Volume

# #

R0258

BOOK A-258

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, ...and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

.....

....., *Chainman.*

....., *Chainman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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

.....

....., *Monumen.*

....., *Monumen.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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

.....

....., *Axman.*

....., *Axman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

I, ..., do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of .....

....., *Flagman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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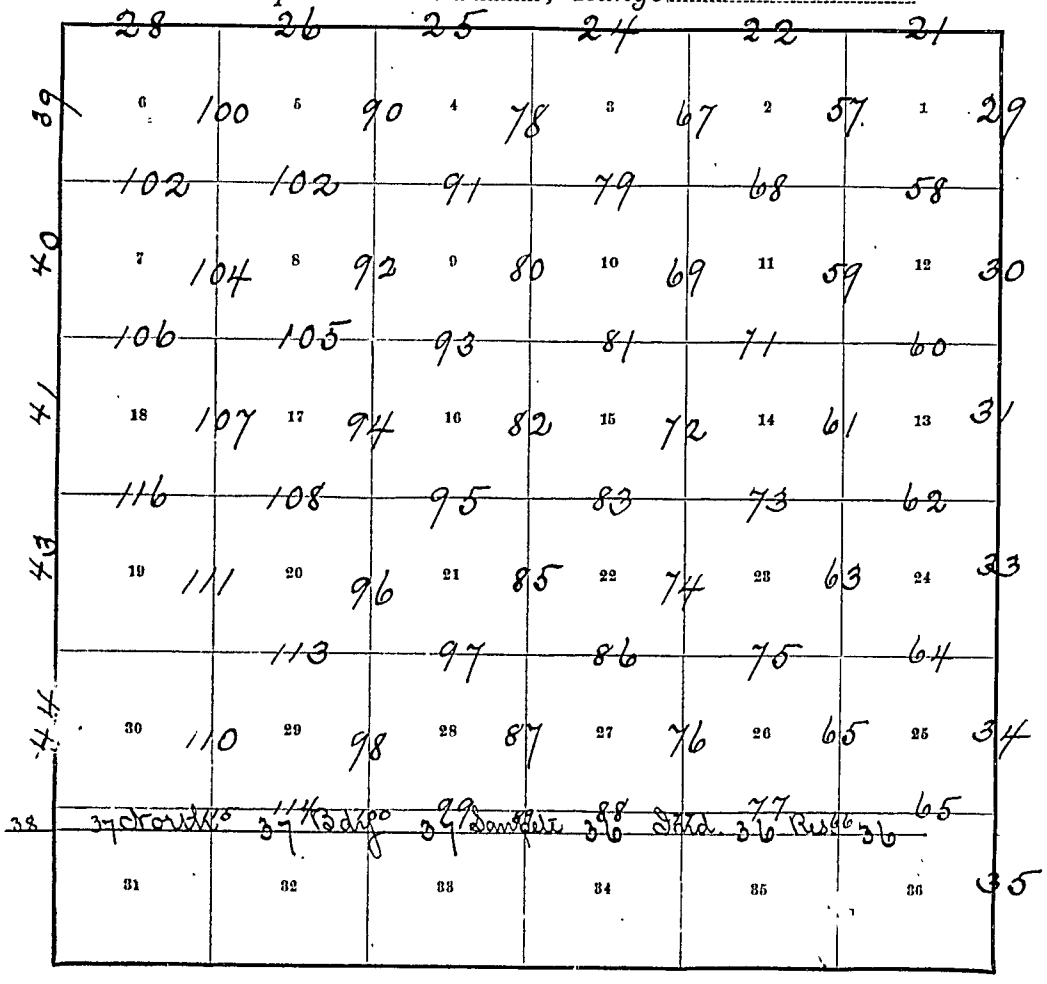
INDEX DIAGRAM.

Township 18 S, *Range* 1 E.



Meanders Page.....

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_____

_____, *Chainman.*

_____, *Chainman.*

Subscribed and sworn to before me this _____ day of _____, 189

_____

SEAL

_____

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 _____, 189

_____

SEAL

_____

WE, _____ and _____

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

_____

_____, *Axman.*

_____, *Axman.*

Subscribed and sworn to before me this _____ day of _____, 189

_____

SEAL

_____

I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 189

_____

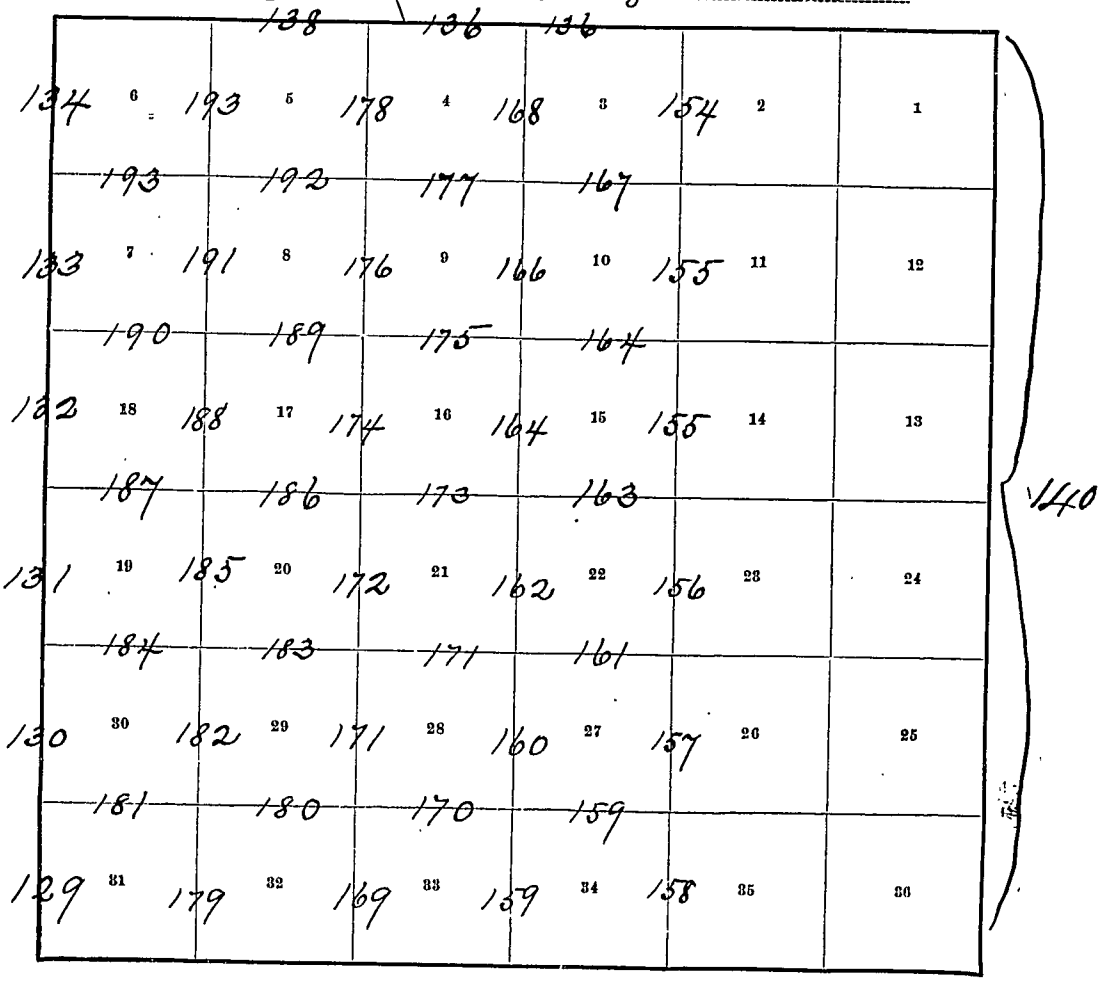
SEAL

_____

BOOK A-258

INDEX DIAGRAM.

Township 17 S., *Range* 2 E.



*Meanders Page*_____

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_____, *Chainman.*

_____, *Chainman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

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 _____, 189

SEAL

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

_____

_____, *Axman.*

_____, *Axman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

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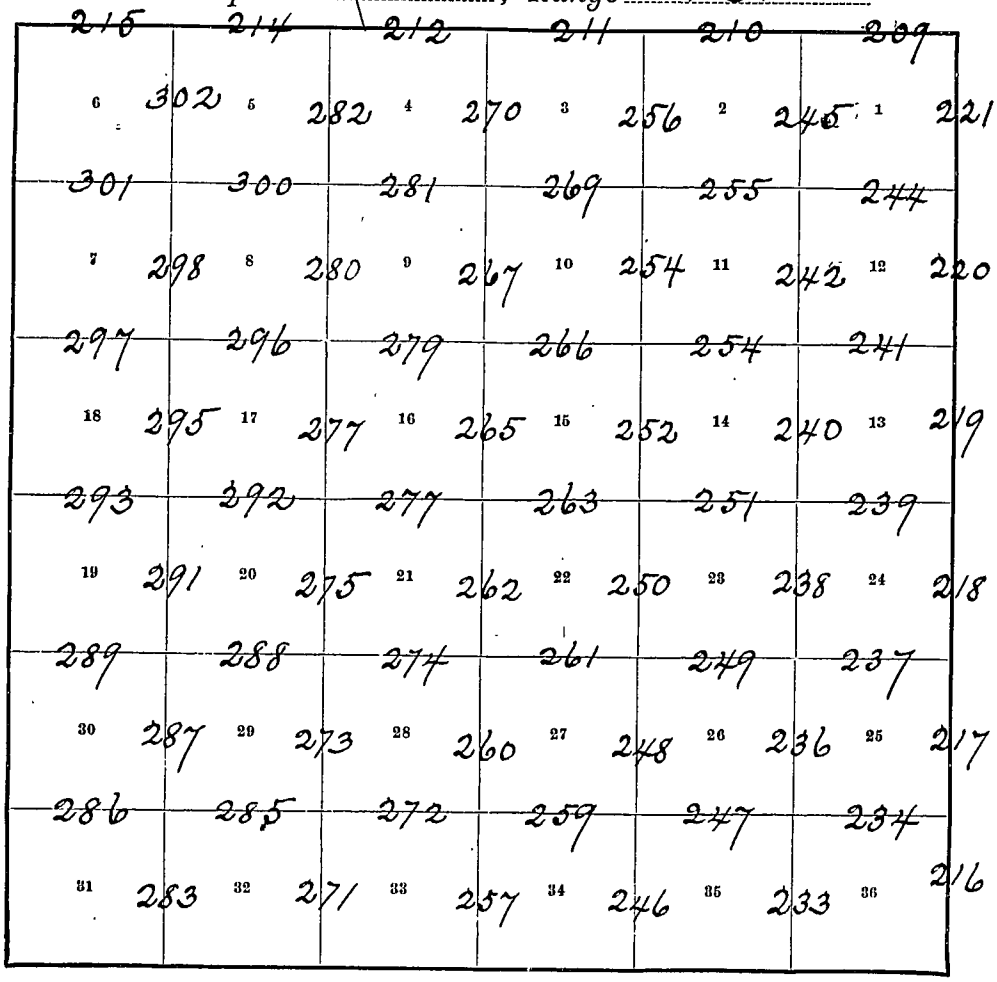
INDEX DIAGRAM.

Township 17 S, *Range* 1 E.



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_____, *Chainman.*

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SEAL

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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

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_____, *Moundman.*

Subscribed and sworn to before me this _____
day of _____, 189

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_____, *Axman.*

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SEAL

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_____, *Flagman.*

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day of _____, 189

SEAL

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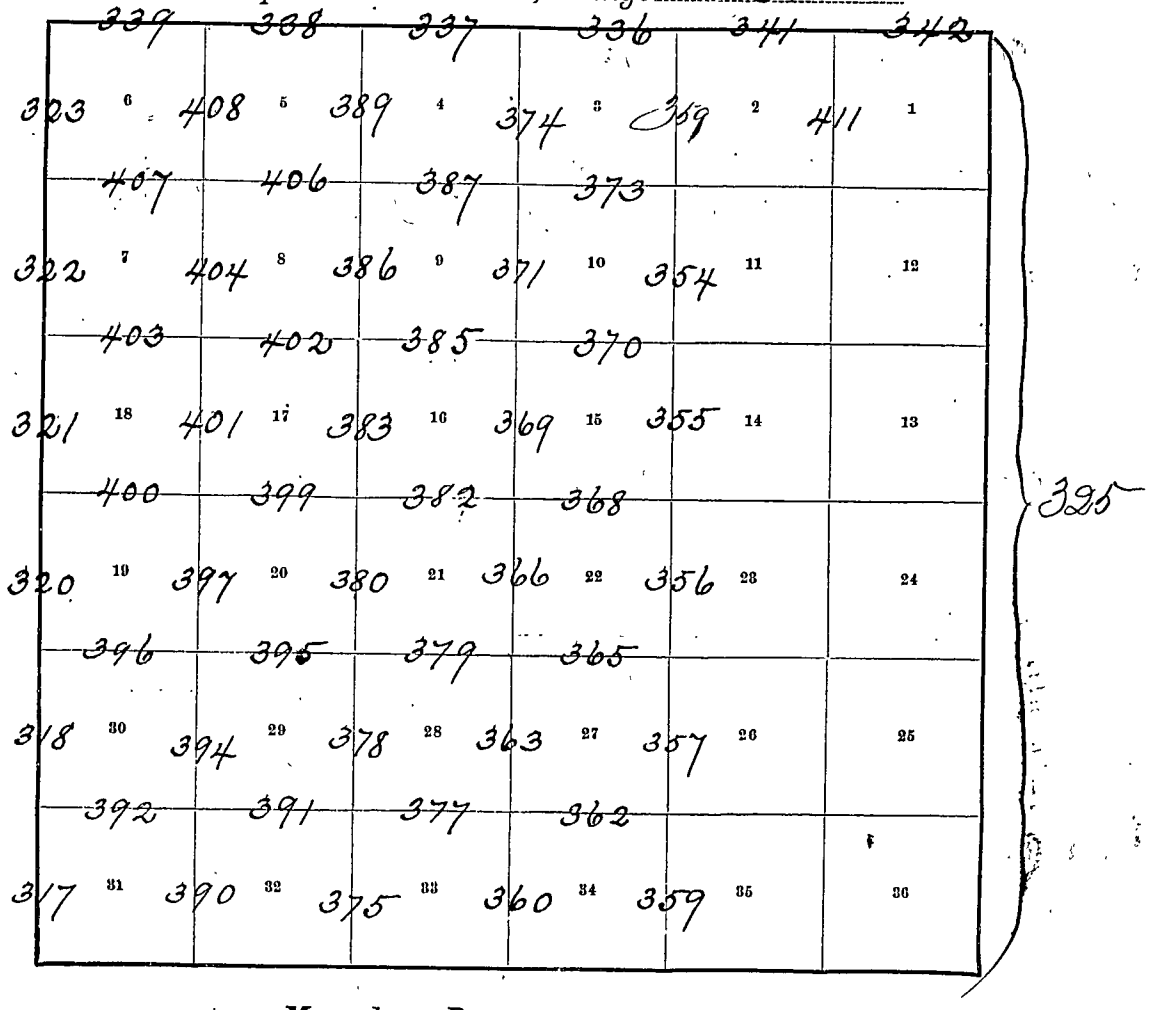
BOOK A-258

INDEX DIAGRAM.

Township 16 S , *Range* 2 E.



Meanders Page.....

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....., *Chainman.*

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....., *Moundman.*

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day of ....., 189

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

.....

....., *Axman.*

....., *Axman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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....., *Flagman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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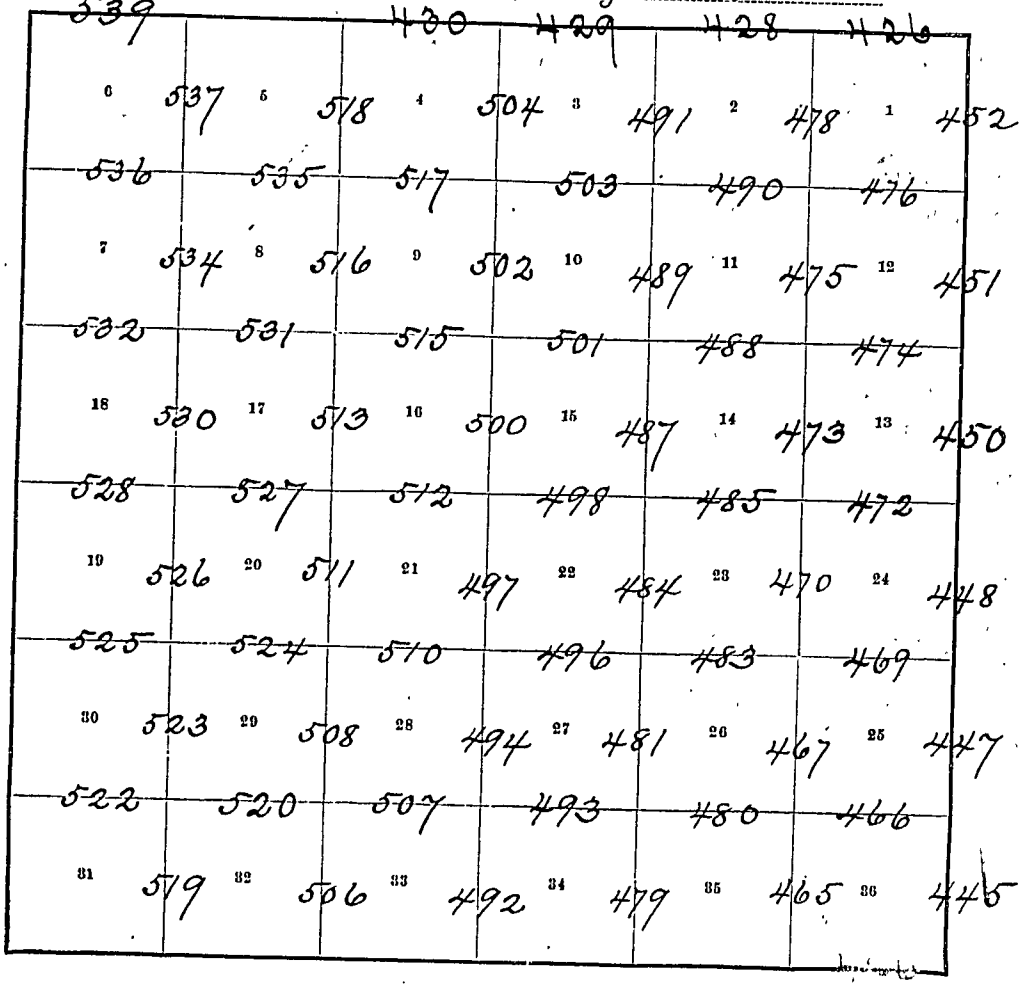
INDEX DIAGRAM.

Township 16 S, *Range* 1 E.



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_____, *Chainman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

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WE, _____ and _____

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_____

_____, *Moundman.*

_____, *Moundman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

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_____, *Axman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

_____

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I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

_____

_____

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Meanders Page.....

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....., *Chainman.*

Subscribed and sworn to before me this .....
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....., *Axman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

I, ..., do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of .....

....., *Flagman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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BOOK A-258

R.3.B.

FIELD NOTES

OF THE SURVEY OF THE

North and East Boundaries

of

Township 1 South, Range 1 East

Of the Salt Lake Base and Meridian,

In the State of Utah.

AS SURVEYED BY

Scott P. Stewart & Andrew J. Stewart Jr. United States Deputy Surveyors.

Under ~~his~~ their Contract No. 217, dated November 1st, 1897.

Survey commenced July 8th, 1898.

Survey completed July 14th, 1898.

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BOOK A-259

NAMES AND DUTIES OF ASSISTANTS.

Jesse R. Stewart, Chairman.

Daniel St. Y. McAllister, Chairman.

Wm W. Richardson Jr., Chairman.

Alma Betts, Chairman.

Antone A. Stewart, Mounaman.

Peter S. Sorensen, Mounaman.

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary affidavits see book "B".

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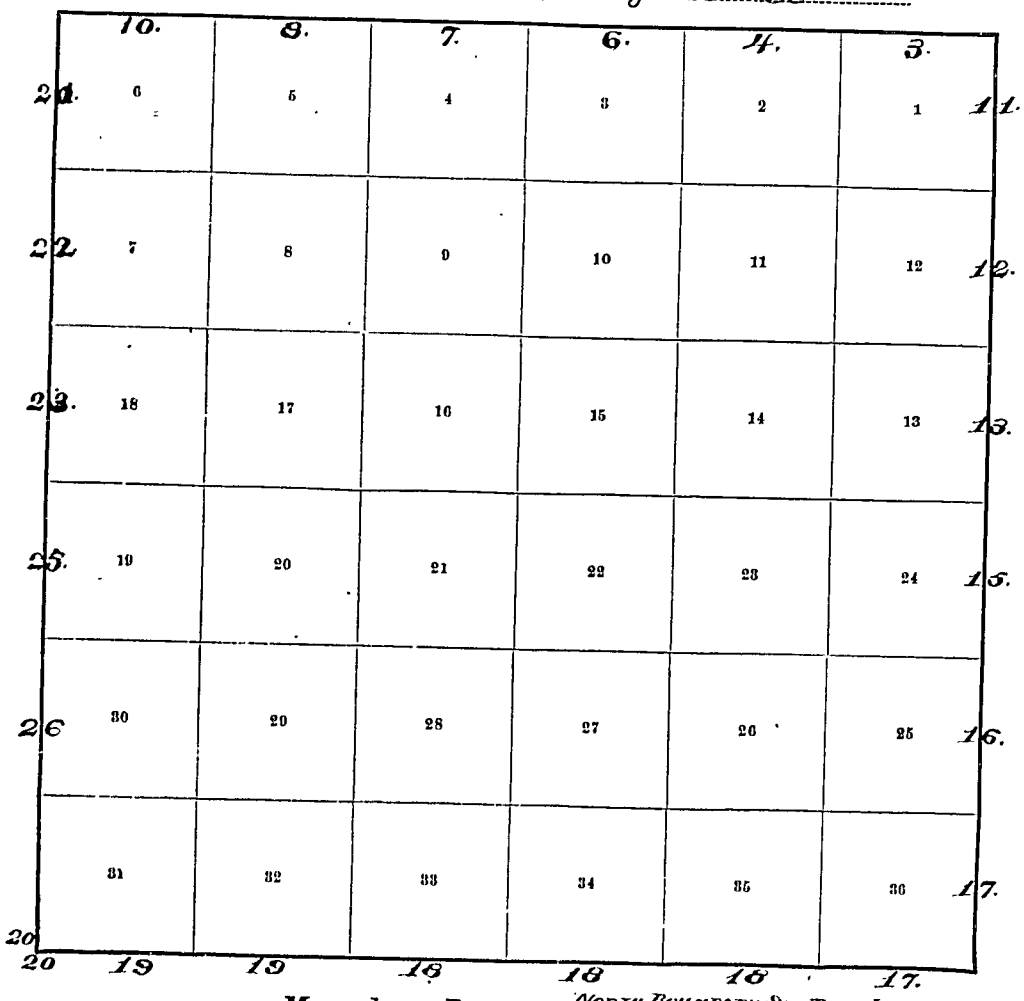
Township 18 South, Range 1 East.



Meanders Page.....

North Boundary San Pete Indian Reservation.

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PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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

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_____

_____ *Moundman.*

_____ *Moundman.*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

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day of _____, 189

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Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

North boundary of T. 18 S., R. 1 E., S. L. B. and M.

Chains Survey commenced July 8, 1898 and executed with a W. and L. E. Gurley light mountain transit, No. -, with solar attachment, the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs, and a Buff and Berger transit, No. 2511, the horizontal limb is provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former Dec. 4, 1897, and the latter April 5, 1898.

We examine the adjustments of the transits, and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications, resulting from solar observations, made during a. m., and p. m. hours, with a true meridian determined by observations on Polaris, we proceed as follows:

At the cor. of Tps. 17 and 18 S., Rs. 1 E. and 1 W., latitude 39° 17' N., longitude 111° 53' 47" W., We set off 39° 17' N. on the lat. arc; 22° 25' N., on the decl. arc; and at 4 h 3 m p. m., L. m. t., determine a true meridian with the solar, of the Gurley instrument, and m a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

July 8, 1898.

Chains

July 9, 1898: At 0h 17m a. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station. At 6h 20m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36′ to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined, by cutting a small groove in the stone set July 8, on which the true meridian falls 0.35 ins. east of the mark determined by the solar of the Gurley instrument. At 6h 35m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36′.8 to the west, on the Gurley instrument, and mark the True Meridian thus determined, by cutting a small groove in the stone set July 8, on which the true meridian falls 0.35 ins. east of the mark determined by the solar.

At 8h 0m a. m., l. m. t., we set off 39° 17′ N., on the lat. arc; 22° 20′ N., on the decl. arc; and mark a point in the true meridian determined with the solar, of the Gurley instrument, by a cross on the stone already set 5 chs. N. of our station; this mark falls 0.25 ins. east of the true meridian established by Polaris observation. The solar apparatus of the Gurley instrument, by p. m. and a. m. observations, defines positions for true meridians, respectively about 0.″18 west and 0.″13 east of the meridian established by Polaris

Chains

observations, therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian, at 7h 30m a. m. is N. 16° 36' W.; the angle thus determined, reduced by the table, page 100, gives the mean mag. decl. 16° 30' E.

From the cor. of Tps. 17 and 18 S., Rs. 1 E. and 1 W., heretofore described We run

East, on a random line bet. Tps. 17 and 18 S., R. 1 E., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs., and at 493.50 chs., intersect W. bdy. of T. 18 S., R. 2 E., 20.25 chs. S. of the cor. of Tps. 17 and 18 S., Rs. 1 and 2 E., which is a limestone, 12 x 15 x 12 ins., above-ground, firmly set, and marked and witnessed as described by the surveyor general.

Note: We destroy all marks on the above described cor. which pertain to Tps. 17 and 18 S., R. 1 E.

Set a limestone, 20 x 12 x 6 ins., 15 ins. in the ground, for closing cor. of Tps. 17 and 18 S., R. 1 E., marked c. c. 1 E. on W.; 17 S. on N., and 18 S. on S.; with 6 grooves on N., S., and W. faces; from which

Cu mahogany, 6 ins. diam., bears S. 5° 30' W., 90 lks. dist., marked c. c. T. 18 S., R. 1 E., S. 1, B. T.

Cu pinion pine, 9 ins. diam., bears N. 18° W., 60 lks. dist., marked c. c. T. 17 S., R. 1 E., S. 36, B. T.

and raise a mound of stone, 2 ft. , 1½ ft. high, W. of cor.

Thence we run

West, on a true line bet. secs. 1 and 36

Over mountainous land, through scattering timber and undergrowth, descend.

Chains	
40.00	Set a limestone, 18 x 10 x 5 ins., 12 in the ground, for ± sec. cor., marked ± on N. face; from which A pinion pine, 7 ins. diam., bears N. 75° W., 18 lks. dist., marked ± S. 36, B. A pinion pine, 8 ins. diam., bears S. 25½° W., 15 lks. dist., marked ± S. 1, B. T.
70.00	Wood road, bears N. and S.
75.50	Bottom of hollow, 400 ft. below closing cor., course S. 60° W.; ascend.
80.00	Set a limestone, 18 x 14 x 10 ins., 12 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, marked with 1 notch on E. and 5 notches on W. edges; from which A cedar, 4 ins. diam., bears N. 52° E., 24 lks. dist., marked T. 17 S., R. 1 E. S. 36, B. T. A cedar 5 ins. diam., bears S. 38° E., 222 lks. dist., marked T. 18 S., R. 1 E. S. 1, B. T. A cedar, 4 ins. diam., bears S. 40° W., 46 lks. dist., marked T. 18 S., R. 1 E., S. 2, B. T. A cedar, 5 ins. diam., bears N. 51° W. 20 lks. dist., marked T. 17 S., R. 1 E., S. 35, B. T. Land, mountainous. Soil, dark loam and gravelly; 1st and 3rd rate. Timber, cedar, pinion pine, and mahogany. Undergrowth, oak-brush. Good grass for grazing. Mountainous land, 80.00 chs.

West, on a true line bet. secs. 2 and 35.
Over mountainous land, through heavy timber and scattering undergrowth, ascend.

14.75	Top of spur, 150 ft. above hollow, bears N. and S.; descend.

Chains	
30.00	Wood road, bears N. E. and S. W.; in bottom of Mellor's cañon, 200 ft. below ridge, course S. W.; ascend.
40.00	Set a quartz stone, 16 x 12 x 8 ins., 11 ins. in the ground, for ± sec. cor., marked ± on N. face; from which A cedar, 6 ins. diam., bears N. 20° E., 34 lks. dist., marked ± S. 35, B. T. A mahogany, 10 ins. diam., bears S. 7° 30' W., 16 lks. dist., marked ± S. 2, B. T.
43.75	Top of spur, 150 ft. above cañon, bears N. and S.; descend.
47.00	Bottom of hollow, 30 ft. below ridge, course S.; ascend.
51.00	Top of ridge, 40 ft. above hollow, bears N. and S.; descend.
58.25	Bottom of hollow, 100 ft. below ridge, course S.; ascend.
73.50	Wood road, bears N. 40° E. and S. 40° W.
80.00	Set a limestone, 18 x 11 x 6 ins. 12 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, marked with 2 notches on E. and 4 notches on W. edges; from which A pinion pine, 10 ins. diam., bears N. 45° E., 65 lks. dist., marked T. 17 S., R. 1 E. S. 35, B. T. A cedar, 10 ins. diam., bears S. 77° E., 11 lks. dist., marked T. 18 S., R. 1 E. S. 2, B. T. A cedar, 6 ins. diam., bears S. 20° W., 99 lks. dist., marked T. 18 S., R. 1 E. S. 3, B. T. A pinion pine, 6 ins. diam., bears N. 56° W. 62 lks. dist., marked T. 17 S., R. 1 E., S. 34, B. T.

Land, mountainous.
Soil, rich loam and gravelly; 1- and 3rd rate.

Chains Timber, Cedar, pinion pine and mahog
Undergrowth, oak brush.
Good grass for grazing.
Mountainous or heavily timbered
land, 80.00 chs.

July 9, 1898.

July 11, 1898 At 7h 30m a.m., L. m. t., we set off 39° 17' N., on the lat. arc; 22°05 N., on the decl. arc; and determine a true meridian at the cor. of secs. 2, 3, 34, and 35.
Thence we run
West, on a true line bet. secs. 3 and 34.
Over mountainous land, through heavy timber.; ascend.

10.00 Top of ridge, 100 ft. above cor., bears N. and S.; descend.

15.50 Bottom of hollow, 40 ft. below ridge, course S. E.; ascend.

25.00 Wood road, bears N. W. and S. E.

29.00 Top of ridge, 50 ft. above hollow, bears N. 20° W. and S. 20° E.; descend.

40.00 Set a limestone, 14 x 8 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which
A pinion pine, 5 ins. diam., bears N. 29° W. 31 lks. dist., marked ¼ S. 34, B. J.
A cedar, 14 ins. diam., bears S. 36° E., 8 lks. dist., marked ¼ S. 3, B. J.

43.25 Bottom of hollow, 100 ft. below ridge, course S. 10° W.; ascend.

50.00 Top of ridge, 140 ft. above hollow, bears N. and S.; descend.

53.00 Bottom of hollow, 30 ft. below ridge, course S.; ascend.

60.00 Top of spur, 30 ft. above hollow, bears N. and S.; descend.

72.50 Bottom of hollow, 100 ft. below ridge, course S.; ascend.

Chains	
80.00	Set a limestone, 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, marked with 3 notches on E., and W. edges; from which Pinion pine, 6 ins. diam., N. 57° E. 62 lks. dist., marked T. 17 S., R. 1 E., S. 34, B.T. A cedar, 5 ins. diam., bears S. 78° E. 26 lks. dist., marked T. 18 S., R. 1 E. S. 3, B.T. Pinion pine, 8 ins. diam., bears S. 33° W. 16 lks. dist., marked T. 18 S., R. 1 E. S. 4, B.T. Pinion pine, 6 ins. diam., bears N. 38° W. 56 lks. dist., marked T. 17 S., R. 1 E., S. 33, B.T. Land, mountainous. Soil, rich loam and gravelly; 1st and 3rd. rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	West, on a true line bet. secs. 4 and 33 over mountainous land, through heavy timber; ascend.
15.50	Top of spur, 150 ft. above cor., bears N. and S.; descend.
19.00	Bottom of hollow, 60 ft. below ridge, course S.; ascend.
29.00	Top of spur, 75 ft. above hollow, bears N. and S.; descend.
31.00	Bottom of hollow, 50 ft. below ridge, course S.
40.00	Set a limestone, 18x12x10 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A pinion pine, 24 ins. diam., bears N. 65° E., 31 lks. dist., marked ¼ S. 33, B.T. A pinion pine, 12 ins. diam., bears S. 3° E., 52 lks. dist., marked ¼ S. 4, B.T.

Chains	
47.00	Top of ridge, 100 ft. above hollow, bears N. E. and S. W.; descend.
54.75	Bottom of hollow, 100 ft. below, ridge, course S. 60° W.; ascend.
57.00	Top of ridge, 20 ft. above hollow, bears N. and S.; descend.
63.00	Bottom of hollow, 60 ft. below, ridge, course S.; ascend.
66.50	Top of ridge, 75 ft. above hollow, bears N. E. and S. W.; descend.
75.00	Bottom of hollow, 200 ft. below ridge, course S. W.; ascend.
80.00	Set a sandstone, 18 x 12 x 6 ins., 12 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, marked with 4 notches on E. and 2 notches on W. edges; from which A pinion pine, 6 ins. diam., bears N. 33° E. 100 lks. dist., marked T. 17 S., R. 1 E., S. 33, B. T. A mahogany, 10 ins. diam., bears S. 30° E. 38 lks. dist., marked T. 18 S., R. 1 E., S. 4, B. T. A pinion pine, 6 ins. diam., bears S. 19° W. 98 lks. dist., marked T. 18 S., R. 1 E. S. 5, B. T. A cedar, 30 ins. diam., bears N. 88° W. 20 lks. dist., marked T. 17 S., R. 1 E. S. 32, B. T. and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, mountainous. Soil, rich loam and gravelly; 1st and 2nd rate. Timber, cedar, pinion pine and mahogany. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.

West, on a true line bet. secs. 5 and 32.
Over mountainous land, through heavy timber; ascend.

5.50	Top of high ridge, 200 ft. above hollow; bears

Chains.	
	N. 40° E. and S. W.; descend.
35.75	Bottom of hollow, 500 ft. below ridge, course S. 60° W.; leave heavy timber, bears N. 60° E and S. 60° W.; ascend
40.00	Top of ridge, 200 ft. above hollow, bears N. 30° E. and S. 30° W.
	Set a sandstone, 16 X 14 X 8 ins., 11 ins in the ground for 1/4 sec. cor. marked ✱ on N. face; from which
	A pinion pine, 4 ins. diam., bears N. 2° 30' W., 6 lks. dist., marked ✱ S. 32, T. 3.
	A cedar, 8 ins. diam., bears S. 5° W. 11 lks. dist., marked ✱ S. 5, T. 3. ;
	enter scattering timber, bears with ridge.
63.50	Bottom of Axhandle canon, 200 ft. below ridge, course S. 40° W.; ascend
70.75	Top of ridge, 200 ft. above hollow, bears N. 20° E. and S. 20° W.; enter heavy timber, bears with ridge; descend.
75.70	Bottom of hollow, 150 ft. below ridge course S. 20° W.; ascend.
80.00	Set a sandstone, 18 X 16 X 8 ins., 12 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, marked with 5 notches on E. and 1 notch on W. edges; from which
	A pinion pine, 7 ins diam, bears N. 34° 30' E., 36 lks. dist., marked T. 17 S., R. 1 E. S. 32. T. 3.
	A pinion pine, 4 ins. diam., bears S. 78° E. 20 lks. dist, marked T. 18 S., R. 1 E., S. 5; T. 3.
	A cedar, 10 ins. diam., bears S. 78° W. 71 lks. dist., marked T. 18 S., R., 1 E., S. 6, T. 3.
	A pinion pine, 8 ins. diam., bears N. 37° W. 55 lks. dist., marked T. 17 S., R. 1 E. S. 31. T. 3.
	Land mountainous.
	Soil, rich loam and gravelly loam, 1st and 2nd rate,
	Timber, cedar and pinion pine
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	July 11, 1898: At this cor. we set off 22° 03' N., on the decl. arc; and at 0h 4m p. m. l.m.t., observe the sun on the meridian, the resulting lat. is 39° 17' N..

North boundary of T. 18 S., R. 1 E.—Concluded.

	West on a true line bet. secs. 6 and 31.
	Over mountainous land, through heavy timber; ascend
.75	Top of ridge, 10 ft. above cor., bears N. 20 E. and S. 20° W.; descend.
10.70	Leave heavy timber, bears N. 20° E. and S. 20° W. Enter dense undergrowth.
13.00	Bottom of hollow 200 ft. below ridge, course S. 20° W.; ascend
15.50	Enter heavy cedar and pinion timber, bears N. 20° E. and S. 20° W.
18.50	Top of spur, 40 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
31.25	Bottom of hollow, 300 ft. below ridge, course S. 20° W.; ascend.
35.50	Top of spur 30 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
40.00	Set a sandstone 15 x 10 x 8 ins. 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face from which A cedar 10 ins. diam. bears N. 16° E. 62 lks. dist. marked 1/4 S. 31 B. T. A cedar 10 ins. diam. bears S. 9° W. 68 lks. dist. marked 1/4 S. 6 B. T.
55.50	Find no trace of foot of mountain cor.
64.00	Leave heavy timber, bears N. and S.
67.00	Foot of mountain, 400 ft. below ridge, bears N. and S.
74.00	Wood road, bears N. and S.
93.50	The cor. of Tps. 17 and 18 S., Rs. 1 E. and 1 W.
	Land, mountainous.
	Soil, rich and sandy loam, and gravelly; 1st, 2nd, and 3rd rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 93.50 chs.
	July 11, 1898.

East boundary of T. 18 S., R. 1 E.

Chains	
	July 12, 1898: At 8h 0m a. mn., l. mn. t., we set off 39° 17' N., on the lat. arc; 21° 56' N., on the decl. arc; and determine a true meridian at the closing cor. of Tps. 17 and 18 S., R. 1 E., heretofore described. Thence we run South, along E. bdy. of sec. 1. Over mountainous land, through heavy cedar and pinion pine timber; ascend.
6.75	Top of ridge, 100 ft. above cor., bears N. 20° E. and S. 20° W.; thence gently descending along E. side of ridge.
19.75	The ± sec. cor. on W. side of sec. 6, T. 18 S., R. 2 E., which is a limestone, 5 x 10 x 6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.
40.00	Set a limestone, 20 x 10 x 6 ins., 15 ins. in the ground, for ± sec. cor., marked ± on W. face; from which A pinion pine, 8 ins. diam., bears S. 30° W., 30 lks. dist., marked ± S. 1, B. T.
49.70	Top of same ridge, bears N. 20° W. and S. 40° E.; descend.
59.75	The cor. of secs. 6 and 7, T. 18 S., R. 2 E., which is a limestone, 5 x 9 x 7 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Note: We destroy all marks on the above described cor., which pertain to secs. 1 and 12.
75.00	Bottom of cañon, 200 ft. below ridge, course S. 80° W.; ascend.
80.00	Set a limestone, 30 x 18 x 12 ins., 22 ins. in the ground, for cor. of secs. 1 and 12, marked with 1 notch on N. and 5 notches on S. edges; from which

Chains

A pinion pine, 18 ins. diam., bears N. 50 40 lks. dist., marked T. 18 S. R. 1 E. S. 1, B. T.
A pinion pine, 8 ins. diam., bears S. 61° W. 30 lks. dist., marked T. 18 S., R. 1 E., S. 12, B. T.

Land, mountainous:
oil, rich loam; 1st rate.
Timber, cedar and pinion-pine.
Good grass for grazing.
Mountainous or heavily timbered.
d, 80.00 chs.

South, along E. side sec. 12.
Over mountainous land, through heavy cedar and pinion-pine timber; ascend.

17.00 Top of ridge, 200 ft. above canon, bears E. and W.; descend; leave timber, bears E. and W.

19.75 The ¼ sec. cor. on W. side of sec. 7, T. 18 S. R. 2 E., which is a limestone, 7 x 10 x 5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.;
Enter scattering timber, bears E. and W.

21.50 Wood road, bears N. 30° E. and S. 30° W.

40.00 Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
A cedar, 8 ins. diam., bears S. 5° 30' W. 33 lks. dist., marked ¼ S. 12, B. T.

59.75 The cor. of secs. 7 and 18, T. 18 S., R. 2 E., which is a limestone, 5 x 7 x 5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
Note: We destroy all marks on the above described cor. which pertain

Chains	
	to secs. 12 and 13.
– 80.00	Set a limestone, 18 x 10 x 4 ins., 12 ins. in the ground, for cor. of sec. 12 and 13, marked with 2 notches on N. and 4 notches on S. edges; from which A pinion pine, 12 ins. diam., bears N. 50° W., 48 lks. dist. marked T. 18 S. R. 1 E. S. 12, B. T. A cedar, 12 ins. diam., bears S. 54° W. 33 lks. dist. marked T. 18 S., R. 1 E., S. 13, B. T. and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, mountains.
	Soil, loam and gravelly; 1st and 3rd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	South, along E. side of sec. 13.
	Over mountainous land, through scattering cedar and pinion pine timber. Ascend.
19.65	The ✝ sec. cor. on W. side of sec. 18; T. 18 S., R. 2 E., which is a limestone, 5 x 10 x 7 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
26.25	Wagon road leading from Manti to Fayette, bears N. W. and S. E.; in bottom of canon, 450 ft. below ridge, course S. E.; ascend.
39.80	Top of spur, 80 ft. above canon, bears E. and W.; descend.
+0.00	Set a limestone, 24 x 12 x 8 ins., 18 ins. in the ground, for ✝ sec. cor., marked

Chains	
	≠ on W. face: from which A cedar, 12 ins. diam., bears W. 50 lks. dist., marked ≠ S. 13, B. T. and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
39.60	The cor. of secs. 18 and 19; T. 18 S., R. 2 E., which is a limestone, 5 x 7 x 6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	Note: We destroy all marks on the above described cor., which pertain to secs. 13 and 24.
	Foot of mountain, 100 ft. below ridge bears N. E. and S. W.; thence across Antelope valley; leave timber and enter dense undergrowth, bears N. E. and S. W.
80.00	Set a limestone, 20 x 12 x 8 ins., 15 ins. in the ground, for cor. of secs. 13 and 24, marked with 3 notches on N., and S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land, mountainous and level.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, cedar and pinon pine
	Undergrowth, sagebrush and shadscales.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 80.00 chs.
	July 12, 1898: At this cor. we set off 21° 53' N., on the decl. arc; and at 0h 2m p. m.; l. m. t., observe the sun on the meridian; the resulting lat. is 39° 15' N., which is about 0:26' greater

Chains	than the proper lat.
	South, along E. side of sec. 24. Over level land, through dense undergrowth.
19.45	The ¼ sec. cor. on W. side of sec. 19, T. 18 S., R 2 E.; which is a limestone 5 x 6 x 6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high. E. of cor. Pits impracticable.
40.00	Set a sandstone, 16 x 12 x 4 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
59.30	The cor. of secs. 19 and 30., T. 18 S., R. 1 E., which is a limestone, 4 x 12 x 6 ins., above ground firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Pits impracticable Note: We destroy all marks on the above described cor. which pertains to secs. 24 and 25.
80.00	Set a sandstone, 20 x 8 x 6 ins., 15 ins in the ground, for cor. of secs. 24 and 25, marked with 4 notches on N. and 2 notches on S edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, level. Soil, clay loam; 2nd rate. No timber Undergrowth; sage brush and shadscales Good grass for grazing.

East boundary of T. 18 S., R. 1 E. - Continued.

Chains	
	Land covered with dense undergrowth, 80.00 chs.
	South, along E. side of sec. 25. Over level land, though dense undergrowth.
19.45	Set sec. cor. on W. side of sec. 30, T. 18 S., R. 2 E., which is a limestone, 5 X 10 X 7 ins., above ground, firmly set and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Pits impracticable.
40.00	Set a limestone, 16 X 6 X 6 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18 X 18 X 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft base, 1½ ft high, W. of cor.
59.00	The cor. of secs. 30 and 31, T. 18 S. R. 2 E., which is a sandstone, 4 X 10 X 10 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. We raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Pits impracticable.
	Note: We destroy all marks on this cor., which pertain to secs. 25 and 36.
80.00	Set a limestone, 16 X 8 X 4 ins., 11 ins. in the ground, for cor. of secs 25 and 36, marked with 5 notches on N. and 1 notch on S. edges; dig pits, 24 X 24 X 12 ins., in secs 25 and 36, 3½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Sand, level.
	Soil, clay loam, 2nd rate.

East boundary of T. 18 S., R. 1 E. - Concluded.

Chains	
	No timber. Undergrowth, sage brush and shadscales. Good grass for grazing Land covered with dense undergrowth, 80.00 chs.
	South, along E. bdy. of secs. 36. Over level land, through dense undergrowth.
5.50	Intersect N. bdy. of San Pete Indian Reservation at the closing cor. of T. 18 S., R. 1 and 2 E., which is a sandstone, 5 x 7 x 5 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general. Note: This cor. is 18.75 chs. W. of closing cor. of secs. 31 and 36, established from S.; which is a limestone 6 x 12 x 4 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general. Land level Soil, clay loam; 2nd rate. No timber Undergrowth, sage brush, and shadscale. Good grass for grazing. Land covered with dense undergrowth, 5.50 chs.
	Note: From connections already made we are satisfied that discrepancies exist either in the S. or W. bdy. of this township. Therefore we proceed to retrace said bdys. as follows:

Retracement of bdy. of San Pete Indian Reservation

	Chains	
		From the closing cor. of secs. 31 and 36 as closed from N. heretofore described we run
		West, on a retracement line along North boundary San Pete Indian Reservation.
C	61.43	The closing cor. of secs. 35 and 36, which is a limestone, 5 X 6 X 15 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.
		July 13. 1898.
		July 13, 1898: At 8h 0m a.m. l. m. t., we set off 39° 13' N., on the lat. arc; 21° 48' N., on the decl. arc; and determine a true meridian at the closing cor. of secs. 35 and 36.
		Thence we run
		West, along N. bdy. San Pete Indian Reservation.
A	80.00	The closing cor. of secs. 34 and 35, which is a limestone, 5 X 12 X 4 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears S. 35 lks. dist.
		The course of this line is therefore S. 89° 45' W.
		West, along N. bdy. San Pete Indian Reservation.
L	79.75	The closing cor. of secs. 33 and 34, which is a limestone, 4 X 12 X 5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears S. 20 lks. dist.
		The course of this line is therefore

Chains	
	S. 88° 34' W.
	West, along N. bdy. San Pete Indian Reservation.
80.30	The closing cor. of secs. 32 and 33, which is a limestone, 5 X 8 X 6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears N. 70 lks. dist. The course of this line is therefore N. 89° 30' W.
	West, along N. bdy. San Pete Indian Reservation,
81.10	The closing cor. of secs. 31 and 32. which is a limestone, 6 X 14 X 8 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears S. 71 lks. dist. The course of this line is therefore, S. 89° 30' W.
	West, along N. bdy. San Pete Indian Reservation.
20.60	The closing cor. of secs. 31 and 32 from North, which is a limestone, 4 X 12 X 7 ins., above ground, firmly set. and marked and witnessed as described the surveyor general
80.10	The closing cor. of secs. 31 and 36, as set from the South. which is a sandstone, 8 X 6 X 5 ins., above ground, firmly set, and marked and witnessed as described by

	Chains	
		the surveyor general.
		West, along N. bdy. San Pete Indian Reservation.
	19.90	The closing cor. of secs. 31 and 36, as set from the north on Salt Lake Meridian, which is a limestone, 5"X8"X7" ins., above ground, firmly set, and marked and witnessed as described by the surveyor general. July 13, 1898: During the noon hour the sky is overcast and solar observations are impossible.
		North, on a retracement line bet. fract. secs. 31 and 36; from the closing cor. of secs. 31 and 36 above described.
C	5.65	The cor. of secs. 25, 30, 31 and 36, on Salt Lake Meridian, which is a greatly decayed post in mound, marked and witnessed as described by the surveyor general; the marks are nearly obliterated, therefore we destroy all traces of old cor. and re-established it at the same point as follows. Set a hard sandstone, 16"X10"X5" ins., 11 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, marked with 5 notches on N. and 1 notches on S. edges; dig pits, 18"X18"X12" ins., in each sec., 5 ft. dist.; and raise a mound of earth, 4 ft base, 2 ft high, W. of cor.
		North, on a retracement line bet.

Chains

secs. 25 and 30; At 40.00 chs. we find no trace of ¼ sec. cor.; and at 80.00 chs. find no trace of cor. of secs. 19, 24, 25, and 30; therefore we continue our line north, and search diligently for corners, but are unable to find any of the corners. At 401.86 chs. Intersect N. bdy. of T. 18 S., R 1 E., 10.35 chs. E. of the cor. of Tp. 17 and 18 S., Rs. 1 E. and 1 W., heretofore described. The falling answers to a correction of 1° 30' or 2.10½ lks. E. per mile counting from the cor. of Tps. 17 and 18 S., Rs. 1 E. and 1 W., and the length of each mile will be 80.40 chs.; therefore we proceed to resurvey the line just retraced as follows:

From the cor. of Tps. 17 and 18 S., Rs. 1 E. and 1 W. already described We run

S. 1° 30' E., on a resurvey line bet secs. 1 and 6.

Over gently rolling land, through dense undergrowth.

Difference between measurements of 40.20 chs., by two sets of chainmen, is 4 lks.; position of middle point By 1st set 40.18 chs.

By 2nd set 40.22 chs.; the mean of which is

40.20 Set a quartzite stone, 14 x 10 x 9 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.

Note: We search diligently but find no trace of old ¼ sec. cor.

Difference between measurements of 80.40 chs.; by two sets of chainmen,

	Chains	
		is 6 lks.; position of middle point. By 1st set 80.37 chs. By 2nd set 80.43 chs.; the mean of which is
✓	80.40	Set a sandstone, 20 x 12 x 7 ins., 15 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, marked with 1 notch on N. and 5 notches on S. edges; dig pits, 18 x 18 x 12 ins., in each sec., 3½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Note: After diligent search, find no trace of old cor. of secs. 1, 6, 7, and 12. Land, nearly level. Soil, gravelly and clay loam; 2nd rate. No timber. Undergrowth, sage-brush and shadscales. Good grass for grazing. Land covered with dense undergrowth, 80.40 chs. July 13, 1898.
		July 14, 1898: At 7h 55m a. m., t. m. t., we set off 39° 17' N., on the lat. arc. 21° 39' N. on the decl. arc. and determine a true meridian with the solar at the cor. of secs. 1, 6, 7, and 12 Thence we run S. 1° 30' E., on a resurvey line bet. secs. 7 and 12. Over level land, through scattering undergrowth. Difference between measurements of 40.20 chs.; by two sets of chainmen is 6 lks.; position of middle point By 1st set 40.17 chs.

Chains	
40.20	By 2nd set 40.23 chs.; the mean of which is Set a hard sandstone, 14 X 7 X 7 ins., 9 ins. in the ground, for + sec. cor., marked + on W. face; dig pits, 18 X 18 X 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor..
	A sheep corral bears E. above. 6.00 chs. dist.
	Note: We find no trace of old + sec. cor.
	Difference between measurements of 80.40 chs., by two sets of chainmen is 10 lks.; position of midde point
	By 1st set 80.35 chs.
	By 2nd set 80.45 chs.; the mean of which is
80.40	Set a hard sandstone, 16 X 8 X 6 ins., 11 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, marked with 2 notches on N. and 4 notches on S. edges; dig pits, 18 X 18 X 12 ins., in each sec., 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Note: We find no trace of old cor.
	Land level
	Soil, clay loam; 2 nd rate.
	No timber.
	Undergrowth, sage brush and shadscales
	S. 1° 30° E., on a resurvey line bet secs. 13 and 18.
	Over level land, through dense undergrowth
27.50	County road leading from Fayette to Levan, bears N. 16° W. and S. 16° E.

Chains	
	Difference between measurements of 40.20 chs., by 2 sets of chainmen is 8 lks.; position of middle point
	By 1st set 40.16 chs.
	By 2nd set 40.24 chs.; the mean of which is
40.20	Set a quartzite stone, 17 x 10 x 7 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18 x 18 x 12 ins. N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
	Note: We find no trace of old ¼ sec. cor.
62.00	Fence, bears N. 60° E. and S. 60° W.; thence across cultivated land; leave undergrowth, bears with fence.
78.65	Fence, bears N. 60° E. and S. 60° W.; leave cultivated field.
	Difference between measurements of 80.40 chs., by two sets of chainmen is 12 lks.; position of middle point
	By 1st set 80.34 chs.
	By 2nd set 80.46 chs.; the mean of which is
C 80.40	Set a quartzite stone, 18 x 11 x 4 ins., 12 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N., and S. edges; dig pits, 18 x 18 x 12 ins., in each sec., 3½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Note: We find no trace of old cor.
	Land, level.
	Soil, clay loam; 2nd rate.
	No timber.
	Undergrowth, sage-brush and shadscales.
	Land covered with dense undergrowth, 62.00 chs.

Chains	
	S. 1° 30' E., on a resurvey line bet. secs. 19 and 24.
	Over level land.
12.00	Road from Jayette to Dover, bears N. 60° W. and S 60° E.
13.00	Canal, 15' lks. wide, 18 ins. deep, course N. 50° W.; Enter cultivated fields.
	Difference between measurements of 40.20 chs., by two sets of chainmen is 10 lks., position of middle point
	By 1st set 40.15 chs.
	By 2nd set 40.25 chs.; the mean of which is
40.20	Set a limestone, 14 X 10 X 4 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18 X 18 X 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft high, W. of cor.
	Note: We find no trace of old ¼ sec. cor.
	Difference between measurements of 80.40 chs., by two sets of chainmen is 18 lks.; position of middle point
	By 1st set 80.31 chs.
	By 2nd set 80.49 chs., the mean of which is
80.40	Set a limestone, 16 X 8 X 6 ins., 11 ins. in the ground for cor. of secs. 19, 24, 25, and 30, marked with 4 notches on N. and 2 notches on S. edges; dig pits, 18 X 18 X 12 ins., in each sec., 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Note: We find no trace of old cor.
	Sand, level.
	Soil, rich loam; 1st rate.
	No timber.
	July 14, 1898: At this cor. we set off 21° 37' N., on the decl. arc, and at 0h 3m p. m., l. m. t., observe the sun

Chains.	
	on the meridian the resulting lat is 39°14' N.; which is about 0.13 greater than proper lat.
	South on a resurvey line bet. secs. 25 and 30.
	Over level land, through cultivated fields.
	Difference between measurements of 40.20 chs., by two sets of chainmen is 14 lks., position of middle point
	By 1st set 40.13 chs.
	By 2nd set 40.27 chs.; the mean of which is
40.20	Set a limestone, 14 X 8 X 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18 X 18 X 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
	Note: We find no trace of old ¼ sec. cor.
74.00	North bank of Servier river, course N. 70° W.
75.65	S. bank of Servier river.
	Difference between measurements of 80.40 chs., by two sets of chainmen is 22 lks., position of middle point
	By 1st set 80.29 chs.
	By 2nd set 80.51 chs.; the mean of which is
80.40	The cor. of secs. 25, 30, 31, and 36.
	Sand, level,
	Soil, rich loam; 1st rate.
	no timber
	2 p. m. July 14, 1898.

Boundaries of T. 18 S., R. 1 E.

Latitudes departures and closing errors

Lines	designated	True bearing	Distance	Latitudes		Departures	
				N.	S.	E.	W.
			chs.	chs.	chs.	chs.	chs.
N. bdy.	T. 18 S., R. 1 E.	West	493.50				493.50
W. bdy.	T. 18 S., R. 1 E.	S. 1° 30' E.	402.00		401.86	10.52	
W. bdy.	T. 18 S., R. 1 E.	South	5.65		5.65		
S. bdy.	T. 18 S., R. 1 E.	East	100.00			100.00	
S. bdy.	T. 18 S., R. 1 E.	N. 89° 30' E.	81.10	.71		81.10	
S. bdy.	T. 18 S., R. 1 E.	S. 89° 30' E.	80.30		.70	80.30	
S. bdy.	T. 18 S., R. 1 E.	N. 88° 34' E.	79.75	1.99		79.73	
S. bdy.	T. 18 S., R. 1 E.	N. 89° 45' E.	80.00	.35		80.00	
S. bdy.	T. 18 S., R. 1 E.	East	61.43			61.43	
E. bdy.	T. 18 S., R. 1 E.	North	405.50	405.50			
E. bdy.	T. 18 S., R. 1 E.						
Convergency							.60
Totals.				408.55	408.21	493.08	494.10
				408.21			493.08
Error in Lat.				.34	Error in Dep.		1.02

For General Description see subdivisions of this township.

July 14, 1898.

Scott P. Stewart,
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

showing the respective capacities in which they acted:

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ..... United States Deputy Surveyor, in surveying all those parts or portions of the ..... of the ..... meridian, ... of ....., which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the other monuments established, according to the instructions furnished by the United States Surveyor General for .....

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

Subscribed and sworn to before me this ..... day of ....., 189

SEAL

.....

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ... United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from ..... United States Surveyor General for ..... bearing date of the ..... day of ..... 189 . I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for ..... the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

.....

.....

.....

..... of the .....

..... meridian, in the ..... of ....., which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for ..... and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

.....

United States Deputy Surveyor.

Subscribed by said ..... and sworn to before me this ..... day of ..... 189 .

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, June 23 1900 ..... ~~189~~

The foregoing field notes of the survey of The Nth & East Boundaries of Township 18 Nth Range 1 East of the Salt Lake Base and Meridian, Utah

executed by Scott E. Stewart & Andrew J. Stewart Jr. under Contract No. 207, dated November 1st, 1897, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys therein described are hereby approved.

Jacob B. Bl

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.

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BOOK A-258

FIELD NOTES

OF THE SURVEY OF THE

2.3.68.

Subdivisions,

of

Township 18 South, Range 1 East.

Of the Salt Lake Base and Meridian,

In the State of Utah.

AS SURVEYED BY

Scott T. Stewart & Andrew J. Stewart Jr., United States Deputy Surveyors,

under ~~his~~ Contract No. 217, dated November 1st, 1897.

Survey commenced July 14th, 1898.

Survey completed July 23rd, 1898.

6—151

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. Y. McAllister, Chainman.

Wm W. Richardson Jr, Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Monumman.

Peter S. Sorensen, Monumman.

Benjamin F. Stewart, Axman.

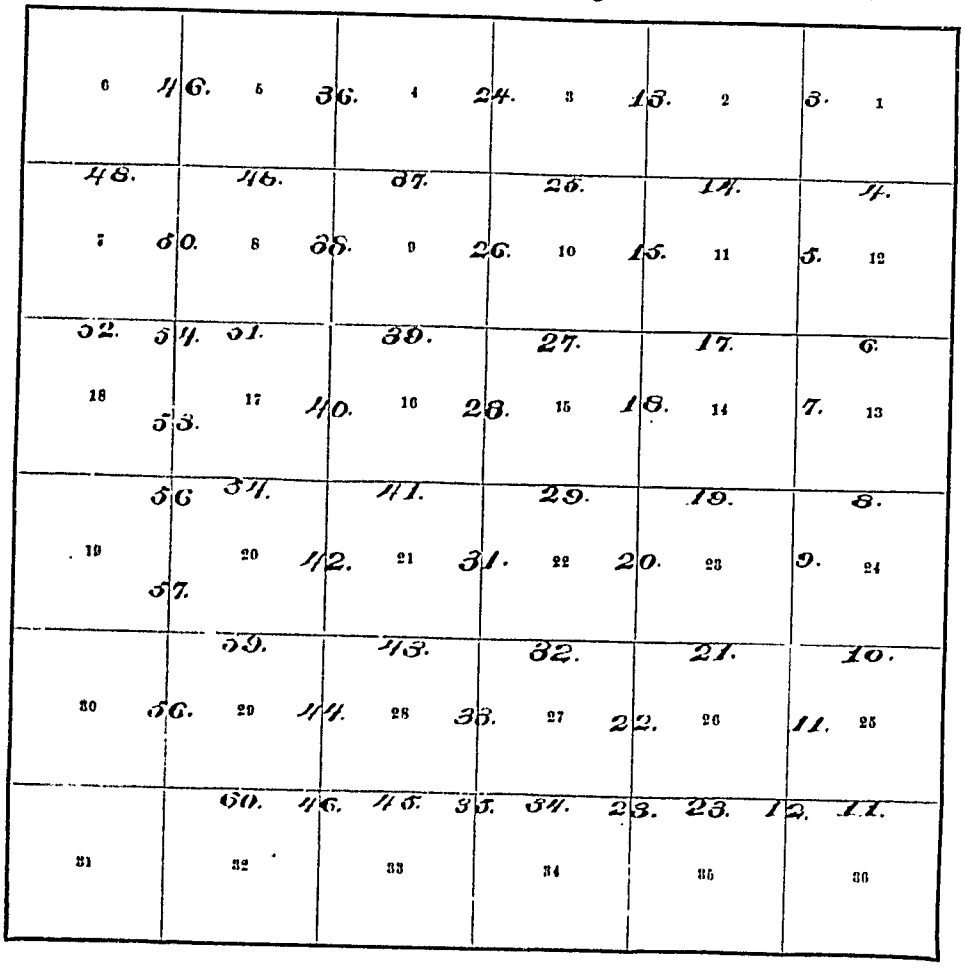
Quinby Stewart, Flagman.

For preliminary affidavits see book "A"

BOOK A-258

INDEX DIAGRAM.

Township 18 South, Range 1 East



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Sets - 180-[illegible] 54 A-258

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6-14			
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1-00-30			
51-85			
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1-00-22			
15-75			
40-40			
48-20			
1-06-00			
65-70			
48-14.50			
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Closing 18.75 ✓

18.53 ✓

18.00 ✓

18.00 ✓

Low 34.00 ✓

2.05 ✓

8.95 ✓

4.00 ✓

18.00 ✓

90 ✓

1-09-18 ✓

52.00 ✓

Retirement 5.87 ✓

high Resurrey -

40.00 ✓

~~40.00~~

40.00 ✓

40.00 ✓

79.74 ✓

2-39.74

Resurrey. low

1-01-20 ✓

1-01-20 ✓

2-02-40

40.00

2.42.40

135 / 8 / 5 | 734 / 72 / 14 | 9

11 13.7

Chains

Survey commenced July 14, 1898, and executed with a W. and L. E. Gurley light mountain transit, No. –, with solar attachment, the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb being provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former December 4, 1897, and the latter April 5, 1898.

We examine the adjustments of the instruments, and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications, resulting from solar observations, made during p. m. and a. m. hours, with a true meridian determined by observations on Polaris, we proceed as follows:

At the cor. of secs. 1, 2, 35, and 36, on N. bdy. of Tp., latitude 39° 17' N., longitude 111° 48' W., We set off 39° 17' N., on the lat. arc; 21° 35' N., on the decl. arc; and at 4h 0m p. m., l. m. t., determine a true meridian with the solar, of the Gurley instrument, and mark a point thereof on a stone, firmly set in the ground,

Chains 5 chs. N. of the corner.

At 11h 54m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions; and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station.

July 14, 1898.

July 15, 1898: At 6h 15m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the true meridian thus determined by cutting a small groove in the stone set July 14, on which the true meridian falls 0.4 ins. east of the mark determined by the solar, of the Gurley instrument.

At 6h 20m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the true meridian thus determined, by cutting a small groove in the stone set July 14, on which the true meridian falls 0.4 ins. east of the mark determined by the solar.

At 7h 53m a. m., l. m. t., we set off 39° 17' N., on the lat. arc; 21° 30' N., on the decl. arc; and mark a point in the true meridian determined with the solar, of the Gurley instrument, by a cross on the stone already set 5 chs. N. of our station. This mark falls 0.34 ins. east of the true meridian established by Polaris observation.

The solar apparatus of the Gurley instrument, by p. m. and a. m.

Chains	
	observations, defines positions for true meridians, respectively about 0.22 west and 0.18 east of the meridian established by Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory. The magnetic bearing of the true meridian, at 7h 30m a. m. is N. 16° 36' W.; the angle thus determined, reduced by the table, page 100, gives the ~~mean~~ mag. decl. 16° 30' E.
	From the cor. of secs. 1, 2, 35, and 36, heretofore described, we run S. 0° 1' E., bet. secs. 1 and 2. Over mountainous land, through heavy cedar and pinion pine timber; descend.
2.00	Bottom of hollow, course S. 30° W.; ascend.
19.50	Top of ridge; 100 ft. above hollow, bears E. and W.; descend.
40.00	Set a limestone, 18 x 14 x 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A cedar, 14 ins. diam., bears S. 50° E., 22 lks. dist., marked ¼ S. 1, B. T. A pinion pine, 3 ins. diam., bears W., 3 lks. dist., marked ¼ S. 2, B. T.
45.00	Wood road in hollow, 50 ft. below ¼ sec. cor., course S. 30° W.; ascend.
71.50	Top of spur, 50 ft. above hollow, bears E. and W.; descend.
80.00	Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, marked with 5 notches on S. and 1 notch on E. edges; from which A pinion pine, 6 ins. diam., bears

Chains

N. 40° E., 95 lks. dist., marked T. 18 S., R. 1 E., S. 1, T3. J.
A pinion pine, 8 ins. diam., bears S. 65° E., 13 lks. dist., marked T. 18 S., R. 1 E., S. 12, T3. J.
A pinion pine, 10 ins. diam., bears S. 76° W., 94 lks. dist., marked T. 18 S., R. 1 E., S. 11, T3. J.
A pinion pine, 12 ins. diam., bears N. 44° W., 50 lks. dist., marked T. 18 S., R. 1 E. S. 2, T3. J.

and, mountainous.

Soil, clay and gravelly loam; 2nd rate.
Timber, cedar and pinion pine.
Good grass for grazing.
Mountainous or heavily timbered land, 80.00 chs.

East, on a random line bet. secs. 1 and 12.

40.00 Set temp. ± sec. cor.

80.30 Intersect E. bdy. of T. p. at the cor. of secs. 1 and 12, heretofore described.

Thence we run
West, on a true line bet. secs. 1 and 12.

Over mountainous land, through avg cedar and pinion pine timber, descend.

1.85 Bottom of cañon, 30 ft. below cor., course S. 50° W.; ascend.

4865 Top of ridge 250 ft. above cañon, bears N. 60° E. and S. 60° W.; descend.

40.15 Set a limestone, 18 x 9 x 7 ins., 12 ins. in the ground, for ± sec. cor., marked ± on N. face; from which

A cedar, 12 ins. diam., bears N. W., 40 lks. dist., marked ± S. 1, T3. J.
A pinion pine, 10 ins. diam., bears S. 10 lks. dist., marked ± S. 12, T3. J.

80.30 The cor. of secs. 1, 2, 11, and 12; 450 ft. below ridge.

Land, mountainous.

Chains	
	Soil, clay and gravelly loam; 2nd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous, or heavily timbered land, 80.30 chs.
	S. 0° 1' E., bet. secs. 11 and 12.
	Over mountainous land, through scattering cedar and pinion pine timber; descend.
30.00	Road leading from Manti to Fayette, bears E. and W.; in bottom of hollow, 200 ft. below cor., course E.; ascend.
40.00	Set a limestone, 14 x 9 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.;
44.00	Enter heavy cedar and pinion-pine timber, bears E. and W.
80.00	Set a limestone, 14 x 8 x 6 ins., 9 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, marked with 4 notches on S. and 1 notch on E. ed yes; from which
	A pinion-pine, 10 ins. diam., bears N. 30° E., 46 lks. dist., marked T. 18 S., R. 1 E., S. 12, B.T.
	A pinion-pine, 7 ins. diam., bears S. 70° E., 6 lks. dist., marked T. 18 S., R. 1 E., S. 13, B.T.
	A pinion-pine, 12 ins. diam., bears S. 84° W., 20 lks. dist., marked T. 18 S., R. 1 E. S. 14, B.T.
	A pinion pine, 12 ins. diam., bears N. 80° W. 74 lks. dist., marked T. 18 S., R. 1 E., S. 11, B.T.
	Land, mountainous.
	Soil, clay loam and gravelly; 2nd

Chains	
	and 3rd. rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line bet. secs. 12 and 13.
40.00	Set temp. ✠ sec. cor.
80.40	Intersect E. bdy. of Tp., 10 lks. S. of the cor. of secs. 12 and 13. Thence we run S. 89° 56' W., on a true line bet. secs. 12 and 13. Over mountainous land, through scattering cedar and pinion-pine timber; ascend.
4.10	Top of ridge, 50 ft. above cor., bears N. 10° E. and S. 10° W.; descend.
27.40	Road leading from Manti to Fayette, bears N. W. and S. E.; in bottom of cañon, 250 ft. below ridge, course S. E.; ascend.
40.20	Top of ridge, 250 ft. above cañon, bears N. 60° W. and S. 30° E. Set a limestone, 24 x 12 x 12 ins., 18 ins. in the ground, for ✠ sec. cor., marked ✠ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable, descend abruptly.
55.00	Bottom of deep cañon, 300 ft. below ridge, course S. 30° E.; ascend.
73.00	Top of ridge, 500 ft. above cañon, bears N. 30° E. and S. 80° W.; descend.
80.40.	The cor. of secs. 11, 12, 13, and 14. Land, mountainous. Soil, clay loam and gravelly; 2nd. and 3rd. rate.

Chains	
	Timber, scattering cedar and pinion-pine. Good grass for grazing. Mountainous land, 80.40 chs. July 15, 1898: At this cor. we set off 21° 27' W., on the decl. arc; and at 0h 6m p. m., l. m. t., observer the sun on the meridian the resulting lat. is 39° 16' N.; which is about 0.4' greater than the proper lat.
	S. 0° 1' E., bet. secs. 13 and 14. Over mountainous land, through heavy cedar and pinion-pine timber; ascend.
1.50	Top of ridge, bears N. 80° E. and S. 10° W.; descend gently.
5.00	Head of swale, 50 ft. below ridge, course S. 60° E.; ascend.
26.00	Same ridge as crossed at 1.50 chs., 50 ft. above swale, bears N. 20° W. and S. 4° E.; thence along W. side of ridge.
40.00	Set a limestone, 20 x 12 x 8 ins., 15 ins. in the ground, for ± sec. cor., marked ± on W. face; from which A pinion-pine, 12 ins. diam., bears N. 3° E. 10 lks. dist., marked ± S. 13, B. T. A pinion pine, 6 ins. diam., bears S. 30° W., 50 lks. dist., marked ± S. 14, B. T.
80.00	Set a limestone, 30 x 10 x 8 ins., 22 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, marked with 3 notches on S. and 1 notch on E. edges; from which A pinion-pine, 8 ins. diam., bears N. 40° E., 28 lks. dist., marked T. 18 S., R. 1 E., S. 13, B. T. A pinion-pine, 15 ins. diam., bears N. 87° W., 100 lks. dist., marked T. 18 S., R. 1 E., S. 14, B. T. no other trees within limits; raise

a mound of stone, 2 ft. base, 1½ ft. hi
W. of cor. Pits impracticable.
Land, mountainous.
oil, clay loam and gravelly; 2nd.
and 3rd. rate.
Timber, cedar and pinion pine.
ood grass for grazing.
tainous or heavily timbered
d, 80.00 chs.

N. 89°56' E., on a random line bet.
secs. 13 and 24.
40.00 Set temp. ✠ sec. cor.
80.00 Intersect E. bdy. of Tp., 40 lks. S. of the
cor. of secs. 13 and 24.
Thence we run
S. 89°35' W., on a true line bet. secs.
13 and 24.
Over rolling land, through dense
undergrowth; ascend gently.
15.00 Begin ascent of mountain, bears
N. 40° E. and S. 40° W.
18.00 Top of spur, 50 ft. above cor., bears N.
30° W. and S. 30° E.; leave undergrowth
and enter heavy cedar and pinion
pine timber; bears with ridge; descend.
24.60 Bottom of cañon, 100 ft. below ridge,
course S. 65° E.; ascend.
40.00 Set a limestone, 18 x 10 x 4 ins., 12 ins. in
the ground, for ✠ sec. cor., marked
✠ on N. face; from which
A pinion pine, 10 ins. diam., bears
N. 70° W., 50 lks. dist., marked ✠ S. 13, B.T.
A pinion pine, 8 ins. diam., bears
S. 50° E., 40 lks. dist., marked ✠ S. 24, B.T.
79.60 Top of high ridge, 450 ft. above cañon,
bears N. 4° E. and S. 4° W.; descend.
80.00 The cor. of secs. 13, 14, 23, and 24.
Land, mountainous and rolling.

Chains	
	Soil, clay loam and gravelly; 2nd. and 3rd rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	S. 0°1' E., bet. secs. 23 and 24.
	Over mountainous land, through heavy cedar and pinion-pine timber. ascend.
2.00	Top of flat ridge, 10 ft. above cor., bears N. 4° E. and S.; thence along top of ridge, gently descending.
40.00	Set a sandstone, 16 x 10 x 5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
	A pinion pine, 15 ins. diam., bears N. 30° E., 30 lks. dist., marked ¼ S. 24, B.T.
	A cedar, 10 ins. diam., bears S. 44° W., 31 lks. dist., marked ¼ S. 23, B.T.
80.00	Set a sandstone, 26 x 9 x 6 ins., 19 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, marked with 2 notches, on S. and 1 notch on E. edges; from which
	A cedar, 10 ins. diam., bears N. 55° E., 88 lks. dist., marked T. 18 S., R. 1 E., S. 24, B.T.
	A cedar, 20 ins. diam., bears S. 28° E., 42 lks. dist., marked T. 18 S., R. 1 E., S. 25, B.T.
	A cedar, 12 ins. diam., bears S. 55° W., 86 lks. dist., marked T. 18 S., R. 1 E., S. 26, B.T.
	A cedar, 10 ins. diam., bears N. 64° W., 8 lks. dist., marked T. 18 S., R. 1 E., S. 23, B.T.
	Land, mountainous.
	Soil, gravelly loam; 2nd rate.
	Timber, cedar and pinion-pine.

Sub-division of T. 18 S., R. 1 E. - Continued.

ood grass for grazing.
ountainous or heavily
and, 80.00 chs.

N. 89°39' E., on a random line bet.
secs. 24 and 25.

40.00 Set temp. ± sec. cor.

80.30 Intersect E. bdy. of Tp. 20 lks. N. of the cor. of secs. 24 and 25,
Thence we run
S. 89°48' W., on a true line bet. secs. 24 and 25.
Over level land, through dense undergrowth.

10.00 Begin ascent of mountain, bears N. and S.

40.15 Set a sandstone, 20 x 10 x 6 ins., 15 ins. in the ground, for ± sec. cor., marked ± on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

60.00 Leave undergrowth, and enter any cedar and pinion-pine timber, bears N. and S.

80.30 The cor. of secs. 23, 24, 25, and 26.
Land, level and mountainous.
oil, clay loam and gravelly; 2nd and 3rd rate.
Timber, cedar and pinion-pine, undergrowth, sage-brush and shadscales.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.30 chs.

July 15, 1898.

July 16, 1898: At 7h 52m a. m., l. m. t., we

Chains	
	set off 39°14' N., on the lat. arc; 21°25' N., on the decl. arc; and determine a true meridian at the cor. of secs. 23, 24, 25, and 26.
	Thence we run
	S. 0°1' E., bet. secs. 25 and 26.
	Over mountainous land, through scattering cedar and pinion-pine timber; descend along top of ridge.
40.00	Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for ± sec. cor., marked ± on W. face; from which
	A cedar, 7 ins. diam., bears E., 22 lks. dist., marked ± S. 25, T. 3.
	A cedar, 8 ins. diam., bears S. 80° W., 20 lks. dist., marked ± S. 26, T. 3.
80.00	Set a sandstone, 20 x 10 x 5 ins., 15 ins. in the ground, for cor. of secs. 25, 26, 35, and 36, marked with 1 notch on S. and 1 notch on E. edges; and raised a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	From this cor. the Mount Temple bears N. 62°15' E., about 8 miles dist.
	Land, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, scattering cedar and pinion-pine.
	Good grass for grazing.
	Mountainous land, 80.00 chs.
	N. 89°48' E., on a random line bet. secs. 25 and 36.
40.00	Set temp. ± sec. cor.
80.18	Intersect E. bdy. of Tp. 26 lks. N. of the cor. of secs. 25 and 36,
	Thence we run
	S. 89°59' W., on a true line bet. secs.

Chains 25 and 36.

Over level land, through dense undergrowth; ascend gently.

40.09 Set a limestone, 16x6x5 ins., 11 ins. in ground, for ¼ sec. cor.; marked ¼ on N face; and raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

45.00 Begin ascent of mountain, bears N. and S.

+ 80.18 The cor. of secs. 25, 26, 35 and 36; 500 ft. above ¼ sec. cor.

Land, level and mountainous.

Soil, clay loam and gravelly; 2nd. and 3rd. rate.

No timber.

Undergrowth, sage-brush and shadscales.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.18 chs.

Note.-

Knowing that this line will require a closing cor. on N. bdy. San Pete Indian Reservation, we run N. .0° 1' E., on a true line bet. fracl. secs. 35 and 36.

Over mountainous land, through dense undergrowth; descend along top of ridge.

- 5.48 Intersect N. bdy. San Pete Indian Reservation 18.75 chs. S. 89° 45' W. from the closing cor. of secs. 35 and 36, S., heretofore described.

Set a limestone, 15x10x4 ins., 10 ins. in the ground, for closing cor. of fracl. secs. 35 and 36, marked C.C. on N.; with 1 groove on E. and 5

Chains	
	grooves on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Land, mountainous. Soil, clay loam; 2nd rate. No timber. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 5.48 chs.
	July 16, 1898; At this cor. we set 21° 17' N., on the decl. arc; and at 0 h 4 m p. m., l. m. t., observe the sun on the meridian, the resulting lat: is 39° 13' N., which is about the proper lat.
	From the cor. of secs. 2, 3, 34, and 35, on N. bdy. of Tp. heretofore described We run S. 0° 1' E., bet. secs. 2 and 3. Over mountainous land, through heavy cedar and pinion-pine timber, descend.
16.50	Bottom of hollow, 100 ft. below cor., course S. E.; ascend.
21.00	Wood road on top of ridge, 150 ft. above hollow, bears N. W. and S. E.; descend.
23.00	Bottom of hollow, 75 ft. below ridge, course S. E.; ascend.
31.00	Top of spur, 100 ft. above hollow, bears N. W. and S. E.; descend.
37.50	Bottom of hollow, 60 ft. below ridge, course S. E.; ascend.
40.00	Set a limestone, 20 x 12 x 8 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which

Chains

Pinion pine, 10 ins. diam., bears S. 82° E., 9 lks. dist., marked # S. 2, B. T.
Cedar, 24 ins. diam., bears S. 55° W. 12 lks. dist., marked # S. 3, B. T.

47.00 Top of ridge, 100 ft. above # sec. cor., bears N. W. and S. E.; descend.

75.50 Foot of descent, bears N. E. and S. W.; enter bottom of Mellon's cañon; leave heavy timber, bears N. E. and S. W.

77.50 Wood road in Mellon's cañon, bears N. E. and S. W.

80.00 Set a hard sandstone, 24 x 9 x 9 ins., 18 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, marked with 5 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, clay loam, and gravelly; 1st. and 3rd. rate.
Timber, cedar and pinion pine.
Good grass for grazing.
Mountainous or heavily timbered land, 80.00 chs.

East, on a random line bet. secs. 2 and 11.

110.00 Set temp. # sec. cor.

80.10 Intersect N. and S. line, at the cor. of secs. 1, 2, 11, and 12.
Thence we run
West, on a true line bet. secs. 2 and 11.
Over mountainous land, through heavy cedar and pinion pine timber; descend.

5.00 Wood road, bears N. and S. 50° W.; in bottom of hollow, 50 ft. below cor.,

Chains	
	course S. 50° W.; enters scattering timber, and dense undergrowth, bears with canon; ascend.
40.05	Set a limestone, 16x10x8 ins. 11 ins. in the ground, for ± sec. cor., marked # on N. face; from which A cedar, 6 ins. diam., bears N. 70° E. 73 lks. dist., marked ± S. 2, B. T. A cedar, 14 ins. diam., bears S. 84° E. 48 lks. dist., marked ± S. 11, B. T.
50.00	Top of ridge, 50 ft. above ± sec. cor., bears N. and S.; descend.
75.00	Leave timber, bears N. and S.
77.60	Foot of descent, bears N. E. and S. W., enter bottom of Mellor's canon.
79.60	Center of Wash in Mellor's canon, 30 lks. wide, 6 ft. deep, course S. W.
80.10	The cor. of secs. 2, 3, 10, and 11. Land, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, cedar and pinion-pine. Undergrowth, sage-brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.10 chs. July 16, 1898.

July 18, 1898: At 7h 58m a. m., l. m. t., we set off 39° 17' N., on the lat. arc; 20° 59' N., on the decl. arc; and determine a true meridian at the cor. of secs. 2, 3, 10, and 11.
Thence we run
S. 0° 1' E., bet. secs. 10 and 11.
Over mountainous land, through sage brush.

.50	Center of wash in Mellor's canon, 30 lks.

wide, 6 ft. deep, course S. W.

2.50 Leave cañon, begin ascent, bears E. and S. W.

6.00 Enter heavy cedar and pinion pine timber, bears E. and W., leave

12.00 Top of ridge, 100 ft. above cañon, E. and W.; descend.

27.00 Wood road, bears N. 80° W. and S. 80° E.; bottom of hollow, 75 ft. below ridge, course N. 80° W.; ascend.

38.50 Top of ridge, 50 ft. above hollow, bears E. and W.; descend.

40.00 Set a limestone, 18 x 7 x 4 ins., 12 in the ground, for ± sec. cor., marked ± on W. face; from which

A pinion-pine, 16 ins. diam., bears N. 22° 30' E., 80 lks. dist., marked ± S. 11, T. 3 S.

A cedar, 12 ins. diam., bears N. 33° W. 30 lks. dist., marked ± S. 10, T. 3 S.

46.30 Road leading from Manti to Fayette, bears N. E. and S. W.; in hollow, 50 ft. below ridge, course S. W.; ascend

55.00 Top of low flat ridge, 30 ft. above hollow, bears N. E. and S. W.; descend.

66.00 Wood road, bears N. E. and S. W.; in hollow, 50 ft. below ridge, course S. W.; ascend.

80.00 Top of spur, 30 ft. above hollow, bears E. and W.

Set a limestone, 20 x 12 x 5 ins., 15 ins. in the ground, for cor. of secs. 10, 11, 14, and 15, marked with 4 notches on S. and 2 notches on E. edges; from which

A pinion-pine, 12 ins. diam., bears N. 67° E., 67 lks. dist., marked T. 18 S., R. 1 E. S. 11, T. 3 S.

A pinion-pine, 8 ins. diam., bears S. 54° 30' E. 52 lks. dist., marked T. 18 S., R. 1 E. S. 14, T. 3 S.

A cedar, 12 ins. diam., bears S. 32° W., 30 lks. dist., marked T. 18 S., R. 1 E. S. 15, T. 3 S.

A pinion-pine, 8 ins. diam., bears N. 55° W., 16 lks. dist., marked T. 18 S., R. 1 E. S. 10, T. 3 S.

Chains	
	Land, rolling mountains. Soil, clay and gravelly loam; 2nd rate. Timber, cedar and pinion-pine. Undergrowth, sage-brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 8000 chs.
	East, on a random line bet. secs. 11 and 14.
40.00	Set temp. ± sec. cor.
79.80	Intersect N. and S. line, 30 lks. N. of cor. of secs. 11, 12, 13, and 14.
	Thence we run N. 89° 47' W., on a true line bet. secs. 11 and 14.
	Over mountainous land, through scattering cedar and pinion-pine timber; descend.
39.90	Set a sandstone, 14 x 12 x 4 ins. 9 ins. in the ground, for ± sec. cor., marked ± on N. face; from which A cedar, 8 ins. diam., bears N. 78° W. 13 lks. dist., marked ± S. 11, B. T. A pinion-pine, 10 ins. diam., bears S. 38° 30' E., 60 lks. dist., marked ± S. 14, B. T.
	Enter heavy timber, bears N. and S.
50.00	Bottom of hollow, 350 ft. below sec. cor., course S. W.; ascend.
60.00	Top of spur, 40 ft. above hollow, bears N. E. and S. W.; descend.
79.80	The cor. of secs. 10, 11, 14, and 15.
	Land, mountainous. Soil, clay loam, and gravelly; 2nd and 3rd rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered

Subdivision of T. 18 S., R. 1 E. – Continued.

Chains land, 79.80 chs.

S. 0° 1' E., bet. secs. 14 and 15.
Over mountainous land, through heavy cedar and pinion-pine timber; descend.

10.00 Bottom of hollow, 20 ft. below ridge, course S. W.; ascend.

20.00 Top of spur, 30 ft. above hollow, bears N. E. and S. W.; descend.

40.00 Set a limestone, 24 x 9 x 6 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
A cedar, 4 ins. diam., bears S. 18° 30' E. 103 lks. dist., marked ¼ S. 14, B.T.
A cedar, 10 ins. diam., bears S. 74° 30' W., 146 lks. dist., marked ¼ S. 15, B.T.

41.00 Foot of descent, bears N. E. and S. W.; thence across broad hollow; leave timber and enter dense under-growth, bears N. E. and S. W.

43.25 Wash, 20 lks. wide, 6 ft. deep, in hollow, course S. W.

49.30 Wood road, bears N. E. and S. W.

53.50 Leave hollow; begin ascent, bears N. E. and S. W.; leave undergrowth and enter cedar and pinion-pine timber, bears N. E. and S. W.

80.00 Set a limestone, 18 x 10 x 8 ins., 12 ins. in the ground, for the cor. of secs. 14, 15, 22, and 23, marked with 3 notches on S. and 2 notches on E. edges; from which
A pinion-pine, 9 ins. diam., bears N. 50° E. 30 lks. dist., marked T. 18 S., R. 1 E., S. 14, B. T.
A cedar, 20 ins. diam., bears S. 35° E. 24 lks. dist., marked T. 18 S., R. 1 E., S. 23, B.T.
A pinion pine, 8 ins. diam., bears S. 13° W. 77 lks. dist., marked T. 18 S., R. 1 E., S. 22, B.T.
A pinion-pine, 14 ins. diam., bears N. 47° W. 13

Chains	
	lks. dist., marked T. 18 S., R. 1 E. S. 15, M. T.
	Land, mountainous.
	Soil, clay and gravelly loam; 2nd rate
	Timber, cedar and pinion-pine.
	Undergrowth, sage-brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	S. 89° 47' E., on a random line bet. secs. 14 and 23.
40.00	Set temp. ± sec. cor.
80.00	Intersect N. and S. line, 10 lks. W. of the cor. of secs. 13, 14, 23, and 24.
	Thence we run
	N. 89° 43' W., on a true line bet. secs. 14 and 23.
	Over mountainous land, through heavy cedar and pinion-pine timber; descend mountain.
40.00	Set a limestone, 20 x 13 x 4 ins., 15 ins. in the ground, for ± sec. cor., marked ± on N. face, from which
	a pinion-pine, 10 ins. diam., bears N. 15° E. 76 lks. dist., marked ± S. 14, M. T.
	a pinion-pine, 16 ins. diam., bears S. 60° E. 54 lks. dist., marked ± S. 23, M. T.
48.80	Wood road, bears N. 65° E. and S. 65° W.
52.00	Bottom of hollow, 400 ft. below sec. cor., course S. 45° W.; ascend.
80.00	The cor. of secs. 14, 15, 22, and 23.
	Land, mountainous.
	Soil, clay loam and gravelly; 2nd and 3rd. rate.
	Timber, cedar and pinion-pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.

Subdivision of T. 18 S., R. 1 E. — Continued.

Chains July 18, 1898: At this cor. we set off 20°57' N., on the decl. arc; and at 11h 58m a. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39°15' N., which is about 0.'27 greater than the proper lat.

S. 0°1' E., bet. secs. 22 and 23.
Over rolling mountains, through heavy cedar and pinion-pine timber; ascend.

15.00 Top of ridge, 100 ft. above cor., bears N. E. and S. W.; descend.

28.00 Leave heavy timber; enter scattering timber, and scattering undergrowth, bears N. E. and S. W.

38.20 Wood road leading to Gunnison, bears N. 50° E. and S. 30° W.; in cañon 100 ft. below ridge, course S. 30° W.; ascend.

40.00 Set a limestone, 16×9×6 ins., 11 ins. in the ground, for ± sec. cor., marked ± on W. face; from which
A cedar, 8 ins. diam., bears S. 46° E. 35 lks. dist., marked ± S. 23, B. T.
A cedar, 8 ins. diam., bears N. W. 20 lks. dist., marked ± S. 22, B. T.

80.00 Set a limestone, 16×12×5 ins., 11 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; from which
A pinion-pine, 18 ins. diam., bears N. 73° E. 200 lks. dist., marked T. 18 S., R. 1 E., S. 23, B. T.
A cedar, 6 ins. diam., bears S. 66° E. 32 lks. dist., marked T. 18 S., R. 1 E. S. 26, B. T.
A cedar, 7 ins. diam., bears S. 81° W. 240 lks. dist., marked T. 18 S., R. 1 E., S. 27, B. T.
No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Chains	
	Land, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, cedar and pinion-pine. Undergrowth, sage-brush. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	S. 89° 43' E., on a random line bet. secs. 23 and 26.
40.00	Set temp. ± sec. cor.
79.70	Intersect N. and S. line 40 lks. S. of the cor. of secs. 23, 24, 25, and 26. Thence we run West, on a true line bet. secs. 23 and 26. Over mountainous land, through scattering cedar and pinion-pine timber and undergrowth; descend
19.00	Wood road, bears N. 50° E. and S. 50° W.; in bottom of hollow, 200 ft. below cor., course S. 50° W.; ascend.
31.00	Top of ridge, 200 ft. above hollow, bears N. 40° E. and S. 20° W.; descend.
39.85	Set a limestone, 30x8x8 ins., 22 ins. in the ground, for ± sec. cor., marked ± on N. face; from which A pinion pine, 18 ins. diam., bears N. 52° E. 190 lks. dist., marked ± S. 23, T. 3. J. A cedar, 6 ins. diam., bears S. 63° E. 18 lks. dist., marked ± S. 26, T. 3. J.
43.00	Wood road, bears N. 20° E. and S. 20° W.; in hollow, 225 ft. below ridge, course S. 20° W.; ascend.
55.00	Top of ridge, 250 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
79.70	The cor. of secs. 22, 23, 26, and 27. Land, mountainous.

Subdivision of T. 18 S., R. 1 E. — Continued.

Chains Soil, clay and gravelly loam; 2nd rate
timber, cedar and pinion-pine.
Undergrowth, sage-brush and shad-
scales.
Good grass for grazing.
Mountainous land, 79.70 chs.

S. 0° 1' E.; bet. secs. 26 and 27.
Over mountainous land, through
scattering cedar and pinion pine
timber; ascend.

8.00 Top of ridge, 80 ft. above sec. cor., bears
N. 60° E. and S. 60° W.; descend.

21.00 Bottom of hollow, 90 ft. below ridge,
course W.; ascend.

40.00 Set a limestone, 16x8x6 ins., 11 ins. in
the ground, for ¼ sec. cor., marked ¼
on W. face; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor. Pits
acticable.

42.00 op of ridge, 300 ft. above hollow, bears
E. and W.; descend.

51.00 Bottom of hollow, 120 ft. below ridge,
course W.; ascend.

62.50 Top of ridge, 120 ft. above hollow; bears
E. and W.; descend.

80.00 Set a limestone, 72x9x6 ins. 40 ins. in
the ground, for cor. of secs. 26, 27, 34, and
35, marked with 1 notch on S. and
notch on E. edges; and raise a
mound of stone, 2 ft. base, 1½ ft. high,
W. of cor. Pits impracticable.
Land, mountainous.
oil, clay and gravelly loam; 2nd rate.
Timber, cedar and pinion pine.
Good grass for grazing.
Mountainous land, 80.00 chs.

Chains	
.	East, on a random line bet. secs. 26 and 35.
40.00	Set temp. ± sec. cor.
79.98	Intersect N. and S. line, 32 lks. S. of sec. 25, 26, 35, and 36.
	Thence we run S. 89°46' W., on a true line bet. secs. 26 and 35.
	Over mountainous land, through dense undergrowth; descend.
36.50	Wood road, bears N. and S.; in hollow, 200 ft. below cor.; course S.; ascend.
39.99	Set a limestone, 20 x 12 x 5 ins., 15 ins. in the ground, for ± sec. cor., marked ± on W. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
51.50	Top of ridge, 250 ft. above hollow, bears N. 40° E. and S. 40° W.; descend.
79.98	The cor. of secs. 26, 27, 34, and 35.
	Land, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	No timber.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 79.98 chs.
	For reasons already explained We run S. 0°1' E., on a true line, bet. fracl. secs. 34 and 35.
	Over mountainous land, through dense undergrowth; descend.
4.50	Bottom of hollow, 20 ft. below cor.,

course S. 80° W.; ascend.

5.87 Intersect N. bdy. San Pete Indian Reservation, 18.53 chs. S. 88° 34' W. from the closing cor. of secs. 34 and 35, heretofore described. Set from the South.

Set a sandstone, 24 X 20 X 5 ins., 18 ins. in the ground, for closing cor. of ach. secs. 34 and 35, marked C.C. on ; with 2 grooves on E. and 4 grooves on W. faces; dig pits, 24 X 18 X 12 ins., crosswise on each line, E. and W. 3 ft., and N. of stone, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

Land, mountainous.

Soil clay loam; 2nd rate.

No timber.

Undergrowth, sage-brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 5.87 chs.

July 18, 1898.

July 19, 1898: At 7h 57m a. m., l. m. t., we took off 39° 17' N., on the lat. arc; 20° 48' N., on the decl. arc; and determine a true meridian, at the cor. of secs. 3, 4, 33, and 4, heretofore described.

Thence we run

. 0° 2' E., bet. secs. 3 and 4.

Over mountainous land, through heavy cedar and pinion-pine timber; descend.

39.50 Bottom of hollow, 350 ft. below cor., course S. 20° W. about 5.00 chs. thence E.; ascend.

40.00 Set a limestone, 16 X 12 X 8 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which

Chains	
	A cedar, 24 ins. diam., bears E. 3 lks. dist., marked # S. 3, B. T.
	A cedar, 14 ins. diam., bears N. 36° W., 204 lks. dist., marked # S. 4, B. T.
41.00	Top of low spur, 10 ft. above hollow, bears N. E. and S. W.; descend.
46.50	Bottom of same hollow, 15 ft. below spur, course S. E.; ascend.
71.00	Top of ridge 200 ft. above hollow, bears N. W. and S. E.; descend.
80.00	Set a limestone, 18 x 11 x 9 ins., 12 ins. in the ground, for cor. of secs. 3, 4, 9, and 10, marked with 5 notches on S. and 3 notches on E. edges; from which
	A cedar, 10 ins. diam., bears N. 64° 30' E., 19 lks. dist., marked T. 18 S., R. 1 E., S. 3, B. T.
	A pinion-pine, 9 ins. diam., bears S. 12° E., 52 lks. dist., marked T. 18 S., R. 1 E., S. 10, B. T.
	A cedar, 10 ins. diam., bears S. 15° W., 16 lks. dist., marked T. 18 S., R. 1 E., S. 9, B. T.
	A cedar, 14 ins. diam., bears N. 27° W. 5 lks. dist., marked T. 18 S., R. 1 E., S. 4, B. T.
	Land, mountainous.
	Soil, rich loam and gravelly; 1st and 2nd rate.
	Timber, cedar and pinion-pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line bet. secs. 3 and 10.
40.00	Set temp. # sec. cor.
80.38	Intersect N. and S. line, 25 lks. N. of the cor. of secs. 2, 3, 10, and 11.
	Thence we run
	N. 89° 49' W., on a true line bet. secs. 3 and 10.

Subdivision of T. 18 S., R. 1 E.- Continued.

Over mountainous land.

2.50 Wood road in Mellor's cañon, bears N. E. and S. W.

5.50 Leave Mellor's cañon, bears N. E. and S. W.; enter heavy timber, bears N. E. & S. W.; ascend.

35.00 Top of ridge, 300 ft. above cañon, bears N. and S.; descend.

40.19 Set a limestone, 16 x 8 x 5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ N. face; from which
Cedar, 10 ins. diam., bears N. 46° 30' E., 75 lks. dist., marked ¼ S. 3, B. T.
Cpinion-pine, 5 ins. diam., bears S. 60° E., 50 lks. dist., marked ¼ S. 10, B. T.

43.00 Bottom of hollow, 100 ft. below ridge, course S. 20° E.; ascend.

57.30 Top of spur, 100 ft. above hollow, bears and S.; descend.

63.80 Bottom of hollow, 175 ft. below ridge, course S.; ascend

80.38 The cor. of secs. 3, 4, 9, and 10.

Land, mountainous.
Soil, rich loam and gravelly; 1st and 3rd rate.
Timber, cedar and pinion pine.
Good grass for grazing.
Mountainous or heavily timbered and, 80.38 chs.

S. 0° 2' E., bet. secs. 9 and 10.
Over mountainous land, through heavy cedar and pinion-pine timber; descend.

26.50 Bottom of deep cañon, 500 ft. below cor., course S. 20° W.; ascend.

40.00 Top of spur, 300 ft. above cañon, bears E. and W.;
Set a limestone, 16 x 8 x 5 ins., 11 ins.

Chains	
	in the ground, for ¼ sec. cor., marked ¼ on W. face; from which Cu cedar, 30 ins. diam., bears N. 84° E., 47 lks. dist., marked ¼ S. 10, T. 3. J. Cu pinion-pine, 12 ins. diam., bears N. 64° W., 30 lks. dist., marked ¼ S. 9, T. 3 J. descend.
59.00	Bottom of hollow, 200 ft. below ridge, course W.; ascend.
72.50	Top of spur, 250 ft. above hollow, bears E. and W.; descend; leave timber.
80.00	Set a limestone, 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, marked with 4 notches on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rich loam and gravelly; 1st and 3rd. rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs. July 19, 1898: At this cor. we set off 20° 63' N., on the declinator; and at 11h 57m a. m., l. m. t., observe the sun on the meridian, the resulting Lat. is 39° 16' N.; which is about 0.07 greater than the proper Lat.
	S. 89° 49' E., on a random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
80.20	Intersect N. and S. line, 15 lks. N. of cor. of secs. 10, 11, 14, and 15. Thence we run N. 89° 43' W., on a true line bet. secs. 10 and 15.

Subdivision of T. 18 S., R. 1 E. - Continued.

Over rolling mountains, through heavy cedar and pinion-pine timber; descend [illegible]

20.00 Leave heavy timber; enter scattering timber, bears N. and S.

23.80 Road leading from Manti to Fayette, bears N. E. and S. W.

25.50 Wood road, bears N. and S.; in bottom of Mellor's cañon, 100 ft. below cor., course S.; ascend.

40.10 Set a limestone, 18 x 13 x 6 ins., 12 ins. in the ground, for ± sec. cor., marked ± on W. face; from which

C cedar, 10 ins. diam., bears N. 40° E. 4 lks. dist., marked ± S. 10, T. J.

C pinion-pine, 12 ins. diam., bears S. 75° W., 50 lks. dist., marked ± S. 15, T. J.

42.00 Top of spur, 30 ft. above cañon, bears N. and S.; descend.

63.70 Bottom of hollow, 40 ft. below ridge, course S.; ascend.

80.20 The cor. of secs. 9, 10, 15, and 16.

and, mountainous.

oil, clay loam; 2nd rate.

Timber, cedar and pinion-pine.

Good grass for grazing.

Mountainous or heavily timbered and, 80.20 chs.

S. 0° 2' E., bet. secs. 15 and 16.

Over mountainous land; descend.

7.00 Wood road, bears E. and W.; in bottom of Mellor's cañon, 300 ft. below sec. cor., course W.; ascend.

9.00 Enter heavy cedar and pinion-pine timber, bears E. and W.

20.50 Top of ridge, 450 ft. above cañon, bears E. and W.; leave heavy timber and enter scattering timber, bears E. and W.

Chains	descend.
40.00	Set a limestone, 14×9×8 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A cedar, 12 ins. diam., bears S. 18° E. 142 lks. dist., marked ¼ S. 15, T. J. A cedar, 14 ins. diam., bears S. 42½ W., 95 lks. dist., marked ¼ S. 16, T. J.
80.00	Set a limestone, 26×16×6 ins. 19 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, marked 18 S., on N. E., and 1 E. on S. E. faces; with 3 notches on S. and E. edges; from which A cedar, 12 ins. diam., bears S. 12½ E. 175 lks. dist., marked T. 18 S., R. 1 E., S. 22, T. J. A cedar, 12 ins. diam., bears S. 2° W., 99 lks. dist., marked T. 18 S., R. 1 E., S. 21, T. J. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, gravelly; 3rd rate. Timber, cedar and pinion-pine. Good grass for grazing. ountainous or heavily and, 80.00 chs. Note.—This corner is o foot of descent bears N. E. and S. W.
	S. 89° 43' E., on a random line bet. secs. 15 and 22.
40.00	Set temp. ¼ sec. cor.
79.80	Intersect N. and S. line, 8 lks. N. of cor. of secs. 14, 15, 22, and 23.
	Thence We run N. 89° 40' W., on a true line bet. secs. 15 and 22.
	Over mountainous land, through heavy cedar timber; descend.
20.00	Foot of descent, bears N. and S.; leave timber and enter sage-brush,

bears N. and S.; thence across flat.

31.30 Wood road leading to Gunnison, .20° E. and S. 20° W.

39.90 Set a limestone, 18x16x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

45.50 Wash, 30 lks. wide, 10 ft. deep, course S. 60° W.

57.60 Road leading from Manti to Fayette, bears N. 20° E. and S.

79.80 The cor. of secs. 15, 16, 21, and 22.

Land, mountainous and nearly level.

Soil, clay loam and gravelly; 2nd and 3rd rate.

Timber, cedar.

Undergrowth, sage-brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.80 chs.

July 19, 1898.

July 19, 1898: At the cor. of secs. 15, 16, 21, and 22, latitude 39° 15' N., longitude 111° 50' W., at 11h 34m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined by a tack driven in a wooden plug, set in the ground, 5 chs. N. of our station.

July 20, 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 35.9' to the west, on the Buff and Berger instrument,

Chains	
	and mark the True Meridian thus determined by cutting a small groove in a stone firmly set in the ground, west of the mark established by Polaris observation; the magnetic bearing of said true meridian is N 16° 35' W., which reduced by the table, page 100, of the manual, gives the mean mag. decl. 16° 30' E.
	At 8h 0m a. m., l. m. t., we set off 39° 15' N., on the lat. arc; 20° 51' N., on the decl. arc; and mark the true meridian determined with the solar, of the Gurley instrument, by a cross on the stone already set 5 chs. N. of our station; this mark falls 0.25 ins. east of the true meridian established by Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory.
	Thence we run
	S. 0° 2' E., bet. secs. 21 and 22.
	Over rolling land, through dense undergrowth; descend gently.
21.00	Wash, 30 lks. wide, 8 ft. deep, in hollow, 30 ft. below cor., course S. 80° W.; ascend gradually.
23.50	Road leading from Manti to Fayette, bears E. and W.
26.50	Leave undergrowth and enter heavy timber, bears E. and W.
40.00	Set a limestone, 18 x 12 x 6 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
	Cu pinion pine, 10 ins. diam., bears N. 51° E. 28 lks. dist., marked ¼ S. 22, B. T.
	Cu cedar, 12 ins. diam., bears S. 72° W., 26 lks. dist., marked ¼ S. 21, B. T.
80.00	Set a sandstone, 18 x 8 x 8 ins., 12 ins.

Chains in the ground, for cor. of secs. 21, 22, 27, and 28, marked with 2 notches on S. and 3 notches on E. edges; from which
Cr. pinion-pine, 14 ins. diam., bears N. 25° E. 77 lks. dist., marked T. 18 S., R. 1 E., S. 22, T. 3.
Cr. pinion-pine, 16 ins. diam., bears S. 85° E., 84 lks. dist., marked T. 18 S., R. 1 E. S. 27, T. 3.
Cr. pinion-pine, 8 ins. diam., bears S. 87° W., 28 lks. dist., marked T. 18 S., R. 1 E. S. 28, T. 3.
Cr. pinion-pine, 12 ins. diam., bears N. 26° W., 69 lks. dist., marked T. 18 S., R. 1 E. S. 21, T. 3.
and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Land, rolling.
Soil, clay loam; 2nd rate.
Timber, cedar and pinion pine.
Undergrowth, sage-brush and shadscales.
Good grass for grazing.
Heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
Note.- This cor. is at foot of descent bears N. 50° E. and N. 50° W.

S. 89° 40' E., on a random line bet. secs. 22 and 27.

40.00 Set temp. ± sec. cor.

79.70 Intersect N. and S. line, 40 lks. S. of the cor. of secs. 22, 23, 26, and 27.

Thence we run
N. 89° 57' W., on a true line bet. secs. 22 and 27.
Over mountainous land, through dense undergrowth; descend.

10.00 Foot of descent, bears N. and S.; thence across flat.

18.75 Wood road, bears N. and S.

19.00 Wash, 10 lks. wide, 4 ft. deep, course S. 20° W.

33.00 Wood road leading to Gunnison;

Chains	
	bears N. 20° W. and S. 20° E.; begin ascent, bears N. and S.
39.85	Set a limestone, 16x9x8 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
44.00	Enter scattering timber; leave undergrowth, bears N. and S.; ascend.
55.00	Top of ridge, 350 ft. above flat, bears N. E. and S. W.; enter heavy timber, bears with ridge; descend abruptly.
79.70	The cor. of secs. 21, 22, 27, and 28; 350 ft. below ridge.
	Land, mountainous and level.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, cedar and pinion-pine.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.70 chs.

	S. 0° 2' E., bet. secs. 27 and 28.
	Over mountainous land, through heavy cedar and pinion-pine timber; ascend.
12.00	Top of ridge, 300 ft. above cor., bears E. and W.; leave heavy timber; enter scattering timber, bears with ridge; descend.
40.00	Bottom of hollow, 500 ft. below ridge; course: East.
	Set a limestone, 22x12x4 ins., 17 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which

Subdivision of T. 18 S., R. 1 E. — Continued.

A cedar, 6 ins. diam., bears N. 80°
80 lks. dist., marked ∡ S. 28, B. T.
No other trees within limits; raise
a mound of stone, 2 ft. base, 1½ ft. high,
W. of cor. Pits impracticable.
60.00 ave timber, and enter dense
undergrowth, bears E. and W.
70.00 Top of spur, 200 ft. above hollow, bears
E. and S. W.; descend.
80.00 Set a sandstone, 15×12×7 ins., 10 ins.
the ground, for cor. of secs. 27, 28, 33,
d 34, marked with 1 notch on S.
and 3 notches on E. edges; and raise
a mound of stone, 2 ft. base, 1½ ft. high,
W. of cor. Pits impracticable.
and, mountainous.
oil, clay and gravelly loam; 2nd
rate.
Timber, cedar and pinion-pine.
Undergrowth, sage-brush and
shadscales.
Good grass for grazing.
Mountainous or heavily timbered
land, or land covered with dense
undergrowth, 80.00 chs.

S. 89°57' E., on a random line bet. secs.
27 and 34.
40.00 Set temp. ∡ sec. cor.
79.54 Intersect N. and S. line, 33 lks. S.
of the cor. of secs. 26, 27, 34, and 35.
Thence we run
S. 89°49' W., on a true line bet. secs.
27 and 34.
Over mountainous land, through
dense undergrowth, ascend.
39.77 Top of ridge, 250 ft. above cor., bears
N. E. and W.
Set a limestone, 16×12×6 ins., 11 ins.

Subdivision of T. 18 S., R. 1 E.—Continued.

Chains	
	in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable; thence along top of ridge.
56.00	Leave top of ridge, bears E. and S. W.; descend.
72.10	Bottom of cañon, 200 ft. below ridge, course S. 28° W.; ascend.
73.55	Wood road leading to Gunnison, bears N. 28° E. and S. 28° W. ascend.
79.54	The cor. of secs. 27, 28, 33, and 34.
	Land, mountainous.
	Soil, clay and gravelly loam and rocky; 2nd and 4th rate.
	No timber.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 79.54 chs.

For reasons already explained, we run S. 0° 2' E., on a true line bet. frac. secs. 33 and 34.

Over mountainous land; descend.

6.97	Intersect N. bdy. San Pete Indian Reservation, 18.00 chs. N. 89° 30' W. from the closing cor. of secs. 33 and 34, heretofore described: set from the South Set a limestone, 18 x 8 x 6 ins., 12 ins. in the ground, for closing cor. of frac. secs. 33 and 34, marked C. C. on N.; with 3 grooves on E., and W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.

Chains

oil, clay loam; 2nd rate.
No timber.
Good grass for grazing.
Mountainous land, 6.97 chs.
July 20, 1898; At this cor. we set off 20° 34' N., on the decl. arc; and at 0h 4m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 13' N.; which is about the proper lat.

From the cor. of secs. 4, 5, 32, and 33, on W. bdy. of Tp. heretofore described We run
S. 0° 3' E., bet. secs. 4 and 5.
Over mountainous land, through heavy cedar and pinion-pine timber; descend.

13.00 Bottom of hollow, 300 ft. below sec. cor., course W.; ascend.

32.00 Top of ridge, 600 ft. above hollow; bears E. and W.; descend.

40.00 Set a limestone, 14 x 12 x 6 ins., 9 ins. in the ground, for ± sec. cor., marked ± on W. face; from which
A cedar, 16 ins. diam., bears E. 50 lks. dist., marked ± S. 4, R. 3. J.
A pinion-pine, 10 ins. diam., bears N. 20° W., 80 lks. dist., marked ± S. 5, R. 3. J.

63.00 Bottom of hollow, 700 ft. below ridge, course S. 20° W.; ascend.

80.00 Set a sandstone, 20 x 14 x 7 ins., 15 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, marked with 5 notches on S. and 4 notches on E. edges; from which
A cedar, 6 ins. diam., bears N. 38° E., 39 lks. dist., marked T. 18 S., R. 1 E., S. 4, R. 3. J.
A pinion-pine, 5 ins. diam., bears S. 39° E. 25 lks. dist., marked T. 18 S., R. 1 E., S. 9, R. 3. J.

Chains	
	A pinion pine, 8 ins. diam., bears S. 64° W. 52 lks. dist., marked T. 18 S., R. 1 E. S. 8, B. T.
	A cedar, 12 ins. diam., bears N. 32° W. 46 lks. dist., marked T. 18 S., R. 1 E. S. 5, B. T.
	Land, mountainous.
	Soil, gravelly and rocky; 2nd and 4th rate.
	Timber, cedar and pinion-pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line bet. secs. 4 and 9.
40.00	Set temp. ± sec. cor.
80.20	Intersect N. and S. line, 25 lks. N. of cor. of secs. 3, 4, 9, and 10.
	Thence we run
	N. 89° 49' W., on a true line bet. secs. 4 and 9.
	Over mountainous land, through heavy cedar and pinion-pine timber, ascend.
10.00	Top of ridge, 100 ft. above sec. cor., bears N. 10° E. and S. 10° W.; descend.
25.50	Bottom of hollow, 250 ft. below ridge, course S. 10° W.; ascend.
40.10.	Set a limestone, 12 x 10 x 6 ins., 8 ins. in the ground, for ± sec. cor., marked ± on N. face; from which
	A cedar, 10 ins. diam., bears N. 3° W. 72 lks. dist., marked ± S. 4, B. T.
	A cedar, 4 ins. diam., bears S. 20° E. 66 lks. dist., marked ± S. 9, B. T.
47.50	Top of ridge 400 ft. above hollow, bears N. 10° E. and S. 10° W.; descend.
80.20	The cor. of secs. 4, 5, 8, and 9; 400 ft. below ridge.
	Land, mountainous.

Soil, sandy and gravelly loam; 2nd rate.
Timber, cedar and pinion-pine.
Good grass for grazing.
Mountainous or heavily timbered land, 80.20 chs.

July 20, 1898.

July 21, 1898: At 8 h. 3 m. a. m., l. m. t., we set off 39° 16' N., on the lat. arc; 20° 25' N., on the decl. arc; and determine a true meridian at the cor. of secs. 4, 5, 8, and 9.
Thence we run
S. 0° 3' E., bet. secs. 8 and 9.
Over mountainous land, through heavy cedar and pinion-pine timber; ascend.

18.50 Top of spur, 200 ft. above sec. cor., bears E. and W.; descend.

24.60 Bottom of hollow, 100 ft. below spur, course S. 80° W.; ascend.

35.00 Top of ridge, 250 ft. above hollow, bears N. E. and S.; thence along top of ridge, gently descending.

40.00 Set a limestone, 14 x 12 x 5 ins., 9 ins. in the ground, for ± sec. cor., marked ± on W. face; from which
Cedar, 6 ins. diam., bears N. 38° 30' E. 53 lks. dist., marked ± S. 9, B. J.
Cedar, 12 ins. diam., bears S. 15° W. 55 lks. dist., marked ± S. 8, B. J.

56.50 Leave top of ridge, bears N. and S. 20° W.; descend.

80.00 The point for cor., 500 ft. below ridge, falls on a stationary ledge of sandstone, 20 x 14 x 18 ft. above ground, on which we
Cut a cross (x) at the exact cor. point;

Chains	
	for cor. of secs. 8, 9, 16, and 17, marked with 4 notches on S. and E. edges; from which Pinion-pine, 10 ins. diam., bears N. 40° E. 76 lks. dist., marked T. 18 S., R. 1 E. S. 9, B.T. Cedar, 14 ins. diam., bears S. 32° E., 18 lks. dist., marked T. 18 S., R. 1 E. S. 16, B.T. Pinion-pine, 16 ins. diam., bears S. 82° W. 127 lks. dist., marked T. 18 S., R. 1 E. S. 17, B.T. Cedar, 12 ins. diam., bears N. 69° W. 81 lks. dist., marked T. 18 S., R. 1 E. S. 8, B.T. Land, mountainous. Soil, sandy loam and rocky; 1st and 4th rate. Timber, cedar and pinion-pine. Good grass for grazing. Mountainous or heavily timbered Land, 80.00 chs.
	S. 89° 49' E., on a random line bet. secs. 9 and 16.
40.00	Set temp. ✠ sec. cor.
80.40	Intersect N. and S. line, 30 lks. S. of the cor. of secs. 9, 10, 15, and 16. Thence we run S. 89° 58' W., on a true line bet. secs. 9 and 16. Over mountainous land, through scattering cedar and pinion-pine timber; ascend.
12.00	Top of ridge, 30 ft. above sec. cor., bears N. 70° E. and S. 70° W.; descend.
24.50	Wash, 30 lks. wide, 6 ft. deep, in branch of Mellor's cañon, 300 ft. below ridge, course S. 30° W.; ascend.
25.00	Wood road, bears N. 30° E. and S. 30° W.
40.20	Top of spur, 300 ft. above cañon, bears N. and S.; Set a limestone, 18 x 10 x 6 ins., 12 ins.

Chains	
	in the ground, for ± sec. cor., marked ± on N. face; from which A cedar, 8 ins. diam., bears N. 125 lks. dist., marked ± S. 9, B. J. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable; descend.
71.00	Bottom of hollow, 350 ft. below ridge; course S. 20° W.; ascend.
80.40	The cor. of secs. 8, 9, 16, and 17. Land, mountainous. Soil, gravelly and rocky; 3rd and 4th rate. Timber, cedar and pinion-pine. Good grass for grazing. Mountainous land, 80.40 chs.

	S. 0° 3' E., bet. secs. 16 and 17. Over mountainous land, through heavy cedar and pinion-pine timber; descend abruptly.
10.00	Wood road in Miller's cañon, 300 ft. below sec. cor., course S. 80° W.; ascend.
30.00	Top of ridge, 400 ft. above cañon, bears N. 80° E. and S. 80° W.; leave heavy timber, and enter scattering timber, bears with ridge; descend.
40.00	Set a limestone, 18 x 11 x 7 ins., 12 ins. in the ground, for ± sec. cor., marked ± on W. face; from which A cedar, 8 ins. diam., bears N. 84° E. 28 lks. dist., marked ± S. 16, B. J. A cedar, 10 ins. diam., bears N. 87° W. 72 lks. dist., marked ± S. 17, B. J.
57.00	Bottom of hollow, 250 ft. below ridge, course W.; ascend.
72.50	Top of ridge, 200 ft. above hollow, bears N. 10° E. and S. 70° W.; descend.

Chains	
80.00	Set a limestone, 20 x 13 x 8 ins., 15 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, marked with 3 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous.
	Soil, clay loam and gravelly; 2nd and 3rd rate.
	Timber, cedar and pinion-pine.
	Good grass for grazing.
	Mountainous or heavily timbered d, 80.00 chs.
	N. 89° 58' E., on a random line bet. cs. 16 and 21.
40.00	Set temp. ± sec. cor.
80.20	Intersect N. and S. line, 30 lks. S. of the cor. of secs. 15, 16, 21, and 22.
	Thence we run
	S. 89° 45' W., on a true line bet. secs. 16 and 21.
	Over rolling mountains, through cattering timber and dense ; ascend gradually.
36.50	Top of ridge, 50 ft. above sec. cor., bears N. E. and S. W.; descend.
40.10	Set a limestone, 18 x 10 x 4 ins., 12 ins. in ground, for ± sec. cor., marked ± on N. face; and raise a mound stone, 2 ft. base, 1½ ft. high, N. of cor. its impracticable.
45.00	Bottom of swale, 40 ft. below ridge, S. W.; ascend.
61.50	op of spur, 50 ft. above swale, bears N. and S.; descend.
80.20	The cor. of secs. 16, 17, 20, and 21.
	Land, mountainous.

Chains	
	Soil, clay loam and rocky; 2nd and 4th rate.
	Timber, cedar.
	Undergrowth, sage-brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.20 chs.
	July 21, 1898: At this cor. we set off 20° 23' N., on the decl. var.; and at 0h 2m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 15' N., which is about 0.2' greater than the proper lat.
	S. 0° 3' E., bet. secs. 20 and 21.
	Over mountainous land, through scattering timber and undergrowth; descend.
8.50	Bottom of hollow, 400 ft. below sec. cor.; course S. W.; ascend.
22.00	Top of spur, 200 ft. above hollow, bears N. 70° E. and S. 70° W.; descend.
36.00	Bottom of hollow, 150 ft. below ridge, course S. 80° W.; ascend.
40.00	Set a limestone, 18 x 14 x 12 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A cedar, 6 ins. diam., bears N. 12° E. 63 lks. dist., marked ¼ S. 21, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
48.00	Top of spur, 150 ft. above hollow, bears N. 80° E. and S. 80° W.; descend.
75.75	Bottom of cañon, 100 ft. below ridge, course S. 80° W.; ascend.
77.20	Road leading from Manti to Fayette, N. 80° E. and S. 80° W.
80.00	Set a limestone, 18 x 12 x 4 ins., 12 ins.

Chains	
	in the ground, for the cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges, from which A cedar, 4 ins. diam., bears N. 56° E. 118 lks. dist., marked T. 18 S., R. 1 E. S. 21, B.T. A cedar, 12 ins. diam., bears S. 69° E. 183 lks. dist., marked T. 18 S., R. 1 E. S. 28, B.T. A cedar, 14 ins. diam., bears S. 26½ W. 128 lks. dist., marked T. 18 S., R. 1 E. S. 29, B.T. A cedar, 8 ins. diam., bears N. 38½ W. 110 lks. dist., marked T. 18 S., R. 1 E. S. 20, B.T. Land, mountainous. Soil, clay loam and gravelly; 1st and 3rd rate. Timber, cedar and pinion-pine. Undergrowth, sage-brush. Good grass for grazing. Mountainous land, 80.00 chs.
	N. 89° 45' E., on a random line bet. secs. 21 and 28.
40.00	Set temp. ✠ sec. cor.
80.14	Intersect N. and S. lines, at the cor. of secs. 21, 22, 27, and 28. Thence we run S. 89° 45' W., on a true line bet. secs. 21 and 28. Over mountainous land, through scattering timber; descend.
40.07	Set a limestone, 18 x 8 x 5 ins., 12 ins. in the ground, for ✠ sec. cor., marked ✠ on N. face; from which A cedar, 4 ins. diam., bears N. 62° E., 244 lks. dist., marked ✠ S. 21, B.T. A cedar, 8 ins. diam., bears S. 35° W. 146 lks. dist., marked ✠ S. 28, B.T.
80.14	The cor. of secs. 20, 21, 28, and 29. Land, mountainous.

Soil, rich loam; 1st rate.
imber, cedar and pinion pine.
Good grass for grazing.
taimous land, 80.14 chs.

S. 0° 3' E., bet. secs. 28 and 29.
Over mountainous land, through
scattering timber; ascend.

40.00 Set a limestone, 22 x 10 x 5 ins., 16 ins.
the ground, for ¼ sec. cor., marked
¼ on W. face; from which
A cedar, 10 ins. diam., bears S. 65° 30' E.
14 lks. dist., marked ¼ S. 28, B. T.
A cedar, 14 ins. diam., bears S. 57° W.
53 lks. dist., marked ¼ S. 29, B. T.

64.00 Top of ridge, 600 ft. above sec. cor., bears
N. 32° E. and S. 32° W.; leave timber
& enter dense undergrowth, bears
th ridge; descend.

66.00 Head of swale, 20 ft. below ridge,
course S. 30° E.; ascend.

80.00 Set a limestone, 20 x 9 x 6 ins., 15 ins.
the ground, for cor. of secs. 28, 29, 32,
and 33, marked with 1 notch on S.
& 4 notches on E. edges; and raise
mound of stone, 2 ft. base, 1½ ft. high,
W. of cor. Pits impracticable.
and, mountainous.
oil, clay loam and gravelly; 2nd
and 3rd rate.
imber, cedar and pinion-pine.
Undergrowth, sage-brush and
shadscales.
Good grass for grazing.
Mountainous land, or land
covered with dense undergrowth,
80.00 chs.

Chains	
	N. 89° 45' E., on a random line bet. secs. 28 and 33.
40.00	Set temp. ± sec. cor.
80.30	Intersect N. and S. line, 8 lks. S. of the cor. of secs. 27, 28, 33, and 34.
	Thence we run
	S. 89° 42' W., on a true line bet. secs. 28 and 33.
	Over mountainous land, through dense undergrowth; ascend.
8.00	Top of spur, 175 ft. above sec. cor; bears N. E. and S. W.; descend.
24.50	Bottom of hollow, 200 ft. below spur; course S. E.; enter scattering timber; bears N. W. and S. E.; ascend.
40.15	Set a sandstone, 14 x 12 x 5 ins., 9 ins. in the ground, for ± sec. cor., marked ± on N. face; from which
	A cedar, 4 ins. diam., bears N. 10° E. 33 lks. dist., marked ± S. 28, T. J.
	A cedar, 10 ins. diam., bears S. W. 67 lks. dist., marked ± S. 33, T. J.
42.00	Top of ridge, 250 ft. above hollow, bears N. W. and S. E.; descend.
61.00	Leave timber; bears N. and S.
73.50	Bottom of hollow, 150 ft. below ridge; course S. 30° E.; ascend.
80.30	The cor. of secs. 28, 29, 32, and 33; 150 ft. above hollow.
	Land, mountainous.
	Soil, clay loam; 2nd rate.
	Timber, scattering cedar and pinion-pine.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.30 chs.

Chains	
	For reasons already explained we run
	S. 0° 3' E., on a true line bet. fracl. secs. 32 and 33.
	Over mountainous land., through dense undergrowth; ascend
— 6.14	Intersect N. bdy. San Pete Indian Reservation, 18.00 chs. S. 89° 30' W. from the closing cor. of secs 32 and 33, heretofore described. Set from the South
	Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for closing cor. of fracl. secs. 32 and 33, marked C.C. on N.; with 4 grooves on E. and 2 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.
	Soil, clay loam and rocky; 2nd and 4th rate.
	No timber.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 6.14 Chs.
	July 21, 1898.

July 22, 1898; At 8h 2m a. m., l. m. t., we set of 39° 17' N., on the Lat. arc; 2.0° 13' N., on the decl. arc; and determine a true meridian at the cor. of secs. 5, 6, 31, and 32, on N. bdy. of Tp, heretofore described. Thence we run

S. 0° 3' E., bet. secs. 5 and 6.

Over mountainous land, through heavy cedar and pinion-pine

Chains	
	timber; descend.
15.75	Bottom of gulch and canon, 350 ft. below cor., course S. 80° W.; ascend.
28.50	Top of spur, 200 ft. above hollow, bears N. 80° E. and S. 80° W.; leave heavy timber, enter scattering timber, bears with ridge; descend.
33.10	Bottom of hollow, 100 ft. below ridge, course S. 80° W.; ascend.
40.00	Top of spur, 80 ft. above hollow, bears N. 10° W. and S. E.; Set a limestone, 20 x 11 x 6 ins., 15 ins. in the ground, for ± sec. cor., marked ± on W. face; from which Cr cedar, 14 ins. diam., bears N. 4° E., 12 lks. dist., marked ± S. 5, B. T. No other trees within limits; raised a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable; descend.
66.50	Bottom of canon, 250 ft. below ridge, course W.; ascend.
72.50	Top of spur, 150 ft. above canon, bears E. and W.; descend
80.00	Set a sandstone, 24 x 18 x 6 ins., 18 ins. in the ground, for cor. of secs. 5, 6, 7, and 8, marked with 5 notches on S., and E. edges; from which Cr cedar, 10 ins. diam., bears N. 9½ E. 90 lks. dist., marked T. 18 S., R. 1 E., S. 5, B. T. Cr cedar, 7 ins. diam., bears S. 26° E. 26 lks. dist., marked T. 18 S., R. 1 E., S. 8, B. T. Cr cedar, 6 ins. diam., bears S. 12° W. 19 lks. dist., marked T. 18 S., R. 1 E., S. 7, B. T. Cr cedar 8 ins. diam., bears N. 30° W. 90 lks. dist.; marked T. 18 S., R. 1 E. S. 6, B. T.

Land, mountainous.

Soil, rich loam and rocky; 1st and 4th rate.

Timber, cedar and pinion-pine.

Good grass for grazing.

Chains. Mountainous or heavily timbered land, 8000 chs.

East, on a random line bet. secs. 5 and 8.

40.00 Set temp. # sec. cor.

80.30 Intersect N. and S. line, 20 lks. W. of the cor. of secs. 4, 5, 8, and 9.

Thence we run
N. 89° 51' W., on a true line bet. secs. 5 and 8.

Over mountainous land, through scattering cedar and pinion-pine timber, descend.

11.50 Bottom of hollow, 350 ft. below sec. cor.; course S. 30° W.; ascend.

40.13 Set a limestone, 16 x 10 x 8 ins., 11 ins. in the ground, for # sec. cor., marked # on N. face; from which
Cedar, 8 ins. diam., bears N. 80° W. 50 lks. dist., marked # S. 5, B. J.
No other trees within limits; raised a mound of stone, 2 ft. base, 1½ ft. high N. of cor. Pits impracticable.

57.00 Top of ridge, 350 ft. above hollow; bears N. and S.; descend.

80.30 The cor. of secs. 5, 6, 7, and 8; 500 ft. below ridge.

Land, mountainous.
Soil, gravelly and rocky; 3rd and 4th rate.
Timber, cedar and pinion-pine.
Good grass for grazing.
Mountainous land, 8030 chs.

West, on a random line bet. secs. 6 and 7.

Subdivision of T. 18 S., R. 1 E. - Continued:

Chains	
40.00	Find no trace of old ± sec. cor.; Set temp. ± sec. cor.
91.82	Intersect Salt Lake Meridian, 30 lks. N. 1.30' W. of cor. of secs. 1, 6, 7, and 12, heretofore described.
	Thence we run N. 88°30' E., on a true resurvey line bet. secs. 6 and 7. from cor. of secs. 1, 6, 7, 12.
	Note: We run the line on this course in order to establish it as near as possible in its original position.
	Over level land, through dense undergrowth.
18.50	Wood road, bears N. 30° E. and S. 30° W.
40.00	Set a sandstone, 16 x 10 x 10 ins., 11 ins. in the ground, for ± sec. cor., marked ± on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
62.35	Wash, 20 lks. wide, 3 ft. deep, course S. W.
64.00	Find no trace of foot of mountain cor.
68.85	Begin ascent of mountain, bears N. and S.; leave undergrowth, and enter heavy timber, bears N. and S.
91.85	Intersect N. and S. line, 2.10 chs. No. 3' W. of the cor. of secs. 5, 6, 7, and 8.
	Set a sandstone, 14 x 8 x 6 ins., 9 ins. in the ground, for closing cor. of secs. 6 and 7, marked c.c. on W.; with 5 grooves on S., and E. faces; from which
	Cedar, 5 ins. diam., bears S. 50° W. 50 lks. dist., marked c.c. T. 18 S., R. 1 E. S. 7, B.T.
	Cedar, 12 ins. diam., bears N. 11° W. 36 lks. dist., marked c.c. T. 18 S., R. 1 E. S. 6, B.T.
	Note: We destroy all marks on the cor. of secs. 5, 6, 7, and 8, which pertain to secs. 6 and 7.
	Land, mountainous and level.
	Soil, clay and gravelly; 2nd and 3rd rate.
	Timber, cedar.

Chains	
	ourth, sage-brush and shadscales. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth 91.85 chs.
	S. 0° 3' E., bet. secs. 7 and 8; from the cor. of secs. 5 and 8. Along W. face of mountain, through scattering cedar timber; descend gently.
32.80	Bottom of cañon, 100 ft. below sec. cor., course W., ascend along side of mountain.
40.00	Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A cedar, 8 ins. diam., bears N. 25° E., 96 lks. dist., marked ¼ S. 8, R. 3. J. A cedar, 10 ins. diam., bears N. 12½° W., 200 lks. dist., marked ¼ S. 7, R. 3. J.
80.00	Set a limestone, 17 x 12 x 6 ins., 11 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, marked with 4 notches on S. and 5 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, scattering cedar. Good grass for grazing. Mountainous land, 80.00 chs. July 22, 1898: At this cor. we set off 20° 11' N., on the decl. arc; and at 0h 3m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is

Chains	
	39°16' N., which is about 0.4 greater than the proper lat.
	S. 89°51' E., on a random line bet. secs. 8 and 17.
40.00	Set temp. ✠ sec. cor.
80.22	Intersect N. and S. line, at the cor. of secs. 8, 9, 16, and 17.
	Thence we run
	N. 89°51' W., on a true line bet. secs. 8 and 17.
	Over mountainous land, through scattering cedar and pinion pine timber; ascend.
12.00	Top of rocky ridge, 400 ft. above sec. cor., bears N. and S.; descend abruptly over ledges.
39.70	Bottom of cañon, 600 ft. below ridge, course S.; ascend.
40.11	Set a conglomerate stone, 24 x 18 x 12 ins., 18 ins. in the ground, for ✠ sec. cor., marked ✠ on N. face; from which
	A cedar, 14 ins. diam., bears N. 12° E. 130 lks. dist., marked ✠ S. 8, R. 3.
	No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
67.50	Top of ridge, 200 ft. above cañon, bears N. 37° E. and S. 37° W.; descend.
80.22	The cor. of secs. 7, 8, 17, and 18.
	Land, mountainous.
	Soil, gravelly and rocky; 3rd and 4th rate.
	Timber, cedar and pinion-pine.
	Good grass for grazing.
	Mountainous land, 80.22 chs.

Chains	
	West, on a random line bet. secs. 7 and 18
40.00	Find no trace of old # sec. cor.; Set temp. # sec. cor.
89.72	Intersect Salt Lake Meridian, 30 lks. N. 1°30' W. from the cor. of secs. 7, 12, 13, and 18, heretofore described; We run N. 88°30' E., on a true resurvey line bet. secs. 7 and 18. from the cor. of secs 7, 12, 13 & 18
	Note: We run this line parallel to the N. bdy. of sec. 7; in order to establish it as near as possible in its original position.
	Over level land, through scattering undergrowth,
40.00	Set a sandstone, 18x6x5 ins., 12 ins. in the ground, for # sec. cor., marked # on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
70.00	Find no trace of foot of mountain cor.
74.00	Begin ascent of mountain, bears N. and S.
89.75	Intersect N. and S. line, 2.05 lks. N. 0°3' W. of the cor. of secs. 7, 8, 17, and 18.
	Set a limestone, 18x10x9 ins., 12 ins. in the ground, for closing cor. of secs. 7 and 18, marked C.C. on W.; with 4 grooves on S. and 5 grooves on E. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor., Pits impracticable.
	Note: We destroy all marks on the cor. of secs. 7, 8, 17, and 18, which pertain to secs. 7 and 18.
	Land, mountainous and level.
	Soil, clay loam; 2nd rate.
	No timber.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.

Chains	Mountainous land, 15.75 chs.
	S. 0°3' E., on a random line bet. secs. 17 and 18
40.00	Find no trace of ¼ sec. cor.; set temp. ¼ sec. cor.
78.50	We fall 7.96 chs. E. of the cor. of secs. 17, 18, 19, and 20, which is a greatly decayed post; marked and witnessed as described by the surveyor general. We destroy all traces of the old cor. and reestablish it at the same point as follows; Set a sandstone, 22 x 14 x 4 ins., 17 ins. in the ground, for reestablished cor. of secs. 17, 18, 19, and 20, marked with 3 notches on S. and 5 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Thence we run N. 1°30' W., on a true resurvey line bet. the S. halves of secs. 17 and 18. Note: We run this half mile parallel to the W. bdy. of sec. 18, in order to establish the ¼ secs cor. bet. secs. 17 and 18, as near as possible in its original position. Over mountainous land, through scattering undergrowth; descend.
37.50	Bottom of hollow, 100 ft. below sec. cor.; course N. 80° W.; ascend.
40.00	Set a sandstone, 18 x 12 x 6 ins., 12 ins. in the ground, for reestablished ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Subdivision of T. 18 S., R. 1 E. - Continued.

Chains	
	Thence we run
	N. 0° 3' W., on a true line bet. the N. halves of secs. 17 and 18.
10.00	Top of low ridge, 60 ft. above hollow, bears E. and W.; descend.
17.20	Wood road, bears E. and W.
21.50	Wash, 40 lks. wide, 4 ft. deep, in bottom of Mellor's cañon, 75 ft. below ridge, course W.; ascend.
40.40	Intersect E. and W. line 8.95 chs. S. 88° 30' W. from the closing cor. of secs. 7 and 18.
	Set a limestone, 14 x 10 x 10 ins., 9 ins. in the ground, for closing cor. of secs. 17 and 18, marked C.C. on S.; with 4 grooves on S. and 5 grooves on E. faces; from which
	A lone cedar, 7 ins. diam., bears S. 10° 45' W. 260 lks. dist., marked T. 18 S., R. 1 E., S. 18, C. B.
	and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
	Note: We destroy all marks on the cor. of secs. 8 and 17, and remark it as S. W. cor. of sec. 8.; and destroy all marks on the closing cor. of secs. 7 and 18, and remark it as S. E. cor. of sec. 7.
	Land, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	No timber.
	Undergrowth, sage-brush and shadscales.
	Good grass for grazing.
	Mountainous land, 40.40 chs.

We are unable to find ¼ sec. cor. bet. secs. 17 and 20, therefore from the cor. of secs. 17, 18, 19, and 20, We run

N. 88° 30' E., on a true resurvey line bet. secs. 17 and 20.

For reasons already explained.

Subdivision of J. 18 S., R. 1 E. - Continued.

Chains	
	Over mountainous land, through scattering undergrowth; descend.
13.50	Bottom of hollow, 20 ft. below sec. cor., course S.; enter scattering cedar timber; ascend.
40.00	Set a limestone, 14 x 12 x 7 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A cedar, 8 ins. diam., bears N. 20° E. 180 lks. dist., marked ¼ S. 17, B. J. A cedar, 8 ins. diam., bears S. 24° E. 143 lks dist., marked ¼ S. 20, B. J.
52.00	Top of ridge, 600 ft. above hollow, bears N. E. and S. W.; descend.
58.90	Bottom of hollow, 150 ft. below ridge, course S. W.; ascend.
71.50	Find no trace of foot of mountain cor.
76.00	Top of ridge, 250 ft. above hollow, bears N. 80° E. and S. 20° W.; descend.
88.20	Intersect N. and S. line, 4.00 chs. N. 0° 3' W. from the cor. of secs. 16, 17, 20, and 21. Set a limestone, 14 x 6 x 6 ins., 9 ins. in the ground, for closing cor. of secs. 17 and 20, marked C. C. on W.; with 3 grooves on S. and 4 grooves on E. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Note: We destroy all marks on the cor. of secs. 16, 17, 20, and 21, which pertain to secs. 17 and 20. Land, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, scattering cedar. Undergrowth, sage-brush and shadscales. Good grass for grazing. Mountainous land, 88.20 chs. July 22, 1898.

Chains	
	July 23, 1898: At 8h 2m a. m., l. m. t., we set off 39° 15' N., on the lat. arc; 20.01 N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 17, 18, 19, and 20.
	Thence we run
	S. 1° 30' E., on a retracement line bet. secs. 19 and 20.; at 40.00 chs we find no trace of ¼ sec. cor.; and at 80.00 chs. find no trace of the cor. of secs. 19, 20, 29, and 30; therefore we continue our line S. 1° 30' E.. At 162. 40 chs. we intersect E. and W. line at the cor of secs. 29, 30, 31, and 32, which is a greatly decayed post marked and witnessed as described by the surveyor general.
	We proceed to resurvey the line just retraced as follows:
	We destroy all traces of the old cor. of secs. 29, 30, 31, and 32, and re-establish it at the same point as follows: Set a red sandstone, 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 29, 30, 31, and 32, marked with 1 notch on S. and 5 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Thence we run
	N. 1° 30' W., on a true resurvey line bet. secs. 29 and 30.
	Over rolling land, through scattering undergrowth; ascend gently.
13.00	Wood road, bears N. 80° E. and S. 80° W.
15.00	Wood road, bears E. and W.
26.50	Top of spur, 50 ft. above cor., bears E. and W.; descend.
32.50	Wood road, bears E. and W.
39.25	Wash, 50 lks. wide, 2 ft. deep, in stone

Chains	
	30 ft. below spur, course W.; ascend.
40.60	Set a red sandstone, 16x12x5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
75.00	Top of ridge, 60 ft. above hollow, bears N. W. and S. E.; descend.
81.20	Set a hard sandstone, 26x8x6 ins., 19 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, marked with 2 notches on S. and 5 notches on E. edges; from which A cedar, 10 ins. diam., bears N. E., 137 lks. dist., marked T. 18 S., R. 1 E. S. 20, B. T. A cedar, 6 ins. diam., bears N. 87° W., 150 lks. dist., marked T. 18 S., R. 1 E. S. 19, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Note: We search diligently but find no trace of old cor. Land, rolling. Soil, clay and sandy loam; 2nd rate. No timber. Undergrowth, sage-brush and shadscales. Good grass for grazing
	N. 1° 30' W., on a true resurvey line bet. secs. 19 and 20. Over rolling land, through scattering cedar timber and undergrowth, descend gently.
6.50	Bottom of canon, 75 ft. below cor., course N. 80° W.; ascend.
8.50	Road leading from Manti to Fayette, bears N. 80° W. and S. 80° E.
26.30	Top of spur, 25 ft. above canon, bears

Subdivision of T. 18 S., R. 1 E. - Continued.

Chains	
	N. 80° W. and S. 80° E.; descend.
26.30	Bottom of Spring Hollow, 30 ft.
	ridge, course N. 75° W.; ascend.
40.60	Set a grey limestone, 15 x 10 x 8 ins.,
	10 ins. in the ground, for ± sec.
	cor., marked ± on W. face; from which
	a cedar, 12 ins. diam., bears
	N. 68° E., 165 lks. dist., marked
	± S. 20, B. J.
	a cedar, 10 ins. diam., bears
	N. 88° W., 108 lks. dist., marked
	± S. 19, B. J.
	From this cor. "Warm Spring" bears
	S. 44° W. about 14.00 chs. dist.
51.00	Top of spur, 40 ft. above hollow,
	bears E. and W.; descend.
63.20	Wood road, bears E. and W.
64.00	Bottom of hollow, 30 ft. below spur;
	course W.; ascend.
81.20	The cor. of secs. 17, 18, 19, and 20.
	Land, rolling.
	Soil, sandy and clay loam; 2nd
	rate.
	Timber, scattering cedar.
	Undergrowth, sage-brush.
	Good grass for grazing.
	July 23, 1898: At this cor. we set off
	19° 58' N., on the decl. arc.; and at 0h
	4m p. m., l. m. t., observe the sun on
	the meridian, the resulting lat.
	is 39° 15' N., which is about 0.2' greater
	than the proper lat.

Note.- As there are no entries dependant on this line and
as we are unable to find the
post established 33.00 chs. East of the
cor. of secs. 19, 20, 29, and 30, therefore
we begin at the cor. of secs. 19, 20, 29,
and 30, and run
East, on a random line bet. secs.

Chains	
	20 and 29.
40.00	Set temp. ± sec. cor.
86.00	I intersect N. and S. line 50 lks. N. of the cor. of secs. 20, 21, 28, and 29.
	Thence we run
	N. 89° 40' W., on a true line bet. secs. 20 and 29.
	Over rolling mountainous land, through scattering cedar timber, descend.
14.30	Bottom of cañon, 30 ft. below cor., course S. 80° W.; ascend.
15.00	Road leading from Manti to Fayette, bears N. 80° E. and S. 80° W.
18.80	Top of spur, 30 ft. above cañon, bears N. and S.; descend.
23.00	Bottom of cañon, 30 ft. below spur, course N. 60° W.; ascend.
24.00	Road leading from Manti to Fayette, bears N. 60° W. and S. 80° E.
41.00	Top of spur, 60 ft. above cañon, bears N. 60° E. and S. 60° W.; descend
	Set a grey limestone, 18 x 14 x 6 ins., 12 ins. in the ground, for ± sec. cor., marked ± on N. face; and raise a mound of stone 2 ft. base, 2 ft. high, N. of cor. Pits impracticable.
57.50	Road leading from Manti to Fayette, bears N. 80° E. and S. 80° W.
59.00	Bottom of same cañon, 75 ft. below spur, course S. 80° W.; ascend.
62.00	Top of spur, 15 ft. above cañon, bears N. and S.; descend.
63.30	Road leading from Manti to Fayette, bears N. 80° W. and S. 80° E.
65.25	Bottom of same cañon, 40 ft. below spur, course N. 80° W.; ascend.
86.00	The cor. of secs. 19, 20, 29, and 30. Land, mountainous.

Subdivision of T. 18 S., R. 1 E. - Continued.

Chains — Soil, clay and sandy loam and gravelly; 2nd and 3rd rate.
Timber, scattering cedar.
Good grass for grazing.
Mountainous land, 8600 chs.

Note. As there are no enteries dependent on this line and as We are unable to find any trace of the post set 31.00 chs. East of the cor. of secs. 29, 30, 31, and 32; and knowing from previous connections that the line bet. secs. 29 and 32 will close within the prescribed to, therefore after running a random line for distance only, we run East, on a true line bet. secs. 29 and 32.

Over rolling land, gently ascending; through scattering undergrowth.

18.00 Begin ascent of mountain, bears N. and S.; enter scattering cedar timber, bears N. and S.

37.80 Top of ridge, 400 ft. above cor., bears N. 80° W. and S. 80° E.; descend along North face of ridge.

40.00 Head of swale 30 ft. below ridge, course N.;

43.70 Set a limestone, 18 x 12 x 5 ins., 12 ins. in the ground, for ± sec. cor., marked ± on N. face; from which
A cedar, 14 ins. diam., bears N. 50° W. 110 lks. dist., marked ± S. 29, B. T.
A cedar, 12 ins. diam., bears S. 63° W. 21 lks. dist., marked ± S. 32, B. T.
Ascend.

43.75 Top of same ridge, 30 ft. above swale, bears N. 50° E. and S. 50° W.; descend.

55.30 Bottom of hollow, 50 ft. below ridge, course S.; ascend.

81.25 Top of ridge, 75 ft. above hollow,

Chains
8.30 bears N. 10° W. and S. 10° E.; descend.
Intersect N. and S. line 90 lks.
S. 0°03' E. of the cor. of secs. 28, 29, 32, and 33.
65.70 Set a flint stone, 17 x 8 x 5 ins., 11 ins.
18.00 in the ground, for closing cor. of secs. 29 and 32, marked c. c. on W. with 1 groove on S. and 4 grooves on E. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Note: We destroy all marks on the cor. of secs. 28, 29, 32, and 33, which pertain to secs. 29 and 32.
Land, mountainous and rolling.
Soil, clay and gravelly loam; 2nd rate.
Timber, scattering cedar.
Undergrowth, sagebrush and shadscales.
Good grass for grazing.
Mountainous land, 65.70 chs.

Note: Believing from our connection on fractional line bet. secs. 32 and 33 with the San Pete Indian Reservation bdy., that the old returns of fractional line bet. secs. 31 and 32 is in error.
We proceed as follows:
From cor. of secs. 29, 30, 31, and 32, we run
South, on a retracement line bet. secs. 31 and 32.
5.87 The closing cor. of secs. 31 and 32 heretofore described.

Note: Sec. 18 not closing within limits we deem it necessary

Chains	
	to retrace the line bet. secs. 18 and 19. We proceed as follows: From the cor. of secs. 17, 18, 19, and 20, heretofore described we run S. 88° 30' W., on a retracement line bet. secs. 18 and 19.
40.00	Find slight trace of old cor. Set temp. ± sec. cor.
79.74	Intersect W. bdy. of Tp. at the cor. of secs. 13, 18, 19, and 24.
	Thence we run N. 88° 30' E., on a resurvey line bet. secs. 18 and 19.
	Over level land, through dense undergrowth.
8.00	County road, bears N. and S.
39.74	Find slight trace of old ± sec. cor. Set a limestone, 16 x 9 x 6 ins., 11 ins. in the ground, for reestablished ± sec. cor., marked ± on N. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
79.74	The cor. of secs. 17, 18, 19, and 20.
	Land, level.
	Soil, clay loam; 2nd rate.
	No timber.
	Undergrowth, sage brush and shadscales.
	Good grass for grazing.
	Land covered with dense undergrowth, 79.74 chs.

July 23, 1898.

General Description

This fractional township contains several varieties of land, from level valleys to high mountains, and the soil ranges from rocky to rich loam. The soil of some of the hollows and ridges, where

the timber is heavy, is generally rich black loam; the soil of the valleys and low ridges, is generally clay and sandy loam, and is capable of producing excellent crops without irrigation.

The soil of the remaining portion of the township can nearly all be classed as 3rd rate, and is very well adapted to grazing, being covered with an abundant growth of rich and nutritious grasses.

A heavy growth of scrub cedar and pinion pine timber is found nearly all over the northern portion of the township.

The township is watered in the Southwestern part by Warm Creek which rises in sec. 19 and flows N.W.

There is no other water in the township.

We fail to find Peter Peterson H. E. No. 1445, or his improvements.

There are no settlers in this fractional township.

Scott P. Stewart.
Andrew J. Stewart Jr.
U. S. Deputy Surveyors

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PAGE

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, 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 _____

_____

showing the respective capacities in which they acted:

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____

_____

_____ of the _____

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

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

Subscribed and sworn to before me this _____ day of _____, 189

_____

SEAL

_____

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I. _____, United States Deputy Surveyor, d solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of th _____ day of _____, 189 , I have well, faithfully, and truly, in my ow proper person, and in strict conformity with the instructions furnished by the United States Surveyo General for _____, the Manual of Surveying Instructions, and the laws of th United States, surveyed all those parts or portions of _____

_____

_____

_____

_____ of the _____

_____ meridian, in the _____ of _____, which are represented in th foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnl swear that all the corners of said survey have been established and perpetuated in strict accordance wit the Manual of Surveying Instructions, and the special written instructions of the United States Surveyo General for _____ and in the specific manner described in the field notes, and tha the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffe the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

_____

United States Deputy Surveyo

Subscribed by said _____, and sworn to before me this _____ day of _____, 189

_____

_____

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah June 23 1900, ~~189~~

The foregoing field notes of the survey of The Subdivisions of Township 18 South Range 1 East of the Salt Lake Base and Meridian, Utah

_____

_____

_____

_____

executed by Scott Stewart & Andrew J. Stewart Jr. under his contract No. 217, dated March 1st, 1897, having bee critically examined, and the necessary corrections and explanations made, the said field notes, and th surveys they describe, are hereby approved.

_____

United States Surveyor Genera

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 Genera

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PAGE

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PAGE

4—679.

BOOK A-258

FIELD NOTES

OF THE SURVEY OF THE

North and West Boundaries

of

Township 17 South Range 2 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Scott P. Stewart and Andrew J. Stewart Jr. United States Deputy Surveyors.

Under ~~his~~ their Contract No. 217, dated November 1st, 1897

Survey commenced July 25, ~~th~~, 1898

Survey completed July 27th, 1898

6—151

W. Boundary - [illegible] 6-00-00 ✓

N - Boundary - [illegible] 3-24-00 ✓

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. Y. McAllister, Chainman,

William W. Richardson, Chainman,

Alma Betts, Chainman.

Antone P. Stewart, Maundsman.

Peter S. Sorensen, Maundsman.

Benjamin T. Stewart Axman.

Quinby Stewart, Flagman.

For preliminary affidavits, see book "B"

BOOK A-258

INDEX DIAGRAM.

Township 17 SOUTH , *Range* 2 EAST.

	13.	12.	10	10.		
8.	6	5	4	3	2	1
7.	7	8	9	10	11	12
6.	18	17	16	15	14	13
5	19	20	21	22	23	24
4.	30	29	28	27	26	25
3.	31	32	33	34	35	36

14.

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level t
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; th
we will report the true distances to all notable objects, and the true lengths of all lines that we assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey
_____

_____, *Chainma*

_____, *Chainma*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____, *Moundma*

_____, *Moundma*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____, *Axma*

_____, *Axma*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

I, _____, do solemnly swear that I will well and tru
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in t
survey of _____

_____, *Flagma*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

West boundary of T. 17 S., R. 2 E.-

Chains. Survey commenced July 25, 1898, and executed with a W. and L. E. Gurley light mountain transit no. -, with solar attachment, the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arc; and a Buff and Berger transit, No. 2511, the horizontal limb is provided with two double verniers reading to single minutes of arc.
The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former December 4, 1897, and the latter, April 5, 1898.
We examine the adjustments of the instruments, and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications resulting from solar observations, made during a. m. and p. m. hours, with a true meridian determined by observations on Polaris, we proceed as follows:
At the cor. of Tps. 1 7 and 18 S., R. 2 E., latitude 39° 17' N., longitude 111° 47' W., we set off 39° 17' N., on the lat. arc; 1.90° 31' N., on the decl. arc; and at 4h 3m p. m., l. m. t., determine a true meridian with the solar of the Gurley instrument, and

rains. mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 11h 11m p. m., l. m. t., we ob Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the manual of Instructions, and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station.

July 25, 1898.

July 26, 1898; At 6h 0m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west on the Buff and Berger instrument, and mark the true meridian thus determined, by cutting a small groove in the stone set July 25, on which the true meridian falls 0.3 ins. east of the mark determined by the solar of the Gurley instrument.

At 6h 20m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the True meridian thus determined, by cutting a small groove in the stone set July 25, on which the true meridian falls 0.3 ins. east of the mark determined by the solar.

At 7h 3m a. m., l. m. t., we set off 39° 17' N., on the lat. arc.; 19° 22' N., on the decl. arc; and mark a point in the true meridian determined with the solar of the Gurley instrument, by a cross on the stone already set 5 chs. N.

chains	
	of our station; this marks falls 0.2 ins. east of the true meridian established by Polaris observation. The solar apparatus of the Gurley instrument, by p. m. and a. m. observations, defines positions for true meridians, respectively about 0.'16" west and 0.' 10" east of the meridian established by Polaris observation, therfore we conclude that the adjustments of the instruments are satisfactory. The magnetic bearing of the true meridian, at 7h 30m a. m. is N. 16° 36' W.; the angle thus determined reduced by the table, page 100, gives the mean mag. decl. 16° 30' E.
	From the cor. of Tps. 17 and 18 S., R. 2 E., heretofore described, We run North on W. side sec 31.
	Over mountainous land, through heavy cedar, mahogany, and pinion pine timber; descend.
14.50	Leave heavy timber and enter scattering timber; bears E. and W.
24.00	Bottom of hollow, 300 ft. below cor., course N. 80° W.; ascend.
29.50	Top of spur, 50 ft. above hollow; bears E. and W.; descend.
39.00	Bottom of hollow, 20 ft. below cor course S. 48° W.; ascend.
40.00	Falls on a stationary ledge of limestone, 36 x 24 x 10 ins. above ground. We cut a cross (X) at the exact cor. point for 1/4 sec. cor., mark 1/4 on W. side; from which A pinion pine, 16 ins. diam. bears S. 74° E, 30 lks. dist., marked 1/4 S. 31, B. T.

50.00	Top of main divide ridge, 500 ft. above hollow, bears N. 5° W. and S. 10° E.; descend.
80.00	Set a flint stone, 16 X 10 X 4 ins., 11 ins. the ground, for cor. of secs. 30 and 31, marked with 5 notches on N. and 1 notch on S. edges; from A pinion pine, 16 ins. diam., bears N. 20° E. 45 lks. dist., marked T. 17 S., R. 2 E. S. 30, B. T. A mahogany, 8 ins. diam., bears S. 56° E. 50 lks. dist., marked T. 17 S. R. 2 E. S. 31, B. T. Sand, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, cedar, pinion pine, and mahogany. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	North, on W. side sec. 30. Over mountainous land, through scattering cedar, pinion pine, and mahogany timber; and oak and service-berry under-growth; descend.
14.10	Head of swale, 100 ft. below cor., course S. 60° E.; ascend.
19.25	Top of spur, 100 ft. above swale, bears N. 50° E. and S. 50° W.; descend.
40.00	Set a sandstone, 30 X 16 X 10 ins., 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which An oak, 3 ins. diam., bears S. 21° E. 25 lks. dist., marked 1/4 S. 30, B. T.
62.00	Wood road leading to Manti, bears E. and W.
67.25	Bottom of branch of Maple cañon, 300 ft. below spur, course N. E.; ascend.

Chains.	
69.00	Wood road leading to Manti, bears N. 40° W. and S. 50° E.
80.00	Set a quartzite stone, 24x16x6 ins., 18 ins. in the ground, for cor. of secs. 19 and 30, marked with 4 notches on N. and 2 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, cedar, pinion pine, and mahogany. Undergrowth, oak and service-berry brush. Good grass for grazing. Mountainous land, 80.00 chs.
	North, on W. side sec. 19. Over mountainous land, through scattering cedar timber, and undergrowth; ascend.
6.50	Top of spur, 60 ft. above sec. cor., bears E. and W.; descend.
8.20	Bottom of hollow, 50 ft. below spur, course E.; a small spring bears E. about 2 chs. dist.; ascend.
15.25	Top of ridge, 60 ft. above hollow, bears E. and W.; descend.
24.40	Bottom of hollow, 200 ft. below ridge, course E.; ascend.
40.00	Set a limestone, 14x10x8 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
58.25	Top of ridge, 350 ft. above hollow, bears N. 80° E. and S. 80° W.;

descend.

64.35 Wood road, bears N. 50° E. and S. 50°

76.00 Spring branch, 4 lks. wide 6 ins. deep, rapid current, rocky bottom; in bottom of branch of maple canon, 200 ft. below ridge, course N. 30° E.; ascend.

— 80.00 Set a limestone, 20 x 14 x 5 ins., 15 ins. in the ground, for cor. of secs. 18 and 19, marked with 3 notches on N. and 3 notches on S. edges; from which

Cedar, 40 ins. diam., bears N. 62° E. 85 lks. dist., marked T. 17 S., R. 2 E. S. 18, B. T.

Cedar 16 ins. diam., bears S. 31° E. 55 lks. dist., marked T. 17 S., R. 2 E. S. 19, B. T.

Sand, mountainous.

Soil, rich loam and gravelly; 1st and 3rd rate.

Timber, cedar.

Undergrowth, oak and service berry.

Good grass for grazing.

Mountainous land, 80.00 chs.

July 26, 1898: At this cor., we set off 19° 20' N., on the decl. arc; and at 0h 4m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 20' N., which is about 0.05 greater than the proper lat.

---

north, on W. side sec. 18.

Over mountainous land, through heavy cedar and pinion pine timber, and oak, service-berry and mountain-apple undergrowth; ascend.

13.00 Top of spur, 100 ft. above sec. cor., bears E. and W.; descend.

West boundary of T. 17 S., R. 2 E. - Continued. -

rains.

40.00 Set a limestone, 16 x 12 x 9 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
A cedar, 12 ins. diam., bears N. 83° E. 30 lks. dist., marked 1/4 S. 18, B. T.

47.25 Maple Creek, 3 lks. wide, 4 ins. deep, rocky bottom, rapid current, in bottom of canon, 500 ft. below spur, course S. 70° E.; ascend o

55.75 Foot of perpendicular ledge 20 ft. high, bears E. & W.; enter scattering timber.

80.00 Set a limestone, 18 x 9 x 5 ins., 12 ins. in the ground, for cor. of secs. 7 and 18, marked with 2 notches on N. and 4 notches on S. edges; from which
A pinion pine, 14 ins. diam., bears N. 70° E. 60 lks. dist., marked T. 17 S., R. 2 E., S. 7, B. T.
A pinion pine, 8 ins. diam., bears S. 25 E. 90 lks. dist., marked T. 17 S., R. 2 E., S. 18, B. T.
Sand, mountainous.
Soil, gravelly and rocky; 3rd 4th rate.
Timber, cedar and pinion pi
Undergrowth, oak, service-berry and mountain-apple.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00

North, on W. side, sec. 7.
Over mountainous land, through heavy cedar and ion pine timber; ascend a

16.50 Leave timber, enter dense undergrowth, bears E. and W.

18.00 Top of steep ascent, 600 ft. above canon, bears E. and W.; thence

	gentle ascending over mesa; continue through dense oak and sage-brush under-growth, bears E. and W.
40.00	Set a quartzite stone, 18 x 6 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
80.00	Set a limestone, 14 x 10 x 4 ins., 9 ins. in the ground, for cor. of secs. 6 and 7, marked with 1 notch on N. and 5 notches on S. edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	Sand, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, cedar and pinion pine.
	Undergrowth, oak and sage-brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs
	north, on West side sec. 6.
	Over mountainous land, through dense undergrowth and scattering timber; ascend.
33.00	Top of ridge, 125 ft. above sec. cor., bears N. 60° W. and S. 60° E.; descend.
40.00	Set a sandstone, 18 x 12 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which a maple, 6 ins. diam., bears S. 12° E.

chains	
	43 lks. dist., marked 4 S. 6, B. T.
48.50	Bottom of branch of Maple Cañon, 150 ft. below ridge, course S. 60° E.; ascend.
61.00	Top of ridge, bet. Maple and Dry Cañons; 300 ft. above cañon, bears N. 70° W. and S. 70° E.; descend.
75.00	Spring branch, 1 lk. wide, 2 ins. deep, in branch of Dry Cañon, 200 ft. below ridge, course E.; ascend.
80.00	Set temp. cor. of Tps. 16 and 17 S., R. 2 E.; on top of ridge, 20 ft. above cañon, bears N. W. and S. E.
	Sand, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, cedar and pinion-pine.
	Undergrowth, sage-brush, oak, and maple.
	Good grass for graging.
	mountainous land, or land covered with dense undergrowth, 80.00 chs.

Note. - The permanent cor was set at same point; for description see notes of N. bdy. of Tp. this book. July 26, 1898.

July 27, 1898: - At 7h 0m a. m., l. m. t., we set off 39° 23' N., on the lat. arc. 19° 16' N., on the decl. arc, and determine a true meridian with the solar, at the temp. cor. of Tps. 16 and 17 S., R. 2 E.

Thence we run East, on a random line, along the N. bdy. of Tp. 17 S., R. 2 E., setting temp. 4 sec. and secs. cors. at intervals of 40.00 chs.; and, at 274.00 chs., we fall 35 lks. N. of the 4 sec. cor. bet. secs. 3 and 34, which is a greatly decayed post marked and witnessed as described by the surveyor general. We destroy all traces of the old cor. and re-estab-

chains	
	lish it at the same point as follows: Set a limestone, 14 x 8 x 7 ins.; 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor. The falling answers to a correction of 0°4' or 10 lks. S. per mile, counting from the N. W. cor. of the Tp.; therefore we run N. 89°56' W., bet. the W. halves of secs. 3 and 34. Over gently rolling valley, through dense undergrowth.
40.00	Set a gray limestone, 18 x 10 x 9 ins., 12 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, marked with 3 notches on E. and 3 notches on W. edges; dig pits, 18 x 18 x 12 ins., in each sec. 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, nearly level. Soil, clay loam; 2nd rate. No timber. Undergrowth, sage brush. Good grass for grazing. Land covered with dense undergrowth, 40.00 chs. July 27, 1898: At this cor., we set off 19°06' N., on the decl. arc; at 11h 58m a. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39°23' N.
	N. 89°56' W. bet. secs. 4 and 33. Over nearly level valley,

	through dense undergrowth.
5.00	Water ditch, 2 lks. wide, 3 ins. deep, good water, from Dry Cañon, course n.
5.50	Foot of mountain, bears n. and s.; ascend.
40.00	Set a limestone, 16 x 14 x 6 ins., 11 ins. in the ground, for ¼ sec. cor., marked 4 on n. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, n. of cor. Pits impracticable.
49.00	Top of ridge, 500 ft. above sec. cor. bears n. 30° W. and s. 30° E., enter scattering timber, bears with ridge; descend.
71.00	Wood road leading to Ephraim, bears n. 60° W. and s. 80° E.
71.50	Creek, 3 lks. wide, 3 ins. deep, rapid current, in bottom of Dry Cañon, 300 ft. below ridge, course s. 50° E.; ascend.
80.00	Set a limestone, 16 x 7 x 4 ins., 11 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked with 4 notches on E. and 2 notches on W. edges; from which a cedar, 12 ins. diam., bears n. 13° 40' E. 13 lks. dist., marked T. 16 S., R. 2 E. S. 33, B. T. a cedar, 6 ins. diam., bears n. 11° 30' W. 1 to 3 lks. dist., marked T. 16 S. R. 2 E. S. 32, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, clay loam and rocky; 2nd and 4th rate. Timber, cedar and pinion pine. Undergrowth, sage-brush. Good grass for grazing. Mountainous land, or land

chains	
	covered with dense undergrowth
	80.00 chs.
	N. 89° 56' W., bet. secs. 5 and 32.
	Over mountainous land, through
	scattering timber and under-
	growth; ascend.
29.00	A small spring of good water,
	bears S. 6.00 chs. dist.
40.00	Set a limestone, 18 x 10 x 6 ins., 12 ins.
	in the ground, for 1/4 sec. cor.,
	marked 1/4 on N. face; from which
	A cedar, 18 ins. diam., bears S. 5 1/2° E.
	266 lks. dist., marked 1/4 S. 5, B. T.
	No other trees within limits; raise
	a mound of stone, 2 ft. base, 1 1/2 ft.
	high, N. of cor. Pits impracticable.
80.00	Set a sandstone, 17 x 7 x 6 ins., 11 ins.
	in the ground, for cor. of secs. 5, 6, 31,
	and 32, marked with 5 notches
	on E. and 1 notch on W. edges.;
	from which
	A maple, 3 ins. diam., bears N. 65° E.
	64 lks. dist., marked T. 16 S., R. 2 E., S. 32, B. T.
	An oak, 3 ins. diam., bears N. 48° W.
	189 lks. dist., marked T. 16 S., R. 2 E., S. 31, B. T.
	No other trees within limits; and
	raise a mound of stone, 2 ft. base,
	1 1/2 ft. high, W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rich loam, and gravelly; 1st
	and 3rd rate.
	Timber, cedar and maple.
	Undergrowth, oak and service-
	berry.
	Good grass for grazing.
	Mountainous land, 80.00 chs.

chains.	
	N. 89° 56' W., bet. secs. 6 and 31.
	Over mountainous land, through scattering timber and under-growth; ascend.
16.00	Top of ridge, 200 ft. above sec. cor., bears N. and S.; descend.
23.25	Bottom of branch of Dry Cañon, 300 ft. below ridge, course N. 20° E.; ascend.
30.00	Top of spur, 150 ft. above cañon, bears N. 42° E. and S. 42° W.; descend.
40.00	Fall on a stationary ledge of sandstone, 6 x 10 x 2 ft. above ground. We cut a cross, (X) at the exact cor. point for 1/4 sec. cor., mark 1/4 on N. face; from which a maple, 4 ins. diam., bears N. 80° E. 44 lks. dist., marked 1/4 S. 31, B. T. An oak, 3 ins. diam., bears S. 55° E. 49 lks. dist., marked 1/4 S. 6, B. T.
42.00	Bottom of branch of Dry Cañon, 100 ft. below ridge, N. 60° E.; ascend.
74.00	The temp. cor. of Tps. 16 and 17 S., R. 2 E., 500 ft. above cañon Set a sandstone, 18 x 16 x 10 ins., 12 ins. in the ground, for cor. of Tps. 16 and 17 S., R. 2 E., marked 16 S. 2 E. on N. E. and 17 S. on S. E. faces; with 6 notches on N., S., and E. edges; from which a red pine, 14 ins. diam., bears N. 80° E. 54 lks. dist., marked T. 16 S., R. 2 E., S. 31, B. T. A red pine, 10 ins. diam., bears S. 12° E. 90 lks. dist., marked T. 17 S., R. 2 E., S. 6, B. T. Sand, mountainous. Soil, rich dark loam, and gravelly; 1st and 3rd rate. Timber, cedar, maple and pine. Undergrowth, oak and service-berry. Good grass for grazing. Mountainous land, 74.00 chs.

East boundary of T. 17 S., R. 2 E.

Note:- From the connection just made, we are led to believe that the E. bay. of the Tp. is not a N. and S. line; we proceed to determine the course of said bay. as follows:-

At the cor. of Tps. 16 and 17 S., Rs. 2 and 3 E., which is a sandstone, 10 x 6 x 6 ins., above ground, marked and witnessed as described by the surveyor general. We set off 39° 23' N. on the lat. arc; 19° 04' N. on the decl. arc; and at 4h 30m p. m., l. m. t., determine a true meridian with the solar. We erect a flag at the cor. of Tps. 17 and 18 S., Rs. 2 and 3 E.; which is a sandstone, 6 x 6 x 6 ins. above ground, marked and witnessed as described by the surveyor general, can be plainly seen from our position, and find the true bearing to be S. 0° 40' E.

July 27, 1878.

Boundaries of T. 17 S., R. 2 E.
Latitudes, departures and closing errors.

Line designated.	True Bearing	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
		chs.	chs.	chs.	chs.	chs.
W. bdy. T. 17 S., R. 2 E.	north	480.00	480.00			
N. bdy. T. 17 S., R. 2 E.	S 89° 56' E	274.00		.35	274.00	
N. bdy. T. 17 S., R. 2 E.	East	200.00			200.00	
E. bdy. T. 17 S., R. 2 E.	S. 0° 40' E.	480.00		479.97	5.58	
S. bdy. T. 17 S., R. 2 E.	West	480.00				480.00
Convergency					.60	
Totals			480	480.32	480.18	480.00
Error in Lat.				480. 32	480. 18	Error in Dep.

Boundaries of T. 17 S., R. 2 E. - Concluded.

This fracl. township is rolling and mountainous in the western part, and contains a little level valley in the eastern part. The township is well watered and well timbered. The soil is nearly all fertile, and produces an abundant growth of rich grasses. The township should be subdivided.

Scott T. Stewart
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.
July 27, 1898.

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PAGE

LIST OF NAMES.

A list of the names of the individuals employed by _____, 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 _____

showing the respective capacities in which they acted:

_____ *Chainman.*

_____ *Chainman.*

_____ *Moundman.*

_____ *Moundman.*

_____ *Axman.*

_____ *Axman.*

_____ *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

6—151

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, d
solemnly swear that, in pursuance of a contract received from _____
United States Surveyor General for _____, bearing date of t
_____ day of _____, 189 , I have well, faithfully, and truly, in my ow
proper person, and in strict conformity with the instructions furnished by the United States Survey
General for _____, the Manual of Surveying Instructions, and the laws of t
United States, surveyed all those parts or portions of _____
_____
_____
_____
_____ of the _____
_____ meridian, in the _____ of _____, which are represented in tl
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemn
swear that all the corners of said survey have been established and perpetuated in strict accordance wi
the Manual of Surveying Instructions, and the special written instructions of the United States Survey
General for _____ and in the specific manner described in the field notes, and th
the foregoing are the original field notes of such survey; and should any fraud be detected, I will suff
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

_____
United States Deputy Surveyo

Subscribed by said _____, and sworn to before me
this _____ day of _____, 189

SEAL

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23 1900.

The foregoing field notes of the survey of the North & West Boundaries
of Township 17 South Range 2 East of the Salt Lake
Base & Meridian Utah
_____
_____
_____
_____
executed by Scott P. Stewart & John W. Stewart
under ~~his~~ their contract No. 217, dated November 1st, 1897, having be
critically examined, and the necessary corrections and explanations made, the said field notes, and t
surveys they describe, are hereby approved.

Jacob S. [illegible]
United States Surveyor Gener

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 Gener

6--151

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4—679.

BOOK A-258

R.3.B.

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

of

Township 17 South, Range 2 East.

Of the Salt Lake Base and Meridian,

Utah.

AS SURVEYED BY

Scott C. Stewart and Andrew J. Stewart Jr., United States Deputy Surveyors,

Under ~~his~~ their Contract No. 217, dated November 1st, 1897.

Survey commenced July 28th, 1898.

Survey completed August 4th, 1898.

6—151

			M. Chs. Lks
Subs.	high		32-64-95 ✓
"	closings		21-35 ✓
Resurvey	"	high	4-28-30 ✓
"	"	low	6-50-42 ✓

BOOK A-258

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. Y. McAllister, Chainman.

William W. Richardson Jr. Chainman

Alma Betts, Chainman.

Antone P. Stewart, Marndman.

Peter S. Sorensen, Marndman.

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary affidavits, see book "A"

BOOK A-258

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PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level th
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; the
we will report the true distances to all notable objects, and the true lengths of all lines that we assist i
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____

_____, *Chainma*

_____, *Chainma*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____

_____, *Moundma*

_____, *Moundm*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____

_____, *Axm*

_____, *Axm*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

I, _____, do solemnly swear that I will well and tr
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in
survey of _____

_____, *Flagm*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

Subdivision of T. 17 S., R. 2 E. S. L. B. and M.

Chains Survey commenced July 28, 1898, and ... with a W. and L. E. Gurley light mountain transit, No.-, with solar attachment, the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb being provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former December 4, 1897, and the latter April 5, 1898.

We examine the adjustments of instruments, and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications resulting from solar observations, made during a. m., and p. m. hours, with a true meridian determined by observations on Polaris, we proceed as follows.

At the cor. of secs. 2, 3, 34, and 35 on S. bdy. of Tp., latitude 39° 17' N., longitude 111° 43' W., we set off 39° 17' N; on the lat. arc; 18° 51.' N., on the decl. arc; and at 3h 0m p. m., l, m, t, determine a true meridian with the solar of the Gurley instrument, and mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 10 h. 5 m. ... p. m., l, m, t, we

Subdivision of T. 17 S., R. 2 E. - continued.

chain Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the manual of instructions, and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station.

July 28, 1898.

July 29, 1898: At 6h 4m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined, by cutting a small groove in the stone set July 28, on which the true meridian falls 0.4 ins. east of the mark determined by the solar of the Gurley instrument. At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the true meridian thus determined, by cutting a small groove in the stone set July 28, on which the True Meridian falls 0.4 ins. east of the mark determined with the solar. At 7h 3m a. m; l. m. t., we set off 39° 17' N., on the lat. arc; 18° 42' N., on the decl. arc; and mark a point in the true meridian determined with the solar of the Gurley instrument, by a cross on the stone already set 3 chs N. of our station, this mark falls 0.25 ins. east of the true meridian established by Polaris observation. The solar apparatus of the Gurley instrument, by p. m. and a. m. observations, defines positions for true meridians, respectively about 0' 21" west and 0' 13" east of the meridian

cha established by Polaris observation, therefore we conclude that the adjustments of the instruments are satisfactory. . . .

The magnetic bearing of the true meridian, at 7h 30m a.m. is N. 16° 36' W.; the angle thus determined reduced by the table, page 100, gives the mean mag. decl. 16° 30' E.

Note: Being unable to find any of the corners in the subdivision of this Tp. adjacent to our work; we proceed to retrace and resurvey the lines on which to close our survey. as follows:

From the cor. of secs. 2, 3, 34, and 35 on S. bdy. of Tp., which is a post in mound of earth, we run northerly on a retracement line bet. secs. 34 and 35; at 40.00 chs. we find no trace of ¼ sec. cor.; and at 80.00 chs. find no trace of cor. of secs. 26, 27, 34, and 35; therefore we continue our line N.; and at 478.98 chs. intersect N. bdy. of Tp. 5.99 chs. E. of the cor. of secs. 2, 3, 34 and 35; which is a greatly decayed post marked and witnessed as described by the surveyor general, which we reestablish at the same point as follows:

Set a sandstone, 16x10x6 ins.; 11 ins. in the ground, for cor. of secs. 2, 3, 34 and 35; marked with two notches on E., and 4 notches on W. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

The following answers to a correction of 0° 43' or 100 lks. W. per mile counting

chains	from the cor. of secs. 2, 3, 34, and 35, on S. bdy. of Tp.; and the length of each mile will be 79.80 chs. except line bet. secs. and 3, which will be 80.02 in proportional to old dista Therefore we run S 0° 43' E., on a true resurvey line bet. secs. 2 and 3.
	Over gently rolling valley, thru scattering undergrowth.
3.00	Wood road, bears E. and W.
22.00	Wood road, bears E. and W.
40.12	Set a gray sandstone, 14 x 8 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
57.80	Wash, 10 lks. wide, 3 ft deep, course S 75° E.
72.70	Wash, 10 lks. wide, 3 ft deep, course E.
75.30	Wash, 20 lks. wide. 3 ft deep, course E.
80.02	Set a gray limestone, 16 x 8 x 7 ins., 11 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, marked with 3 notches on S and 2 notches on E. edges; dig pits, 18 x 18 x 12 ins., in each sec., 3 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, nearly level.
	Soil, clay loam; 2nd. rate.
	No. timber.
	Undergrowth, sage brush and shadscales.
	Good grass for grazing.
	July 29, 1898: At this cor. we set off 18° 38' N., on the decl. arc, and at 0 h. 4 m. p. m. L. m. t., observe the sun on the meridian, the resulting lat. is 39° 22' N.

chains S 0° 43' E., on a true resurvey line bet secs. 10 and 11.
Over nearly level land, through dense undergrowth.
2.30 Enter cultivated land bears E. and W.
3.70 Leave cultivated land, bears E and W.
13.80 Wash, 10 lks. wide, 3 ft. deep, course S. 70° E.
20.20 Wash, 10 lks. wide, 4 ft. deep, course S. 70° E.
32.30 Old wood road, bears N. 70° W. and S. 70° E.
32.70 Wash, 20 lks. wide, 3 ft. deep, course S 70° E
39.90 Set a gray limestone, 11 x 8 x 5 ins., 9 ins. in the ground, for 1/4 sec. cor, marked 1/4 on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
79.80 Set a quartzite stone, 16 x 7 x 5 ins., 11 ins. in the ground, for cor. of secs. 10, 11, 14, and 15; marked with 4 notches on S. and 2 notches on E. edges; dig pits, 18 x 18 x 12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, nearly level.
Soil, clay loam; 2nd. rate.
No timber.
Undergrowth, sage brush and shadscales.
Good grass for grazing.
Land covered with dense undergrowth, 79.80 chs.

S. 0° 43' E., on a true resurvey line bet. secs. 14 and 15;
Over level land, through scattering undergrowth.
19.00 A corral bears E. 80 lks. dist.

ch

38.00 Wood road, bears N. 10° E. and S. 10° W.

39.90 Set a limestone, 15 x 6 x 6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dig pits, 18 x 18 x 12 ins., and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

60.10 Wire fence, bears E. and W.

79.80 Set a gray limestone, 15 x 12 x 3 ins., 10 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, marked with 3 notches on S. and 2 notches on E. edges; dig pits, 18 x 18 x 12 ins., in each sec., 3 1/2 ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

Land, level.

Soil, clay loam. 2nd. rate.

No timber

Undergrowth, sage brush and shadscale.

Good grass for grazing.

S. 0° 43' E., on a true resurvey line bet. secs. 22 and 23.

Over nearly level land, through dense undergrowth.

20.60 Wire fence, bears E. and W.

38.30 Fence, bears N. 10° E. and S. 10° W. Leave undergrowth enter meadow.

39.90 Set a cedar post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., bet. secs. 22 and 23, marked 1/4 S. 22 on N. face, 23 on E. face; dig pits 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of Cor.

40.75 Wire fence, bears E. and W.

73.20 Pole fence. bears E. and W.

	Chains	
C	79.80	Set a gray limestone, 17 x 10 x 3 ins., 7 ins. in the ground, for cor. of secs. 22, 23, 26, and 27; marked with 2 notches on S. and 2 notches on E. edges; dig pits, 18 x 18 x 12 ins., in each sec., 3½ ft. dist.; and raise a mound of earth, 4 ft. base 2 ft. high, W. of cor.
	38.50 / 41.20	Land, nearly level.
		Soil, clay loam; 2nd. rate.
		No timber.
		Undergrowth, rabbit brush.
		Good grass for grazing.
		Land covered with dense undergrowth 38.50 chs.
		S. 0° 13' E., on a true resurvey line bet. secs. 26 and 27.
		Over level land, across meadow
	9.20	Pole fence, bears E. and W.
	39.90	Set a limestone, 18 x 12 x 3 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18 x 18 x 12 ins; N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
	44.80	North edge of slough, bears E. and W.
	64.73	South edge of slough, bears E. and W.
C	79.80	Set a limestone 16 x 10 x 6 ins., 11 ins. in the ground, for cor. of secs. 26, 27, 34, and 35; marked with one notch on S. and 2 notches on E. edges; dig pits, 18 x 18 x 12 ins; in each sec., 3½ ft. dist.; and raise a mound of earth, 4 ft. base 2 ft. high, W. of cor.
		Land, level.
		Soil, clay loam. 2nd. rate.
		No timber.

Chains

S. 0° 45' E., on a true resurvey line bet. secs. 34 and 35:
Over level meadow land.

39.90 Set a sandstone, 18 x 6 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dig pits, 18 x 18 x 12 ins; N. and S. of stone, 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

41.00 Fence, bears E. and W.

42.80 Fence, bears E. and W.

58.45 Fence, bears E. and W.

78.50 Fence, bears E. and W.

C 79.80 The cor. of secs. 2, 3, 34, and 35:
We destroy all traces of the old cor. and reestablish it at the same point as follows:
Set a sandstone 14 x 9 x 5 ins., 11 ins in the ground, for cor. of secs. 2, 3, 34 and 35; marked with 2 notches on E. and 4 notches on W. edges; dig pits, 18 x 18 x 12 ins; in each sec., 5 1/2 ft dist.; and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.
Land, level.
Soil, clay loam; 2nd. rate.
No timber.
Good grass for grazing.
July 29, 1898.

July 30, 1898: At 7h. 0m. a. m., l. m. t., we set off 39° 17' N., on the lat. arc; 18° 27' N., on the decl. arc; and determin a true meridian with the solar at the cor. of secs. 3, 4, 33, and 34, on S. bdy. of Tp. heretofore described.
Being unable to find the 1/4 sec. cor.

Chains	
	bet. secs. 33 and 34 or the cor. of secs. 27, 28, 33, and 34; we run the line bet. secs 33 and 34, parallel to the line bet. secs. 34 and 35, and the distance the same. Therefore we run.
	N. 0° 43' W., on a resurvey line bet. secs. 33 and 34.
	Over gently rolling land, through lucern field.
13.00	Leave lucern field, bears N. 60° W. and S 60° E.
15:00	Old wood road, bears N 60° W. and S. 60. E.
30.00	Wagon road, bears N. 10° W. and S. 10° E.
39.90	Set a limestone, 18 x 8 x 7 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable; ascend gently.
50.00	Top of low spur, 20 ft. above 1/4 sec. cor., bears N. W. and S. E., descend gently.
55:00	Wagon road, bears N. 20° E. and S. 20° W.
C 79.80	Set a limestone, 18 x 14 x 6 ins., 12 ins. in the ground, for cor. of secs. 27, 28, 33, and 34, marked with one notch on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, nearly level. Soil, clay and gravelly loam; 2nd. rate. No timber. Good grass for grazing.
	East, on a retracement line bet. secs. 27 and 34.
40.00	Find no trace of 1/4 sec. cor. Set temp. 1/4 sec. cor.
79.90	Intersect N. and S. line at the cor. of secs. 26, 27, 34 and 35.
	Thence we run
	West, on a true resurvey line bet.

Chain secs. 27 and 34.

Over nearly level land; across meadow.

1.25 Fence, bears N. and S.

35.83 Pole fence, bears N. and S.; leave meadow.

39.93 Set a limestone 16 x 10 x 5 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1½ ft high, N. of cor. Pits impracticable.

68.00 Wood road, bears N. 30° E. and S. 30° W.

79.90 The cor. of secs. 27, 28, 33, and 34.

Land, nearly level.

Soil, clay loam; 2nd rate.

No timber.

Good grass for grazing.

Finding no improvements or evidence of settlement in sec. 28, or W. ½ of sec. 27, and as we are unable to find the 1/4 sec. cor. bet. secs. 27 and 28 or foot of mountain cor. Therefore we run.

North, bet. secs. 27 and 28.

Over gently rolling land, through dense undergrowth; ascend gently.

16.00 Top of spur 20 ft. above cor., bears N. E. and S. W.; descend gently.

31.00 Wash, 15 lks. wide, 3 ft. deep, course S. E.

40.00 Find no trace of 1/4 sec. cor. Set a gray limestone, 15 x 8 x 5 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft. high, W. of cor.

112.20 Wash, 20 lks. wide, 5 ft. deep, course S. 30° E.

69.00 Find no trace of foot of mountain cor.

80.00 Set a limestone, 20 x 10 x 8 ins., 15 ins. in the ground, for cor. of secs. 21, 22, 27, and 28, marked with 2 notches on S. and 3 notches on E. edges; dig pits, 18 x 18 x 12 ins., in each sec., 3½ ft. dist. and raise a mound of earth, 4 ft.

Chains base, 2 ft. high, W. ¼ cor.
Land, rolling
Soil, clay loam. 2nd. rate.
No timber.
Undergrowth, sage brush and shad scales.
Good grass for grazing.
Land covered with dense undergrowth.
80.00 chs.

East on the random line bet. secs. 22 & 27.
9.00 Find no trace of foot of mountain cor.
40.00 Find no trace of ¼ sec. cor. Set temp. ¼ sec. cor.
78.80 Intersect N. and S. line, at the cor. of secs. 22, 23, 26, and 27, Thence run.
West, on a true line bet. secs, 22 and 27.
Over level land, Through meadow.
10.00 Leave meadow and enter dense undergrowth, bears N. and S.
18.00 Pole fence, bears N. 5° E. and S. 5° W.
A house, bears N. about 10 chs. dist.
23.70 Wagon road, bears N. 10° E. and S. 10° W.
29.00 A flowing well, bears S. about 2.00 chs. dist.
40.00 Set a gray limestone, 14x8x6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high. N. of cor.
54.80 Wash, 10 lks wide, 3 ft. deep, course S. 60° E.
61.65 Wood road, bears N. 60° E. and S. 60° W.
78.80 The cor. of secs. 21, 22, 27, and 28.
Land, level.
Soil, clay loam.
No timber
undergrowth, sagebrush and shadscale.

40.00
38.80

chains Good grass for grazing.
Land covered with dense undergrowth,
68.80 chs.
July 30, 1898; At the noon hour the sky is overcast, and solar observations are impossible.

North., bet. secs. 21 and 22.
Over gently rolling land, through dense undergrowth.
11.50 Wood road, bears E. and W.
40.00 Set a limestone, 40 x 10 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
42.00 Wash, 10 lks. wide, 3 ft. deep, course E.
80.00 Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, marked 17 S. on N. E. and 2 E. on S. E. faces; with 3 notches on S. and 3 notches on E. edges; dig pits, 18 x 18 x 12 ins.; in each sec., 3½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, rolling.
Soil, clay loam; 2nd. rate.
No timber.
Undergrowth, grease wood and sage brush.
Good grass for grazing.
Land covered with dense undergrowth, 80.00 chs.

East., on a random line bet. secs. 15 & 22.
19.00 Find no trace of foot of mountain cor.
40.00 Find no trace of old 1/4 sec. cor.

Chains	
	Set temp. 1/4 sec. cor.
77.65	Intersect N. and S. line 55 lks. N. of the cor. of secs. 14, 15, 22 and 23. The falling is outside the prescribed limits therefore we run.
	West, on a true line bet. secs. 15 and 22. Over nearly level land, through dense undergrowth.
1.56	Wire fence, bears N. and S.
22.56	Cor. of wire fence, bears N. and N. 88° E. The south end of a reservoir 1.00 ch. wide and 3 chs. long, bears N. 10 lks. dist. There are four artesian wells in the reservoir.
39.25	Wash, 20 lks. wide 6 ft. deep, course N. 60° E.
40.00	Set a gray limestone, 15 x 10 x 6 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
43.50	Wood road bears N. W. and S. E.
57.43	Wash 10 lks. wide, 2 ft. deep course N. 60° E.
77.65	Intersect N. and S. line 55 lks. S. of the cor. of secs. 15, 16, 21 and 22.
C H 40 37.65	Set a gray limestone, 16 x 10 x 6 ins., 11 ins. in the ground, for a sixteen cor. of secs. 15 and 22, marked C.C. on E.; with 3 grooves on S. and 3 grooves on E. faces; dig pits 24 x 18 x 12 ins., crosswise on each line, N. and S., 3 ft., and E. of stone, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.
	Note: We destroy all marks on the cor. of secs. 15, 16, 21 and 22 which pertains to secs. 15 and 22.
	Land, nearly level.
	Soil, clay loam; 2nd rate.
	No timber.

chains Undergrowth rabbit brush.
Good grass for grazing.
Land covered with dense undergrowth,
77.65 chs.

North, bet. secs. 15 and 16.
Over nearly level land, through dense undergrowth.

32.50 Wash, 30 lks. wide, 10 ft. deep, course E.

40.00 Set a trachyte stone, 14 x 8 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dig pits 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

76.50 Wash, 15 lks. wide, 4 ft. deep, course E.

80.00 Set a gray sandstone, 14 x 10 x 8 ins., 9 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, marked with 4 notches on S. and 3 notches on E. edges; dig pits 18 x 18 x 12 ins., in each sec., 3 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land, nearly level.
Soil, clay loam; 2nd. rate.
No timber.
Undergrowth, sage brush and greasewood.
Good grass for grazing.
Land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 10 & 11.

13.00 Find no trace of foot of mountain.

40.00 Find no trace of old 1/4 sec. cor.
Set temp. 1/4 sec. cor.

76.45 Intersect N. and S. line, 10.5 lks.

chains	
	N. of the cor. of secs. 10, 11, 14 and 15: Thence we run.
	West, on a true line bet. secs. 10 and 15:
	Over gently rolling land, through dense undergrowth.
25.55	Creek from Dry Cañon, 3 lks. wide, 3 ins. deep, good water, rocky bottom, course S. E.
34.50	Wash, 20 lks. wide, 3 ft. deep, course S. E.
40.00	Set a red sandstone, 16 x 7 x 6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
55.70	Wash, 20 lks. wide, 4 ft. deep, course S. 70° E.
57.50	Wagon road, bears N. 70° W. and S. 70° E.
60.00	Wash, 20 lks. wide, 10 ft. deep, course S. 80° E.
76.45	Intersect N. and S. line 10 5 lks. S. of the cor. of secs. 9, 10, 15 and 16.
C 40 H 36 45	Set a gray limestone, 20 x 12 x 6 ins., 15 ins. in the ground, for closing cor. of secs. 10 and 15; marked C. C. on E.; with 4 grooves on S. and 3 grooves on E. faces; dig pits 24 x 18 x 12 ins., crosswise on each line, N. and S., 3 ft., and E. of stone, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.
	Note: We destroy all marks on the cor. of secs. 9, 10, 15 and 16, which pertain to secs. 10 and 15:
	Land, rolling.
	Soil, clay loam; 2 nd. rate.
	No timber.
	Undergrowth, greasewood.
	Good grass for grazing.
	Land covered with dense undergrowth.

chains	
	76.45 chs.
	July 30, 1898.
	Aug. 1, 1898: At 7h. 5m. a. m., l. m. t., we set off 39° 21' N., on the lat. arc; 17° 57' N., on a decl. arc; and determine a true meridian with the solar, at the cor. of secs. 9 and 16.
	Thence we run.
	North., bet. secs. 9 and 10.
	Over nearly level land, through dense undergrowth.
3.25	Wood road leading to Ephraim, bears E. and W.
15.00	Wash, 20 lks. wide 4 ft. deep, course S. 80° E.
40.00	Set a gray limestone, 24 x 15 x 4 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
41.00	Foot of mountain, bears N. E. and S. W.; ascend.
50.00	Top of spur, 50 ft. above valley, bears E. and W.; decend.
53.50	Foot of mountain, bears N. W. and S. E., thence across valley.
79.50	Wash, 20 lks. wide, 4 ft. deep, course S. 80° E.
80.00	Set a gray limestone, 14 x 12 x 6 ins., 9 ins. in the ground, for cor. of secs. 3, 4, 9, and 10, marked with 3 notches on S. and 3 notches on E. edges; dig pits 18 x 18 x 12 ins., in each sec., 3 1/2 ft. dist.; and raise a mound of earth, 4 ft base, 2 ft. high, W. of cor.
	Land, nearly level and mountainous.
	Soil, clay and gravelly loam; 2nd. rate.
	No timber.
	Under growth, grease wood and sage brush.
	Good grass for grazing.

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

3.00 East, on a random line bet secs. 3 and 10. Found no trace of foot of mountain cor.
40.00 Found no trace of old 1/4 sec. cor. Set temp. 1/4 sec. cor.
73.25 Intersect N. and S. line, 15 5 lks. N. of the cor. of secs. 2, 3, 10 and 11.
Thence we run
West on a true line bet. secs. 3 and 10.
Over nearly level land, through dense greasewood undergrowth.
40.00 Found no trace of old 1/4 sec. cor.
Set a gray limestone, 14 x 12 x 4 ins., 9 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
37.00 Wood road, bears N. 85° W. and S. 75° E.
37.84 Creek from Dry Canyon 3 lks wide, 3 ins deep, in wash, 20 lks. wide, 10 ft. deep, course S. 75° E.
73.25 Intersect N. and S. line 15 5 lks. S. of the cor. of secs. 3, 4, 9, and 10.
40.00 Set a hard sandstone, 18 x 14 x 10 ins; 12 ins. in the ground, for closing cor. of secs. 3 and 10, marked C. C. on E.; with 3 grooves on S. and 3 grooves on E. faces. dig pits 24 x 18 x 12 ins, cross-wise on each line, N. and S., 2 ft., and E. of stone, 1 ft. dist.; and raise a mound of earth, 1 ft. base, 2 ft. high E. of cor.
Note: We destroy all marks on the cor. of secs. 3, 4, 9, and 10, which pertain to secs. 3 and 10.
Land, nearly level.
Soil, clay loams; 2nd. rate.
No timber.
Undergrowth, grease wood.

Chains	
	Good grass for grazing. Land covered with dense undergrowth 73.25 chs.
	Note: Knowing from former connections that the line bet. secs. 3 and 4 will not intersect the N. bdy of Tp. within the prescribed limits for closing, we run.
	North, on a true line bet. secs. 3 and 4.
	Over gently rolling land, through dense undergrowth.
.90	Creek, 3 lks. wide, 3 ins. deep, course S. 80° E.
1.25	Wood road, bears N. 80° W. and S. 80° E.
14.00	Wood road, bears E. and W.
27.70	Wood road, bears E and W.
28.75	Wash, 20 lks. wide, 3 ft. deep, course E.
40.00	Set a gray sandstone, 15 X 10 X 5 ins., 10 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
41.50	Wood road, bears N. 75° W. and S. 75° E.
62.80	Wash, 15 lks. wide, 4 ft. deep, course E.
64.00	Wood road, bears E. and W.
78.50	Intersect N. bdy. of Tp. 6.00 chs. S 89° 56' E. of the cor. of secs. 3, 4, 33, and 34, heretofore described.
	Set a gray limestone, 18 X 10 X 9 ins., 12 ins. in the ground, for the closing cor. of secs. 3 and 4, marked C. C. on S.; with 3 grooves on E. and 3 grooves on W. faces; dig pits 24 X 18 X 12 ins., cross wise on each line, E and W., 3 ft., and S. of stone, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
	Note: We destroy all marks on the cor. of secs. 3, 4, 33, and 34, which pertain to secs. 3 and 4.
	Land, nearly level.

Soil, clay and gravelly loam; 2nd rate
No timber.
Undergrowth, sage brush.
Good grass for grazing.
Land covered with dense undergrowth,
78.50 chs.
August 1, 1898: At this cor. we set off
17 5/8' N., on the decl. arc; and at 0 h.
3 m. p. m., l. m. t., observe the sun's
on the meridian, the resulting lat.
is. 39° 23' N.

From the cor. of secs. 4, 5; 32, and 33, on S.
bdy. of T. p. heretofore described
We run.
North, bet. secs. 32 and 33.
Over mountainous land, through
heavy cedar and pinion pine
timber; ascend.

40.00 Set a limestone, 20 x 10 x 5 ins., 15 ins.
in the ground, for 1/4 sec. cor., marked
1/4 on W. face; from which
A pinion pine, 16 ins. diam., bears S.
35° E., 22 lks. dist., marked 1/4 S. 33, B. T.
A cedar, 6 ins. diam., bears N. 33°
W. 10 lks. dist., marked 1/4 S. 32, B. T.

50.00 Top of ridge, 200 ft. above sec. cor.,
bears N. 80° E. and S. 80° W.; descend.

70.00 Bottom of hollow, 400 ft. below ridge
course N. 80° E.; Leave timber, bears N. 80°
E. and S. 80° W., ascend.

80.00 Set a limestone, 18 x 12 x 6 ins; 12 ins. in
the ground, for cor. of secs. 28, 29, 32, and
33, marked with 1 notch on S. and
4 notches on E. edges; from which
A cedar, 7 ins. diam., bears N. E. 20 lks.
dist. marked T. 17 S., R. 2 E., S. 28, B. T.
No other trees with in limits; raise
a mound of stone, 2 ft. base, 1 1/2 ft high.

W. of cor. Pits impracticable.
Land, mountainous.
Soil, clay and gravelly loam and rocky; 2nd. and 4th. rate.
Timber, cedar and pinion pine.
Good grass for grazing.
Mountainous or heavily timbered land, 80.00 chs.

East on a random line bet. secs. 28 and 33.
29.00 Find no trace of post of mountain cor.
40.00 Find no trace of old 1/4 sec. cor. Set temp. 1/4 sec. cor.
79.50 Intersect N. and S. line, at the cor. of secs. 27, 28, 33 and 34.
Thence we run
West, on a true line bet. secs. 28, and 33.
Over gently rolling land, through dense undergrowth.
20.00 Wood road leading to Manti, bears N. 10° W. and S. 10° E.
40.00 Set a limestone, 14 x 8 x 7 ins., 9 ins. in the ground, for 1/4 sec. cor; marked 1/4 on N. face; from which
A cedar, 6 ins. diam., bears N. 7° E. 32 lks. dist., marked 1/4 S. 28, B. T.
A cedar, 7 ins. diam., bears S. 14° W. 45 lks. dist; marked 1/4 S. 33, B. T.; Enter scattering timber; begin ascent of mountain bears N. and S.
79.50 Quar. cor. of secs. 28, 29, 32, and 33.
Land, rolling and mountainous.
Soil, clay and gravelly loam; 2nd. rate.
Timber, scattering cedar and pinion pine.
Undergrowth, sage brush and shadscale.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 79.50 chs.

Chains	
	N. 0°01' W. ~, bet. secs. 28 and 29. Over mountainous land, through scattering cedar and pinion pine pine timber; ascend along E. face of mountain.
40.00	Set a limestone, 20 x 8 x 6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 14 ins. diam., bears N. 86° E. 25 lks. dist., marked 1/4 S. 28, B. T. A cedar, 14 ins. diam., bears S. 31° W. 50 lks. dist., marked 1/4 S. 29, B. T.
80.00	Set a limestone, 24 x 10 x 8 ins., 18 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, marked with two notches on S., and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, gravelly and rocky; 3rd and 4th rate. Timber, scattering cedar and pinion pine. Good grass for grazing. Mountainous land, 80.00 chs. August 1, 1898.
	August 2, 1898: at 7h. 4m. a. m., l. m. t., we Bs off 39°, 4' N., on the lat. arc; 17° 42' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 20, 21, 28, and 29. Thence we run East , on a random line bet. secs. 21 and 28.
40.00	Set temp. 1/4 sec. cor.
79.80	Intersect N. and S. line 10 lks. N. of the of secs. 21, 22, 27, and 28. Thence we run N. 89°56' W., on a true line bet. secs.

chains	
	21 and 28.
	Over nearly level land, gently ascending to the west; through dense undergrowth
22.70	Wood road leading to Manti from Maple Cañon, bears N.E. and S.W.
32.90	Foot of mountain, bears N. and S.; ascend.
39.90	Set a limestone, 15 x 10 x 4 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
43.00	Enter scattering timber, bears N. and S.; leave undergrowth.
47.00	Drag road, bears N. 3° 2° E. and S. 3° 2° W.
79.80	The cor. of secs. 20, 21, 28, and 29.
	Land, mountainous and nearly level.
	Soil, clay and gravelly loam; and rocky.
	2nd and 4th rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage brush and shadscale.
	good grass for grazing
	Mountainous land, or land covered with dense undergrowth, 47.80 chs.

	N. 0° 1' W., bet. secs. 20 and 21.
	Over mountainous land; descend gradually along E. slope of mountains.
3.10	Enter heavy cedar and pinion pine timber.
30.00	Foot of mountain, 400 ft. below cor. bears N.E. and S.W.; enter Maple Cañon, leave heavy and enter scattering timber, bears N.E. and S.W.
40.00	Set a limestone, 20 x 12 x 8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which
	A pinion pine, 14 ins. diam. bears N. 83° 30' W., 77 lks. dist. marked 1/4 S. 20. B.T.
	A cedar, 4 ins. diam. bears S. 24°

chains	
	30' E. 17.4 lks. dist., marked 1/4 S. 21, B.T.
40.95	Wagon road in Maple Cañon, bears N. 85° W. and S. 85° E.
47.30	Wash. 60 lks. wide, 8 ft. deep, in Maple Cañon, course S. 85° E.
50.00	Leave cañon, bears E. and W.; enter heavy timber; ascend.
80.00	Set a limestone, 18 x 10 x 5 ins., 12 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked with 3 notches on S., and 4 notches on E. edges; from which A pinion pine, 10 ins. diam., bears N. 38° E., 68 lks. dist., marked T. 17 S., R. 2 E; S. 16, B.T. A pinion pine, 14 ins. diam., bears S. 2°15' E. 53 lks. dist; marked T. 17 S. R. 2 E. S. 21, B.T. A cedar, 8 ins. diam., bears S. 61°30' W. 50 lks. dist; marked T. 17 S; R. 2 E; S. 20, B.T. A cedar, 12 ins. diam., bears N. 18° W; 67 lks. dist., marked T. 17 S., R. 2 E., S. 17, B.T. Land, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	S. 89°56' E., on a random line bet. secs. 16 and 21.
40.00	Set temp. 1/4 sec. cor.
80.00	Intersect N. and S. line 10 lks. S. of the cor. of secs. 16 and 21. Thence we run West, on a true line bet. secs. 16 and 21. Over nearly level land, gently ascending to the west; through

chains	
	dense under growth.
30.00	Foot of mountain, bears N. and S.; ascend.
40.00	Set a limestone, 14 x 10 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
58.25	Wood road, bears N. 30° W. and S. 30° E.; enter scattering timber and leave undergrowth, bears N. and S.
80.00	The cor. of secs. 16, 17, 20 and 21.
	Land, mountainous and level.
	Soil, clay and gravelly loam; 2nd. rate
	Timber, cedar and pinion pine.
	Undergrowth, sage brush and grease wood.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.

	N. 0° 1' W., bet. secs. 16 and 17.
	Over mountainous land, through heavy timber; ascend.
40.00	Set a limestone, 24 x 14 x 4 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which.
	A cedar, 10 ins. diam., bears N. 87° 30' E., 87 lks. dist., marked 1/4 S. 16, B.T.
	A pinion pine, 12 ins. diam., bears S. 37° W. 103 lks. dist; marked 1/4 S. 17, B.T.
70.00	Top of ridge, 800 ft. above Maple Cañon bears N. and S. 15° W.; descend.
80.00	Set a limestone, 14 x 12 x 5 ins., 9 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and 4 notches on E. edges; from which
	A mohogany 4 ins. diam; bears N. 56° 30' E. 33 lks. dist; marked T. 17 S. R. 22 E., S. 9, B.T.

Chains	
	A cedar, 10 ins. diam. bears S. 19° E., 3.0 lks. dist., marked T. 17 S., R. 2 E., S. 16, B. T.
	A pinion pine, 18 ins. diam., bears S. 73° W., 73 lks. dist; marked T. 17 S., R. 2 E., S 17, B. T.
	A cedar, 12 ins. diam., bears N. 87° 30' W; 64 lks. dist., marked T. 17 S., R 2 E. S. 8, B. T.
	Land, mountainous.
	Soil, rich loam and gravelly; 1st and 2nd. rate.
	Timber, cedar, pinion pine and mahogany.
	Good grass for graging.
	Mountainous or heavily timbered land, 80.00 chs.
	August 2nd. 1898: At the noon hour the sky is overcast and solar observations are impossible.
	East, on a random line bet. secs. 9 and 16.
40.00	Set temp. 1/4 sec. cor.
80.30	Intersect N. and S. line 10 lks. S. of the cor. of secs. 9 and 16.
	Thence run:
	S. 89° 36' W., on a true line bet. secs. 9 and 16.
	Over nearly level land, gradually ascending to the west; through dense undergrowth.
14.50	Wood road, bears N. 20° E. and S. 20° W.
20.00	Begin ascent of mountain, bears N. and S.
22.50	Leave undergrowth and enter scattering timber, bears N. and S.
40.15	Set a limestone, 18 x 14 x 5 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which.
	A cedar, 10 ins. diam., bears N. 5° E. 93 lks. dist., marked 1/4 S. 9, B. T.
	A cedar, 12 ins. diam., bears S. 41° W. 107 lks. dist., marked 1/4 S. 16, B. T.
60.00	Drag road, bears N. 60° E. and S. 60° W.
80.30	The cor. of secs. 8, 9, 16 and 17.

chains	Land, mountainous and nearly level. Soil, clay loam and rocky; 2nd and 3rd [illegible] Growth, cedar and pinion pine. Undergrowth, sage brush and shadscale. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 8.00 chs.
	N. 0° W., bet. secs. 8 and 9.
	Over mountainous land, through heavy timber; along top of ridge, bears N. and S.
4.00	leave top of ridge, bears N. 5° E. and S., down a along west slope of ridge.
11.75	Enter road, bears N. E. and S. W.
16.00	Set a hard sandstone, 14 x 9 x 4 ins., 7 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
	A pinion pine, 4 ins. diam., bears S. 87° E., 27 lks. dist., marked 1/4 S., 9. B.T.
	A pinion pine, 10 ins. diam., bears N. 34° W. 10 lks. dist., marked 1/4 S. 8, B.T.
80.00	Set a sandstone, 16 x 10 x 4 ins., 11 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, marked with 5 notches on S. and 4 notches on E. edges; from which
	A cedar, 6 ins. diam. bears N. 24° E. 30 lks. dist., marked T. 17 S., R. 2 E., S. 4, B.T.
	A cedar, 8 ins. diam., bears S. 12° E., 35 lks. dist., marked T. 17 S., R. 2 E., S. 9, B.T.
	A cedar, 12 ins. diam., bears S. 30° W., 12 lks. dist., marked T. 17 S., R. 2 E., S. 8, B.T.
	A cedar, 4 ins. diam., bears N. 20° W. 32 lks. dist., marked T. 17 S., R. 2 E., S. 5, B.T.
	Land, mountainous.
	Soil, rich dark loam; 1st rate.

chains	
	Timber, cedar and pinion pine. Good grass for grazing. Mountainous, or heavily timbered land 80.00 chs.
	N. 89°56' E., on a random line bet. secs. 4 and 9.
40.00	Set temp. 1/4 sec. cor.
80.20	Intersect N. and S. line, 10 lks. S. of the cor. of secs. 4 and 9. Thence we run S. 89°52' W. on a true line bet. secs. 4 and 9. Over nearly level land, through dense undergrowth, ascend gently.
15.00	Begin ascent of mountain, bears N. and S. leave undergrowth and enter heavy timber, bears N. and S.
34.50	Top of ridge, 200 ft. above sec. cor., bears N. 75° W. and S. 75° E.; descend.
36.50	Bottom of deep, rocky gulch, 100 ft. below ridge, course S. 75° E.; ascend.
40.10	Set a sandstone, 18 x 14 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; from which. A cedar, 8 ins. diam., bears N. 10° W. 20 lks. dist., marked 1/4 S. 4 B. T. A cedar, 12 ins. diam., bears S. 45° W., 5 lks. dist., marked 1/4 S. 4 B. T.
70.00	Top of ridge, 900 ft. above sec. cor. bears N. 10° W. and S.; descend.
80.20	The cor. of secs. 4, 5, 8, 9 and 9. Land, mountainous and nearly level. Soil, clay loam and rocky; 2nd 3, 4th grass. Timber, cedar and pinion pine. Undergrowth, sage brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense

Chains	
	under growth, 80.20 chs.
	For reasons already explained we run N. 0° 1' W., on a true line bet. secs. 4 & 5.
	Over mountainous land through scattering timber.
13.50	Top of ridge, 100 ft. above swale, bears N. 80° W. and S. 80° E; descend. into Dry Canyon.
40.00	Set a limestone, 18 x 14 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
79.00	Intersect N. bdy. of Tp. 6.00 chs. S. 89° 56' E. of the cor. of secs. 4, 5; 32, and 33. Set a sandstone, 16 x 12 x 4 ins., 11 ins. in the ground, for closing cor. of secs. 4 and 5 marked C.C. on S.; with 4 grooves on E. and 2 grooves on W. faces; from which A cedar, 5 ins. diam., bears S. 62° 30' E. 13.2 lks. dist; marked T. 17 S., R. 28 E., S. 4, B.T. A cedar, 14 ins. diam., bears S. 75° 30' W; 30 lks. dist., marked T. 17 S., R. 28 E., S. 5; B.T. Note: We destroy all marks on the cor. of secs. 4, 5; 32, and 33, which pertains to secs. 4 and 5. Land, mountainous. Soil, rich dark loam and gravelly; 1st. and 3rd. rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous land, 79.00 chs. August 2nd. 1898.

Chains	
	Aug. 3, 1898: At 7h. 31m. a. m. l. m. t., we set of 39° 17' N.; on the lat. arc; 17° 26' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 5; 6, 31 and 32, on S. bdy. of Tp., heretofore described. Thence we run.
	N. 0° 1' W., bet. secs. 31 and 32.
	Over mountainous land, through heavy timber; ascend.
7.00	Top of spur, 10 ft. above sec. cor., bears E, and W.; descend.
21.50	Bottom of hollow, 150 ft. below ridge, course E.; ascend.
30.00	Top of ridge, 100 ft. above hollow, bears E. and W.; descend.
40.00	Set a white flint stone, 14 X 10 X 8 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which.
	A pinion pine, 16 ins. diam., bears S. 30° 30' E. 39 lks. dist., marked 1/4 S. 32, B. T.
	A pinion pine, 16 ins. diam. bears S. 23° 30' W. 86 lks. dist., marked 1/4 S. 31, B. T.
57.75	Bottom of canon, 150 ft. below ridge, course S. 35° E.; ascend.
70.00	Top of ridge, 100 ft. above canon, bears N. 35° W. and S. 35° E.; descend.
79.05	Wood road leading to Manti, bears N. W. and S. E.; in head of swale, 75 ft. below ridge, course S. E.; ascend.
80.00	Set a limestone, 14 X 12 X 6 ins., 9 ins. in the ground, for cor. of secs. 29, 30, 31, and 32, marked with 1 notch on S. and 3 notches on E. edges; from which.
	A cedar 10 ins diam., bears, N. 32° E. 82 lks. dist., marked T. 17 S.

Chains	
	R. 2 E., S. 29, 32, T.
	A cedar, 20 ins. diam., bears S. 17° E., 79 lks. dist., marked T. 17 S., R. 2 E., S., 32, B. T.
	A cedar, 6 ins. diam., bears S. 14° 40' W. 29 lks. dist., marked T. 17 S. R. 2 E. S. 31, B. T.
	A cedar, 7 ins. diam., bears N. 28° 45' W. 80 lks. dist. marked T. 17 S., R. 2 E. S. 30, B. T.
	Land, mountainous
	Soil, clay loam, 2nd. rate
	Timber, cedar and pinion pine
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line bet. secs. 29 and 32.
40.00	Set temp. 1/4 sec. cor.
79.80	Intersect N. and S. line 30 lks. S. of the cor. of secs. 28, 29, 32, and 33.
	Thence we run S. 89° 47' W., on a true line bet. secs. 29 and 32.
	Over mountainous land, through scattering timber and undergrowth; ascend
8.50	Top of ridge, 200 ft. above cor. bears N. 10° E. and S. 10° W.; descend.
23.30	Bottom of hollow, 200 ft. below ridge, course S. 20° E. about 10 chs. thence E.; ascend
30.00	Top of ridge, 150 ft. above hollow; bears N. 35° W. and S. 35° E.; descend.
39.90	Set a limestone, 18 x 12 x 4 ins., 12 ins in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
	A cedar, 6 ins. diam., bears N. 48° W. 18 lks dist; marked 1/4 S. 29, B. T.
	A pinion pine, 16 ins. diam., bears S. 9° W. 117 lks. dist, marked 1/4

Chains	
	S. 32, B. T.
45.00	Wood road leading to manti, bears N. 20° E. and S. 20° W.
46.50	Bottom of hollow 100 ft. below ridge, course S. 20° W.; ascend.
53.75	Top of ridge, 50 ft. above hollow; bears N. 10° W. and S. 10° E.; descend.
59.35	Wood road leading to manti, bears N. and S.
69.50	Bottom of cañon, 100 ft. below ridge, course S.; ascend.
77.80	Wood road leading to manti, bears N. E. and S. W.
79.80	The cor. of secs. 29, 30, 31, and 32. Land, mountainous. Soil, clay loam; 2nd rate. Timber, cedar and pinion pine. Undergrowth, sage brush and oak brush. Good grass for grazing. Mountainous land, 79.80 chs.
	West, on a random line bet. secs. 30 and 31.
40.00	Set temp. 1/4 sec. cor.
80.00	Intersect W. bdy. of Tp. 10 lks. S. of the cor. of secs. 30 and 31. Thence we run. S 89° 56' E., on a true line bet. secs. 30 and 31. Over mountainous land, through heavy timber and scattering undergrowth; descend.
26.50	Bottom of hollow 250 ft. below cor; course S. 80° E.; ascend.
40.00	Set a limestone, 18 x 10 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which A pinion pine, 8 ins. diam., bears N. 26° W. 32 lks. dist., marked 1/4 S 30, B. T.

chains	
	A pinion pine, 12 ins. diam., bears S. 12° W., 102 lks. dist., marked 1/4 S. 31, T.
42.50	Top of ridge, 100 ft. above hollow; bears N. 70° W. and S. 70° E.; descend.
62.00	Bottom of hollow; 200 ft. below ridge. course S. 35° E.; ascend.
63.30	Wood road leading to manti, bears N. 20° W. and S. 20° E.
74.50	Top of ridge, 50 ft. above hollow, bears N. 35° W. and S. 35° E.; descend.
76.00	Wood road, bears N. 15° E. and S. 15° W.
78.35	Same road, bears N. W. and S. E.
80.00	The cor. of secs. 29, 30, 31 and 32.
	Land, mountainous.
	Soil, black, and clay loam; 1st and 2nd. rate.
	Timber, cedar and pinion pine.
	Undergrowth, oak and service berry.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.

	N. 0° 1' W., bet. secs. 29 and 30.
	Over mountainous land, through heavy timber; ascend.
12.50	Top of ridge, 100 ft. above cor., bears N. E. and S. W.; descend.
22.00	Wood road, bears N. E. and S. W.
24.50	Bottom of branch of Maple Cañon, 150 ft. below ridge, course N. E.; ascend.
29.25	Wood road, bears N. E. and S. W.
40.00	Set a gray sandstone, 18 x 10 x 8 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; from which
	A cedar, 8 ins. diam., bears N. 74° 30' E. 8 lks. dist., marked 1/4 S. 29, T.
	A pinion pine, 14 ins. diam., bears N. 49° W., 14 lks. dist. marked 1/4 S. 30, T.

Chains.	
46.50	Leave heavy timber, bears N.E. and S.W. Top of ridge, 200 ft. above cañon, bears N.E. and S.W., enter scattering timber, descend.
80.00	Set a limestone, 14 x 9 x 6 ins., 9 ins. in the ground, for cor. of secs. 19, 20, 29 and 30 marked with 2 notches on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, black and clay loam; 1st and 2nd. rate. Timber, pinion pine and cedar. Good grass for grazing. Mountainous, or heavily timbered land, 80.00 chs.

August 3, 1898: at this cor. we set off 17° 22' N., on the decl. arc; and at 0h. 4m. p.m. l. m. t., observe the sun on the meridian, the resulting lat. is 39° 19' N., which is about 0.'08 less than the proper lat.

N. 89° 47' E., on a random line bet. secs. 20 and 29.

40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. l. in., 10 lks. N. of the cor. of secs. 20, 21, 28 and 29. Thence we run S. 89° 3' W., on a true line bet. secs. 20 and 29. Over mountainous land through scattering timber; ascend.
10.00	Top of ridge, 300 ft. above cor., bears N and S.; descend.
40.00	Set a sandstone, 18 x 8 x 6 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which. A pinion pine, 8 ins. diam; bears N. 2° W; 31 lks. dist., marked

Chains	
	1/4 S. 20, B.T. A pinion pine, 12 ins. diam. bears S. 23° E., 40 lks. dist., marked 1/4 S. 29, B.T.
52.00	Bottom of branch of Maple Cañon, 400 ft. below ridge, course N.; ascend
52.50	Wood road, bears with cañon.
64.50	Top of spur, 150 ft. above cañon bears N. E. and S. W.; descend.
76.75	Leave timber, bears N. and S.
80.00	The cor. of secs. 19, 20, 29, and 30. Land, mountainous. Soil, clay loam and gravelly 2nd. and 3rd. rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous land, 80.00 chs.

N. 89° 56' W., on a random line bet. secs. 19 and 30.

40.00	Set temp. 1/4 sec. cor.
80.80	Intersect W. bdy of Tp. 19 lks. N. of the cor. of secs. 19 and 30.

Thence we run
N. 89° 56' E.; on a true line bet. secs. 19 and 30
Over mountainous land, through scattering timber and undergrowth, desc

8.75	Creek, 3 lks. wide, 2 ins. deep, in bottom of branch of Maple Cañon, 80 ft. below cor., course N.E.; ascend.
27.50	Top of ridge, 150 ft. above cañon, bears N. 10° E. and S. 10° W.; descend.
40.30	Set a limestone, 16 x 8 x 6 ins., 11 ins. in the ground, for 1/4 sec. cor.; marked 1/4 on N. face; from which A cedar, 4 ins. diam. bears S. 22° 30' W. 132 lks. dist., marked 1/4 S. 30, B.T. No other trees within limits; raise a mound of stone, 2 ft. base, 1 1/2 ft.

Chains	
77.00	high N. of cor. Pits impracticable.
80.30	Bottom of branch of Maple Canon, 200 ft. below ridge course N.E. The Cor. of Secs. 19, 20, 29 and 30.
	Land, mountainous
	Soil, rich loam and gravelly; 1st and 3rd. rate.
	Timber, cedar and pinion pine.
	Undergrowth, oak and sage brush.
	Good grass for grazing.
	Mountainous land, 80.30 chs.

	N. 0° 1' W., bet. secs. 19 and 20.
	Over mountainous land, through scattering timber; descend
2.25	Bottom of branch of Maple Canon, course N.E.; ascend.
27.50	Top of ridge, 300 ft. above canon, bears N.E. and S.W.; descend.
40.00	Set a limestone, 14 X 12 X 6 ins. 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
	A cedar, 6 ins. diam., bears S. 80 E. 23 lks. dist., marked 1/4 S. 20, 73 T.
	A pinion pine, 6 ins. diam. bears N. 15° W., 18 lks. dist. marked 1/4 S. 17, 13. T.
50.00	Enter thick sagebrush, bears E. and W.
52.50	Bottom of branch of Maple canon, 300 ft. below ridge, course N.E.; ascend.
53.00	Begin abrupt ascend over ledges
	Leave oak brush, bears E. and W.
73.50	Leave ledges, bears E. and W.; enter heavy timber, bears E. and W.
80.00	Set a limestone, 24 X 16 X 8 ins., 18 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, marked with 8 notches on S. and 3 notches on E. edges; from which
	a pinion pine, 6 ins. diam., bears N. 65° E. 77 lks. dist., marked T. 17 S., R. 2 E. S. 17, B. T.
	A pinion pine, 5 ins. diam.

Chains	
	bears S. 38° E. 67 lks. dist., marked T. 17 S., R 2 E. S. 20, B. T.
	A pinion pine, 20 ins. diam., bears S. 64° W. 19 lks. dist., marked T. 17 S., R. 2 E. S. 19, B. T.
	A cedar, 15 ins. diam., bears N. 32° W. 80 lks. dist., marked T. 17 S., R. 2 E. S. 18, B. T.
	Land, mountainous
	Soil, clay loam and rocky; 2nd. and 4th. rate.
	Timber, cedar and pinion pine.
	Undergrowth, oak brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	N. 89° 57' E., on a random line bet. secs. 17 and 20.
40.00	Set temp. 1/4 sec. cor.
79.90	Intersect N. and S. line at the cor. of secs. 16, 17, 20 and 21.
	Thence we run
	S. 89° 57' W., on a true line bet. secs. 17 and 20.
	Over mountainous land, through heavy timber and scattering undergrowth; ascend.
11.00	Top of ridge, 200 ft. above cor., bears N. 40° W. and S. 40° E.; descend.
39.50	Foot of descent, 700 ft. below ridge, bears N. 40° W. and S. 40° E.; enter bottom of Maple canon.
39.95	Set a sandstone, 14 x 10 x 10 ins., 9 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; from which
	A cedar, 6 ins. diam., bears N. 39° E. 33 lks. dist., marked 1/4 S. 17, B. T.

Subdivision of T. 17 S., R. 2 E. – Continued.

chains	
	A cedar 8 ins. diam., bears S. 70° E. 41 lks. dist., marked ¼ S. 20, B. T.
47.50	Wash, 25 lks. wide, 6 ft. deep, in Maple Cañon, course S. 40° E.
49.30	Road in Maple Cañon, bears N. 40° W. and S. 40° E.
50.00	Leave bottom of cañon, bears N. 40° W and S. 40° E.; ascend.
79.90	The cor. of secs. 17, 18, 19, and 20.
	Land, mountainous
	Soil, clay loam; 2nd. rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage and oak brush.
	Good grass for grazing.
	Mountainous land, 79.90 chs.
	August 3, 1898.
	August 4, 1898: At 7h. 0m. a. m; l. m. t., we set off 39° 20' N., on the lat. arc; 17° 11' N, on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 17, 18, 19 and 20.
	Thence we run
	S. 89° 56' W., on a random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
80.20	Intersect W. bdy. of Tp. 10 lks. N. of the cor. of secs. 18 and 19.
	Thence we run
	N. 89° 52' E., on a true line bet. secs. 18 and 17.
	Over mountainous land, through scattering timber and undergrowth; descend.
3.00	Spring branch, 2 lks. wide, 2 ins. deep, rapid current, rocky bottom in bottom of branch of Maple Cañon, 200 ft. below cor., course N. 15° E.; ascend.
20.00	Top of ascent, bears N. 15° E. and S. 15° W.

Chain thence across mesa; enter dense undergrowth; ascend gently.

33.00 Top of ascent on mesa, bears N. and S.; descend.

40.20 Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
A cedar, 9.4 ins. diam., bears N. 60° E., 3.9 lks. dist., marked 1/4 S. 18, T3. T.
A cedar, 10 ins. diam., bears S. 35° E., 17.5 lks. dist., marked 1/4 S. 19, T3. T.

42.00 Enter heavy timber, leave undergrowth; bears N. and S.

70.00 Leave mesa; descend abruptly, bears N. and S.

80.20 The cor. of secs. 17, 18, 19 and 20.
Land, mountainous.
Soil, clay loam, 2nd. rate
Timber, cedar and pinion pine.
undergrowth, sage and oak brush.
Good grass for grazing.
Mountainous or heavily timbered land, 80.20 chs.

N. 0° 1' W., bet. secs. 17 and 18.
Over mountainous land, through scattering timber; ascend.

2.00 Top of long ridge, 20 ft. above cor., bears E. and W.; descend abruptly into Maple Canon.

25.00 Foot of descent, bears N. 60° W. and S. 30° E.; enter bottom of Maple Canon

26.00 Spring branch, 2 lks. wide, 2 ins. deep, rocky bottom, good water; in Maple Canon, 700 ft. below ridge, course S. 30° E.

27.00 Road in canon, bears with canon.

29.00 Leave bottom of Maple Canon, bears N. 30° W. and S. 30° E.; ascend.

Chains	
40.00	Set a sandstone, 16 x 9 x 6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which a hard sandstone boulder 4 x 4 x 4 ft. above ground, bears N. 15° E., 50 lks. dist. marked (X) B. C. and raise a mound of stone, 2 ft base, 1½ ft. high, W. of cor. pits impracticable.
50.50	Top of spur, 700 ft. above canon, bears N. 35° E and S. 35° W; descend.
	Enter heavy timber, bears N. 35° E. and S. 35° W.
80.00	Set a limestone, 18 x 10 x 5 ins., 12 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked with 4 notches on S. and 5 notches on E. edges; from which a pinion pine, 16 ins. diam., bears N. 24° E; 40 lks. dist; marked T. 17 S., R. 2 E., S. 8, B. T.
	a cedar, 10 ins diam; bears S. 19° E. 32 lks. dist., marked T. 17 S., R. 2 E., S. 17, B. T.
	a cedar, 24 ins. diam., bears S. 56° W., 92 lks. dist., marked T. 17 S., R. 2 E., S. 18, B. T.
	a pinion pine, 8 ins. diam., bears N. 32° 30' W., 77 lks. dist., marked T. 17 S., R. 2 E., S. 7, B. T.
	Land, mountainous.
	Soil, gravelly loam and rocky. 2nd and 4th rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 8000 lbs.

	N. 89° 51' E., on a random line bet. secs. 8 and 17.
40.00	Set temp. 1/4 sec. cor.
79.80	Intersect N. and S. line, 15 lks. S. of the

chains	
	cor. of secs. 8, 9, 16 and 17.
	Thence we run
	S. 89° 45' W., on a true line bet. secs. 8 and 17;
	Over mountainous land, through heavy timber; descend.
12.50	Drag road, bears N. E. and S. W.
33.50	Bottom of branch of Maple Cañon, 400 ft. below cor., course S. 20° E.; ascend.
39.90	Set a sandstone, 18 x 12 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which:
	A pinion pine, 5 ins. diam. bears N. 1° 30' E., 25 lks. dist., marked 1/4 S. 8 B. T.
	A pinion pine, 6 ins. diam., bears S. 77° E., 72 lks. dist., marked 1/4 S. 17, B. T.
71.00	Top of ridge, 400 ft. above cañon, bears N. 25° E. and S. 25° W.; descend.
79.80	The cor. of secs. 7, 8, 17 and 18.
	Land, mountainous.
	Soil, rich black loam; 1st. rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 79.80 chs.

	S. 89° 32' W., on a random line bet. secs. 7 and 18.
40.00	Set temp. 1/4 sec. cor.
79.90	Intersect W. bdy. of Tp. 10 lks. N. of the cor. of secs. 7 and 18.
	Thence we run
	N. 89° 48' E., on a true line bet. secs. 7 and 18.
	Over mountainous land, through heavy timber; ascend.
6.50	Top of ridge, 150 ft. above cor., bears N. 20° E. and S. 20° W.; descend.
22.10	Bottom of branch of Maple Cañon,

Chains	
	200 ft. below ridge, course S.; ascend.
39.90	Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which A cedar 18 ins. diam., bears N. 8° W. 33 lks. dist., marked 1/4 S. 7, T. 17 S. A pinion pine, 7 ins. diam., bears S. 11° E., 30 lks. dist., marked 1/4 S. 18 T. 17 S.
43.00	Top of ridge, 250 ft. above hollow, bears N. 25° E. and S. 25° W.; descend.
72.25	Bottom of branch of Maple Canon, 250 ft. below ridge, course S.; ascend.
79.90	The cor. of secs. 7, 8, 17 and 18. Land, mountainous Soil, clay loam and gravelly, 2nd & 3rd class. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 79.90 chs. August 4, 1898; At the noon hour the sky is overcast and solar observations are impossible.

	N. 0° 1' W., bet. secs. 7 and 8. Over mountainous land, through heavy timber; descend.
20.00	Leave heavy and enter scattering timber, bears E. and W.
32.00	Bottom of hollow, 150 ft. below ridge, course W.; ascend.
40.00	Set a limestone, 16 x 9 x 7 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 10 ins. diam., bears N. 54° 30' E., 70 lks. dist., marked 1/4 S. 8, T. 17 S. A cedar, 12 ins. diam., bears S. 32° 30' W. 25 lks. dist., marked 1/4 S. 7, T. 17 S.
43.50	Top of ridge, 150 ft. above hollow, bears N. 80° E. and S. 80° W.; descend.

Chains	
56.00	Bottom of branch of Maple Canon, 250 ft. below ridge, course S. 66° E.; Ascend.
73.50	Top of ridge, 300 ft. above canon, bears E and W.; descend.
80.00	Set a limestone, 16 x 8 x 6 ins., 11 ins. in the ground, for cor. of secs. 5; 6, 7, and 8, marked with 5 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, clay and gravelly loam; 2nd. rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous land, or heavily timbered land, 80.00 chs.

	N. 89° 45' E., on a random line bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at the cor. of secs. 4, 5; 8, and 9.
	Thence meander.
	S. 89° 45' W., on a true line bet. secs. 5 and 8.
	Over mountainous land, through heavy timber, descend gradually.
40.00	Set a limestone, 14 x 9 x 5 ins., 4 ins. in the ground, for ¼ sec. cor. marked, ¼ on N. face; from which
	A cedar, 8 ins. diam., bears N. 2° E. 35 lks. dist., marked ¼ S. 5; B. T.
	A cedar, 6 ins. diam., bears S. 25° W. 15 lks. dist., marked ¼ S. 8. B. T.
65.60	Bottom of branch of Maple Canon, 600 ft. below sec. cor., course S. 30° E., leave timber, bears N. 30° W. and S. 30° E. Ascend.
80.00	The cor. of secs. 5; 6, 7, and 8.
	Land, mountainous.
	Soil, rich loam; 1st. rate.
	Timber, cedar and pinion pine

	Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	S. 89° 48' W., on a random line bet. secs. 6 and 7.
40.00	Set temp. 1/4 sec. cor.
80.10	Intersect W. bdy. of Tp. at the cor. of secs. 6 and 7.
	Thence we run
	N. 89° 48' E., on a true line bet. secs. 6 and 7.
	Over mountainous land, through dense undergrowth; descend gently across mesa.
15.00	An old corral bears S. about 5 chs. dist.
40.10	Leave mesa, bear N., W. and S. E.; descend
	Set a limestone, 16 x 12 x 4 ins., 11 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable
80.10	The cor. of secs. 5, 6, 7, and 8.
	Land, mountainous
	Soil, clay loam; 2nd. rate.
	No timber.
	Undergrowth, sage and oak brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.10 chs.
	For reasons already explained, we run N. 0° 1' W., on a true line bet. secs. 5 and 6.
	Over mountainous land, through dense undergrowth; descend.
15.00	Bottom of branch of Maple Canon 130 ft. below sec. cor., course S. 50° E.; ascend.
20.00	Enter scattering timber, bears N. W. and S. E.

Chains	
35.00	Top of ridge, 600 ft. above cañon, bears N. 75° W. and S. 75° E.; descend into Dry Cañon.
40.00	Set a limestone, 16 x 7 x 5 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable
79.50	Intersect N. bdy. of Tp. 6.00 chs. S. 89° 36' E. of the cor. of secs. 5, 6, 31 and 32. heretofore described. Set a limestone, 15 x 12 x 9 ins., 10 ins. in the ground, for closing cor. of secs. 5 and 6, marked C. C. on S.; with 5 grooves on E. and 1 groove on W. faces; and raise a mound of stone 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable. Note: We destroy all marks on the cor. of secs. 5, 6, 31, and 32, which pertain to secs. 5 and 6. Land mountainous. Soil clay loam; 2nd. rate. Timber cedar and pinion pine. Undergrowth, sage and oak brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 79.50 chs. August 4, 1898.

General Description.

This fract. Tp. contains nearly every variety of land from level valleys to high rough mountains, and the soil ranges from rocky ground and cliffs to rich loam. The soil of the heavily timbered land is generally rich loam, and will produce abundant crops without irrigation. The soil of the cañon and valley is generally clay loam, 2nd. rate, and

chains	
	is capable of producing good crops without irrigation.
	The remaining portion of the township, excepting the ledges and cliffs, is gravelly loam, 2nd. and 3rd. rate, and is covered with an abundant growth of rich and nutritious grasses, and dense undergrowth.
	Cedar and pinion pine timber, is found on nearly all the ridges and cañons.
	The township is well watered by Maple Creek, Dry Creek, and numerous springs.
	We were unable to find J. Coolidge's D. E. No. 2221.
	There is no mineral in the township. There are no settlers in this fractional Tp.

Scott O. Stewart,
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, 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 _____

_____

showing the respective capacities in which they acted:

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____

_____

_____ of the _____

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

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

Subscribed and sworn to before me this _____

day of _____, 189

_____

SEAL

_____

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ... United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing date o
.....day of ...., 189 , I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surv
General for ....., the Manual of Surveying Instructions, and the laws o
United States, surveyed all those parts or portions of .....
.....
.....
.....
.....of the.....
..... meridian, in the.....of ....., which are represented i
foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Surv
General for .....and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will s
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surv

Subscribed by said ..... , and sworn to before me
this..... day of ..... , 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, June 23 1902.

The foregoing field notes of the survey of the subdivisions of Township
17 South Range 2 East of the Salt Lake Base and
Meridian, Utah
.....
.....
.....
.....
executed by Scott B. Stewart & Andrew J. Stewart
under his contract No. 217, dated January 14, 1897, having
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

Jacob Thal

United States Surveyor Gen

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 offic

.....

United States Surveyor Gen

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BOOK A-258

U.S.B.

FIELD NOTES

OF THE SURVEY OF THE

North and East Boundaries

of

Township 17 South, Range 1 East,

of the Salt Lake Principal Meridian,

Utah.

AS SURVEYED BY

Scott Stewart & Andrew J. Stewart Jr., United States Deputy Surveyors

Under ~~his~~ their Contract No. 217, dated November 1st, 1897.

Survey commenced August 4th, 1898.

Survey completed August 6th, 1898.

[illegible]

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. J. McAllister, Chainman.

William W. Richardson Jr. Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Maundman.

Peter S. Sorensen, Maundman.

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary official see Book "B"

BOOK A-258

INDEX DIAGRAM.

Township 17 SOUTH, *Range* 1 EAST.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same
we will report the true distances to all notable objects, and the true lengths of all lines that we as
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the sur

_____

_____, *Chai*

_____, *Chai*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____

_____, *Moun*

_____, *Moun*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____

_____, *A*

_____, *A*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of _____

_____, *Fla*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

Survey commenced Aug. 4, 1898, and executed with a W. and L. E. Gurley light mountain transit, No. -, with solar attachment. The horizontal limb, being provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb is provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former on December 4, 1897; and the latter on April 5, 1898.

We examine the adjustments of the instruments, and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a true meridian determined by observation on Polaris, we proceed as follows:-

At the cor. of Tps. 16 and 17 S., Rs. 1 E. and 1 W., latitude 39° 02' 3" N., longitude 111° 53' 47" W.; we set off 39° 02' 3" N. on the lat. arc; 17° 04' N., on the decl. arc; and at 3h 30m p. m., l. m. t., determine a true meridian with the solar of the Gurley

instrument, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor. At 10h 31m p.m., l.m.t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station.

August 4, 1898.

August 5, 1898:- At 6h 5m a.m., l.m.t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined, by cutting a small groove in the stone set Aug. 4, on which the true meridian falls 0.4 ins. east of the mark determined by the solar.

At 7h 30m a.m., l.m.t., we set off 39° 23' N. on the lat. arc; 16° 54' N. on the decl. arc; and mark a point in the true meridian determined with the solar of the Gurley instrument, by a cross on the stone already set 5 chs. N. of our station; this mark falls 0.2 ins. east of the true meridian established by Polaris observation.

The solar apparatus of the Gurley instrument by p.m. and a.m. observations, defines positions for true meridians, respectively about 0' 2" West and 0' 0" East of

the meridian established by the Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory.
The magnetic bearing of the true meridian at 7h 30m a.m. is N. 16° 36' W., the angle thus determined, reduced by the table, page 100, gives the mean mag. decl. 16° 30' E.

From the cor. of Tps. 16 and 17 S., Rs. 1 E. and 1 W. heretofore described, we run East, on a random line, along N. bdy. of Tp. 17 S., R. 1 E., setting temp. 1/4 sec. and sec. cors. at intervals of 40.00 chs.; and at 494.00 chs., intersect the W. bdy. of T. 17 S. R. 2 E., 20.00 chs. S. of the cor. of Tps. 16 and 17 S., R. 2 E.
Set a sandstone, 17 x 12 x 10 ins., 11 ins. in the ground, for closing cor. of Tps. 16 and 17 S., R. 1 E., marked C. C., 1 E. on W., 16 S. on N., and 17 S. on S. faces; with 6 grooves on N., S. and W. faces; and raise a mound of stone, 2 ft. base, 1/2 ft. high, W. of cor. Pits impracticable.
Thence we run
West, on a true line, bet. secs. 1 and 36. Over mountainous land, through dense undergrowth; descend.

12.50 Bottom of branch of Maple Canon, 150 ft. below ridge, course S. 20° W.; ascend.

24.25 Top of long ridge, 200 ft. above canon, bears N. 25° E. and S. 25° W.; descend.

chains	
32.75	Bottom of branch of Maple Cañon, 150 ft. below ridge, course 25° W.; ascend.
40.00	Set a sandstone, 15 x 12 x 7 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
48.50	Top of ridge, 500 ft. above cañon, bears N. 30° E. and S. 30° W.; descend.
62.75	Creek, 5 lks. wide, 4 ins. deep, good water, rocky bottom, in bottom of Maple Cañon, 600 ft. below ridge, course S.; ascend.
80.00	Set a blue limestone, 20 x 12 x 8 ins., 15 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, marked with 1 notch on E. and 5 notches on W. edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Sand, mountainous.
Soil, clay and gravelly loam; 2nd rate.
No timber.
Undergrowth, sage, oak, maple, and service-berry brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.
August 5, 1898: At this cor., we set off 14° 50' N., on the decl. arc; at 0h 3m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 23' N.

West, bet. secs. 2 and 35,
Over mountainous land; through dense undergrowth; ascend.

Chains.	
39.50	Top of main dividge ridge, 700 ft. above cor., bears N. 50° E. and S. 50° W.; descend.
40.00	Set a sandstone, 15 X 13 X 6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
71.50	Bottom of branch of Timber Canon, 600 ft. below ridge, course N. 70° W.; ascend.
80.00	Set a yellow sandstone, 15 X 8 X 6 ins., 10 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, marked with 2 notches on E. and 4 notches on W. edges; from which An oak, 3 ins. diam., bears N. 47° E., 94 lks. dist., marked T. 16 S., R. 1 E., S. 35, B. T. An oak, 3 ins. diam., bears S. 73° E., 2 lks. dist., marked T. 17 S., R. 1 E., S. 2, B. T. An oak, 3 ins. diam., bears S. 44° 30' W., 34 lks. dist., marked T. 17 S., R. 1 E., S. 3, B. T. An oak, 3 ins. diam., bears N. 18° 30' W., 175 lks. dist., marked T. 16 S., R. 1 E., S. 34, B. T. Land, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. No timber. Undergrowth, sage, oak, service-berry and maple. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.

West, bet. secs. 3 and 34.
Over mountainous land, through dense undergrowth; descend

" ains. along N. slope of ridge.
40.00 Set a limestone, 15 x 12 x 5 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which
An oak, 4 ins. diam., bears N. 3° E. 3½ lks. dist., marked ¼ S. 34 B. T.
An oak, 5 ins. diam., bears S. 20° W. 3 lks. dist., marked ¼ S. 3, B. T.
45.00 Bottom of Timber Cañon, 600 ft. below cor., course S. W. Creek, 8 lks. wide, 5 ins. deep, in cañon; ascen
75.00 Enter heavy mahogany and cedar timber, bears N. and S., leave undergrowth.
80.00 Set a limestone, 16 x 15 x 14 ins., 11 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, marked with 3 notches on E. and 3 notches on W. edges; from which
A mahogany, 7 ins. diam., bears N. 16° E. 56 lks. dist. marked T. 16 S., R. 1 E., S. 34, B. T.
A cedar, 16 ins. diam., bears S. 42° 30' E. 77 lks. dist., marked T. 17 S., R. 1 E., S. 3, B. T.
A cedar, 12 ins. diam., S. 2° W., 58 lks. dist., marked T. 17 S., R. 1 E., S. 4, B. T.
A mahogany, 10 ins. diam., bears N. 88° 25 lks. dist., marked T. 16 S., R. 1 E. S. 33, B. T.
Sand mountainous.
Soil, clay and rich black loam; 1st and 2nd rate.
Timber, mahogany and cedar, undergrowth, sage, oak, maple, and service-berry brush.
Good grass for grazing.
Mountainous, or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

West, bet. secs. 4 and 33.

	mains. Over mountainous land, through heavy timber; ascend.
2.00	Top of ridge, 1,000 ft. above Timber Canon, bears N. 20° E. and S. 20° W.; descend.
22.70	Bottom of branch of Timber Canon, 700 ft. below ridge, course S. 40° W.; ascend.
40.00	Set a sandstone, 14 x 12 x 7 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which A cedar, 15 ins. diam., bears N. 100° E. 85 lks. dist., marked 1/4 S. 33, B. T. A mahogany, 4 ins. diam. bears S. 47° E. 48 lks. dist., marked 1/4 S. 4, B. T.
60.00	Top of ridge, 800 ft. above canon, bears N. 30° E. and S. 30° W.; descend.
73.00	Bottom of hollow, 500 ft. below ridge, course S. 30° W.; ascend.
80.00	Set a limestone, 18 x 7 x 5 ins., 12 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, marked with 4 notches on E., and 2 notches on W. edges; from which A cedar, 48 ins. diam., bears N. 47° 30' E. 63 lks. dist., marked T. 16 S., R. 1 E., S. 33, B. T. A cedar, 36 ins. diam., bears S. 26° E. 76 lks. dist., marked T. 17 S., R. 1 E., S. 4, B. T. A pinion pine, 14 ins. diam., bears S. 82° W. 63 lks. dist., marked T. 17 S., R. 1 E., S. 5, B. T. A cedar, 10 ins. diam., bears N. 26° W. 34 lks. dist., marked T. 16 S., R. 1 E. S. 32. B. T. Land, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, cedar, pinion pine, and mahogany. Mountainous or heavily timbered land, 80.00 chs.

chains	
	West, bet. secs. 5 and 32.
	Over mountainous land, through heavy timber; ascend.
1.00	Top of ridge, 10 ft. above cor. bears N. 20° E. and S. 20° W.; descend abruptly over a series of perpendicular ledges.
24.00	Spring branch, 2 lks. wide, 2 ins. deep, in branch of Timber Cañon, 1000 ft. below ridge, course S. 30° W.; leave ledges, bears with cañon; ascend.
31.00	Top of ridge, 200 ft. above cañon, bears N. 10° E. and S. 10° W.; descend.
40.00	Set a sandstone, 14 x 10 x 8 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which a cedar, 8 ins. diam., bears N. 40° W. 26 lks. dist., marked 1/4 S. 32, B. T. A pinion pine, 12 ins. diam., bears S. 3 lks. dist., marked 1/4 S. 5, B. T.
42.00	Bottom of branch of Timber Cañon, 500 ft. below ridge, course S.; ascend.
53.50	Top of spur, 500 ft. above cañon, bears S. 25° W.; descend.
76.00	Bottom of branch of Timber Cañon 600 ft. below spur, course S. 35° W.; leave heavy timber, bears with cañon; ascend.
— 80.00	Top of ridge, 100 ft. above cañon, bears N. and S.
	Set a sandstone, 18 x 10 x 7 ins., 12 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, marked with 5 notches on E. and 1 notch on W. edges;
	from which
	A pinion pine, 6 ins. diam., bears N. 20° 30' E. 32 lks. dist., marked T. 16 S., R. 1 E. S. 32, B. T.
	A pinion pine, 10 ins. diam., bears S. 60° W. 56 lks. dist., marked T. 17 S., R. 1 E. S. 6, B. T.
	No other trees within limits; raise a

	mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits in impracticable.
	Sand mountainous. Soil, gravelly, 2nd rate. Timber cedar and pinon pine. Mountainous or heavily timbered land 80.00 chs.
	West, bet. secs. 6 and 31.
	Over mountainous land, through scattering timber; descend.
2.50	Bottom of branch of Timber Cañon 25 ft. below cor., course S. 10° E.; spring branch 2 lks. wide, 2 ins. deep, in cañon; ascend.
10.00	Top of ridge, 300 ft. above cañon bears N. and S.; descend.
19.75	Bottom of hollow, 250 ft. below ridge, course S. 20° E.; ascend.
32.00	Top of ridge, 800 ft. above hollow, bears N. 5° E. and S. 5° W.; descend.
40.00	Set a limestone, 18 x 12 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which a pinion pine, 6 ins. diam., bears N. 73° 30' E. 19 lks. dist., marked ¼ S. 31, B. T. A pinion pine, 6 ins. diam., bears S. 3° E. 5 lks. dist., marked ¼ S. 6, B. T.
45.00	Bottom of hollow, 140 ft. below ridge, course S.; ascend.
56.00	Top of ridge, 125 ft. above hollow, bears N. and S.; descend.
67.00	Enter heavy timber, bears N. and S.
94.00	The cor. of Tps. 16 and 17 S., Rs. 1 E. and 1 W.
	Sand, mountainous.
	Soil, rich loam; 1st rate.
	Timber, cedar, and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 94.00 chs.
	August 5, 1898.

East boundary of T. 17 S., R. 1 E. -

	August 6, 1898:- At 8h 30m a.m., l.m.t., we set off 39° 17' N., on the lat. arc; 16° 36' N., on the decl. arc; and determine a true meridian with the solar, at the closing cor. of Tps. 17 and 18 S., R. 1 E., heretofore described. Thence we run north, along the E. bdy. of T. 17 S., R. 1 E. along E. side sec. 36.
	Over mountainous land, through heavy timber; descend.
20.25	The cor. of Tps. 17 and 18 S., R. 2 E.
34.75	Leave heavy timber and enter scattering timber, bears E. and W.
40.00	Set a limestone, 16 x 10 x 4 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which a pinion pine, 5 ins. diam., bears S. 100 W. 24 lks. dist., marked 1/4 S. 36, B. T.
44.25	Bottom of hollow, 400 ft. below sec. cor., course N. 80° W.; ascend.
49.75	Top of spur, 50 ft. above hollow, bears E. and W.; descend.
59.25	Bottom of hollow, 20 ft. below ridge, course S. 48° W.; ascend.
60.25	The 1/4 sec. cor. on W. side, sec. 31, T. 17 S. R. 2 E.; enter scattering under-growth, bears N. and S.
70.25	Top of main divide ridge, 500 ft. above hollow, bears N. 5° W. and S. 110° E.; descend.
80.00	Set a yellow sandstone, 20 x 8 x 8 ins., 15 ins. in the ground, for cor. of secs. 25 and 36, marked with 1 notch on S. and 5 notches on N. edges; from which A mahogany, 8 ins. diam., bears N. 65° W. 116 lks. dist., marked T. 17 S., R. 1 E. S. 25, B. T. A cedar, 6 ins. diam., bears S. 59° W. 180 lks. dist., marked T. 17 S., R. 1 E. S. 36, B. T. Sand, mountainous.

East boundary of T. 17 S., R. 1 E.- continued.-

	Soil, clay loam and gravelly; 2nd and 3rd rate.
	Timber, cedar, pinion pine and mahogany.
	Undergrowth, oak and service-berry brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	North, along E. side, sec. 25,
	Over mountainous land, through scattering timber and under-growth; descend.
20.25	The cor. of secs. 30 and 31, T. 17 S., R. 2 E
34.35	Head of swale, 150 ft. below sec. cor., course S. 60° E.; ascend.
39.50	Top of spur, 100 ft. above swale, bears N. 50° E. and S. 50° W.; descend.
40.00	Set a sandstone, 16 x 8 x 7 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
60.25	The 1/4 sec. cor. on W. side of sec. 30 T. 17 S., R. 2 E.
80.00	Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for cor. of secs. 24 and 25, marked with 4 notches on N. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Sand, mountainous.
	Soil, clay loam and gravelly; 2nd and 3rd rate.
	Timber, cedar, pinion pine and mahogany.
	Undergrowth, oak, and service-berry.
	Good grass for grazing.

East boundary of T. 17 S., R. 1 E.-

	Mountainous land, 80.00 chs.
	North, along E. side, of sec. 24.
	Over mountainous land,
	through scattering timber and
	undergrowth; descend.
2.25	Wood road leading to Manti,
	bears E. and W.
7.50	Bottom of branch of Maple Cañon,
	300 ft. below spur, course N. E.; ascend.
9.25	Wood road, leading to Manti,
	bears N. 40° W. and S. 50° E.
20.25	The cor. of secs. 19 and 30, T. 17 S., R. 2 E.
26.75	Top of spur, 60 ft. above sec. cor.,
	bears E. and W.; descend.
29.45	Bottom of hollow, 50 ft. below spur,
	course E.; a small spring bears E.
	about 2 chs. dist.; ascend.
35.50	Top of ridge, 60 ft. above hollow,
	bears E. and W.; descend.
40.00	Set a limestone, 18 x 12 x 4 ins., 12 ins. in
	the ground, for ¼ sec. cor., marked
	¼ on W. face; and raise a mound
	of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
44.65	Bottom of hollow, 200 ft. below
	ridge, course E.; ascend.
60.25	The ¼ sec. cor. on W. side, sec. 19 T. 17 S. R. 2 E.
78.50	Top of ridge, 350 ft. above hollow,
	bears N. 80° E. and S. 80° W.; descend.
80.00	Set a limestone, 16 x 9 x 6 ins., 11 ins.
	in the ground, for cor. of secs.
	13 and 24, marked with 3 notches
	on N. and 3 notches on S. edges;
	from which
	A cedar, 6 ins. diam., bears N. 43° W.
	91 lks. dist., marked T. 17 S., R. 1 E., S. 13, B. T.
	A cedar, 8 ins. diam., bears S. 78° W.
	147 lks. dist., marked T. 17 S., R. 1 E., S. 24, B. T.

East boundary of T. 17 S., R. 1 E. - Continued.

chains.	
	Sand, mountainous.
	Soil, rich loam and gravelly; 1st and 3rd rate.
	Timber, cedar.
	Undergrowth, oak, and service-berry.
	Good grass for grazing.
	Mountainous land, 80.00 chs.

	North, along E. side, sec. 13.
	Over mountainous land, scattering timber and undergrowth; descend.
4.60	Wood road, bears N. 50° E. and S. 50°
16.25	Spring branch, 4 lks. wide, 6 ins. deep, rapid current, rocky bottom; in bottom of branch of Maple Cañon, 200 ft. below course N. 30° E.; ascend.
20.25	The cor. of secs. 18 and 19, T. 17 S., R. 2 E. Enter heavy timber, bears E. and
33.25	Top of spur, 150 ft. above cañon, bears E. and W.; descend.
40.00	Set a limestone, 18 x 10 x 10 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 24 ins. diam., bears S. 16° W., 98 lks. dist., marked 1/4 S. 13, B. T.
60.25	The 1/4 sec. cor. on W. side of sec. 18, T. 17 S. R. 2 E.
67.50	Maple Creek, 3 lks. wide, 4 ins. deep, rocky bottom, rapid current, in bottom of Maple Cañon, 500 ft. below spur, course S. 70° E.; ascend abruptly.
76.00	Foot of perpendicular ledge, 20 ft. high, bears E. and W.; leave heavy timber and enter scattering timber, bears E. and W.

80.00 Set a limestone, 18x16x6 ins., 12 ins. in the ground, for cor. of secs. 12 and 13, marked with 2 notches on N. and 4 notches on S. edges; from which
A pinion pine, 14 ins. diam., bears N. 82° W., 55 lks. dist., marked T. 17 S., R. 1 E., S. 12, B. T.
No other trees within limits.
A limestone ledge, 12 ft. high, bears S. 2° W., 10 lks. dist., marked cross (x) B. O.;
and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, gravelly and rocky; 3rd and 4th rate.
Timber, cedar and pinion pine.
Undergrowth, oak and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, 80.00 chs.

North, along E. side, sec. 12.
Over mountainous land, heavy timber; ascend.
20.25 The cor. of secs. 7 and 18, T. 17 S., R. 2 E.
36.75 Leave timber and enter dense undergrowth, bears E. and W.
38.25 Top of steep ascent, 600 ft. above canon, bears E. and W.; thence gently ascending over mesa.
40.00 Set a limestone, 16x10x5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ high, W. of cor. Pits impracticable.

East boundary of T. 17 S., R. 1 E. - Continued.

chains	
60.25	The ¼ sec. cor. on W. side of sec. 7, T. 17 S., R. 2 E.
80.00	Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, marked with 1 notch on N. and 5 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, cedar and pinion Undergrowth, sage brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs. August 6, 1898: At this cor. we set off 16° 34' N., on the decl. arc; and at 0h 5m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 2' 2" N.
	North, along E. side, sec. 1. Over mountainous land, th dense undergrowth; ascend gradually.
20.25	The cor. of secs. 6 and 7, T. 17 S., R. 2 E.; enter scattering timber, bears E. and W.
40.00	Set a limestone, 18 x 9 x 7 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
53.25	Top of ridge, 1.50 ft. above sec. cor., bears N. 60° W. and S. 60° E.; descend.
60.25	The ¼ sec. cor. on W. side, sec. 6, T. 17 S., R. 2 E.

68.75	Bottom of branch of maple ~ 150 ft. below ridge, course S. 60° E.; ascend.
80.25	The closing cor. of Tps. 16 and 17 S., R. 1 E.
	Sand, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, scattering cedar and pinion pine.
	Undergrowth, sage, oak, and maple.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.25 chs.

August 6, 1898.

Boundaries of T. 17 S., R. 1 E.

Latitudes, departures, and closing errors.

Line designated.		True bearing	Distance.	Latitudes		Departures	
				N.	S.	E.	W.
			Chs.	Chs.	Chs.	Chs.	Chs.
W. bdy.	T. 17 S., R. 1 E.	N. 1°30' W.	80.80	80.77			2.12.
W. bdy.	T. 17 S., R. 1 E.	North	400.00	400.00			
N. bdy.	T. 17 S., R. 1 E.	East	494.00			494.00	
E. bdy.	T. 17 S. R. 1 E.	South	480.25		480.25		
S. bdy.	T. 17 S., R. 1 E.	West	493.50				493.50
Convergency						.64	
Totals				480.77	480.25	494.64	495.62
				480.25			
Error in lat.				.52			494.64
Error in dep.							.98

This township is all mountainous land, is well watered, and fairly well timbered. The soil is fertile and the township is very well adapted for grazing. The township should be subdivided.

Scott P. Stewart.
Andrew J. Sawyer Jr.
U. S. Deputy Surveyors.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, 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 _____

_____

showing the respective capacities in which they acted:

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____

_____

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

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

Subscribed and sworn to before me this _____ day of _____, 189

_____

SEAL

_____

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ... United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing date
..... day of ....., 189 , I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Su
General for ....., the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of .....
.....
.....
.....
..... of the .....
..... meridian, in the ..... of ....., which are represented i
foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Sur
General for ..... and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

....
United States Deputy Sur

Subscribed by said ....., and sworn to before me
this ..... day of ....., 189

SEAL

....
....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Jan 23 1900 1

The foregoing field notes of the survey of the North and East Boundar
of Township 17 South Range 1 East of the Salt Lake Ba
& Meridian, Utah .....
.....
.....
.....
.....

executed by Scott D. Stewart & Andrew J. Stewart Jr.
under ~~his~~ their contract No. 217, dated November 1st, 1897, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
surveys they describe, are hereby approved.

June 6 '73
United States Surveyor Ge

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 offi

.....
United States Surveyor Ge

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BOOK A-258

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

of

Township 17 South, Range 1 East

of the Salt Lake Base and Meridian,

Utah.

AS SURVEYED BY

John Steward and Andrew J. Steward, United States Deputy Surveyors,

Under the Contract No. 217, dated November 1st, 1897.

Survey commenced August 4th, 1898.

Survey completed August 18th, 1898.

Lbs. 1078.06

BOOK A-258

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman,

Daniel H. Y. McAllister, Chainman,

William W. Richardson, Chainman,

Alma Betts, Chainman,

Antone P. Stewart, Roundsman,

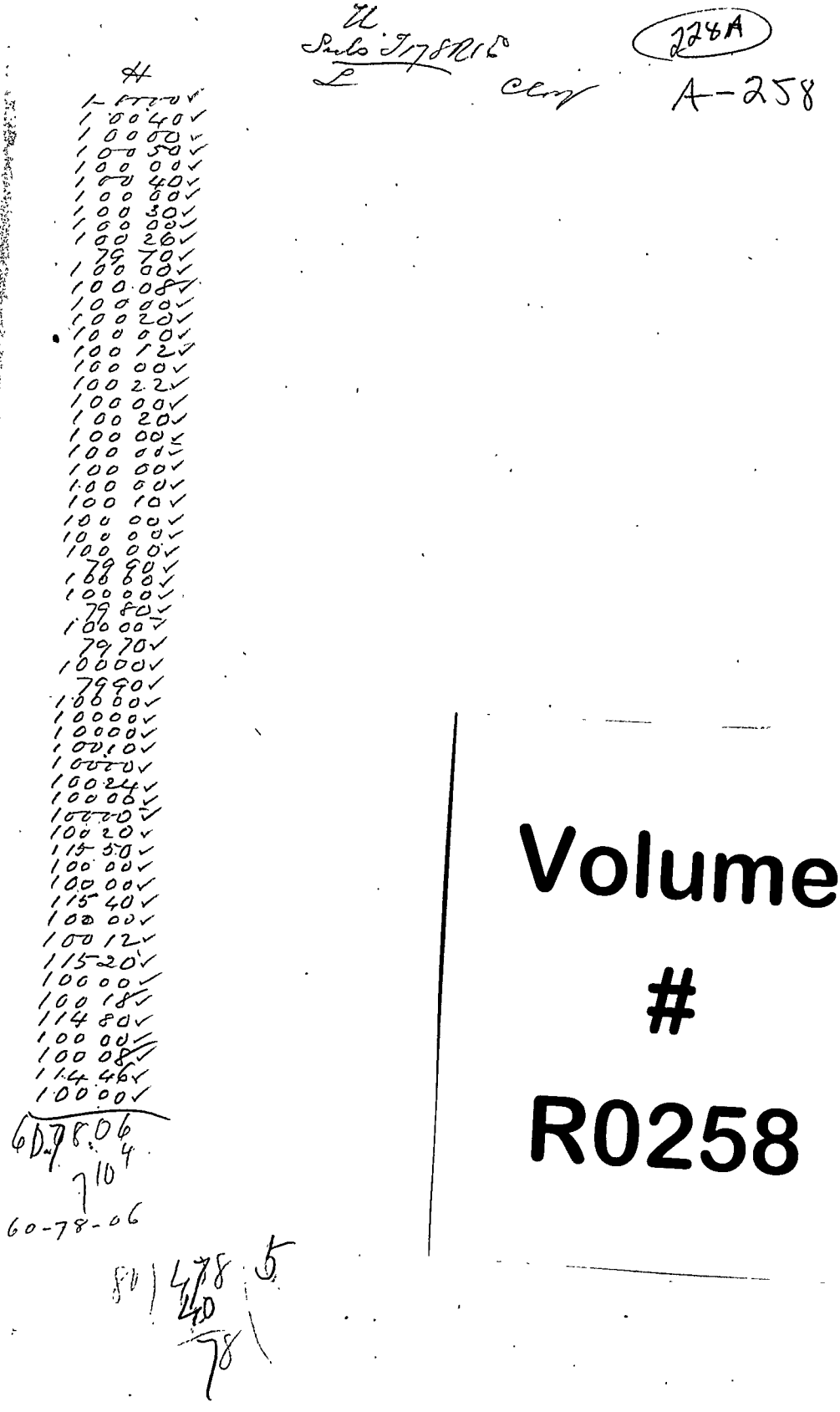
Peter S. Sorensen, Roundsman,

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary affidavits see book "A"

6—151



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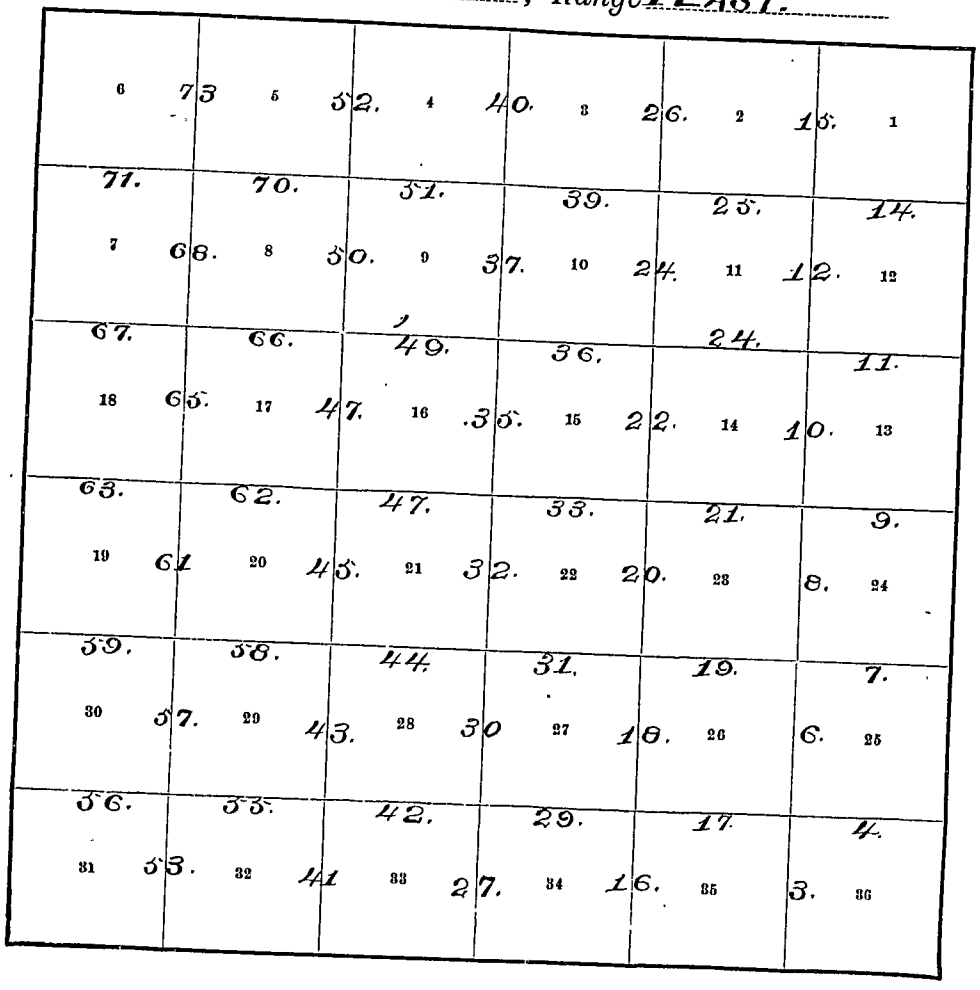
BOOK A-258

INDEX DIAGRAM.

Township 17 SOUTH, *Range* 1 EAST.



Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will le
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the sam
we will report the true distances to all notable objects, and the true lengths of all lines that we a
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su

_____

_____, *Chai*

_____, *Chai*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____

_____, *Mou*

_____, *Moun*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

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

_____

_____, *A*

_____,

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

I, _____, do solemnly swear that I will well an
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of _____

_____, *Fl*

Subscribed and sworn to before me this _____
day of _____, 189

_____

SEAL

_____

chains. Survey commenced August 6, 1898, and executed with a W. and L. E. Gurley light mountaian transit, No. –, with solar attachment; the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc.

The instruments were examined, tested on the True Meridian at Salt Lake City, found correct, were approved by the surveyor general for Utah; the former, December 4, 1897; and the latter on April 5, 1898.

We examine the adjustments of the instruments and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instruments, by comparing its indications resulting from solar observations, made during a. m. and p. m. hours, with a true meridian determined by observation on Polaris, we proceed as follows:

At the cor. of secs. 1, 2, 35 and 36, on S. bdy. of Tp. 17 S. R. 1 E., latitude 39°17' N., longitude 111°48' W., we set off 39°17' N., on the lat. arc; 16°31' N. on the decl. arc; and at

August 4th 30m p. m., l. m. t., determine with the solar of the Gurley instrument, a true meridian and mark a point thereof on a stone firmly set in the ground, 5 chs., N. of the cor.
At 10h 24m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station.

August 6, 1898.

August 8, 1898: At 6h 20m a. m., l. m. t. we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined by cutting a small groove in the stone set August 6, on which the true meridian falls 0.36 ins. east of the mark determined by the solar of the Gurley instrument.
At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument and mark the True Meridian thus determined by cutting a small groove in the stone set August 6, on which the true meridian falls 0.36 ins. east of the mark determined by the solar.
At 7h 0m a. m., l. m. t., we set off 39° 1' N., on the lat. arc, 16° 04' N., on the decl. arc; and mark a point in the true meridian determined with the solar, of the

chains

Gurley instrument, by a cross on the stone already set 5 chs., N. of our station; this mark falls 0.22 ins. east of the true meridian established by Polaris observation.

The solar apparatus of the Gurley instrument, by p. m. and a. m. observations, defines positions for for true meridians, respectively about 0'19" west, and 0'11" east of the meridian established by Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian, at 7h 30m a. m., l. m. t., is N. 16° 30' W.; the angle thus determined, reduced by the table, page 100, of the Manual, gives the mean mag. decl. 16° 30' E..

From the cor. of secs. 1, 2, 35, and 36, heretofore described; we run N. 0° 1' W., bet. secs. 35 and 36. Over mountainous land, through heavy cedar and pinion pine timber, and scattering oak and sage-brush, undergrowth; ascend.

30.00 Top of flat ridge, 100 ft. above sec. cor., bears N. 70° E. and S. 70° W.; descend.

40.00 Set a limestone, 18 x 16 x 8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 6 ins. diam., bears N. 55° E., 89 1/2 lks. dist., mark-

Chains.	
	ed ¼ S. 36, B. T. A cedar, 5 ins. diam., bears S. 49 W., 164 lks. dist., marked ¼ S. 35, B. T.
57.50	Bottom of hollow; 100 ft. below; course S. W.; ascend.
72.00	Top of ridge, 80 ft. above hollow; bears N. E. and S. W.; descend.
78.25	Wash, 20 lks. wide, 8 ft. deep, in hollow, 25 ft. below ridge, course S. 40° W.; ascend.
80.00	Set a limestone, 16 x 10 x 4 ins., 11 ins. in the ground, for cor. of secs. 25, 26, 35, and 36, marked with 1 notch S. and 1 notch on E. edges; from which A cedar, 6 ins. diam., bears N. 60° 30' E., 150 lks. dist., marked T. 17 S., R. 1 E., S. 25, B. T. A cedar, 8 ins. diam., bears S. 81° 15' W., 141 lks. dist., marked T. 17 S., R. 1 E., S. 35, B. T. A cedar, 14 ins. diam., bears N. 31° W., 117 lks. dist., marked T. 17 S., R. 1 E., S. 26, B. T. No tree within limits in sec. 36; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, cedar and pinion pine. Undergrowth, oak and sage brush. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line, bet. secs. 25 and 36.
40.00	Set temp. ¼ sec. cor.

Subdivision of T. 17 S., R. 1 E. - Continued. -

chains.	
80.40	Intersect E. bdy. of Tp. 10 lks. S. of cor. of secs. 25 and 36.
	Thence we run
	S. 89° 56' W., on a true line bet. secs. 25 and 36.
	Over mountainous land, through scattering cedar and pinion pine timber, and undergrowth;
.87	Top of a narrow ridge, bears N. 5° W. and S. 5° E.
15.50	Bottom of cañon, 300 ft. below cor., course S. 40° W; ascend.
17.50	Top of ridge, 50 ft. above cañon, bears N. 40° E. and S. 40° W.; descend.
29.00	Bottom of hollow, 100 ft. below ridge, course S.; ascend.
40.20	Top of ridge, 80 ft. above hollow, bears N. 40° E. and S. 40° W.
	Set a limestone, 15 x 10 x 5 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
	A pinion pine, 4 ins. diam., bears N. 78° E., 26 lks. dist., marked 1/4 S. 25, B. T.
	A cedar, 4 ins. diam., bears S. 20° W., 94 lks. dist., marked 1/4 S. 36, B. T.;
	descend.
53.75	Bottom of hollow, 250 ft. below ridge, course S. 40° W.; ascend.
72.00	Top of spur, 20 ft. above hollow, bears N. 46° E. and S. 46° W.; descend.
78.75	Wash, 20 lks. wide, 8 ft. deep, in hollow, 120 ft. below ridge, course S. 40° W.; ascend.
80.40	The cor. of secs. 25, 26, 35, and 36.
	Sand, mountainous.
	Soil, clay loam and gravelly; 2nd and 3rd rate.
	Timber, cedar and pinion pine.
	Undergrowth, oak and service berry.

Subdivision of T. 17 S., R. 1 E.- Continued.-

Good grass for grazing.
Mountainous land, 80.40 chs.

N. 0° 1' W., bet. secs. 25 and 26.
Over mountainous land, through scattering timber; ascend gradually.

40.00 Set a limestone, 16 x 8 x 5 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
A cedar, 18 ins. diam., bears S. 10° E., 87 lks. dist., marked 1/4 S. 25, B. T.
A cedar, 8 ins. diam., bears S. 4° W. 128 lks. dist., marked 1/4 S., 26, B. T.

58.00 Top of ridge, 350 ft. above sec. cor., bears N. E. and S. W.; leave timber, bears with ridge; descend.

65.00 Bottom of branch of Mellors Canon, 100 ft. below ridge, course S. W.; ascend.

80.00 Set a limestone, 19 x 9 x 6 ins., 12 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, marked with 2 notches on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, clay and gravelly loam; 2nd rate.
Timber, cedar, and pinion pine.
Undergrowth, oak, sage, and service-berry.
Good grass for grazing.
Mountainous land, 80.00 chs.

Subdivision of T. 17 S., R. 1 E. - Continued.

N. 89°56' E., on a random line bet. secs. 24 and 25.

40.00 Set temp. ¼ sec. cor.

80.50 Intersect E. bdy. of Tp. at the cor. of secs. 24 and 25.

Thence we run S. 89°56' W., on a true line, bet. secs. 24 and 25,

Over mountainous land; ascend.

3.00 Top of spur, 10 ft. above cor., bears N. E. and S. W.; descend.

22.50 Bottom of branch of Maple Cañon, 10 ft. below ridge, course N. 80° E. A corral bears S. 25 lks. dist.; ascend.

25.00 Enter dense undergrowth, bears N. E. and S. W.

39.00 Enter aspen saplings, bears N. and S.

40.25 Set a limestone, 18 X 10 X 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which

An oak, 4 ins. diam., bears N. 35° E. 14 lks. dist., marked ¼ S. 24, B. T.,

An aspen, 4 ins. diam., bears S 86° E., 45 lks. dist., marked ¼ S. 25, B. T.

41.00 Leave aspen saplings, bears N. and S.

53.00 Top of main divide ridge, 500 ft. above cañon, bears N. 50° W. and S. 50° E.; descend.

80.50 The cor. of secs. 23, 24, 25, and 26.

Land, mountainous.

Soil, clay and gravelly loam; 2nd rate.

Timber, aspen.

Undergrowth, oak, maple, and service-berry.

Good grass for grazing.

Mountainous or heavily ed land, or land covered with dense undergrowth, 80.50 chs.

August 8, 1898:- At the noon hour,

chai the sky is overcast and solar observations are impossible.

N. 0° 1' W., bet. secs. 23 and 24.
Over mountainous land, through dense undergrowth; ascend.

18.25 Top of ridge, 100 ft. above sec. cor., bears N. 60° W. and S. 60° E., descend abruptly.

20.50 Foot of descent, bears N. 50° W. and S. 50° E.; thence across small basin.

22.50 Leave basin; begin ascent, bears N. 50° W. and S. 50° E.

40.00 Top of main divide ridge, 300 ft. above basin, bears N. 20° W. and S. 30° E.
Set a limestone, 14 x 10 x 8 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Descend.

58.00 Bottom of swale, 200 ft. below ridge, course N. 70° E.; ascend.

60.00 A spring of good water, bears E. about 7.00 chs. dist.

80.00 Set a yellow sandstone, 18 x 8 x 5 ins. 12 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, marked with 3 notches on S. and 1 notch on E. ed; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, clay and gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, sage, and service-berry.

Subdivision of T. 17 S., R. 1 E. - Continued.

Good grass for grazing.
Mountainous land, or land
covered with dense undergro
80.00 chs.

	N. 89° 56' E., on a random line,
	bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor..
80.40	Intersect E. bdy. of Tp. 10 lks. S. of the
	cor. of secs. 13 and 24.
	Thence we run
	S. 89° 52' W., on a true line bet. secs.
	13 and 24.
	Over mountainous land, through
	heavy cedar and pinion
	pine timber, and dense under-
	growth; descend gradually
	along N. slope of ridge.
10.00	Sco. timber, bears N. and S.
21.25	Bottom of hollow, 30 ft. below
	ridge, course N. 60° E.; ascend.
40.20	Set a gray limestone, 16 x 13 x 7 ins.,
	11 ins. in the ground, for ¼ sec. cor.,
	marked ¼ on N. face; from which
	An oak, 8 ins. diam., bears N. 115
	lks. dist., marked ¼ S. 13, B. T.
	no other trees within limits;
	raise a mound of stone, 2 ft. base,
	1½ ft. high, N. of cor. Pits impractical.
43.00	A cor. all bears S. about 6.00 chs. dist
70.00	E. edge of basin, bears N. and S.;
	leave undergrowth.
77.00	W. edge of basin, bears N. and S.;
	enter undergrowth.
80.40	The cor. of secs. 13, 14, 23, and 24.
	Sand, mountainous.
	Soil, clay and gravelly loam;
	sandy.
	Timber, cedar, and pinion pine.

Undergrowth, oak, sage, maple, and service berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.40 chs.

	N. 0° 1' W., bet. secs. 13 and 14.
	Over mountainous land, through dense undergrowth; ascend.
35.00	Top of ridge, 50 ft. above cor., bears E. and W.; descend.
40.00	Set a yellow sandstone, 30 x 10 x 6 ins. 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A maple, 6 ins. diam., bears S. 25° 30' E., 125 lks. dist., marked ¼ S. 13, B. T. An oak, 5 ins. diam., bears N. 5° 30' W., 115 lks. dist., marked ¼ S. 14, B. T.
50.50	Head of hollow, 40 ft. below ridge, course E.; ascend.
57.00	Top of ridge, 140 ft. above hollow; bears E. and W.; descend.
80.00	Set a limestone, 18 x 12 x 6 ins., 12 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, marked with 4 notches on S. and 1 notch on E. edges; from which An oak, 5 ins. diam., bears N. 69° E., 50 lks. dist., marked T. 17 S., R. 1 E., S. 12, B. T. An oak, 5 ins. diam., bears S. 17° 15' W., 68 lks. dist., marked T. 17 S., R. 1 E., S. 14, B. T. A oak, 5 ins. diam., bears N. 61° W.; 68 lks. dist., m T. 17 S., R. 1 E., S. 11, B. T.

chains. No other trees within limits;
raise a mound of stone, 2 ft.
base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, clay and gravelly loam;
2nd rate.
No timber.
Undergrowth, oak, sage, maple,
and service-berry.
Good grass for grazing.
Mountainous land, or land
covered with dense undergrowth;
80.00 chs.

N. 89° 52' E., on a random line bet.
secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

80.30 Intersect E. bdy. of Tp. 15 lks. N. of
the cor. of secs. 12 and 13.
Thence we run
S. 89° 58' W., on a true line bet. secs.
12 and 13.
Over mountainous land,
through scattering cedar and
pinion pine timber; descend
abruptly.

9.00 Foot of descent, 200 ft. below cor.;
enter bottom of Maple Canon,
bears N. 40° W. and S. 40° E.

10.50 Maple Creek, 4 lks. wide, 2 ins.
deep, in Maple Canon, course
S. 40° E.

16.50 Leave canon, bears N. 42° W.; and
S. 42° E.; enter heavy timber,
bears with canon; ascend.

20.00 Top of spur, 60 ft. above canon,
- bears N. 20° E. and S. 20° W.; descend.

22.00 Bottom of steep, rocky gulch,

Chains	
	50 ft. below spur, course N. 40° E., ascend abruptly.
38.50	Top of steep ascent; ascend gradually.
40.15	Set a limestone, 18 x 10 x 9 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A cedar, 6 ins. diam., bears N. 77° 30' E., 35 lks. dist., marked ¼ S., 1.2, B. T. A pinion pine, 18 ins. diam., bears S. 22° 30' W., 120 lks. dist., marked ¼ S. 13, B. T.
45.00	Seave heavy timber; enter scattering timber and dense undergrowth, bears N. and S.
56.50	A small spring bears N. 50 lks. dist.
80.30	The cor. of secs. 11, 12, 13, and 14. Land, mountainous. Soil, rich black loam, gravelly and rocky; 1st, 2nd, and 4th rate. Timber, cedar, and pinion pine. Undergrowth, oak, maple, sage, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.30 chs. August 8, 1898.

August 9, 1898: At 7h 0m a. m., l. m. t., we set off 39° 21' N., on the lat. arc; 15° 46' N. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 11, 12, 13, and 14.

Thence we run N. 0° 1' W., bet. secs. 11 and 12.

Over mountainous land,

Subdivision of T. 17 S., R. 1 E.-Continued.

through dense undergrowth; descend along E. slope of mountain.

4.50 Bottom of hollow, 80 ft. below cor., course N. 70° E.; ascend.

35.00 Top of ridge, 120 ft. above hollow, bears E. and W.; descend.

40.00 Set a limestone, 18 x 10 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
An oak, 4 ins. diam., bears S. 39° E., 22 lks. dist., marked 1/4 S. 12, B. T.
An oak, 6 ins. diam., bears S. 70° W., 106 lks. dist., marked 1/4 S., 11, B. T.

61.50 Bottom of branch of Maple Cañon, 350 ft. below 1/4 sec. cor., course E.; spring branch, 3 lks. wide, 4 ins. deep, course E.; enter heavy timber, bears with cañon, ascend.

80.00 Set a limestone, 20 x 10 x 8 ins., 15 ins. in the ground, for cor. of secs. 1, 2 11, and 12, marked with 5 notches on S. and 1 notch on E. edges; from which
A pinion pine, 12 ins. diam., bears N. 52° 30' E., 59 lks. dist., marked T. 17 S., R. 1 E., S. 1, B. T.
A pinion pine, 20 ins. diam., bears S. 38° 30' E., 46 lks. dist., marked T. 17 S., R. 1 E., S. 12, B. T.
A pinion pine, 15 ins. diam., bears S. 64° W., 22 lks. dist., marked T. 17 S., R. 1 E., S. 11, B. T.
A cedar, 4 ft. diam., bears N. 73° W., 7 lks. dist., marked T. 17 S., R. 1 E., S. 2, B. T.

Sand, mountainous.
Soil, gravelly loam; ~~2nd~~ rate.
Timber, cedar and pinion pine.

Chains	
	Undergrowth, oak, sage, maple, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth; 80.00 chs.
	N. 89° 58' E., on a random line bet. secs. 1 and 12.
40.00	Set temp. ¼ sec. cor.
80.26	Intersect E. bdy. of Tp., 12 lks. N. of the cor. of secs. 1 and 12. Thence we run N. 89° 57' W., on a true line bet. secs. 1 and 12. Over mountainous land, through dense undergrowth; ascend.
5.00	Top of ridge, 20 ft. above cor., bears N. 10° E. and S. 10° W.; descend.
21.00	Bottom of branch of Maple Canon, 400 ft. below ridge, course S. 10° W.; ascend.
40.13	Set a limestone, 14 x 8 x 8 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
46.00	Top of ridge, 500 ft. above canon, bears N. and S.; descend.
65.50	Bottom of Maple Canon, 400 ft. below ridge, course S. 50° E.; ascend. Creek, 6 lks. wide, 2 ins. deep.
80.26	The cor. of secs. 1, 2, 11, and 12. Sand, mountainous. Soil, gravelly loam; 2nd rate. No timber. Undergrowth, oak, sage, maple, and service-berry. Good grass for grazing.

chains.	mountainous land, or land covered with dense undergrowth.
	80.26 chs.
	N. 0° 1' W., on a random line, bet. secs. 1 and 2.
40.00	Set temp. ¼ sec. cor.
79.70	Intersect N. bdy. of Tp., 20 lks. W. of the cor. of secs. 1, 2, 35, and 36.
	Thence we run
	S. 0° 8' W., on a true line, bet. secs. 1 and 2.
	Over mountainous land, through dense undergrowth; ascend.
26.00	Top of ridge, 500 ft. above cor., bears N. 40° W. and S. 40° E.; descend.
39.70	Set a limestone, 16 x 8 x 5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
61.75	Spring branch, 2 lks. wide, 2 ins. deep, solid rock bottom, rapid current, in hollow, 430 ft. below ridge, course E.; ascend.
78.00	Top of ridge, 200 ft. above hollow, bears N. 30° E., and S. 80° W.; descend.
79.70	The cor. of secs. 1, 2, 11, and 12.
	Sand, mountainous.
	Soil, gravelly loam; separate.
	No timber.
	Undergrowth, sage, oak, maple, and service-berry.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 79.70 chs.
	August 9, 1898: At this cor., we set off 15° 45' N., on the decl. arc; and

chains.	
	at 0h 5m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 2 3/4' N.
	From the cor. of secs. 2, 3, 34, and 35 on S. bdy. of Tp., heretofore described, run N. 0° 1' W., bet. secs. 34 and 35. Over mountainous land, through heavy cedar and pinion pine timber; ascend.
25.00	Top of spur, 50 ft. above cor., bears E. and W.
30.75	Bottom of hollow, 40 ft. below ridge, course N. 60° E.; ascend.
37.00	Top of ridge, 50 ft. above hollow, bears N. 60° W. and S. 60° E.; descend.
40.00	Set a limestone, 14 x 12 x 4 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 5 ins. diam., bears S. 12° E., 97 lks. dist., marked 1/4 S., 35, B. T. A cedar, 10 ins. diam., bears S. 10° 30' W., 90 lks. dist., marked 1/4 S. 34, B. T.
44.00	Bottom of hollow, 30 ft. below ridge, course S. 60° E.; ascend.
48.00	Top of spur, 40 ft. above hollow, bears N. 60° W. and S. 60° E.; descend.
60.00	Bottom of branch of Mellors Cañon, 60 ft. below ridge, course S. 5° E.; leave heavy timber, and enter scattering timber, bears with cañon; ascend.
77.50	Top of ridge, 40 ft. above cañon, bears N. 60° W. and S. 30° E.; descend.
80.00	Set a gray limestone, 15 x 8 x 6 ins., 10 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, marked with 1 notch on S. and 2 notches on E.

chains.	
	edges; from which A cedar, 14 ins. diam., bears S. 2° E., 1.37 lks. dist., marked T. 17 S., R. 1 E., S. 35, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, gravelly loam; 2nd rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line, bet. secs. 26 and 35,
40.00	Set temp. ¼ sec. cor.
80.08	Intersect N. and S. line, at the cor. of secs. 25, 26, 35, and 36.
	Thence we run
	West, on a true line bet. secs. 26 and 35.
	Over mountainous land, through heavy cedar and pinion pine timber; ascend gradually.
40.04	Set a sandstone, 24 x 10 x 4 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A pinion pine, 4 ins. diam., bears N. 9° E., 13 lks. dist., marked ¼ S. 26, B. T. A cedar, 16 ins. diam., bears S. 15° E., 33 lks. dist., marked ¼ S. 35, B. T.
50.00	Top of ridge, 100 ft. above sec. cor., bears N. and S.; descend.
55.35	Bottom of branch of Mellon's Canon, 200 ft. below ridge, course S.; ascend.

Chains.	
62.50	Top of spur, 200 ft. above cañon, bears N. 30° W and S. 30° E; descend.
69.50	Bottom of branch of Mellors Cañon, 200 ft. below ridge, course S. E.; leave timber, bears with cañon; ascend.
80.08	The cor. of secs. 26, 27, 34, and 35. Sand, mountainous. Soil, gravelly loam; 2nd rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.08 chs.

N. 0° 1' W., bet. secs. 26 and 27. Over rolling mountains, through dense undergrowth; descend.

8.00	Bottom of branch of Mellors Cañon, 100 ft. below cor., course S. 30° E.; ascend.
20.00	Top of ridge, 125 ft. above cañon, bears N. 10° W. and S. 10° E.; descend.
40.00	Set a flint stone, 20 x 10 x 6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which a lone cedar, 8 ins. diam., bears N. 80° 30' E., 26 2 lks. dist., marked 1/4 S., 26, B. T.; dig a pit, 18 x 18 x 12 ins., S. of stone, 3 ft. dist.; and raise a mound of earth, 2 ft. base, 1 ft. high, W. of cor.
64.00	Bottom of hollow, 40 ft. below ridge, course S. 30° E.; ascend.
80.00	Set a gray limestone, 16 x 8 x 6 ins., 11 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of

	chains. cor. Pits impracticable.
	Sand, rolling mountains.
	Soil, gravelly loam; 2nd rate.
	No timber.
	Undergrowth, sage and oak brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.

August 9, 1898.

August 10, 1898; at 7h 30m a.m., l. m. t., we set off 39° 19' N., on the lat. arc; 15° 29' N., on the decl. arc; and determine a true meridian with the solar, at cor. of secs. 22, 23, 26, & 27.

Thence we run

East, on a random line bet. secs. 23 and 26.

40.00	Set temp. ¼ sec. cor.
80.20	Intersect N. and S. line, 14 lks. S. of the cor. of secs. 23, 24, 25, and 26.

Thence we run

S. 89° 54' W., on a true line bet. secs. 23 and 26.

Over mountainous land, through dense undergrowth; descend.

17.50	Bottom of swale, 50 ft. below cor., course S. 10° W.; ascend.
12.50	Top of ridge, 75 ft. above swale, bears N. 20° E. and S. 20° W.; enter scattering timber, bears with ridge; descend.
32.50	Bottom of hollow, 100 ft. below ridge, course S.; ascend.
34.25	Top of spur, 50 ft. above hollow, bears N. and S.; descend.
40.10	Set a limestone, 20 x 16 x 12 ins., 15 ins.

chains.	
	in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
50.75	Bottom of branch of Mellors Cañon, 150 ft. below ridge, course S. 10° W.; ascend.
54.50	Top of spur, 100 ft. above hollow, bears N. 10° W. and S. 10° E.; descend.
57.75	Bottom of branch of Mellors Cañon, 75 ft. below ridge, course S. 30° E.; ascend.
67.00	Wood road leading to Fayette on top of ridge, 100 ft. above cañon, bears N. 20° W. and S. 20° E.
80.20	The cor. of secs. 22, 23, 26, and 27. Sand, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, cedar and pinion pine. Undergrowth, sage, oak, and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.20 chs.

N. 0° 1' W., bet. secs. 22 and 23. Over mountainous land, through dense undergrowth; ascend gradually.

30.00	Begin steep ascent, bra. E. and W.
40.00	Set a gray limestone, 18 x 10 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
41.25	Top of smooth ridge, 200 ft. above

Subdivision of T. 17 S., R. 1 E. - Continued.

ains. sec. cor. bears E. and W.; descend.
145.50 Bottom of hollow, 100 ft. below ridge, course W.; ascend.
58.00 Enter heavy cedar timber, bears E. and W.
61.00 Leave timber, bears E. and W.
65.00 Top of ridge, 200 ft. above hollow, bears N. 60° W. and S. 60° E.
A spring of good water bears N. 78° W., about 10.00 chs. dist.; descend.
72.25 Bottom of hollow, 30 ft. below ridge, course N. 75° W.; ascend.
80.00 Set a gray limestone, 18 x 14 x 5 ins., 12 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, marked with 3 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, loam and gravelly; 1st and 3rd rate.
Timber, cedar.
Undergrowth, sage, oak, maple, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

N. 89° 54' E., on a random line bet. secs. 14 and 23.
40.00 Set temp. ¼ sec. cor.
80.12 Intersect N. and S. line, at the cor. of secs. 13, 14, 23, and 24.
Thence we run
S. 89° 54' W., on a true line bet. secs. 14 and 23.
Over mountainous land, through

chains	dense undergrowth; ascend.
21.00	Top of main divide ridge, 500 ft. above sec. cor. bears N. 10° W. and S. 10° E.; descend.
32.50	Bottom of swale, 20 ft. below ridge, course N. W.; ascend.
36.00	Enter aspen saplings, bears N. and S.
39.50	Leave aspen saplings, bears N. and S.
40.06	Set a yellow sandstone, 20x10x6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which An oak, 4 ins. diam., bears N. 15° E., 120 lks. dist., marked 1/4 S. 14, B.T. An oak, 3 ins. diam., bears S. 60° E., 30 lks. dist., marked 1/4 S. 23, B. T.
43.00	Top of spur, 60 ft. above swale, bears N. and S.; descend.
50.00	Bottom of swale, 80 ft. below ridge, course N. E.; ascend.
62.00	Top of ridge, 40 ft. above swale, bears N. 60° W. and S. 60° E.; descend.
80.12	The cor. of secs. 14, 15, 22, and 23. Sand, mountainous. Soil, clay and gravelly loam; separate. No timber. Undergrowth, oak, maple, aspen, and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.12 chs.

	N. 0° 1' W., bet. secs. 14 and 15. Over mountainous land, through dense undergrowth; ascend.
8.00	Top of smooth ridge, 160 ft. above

	mains. hollow, bears N. 75° W. and S. 75° E.; descend.
39.50	Enter heavy maple timber, bears E. and W.
40.00	Set a gray limestone, 16x12x4 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A maple, 7 ins. diam., bears S. 89° E., 20 lks. dist., marked 1/4 S. 14, B. T. A maple, 8 ins. diam., bears N. 89° W., 30 lks. dist., marked 1/4 S. 15, B. T.
41.50	Leave maple timber, bears E. and W.
63.25	Creek, 6 lks. wide, 5 ins. deep, in bottom of Hell's Kitchen Cañon, 200 ft. below ridge, course W.; ascend.
68.00	Top of spur, 100 ft. above cañon, bears E. and W.; descend.
72.00	Bottom of swale, 50 ft. below spur, course S. 75° W.; ascend.
80.00	Set a limestone, 24x14x5 ins., 18 ins. in the ground, for cor. of secs. 10, 11, 14, and 15, marked with 4 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, loam and gravelly; 1st and 3rd rate. Timber, maple. Undergrowth, oak, sage, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	August 10, 1898: At the noon hour the sky is overcast, and solar

chains	
	observations are impossible.
	N. 89° 54' E., on a random line bet. secs. 11 and 14.
40.00	Set temp. ¼ sec. cor.
80.22	Intersect N. and S. line, 20 lks. N. of the cor. of secs. 11, 12, 13, and 14. Thence we run N. 89° 54' W., on a true line bet. secs. 11 and 14. Over mountainous land, through dense undergrowth; descend.
5.00	Swale, 20 ft. below cor., course N. E.; ascend.
38.50	Top of main divide ridge, 500 ft. above swale, bears N. 20° W. and S. 20° E.; descend.
40.11	Set a limestone, 20 x 10 x 4 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
66.50	Bottom of swale, 700 ft. below ridge, course S. 60° W.; ascend.
80.22	The cor. of secs. 10, 11, 14, and 15. Sand, mountainous. Soil, gravelly loam; 2nd rate. No timber. Undergrowth, oak, service-berry, and maple. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.22 chs.
	N. 0° 1' W., bet. secs. 10 and 11. Over mountainous land,

rains. through dense undergrowth; ascend.

15.00 Top of ridge, 40 ft. above hollow, bears N. 64° E. and S. 64° W.; descen

21.00 Bottom of hollow, 20 ft. below ridg course W.; ascend.

30.00 Top of ridge, 50 ft. above hollow, bears E. and W.; descend.

40.00 Set a gray limestone, 22 x 18 x 4 ins., 14 ins in the ground, for 1/4 sec. cor., m 1/4 on W. face, and raise a mound of 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

45.75 Bottom of hollow, 20 ft. below ridge course S. 80° W.; ascend.

49.00 Top of ridge, 25 ft. above hollow, bears N. 80° E. and S. 80° W.; descend.

53.50 Bottom of branch of Hells Kitchen Canon, 30 ft. below ridge, course S. W.; ascend.

80.00 Set a gray limestone, 24 x 10 x 6 ins. 18 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, marked with 5 notches on S. and 2 notches o E. edges; and raise a mound o stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Sand, mountainous.
Soil, gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, sage, maple, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense under-growth; 80.00 chs.

S. 89° 57' E., on a random line bet. secs. 2 and 11.

Chains.	
40.00	Set temp. ¼ sec. cor.
80.20	Intersect N. and S. line, 8 lks. E. of the cor. of secs. 1, 2, 11, and 12.
	Thence we run
	West, on a true line bet. secs. 2 and 11.
	Over mountainous land, through dense undergrowth; ascend.
40.10	Set a limestone, 18 x 8 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
45.00	Top of main divide ridge, 1000 ft. above sec. cor., bears N. 15° W. and S. 5° E.; descend.
64.25	Bottom of branch of Hells Kitchen Canon, 400 ft. below ridge, course S. 20° W.; ascend.
80.20	The cor. of secs. 2, 3, 10, and 11.
	Sand, mountainous.
	Soil, clay and gravelly; 2nd rate.
	No timber.
	Undergrowth, sage, oak, maple, and service berry.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.20 chs.
	N. 0° 1' W., on a random line bet. secs. 2 and 3.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, 10 lks. E. of the cor. of secs. 2, 3, 34, and 35.
	Thence we run
	S. 0° 5' E., on a true line bet. secs. 2 and 3.
	Over mountainous land, through dense undergrowth; ascend.
5.50	Top of ridge, 150 ft. above cor., bears E. and W.

Subdivision of T. 17 S., R. 1 E. Continued.

chains.

26.00 Bottom of branch of Timber Canon, 14 ft. below ridge, course W.; ascend.

40.00 Set a gray limestone, 16 x 12 x 6 ins 11 ins. in the ground, for 4 sec. marked 4 on W. face; from which
An oak, 3 ins. diam., bears N. 35° E., 33 lks. dist., marked 4 S. 2, B. T.
An oak, 3 ins. diam., bears N. 10° W., 70 lks. dist., marked 4 S. 3, B. T.

58.00 Top of ridge, dividing Timber and Hell's Kitchen Canons, 200 ft. above canon, bears N. E. and S. W.; descend.

80.00 The cor. of secs. 2, 3, 10, and 11.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, sage, and service-berry.
Mountainous land, or land covered with dense undergrowth, 80. 00 chs.

August 10, 1898.

August 11, 1898: At 8h 30m a. m., l. m. t., we set off 39° 17' N. on the lat. arc.; 15° 10' N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 3, 4, 33, and 34, on S. bdy. of Tp
Thence we run
N. 0° 21' W., bet. secs. 33 and 34.
Over mountainous land, through heavy timber and scaring undergrowth; ascend gradually.

39.00 Leave heavy and enter scatting timber, bears E. and W.

40.00 Set a limestone, 18 x 6 x 6 ins., 12 ins.

Subdivision of T. 17 S., R. 1 E. - Con

chains in the ground, for ¼ sec. cor., marked 4 on W. face; from which
A mahogany, 3 ins. diam., bears N. 62° 30' E., 18 lks. dist., marked ¼ S. 34, B. T.
An oak, 5 ins. diam., bears W., 80 lks. dist., marked ¼ S. 33, B. T.

60.00 Top of ridge, 150 ft. above sec. cor., bears E. and W.; descend.

79.50 Bottom of branch of Axhandle Canon 250 ft. below ridge, C

N. 80° W.; ascend.

– 80.00 Set a limestone, 16 X 8 X 5 ins., 11 ins. in the ground, for cor. of secs. 27, 28, 33, and 34, marked with 1 notch on S. and 3 notches on E. edges; from which
A pinion pine, 5 ins. diam., bears N. 23° E., 80 lks. dist., m
ea T. 1 S., R. 1 E., S. 27, B. T.
A pinion pine, 10 ins. di
bears N. 63° W., 170 lks. dist., marked T. 17 S., R. 1 E., S. 28, B. T.
No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, rolling mountains.
Soil, clay loam and gravelly; 2nd and 3rd rate.
Timber, cedar and pinion pine.
Undergrowth, oak, mahogany, sage, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, 80.00 chs.

chains.	
	East, on a random line bet. secs. 27 and 34.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, 30 lks. S. of the cor. of secs. 26, 27, 34, and 35. Thence we run S. 89° 45' W., on a true line bet. secs. 27 and 34. Over mountainous land, through dense undergrowth and scattering timber; ascend.
8.50	Top of ridge, 10 ft. above cor., bears N. and S. E.; descend.
21.50	Wood road leading to Fayette, bears N. 10° W. and S. 10° E.
40.00	Set a limestone, 16 x 8 x 6 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A cedar, 12 ins. diam., bears N. 76° 30' W., 33 lks. dist., marked ¼ S. 27, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Thence descend along spur of ridge, bears N. 80° E. and W.
56.50	Bottom of branch of Axhandle Cañon at forks, 300 ft. below ridge, course W.; thence descend along cañon.
80.00	The cor. of secs. 27, 28, 33, and 34. Sand, rolling mountains. Soil, gravelly loam; 2nd rate. Timber, cedar, and pinion pine. Undergrowth, oak, sage, and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth; 80.00 chs.

N. 0° 2' W., bet. secs. 27 and 28.
Over mountainous land,
scattering timber, and under-
growth; ascend.

24.50 Top of ridge, 250 ft. above cañon,
bears E. and W.; descend.

28.00 Bottom of hollow, 40 ft. below
ridge, course W.; ascend.

32.50 Top of ridge, 100 ft. above hollow,
bears E. and W.; descend.

40.00 Set a sandstone, 14 x 10 x 10 ins., 9 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; and raise
a mound of stone, 2 ft. base, 1½ ft.
high, W. of cor. Pits impractic

49.50 Bottom of Axhandle Cañon, 300 ft.
below ridge, course S. 30° W.; ascend

80.00 Set a gray limestone, 18 x 8 x 7 ins.,
12 ins. in the ground, for cor. of
secs. 21, 22, 27, and 28, marked with
2 notches on S. and 3 notches on
E. edges; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.

Sand, mountainous.
Soil, clay and gravelly loam;
2nd rate.
Timber, cedar and pinion pine.
Undergrowth, oak, sage, and
service-berry.
Good grass for grazing.
Mountainous land, or land
covered with dense under-
growth, 80.00 chs.
August 11, 1898; At the noon hour
the sky is overcast and solar
observations are impossible.

Subdivision of T. 17 S., R. 1 E. - Continued.

N. 89° 47' E., on a random line bet. secs. 22 and 27.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line, at the cor. of secs. 22, 23, 26, and 27.

Thence we run

S. 89° 47' W., on a true line bet. secs. 22 and 27.

Over mountainous land, through dense undergrowth; ascend.

20.00 Wood road leading to Fayette, bears N. 10° E. and S. 10° W.

A spring of good water, bears S. about 6.00 chs. dist.

25.00 Top of ridge, 60 ft. above sec. cor., bears N. and S. 20° W.; descend.

40.05 Set a sandstone, 20 x 6 x 5 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits unpracticable.

52.55 Bottom of Ashandle Cañon, 200 ft. below ridge, course S. 10° W. about 10 chs. thence W.; ascend.

55.00 Enters scattering cedar timber, bears N. and S.

60.00 Top of ridge, 100 ft. above cañon, bears N. and S.; descend.

64.00 Bottom of hollow, 60 ft. below ridge, course S.; ascend.

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

Sand, mountainous.

Soil, gravelly; 2nd rate.

Timber, cedar.

Undergrowth, sage, oak, and service-berry.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.10 chs.

N. 0° 2' W., bet. secs. 21 and 22.
Over mountainous land,
through scattering timber and
dense undergrowth; ascend.

21.00 Top of ridge, dividing Axhandle
and Hell's Kitchen Cañons, 100 ft.
above cor., bears N. 65° E. and S. 65° W.;
descend.

30.00 Bottom of branch of Hell's Kitchen
Cañon, 150 ft. below ridge, course
S. 65° W.; ascend.

40.00 Set a limestone, 16 x 14 x 9 ins., 11 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from which
A mahogany, 8 ins. diam.,
bears N. 59° E., 58 lks. dist., marked
1/4 S. 22, B. T.
A cedar, 12 ins. diam., bears
N. 30° 30' W., 27 lks. dist., marked
1/4 S. 21, B. T.

62.50 Top of ridge, 300 ft. above cañon,
bears N. E. and S. W.; descend.

79.80 Bottom of branch of Hell's Kitchen
Cañon, 300 ft. below ridge, course
S. 55° W.; ascend.

80.00 Set a hard sandstone, 15 x 10 x 8 ins.,
10 ins. in the ground, for cor. of
secs. 15, 16, 21, and 22, marked 17 S.
on N. E. and 1 E. on S. E. faces; with
3 notches on S. and 3 notches on E.
edges; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of
cor. Pits impracticable.
Sand, mountainous.
Soil, black loam, and gravelly;
1st and 3rd rate.
Timber, cedar, mahogany,
and pinion pine.
Undergrowth, oak, sage, and
service-berry.

Subdivision of T. 17 S., R. 1 E. - Continued.

ains. Good grass for grazing. Mountainous land, or land covered with dense under-growth, 80.00 chs.

	N. 89° 47' E., on a random line bet. secs. 15 and 22.
40.00	Set temp. 1/4 sec. cor.
80.00	Intersect n. and s. line, 20 lks. n. of the cor. of secs. 14, 15, 22, and 23
	Thence we run
	S. 89° 56' W., on a true line bet. secs. 15 and 22.
	Over mountainous land, through dense undergrowth; descend.
24.00	Bottom of branch of Hell's Kitchen Cañon, 200 ft. below cor., course N. 75° W.; ascend,
28.80	Wood road leading to Fayette, bears N. 60° W. and S. 60° E.
40.00	Set a gray sandstone, 18 x 10 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face;
	from which
	An oak, 5 ins. diam., bears N. 30° E., 48 lks. dist., marked 1/4 S. 15, B. T.
	A maple, 8 ins. diam., bears S. 60° E., 150 lks. dist., marked 1/4 S. 22, B. T.
67.50	Top of ridge, 30 ft. above hollow, bears N. and S. A spring of good water bears N. about 5.00 chs. dist.; descend.
79.50	Bottom of branch of Hell's Kitchen Cañon, 40 ft. below ridge, course S. 80° W.; ascend.
80.00	The cor. of secs. 15, 16, 21, and 22.

rains. Sand, mountainous.
Soil, black loam and gravelly; 1st and 3rd rate.
No timber.
Undergrowth, sage, oak, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.

At the cor. of secs. 15, 16, 21, and 22, latitude 39° 20' N., longitude 111° 50' W.; at 10h 04m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined by a tack driven in a wooden plug, set in the ground, 5 chs. N. of our station.

August 11, 1898.

August 12, 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined by cutting a small groove in a stone firmly set in the ground, west of the mark determined by Polaris observation; the magnetic bearing of said true meridian is N. 15° 35' W., which reduced by the table, page 100, of the Manual, gives the mean mag. decl. 14° 30' E.

ans. At 7h 3m a.m., l.m.t., we set off 39° 25' N., on the lat. arc; 14° 54' N., on the decl. arc; and mark the true meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of our station; this mark falls 0.26 lns. west of the meridian established by Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory. Thence we run N. 0° 2' W., bet. secs. 15 and 16. Over mountainous land; ascend.

3.50 Enter heavy timber, bears E. and W.

10.00 Leave timber and enter dense undergrowth, bears E. and W.

26.50 Top of ridge, 200 ft. above sec. cor., bears N. 65° E. and S. 65° W.; descend.

36.50 Bottom of branch of Hells Kitchen Cañon, 100 ft. below ridge, course S. 65° W.; enter scattering cedar and mahogany timber, bears with cañon; ascend.

40.00 Set a limestone, 12 x 10 x 6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
A mahogany, 10 ins. diam., bears S. 86° 30' E., 78 lks. dist., marked 1/4 S. 15, B. T.
A mahogany, 4 ins. diam., bears S. 59° W., 47 lks. dist., marked 1/4 S. 16, B. T.

50.00 Leave timber, bears E. and W.

56.50 Top of flat ridge, 150 ft. above cañon, bears E. and W.; descend.

70.00 Enter pine and cedar timber, bears E. and W.

72.25 Bottom of branch of Hell's Kitd Cañon, 400 ft. below ridge, course N. W.; ascend.

80.00 Top of spur, 40 ft. above cañon, bears N. W. and S. E.
Set a sandstone, 22 x 10 x 5 ins., 17 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked with 4 notches on S. and 3 notches on E. edges; from which
A white pine, 5 ins. diam., bears N. 59° 15' E., 58 lks. dist., marked T. 17 S., R. 1 E., S. 10, B. T.
A white pine, 14 ins. diam., bears S. 69° 15' E., 119 lks. dist., marked T. 17 S., R. 1 E., S. 15, B. T.
A cedar, 8 ins. diam., bears S. 49° W., 48 lks. dist., marked T. 17 S., R. 1 E., S. 16, B. T.
A pinion pine, 10 ins. diam., bears N. 57° W., 26 lks. dist., marked T. 17 S., R. 1 E., S. 9, B. T.
Sand, mountainous.
Soil, black loam; 1st rate.
Timber, cedar, mahogany, pinion and white pine.
Undergrowth, oak and sage brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

N. 89° 56' E., on a random line bet. secs. 10 and 15.

40.00 Set temp. 1/4 sec. cor.

79.90 Intersect N. and S. line, 20 lks. S.

chains. of the cor. of secs. 10, 11, 14 and 15.
Thence we run
S. 89° 47' W., on a true line bet.
secs. 10 and 15.
Over mountainous land,
through dense undergrowth;
and scattering timber; ascend.
30.00 Creek, 5 lks. wide, 4 ins. deep, rapid
current, clear cold water; in
bottom of fork of Hells Kitchen
Cañon, 200 ft. below sec. cor., course
N. W.; ascend.
39.95 Set a hard sandstone, 30 X 16 x 6 ins.,
22 ins. in the ground, for ¼ sec. cor.,
marked ¼ on N. face; from which
An oak, 4 ins. diam., bears N. 66°
W., 38 lks. dist., marked ¼ S. 10, B. T.
A pine, 18 ins. diam., bears S. 7° W.,
66 lks. dist., marked ¼ S. 15, B. T.
79.90 Top of spur, 50 ft. above cañon,
bears N. W. and S. E.;
The cor. of secs. 9, 10, 15, and 16.
Sand, mountainous.
Soil, black loam and gravelly
loam; 1st and 2nd rate.
Timber, cedar and pine.
Undergrowth, oak, maple, and
service-berry.
Good grass for grazing.
Mountainous land, or land
covered with dense undergrowth,
79.90 chs.

N. 0° 2' W., bet. secs. 9 and 10.
Over mountainous land,
through heavy cedar, pine,
and mahogany timber; descend.
8.00 Creek, 5 lks. wide, 6 ins. deep,
rapid current, clear cold.

rains. water, in bottom of
Hell's Kitchen Cañon, 200 ft. below
cor., course S. W.; ascend.

40.00 Set a limestone, 20 x 12 x 9 ins., 15 ins.
in the ground, for ¼ sec. cor.,
marked ¼ on W. face; from which
A cedar, 12 ins. diam., bears S. 84°
58 lks. dist., marked ¼ S. 10, B. T.
A cedar, 4 ins. diam., bears S. 83° E.,
W., 20 lks. dist., marked ¼ S. 9, B. T.

45.00 Leave heavy timber and enter
dense undergrowth, bears E.
and W.

70.00 Top flat ridge dividing Hell's
Kitchen and Timber Cañons,
400 ft. above cañon, bears N. 70° E.
and S. 70° W.; descend.

80.00 Set a limestone, 24 x 8 x 8 ins., 18 ins.
in the ground, for cor. of secs.
3, 4, 9, and 10, marked with 5
notches on S. and 3 notches on E.
edges; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, clay and gravelly loam;
2nd rate.
Timber, cedar, pine, and
mahogany.
Undergrowth, sage, and oak
brush.
Good grass for grazing.
Mountainous or heavily
timbered land, or land covered
with dense undergrowth, 80.00

August 12, 1898:- At this cor., we
set off 14° 49' N., on the decl. arc;
and at 11h 58m a. m., l. m. t.,
observe the sun on the meridi
the resulting lat. is 39° 22' N.

Subdivision of T. 17 S., R. 1 E.-Continued.

ains.	
	N. 89°47' E., on a random line bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, 6 lks. S. of the cor. of secs. 2, 3, 10, and 11. Thence we run
	S. 89°44' W., on a true line bet. secs. 3 and 10.
	Over rolling mountains, through dense undergrowth; ascend.
25.00	Top of divide bet. Hells Kitchen and Timber Cañons, 50 lks. above cor., bears N. 65° E. and S. 65° W.; descend.
40.00	Set a sandstone, 18 x 14 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 lks. base, 1 ½ lks. high, N. of cor. Pits impracticable.
80.00	The cor. of secs. 3, 4, 9, and 10. Sand, rolling mountains. Soil, clay loam; 2nd rate. No timber. Undergrowth, oak, sage, and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	N. 0°2' W., on a random line bet. secs. 3 and 4.
40.00	Set temp. ¼ sec. cor.
79.80	Intersect N. bdy. of Tp. at the cor. of secs. 3, 4, 33, and 34. Thence we run

Subdivision of T. 17 S., R. 1 E.- Continued.

S. 0° 2' E., on a true line bet. secs. 3 and 4.
Over mountainous land, heavy timber; descend.

29.50 Creek, 4 lks. wide, 4 ins. deep, clear cold water, rapid curr in bottom of Timber Cañon, 600 l. below cor., course S. 85° W.; ascend.

39.80 Falls on limestone ledge, 10 ft. high, on which
We cut a cross (X) at the exact cor. point, for 1/4 sec. cor., marked 1/4 N. of cross; from which
A pinion pine, 10 ins. diam. bears S. 75° E., 42 lks. dist., m ea 1/4 S. 3, B. T.
A mahogany, 6 ins. diam., be N. 74° W., 46 lks. dist., marked 1/4 S. 4,

51.00 Top of spur, 500 ft. above cañon, bears N. 70° E. and S. 70° W.; descend.

62.00 Leave timber and enter dense undergrowth, bears N. 70° E. and S. 70° W.

65.00 Bottom of branch of Timber Cañon, 200 ft. below spur, course S. 70° W.; ascend.

79.80 The cor. of secs. 3, 4, 9, and 10.
Land, mountainous.
Soil, gravelly loam and rocky; 2nd and 4th rate.
Timber, cedar, pine, and mahogany.
Undergrowth, sage, oak, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.80

August 12, 1898.

Chains.

August 13, 1898:- At 8h 0m a.m., l.m.t., we set off 39° 17' N., on the lat. arc; 140° 34' N., on the dec. arc; and determine a true meridian with the solar at the cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp. heretofore described. Thence we run N. 0° 3' W., bet. secs. 32 and 33. Over mountainous land, through heavy cedar and pinion timber; ascend.

8.00 Top of ridge, 100 ft. above cor., bears S. 34° W. and N. 60° E.; descend.

25.00 Bottom of Axhandle Cañon, 500 ft. below ridge, course N. 80° W.; leave heavy timber, and enter scattering timber and undergrowth, bears with cañon; ascend.

28.00 Foot of perpendicular cliff of conglomerate rock, 50 ft. high, bears with cañon.

40.00 Set a quartz stone, 18 x 10 x 8 ins., 12 ins. in the ground, for 4 sec. cor., marked 4 on W. face; from which

A pinion pine, 7 ins. diam., bears N. 78° E., 102 lks. dist., marked 4 S. 33, B. T.
A pinion pine, 6 ins. diam., bears N. 56° W., 57 lks. dist., marked 4 S. 32, B. T.

61.50 Top of spur, 200 ft. above cañon, bears N. E. and S. W.; descend.

80.00 Set a conglomerate stone, 16 x 12 x 6 ins., 11 ins. in the ground for cor. of secs. 28, 29, 32, and 33, marked with 1 notch on S. and 4 notches on E. edges; from which

A mahogany, 8 ins. diam.,

chains	
	bears N. 53° E., 41 lks. dist., marked T. 17 S., R. 1 E., S. 28, B. T.
	A mahogany, 10 ins. diam., bears S. 85° E., 49 lks. dist., marked T. 17 S., R. 1 E., S. 33, B. T.
	A pinion pine, 6 ins. diam., bears S. 51° W., 45 lks. dist., marked T. 17 S., R. 1 E., S. 32, B. T.
	A pinion pine, 5 ins. diam., bears N. 26° W., 85 lks. dist., marked T. 17 S., R. 1 E., S. 29, B. T.
	Sand, mountainous.
	Soil, gravelly; 3rd rate.
	Timber, cedar, pinion pine, and mahogany.
	Undergrowth, oak and sagebrush.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
79.70	Intersect N. and S. line, 15 lks. S. of cor. of secs. 27, 28, 33, and 34.
	Thence we run S. 89° 54' W., on a true line bet. secs. 28 and 33.
	Over mountainous land, through scattering undergrowth and timber; descend.
3.50	Bottom of branch of Axhandle Cañon, 10 ft. below cor., course N. 60° W.; ascend.
15.00	Top of spur, 100 ft. above cañon, bears N. and S.; descend.
23.50	Bottom of Axhandle Cañon, 200 ft. below spur, course S. 40° W.; ascend.
39.85	Set a limestone, 16 x 10 x 5 ins., 11 ins.

	mains. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which a cedar, 6 ins. diam., bears N. 69° W., 94 lks. dist., marked ¼ S, 28, B. T. a cedar, 6 ins. diam., bears S. 73° W., 43 lks. dist., marked ¼ S. 33, B. T.
52.00	Top of spur, 500 ft. above canon, bears N. and S.; descend.
63.75	Bottom of hollow, 250 ft. below ridge, course S.; ascend.
75.75	Top of spur, 250 ft. above hollow, bears N. and S.; descend.
79.70	The cor. of secs. 28, 29, 32, and 33, Sand, mountainous. Soil, gravelly and rocky; 3rd and 4th rate, Timber, cedar, and pinion pin Undergrowth, sage and oak brush. Good grass for grazing. Mountainous land, 79.70 chs.
	N. 0° 3' W., bet. secs. 28 and 29. Over mountainous land, through heavy timber; descend
22.50	Bottom of hollow, 200 ft. below ridge, course S. W.; leave heavy and enter scattering timber, bears with hollow; ascend.
28.00	Top of spur, 40 ft. above hollow, bears N. 40° W. and S. 40° E.; desc
30.75	Bottom of hollow, 30 ft. below ridge, course S. 40° E.; thence ascend along top of ridge, bears N. and S.
40.00	Set a limestone, 16 x 14 x 4 ins., 11 ins. in the ground, for ¼ sec. cor.,

chains.	
	marked ¼ on surface; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impractical
60.50	Top of divide ridge bet. Hell's Kitchen and Axhandle Cañons, 600 ft. above Axhandle Cañon, bears N. 70° E. and S. 70° W.; descend
70.00	Enter pine timber, bears E. and W.
79.25	Drag road, bears N. E. and S. W.
80.00	Set a limestone, 16 x 8 x 8 ins., 11 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges; from which A mahogany, 10 ins. diam., bears N. 26° E., 98 lks. dist., mkd T. 17 S., R. 1 E., S. 21, B. T. A cedar, 5 ins. diam., bears S. 63½° E., 49 lks. dist., marked T. 17 S., R. 1 E., S. 28, B. T. A pine , 18 ins. diam., bears S. 80° W., 230 lks. dist., marked T. 17 S., R. 1 E., S. 29, B. T. A cedar, 18 ins. diam., bears N. 87° W., 200 lks. dist., marked T. 17 S., R. 1 E., S. 20, B. T. Sand, mountainous. Soil, loam, and gravelly; 1st and 3rd rate. Timber, pine, cedar, and mahogany. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	N. 89° 54' E., on a random line bet. secs. 21 and 28.
40.00	Set temp. ¼ sec. cor.
79.90	& intersect N. and S. line, at the

chains. cor. of secs. 21, 22, 27, and 28.
Thence we run
S. 89° 54' W., on a true line bet.
secs. 21 and 28.
Over mountainous land,
through scattering timber
and undergrowth; descend.
34.50 Top of ridge, 100 ft. above hollow,
bears N. 20° E. and S. 20° W.; descend.
39.95 Set a limestone, 16 x 8 x 4 ins., 11 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on N. face; and raise
a mound of stone, 2 ft. base,
1½ ft. high, N. of cor.
Pits impracticable.
50.00 Bottom of branch of Hell's Kitchen
Canon, 60 ft. below spur, course
N. 50° W.; ascend.
64.00 Top of spur, 75 ft. above canon,
bears N. 15° W. and S. 15° E.; descend.
79.15 Dray road, bears N. E. and S. W.
79.90 The cor. of secs. 20, 21, 28, and 29.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, cedar and pine.
Undergrowth, sage, and oak
brush.
Good grass for grazing.
Mountainous land, 79.90 chs.
August 13, 1898:- At this cor., we
set off 14° 31' N., on the decl. arc;
and at 0h 4m p. m.; l. m. t.,
observe the sun on the meridian, the resulting lat. is
39° 19' N., which is about 0'.08
less than the proper lat.

N. 0° 3' W., bet. secs. 20 and 21.
Over mountainous land,

chains.	
	through heavy timber; des
12.50	Bottom of Hells Kitchen Cañon, 500 ft. below cor., course S. 70° W.; ascend abruptly.
40.00	Set a sandstone, 15 x 12 x 6 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A pinion pine, 8 ins. diam., bears N. 47° E., 18 lks. dist., marked ¼ S. 21, B. T. A cedar, 18 ins. diam., bears N. 50° W., 35 lks. dist., marked ¼ S. 20, B. T.
60.00	Top of ridge, 800 ft. above cañon, bears N. 40° E. and S. 40° W.; descend.
80.00	Set a limestone, 16 x 12 x 6 ins., 11 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, marked with 3 notches on S. and 4 notches on E. edges; from which A cedar, 8 ins. diam., bears N. 53° 30' E., 54 lks. dist., marked T. 17 S., R. 1 E., S. 16, B. T. A mahogany, 4 ins. diam., bears S. 73° E., 60 lks. dist., marked T. 17 S., R. 1 E., S. 21, B. T. A mahogany, 4 ins. diam., bears S. 3° W., 44 lks. dist., marked T. 17 S., R. 1 E., S. 20, B. T. A mahogany, 5 ins. diam., bears N. 34° W., 45 lks. dist., marked T. 17 S., R. 1 E., S. 17, B. T. Sand, mountainous. Soil, gravelly and rocky; 3rd and 4th rate. Timber, cedar, mahogany and pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.

Subdivision of T. 17 S., R. 1 E. - Continued.

ains.	
	N. 89° 54' E., on a random line bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect n. and s. line, 20 lks. N. of the cor. of secs. 15, 16, 21, and 22. Thence we run N. 89° 57' W., on a true line bet. secs. 16 and 21. Over mountainous land, through heavy timber; ascend.
29.00	Top of ridge, 500 ft. above sec. cor., bears N. and S.; descend.
37.25	Bottom of branch of Hells Kit Canon, 300 ft. below ridge, course S. 40° W.; ascend.
40.00	Set a sandstone, 18 x 6 x 6 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A pinion pine, 10 ins. diam., bears N. 30° W., 30 lks. dist., marked ¼ S. 16, B. T. A pinion pine, 6 ins. diam., bears S. 58° E., 52 lks. dist., marked ¼ S. 21, B. T.
62.00	Top of ridge, 800 ft. above canon, bears N. E. and S. W.; descend.
80.00	The cor. of secs. 16, 17, 20, and 21, Sand, mountainous. Soil, gravelly and rocky; 3rd and 4th rate. Timber, cedar, and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.

N. 0° 3' W., bet. secs. 16 and 17.
Over mountainous land, through heavy timber, and

chains.	
	scattering undergrowth; disc
1.00	Bottom of branch of Hells Kitchen Cañon, 10 ft. below cor.; course S. 70° W.; ascend.
25.00	Top of ridge, 600 ft. above cañon bears E. and W.; descend.
40.00	Set a sandstone, 14 x 8 x 8 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A mahogany, 3 ins. diam., bears N. 75° E., 54 lks. dist., marked 1/4 S. 16, B. T. A mahogany, 5 ins. diam., bears S. 76° W., 55 lks. dist., marked 1/4 S. 17, B. T.
63.80	Creek, 4 lks. wide, 6 ins. deep, rapid current, clear cold water, in bottom of Hell's Kitchen Cañon, 600 ft. below ridge, course S. 80° W.; ascend.
80.00	Falls on stationary boulder, 18 x 18 x 18 ins., above ground, on W. cut a cross (X) at the exact cor. point; with 4 notches on S. and E. edges, for cor. of secs. 8, 9, 16, and 17, from which A longleaf pine, 14 ins. diam., bears N. 6° 45' E., 62 lks. dist., marked T. 17 S., R. 1 E., S. 9, B. T. A longleaf pine, 16 ins. diam., bears S. 13° E., 64 lks. dist., marked T. 17 S., R. 1 E., S. 16, B. T. A longleaf pine, 16 ins. diam. bears S. 17° 30' W., 112 lks. dist., marked T. 17 S., R. 1 E., S. 17, B. T. A longleaf pine, 12 ins. diam. bears N. 56° W., 125 lks. dist., marked T. 17 S., R. 1 E., S. 8, B. T. Sand, mountainous. Soil, gravelly and loam; 1st and 3rd rate. Timber, cedar, pinion pine,

ains. mahogany, and long leaf pine.
Undergrowth, oak and service berry.
Mountainous or heavily timbered land, 80.00 chs.

August 13, 1898.

August 15, 1898; The sky is overcast the entire forenoon and solar observations are impossible.
S. 89° 57' E., on a random line bet. secs. 9 and 16.
40.00 Set temp. ¼ sec. cor.
80.10 Intersect N. and S. line 8 lks. S. of the cor. of secs. 9, 10, 15, and 16.
Thence we run
West, on a true line bet. secs. 9 and 16.
Over mountainous land, through heavy timber and scattering undergrowth; descend.
3.00 Bottom of branch of Hells Kitchen Canon, 100 ft. below cor., course N. W.; ascend.
16.00 Top of spur, 100 ft. above canon, bears N. and S.; descend.
24.70 Creek, 5 lks. wide, 6 ins. deep, rocky bottom, clear cold water, in bottom of Hells Kitchen Canon, 200 ft. below spur, course S. 55° W.; ascend.
40.05 Top of spur, 75 ft. above canon, bears N. and S.
Set a hard sandstone, 20 x 11 x 8 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which
A cedar, 8 ins. diam., bears

ains. N. 56° 30' E., 17 lks. dist., marked
1/4 S. 9, B. T.
A cedar, 14 ins. diam., bears
S. 50° E., 62 lks. dist., marked
1/4 S. 16, B. T.

49.75 Bottom of hollow, 100 ft. below ridge, course S.; ascend.

57.50 Top of spur, 130 ft. above hollow, bears N. and S.; descend.

74.50 Bottom of hollow, 200 ft. below ridge, course S.; ascend.

80.10 The cor. of secs. 8, 9, 16, and 17.
Sand, mountainous.
Soil, black loam; 1st rate.
Timber, cedar, pinion pine, and long leaf pine.
Undergrowth, oak.
Good grass for graging.
Mountainous or heavily timbered land, 80.10 chs.

N. 0° 3' W., bet. secs. 8 and 9.
Over mountainous land, through heavy timber; ascend.

40.00 Set a hard sandstone, 18 x 12 x 7 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
A pinion pine, 10 ins. diam., bears N. 50° E., 43 lks. dist., marked 1/4 S. 9, B. T.
A pinion pine, 12 ins. diam. bears N. 54° 30' W., 15 lks. dist., marked 1/4 S. 8, B. T.

47.00 Top of ridge, dividing Hell's Kitchen and Timber Cañons, 600 ft. above cañon, bears N. 60° E. and S. 60° W.; descend abruptly.

65.50 Top of perpendicular ledge of sandstone, 40 ft. high, bears

Subdivision of T. 17 S., R. 1 E. - Continued.

	ains. N. E. and S. W.
77.25	Bottom of hollow, 350 ft. below ridge, course N. 80° W., leave he and enter scattering timber, bears with hollow; ascend.
80.00	Set a hard sandstone, 18 x 14 x 5 ins. 12 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, marked with 5 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, loam and gravelly; 1st and 3rd rate. Timber, cedar, pinion pine, and long leaf pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	East, on a random line bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
80.24	Intersect N. and S. line, 30 lks. S. of cor. of secs. 3, 4, 9, and 10. Thence we run S. 89° 47' W., on a true line bet. secs. 4 and 9. Over mountainous land, through scattering timber and dense undergrowth, descend.
15.00	Bottom of branch of Timber Cañon, 75 ft. below cor., course N. W.; ascend.
40.12	Top of spur, 300 ft. above cañon, bears N. and S. Set a limestone, 20 x 14 x 6 ins., 15 ins. in the ground, for ¼ sec. cor.,

marked ¼ on N. face; from which
A cedar, 5 ins. diam., bears N. 88°
30' W., 27 lks. dist., marked ¼ S. 4, B
A cedar, 7 ins. diam., bears S. 32° 45' W.
65 lks. dist., marked ¼ S. 9, B. T.

– 80.24 The cor. of secs. 4, 5, 8, and 9.
Sand, mountainous.
Soil, gravelly loam and rocky
2nd and 4th rate.
Timber, pine, cedar, and
mahogany.
Undergrowth, sage and oak.
Good grass for grazing.
Mountainous land, or land
covered with dense undergrow
80.24 chs.

N. 0° 3' W., on a random line bet.
secs. 4 and 5.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. bdy. of Tp. at the cor. of
secs. 4, 5, 32, and 33, heretofore
described.
Thence we run
S. 0° 3' E., on a true line bet. secs.
4 and 5.
Over mountainous land,
through heavy timber;
into Timber Cañon.

17.25 Top of perpendicular limestone
ledge, 150 ft. high, bears N. E. and S.

40.00 Set a limestone, 16 x 12 x 10 ins., 11 ins.
in the ground, for ¼ sec. cor.,
marked ¼ on W. face; from which
A cedar, 10 ins. diam., bears
N. 70° E., 34 lks. dist., marked
¼ S. 4, B. T.
A pinion pine, 5 ins. diam.,
bears S. 86° W., 17 lks. dist.,

ains	
	marked ¼ S. 5, B. T.
52.60	Creek, 4 lks. wide, 5 ins. deep, rocky bottom, rapid current, clear cold water, in bottom of Timber Cañon, 1000 ft. below sec. cor., course W.; ascend abruptly.
75.00	Top of spur, 250 ft. above cañon, bears N. W. and S. E.; leave heavy and enter scattering timber, bears with ridge; descend.
80.00	The cor. of secs. 4, 5, 8, and 9.
	Sand, mountainous.
	Soil, loam and rocky; 1st and 4th rate.
	Timber, cedar, mahogany, and pine.
	Good grass for grazing.
	Mountainous or heavily land, 80.00 chs.
	August 15, 1898.

August 16, 1898; At 8h 0m a. m., l. m. t., we set off 39° 17' N., on the lat. arc; 13° 38' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 5, 6, 31, and 32, on S. bdy. of Tp. heretofore described.

Thence we run N. 0° 3' W., bet. secs. 31 and 32. Over mountainous land, through heavy timber; asc

.50	Top of ridge, 10 ft. above cor., bears N. 40° E. and S. 40° W.; de-
8.50	Bottom of hollow, 50 ft. below ridge, course S. W.; ascend.
15.50	Top of ridge, 50 ft. above hollow, bears N. 75° E. and S. 75° W.; descend.
19.50	Bottom of hollow, 40 ft. below

ridge, course W.; ascend.

24.50 Top of spur, 50 ft. above hollow; bears E. and W.; descend.

40.00 Set a limestone, 12 x 10 x 5 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
A cedar, 10 ins. diam., bears N. 31° E., 35 lks. dist., marked 1/4 S. 32, B. T.
A cedar, 10 ins. diam., bears S. 33° 30' W., 47 lks. dist., marked 1/4 S. 31, B. T.

41.00 Bottom of branch of Rough Canon, 20 ft. below 1/4 sec. cor., course N. 60° W.; ascend.

48.50 Top of spur, 20 ft. above canon, bears N. E. and S. W.; descend.

65.00 Bottom of Rough Canon, 50 ft. below ridge, course S. 20° W.; wood road in bottom, bears with canon; ascend.

80.00 Set a limestone, 18 x 10 x 8 ins., 12 ins. in the ground, for cor. of secs. 29, 30, 31, and 32, marked with 1 notch on S. and 5 notches on E. edges; from which
A cedar, 12 ins. diam., bears N. 20° E., 14 lks. dist., marked T. 17 S., R. 1 E., S. 29, B. T.
A cedar, 12 ins. diam., bears S. 14° E., 18 lks. dist., marked T. 17 S., R. 1 E., S. 32, B. T.
A cedar, 5 ins. diam., bears S. 35° W., 27 lks. dist., marked T. 17 S., R. 1 E., S. 31, B. T.
A cedar, 4 ins. diam., bears N. 53° W., 118 lks. dist., marked T. 17 S., R. 1 E., S. 30, B. T.

Land, mountainous.
Soil, clay and gravelly loam; 2nd rate.

ains timber, cedar, and pinion pine.
good grass for grazing.
mountainous or heavily
wooded land, 80.00 chs.

	East, on a random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.,
80.20	Intersect N. and S. line, 30 lks. N. of the cor. of secs. 28, 29, 32, and 33. Thence we run N. 89° 47' W., on a true line bet. secs. 29 and 32. Over mountainous land, through scattering cedar and pinion pine timber, and undergrowth; descend.
8.50	Bottom of hollow, 100 ft. below ridge, course S. 50° W.; ascend.
19.75	Top of spur, 10 ft. above hollow, bears N. 15° E. and S. 15° W.; descend abruptly.
40.10	Set a sandstone, 12 x 8 x 6 ins., 11 ins. in the ground, for ¼ sec. cor., marked 4 on N. face; from which Cedar, 5 ins. diam., bears N. 10° E., 9 lks. dist., marked 4 S. 29, B. T. A cedar, 4 ins. diam., bears S. 5° W., 26 lks. dist., marked 4 S. 32, B. T.
54.50	Bottom of branch of Rough Cañon, 400 ft. below ridge, course S. W.; ascend.
64.00	Top of spur, 20 ft. above cañon, bears N. 10° E. and S. 10° W.; descend.
72.00	Bottom of Rough Cañon, 50 ft. below spur, course S. 20° W.; ascend.
80.20	The cor. of secs. 29, 30, 31, and 32.

Chains	
	Sand, mountainous.
	Soil, loam, and gravelly; 1st and 3rd rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage and oak.
	Good grass for grazing.
	Mountainous land, 80.20 chs.
	West, on a random line bet. secs. 30 and 31.
40.00	Set temp. ¼ sec. cor.
95.50	Intersect W. bdy. of Tp. 55 lks. S. of cor. of secs. 25, 30, 31, and 36, heretofore described.
	Thence we run S. 89° 40' E., on a true line bet. secs. 30 and 31.
	Over mountainous land, through scattering timber and undergrowth; descend.
5.40	Bottom of hollow, 100 ft. below spur, course S.; ascend.
10.40	Top of spur, 50 ft. above hollow; bears N. and S.; descend.
15.15	Bottom of hollow, 50 ft. below ridge, course S. 50° W.; ascend.
55.50	Set a limestone, 16 x 9 x 8 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A cedar, 4 ins. diam., bears N. 73° 30' W., 49 lks. dist., marked ¼ S. 30, B. T. A cedar, 10 ins. diam., bears S. 19° 30' E., 51 lks. dist., m ¼ S. 31, B. T.
77.65	Top of ridge, 700 ft. above holl bears N. 20° E. and S. 20° W.; descend.
82.40	Bottom of hollow, 100 ft. below

	hains. ridge, course S. 20° W.; ascend.
	86.00. Top of spur, 100 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
	- 95.50 The cor. of secs. 29, 30, 31, and 32.
	Land, mountainous.
	Soil, clay loam and rocky; 2nd and 4th rate.
	Timber, cedar, and pinion pine.
	Undergrowth, sagebrush.
	Good grass for grazing.
	Mountainous land, 95.50 chs.
	August 16, 1878: At the noon hour, the sky is overcast and solar observations are impossible.
	N. 0° 3' W., bet. secs. 29 and 30.
	Over mountainous land, through scattering timber and undergrowth; ascend. along E. face of mountain.
31.50	Top of ridge, 300 ft. above cor., bears N. 48° E. and S. 48° W.; enter heavy timber, bears with ridge; ascend.
39.60	Bottom of hollow, 100 ft. below ridge, course S. 70° W., ascend.
40.00	Set a limestone, 18 x 14 x 3 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
	A cedar, 10 ins. diam., bears N. 88° 30' E., 41 lks. dist., marked 1/4 S. 29, B. T.
	A pinion pine, 6 ins. diam. bears S. 88° W., 12 lks. dist., marked 1/4 S. 30, B. T.
74.00	Top of ridge, 300 ft. above hi.

bears N. 80° E. and S. 80° W.; descend into Hells Kitchen Canyon.

– 80.00 Set a sandstone, 18 x 16 x 6 ins., 12 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, marked with 2 notches on S. and 5 notches on E. edges; from which

A cedar, 7 ins. diam., bears N. 7° E., 47 lks. dist., marked T. 17 S., R. 1 E., S. 20, B. T.

A cedar, 10 ins. diam., bears S. 73° E., 66 lks. dist., marked T. 17 S., R. 1 E., S. 29, B. T.

A cedar, 8 ins. diam., bears S. 28° W., 48 lks. dist., marked T. 17 S., R. 1 E., S. 20, B. T.

A cedar, 12 ins. diam., bears N. 67° W., 40 lks. dist., marked T. 17 S., R. 1 E., S. 19, B. T.

Sand, mountainous.

Soil, clay and gravelly loam; 2nd rate.

Timber, cedar and juniper pine.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

S. 89° 47' E., on a random line bet. secs. 20 and 29.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line, 16 lks. S. of the cor. of secs. 20, 21, 28, and 29,

Thence run

N. 89° 54' W., on a true line bet. secs. 20 and 29.

Over mountainous land, through heavy cedar and

chains.	
	pinion pine timber; descend.
26.50	Bottom of hollow, 300 ft. below sec. cor., course N. 20° W.; ascend.
26.75	Foot of perpendicular cliff, 100 ft. high, bears N. 20° W. and S. 20° E.
40.00	Set a limestone, 14 x 8 x 8 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A pinion pine, 8 ins. bears N. 72° W., 20 lks. dist., marked ¼ S. 20, B. T. A pinion pine, 10 ins. diam., bears S. 10° W., 22 lks. dist., marked ¼ S. 29, B. T.
116.00	Spur, 500 ft. above hollow, bears N. and S.; descend.
65.50	Bottom of branch of Hell's Kitchen Cañon, 200 ft. below spur, course N. 20° W.; ascend abruptly.
80.00	The cor. of secs. 19, 20, 29 and 30. Sand, mountainous. Soil, gravelly loam and rocky; 2nd and 4th rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	N. 89° 40' W., on a random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.
95.40	Intersect W. bdy. of Tp. 17 lks. N. of cor. of secs. 19, 24, 25, and 30, heretofore described.
	Thence we run S. 89° 46' E., on a true line bet. secs. 19 and 30. Over mountainous land,

Subdivision of T. 17 S., R. 1 E.-Continued.

chains through scattering timber and undergrowth; descend.

3.70 Bottom of hollow, 50 ft. below cor., course S.; ascend.

19.00 Top of spur, 100 ft. above hollow, bears N. and S.; descend.

23.50 Bottom of hollow, 100 ft. below spur, course S.; ascend.

28.00 Top of spur, 40 ft. above hollow, bears N. and S.; descend.

30.50 Bottom of Canon, 80 ft. below sp course S. 30° W.; ascend.

55.40 Set a limestone, 20 x 8 x 5 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which a pinion pine, 20 ins. diam., bears N. 41° E., 39 lks. dist., marked 1/4 S. 19, B. T.
a pinion pine, 8 ins. diam., bears S. 67° 30' W., 13 lks. dist., marked 1/4 S. 30, B. T.
Enter heavy timber, bears N. and S.

69.50 Top of ridge, 400 ft. above canon, bears N. 40° W. and S. 40° E.; descend.

77.00 Bottom of hollow, 300 ft. below ridge, course N. 10° E.; ascend.

93.40 Top of spur, 250 ft. above hollow, bears N. 10° W. and S.; descend.

— 95.40 The cor. of secs. 19, 20, 29, and 30.
Sand, mountainous.
Soil, clay loam and gravelly; 2nd and 3rd rate.
Undergrowth, oak and sage.
Good grass for grazing.
Mountainous or heavily timbered land, 95.40 chs.

August 16, 1898.

Subdivision of T. 17 S., R. 1 E.-Continued.

ains.

August 17, 1898: At 7h 5m a.m., l.m.t., we set off 39°19' N., on the lat. arc; 13°20' N., on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 19, 20, 29, and 30.
Thence we run
N. 0°3' W., bet. secs. 19 and 20.
Over mountainous land, through heavy cedar and pinion pine timber; descend.

27.50 Bottom of branch of Hell's Kitchen Cañon, 800 ft. below sec. cor., course N. 60° W.; ascend.

40.00 Set a limestone, 16 x 9 x 6 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
A cedar, 8 ins. diam., bears N. 74° E., 88 lks. dist., marked ¼ S. 20, B. T.
A pinion pine, 14 ins. diam., bears S. 47° W., 80 lks. dist., marked ¼ S. 19, B. T.

46.50 Top of ridge, 900 ft. above cañon, bears N. 60° W. and S. 60° E.; descend.

59.00 Bottom of hollow, 200 ft. below ridge, course N. 60° W.; ascend.

63.00 Top of spur, 50 ft. above hollow, bears N. 70° W. and S. 70° E.; descend.

68.50 Bottom of branch of Hell's Kitchen Cañon, 150 ft. below ridge, course N. 70° W.; ascend.

80.00 Set a sandstone, 18 x 10 x 7 ins., 12 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, marked with 3 notches on S. and 5 notches on E. edges; from which
A cedar, 12 ins. diam., bears N. 63° E., 20 lks. dist., marked

ains. T. 17 S., R. 1 E., S. 17, B. T.
A cedar, 10 ins. diam., bears
S. 12° E., 47 lks. dist., marked
T. 17 S., R. 1 E., S. 20, B. T.
A pinion pine, 6 ins. diam.,
bears S. 52° W., 57 lks. dist.,
marked T. 17 S., R. 1 E., S. 19, B. T.
A cedar, 10 ins. diam., bears
N. 70° W., 30 lks. dist., marked
T. 17 S., R. 1 E., S. 18, B. T.
Sand, mountainous.
Soil, gravelly and rocky;
3rd and 4th rate.
Timber, cedar, and pinion
pine.
Good grass for grazing.
Mountainous or heavily
timbered land, 80.00 chs.

S. 89° 54' E., on a random line bet.
secs. 17 and 20.
40.00 Set temp. ¼ sec. cor.
80.12 Intersect N. and S. line, 4 lks. S. of
the cor. of secs. 16, 17, 20 and 21.
Thence we run
N. 89° 56' W., on a true line bet.
secs. 17 and 20.
Over mountainous land, through
dense undergrowth; descend.
3.05 Bottom of branch of Hell's Kitchen
Cañon, 40 ft. below cor., course S. 70°
E. enter heavy timber; bears
with cañon; ascend.
6.50 Top of spur, 20 ft. above cañon,
bears N. and S.; descend.
14.00 Bottom of same cañon, 100 ft.
below spur, course N. 50° W.; as
16.00 Top of spur, 20 ft. above cañon,
bears N. 10° W. and S. 10° E.; de

Subdivision of T. 17 S., R. 1 E.- Continued.

ains.

21.75 Bottom of same cañon, 50 ft. below spur, course S. 70° W.; asc

30.00 Top of ridge, 120 ft. above cañon, bears N. and S.; descend.

37.50 Bottom of hollow, 150 ft. below ridge, course S. 20° W.; ascend.

40.06 Set a sandstone, 24 x 14 x 6 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which

A cedar, 8 ins. diam., bears N. 42° W., 14 lks. dist., marked ¼ S. 17, B. T.

A cedar, 12 ins. diam., bears S. 37° 30' E., 30 lks. dist., marked ¼ S. 20, B. T.

47.80 Top of ridge, 200 ft. above hollow, bears N. 43° E. and S. 43° W.; desc

80.12 The cor. of secs. 17, 18, 19, and 20.

Sand, mountainous.

Soil, gravelly; 3rd rate.

Timber, cedar and pinion.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.12 chs.

N. 89° 46' W., on a random line bet. secs. 18 and 19.

40.00 Set temp. ¼ sec. cor.

95.20 Intersect W. bdy. of Tp., 14 lks. N. of the cor. of secs. 19, 24, 25, and 30, heretofore described.

Thence we run

S. 89° 51' E., on a true line bet. secs.

chains	
	18 and 19.
	Over mountainous land,
	through heavy timber, descend
15.00	Creek, 10 lks. wide, 2 ins. deep,
	rocky bottom, good water, in
	bottom of Hells Kitchen Cañon,
	200 ft. below cor., course S. 70° W.;
	ascend.
50.00	Top of ridge, 300 ft. above cañon,
	bears N. 10° E. and S. 10° W.; descend
54.70	Bottom of hollow, 125 ft. below
	ridge, course S.; ascend.
55.20	Set a sandstone, 20 x 10 x 6 ins., 15 ins.
	in the ground, for 1/4 sec. cor.,
	marked 1/4 on N. face; from which
	A pinion pine, 10 ins. diam.,
	bears N. 20° W., 45 lks. dist.,
	marked 1/4 S. 18, B. T.
	A pinion pine, 14 ins. diam.,
	bears S. 10° W., 75 lks. dist., mark
	ed 1/4 S. 19, B. T.
67.50	Top of ridge, 250 ft. above hollow,
	bears N. 10° W. and S. 10° E.; descend.
87.50	Bottom of branch of Hells Kitchen
	Cañon, 300 ft. below ridge, course
	S. 45° W.; ascend.
95.20	The cor. of secs. 17, 18, 19, and 20.
	Land, mountainous.
	Soil, loam and gravelly; 1st
	and 3rd rate.
	Timber, cedar, and pinion
	pine.
	Good grass for grazing.
	Mountainous or heavily
	timbered land, 95.20 chs.
	August 17, 1898: At this cor., we
	set off 13° 15' E. on the decl., and
	at 0h 4m p. m., l. m. t., observe
	the sun on the meridian, the
	resulting lat. is 39° 20' N., which
	is about 0.05 greater than the

Subdivision of T. 17 S., R. 1 E.- Continued.

chains. proper lat.

N. 0° 3' W., bet. secs. 17 and 18.
Over mountainous island,
through heavy timber; descend.

8.50 Bottom of branch of Hell's Kitchen
Canon, 150 ft. below ridge, course
S. 50° W.; ascend.

40.00 Set a sandstone, 17 x 12 x 5 ins., 12 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from
which

Cedar, 10 ins. diam., bears
S. 60° E., 28 lks. dist., marked
1/4 S. 17, B. T.
A juniper pine, 11 ins. diam.,
bears S. 65° W., 50 lks. dist.,
marked 1/4 S. 18, B. T.

113.00 Foot of perpendicular cliff of
conglomerate stone, 80 ft. high,
bears E. and W.

143.50 Top of ridge, 1000 ft. above can-
on, bears E. and W.; descend
very abruptly.

155.50 Creek, 8 lks. wide, 6 ins. deep,
rapid current, solid rock
bottom, in bottom of Hell's Kitch-
en Cañon, 900 ft. below ridge,
course W.; ascend abruptly.

180.00 Top of ridge, bet. Hell's Kitchen
and Timber Cañons, 1000 ft.
above cañon, bears N. 40° E. and
S. 40° W. and N. W.

Set a sandstone, 15 x 10 x 6 ins.,
10 ins. in the ground, for cor. of
secs. 7, 8, 17, and 18, marked
with 4 notches on S. and 5
notches on E. edges; from which
A juniper pine, 15 ins. diam.,

Chains.	
	bears N. 35° E., 12 lks. dist., mkd T. 17 S., R. 1 E., S. 8, B. T. A cedar, 3 ft. diam., bears S. 71° E., 25 lks. dist., marked T. 17 S., R. 1 E. S. 17, B. T. A pinion pine, 8 ins. diam., bears S. 26° W., 13 lks. dist., marked T. 17 S., R. 1 E., S. 16, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, gravelly and rocky; 3rd and 4th rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	S. 89° 56' E., on a random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
80.16	Intersect N. and S. line at the cor. of secs. 8, 9, 16 and 17.
	Thence run N. 89° 56' W., on a true line bet. secs. 8 and 17.
	Over mountainous land, through heavy timber; ascend.
10.00	Top of spur, 100 ft. above cor., bears N. and S.; descend.
37.00	Bottom of hollow, 250 ft. below spur, course S.; ascend.
40.09	Set a sandstone, 18 x 18 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., mkd ¼ on N. face; from which A cedar, 7 ins. diam., bears

mains.	N. 10° E., 43 lks. dist., marked ¼ S. 8, B. T. A cedar, 6 ins. diam., bears S. 45° E., 42 lks. dist., marked ¼ S. 17, B. T.
80.18	Top of ridge, bet. Hell's Kitchen and Timber Cañons, 500 ft. above hollow, bears N. 40° E. and S. 40° W.; and N. W. The cor. of secs. 7, 8, 17, and 18. Sand, mountainous. Soil, black loam and gravelly; 1st and 3rd rate. Timber, pinion pine, long leaf pine and cedar. Good grass for grazing. Mountainous or heavily timbered land, 80.18 chs.
	N. 89° 51' W., on a random line bet. secs. 7 and 18.
40.00	Set temp. ¼ sec. cor.
94.80	Intersect W. bdy. of Sp. at the cor. of secs. 7, 12, 13, and 18, heretofore described. Thence west on S. 89° 51' E., on a true line bet. secs. 7 and 18. Over mountainous land, through heavy cedar and pinion pine timber; ascend.
17.00	Top of divide ridge bet. Hell's Kitchen and Timber Cañons, 200 ft. above sec. cor., bears N. 80° E. and S. 80° W.; descend.
31.00	Bottom of hollow, 150 ft. below ridge, course S.; ascend.
36.50	Top of ridge, 250 ft. above hollow bears N. and S.; descend.

chain.

44.00 Bottom of hollow, 100 ft. below ridge, course S. 10° E.; ascend.

48.00 Top of ridge 150 ft. above hollow, bears N. and S.; descend.

50.75 Bottom of hollow, 200 ft. below ridge, course S. W.; ascend.

54.80 Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from whi
A cedar, 12 ins. diam., bears N. 25° E., 30 lks. dist., marked ¼ S. 7, B. T.
A pinion pine, 14 ins. diam. bears S. 60° E., 40 lks. dist., marked ¼ S. 18, B. T.

59.50 Top of ridge, 200 ft. above hollow, bears N. 25° E. and S. 25° W.; descend.

70.50 Bottom of hollow, 300 ft. below ridge, course S. 20° W.; ascend abruptly over ledges.

94.80 The cor. of secs. 7, 8, 17, and 18.
Sand, mountainous.
Soil, gravelly loam and rocky; 2nd and 4th rate.
Timber, cedar and pinion pi
Good grass for grazing.
Mountainous or heavily timbered land, 94.80 chs.

N. 0° 3' W., bet. secs. 7 and 8.
Over mountainous land, through heavy timber, over a series of ledges; descend abru h. f.

32.50 Leave ledges and heavy and enter scattering timber and undergrowth; bears N. E. and S. W.

Chains	
40.00	Set a limestone, 18x10x7 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A cedar, 4 ins. diam., bears S. 70° E., 35 lks. dist., marked ¼ S. 8, B. T. A pinion pine, 9 ins. diam., bears N. 5° W., 50 lks. dist., marked ¼ S. 7, B. T.
51.00	Bottom of hollow, 1000 ft. below sec. cor. course N. 60° W.; ascend.
65.50	Top of ridge, 100 ft. above hollow; bears N. 75° W. and S. 75° E.; descend.
79.60	Creek, 2 lks. wide, 5 ins. deep, rocky bottom, rapid current in Timber Canon, course S. 60° W.
80.00	Falls on a stationary limestone boulder, 5x5x4 ft. above ground, on which we cut a cross (X) at the exact cor. point, for cor. of secs. 5, 6, 7, and 8, marked with 5 notches on S., and E. edges; from which A cedar, 12 ins. diam., bears N. 63° E., 3 lks. dist., marked T. 17 S., R. 1 E., S. 5, B. T. An oak, 5 ins. diam., bears S. 11° E., 90 lks. dist., marked T. 17 S., R. 1 E., S. 8, B. T. A mahogany, 7 ins. diam., bears S. 1 e° W., 87 lks. dist., marked T. 17 S., R. 1 E., S. 7, B. T. A cedar, 14 ins. diam., bears N. 53° W., 24 lks. dist., marked T. 17 S., R. 1 E., S. 6, B. T.
	Land, mountainous, very rough.
	Soil, gravelly and rocky; 3rd and 4th rate.
	Timber, cedar, and pinion.

pine, mostly cedar.
Undergrowth, sage and oak.
Good grass for grazing.
Mountainous or heavily
ed land, 80.00 chs.

August 17, 1898.

August 18, 1898:- At 7h 30m a. m., l. m. t., we set off 39° 22' N. on the lat. arc, 13° 6' N., on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 5, 6, 7, and 8.

Thence we run
S. 89° 56' E., on a random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.08 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 4, 5, 8, and 9.

Thence we run
N. 89° 53' W., on a true line bet. secs. 5 and 8.

Over mountainous land, through scattering timber; descend abruptly.

18.50 Top of perpendicular cliff, 125 ft. high, bears N. W. and S. E.

20.00 Bottom of branch of Timber Cañon, 300 ft. below sec. cor., course N. 80° W.; ascend.

40.04 Set a hard sandstone, 18 x 14 x 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

55.00 Top of spur, 150 ft. above cañon, bears N. and S.; descend.

79.00 Creek, 6 lks. wide, 5 ins. deep, in

Chains.	
	bottom of Timber Canon, course S. 60° W.
80.08	The cor. of secs. 5, 6, 7, and 8. Land, mountainous, very rough. Soil, gravelly and rocky; 3rd and 4th rate. Timber, scattering cedar and pinion pine. Good grass for grazing. Mountainous land, 80.08 chs.
	N. 89° 51' W., on a random line bet. secs. 6 and 7.
40.00	Set temp. 1/4 sec. cor.
94.46	Intersect W. bdy. of T. 17 S. at the cor. of secs. 1, 6, 7, and 12. Thence we run S. 89° 51' E., on a true line bet. secs. 6 and 7. Over mountainous land, through heavy cedar and pinion pine timber; ascend.
30.00	Top of ridge, 350 ft. above sec. cor., bears N. 60° E. and S. 60° W.; descend.
54.46	The point for cor., 250 ft. below ridge, falls on a stationary limestone boulder, 16 x 12 x 10 ins., above ground, on which we cut a cross (X) at the exact cor. point, for 1/4 sec. cor., marked 1/4 on N. face; from which A cedar, 18 ins. diam., bears N. 70° E., 46 lks. dist., marked 1/4 S. 6 B. T. A cedar, 16 ins. diam., bears S. 85° E., 16 lks. dist., marked 1/4 S. 7 B. T.
64.00	Bottom of hollow, 400 ft. below

chains.	
	ridge, course S. W.; ascend.
73.40	Top of spur, 100 ft. above hollow; bears N. 30° E. and S. 30° W.; descend.
90.30	Bottom of hollow, 150 ft. below ridge, course S. 25° W.; ascend.
37.00	Top of spur, 75 ft. above hollow; bears N. and S.; descend.
74.46	The cor. of secs. 5, 6, 7 and 8.
	Sand, mountainous.
	Soil, loam and gravelly; 1st and 3rd rate.
	Timber, cedar and pinion pine.
	good grass for grazing.
	Mountainous or heavily timbered land, 94.46 chs.

	N. 0° 3' W., on a random line bet. secs. 5 and 6.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. bdy. of Tp. 7 lks. W. of the cor. of secs. 5, 6, 31, and 32.
	Thence we run South, on a true line bet. secs. 5 and 6.
	Over mountainous land, through scattering cedar and pinion pine timber; descend along ridge, bears N. & S.
6.00	Bottom of hollow, 30 ft. below cor., course S. 20° W.; ascend.
40.00	Set a limestone, 16 x 12 x 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
	A pinion pine, 18 ins. diam., bears S. 40° E., 35 lks. dist., marked ¼ S. 5, B. T.
	A pinion pine, 18 ins.

Subdivision of T. 17 S., R. 1 E. - Continued.

	mains. bears S. 50° W., 41 lks. dist., marked 4 S. 6, B. T.
53.00	Top of ridge, 200 ft. above hollow, bears N. 30° E. and S. 30° W. descend.
80.00	The cor. of secs. 5, 6, 7, and 8.

Land, mountainous.
Soil, loam and gravelly; 1st and 3rd rate.
Timber, cedar and pinion pi
Good grass for grazing.
Mountainous land, 80.00 chs.
August 18, 1898.

General Description.

This township contains several varieties of land, from low rolling hills to high mountains, and the soil ranges from rocky ground to rich loam. The soil in the cañons and on the heavily timbered land, is generally rich, black loam, capable of producing excellent crops without irrigat The soil of the remaining portion of the township, excep the rocky land, can nearly be classed as 2nd rate, is covered with an abundant growth of rich and nutritious grasses, and is very well adapted for grazing purposes.
There is a heavy growth of cedar and pinion pine nearly all over the township, and some long leaf pine and mahogany.
There is no mineral in the

Subdivision of T. 17 S., R. 1 E. - Concluded

township.

The township is well watered by Timber and Hells Kitchen Creeks and numerous spr We do not find Alpha Barton, D. E. No. 2222; Ed. W. Fox, D. E. No. 2224; Geo. Fox, D. E. No. 2225; nor B. Christensen, D. E. No. 2226; nor their improvements. There are no settlers in this township.

Scott C. Stewart.
Andrew J. Stewart Jr.
U. S. Deputy Surveys

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, 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 _____

_____

showing the respective capacities in which they acted:

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all those parts or portions of the _____

_____

_____

_____ of the _____

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

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

6–161

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Survey
solemnly swear that, in pursuance of a contract received from _____
United States Surveyor General for _____, bearing date
_____ day of _____, 189 , I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States Su
General for _____, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of _____
_____
_____
_____
_____ of the _____
_____ meridian, in the _____ of _____, which are represente
foregoing field notes as having been surveyed by me, and under my direction; and I do further so
swear that all the corners of said survey have been established and perpetuated in strict accordan
the Manual of Surveying Instructions, and the special written instructions of the United States S
General for _____ and in the specific manner described in the field notes, a
the foregoing are the original field notes of such survey; and should any fraud be detected, I wil
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

_____
United States Deputy Su

Subscribed by said _____, and sworn to before me
this _____ day of _____, 189

_____

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23 1900.

The foregoing field notes of the survey of The subdivisional lines of T. 17 South Range 1 East of the Salt Lake Base & Meridian Utah

executed by Scott L. Stewart and Andrew J. Stewart Jr.
under ~~his~~ their contract No. 27, dated September 1st, 1899, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
surveys they describe, are hereby approved.

Isaac B

United States Surveyor

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

_____
United States Surveyor

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4—679.

BOOK A-258

FIELD NOTES

OF THE SURVEY OF THE

West Boundary

of

Township 16 South, Range 2 East.

Of the Salt Lake Base and Meridian,

In the State of Utah.

AS SURVEYED BY

Scott P. Stewart and Andrew J. Stewart Jr., United States Deputy Surveyors,

Under ~~his~~ their Contract No. 217, dated November 1st, 1897.

Survey commenced August 19th, 1898.

Survey completed August 23rd, 1898.

6—151

W. Bodey high M. Ch. Elk 6-07-24 ✓

Retracement Cerity E. Bodey 6-07-65 ✓

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel L. Y. McAllister, Chainman.

Wm U. Richardson jr. Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Moundman.

Peter S. Sorensen, Moundman.

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary affidavits see book "B"

BOOK A-258

INDEX DIAGRAM.

Township 16 South, Range 2 East.

9 6	5	4	3	2	1
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4 30	29	28	27	26	25
3. 31	32	33	34	35	36

Meanders Page.....

PRELIMINARY CATUS OF ASSISTANTS

V— 165.2 E— (314) A-258

W. Bdry—
high
M. Chs lks—
1-00-00 ✓
1-00-00 ✓
1-00-00 ✓
1-00-00 ✓
1-00-00 ✓
1-07-24 ✓
6-07-24 ✓

E—Bdry—
Relocaments
M. Chs lks—
6-07-65 ✓

Volume
#
R0258

chains. Survey commenced August 19, 1898, and executed with a W. and L. E. Gurley light mountain transit, No. -, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb is provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former, December 4, 1897, and the latter, April 5, 1898.

We examine the adjustments of the instruments, and correct the level and collimation errors; then to test the solar apparatus of the Gurley instrument, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a true meridian determined by obervations on Polaris, we proceed as follows:- At the cor. of Tps. 16 and 17 S., R. 2 E., latitude 39° 23' N., longitude 111° 47' W.; we set off 39° 23' N., on the lat. arc; 120° 34' N., on the decl. arc; and at 4h 2m p. m., l. m. t., determine with the solar, of the Gurley instrument, a true meridian and mark a point

chains. thereof on a stone, firmly set in the ground, 5 chs., N. of the cor.
At 9h 33m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined on a plug driven in the ground, 5 chs. N. of our station.

August 19, 1898.

August 20, 1898: At 6h 10m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian, thus determined, by cutting a small groove in the stone set August 19, 1898, on which the true meridian falls 0.25 ins. east of the mark determined by the solar of the Gurley instrument.
At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the True Meridian thus determined by cutting a small groove in the stone set August 19, 1898, on which the true meridia falls 0.25 ins. east of the mark determined by the solar.
At 7h 0m a. m., l. m. t., we set off 39° 23' N., on the lat. arc; 12° 21' N., on the decl. arc; and mark a point in the true meridian determined with the solar, of the Gurley instrument, by a cross on the stone already set 5 chs. N. of our station; this mark falls 0.3 ins.

chains.	
	east of the true meridian established by Polaris observation. The solar apparatus of the Gurley instrument, by p. m. and a. m. observations, defines positions for true meridians, respectively about 0°13" west, and 0°16" east of the meridian established by Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory.
	The magnetic bearing of the true meridian at 7h 30m a. m., is N. 16° 37' W.; the angle thus determined, reduced by the table, page 100 of the Manual, gives the mean mag. decl. 16° 31' E.
	From the cor. of Tps. 16 and 17 S., R. 2 E., heretofore described.
	We run
	North, along W. bdy. T. 16 S., R. 2 E., along W. side, sec. 31.
	Over mountainous land, through dense undergrowth; descend.
2.00	Creek, 1 lk. wide, in branch of Dry Canon, 150 ft. below cor., course E.; ascend.
11.25	Top of ridge, 200 ft. above canon, bears E. and W.; descend.
22.00	Bottom of hollow, 300 ft. below ridge, course E.; ascend.
27.50	Top of ridge, 150 ft. above hollow, bears E. and W.; descend.
34.00	Enter scattering timber, bears E. and W.
40.00	Set a limestone, 16 x 10 x 5 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A red pine, 30 ins. diam., bears N. 82° 30' E. 21 lks. dist., marked 1/4 S. 31, B. T.

chains.	
40.10	Bottom of branch of Dry Cañon, 600 ft below ridge, course S. 80° E.; ascend abruptly.
45.50	Top of spur, 400 ft. above cañon, bears N. 10° W. and S. 10° E.; descend gradually.
69.50	Bottom of Dry Cañon, 100 ft. below spur, course S. 70° E.; ascend.
80.00	Set a limestone, 15 x 12 x 4 ins., 10 ins. in the ground, for cor. of secs. 30 and 31, marked with 5 notches on N. and 1 notch on S. edges; from which A mahogany, 4 ins. diam., bears N. 66° 30' E., 82 lks. dist., marked T. 16 S., R. 2 E., S. 30, B. T. A mahogany, 8 ins. diam., bears S. 64° 30' E., 47 lks. dist., marked T. 16 S., R. 2 E., S. 31, B. T. Sand, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, pine, cedar, and mahogany. Undergrowth, oak, and serviceberry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth. 80.00 chs.
	North, along W. side sec. 30. Over mountainous land, through dense undergrowth, and scattering timber; ascend.
21.25	Top of ridge, dividing Dry and Axhandle Cañons, 500 ft. above Dry Cañon, bears E. and W.; ascend.
35.25	Drag road, bears N. 30° W. and S. 30° E.;

chains.	
	in hollow, 300 ft. below ridge, course N. 3° W.; thence descending along side of mountain.
40.00	Set a sandstone, 20 X 6 X 10 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A balsom, 16 ins. diam., bears N. 55° E., 46 lks. dist., marked 1/4 S. 30, B. T.
55.00	Road in same hollow, 300 ft. below 1/4 sec. cor., course N. E.; ascend.
60.10	Top of ridge, 100 ft. above hollow, bears N. 60° E. and S. 60° W.; descend.
66.00	Old wood road, bears E. and W.; in bottom of branch of Axhandle Canon, 100 ft. below ridge, course E.; ascend.
75.75	Top of ridge, 350 ft. above canon, bears E. and W.; enter heavy timber, bears E. and W.; descend.
80.00	Set a limestone, 18 X 12 X 8 ins., 12 ins. in the ground, for cor. of secs. 19 and 30, marked with 4 notches on N. and 2 notches on S. edges; from which A red pine, 5 ins. diam., bears N. 60° 15' E., 25 lks. dist., marked T. 16 S., R. 2 E., S. 19, B. T. A red pine, 10 ins. diam., bears S. 70° E., 15½ lks. dist., marked T. 16 S., R. 2 E., S. 30, B. T.
	Sand, mountainous. Soil, rich black loam and gravelly; 1st and 3rd rate. Timber, cedar, pine, and mahogany. Under growth, oak and serviceberry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

Chains.	
	North, along W. side sec. 19.
	Over mountainous land, through heavy timber; descend.
10.50	Old road, bears E. and W.
11.35	Spring branch, 4 lks. wide, 2 ins. deep, rapid current, gravelly bottom, in bottom of branch of Axhandle Canon, 350 ft. below ridge, course E.; ascend.
15.25	Leave timber and enter dense undergrowth, bears E. and W.
26.50	Top of ridge, 450 ft. above canon, bears N. 80° E. and S. 80° W.; descend.
40.00	Set a sandstone, 14 x 9 x 8 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A maple, 3 ins. diam., bears S. 36° 30' E., 59 lks. dist., marked ¼ S. 19, B. T.
42.25	Bottom of hollow, 400 ft. below ridge, course S. 78° E.; enter scattering timber, bears E. and W.
65.00	Top of ridge, 600 ft. above hollow, bears E. and W.; descend.
80.00	Set a limestone, 14 x 10 x 4 ins., 9 ins. in the ground, for cor. of secs. 18 and 19, marked with 3 notches on N. and 3 notches on S. edges; from which A red pine, 6 ins. diam., bears N. 68° 45' E., 30 lks. dist., marked T. 16 S., R. 2 E., S. 18, B. T. A balsom, 4 ins. diam., bears S. 57° 15' E., 46 lks. dist., marked T. 16 S., R. 2 E., S. 19, B. T.
	Sand, mountainous.
	Soil, rich black loam and gravelly; 1st and 3rd rate.
	Timber, cedar, pinion pine, red pine, and balsom.

chains	
	Undergrowth, oak, manle, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	North, along W. side, sec. 18. Over mountainous land, through heavy timber and dense undergrowth; descend.
7.25	Branch of S. fork of Axhandle Cañon, 275 ft. below ridge, course S. 88° E.; ascend.
8.00	Old wood road, bears N. 88° W. and S. 88° E.
10.25	Top of spur, 10 ft. above cañon, bears E. and W.; descend.
13.75	Bottom of hollow, 10 ft. below spur, course S. 70° E.; ascend.
28.25	Top of spur, 300 ft. above hollow, bears N. W. and S. E.; leave timber, bears with ridge; descend.
40.00	Set a limestone, 14 x 8 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable; in bottom of swale, 40 ft. below spur, course S. E.; ascend.
43.75	Top of ridge, 25 ft. above swale, bears N. 80° W. and S. 80° E.; leave undergrowth, enter timber, bears with ridge; descend.
50.25	Bottom of hollow, 100 ft. below ridge, course N. E.; leave timber, bears N. E. and S. W.
55.25	Top of spur, 20 ft. above hollow,

Chains.	
	bears N. E. and S. W.; descend.
64.40	Branch of N. fork of Axhandle Canon, 50 ft. below ridge, course E.; ascend.
71.25	Top of spur, 100 ft. above canon, bears N. 80° W. and S. 80° E.; descend.
77.00	Bottom of hollow, 60 ft. below ridge, course S. E.; ascend.
80.00	Set a limestone, 17 X 7 X 6 ins., 11 ins. in the ground, for cor. of secs. 7 and 18, marked with 2 notches on N. and 4 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, rich black loam and gravelly; 1st and 3rd rate. Timber, red pine, cedar, pinion pine, balsom, and maple. Undergrowth, oak, service-berry, and wild currant. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth; 80.00 chs. August 20, 1898:- At this cor., we set off 12° 1' 6" N., on the decl. arc; and at 0h 3m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 26' N., which is about 0.'03 less than the proper lat.

North, along W. side, sec. 7.
Over mountainous land, through dense undergrowth; ascend.

2.50	Top of spur, 200 ft. above hollow,

West boundary of T. 16 S., R. 2 E. - Continued.

chains.	
	bears N. W. and S. E.; descend.
21.50	Swale, 60 ft. below ridge, course S. 80° E.; ascend.
36.50	Top of main divide ridge, 300 ft. above swale, bears N. 10° E. and S. 10° W.; enter scattering timber, bears with ridge; descend.
40.00	Set a limestone, 12 x 8 x 6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A balsom, 4 ins. diam., bears N. 46° E., 75 lks. dist., marked 1/4 S., 7, B. T.
46.00	Bottom of Little Salt Creek Cañon, 30 ft. below ridge, course W.; ascend.
56.00	Leave timber, bears E. and W.
80.00	Set a gray limestone, 14 x 10 x 4 ins., 9 ins. in the ground, for cor. of secs. 6 and 7, marked with 1 notch on N. and 5 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, black loam and gravelly; 1st and 3rd rate. Timber, balsom, cedar, and pine. Undergrowth, oak, service-berry, and mahogany. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	North, along W. side, sec. 6, Over mountain, through dense undergrowth; ascend.
27.80	Enter scattering balsom timber,

chains	
	bears E. and W.
30.00	Wood road, bears N. 10° W. and S. 10° E.
32.50	Top of ridge, 40 ft. above canon, bears N. 80° E. and S. 80° W.; descend.
40.00	Set a marble stone, 14 x 10 x 6 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
58.00	Bottom of branch of Little Salt Creek Canon, 100 ft. below ridge, course S. W.; ascend.
69.00	A spring of good water, bears E. about 5 chs. dist.
70.00	Top of spur, 80 ft. above hollow, bears N. E. and S. W.; descend.
78.50	Head of hollow, 60 ft. below ridge, course S. 80° W.; ascend.
80.00	Set temp. cor. of Tp's. 15 and 16 S., R. 2 E.
87.24	Permanent cor. was set, for description see Book "W" Third Standard

Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, balsom.
Undergrowth, oak, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense under-growth; 87.24 chs.

August 20, 1898.

Retracement of E. bdy. of T. 16 S., R. 2 E.

August 23, 1898: At the cor. of Tps. 15 and 16 S., Rs. 2 and 3 E., which is a limestone, 10 x 6 x 6 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, we set off 11° 16' N., on the decl. arc; and at 0h 2m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 28' N.

Thence we run South, on a retracement line along E. bdy. of Tp. 16 S., R. 2 E.; and at 487.65 chs. fall 4.25 chs. W. of the cor. of Tps. 16 and 17 S., Rs. 2 and 3 E., heretofore described.

The course of this line is therefore S. 00° 30' E. d length 487.65 chs.

Boundaries of T. 16 S., R. 2 E.

Latitudes, departures, & closing errors

Line designated	True bearing	Dist	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
W. bdy. T. 16 S., R. 2 E.	North	487.24	487.24			
N. bdy. T. 16 S., R. 2 E.	East	309.00			309.00	
N. bdy. T. 16 S., R. 2 E.	N. 89° 20' E.	160.90	1.87		160.89	
E. bdy. T. 16 S., R. 2 E.	S. 0° 30' E.	487.65		487.63	4.25	
S. bdy. T. 16 S., R. 2 E.	West	200.00				200.00
S. bdy. T. 16 S., R. 2 E.	N. 89° 56' W.	274.00	.35			274.00
Convergency					.60	
Totals			489.46	487.63	474.74	474.00
Error in lat.			487.63			
			1.83		474.00	
Error in dep.					.74	

General Description.

This fract. township is mostly rough and mountainous or rolling, well watered, and very well adapted for graz-

ing. The township should be subdivided.

August 23, 1898.

Scott J. Stewart,
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

Volume
#
R0258

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

showing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ..... United States Deputy Surveyor, in surveying all those parts or portions of the ..... of the ..... meridian, ... of ....., which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL.

.....

6–151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from .... United States Surveyor General for ...., bearing date of .... day of ...., 189 , I have well, faithfully, and truly, in my o[wn] proper person, and in strict conformity with the instructions furnished by the United States Surve[yor] General for ...., the Manual of Surveying Instructions, and the laws of [the] United States, surveyed all those parts or portions of ....

....

....

....

....of the..

.... meridian, in the .... of ...., which are represented in [the] foregoing field notes as having been surveyed by me, and under my direction; and I do further solem[nly] swear that all the corners of said survey have been established and perpetuated in strict accordance w[ith] the Manual of Surveying Instructions, and the special written instructions of the United States Surve[yor] General for .... and in the specific manner described in the field notes, and t[hat] the foregoing are the original field notes of such survey; and should any fraud be detected, I will su[ffer] the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surve[yor]

Subscribed by said ...., and sworn to before me this .... day of ...., 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, June 23 1902.

The foregoing field notes of the survey of the West Boundary of Township 16 South Range 2 East of the Salt Lake Base & Meridian Utah ....

....

executed by Scott P. Stewart & Andrew J. Stewart Jr. .... under their contract No. 27, dated November ...., 1897, having [been] critically examined, and the necessary corrections and explanations made, the said field notes, and [the] surveys they describe, are hereby approved.

Jacob F. B. T.

United States Surveyor Gen[eral]

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 offic[e].

....

United States Surveyor Gen[eral]

6-151

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4—679.

BOOK A-258

FIELD NOTES

OF THE SURVEY OF THE

H.J.B.

Third Standard Parallel South

Through

Range 2 East.

Of the Salt Lake Base and Meridian,

In the State of Utah

AS SURVEYED BY

Scott P. Stewart and Andrew J. Stewart Jr, United States Deputy Surveyors

Under ~~his~~ their Contract No. 217, dated November 1st, 1897.

Survey commenced August 21, st, 1898.

Survey completed August 23rd, 1898.

6—151

Paid H. 3.69.00 ✓

Clerk Ltd — 2-00-90

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. Y. Mc Allister, Chainman.

Wm W. Richardson Jr. Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Mountman.

Peter S. Sorensen, Mountman.

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary affidavit see book "F"

BOOK A-258

INDEX DIAGRAM.

Township 16 South, Range 2 East

5	4.	3.	1.	7.	8.
THIRD STANDARD PARALLEL SOUTH					
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	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will leve
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we ass
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surv

_____

_____, *Chain*

_____, *Chai*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

_____

_____

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

_____

_____, *Mound*

_____, *Mound*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

_____

_____

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

_____

_____, *A*

_____, *A*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

_____

_____

I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of _____

_____, *Fla*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

_____

_____

Chains

Survey commenced August 21, 1898, and executed with a W. and L. E. Gurley light mountian transit, No. —, the horizontal limb being provided with two double verniers placed opposite to each other, reading to single minutes of arc; and a Buff and Berger transit, No. 2511, the horizontal limb being provided with two double verniers reading to single minutes of arc.

At the Standard cor. of secs 34 and 35 on N. bdy. of T. 16 S., R. 2 E., latitude 39° 28' N., longitude 111° 43' W., at 9h 24m 45s p. m., l. m. t. we observe Polaris at eastern elongation, in accordance with the instructions in the Manual, with the Buff and Berger instrument, and mark the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs. N. of our station.

August 21, 1898.

August 22, 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined by cutting a small groove in a stone, firmly set in the ground west of the mark established last night; the magnetic bearing of said true meridian is N. 16° 35' W., which reduced by the table, page 100 of the Manual, gives the mean magnetic declination 16° 30' E.

From the standard cor. of secs. 34 and 35, which is a limestone, 6 x 10 x 8 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general, from which

Chains	
	A pinion pine, 10 ins. diam., bears N. 20° E. 48 lks. dist., marked S.C. T.15 S., R.2 E. S.33, B.T. A pinion pine, 10 ins. diam., bears N. 46° W. 40 lks. dist., marked S.C. T. 15 S., R. 2 E. S. 34. B.T.
	Thence we run
	West, on S. bdy. sec. 34.
	Over mountainous land, through heavy cedar and pinion pine timber.
	Descend.
	Difference between measurements of 40.00 chs., by two sets 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 sandstone, 18 x 16 x 10 ins., 12 ins. in the ground, for standard ± sec. cor., marked S. C ± on N. face; from which
	A pinion pine, 6 ins. diam., bears N. 12° 30' E., 25 lks. dist., marked S.C. ± S. 34, B.T.
50.00	A corral bears S. about 10.00 chs. dist.
56.50	Top of perpendicular cliff, 50 ft. high, bears N. 20° W. and S. 20° E.
58.50	Spring branch, 3 lks. wide, 3 ins. deep, in bottom of cañon, 150 ft. below sec. cor., course S. 10° E.; ascend.
59.70	Foot of perpendicular cliff 40 ft. high, bears N. 5° E. and S. 5° W.
77.00	Top of spur, 60 ft. above cañon bears N. and S.; descend abruptly.
	Difference between measurements of 80.00 chs., by two sets of chainmen is 30 lks.; position of middle point
	By 1st set 79.85 chs.
	By 2nd set 80.15 chs. the mean of which is
80.00	Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for standard cor. of secs. 33 and 34, marked S. C.; on N., with 3 grooves on E. and 3 grooves on W. faces;

Chains	
	from which C. cedar, 6 ins. diam., bears N. 7° E., 101 lks. dist., marked S.C. T. 15 S., R. 2 E. S. 34, B.T. C. cedar, 4 ins. diam., bears N. 32° W. 157 lks. dist., marked S.C. T. 15 S., R. 2 E. S. 33, T.B. Land, mountainous. Soil, gravelly loam and rocky; 2nd and 4th rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.
	West, on S. bdy. sec. 33. Over mountainous land, through heavy cedar and pinion pine timber. Descend.
.50	Leave timber; enter dense undergrowth, bears N. and S.
31.20	Bottom of Pitch Canon, 80 ft. below ridge, course S. 80° E.; ascend, creek 3 lks. wide to S.
	Difference between measurements of 40.00 chs., by two sets of chainmen is 22 lks.; position of middle point By 1st. set 40.11 chs. By 2nd set 39.89 chs., the mean of which is
40.00	Set a limestone, 14 x 12 x 6 ins., 9 ins. in the ground, for standard ¼ sec. cor., marked S.C. ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
60.00	Top of ridge dividing Pitch and Axhandle Canons, 300 ft. above Pitch Canon, bears N. 20° W. and 20° E.; descend.
77.50	Wash, 20 lks. wide, 3 ft. deep, course S.
	Difference between measurements of 80.00 chs., by two sets of chainmen is 40 lks.; position of middle point

Third Standard Parallel South, through Range 2 East, Cou

Chains) By 1st. set 79.80 chs.
By 2nd. set 80.20 chs. the mean of which is

80.00 Set a sandstone, 16 x 12 x 6 ins., 11 ins. in the ground, for standard cor. of secs. 32 and 33, marked S. C. on N.; with 4 grooves on E. and 2 grooves on W. faces; from which

A cedar, 24 ins. diam., bears N. 60° 170 lks. dist., marked S.C. T. 15 S., R. 2 E. S. 32, B.

No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
Land, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, cedar and pinion pine.
Undergrowth, oak, maple, and sage brush.
Good grass for grazing.
Mountainous or heavily timbered land or land covered with dense undergrowth, 80.00 chs.
At this cor. we erect a signal for a test sight from some point to the west.

West, on S. bdy. sec. 32.
Over mountainous land, through dense undergrowth and scattering timber; descend.

5.00 Bottom of hollow, 25 ft. below cor., course S.W.; ascend.

26.00 Top of spur, 150 ft. above hollow, bears N. 20° W. and S.; descend.

Difference between measurements of 40.00 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

40.00 Set a sandstone, 16 x 10 x 4 ins., 11 ins. in the

Chains	
	ground, for standard ± sec. cor., marked S. C. ± on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
40.70	Spring branch, 1 lk. wide, 1 in. deep, course S. W.
43.50	Bottom of hollow, 200 ft. below ridge, course S. 5° E.; ascend.
52.50	Top of spur, 100 ft. above hollow; bears N. and S.; descend.
62.50	Bottom of hollow, 40 ft. below cor., course S.; ascend.
	Difference between measurements of 8000 chs., by two sets of chainmen is 16 lks.; position of middle point
	By 1st. set 80.08 chs.
	By 2nd set 7992 chs.; the mean of which is
80.00	Top of spur, 50 ft. above hollow, bears N. and S.
	Set a sandstone, 16 x 12 x 8 ins., 11 ins. in the ground, for standard cor. of secs. 31 and 32, marked S. C. on N., with 5 grooves on E. and 1 groove on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
	Land, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, scattering cedar and pinion pine.
	Undergrowth, oak, mahogany and service-berry.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 8000 ch.
	August 22, 1898: At the noon hour the sky is overcast and solar observations are impossible.

West, on S. bdy. sec. 31.

Third Standard Parallel South, through Range 2 East—C

Chains	
	Over mountainous land, through undergrowth and scattering timber;
2.75	Bottom of hollow, 30 ft. below cor., course S.; ascend.
21.00	Top of smooth ridge, 200 ft. above swale, bears N. E. and S. W.; descend.
28.50	Bottom of hollow, 100 ft. below ridge, course S. 20° W.; ascend.
39.70	Trail, bears N. E. and S. W.
	Difference between measurements of 40.00 chs., by two sets of chainmen is 1.4 lks.; position of middle point
	By 1st. set 39.93 chs.
	By 2nd set. 40.07 chs.; the mean of which is
40.00	Set a limestone, 15 x 14 x 4 ins., 10 ins. in the ground, for standard ¼ sec. cor., marked S. C. ¼ on N. face; from which
	A balsom, 4 ins. diam., bears N. 60° E. 2.57 lks. dist., marked S. C. ¼ S. 31 B.T.
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
56.00	Trail on top of main divide ridge, 1500 above Saw Pete valley, bears N. 30° E. and S. 30° W.; descend.
	Difference between measurements of 69.00 chs., by two sets of chainmen is 10 lks.; position of middle point
	By 1st. set 69.05 chs.
	By 2nd set 68.95 chs.; the mean of which is
69.00	Intersect W. bdy. of T. 16 S., R. 2 E., 7.24 chs. N. of the temp. cor. of Tps. 15 & 16 S., R. 2 E.
	Set a sandstone, 17 x 12 x 6 ins., 12 ins. in the ground, for standard cor. of Tps. 15 and 16 S., R. 2 E.; marked S. C., 15 S., on N., 16 S. on S., and 2 E. on E.; with 6 grooves on N. and E. faces; from which
	A balsom, 8 ins. diam., bears N. 83° E., 300 lks. dist., marked S. T. 15 S., R. 2 E. S. 31, C.

Third Standard Parallel South, through Range 2 East, Continued.

Chains We are unable to see the signal erected at the standard cor. of secs. 32 and 33, therefore we are unable to test the parallel with a true meredian established by Polaris observation.
Sand, mountainous.
Soil gravelly loam; 2nd rate
Timber, balsom, cedar, and prion pine
Undergrowth, oak serviceberry and maple.
Good grass for grazing.
Mountainous land or land covered with dense undergrowth, 69.00 chs.

August 22, 1898.

General Description.

This line crosses rough, high, mountains having a northwesterly trend. The land north and south of the line is mountainous, well timbered and well watered, and very well adapted for grazing, it should be subdivided.

Scott P. Stewart
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

August 23, 1898: At 7h 0m a.m., l.m.t. we set off 39°28'N. on the lat. arc; 11°21'N., on the decl. arc; and determine a true meridian, with the solar, at the standard cor. of secs. 34, and 35 on N. bdy. T. 16 S. R. 2 E.
Note: From connections already made we are led to believe that discrepancies exist either in the E. bdy. of Tp. or in the E. 2 miles of the N. bdy. Therefore from the above described cor. we run N. 89°45'E., on a retracement line on S. bdy. sec. 35.

40.25 The standard ¼ sec. cor. on S. bdy. sec. 35;

Chains	
	bears N. 30 lks. dist.
80.50	The standard cor. of secs. 35 and 36 bears N. 59 lks. dist.;
	The course of this line is therefore N. 89°20' E.

N. 89°45' E., on a retracement line on S. bdy. of sec. 36.

40.20	The standard ¼ sec. cor. on S. bdy. sec. 36, bears N. 29 lks. dist.
80.40	The standard cor. of Tps. 15 and 16 S., Rs 2 and 3 E. bears N. 59 lks. dist; the course of this line is therefore N. 89°20' E.

Scott P. Stewart,
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

August 23, 1898.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, 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 _____

_____

howing the respective capacities in which they acted:

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all ıose parts or portions of the _____

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented the foregoing field notes as having been surveyed by him and under his direction; and that said survey ıs been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ›rner monuments established, according to the instructions furnished by the United States Surveyor eneral for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

bscribed and sworn to before me this _____ day of _____, 189

_____

_____

SEAL

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ... United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing date o
..... day of ..... 189 , I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surv
General for ....., the Manual of Surveying Instructions, and the laws o
United States, surveyed all those parts or portions of .....

.....

.....

.....

..... of the .....

..... meridian, in the ..... of ....., which are represented i
foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Sur
General for ..... and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

.....
United States Deputy Surv

Subscribed by said ....., and sworn to before me
this ..... day of ....., 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23, 1

The foregoing field notes of the survey of the Third Standard Parallel South Range East of the Salt Lake Base and Meridian, Utah,

executed by Scott E. Stewart & Cordon J. Stewart Jr.
under the contract No. 17, dated November 1st, 1897, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
surveys therein described, are hereby approved.

Jacob B. Bl
United States Surveyor Ge

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 off

United States Surveyor Ge

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PAGE

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BOOK A-258

S.L.B.M.

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

of

Township 16 South, Range 2 East

Of the Salt Lake Base and Meridian,

In the State of Utah

AS SURVEYED BY

Scott O. Stewart & Andrew J. Stewart Jr., United States Deputy Surveyors,

under their Contract No. 217, dated November 1st, 1897.

Survey commenced August 24th, 1898.

Survey completed September 1st, 1898.

6—151

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NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. Y. McAllister, Chainman.

Wm W. Richardson Jr., Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Moundman.

Peter S. Sorensen, Moundman.

Benjamin F. Stewart, Axman.

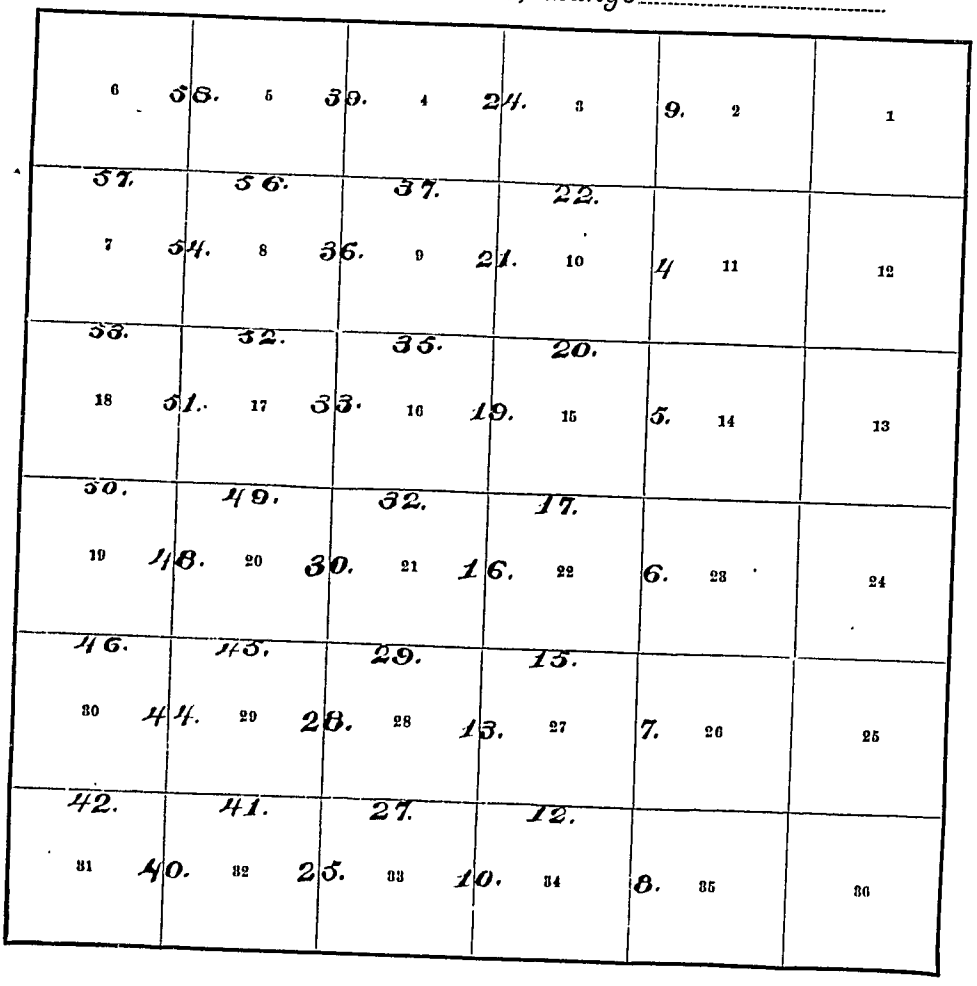
Quinby Stewart, Flagman.

For preliminary affidavit see book "A"

BOOK A-258

INDEX DIAGRAM.

*Township*_____, *Range*_____



*Meanders Page*_____

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the sam
we will report the true distances to all notable objects, and the true lengths of all lines that we a
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su

.....

..... *Chai*

..... *Chai*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

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

.....

..... *Mou*

..... *Mou*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

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

.....

.....,

.....,

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

I, ..., do solemnly swear that I will well an
perform the duties of flagman according to instructions given me, to the best of my skill and abilit
survey of .....

..... *Fl*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

Subdivision of T. 16 S., R. 2 E. - S. L. B. and M.

Survey commenced August 24, 1898, and executed with a W. and L. E. Gurley light mountain transit, No. -, with solar attachment, the horizontal limb having two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb being provided with double verniers reading to single minutes of arc. The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah; the former on December 4, 1897, and the latter on April 5, 1898.

We examine the adjustments of the instruments and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications resulting from solar observations made during p. m. and a. m. hours, with a true meridian determined by observations on ☉ is, we proceed as follows; At the cor. of secs. 2, 3, 34, and 35, on S. bdy. of Tn. heretofore described; latitude 39° 23' N., longitude 111° 43' W.; we set off 39° 23' N. on the lat. arc; 10° 54' N.,

the decl. arc; and at 3h 0m p.m., l. m.t., determine with the solar of the Gurley instrum a true meridian, and a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of our station.

At 9h 13m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a plug driven in the ground, 5.00 chs. N. of our station.

August 24, 1898.

August 25, 1898: At 6h 20m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined, by cutting a small groove in the stone, set August 24, on which the true meridian falls 0.28 ins. east of the mark determined by the solar of the Gurley

At 6h 35m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the True Meridian thus determined by cutting a small groove in the stone set August 24, on which the true meridian falls 0.28 ins. east of the mark determined by the solar.

At 7h 3m a.m., l.m.t., we set off 39° 23' N., on the lat. arc; 100° 40' N., on the decl. arc; and mark a point in the true meridian determined with the solar, of the Gurley instrument, by a cross on the stone already set 5.00 chs., N., of our station; this mark falls 0.3 ins. east of the true meridian established by Polaris observations. The solar apparatus of the Gurley instrument, by p.m. a.m. observations, defines positions for true meridians respectively about 0".15' west, and 0".16" east of the meridian established by Polaris observation; therefore we conclude that the adjustments of the instruments are satisfactory. The magnetic bearing of the true meridian at 7h 30m a.m., is N. 16° 37' W.; the angle thus determined, reduced by the table, page 100 of the Manual, gives the mean mag. decl. 16° 31' E.

Note: We are unable to find any of the old ¼ sec. or sec. corners adjacent to our work; therefore, before commencing the subdivision of this township, we conclude to retrace, and if necessary, resurvey the lines upon which we are to close our survey. We proceed as follows:

From the cor. of secs. 2, 3, 34, and 35, heretofore described, we run North, on a retracement line

bet. secs. 34 and 35. At 40.00 chs., we find no trace of old ¼ sec. cor., and at 80.00 chs., we find no trace of the cor. of secs. 26, 27, 34, and 35; therefore we continue our line north, finding no trace of any of the old cors., and at 404.37 chs., we fall 4.94 chs. E. of the cor. of secs. 2, 3, 10, and 11, which is a limestone, 7 x 10 x 9 ins., above ground, firmly set and marked and witnessed as described by the surveyor general.

The falling answers to a correction of 0° 42' or 99 lks. W. per mile counting from the cor. of secs. 2, 3, 34 and 35, on S. bdy. of Tp. and the length of each mile will be 80.88 chs., therefore we run S. 0° 42' E., on a resurvey line bet. secs. 10 and 11.

Over mountainous land, through dense oak and sage brush; ascend.

13.50 Leave oak brush, bears E. and W.

27.00 Top of spur, 20 ft. above cor., bears N. E. and S. W.; descend.

40.44 Find no trace of old ¼ sec. cor. Set a limestone, 18 x 10 x 7 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

80.88 Set a limestone, 20 x 10 x 6 ins., 15 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked with 4 notches on S. and 2 notches on E. edges; from which

C 40.00 4 40.58

A cedar, 8 ins. diam., bears

chains.	
	S. 58° E., 208 lks. dist., marked T. 16 S., R. 2 E., S. 14, B. T.
	No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We search diligently but find no trace of old sec. cor.
	Sand, rolling mountains.
	Soil, rich clay loam; 1st rate.
	No timber.
	Undergrowth, oak and sagebrush.
	good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.88 chs.
	August 25, 1898: At this cor., we set off 10° 34' N., on the decl. arc; and at 11h 55m a. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 26' N., which is about 0.05 less than the proper lat.
	S. 0° 42' E., on a resurvey line bet. secs. 14 and 15.
	Over very rough mountains, through scattering cedar timber; descend.
4.00	Bottom of swale, 120 ft. below cor., course S. 80° W.; ascend very abruptly.
19.00	Top of ridge, 200 ft. above swale, bears N. 80° E. and S. 80° W.; descend abruptly.
40.44	Set a limestone, 18 x 14 x 10 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and

	chains.	
		raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	48.00	Bottom of cañon, 300 ft. below ridge, course S. 60° E.; ascend.
C	80.88	Top of ridge, 600 ft. above cañon, bears N. 20° W. and S. 20° E. Set a limestone, 16 x 12 x 6 ins., 12 ins. in the ground, for cor. of secs. 14, 15 22, and 23, marked with 3 notches on S. and 2 notches on E. edges from which A pinion pine, 6 ins. diam., bears S. 3° 30' E., 59 lks. dist., marked T. 16 S., R. 2 E., S. 23; B. T. A pinion pine, 7 ins. diam., bears S. 27° 30' W., 55 lks. dist., marked T. 16 S., R. 2 E., S. 22, B. T. A pinion pine, 8 ins. diam., bears N. 51° W., 79 lks. dist., marked T. 16 S., R. 2 E., S. 15, B. T. No other trees within limits; raise a mound of stone, 2 ft. base 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous, very rough. Soil, gravelly and rocky; 3rd and 4th rate. Timber, scattering cedar. Mountainous land, 80.88 chs.
		S. 0° 42' E., on a resurvey line bet. secs. 22 and 23. Over mountainous land, through scattering cedar timber; descend abruptly.
	8.00	Bottom of hollow, 200 ft. below cor., course S. 20° E.; ascend.

Subdivision of T. 16 S., R. 2 E. - Continued.

chains.	
20.00	Top of sharp, rocky spur, 50 ft. above hollow, bears N. 20° W. and S. 20° E.; descend.
28.50	Top of perpendicular cliff, 60 ft. high, bears E. and W.
40.44	Set a sandstone, 16 x 14 x 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A cedar, 5 ins. diam., bears S. 80° E., 30 lks. dist., marked ¼ S. 23, B. T. A cedar, 3 ins. diam., bears N. 70° W., 42 lks. dist., marked ¼ S. 22 B. T.
66.50	Foot of mountain, 900 ft. below ridge, bears N. E. and S. W.; leave timber, and enter scattering undergrowth; thence across nearly level valley.
71.50	Old wood road, bears E. and W.
80.88	Set a sandstone, 16 x 10 x 8 ins., 11 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

66.50 / 14.38

Sand, mountainous and nearly level.
Soil, gravelly and clay loam; and rocky; 2nd and 4th rate.
Timber, scattering cedar.
Undergrowth, sage.
Good grass for grazing.
Mountainous land, 66.50 chs.

S. 0° 42' E., on a resurvey line bet. secs. 26 and 27.
Over nearly level valley.

	chains.	through scattering under-growth.
	5.00	Wash, 20 lks. wide, 1 ft. deep, course S. 80° E.
	35.00	Water ditch, 2 lks. wide, 2 ins. deep, course E. Enter cultivated field and leave undergrowth bears E. and W.
	40.44	Set a gray limestone, 18 x 10 x 8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	50.00	Leave cultivated field and enter scattering undergrowth bears E. and W.
	55.00	Wash, 20 lks. wide, 4 ft. deep, from Axhandle Cañon, course S. E.
	59.25	Wash, 10 lks. wide, 3 ft. deep, course S. E.
	64.00	Wash, 10 lks. wide, 3 ft. deep, S. E.
U	80.88	Set a sandstone, 24 x 7 x 6 ins., 18 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, marked with 1 notch on S. and 2 notches on E. edges; dig pits, 18 x 18 x 12 ins., in each sec.; 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Sand, nearly level. Soil, clay loam; 2nd rate. No timber. Undergrowth, sage and scales. Good grass for grazing.

S. 0° 42' E., on a resurvey line bet.

Subdivision of T. 16 S., R. 2 E.- Continued.

Chains	
	secs. 34 and 35.
	Over nearly level land, through scattering under-growth.
14.50	Wash, 15 lks. wide, 3½ ft. deep, course S. 60° E.
31.00	Wash, 10 lks. wide, 4 ft. deep, course S. 60° E.
35.00	Wash, 15 lks. wide, 3 ft. deep, course S. 70° E. Road bears E. and W.
40.44	Set a limestone, 18×10×7 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; dig pits, 18×18×12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
53.50	Wash, 10 lks. wide, 5 ft. deep, course S. 70° E.
80.88	The cor. of secs. 2, 3, 34, and 35.
	Sand, nearly level.
	Soil, clay loam; 2nd rate.
	No timber.
	Undergrowth, grease-wood and shadscales.
	Good grass for grazing.
	August 25, 1898.

August 26, 1898: At 7h 32m a.m., l.m.t., we set off 39° 27' N., on the lat. arc; 10° 19' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 2, 3, 10, and 11.

Thence we run

North, on a true line bet. secs. 2 and 3.

Over mountainous land; descend.

Subdivision of T. 16 S., R. 2 E. - Contin.

ch	
16.00	Enter scattering cedar timber, bears E. and W.
40.00	Set a limestone, 18 x 10 x 7 ins., 12 in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
43.00	Creek, 4 lks. wide, 2 ins. deep, in bottom of Pitch Cañon, 350 ft. below sec. cor., course S. 80° E.; ascend.
81.00	
~~80.65~~	Intersect the Third Standard Parallel South, 13 lks. E. of the Standard cor. of secs. 34 and 35 heretofore described.
	Set a limestone, 16 x 8 x 7 ins., 11 ins. in the ground, for closing cor. of secs. 2 and 3, marked C. C. on S.; with 2 grooves on E. and 4 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
	Sand, mountainous.
	Soil, gravelly and rocky; 3rd and 4th rate.
	Timber, scattering cedar.
	Good grass for grazing.
	Mountainous land, ~~80.65~~ 81.00 chs.

See depositions letter Jany 8. 1901

From the cor. of secs. 33 and 34, on S. bdy. of Tp. heretofore described.

We run

North, bet. secs. 33 and 34.

Over nearly level valley,

through dense undergrowth,

Subdivision of T. 16 S., R. 2 E.-Continued.

Chains.	
8.00	The W. end of a cultivated field, 150 lks. wide, 20.00 chs. long, bears E. about 2.00 chs. dist.
26.50	Wash from Rock Cañon, 25 lks. wide, 8 ft. deep, course S. 70° E.
35.00	Old wood road, bears N. 80° W. and S. 80° E.
40.00	Set a limestone, 16 x 11 x 7 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
60.50	Wash, 50 lks. wide, 6 ft. deep, course S. 65° E.
73.75	Wash, 100 lks. wide, 75 ft. deep, course S. 65° E.
	Begin ascent of mountain, bears E. and W.
80.00	Set a limestone, 20 x 12 x 8 ins., 15 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on S. and 3 notches on E. edges; from which A cedar, 6 ins. diam., bears N. 26° E., 38 lks. dist., marked T. 16 S., R. 2 E., S. 27, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Sand, mountainous and nearly level.
	Soil, clay loam; 2nd rate.
	No timber.
	Undergrowth, sage and grease-wood.
	Good grass for grazing.
	Mountainous land, or land with dense under-

Chains	growth, 80.00 chs.
	August 25, 1898: At this cor., we set off 10° 14' N., on the decl. arc; and at 0 hr 2 m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 24' N., which is about 0.56 greater than the proper lat.
	East, on a random line bet. secs. 27 and 34.
8.00	Find no trace of foot of mountain cor.
40.00	Find no trace of old 1/4 sec. cor., Set temp. 1/4 sec. cor.
78.81	Intersect N. and S. line, 9 offs., S. 0° 42' E. of the cor. of secs. 27 and
	Thence we run West, on a true resurvey line bet. secs. 27 and 34.
	Over nearly level valley, through scattering undergrowth.
18.35	Wood road, bears N. 40° W. and S. 20° E.
30.00	Begin ascent of mountain, bears N. E. and S. W.
	Leave undergrowth and enter scattering timber, bears N. E. and S. W.
40.00	Set a limestone, 16 x 8 x 7 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
	O. cedar, 6 ins. diam., bears N. 35 E., 25 lks. dist., marked 1/4 S. 27, B. T.
	A pinion pine, 8 ins. diam., bears S. 12 5 lks. dist., marked 1/4 S. 34, B. T.
	We find no trace of old 1/4 sec. cor.

Subdivision of T. 16 S., R. 2 E.-Continued.

45.00 Top of ridge, 125 ft. above valley, bears N. and S.; descend.
57.00 Bottom of hollow, 120 ft. below ridge, course S. 20° E.; ascend.
65.00 Wood road, bears N. and S.
78.80 Intersect N. and S. line, 90 lks. N. of the cor. of secs. 27, 28, 33, and 34.
40.00
38.80
Set a limestone, 18 x 6 x 6 ins., 12 ins. in the ground, for closing cor. of secs. 27 and 34, marked with 1 groove on S. and 3 grooves on E. faces; from which
a cedar, 3 ins. diam., bears S. 20° E., 60 lks. dist., marked T. 16 S., R. 2 E., S. 34, B. T.
No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
Pits impracticable.
Note: We destroy all marks on the cor. of secs. 27, 28, 33, and 34, which pertain to secs. 27 and 34.
Land, nearly level and mountainous.
Soil, clay and gravelly; 2 +
Timber, scattering cedar.
Undergrowth, sage, greasewood and shadscales.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 78.80 chs.

North, bet. secs. 27 and 28, from the cor. of secs. 28 and 33.
Over mountainous land, scattering timber; ascend abruptly.

.90	The closing cor. of secs. 27 and 34.
11.00	Top of ridge, bears N. 80° E. and S. 80°
11.35	A log cabin bears N. 70° W. about 25.00 chs. dist. from this point.
18.00	Old wood road, bears E. and W.
34.40	Drag road, in hollow, course E.
40.00	Set a sandstone, 18 x 17 x 5 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A pinion pine, 16 ins. diam., bears N. 45° E., 23 lks. dist., marked 1/4 S. 27, B. T. A cedar, 16 ins. diam., bears S. 41° W., 47 lks. dist., marked 1/4 S. 28, B. T.
80.00	Set a limestone, 20 x 12 x 4 ins., 15 in the ground, for cor. of secs. 21, 22, 27, and 28, marked with 2 notches on S. and 3 notches on E. edges; from which A cedar, 6 ins. diam., bears N. 70° E., 14 lks. dist., marked T. 16 S., R. 2 E., S. 22, B. T. A cedar, 8 ins. diam., bears S. 40° E., 14 lks. dist., marked T. 16 S., R. 2 E., S. 27, B. T. A pinion pine, 6 ins. diam., bears S. 32° W., 16 lks. dist., marked T. 16 S., R. 2 E., S. 28, B. T. A cedar, 3 ft. diam., bears N. 49° W., 20 lks. dist., m T. 16 S., R. 2 E., S. 21, B. T.
	Sand, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, scattering cedar and pinion pine. Good grass for grazing. Mountainous land, 80.00 chs.

Subdivision of T. 16 S., R. 2 E. - Continued.

chains	
	Note: We are unable to find the ¼ sec. cor., bet. secs. 22 and 27; and knowing from previous connections that it will require a closing cor.
	We run from the cor. of secs 22, 23, 26 and 27. West, on a true line bet. secs. 22 and 27.
	Over nearly level valley, through dense undergrowth.
17.85	Creek, 4 lks. wide, 1½ ins. deep, in Wash, 7 lks. wide, 4 ft. deep, from Axhandle Cañon, course S. 20° E.
24.90	Wood road, bears N. 20° W. and S. 20° E.
28.50	Wood road, bears N. 30° W. and S. 30° E.
30.00	Foot of mountain, bears N. 10° W. and S. 10° E.; ascend.
39.00	Enter scattering timber, bears N. and S.
40.00	Find no trace of old ¼ sec. cor. Set a sandstone, 28 x 14 x 6 ins., 21 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which Cedar, 10 ins. diam., bears N. 61° E., 82 lks. dist., marked ¼ S. 22, B. T. Cedar, 4 ins. diam., bears S. 51° E. 66 lks. dist., marked ¼ S. 27, B. T.
76.00	Find no trace of foot of mountain cor.
78.00	Intersect N. and S. line, 2.00 chs. N. of the cor. of secs. 21, 22, 27, and 28.
C 1000 # 3800	Set a limestone, 18 x 6 x 5 ins., 12 ins. in the ground, for closing cor. of secs. 22 and 27, marked C. C. on E.; with 2 grooves on S. and 3 grooves on E. faces; from which Cedar, 8 ins. diam., bears S. 80° E., 18 lks. dist., marked T. 16 S., R. 2 E., S. 27, B. T.
	No other trees within limits;

chains	
	raise a mound of stone, 2 ft. 1½ ft. high, E. of cor. Pits impracticable.
	Note: We destroy all marks on the cor. of secs. 21, 22, 27, and 28, which pertain to secs. 22 and 27.
	Sand, nearly level and mountainous.
	Soil, gravelly, clay loam, and rocky; 2nd and 4th rate.
	Timber, scattering cedar and pinion pine.
	Undergrowth, sage and shadscales.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 78.00 chs.

	North, bet. secs. 21 and 22, from the cor. of secs. 21 and 28.
	Over mountainous land, through heavy cedar and pinion pine timber; ascend.
2.00	The closing cor. of secs. 22 and 27.
4.35	Top of divide ridge, bet. Ash and Rock Cañons, 50 ft. above sec. cor., bears N. E. and S. W.; descend abruptly.
15.00	Bottom of hollow, 300 ft. below ridge, course N. E.; ascend.
20.25	Top of spur, 75 ft. above hollow, bears N. E. and S. W.; descend.
40.00	Set a sandstone, 14 x 14 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
	An oak, 4 ins. diam., bears N. 5 E., 7 lks. dist., marked ¼ S. 22, B. T.

Chains	
	A pinion pine, 4 ins. diam., bears S. 35° 30' W., 10 lks. dist., marked # S. 21, B. T.
41.00	Scar e timber, bears E. and W.
42.75	Creek, 5 lks. wide, 3 ins. deep, in bottom of Axhandle Cañon, 400 ft. below spur, course S. 52° E; ascend.
43.25	Wood road in cañon, bears N. 52° W. and S. 52° E.
46.00	Enter scattering cedar and pinion pine, bears E. and W.
52.50	Top of spur, 200 ft. above creek, bears N. 50° E. and S. 50° W.; descend.
63.00	Bottom of hollow, 30 ft. below spur, course S. 55° W.; ascend.
78.50	Top of spur, 250 ft. above hollow bears N. 30° E. and S. 30° W.; descend.
80.00	Set a limestone, 15 x 12 x 6 ins., 10 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, marked 16 S., on N. E. and 2 E. on S. E. faces; with 3 notches on S. and E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, gravelly loam and rock; 2nd and 4th rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.

August 26, 1898.

August 27, 1898: At 7h 0m a. m., l. m. t., we set off 39° 26' N., on the lat. arc, 19.0 59' N., on the decl. arc.

	and determine a true meridian with the solar, at the cor. of secs. 14, 15, 22, and 23. Thence run West, on a true line bet. secs. 15 and 22, for reasons already explained. Over mountainous land, through scattering timber; descend.
3.00	Hollow, 20 ft. below sec. cor., course S. 20° E.
40.00	Find no trace of old ¼ sec. cor. Set a limestone, 16 x 9 x 7 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1 ½ ft. high, N. of cor. Pits impracticable.
58.25	Foot of perpendicular cliff, 30 ft. high, bears N. and S.
59.00	Top of ridge, 600 ft. above sec. cor., bears N. and S.; descend.
66.00	Find no trace of foot of mountain cor.
71.00	Bottom of hollow, 50 ft. below ridge, course S. 20° W.; ascend.
76.00	Top of spur, 30 ft. above hollow, bears N. 30° E. and S. 30° W.
77.10	Intersect N. and S. line, 3.00 chs. N. of the cor. of secs. 15, 16, 21, and 22. Set a limestone, 14 x 8 x 4 ins., 9 ins. in the ground, for closing cor. of secs. 15 and 22, marked C. C. on E.; with 3 grooves on S. and E. faces; from which A pinion pine, 8 ins. diam., bears N. 20° E., 62 lks. dist., 2d. T. 16 S., R. 2 E., S. 15, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1 ½ ft. high, E. of cor. Pits impracticable. Note: We destroy all marks on

	the cor. of secs. 15, 16, 21, and 22, which pertain to secs. 15 and 22. Sand, mountainous. Soil, gravelly loam and rocky, 3 2nd and 4th rate. Timber, scattering cedar and pinion pine. Good grass for grazing. Mountainous land, 77.10 chs.
	North, bet. secs. 15 and 16, from the cor. of secs. 1 and 21. Over mountainous land, through scattering timber and undergrowth; descend.
3.00	The closing cor. of secs. 15 and 22.
4.50	Bottom of hollow, 10 ft. below cor., course S. W.; ascend.
22.50	Enter dense undergrowth, bears E. and W.
35.00	Top of flat ridge, 200 ft. above hollow, bears N.E. and S.W.; descend gently.
40.00	Set a limestone, 18 x 12 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 8 ins. diam., bears S. 16° 30' W., 87 lks. dist., marked 1/4 S. 16, B.T. No other trees within limits; raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
62.65	Bottom of hollow, 50 ft. below ridge, course S. 85° W.; ascend.
70.00	Top of flat ridge, 25 ft. above hollow, bears E. and W.;
80.00	Set a sandstone, 24 x 10 x 8 ins., 18 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, marked

Subdivision of T. 16 S., R. 2 E. - Continued

chains	with 4 notches on S., and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Sand, mountainous.
	Soil, black loam and rocky; 1st and 4th rate.
	Timber, scattering cedar and pinion pine.
	Undergrowth, sage brush, good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	For reasons already
	We run from cor. of secs. 10, 11, 14 and 15.
	West, on a true line bet. secs. 10 and 15.
	Over mountainous land, through dense undergrowth
28.00	Find no trace of foot of mountain cor.
34.50	Bottom of hollow, 150 ft. below cor., course S. 20° E.; ascend.
40.00	Set a limestone, 16 x 10 x 6 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft high, N. of cor. Pits impractical
41.50	Top of ridge, 30 ft. above ¼ sec. cor, bears N. 20° E. and S.; descend.
56.50	Enter scattering cedar and pinion pine timber; bears N. and S.
[illegible]4.50	Bottom of hollow, 150 ft. below ridge, course S. 85° W.; ascend.
See deputies letter Jany 8/01 [illegible].00	Intersect N. and S. line, ~~3.85~~ 4.25 chs. N. of the cor. of secs. 9, 10, 15, and 16. Set a sandstone, 15 x 12 x 8 ins., 10 ins.

chains

in the ground, for closing cor. of secs. 10 and 15, marked C. C. on E., with 4 grooves on S. and 3 grooves on E. faces; from which
A cedar, 8 ins. diam., bears N. 78° E., 6 lks. dist., marked T. 16 S., R. 2 E., S. 10, B. T.
A pinion pine, 5 ins. diam., bears S. 51° E., 27 lks. dist., marked T. 16 S., R. 2 E., S. 15, B. T.
Note: We destroy all marks on the cor. of secs. 9, 10, 15, and 16 which pertain to secs. 10 and 15.
Sand, mountainous.
Soil, clay loam; separate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 76.00 chs.
August 27, 1898: At the noon hour, the sky is overcast and solar observations are impossible.

North, bet. secs. 9 and 10, from the cor. of secs. 9 and 16.
Over mountainous land; descend.

2.85 Bottom of hollow; 20 ft. below cr., course S. 85° W.; ascend.

3.20 Enter heavy cedar and pinion pine, bears E. and W.

3.85 The closing cor. of secs. 9 and 10

6.00 Scar etimber, bears N. E. and S. W.

9.50 Top of spur, 60 ft. above cr., bears N. E. and S. W.; descend.

Chains	
35.00	Enter scattering cedar and pinion pine timber, bears N. E. and S. W.
36.00	Bottom of branch of axhandle Cañon, 100 ft. below ridge, course S. 30° W.
40.00	Set a blue limestone, 20 x 8 x 6 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A pinion pine, 7 ins. diam., bears N. 13° E., 34 lks. dist., marked ¼ S. 10, B. T. A pinion pine, 14 ins. diam., bears S. 42° W., 50 lks. dist., marked ¼ S. 9, B. T.
52.50	Top of spur, 100 ft. above cañon, bears E. and W. Leave timber, bears with spur; descend.
68.00	Bottom of same cañon, as crossed at 36.00 chs., 20 ft. below spur, course S. 20° E.; ascend.
80.00	Set a limestone, 16 x 14 x 3 ins.; 11 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked with 5 notches on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, gravelly loam; 2nd rate. Timber, cedar and pinion pine. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.

Note: Knowing from former

Chains.	
	connections that the line bet. secs. 3 and 10, will not close within the prescribed limits. We run East, on a true line bet. secs. 3 and 10. Over mountainous land, through dense undergrowth, ascend
2.50	Top of spur, 20 ft. above cor., bears N. and S.; descend,
5.00	Bottom of swale, 15 ft. below spur, course S. 10° W.; ascend.
15.00	Top of spur, 20 ft. above swale, bears N. and S.; descend.
21.00	Bottom of swale, 20 ft. below spur, course S. W.; ascend,
27.00	Top of divide ridge, bet. Ax-handle and Pitch Cañons; 30 ft. above swale, bears N. 60° W. and S. 60° E.; descend.
35.00	Bottom of swale, 40 ft. below ridge, course N.; ascend.
40.00	Set a gray limestone, 18 x 8 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked + on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
75.20	Intersect N. and S. line, ~~6.55~~ 5.43 chs. S. 0° 42' E. from the cor. of secs. 2, 3, 10 and 11. *See deputies letter Jany 8. 1901*
	Set a limestone, 16 x 14 x 4 ins., 11 ins. in the ground, for closing cor. of secs. 3 and 10, marked C. C. on W., with 5 grooves on S. and 2 grooves on E. faces; from which
	An oak, 4 ins. diam., bears S. 2° W., 53 lks. dist., marked T. 16 S., R. 2 E., S. 10, B. T.
	An oak, 4 ins. diam., bears

chains	
	N. 56° W., 10 lks. dist., marked T. 16 S., R. 2 E., S. 3, B. T.
	Note: We destroy all marks on the cor. of secs. 2, 3, 10, and 11, which pertain to secs. 3 and 10.
	Sand, mountainous.
	Soil, rich dark loam and gravelly; 1st and 3rd rate.
	No timber.
	Undergrowth, oak, and serviceberry.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth,
75.20	chs.
	N. 0° 1' W., on a true line bet. secs. 3 and 4, from the cor. of secs. 3, 4, 9, and 10.
	Over mountainous land, through scattering undergrowth; descend.
10.00	Bottom of hollow, 30 ft. below cor., course S. 10° W. Enter scattering timber, bears with hollow; ascend.
40.00	Set a limestone, 15 x 10 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
	A pinion pine, 7 ins. diam., bears N. 82° E., 9 lks. dist., marked 1/4 S. 3, B. T.
	No other trees within limits; raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
	Pits impracticable.
47.00	Top of divide ridge, bet. Axhandle and Pitch Cañons, 10.0 ft. above

Subdivision of T. 16 S., R. 2 E. - Continued.

chains.	
	hollow, bears E. and W.; descend.
51.00	Wood road, bears E. and W.
71.60	Creek, 3 lks. wide, 3 ins. deep, in Pitch Cañon, 150 ft. below ridge, course E.; ascend.
87.00	Intersect the Third Standard Parallel South, 4.70 chs. E. of the standard cor. of secs. 33 and 34. Set a limestone, 18 x 9 x 5 ins., 12 ins. in the ground, for closing cor. of secs. 3 and 4, marked C.C. on S., with 3 grooves on E. and W. faces; from which
See definitee' letter Jan 30/01	

A cedar, 8 ins. diam., bears S. 5° E., 72 lks. dist., marked T. 16 S., R. 2 E., S. 3, B.T.

A cedar, 24 ins. diam., bears S. 70° W., 63 lks. dist., marked T. 16 S., R. 2 E., S. 4, B.T.

Land, mountainous.

Soil, gravelly loam and rocky; 2nd and 4th rate.

Timber, scattering cedar and pinion pine.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous land, 87. chs.

August 27, 1898.

August 29, 1898: At 7h 34m a.m., l.m.t., we set off 39° 2' 3" N., on the lat. arc; 9° 16' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 32, and 33, on S. bdy. of Tp., heretofore described. Thence we run

N. 0° 1' W., bet. secs. 32 and 33.

	Over mountainous land, through scattering timber, and scattering undergrowth; descend.
4.00	Bottom of hollow, 75 ft. below cor., course N. 80° E.; ascend.
8.00	Top of spur, 30 ft. above hollow; bears N. E. and S. W.; descend.
14.00	Creek, 2 lks. wide, 2 ins. deep, in bottom of branch of Dry Cañon, course N. 30° E; ascend.
16.50	Top of spur, 25 ft. above hollow; bears N. 50° E. and S. 50° W.; descend
18.85	Creek, 2 lks. wide, 2 ins. deep, rocky bottom, in Dry Cañon, 20 ft. below spur; course S. 50° E.; ascend.
19.30	Wood road, bears N. 50° W. and S. 50° E.
40.00	Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A pinion pine, 14 ins. diam bears S. 68° 15' E., 10 lks. dist., marked 1/4 S. 33, B. T. A cedar, 12 ins. diam., bears S. 30' W., 57 lks. dist., marked 1/4 S. 3 and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
43.00	Top of divide ridge, bet. Dry and Rock Cañons, 300 ft. above cañon, bears E. and W. Road top of ridge. Descend.
61.65	Wood road, bears N. 50° W and S. 50° E.
71.75	Bottom of Rock Cañon, 150 ft. below ridge, course S. 70° E.; ascend.
80.00	Set a limestone, 20 x 8 x 4 ins., 15 ins. in the ground, for cor.

chains.	
	secs. 28, 29, 32, and 33, marked with 1 notch on S. and 4 notches on E. edges; from which a cedar, 10 ins. diam., bears N. 22° E., 68 lks. dist., marked T. 1 bS., R. 2 E., S. 28, B. T. a pinion pine, 10 ins. diam., bears S. 80° E., 52 lks. dist., marked T. 1 bS., R. 2 E., S. 33, B. T. a pinion pine, 12 ins. diam., bears S. 78° 30' W., 42 lks. dist., marked T. 1 bS., R. 2 E., S. 32, B. T. a pinion pine, 12 ins. diam., bears N. 21° 45' W., 70 lks. dist., marked T. 1 bS., R. 2 E., S. 29, B. T. Sand, mountainous. Soil, clay loam and gravelly; 2nd and 3rd rate. Timber, scattering cedar and pinion pine. Good grass for grazing. Mountainous land, 80.00 chs.
	S. 89° 54' E., on a random line bet. Secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.,
79.82	Intersect N. and S. line, 11 lks. N. of the cor. of secs. 28 and 33.
	Thence run N. 89° 51' W., on a true line bet. secs. 28 and 33.
	Over mountainous land, through scattering cedar and pinion pine timber; ascend.
13.00	Wash, 50 lks. wide, 10 ft. deep, course S. 10° E.
	Enter heavy timber, bears N. 10° W. and S. 10° E.

Subdivision of T. 16 S., R. 2 E.-

14.00	Wagon road, bears N. and S.
14.50	A lumber shanty bears N., 35 l dist.
39.50	Top of ridge, 350 ft. above sec. cor., bears N. and S.; descend.
39.91	Set a hard sandstone, 18 x 12 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which A pinion pine, 8 ins. diam., bears N. 23° W., 108 lks. dist., marked 1/4 S., 28, B. T. A pinion pine, 6 ins. diam., bears S. 43° E., 67 lks. dist., marked 1/4 S. 33, B. T.
49.75	Bottom of hollow, 50 ft. below ridge, course S.; ascend.
55.50	Top of spur, 75 ft. above hollow, bears N. and S.; descend.
61.80	Bottom of hollow, 50 ft. below ridge, course S.; ascend.
65.50	Top of spur, 75 above hollow, bears N. and S.; descend.
73.25	Bottom of hollow, 80 ft. below ridge, course S. 20° E.; ascend.
79.82	The cor. of secs. 28, 29, 32, and 33. Sand, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, cedar and pinion Good grass for grazing. Mountainous or heavily timbered land, 79.82 chs.

N. 0° 1' W., bet. secs. 28 and 29.
Over mountainous land, through scattering timber; ascend.

10.00	Top of spur, 60 ft. above cor., be

chains	
	E. and W.; descend.
34.00	Bottom of hollow, 75 ft. below ridge, course S. 20° W.; ascend.
40.00	Set a gray limestone, 18 x 8 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.
55.00	Top of divide ridge, bet. Axhandle and Rock Cañons, 200 ft. above hollow, bears N. 80° E. and S. 80° W.; descend.
80.00	Set a sandstone, 14 x 10 x 8 ins., 9 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft high, W. of cor. Pits impracticable.
	Sand, mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, scattering cedar and pinion pine.
	Good grass for grazing.
	Mountainous land, 80.00 chs.
	S. 89° 51' E., on a random line bet. secs. 21 and 28.
40.00	et temp. ¼ sec. cor.
79.90	Intersect N. and S. line, 12 lks. S. of the cor. of secs. 21 and 28.
	Thence we run
	N. 89° 56' W., on a true line bet. secs. 21 and 28.
	Over mountainous land, through scattering timber

and undergrowth; ascend.

8.50 Top of divide ridge, bet. Ash and Rock Cañons, 100 ft. above cor., bears N. 30° E. and S. 30° W; descend gently.

39.9 Falls on a stationary limestone boulder, 6 x 3 x 3 ft. above ground We cut a cross (X) at the exact cor. point, for 1/4 sec. cor., marked 1/4 on N. face; from which

A cedar, 8 ins. diam., bears N. 20 30' E., 131 lks. dist., marked 1/4 S. 21, B. T.

A pinion pine, 12 ins. diam., bears S. 41° 30' E., 87 lks. dist., marked 1/4 S. 28, B. T.

63.25 Bottom of hollow, 200 ft. below ridge, course N. 10° W.; ascend.

79.90 The cor. of secs. 20, 21, 28, and 29.

Sand, mountainous.

Soil, clay and gravelly loam; 2nd rate.

Timber, scattering cedar and pinion pine.

Undergrowth, oak and brush.

Good grass for grazing.

Mountainous land, 79.90 chs

August 29, 1898: At this cor., we set off 9° 10' N., on the decl. arc; and at 0h 3m p. m., l. m. t. observe the sun on the ian, the resulting lat. is 39° 24' N., which is about 0.' 36. less than the proper lat.

N. 0° 1' W., bet. secs. 20 and 21.

Over mountainous land, through dense undergrow

chains.	descend.
7.50	Leave undergrowth and enter heavy timber, bears E. and W.
20.25	A cone shaped rock, 30 ft. diam., and 100 ft. high, bears W. 50 lks. dist.
29.75	Old road, bears N. 85° E. and S. 85° W.
30.00	Creek, 5 lks. wide, 2 ins. deep, rapid current, rocky bottom, in bottom of S. fork of Ashandle Cañon, 400 ft. below ridge, course N. 85° E.; ascend.
40.00	Point for cor. falls on stationary boulder of sandstone, 2x2x2 ft. above ground, on which we cut a cross (x) at the exact cor. point, and mark 4 on W. face; from which A pinion pine, 8 ins. diam., bears N. 77° 45' E., 77 lks. dist., marked 4 S. 21. B. T. A pinion pine, 12 ins. diam., bears S. 12° 15' W., 88 lks. dist., marked 4 S. 20, B. T.
63.50	Leave timber and enter dense undergrowth, bears E. and W.
70.00	Top of ridge, dividing N. and S. fork of Ashandle Cañon, 300 ft. above cañon, bears N. 55° W. and S. 55° E.; descend.
80.00	Set a quartz stone, 14x12x5 ins., 9 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, marked with 3 notches on S. and 4 notches on E. edges; from which An oak, 5 ins. diam., bears N. 17° E., 10 lks. dist., marke T. 16 S., R. 2 E., S. 16, B. T. An oak, 5 ins. diam., bears

Chains.	
	S. 29° E., 11 lks. dist., marked T. 16 S., R. 2 E., S. 21, B.T. An oak, 5 ins. diam., bears S. 8° 10' W., 7 lks. dist., marked T. 16 S., R. 2 E., S. 20, B.T. An oak, 5 ins. diam., bears N. 48° 15' W., 5½ lks. dist., ed T. 16 S., R. 2 E., S. 17, B.T.
	Sand, mountainous.
	Soil, gravelly loam and rocky 2nd and 4th rate.
	imber, cedar and pinion
	Undergrowth, oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covere dense undergrowth, 80.0
	S. 89° 56' E., on a random line bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.,
80.00	Intersect N. and S. line 16 lks. N. of the cor. of secs. 16 and 21. Thence we run N. 89° 49' W., on a true line bet. secs. 16 and 21. Over mountainous land, through scattering timber; descend,
4.00	Bottom of hollow, 50 ft. below ridge, course S. W.; ascend,
12.50	Top of spur, 200 ft. above hollow, bears N. 30° E. and S. 30° W. Enter heavy timber, bears ridge; descend,
19.75	Top of perpendicular cliff, 40 ft. high, bears N. W. and S.
29.00	Crick, 2 lks. wide, 2 ins. deep,

chains	
	rapid current, cold water, rocky bottom, in N. fork of Ashandle Cañon, 300 ft. below spur, course S. 30° E.; ascend.
29.50	Old road, bears N. 30° W. and S. 30° E.
40.00	Point for cor. falls on a station airy boulder of conglomerate stone, 6 x 4 x 4 ft. above ground, on which we cut a cross (x) at the exact cor. point for ¼ sec. cor., marked ¼ on N. face; from which A pinion pine, 12 ins. diam., bears N. 28° 15' W., 51 lks. dist., marked ¼ S. 16, B. T. A pinion pine, 6 ins. diam., bears S. 20° 30' E., 29 lks. dist., marked ¼ S. 21, B. T.
61.00	Leave timber and enter dense undergrowth, bears N. and S.
80.00	The cor. of secs. 16, 17, 20, and 21.
	Sand, mountainous.
	Soil, clay loam and rocky; 2nd and 4th rate.
	Timber, cedar and pinion pine.
	Undergrowth, oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

N. 0° 1' W., bet. secs. 16 and 17.
Over mountainous land, through scattering undergrowth and timber; descend.

40.00	set a quartzite stone, 14 x 14 x 12 ins., 9 ins. in the ground, for ¼ sec.

chains. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

49.30 Leave undergrowth and enter heavy cedar and pinion pine timber, bears E. and W.

62.00 Old road, N. 75° W. and S. 75° E.

62.70 Creek, 1 lk. wide, 2 ins. deep, good water, in N. fork of Ashandle Cañon, 700 ft. below ridge, course S. 75° E.; ascend.

80.00 Set a limestone, 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked with + notches on S. and 4 notches on E. edge; from which

A pinion pine, 8 ins. diam., bears N. 62° E., 56 lks. dist., marked T. 16 S., R. 2 E., S. 9, B. T.

A pinion pine, 10 ins. diam., bears S. 67° 30' E., 28 lks. dist., marked T. 16 S., R. 2 E., S. 16, B. T.

A pinion pine, 10 ins. diam., bears S. 29° 30' W., 23 lks. dist., marked T. 16 S., R. 2 E., S. 17, B. T.

A pinion pine, 14 ins. diam., bears N. 60° W., 28 lks. dist., marked T. 16 S., R. 2 E., S. 8, B. T.

Sand, mountainous.
Soil, rich black loam, 1st rate.
Timber, cedar and pinion pine.
Undergrowth, oak and sage brush.
Good grass for grazing.
Mountainous or heavily timbered land, 80.00 chs.

Chains.	
	S. 89° 49' E., on a random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
80.10	Intersect N. and S. line, 14 lks. S. of the cor. of secs. 9 and 16. Thence we run N. 89° 55' W., on a true line bet. secs. 9 and 16. Over mountainous land, through dense undergrowth and scattering timber; descend.
11.50	Leave undergrowth and enter heavy cedar and pinion pine timber, bears N. E. and S. W.
16.50	Bottom of branch of N. fork of Ashandle Cañon, 150 ft. below cor., course S. 30° W.; ascend.
27.50	Leave timber and enter dense undergrowth, bears N. E. and S. W.
33.50	Top of ridge, 200 ft. above cañon, bears N. 10° E. and S. 10° W. Enter scattering timber, bears with ridge; descend.
40.05	Set a blue limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A cedar, 14 ins. diam.; bears S. 50° 30' E., 15 lks. dist., marked ¼ S. 16, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
47.00	Leave undergrowth and enter heavy timber, bears N. and S.
60.30	Creek, 2 lks. wide, 2 ins. deep, rocky bottom, rapid current;

good water, in Cañon, 250 ft.
below ridge, course S.; ascend.
75.25 Top of spur, 250 ft. above c ~
bears N. 5° W. and S. 5° E.; descend.
– 80.10 The cor. of secs. 8, 9, 16, and 17.
Sand, mountainous.
Soil, rich black loam and
rocky; 1st and 4th rate.
Timber, cedar and pinion
pine.
Undergrowth, oak and sage
brush.
Good grass for grazing.
Mountainous or heavily
timbered land, or land cover
ed with dense undergrowth,
80.10 chs.

August 29, 1898.

August 30, 1898: At 7h 0m a. m.,
l. m. t., we set off. 39° 27' N., on the
lat. arc; 8° 54' N., on the decl. arc;
and determine a true merid
ian with the solar at the
cor. of secs. 8, 9, 16 and 17.
Thence we run
N. 0° 1' W., bet. secs. 8 and 9.
Over mountainous land,
through heavy cedar and
pinion pine timber; ascend.
22.50 Top of spur, 100 ft. above cor.,
bears N. 10° W. and S. 10° E. Leave
heavy timber and enter
undergrowth and sca ~
timber, bears with ridge;
descend.
40.00 Set a limestone, 18 x 10 x 6 ins., 12 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from

chains.	
	which A cedar, 8 ins. diam., bears S. 71° E., 118 lks. dist., marked +4 S. 9, B. T. A cedar, 5 ins. diam., bears N. 82° 30' W., 90 lks. dist., marked +4 S. 8, B. T.
57.00	Bottom of hollow, 150 ft. below ridge, course S. 72° E.; ascend.
67.50	Top of spur, 75 ft. above hollow, bears N. 25° W. and S. 25° E.; descend.
80.00	Set a sandstone, 16 x 12 x 6 ins., 11 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, marked with 5 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, rich black loam; 1st rate. Timber, cedar and pinion pine. Undergrowth, oak, sage, and mahogany. good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

S. 89° 55' E., on a random line bet. secs. 4 and 9.

40.00	Set temp. ¼ sec. cor.
79.86	Intersect N. and S. line, at the cor. of secs. 3, 4, 9 + 10.

Thence we run N. 89° 55' W., on a true line bet. secs. 4 and 9.

Over mountainous land,

chains.	
	through dense undergrowth; descend.
2.50	Bottom of swale, 20 ft. below cor., course S. 10° E.; ascend.
9.50	Top of ridge, 50 ft. above swale, bears N. and S.; descend.
10.00	Enter scattering cedar and pinion pine timber, bears N. and S.
24.00	Bottom of hollow, 120 ft. below ridge, course S. 20° W.; ascend.
36.50	Top of spur, 40 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
39.93	Set a gray limestone, 20 x 13 x 4 ins. 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which An oak, 3 ins. diam., bears N. 21° W., 86 lks. dist., marked 1/4 S. 4, B. T. An oak, 3 ins. diam., bears S. 40° W., 45 lks. dist., marked 1/4 S. 9; B. T.
61.50	Bottom of hollow, 300 ft. below spur, course S. W.; ascend.
66.00	Top of spur, 50 ft. above l bears N. and S. Leave timber, bears with ridge; descend.
71.25	Creek, 3 lks. wide, 3 ins. deep, in branch of N. fork of Cañon, 30 ft. below spur, S. 20° E.; ascend.
79.86	The cor. of secs. 4, 5, 8, and 9.

Sand, mountainous.
Soil, loam and gravelly; 1st and 3rd rate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak and sage brush.
Good grass for grasi
Mountainous land, or covered with dense under-

chains.	growth, 79.86 chs.
	N. 0° 1' W., on a true line bet. secs. 4 and 5.
	Over mountainous land, through dense undergrowth; descend.
6.00	Creek, 3 lks. wide, 3 ins. deep, in bottom of branch of the N. fork of Axhandle Cañon, 100 ft. below cor., course S. 50° E.; ascend.
17.50	Top of ridge, 66 ft. above creek, bears N. 80° E. and S. 80° W.; descend.
22.90	Bottom of hollow, 30 ft. below ridge, course S. 30° W.; ascend.
35.00	Enter scattering cedar timber, bears E. and W.
40.00	Set a gray limestone, 16 x 7 x 6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 10 ins. diam., bears S. 15° E., 143 lks. dist., marked 1/4 S. 4, B. T. A cedar, 10 ins. diam., bears S. 63° 30' W., 49 lks. dist., marked 1/4 S. 5, B. T.
42.00	Top of spur, 180 ft. above hollow, bears N. 20° E. and S. 80° W.; descend.
57.20	Intersect the Third Standard Parallel South, 5.00 chs. E. of the standard cor. of secs. 32 and 33.
	Set a limestone, 18 x 12 x 8 ins., 12 ins. in the ground, for closing cor. of secs. 4 and 5, marked C. C. on S., with 4 grooves on E. and 2 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.

	Land, mountainous.
	Soil, rich loam and gravelly;
	1st and 3rd rate.
	Timber, scattering cedar and
	pinion pine.
	Undergrowth, oak, service-
	berry, and sage brush.
	Good grass for grazing.
	Mountainous land, or land
	covered with dense under-
	growth, 87.20 chs.
	August 30, 1898; At the noon
	hour, the sky is overcast and
	solar observations are impos-
	sible.
	From the cor. of secs. 31 and 32,
	on S. bdy. of Tp., heretofore
	described,
	We run
	N. 0° 1' W., bet. secs. 31 and 32.
	Over mountainous land,
	through dense undergrowth;
	descend.
28.40	Creek, 3 lks. wide, 2 ins. deep,
	gentle current, in bottom of
	Dry Cañon, 400 ft. below sec.
	cor., course S. 75° E.; ascend.
36.00	Top of spur, 250 ft. above cañon
	bears N. 30° W. and S. 30° E.; descend.
40.00	Set a limestone, 18 x 14 x 6 ins., 12 ins.
	in the ground, for 1/4 sec. cor.,
	marked + on W. face; from
	which
	A mahogany, 5 ins. diam.,
	bears S. 60° E., 35 lks. dist., mark-
	ed 1/4 S. 32. B. T.
	A mahogany, 7 ins. diam.,
	bears N. 79° W., 24 lks. dist.,

Subdivision of T. 16 S., R. 2 E. - Continued.

marked 1/4 S. 31, B.T.

58.70 Bottom of cañon, 200 ft. below spur, course S. 30° E.; ascend.

77.00 Top of divide ridge, bet. Dry and Rock Cañons, bears North and S.E.; descend.

0.00 Set a limestone, 30 x 7 x 6 ins., 2 2 in the ground, for cor. of secs. 29, 30, 31, and 32, marked with 1 notch on S. and 5 notches on E. edges; from which

An oak, 5 ins. diam., bears N. 1 30' E., 45 lks. dist., marked T. 16 S., R. 2 E., S. 29, B.T.

An oak, 5 ins. diam., bears S. 71° E., 19 lks. dist., marked T. 16 S., R. 2 E., S. 32, B.T.

A mahogany, 4 ins. diam., bears S. 53° 30' W., 57 lks. dist., marked T. 16 S., R. 2 E., S. 31, B.T.

A cedar, 14 ins. diam., bears N. 48° W., 158 lks. dist., marked T. 16 S., R. 2 E., S. 30, B.T.

Sand, mountainous.

Soil, clay and gravelly loam; 2nd rate.

No timber.

Undergrowth, oak and mahogany.

Good grass for grazing.

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

S. 89° 56' E. on a random line bet. secs. 29 and 32.

40.00 Set temp. 1/4 sec. cor.

79.68 Intersect N. and S. line 1.0 lk. south the cor. of secs. 28, 29, 32, and 33.

chains	
	Thence we run West, on a true line bet. secs. 29 and 32. Over mountainous land, through heavy cedar and pinion pine timber; ascend.
5.00	Top of ridge, 200 ft. above cor., bears N.W. and S.E.; descend.
14.25	Bottom of Rock Cañon, 300 ft. ridge, course S. 60° E.; ascend.
33.00	Wood road, bears N. and S. Leave heavy timber and enter scattering timber and undergrowth, bears N. and S.
39.84	Set a sandstone, 14 x 12 x 7 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
79.68	The cor. of secs. 29, 30, 31, and 32. Sand, mountainous. Soil, gravelly; 3rd rate. Timber, cedar and pinion pine. Undergrowth, oak, mahogany, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth 79.68 chs.
	N. 89° 51' W., on a random line bet. secs. 30 and 31.
40.00	Set temp. 1/4 sec. cor.
73.96	Intersect W. bdy of Tp. 8 N. North of the cor. of secs. 30 and 31.
	Thence we run

Subdivision of T. 16 S., R. 2 E. - Continued.

chains. East, on a true line bet. secs. 30 and 31.
Over mountainous land, through heavy cedar, pinion pine, and mahogany timber; descend abruptly.

2.35 Bottom of branch of Dry Cañon, 100 ft. below cor., course S. 50° W.; ascend.

14.50 Top of divide ridge, between Dry and Rock Cañons, 400 ft. above cañon, bears N. 20° E., S. and E. Thence we descend top of ridge.

33.96 Set a sandstone, 24 x 10 x 4 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
A mahogany, 8 ins. diam., bears N. 50° W., 36 lks. dist., marked 1/4 S. 30, B. T.
An oak, 4 ins. diam., bears S. E., 25 lks. dist., marked 1/4 S. 31, B. T.
Leave top of ridge, bears N. 60° E., and W. Leave heavy and enter scattering timber and dense undergrowth, bears N. and S.; descend.

62.50 Bottom of cañon, 400 ft. below ridge, course S.; ascend.

73.96 The cor. of secs. 29, 30, 31, and 32.
Sand, mountainous.
Soil, clay loam and gravelly; 2nd and 3rd rate.
Timber, cedar, pinion pine, and mahogany.
Undergrowth, oak, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land

chains	
	covered with dense under-growth, 73.96 chs.
	August 30, 1898.
	August 31, 1898: At 7h 5m a. m., l. m. t., we set off 39° 24' N., on the lat. arc; & 8° 33' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 29, 30, 31, and 32.
	Thence we run
	N. 0° 1' W., bet. secs. 29 and 30.
	Over mountainous land, through scattering timber and undergrowth; ascend.
5.00	Leave divide ridge, between Dry and Rock Cañons, 80 ft. above cor., bears South and N. 80° W.; descend.
22.50	Bottom of Rock Cañon, 300 ft. below ridge, course S. 70° E.; ascend. Wood road bears E. and W.
40.00	Set a limestone, 20 x 14 x 8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
	A mahogany, 5 ins. diam., bears S. 79° E., 64 lks. dist., marked 1/4 S. 29, B. T.
	A pinion pine, 5 ins. diam., bears S. 2° W., 46 lks. dist., marked 1/4 S. 30, B. T.
73.50	Top of ridge, dividing Rock and Axhandle Cañons, 500 ft. above Rock Cañon, bears E. S. 70° W.; descend.
80.00	Set a sandstone, 18 x 10 x 6 ins., 12 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, marked

mains.	with 2 notches on S. and 5 notches on E. edges; from which An oak, 4 ins. diam., bears N. 45° E., 59 lks. dist., marked T. 16 S., R. 2 E., S. 20, B. T. An oak, 3 ins. diam., bears S. 32° E., 61 lks. dist., marked T. 16 S., R. 2 E., S. 29, B. T. An oak, 4 ins. diam., bears S. 36° 30' W., 28 lks. dist., marked T. 16 S., R. 2 E., S. 30, B. T. An oak, 4 ins. diam., bears N. 31° W., 21 lks. dist., marked T. 16 S., R. 2 E., S. 19, B. T. Sand, mountainous. Soil, gravelly loam; 2nd rate Timber, scattering cedar, pinion pine, and mahogany. Undergrowth, oak and service-berry. Good grass for grazing. Mountainous land, 80.00 chs.
	East, on a random line bet. secs. 20 and 29.
40.00	Set temp. 1/4 sec. cor.
79.80	Intersect N. and S. line, 21 lks. N. of the cor. of secs. 20, 21, 28, and 29, Thence we run N. 89° 51' W., on a true line bet. secs. 20 and 29. Over mountainous land, through dense undergrowth; ascend gradually.
15.00	Top of ridge, 4 ft. above sec. cor., bears N. and S.; descend.
20.00	Bottom of hollow, 40 lks. below ridge, course N.; ascend.
39.90	Set a gray limestone, 16 x 10 x 4 ins., 11 ins. in the ground, for 1/4 sec.

Subdivision of T. 16 S., R. 2 E.-

chains	
	cor., marked ¼ on N. face; from which An oak, 4 ins. diam., bears N. 40 E., 53 lks. dist., marked ¼ S. 20, B. T An oak, 4 ins. diam., bears S. 80°, 106 lks. dist., marked ¼ S. 29, B. T
60.00	Top of ridge, 150 ft. above hollow; bears N. and S.; descend.
79.80	The cor. of secs. 19, 20, 29, and 30. Sand, mountainous. Soil, rich clay loam; 1st rate. No timber. Undergrowth, oak and sage brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 79.80 chs.

	West, on a random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.
74.08	Intersect W. bdy. of Tp. 7 lks. S. the cor. of secs. 19 and 30. Thence we run S. 89° 57' E., on a true line bet. secs. 19 and 30. Over mountainous land, through heavy pine timber; descend.
6.00	Seave timber, bears N. E. and S.
22.50	An old log cabin, bears N. 5.00 chs. dist.
29.50	An old mill site, bears S. about 3.00 chs. dist. Creek, 3 lks. wide, 3 ins. deep, in bottom of branch of Ashan Canon, 20 ft. below cor., course N. E. Enter scattering timber,

chains. bears with cañon; ascend.
3.4.08 Top of ridge, 100 ft. above creek, bears N. 20° E. and S. W.
Set a gray limestone, 15 x 8 x 4 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
A red pine, 4 ins. diam., bears N. 5° W., 80 lks. dist., marked 1/4 S. 19, B. T.
A red pine, 5 ins. diam., bears S. 81° W., 74 lks. dist., marked 1/4 S. 30, B. T.
Descend.
45.80 Bottom of hollow, 100 ft. below ridge, course N. E.; ascend.
74.08 The cor. of secs. 19, 20, 29, and 30.
Sand, mountainous.
Soil, rich loam and gravel; 1st and 3rd rate.
Timber, red pine and balsam.
Good grass for grazing.
Mountainous or heavily timbered land, 74.08 chs.

August 31, 1898: At this cor., we set off 8° 27' N. on the decl. arc; and at 0h 5m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 24' N., which is about 0.30 less than the proper lat.

N. 0° 1' W., bet. secs. 19 and 20.
Over mountainous land, through dense undergrowth and scattering timber; descend.
37.50 Old wood road, bears E. and
38.10 Creek, 8 lks. wide, 4 ins. deep, moderate current, good

drains. water, in bottom of Ashland Cañon, 300 ft. below cor., course E.; ascend.

40.00 Set a limestone, 24 x 12 x 4 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
A pinion pine, 10 ins. diam., bears S. 85° 30' E., 31 lks. dist., marked ¼ S. & O., B. T.
A pinion pine, 9 ins. diam., bears N. 40° W., 75 lks. dist., marked ¼ S. 19, B. T.

80.00 Set a sandstone, 14 x 10 x 6 ins., 9 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, marked with 3 notches on S. and 5 notches on E. edges; from which
An oak, 4 ins. diam., bears N. 85° 30' E., 126 lks. dist., marked T. 16 S., R. 2 E., S. 17, B. T.
An oak, 4 ins. diam., bears S. 77° E., 83 lks. dist., marked T. 16 S., R. 2 E., S. 20, B. T.
A cedar, 5 ins. diam., bears S. 26° W., 129 lks. dist., marked T. 16 S., R. 2 E., S. 19, B. T.
An oak, 4 ins. diam., bears N. 76° W., 118 lks. dist., marked T. 16 S., R. 2 E., S. 18, B. T.

Sand, mountainous.
Soil, clay loam and gravelly; 2nd and 3rd rate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.

Subdivision of T. 16 S., R. 2 E. - Continued.

hains.

S. 89° 51' E., on a random line
bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

79.92 Intersect N. and S. line 6 lks. S.
of the cor. of secs. 16, 17, 20, and 21.
Thence we run
N. 89° 54' W., on a true line bet.
secs. 17 and 20.
Over mountainous land,
through dense undergrowth
scattering timber; as

9.00 Top of ridge, 20 ft. above cor.,
bears N. 20° W. and S. 20° E.; descend.

28.00 Bottom of cañon, 50 ft. below
ridge, course S. 10° W.; ascend.

39.96 Top of spur, 75 ft. above cañon,
bears N. 20° E. and S. 20° W.
Set a limestone, 24 x 11 x 4 ins.,
18 ins. in the ground, for ¼ sec.
cor., marked ¼ on N. face; from
which
An oak, 4 ins. diam., bears N. 36°
15' E., 46 lks. dist., marked ¼ S. 17, B. T.
No other trees within limits;
raise a mound of stone, 2 ft.
base, 1½ ft. high, N. of cor. Pits
impracticable. Descend.

53.00 Bottom of cañon, 100 ft. below
spur, course S. 20° W.; ascend.

77.50 Top of spur, 125 ft. above cañon,
bears N. 20° E. and S.; descend.

79.92 The cor. of secs. 17, 18, 19, and 20.
Sand, mountainous.
Soil, gravelly loam; 2nd rate
Timber, scattering cedar
pinion pine.
Undergrowth, oak and

Good grass for grazing.
Mountainous land, or land

Subdivision of T. 16 S., R. 2 E. - Contin

chains	
	covered with dense under-growth, 79.92 chs.
	N. 89° 57' W., on a random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
74.15	Intersect W. bdy. of Tp. at the cor. of secs. 18 and 19.
	Thence we run S. 89° 57' E., on a true line bet. secs. 18 and 19.
	Over mountainous land, through heavy pine and balsom timber; descend.
12.50	Leave timber and enter undergrowth, bears N. and S.
16.50	A corral bears N., 5.00 chs. dist.
34.15	Set a limestone, 14 x 12 x 6 ins., 9 ins in the ground, for ¼ sec. cor., marked ¼ on N. face; from which
	An oak, 4 ins. diam., bears N. 20° 25 lks. dist., marked ¼ S. 18, B.T.
	An oak, 4 ins. diam., bears S. 26 E., 19 lks. dist., marked ¼ S. 19, B.T.
47.90	Old road, bears N. 45° W. and S. 45° E.
50.50	Branch of S. fork of Axhandle Cañon, 200 ft. below ¼ sec. cor., course S. 40° E.; ascend.
60.50	Top of ridge, 200 ft. above bears N. 12° E. and S. 12° W.; descend
64.50	Bottom of hollow, 100 ft. below ridge, course S. 10° W.; ascend.
74.15	The cor. of secs. 17, 18, 19, and 20.
	Sand, mountainous.
	Soil, rich loam; 4th rate.
	Timber, pine and balsom.
	Undergrowth, oak and service berry.

Subdivision of T. 16 S., R. 2 E. - Continued.

Good grass for grazing.
Mountainous or hearly
timbered land, or land cover
with dense undergrowth,
74.15 chs.

N. 0° 1' W., bet. secs. 17 and 18.
Over mountainous land,
through dense oak, sage, and
mountain apple under-
growth and scattering timber; ascend.
25.00 Divide ridge, 200 ft. above cor.,
bears N. 70° E. and S. 70° W.; descend.
40.00 Set a limestone, 16 x 8 x 6 ins., 11 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from which
An oak, 4 ins. diam., bears N. 37° E.,
69 lks. dist., marked 1/4 S. 17, B.T.
An oak, 4 ins. diam., bears N. 83°
W., 80 lks. dist., marked 1/4 S. 18, B.T.
62.50 Bottom of hollow, 350 ft. below
ridge, course N. 20° E.; ascend.
67.00 Top of spur, 20 ft. above hollow,
bears N. 30° E. and S. 30° W.; descend.
75.16 Creek, 2 lks. wide, 2 ins. deep,
in branch of N. fork of Ax-
handle Canon, 200 ft. below
spur, course S. 80° E.; ascend.
80.00 Set a sandstone, 15 x 12 x 8 ins.,
10 ins. in the ground, for cor.
secs. 7, 8, 17, and 18, marked
4 notches on S. and 5
notches on E. edges; from which
A redcedar, 10 ins. diam.,
bears N. 65° E., 47 lks. dist., mark-
ed T. 16 S., R. 2 E., S. 8, B.T.
An oak, 5 ins. diam., bears S. 80°
E., 15 lks. dist., marked T. 16 S.,
R. 2 E., S. 17, B.T.

Subdivision of T. 16 S., R. 2 E.-

a red cedar, 10 ins. diam.,
bears S. 28° 30' W., 62 lks. dist.,
marked T. 16 S., R. 2 E., S. 18, B. T.
a red cedar, 12 ins. diam.,
bears N. 52° 30' W., 25 lks. dist.,
marked T. 16 S., R. 2 E., S. 7, B. T.
Sand, mountainous.
Soil, clay loam and gravelly
1st and 3rd rate.
Timber, scattering cedar.
Undergrowth, oak and
service-berry.
good grass for grazing.
Mountainous land, or land
covered with dense under-
growth, 80.00 chs.

August 31, 1898.

September 1, 1898: At 7h 30m a. m.,
l. m. t., we set off 39° 27' N., on the
lat. arc; 8° 10' N., on the decl. arc;
and determine a true merid-
ian with the solar at the cor.
of secs. 7, 8, 17, and 18.
Thence we run
S. 89° 54' E., on a random line bet.
secs. 8 and 17.
40.00 Set temp. ¼ sec. cor.
80.08 Intersect N. and S. line, 20 lks. N.
of the cor. of secs. 8, 9, 16, and 17.
Thence we run
N. 89° 45' W., on a true line bet.
secs. 8 and 17.
Over mountainous land,
through dense un
and scattering timber;
35.00 Creek, 2 lks. wide, 1 in. deep,
N. fork of Ashandle Cañon,
400 ft. below cor., course S. 70° E.;

Chains	
	ascend.
40.04	Set a limestone, 24 x 8 x 6 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which A cedar, 20 ins. diam., bears N. 80° E., 63 lks. dist., marked 1/4 S. 8, B. T. A cedar, 8 ins. diam., bears S. 34° W., 66 lks. dist., marked 1/4 S. 17, B. T.
45.00	Top of ridge, 400 ft. above cañon, bears N. 10° W. and S. 10° E.; descend.
67.20	Bottom of hollow, 100 ft. below ridge, course S.; ascend.
71.80	Top of ridge, 50 ft. above hollow, bears N. 10° W. and S. 10° E.; descend.
80.08	The cor. of secs. 7, 8, 17, and 18. Sand, mountainous. Soil, rich loam and gravelly; 1st and 3rd rate. Timber, scattering cedar and pinion pine. Undergrowth, oak and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.08 chs.

N. 89° 57' W., on a random line bet. secs. 7 and 18.

40.00	Set temp. 1/4 sec. cor.
74.20	Intersect W. bdry. of Tp. 9 lks. S. of the cor. of secs. 7 and 18.

Thence we run S. 89° 53' E., on a true line bet. secs. 7 and 18.

Over mountainous land, through dense undergrowth, ascend.

chains.

10.50 Top of ridge, 200 ft. above cor., bears N. 70° W. and S. 70° E.; descend.

34.20 Set a sandstone, 24 x 8 x 8 ins, 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which An oak, 6 ins. diam., bears N. 50° W., 125 lks. dist., marked 1/4 S. 7, B. T. An oak, 4 ins. diam., bears S. 33° 30 E., 50 lks. dist., marked 1/4 S. 18, B. T.

46.00 Bottom of cañon, 600 ft. below ridge, course N. 40° E.; ascend..

49.20 Top of ridge, 25 ft. above cañon, bears N. and S.; descend.

68.70 Creek, 2 lks. wide, 1 in. deep, in cañon, 80 ft. below ridge, S. E.; ascend.

74.20 The cor. of secs. 7, 8, 17, and 18.
Sand, mountainous.
Soil, rich loam; 1st rate.
No timber.
Undergrowth, oak, service berry, and maple.
Good grass for grazing.
Mountainous land, or land covered with dense under-growth, 74.20 chs.

N. 0° 1' W., bet. secs. 7 and 8.
Over mountainous land, through dense undergrowth and scattering timber; asce

33.00 Top of ridge, 500 ft. above cor., bears N. 20° W. and S. 20° E. Seave timber, bears with ridge; descend.

40.00 Set a limestone, 17 x 8 x 6 ins, 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from

chains	which
	An oak, 4 ins. diam., bears S. 47° E., 41 lks. dist., marked 4S. 8, B.T.
	An oak, 4 ins. diam., bears S. 84° W., 39 lks. dist., marked 4S. 7, B.T.
47.50	Bottom of cañon, 150 ft. below ridge, course S. 60° E.; ascend.
57.50	Top of ridge, 120 ft. above cañon, bears N. 75° W. and S. 75° E.; enter scattering timber, bears with ridge; descend.
72.55	Creek, 3 lks. wide, 2 ins. deep, in N. fork of Axhandle Cañon, 300 ft. below ridge, course S. E.; ascend.
80.00	Set a limestone, 16 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 5, 6, 7, and 8, marked with 5 notches on S. and 5 notches on E. edges; from which
	An oak, 5 ins. diam., bears N. 67° E., 52 lks. dist., marked T. 1 6S., R. 2 E., S. 5, B.T.
	A pinion pine, 30 ins. diam., bears S. 80° E., 16 lks. dist., marked T. 1 6S., R. 2 E., S. 8, B.T.
	A cedar, 8 ins. diam., bears S. 56° W., 8 lks. dist., marked T. 1 6S., R. 2 E., S. 7, B.T.
	A cedar, 18 ins. diam., bears N. 65° W., 64 lks. dist., marked T. 1 6S., R. 2 E., S. 6, B.T.
	Sand, mountainous.
	Soil, gravelly loam; 2nd rate.
	Timber, scattering cedar and pinion pine.
	Undergrowth, oak, maple, service-berry and choke-cherry.
	Good grass for grazing.
	Mountainous land, or land covered with dense under-growth, 80.00 chs.

chains.	
	September 1, 1898; at this cor., we set off 8° 5' N., on the decl. arc and at 11h 56m a. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 27' N., which is about 6 links greater than the proper lat.
	S. 89° 45' E., on a random line bet. secs. 5 and 8.
40.00	Set temp. 1/4 sec. cor.
80.00	Intersect N. and S. line 25 lks. S. of the cor. of secs. 4, 5, 8, and 9. Thence we run N. 89° 5' W., on a true line bet. secs. 5 and 8. Over mountainous land, through dense undergrowth, ascend.
14.00	Top of spur, 150 ft. above cor., bears N. 50° W. and S. 50° E. Enter scattering cedar and pinion pine timber, bears with ridge; descend.
17.00	Bottom of hollow, 20 ft. below ridge, course S. 20° E.; ascend.
26.00	Enter heavy timber, bears N. and S.
30.00	Top of ridge, 150 ft. above bears N. and S.; descend.
37.00	Leave heavy and enter scattering timber, bears N. E. and S.
40.00	Set a hard sandstone, 16 x 9 x 7 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which a cedar, 8 ins. diam., bears S. 39 45' E., 136 lks. dist., marked 1/4 S. 8, B No other trees within limits;

chains	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
65.30	Bottom of hollow, 150 ft. below ridge, course S. 10° W.; ascend.
75.00	Top of ridge, 75 ft. above hollow, bears N. 40° W. and S. 40° E.; descend.
80.00	The cor. of secs. 5, 6, 7, and 8. Sand, mountainous. Soil, rich loam and gravelly; 1st and 3rd rate. Timber, cedar and pinion pine. Undergrowth, oak, maple, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

N. 89° 53' W., on a random line bet. secs. 6 and 7.

40.00 Set temp. ¼ sec. cor.

74.30 Intersect W. bdy. of Tp. at the cor. of secs. 6 and 7.

Thence we run S. 89° 53' E., on a true line bet. secs. 6 and 7.

Over mountainous land, through scattering timber and dense undergrowth; ascend.

10.00 Top of main divide ridge, 50 ft. above cor., bears N. 10° E. and S. 10° W.; descend.

14.00 Bottom of swale, 30 ft. below ridge, course S. 60° E.; ascend.

18.50 Top of ridge, 100 ft. above

chains	
	swale, bears N. 60° W. and S. 60° E.; descend.
34.30	A maple, 5 ins. diam., for ¼ sec. cor., we mark ¼ on N. side; from which A maple, 5 ins. diam., bears N. 76 E., 18 lks. dist., marked ¼ S. 6, B. T. An oak, 5 ins. diam., bears S. 57 W., 26 lks. dist., marked ¼ S. 7, B. T.
68.00	Creek, 3 lks. wide, 2 ins. deep, rapid current, in bottom of N. fork of Ashandle Cañon, 600 ft. below ridge, course S. E.; ascend.
74.30	The cor. of secs. 5, 6, 7, and 8. Sand, mountainous. Soil, black loam; 1st rate. Timber, scattering cedar, red pine, balsom, and pinion pine. Undergrowth, oak, maple, and service berry. good grass for graging. Mountainous land, or land covered with dense under-growth, 74.30 chs.
	N. 0° 2' W., on a true line bet. secs. 5 and 6. Over mountainous land, through scattering timber and dense undergrowth; ascend.
5.60	Top of spur, 25 ft. above cor., bears N. 40° W. and S. 40° E. A cedar, 24 ins. diam., on line we mark with 2 notches on N. and S. sides; descend.
22.00	Bottom of hollow, 75 ft. below

chains.	
	course S. E.; ascend.
40.00	Set a limestone, 14 x 12 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
47.50	Top of ridge, 200 ft. above hollow; bears N. 80° W. and S. 50° E.; descend
54.25	Bottom of hollow, 50 ft. below ridge, course S. E.; ascend.
66.00	Top of spur, 75 ft. above hollow; bears N. 75° W. and S. 75° E. Enter heavy pine and balsom timber, bears with ridge; descend.
78.75	Bottom of cañon, 150 ft. below ridge, course S. E. Leave timber, bears with cañon; ascend.
87.15	Intersect the Third Standard Parallel South, 5.30 chs. E. of the standard cor. of secs. 31 and 32. Set a sandstone, 18 x 12 x 6 ins., 12 ins. in the ground, for closing cor. of secs. 5 and 6, marked S. C. 5 on S.; with 5 grooves on E. and 1 groove on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
	Sand, mountainous.
	Soil, rich black loam and gravelly; 1st and 3rd rate.
	Timber, cedar, pine, and balsom.
	Undergrowth, oak and service berry.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth.

Subdivision of T. 1 6S., R. 2E.-Con-

$7.15 Chs.

September 1, 1898.

General Description.

This fractional township consists of several varieties of land, from valley land to and percipitious mountains, and the soil ranges from rocky ground to rich black loam. The soil of the valley land, and some of the cañons and hollows, can be classed as 1st and 2nd rate, and will produce good crops without irrigation. The soil of the remaining portion of the township, except the rocky ground, is mostly gravelly and can be classed as 3rd rate. Almost the entire township is covered with a dense un growth of oak, maple, sage, service-berry, and choke-cherry brush, and is covered with an abundant growth of rich and nutritous grasses Cedar and pinion pine timber is found in every section in the township and there is some scattering red pine balsom timber in the west part.

The township is sufficiently well watered for grazing purposes by Archandale, Dry, and Pitch Creeks, and a number of springs in differ parts.

Coal has been found in secs. 2, 3, and 28, there are no other indications of

We do not find Joseph Bagnall D. E. No. 1778, O. F. Coolidge, nor Alex. Barton, nor their improvements. The township is mainly valuable for grazing purposes, and for its large coal deposits; and we herewith return sec. 2 as coal land. There are no settlers in this fractional Tp.

Scott C. Stewart.
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

Note.- On account of finding that sec. 2 will not close within limits we conclude to retrace the E. bdy. of said sec. as follows;
From the standard cor. of secs. 1, 2, 35, and 36 heretofore described be run South, on a retracement line bet. secs. 1 and 2.

40.40 Fall 46 lks. W. of ¼ sec. cor. which is a limestone 14 x 6 x 6 ins., above ground, marked and witnessed as described by the Surveyor General.

80.82 Fall 93 lks. W. of ¼ sec. cor. which is a limestone, 5 x 12 x 7 ins., above ground marked and witnessed as described by the surveyor general.

The course of this line is therefore S. 0° 40' E. 80.84 chs.

Scott C. Stewart.
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

.....

showing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in surveying all those parts or portions of the .....

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

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

Subscribed and sworn to before me this ..... day of ....., 180 .....

SEAL.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, c
solemnly swear that, in pursuance of a contract received from _____
United States Surveyor General for _____, bearing date of t
_____ day of _____, 189 , I have well, faithfully, and truly, in my o
proper person, and in strict conformity with the instructions furnished by the United States Survey
General for _____, the Manual of Surveying Instructions, and the laws of t
United States, surveyed all those parts or portions of _____
_____
_____
_____
_____ of the _____
_____ meridian, in the _____ of _____, which are represented in
foregoing field notes as having been surveyed by me, and under my direction; and I do further solem
swear that all the corners of said survey have been established and perpetuated in strict accordance w
the Manual of Surveying Instructions, and the special written instructions of the United States Surv
General for _____ and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

_____
United States Deputy Surve

Subscribed by said _____, and sworn to before me
this _____ day of _____, 189

_____

SEAL

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23 1900.

The foregoing field notes of the survey of the Subdivisions of Sec
16 South Range 2 East of the Salt Lake Base & Meridi
Utah

executed by Scott P. Stewart & Andrew J. Stewart
under ~~his~~ their contract No. 217, dated November 1st, 1897, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
surveys they describe, are hereby approved.

Jacob F3
United States Surveyor G

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 of

_____
United States Surveyor G

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4—659.

BOOK A-252

S.L.B.

FIELD NOTES

OF THE SURVEY OF THE

Third Standard Parallel South

Through

Range 1 East

Of the Salt Lake Base and Meridian,

In the State of Utah.

AS SURVEYED BY

Scott P. Stewart & Andrew J. Stewart Jr. , United States Deputy Surveyors

Under ~~his~~ their Contract No. 217 , dated November 1st , 1897.

Survey commenced September 2nd , 1898.

Survey completed September 3rd , 1898.

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NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel St. Y. McAllister, Chainman.

Wm W. Richardson Jr., Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Moundsman.

Peter S. Sorensen, Moundsman.

Benjamin F. Stewart, Axman.

Quinby Stewart Flagman.

For preliminary affidavits see book "F"

BOOK A-258

INDEX DIAGRAM.

Township 16 South, Range 1 East.

THIRD STANDARD PARALLEL SOUTH

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, ...and ..... do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level th chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; th we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey ..... , *Chainme* ....., *Chainm*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

We, ...and ..... do solemnly swear that we will well and truly perform the duties of moundmen in the establishm of corners, according to the instructions given us, to the best of our skill and ability, in the surve ...., *Mound* ., *Mound*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

We, ...and ..... do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co and other duties, according to instructions given us, to the best of our skill and ability, in the surv ...., *A* ..... *A*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

I, ..., do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, survey of ...., *Fl*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

chains

Survey commenced September 2, 1898, and executed with a W. and E. E. Gurley light mountain transit, No. –, with solar attachment, the horizontal limb having two double verniers placed opposite to each other, reading to single of arc; which is also the least count of the latitude and declination arcs; and a Buff and Berger transit, No. 2511, the horizontal limb being provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah; the former on December 4, 1897; the latter on April 5, 1898.

We examine the adjustments of the instruments and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications resulting from solar observations made during p. m. and a. m. hours, with a true meridian determined by observations on Polaris, we proceed as follows:

At the standard ¼ sec. cor., on the S. b'dy. of sec. 33 Tp. 1 S., R. 1 E., latitude 39° 26' N., longitude 111° 51' W.; we set off 39° 28' N. on the lat. arc; 7° 39' N. on the decl. arc; and at 3h 35m p. m., l. m. t., with the solar, of the Gurley

instrument, a true meridian, and mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of our station.

At 8h 38m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a plug driven in the ground, 5 chs. N. of our station.

September 2, 1898.

September 3, 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined, by cutting a small groove in the stone set September 2, on which the true meridian falls 0.34 ins. east of the mark determined by the of the Gurley instrument.

At 6h 45m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the True Meridian thus determined by cutting a small groove in the stone, set September 2, on which the true meridian falls 0.34 ins. east of the mark determined by the solar.

At 7h 0m a. m., l. m. t., we set off 39° 28'. N. on the lat. arc; 7° 27'. N., on the decl. arc; and mark a point in the true meridian determined with the solar,

chains. of the Gurley instrument, by a cross on the stone, already set 5 chs. N. of our station; this mark falls 0.22 ins. east of the true meridian established by Polaris observations.
The solar apparatus of the Gurley instrument, by p.m. and a.m. observations, defines positions for true meridians, respectively about 0'18" west, and 0'12" east of the meridian established by Polaris observation; therefore we conclude that the adjustments of the intruments are satisfactory.
The magnetic bearing of the true meridian at 7h 30m a.m. is N. 16° 33' W.; the angle thus determined, reduced by the table, page 100 of the Manual, gives the mean mag. decl. 16° 30' E.

From the standard ¼ sec. cor. on S. side of sec. 33, T. 15 S., R. 1 E., which is a sandstone, 9 x 12 x 8 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, we run
East, on a random line along S. bdy. of T. 15 S., R. 1 E., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.
Difference between measurements of 325.00 chs., by two sets of chainmen, is 40 lks., position of middle point
By 1st set, 325.20 chs.
By 2nd set, 324.80 chs.; the mean of which is
325.00 Intersect W. bdy. of T. 16 S., R. 2 E., 11.34

Third Standard Parallel South, through R. 1 E.-Cont'd

ains chs. S. of the standard cor. of Tps. 15 and 16 S., R. 2 E.
Set a blue limestone, 19 X 12 X 7 ins., 12 ins. in the ground, for standard and closing cor. of Tps. 15 and 16 S., R. 1 E., marked C. C. 1 E., on W., 15 S. on N., 16 S. on S.; with 12 grooves on N., S., and W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Thence we run
West, on a true line, on S. bdy. of sec. 36.
Over mountainous land, through scattering timber, and dense undergrowth; descend.

1.50 Bottom of swale, 20 ft. below cor., course S. 20° W.; ascend.

9.00 Top of spur, 40 ft. above swale, bears N. and S.; descend.

18.00 Creek, 2 lks. wide, 2 ins. deep, in hollow, 130 ft. below ridge, course S.; ascend.

31.60 Top of ridge, 30 ft. above hollow, bears N. 30° E. and S. 30° W.; descend.
Difference between measurements of 40.00 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

40.00 Set a limestone, 16 X 8 X 5 ins., 11 ins. in the ground, for standard ¼ sec. cor., marked S. C. ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

51.10 Creek, 2 lks. wide, 2 ins. deep, in branch of Little Salt Creek Canon, 180 ft. below ridge, S. 20° W.; ascend.

Third Standard Parallel South, through R. 1 E.-Continued

chains.	
65.00	Top of ridge, 200 ft. above canon, bears N. and S.; descend.
74.50	Creek, 5 lks. wide, 2 ins. deep, in bottom of branch of Little Salt Creek Canon, 200 ft. below ridge, course S. 10° W.; ascend. Difference between measurements of 80.00 chs. 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 sandstone, 16 x 12 x 7 ins., 12 ins. in the ground, for standard cor. of secs. 35 and 36, marked S.C. on N. with 1 groove on E. and 5 grooves on W. faces; from which An oak, 3 ins. diam., bears N. 67° E., 180 lks. dist., marked T. 17 S., R. 1 E., S. 36, B. T. An oak, 5 ins. diam., bears N. 57° 30' W., 237 lks. dist., marked T. 15 S., R. 1 E., S. 35, B. T. Land, mountainous. Soil, gravelly loam; 3rd rate. Timber, scattering cedar and pinion pine. Undergrowth, oak and service berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs. September 3, 1898: At the noon hour, the sky is overcast and solar observations are impossible. At this cor., we erect a signal for a test sight from some point to the west.

Third Standard Parallel South, through R. 1 E.-

chains.	
	West, on a true line on S. bdy. sec. 35. Over mountainous land, dense undergrowth; ascend.
25.00	Top of ridge, 400 ft. above sec. cor., bears N. 60° E. and S. 60° W.; descend. Difference between measurements of 40.00 chs., by two sets of chainmen, is 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 sandstone, 16 X 14 X 5 ins., 11 ins. in the ground, for standard ¼ sec. cor., marked S. C. ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
63.65	Creek, 2 lks. wide, 2 ins. deep, in branch of Little Salt Creek Cañon, 600 ft. below ridge, course S. 80° W.; ascend.
72.50	Top of ridge, 50 ft. above cañon, bears N. and S.; descend. Difference between measurements of 80.00 chs., by two sets of chainmen, is 22 lks.; position of middle point
	By 1st set, 80.11 chs.
	By 2nd set, 79.89 chs., the mean of which is
80.00	Set a limestone, 15 X 8 X 7 ins., 10 ins. in the ground, for standard cor. of secs. 34 and 35, marked S. C. on N.; with 2 grooves on E. and 4 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impra-
	Sand, mountainous.
	Soil, gravelly loam and rocky; 2nd and 4th rate.
	No timber.

Chains	
	Undergrowth, oak and service-berry. Good grass for grazing. Mountainous land, or land covered with dense under-growth, 80.00 chs.
	West, on a true line on S. bdy. of sec. 34. Over mountainous land through dense undergrowth; descend. Difference between measurements of 40.00 chs., by two 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, 16 x 10 x 6 ins., 11 ins. in the ground, for standard ¼ sec. cor., marked S. C. ¼ on N. face; from which An oak, 3 ins. diam., bears N. 31° W., 22 lks. dist., marked ¼ S. 34, B. J. and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
55.50	Spring branch, 3 lks. wide, 3 ins. deep, in branch of Sitkle Salt Creek Cañon, 300 ft below sec. cor., course S. 20° W. ascend.
61.50	Top of spur, 30 ft. above cañon, bears N. 10° E. and S. 10° W., descend.
72.25	Creek, 2 lks. wide, 1 in. deep

Chains

in branch of Little Salt Creek Cañon, 50 ft. below spur, course S.; ascend.
Difference between measurements of 80.00 chs., by two 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, 30x16x5 ins., 22 ins., in the ground, for standard cor. of secs. 33 and 34, marked S. C. on N.; with 3 grooves on E. and W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
Sand, mountainous.
Soil, gravelly loam and rocky; 2nd and 4th rate.
No timber.
Undergrowth, oak and serviceberry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.

West, on a true line on S. bdy. sec. 33.
Over mountainous land, through scattering cedar, pinon pine and mahogany timber, and dense undergrowth; ascend.

1.00 Old road, bears N. 40° E. and S. 40° W.
16.00 Old road, bears N. 20° E. and S. 20° W.
27.00 Top of ridge, 130 ft. above sec. cor.,

chains.	
	bears N 70° W. and S. 70° E.; descend.
32.50	Old road, bears N. 50° W. and S. 50° E.
53.00	Bottom of hollow, 200 ft. below ridge, course S. 18° W.; ascend.
60.00	Top of ridge, 130 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
67.00	Bottom of hollow, 100 ft. below ridge, course S. 25° W.; ascend.
75.00	Top of ridge, 200 ft. above hollow, bears N. 20° E. and S. 20° W.; descend.
	Difference between measurements of 85.00 chs., by two sets of chainmen, is 6 lks., position of middle point
	By 1st set, 85.03 chs.
	By 2nd set, 84.97 chs., the mean of which is
85.00	The standard ¼ sec. cor., on S. bdy. sec. 33.
	Sand, mountainous.
	Soil, gravelly loam and rocky; 2nd and 4th rate.
	Timber, scattering.
	Undergrowth, oak, and service berry.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 85.00 chs.
	Note: We are unable to see the test sight erected at the standard cor. of secs. 35 and 36, therefore we cannot test the parallel just run with a true meridian established by Polaris observation.
	September, 3, 1893.

Third Standard Parallel South, through R. 1 E. - C

General Description.

This line crosses a number of rough mountain ridges and añons, having a southwes trend, the land S. of the line is mountainous, well watered, and well timbered; and very well adapted for grazing. It should be subdivided.

Scott C. Stewart,
Andrew J. Stewart Jr
U. S. Deputy Surveyors
September 3, 1898.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Scott P. Stewart and Andrew J. Stewart Jr, United States Deputy Surveyors to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Third Standard Parallel South through Ranges 1 W.; 1½ W.; 2 E.; and 1 E. of the S. L. B. and M. Utah. showing the respective capacities in which they acted:

John R. Stewart, Chainman, Wm W. Richardson Jr, Chainman.
Daniel H. Y. McAllister, Chainman, Alma Betts, Chainman.
Antone P. Stewart, Moundman.
Peter S. Sorensen, Moundman.
Benjamin F. Stewart Axman.
Quimby Stewart, ~~Flagman.~~ Rodman.
, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Scott P. Stewart and Andrew J. Stewart Jr, United States Deputy Surveyors, in surveying all those parts or portions of the Third Standard Parallel South through Ranges 1 W.; 1½ W.; 2 E.; and 1 E., of

of the Salt Lake Base and meridian, State of Utah, which are represented the foregoing field notes as having been surveyed by ~~him~~ them and under ~~his~~ their direction; and that said survey as been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the orner monuments established, according to the instructions furnished by the United States Surveyor eneral for Utah

John R Stewart, Wm W Richardson Jr, Chainman.
Daniel H Y McAllester, Alma Betts, Chainman.
Antone P Stewart, Moundman.
Peter S. Sorensen, Moundman.
Benjamin F Stewart, Axman.
Quimby Stewart, ~~Flagman.~~ Rodman.
, Flagman.

ubscribed and sworn to before me this 19th day of September, 1898

Shadrach M Richardson
Justice of the Peace
Benjamin precinct
Utah Co. Utah

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

We Scott P. Stewart and Andrew J. Stewart Jr., United States Deputy Surveyors solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for Utah, bearing date of th 1st day of November, 1897, we have well, faithfully, and truly, in ~~my~~ our o proper persons and in strict conformity with the instructions furnished by the United States Survey General for Utah, the Manual of Surveying Instructions, and the laws of t United States, surveyed all those parts or portions of the Third Standard Pa South through Ranges 1 W.; 1½ W.; 2 E. and 1 E.

of the Salt Lak Base and meridian, in the State of Utah, which are represented in foregoing field notes in book F.S. W.&Y. as having been surveyed by ~~me~~ us, and under ~~my~~ our direction; and ~~I~~ we do further solem swear that all the corners of said survey have been established and perpetuated in strict accordance w the Manual of Surveying Instructions, and the special written instructions of the United States Surve General for Utah and in the specific manner described in the field notes, and t the foregoing are the original field notes of such survey; and should any fraud be detected, ~~I~~ we will su the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Scott P. Stewart.
Andrew J. Stewart Jr.
United States Deputy Surve

Subscribed by said Scott P. Stewart and Andrew J. Stewart Jr., and sworn to before me this 16th day of January, 1900

Jacob B. Blair
U.S. Surveyor General

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah June 23 1

The foregoing field notes of the survey of the Third Standard Par South Range 1 East of the Salt Lake Base & Meridian Utah

executed by Scott P. Stewart and Andrew J. Stewart Jr. under ~~his~~ their contract No. 27, dated November 1st, 1897, havin critically examined, and the necessary corrections and explanations made, the said field notes, a surveys they describe, are hereby approved.

Jacob B
United States Surveyor Ge

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 of

United States Surveyor G

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BOOK A-258

FIELD NOTES

OF THE SURVEY OF THE

R.3.B.

East Boundary

of

Township 16 South Range 1 East.

Of the Salt Lake Base and *Meridian,*

In the State of Utah.

AS SURVEYED BY

Scott B. Stewart and Andrew J. Stewart Jr, *United States Deputy Surveyors,*

Under ~~his~~ their *Contract No.* 217, *dated* November 1st, *1897.*

Survey commenced September 4th, *1898*

Survey completed September 5th, *1898*

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E. Bdy. Twp. 6-16-00 V

BOOK A-258

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel H. Y. Mc Allister, Chainman.

Wm W. Richardson Jr. Chainman.

Alma Betts, Chainman.

Antone A. Stewart, Roundman.

Peter S. Sorensen, Roundman

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

For preliminary affidavits see book "B."

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BOOK A-258

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; t
we will report the true distances to all notable objects, and the true lengths of all lines that we assis
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surve
_____

_____, *Chainm*

_____, *Chainn*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

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

_____, *Mound*

_____, *Mound*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

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

_____, *A*

_____, *A*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of _____
_____

_____, *Fl*

Subscribed and sworn to before me this _____
day of _____, 189

SEAL

East boundary of T. 16 S., R. 1 E., of S. L. B. and M.

. Survey commenced S
4, 1898, and executed with a W.
S. E. Gurley light mount
transit No. –, with solar attach-
ment, the horizontal limb is
provided with two double
verniers placed opposite to
each other, reading to single
minutes of arc; which is also
least count of the verniers
the latitude and declination
arcs; and a Buff and Berger
sit No. 2511, the horizontal
limb is provided with two
double verniers reading to
single minutes of arc.
The instruments were exam-
ined, tested on the true meri-
dian at Salt Lake City, found
correct, and were approved
he surveyor general for Utah;
the former, December 4, 1897,
the latter, April 5, 1898.
We examine the adjustments
of the instruments, and
the level and collimation
errors; then, to test the solar
apparatus of the Gurley ins
ment, by comparing its in-
dications, resulting from
observations, made
ing p. m. and a. m. hours, wi
a true meridian, de
by observations on Polaris, we
proceed as follows:
At the closing cor. of Tps. 16 and 17 S.,
R. 1 E., latitude 39° 23' N., longitude
111° 47' W.; we set off 39° 23' N. on the
lat. arc; 6° 56' N. on the decl. arc;
and at 4h 2m p. m., l. m. t., deter-
mine with the solar, of the

chains Gurley instrument, a true meridian and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 8h 30m p. m., l. m. t., we observe Polaris at eastern elong with the Buff and Berger instrument, in accordance with the manual of Instructions, and mark a point in line thus determined on a plug driven in the ground, 5.00 chs. N. of our station.

September 4, 1898.

September 5, 1898: At 6h 27m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west on the Buff and Berger instrument, and mark the True Meridian, thus determined, by cutting a small groove in the stone set September 4, 1898, on which the true meridian falls 0.25 ins. east of the mark determined by the solar of the Gurley instrument.

At 6h 59m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrumen and mark the True Meridian thus determined by cutting a small groove in the stone set September 4, 1898, on which the true meridian falls 0.25 ins. east of the mark determined by the solar.

At 7h 30m a. m., l. m. t., we set off 39° 23' N., on the lat. arc; 60° 42' N. on the decl. arc; and mark a in the true meridian

ed with the solar of the Gurley instrument, by a cross on the stone already set 5.00 chs. N. of station; this mark falls 0.3 ins. east of the true meridian established by Polaris observation.

The solar apparatus of the Gurley instrument, by p. m. and a. m. observations defines positions for true meridians, respectively about 0° 13" west 0° 16" east of the meridian established by Polaris observation; therefore we conclude the adjustments are satisfactory.

The magnetic bearing of the true meridian at 7h 59m a. m., is N. 16° 34' W., the angle thus determined, reduced by the table, page 100, of the Manual, gives the mean mag. decl. 16° 31' E.

From the closing cor. of T. 16 S., R. 1 E., heretofore described.

We run North, along E. bdy. of T. 16 S., R. 1 E., on E. side, sec. 36.

Over mountainous land, through dense under scattering cedar and pinion pine timber; ascend.

1.00 Top of ridge, bet. Maple and Cañons, 10 ft. above cor., bears N. 70° W. and S. 70° E.; descend

14.00 Spring branch, 1 lk. wide, 2 ins. deep, in branch of Dry Cañon, 200 ft. below ridge, course E.; ascend.

20.00 The cor. of Tps. 16 and 17 S., R. 2 E. heretofore described.

East boundary of T. 16 S., R. 1 E.-Continue

Seave timber, bears E. and W.
Top of ridge, 20 ft. above cañon, bears N. W. and S. E.; descend.
22.00 Bottom of branch of Dry Cañon, 150 ft. below cor., course E.;
31.25 Top of ridge, 200 ft. above cañon, bears E. and W.; descend.
40.00 Set a sandstone, 14 x 8 x 7 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits
42.00 Bottom of hollow, 300 ft. below ridge, course E.; ascend.
47.5 Top of ridge, 150 ft. above bears E. and W.; descend.
54.00 Enter scattering timber, bears E. and W.
60.00 The ¼ sec. cor. on W. bdy. sec. 31, T. 16 S., R. 2 E.
60.10 Bottom of branch of Dry Cañon, 600 ft. below ridge, course S. 80° E.; ascend abruptly.
65.50 Top of spur, 400 ft. above cañon, bears N. 10° W. and S. 10° E.; descend gradually.
-80.00 Set a limestone, 14 x 8 x 5 ins., 9 ins. in the ground, for the cor. of 25 and 36, marked with 5 on N. and 1 notch on S. edges; from which
A red pine, 30 ins. diam., bears N. 23° W., 108 lks. dist., marked T. 16 S., R. 1 E., S. 25, B. T.
An oak, 5 ins. diam., bears S. 80° W., 45 lks. dist., marked T. 16 S., R. 1 E., S. 36, B. T.
Sand, mountainous.
Soil, clay loam and gravelly; 2nd and 3rd rate.
Timber, pine, cedar, and ma-

hogany.
Undergrowth, oak, and
berry.
Good grass for grazing.
Mountainous land, or land
covered with dense under-
growth, 80.00 chs.

North, along E. bdy. sec. 25.
Over mountainous land,
through dense undergrowth
and scattering timber;
9.50 Bottom of Dry Canon, 100 ft.
spur, course S. 70° E.; ascend.
20.00 The cor. of secs. 30 and 31, T. 16 S., R. 2
40.00 Set a limestone, 17 x 7 x 4 ins., 12 ins.
in the ground, for ¼ sec. cor.,
marked ¼ on W. face; from
which
A mahogany, 10 ins. diam.,
bears S. 80° W., 45 lks. dist., m
¼ S. 25, B. T.
41.25 Top of ridge, dividing Dry and
Axhandle Canons, 500 ft. above
Dry Canon, bears E. and W.;
55.25 Drag road bears N. 3° W. and S. 3° E.;
in hollow, 300 ft. below ridge,
course N. 3° W.; thence descend-
ing along side of mountain.
60.00 The ¼ sec. cor. on W. side sec. 30,
T. 16 S., R. 2 E.
75.00 Road in same hollow, 300 ft.
ow ¼ sec. cor., course N. E.; as
0.00 Set a sandstone, 17 x 14 x 7 ins., 11 ins.
in the ground, for cor. of secs. 24
and 25, marked with 4 notches
on N. and 2 notches on S. edges;
from which
A balsom, 8 ins. diam., bears

East boundary of 16S., R. 1 E. - Continued.

chains

N. 75° W., 53 lks. dist., marked T. 16 S., R. 1 E., S. 24, B. T.
No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, black loam and gravelly; 1st and 3rd rate.
Timber, cedar, pine, and ash.
Undergrowth, oak and service berry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.

North, along E. side of sec. 24.
Over mountainous land, thr dense undergrowth and scattering timber; ascend.

.10 Top of ridge, 100 ft. above hollow, bears N. 60° E. and S. 60° W.; descend.

6.00 Old wood road bears E. and W.; in bottom of branch of a cañon, 100 ft. below ridge, course E.; ascend.

15.75 Top of ridge, 350 ft. above cañon, bears E. and W.; enter heavy timber; descend.

20.00 The cor. of secs. 19 and 30, T. 16 S., R. 2 E.

30.50 Old road bears E. and W.

31.35 Spring branch, 4 lks. wide, 2 ins. deep, rapid current, gravelly bottom, in bottom of branch of Axhandle Cañon, 350 ft. below ridge, course E.; ascend.

35.25 Leave timber and enter

undergrowth, bears E. and W.

40.00 Set a sandstone, 24 x 10 x 4 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 4 on W. face; from which
An oak, 4 ins. diam., bears N. 48° 45° W., 30 lks. dist., marked 1/4 S. 24, B. T.

46.50 Top of ridge, 450 ft. above canon, bears N. 80° E. and S. 80° W.; descend.

60.00 The 1/4 sec. cor., on W. side of sec. 19, T. 16 S., R. 2 E.

62.25 Bottom of hollow, 400 ft. below ridge, course S. 78° E.; ascend.

80.00 Set a limestone, 24 x 14 x 6 ins., 18 ins. in the ground, for cor. of secs. 13 24, marked with 3 notches on N. and S. edges; from which
A pinion pine, 10 ins. diam., bears N. 9° W., 36 lks. dist., marked T. 16 S., R. 1 E., S. 13, B. T.
A pinion pine, 8 ins. diam., bears S. 7° 30' W., 67 lks. dist., marked T. 16 S., R. 1 E., S. 24, B. T.

Sand, mountainous.
Soil, rich loam and gravelly; 1st and 3rd rate.
Timber, cedar and pine.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous, or heavily timbered land, or land covered dense undergrowth, 80.00 chs.

eptember 5, 1898; At this cor., we set off 6° 37' N., on the decl. arc; and at 0h 6m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 25' N., which is about 0'.05 greater than the proper lat.

Chains	
	North, along E. side of sec. 13. Over mountainous land, thr dense undergrowth, and scat- ering timber; ascend.
5.00	Top of ridge, 60 ft. above hollow, bears E. and W.; descend.
20.00	The cor. of secs. 18 and 19, T. 16 S., R. 2 E. Enter heavy timber, bears E. and W.,
27.25	Bottom of branch of Ashandale ~, 275 ft. below ridge, course S. 88° E.; ascend.
28.00	Old wood road, bears N. 88° W., and S. 88° E.
30.25	Top of spur, 10 ft. above cañon, bears E. and W.; descend.
33.75	Bottom of hollow, 10 ft. below spur, course S. 70° E.; ascend.
40.00	Set a sandstone, 18 x 10 x 4 ins., 12 ins. the ground, for ¼ sec. cor., marked ¼ on W. face; from which A pinion pine, 5 ins. diam., bears S. 68° W., 48 lks. dist., ma ed ¼ S. 13, B. T.
48.25	Top of spur, 300 ft. above hollow, bears N. W. and S. E.; leave timber, bears with ridge; descend.
60.00	The ¼ sec. cor. on W. side of sec. 18, T. 16 S., R. 2 E. Swale, 40 ft. below spur, course S., ascend.
63.75	Top of ridge, 25 ft. above swale, bears N. 80° W. and S. 80° E.; leave undergrowth and enter timber, bears with ridge; des
70.25	Bottom of hollow, 100 ft. below ridge, course N. E.; leave timber, bears N. E. and S. W.; ascend.
75.25	Top of spur, 20 ft. above hollow, bears N. E. and S. W.; descend.

Chains.

-80.00 Set a limestone, 16x12x9 ins., 11 ins. in the ground, for cor. of secs. 12 and 13, marked with 2 notches on N. and 4 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. its impracticable.
Sand, mountainous.
Soil, rich black loam and gravelly; 1st and 3rd rate.
Timber, red pine, cedar, pinion pine, balsom, and maple.
Undergrowth, oak, service-berry and wild currant.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

North, along E. side of sec. 12.
Over mountainous land; descen
4.40 Bottom of branch of Axhandle Canon, 50 ft. below ridge, course E.; ascend.
11.25 Top of spur, 100 ft. above canon, bears N. 80° W. and S. 80° E.; descend.
17.00 Bottom of hollow, 60 ft. below ridge, course S. E.; ascend.
20.00 The cor. of secs. 7 and 18, T. 16 S., R. 2 E. Enter dense undergrowth, bears E. and W.
29.50 Top of spur, 200 ft. above hollow, bears N. W. and S. E.; descend.
40.00 Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
An oak, 4 ins. diam., bears N. 8° 30' W., 190 lks. dist., marked ¼ S. 12, B. T.

East boundary of T. 16 S., R. 1 E. - Continued

41.50 Swale, 60 ft. below ridge, course S. 80° E.; ascend.
56.50 Top of main divide ridge, 300 ft. above swale, bears N. 10° E. and S. 20° W.; enter scattering timber, bears with ridge; descend.
60.00 The 1/4 sec. cor. on W. side of sec. 7, T. 16 S., R. 2 E.
66.00 Branch of Little Salt Creek Can 30 ft. below ridge, course W.; as
76.00 Scarce timber, bears E. and W.
80.00 Set a marble stone, 18 x 10 x 6 ins., 12 ins. in the ground, for cor. of secs. 1 and 12, marked with 1 notch on N. and 5 notches on S. edges; and raise a mound of tone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, black loam and gravelly; 1st and 3rd rate.
Timber, balsom, cedar, and pine.
Undergrowth, oak, service - and mahogany.
Good grass for grazing.
Mountainous land, or land overed with dense
80.00 chs.

North, along E. side of sec. 1.
Over mountainous land, through dense undergrowth; ascend.
20.00 The cor. of secs. 6 and 7, T. 16 S., R. 2 E.
40.00 Set a gray limestone, 24 x 10 x 6 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft

East boundary of T. 16 S., R. 1 E.—Continued.

hains.	high, W. of cor. Pits impracticable.
47.80	Enter scattering balsom timber bears E. and W.
50.00	Wood road, bears N. 10° W. and S. 10° E.
52.50	Top of ridge; 40 ft. above cañon, bears N. 80° E. and S. 80° W; descend.
60.00	The ¼ sec. cor. on W. side of sec. 6, T. 16 S., R. 2 E.
78.00	Bottom of branch of Little Salt Creek Cañon, 100 ft. below ridge, S. W.; ascend.
89.00	A spring of good water bears E. about 5.00 chs. dist.
90.00	Top of spur, 80 ft. above hollow, bears N. E. and S. W.; descend.
6.00	The closing standard cor. of Tps. 15 and 16 S., R. 1 E.

Land, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, balsom.
Undergrowth, oak, and service-berry.
Good grass for grazing.
Mountainous land, or land overed with dense under-growth, 96.00 chs.

September 5, 1898.

Boundaries of T. 16 S., R. 1 E.

	True					
			N.	S.	E.	W.
		chs.	Chs.	Chs.	Chs.	Chs.
bay. T. 16 S., R. 1 E.	est	494.0				494.0
W. bay. T. 16 S., R. 1 E.	orth	495.00	495.00			
N. bay. T. 16 S., R. 1 E.	-	495.05			495.05	
E. bay. T. 16 S., R. 1 E.	S -	496.00		496.0		
Convergency				496.00		
Totals			495.0	5	495.65	
Error in lat.				1.0	4	
					.6	

East boundary of T. 16 S., R. 1 E. - Concluded.

This township is all mountainous, well watered, and well, and very well adapted for grazing. The township should be subdivided.

Scott O. Stewart,
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.
September 5, 1898.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Scott P. Stewart and Andrew J. Stewart Jr., United States Deputy Surveyors to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the North and South Boundaries T. 13 S. R. 2 W.; West and South Boundaries T. 14 S. R. 1 W.; North, South, and West Boundaries T. 17 S. R. 1 W.; North and East Boundaries T. 18 S. R. 1 E.; North and West Boundaries T. 17 S. R. 2 E.; North and East Boundaries T. 17 S. R. 1 E.; West Boundary T. 16 S. R. 2 E.; and East Boundary T. 16 S. R. 1 E. showing the respective capacities in which they acted:

John R. Stewart, Chainman.
Wm W. Richardson Jr., Chainman.
Daniel H. Y. McAllister, Chainman.
Alma Betts, Chainman.
Antone P. Stewart, Moundman.
Peter S. Sorensen, Moundman.
Benjamin F. Stewart, Axman.
, Axman.
Quinby Stewart, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Scott P. Stewart and Andrew J. Stewart Jr, United States Deputy Surveyors in surveying all those parts or portions of the North and South Boundaries T. 13 S. R. 2 W.; West and South Boundaries T. 14 S. R. 1 W.; North, South, and West Boundaries T. 17 S. R. 1 W.; North and East Boundaries T. 18 S. R. 1 E.; North and West Boundaries T. 17 S. R. 2 E.; North and East Boundaries T. 17 S. R. 1 E.; West Boundary T. 16 S. R. 2 E.; and East Boundary T. 16 S. R. 1 E. Km 64,755 M of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by ~~him~~ them and under ~~his~~ their 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 Utah.

John R Stewart, Chainman.
Wm W Richardson Jr, Chainman.
Daniel H. Y. McAllister, Chainman.
Alma Betts, Chainman.
Antone P Stewart, Moundman.
Peter S. Sorensen Moundman.
Benjamin F. Stewart, Axman.
Quinby Stewart, Flagman Axman.
, Flagman.

Subscribed and sworn to before me this 19th day of September, 1898

Shadrach Wm Richardson
Justice of the Peace
Benjamin precinct
Utah Co. Utah

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Scott O. Stewart & Andrew J. Stewart Jr., United States Deputy Surveyors, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair, United States Surveyor General for Utah, bearing date of the 1st day of November, 1897, 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of North and South Boundaries T. 13 S. R. 1 W.; West and South Boundaries T. 14 S. R. 1 W.; West Boundary T. 15 S. R. 1 W.; North, South, West Boundaries T. 17 S. R. 1 W.; North and East Boundaries T. 18 S. R. 1 E.; and West Boundaries T. 17 S. R. 2 E.; North and East Boundaries T. 17 S. R. 1 E. West Boundary T. 16 S. R. 2 E.; and East Boundary T. 16 S. R. 1 E. of the Salt Lake Base and Meridian, in the State of Utah, 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 Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will submit to the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Scott O. Stewart
Andrew J. Stewart Jr.
United States Deputy Surveyors

Subscribed by said Scott O. Stewart & Andrew J. Stewart, and sworn to before me this 16th day of January, 1900

Jacob B. Blair
U. S. Surveyor General

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23, 1900.

The foregoing field notes of the survey of the East Boundary of 16 South Range 1 East of the Salt Lake Base & Meridian, Utah

executed by Scott O. Stewart & Andrew J. Stewart Jr. under his contract No. 257, dated Nov. 1st, 1897, having been critically examined, and the necessary corrections and explanations made, the said field notes, surveys they describe, are hereby approved.

Jacob B. Blair
United States Surveyor

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

United States Surveyor

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BOOK A-258

N.3.13.

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

of

Township 16 South, Range 1 East.

of the Salt Lake Base and *Meridian,*

In the State of Utah.

AS SURVEYED BY

Scott F. Stewart & Andrew Stewart, *United States Deputy Surveyors,*

Under ~~their~~ *Contract No.* 211, *dated* November 1st, *1897.*

Survey commenced September 6th, *1898.*

Survey completed September 17th, *1898.*

—1—

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel St. Y. McAllister, Chainman.

Wm W. Richardson Jr, Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Monumentman.

Peter S. Sorenson, Monumentman.

Benjamin F. Stewart, Axman.

Quinby Stewart, Flagman.

See preliminary affidavits See Book "A"

BOOK A-258

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Township 16 South, *Range* 1 East.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surve

.....

....., *Chainm*

....., *Chainm*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

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

.....

....., *Mound*

....., *Mound*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

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

.....

....., *A*

.....,

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

I, ..., do solemnly swear that I will well a
perform the duties of flagman according to instructions given me, to the best of my skill and abilit
survey of .....

....., *F*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

Chains

Survey commenced September 6, 1898; and executed with a W. and L. E. Gurley light mountain transit No. —, with solar attachment. The horizontal limb is provided with two double verniers reading to single minutes of arc, which is also the least t of the verniers of the latitude and declination arcs, and a Buff and Berger transit, No. 2511, the horizontal limb is provided with two double verniers reading to single minutes of arc. The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah; the former on December 4, 1897, and the latter on April 5, 1898.

We examine the adjustments of the transits, and correct the level and collimation errors; then, to test the solar apparatus of the Gurley instrument, by comparing its indications resulting from solar observations made during p. m. and a. m. hours, with a true meridian determined by observations on Polaris, we proceed as follows:

At the cor. of secs. 1, 2, 35, and 36, S. bdy. of T. 16 S., R. 1 E., latitude 39° 23' longitude, 111° 48' W., we set off 39° 23' N., on the lat. arc; 6° 11' N., decl. arc; and at 4h 0m p. m., l. m. t., determine a true meridian with the solar, of the Gurley instrument, and mark a point thereof on a stone,

Chains firmly set in the ground, 5.00 N. of the cor.

At 8h 22m p. m., l. m. t., we observe Polaris at eastern elongation, with the Buff and Berger instrument, in accordance with the Manual of Instru and mark a point in the line thus determined, on a plug driven in the ground, 5.00 chs. N. of our station.

September 6, 1898.

September 7, 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined by cutting a small groove in the stone set September 6, on which the true meridian falls 0.38 ins. east of mark determined with the solar of the Gurley

At 6h 40m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley

mark the True Meridian thus determined by cutting a small groove in the stone set September 6, on which the true meridian falls 0.38 ins. east of the mark determined with the solar.

At 7h 30m a. m., l. m. t., we set 39° 23' N., on the lat. arc, 5° 57' N., on the decl. arc; and mark a point in the true meridian determined with the solar, of the Gurley instrument, by a cross on the stone already set.

Chains	
	5.00 chs. N. of our station; this mark falls 0.32 ins. east of the true meridian established by Polaris observation. The solar apparatus of the Gurley instrument, by p. m. and a. m. observations, defines positions for true meridians respectively about 0° 20" west and 0° 17" east of the meridian established by Polaris observations; therefore we conclude that the adjustments of the instruments are satisfactory. The magnetic bearing of the true meridian at 7h 36m a. m., is N. 16° 33' W.; the angle thus determined reduced by the table, page 100 of the Manual, gives the ~~mean mag.~~ decl. 16° 30' E.
	From the cor. of secs. 1, 2, 35, and 36 on S. bdy. of T. 15 S., heretofore described We run N. 0° 1' W., bet. secs. 35 and 36. Over mountainous land, through dense undergrowth; ascend.
15.00	Top of ridge, 200 ft. above cor., bears N. 40° W. and S. 40° E.; descend.
24.00	Bottom of head of Maple Cañon, 100 ft. below ridge, course S. 30° E.; ascend.
40.00	Set a limestone, 14 x 8 x 8 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of stone, 3 ft. base, 1 ft. high, W. of cor.

Subdivision of T. 16 S., R. 1 E.- Continued.

43.50 Top of main divide ridge, 400 ft above cañon, bears N. 60° E. and S. 60° W.; enter heavy pine and balsom timber, bears with ridge; descend into chriss'Canon.

73.00 Leave timber, bears E. and W.

80.00 Set a limestone, 20x11x6 ins., 15 ins. in the ground, for cor. of secs. 25, 26, 35, and 36, marked with 1 notch on S. and 1 notch on E. edges; from which

An oak, 4 ins. diam., bears N. 38° E. 31 lks. dist., marked T. 16 S., R. 1 E., S. 25,

An oak, 5 ins. diam., bears S. 18° E., 123 lks dist., marked T. 16 S., R. 1 E., S. 36, B. T.

An oak, 5 ins. diam., bears S. 30° W., 85 lks. dist., marked T. 16 S., R. 1 E., S. 35, B. T.

No other trees within limits, in sec. 26; dig a pit, 18x18x12 ins., in sec. 26, 5 ± ft. dist.; and raise a mound of earth, 2 ft. base, 1 ft. high, W. of cor.

Sand, mountainous.
Soil, rich loam and gravelly; 1st and 3rd rate.
Timber, pine and balsom.
Undergrowth, oak, service and sage.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 36 and 25.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect E. bdy. of Tp. 6 lks. S. of the cor. of secs. 25 and 36.

Subdivision of T. 16 S., R. 1 E.- Continued.

chains.	
	Thence we run S. 89°57' W., on a true line bet. secs. 25 and 36.
	Over mountainous land, through heavy timber; ascend over a series of ledges.
5.00	Leave ledges and timber, and enter dense undergrowth, bears N. and S.
36.00	Top of main divide ridge, 900 ft. above cañon, bears N. 50° E. and S. 30° W.
40.00	Set a sandstone, 18 x 14 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
76.50	Bottom of Chriss' Cañon, 800 ft. below ridge, course N. 30° W.; wood road bears N. W. and S. E.; ascend.
80.00	The cor. of secs. 25, 26, 35, and 36.
	Land, mountainous.
	Soil, black loam and gravelly; 1st and 3rd rate.
	Timber, cedar and pine.
	Undergrowth, oak, service-berry, and sage.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.0 chs.
	N. 0°1' W., bet. secs. 25 and 26.
	Over mountainous land, through dense und descend.
3.25	Enter scattering pine timber, bears E. and W.
4.30	Wood road, bears N. W. and S. E.

chains.	
8.10	Creek, 3 lks. wide, 3 ins. deep, gravelly bottom, clear cold water, heads at spring about 5.00 chs. S.E., in bottom of Chriss' Canon, 30 ft. below cor., course N.W.;
18.00	Top of spur, 30 ft. above canon, bears E. and W.; descend.
22.75	Bottom of hollow, 30 ft. below ridge, course W.; ascend.
40.00	Set a sandstone, 16 x 10 x 8 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1.5 ft. high, W. of cor. Pits impracticable.
41.00	Top of spur, 300 ft. above hollow, bears N. 60° E. and S. 60° W.;
45.00	Bottom of swale, 30 ft. below course W.; ascend.
72.50	Top of ridge, 250 ft. above swale, bears N. 60° W. and S. 60° E.;
80.00	Set a gray limestone, 20 x 8 x 5 ins., 15 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, marked with 2 notches on S. and 1 notch on E. edges; from which A maple, 4 ins. diam., bears N. 5 E., 22 lks. dist., marked T. 16 S., R. 1 E. S. 24, B. T. A maple, 4 ins. diam., bears S. 6° 30' E., 27 lks. dist., T. 16 S., R. 1 E., S. 25, B. T. A maple, 4 ins. diam., bears S. 5° W., 100 lks. dist., marked T. 16 R. 1 E., S. 26, B. T. A maple, 4 ins. diam., N. 70° W., 105 lks. dist., marke T. 16 S., R. 1 E., S. 23, B. T.
	Sand, mountainous.
	Soil, black loam and gravelly 1st and 3rd rate.

Subdivision of T. 16 S., R. 1 E.-Continued.

hains. Timber, scattering pine.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense under-rowth, 80.00 chs.
eptember 7, 1898: At this cor., set off 5°52' N., on the decl. arc; and at 0h 5m p.m.l. m.t., observe the sun on the meridian, the resulting lat. is 39°24' N., which is about 0'.08 less than the proper lat.

N. 89°57' E., on a random line bet. secs. 24 and 25.
40.00 Set temp. ¼ sec. cor.
80.10 Intersect E. bdy. of Tp. 13 lks. N. of the cor. of secs. 24 and 25 on top of ridge, bears N. 60° E. and S. 60° W. Thence we run N. 89°57' W., on a true line bet. secs. 24 and 25.
Over mountainous land, through scattering pine an balsom timber and dense undergrowth; descend.
19.25 Bottom of hollow, 50 ft. below cor., course N. E.; ascend.
25.50 Wood road, bears N. 65° E. and S. 65° W.
36.50 Top of main divide ridge, 250 ft. above hollow, bears N. and S.; descend.
40.05 A balsom, 4 ins. diam., for ¼ sec. cor., We mark
¼ S. on N. side; from which
A balsom, 4 ins. diam.,
N. 10° E., 17 lks. dist., marked

Chains	
	¼ S. 24, B. T.
	A balsom, 8 ins. diam., bears S. 50° E., 24 lks. dist., marked ¼ S. 25, B. T.
52.25	Bottom of hollow, 150 ft. below ridge, course N. 40° W; ascend.
60.00	Top of ridge, 100 ft. above bears N. 40° W. and S. 40° E.; descend.
76.75	Bottom of swale, 30 ft. below ridge, course N. W.; ascend.
80.10	The cor. of secs. 23, 24, 25, and 26.
	Sand, mountainous.
	Soil, black loam and gravelly; 1st and 3rd rate.
	Timber, scattering pine and balsom.
	Undergrowth, oak, maple, and service-berry.
	Good grass for grazing.
	Mountainous land or land covered with dense under-growth, 80.10 chs.
	N. 0° 1' W., bet. secs. 23 and 24.
	Over mountainous land, through dense undergrowth; descend.
3.75	Bottom of swale, 125 ft. below cor. course N. W; ascend.
10.00	Top of spur, 20 ft. above swale, bears N. W. and S. E.; descend.
16.50	A log cabin, bears W., 30 lks. dist.
19.75	Creek, 5 lks. wide, 3 ins. deep, in branch of Chriss Canon, 200 ft. below spur, course W.; ascend
22.50	Top of spur, 30 ft. above canon, bears E. and W.; descend.
25.25	Creek, 2 lks. wide, 2 ins. deep, in branch of Chriss Canon, 30 ft.

ains. below ridge, course S. W.; ascend.
40.00 Set a sandstone, 20 x 12 x 6 ins., 15 ins. in the ground, for ¼ sec. cor., mark- ed ¼ on W. face; from which
An oak, 5 ins. diam., bears N. 66° E., 40 lks. dist., marked ¼ S. 24, B.T.
An oak, 4 ins. diam., bears N. 51° W., 13 lks. dist., marked ¼ S. 23, B.T.
44.50 Top of ridge, 100 ft. above canon, bears N. 60° E. and S. 60° W.; descend.
59.75 Bottom of swale, 30 ft. below ridge, course N. 80° W.; ascend.
66.50 Top of spur, 20 ft. above swale, bears N. 80° E. and S. 80° W.;
80.00 Set a sandstone, 18 x 11 x 8 ins., 12 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, marked with 3 notches on S. and 1 notch on E. edges; from which
An aspen, 6 ins. diam., bears N. 15° 45' E., 129 lks. dist., marked T. 16 S., R. 1 E., S. 13, B.T.
An oak, 3 ins. diam., bears S. 42 30' E., 51 lks. dist., marked T. 16 S., R. 1 E., S. 24, B.T.
An aspen, 5 ins. diam., bears S. 57° 30' W., 72 lks. dist., marked T. 16 S., R. 1 E., S. 23, B.T.
An aspen, 6 ins. diam., N. 71½° W., 52 lks. dist., marke T. 16 S., R. 1 E., S. 14, B.T.

Sand, mountainous.
Soil, loam and gravelly; 1st and 3rd rate.
No timber.
Undergrowth, oak, maple, aspen, service-berry and choke berry.
Good grass for grazing.
Mountainous land, or land covered with dense under-

growth, 80.00 chs.

S. 89° 57' E., on a random line bet. 13 and 24.

40.00 Set temp. ¼ sec. cor.

80.30 Intersect E. bdy. of Tp. 20 lks. S. of the cor. of secs. 13 and 24.

Thence we run S. 89° 54' W., on a true line bet. secs. 13 and 24.

Over mountainous land, dense undergrowth and scattering timber; descend.

17.75 Bottom of hollow, 180 ft. below cor., course S. 10° E.; ascend.

26.25 Top of main divide ridge, 200 ft. above hollow, bears N. and S. 25° W.; descend.

34.00 Bottom of swale, 160 ft. below ridge, course N. 60° W.; ascend.

40.15 Set a sandstone, 14 x 6 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., ed ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

41.00 Top of flat ridge, 20 ft. above swale, bears N. 60° W. and S. 60° E.; descend.

59.00 Bottom of hollow, 300 ft. below ridge, course N. 30° W.; ascend.

70.00 Top of ridge, 100 ft. above hollow, bears N. 20° W. and S. 20° E.; descend.

80.30 The cor. of secs. 13, 14, 23, and 24.

Sand, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, scattering cedar, and pinion pine.

Undergrowth, oak, service and sage.

Subdivision of T. 16 S., R. 1 E.-Continued.

chains Good grass for grazing.
Mountainous land, oak land c
h dense undergrowth, 80.30 chs.
September 7, 1898.

September 8, 1898: At 7h 0m a. m., l. m. t., we set off 39°26' N., on the lat. arc; 5°36' N. on the decl. arc; and determine a true meridian with the solar, at the cor. to secs. 13, 14, 23, and 24.
Thence we run
N. 0°1' W., bet. secs. 13 and 14.
Over mountainous land,
through dense undergrowth;
descend.

2.70 Bottom of branch of Chriss' Can 20 ft. below sec. cor., course S. 50° W.; ascend.

40.00 Set a sandstone, 26 x 18 x 6 ins., 19 ins in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
An oak, 6 ins. diam., bears S. 48° 32 lks. dist., marked ¼ S. 13, B. T.
An oak, 6 ins. diam., bears S. 62° 30' W., 106 lks. dist., marked ¼ S. 14, B. T.

56.00 Top of divide ridge, bet. Chriss' and Little Salt Creek Cañons, 800 ft. above sec. cor., bears E. and W. Enter scattering pine timber, bears with ridge; descend.

80.00 Set a sandstone, 26 x 10 x 4 ins., 11 in the ground, for cor. of secs. 11, 12, 13, and 14, marked with 4 notches on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.

Subdivision of T. 16 S., R. 1 E.-Continued.

Soil, clay loam and gravelly;
2nd and 3rd rate.
Timber, scattering pine.
Undergrowth, oak, service-berry
and chokecherry.
Good grass for grazing.
Mountainous land, or land
covered with dense undergrou-
80.00 chs.

N. 89° 54' E., on a random line
bet. secs. 12 and 13.
40.00 Set temp. ¼ sec. cor.
80.20 Intersect E. bdy. of Tp. 15 lks. S. of the
cor. of secs. 12 and 13.
Thence we run
S. 89° 48' W., on a true line bet. secs.
12 and 13.
Over mountainous land,
through dense undergrowth
and scattering timber; descend
16.50 Bottom of hollow 60 ft. below cor.,
course N. E.; ascend.
20.00 Top of main divide ridge, 100 ft.
above canon, bears N. 20° E. and
S. 10° W.; descend.
40.10 Set a gray sandstone, 20 x 12 x 4 ins.,
15 ins. in the ground, for ¼ sec.
cor., marked ¼ on N. face; from
which
An oak, 4 ins. diam., bears N. 45°
W., 133 lks. dist., marked ¼ S. 12, B. T.
A red cedar, 11 ins. diam.,
S. 34° W., 156 lks. dist., marked
¼ S. 13, B. T.
45.00 Bottom of hollow, 200 ft. below
ridge, course N. W.; ascend.
62.00 Top of ridge, 150 ft. above hollow,
N. 20° W. and S. 30° E.; descend.

chains.	
77.75	Bottom of hollow, 200 ft. below ridge, course N. 30° W.; ascend.
80.20	The cor. of secs. 11, 12, 13, and 14. Sand, mountainous. Soil, gravelly loam; 2nd rate. Timber, scattering cedar and pinion pine. Undergrowth, oak, service-berry, and choke-cherry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.20 chs.

N. 0° 1' W., bet. secs. 11 and 12. Over mountainous land, through dense undergrowth; descend.

3.00	Bottom of hollow, 40 ft. below cor., course N. W.; ascend.
11.50	Top of spur, 60 ft. above hollow, bears N. W. and S. 60° E.; descend.
30.70	Little Salt Creek, 10 lks. wide, 6 ins. deep, in bottom of Little Salt Creek Canon, 300 ft. below spur, course S. 80° W. The ruins of an old saw mill bears E. about 10.00 chs. dist.; ascend.
40.00	Set a sandstone, 16 x 10 x 5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
55.00	Top of spur, 200 ft. above canon, bears N. 15° W. and S. 15° E.; descend.
66.50	Bottom of swale, 100 ft. below spur, course N. 50° E.; ascend.
70.00	Top of ridge, 120 ft. above swale, bears N. 50° E. and S. W.; descend.

Subdivision of T. 16 S., R. 1 E.-Continued.

raint.

80.00 Set a gray limestone, 16x10x6 ins., 11 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, marked with 5 notches on S. and 1 notch on E. edges; from which
A maple, 4 ins. diam., bears S. 5° W., 80 lks. dist., marked T. 16 S., R. 1 E., S. 11, B. T.
No other trees within limits; raise a mound of stone, 2 ft. b 1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, loam and gravelly; 1st and 3rd rate.
No timber.
Undergrowth, oak, maple, sage and service-berry.
good grass for grazing.
Mountainous land or land covered with dense undergrowth, 80.00 chs.
September 8, 1898; at this cor., we set off 5° 24' N., on the decl. arc; and at 0h 2m p.m., l. m. t., the sun on the meridian, the resulting lat. is 39° 27' N., is about 0.' 31 mnd than the proper lat.

N. 89° 48' E., on a random line bet. secs. 1 and 12.

40.00 Set temp. ¼ sec. cor.

80.38 Intersect E. bdy. of Tp. at the cor. of secs. 1 and 12.
Thence we run,
S. 89° 48' W., on a true line bet. secs. 1 and 12,

Subdivision of T. 16 S., R. 1 E. - Continued.

chains.	
	Over mountainous land, thro dense undergrowth; descend.
5.50	Bottom of hollow, 40 ft. below cor., course S. W.; ascend.
11.50	Top of spur, 30 ft. above hollow; bears N. and S.; descend.
32.00	Top of perpendicular cliff of stone, 25 ft. high, bears N. and S.
35.00	A corral bears S. about 4.00 chs. dist.
37.25	Spring branch, 3 lks. wide, 2 ins. deep, in hollow, course S. W.
40.19	Set a sandstone, 16 x 9 x 4 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from An oak, 4 ins. diam., bears N. 64° W., 5 3 lks. dist., marked 1/4 S. 1, B. T. An oak, 3 ins. diam., bears S. 50° W., 6 4 lks. dist., marked 1/4 S. 12, B. T. A log cabin, now being erected, bears S. about 6.00 chs. dist.
45.00	Spring branch, 3 lks. wide, 2 ins. deep, course S. W.
47.65	Creek, 3 lks. wide, 2 ins. deep, in branch of Little Salt Creek Canon, 300 ft. below ridge, course N. 75° W.; ascend.
56.50	Spring branch, 2 lks. wide, 1 in. deep, in hollow, course N.; ascend
80.38	The cor. of secs. 1, 2, 11, and 12. Sand, mountainous. Soil, gravelly loam; 2nd rate. No timber. Undergrowth, oak, sage, and service-berry. Good grass for grazing. Mountainous land, or land covered with dense under-growth, 80.38 chs.

Subdivision of T. 16 S., R. 1 E. - Continued.

N. 0° 1' W., on a true line bet. secs. 1 & 2.

Over mountainous land, through undergrowth; descend.

24.38 Creek, 5 lks. wide, 3 ins. deep, rapid, gravelly bottom, in branch of Sittle Salt Creek Cañon, 250 ft. below cor., course W.; ascend.

40.00 Set a gray limestone, 16 x 10 x 4 ins., 11 in the ground, for 1/4 sec. cor., ed 1/4 on W. face; from which
An oak, 4 ins. diam., bears S. 75° E. 6 lks. dist., marked 1/4 S. 1, B. T.
An oak, 3 ins. diam., bears N. 63° 5 lks. dist., marked 1/4 S. 2, B. T.

43.88 Top of ascent; bears E. and W.; thence across mesa.

54.13 Spring branch, 1 lk. wide, 1 in. sluggish current, course W.

62.88 mesa bears E. and W.;

68.28 , 3 lks. wide, 3 ins. deep, rocky bottom, rapid current, in bot of branch of Sittle Salt Creek Cañon, 300 ft. below cor., course S. W.;

— 95.88 Intersect the Third Standard Parallel South, 10 lks. E. of the standard cor. of secs. 35 and 36, heretofore described.
Set a limestone, 16 x 9 x 5 ins., 11 ins. in the ground, for closing of secs. 1 and 2, marked C. C. on S., with 1 groove on E., 5 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.
Pits impracticable.
Sand, mountainous.
Soil, black loam; 1st rate.
No timber.
Undergrowth, oak, sage, and

Chains

service-berry.
Good grass for grazing.
Mountainous land, or land
vered with dense
95.88 chs.

September 8, 1898.

September 9, 1898: At 7h 31m a.m., l.m.t., we set off 39°23' N., on the lat. arc; 5° 13' N., on the decl. arc; and determine a true merid with the solar at the cor. of secs. 2, 3, 34, and 35, on S. bdy. of Tp. heretofore described.

Thence we run
N. 0°1' W., bet. secs. 34 and 35.
Over mountainous land,
through dense undergrowth;
descend.

4.25 Bottom of hollow, 30 ft. below cor., course S. 85° W.; ascend.

15.00 Top of ridge, 125 ft. above hollow bears N. 30° E. and S. 80° W.; descend.

18.75 Swale, 15 ft. below ridge, course S. 70° W; ascend.

25.00 Top of ridge, 15 ft. above swale, bears N. 80° E. and S. 80° W.; descend.

38.25 Creek, 3 lks. wide, 3 ins. deep, rapid current, sandy bottom, in bottom of Timber Canon, 150 ft. below ridge, course S. 75° W.
A corral bears S. 75° W. about 10.00 chs. dist.; ascend.

40.00 Set a gray limestone, 15 x 12 x 6 ins., 10 ins. in the ground, for 1/4 sec. cor. mark a + on W. face; from which
A maple, 4 ins. diam., bears S. 15° E., 35 lks. dist., marked 1/4 S. 35, B. Y.

chains.	
	An oak, 3 ins. diam., bears S. 77° W. 14 lks. dist., marked 4 S. 34, B. T.
55.00	Top of ridge, 140 ft. above cañon, bears N. 80° E. and S. 80° W.; descend.
71.00	Bottom of branch of Timber Cañon, 100 ft. below ridge, course S. W.; ascend.
80.00	Set a sandstone, 16 x 10 x 6 ins., 11 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, marked with 1 notch on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Sand, mountainous. Soil, gravelly loam; 2nd rate. No timber. Undergrowth, oak, maple, choke-cherry and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth. 80.00 chs.
	East, on a random line bet. secs. 26 and 35.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line at the cor. of secs. 25, 26, 35, and 36.
	Thence we run West, on a true line bet. secs. 26 and 35. Over mountainous land, through dense undergrowth; ascend.
15.00	Top of ridge, 250 ft. above sec. cor., bears N. 20° E. and S. 20° W.; descend.
19.20	Bottom of hollow, 80 ft. below ridge, course N. 20° E.; ascend.

Subdivision of T. 16 S., R. 1 E. - Continued.

27.00 Top of ridge, 150 ft. above hollow, bears N. 35° E. and S. 35° W.;
34.00 Head of swale, 50 ft. below ridge, course N. 15° E.; ascend.
40.03 Set a limestone, 16 x 14 x 6 ins., 11 ins in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
42.00 Top of divide ridge, bet. Timber and Chriss' Cañons, 600 ft. sec. cor., bears N. 60° W. and S. 50° E.; descend.
72.00 Branch of Timber Cañon, 300 ft below ridge, course S. W.; asce
80.06 The cor. of secs. 26, 27, 34, and 35.
Sand, mountainous.
Soil, rich loam and gravelly; 1st and 3rd rate.
No timber.
Undergrowth, oak, maple, rice-berry, choke-cherry and sage.
Good grass for graging.
Mountainous land, or land covered with dense under-growth, 80.06 chs.

N. 0° 1' W., bet. secs. 26 and 27.
Over mountainous land, through dense undergrowth ascend.
16.00 Top of divide ridge, bet. T and Chriss' Cañons, 200 ft. above sec. cor., bears E. and W.; descend.
30.00 A spring of good water bears W. about 2.50 chs. dist.
40.00 Set a gray limestone, 15 x 10 x 4 ins.,

Subdivision of T. 16 S., R. 1 E. - Continued.

chain .10 ins. in the ground, for 4 sec. cor., marked 4 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable
69.25 Creek, 3 lks. wide, 2 ins. deep, in bed of Chriss Canon, 350 ft. below ridge, course N. E.; ascend.
-80.00 Set a sandstone, 24 x 12 x 4 ins., 19 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, marked with 2 notches on S. and 2 notches on E. edges; from which
An oak, 5 ins. diam., bears N. 45° E., 10 lks. dist., marked T. 16 S., R. 1 E., S. 23, B. T.
An oak, 3 ins. diam., bears S. 52° E., 33 lks. dist., marked T. 16 S., R. 1 E., S. 26, B. T.
An oak, 3 ins. diam., bears S. 35° W., 97 lks. dist., marked T. 16 S., R. 1 E., S. 27, B. T.
An oak, 6 ins. diam., bears N. 76° W., 29 lks. dist., marked T. 16 S., R. 1 E., S. 22, B. T.

Sand, mountainous.
Soil, gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.
September 9, 1898: At the noon hour, the sky is overcast, and solar observations are impossible.

East, on a random line bet.

secs. 23 and 26.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N. and S. line 16 lks. S. of the cor. of secs. 23, 24, 25, and 26.
Thence we run
S. 89° 53' W., on a true line bet. secs. 23 and 26.
Over mountainous land, through dense undergrowth & scattering timber; ascend.
9.50 Top of spur, 100 ft. above sec. cor., bears N. 20° W. and S. 20° E.; descend.
40.00 Set a gray limestone, 15 x 10 x 8 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which
An oak, 5 ins. diam., bears N. 62° 30' W., 120 lks. dist., marked ¼ S. 23, B. T.
A balsom, 8 ins. diam., bears bears S. 12° W., 160 lks. dist., marked ¼ S. 26, B. T.
55.00 Wood road, bears N. W. and S. E.
56.00 Chriss' Creek, 5 lks. wide, 3 ins. deep, rapid current, rocky bottom, clear cold water, in bottom of Chriss' Cañon, 250 ft. below ridge, course N. W.; ascend.
67.25 Top of spur, 300 ft. above cañon, bears N. and S.; descend.
74.00 Creek, 3 lks. wide, 2 ins. deep, in bottom of branch of Chriss' Cañon, 100 ft. below ridge, course N. 10° E.; ascend.
80.00 The cor. of secs. 22, 23, 26, and 27.
Sand, mountainous.
Soil, dark loam; 1st rate.
Timber, scattering pine and balsom.
Undergrowth, oak, sage, maple, and service-berry.

Subdivision of T. 16 S., R. 1 E. - Continued.

ains good grass for grazing.
Mountainous land, or land
covered with dense undergr
80.00 chs.

N. 0° 1' W., bet. secs. 22 and 23.
Over mountainous land,
through dense undergrowth
and scattering timber;
15.75 Top of ridge, 150 ft. above cor., bea
N. 75° E. and S. W.; descend.
35.50 Chriss Creek, 5 lks. wide, 2 ins. dee
rapid current, rocky bottom,
in bottom of Chriss Cañon, 200 ft.
below ridge, course N. 5° W.; ascend.
36.30 Wood road, bears with cañon.
40.00 Set a gray limestone, 15 X 14 X 6 ins.,
10 ins. in the ground, for 1/4 sec. cor.,
marked + on W. face; from which
A red cedar, 20 ins. diam., bears
S. 57° E., 38 lks. dist., marked + S. 23, B. T.
A pinion pine, 7 ins. diam.,
N. 58° W., 83 lks. dist., marked + S. 22, B. T.
75.00 Top of ridge, 300 ft. above cañon,
bears N. 70° E. and S. W.; leave
growth and enter heavy maple
timber, bears with ridge;
descend.
80.00 Set a gray limestone, 16 X 10 X 4 ins.,
11 ins. in the ground, for cor. of
secs. 14, 15, 22, and 23, marked
3 notches on S. and 2 notches on
E. edges; from which
A maple, 4 ins. diam., bears
N. 45° E., 16 lks. dist., marked
T. 16 S., R. 1 E., S. 14, B. T.
A maple, 6 ins. diam., bears
S. 70° E., 35 lks. dist., marked
T. 16 S., R. 1 E., S. 23, B. T.

chains

A maple, 5 ins. diam., bears S. 3° W., 38 lks. dist., marked T. 16 S., R. 1 E., S. 22, B. T.
A maple, 5 ins. diam., bears N. 28° W., 18 lks. dist., marked T. 16 S., R. 1 E., S. 15, B. T.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, cedar, pinion pine, and maple.
Undergrowth, oak, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

N. 89° 53' E., on a random line bet. secs. 14 and 23.

40.00 Set temp. 1/4 sec. cor.

80.22 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 13, 14, 23, and 24.
Thence run
S. 89° 58' W., on a true line bet. secs. 14 and 23.
Over mountainous land, through dense sage, choke, nerry, and service-berry brush; descend.

.50 Enter aspen saplings, bears N. and S. W.

2.10 Creek, 2 lks. wide, 4 ins. deep, in branch of Chriss' Cañon, 20 ft. below ridge, course S. W. Leave aspen saplings, bears with cañon; ascend.

17.50 A corral bears S. about 14.00 chs. dist. A spring of good water bears S. 10° E. about 12.00 chs.

Subdivision of S. 16th., R. 12 E. - Continued.

chains

22.50 Top of spur, 80 ft. above coteau, bears N. 20° E. and S. 20° W.; descend.

35.50 Bottom of swale, 90 ft. below ridge, course S. 30° E.; ascend.

40.11 Set a gray limestone, 16 x 12 x 9 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 4 on N. face; from which a cherry, 4 ins. diam., bears N. 15° E., 57 lks. dist., marked 4 S. 14, B. T. A service-berry, 3 ins. diam., bears S. 71° W., 67 lks. dist., marked 4 S. 23, B. T.

54.00 Top of spur, 130 ft. above swale, bears N. and S.; descend.

59.00 Bottom of swale, 20 ft. below spur, course S.; ascend.

64.00 Top of ridge, 20 ft. above swale, bears N. E. and S. 60° W.; descend.

75.50 Enter heavy maple timber, bears N. and S.

80.22 The cor. of secs. 14, 15, 22, and 23.

Sand, mountainous.
Soil, rich black and gravelly loam; 1st and 2nd rate.
Timber, maple.
Undergrowth, sage, choke-cherry, service-berry, and aspen.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.22 chs.

September 9, 1898

September 10, 1898: At 7h 3m a. m., l. m. t., we set off 39° 26' N., on the lat. arc; 4° 50' N., on the decl. arc; and determine a true meridian with the solar at the cor. of

secs. 14, 15, 22, and 23.
Thence we run
N. 0° 01' W., bet. secs. 14 and 15.
Over mountainous land,
through scattering maple
timber and dense undergrowth;
descend.

10.00 Bottom of hollow, 120 ft. below
cor., course S. 60° W.; ascend.

20.00 Top of spur, 80 ft. above hollow
bears N. 30° E. and S. 30° W.

40.00 Set a gray limestone, 16 x 7 x 6 ins.
11 ins. in the ground, for 1/4 sec.
cor., marked 1/4 on W. face; dig
pits 18 x 18 x 12 ins., N. and S. of
stone, 3 ft. dist.; and raise a
mound of earth, 3½ ft. base, 1½ ft.
high, W. of cor.

42.50 Bottom of swale, 100 ft. below spur,
course W.; ascend.

80.00 Set a gray limestone, 16 x 10 x 5 ins.,
11 ins. in the ground, for cor. of
secs. 10, 11, 14, and 15, marked with
4 notches on S. and 2 notches on
E. edges; and raise a mound of
stone, 2 ft. base, 1½ ft. high, W. of
cor. Pits impracticable.
Land, mountainous.
Soil, black loam and gravel-
ly; 1st and 3rd rate.
Timber, scattering maple.
Undergrowth, oak, maple,
and service-berry.
Good grass for grazing.
Mountainous land, or land
overed with dense under-
growth, 80.00 chs.

N. 89° 58' E., on a random line be

Subdivision of T. 16 S., R. 1 E. - Continued.

chains secs. 11 and 14.
40.00 Set temp. ¼ sec. cor.
80.10 Intersect N. and S. line 30 lks. S. of cor. of secs. 11, 12, 13, and 14.
Thence we run
S. 89° 45' W., on a true line bet. secs 11 and 14.
Over mountainous land,
through dense undergrowth;
ascend.
20.00 Top of spur, 100 ft. above cor.,
bears N. 20° W. and S. 20° E.; descend.
31.90 Creek, 30 lks. wide, 3 ins. deep, in branch of Little Salt Creek Canon
200 ft. below ridge, course N. 10° W.;
ascend.
40.05 Set a gray limestone, 16 x 9 x 7 ins.,
11 ins. in the ground, for ¼ sec. cor.,
marked + on N. face; from which
An oak, 4 ins. diam., bears N. 10°
E., 150 lks. dist., marked + S. 11, R. T.
A maple, 6 ins. diam., bears S. 80°
W., 134 lks. dist., marked + S. 14, R. T.
71.00 Top of divide bet. Chriss' and Little Salt Creek Canons, 500 ft.
above canons, bears N. 80° W. and
S. 80° E.; descend.
80.10 The cor. of secs. 10, 11, 14, and 15.
Land, mountainous.
Soil, gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, maple,
and service-berry.
good grass for grazing.
Mountainous land, or land
covered with dense under-
growth, 80.10 chs.

N. 0° 1' W., bet. secs. 10 and 11.

Subdivision of T. 16 S., R. 1 E.-Continued.

Over mountainous land, through dense undergrowth; ascend.

3.00 Top of divide ridge, bet. Chriss' and Sittle Salt Creek Cañons, 20 above sec. cor. bears N. 85° W. and S. 55° E.; descend.

35.60 Bottom of branch of Sittle Salt Creek Cañon, 250 ft. below ridge, N. 50° E.; ascend.

40.00 Set a limestone, 18 x 10 x 4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from whi An oak, 6 ins. diam., bears S. 19° 45 E., 41 1/2 lks. dist., marked 1/4 S. 11, B. T. An oak, 6 ins. diam., bears S. 2° 15' W., 47 lks. dist., marked 1/4 S. 10, B. T.

46.00 Top of spur, 50 ft. above hollow, bears N. 70° W. and S. 70° E.; descend.

64.00 Enter heavy pine and aspen. , bears E. and W.

66.75 Creek, 4 lks. wide, 4 ins. deep, rocky bottom, rapid current, in branch of Sittle Salt Creek Cañon, 250 ft. below spur, course N. 20° W.; leave timber, bears with cañon; ascend.

78.50 Top of spur, 150 ft. above cañon, bears N. 80° W. and S. 80° E.; discend

80.00 Set a lime-stone, 20 x 18 x 6 ins., 15 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, marked with 5 notches on S. and 2 notches on E. edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

and, mountainous
Soil, black loam and gravelly; 1st and 3rd rate.
Timber, pine, and aspen.
Undergrowth, oak, sage, and

Subdivision of T. 16 S., R. 1 E.-Continued.

maple.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
September 10, 1898: At this cor., we set off 40 4¼' N., on the decl. arc;
d at 0h 3m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 27' N., which is about 0.' 31' greater than the proper lat.

N. 89° 45' E., on a random line bet. secs. 2 and 11.
40.00 Set temp. ¼ sec. cor.
80.32 Intersect N. and S. line 35 lks. N. of cor. of secs. 1, 2, 11, and 12.
Thence we run
West, on a true line bet. secs. 2 and 11.
Over mountainous land, through dense undergrowth; ascend.
6.00 Top of spur, 25 ft. above sec. cor., bears N. and S.; descend.
40.16 Set a gray limestone, 14 x 10 x 6 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which
An oak, 5 ins. diam., bears N. 35° E., 11½ lks. dist., marked ¼ S. 2, B.T.
An oak, 5 ins. diam., bears S. 21 W., 38 lks. dist., marked ¼ S. 11, B.T.
80.32 The cor. of secs. 2, 3, 10, and 11.
Sand, mountainous.
Soil, gravelly loam; 2nd rate
No timber.

chains.	
	Undergrowth, oak, and serviceberry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.32 chs.
	N. 0° 1' W., on a true line bet secs. 2 and 3. Over mountainous land, through dense undergrowth; descend.
11.70	Creek, 6 lks. wide, 8 ins. deep, sandy bottom, rapid current, in bottom of branch of Sittle Salt Creek Canon, 150 ft. below sec. cor., course S. 80° W.; ascend.
40.00	Set a limestone, 18 x 9 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked + on W. face; from which An oak, 4 ins. diam., bears S. 3° E., 28 lks. dist., marked + S. 2, B. T. An oak, 11 ins. diam., bears N. 56° W., 8 lks. dist., marked + S. 3, B. T.
47.50	Top of spur, 100 ft. above hollow, bears N. 10° E. and S. 75° W.; descend.
57.70	Bottom of hollow, 40 ft. below ridge, course S. 75° W.; ascend.
69.70	Top of ridge, 30 ft. above cañon bears N. 70° W. and S. 70° E.; descend.
90.85	Creek, 2 lks. wide, 2 ins. deep, in branch of Sittle Salt Creek Canon, 300 ft. below cor., course S. 85° W.; ascend.
95.70	Intersect the Third Standard Parallel South 14 lks. E. of the standard cor. of secs. 34 and 35. Set a limestone, 16 x 6 x 6 ins., 4 ins.

chains in the ground, for closing cor. of secs. 2 and 3; marked C. C. on S., 2 grooves on E. and 1 grooves on W. faces; and raised a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable. Sand, mountainous. Soil, gravelly loam; 2nd rate. No timber. Undergrowth, oak, manzanita, and service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 95.70 chs.

September 10, 1898.

September 12, 1898: At 8h 0m a.m., l. m. t., we set off 39° 2' N., on the lat. arc; 4° 03' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 3, 4, 33, and 34, on S. bdy. of Tp., heretofore described.

Thence we run N. 0° 2' W., bet. secs. 33 and 34. Over mountainous land, through scattering mahogany and cedar timber; ascend.

3.00 Top of ridge, 15 ft. above sec. cor., bears N. E. and S. W. Scave timber and enter dense undergrowth. descend.

35.50 Enter heavy cedar and pine timber, bears E. and W.

37.00 Scave timber, bears E. and W.

40.00 Set a gray limestone, 22x10x6 in 17 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from

rains. which

An oak, 3 ins. diam., bears N. 15° E., 38 lks. dist., marked ¼ S. 34, B. T.

An oak, 3½ ins. diam., bears N. 10° W., 41 lks. dist., marked ¼ S. 33, B. T.

43.00 Bottom of swale, 60 ft. below ridge, course S. W.; ascend.

80.00 Set a sandstone, 18 x 12 x 7 ins., 12 ins. in the ground, for cor. of secs. 27, 28, 33, and 34, marked with 1 notch on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Sand, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, cedar, pine, and mahogany.

Undergrowth, oak, and service berry.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.0 lks.

East, on a random line bet. secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

80.20 Intersect N. and S. line at the of secs. 26, 27, 34, and 35.

Thence we run

West, on a true line bet. secs. 27 and 34.

Over mountainous land, through dense undergrowth; descend.

4.50 Bottom of hollow, 20 ft. below sec. cor., course S.; ascend.

11.25 Top of ridge, 120 ft. above hollow;

chains	
	bears N. 10° E. and S. 10° W.; descend.
33.30	Bottom of hollow, 120 ft. below ridge, course S. 20° W.; ascend.
40.10	Set a sandstone, 16 x 10 x 7 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable
45.00	Top of ridge, 60 ft. above hollow, bears N. 20° W. and S. 20° E.; descend.
73.00	Bottom of swale, 80 ft. below ridge, course S.; ascend.
77.00	Top of spur, 10 ft. above swale, bears N. and S.; descend.
80.20	The cor. of secs. 27, 28, 33, and 34.
	Sand, mountainous.
	Soil, gravelly loam; 2nd rate.
	No timber.
	Undergrowth, oak, and service berry.
	Good grass for grazing.
	Mountainous land, or land covered with dense under-growth, 80.20 chs.

N. 0° 2' W., bet. secs. 27 and 28.
Over mountainous land, through dense undergrowth; ascend.

20.00	Top of ridge, 200 ft. above sec. cor.; bears E. and W.; descend.
40.00	Set a sandstone, 20 x 8 x 4 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which A maple, 5 ins. diam., bears S. 55° E., 33 lks. dist., marked ¼ S. 27, B. T. A maple, 5 ins. diam., bears S. 84° W., 29 lks. dist., marked ¼ S. 28, B. T.
44.00	Bottom of hollow, 350 ft. below

chains. ridge, course N. E.; ascend.
119.50 Top of spur, 80 ft. above hollow, bears N. E. and S. W.; descend.
58.00 Bottom of hollow, 120 ft. below spur, course N. E.; ascend.
61.00 Top of ridge, 40 ft. above hollow, bears N. E. and S. W.; descend.
69.00 A spring bears E. about 5.00 chs. dist.
71.85 A corral bears W. about 2.00 chs. d
78.75 Creek, 2 lks. wide, 2 ins. deep, in branch of Chriss' Canon, 40 ft. below ridge, course N. W.; ascend
80.00 Set a sandstone, 20 x 8 x 6 ins., 15 in the ground, for cor. of secs. 27, 28, 21, and 22, marked with 2 notches on S. and 3 notches on E. edges; from which
An oak, 4 ins. diam., bears N. 27° E. 35 lks. dist., marked T. 16 S., R. 1 E., S. 22, B. T.
An oak, 3 ins. diam., bears S. 55° E., 41 lks. dist., marked T. 16 S., R. 1 E., S. 27, B. T.
A maple, 5 ins. diam., bears S. 38° W., 9 lks. dist., marked T. 16 S., R. 1 E., S. 28, B. T.
An oak, 14 ins. diam., bears N. 18° W., 31 lks. dist., marked T. 16 S., R. 1 E., S. 21, B. T.

Sand, mountainous.
Soil, black loam; 1½ rate.
No timber.
Undergrowth, oak, maple, service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.
September 12, 1898: At the noon hour, the sky is overcast and solar observations are impr

hains. ible.

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

40.00 Set temp. ¼ sec. cor.

80.36 Intersect N. and S. line 6 lks. S. of cor. of secs. 22, 23, 26, and 27.

Thence we run S. 89° 57' W., on a true line bet. secs. 22 and 27.

Over mountainous land, thr underbrush and scattering timber; ascend.

12.00 Top of ridge, 200 ft. above sec. cor., bears N. 20° W. and S. 20° E.; descend.

24.25 Bottom of hollow, 280 ft. below ridge, course N. 20° E.; ascend.

35.00 Top of spur, 300 ft. above hollow, bears N. and S.; descend.

40.18 Set a limestone, 18 x 16 x 12 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A balsom, 8 ins. diam., bears N. 65 lks. dist., marked ¼ S. 22, B. T. A red cedar, 5 ins. diam., bears S. 45° W., 120 lks. dist., marked ¼ S. 27, B.

45.00 Bottom of swale, 30 ft. below spur, course N.E.; ascend.

48.75 Top of ridge, 100 ft. above swale, bears N. 34° W. and S. 34° E.;

80.36 The cor. of secs. 21, 22, 27, and 28.

Sand, mountainous.
Soil, black loam; 1st rate.
Timber, scattering cedar balsom.
Underbrush, oak, and good grass for grazing.
Mountainous land, or land covered with dense under-

Subdivision of T. 16 S., R. 1 E. - Continued.

ins growth, 80. 36 chs.

N. 0° 2' W., bet secs. 21 and 22.
Over mountainous land,
through dense undergrowth;
ascend.

40.00 Set a gray limestone, 20 x 10 x 6 ins,
15 ins. in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from whi
An oak, 4 ins. diam., bears N. 40
3 3 lks. dist., marked 1/4 S. 22, B. T.
An oak, 4 ins. diam., bears N. 15°
W., 9 lks. dist., marked 1/4 S. 21, B. T.

13.50 Top of spur, 40 ft. above sec. cor.,
bears N. 30° W. and S. 30° E.; descend,

65.25 Chriss' Creek, 20 lks. wide, 4 ins.
deep, rapid current, rocky
bottom, in bottom of Chriss'
Canon, 250 ft. below spur, cou
N. 80° W.; enter scattering timber
bears with canon; ascend.

65.75 Old wood road bears with
canon.

- 80.00 Set a gray limestone, 18 x 12 x 6 ins,
12 ins. in the ground, for cor. of
secs. 15, 16, 21, and 22, marked 16 S. o
N. E. and 1 E. on S. E. faces; with 3
notches on S. and E. edges; from
which
A cedar, 20 ins. diam., bears N. 25
E., 92 lks. dist., marked T. 16 S.,
R. 1 E., S. 15, B. T.
A cedar, 20 ins. diam., bears N. 21°
W., 167 lks. dist., marked T. 16 S.,
R. 1 E., S. 16 B. T.
No other trees within limits;
raise a mound of stone, 2 ft.
1 1/2 ft. high, W. of cor. Pits impract
icable.

Subdivision of T. 16 S., R. 1 E. - Continued.

Sand, mountainous.
Soil, blackloam and gravelly;
1st and 3rd rate.
Timber, scattering cedar and
pinion pine.
Undergrowth, oak, maple,
service-berry.
good grass for grazing.
Mountainous land, or land
covered with dense under
80.00 chs.

N. 89° 57' E., on a random line bet.
secs. 15 and 22.
40.00 Set temp. ¼ sec. cor.
80.14 Intersect N. and S. line 18 lks. S. of
the cor. of secs. 14, 15, 22, and 23.
Thence we run
S. 89° 49' W., on a true line bet.
secs. 15 and 22.
Over mountainous land,
ough dense undergrow
and maple timber; ascend.
6.50 Top of spur, 25 ft. above cor.,
bears N. and S. Sieve maple
, bears with ridge; des
30.75 Bottom of branch of Chriss'
Cañon, 250 ft. below ridge,
S. 30° W.; ascend.
40.07 Top of spur, 300 ft. above cañon,
bears N. 20° E. and S. 20° W.
Set a gray limestone, 20 X 12 X 7 ins.,
15 ins. in the ground, for ¼ sec.
marked ¼ on N. face; from whic
an oak, 4 ins. diam., bears N. 6
50 lks. dist., marked ¼ S. 15, B. T.
An oak, 4 ins. diam., bears S. 10°
W., 12 lks. dist., marked ¼ S. 22, B. T.
45.00 A spring of good water, bears

N. 3.00 chs. dist.

50.50 Swale, 40 ft. below ridge, course S. 20° E.; ascend.

75.00 Top of spur, 20 ft. above swale, bears N. and S.; descend.

80.14 The cor. of secs. 15, 16, 21, and 22.
Sand, mountainous.
Soil, black loam; 1st rate.
Timber, maple.
Undergrowth, oak, sage, and service-berry; mostly oak.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.14 chs.

September 12, 1898: At the cor. of secs. 15, 16, 21, and 22, latitude 39° 26' N., longitude 111° 50' W. at 7h 58m p. m., l. m. t., we observe Polaris at eastern elongation with Buff and Berger instrument, in accordance with the Manual of Instructions, and mark a point in the line thus determined, by a tack driven in a wooden plug, set in the ground, 5.00 chs. N. of our station.

September 12, 1898.

September 13, 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west, on the Buff and Berger instrument, and mark the True Meridian thus determined by cutting a small groove in a stone set in the ground, west of the mark, established by Polaris observat-

ion; the magnetic bearing of
meridian is N. 16° 33' W., which,
reduced by the table, page 100 of
the Manual, gives the mean
mag. decl. 16° 30' E.
At 7h 5m a. m., l. m. t., we set off 39° 2'
N., on the lat. arc; 30° 12' N., on the
decl. arc; and mark the true
meridian determined with
the solar of the Gurley instru-
ment, by a cross on the stone al-
ready set 5.00 chs., N. of our station;
this mark falls 0.2 ins. east of the
meridian established by
Polaris observation; therefore we
note that the adjustments
of the instruments are satisfact-
ory.
Thence we run
N. 0° 2' W., bet. secs. 15 and 16.
Over mountainous land,
heavy cedar and pinion
pine timber; ascend.

5.00 Top of ridge, 50 ft. above cor., bears
N. 50° E. and S. 70° W. Leave timber
and enter dense undergrowth;
descend.

24.00 Bottom of hollow, 250 ft. below
ridge, course S. 55° W.; ascend.

40.00 Set a limestone, 16 x 10 x 8 ins., 11 ins.
in the ground, for ¼ sec. cor., mark
ed ¼ on W. face; from which
An oak, 4 ins. diam., bears N. 67
E., 59 lks. dist., marked 4 S. 15, B. T.
An oak, 5 ins. diam., bears S. 1°
174 lks. dist., marked 4 S. 16, B. T.

41.00 Top of ridge, 250 ft. above
bears N. 65° W. and S. 65° E.;

79.50 Branch, 1 lk. wide, 1 in. deep, in
bottom of branch of Chriss' Can-
on, 20 ft. below ridge, course N. 80

Subdivision of T. 16 S., R. 1 E.- Continued.

W.; ascend.

80.00 Set a limestone, 15 x 10 x 7 ins., 10 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, marked with 4 es on S. and 3 notches on E. edges; from which

An oak, 4 ins. diam., bears N. 61° E., 29 lks. dist., marked T. 16 S., R. 1 E., S. 10, B. T.

An oak, 4 ins. diam., bears S. 75° E., 23 lks. dist., marked T. 16 S., R. 1 E., S. 15, B. T.

An oak, 4 ins. diam., bears S. 22 W., 106 lks. dist., marked T. 16 S., R. 1 E., S. 16, B. T.

An oak, 3 ins. diam., bears N. 19° W., 22 lks. dist., marked T. 16 S., R. 1 E., S. 9, B. T.

Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, cedar, and pinion
Undergrowth, oak, sage, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.0

N. 89° 49' E., on a random line bet. secs. 10 and 15.

40.00 Set temp. ¼ sec. cor.

79.96 Intersect N. and S. line at the cor. of secs. 10, 11, 14, and 15.

Thence we run S. 89° 49' W., on a true line bet. secs. 10 and 15.

Over mountainous land, through dense ascend.

Subdivision of T. 16 S., R. 1 E.-Continue

chains	
30.00	Top of ridge, 600 ft. above sec. cor bears N. 50° E. and S. 50° W.; desce
39.9	Set a limestone, 18 x 8 x 6 ins., 12 ins in the ground, for ¼ sec. cor., marked ¼ on N. face; and a mound of stone, 2 ft. base, 1½ ft high, N. of cor. Pits impractic
79.9	The cor. of secs. 9, 10, 15, and 16. Sand, mountainous. Soil, gravelly loam; 2nd rate. No timber. Undergrowth, oak, maple, and service-berry. good grass for grazing. Mountainous land, or land covered with dense under-growth, 79.96 chs.
	N. 0° 2' W., bet. secs. 9 and 10. Over mountainous land, through dense under ascend.
17.75	Top of ridge, 100 ft. above sec. cor., bears N. E. and S. 30° W.; desce
29.75	Bottom of hollow, 60 ft. below ridge, course S. 30° W.; ascend.
40.00	Set a sandstone, 20 x 12 x 4 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
49.50	Top of divide ridge, bet. Chriss' and Little Salt Creek Cañons, 100 above Chriss' Cañon, bears E. o W.; descend.
80.00	Set a sandstone, 16 x 12 x 8 ins., 11 ins. in the ground, for cor. of secs.

3, 4, 9, and 10, marked with 5 notches on S. and 3 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, black loam and gravelly; 1st and 3rd rate.
No timber.
Undergrowth, oak, mahogany, service-berry, and sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.00 chs.
September 13, 1898: At this cor., we set off 3° 34' N., on the decl. arc; and at 0h 3m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 27' N., which is about 0.' 31. more than the proper lat.

N. 89° 49' E., on a random line bet. secs. 3 and 10.
40.00 Set temp. ¼ sec. cor.
80.08 Intersect N. and S. line 14 lks. N. of the cor. of secs. 2, 3, 10, and 11.
Thence we run
S. 89° 55' W., on a true line bet. secs 3 and 10.
Over mountainous land, rough dense undergrowth, descend.
9.75 Creek, 4 lks. wide, 3 ins. deep, in bottom of branch of Sittle Salt Creek Cañon, 150 ft. below cor., course N. 20° W.; ascend.

Chains.	
40.04	Set a sandstone, 20x8x8 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which An oak, 4 ins. diam., bears N. 65 30' E., 15 lks. dist., marked ¼ S. 3, B. T. An oak, 4 ins. diam., bears S. 18° W., 43 lks. dist., marked ¼ S. 10, B. T.
42.95	Spring branch, 1 lk. wide, 2 ins. deep, soft bottom, sluggish current, fairly good water, course N. 10° E. This water comes from a spring which bears S. 10° W. about 200 chs. dist.
47.75	Top of spur, 300 ft. above cañon, bears N. 15° W. and S. 15° E.; descend.
61.25	Bottom of hollow, 175 ft. below ridge, course N.; ascend.
80.08	The cor. of secs. 3, 4, 9, and 10. Sand, mountainous. Soil, black loam and gr 1st and 2nd rate. No timber. Undergrowth, oak, and good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.08 chs.

N. 0° 2' W., on a true line bet. secs. 3 and 4.
Over mountainous land, through dense undergrowth; descend.

40.00	Set a sandstone, 24x12x6 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ high, W. of cor. Pits impractic-

able.

43.06 Creek, 7 lks. wide, 6 ins. deep, current, rocky bottom, in bot- of Sittle Salt Creek Cañon, 600 ft. below ridge, course N. 60° W., ascend.

44.65 Wood road, bears N. 60° W. and S. 60° E.

76.65 Top of ridge, 200 ft. above cañon, bears N. 80° E. and S. 80° W.; descend.

91.95 Creek, 3 lks. wide, 3 ins. deep, in branch of Sittle Salt Creek Cañon, 150 ft. below ridge, S. 55° W.; ascend.

95.65 Intersect the Third Standard Parallel South, 5 lks. E. of the Standard cor. of secs. 33 and 34, heretofore described.
Set a sandstone, 18 x 8 x 6 ins., 12 ins. in the ground, for closing cor. of secs. 3 and 4 marked C. C. on S., with 3 grooves on E. and W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor
Pits impracticable.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, maple, service-berry, choke-cherry, and sage-brush.
Good grass for grazing.
Mountainous land, or land covered with dense under-growth, 95.65 chs.

September 13, 1898.

September 14, 1898: At 7h 30m a.m.,

l. m. t., we set off 39° 23' N., on the lat. arc; 30.17 N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp heretofore described.

Thence we run N. 0° 3' W., bet. secs. 32 and 33. Over mountainous land, through heavy pine, cedar, and mahogany timber; as

3.00 Top of spur, 20 ft. above cor., bears N. 10° E. and S. 10° W.; thence descend along W. face of ridge.

40.00 Set a sandstone, 20 x 18 x 5 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which

A cedar, 16 ins. diam., bears S. 62° 45° E., 45 lks. dist., marked 1/4 S. 33, B. T.

A pinion pine, 9 ins. diam., bears S. 42° W., 40 lks. dist., marked 1/4 S. 32, B. T.

45.00 Leave timber and enter dense undergrowth, bears E. and W.

54.25 Spring branch, 1 lk. wide, 1 in. deep, in branch of Timber Cañon, 400 ft. below sec. cor., course S. 30° W.; ascend.

67.50 Top of divide ridge bet. Timber and Pierces Cañons, 600 ft. above cañon, bears N. 65° E. and S. 65° W.; descend.

76.00 Enter heavy maple timber, bears E. and W.

80.00 Set a sandstone, 16 x 8 x 5 ins., 11 ins. in the ground, for cor. of secs. 28, 29, 32, and 33, marked with 1 notch on S. and 4 notches on E. edges; from which

A maple, 4 ins. diam., bears N. 22° E., 17 lks. dist., marked

mains.	T. 16 S., R. 1 E., S. 28, B. J. A maple, 5 ins. diam., bears S. 76½° E., 35 lks. dist., marked T. 16 S., R. 1 E., S. 33, B. J. A red cedar, 16 ins. diam., bears S. 49½° W., 24 lks. dist., marked T. 16 S., R. 1 E., S. 32, B. J. A maple, 6 ins. diam., bears N. 6° W., 19 lks. dist., marked T. 16 S., R. 1 E., S. 29, B. J. Sand, mountainous. Soil, clay and gravelly loam; 2nd rate, Timber, pine, cedar, mahog y, and maple. Undergrowth, oak, maple, and service-berry. Good grass for grazing. Mountainous or heavily l land, or land covered with dense undergrowth, 80.00 chs.

East, on a random line bet. secs. 28 and 33.

40.00 Set temp. ¼ sec. cor.

80.20 Intersect N. and S. line at the cor. of secs. 27, 28, 33 and 34.

Thence we run West, on a true line bet. secs. 28 and 33.

Over mountainous land, through dense undergrowth, descend.

6.50 Bottom of hollow, 80 ft. below " course S. 10° E.; ascend.

11.00 Top of spur, 100 ft. above hollow, bears N. and S.; descend.

22.00 A spring of good water bears

chains S. about 4.00 chs. dist.
38.50 Bottom of hollow, 60 ft. below ridge, course S. 10° W.; ascend.
40.10 Set a gray limestone, 16x8x8 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
An oak, 3 ins. diam., bears S. 50° W., 16 lks. dist., marked 1/4 S. 33, B. T.
No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
43.50 Top of ridge, 80 ft. above hollow, bears N. and S. W.; descend.
51.50 A corral bears N. about 4.00 chs. dist.
A spring of good water bears N. about 5.00 chs. dist.
75.00 Pierce's Creek, 3 lks. wide, 2 ins. deep in bottom of Pierce's Cañon, 200 ft. below ridge, course N. 70° W.;
80.20 The cor. of secs. 28, 29, 32, and 33.
Sand, mountainous.
Soil, black loam and gravelly; 1st and 3rd rate. No timber.
Undergrowth, oak, sage, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense undergr 80.20 chs.

N. 0° 3' W., bet. secs. 28 and 29.
Over mountainous land, through scattering timber undergrowth; descend.
1.43 Creek, 2 lks. wide, 2 ins. deep, in bottom of branch of Pierce's Cañ-

Subdivision of T. 16 S., R. 1 E.-Continued.

on, 20 ft. below cor., course N. 80° W.; ascend.

14.00 Top of ridge, 60 ft. above cañon bears E. and W.; descend.

16.20 A red cedar, 3 ft. diam., on line, we mark with 2 notches on N. and S. sides.

16.35 Pierce's Creek, 3 lks. wide, 2 ins. deep, rapid current, in b of Pierce's Cañon, 20 ft. below ridge, course S. 80° W. Seavetimber, and enter dense undergrowth; ascend.

20.00 Top of ridge, 400 ft. above cañon bears N. and S. W. descend.

34.25 Bottom of swale, 50 ft. below ridge, course S. 65° W.; ascend.

40.00 Set a sandstone, 20x12x5 ins., 15 ins. in the ground, for ¼ sec. cor., marked + on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impract'

55.00 Top of ridge, dividing Pierce's and Chriss' Cañons, 200 ft. swale, bears N. 80° E. and S. 80° W.; descend.

80.00 Set a sandstone, 14x14x4 ins., 9 ins in the ground, for cor. of secs. 20, 21, 28, and 29, marked with 2 notches on S. and 4 notches on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Sand, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, scattering cedar, and maple.

Undergrowth, oak, sage, and service-berry.

Good grass for grazing.

Mountainous land, or land

chains	covered with dense undergrowth, 80.00 chs. September 14, 1898: At the noon hour, the sky is overcast and solar observations are impossible.
	East, on a random line bet. secs. 21 and 28.
40.00	Set temp. ¼ sec. cor.
80.12	Intersect N. and S. line, 20 lks. N. of the cor. of secs. 21, 22, 27, and 28. Thence we run N. 89° 51' W., on a true line bet. secs. 21 and 28. Over mountainous land, through dense undergrowth and scattering timber; descend.
1.25	Creek, 2 lks. wide, 2 ins. deep, in cañon, 10 ft. below sec. cor., course N. W.; ascend.
11.00	Top of spur, 25 ft. above cañon, bears N. E. and S. W.; descend.
15.60	Spring branch, 2 lks. wide, 2 ins. deep, in cañon, 20 ft. below spur, course N. E.; ascend.
40.06	Set a gray limestone, 16 x 14 x 8 ins. 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which An oak, 3 ins. diam., bears N. 20° E., 105 lks. dist., marked ¼ S. 21, B. T. An oak, 7 ins. diam., bears S. 20° E., 12 lks. dist., marked ¼ S. 28, B. T.
49.00	Top of ridge, 600 ft. above cañon, bears N. 10° E. and S. 10° W.; descend.
64.25	Bottom of hollow, 300 ft. below ridge, course N. 20° W.; ascend.
80.12	The cor. of secs. 20, 21, 28, and 29.

Chains
Sand, mountainous.
Soil, rich loam and gravelly, 1st and 3rd rate.
Timber, cedar, balsom, maple, and oak.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous land, or land covered with dense under-growth, 80.12 chs.

N. 0° 3' W., bet. secs. 20 and 21.
Over mountainous land, through dense maple, oak, and service-berry undergrowth; descend.

23.50 Creek, 2 lks. wide, 2 ins. deep, in branch of Chriss' Canon, 500 ft. below sec. cor., course N. 70° E., ascend.

30.00 Top of ridge, 30 ft. above cañon, bears E. and W.; descend.

40.00 Set a sandstone, 14 x 9 x 7 ins., 9 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which
A maple, 4 ins. diam., bears S. 1.6° E., 7 lks. dist., marked 1/4 S. 21, B. T.
A maple, 6 ins. diam., bears S. 64° W., 27 lks. dist., marked 1/4 S. 20, B. T.

41.70 Creek, 3 lks. wide, 2 ins. deep, in branch of Chriss' Canon, 100 ft. below ridge, course N. 10° W.; ascend.

72.50 Top of ridge, 150 ft. above cañon, bears N. 20° W. and S. 20° E.; descend.

80.00 Set a limestone, 16 x 9 x 6 ins., 11 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, marked with 3

a notches on S. and 4 notches on E. edges; from which
A red cedar, 8 ins. diam., bears
S 34° 30' E., 28 lks. dist., marked
T. 16 S., R. 1 E., S. 21, B. T.
No other trees within limits;
raise a mound of stone; 2 ft. base,
1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, black loam and rocky;
1st and 4th rate.
No timber.
Undergrowth, oak, maple,
and service-berry.
Good grass for graging.
Mountainous land, or land
covered with dense under-
growth, 80.00 chs.

S. 89° 51' E., on a random line bet.
secs. 16 and 21.
40.0 Set temp. ¼ sec. cor.
79.8 Intersect N. and S. line, 10 lks. N.
of the cor. of secs. 15, 16, 21, and 22.
Thence we run
N. 89° 47' W., on a true line bet.
secs. 16 and 21.
Over mountainous land,
through scattering under-
growth and scattering timber;
descend.
24.25 Bottom of hollow, 100 ft. below
cor., course S. 20° E.; ascend.
36.00 Top of ridge, 250 ft. above hollow
bears N. 20° E. and S. 20° W.; desc
39.93 Set a sandstone, 16 x 11 x 7 ins., 10 ins
in the ground, for ¼ sec. cor.,
marked ¼ on N. face; from

mains. which

A pinion pine, 24 ins. diam.,
bears N. 69° E., 9 lks. dist.,
marked 1/4 S. 16, B. T.
A pinion pine, 20 ins. diam.,
bears S. 88° E., 7 lks. dist.,
marked 1/4 S. 21, B. T.

40.25 Top of limestone ledge, 20 ft. high, bears N. W. and S. E.

49.50 Wood road bears W. and S. 70° E.

50.00 Creek, 7 lks. wide, 6 ins. deep, in bottom of Chriss' Cañon, 300 ft. below ridge, course W. Thence along creek bed in bottom of cañon.

69.00 Leave Chriss' Cañon, course N. 60° W.; ascend.

79.86 The cor. of secs. 16, 17, 20, and 21.
Sand, mountainous.
Soil, gravelly and rocky; 3rd and 4th rate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous land, 79.86 chs.

September 14, 1898.

September 15, 1898. At 7h 30m a. m., l. m. t., we set off 39° 26' N., on the lat. arc; 20 5/4 N., on the decl. arc; and determine a true meridian at the cor. of secs. 16, 17, 20, and 21. Thence we run
N. 0° 3' W., bet. secs. 16 and 17.
Over mountainous land, through scattering timber and undergrowth; descend.

Subdivision of T. 16 S., R. 1 E.-Continued.

Chains.

3.50. Old wood road bears N. 80° W. and S. 80° E.

3.70 Creek, 10 lks. wide, 5 ins. deep, rapid current, rocky bottom, in bottom of Chriss' Canon, 50 ft. below cor., course W.; ascend.

22.00 Top of spur, 180 ft. above cañon, bears N. 10° E. and S. 10° W.; descend.

40.00 Set a yellow sandstone, 18 x 8 x 6 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which

A red cedar, 6 ins. diam., bears N. 17° E., 28 lks. dist., marked 1/4 S. 16, B. T.

An oak, 3 ins. diam., bears S. 60° W., 34 lks. dist., marked 1/4 S. 17, B. T.

59.00 A spring of good water bears W. about 5.00 chs. dist., course S.

68.00 Wash, 3 ft. deep, 20 lks. wide; course S. 10° W.

80.00 Set a sandstone, 16 x 8 x 7 ins., 11 ins. in the ground, for cor. of secs. 8, 9, 16, and 17, marked with 4 notches on S. and 4 notches on E. edges; from which

A maple, 4 ins. diam., bears N. 55° E., 45 lks. dist., marked T. 16 S., R. 1 E., S. 9, B. T.

An oak, 4 ins. diam., bears S. 76° 30' W., 65 lks. dist., marked T. 16 S., R. 1 E., S. 17, B. T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

Sand, mountainous.

Soil, gravelly loam; 2nd rate.

Timber, scattering cedar and pinion pine.

Undergrowth, oak, maple,

and service-berry.
Good grass for grazing.
Mountainous land, 80.00 chs.

S. 89° 47' E., on a random line bet. secs. 9 and 16.
40.00 Set temp. ¼ sec. cor.
79.80 Intersect N. and S. line, 20 lks. S. of the cor. of secs. 9, 10, 15, and 16.
Thence we run
N. 89° 56' W., on a true line bet. secs. 9 and 16.
Over mountainous land, rough scattering cedar and pinion pine timber, and undergrowth; descend.
2.00 Spring branch, 2 lks. wide, 2 ins. deep, course N. 85° W.
12.50 Same branch, 2 lks. wide, 2 ins. deep, course S. 80° W.
30.75 Top of spur, 60 ft. above hollow, bears N. and S.; descend.
38.50 Bottom of hollow, 80 ft. below ridge, course S.; ascend.
39.90 Set a limestone, 24 x 14 x 4 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
Pits impracticable.
52.70 Top of spur, 100 ft. above hollow, bears N. 10° W. and S. 10° E.; descend.
76.15 Bottom of hollow, 80 ft. below spur, course S. 10° W.; ascend.
79.80 The cor. of secs. 8, 9, 16, and 17.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, scattering cedar and

Subdivision of T. 16 S., R. 1 E. - Continued.

pinion pine.
Undergrowth, oak, maple,
and service-berry.
Good grass for grazing.
Mountainous land, 79.80 chs.

N. 0° 3' W., bet. secs. 8 and 9.
Over mountainous land, t
dense undergrowth; ascend.
13.00 Top of ridge, 175 ft. above sec. cor.,
bears N. 50° E. and S. 60° W.; descend.
35.00 Bottom of branch of Chriss'
130 ft. below ridge, course W.;
40.00 Set a sandstone, 18 x 11 x 9 ins., 12 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from whi
An oak, 3½ ins. diam., bears N. 2
E., 35 lks. dist., marked 1/4 S. 9, B. T.
An oak, 3½ ins. diam., bears N. 84°
W., 33 lks. dist., marked 1/4 S. 8, B. T.
45.00 Top of spur, 180 ft. above cañon,
bears N. 60° E. and S. 60° W.; descend.
61.00 Bottom of hollow, 100 ft. below
ridge, course S. 55° W.; ascend.
80.00 Set a sandstone, 18 x 9 x 6 ins., 12 ins.
in the ground, for cor. of secs. 4, 5,
8, and 9, marked with 5 notch-
es on S. and 4 notches on E. edges;
d raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, gravelly loam and
2nd and 4th rate.
No timber.
Undergrowth, oak, sage, m
and service-berry.
Good grass for grazing.
Mountainous land, or land

chains covered with dense under-
growth, 80.00 chs.
September 15, 1898: At this cor.,
we set off 2° 49' W., on the decl. arc;
at 0h 2m p. m., l. m. t.,
the sun on the meridian, the
resulting lat. is 39° 27' N., which
is about 0.' 31. more than the pr
lat.

S. 89° 56' E., on a random line bet.
secs. 4 and 9.

40.00 Set temp. 1/4 sec. cor.

79.90 Intersect N. and S. line, at the
cor. of secs. 3, 4, 9, and 10.
Thence we run
N. 89° 56' W., on a true line bet.
secs. 4 and 9.
Over mountainous land,
brough dense undergrowth;
descend.

20.60 Bottom of branch of Little Salt
Creek Cañon, 150 ft. below cor.,
course N. W.; ascend.

39.95 Set a lim. stone, 14 x 8 x 7 ins., 9 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on N. face; from
which
A oak, 3 ins. diam., bears N. 7°
30' W., 16 lks. dist., marked 1/4 S. 4, B.
A oak, 3 ins. diam., bears S. 86° 4'
W., 12 lks. dist., marked 1/4 S. 9, B. T.

71.50 Top of divide, bet. Chriss' and
Little Salt Creek Cañons, 250 ft.
above cañon, bears N. 56° W. and
S. 56° E.; descend.

79.90 The cor. of secs. 4, 5, 8, and 9.
Sand, mountainous.
Soil, rich black loam; 1st rate.

Subdivision of T. 16 S., R. 1 E. - Continued.

Chains	
	No timber. Undergrowth, oak, maple, service-berry. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 79.90 chs.
	N. 0° 3' W., on a true line bet. secs. 4 and 5. Over mountainous land, through dense undergrowth; ascend.
5.00	Top of divide ridge, bet. Chriss and Sittle Salt Creek Cañons, 25 ft. above cor., bears N. W. and S. 60° E.; descend.
40.00	Set a hard sandstone, 16 x 8 x 7 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which An oak, 4 ins. diam., bears N. 33° E., 49 lks. dist., marked ¼ S. 4, B. T. No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits in pria
82.00	Sittle Salt Creek, 10 lks. wide, 4 ins. deep, Sittle Salt Creek Canon, 300 ft. below ridge, course S. 83° W.; ascend.
91.90	Top of sharp spur, 100 ft. above cañon, bears N. 50° E. and S. 20° W.; descend.
95.40	Intersect the Third Stand Parallel South, 5.00 chs. E. of the Standard ¼ sec. cor. on S. bdy. sec. 33, heretofore described. Set a flint stone, 14 x 9 x 5 ins., 9 ins. in the ground, for closing cor. of secs. 4 and 5, marked C. C. on S.;

with 4 grooves on E. and 2 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impractic
Sand, mountainous.
Soil, rich loam and rocky; 1st and 4th rate.
No timber.
Undergrowth, oak, maple, and mahogany; mostly good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 95.40 chs.

September 15, 1898.

September 16, 1898: At 8h 3m a.m., l. m. t., we set off 39° 23' N., on the lat. arc; 20° 30' N., on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 5, 6, 31, and 32, on S. bdy. of Tp. heretofore described.
Thence we run
N. 0° 3' W., bet. secs. 31 and 32.
Over mountainous land, gh scattering timber and undergrowth; descend.
20.00 Bottom of cañon, 50 ft. below cor., course S. 10° W.; ascend abruptly.
33.00 Sea ve timber, bears S. and W.
33.75 Top of ridge, dividing Timber and Pierce's Cañons, 200 ft. above cañon, bears N. 80° E. and S. 50° W.; descend.
40.00 Set a sandstone, 14 x 12 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft.

base, 1½ ft. high, W. of cor.
Pits impracticable.

60.00 Creek, 3 lks. wide, 2 ins. deep, solid rock bottom, rapid current, in bottom of Pierce's Cañon, 300 ft. below ridge, course N. 80° W.; as

- 80.00 Set a sandstone, 14 x 10 x 7 ins., 9 ins in the ground, for cor. of secs. 29, 30, 31, and 32, marked with 1 notch on S. and 5 notches on E. edges; from which
A cedar, 6 ins. diam., bears S. 41° 30' W., 80 lks. dist., marked T. 16 S., R. 1 E., S. 31, B. T.
no other trees within limits;
raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous land, 80.00 chs.

East, on a random line bet. secs. 29 and 32.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line 2 lks. S. of the cor. of secs. 28, 29, 32, and 33.
Thence we run
S. 89° 51' W., on a true line bet. secs. 29 and 32.
Over mountainous land, through heavy timber and enter dense undergrowth; descend.

19.50 Creek, 4 lks. wide, 4 ins. deep, rapid current, clear cold water, in bottom of Pierce's Cañon, 100 ft. below sec. cor., course .60° W.; leave timber, bears with cañon; ascend.

29.00 Top of spur, 100 ft. above cañon, bears N. E. and S. W.; descend.

40.05 Set a limestone, 20 x 18 x 5 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

41.50 Bottom of hollow, 25 ft. below spur, course S. 50° W.; ascend.

54.75 Top of spur, 100 ft. above hollow, bears N. E. and S. W.; descend.

62.00 Bottom of hollow, 100 ft. below spur, course S. W.; ascend.

68.50 Top of spur, 80 ft. above hollow, bears N. E. and S. W.; descend.

80.10 The cor. of secs. 29, 30, 31, and 32. Sand, mountainous. Soil, rich black loam and gravelly; 1st and 3rd rate. Timber, maple, red cedar, and mahogany. Undergrowth, oak, wild currant, and service-berry. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.10 chs.

West, on a random line bet. secs. 30 and 31.

Subdivision of T. 16 S., R. 1 E. - Continued.

chains	
40.00	Set temp. ¼ sec. cor.
4.20	Intersect W. bdy. of Tp. on salt meridian at the cor. of secs. 25, 30, 31, and 36.
	Thence we run East, on a true line bet. secs. 30 and 31.
	Over mountainous land, through scattering timber and undergrowth; ascend.
12.00	Top of spur, 200 ft. above cor., bears N. W. and S. E.; descend.
34.00	Creek, 4 lks. wide, 6 ins. deep, rapid current, rocky bottom, in bottom of Pierce's Cañon, 250 ft. below spur, course N. 65° W.; ascend.
50.00	Top of spur, 150 ft. above cañon, bears N. and S.; descend.
54.20	Set a limestone, 20 x 12 x 6 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; from which A pinion pine, 10 ins. diam., bears N. 12° 30' W., 42 lks. dist., marked ¼ S. 30, B. T. A pinion pine, 12 ins. diam., bears S. 5° 15' W., 25 lks. dist., marked ¼ S. 31, B. T.
56.00	Bottom of hollow, 20 ft. below spur, course S. W.; ascend.
68.00	Top of spur, 200 ft. above hollow, bears N. 25° E. and S. W.; descend.
71.50	Creek, 3 lks. wide, 6 ins. deep, rocky bottom, rapid current, cold water, in branch of Pierce's Cañon, 100 ft. below spur, course S.; ascend.
4.20	The cor. of secs. 29, 30, 31, and 32.
	Sand, mountainous.
	Soil, rich black loam and rocky; 1st and 4th rate.

chains.	
	Timber, scattering cedar and pinion pine. Undergrowth, scattering oak, maple, and service-berry. Good grass for grazing. Mountainous land, 94.20 chs.
	N. 0° 3' W., bet. secs. 29 and 30. Over mountainous land, through dense undergrowth, ascend.
25.00	Top of ridge, 150 ft. above sec. cor., bears N. 40° E. and S. 40° W.; enter heavy timber, bears with ridge, descend.
27.75	Bottom of hollow, 120 ft. below ridge, course S. 40° W.; ascend abruptly.
40.00	Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A cedar, 10 ins. diam., bears S. 60° E., 27 lks. dist., marked 1/4 S. 29, B. T. A pinion pine, 20 ins. diam., bears S. 50° W., 20 lks. dist., marked 1/4 S. 30, B. T.
41.50	Top of divide ridge, bet. Pierces and Chriss' Cañons, 300 ft. above hollow, bears N. 80° E. and S. 80° W. Scant timber, bears with ridge; descend.
53.00	Bottom of swale, 25 ft. below ridge, course W.; ascend.
56.75	Top of ridge, 25 ft. above swale, bears E. and W.; descend.
80.00	Set a sandstone, 18 x 12 x 9 ins., 12 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, marked with 2 notches on S. and 5 notches on

E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Sand, mountainous.
Soil, dark loam and gravelly; 1st and 3rd rate.
Timber, cedar and pinion pine.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with se undergrowth, 80.00 chs.
eptember 16, 1898: At this cor., we set off 2° 26' N., on the decl. arc; and at 0h 14m p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39° 24' N., which is about 0.08 less than the proper lat.

N. 89° 51' E., on a random line bet. secs. 20 and 29.

40.00 Set temp. ¼ sec. cor.

80.32 Intersect N. and S. line at the cor. of secs. 20, 21, 28, and 29.
Thence we run
S. 89° 51' W., on a true line bet. secs. 20 and 29.
Over mountainous land, through dense undergrowth; descend.

3.00 Leave dense undergrowth, and enter scattering undergrowth, bears N. and S.

28.50 Bottom of branch of Chriss' Cañon, 200 ft. below cor., course N. 15° E.; ascend.

40.16 Set a hard sandstone, 14 x 12 x 4 ins. in the ground, for ¼ sec.

marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impractic

46.00 Top of ridge, 150 ft. above ¼ sec. cor., bears N. 15° E. and S. 15° W.;

- 80.32 The cor. of secs. 19, 20, 29, and 30.

Sand, mountainous.
Soil, gravelly loam; 2nd rate.
No timber.
Undergrowth, oak, and berry.
good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 80.32 chs.

West, on a random line bet. secs. 19 and 30.

40.00 Set temp. ¼ sec. cor.

94.30 Intersect W. bdy. of Tp. or Salt Lake Meridian, 14 lks. S. of the cor. of secs. 19, 24, 25, and 30.

Thence we run S. 89° 55' E., on a true line bet. secs. 19 and 30.

Over mountainous land, through heavy cedar and ion pine timber; ascend.

30.00 Leave timber and enter scattering undergrowth, bears N. and S.

54.30 Set a sandstone, 14 x 10 x 6 ins., 9 ins in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. its impracticable.

73.00 Top of spur, 650 ft. above sec. cor. bears N. and S.; descend.

81.00 Bottom of swale, 70 ft. below course N. 10° W.; ascend.

< 94.30 The cor. of secs. 19, 20, 29, and 30.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, cedar, and pinion pine.
Undergrowth, oak.
Good grass for grazing.
Mountainous or heavily timbered land, 94.30 chs.

N. 0° 3' W., bet. secs. 19 and 20.
Over mountainous land, through scattering undergrowth; descend.

40.0 Set a limestone, 14 x 10 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.

– 80.00 Set a limestone, 14 x 14 x 7 ins., 9 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, marked with 3 notches on S. and 5 notches on E. edges; from which
An oak, 4 ins. diam., bears N. 44° 30' E., 62 lks. dist., marked T. 16 S., R. 1 E., S. 17, B. T.
An oak, 4 ins. diam., bears S. 18° 30' E., 53½ lks. dist., marked T. 16 S., R. 1 E., S. 20, B. T.
An oak, 4 ins. diam., bears S. 43° 30' W., 74 lks. dist., marked T. 16 S., R. 1 E., S. 19, B. T.
No other tree within limits in sec. 19; and raise a mound of

stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Sand; mountainous.
Soil, rich dark loam and gravelly; 1st and 3rd rate.
No timber.
Undergrowth, oak, maple, and service-berry.
Good grass for grazing.
Mountainous land, 80.00 chs.

September 16, 1898.

September 17, 1898: At 7h 30m a.m., l.m.t., we set off 39° 26' N., on the lat. arc; 2° 08' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 17, 18, 19, and 20.

Thence we run
N. 89° 51' E., on a random line bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

80.06 Intersect N. and S. line, 18 lks. S. of the cor. of secs. 16, 17, 20, and 21.

Thence we run
S. 89° 43' W., on a true line bet. secs. 17 and 20.
Over mountainous land, through scattering cedar and pinion pine timber and undergrowth; ascend.

2.00 Top of spur, 50 ft. above cor., bears N. W. and S.; descend.

8.50 Creek, 3 lks. wide, 4 ins. deep, in branch of Chriss' Cañon, 75 ft. below spur, course N.; ascend.

27.00 Top of spur, 200 ft. above hollow, bears N. 30° W. and S. 30° E.; descend.

33.50 Creek, 3 lks. wide, 2 ins. deep, in

Subdivision of T. 16 S., R. 1 E.-Continued.

	ains branch of Chriss' Cañon, 150 ft. below spur, course N.; ascend.
38.75	Top of spur, 150 ft. above cañon, bears N. 15° E. and S. 15° W.; descend.
40.03	Point for cor. falls on stationary ledge of conglomerate stone, 4 x 2 x 2 ft. above ground, we mark a cross at the exact cor. point, for 1/4 sec. cor., marked 1/4 on N. face; from which A pinion pine, 16 ins. diam., bears N. 87° 30' E., 103 lks. dist., marked 1/4 S. 17, B. T. A red cedar, 12 ins. diam., bears S. 86° 30' E., 101 lks. dist., marked 1/4 S. 20, B. T.
49.00	Wash, 20 lks. wide, 5 ft. deep, in bottom of hollow, 100 ft. below spur, course N.; ascend.
70.00	Top of spur, 250 ft. above hollow, bears N. and S.; leave timber, bears with ridge; descend.
80.06	The cor. of secs. 17, 18, 19, and 20. Sand, mountainous. Soil, rich loam and rocky; 1st and 4th rate. Timber, cedar, and pinion pine. Undergrowth, oak, maple, service-berry, and mahog good grass for grazing. Mountainous land, 80.06 chs.
	N. 89° 55' W., on a random line bet. secs. 18 and 19.
40.00	Set temp. 1/4 sec. cor.
94.45	Intersect W. bdy. of Tp. or Salt Lake Meridian at the cor. of secs.

Subdivision of T. 16 S., R. 1 E. - Continued.

13, 18, 19, and 24.
Thence we run
S. 89° 55' E., on a true line bet. secs. 18 and 19.
Over mountainous land, through scattering timber and undergrowth; descend.

9.50 Bottom of hollow, 100 ft. below cor., course N.; ascend.

29.00 Top of spur, 25 ft. above hollow, bears N. E. and S. W.; descend.

31.50 Bottom of hollow, 50 ft. below spur, course S. 80° W.; ascend.

36.50 Top of spur, 75 ft. above hollow, bears N. 30° W. and S.; descend.

39.00 Bottom of swale, 25 ft. below spur, course N. 30° W.; ascend.

54.45 Set a limestone, 16 x 8 x 6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
A cedar, 24 ins. diam., bears N. 10° 15' E., 9 lks. dist., marked 1/4 S. 18, B. T.
An oak, 4 ins. diam., bears S. 65° W., 62½ lks. dist., marked 1/4 S. 19, B. T.

67.25 Wash, 50 lks. wide, 10 ft. deep, in hollow, 25 ft. below ridge, course N. 60° W.

73.50 Top of spur, 40 ft. above hollow, bears N. and S. Leave timber, bears with ridge; descend.

77.50 Bottom of hollow, 20 ft. below spur, course N. 35° E.; ascend.

79.50 Top of spur, 25 ft. above hollow, bears N. and S.; descend.

83.50 Bottom of hollow, 30 ft. below spur, course N. 20° E.; ascend.

94.45 The cor. of secs. 17, 18, 19, and 20.
Sand, mountainous.
Soil, gravelly loam; 2nd rate.

Chains.	
	Timber, scattering cedar and pinion pine. Undergrowth, oak, maple, and sage. Good grass for grazing. Mountainous land, 94.45 chs.
	N. 0° 3' W., bet. secs. 17 and 18. Over mountainous land, through scattering timber; descend abruptly.
5.00	Enter dense undergrowth, bears E. and W.
16.00	Creek, 8 lks. wide, 6 ins. deep, rapid current, in bottom of Chriss Cañon, 500 ft. below cor., course W. Ascend abruptly over a series of ledges.
34.00	Top of ridge, 350 ft. above cañon bears N. 60° E. and S. 60° W.; descend.
110.00	Set a limestone, 17 x 10 x 8 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from which A pinion pine, 18 ins. diam., bears N. 45° 30' E., 106 lks. dist., marked 1/4 S. 17, B. T. A pinion pine, 6 ins. diam., bears N. 7° 30' W., 18 lks. dist., marked 1/4 S. 18, B. T.
140.35	Bottom of hollow, 30 ft. below ridge, course S. 70° W.; ascend.
149.00	Top of ridge, 200 ft. above hollow, bears N. 60° E. and S. 60° W.; descend.
168.50	Bottom of hollow, 60 ft. below ridge, course S. 60° W.; ascend.
172.50	Top of ridge, 60 ft. above hollow bears N. 60° E. and S. 60° W.; descend

chains.	
80.00	Set a sandstone, 15 x 12 x 10 ins., 10 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, marked with 4 notches on S. and 5 notches on E. edges; from which A pinion pine, 10 ins. diam., bears N. 40° E., 31 lks. dist., marked T. 16 S., R. 1 E., S. 8, B. T. A cedar, 6 ins. diam., bears S. 45° E., 21 lks. dist., marked T. 16 S., R. 1 E., S. 17, B. T. A pinion pine, 12 ins. diam., bears S. 45° W., 69 lks. dist., marked T. 16 S., R. 1 E., S. 18, B. T. A pinion pine, 9 ins. diam., bears N. 60° W., 11 lks. dist., marked T. 16 S., R. 1 E., S. 7, B. T. Sand, mountainous. Soil, clay and gravelly loam; 2nd rate. Timber, scattering cedar and pinion pine. Undergrowth, oak, maple, and sage. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	N. 89° 43' E., on a random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
79.86	Intersect N. and S. line, 22 lks. N. of the cor. of secs. 8, 9, 16, and 17. Thence we run S. 89° 52' W., on a true line bet. secs. 8 and 17. Over mountainous land,

through dense undergrowth; ascend.

14.50 Top of ridge, 100 ft. above cor., N. 50° E. and S. 60° W.; descend.

35.00 Bottom of swale, 150 ft. below ridge, course N. 30° W.; ascend.

39.9 Top of ridge, 40 ft. above swale bears N. 70° W. and S. 60° E.; set a limestone, 16 x 15 x 6 ins., 11 ins in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 ft. high, N. of cor. Pits impracticable. Descend.

53.00 Head of swale, 40 ft. below course S. 50° W.; ascend.

55.00 Enter scattering timber, bears N. and S.

60.00 Top of ridge, 30 ft. above swale, bears N. 70° E. and S. 70° W.; descend.

79.86 The cor. of secs. 7, 8, 17, and 18.

Sand, mountainous.
Soil, gravelly loam; 2nd rate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 79.86 chs.

September 17, 1898: At the noon hour, the sky is overcast and solar observations are impossible.

N. 89° 55' W., on a random line bet. secs. 7 and 18.

40.00 Set temp. 1/4 sec. cor.

4.37 Intersect W. bdy. of Tp. or Salt S

Subdivision of T. 16 S., R. 1 E. - Continued.

rams. Meridian, 30 lks. N. of the cor. of
ss. 7, 12, 13, and 18.
Thence we run
N. 89° 54' E., on a true line bet. secs.
7 and 18.
Over mountainous land,
ough heavy cedar and
pinion pine timber; descend.
2.25 Bottom of hollow, 15 ft. below cor.,
rse S. 20° W.; ascend.
19.50 Top of spur, 50 ft. above hollow;
bears N. 20° E. and S. 20° W.; descend.
22.00 Se ave heavy timber, bears N.
and S.
25.40 Bottom of hollow, 25 ft. below
ridge, course S. W.; enter dense
oak bears with hollow; ascend.
50.00 Enter heavy cedar and pinion
timber; leave dense
undergrowth, bears N. and S.
54.37 Set a sandstone, 18 x 10 x 8 ins., 12 ins.
in the ground, for ¼ sec. cor.,
marked ¼ on N. face; from which
A cedar, 7 ins. diam., bears N. 42°
W., 50 lks. dist., marked ¼ S. 7, B. T.
A cedar, 20 ins. diam., bears S. 7° 30'
E., 45 lks. dist., marked ¼ S. 18, B. T.
63.00 Top of spur, 50 ft. above ¼ sec.
cor., bears N. 60° E. and S. 60° W.;
descend.
71.25 Bottom of hollow, 100 ft. below
, course S. 40° W.; ascend.
77.50 Top of spur, 150 ft. above hollow,
bears N. 60° E. and S. 60° W.; descend.
87.75 Bottom of branch of Chriss'
Cañon, 150 ft. below spur, course
S. W.; ascend.
94.37 The cor. of secs. 7, 8, 17, and 18.
Sand, mountainous.
Soil, clay loam; 2nd rate.
Timber, cedar, and pinion

ni pine.
Undergrowth, oak.
good grass for grazing.
Mountainous or hearily
land, or land cover
ed with dense undergrowth,
94.37 chs.

N. 0° 3' W., bet. secs. 7 and 8.
Over mountainous land,
heavy cedar and
pinion pine timber; descend.
5.25 Bottom of branch of Chriss' Cañon, course S. 50° W.; ascend.
17.25 Top of ridge, 450 ft. above cañon, bears N. 80° E. and S. 80° W.; descend.
40.00 Set a sandstone, 15 x 9 x 8 ins., 10 ins in the ground, for 1/4 sec. cor., marked 1/4 on W. face; from
nich
A cedar, 6 ins. diam., bears N. 19° E., 89 lks. dist., marked 1/4 S. 8, B. T.
An oak, 3 ins. diam., bears N. 89° W., 34 lks. dist., marked 1/4 S. 7, B. T.
41.00 Creek, 3 lks. wide, 2 ins. deep, in branch of Chriss' Cañon, 100 ft. below ridge, course S. 75° W.; ascend.
51.25 Top of ridge, 200 ft. above cañon, bears N. 50° E. and S. 50° W.; descend.
60.85 Bottom of hollow, 150 ft. below ridge, course S. 65° W.; ascend.
66.25 Top of ridge, 170 ft. above hollow, bears S. W. and N.; thence along top of ridge.
— 0.00 Set a sandstone, 18 x 12 x 8 ins., 12 ins in the ground, cor. of secs. 5, 6, 7, and 8, marked with 5 notches on S. and E. edges; from which

chains. A cedar, 18 ins. diam., bears N. 2 ° E., 101 lks. dist., marked T. 16 S., R. 1 E., S. 5, B. T.
A cedar, 8 ins. diam., bears S. 12 E., 72 lks. dist., marked T. 16 S., R. 1 E., S. 8, B. T.
A cedar, 8 ins. diam., bears S. 5 ° W., 34 lks. dist., marked T. 16 S., R. 1 E., S. 7, B. T.
A cedar, 18 ins. diam., bears N. 6 W., 72 lks. dist., marked T. 16 S., R. 1 E., S. 6, B. T.

Sand, mountainous.
Soil, rich black loam; 1st rate.
Timber, cedar, and pinion pine.
Good grass for grazing.
Mountainous or heavily
wooded land, 80.00 chs.

N. 89° 52' E., on a random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line, 8 lks. N. of the cor. of secs. 4, 5, 8, and 9.

Thence we run S. 89° 55' W., on a true line bet. secs. 5 and 8.

Over mountainous land, rough dense undergrowth, ascend.

5.00 Top of spur, 25 ft. above cor., bears N. 20° E. and S. 60° W.; descend.

32.50 Bottom of hollow, 200 ft. below spur, course S. 60° W.; ascend.

40.05 Set a sandstone, 14 x 10 x 6 ins., 9 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face; and raise a mound of stone, 2 ft.

Subdivision of T. 15 S., R. 1 E. - Continued.

chains	base, 1½ ft. high, N. of cor.
	Pits impracticable.
+5.00	Top of spur, 100 ft. above hollow;
	bears N. 40° E. and S. 70° W.; descend.
-30.10	Cor. of secs. 5, 6, 7, and 8.
	Sand, mountainous.
	Soil, clay loam; 2nd rate.
	No timber.
	Undergrowth, oak, service-berry, and sage.
	Good grass for grazing.
	Mountainous land, or land covered with dense under-growth, 80.10 chs.

	S. 89° 54' W., on a random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
74.95	Intersect the W. bdy. of Tp. or Salt Lake Meridian, at the cor. of secs. 1, 6, 7, and 12.
	Thence we run N. 89° 54' E., on a true line bet. secs. 6 and 7.
	Over mountainous land, through scattering timber and undergrowth; descend.
16.00	Bottom of hollow, 40 ft. below cor., course S. 15° W.; ascend.
23.70	Top of ridge, 80 ft. above hollow, bears N. 25° E. and S. 25° W.; descend.
35.00	Bottom of hollow, 200 ft. below ridge, course S. 30° W.; ascend.
44.20	Top of ridge, 240 ft. above hollow, bears N. 40° E. and S. 40° W.; descend.
50.00	Bottom of hollow, 100 ft. below ridge, course S. 30° W.; ascend.
54.95	Set a sandstone, 15 x 11 x 5 ins., 10 ins. in the ground, for ¼ sec. cor.,

marked 1/4 on N. face; from
which
A cedar, 12 ins. diam., bears N. 70°
E., 61 lks. dist., marked 1/4 S. 6, B. T.
A cedar, 10 ins. diam., bears S.
51° W., 26 lks. dist., marked 1/4 S. 7, B. T.
~ 94.95 The cor. of secs. 5, 6, 7, and 8.
Sand, mountainous.
Soil, clay loam; 2nd rate.
Timber, scattering cedar and
pinion pine.
Undergrowth, oak, maple,
and service-berry.
Good grass for grazing.
Mountainous land, 94.95 chs.

N. 0° 3' W., on a true line bet. secs.
5 and 6.
Over mountainous land,
scattering cedar and
pine timber, and
undergrowth; ascend.
40.00 Top of divide bet. Chriss' and
Sittle Salt Creek Cañons, bears
N. 60° W. and S. 80° E.
Set a sandstone, 18 x 8 x 6 ins., 12 ins.
in the ground, for 1/4 sec. cor.,
marked 1/4 on W. face; from
which
A cedar, 5 ins. diam., bears S. 50°
W., 38 lks. dist., marked 1/4 S. 6, B. T.
No other trees within limits;
raise a mound of stone, 2 ft.
base, 1 1/2 ft. high, W. of cor.
Pits impracticable. Descend.
~ 95.10 Intersect the Third Standard
Parallel 5.00 chs. E. of the stand-
ard 1/4 sec. cor. on S. side of sec.
32, which is a sandstone,

Trans. 8 x 16 x 8 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general.
Set a limestone, 18 x 10 x 6 ins., 12 ins. in the ground, for closing cor. of secs. 5 and 6, marked C. C. on S., with 5 grooves on E. and 1 groove on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
Sand, mountainous.
Soil, clay and gravelly loam 2nd rate.
Timber, scattering cedar and pinion pine.
Undergrowth, oak, maple, service-berry and choke cherry.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth, 95.10 chs.

September 17, 1898.

General Description.

This township is all mountainous land, the soil ranges from rocky to rich black loam. The soil of the heavily timbered land and most of the cañons and hollows is generally rich black loam, capable of producing abundant crops without irrigation. The soil of the remaining portion of the township except the rocky ground can nearly all be classed as second rate and is mostly covered with a dense undergrowth of oak, service-berry, choke-cherry, and sagebrush

chains

The township is covered with an abundant growth of rich and nutritous grasses, and is very well adapted for grazing. There is a very heavy growth of cedar and pinion pine timber in many parts of the township; and some pine and balsom; but most of the accessible timber, suitable for lumber has been cut and hauled away.

The township is very well watered by Sittle Salt Creek, Chriss Creek, Timber Creek, and numerous springs. We find no indications of mineral.

The township is grazed by many hundreds of sheep and cattle from Sanpete and Juab Vallies, and is mainly valuable for grazing purposes. There are no settlers in this township.

Scott P. Stewart,
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

Note.- Finding the closings in sec. 6 exceed the prescribed limit of error, we conclude after testing the accuracy of our own work, to retrace the N. bdy. of said sec. and proceed as follows:

From the closing cor. of Tps. 16 S., Rs. 1 E. and 1 W. heretofore described we run

East on a retracement along the Third Standard Parallel South on S. bdy. of sec 30.1

10.65 The standard ¼ sec. cor. on S. bdy. of sec. 31, which is a sm stone 12 x 16 x 6 ins. above gr firmly set and marked and witnessed as described by the surveyor general.

50.35 The standard cor. of secs. 31 and 32, which is a limestone 8 x 14 x 5 ins. above ground firmly set and marked witnessed as described by the surveyor general.

East, on S. bdy. of sec. 32. on a retracement line.

39.70 The standard ¼ sec. cor. on S. bdy. of sec. 32, heretofore described.

Scott P. Stewart
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

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PAGE

S OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

showing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ..... United States Deputy Surveyor, in surveying all those parts or portions of the ..... of the ..... meridian, ... of ....., which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

Subscribed and sworn to before me this ..... day of ....., 189

.....

SEAL

.....

6–161

541-547
S. Ann

FINAL OATH OF UNITED S A S

I ..... United States Deputy Surveyor,
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing date of
..... day of ....., 189 , I have well, faithfully, and truly, in my o
proper person, and in strict conformity with the instructions furnished by the United States Surve
General for ....., the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of .....

.....

.....

.....

..... of the .....

..... meridian, in the ..... of ....., which are represented in
foregoing field notes as having been surveyed by me, and under my direction; and I do further solem
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Surv
General for ..... and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will s
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

.....
United States Deputy Surv

Subscribed by said ....., and sworn to before me
this ..... day of ....., 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23 1900

The foregoing field notes of the survey of The Subdivisions of Township South Range 1 East of the Salt Lake Base & Meridian Utah,

executed by Scott Stewart & Andrew J Stewart
under the contract No. 27, dated November 1st, 1897, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
surveys they describe, are hereby approved.

Jacob B. T.
United States Surveyor G

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 o

.....
United States Surveyor G

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BOOK A-258

K.3.B.

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

of

Township 15 South, Range 3 East

Of the Salt Lake Base and *Meridian,*

In the State of Utah

AS SURVEYED BY

Scott P. Stewart & Andrew J. Stewart Jr. *United States Deputy Surveyors*

Under ~~*his*~~ their *Contract No.* 247, *dated* November 1st, *1897.*

Survey commenced September 18th, *1898.*

Survey completed September 19th, *1898*

6—161

Subs - high 1-71-15 ✓
" low 10-10 ✓
" Closing 1-30
1-78-32 ✓

Contract -

NAMES AND DUTIES OF ASSISTANTS.

John R. Stewart, Chainman.

Daniel St. Y. McAllister Chainman.

Wm W. Richardson Jr. Chainman.

Alma Betts, Chainman.

Antone P. Stewart, Moundman.

Peter S. Sorensen, Moundman.

Benjamin F. Stewart, Axman.

Grimsby Stewart, Flagman.

For preliminary affidavits see book "A"

BOOK A-258

INDEX DIAGRAM.

Township 13 South, *Range* 3 East

6	5	4	3	4 2	3 1
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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; t we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____

_____, *Chainm*

_____, *Chainm*

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

WE, _____ and _____

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

_____

_____, *Moundm*

_____, *Moundm*

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

WE, _____ and _____

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

_____

_____, *Axm*

_____, *Axm*

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

I, _____, do solemnly swear that I will well and tr perform the duties of flagman according to instructions given me, to the best of my skill and ability, in survey of _____

_____, *Flagm*

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

Subdivision of T. 15 S. R. 3 E. of S. L. B. and M.

Survey commenced September 16, 1898 and executed with a W. and L. E. Gurley light mountain transit No- with solar attachment. The horizontal limb is provided with two double verniers placed opposite each other reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs; and a Buff and Berger transit No 2511, the horizontal limb is provided with two double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct and were approved by the surveyor general for Utah, the former on December 4, 1897, and the latter on April 5, 1898.

We examine the adjustments of the transit, and correct the level and collimation errors; then to test the solar apparatus of the Gurley instrument, by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a true meridian determined by observations on Polaris, we proceed as follows:

At the cor. of secs. 1, 6, 7, and 12, on E. bdy. of T. 15 S. R. 3 E., latitude 39° 32' N. longitude 111° 34' W.; we set off 39° 32' N.; on the lat. arc. 1° 35' N. on the decl. arc; and at 4h 1m p.m., l.m.t., determine a true meridian with the solar, of the Gurley instrument, and mark a point thereof on a stone, set in the ground 5.00 chs. N. of the cor.

At 7h 35m p.m. l.m.t., we observe Polaris at Eastern elongation, with the Buff and Berger instrument, in accordance with the manual of instructions and mark a point in the line thus determined, on a plug driven in the ground, 5.00 chs. N. of our station.

September 16, 1898.

Chains.

September 19: 1898: At 6h 30m a. m., l. m. t., we lay off the azimuth of Polaris 1° 36' to the west on the Buff and Berger instrument, and mark the true meridian thus determined by cutting a small groove in the stone set September 18, on which the true meridian falls 0.38 lns. east of the mark determined with the solar of the Gurley instrument.

At 6h 40m a. m. l. m. t. we lay off the azimuth of Polaris 1° 36' to the west, on the Gurley instrument, and mark the True Meridian thus determined by cutting a small groove in the stone set September 18, on which the true meridian falls 0.38 lns. east of the mark determined with the solar.

At 7h 30m a. m., l. m. t., we set off 39° 32' N., on the lat. arc. 1° 23' N. on the decl. arc; and mark a point in the true meridian determined with the solar of the Gurley instrument, by a cross on the stone already set 5 chs N. of our station; this mark fals 0.32 lns. east of the true meridian established by Polaris Observation.

The solar apparatus of the Gurley instrument, by p. m. and a m. observations, defines positions for true meridians respectively about 0' 20" west and 0' 17" east of the meridian established by Polaris observations; therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian at 7h 35m a. m. is N. 16° 33' W; the angle thus determined reduced by the table page 100 of the manual, gives the mean mag. decl. 16° 30' E.

Chains.	
	Note.- Being unable to find the cor. of secs. 1, 2, 11, and 12, from which to begin our survey, without retracing some line we begin at the cor. of secs. 1, 6, 7, and 12, on E. bdy. of Tp. which is a quartzite stone 12 x 12 x 6 ins., above ground, properly marked and identified as being in the position of the original cor. by Swen Olsen an old resident of this neighborhood.
	Thence we run
	West on a retracement line bet. secs. 1 and 12
40.00	Find no trace of old ¼ sec. cor.
79.00	The cor. of secs. 1, 2, 11, and 12, which is a decayed post with marks nearly obliterated in old mound of earth and pits, bears S. 12 4 lks. dist.
	We destroy all traces of the old cor. and reestablish it at the same point as follows:
	Set a trachyte stone 16 x 10 x 8 ins., 11 ins. in the ground for cor. of secs. 1, 2, 11, and 12, marked with 5 notches on S. and 1 notch on E. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	The course of this line is therefore, S. 89° 06' W., and the distance 79.01 chains.
	North, on a random line bet. secs. 1 and 2.
40.00	Set temp ¼ sec. cor.
81.20	Intersect N. bdy. of Tp. 1 30 lks. E. of the cor. of secs. 1, 2, 35, and 36, which is a sandstone 10 x 10 x 8 ins. above ground, firmly set and marked and witnessed as described by the surveyor general.

Chains. As the falling exceeds the prescribed limits. We set a sandstone 16x10x8 ins., 11 ins. in the ground for closing cor. of secs. 1 and 2, marked C.C. on S., with 1 groove on E. and 5 grooves on W. faces; dig pits 24x24x18 ins. E. and W. 5 ft. and S. of stone 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Thence we run

South, on a true line bet. secs. 1 and 2.

Over nearly level land through dense sage undergrowth and scattering scrub cedar timber.

41.20 Set a sandstone, 17x10x6 ins.; 12 ins. in the ground for ¼ sec. cor. marked ¼ on W. face; dig pits 18x18x12 ins. N. and S. of stone, 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 1½ ft. high, W. of cor.

53.60 Mount Pleasant and Moroni Irrigation canal, 15 lks. wide 18 ins. deep, course S. 80° W.

Enter cultivated land, bears with canal

Leave undergrowth and cedars

63.75 Leave cultivated land, bears N.E. and S.W.;

Enter undergrowth.

68.75 Deseret telegraph line, bears N. 80° E. and S. 80° W.

79.00 A stack yard on D.H. Cook's D.E., bears E. 2.00 chs. dist.

81.20 The cor. of secs. 1, 2, 11, and 12.

Land, nearly level.

Soil, sandy and clay loam; 1st rate.

Timber, scattering scrub cedar.

Undergrowth sage brush.

Good grass for grazing.

Land covered with dense undergrowth 71.10 chs.

Note.- As the closing in sec. 2, exceeds the prescribed limits we proceed to locate

Chains.	
	the error as follows:
	From cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp. heretofore described we run West on a retracement line bet. secs. 2 and 35:
39.30	The ¼ sec. cor. bet. secs. 2 and 35, which is a sandstone 6 x 8 x 8 ins., above ground, marked and witnessed as described by the surveyor general bears S. 62 lks. dist.
79.30	The cor. of secs. 2, 3, 34, and 35, which is a limestone, 6 x 10 x 5 ins., above ground firmly set, and marked and witnessed as described by the surveyor general bears S. 125 lks. dist. The course of this line is therefore S. 89° 06' W., and the distance 79.31 chs.
	Note. - September 19: At the noon hour the sky is overcast during the entire hour, and solar observations impossible.
	From the cor. of secs. 3, 4, 9, and 10, which is a decayed post in old mound of earth and pits, marked and witnessed as described by the surveyor general, and which we reestablish at same point as follows:
	Set a sandstone, 16 x 8 x 8 ins., 11 ins. in the ground for cor. of secs. 3, 4, 9, and 10, marked with 5 notches on S. and 3 notches on E. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist.; and raise a mound of earth, 4 ft. base 1½ ft. high, W. of stone
	We run
	North, on a random line bet. secs. 3 and 4.
40.00	Set temp. ¼ sec. cor.
80.05	Intersect N. bdy. of Tp. at the cor. of secs. 3, 4, 33, and 34, which is a sandstone, 10 x 20 x 14 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general.
	Thence we run
	South, on a true line bet. secs. 3 and 4.

Chains.	
	Over gently rolling ground through dense undergrowth.
40.05	Set a sandstone, 14 x 8 x 6 ins. 9 ins., in the ground for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base 1½ ft. high, W. of cor. Pits impracticable. An old road which bears S. 30° E., and N. 5° E. passes 20 lks. E. of the cor.
	Ascend ridge, bears E. and W.
55.00	Top of ridge, 80 ft. above ¼ sec. cor. bears N. E. and S. W.; descend.
68.50	The Mount Pleasant and Moroni Canal 15 lks. wide 18 ins. deep, course S. 80° W.
	Foot of descent, bears N. 80° E. and S. 80° W.
70.00	N. E. cor. of cultivated field bears W. 50 lks. dist.
77.00	N. S. Madsen's house bears E. about 3.50 chs. dist. His corral, sheds and stack yard are about 2.50 chs. N. of house.
80.05	The cor. of secs. 3, 4, 9, and 10.
	Sand level and rolling.
	Soil, sandy loam and gravelly, 2nd rate.
	No timber.
	Undergrowth sage brush.
	Good grass for grazing:
	Sand covered with dense undergrowth 80.05 chs.

September 19, 1898.

General Description.

This fractional township contains two varieties of land, nearly level, and rolling. The soil is sandy and gravelly loam, 1st and 2nd rate.

There is a dense growth of sage brush and some scattering scrub cedar timber in all except the cultivated portion of the township.

About ⅓ of the ground lies under the Mount

Pleasant and Moroni Canal, and is now under cultivation.

N. S. Madsen, has a house, corral, sheds, and about 15 acres of cultivated land in secs. 3 and 4. He is living on the claim and his improvements are valued at about $750.00. D. H. Cooke's D. E. 4161 has been partially cleared of undergrowth and is now under cultivation. It is watered from the Mount Pleasant and Moroni canal.

There are no other settlers living in this fractional township.

No mineral has been found in the Tp.

Scott P. Stewart.
Andrew J. Stewart Jr.
U. S. Deputy Surveyors.

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Certificate:-

State of Utah.
County of Utah. SS

I, George Havercamp, County Clerk of Utah County, Uth hereby certify that Shadrach M, Richardson was the duly elected, qualifid and acting Justice of the Peace in and for Benjamin precinct, Utah County Utah. That he was elected on November 3rd A.D,1896, and that his Official Bond as Justice elect for the years 1897 and 1898 was duly approved on December 31st,1896.

In witness whereof I, have hereunto affixed the seal of my office at Provo City, Utah this 19th day of Januray A.D.1900.

Geo Havercamp

County Clerk.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Scott B. Stewart and Andrew J. Stewart Jr, United States Deputy Surveyors, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Subdivisions of T. 10 S., R. 1 W.; T. 13 S., R. 2 W.; T. 14 S. R. 1 W.; T. 15 S., R. 1 W.; T. 15 S., R. 1½ W.; T. 17 S. R. 1 W.; T. 16 S., R. 1 W.; T. 18 S., R. 1 E.; T. 17 S. R. 2 E.; T. 17 S., R. 1 E.; T. 16 S. R. 2 E.; and T. 16 S., R. 1 E. of S. L. B. and M. showing the respective capacities in which they acted:

John R. Stewart, Chainman, Wm W. Richardson Jr, Chainman.
Daniel H. Y. McAllister Chainman, Alma Betts, Chainman.
Antone P. Stewart, Moundman.
Peter S. Sorensen, Moundman.
Benjamin F. Stewart, Axman.
, Axman.
Quinby Stewart, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Scott B. Stewart and Andrew J. Stewart Jr, United States Deputy Surveyors in surveying all those parts or portions of the Subdivisions of T. 10 S., R. 1 W.; T. 13 S., R. 2 W.; T. 14 S. R. 1 W.; T. 15 S., R. 1 W.; T. 15 S. R. 1½ W.; T. 17 S., R. 1 W.; T. 16 S., R. 1 W.; T. 18 S. R. 1 E.; T. 17 S. R. 2 E.; T. 17 S., R. 1 E.; T. 16 S., R. 2 E.; & T. 16 S., R. 1 E. & T. 15 S., R. 1 E. of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by ~~him~~ them and under ~~his~~ their 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 Utah.

John R Stewart. Wm W Richardson Jr. Chainman.
Daniel H Y McAllister. Alma Betts, Chainman.
Antone P Stewart Moundman.
Peter S. Sorensen Moundman.
Benjamin F. Stewart. Axman.
Quinby Stewart Flagman. ~~Axman.~~
, Flagman.

Subscribed and sworn to before me this 19th day of September, 1898

Shadrach M. Richardson
Justice of the Peace
Benjamin precinct
Utah Co. Utah

6-151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

We Scott P. Stewart and Andrew J. Stewart Jr., United States Deputy Surveyors do solemnly swear that, in pursuance of a contract received from Jacob B. Blair, United States Surveyor General for Utah, bearing date of the 1st day of November, 1897, we have well, faithfully, and truly, in our own proper persons, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisions of T. 10 S., R. 1 W. T. 13 S., R. 2 W.; T. 14 S., R. 1 W.; T. 15 S., R. 1 W.; T. 15 S., R. 1½ W.; T. 17 S., R. 1 E. T. 16 S., R. 1 W.; T. 18 S., R. 1 E.; T. 17 S., R. 2 E.; T. 17 S. R. 1 E.; T. 16 S., R. 2 E.; ~~and~~ T. 16 S., R. 1 E. and T. 15 S. R. 2 E. of the Salt Lake Base and Meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by us, and under our direction; and we 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 Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, we will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Scott P. Stewart
Andrew J. Stewart Jr.
United States Deputy Surveyors

Subscribed by said Scott P. Stewart & Andrew J. Stewart Jr., and sworn to before me this 16th day of January, 1900

Jacob B. Blair
U. S. Surveyor General

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 23, 1900

The foregoing field notes of the survey of the subdivisions of Townships 15 South, Ranges 3 East of the Salt Lake Base and Meridian, Utah

executed by Scott P. Stewart & Andrew J. Stewart under their contract No. 27, dated November 1st, 1897, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Jacob B. Blair
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

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