Volume

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R0395

BOOK A-395

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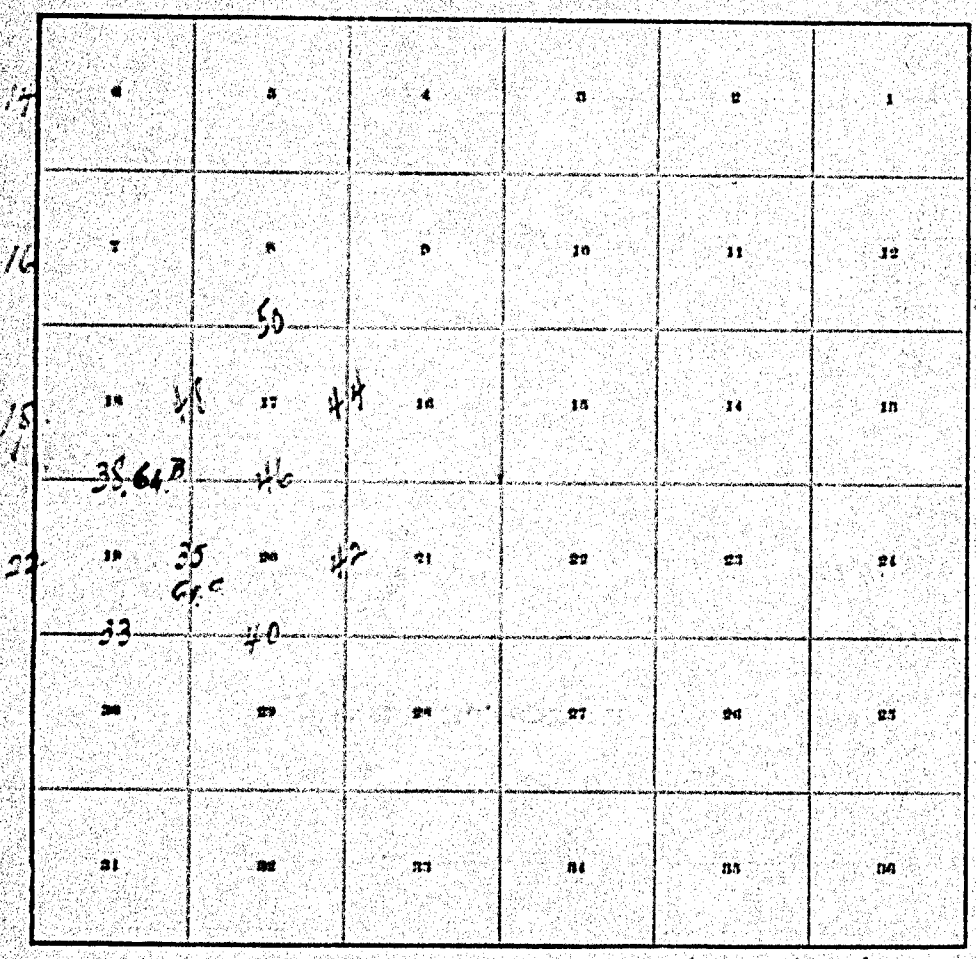
Township 23 South, Range 25 East



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FIELD NOTES

OF THE SURVEY OF THE

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Of the ..... *Meridian,*

In the State of .....

EXECUTED BY

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In the capacity of U. S. Surveyor...., *under instructions dated*....., *191*...

issued by the United States Surveyor General to govern surveys included in Group No. ....., *which were approved by the Commissioner of the General Land Office*, ..., *191*..., *pursuant to authority contained in the Act of Congress dated* ....., *191*...

Survey commenced ....., *191*...

Survey completed ....., *191*...

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FIELD NOTES

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Congress dated ....., 191.....

Survey commenced ....., 191.....

Survey completed ....., 191.....

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FIELD NOTES

OF THE SURVEY OF THE

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Congress dated ....., *191*...

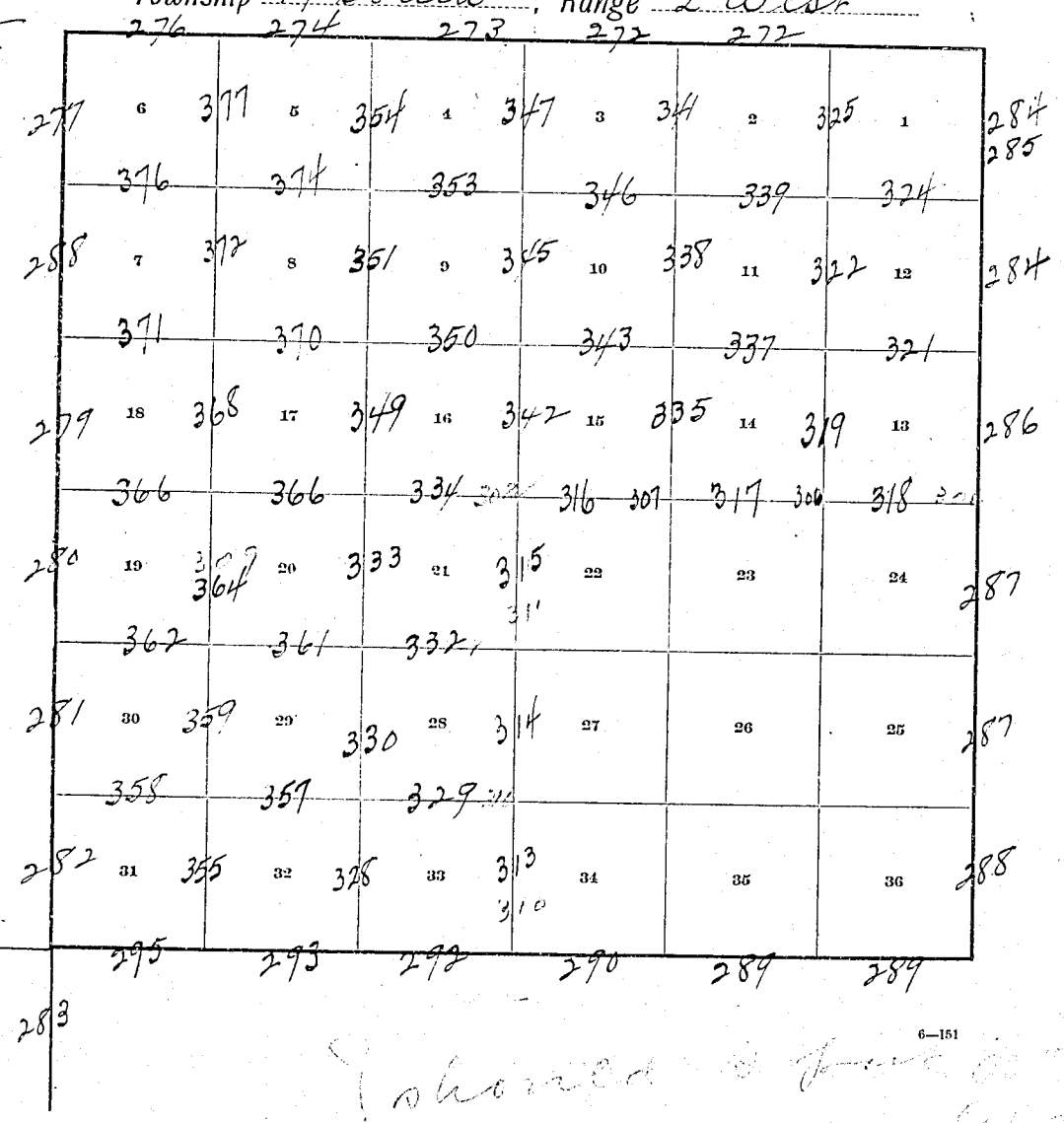
Survey commenced ....., *191*....

Survey completed ....., *191*....

BOOK A-395

INDEX DIAGRAM.

Township 14 South, Range 2 West



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I showed [illegible] where corners only are given

FIELD NOTES

OF THE SURVEY OF THE

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Of the ..... *Meridian,*

In the State of .....

EXECUTED BY

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Survey commenced ..... *, 191....*

Survey completed ..... *, 191...*

E.R.
K.F.B. 9

Filed April 12, 1912.

Obs.MFY.
Ex. VIF.

WSH.

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Book "C"
BOOK A-395

MSB.

FIELD NOTES

OF THE SURVEY OF THE

WEST BOUNDARY

OF

TOWNSHIP 23 SOUTH, RANGE 25 EAST

Of the SALT LAKE BASE AND *Meridian,*

State of UTAH

EXECUTED BY

Howard W. Miller

capacity of U. S. Transitman ~~Surveyor~~, *under instructions dated* March 27, *191*1, *by the United States Surveyor General to govern surveys included in No.* 11, *which were approved by the Commissioner of the General Land* April 20, *191*1, *pursuant to authority contained in the Act of ss dated* , *191*

Survey commenced May 20, *191*1

Survey completed May 25, *191*1.

W. Chy 4-00-00

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NAMES AND DUTIES OF ASSISTANTS.

Earl Harvey, Chainman.

Roscoe Hallett, Moundman.

See also certificate of assistants book "G" T.24 S.R.16 E.

BOOK A-395

INDEX DIAGRAM.

Township ....., *Range* .....

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INDEX DIAGRAM.

Township 23 South, Range 25 East.

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Meanders Page .....

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BOOK A-395

PRELIMINARY OATHS OF ASSISTANTS.

~~We~~, I Earl Harvey and

do solemnly swear that ~~we~~ I will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that ~~we~~ I will report the true distances to all notable objects, and the true lengths of all lines that ~~we~~ I assist in measuring, to the best of ~~our~~ my skill and ability, and in accordance with instructions given ~~us~~ me, in the survey of the West boundary of T. 23 S. R. 25 E.

, Chainman.

Earl Harvey, Chainman.

Subscribed and sworn to before me this 20 day of May, 1911

SEAL

Howard W. Miller
U. S. Transitman,

~~We~~, I Roscoe Hallett and

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of the West boundary of T. 23 S. R. 25 E.

Roscoe Hallett, Moundman.

, Moundman.

Subscribed and sworn to before me this 20 day of May, 1911

SEAL

Howard W. Miller
U. S. Transitman,

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 , 19

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 , 19

SEAL

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West boundary of T. 23 S., R. 25 E.

Chains.

Survey commenced May 20, 1911 and executed with a W. & L. E. Gurley solar compass No. 10143.
For description and test of instrument see book "A" of this survey.
I examine the adjustments of the compass and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications, resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:
At my camp which is situated near the N. bdy. of sec. 32, T. 22 S., R. 24 E., latitude 38° 52' N., longitude 109° 19' 43" W.; I set off 38° 52' on the latitude arc; 19° 55' N., on the decl. arc; and, at 4h. 26m. p.m. l.m.t., determine with the solar a meridian, and mark a point thereof, on a stone, firmly set in the ground. 5 chs. N. of my station.
At 8h. 30m. p.m., by my watch which carries correct l.m.t., I observe Polaris in accordance with the Manual of Instructions and mark the direction thus determined by a tack driven in a picket firmly set, 5 chs. N. of the station.

Astron. l.m.t. of obsn. May 20, 1911		8h	30m
Equiv. to time of May 19.		32	30.
U.C. Polaris May 15	21h 54m.4		
Reduced to May 19	15.7		
U.C. Polaris May 19	21 38.7	21	38.7
Hour angle of Polaris		10	51.3
Azimuth of Polaris		0° 25' W.	

May 20, 1911

West boundary of T. 23 S., R. 25 E.

Chains

May 21: At 7h. 56m. a.m. l.m.t., I lay off the azimuth of Polaris 0° 25' E. and mark the meridian thus determined, by cutting a small groove on the stone set May 20, on which the meridian falls 0.4 lks. east of the mark determined by the solar.
At 8h. 26m. a.m. l.m.t., I set off 38° 52' on the lat. arc., 20° 04 N., on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station, which mark falls 0.3 lks. east of the meridian established by the Polaris observation
The solar apparatus by p.m. and a.m. hours, defines positions for meridians, respectively 0' 21" west and 0' 16" east of the meridian established by the Polaris observation: therefore, I conclude that the adjustments of the instrument are satisfactory
The magnetic bearing of the true meridian at 8h. 30m. a.m. is N. 16° 20' W., which gives the magnetic decl. 16° 20' E.

May 21, 1911

May 22: At 7h. 56m. a.m. l.m.t., I set off 38° 51' on the lat. arc; 20° 16' N. on the decl. arc., and determine a meridian with the solar at the cor. of Ts. 22 and 23 S., Rs. 24 and 25 E., which I established October 28, 1910.
Thence I run
South, bet. secs. 1 & 6:
over mountainous land draining SW., through scattering forest of

West boundary of T. 23 S., R. 25 E.

Chains	
	cedar and pinon and undergrowth of shadscale.
	Descend 50 ft. to
2.40	Wash, 20 lks. wide, drains W. 5 chs., thence SW.
	Ascend 75 ft. to
9.00	Rocky spur, projects W.
	Descend abruptly
19.90	Hollow, 100 ft. deep, drains W.
	Ascend 100 ft. to
30.00	Ridge, bears NE. and SW.
	Descend abruptly into canyon over ledges and boulders.
40.00	200 ft. below top.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 1 on W. half and S 6 on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.
	Pits impracticable
	Trees within limits but none suitable for bearing trees.
	Continue steep descent.
59.90	Wash in canyon, 25 lks. wide, 375 ft. below ridge, course SW.
	Ascend 175 ft. to
76.00	Spur, projects W.
	Descend 25 ft. to
79.00	Wash, 10 lks. wide, course W.
	Ascend.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap
	T 23 S on N. half,
	R 24 E S 1 in NW.,
	R 25 E S 6 in NE.,
	S 7 in SE. and
	S 12 in SW. quadrant,

West boundary of T. 23 S., R. 25 E.

Chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits impracticable No trees within limits Land, mountainous draining SW. Soil, rocky on rocky sub-soil, 4th rate. Timber, scrub cedar and pinon. Undergrowth, short, shadscale. Land, mountainous heavily timbered or covered with dense undergrowth 80.00 chs.
	South, bet. secs. 7 and 12. Over mountainous land, through forest of cedar and pinon and undergrowth of short shadscale. Gradually ascend.
32.00	Top of ridge, 125 ft. above sec. cor., brass NE. and SW. Begin descent towards Dolores river over land facing SW.
40.00	125 ft. below ridge. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 12 on W. half and S 7 on E. half, raise a mound of stone, 2 ft. base 1½ ft. high W. of cor. Pits impracticable. No trees within limits. May 22: At this sec. cor. I set off 20° 17' N., on the decl. arc, and at 11h. 56m. a.m. l.m.t., observe the sun on the meridian; the resulting lat. is 38° 50' Continue to descend.
47.60	Wash in canyon, 30 lks. wide, 400 ft. below ridge, course W.

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West boundary of T. 23 S., R. 25 E.

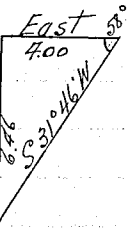
Chains.	
	Ascend over land facing NW.
62.70	Top of bluff, 200 ft. above canyon, bears E. & W.
77.30	Edge of canyon on N. side of Dolores river, bears E. & W.
	Leave timber and undergrowth.
	Descend abruptly over ledges.
80.00	110 ft. below top
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high, for cor. of secs. 7, 12, 13 and 18, marked on brass cap
	T 23 S on N. half,
	R 24 E S 12 in NW.,
	R 25 E S 7 in NE.,
	S 18 in SE. and
	S 13 in SW. quadrant,
	raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
	Pits impracticable
	Note: on account of natural obstacles I am unable to set post in the ground.
	Land mountainous with a general SW. drain.
	Soil, rocky; on rocky sub soil; 4th rate
	Timber, scattering scrub cedar and pinon.
	Undergrowth, short shadscale.
	Land mountainous heavily timbered or covered with dense undergrowth
	80.00 chs.
	May 22, 1911

May 24: At 9h. 27m. a.m. l.m.t., I set off 38° 50' on the lat. arc., 20° 40' N., on the decl. arc., and determined a meridian

West boundary of T. 23 S., R. 25 E.

Chains

with the solar at the cor. of secs. 7, 12, 13 & 18
Thence I run
South, bet. secs. 13 and 18.
over mount anous land.
Descend 30 ft. to
1.75 Right bank of Dolores river
course W.
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone 4 ft. base, 2 ft. high for meander cor. of fracl. secs. 13 & 18
marked on brass cap
T 23 S on N. half,
R 24 E S 13 on W. half,
R 25 E S 18 on E. half,
MC to the south,
raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
Pit impracticable
Note: on account of natural obstacles I am unable to set post in the ground.
To det. true distance across river, I set a flag on left bank, then measure a base line east, 4 chs. dist., to a point from which flag bears S. 31° 46' W., from the flag the east end of the base bears N. 31° 46' E., therefore tan 58° 14' × base or 1.615 × 4 = 6.46 chs. which added to 1.75 chs. makes



8.21 To left bank Dolores river.
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for meander cor fracl. secs. 13 and 18, marked on brass cap
T 23 S MC on N. half,
R 24 E S 13 in W. half and
R 25 E S 18 in E. half,
dig pit, 36 × 36 × 12 ins., S. of post 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high S. of cor.

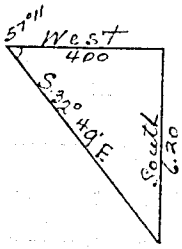
West boundary of T. 23 S., R. 25 E.

chains.

Thence over bottom land facing east at base of high ridge
21.95 Left Bank of Dolores river.
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for meander cor. fracl. secs. 13 & 18, marked on brass cap

T 23 S on N. half.
R 24 E S 13 on W. half,
R 25 E S 18 on E. half and
M C to the south,

raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
Pit impracticable
To determine distance across river I set a flag on right bank, then measure a base line West, 4 chs. to a point from which flag bears S 32° 49' E., from the flag the west end of base bears N., 32° 49' W., therefore tan 57° 11' × base or 1.55 × 4 = 6.20 chs., which added to 21.95 chs makes



28.15 To right bank of Dolores river.
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for meander cor. of fracl. secs. 13 and 18, marked on brass cap

T 24 S M C on N. half,
R 24 E S 13 on W. half and
R 25 E S 18 on E. half,

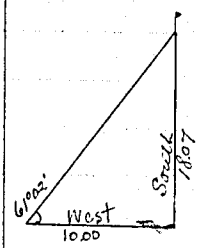
dig pit 36 × 36 × 12 ins., S. of post 8 ft. dist.; raise a mound of earth 4 ft. base, 2 ft. high S. of cor.
May 24: At this cor., I set off 20° 40' N., on the decl. arc; and at 11h. 57m. a.m. l.m.t., observe the sun on the meridian; the resulting latitude is 38° 49'
Gradually ascend across river

West boundary of T. 23 S., R. 25 E.

chains	
	bottom.
35.00	Begin ascent over rocky land facing NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brass cap 1/4 S 13 on W. half and S 18 on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground.
55.00	Top of spur, 200 ft. above river, projects W. Descend abruptly.
57.80	On top of perpendicular sandstone ledge on right bank of Colorado river Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for meander cor. of fracl. secs. 13 & 18, marked on brass cap T 23 S. on N. half, R 25 E S 18 on E. half, R 24 E S 13 on W. half, with M C. to the south, raise a mound of stone, 2 ft base, 1 1/2 ft. high N. of cor. Pits impracticable Note: On account of natural obstacles I am unable to set post in the ground. Being unable to secure a base line at this point to triangulate across river, I erect a signal which can be seen from the left bank. From a point on the left bank of river, south of the meander cor.,

West boundary of T. 23 S., R. 25 E.

chains	
	I measure a base line west, 10.00 chs. to a point from which the base subtends an angle of 61° 02' to the flag at meander cor.; therefore tan. 61° 02' x base, or. 1.807 x 10.00 = 18.07 chs. which added to 57.80 chs. makes.
75.87	To left bank of Dolores river. Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for meander cor. of fracl. secs. 13 and 18, marked on brass cap T 23 S M C on N. half, R 25 E S 18 on E. half, R 24 E S 13 on W. half, from which a cottonwood, 5 ins. diam., bears S. 10½° W., 174 lks. dist., marked M C T 23 S R 24 E S 13 B T a cottonwood, 7 ins. diam., bears S. 5½° E., 155 lks. dist., marked M C T 23 S R 25 E S 18 B T.
	Gradually ascend over gently rolling land through dense undergrowth of sage brush and a few scattering cottonwood trees
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 13, 18, 19 and 24, marked on brass cap T 23 S on N. half, R 24 E S 13 in NW., R 25 E S 18 in NE., S 19 in SE. and S 24 in SW quadrant, dig pits, 18 x 18 x 12 ins. in each sec., 5½ ft. dist.; raise a mound of earth, 4 ft. base, 2 ft. high west of cor. Land, mountainous and level.



West boundary of T. 23 S., R. 25 E.

Chains

Level land along bottom lands of Dolores river and is covered with a dense undergrowth of sage brush and some cotton wood trees. Soil, a rich sandy loam with a deep sand sub-soil; 1st rate.
Soil on mount anonis land, rocky with a rock sub-soil, 4th rate.
Mount anonis land 24.50 chs.
May 24, 1911

May 25: At 7h. 57m. a.m. l.m.t., I set off 38° 49' on the lat. arc, 20° 50' N., on the decl. arc, and determine a meridian with the solar at the cor. of secs. 13, 18, 19 & 24.
Thence I run
South, bet. secs. 19 and 24.
Gradually ascend over nearly level land through dense undergrowth of sage brush, in bottom of Dolores river canyon.
8.00 Road from Cisco Utah to Scharf's ranches, bears E. & W.
9.00 Base of mount ani, bears E. & W. -Ascend abruptly over ledges.
11.50 Spur, 125 ft. high, projects NE.
Enter scattering scrub cedar and pinon, bears NE. and SE.
Descend abruptly over ledges into Blind canyon.
15.00 Wash in Blind canyon, 30 lks. wide, 160 ft. below spur, course N. 20° E.
Ascend from canyon over ledges.
16.00 Top of 75 ft. ledge and brush, 250 ft. above wash, bears N. 20° E. & S. 20° W.
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone

West boundary of T. 23 S., R. 25 E.

Chains.	
	1 ft. base, 2 ft. high for 1/4 sec. cor, marked on brass cap 1/4 S 24 on W. half and S 19 on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.
	Pits impracticable.
	No trees within limits.
	Note: On account of natural obstacles I am unable to set post in the ground.
43.00	Gulch, drains NW.
56.00	Same gulch, drains N. 20° E.
	Ascend.
72.00	Top of ridge and broken mountain top, 360 ft. above canyon, bears N. 20° E. and SW.
	Thence over broken land.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, marked on brass cap T 23 S on N. half, R 24 E, S 24 in NW., R 25 E S 19 in NE. S 30 in SE. and S 25 in SW. quadrant,
	raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.
	Pits impracticable
	No trees within limits.
	Land. Mountainous and level.
	N. 9 chs. level bottom land of canyon
	Soil, rich sandy loam with a deep sand sub-soil, 1st rate
	Undergrowth sage brush.
	S 71 chs. rough mountainous land with general N. drain.
	Soil, rocky on rocky sub-soil; 4th rate.
	Timber, scattering scrub cedar

West boundary of T. 23 S., R. 25 E.

Chains

and pinon.
Undergrowth, some sage brush.
Land mountainous or heavily timbered land on 71.00 chs
May 25: At this sec. cor., I set off 20° 52' N., on the decl. arc., and at 11h. 57m. a.m. l.m.t., observe the sun on the meridian, the resulting lat. is 38° 48'.
There being no land to my knowledge of any value south of this sec. cor., I discontinue my line south.

May 25, 1911.

For general description see book "D" of this survey.

Howard W. Miller
U. S. Transit man

~~FINAL OATHS OF DEPUTY SURVEYOR AND HIS~~ ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W Miller Transitman, United States ~~Deputy Surveyor~~, to assist in running, measuring, and ...king the lines and corners described in the foregoing field notes of the survey of the West boundary of T. 23 S., R. 25 E ...ving the respective capacities in which they acted:

Earl Harvey, *Chainman.*

, *Chainman.*

Roscoe Hallett, *Moundman.*

, *Moundman.*

, *Axman.*

, *Axman.*

, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W Miller, United States ~~Deputy Surveyor,~~ Transitman in surveying all parts or portions of the West boundary of T. 23 S., R. 25 E ...of the Salt ...e Base & meridian, State of Utah, which are represented ...e foregoing field notes as having been surveyed by him and under his direction; and that said survey ...een in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ...r monuments established, according to the instructions furnished by the United States Surveyor ...al for Utah.

, *Chainman.*

Earl Harvey, *Chainman.*

, *Moundman.*

Roscoe Hallett, *Moundman.*

, *Axman.*

, *Axman.*

, *Flagman.*

...ibed and sworn to before me this 25 ...y of May, 19 11

SEAL

Howard W Miller
U. S. Transitman

For certificate of remaining assistants see book "G" T. 24 S. R. 16 E.

BOOK A-395

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 ....., 19 , I have well, faithfully, and truly, in my 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 .....

For final oath of transitman see book "G" T. 24 S. R. 16 E.

..... 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 soler 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.

.....
United States Deputy Surve

Subscribed by said ....., and sworn to before me this ..... day of ....., 19

SEAL

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of the West Boundary of Township 23 South, Range 25 East of the Salt Lake Base and Meridian, Utah

executed by Howard W. Miller under his ~~contract No.~~ special instructions, dated March 27, 19 11, having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas Hall
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

6—151

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Obs. MFY. Filed April 12, 1912.
Ex. VIF. WSH.

4-670

BOOK A-395

Book "D"

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION AND MEANDERS

OF

TOWNSHIP NO.23 SOUTH, RANGE NO.25 EAST

Of the SALT LAKE BASE AND *Meridian,*

the State of UTAH

EXECUTED BY

HOWARD W. MILLER

the capacity of U.S. Transitman *, under instructions dated* March 27 *, 1911,*

ued by the United States Surveyor General to govern surveys included in

oup No. 11 *, which were approved by the Commissioner of the General Land*

ce, April 20 *, 1911, pursuant to authority contained in the Act of*

gress dated *, 191*

Survey commenced May 25 *, 1911,*

Survey completed July 6 *, 1911.*

Subc. 9-77-37

NAMES AND DUTIES OF ASSISTANTS.

Earl Harvey,	Chainman.
Roscoe Hallett,	Moundman.
Offie Scharf,	Flagman.
Offie Scharf,	Axman.

See also certificate of assistants book "G" T.24 S.R.16 E.

BOOK A-395

INDEX DIAGRAM.

Township ....., *Range* .....

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

6—151

BOOK A-395

INDEX DIAGRAM.

Township 23 South, *Range* 25 East.

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

Meanders Page 20 to 25.

PRELIMINARY OATHS OF ASSISTANTS.

~~We~~ I Earl Harvey ~~and~~

do solemnly swear that ~~we~~ I will well and faithfully execute the duties of chainm~~en~~a; that ~~we~~ I will lev chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same ~~we~~ I will report the true distances to all notable objects, and the true lengths of all lines that ~~we~~ I as measuring, to the best of ~~our~~ my skill and ability, and in accordance with instructions given ~~us~~ me, in the sur the subdivision and meanders of T. 23 S., R. 25

, Chai

Earl Harvey, Chai

Subscribed and sworn to before me this 25 day of May, 1911

Howard W Miller
U.S. Transitman

SEAL

~~We~~ I Roscoe Hallett ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundm~~en~~a in the establis of corners, according to the instructions given ~~us~~ me to the best of ~~our~~ my skill and ability, in the sur the subdivision and meanders of T. 23 S., R. 25

Roscoe Hallett, Moun

, Moun

Subscribed and sworn to before me this 25 day of May, 1912

Howard W Miller
U.S. Transitman

SEAL

~~We~~ I Offie Scharf ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axm~~en~~a in the establishment of and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the su the subdivision and meanders of T. 23 S., R. 2

Offie Scharf, A

, A

Subscribed and sworn to before me this 25 day of May, 1911

Howard W Mille
U.S. Transitm

SEAL

I, Offie Scharf, 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 the subdivision and Meanders of T. 23 S R 2

Offie Scharf, Fl

Subscribed and sworn to before me this 25 day of May, 1911

Howard W Mil
U.S. Transitm

SEAL

Subdivision of T. 23 S., R. 25 E.

chains.	
	Survey commenced May 25, 1911 and executed with a W. & L. E. Gurley solar compass No. 1043. For description and test of instrument see book "A" of this survey. The regular test of my solar apparatus on a Polaris meridian at the beginning of this survey is impossible as the survey is begun in the afternoon of May 25, at the completion of the west bdy. of T. 23 S. R. 25 E. I know, however, that my instrument is in perfect adjustment by recent tests on a Polaris meridian. For solar observation see line bet. secs. 19 and 24, W. bdy. T. 23 S. R. 25 E. From the cor. of secs. 19, 24, 25 and 30 on the W. bdy. of the tp. I run
	East, on true line bet. secs. 19 & 30. Over broken mountain top through scattering cedar and pinon and undergrowth of sage brush.
26.80	West side of canyon, brass N. 20° E., and S. 20° W.
	Descend abruptly over ledges
38.64	Allowing for convergency Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brass cap 1/4 S 19 on N. half and S 30 on S. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor. Pits impracticable No trees within limits Continue to descend.
52.00	Wash in canyon, 25 lks. wide, 480 ft. deep, course N. Ascend abruptly over ledges.

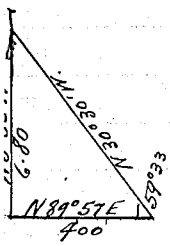
Subdivision of T. 23 S., R. 25 E.

Chains.	
71.00	Top of east side of canyon, 450 ft. above bottom, brass N. + S.
	Thence over rolling mountain top.
78.64	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone, 4 ft. base, 2 ft. high for cor. of secs. 19, 20, 29 and 30, marked on brass cap T 23 S S 19 in NW., R 25 E S 20 in NE., S 29 in SE. and S 30 in SW. quadrant, raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits impracticable No trees within limits Note: on account of natural obstacles I am unable to set posts in the ground. Land mountainous with a general drain to the north. Soil, rocky; 4th rate Sub-soil, rocky. Timber, scattering scrub cedar and pinon. Undergrowth, sage brush Land mountainous heavily timbered or covered with dense undergrowth. 78.64 chs. This 25th day of May, Earl Harvey resigns his position as chainman and I transfer Carl Ray from position of flagman and axman to chainman and hire Offie Schaf. to perform duties of flagman and axman. May 25 - 1911
	May 26: At 7h. 57m. a.m. l.m.t., I set off 38° 48' on the lat. arc.,

Subdivision of T. 23 S., R. 25 E.

Chains		
	21° 01' N., on the decl. arc., and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30	
	Thence I run	
	N. 0° 03' W., bet. secs. 19 & 20	
	Gradually descend over broken mountain top through scattering forest of scrub cedar and pinon and undergrowth of shadscale	
4.00	Hollow, 35 ft. deep, drains W.	
	Gradually ascend	
24.00	Top of high mountain ridge, brass NW. and SE.	
	Gradually descend	
39.50	South side of Dolores river canyon brass E. & W., leave timber.	
	Descend abruptly over rocky land facing N.	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brass cap, 1/4 S 19 on W. half and S 20 on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.	
	Pits impracticable	
	No trees within limits	
	Note: on account of natural obstacles I am unable to set post in the ground.	
55.00	Base of mountain 500 ft. below top, brass E. & W.	
55.05	Road from Cisco, Utah to Allen Schaefs ranch, brass E. and W.	
	Thence across Samuel Schaefs cultivated field	See page 64c
3.70	Left bank of Dolores river.	
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for	

Subdivision of T. 23 S., R. 25 E.

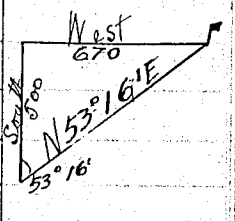
chains	
	Meander cor. of fracl. secs. 19 and 20, marked on brass cap T 23 S R 25 E on N. half, MC S 20 on E. half, and S 19 on W. half, from which
	A cottonwood, 16 ins. diam., bears S 46° W., 235 lks. dist., marked MC T 23 S R 25 E S 19 BT
	A cottonwood, 7 ins. diam., bears S 70¼° E., 130 lks. dist., marked MC T 23 S R 25 E S 20 BT.
	To determine distance across river I set a flag on right bank, then measure a base line N. 89° 57 E, 4 chs to a point from which flag bears N. 30° 30' W, from the flag the east end of base bears S 30° 30' E.,
	
	therefore tan. 59° 33 × base or 1.70 × 4 = 6.80 chs. which added to 63.70 chs makes
70.50	To right bank Dolores river Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground for meander cor. fracl. secs. 19 & 20 marked on brass cap S 20 on E. half, MC. S 19 on W. half and T 23 S R 25 E on N. half, raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor. Pit impracticable. Thence over nearly level land through dense undergrowth of willow and greasewood.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 17, 18, 19 and 20, marked on brass cap T 23 S S 18 in NW., R 25 E S 17 in NE., S 20 in SE. and

Subdivision of T. 23 S., R. 25 E.

chains

S 19 in SW. quadrant, raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
Pits impracticable
Land mountainous and level.
Soil, rocky and sandy loam, 4th and 1st rates.
Timber, cedar and piñon and some cottonwood.
Undergrowth, shadscale, greasewood and willow.
S 55.00 chs. mountainous land draining North and forming south wall of canyon.
N 25 chs. level land in bottom of canyon. Soil a rich sandy loam with deep sand sub soil, 1st rate.
Land mountainous or heavily timbered 55.00 chs.
May 26: At this sec. cor., I set off 21° 02' N., on the decl. arc; and at 11h 57m a.m. l.m.t., observe the sun on the meridian, the resulting lat. is 38° 49'.

West, on random line bet. secs. 18 and 19.
23.70 Right bank Dolores river, set temp. meander cor.
To determine distance across river I set a flag at this point and from a station on left bank of river, West of flag I measure a base line south 5 chs. to a point where the base subtends an angle of 53° 16' to the flag; therefore tan. 53° 16' × base or 1.33998 × 5 = 6.70 chs. which added to 23.70 chs. makes
30.40 To left bank Dolores river.



Subdivision of T. 23 S., R. 25 E.

	Chains	
		Set temporary meander cor.
	40.00	Set temporary 1/4 sec. cor. on left bank of Dolores river.
		At this point the course of river is nearly West. Being unable to secure a base line at any point to triangulate down river I offset as follows.
		South, 8 chs., thence West on offset line. 33.65 chs., or 73.65 chs. from sec. cor.
		thence offset north 8 chs. to true random line and left bank of Dolores river.
		Set temporary meander cor.
	78.65	Intersect West bdy. of the tp. 9 lks. N. of the cor. of secs. 13, 18, 19 and 24 heretofore described
		Thence, I run
		N. 89°56' E., on true line bet. secs. 18 and 19.
		Over level land, through dense undergrowth of sage brush.
	5.00	Left bank of Dolores river
		Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for, for meander cor. for. fract. secs. 18 and 19 marked on brass
See page 64 B		cap T 23 S R 25 E S 18 on N. half, MC S 19 on S. half, dig pit, 36 x 36 x 12 ins., W. of post 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
		Thence, offset S. 8.00 chs.; then run on offset line N. 89°56' E.
	33.65	Offset N. 8.00 chs., to true line
		Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 18 on N. half and S 19 on S. half, from which
		A cottonwood 7 ins. diam., bears

Subdivision of T. 23 S., R. 25 E.

chains	
	S 67½° W., 113 lks. dist., marked 1/4 S 19 BT.
	No tree in sec. 18.
	raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
	Pits impracticable.
	Thence across North end of
	John Scharf's cultivated field.
48.25	Left Bank of Dolores river
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fracl. secs. 18 and 19, marked on brass cap T 23 S R 25 E S 18 on N. half, and M C S 19 on S. half, dig pit, 36 x 36 x 12 ins., W. of post 8 ft. dist., raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.
54.95	Right bank of Dolores river.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for meander cor. of fracl. secs. 18 and 19 marked on brass cap T 23 S R 25 E S 18 M C on N. half and S 19 on S. half, raise a mound of stone, 2 ft. base, 1½ ft. high E. of cor.
	Pits impracticable
	Note: on account of natural obstacles I am unable to set post in the ground.
	Ascend abruptly over south point of high rocky spur.
70.00	Spur, 325 ft. above river, projects S.
	Descend abruptly over ledges.
78.65	290 ft. below top, at base of ledge, The cor. of secs. 17, 18, 19 and 20.

Subdivision of T. 23 S., R. 25 E.

Chains	
	Land, level and mountainous. W. 51.65 chs. level land in bottom of Dolores river canyon. Soil, rich sandy loam, 1st rate with a deep sand sub-soil. Undergrowth sage brush. Some cottonwood trees along river. E. 79.00 chs. rough mountainous land draining south. Soil, rocky on rocky sub-soil, 4th rate. No timber. Undergrowth sage brush. Mountainous land, 79.00 chs.
	May 26, 1911
	May 27: At 7h. 57m. a.m. l.m.t. I set off 38° 48' on the lat. arc., 21° 12' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30
	Thence I run East, brk. secs. 20 and 29. Over broken mountain top through scattering forest of cedar and pinon and undergrowth of shadscale.
19.00	Hollow, 25 ft. deep, drains N. 70° W.
	Ascend 75 ft. to
36.65	Ridge, brass N. & S.
	Descend.
37.75	Top of 25 ft. ledge and west side of canyon, brass N. & S.
	Descend abruptly.
40.00	100 ft. below top of canyon. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brass cap 1/4 S 20 on N. half and S 29 on S. half, raise

Subdivision of T. 23 S., R. 25 E.

Chains	
	a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
	Pits impracticable
	No trees within limits
	Note: on account of natural obstacles I am unable to set post in the ground.
	Continue to descend
62.50	Base of canyon and wash, 30 lks. wide, 480 ft. below top, course N.
	Ascend from canyon over ledges and rocky land facing W.
80.00	Top of canyon and ridge, 500 ft. above base bears N 10° E. and S.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 20, 21, 28 and 29, marked on brass cap,
	T 23 S S 20 in NW.,
	R 25 E S 21 in NE.,
	S 28 in SE. and
	S 29 in SW. quadrant,
	raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
	Pits impracticable
	No suitable trees within limits
	Land, mountainous with a general N. drain.
	Soil, rocky on rocky sub-soil; 4th rate.
	Timber, scattering scrub cedar and pinon.
	Undergrowth, short shadscale
	Land mountainous heavily timbered or covered with dense undergrowth 80.00 chs.
	May 27: At this sec. cor., I set off 21° 13' N., on the decl. arc, and at 11h. 57m. a.m. l.m.t. observe the

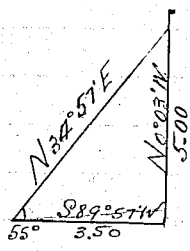
Subdivision of T. 23 S., R. 25 E.

Chains	
	sun on the meridian; the resulting lat. is 38°48'
	N. 0°03' W., bet. secs. 20 & 21. Descend over mount amous land facing nearly NW., through scattering forest of scrub cedar and pinon and undergrowth of short shadscale.
13.50	Edge of canyon, 100 ft. below ridge, bears NW. and SW. Ascend 150 ft. to
23.75	Ridge, bears NW. and S 10° E. Descend over ledges and rocky land facing N.
40.00	Point for 1/4 sec. cor. falls on sandstone ledge where cor. cannot be set.
42.80	Base of ledges, 390 ft. below ridge bears E. & W. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for witness cor. to the 1/4 sec. cor., marked on brass cap. T23 S R25 E on N. half, S 21 on E. half, S 20 on W. half, with W C 1/4 to the south, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable
52.90	Hollow, drains NW. Ascend 75 ft. to
60.10	Top of west side of solid sandstone knoll. Descend.
64.00	Left bank of Dolores river. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone, 4 ft. base, 2 ft. high for meander cor. fracl. secs. 20 and 21, marked

Subdivision of T. 23 S., R. 25 E.

Chains

on brass cap, T 23 S R 25 E on N. half, MC S 21 on E. half and S 20 on W. half, raise a mound of stone, 2 ft. base, 1½ ft. high S. of cor.
Pits impracticable
Note: On account of natural obstacles I am unable to set post in the ground.
To determine distance across river I set a flag on right bank of river, then measure a base line S. 89° 57' W., 3.50 chs. to a point from which flag bears N 34° 57' E., from the flag the west end of base bears S. 34° 57' W., therefore tan. 55° × base or 1.428 × 3.50 = 5.00 chs. which added to 64.00 chs., makes



69.00 Right bank of Dolores river
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fracl. secs. 20 and 21, marked on brass cap T 23 S R 25 E. on N. half, S 21 on E. half and MC S 20 on W. half, raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
Pits impracticable.
Ascend over stony ground facing S.
80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 16, 17, 20 and 21, marked on brass cap

T 23 S S 17 in NW.,
R 25 E S 16 in NE.,
S 21 in SE. and
S 20 in SW. quadrant,

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

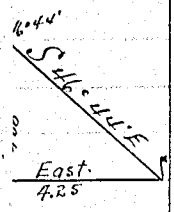
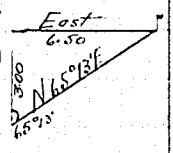
Subdivision of T. 23 S., R. 25 E.

Chains	
	Pits impracticable
	Land, mountainous, draining N. on S. 69.00 chs. and SW. on N. 9 chs.
	Soil, rocky on rocky sub-soil; 4th rate.
	Timber, scattering scrub cedar and pinon.
	Undergrowth, short shadscale.
	Mountainous or timbered land on 80.00 chs.
	May 27, 1911
	July 6: At 7h. 04m. a.m. l.m.t., I set off 38° 49' on the lat. arc., 22° 48' N., on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21
	Thence, I run
	N. 0° 03' W., bet. secs. 16 + 17.
	Over rolling bruch land facing SW.
8.90	Wash, 50 lks. wide, 5 ft. deep, course SW.
	Begin ascent over land facing S.
14.00	Base of mesa and high ledges, bear W. + NE.
	Ascend abruptly.
18.00	Top of ledges, 175 ft. high, bear NE. and W.
	Ascend over rocky land facing SE.
35.00	Top of bruch, bears NE. + SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 17 on W. half and S 16 on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor.
	Pits impracticable
49.00	Begin to ascend.
54.00	Spur, projects E.

Subdivision of T. 23 S., R. 25 E.

Chains	
	Descend 50 ft. to
64.20	Hollow, drains E.
	Thence over broken rocky land.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked on brass cap T 23 S S 8 in NW., R 25 E S 9 in NE., S 16 in SE. and S 17 in SW. quadrant, raise a mound of stone, 2 ft base, 1½ ft. high, W. of cor. Pits impracticable Land mountainous draining south. Soil, rocky on rocky sub soil; 4th rate Timber, a few scattering cedar and pinon. No undergrowth. Mountainous land 80.00 chs. July 6, 1911
	May 29: At 7h 57m a.m. l.m.t., I set off 38° 49' on the lat. arc., 21° 31' N., on the decl. arc., and determine a meridian with the solar at the cor. of secs. 17, 18, 19 + 20 Thence Drew East, on random line bet. secs. 17 and 20.
9.00	Right bank Dolores river. Set temporary meander cor. To determine distance across river, I set a flag on left bank, then measure a base line North, 4 chs. to a point from which flag bears S. 46° 44' E., from the flag the north end of base bears

Subdivision of T. 23 S., R. 24 E.

	Chains	
		N. 46° 44' W., therefore tan 46° 44' × base or 1.062 × 4 = 4.25 chs. which added to 9.00 chs. makes
	13.25	Left bank Dolores river, Set temporary meander cor.
	40.00	Set temporary 1/4 sec. cor.
	57.40	Left bank Dolores river, Set temporary meander cor. To determine distance across river I set a flag on right bank, then measure a base line South, 3.00 chs. to a point from which flag bears N. 65° 13' E., from the flag the south end of base bears S. 65° 13' W., therefore tan 65° 13' × base or 2.166 × 3 = 6.50 chs., which added to 57.40 chs., makes
	63.90	To right bank of Dolores river. Set temporary meander cor.
	80.08	Intersect the cor. of secs. 16, 17, 20 and 21. Thence I run West, on true line bet. secs. 17 and 20. Gradually descend over rolling land facing SW.
	16.18	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fracl. secs. 17 and 20, marked on brass cap, T23SR 25 E MC S17 on N. half and S20 on S. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high E. of cor. Pit impracticable
	22.68	Left bank of Dolores river Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fracl. secs. 17 and 20, marked on brass

Subdivision of T. 23 S., R. 25 E.

chains	
	cap T 23 S R 25 E S 17 on N. half, and MC S 20 on S. half, raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
	Pits impracticable
	Gradually ascend through dense undergrowth of sage brush.
24.10	Canyon wash, 50 lks. wide, course N.
25.50	Wagon road, bears NW. + SE.
30.50	Enter north end of high mountain ridge, bears NE. + S.
	Ascend 60 ft. to
32.10	Spur, projects N.
	Thence over land facing nearly N.
40.04	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 17 on N. half and S 20 on S. half, raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
	Pits impracticable
	Note. Base of mountain bears N. 300 chs.
59.40	Low spur, projects NW.
	Allen Scharf's house bears N. 11° 30' W.
	Gradually descend.
64.15	Road and base of mountain, bears NW. + S 20° W.
	Enter Samuel Scharf's cultivated field.
66.30	Leave field, bears N. + S.
66.83	Left bank of Dolores river
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor., fracl. secs. 17 and 20 marked on brass cap T 23 S R 25 E S 17 MC on N. half, and S 20 on S. half, from which

Subdivision of T. 23 S., R. 25 E.

Chains	
	A cottonwood, 12 ins. diam., bears N. 24 3/4° E., 214 lks. dist., marked MC T 23 S R 25 E S 17 BT.
	No tree in secs 20
	raise a mound of stone, 2 ft. base, 1½ ft. high E. of cor.
	Pit impracticable
71.08	Right bank of Dolores river
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for meander cor. of fracl. secs. 17 and 20 marked on brass cap T 23 S R 25 E S 17 on N. half and MC S 20 on S. half, dig pits 36 x 36 x 12 ins. W. of post 8 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high W. of cor.
	Gradually ascend through dense undergrowth of greasewood.
80.08	The cor. of secs. 17, 18, 19 and 20.
	Land, rolling and mountainous
	Soil, sandy loam and rocky: 1st and 4th rate.
	No timber.
	Undergrowth greasewood and some sage brush.
	Sandy loam soil along bottom land of Dolores river.
	Mountainous land on 33.65 chs.
	July 6: For solar observation see line bet. secs. 16 + 17.
	N. 0° 03' W., bet. secs. 17 + 18
	Bore mountainous land.
	Ascend SE. face of mesa over series of ledges and huge boulders
17.50	Top of spur and steep ascent, 300 ft. above sec. cor., bears E. and SW.
	Gradually ascend.

Subdivision of T. 23 S., R. 25 E.

Chains	
37.00	Ascend abruptly over S. face of ridge.
40.00	On steep S. slope Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone 4 ft. base, 2 ft. high for 1/4 sec. cor., marked on brass cap 1/4 S 18 on W. half and S 17 on E. half, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable Note: on account of natural obstacles I am unable to set post in the ground.
41.30	Top of 25 ft. ledge and rim of mesa, bears E. & W. Thence over broken mesa top through scattering forest of cedar and pinon.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 7, 8, 17 and 18 marked on brass cap T 23 S S 7 in NW., R 25 E S 8 in NE., S 17 in SE. and S 18 in SW. quadrant, raise a mound of stone, 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable Land, mount ainous S. 41.30 chs. forms north wall of Dolores cany on. N. 38.70 chs. broken mesa top draining N. Soil, rocky on rocky sub-soil, 4th rate. Timber, some scattering cedar and pinon on N. 38.70 chs. No undergrowth Mountainous land 80.00 chs.

Subdivision of T. 23 S., R. 25 E.

Chains.	
	July 6: At this sec. cor. I set off 22° 46' N., on the decl. arc, and at 12h. 04m. p.m. l.m.t., observe the sun on the meridian, the resulting lat. is 38° 50'
	East, on random line bet. secs. 8 & 17
40.00	Set temporary 1/4 sec. cor.
80.02	Intersect N. & S. line 5 lks. N. of the cor. of secs. 8, 9, 16 & 17. Thence I run N. 89° 58' W., on true line bet. secs. 8 and 17. Gradually ascend over mountainous land, through scattering cedar and pinon and undergrowth of shadscale.
4.00	Begin steep rocky ascent over land facing SE.
26.00	Top of mesa, 275 ft. above sec. cor., bears N. & S. Gradually ascend.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 26 in. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 8 on N. half and S 17 on S. half, raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor. Pits impracticable
47.50	Ridge, bears N. 20° E. and S. Thence over broken mountain top, draining N.
60.90	Wash, 15 lks. wide, 5 ft. deep, course N.
70.80	Wash, 20 lks. wide, 8 ft. deep, course N.
80.02	The cor. of secs. 7, 8, 17 and 18. Land, mountainous draining SE. on E. 47.50 chs. and north on W.

Subdivision of T. 23 S., R. 25 E.

Chains	
	on W. 37.50 chs. Soil, rocky, on rocky sub soil; 4th rate. Timber, some scattering cedar and pinion. Undergrowth, short shadscale. Mountainous land, 80.02 chs July 6, 1911

Meanders, T. 23 S., R. 25 E.

Meanders of left bank of Dolores river, up stream.
I commence at the meander cor. of frac. secs. 13 and 18 on the W. bdy. of the tp. 75.87 chs. South of the cor. of secs. 7, 12, 13 and 18
May 29: for solar observation see line bet secs. 17 and 20

See page 64D

Thence I run with meanders in sec. 18.
Through dense brush over sandy bank
S. 50¼° E., 6.49 chs. to meander cor. frac. secs. 18 and 19.

Land, level.
Soil, sandy; 1st rate.
Undergrowth, willow and sage brush.
Timber a few cottonwoods.

Thence in sec. 19.
Through high sage brush and willow undergrowth
S. 55¼° E., 4.90 chs. At 50 lks. Bluid canyon wash, 50 lks. wide, course N.
S. 70¾° E., 7.10 chs: At 5 chs. Road. bears SE. & SW. At 6.25 chs. John Scharp house, S. 1 ch.

See page 64D

N. 82° 30' E., 3.80 chs.,
N 77° 00' E. 5.70 chs.
N 74° 45' E., 10.90 chs.
N. 81° 28' E., 3.24 chs; to ¼ sec. cor. bet. secs. 18 & 19.
Land, river bottom.
Soil, sandy loam; 1st rate.
Timber, cottonwood.
Undergrowth, sage and willow brush.
May 29: At this cor. I set off 21° 33' N., on the decl. sic., and at 11h. 57m. a. m. l. m. t., observe the sun on the meridian; the resulting lat is 38° 49'

Thence in sec. 18.
Through dense willow undergrowth
N. 84¾° E., 4.80 chs.
S. 84¾° E., 4.84 chs. to meander cor. frac. secs. 18 & 19.
9.66 chs. N. 89° 56' E. of ¼ cor. bet. secs. 18 & 19.

Land, level.
Soil, stony.

Meanders T. 23 S., R. 25 E.

chains.

Undergrowth, willow.

Thence in sec. 19.
Through dense willow undergrowth
S. 24° E., 1.50 chs.
S 32° 30' E., 5.70 chs. Across east side of John Scharfs field.
S. 43° 30' E., 6.70 chs. At 80 lks. field turns south. Canyon wash, 15 lks wide, 15 ft. deep, course N.
S. 11° 15' E., 2.40 chs
S. 36° 15' E., 7.30 chs. Samuel Scharfs. house and sheds bear South from 2 to 5 chs.
N. 80° E., 17.30 chs. To meander cor. fracl. secs. 19 & 20.
Land, level.
Soil, stony and sandy loam: 3rd and 1st rates.
Undergrowth, willow.
Timber, some cottonwoods

Thence in sec. 20
Over level land near edge of cultivated field, through scattering cottonwood timber
N. 71½° E., 4.00 chs.
N. 43° 30' E., 5.10 chs.
N. 35° 15' E., 4.00 chs.
N. 24° 15' E., 8.80 chs., to meander cor. fracl. secs. 17 and 20, 13.25 chs. east of cor. of secs. 17, 18, 19 and 20.
Land, level.
Soil, sandy loam; 1st rate.
Timber, a few cottonwoods
Undergrowth, some willow

Thence in sec. 17.
Through scattering cotton wood timber and undergrowth of willow

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Meanders T. 23 S., R. 25 E.

N. 26° E., 7.20 chs.
N. 25° E. 2.70 chs. Allen Schafo house bears E.
N. 29° E., 8.40 chs. Along west edge of field.
N. 45° 15' E., 5.40 chs.
N. 76° 15' E., 4.70 chs.
S. 65° 30' E., 14.30 chs.
S. 51° 45' E., 15.30 chs.
S. 23° 30' E. 6.20 chs. At 5.70 mouth of canyon wash, 50 lks. wide course N. To meander cor. fracl. secs. 17 and 20. 57.40 chs. East of cor. of secs. 17, 18, 19 and 20.

Land, level,
Soil, sandy loam; 1st rate.
Timber, some cotton wood.
Undergrowth, willow

Thence in sec. 20
over rocky bank.
S. 1° E., 3.90 chs.
S. 48° 45' E., 11.20 chs.
S. 72° 30' E., 13.70 chs.
S. 63° 30' E., 1.15 chs. To meander cor. fracl. secs. 20 and 21

Land, broken.
Soil, rocky; 4th rate
No timber
No undergrowth.
May 29, 1911

Meanders, T. 23 S., R. 25 E.

Meanders of right bank of Dolores river, down stream.
I commence at the meander cor. of fracl. secs. 20 and 21. heretofore described
July 5: At 8h. 04m. a.m. l.m.t., I set off 38° 49' on the lat. arc., 22° 52' N. on the decl. arc: and determine a meridian with the solar.
Thence I run with meanders in sec. 20.
Through dense undergrowth of sage and willow brush.
West 3.50 chs.
N. 73° 15' W., 7.50 chs.
N. 61° 15' W., 7.30 chs.
N. 11° 02' E., 5.42 chs. to meander cor. fracl. secs. 17 and 20, 16.18 chs. west of cor. of secs. 16, 17, 20 and 21.
Land, level.
Soil, sandy loam; 1st rate
No timber.
Undergrowth, sage and willow.

Thence in sec. 17.
Over stony bank.
N. 8° W., 5.00 chs.
N. 53½° W., 20.50 chs. At 3.00 wash, 60 lks. wide, course SW
N. 60° W., 16.00 chs. At 14.10 chs. wash 30 lks. wide, course S° At 14.90 chs. wash, 25 lks. wide, course S°
N. 84° 30' W., 5.80 chs.
S. 59° W., 8.00 chs. Through dense willow
S. 31° 45' W., 15.60 chs.
S. 21° W., 9.05 chs. to meander cor., fracl. secs 17 and 20 9.00 chs east. of cor. of secs. 17, 18, 19 and 20.

Meanders, T. 23 S., R. 25 E.

Land, level.
Soil, rocky and sandy loam; 4th and 1st rates.
No timber
Undergrowth, some willow

Thence in sec. 20
Through dense brush and scattering cottonwood timber
S. 37° 30' W., 5.50 chs.
S. 48° 00' W., 7.70 chs. to meander cor. fracl. secs. 19 and 20

Land, level.
Soil, Sandy loam; 1st rate.
Timber, some cottonwood
Undergrowth, willow.

Thence in sec. 19.
Through dense brush.
S. 58° 45' W., 9.30 chs.
S. 82° 15' W., 8.00 chs.
N. 32° 45' W., 14.40.
See page 64 E.
North 3.19 chs. Ascend over ledge. To meander cor. fracl. secs. 18 and 19, 23.70 chs. West of cor. of secs. 17, 18, 19 and 20.

Land level and broken,
Soil, sandy loam and rocky; 1st and 4th rates.
Undergrowth, dense willow.
Timber, a few cottonwoods.
July 5: Sky overcast at noon, observations for lat. impossible

Thence in sec. 18.
Over rocky bank.
See page 64 E.
N. 47° W., 5.00 chs.
N. 67° 45' W., 6.80 chs. Mouth of Gulch.
N. 83° W., 7.00 chs.

Meanders, T. 23 S., R. 25 E.

S. 80° W. 8.00 chs.
S. 75° 30' W., 10.80 chs.
N. 85° W., 8.80 chs.
N. 51° W., 7.50 chs.
N. 20° 01' W., 15.06 chs. At 12.00 chs. begin ascent over sandstone ledges To meander cor. frac. secs. 13 & 18, 57.80 chs south of cor. of secs. 7, 12, 13 and 18 on the W. bdy. of the tp.

Land, broken and level.
Soil, rocky; 4th rate
No timber
Some willow undergrowth.
July 5, 1911

General Description.

The portion of this township as surveyed under this assignment consists of mountainous and level land. The soil of the mountainous part which lies on the north and south sides of the Dolores river canyon is all rocky and has a rock sub soil of volcanic formation which can be classed as 4th rate. The soil of the level or gently rolling land in the bottom of the Dolores river canyon is generally rich sandy loam and has a deep sand sub soil, which may be classed as 1st rate.
A short scrubby growth of cedar and pinon of no commercial value exist upon the mountainous part, while upon the lower lands a heavy growth of sage brush and some cottonwood trees along the Dolores river are found.
The tp. is well watered by the Dolores river which flows through secs. 17, 18, 19 and 20 in a westerly direction.
John Schaf's ranch in sec. 18, contains about 30 acres now under cultivation. His improvements amount to about $4000.
Samuel Schaf's ranch in secs. 19 and 20, contains about 40 acres of land now under cultivation His improvements amount to about $4000
Allen A. Schaf's ranch in sec. 17 contains about 25 acres under cultivation. His improvements amount to about $2500.
These ranches are cultivated by

General Description

irrigation, the water being taken from the Dolores river. The construct of the ditch which carries the water to the land would cost approximately $3000.
These ranches compose all the agricultural land in T. 23 S., R. 25 E.
I am unable to find any traces of mineral in the tp.

Howard W. Miller
U. S. Transitman.

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Page

FINAL OATHS OF ~~DEPUTY SURVEYOR AND HIS~~ ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W Miller Transitman, United States ~~Deputy Surveyor~~, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the subdivision and Meanders of T. 23 S R 25 E showing the respective capacities in which they acted:

Earl Harvey, *Chainman.*

, *Chainman.*

, *Moundman.*

, *Moundman.*

, *Axman.*

, *Axman.*

, *Flagman.*

FINAL OATH OF ASSISTANTS.

~~We~~ 3 hereby certify that ~~we~~ 2 assisted Howard W Miller, United States ~~Deputy Surveyor~~ Transitman, in surveying all those parts or portions of the subdivision and meanders of T. 23 S., R 25 E of the Salt Lake Base + meridian, State of Utah, 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 Utah

Earl Harvey, *Chainman.*

, *Chainman.*

, *Moundman.*

, *Moundman.*

, *Axman.*

, *Axman.*

, *Flagman.*

Subscribed and sworn to before me this 25 day of May, 1911

SEAL

Howard W Miller
U. S. Transitman

BOOK A-395

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 ....., 190 , 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 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 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.

.....
United States Deputy Survey

Subscribed by said ....., and sworn to before me
this ..... day of ....., 190

.....

SEAL

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL, ...

....., 190

The foregoing field notes of the survey of .....
.....
.....
.....
.....
.....
.....
executed by .....
under his contract No. ....., dated ....., 190 , having be
critically examined, and the necessary corrections and explanations made, the said field notes, and t
surveys they describe, are hereby approved.

.....
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

FINAL OATHS OF ~~DEPUTY SURVEYOR AND HIS~~ ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Howard W Miller Transitman, United States ~~Deputy Surveyor~~, to assist in running, measuring, and ...king the lines and corners described in the foregoing field notes of the survey of the subdivision and meanders of T. 23 S., R 25 E. ...wing the respective capacities in which they acted:

..... Chainman.

..... Chainman.

Roscoe Hallett ..... Moundman.

..... Moundman.

..... Axman.

Offie Scharf ..... Axman.

Offie Scharf ..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Howard W Miller, United States ~~Deputy Surveyor~~ Transitman, in surveying all ...e parts or portions of the the subdivision and meanders of T. 23 S R 25 E

..... of the Salt ...ke Base & meridian, State of Utah, which are represented ...e foregoing field notes as having been surveyed by him and under his direction; and that said survey ...been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ...r monuments established, according to the instructions furnished by the United States Surveyor ...ral for Utah

..... Chainman.

..... Chainman.

..... Moundman.

Roscoe Hallett ..... Moundman.

..... Axman.

Offie Scharf ..... Axman.

Offie Scharf ..... Flagman.

...ribed and sworn to before me this 6 ...ay of July, 1901

SEAL

Howard W Miller
U. S. Transitman

For certificate of remaining assistants see book "G" T.24 S.R.16 E.

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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 ....., 190 , I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Sur
General for ....., the Manual of Surveying Instructions, and the laws o
United States, surveyed all those parts or portions of .....

For final oath of transitman see book "G" T.24 S., R.16 E.

..... 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, and
the foregoing are the original field notes of such survey.

.....
United States Deputy Surv

Subscribed by said ....., and sworn to before me
this ..... day of ....., 190

SEAL

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1914.

The foregoing field notes of the survey of the Subdivision and Meanders of Township 23 South, Range 25 East of the Salt Lake Base and Meri ian, Utah,

executed by Howard W. Miller
under his ~~contract No.~~ special instructions, dated March 27, 1911 ~~xxx~~, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
surveys they describe, are hereby approved.

Thomas Kell
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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Between pages ...

Filed: April 12, 1912.
BOOK A-395 May 1, 1916.

63B

4—679

— D. —

Make cross-references when book is rebound

notes should
bound with
original notes
the survey of
is Tp. book 395,
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FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION AND MEANDERS

AND

EXAMINATION AND RESURVEY OF MEANDERS

OF

TOWNSHIP NO. 23 SOUTH, RANGE NO. 25 EAST

Of the SALT LAKE BASE AND *Meridian,*

the State of U T A H

EXECUTED BY

HOWARD W. MILLER AND RALPH GENTRY

the capacity of U.S. Transitman and *U. S. Surveyor, under instructions dated* March 27, *191*1,

ued by the United States Surveyor General to govern surveys included in

oup No. 11, *which were approved by the Commissioner of the General Land*

ice, April 20, *191*1; and instructions dated April 26, 1915,
ued by the Assistant Supervisor of Surveys for the District of Utah,
er authority of General Land Office letter "E" dated April 3, 1915.

Survey commenced May 20, *191*1

Survey completed May 12, *191*5.

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NAMES AND DUTIES OF ASSISTANTS.

Earl Harvey,	Chainman.
Roscoe Hallett,	Moundman.
Offie Scharf,	Axman.
Office Scharf,	Flagman.

See also certificate of assistants book "G" T.24 S., R.16 E.

INDEX DIAGRAM.

Township ....., *Range* .....

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

Examination and Resurvey of Meanders in T.23 S.,R.25 E.

Chains Survey commenced May 9, 1915, and executed with a Buff and Buff transit No. 8028, with smith 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.

The instrument was approved by the Assistant Supervisor of Surveys for Utah.

A 5 chain steel tape and clinometer were used to make all measurements. I tested the tape frequently by comparing it with a standard 1 chain tape kept for this purpose only.

I examine the adjustments of the transit, find them correct; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

In the SW. cor. of sec. 17, T.23 S.,R.25 E., in approximate latitude 38°48'N., longitude 109°14'W., I observe Polaris at 4^h27^ma.m.,l.m.t., at Eastern Elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs.north of my station.

At 7:00 a.m.,l.m.t., I lay off the azimuth of Polaris 1°28' to the west, and mark a point in the line thus determined on a stake driven in the ground, 5 chs. N. of my station.

At 7^h56^m a.m.,l.m.t., I set off 38°48'N. on the lat. arc; 17°11'N. on the decl. arc, and mark a point on the meridian determined with the solar, on the stake already set 5 chs. north of my station; this mark falls 0.3 ins. E. of the meridian established by the Polaris observation.

At 11^h56^ma.m.,l.m.t., I set off 17°13'N. on the decl. arc and observe the sun on the meridian;the resulting lat. is 38°48'.

Examination and Resurvey of Meanders in T.23 S.,R.25 E.

Chains

At 3^h56^m p.m.,l.m.t., I set off 38°48' on the lat. arc; 17°16'N. on the decl. arc, and determine a meridian with the solar. This meridian falls 0.2 ins. W. of the meridian established by Polaris.

The solar apparatus, by a.m. and p.m. observations, defines positions for meridians respectively about 16" E and 11" W. of the meridian established by Polaris observation; therefore I conclude that the adjustments c the instruments are satisfactory.

The magnetic bearing of the true meridian at 4^h30^m p.m. is N.15°30'W., the angle thus determined gives the mag. decl.15°30'E.

May 9, 1915.

May 10: At 7^h56^ma.m.,l.m.t., I set off 38°48' on the lat arc; 17°28'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 13,18,19 and 24, on the W. Bdy. of Tp., which is an iron post, 3 in diam., 12 ins. above ground, with brass cap marked

T 23 S
R24E | R25E
S13 | S18
S24 | S19
1911

witnessed by pits 18x18x12 ins. in each sec., 5½ ft. dist., and a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Thence I retrace,

N.39°56'E., bet. secs. 18 and 19,

Over nearly level land, through undergrowth of sage bru and greasewood.

5.00 Intersect the Meander cor. on left bank of the Dolores river, for fractional secs. 18 and 19, which is an ir post, 1 in. diam., 12 ins. above the ground, with bra cap marked

T 23 S R25E
S 18
S19 mc
1911

Examination and Resurveys of Meanders in T.23 S., R.25 E.

Chains

witnessed by a pit 36x36x12 ins. 8 ft. W. of the cor., and md. of earth, 4 ft. base, 2 ft. high W. of cor.

Thence, offset S., 8.00 chs., then run on offset line N.89°56'E., through sec. 19.

38.65 Offset N. 8.00 chs. to true line. Thence continue bet. secs. 18 and 19, through field.

38.70 Intersect the $\frac{1}{4}$ sec. cor. and meander cor. on left bank of the Dolores river, which is an iron post, 1 in. diam 12 ins. above ground, firmly set, with brass cap marked

S 18
$\frac{1}{4}$
S 19
1911

The bearing tree to this cor. has been destroyed by beavers, and there being no other trees available, I raise a mound of stone, $2\frac{1}{2}$ ft. base, 2 ft. high, N. of the cor.

Thence across the N. end of Samuel Scharf's field.

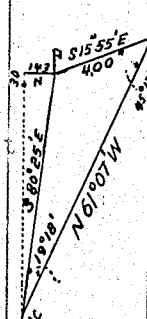
47.29 Intersect the meander cor, on the left bank of the Dolores River, which is an iron post, 1 in. in diam., 12 ins. above ground, firmly set, with brass cap marked

T23S R25E
S 18 MC
S 19
1911

witnessed by a pit 36x36x12 ins. W. of post 8 ft. dist. and a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

To determine the distance across the river, I proceed as follows: The river running into face of ledge on the right bank of river on line, and there being a small rocky point projecting S. which it is impractable to set up transit on, I set a flag S.80°25'E. on right bank of river. I then proceed to flag, from which I measure a base line S.15°55'E., 4.00 chs. dist., to a point from which the M.C. on the left bank of river bears N.61°07'W. I compute the dist. from the M.C. to the flag, as follows:

$$\frac{\sin 45°12'}{\sin 19°18'} \times 4.00, \quad \text{or } \frac{.7096 \times 4.00}{.3305} = 8.59 \text{ chs.}$$



Examination and Resurveys of meanders in T.23 S.,R.25 E.

Chains	
	From flag I offset N. 1.43 chs.to true line, in cove in ledge, thence S.89°56'W. 31 lks. dist., to
55.45	On shelf of ledge, about 50 lks. from river. Note: The river at this time is very high, and runs along face of ledge, making it impossible to follow H.W.Miller's line across river or to get along ledge where river runs. I am unable to find the meander cor. as described in notes of H.W.Miller; evidently it has been washed out either by storms of the river, as it was se on the ledge in a mound of stone.
	I mark a cross (X) on ledge for meander cor. of fracl. secs. 18 and 19., with "MC" W. of cross, and three grooves S. of cross. on right bank of river.
	Note: On account of bare sandstone ledge, I am unable to perpetuate this cor. by setting an iron post, or by raising a mound of stone.
	Thence I continue, N.89°56'E., asc. abruptly over sandstone ledges.
70.00	Point of sandstone spur, 325 ft. above the river, projects S.
	May 10: At this point, I set off 17°30'N. on the decl. arc, and at $11^h 56^m$ a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 38°48'.
	Desc. over series of sandstone ledges, bear NW. and SE
78.75	Fall 3 lks. S. of the cor. of secs. 17,18,19 and 20, which is an iron post, 2 ins. diam., 12 ins. above ground, firmly set, with brass cap marked

T23S	R25E
S 18	S 17
S 19	S 20

1911

witnessed by a mound of stone, 2½ ft. base, 2 ft. high W. of cor.

The true course of this half is therefore N.89°53'E., and the dist. 40.05. chs,

Land of the W. 55.45 chs., nearly level, along the can-

Examination and Resurveys of Meanders in T.23 S.,R.25 E.

Chains

yon of the Dolores River; soil, dark sandy loam, 1st. rate. Land on the E. 23.30 chs. rough and mountainous; soil, light sandy loam,loose rock and ledges, 4th. rate Scattering cottonwood trees along the banks of the river. Sage brush and greasewood undergrowth, and willows along the banks of the river.

The meander cor. of fracl. secs. 19 and 20, on the left bank of the Dolores River, set at 63.70 chs. N.0°03'W. from the cor. of secs. 19,20, 29 and 30,by H.W.Miller, U.S.Surveyor, having been washed out by floods, I proceed to reëstablish same as follows:

From the $\frac{1}{4}$ sec. cor. bet. secs. 19 and 20, which is an iron post, 1 in. diam., set in a mound of stone 4 ft. base, 2 ft. high, with brass cap marked

S $19\frac{1}{4}$ | S 20
1911

witnessed by a mound of stone, $2\frac{1}{2}$ ft. base, 2 ft. high W. of cor., I run

N.0°03'W. bet. secs. 19 and 20, on line for the sec. cor. of secs. 17, 18, 19 and 20, which is visible

Desc, abruptly over rough broken land, through scattering cedars and pinon timber and undergrowth of shadscale and grass

15.00 Base of mountain, 450 ft. below the $\frac{1}{4}$ sec. cor., bears E. and W., thence over nearly level bottom land.

15.10 Road, from Cisco, Utah, to Allan Scharf's ranch, bears E. and W.

23.41 Left bank of the Dolores River. The cor. set. by H.W. Miller, U.S.Surveyor, on this bank being washed out, I reëstablish it as follows:

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for meander cor. of fracl. secs. 19 and 20, with brass cap marked

Examination and Resurvey of Meanders in T. 23 S.,R.25 E

Chains

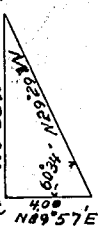
T23S R25E
MC
S19 | S20
1911

from which

A cottonwood, 16 ins. diam., bears S.55°W., 211 lks. dist., marked MC T23S R25E S 19 BT

A cottonwood, 7 ins. diam., bears N.87°15'E.,118 lks. dist., marked MC T23S R25E S 20 BT

To determine the dist. across the river to the meander cor. on the right bank, which is visible, I measure a base line, N.89°57'E., 4.00 chs., to a point, from which the meander cor, on the right bank bears N.29° 29'W. From the meander cor. on the right bank the east end of the base line bears S. 29°29'E.; by separate measurement of each angle they are found respectively 90°00', 60°34', and 29°26'; their sum being 180°. I compute the dist. to the meander cor. as follows:



tan 60°34' X base or 1.7723 x 4.00 = 7.09 chs.

which added to 23.41 chs. makes

30.50 To meander cor. of fracl. secs. 19 and 20 on the right bank of the river, which is an iron post, 1 in. diam., 12 ins. above the ground, with brass cap marked

T 23 S | R 25 E
S 19 | S 20
MC

witnessed by a mound of stone, 2 ft. base, 1½ ft. high N. of cor.

Thence asc. gradually through greasewood and willows.

32.00 Leave willows, bears NE. and SW.

39.94 The cor. of secs. 17, 18, 19 and 20, heretofore described.

Land on S. 15 chs. of half. mile, rough and mountainous; soil, light sandy loam, loose rocks and ledges, 4th. rate. Land on N. 25 chs. nearly level, in bottom of canyon; soil, rich sandy loam, 1st. rate. Timber, scattering cedars and pinon pine, and scattering cottonwood along the river. Shadscale and greasewood under-

Examination and Resurvey of Meanders in T.23 S.,R.25 E.

Chaina

growth, with good grazing grass, and dense willows along the river.

May 10. 1915.

MEANDERS, T. 23 S.,R. 25 E.

Meanders of left bank of the Dolores River, up stream.

May 11: At $7^h 56^m$ a.m.,l.m.t., I set off 38°48' N. on the lat. arc, 17°43'N. on the decl. arc, and determine a meridian with the solar at the meander cor. of fracl. secs. 18 and 19, 5.00 chs. E. of the cor. of secs. 13,18, 19 and 24.

Thence I run with meanders in sec. 19.

Through sage brush and willows

S.55½°E., 4.90 chs.	At 50 lks., wash 50 lks. wide, 10 ft. deep, drains N.
S.70¾°E., 7.10 "	At 5.00 chs. road bears NW. and SE. At 6.25 chs. Geo. Wisters house bears S., 1.00 chs. dist.
N.82½°E., 3.80 "	Across Geo. Wister's field. Note: Settlers state that the river has changed its course from here since the survey made by H.W.Miller, U.S.Surveyor.
S.85°E., 4.00 "	
N.75¼°E., 5.50 "	
N.65¼°E., 7.40 "	
N.82½°E., 3.25 "	To ¼ sec. cor. bet. fracl. secs. 18 and 19.

Thence in sec. 18.

Through dense willows

N.84¾°E., 4.80 chs.

S.83°25'E.3.85 chs. To meander cor. of fracl. secs. 18 and 19, 8.59 chs. N.89°56'E. of the ¼ sec. cor. bet. secs. 18 and

Examination and resurvey of Meanders in T.23 S.,R.25 E.

Chains

Land, river bottom.,

Soil, dark sandy rich loam, 1st. rate.

Dense willow undergrowth.

Thence in sec. 19

Through dense willow undergrowth.

S.29°E., 1.50 chs.

S.32½°E.,5.70 " Across E. side of Samuel Scharf's field.

S.43½°E.,2.40 " At 80 lks., wash, 15 lks. wide, 15 ft. deep, drains N.

Note:Settlers state that the river has changed its course considerably throughout the remaining portion of the section, since the survey made by. H.W.Miller, U.S.Surveyor, in 1911.

S.20½°E.,3.00 " Across Samuel Scharf's field.

S.43°E., 6.40 " Across Samuel Scharf's field.

At 4.00 chs. wire fence, bears N. and S. Leave field, and enter greasewood and willows.

May.11: At this point, I set off 17°46'N. on the decl. arc, and at 11^h56^ma.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 38°48'.

S.77½°E., 16.40 chs.

N.62½°E., 5.30 chs. To re-established meander cor. of fracl. secs. 19 and 20.

Land, nearly level river bottom.

Soil, rich dark sandy loam, 1st. rate.

Sage brush, greasewood and willow undergrowth.

Thence in sec. 20

Through scattering cottonwoods and dense willows.

N.67°50'E., 4.15 chs.

Examination and Resurvey of Meanders in T.23 S., R.25 E.

Chains

N.43½°E., 5.10 chs.

N.35¼°E., 4.00 "

N.24¼°E., 8.80 " To meander cor. of fracl. secs. 17 and 20., 13.25 chs. E. of the cor. of secs. 17, 18, 19 and 20.

Land, nearly level, along river bottom.

Soil, rich dark sandy loam, 1st. rate.

Undergrowth, sagebrush, greasewood and dense willows; scattering cotton wood timber.

May 11, 1915

T

Meanders of the Right bank of the Dolores River, down stream.

I commence at the meander cor. of fracl. secs. 19 and 20, which is 9.44 chs. S. of the cor. of secs. 17, 18, 19 and 20.

At this cor., May 12, I set off 38°48' on the lat. arc; 17°59'N. on the decl. arc, and at 7^h56^ma.m., l.m.t., determine a meridian with the solar.

Thence I run with meanders in sec. 19.

Over nearly level river bottom, through greasewood and and dense willows.

S.58¾°W., 9.30 chs.

S.82½°W., 3.90 " Note: According to the statements of several settlers, the river has changed its course considerably through this portion since the survey made by H.W.Miller, U.S. Surveyor, in 1911.

N.79°W., 5.40 "

N.4¾°W., 2.20 "

N.39°W., 5.40 "

N.22½°W., 6.40 "

N.7¾°W., 1.50 " Ascend over sand stone ledges to re-established point for meander cor, of frac. secs. 18 and 19.

Examination and Resurvey of Meanders in T.23 S.,R.25 E.

Chains

Land, nearly level, except on last course, which is rough and mts.

Soil, sandy loam and gravel.

Undergrowth greasewood and willows.

Thence in sec. 18.

Over rough sandstone ledge.

N.44°W.,	4.55	chs.	On top of ledge 75 ft. high.
N.67¾°W.,	6.80	"	Across mouth of gulch.
N.83°W.,	7.00	"	Along top of sandstone ledge.
S.84°W.,	6.20	"	Desc. over ledges. Note: Settlers state that the river has changed its course in this locality, since the survey made by H. W. Miller, U.S.Surveyor, in 1911.
N.82¾°W.,	8.60	"	Over nearly level bottom land, through willows and greasewood undergrowth.
S.45¼°W.,	6.40	"	
N.85°W.,	8.80	"	
N.51°W.,	7.50	"	
N.20°W.,	15.10	chs.	At 12.00 chs. asc. over ledges. To meander cor. of fracl. secs. 13 and 18, 57.80 chs. S. of the cor. of secs. 7,12,13 and 18, on W. Bdy.

Land, nearly level river bottom, and rough mountainous.

Soil, sandy loam, gravel, and sandrock ledges.

Undergrowth, greasewood and willows.

May 12, 1915.

Ralph Gentry

U.S.Surveyor.

Exteriors of Retracemants and Resurveys in T.23 S.,R.25 E.

Latitudes, Departures and Closing Errors.

Line designated	True Bearing	Distance.	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
Bet. frac. secs. 19 and 20.....	N.0°03'W.	63.41	63.41	.....	.....	0.06
Meanders of left bank in sec. 20.....	N.67°50'E.	4.15	1.57	.....	3.84	.....
".....	N.43½°E.	5.10	3.70	.....	3.51	.....
"	N.35¼°E.,	4.00	3.27	.....	2.31	.....
"	N.24¼°E.,	8.80	8.02	.....	3.61	.....
Bet. frac.secs.17 and 20	West	13.25	.....	.....	.....	13.25
Bet. secs. 18 and 19..	S.89°53'W.	23.30	.....	0.05	.....	23.30
Meanders of right bank in sec. 18.....	N.44°W.	4.55	3.27	.....	.....	3.16
".....	N.67¾°W.,	6.80	2.58	.....	.....	6.29
".....	N.83°W.,	7.00	0.85	.....	.....	6.95
".....	S.84°W.,	6.20	....	0.65	.....	6.17
".....	N.82¾°W.,	8.60	1.09	.....	.....	8.53
".....	S.45¼°W.,	6.40	.....	4.51	.....	4.54
".....	N.85°W.,	8.80	0.77	.....	.....	8.77
".....	N.51°W.,	7.50	4.72	.....	.....	5.83
".....	N.20°W.,	15.10	14.19	.....	.....	5.16
Part of the west bdy. of sec. 18.....	South	22.20	.....	22.20	.....	.....
W. Bdy. sec. 19.....	South	80.00	.....	80.00	.....	.....
S. Bdy. sec. 19.....	East	78.64	.....	.....	78.64	....
Convergency.....	.....	.....	0.02			
Totals.....			107.46	107.41	91.91	92.01
			107.41			91.91
Error in latitude.....			0.05			
Error in departure.....						0.10

GENERAL DESCRIPTION.

The land along the areas surveyed ranges from nearly level river bottom, to rough mountainous sand stone ledges, draining into the Dolores river, which flows westerly. The soil on the river bottom is a rich, dark sandy loam, 1st. rate, 5 ft. or more deep, practically all capable of being irrigated, and of raising good crops alfalfa, potatoes, etc. The sides of the bottom of the canyon terminate abruptly in rough sandstone ledges, cov-

ered in part with gravel and loose broken red sandrock, but mostly bare and denuded of any covering. Dolores River varies in width from 3 to 6 chs., and in depth from 3 to 6 ft. The current is rapid, and in flood periods is apt to change the banks.

Some scattered cedar and pinon timber occur on the rough areas, and cottonwoods grow along the river bottom. Shadscale undergrowth is found on the stony parts, while the river bottom supports a dense undergrowth of willows, sagebrush, and greasewood.

No mineral was found along the lines surveyed.

John Scharf and George Wister are located in the N. part of sec. 19, along the river bottom, and Samuel Scharf is in the NE. part of this Sec., and the NW. part of sec. 20.

Ralph Gentry
U. S. Surveyor.

M

4—680

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Ralph Gentry, U. S. Surveyor, during the periods and in the capacities ted opposite our several signatures, ~~in surveying all those parts or portions of~~ in retracing and resurvey all those parts or portions of T 23 S., R 20 E.

he Salt Lake Bay and Meridian, in the State of Utah

ch are represented in the foregoing field notes as having been executed by him, and under his direc-; and that said survey has been, in all respects, to the best of our knowledge and belief, well and hfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
terling Wright	May 10 - 1915	May 12 - 1915	H. Chainman
George Wister	May 10-1915	May 12-1915	Chainman
eon Wister	May 10-1915	May 12-1915	Flagman

ubscribed and certified to before me on the dates of the final service as shown above.

Ralph Gentry
U. S. Surveyor.

6—2761

34 N

BOOK A-395

FINAL OATH OF UNITED STATES SURVEYOR.

I, Ralph Gentry, U. S. Surveyor, do solemnly swear that, in pursuance of ~~special~~ instructions received from ~~the U. S. Surveyor General for~~ G. D. D. Kirkpatrick, Asst. Supervisor of Surve dated April 26, 1915, and under authority of G. L. O. letter E. dated Ap ~~[illegible]~~ ~~[illegible]~~ ~~[illegible]~~, ~~[illegible]~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of in retracing and resurveying all those parts or portions of T 23 S, R 25 E.

of the Salt Lake Base & Meridian, in the State of Utah, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

Ralph Gentry
U. S. Surveyor.

Subscribed by said Ralph Gentry, and sworn to before me this 21st day of April, 1916

L. F. McCourt
United States Commissioner

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 31, 1916.

The foregoing field notes of the ~~[illegible]~~ examination and resurvey of meanders in Township No. 23 South, Range No. 25 East, of the Salt Lake Base and Meridian, Utah,

executed by Ralph Gentry

under his ~~special~~ instructions dated April 26, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the examination and resurveys they describe, are hereby approved.

C. C. Shoresen
U. S. 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.

U. S. Surveyor General.

Filed Feb.24, 1912.

4—670

BOOK A-395

A.

FIELD NOTES

RETRACEMENT AND

OF THE SURVEY OF THE

SUBDIVISION

OF

TOWNSHIP NO. 11 SOUTH

RANGE NO. 7 EAST

Of the SALT LAKE BASE AND *Meridian,*

the State of UTAH

EXECUTED BY

ROBERT E.L.COLLIER AND GEORGE C.SWAN

the capacity of U. S. TRANSITMEN *under instructions dated* May 23 *191*1.

ued by the United States Surveyor General to govern surveys included in

up No. 13, *which were approved by the Commissioner of the General Land*

ce, July 3, *191*1 *pursuant to authority contained in the Act of*

gress dated *191*

Survey commenced June 28 *191*1

Survey completed July 25 *191*1

6—151

60

BOOK A-395

INDEX DIAGRAM.

Township ....., *Range* .....

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31	32	33	34	35	36

6—175

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Page

Retracement of Subdivisions of T. 11 S., R. 7 E.

Chains

Survey commenced June 28, 1911, and executed with a Young & Sons Transit No. 8517, 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.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, June 3, 1911.

I examine the adjustments of the transit, and correct the levels and collimation errors, then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At my camp, at the corner of secs. 21, 22, 27 and 28, T. 11 S., R. 7 E.; latitude 39°50'25"N., longitude 111°10'01"W.; I set off 39°50'N. on the lat. arc, 23° 19½' on the decl. arc and at 4h 0m p.m., l m.t., determine with the solar a meridian and mark a point thereof, on a peg firmly set in the ground, 5 chs. N. of the cor.

June 28, 1911.

June 29: At 1h 07m a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 8h a.m., l.m.t., I lay off the azimuth of Polaris, 1° 31' to the west, and mark the meridian thus determined, by driving a nail in the peg set June 3, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 8h 30m a.m., l.m.t., I set off 39° 50'N. on the lat. arc, 23°17'N. on decl. arc, and mark a point in the

Chains	
	peg already set 5 chs. N. of my station. This mark falls 0.2 ins. east of the meridian established by the Polaris observation.
	The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'10" west and 0'10" east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian, at 8h 30m a.m. is N 16°30'W., the angle thus determined gives the mag. decl. 16°30'E.
	July 5, 1911: I commence at the cor. of secs. 3, 4, 33 and 34 which is a sandstone 8x8x6 ins. above ground marked and witnessed as described by the surveyor general.
	At 9h 15m a.m., l.m.t., I set off 39°49' N. on the lat. arc, 22°52'N. on the decl. arc, and determine a meridian with the solar.
	Thence I run
	North on retracement line bet. secs. 33 and 34.
	Over smooth, slightly ascending land, sloping south-westerly.
	Through sage brush undergrowth.
35.24	Wagon road from Colton to Scofield brs. S 20°W.
37.90	Wash, 75 links wide, 30 ft. deep, drains W.
40.20	Wagon road from Colton to Scofield brs. N. 45°W. and S 45° E.
40.40	Fall 13 lks. west of ¼ sec. cor. bet. secs. 33 and 34, which is a sandstone 8x6x6 ins. above ground, marked and witnessed as described by the surveyor general, I destroy this cor. and set an iron post 3 ft. long, 1 in. in dia. 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 33 on W. half, and S 34 on E. half, raise a mound of stone 2 ft. base, 1½ ft. high W of cor.

Retracement of Subdivisions of T. 11 S., R. 7 E.

Chains	
	This line is therefore N 0°11'E., 40.40 chs.
	I continue N. on retracement line bet. secs. 33 and 34.
47.00	Top of ridge, projects N 45°W., 6.00 chs. 18 ft. above ¼ sec. cor.
	Descend.
50.65	Wash in bottom of draw, 10 lks. wide, 1 ft. deep, drains W. 12 ft. below top of ridge.
	Ascend.
62.00	Top of ridge, brs. N. 80°W., 10 chs. 80 ft. above wash.
	Descend
63.75	Enter scattering aspen timber brs. E. and W.
66.50	Wash, 8 lks. wide, 2 ft. deep in bottom of canyon, drains S 45°W., 33 ft. below top of ridge.
	Ascend.
80.53	Fall 10 lks. W. of cor. of secs. 27, 28, 33 and 34, which is a sandstone 14x8x8 ins. above ground, marked 1 notch on S. and 3 on east edges and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.; from which
	An aspen, 5 ins. dia., brs. N 35°10'W., 51 lks. dist., marked T 11 S R 7 E S 28 B T
	An aspen, 6 ins. dia., brs. S 7°25'W., 2.82 chs. dist., marked T 11 S R 7 E S 33 B T
	This line from the ¼ sec. cor. is therefore N 0°02'W 40.13 chs.
	Land, rolling.
	Soil, sandy loam with some stone, 2d rate.
	Timber, scattering aspen.
	Undergrowth, sage brush.
	Scattering timber on 16.78 chs.
	Corner stands on top of ridge, brs. E. and W. 212 ft. above wash.
	N. on retracement line bet. secs. 27 and 28.
	Over slightly descending rolling land through scattering quaking asp timber and sage brush undergrowth.
5.10	Wash, 5 lks. wide, 1 ft. deep, drains S 45°W., 106 ft.

Retracement of Subdivisions of T. 11 S., R. 7 E.

Chains	
	Ascend.
25.25	Wagon road from Colton to Scofield brs. N 75°E. and S 75°W
40.00	No trace of old ¼ sec. cor., I set temporary ¼ sec. cor.
	Top of ridge brs. E. and W., 135 ft. above wash.
	Leave timber.
	Descend.
64.00	Wash, 10 lks. wide, 3 ft. deep, drains S 45°W.
	140 ft. below top of ridge.
	Ascend.
77.50	Top of spur projects E. 7 chs., 75 ft. above wash.
	Descend.
80.00	The cor. of secs. 21, 22, 27 and 28 brs. E. 1.14 chs.
	The line bet. secs. 27 and 28 is therefore N 0°49'E.80.00 chs.
	This cor. is a sandstone 30x18x10 ins. above ground, marked and witnessed as described by the surveyor general.
	Land, rolling.
	Soil, sandy loam, 1st rate.
	Timber, scattering aspen,
	Undergrowth, sage brush.
	Scattering aspen timber on 40 chs.
	July 5: At this cor. I set off 22°52'N. on the decl. arc, and at 12h 4m, p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°50'.
	I return to the ¼ sec. cor. bet. secs. 27 and 28, and
	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, 57 lks. E. of the temp. ¼ sec. cor. set by me this morning, marked on brass cap ¼ S 28 on W. half, and S 27 on E. half, from which
	An aspen, 5 ins. dia., brs. N 5°W., 3 lks. dist., marked ¼ S 28 B T
	A quaking asp, 8 ins. dia., brs. S 25°25'W., 56 lks. dist., marked ¼ S 28 B T

From the cor. of secs. 21, 22, 27 and 28, I run

North on Retracement line bet. secs. 21 and 22.

Retracement of Subdivisions of T. 11 S., R. 7 E.

Chains	
	Over slightly descending land through sage brush undergrowth. Land sloping gently south easterly.
2.00	Old wagon road brs. N 20°W. and S.20° E.,then S.
15.40	Wagon road from Colton to Scofield brs. N 40°W.& S.40° E.
40.58	The ¼ sec. cor. bet. secs. 21 and 22 brs. E. 51 lks. dist., which is a sandstone 8x6x4 ins. above ground, marked ¼ on W. face; dig pits 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
	This line is therefore N 0°44'E. 40.58 chs.
	From this cor. land slightly ascending.
48.00	Wagon road from Colton to Scofield brs. N 20°E.& S.20° W.
58.00	Ledge 10 ft. high brs. E. and W.
81.14	The cor. of secs. 15, 16, 21 and 22 brs. E. 93 lks. which is a sandstone 15x12x6 ins. above ground, marked 3 notches on S. and E. edges, I raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	From the ¼ sec. cor. the line brs. N 0°36'E. 40.56 chs.
	Land, smooth valley.
	Soil, sandy loam, 1st rate.
	Undergrowth, sage brush.
	No timber.
	North on retracement line bet. secs. 15 and 16.
	Over rolling land, through sage brush undergrowth.
8.25	Ledge 8 ft. high, brs. E. and W. Thence over rocky surface.
6.50	Leave rocky surface and enter smooth sandy surface.
0.56	The ¼ sec. cor. bet. secs. 15 and 16, brs. E. 41 lks.
	This line is therefore N 0°35'E. 40.56 chs.
	This ¼ sec. cor. is a sandstone 7x7x6 ins. above ground marked ¼ on W. face, I raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.
5.60	Old wagon road, brs. N.45°E. & S.45° W.
3.20	Old wagon road, brs. E. and W.
1.14	The cor. of secs. 9, 10, 15 and 16, brs. E. 89 lks.

Retracement of Subdivisions T. 11 S., R. 7 E.

Chains	
	From the ¼ sec. cor. this line is N 0°41'E. 40.58 chs.
	This sec. cor. is a sandstone 8x8x3 ins. above ground, marked 4 notches on S. and 3 notches on east edges, raise a mound of stone 2 ft. base, 1½ ft. high W. of cor
	Land, smooth valley, sloping gently westerly.
	Soil, sandy loam on 62.89 chs., 1st rate.
	Soil, stony on 18.25 chs.
	Undergrowth, sage brush.
	No timber.
	North on retracement line bet. secs. 9 and 10.
	Over gently rolling land, through sage brush undergrowth.
8.60	Ledge, 10 ft. high, brs. E. and W.
	Enter scattering timber of quaking asp with an occasional pine, brs. E. and W.
40.46	The ¼ sec. cor. bet. secs. 9 and 10; brs. E. 31 lks.
	This line is therefore N 0°27'E. 40.46 chs.
	This ¼ sec. cor. is a pine post 4 ft. long, 4 ins. square marked and witnessed as described by the surveyor general. I set in its place an iron post 3 ft. long, 1 in. dia. 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 9 on W. half and S 10 on E. half; dig pits 18x18x12 ins. N. and S. of post 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high W. of cor., from which
	An aspen, 6 ins. dia. brs. N 34°45'W., 1.74 chs. dist., marked ¼ S 9 B T
80.90	The cor. of secs. 3, 4, 9 and 10, brs. E. 66 lks. dist.
	This line from the ¼ sec. cor. is N 0°30'E. 40.44 chs.
	This cor. is a pine post 6 ft. long, 4 ins. dia., marked as described by the surveyor general, I set in its place an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 3, 4, 9 and 10, marked on brass cap
	T 11 S S 4 in NW.

Retracement of Subdivision T. 11 S., R. 7 E.

Chains

R. 7 E S 3 in NE.

S 10 in SE., and

S 9 in SW. quadrant, erect a mound of stone 2 ft. base, 1½ ft. high W. of cor., from which

An aspen, 6 ins. dia., brs. N 10°W., 4.26 chs. dist., marked T 11 S R 7 E S 4 B T

A pine, 20 ins. dia., brs. S 2°35'W., 3.60 chs. dist., marked T 11 S R 7 E S 9 B T

Land, rolling, sloping gently westerly.

Soil, sandy loam, 1st rate.

Timber, scattering quaking aspen and an occasional pine.

Undergrowth, sage brush.

Scattering timber on 72.30 chs.

July 5, 1911.

July 6: At 9h a.m., l.m.t., I set off 39°53'N. on the lat. arc. and 22°48'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 3, 4, 9 and 10.

Thence I run

North on retracement line bet. secs. 3 and 4.

Over steep ascending land, through scattering aspen timber and an occasional pine.

26.00 Top of ridge brs. E. and W., 375 ft. above sec. cor.

Descend slightly.

36.00 Wash, 1 chain wide, drains N 60°E., 45 ft. below top of ridge.

Ascend.

39.80 The ¼ sec. cor. bet. secs. 3 and 4, brs. E. 58 lks. dist.

This line is therefore N 0°50'E.

This cor. is a pine post 4 ft. long, 3 ins. dia., badly decayed.

I set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S 4 on W. half, and S 3 on E. half, from which

An aspen, 5 ins. dia., brs. N 25°25'W., 116

Retracement of Subdivisions T. 11 S., R. 7 E.

Chains	
	lks. dist., marked ¼ S 4 B T
	14 ft. above wash. Descend slightly.
51.70	Leave scattering timber and enter dense quaking asp timber and dense undergrowth of serviceberry brush, brs. E. and
69.75	Lowest point of swale, drains N 45°W., 160 ft. below sec. cor. Ascend.
77.50	Top of spur, projects W. 4 chs., 45 ft. above swale. Descend.
79.99	Closing cor. for secs. 3 and 4, brs. E. 116 lks. dist.
	This line bet. secs. 3 and 4 is N 0°50'E. 79.99 chs.
	This closing cor. is a pine post, 5 ft. long, marked as described by the surveyor general but the bearing trees as given in the original field notes could not be found.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. on the ground for closing cor. for secs. 3 and 4, marked on brass cap
	C C T 11 S R 7 E on S. half.
	S 3 in SE., and
	S 4 in SW. quadrants, from which
	An aspen, 5 ins. dia., brs. S 23°20'E., 29 lks. dist., marked C C T 11 S R 7 E S 3 B
	A quaking asp tree, 6 ins. dia., brs. S 43°W 26 lks. dist., marked C C T 11 S R 7 E S 4
	15 ft. below top of spur.
	Land, mountainous.
	Soil, dark sandy loam, 1st rate.
	Timber, quaking aspen.
	Undergrowth, sage brush and sarvis berry.
	Dense timber and undergrowth, 28.29 chs.

July 6, 1911.

Robert E. L. Collier

U. S. Transitman.

Subdivisions of T. 11 S., R. 7 E.

Chains	
	For test of instrument of July 9, 1911 previous to the survey of the east boundary of this township, see book "B" of this survey.
	As the south boundaries of secs. 34, 35 and 36 forming the S. bdy. of the unsurveyed portion of this Tp. are more than the allowable limit of error as given in the Manual of Instructions, both in course and distance, therefore I run a sectional correction line west from the cor. of secs. 25, 30, 31 and 36 on the E. bdy. of this Tp.
	July 13: At this cor. at 9h 00m a.m., l.m.t., I set off 39°50'N. on lat. arc, 21°57'N. on the decl. arc, and determine a meridian with the solar. Thence I run from said cor. of secs. 25, 30, 31 and 36, heretofore described,
	West bet. secs. 25 and 36.
	Over ascending land.
32.00	Top of ascent on S. slope of spur., 305 ft. above sec. cor.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S 25 on N. half, and S 36 on S. half, raise mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Pits impracticable.
	A lone red pine, 6 ins. dia., brs. N 88°E., 4.60 chs. dist., marked ¼ S 25 B T
	35 ft. below top of ascent.
48.00	Enter scattering aspen and pine timber.
64.00	Aspen and pine timber become dense, brs. S 45°E.
66.75	Gulch, wash in bottom 8 lks. wide, 2 ft. deep, drs. S 40° E.
	165 ft. below ¼ sec.cor. Ascend along N. slope of spur.
80.00	Set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in the ground for cor. of secs. 25, 26, 35 and 36 marked on brass cap T 11 S S 26 in NW.

Chains

S 36 in SE., and

S 35 in SW. quadrant, from which

An aspen, 5 ins. dia., brs. N 7°45'E., 72 lks. dist., marked T 11 S R 7 E S 25 B T

An aspen, 5 ins. dia., brs. N 35°15'W., 24 lks. dist., marked T 11 S R 7 E S 26 B T

An aspen, 5 ins. dia., brs. S 18°30'W., 38 lks. dist., marked T 11 S R 7 E S 35 B T

An aspen, 5 ins. dia., brs. S 16°10'E., 64 lks. dist., marked T 11 S R 7 E S 36 B T

56 ft. above gulch.

Land, Mountainous.

Soil, sandy loam but stony, 3d rate.

Timber, quaking aspen and some red pine

Dense timber on 16.00 chs.

Undergrowth, oak, sarvis berry and some sage brush.

Fair growth of bunch grass.

July 13: At this cor. I set off 21°56'N. on the decl. arc, and at 12h 5m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°51' or within 1' of the proper lat.

West bet. secs. 26 and 35.

Over ascending land.

32.00 Wash, 4 lks. wide, 1 ft. deep, drs. N 45°E.

36.00 Same wash, 4 lks. wide, 1 ft. deep, course S 70°E.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the the ground for ¼ sec. cor., marked on brass cap ¼ S 26 on N. half, and S 35 on S. half, from which

An aspen, 8 ins. dia., brs. N 32°05'E., 3.02 chs. dist., marked ¼ S 26 B T

An aspen, 8 ins. dia., brs. S 40°45'E., 26 lks. dist., marked ¼ S 35 B T

193 ft. above sec. cor.

55.70 Dividing ridge bet. Pleasant Valley and Price River, brs. N 30°W. and S 30°E., 83 ft. above ¼ sec. cor.

Subdivisions of T. 11 S., R 7 E.

Chains	
	Leave outcrop of sandstone, surface becomes smooth.
	Timber becomes scattering and undergrowth dense brs. S 40°E.
	Descend.
62.00	Sandstone outcrop on surface.
80.00	Set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in the ground for cor. of secs. 26, 27, 34 and 35, marked on brass cap. T 11 S S 27 in NW. R 7 E S 26 in NE. S 35 in SE., and S 34 in SW. quadrant, raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Quaking aspen too small to scribe.
	225 ft. below dividing ridge.
	Land, mountainous.
	Soil, sandy loam but stony, 3d rate.
	Timber, quaking aspen and an occasional pine.
	Dense timber on 55.70 chs.
	Undergrowth, sage and sarvis berry brush.
	Knowing from the course of the south boundary of secs. 34, 35, and 36 that a line west from the cor. of secs. 26, 27, 34 and 35 will not intersect within 50 lks. of the cor. of secs. 27, 28, 33 and 34, I therefore run West on a true line bet. secs. 27 and 34.
	Over smooth descending hilly country.
8.00	Bottom of descent, drs. S., 66 ft. below sec. cor.
	Ascend.
16.00	Top of ridge, brs. S 30°W., 32 ft. above bottom of descent.
	Leave scattering timber.
	Descend.
36.00	Bottom of swale, drs. S 45°W., 165 ft. below top of ridge.
	Thence on nearly level line.
40.00	Set an iron post, 3 ft. long, 1 in dia., 26 ins. in the

Chains	
	ground for ¼ sec. cor., marked on brass cap ¼ S 27 on N. half and S 34 on S. half, raise a mound of stone 2 ft. base, 1½ ft. high N. of cor. An aspen, 4 ins. dia., brs. N 68°20'W., 1.75 lks. dist., marked ¼ S 27 B T July 13, 1911.
	July 14: At 8h 00m a.m., l.m.t., I set off 39°50'N. on the lat. arc, 21°49'N. on the decl. arc, and determine a meridian with the solar at the ¼ sec. cor. set by me yesterday.
	Thence I run, continuing measurement from sec.cor. West on a true line bet. secs. 27 and 34:
40.50	Small bunch of aspens.
51.00	Wash, 15 lks. wide, 2 ft. deep, drs. N., 75 ft. below ¼ sec. cor.
	Ascend.
53.50	Top of spur, brs. N. and S. 13 ft. above wash.
	Descend.
67.00	Bottom of swale, drs. S 45°W. 73 ft. below top of spur.
	Ascend.
73.50	Small depression drs. S 45°E.
76.00	Top of spur, brs. S., 20 ft. above depression.
79.25	Intersect line bet. secs. 33 and 34, S 0°02'E., 4.75 chs. from the cor. of secs. 27, 28, 33 and 34, heretofore described.
	I destroy all marks on this cor. and bearing trees pertaining to secs. 27 and 34.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for C.C. of secs. 27 and 34, marked on brass cap T 11 S R 7 E on N. half. S 28 in NW. S 27 in NE. S 34 in SE., and S 33 CC in SW. quadrant, from which

Chains

An aspen, 4 ins. dia., brs. N 51°40'E., 78 lks. dist., marked CC T 11 S R 7 E S 27 B T

Raise a mount of stone 2 ft. base, 1½ ft. high, E. of cor.

Pits impracticable.

6 ft. below top of spur.

Land, mountainous.

Soil, dark sandy loam, with some stone, 1st and 4th rates.

Timber, scattering aspen.

Undergrowth, sage and some sarvis berry.

Light growth of bunch grass.

Survey commenced July 13, 1911, and executed with a W. and L. E. Gurley Solar compass, no number.

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.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, June 3, 1911.

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

At my camp, at the cor. of secs. 21, 22, 27 and 28, T. 11 S., R. 7 E.; latitude 39°50'25"N., longitude 111°10'01" W.; I set off 39°50'N. on the lat. arc, 21°55'N. on the decl.arc, and at 4h 00m p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on the meridian set by Polaris observation on June 29, by U. S. Transitman, R. E. L. Collier, 5 chs. N. of my station on which the meridian falls 0.3 ins. west of the mark determined by the Polaris observation.

Chains	
	July 13, 1911.
	July 14: At 8h 00m a.m., l.m.t., I set off 39°50'N. on the lat. arc, and 21°49'N. on the decl. arc, and determine a meridian with the solar, and mark a meridian thus determined on the peg set for the Polaris observation on which this line falls 0.2 ins. E.
	The solar apparatus, by p.m. and a.m. observations, defines positions for the meridians, respectively about 0'16" west and 0'10" east of the meridian established by the Polaris observation, therefore, I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h 20m a.m. is N 16°30'W., the angle thus determined gives the mag. decl. 16°30'E.
	July 14: At 10h 00m a.m., l.m.t., I set off 39°50'N. on the lat. arc, 21°48'N. on the decl arc, and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36, heretofore described.
	Thence I run
	S 0°01'E. on a random line bet. secs. 35 and 36.
40.00	Set temp. ¼ sec. cor.
77.62	Intersect S. bdy. of Tp. 17 lks. E. of the cor. of secs. 1, 2, 35 and 36, heretofore described.
	Thence I run
	N 0°06'E. on a true line bet. secs. 35 and 36.
	Over descending land.
1.87	Pine and aspen timber becomes scattering, brs. E. and W.
7.00	At this point at 12h 6m p.m., l.m.t., the sky is overcase and solar observations are impossible.
16.27	Bottom of ravine, 30 lks. wide 2 ft. deep, drs. N 70°E.
	Ascend.
	16 ft. below sec. cor.
20.20	Leave scattering aspen and pine timber, brs. E. and W.
24.90	Enter dense aspen timber, brs. E. and W.
26.90	Leave dense timber and enter burnt fallen timber, brs. E. and W.

Subdivisions of T. 11 S., R. 7 E.

Chains	
28.90	Top of ridge, brs. N 45°E. and S 45°W., 60 ft. above ravine.
	Descend.
37.62	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 35 on W. half, and S 36 on E. half, from which
	An aspen, 5 ins. dia., brs. N 31°20'W., 19 lks. dist., marked ¼ S 35 B T
	An aspen, 4 ins. dia., brs. N 59°E., 15 lks. dist., marked ¼ S 36 B T
41.85	Leave burnt fallen timber, brs. E. and W.
	Enter dense timber.
52.10	Bottom of canyon, 30 lks. wide, drs. N 70°E.
	470 ft. below top of ridge.
	Ascend.
55.25	Top of spur, brs. S 60°E. 190 ft. above bottom of canyon.
	Descend.
77.62	The cor. of secs. 25, 26, 35 and 36.
	Land, mountainous.
	Soil, dark sandy loam, 1st rate.
	Timber, quaking aspen and pine.
	Dense timber on 39.64 chs.
	Light growth of bunch grass.
	120 ft. below top of spur.

July 14, 1911.

George C. Swan
U. S. Transitman.

July 15: At 8h 30m a.m., l.m.t., I set off 39°50'N. on the lat. arc, 21°40'N. on decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36.

Thence I run

N 0°01'W. bet. secs. 25 and 26.

Over descending land.

Subdivisions of T. 11 S., R. 7 E.

Chains	
5.60	Bottom of ravine, drs. E 55 ft. below sec. cor.
9.00	Over a series of small sand stone ledges, 5 ft. high, brs. E. and W.
11.00	Leave sandstone ledges, but soil still stony.
	Enter quaking aspen and pine timber, brs. E. and W.
23.00	Top of ridge, brs. E. and W., 180 ft. above ravine.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 26 on W. half and S 25 on E. half, from which
	An aspen, 4 ins. dia., brs. S 33°45'E., 37 lks. dist., marked ¼ S 25 B T
	An aspen, 4 ins. dia., brs. N 88°W., 43 lks. dist., marked ¼ S 26 B T
41.00	Bottom of ravine, drs. N 70°E. 140 ft. below top of ridge.
	Ascend.
47.00	Outcrop of sandstone, brs. E. and W.
50.00	Leave timber, brs. E. and W.
58.00	Saddle in ridge, brs. S 60°W. 130 ft. above ravine.
	Descend.
62.00	Enter small thick quaking aspen timber and choke cherry undergrowth, brs. E. and W.
71.00	Timber becomes scattering, nearly all cut or fallen, brs. E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 23, 24, 25 and 26, marked on brass cap
	T 11 S S 23 in NW.
	R 7 E S 24 in NE.
	S 25 in SE., and
	S 26 in SW. quadrant, from which
	A pine, 4 ins. dia., brs. N 25°10'W., 29 lks. dist., marked T 11 S R 7 E S 23 B T
	A pine, 4 ins. dia., brs. N15°15'E., 66 lks. dist., marked T 11 S R 7 E S 24 B T

Chains

A pine, 5 ins. dia., brs. S 29°20'E., 75 lks. dist., marked T 11 S R 7 E S 25 B T

A pine, 8 ins. dia., brs. S 63°30'W., 58 lks. dist., marked T 11 S R 7 E S 26 B T

Land, mountainous.

Soil, stony, 4th rate.

Timber, quaking aspen and some pine.

Undergrowth, sage and some choke cherry.

Light growth of bunch grass.

July 15: At this cor. I set off 21°38'N. on the decl. arc, and at 12h 6m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°50'.

East on a random line bet. secs. 24 and 25.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect E. bdy. of Tp. 5 lks. S. of the cor. of secs. 19, 24, 25 and 30, heretofore described.

Thence I run

S 89°58'W. on a true line bet. secs. 24 and 25.

Over steep mountainous land sloping northerly.

21.00 Quaking aspen and pine timber becomes scattering.

40.05 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 24 on N. half, and S 25 on S. half, from which

A pine, 8 ins. dia., brs. N 63°10'E., 1.17 chs. dist., marked ¼ S 24 B T

A pine, 7 ins. dia., brs. S 36°25'W., 1.33 chs. dist., marked ¼ S 25 B T

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

Land, mountainous and rough, sloping to the N.

Soil, stony, 4th rate.

Timber, quaking aspen and pine.

Dense timber on 21 chs.

Undergrowth, scrub oak and some sage brush.

July 15, 1911.

Subdivisions of T. 11 S., R. 7 E.

Chains	
	July 17: At 8h a.m., l.m.t., I set off 39°50'N. on the lat. arc, 21°21'N. on the decl. arc, and determine a meridian with the solar at the corner of secs. 23, 24, 25 and 26.
	Thence I run
	N 0°01'W. bet. secs. 23 and 24.
	Over descending mountain.
13.00	Leave aspen and pine timber, enter dense sage brush, brs. E. and W.
17.00	Bottom of ravine, 30 lks. wide, 2 ft. deep, drains E. 215 ft. below sec. cor.
	Ascend.
22.00	Enter thick aspen timber, brs. E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 23 on W. half and S 24 on E. half, from which
	An aspen, 4 ins. dia., brs. N 65°E., 45 lks. dist., marked ¼ S 24 B T
	An aspen, 4 ins. dia., brs. N 24°W., 95 lks. dist., marked ¼ S 23 B T
47.75	Top of ridge, brs. N.70°W. and S 70°E. 350 ft. above ravine.
	Descend.
58.00	Quaking aspen and pine timber becomes large, brs. E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked on brass cap
	T 11 SS 14 in NW.
	R 7 E S 13 in NE.
	S 24 in SE., and
	S 23 in SW. quadrant, from which
	A pine, 12 ins. dia., brs. N 38°40'W., 80 lks. dist., marked T 11 S R 7 E S 14 B T
	A cedar, 8 ins. dia., brs. N 80°20'E., 16 lks. dist., marked T 11 S R 7 E S 13 B T

Subdivisions of T. 11 S., R 7 E.

Chains	
	An aspen, 4 ins. dia., brs. S 12°45'E., 18 lks. dist., marked T 11 S R 7 E S 24 B T
	A pine, 4 ins. dia., brs. S 45°05'W., 66 lks. dist., marked T 11 S R 7 E S 23 B T
	Land, mountainous.
	Soil, sandy loam but stony, 4th rate.
	Timber, aspen and pine.
	Undergrowth, oak and some sage brush.
	Light growth of bunch grass.
	July 17: At this cor. I set off 21°19'N. on the decl. arc, and at 12h 6m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°51'.
	N 89°58'E. on a random line bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
80.22	Intersect the E. bdy. 21 lks. S. of cor. to secs. 13, 18, 19 and 24, heretofore described.
	Thence I run
	S 89°49'W. on a true line bet. secs. 13 and 24.
	Over ascending N. slope of mountain.
3.25	Leave aspen timber, brs. N. and S.
8.25	Enter aspen timber, bears N. and S.
40.11	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 13 on N. half and S 24 on S. half, from which
	An aspen, 6 ins. dia., brs. N 38°40'E., 31 lks. dist., marked ¼ S 13 B T
	An aspen, 4 ins. dia., brs. S 29°30'E., 28 lks. dist., marked ¼ S 24 B T
48.20	Wash, 8 lks. wide, 2 ft. deep drains, N 80°E.
	Continue to ascend.
50.20	Aspen and pine timber become dense, brs. N. and S.
80.22	The cor. of secs. 13, 14, 23 and 24.
	Land, mountainous.
	Soil, loam but stony in some parts, 3d rate.
	Timber, aspen and some pine.

Chains	
	Undergrowth, sage brush,
	Light growth of bunch grass.
	July 17, 1911.
	July 18: At 8h 30m a.m., l.m.t., I set off 39°51'N on lat. arc, 21°10'N. on the decl. arc, and determine a meridian with the solar at the cor. 13, 14, 23 and 24.
	Thence I run
	N 0°01'W. bet. secs. 13 and 14.
	Over descending mountain.
7.00	Leave aspen and pine timber, brs. E. and W.
11.00	Spring Canyon, wagon road from Colton to Scofield in bottom drains and brs. S 60°E. 135 ft. below sec. cor.
	Ascend.
12.00	Enter scattering aspen timber, brs. E. and W.
12.60	Sandstone ledge, 10 ft. high, brs. N 45°W. and S 45°E.
22.00	Enter dense sarvis berry brush, brs. E. and W.
	Leave timber.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 14 on W. half and S 13 on E. half, raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
	Pits impracticable.
	July 18: At this cor. at 12h 6m p.m., l.m.t., sky overcast and solar observation impossible.
47.00	Leave sarvis berry undergrowth, brs. N 60°W.
55.00	Top of ridge, brs. S 60°E. 800 ft. above canyon.
	Descend.
58.40	Enter aspen timber, brs. S 60°E.
61.00	At this point a severe hail storm prevents further work this day.
	July 18, 1911.
	July 19: At 8h 40m a.m., l.m.t., I set off 39°52' on the lat. arc, 21°00'N. on the decl. arc, and determine a meridian with the solar at a point 61 chs. N. of the cor. of secs. 13, 14, 23 and 24, thence I continue my line

Subdivisions of T. 11 S., R. 7 E.

Chains	
	N 0°01'W. bet. secs. 13 and 14.
63.00	Draw, drains S 15°E.
70.00	Leave aspen timber. enter sage brush flat, brs. S 45°E.
71.00	Wash, 15 lks. wide, 2 ft. deep, course S 45°E.
77.50	Enter dense aspen timber and choke cherry undergrowth, brs. E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 11, 12, 13 and 14, marked on brass cap
	T 11 SS 11 in NW.
	R 7 E S 12 in NE.
	S 13 in SE., and
	S 14 in SW. quadrant, from which
	An aspen, 6 ins. dia., brs. N 15°10'W., 25 lks. dist., marked T 11 S R 7 E S 11 B T
	An aspen, 5 ins. dia., brs. N 87°05'E., 2.95 chs. dist., marked T 11 S R 7 E S 12 B T
	An aspen, 4 ins. dia., brs. S 0°26'E., 2.02 chs. dist., marked T 11 S R 7 E S 13 B T
	An aspen, 5 ins. dia., brs. S 50°45'W., 1.43 chs. dist., marked T 11 S R 7 E S 14 B T
	Land, mountainous on S. 50 chs.
	Land rolling on N. 30 chs.
	Soil, S. 50 chs. stony and N. 30 chs. sandy loam, 3d and 1st rates.
	Timber, aspen and pine.
	Undergrowth, sage and some choke cherry brush.
	Good growth of bunch grass.
	N 89°49'E. on a random line bet. secs. 12 and 13.
0.00	Set temp. ¼ sec. cor.
0.12	Intersect the E. bdy. of the Tp. 12 lks. N. of the cor. of secs. 7, 12, 13 and 18, heretofore described.
	Thence I run
	S 89°54'W. on a true line bet. secs. 12 and 13.
	Over ascending land.

Subdivisions of T. 11 S., R. 7 E.

Chains	
14.00	At this point I set off 20°58'N. on the decl. arc, and at 12h 6m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°52' or within 1' of the true lat.
28.10	Leave dense aspen and pine timber, enter choke cherry undergrowth, brs. N. and S.
38.00	Leave dense choke cherry undergrowth, brs. N. and S.
40.06	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 12 on N. half and S 13 on S. half, raise a mound of stone 2 ft. base, 1½ft. high N. of cor.
	Pits impracticable.
40.90	Trail, brs. N 60°W. and S 60°E.
47.10	White shale ledge 8 ft. high, brs. N. and S.
64.10	Enter aspen timber, brs. N. and S.
74.00	Top of spur, brs. S 45°W.
	Descend.
76.75	Leave dense aspen timber and choke cherry undergrowth brs. N 45°E.
80.12	The cor. of secs. 11, 12, 13 and 14.
	Land, mountainous in E. half, and rolling in W. half.
	Soil, E. half, stony, W. half, sandy loam, 4th and 1st rates.
	Timber, aspen.
	Undergrowth, sage and choke cherry.
	Good growth of bunch grass.

	N 0°01'W. bet. secs. 11 and 12.
	Over descending land.
2.25	Enter aspen timber, brs. E. and W.
8.00	Leave aspen timber, brs. E. and W.
22.00	Top of spur, brs. S 70°E.
	160 ft. above sec. cor.
	Descend.
32.20	Old wagon road, brs. N 60°W. & S. 60°E.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

Subdivisions of T. 11 S., R. 7 E.

Chains	
	ground for ¼ sec. cor., marked on brass cap ¼ S 11 on W. half and S. 12 on E. half, from which
	An aspen, 9 ins. dia., brs. N 30°30'W., 1.33 chs. dist., marked ¼ S 11 B T
	An aspen, 12 ins. dia., brs. N 47°15'E., 1.73 chs. dist., marked ¼ S 12 B T
41.00	Enter dense aspen timber and choke cherry undergrowth, brs. E. and W.
60.00	Head of draw, drains S 30°E.
	215 ft. below top of spur, thence along nearly level line.
70.00	Begin steep descent, brs. E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 1, 2, 11 and 12, marked on brass cap
	T 11 SS 2 in NW.
	R 7 E S 1 in NE.
	S 12 in S E., and
	S 11 in SW. quadrant, from which
	An aspen, 7 ins. dia., brs. N 80°19'E., 1.02 chs. dist., marked T 11 S R 7 E S 1 B T
	An aspen, 8 ins. dia., brs. S 58°30'E., 95 lks. dist., marked T 11 S R 7 E S 12 B T
	An aspen, 9 ins. dia., brs. S 38°W., 70 lks. dist., marked T 11 S R 7 E S 11 B T
	No other bearing tree available, raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Land, rolling mountain.
	Soil, sandy loam, with some stone, 2d rate.
	Timber, aspen and an occasional pine.
	Undergrowth, sage, and choke cherry.
	Good growth of bunch grass.
	July 19, 1911.

July 20: At 8h 30m a.m., l.m.t., I set off 39°53' on the lat. arc, 20°49'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1, 2, 11

Chains	
	and 12.
	Thence I run
	N 89°54'E. on a random line bet. secs. 1 and 12.
40.00	Set temp. ¼ sec. cor.
80.12	Intersect the E. bdy. of the Tp. 7 lks. N. of the cor. of secs. 1, 6, 7 and 12 heretofore described.
	Thence I run
	S 89°57'W. on a true line bet. secs. 1 and 12.
	Over ascending land.
12.00	Leave scattering aspen and pine timber, enter burnt and fallen timber, brs. N. and S.
40.06	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 1 on N. half and S 12 on S. half, from which
	An aspen, 4 ins. in dia., brs. S 44°40'E. 74 lks. dist., marked ¼ S 12 B T
	An aspen, 6 ins. dia., brs. N 14°30'E., 1.72 chs. dist., marked ¼ S 1 B T
52.00	Leave burnt and fallen timber, enter scattering quaking aspen and pines, brs. N. and S.
80.12	The cor. of secs. 1, 2, 11 and 12.
	Land, mountainous and sloping northerly.
	Soil, sandy loam, 1st rate.
	Timber, aspen and scattering pines, dead and fallen pines.
	Undergrowth, sage and choke cherry.
	Scant growth of bunch grass.
	July 20: At this cor. I set off 20°47'N. on the decl. arc, and at 12h 6m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°53'.
	Note: 1.30 p.m. heavy rain prevents further work this day.
	July 20, 1911.
	July 24: At 8h 30m a.m., l.m.t., I set off 39°53' on the lat. arc, 20°03'N. on the decl. arc, and deter-

Subdivisions of T. 11 S., R. 7 E.

Chains

mine a meridian with the solar at the cor. of secs. 1, 2, 11 and 12. Thence I run

N.0°01'W. on a true line bet. secs. 1 and 2,

Over descending land.

4.57 Bottom of ravine, 15 lks. wide, 3 ft. deep, drains E., 40 ft. below sec. cor.

6.00 Enter scattering aspen timber, and dense undergrowth.

9.00 Leave aspen timber, bears N.45° W. and S.45°E.

15.00 Top of spur, brs. N. and W. Limestone outcropping on top, 165 ft. above sec. cor. Descend.

17.00 Enter scattering aspen and pine timber, bears E. and W.

15.00 Leave aspen and pine timber, bears E. and W.

20.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 2 on W. half, and S 1 on E half; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.

An aspen, 8 ins. dia., bears S.55° 45'E. 1.36 chs. dist., marked ¼ S 1 B T

No other bearing tree within limit; raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.

23.00 Top of ridge, bears E.and W.,310 ft.above ravine. Desc.

25.00 Enter aspen timber and choke-cherry undergrowth, bears E. and W.

26.00 Leave aspen timber, bears E. and W.

26.20 Intersect the Second Standard Parallel South, S.89°06'E. 15.34 chs. from ¼ sec. cor., on S. side of sec. 35, heretofore described.

Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 1 and 2, marked on brass cap

C C T 11 S S 35 S 36 in N. half,

S 1 R 7 E in SE.

S 2 in SW. quadrant; from which

An aspen, 6 ins. dia., bears S. 74°20'E. 55 lks. dist., marked C C T 11 S R 7 E S 1 B T

An aspen, 12 ins. dia., bears S.27°W. 1.26 chs.

Chains

dist., marked C C T 11 S R 7 E S 2 B T

290 ft. below top of ridge.

Land, mountainous.

Soil, sandy loam with some stone, 3d rate.

Timber, quaking aspen.

Undergrowth, sage and some choke cherry.

Light growth of bunch grass.

July 24, 1911.

George C. Swan
U. S. Transitman.

July 14, 1911: At 10h 0m a.m.l.m.t., I set off 39°50'N. on the lat. arc; 21°48'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34, and 35. Thence I run

S.0°01'E. on a random line bet. secs. 34 and 35,

40.00 Set temp. ¼ sec. cor.

76.55 Intersect S. bdy. of Tp. 89°55'E. 99 lks. from the cor. of secs. 2,3,34, and 35, heretofore described. I destroy all marks on this cor., and on the bearing trees, that pertain to secs. 34 and 35.

Set an iron post 3 ft. long, 2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 34 and 35, marked on brass cap

T 11 S S 34 in NW.

R 7 E S 35 in NE.

C C S 2 in SE., and S 3 in SW. quadrants,

from which

An aspen 5 ins. dia.bears N40°40'W. 10 lks. dist. marked C C T 11 S R 7 E S 34 B T

An aspen 5 ins. dia. bears N61°20'E.78 lks. dist. marked C C T 11 S R 7 E S 35 B T

July 14: At this cor. I set off 21°47' N. on the decl. arc and at 12h 6m p.m.l.m.t., observe the sun on the meridian; the resulting lat. os 39°49'

Thence I run

Subdivision of T.11 S. R. 7 E.

hains	
	N.0°01'W. on a true line bet.secs.34 and 35,
	Over descending land.
7.80	Bottom of canyon, stream in bottom 3 lks. wide, 2 ins. deep, course S. 80°W. 265 ft. below closing cor.
	Ascend.
20.30	Top of spur, bears E. and W. 245 ft. above canyon.
	Descend.
21.80	Leave oak and service berry brush; enter scattering aspen timber, bears E. and W.
25.80	Wash, 8 lks. wide, 2 ft. deep, drains S. 45° W. 75 ft. below top of spur. Ascend.
34.80	Top of spur, projects N.70°W. 7 chs., 45 ft. above wash.
	Descend.
36.55	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 34 on W. half, and S 35 on E. half; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.
	An aspen 7 ins. dia.bears N.39°45'W. 1.89chs.dist. marked ¼ S 34 B T, 35 ft. below top of spur.
37.00	Wash, 5 lks. wide, 2 ft. deep, in bottom of draw, drains S. 80°W. 5 ft. below ¼ sec. cor. Ascend.
41.80	Surface becomes smooth.
48.30	Top of spur, bears E. and W., 95 ft. above wash; descend.
55.80	Wash, 10 lks. wide, 2 ft. deep, drains N. 75°W. Ascend.
66.55	The cor. of secs. 26, 27, 34, and 35.
	Land, Mountainous.
	Soil, south 34.50 chs. stony; 4th rate; north 38.20 chs. 1st rate.
	Timber, scattering aspen and some red pine.
	Undergrowth sage, service berry and oak.
	Light growth of bunch grass.

July 14: At 2h 10m p.m.l.m.t., I set off 39°50'N. on the lat. arc; 21°46'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35. Thence I run

Subdivisions of T. 11 S., R. 7 E.

Chains

N. 0° 01'W. bet. secs. 26 and 27,

Over ascending land; surface stony.

8.50 Top of spur, bears S. 60°W., 106 ft. above sec. cor.

Leave outcropping of sandstone Descend.

24.00 Outcropping of sandstone again appears, bearing E. and W.

Quaking aspen and red pine become scattering.

31.15 Wash, 10 lks. wide, 2 ft. deep, in gulch, draining N. 60°W., 208 ft. below top of spur; thence over nearly level land.

33.50 Wash, in bottom of gulch, 8 lks. wide, 2 ft. deep, drains W.

Leave scattering aspen timber; enter dense service berry and sagebrush, bearing E. and W.

40.00 Set an iron post 3 ft. long, 1 in dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 27 on W. half, and S 26 on E. half; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.

90 ft. above wash.

46.50 Top of spur, bears E. and W., 23 ft. above ¼ sec. cor.

Descend. Leave dense undergrowth; enter dense aspen timber, bears E. and W.

62.00 Enter dense undergrowth; bears E. and W.; timber scatterin

64.75 Wash, 6 lks. wide, 1 ft. deep also old wagon road; wash. drs. N. 80°E. 26 ft. below top of spur. Ascend.

76.00 Top of spur, projects 2 chs. E., 66 ft. above wash. Descend

80.00 Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, mkd. on brac cap

T 11 S S 22 in NW.

R 7 E S 23 in NE.

S 26 in SE.; and

S 27 in SW. quadrant; from which

An aspen, 4 ins. dia., bears N. 27° 20'W. 1.70 ch dist., marked T 11 S R 7 E S 22 B T

An aspen, 5 ins. dia., bears N. 61°25'E. 1.41 chs. dist., marked T 11 S R 7 E S 23 B T

An aspen, 6 ins. dia., bears S. 25°15'E. 32 lks.

Subdivisions of T. 11 S., R. 7 E.

Chains

dist., marked T 11 S R 7 E S 26 B T

An aspen 8 ins. dia., bears S.71°30'W.1.54 chs. dist., marked T 11 S R 7 E S 27 B T

14 ft. below top of ridge.

Land, mountainous.

Soil, stony; 4th rate.

Timber, aspen and some red pine. Dense timber on 39.50 chs.

Undergrowth, service berry and sage brush.

Light growth of bunch grass.

July 14, 1911.

July 15: At 2h 0m p.m.l.m.t., I set off 39°50' on the lat. arc; 21°38'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26, and 27. Thence I run

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

0.00 Set temp. ¼ sec. cor.

0.40 Intersect N. and S. line 23 lks. S. of cor. of secs. 23, 24, 25, and 26. Thence I run

S. 89°50'W. on a true line bet. secs. 23 and 26,

Over descending land.

7.54 Wash, 10 lks. wide, 2 ft. deep, drains N. 40 ft. below sec. cor. Ascend.

1.00 Top of spur, projects N. 20 chs.; 75 ft. above wash. Descend.

2.00 Pine and aspen timber becomes scattering.

8.00 Quaking aspen and pine become dense, bear N. and S.

0.02 Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 23 on N. half, and S 26 on S. half; from which

An aspen 6 ins. dia., bears N.10°45'W.38 lks. dist. marked ¼ S 23 B T

An aspen, 10 ins. dia., bears S.57° 15'W. 3 lks. dist., marked ¼ S 26 B T

1.79 Wash, 8 lks. wide, 1 ft. deep, drains N. 20°W. 125 ft. below spur, and 20 ft. below ¼ sec. cor. Ascend.

Chains	
57.55	Top of ridge, bears N. and S.,265 ft.above wash.Descend.
77.04	Old wagon road in draw; draw drains N.45°E., 215 ft. below top of ridge. Road bears with draw. Ascend.
80.04	The cor. of secs. 22,23,26, and 27. 21 ft. above draw.
	Land, mountainous.
	Soil, sandy loam; 1st rate.
	Timber, quaking aspen and pine. Dense on W. 42 chs.
	Undergrowth, sagebrush, Good growth of bunch grass.
	July 15, 1911.
	July 15: At 8h 30m a.m.l.m.t., I set off 39°50' on the lat. arc; 21°40'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26, and 27.
	Knowing from the connection west of the line bet. secs. 27 and 34, that when the line bet. secs. 22 and 27 is produced west it will fall more than 50 lks. from the cor. of secs. 21, 22,27, and 28: therefore from the cor. of secs. 22, 23, 26, and 27 I run
	West on a true line bet. secs. 22 and 27,
	Over ascending land.
2.00	Enter stony ground.
8.00	Top of divide between Pleasant Valley and Price River; bears S.45° W. and N.45°E., 30 ft. above sec. cor.
	Descend.
24.00	Leave service berry brush, bearing N. and S.
40.00	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground; for ¼ sec. cor., marked on brass cap ¼ S 22 on N. half, and S 27 on S. half; from which
	An aspen, 4 ins. dia., bears N.53°35'W. 47 lks. dist., marked ¼ S 22 B T
	An aspen, 4 ins. dia., bears S.83°15'E.62 lks. dist. marked ¼ S 27 B T
	450 ft. below top of divide. Leave scattering timber and enter rolling sagebrush land, bearing N. and S.
42.00	Wash, 15 lks. wide, 2 ft. deep, drains S.45°W. Ascend.

Subdivisions of T. 11 S., R. 7 E.

Chains	
62.50	Top of ascent, projects S. 4 chs.
68.90	Wagon road, from Colton to Scofield, bears N.45°W. and S. 45°E.
74.70	Wash, 15 lks. wide, 2 ft. deep, drains S. 45° W. Surface becomes stony. Ascend.
77.80	Old wagon road, bears N. and S.
77.85	Intersect line bet. secs. 27 and 28 S. 0°49'W. 4.72 chs. from the cor. of secs. 21, 22, 27, and 28, heretofore described. I destroy all marks on this cor. pertaining to secs. 22 and 27,
	Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 22 and 27, marked on brass cap
	T 11 S S 21 in NW.
	R 7 E S 22 in NE.
	S 27 in SE.; and
	C C S 28 in SW. quadrant; raise a mound of stone, 2 ft. base, 1½ ft. high E. of cor.
	Land E. half mile mountainous and rough. W. half mile rolling valley.
	Soil, E. half mile stony; 4th rate; W. half mile dark sandy loam; 1st rate.
	Scattering quaking aspen and pine timber on E. half mile.
	Dense sagebrush on W. half mile. Good growth of bunch grass.
	July 15: At this cor. I set off 21°38'N. on the decl. arc; and at 12h 6m p.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°51'

July 17: At 8h 25m a.m.l.m.t., I set off 39°50'N. on the lat. arc; 21°21'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22,23,26, and 27. Thence I run

N.0° 01'W. bet. secs. 22 and 23,

Over descending mountain.

Subdivisions of T. 11 S., R. 7 E.

Chains	
6.50	Draw, 30 lks. wide, 2 ft. deep, drains S.45°E. 38 ft. below sec. cor. Ascend.
14.50	Top of spur projects N.70°E.6 chs.,58 ft.above draw.Desc.
23.00	Swale, drains S.70°E. 47 ft.below top of spur. Ascend.
34.00	Top of spur, bears E. and W.,40 ft.above swale. Descend.
40.00	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 22 on W. half, and S 23 on E. half; from which
	An aspen, 6 ins. dia., bears N.70°W. 26 lks.dist. marked ¼ S 22 B T
	An aspen, 8 ins. dia., bears S.85°15'E. 20 lks. dist., marked ¼ S 23 B T
	20 ft. below top of spur.
40.50	Swale, drains N. 80°E. Ascend.
62.50	Top of spur, bears N. 70°E. from S.70°W. Descend through dense aspen and pine timber bearing N.70°E.&S.70°W.
80.00	Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 14,15,22, and 23, marked on brass cap T 11 S S 15 in NW.
	R 7 E S 14 in NE.
	S 23 in SE.; and
	S 22 in SW. quadrant; from which
	An aspen,7 ins. dia.,bears N.67°40'E. 20 lks. dist., marked T 11 S R 7 E S 14 B T
	An aspen, 5 ins. dia.,bears N.28°20'W. 29 lks. dist., marked T 11 S R 7 E S 15 B T
	An aspen, 9 ins. dia.,bears S.6°50'W. 27 lks. dist., marked T 11 S R 7 E S 22 B T
	An aspen, 7 ins. dia.,bears S.10°30'E., 14 lks. dist., marked T 11 S R 7 E S 23 B T
	107 ft. below top of spur.
	Land, mountainous.
	Soil, sandy loam, 1st rate.
	Timber, aspen and pine. Undergrowth, sagebrush.
	Good growth of bunch grass.

Subdivisions of T 11 S., R. 7 E.

Chains	
	July 17: At this cor. I set off 21°19'N. on the decl. arc; and at 12h 6m p.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°51'.
	N.89°50'E. on a random line bet. secs. 14 and 23,
40.00	Set temp. ¼ sec. cor.
80.16	Intersect N. and S. line 20 lks. S. of cor. of secs. 13, 14, 23 and 24. Thence I run
	S. 89°41'W. on a true line bet. secs. 14 and 23,
	Over descending land.
6.16	Wash, 20 lks. wide, 12 ft. deep, drains N.,16 ft. below sec. corner.
8.16	Wash, 10 lks. wide, 2 ft.deep,drains N. 30°E. Ascend.
29.65	Top of N. slope of ridge, bears N. and S. 175 ft. above wash. Descend.
40.08	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 14 on N. half, and S. 23 on S. half; from which
	A pine, 8 ins. dia., bears N.11°E. 10 lks. dist. marked ¼ S 14 B T
	A pine, 10 ins. dia., bears S.30°10'W. 35 lks. dist., marked ¼ S 23 B T
	100 ft. below top of N. slope of spur.
47.71	Trail at end of wagon road in canyon, bears N.15°E. and S.15°W. Canyon drains N.20°E.,120 ft.below ¼ sec. cor.
	Ascend.
56.65	Trail bears N.45°E. and S.45°W.
80.16	The cor. of secs. 14,15,22, and 23. 230 ft. above canyon.
	Land, mountainous.
	Soil, sandy loam; 1st rate.
	Timber, aspen and pine on 80.00 chs.
	Undergrowth,sagebrush,2 ft.high.Good growth of bunch grass.
	July 18: At 8h 30m a.m.l.m.t., I set off 39°51' on the lat. arc; 21°10'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14, 15,

Chains	
	22 and 23.
	Knowing from connection west of the line bet. secs. 22 and 27, that when the line bet. secs. 15 and 22 is produced west, it will fall more than 50 lks. from the cor. of secs. 15, 16, 21 and 22; therefore, from the cor. of secs. 14, 15, 22, and 23, I run
	West on a true line bet. secs. 15 and 22,
	Over ascending land.
8.00	Top of spur, bears N. and S., 50 ft. above sec. cor. Divide bet. Pleasant Valley and Price River. Descend.
40.00	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 15 on N. half, and S 22 on S. half; from which
	An aspen, 6 ins. dia., bears N.17°40'E. 26 lks. dist., marked ¼ S 15 B T
	An aspen, 6 ins. dia., bears S 23°10'W. 20 lks. dist., marked ¼ S 22 B T
	430 ft. below top of spur.
44.00	Descend gently through scattering timber.
64.00	Leave scattering aspen timber; thence over rolling sage-brush land.
65.65	Wagon road, Colton to Scofield, bears N.15°E. and S.15°W.
76.82	Intersect N. and S. line S.0°36'W. 5.86 chs. from the cor. of secs. 15, 16, 21 and 22, heretofore described. I destroy marks on this cor. pertaining to secs. 15 and 2
	Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 15 and 22, mkd. on brass cap T 11 S in NW. R 7 E S 15 in NE. S 22 in SE.; and S 21 C C in SW. quadrant; raise a mound o
	stone 2 ft. base, 1½ ft. high E. of cor. Pits impractica ble.
	A sandstone 10 ft. base, 7 ft. base, 7 ft. high, bears N.28°20'E. 49 lks. dist. marked X CC B R
	80 ft. below ¼ sec. cor.
	Land, mountainous on E. 64 chs.; rolling on W. 12.82 chs.

Subdivisions of T. 11 S., R. 7 E.

Chains	
	Soil, E. half mile, sandy loam, but stony; 3d rate.
	Soil W. half mile, sandy loam, 1st rate.
	Timber, aspen and pine. Dense on E. 44 chs.
	Undergrowth, sagebrush. Good growth of bunch grass.
	July 18: At 10h a.m.l.m.t., I set off 39°51'N. on the lat. arc; 21°10'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14,15,22, and 23. Thence I run
	N.0°01'W. bet. secs. 14 and 15,
	Over descending hilly country.
3.00	Wash, 15 lks. wide, 2 ft. deep, drains N.45°E. Ascend.
12.00	Top of spur, bears N.45°E. and S.45°W. 18 ft. above wash. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 15 on W. half, and S 14 on E. half; from which
	A red pine, 24 ins. dia. bears S.47°35'E. 46 lks. dist. marked ¼ S 14 B T
	A red pine, 15 ins. dia., bears N.20°10'W. 68 lks. dist., marked ¼ S 15 B T
	250 ft. below top of spur.
	July 18: At this cor. at 12h 6m p.m.l.m.t., the sky is overcast, solar observation is impossible.
44.00	Aspen and pine timber becomes scattering, bears E. and W.
48.70	Wagon road from Colton to Scofield bears E. and W. in lowest point of Spring Canon, 5 chs. wide, drains W. 65 ft. below ¼ sec. cor. Ascend.
64.00	Aspen and pine timber becomes dense, with an occasional cedar; service berry brush, 6 ft. high, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 10,11,14, and 15, marked on brass cap
	T 11 SS 10 in NW.
	R 7 E S 11 in NE.
	S 14 in SE.; and
	S 15 in SW. quadrant; from which

Subdivisions of T. 11 S., R. 7. E.

Chains	
	A pine, 9 ins. dia. bears N.43°W. 94 lks. dist. marked T 11 S R 7 E S 10 B T
	A pine, 12 ins. dia., bears N.16°50'E. 63 lks. dist. marked T 11 S R 7 E S 11 B T
	A pine, 10 ins. dia., bears S.51°15'E. 39 lks. dist. marked T 11 S R 7 E S 14 B T
	A pine, 8 ins. dia., bears S 78°W. 45 lks. dist. marked T 11 S R 7 E S 15 B T
	345 ft. above canyon.
	Land, mountainous.
	Soil, sandy loam; 1st rate.
	Timber, aspen and pine; dense on 60 chs.
	Undergrowth, sage and service berry. Good growth of bunch grass.
	Knowing from the connection west of the line bet. secs. 15 and 22 that when the line bet. secs. 10 and 15 is produced west it will fall more than 50 lks. from the cor. of secs. 9,10,15, and 16; therefore from the cor. of secs. 10,11,14 and 15 I run
	West on a true line bet. secs. 10 and 15,
	Descending over mountain.
4.00	Aspen and pine timber become scattering.
13.35	Leave timber; enter sagebrush flat, bears N. and S.
15.60	Old wagon road bears N. and S.
16.50	Wash, 10 lks. wide, 2 ft. deep, drains S. 300 ft. below sec. cor. Ascend slightly.
40.00	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec.cor., mkd. on brass cap ¼ S 10 on N. half, S 15 on S.half; dig pits 18x18x12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
	A red pine 34 ins. dia., bears S.19°20'E. 5.67 chs. dist., marked ¼ S 15 B T
54.00	Top of ascent, bears N. and S. Thence slight descent.
75.81	Intersect N. and S. line S.0°41'W. 7.00 chs. from cor.

Chains

of secs. 9,10,15, and 16, heretofore described. I destroy all marks on this cor. pertaining to secs. 10 and 15,

Set an iron post 3 ft. long, 2 ins. dia., 24 ins. in the ground for C.C. of secs. 10 and 15, marked on brass cap

T 11 S S 9 in NW.

R 7 E S 10 in NE.

S 15 in SE., and

S 16 C C in SW. quadrant, raise a mound of stone, 2 ft. base, 1½ ft. high E. of cor.

Land, mountainous on E. 13.35 chs.

Land, sage brush flat on W. 62.46 chs.

Soil, dark sandy loam, 1st rate.

Timber, aspen and pine on E. 13.35 chs.

Dense timber on E. 4 chs.

Undergrowth sage brush, good growth of bunch grass.

July 18, 1911.

Robert E. L. Allen

U. S. Transitman.

July 19: At 9h a.m., l.m.t., I set off 39°52'N. on the lat. arc, 21°00'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15.

Thence I run

N 89°41'E. on a random line bet. secs. 11 and 14.

40.00 Set temp. ¼ sec. cor.

80.18 Intersect the N. and S. line 20 lks. N. of the cor. of secs. 11, 12, 13 and 14.

Thence I run

S 89°50'W. on a true line bet. secs. 11 and 14.

Over descending land.

2.20 Enter aspen timber, brs. N. and S.

13.75 Leave dense aspen and an occasional pine, timber brs. N. & S.

Subdivisions of T. 11 S., R. 7 E.

Chains	
36.00	Enter scattering aspen timber, brs. N 45°W.
40.09	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 11 on N. half and S 14 on S. half, from which
	An aspen, 8 ins. dia., brs. N 80°W., 1.03 chs. dist., marked ¼ S 11 B T
	An aspen, 6 ins. dia., brs. S 72°15'E., 29 lks. dist., marked ¼ S 14 B T
	385 ft. below sec. cor.
55.28	Wash, 8 lks. wide, 2 ft. deep in canyon, drains S 30°E.
	205 ft. below ¼ sec. cor. Aspen timber becomes dense, brs. S 30°E.
	Ascend.
68.15	Top of spur projects S. 33 chs.
	218 ft. above wash.
	Descend.
80.18	The cor. of secs. 10, 11, 14 and 15.
	185 ft. below top of spur.
	Land, mountainous.
	Soil, sandy loam, 1st rate.
	Timber, aspen and an occasional pine.
	Undergrowth, short sage brush.
	Light growth of bunch grass.
	July 19, 1911.

July 21: At 8h 35m a.m., l.m.t., I set off 39°52' on the lat. arc, 20°38'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 10,11, 14, and 15.

Thence I run.

N 0°01'W. bet. secs. 10 and 11.

Over mountainous land.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S 10 on W. half and S 11 on E. half, from which

Subdivision of T. 11 S., R. 7 E.

Chains	
	An aspen, 4 ins. dia., brs. S 30°W., 14 lks. dist., marked ¼ S 10 B T
	An aspen, 4 ins. dia., brs. S 37°E., 16 lks. dist., marked ¼ S 11 B T
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 2, 3, 10 and 11, marked on brass cap
	T 11 S S 3 in NW.
	R 7 E S 2 in NE.
	S 11 in SE., and
	S 10 in SW. quadrant, from which
	An aspen, 4 ins. dia., brs. N 39°15'W., 93 lks. dist., marked T 11 S R 7 E S 3 B T
	An aspen, 4 ins. dia., brs. S 52°40'W., 72 lks. dist., marked T 11 S R 7 E S 10 B T
	An aspen, 4 ins. dia., brs. S 38°35'E., 1.74 chs. dist., marked T 11 S R 7 E S 11 B T
	No bearing tree suitable in sec. 2.
	Land, mountainous.
	Soil, sandy loam, 1st rate.
	Timber, aspen and pine, and an occasional cedar.
	Undergrowth, sage brush and choke cherry.
	Light growth of bunch grass.
	July 21: At this cor. I set off 20°36'N. on the decl. arc, and at 12h 6m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°53'.
	N 89°50'E. on a random line bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
80.22	Intersect N. and S. line at the cor. of secs. 1, 2, 11 and 12.
	Thence I run S 89°50'W. on a true line bet. secs. 2 and 11.
	Over ascending mountain.
5.00	Enter aspen timber, brs. N. and S.

Subdivisions of T. 11 S., R. 7 E.

Chains	
8.00	Top of spur, brs. N. and S. 50 ft. above sec. cor.
	Descend.
20.00	Bottom of draw, drains N. 15°E. 50 ft. below top of spur.
	Ascend.
40.11	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S 2 on N. half and S 11 on S. half, from which
	An aspen, 8 ins. dia., brs. N 22°15'E., 64 lks. dist., marked ¼ S 2 B T
	An aspen, 8 ins. dia., brs. S 67°50'E., 51 lks. dist., marked ¼ S 11 B T
42.00	Leave aspen timber, brs. N 60°W.
46.00	Top of ridge, brs. N 60°W.,
	Descend.
65.00	Enter dense wild goose berry brush, brs. N 45°W. and S 45°E.
80.22	The cor. of secs. 2, 3, 10 and 11.
	Land, mountainous.
	Soil, sandy loam, 1st rate.
	Timber, aspen.
	Undergrowth, sage and some wild goose berry.
	Light growth of bunch grass.
	July 21, 1911.
	July 22: At 9h a.m., l.m.t., I set off 39°53' on the lat arc, 20°26'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 2,3,10 and 11.
	Knowing from the connection west of the line bet. secs. 10 and 15 that when the line bet. secs. 3 and 10 is produced west it will fall more than 50 lks. from the cor. of secs. 3, 4, 9 and 10, therefore from the cor. of secs. 2,3,10 and 11, I run
	West on a true line bet. secs. 3 and 10.
	Over descending land.
33.00	Bottom of draw 15 lks. wide, 4 ft. deep, drains N 45°W.

Chains	
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 3 on N. half and S 10 on S. half, from which
	An aspen, 4 ins. dia., brs. N 15°W., 19 lks. dist., marked ¼ S 3 B T
	An aspen, 4 ins. dia., brs. S 10°E., 7 lks. dist., marked ¼ S 10 B T
47.00	Bottom of ravine, 20 lks. wide, 3 ft. deep, drains S 10°W.
	Ascend.
75.40	Intersect N. and S. line, S 0°30'W. 7.65 chs. from the cor. of secs. 3, 4, 9 and 10, heretofore described.
	I destroy all marks pertaining to secs. 3 and 10 on this cor. and the bearing trees.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for C.C. of secs. 3 and 10 and mark on brass cap
	S 4 in NW.
	T 11 S S 3 in NE.
	R 7 E S 10 in SE.
	S 9 C C in SW. quadrant, from which
	An aspen, 4 ins. dia., brs. N 27°10'E., 47 lks. dist., marked CC T 11 S R 7 E S 3 B T
	An aspen, 10 ins. dia., brs. S 10°30'E., 1.65 chs. dist., marked CC T 11 S R 7 E S 10 B T
	Land, mountainous and rolling.
	Soil, sandy loam with some stone 1st and 4th rates.
	Timber, aspen.
	Undergrowth, sage and some choke cherry.
	Light growth of bunch grass.
	July 22: At this cor. I set off 20°24'N. on the decl. arc, and at 12h 6m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°53'.
	N 0°01'W. on a true line bet. secs. 2 and 3.
	Over ascending land.
4.00	Leave aspen timber, enter dense choke cherry brush, brs.

Subdivisions of T. 11 S., R. 7 E.

Chains	
	E. and W.
27.00	At this point I discontinue work this day.
	July 22, 1911.
	July 25: At 9h 10m a.m., l.m.t., I set off 39°53' on the lat. arc, 19°49'N. on the decl. arc, and determine a meridian at a point 27 chs. N. of the cor. of secs. 2, 3, 10 and 11 where I discontinued work on July 22.
	Thence I continue N 0°01'W. bet. secs. 2 and 3.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 3 on W. half and S 2 on E. half, raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Pits impracticable.
56.00	Top of ridge, brs. S 45°E. and N 45°W.
	400 ft. above sec. cor.
	Descend.
68.00	Sandstone cliff 15 ft. high, brs. N 15°E.
70.00	Enter dense choke cherry brush, brs. E. and W.
72.00	Leave choke cherry brush, brs. E. and W.
86.38	Intersect the Second Standard Parallel South, S 89°06'E. 13.95 chs. from the ¼ sec. cor. on the S. side of sec. 34, heretofore described.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for C C of secs. 2 and 3, marked on brass cap
	T 11 S R 7 E in N. half.
	S 34 C C in NW.
	S 35 in NE,
	S 2 in SE., and
	S 3 in SW. quadrant, from which
	An aspen, 10 ins. dia., brs. S 60°E., 1.26 chs. dist., marked CC T 11 S R 7 E S 2 B T
	An aspen, 5 ins. dia., brs. S 60°10'W., 88 lks. dist., marked CC T 11 S R 7 E S 3 B T
	Land, mountainous.
	Soil, sandy loam with some stone, 3d rate.
	Timber, scrub aspen.

Subdivisions of T.11 S., R.7 E.

Undergrowth, sage and some choke cherry.
Light growth of bunch grass.

July 25, 1911.

George C. Swan
U.S.Transitman.

Note: This township was surveyed about three years ago by Deputy Surveyor Kershaw; but he made no returns of this survey to the U.S.Surveyor General's Office. The corners he set were about 9 chs.N.and 20 chs.W.of the true corner points. We destroyed all the corners and the bearing trees as set and marked by him.

GENERAL DESCRIPTION.

This township contains only two varieties of land, mountainous and valley land. The soil generally is a dark sandy loam, but in many places stony, and is capable of producing abundant crops of grass; elevation being too high for most agricultural crops.

A small valley extends through secs.13,14,15, 23,and 27, and is covered with a good growth of sagebrush.

All the other portion of the township is mountainous and is covered with a growth of aspen, and in most parts pine timber; but is of little value commercially, as the best timber has been cut for ties.

There are small streams of water in secs.13,14, 34,and 36 but are of little value for irrigation in this Tp. having been appropriated for lands east and at a lower altitude.

This township produces a fair growth of bunch grass; and from it and the sagebrush, thousands of sheep graze annually during the summer months.

There are no settlers in this township.

Robert E. L. Collins
George C. Swan
U.S.Transitmen.

Boundaries of T.11 S., R.7 E.

LATITUDES, DEPARTURES, AND CLOSING ERRORS.

Line Designated	True Bearing	Dist.	Latitudes, Departures. N.	S.	E.	W.
		chs.	chs.	chs.	chs.	chs.
S.Bdy. sec.36	N.88°14'W.	80.17	2.47	.....	.....	80.13
S.Bdy. sec.35	N.89°07'W.	40.44	.62	.....	.....	40.44
" " "	N.89°55'W.	40.26	.06	.....	.....	40.26
S.Bdy. sec.34	N.89°55'W.	40.26	.06	.....	.....	40.26
" " "	N.89°17'W.	38.60	.48	.....	.....	38.60
W.Bdy. sec.34	N. 0°11'E.	40.40	40.40	.....	.13	.....
" " "	N. 0°02'W.	40.13	40.15	.....	.....	..02
W.Bdy. sec.27	N. 0°49'E.	80.00	80.00	.....	1.14	.....
W.Bdy. sec.22	N. 0°44'E.	40.58	40.58	.....	..51	.....
" " "	N. 0°36'E.	40.56	40.56	.....	.42	.....
W.Bdy. sec.15	N. 0°35'E.	40.56	40.56	.....	.41	.....
" " "	N. 0°41'E.	40.58	40.58	.....	.48	.....
W.Bdy. Sec.10	N. 0°27'E.	40.46	40.46	.....	.32	.....
W.Bdy. Sec.10	N. 0°30'E.	40.44	40.44	.....	.35	.....
W.Bdy. Sec. 3	N. 0°50'E.	79,99	79.99	.....	1.16	.....
2nd St.Par.S.	S.89°06'E.	234.77	.....	3.69	234.76	.....
East Bdy.	South	484.35	.....	484.35	.....	.....
Convergency					.30	
T o t a l s			487.41	488.04	239.98	239.71
				487.41	239.71	
Error in lat.				0.63		
Error in dep.					.27	

4—680

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities tated opposite our several signatures, in surveying all those parts or portions of .....

For Certificates of Assistants see book "B" T.11 S., R.7 E.

f the ..... Meridian, in the State of .....

hich are represented in the foregoing field notes as having been executed by him, and under his direc-on; and that said survey has been, in all respects, to the best of our knowledge and belief, well and ithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

6—2764

.....

U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pursuan
of special instructions received from the U. S. Surveyor General for .....
bearing date of the ..... day of ....., 191 , I have well, faithfully, and trul
in my own proper person, and in strict conformity with said instructions, the Manual of Surveyi
Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oaths of Transitmen see book "H" T.11 S., R.9 E.

..... of the .....
..... Meridian, in the State of ....., which are represented
the foregoing field notes as having been executed by me, and under my direction; and I do furth
solemnly swear that all the corners of said survey have been established and perpetuated in strict acco
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. 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.

.....
U. S. Surveyor.

Subscribed by said ....., and sworn to before me
this ..... day of ....., 191

SEAL

.....

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Aug.8, 1914

The foregoing field notes of the ~~survey of~~ retracement and survey of the Sub-divisional lines of Township No.11 South, Range No.7 East of the Salt Lake Base and Meridian, Utah

executed by Robert E.L.Collier and George C.Swan
under ~~his~~ their special instructions dated May 23, 1911, having be
critically examined, and the necessary corrections and explanations made, the said field notes, and t
surveys they describe, are hereby approved.

A C Thoresen
U. S. 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.

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U. S. Surveyor General.

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Filed Feb.24, 1912. 117

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BOOK A-395

B.

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RETRACEMENT OF THE SOUTH AND SURVEY OF THE EAST BOUNDARY

TOWNSHIP NO.11 SOUTH, RANGE 7 EAST

AND

RESURVEY OF SECOND STANDARD PARALLEL SOUTH

RANGE NO.7 EAST

Of the SALT LAKE BASE AND *Meridian,*

the State of U T A H

EXECUTED BY

ROBERT E. L. COLLIER

the capacity of U. S. ~~*Surveyor*~~ Transitman, *under instructions dated* May 23, *191*1,

ed by the United States Surveyor General to govern surveys included in

up No. 13, *which were approved by the Commissioner of the General Land*

ce, July 3, *191*1, *pursuant to authority contained in the Act of*

gress dated , *191*

Survey commenced July 6, *191*1

Survey completed July 20, *191*1.

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Sur E " 6-04-35 Closing 00-22-44

BOOK A-395

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Retracement South Boundary of T. 11 S., R. 7 E.

Chains	
	July 8, 1911: At 9h a.m., l.m.t., I set off 39°49'N. on the lat. arc, and 22°34½'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34 on the south boundary of T. 11 S., R. 7 E. which is a sandstone 8x8x6 ins. above ground, marked and witnessed as described by the surveyor general.
	Thence I run N 89°58'E. on retracement line over slightly ascending land through sage-brush undergrowth, between secs. 3 and 34.
7.50	Leave smooth valley and begin steep ascent, brs. E. and W.
31.00	Top of ridge, brs. N 45°W. and S 45°E., 400 ft. above valley.
38.60	The ¼ sec. cor. bet. secs. 3 and 34 which is an aspen post, 4 ft. long, 4 ins. square, marked and witnessed as described by the surveyor general, brs. S. 52 lks. dist.
	This line is therefore S 89°17'E. 38.60 chs.
	I set in its place an iron post, 3 ft. long, 1 in. in dia. 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 34 on N. half and S 3 on south half, from which
	An aspen, 5 ins. dia., brs. S 57°50'E., 46 lks. dist., and
	An aspen, 6 ins. dia., brs. S 40°10'W., 40 lks. dist, each tree marked ¼ S 3 B T
	An aspen, 10 ins. dia., brs. N 56°20'E., 31 lks. dist., marked ¼ S 34 B T
	Same elevation as top of ridge.
66.20	Gulch, 50 lks. wide, 10 ft. deep, drains N.
78.60	I find no trace of sec. cor. Set temporary cor. for secs. 2, 3, 34 and 35.
	Land, valley and mountainous.
	Soil, sandy, clay loam, 1st rate.
	Timber, aspen.
	Undergrowth, sage brush.
	Mountainous land, 71.10 chs.

From the temp. cor. of secs. 2, 3, 34 and 35 I run

Retracement South Boundary of T. 11 S., R. 7 E.

Chains

N 89°58'E. on retracement line bet. secs. 2 and 35.

40.52 The ¼ sec. cor. brs. S. 16 lks. dist., which is a sandstone 12x10x4 ins. marked ¼ S on N. face; but find no trace of bearing trees as given in original notes of this ¼ sec. cor. This line is therefore S 89°55'E. 40.26 chs.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 35 on N. half and S 2 on S. half, dig pits 18x18x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor., from which

An aspen, 6 ins. dia., brs. S 66°55'W., 2.10 chs. dist., mkd. ¼ S 2 B T

I return to the temp. cor. of secs. 2, 3, 34 and 35 and set an iron post, 3 ft. long, 2 ins. dia., E. 26 lks. and S. 8 lks. of the temp. cor. 24 ins. in the ground for cor. of secs. 2, 3, 34 and 35, marked on brass cap

T 11 S S 34 in NW.

R 7 E S 35 in NE.

S 2 in SE., and

S 3 in SW. quadrant, from which

An aspen, 5 ins. dia., brs. S 49°40'E., 38 lks. dist., marked T 12 S R 7 E S 2 B T

An aspen, 5 ins. dia., brs. S 36°40'W., 18 lks. dist., marked T 12 S R 7 E S 3 B T

Land, mountainous.

Soil, sandy loam, 1st rate.

Timber, scattering quaking aspen and an occasional pine.

Undergrowth, sage brush.

The E. half of S. bdy. sec. 34 is S 89°55'E. 40.26 chs.

July 8: At the ¼ sec. cor. bet. secs. 2 and 35, I set off 22°33½'N. on the decl. arc, and at 12h 5m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°49'. Thence I run
N.89° 58'E.bet.secs.2 and 35

20.00 Dividing ridge, brs. NW. and SE.

Retracement of the S. Bdy. T. 11 S., R. 7 E.

Chains	
	Descend.
40.44	The cor. of secs. 1, 2, 35 and 36, brs. S. 64 lks. dist., which is a fir post, 4 ft. long, 4 ins. square marked as described by the surveyor general but am unable to find any of the marked bearing trees.
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 1, 2, 35 and 36, marked on brass cap
	T 11 S S 35 in NW.
	R 7 E S 36 in NE.
	R 7 E S 1 in SE., and
	T 12 S S 2 in SW. quadrants, from which
	A red pine, 10 ins. dia., brs. S 0°35'E., 35 lks. dist., marked T 12 S R 7 E S 1 B T
	A red pine, 8 ins. dia., brs. S 40°40'W., 38 lks. dist., marked T 12 S R 7 E S 2 B T
	Land, mountainous.
	Soil, sandy clay loam, 1st rate.
	Timber, quaking asp and pine.
	Undergrowth, sage brush.
	The course of this half mile is therefore S 89°07'E.40.44 chs.
	N 89°58'E. on retracement line bet. secs. 1 and 36.
40.07	The ¼ sec. cor. bet. secs. 1 and 36, which is a quaking asp post, 4 ft. long, 4 ins. square, marked as described by the surveyor general, brs. S. 126 lks. dist.
	Only one of the original bearing trees could be found.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor. of secs. 1 and 36, marked on brass cap ¼ S 36 on N. half and S 1 on S. half, from which
	A red pine, 10 ins. dia., brs. S 21°15'E., 10 lks. dist., marked ¼ S 1 B T, and one of the original bearing trees a
	Quaking aspen, 6 ins. dia., brs. N 9°W., 6 lks. dist., marked ¼ S 36 B T

Retracement of the S. Bdy. T. 11 S., R. 7 E.

Chains	
80.17	The cor. of Tps. 11 and 12 S., Rs. 7 and 8 E., which is a sandstone 30x16x4 ins., marked as described by the surveyor general, brs. S. 2.53 chs.

None of the original bearing trees could be found.

The course of this line is therefore S.88°14'E. 80.17 chs.

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. to Tps. 11 and 12 S., Rs. 7 and 8 E., marked on brass cap

T 11 S on N. half.
T 12 S on S. half.
R 7 E on W. half.
R 8 E on E. half.
S 36 in NW.
S 31 in NE.
S 6 in SE.
S 1 in SW. quadrants, from which

An aspen, 5 ins. dia., brs. N 10°25'E., 2.95 chs. dist., marked T 11 S R 8 E S 31 B T

An aspen, 5 ins. dia., brs. N 76°43'W., 4.83 chs. dist., marked T 11 S R 7 E S 36 B T

Land, mountainous.

Soil, sandy clay loam, 1st rate.

Timber, quaking aspen and pine.

Undergrowth, sage brush.

July 8, 1911.

Robert E. R. Collins

U. S. Transitman.

East Boundary of T.11 S.,R.7 E.

Survey commenced July 9,1911,and executed with a Young and Sons transit,No.8517,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.

The instrument was examined,tested on the true meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah June 3,1911.

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

At my camp,at the cor.of secs.21,22,27 and 28,T.11 S., R.7 E.;latitude 39°50'25''N.,longitude 111°10'01''W.; I set off 39°50'N.on the lat.arc;22°28'N.on the decl. arc;and at 9h.a.m.l.m.t.,determine with the solar a meridian and mark a point thereof,on the meridian set by Polaris obsevation on June 29,5 chs.N.of my station on which the meridian falls 0.2 ins.west of the mark determined by the Polaris observation.

At 3,p.m.l.m.t.,I set off 39°50'N.on the lat.arc.and 22°26'N.on the decl.arc,determine a meridian with the solar,and mark a meridian thus determined on the peg set for the Polaris observation on which this line falls 0.2 ins.E.

The solar apparatus,by a.m.and p.m.observations,defines positions for the meridians,respectively about 0'10'' west and 0'10'' east of the meridian established by the Polaris observation.therefore,I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 3h 30m.p.m. is N.16°30'W.;the angle thus determined gives the mag. decl.16°30'E.

East Buondary T.11 S.,R.7 E.

Chains	
	July 10; At 9h.a.m.l.m.t.,I set off 39°49'N.on.the.lat. arc;22°21'on the decl.arc;and determine a meridian with the solar at the cor.of Tps.11 and 12 S.,Rs.7 and 8 E.heretofore described in the notes of the retracement of the S.bdy.
	Thence I run
	North bet.secs.31 and 36,
	Over smooth,slightly descending land,through sage brush undergrowth.
2.85	Enter dense aspen timber,brs.E.and W.
22.75	Bottom of canyon 75 lks.wide drains N.60°E.
	370 ft.below Tp.cor. Timber becomes scattering.Ascend.
40.00	Top of ridge brs.E.and W. 200 ft.above canyon.
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 36 on W.half and S 31 on E.half,from which,
	An aspen 5 ins.dia.brs.N.21°10'E.2.92 chs.dist. marked 1/4 S 31 B T.and
	An aspen 5 ins.dia.brs.N.29°42'W.1.61 chs.dist. marked 1/4 S 36 B T.
	Thence descend.
45.25	Quaking aspen and red pine timber becomes dense brs. E.& W.
67.75	Bottom of canyon,1.50 chs.wide,stream of good water in bottom,3 lks.wide,2 ins.deep flows E.
	430 ft.below top of ridge. Timber becomes scattering. Ascend.
70.00.	Some sandstone outcropings along line,brs.E.and W.
	Leave scattering timber,undergrowth of sarvis berry and sage brush becomes dense,brs.E.and W.
80.00	Set an iron post 3 ft.long,3 ins.dia.24 ins.in the ground for cor.of secs.25,30,31 and 36,marked on brass cap
	T 11 S on N. half
	R 7 E S 25 in N W.
	R 8 E S 30 in N E.

East Boundary of T.11 S.,R.7 E.

Chains.	
	S 31 in S E.and
	S 36 in S W.quadrant,raise a mound of stone 2 ft. base 1 1/2 ft.high W.of cor.Pits impracticable.
	Land,mountainous.
	Soil,dark sandy loam on S.70 chs.1 st.rate.
	Soil,stony on N.30 chs.4 th.rate.
	Timber,quaking aspen and pine.
	Undergrowth,sarvis berry and sage brush.
	Dense timber on 42.40 chs.
	This cor. is 445 ft.above canyon.
	July 10:At this cor.I set off 22°20'N.,on the decl.arc; and,at 12h5m.p.m.l.m.t.,observe the sun on the meridian; the resulting lat.is 39°50'
	North,bet.secs.25 and 30,
	Over ascending mountain.
10.00	Leave sandstone out crop,surface becomes smooth.
13.00	Top of spur,brs.E.and W.285 ft.above sec.cor.Descend.
16.85	Enter dense aspen timber brs.E.and W.
36.00	Timber becomes scattering.
39.50	Bottom of canyon 15 lks.wide,drains E. 495 ft.below top of spur. Thence slight ascent.
40.00	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 25 on W.half and S 30 on E.half,from which
	An aspen 5 ins.dia.brs.N.71°35'E.14 lks.dist.marked 1/4 S.30 B T.and
	An aspen 6 ins.dia.brs.S.50°20'W.50 lks.dist.marked 1/4 S 25 B T.
40.50	Leave scattering timber brs.E. and W. Thence rapid ascent through sarvis berry and sage brush.
62.50	Leave dense undergrowth and enter scattering aspen timber, brs.E. and W.
64.00	Top of spur,brs.E.and W. 395 ft. above wash. Descend.

East Boundary of T.11 S.,R.7 E.

Chains.	
73.90	Quaking aspen with an occasional pine becomes dense, brs.N.75°E.
80.00	Set an Iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor.of secs.19,24,25 and 30,marked on brass cap,
	T 11 S on N. half,
	R 7 E S 24 in N W.
	R 8 E S 19 in N E.
	S 30 in S E, and
	S 25 in S W. quadrant,from which
	An aspen 4 ins.dia.brs.N.49°E.61 lks.dist.marked
	T 11 S R 8 E S 19 B T.
	An aspen 4 ins.dia.brs.N.64°40'W.18 lks.dist.marked
	T 11 S R 7 E S 24 B T.
	An aspen 4 ins.dia.brs.S.51°20'W.26 lks.dist.marked
	T 11 S R 7 E S 25 B T.and
	An aspen 4 ins.dia.brs.S.70°35'E.47 lks.dist.marked
	T 11 S R 8 E S 30 B T.
	175 ft. below top.of spur.
	Land,mountainous.
	Soil, stony on S.10 chs. 4th.rate
	Soil, dark sandy loam on N.70 chs.1st.rate.
	Timber,quaking aspen and pine.
	Undergrowth,sage brush and sarvis berry brush.
	Heavy timber on 25.25 chs.
	July 10,1911

July 11: At 9 h 0m.a.m.l.m.t.,I set off 39° 51'N.on the lat.arc and 22°13'N.on the decl.arc; and determine a meridian with the solar at the cor.of secs.19,24,25 and 30.

Thence I run

North bet.secs.19 and 24

Over descending land

0.50	Timber becomes scattering,brs.E.and W.

East Boundary of T.11 S.,R.7 E.

chains	
18.50	Bottom of canyon 2 chs.wide,drains E. 345 ft.below sec. cor.
20.00	Leave scattering timber,enter dense undergrowth of oak and sarvis berry brush and some sage brush,brs.E.& W. Ascend.
21.50	Outcrop of sandstone.
40.00	Set an iron post 3 ft.long 1 in.dia,26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 24 on W.half and S 19 on E.half,raise a mound of stone 2 ft.base 1 1/2 ft.high W.of cor.Pits impracticable. 500 ft.above canyon.
48.00	Top of ridge,brs.E.& W. 28 ft.above 1/4 sec.cor.
50.50	Leave sandstone outcrop,enter dense quaking aspen and pine timber,leave oak and sarvis berry brush,brs.E.& W.
80.00	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor.of secs.13,18,19 and 24,marked on brass cap, T 11 S on N.half, R 7 E S 13 in N W. R 8 E S 18 in N E. S 19 in S E. and S 24 in S W.quadrant,from which
	An aspen 6 ins.dia.brs.N.44°20'W.41 lks.dist.marked. T 11 S R 7 E S 13 B T.
	An aspen 4 ins.dia.brs.N.30°50'E.40 lks.dist.marked T 11 S R 8 E S 18 B T.
	An aspen 6 ins.dia,brs.S.54°45'E.23 lks.dist.marked T 11 S R 8 E S 19 B T.and
	An aspen 7 ins.dia.brs.S.82°40'W.24 lks.dist.marked T 11 S R 7 E S 24 B T.
	650 ft.below top of ridge.
	Land,mountainous,
	Soil,stony on 29 chs.4th.rate.
	Soil,dark sandy loam,1st.rate.
	Timber,quaking aspen and pine.
	Undergrowth,oak,sarvis berry and sage brush.
	Heavily timbered land on 30.00 chs.

East Boundary T 11 S.,R.7 E.

Chains	
	July 11: At this cor.I set off 22°12'N.on the decl.arc; and at 12h 6m.p.m.l.m.t.,observe the sun on the meridian; the resulting lat.is 39°52'
	North bet.secs.13 and 18
	Over descending land
0.95	Timber becomes scattering
1.95	Bottom of canyon,1.50 chs.wide,stream of clear water 4 lks.wide 3 ins.deep in bottom,flows E.
	14 ft.below sec.cor. Ascend.
3.25	Wagon road from Colton to Scofield brs.E.& W. Ascend.
4.00	Leave scattering timber,enter dense growth of oak,sarvis berry and sage brush,brs.E.& W. Surface stony.
26.50	Top of ridge brs.E.& W. 655 ft.above creek.Descend.
27.00	Leave dense undergrowth,enter dense aspen and red pine timber also surface becomes smooth,brs.E.& W.
40.00	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 13 on W. half and S 18 on E.half,from which
	A red pine 30 ins.dia.brs.S.79°W.19 lks.dist.marked 1/4 S 13 B T.and
	An aspen 10 ins.dia.brs.N.17°10'E.15 lks.dist.marked 1/4 S 18 B T.
	220 ft.below top of ridge,
41.50	Bottom of canyon 1 ch.wide,drs.E.20 ft.below 1/4 sec.cor.
	Small spring 4 lks.wide 2 ins.deep in canyon 65 lks.E.
	Flows E. Ascend.
44.00	Timber becomes scattering and oak and sarvis berry brush becomes dense,brs,E.& W.
60.00	Top of ridge brs.N.80°E.285 ft.above canyon. Descend.
65.75	Leave undergrowth,enter dense aspen and pine timber brs.E.and W.
78.45	Wash 5 lks.wide 1 ft.deep in bottom of gulch drs.E. 125 ft.below top of ridge. Ascend.
78.80	Leave dense timber and enter dense undergrowth of oak and sarvis berry brush brs.E.& W.

East Boundary T. 11 S., R. 7 E.

Chains	
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 7, 12, 13 and 18, marked on brass cap
	T 11 S on N. half.
	R 7 E S 12 in NW.
	R 8 E S 7 in NE.
	S 18 in SE., and
	S 13 in SW. quadrant, fromwhich
	An aspen, 7 ins. dia., brs. N 66°20'W., 18 lks. dist., marked T 11 S.R 7 E S 12 B T
	An aspen, 10 ins. dia., brs. N 65°20'E., 1.40 chs. dist., marked T 11 S R 8 E S 7 B T
	An aspen, 12 ins. dia., brs. S 63°50'W., 2.48 chs. dist., marked T 11 S R 7 E S 13 B T
	An aspen, 7 ins. dia., brs. S 5°E., 1.35 chs. dist., marked T 11 S R 8 E S 18 B T
	40 ft. above wash.
	Land, mountainous.
	Soil, on southerly 23 chs. stony, 4th rate.
	Soil, on north 57 chs., dark sandy loam, 1st rate.
	Timber, quaking aspen and some pine.
	Dense timber on 31.45 chs.
	Undergrowth, oak, sarvis berry and sage brush.
	July 11, 1911.
	July 12: At 8h 50m a.m., l.m.t., I set off 39°52'N. on the lat. arc, and 22°05'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18.
	Thence I run
	North bet. secs. 7 and 12 over ascending land.
10.00	Top of ridge, brs. N 70°E. 125 ft. above sec. cor.
	Leave oak undergrowth, brs. N 70°E. Descend.
29.00	Timber, quaking aspen and red pine becomes dense, brs. E & W
32.00	Top of small spur, brs. E.& W. 25 ft. above wash. Descend.
36.00	Timber becomes scattering.

East Boundary T. 11 S., R. 7 E.

Chains	
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 12 on W. half and S 7 on E. half, from which
	An aspen, 4 ins. dia., brs. S 52°25'W., 1.31 chs. dist., marked ¼ S 12 B T
	A pine, 14 ins. dia., brs. N 27°35'E., 5.83 chs. dist., marked ¼ S 7 B T
	23 ft. below top of spur. General direction of drainage N
48.50	Timber becomes dense, brs. N 45°E.
55.50	Wash, 5 lks. wide, 2 ft. deep, in bottom of gulch, brs. E.
	100 ft. below ¼ sec. cor. Ascend.
69.50	Top of spur, brs. E. & W. 227 ft. above wash. Descend.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 1, 6, 7 and 12, marked on brass cap T 11 S on N. half.
	R 7 E S 1 in NW.
	R 8 E S 6 in NE.
	S 7 in SE., and
	S 12 in SW. quadrant, from which
	An aspen, 7 ins. dia., brs. N 86°20'W., 18 lks. dist., marked T 11 S R 7 E S 1 B T
	A red pine, 12 ins. dia., brs. N 65°40'E., 3 lks. dist., marked T 11 S R 8 E S 6 B T
	A red pine, 10 ins. dia., brs. S 82°E., 43 lks. dist., marked T 11 S R 8 E S 7 B T
	An aspen, 8 ins. dia., brs. S 24°40'W., 12 lks. dist., marked T 11 S R 7 E S 12 B T
	86 ft. below top of spur.
	Land, mountainous.
	Soil, dark sandy loam, 1st rate.
	Timber, quaking aspen and pine.
	Dense timber on 38.50 chs.
	Undergrowth, oak sarvis berry and sage brush.
	July 12: At 12h 5m p.m., l.m.t., sky overcast, solar observation impossible.

East Boundary T.11 S., R. 7 E.

Chains.	
	North bet.secs.1 and 6, over slightly descending land.
10.00	Wash 5 lks.wide 1 ft.deep in bottom of canyon drains E. 75 ft.below sec.cor. Ascend.
13.75	Timber becomes scattering,brs.E.& W.
	Sarvis berry and oak brush become dense,brs E. & W.
22.00	Top of spur,brs.N.70°E. 180 ft.above wash.
	Leave dense undergrowth.
28.00	Enter dense aspen timber, brs.E.& W.
	Undergrowth of sarvis berry and sage brush becomes scattering.
40.00	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 1 on W.half and S 6 on E.half,from which
	An aspen 7 ins.dia.brs.N.89°40'W.43 lks.dist.marked 1/4 S 1 B T. and
	An aspen 6 ins.dia.brs.N.83°20'E.32 lks.dist.marked 1/4 S 6 B T.
	143 ft.below top of spur.
45.50	Old wagon road brs.E.& W.
46.50	Wash 3 lks.wide 1 ft.deep drains N.45°E.
	155 ft.below 1/4 sec.cor.Ascend.
57.00	Top of ridge brs.N.45°E.and S.45° W.
	145 ft.above wash.Descend.
80.15	Bottom of gulch,30 lks.wide,3 ft.deep,drs.N.45°E.
	100 ft.below top of ridge. Ascend.
84.00	Set temp.closing cor.for secs.1 and 6.
	July 12,1911.
	July 20: I continue my line N.from the temp.C.C. and at
84.35	Intersect the Second Standard parallel South N.89°21'W. 22.44 chs.from the cor.of T.10 S.Rs.7 and 8 E. heretofore described,
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for closing.cor.marked on brass cap
	T 11 S C.C.on N.half

East Boundary T.11 S.,R.7 E.

R 7 W S 1 in S W.

R 8 E S 6 in S E,quadrant,from which

An aspen 5 ins.dia.brs.S.3°20'W.65 lks.dist.marked

C C T 11 S R 7 E S 1 B T.and

An aspen 4 ins.dia.brs.S.31°10'E.33 lks.dist.marked

C C T 11 S R 8 E S 6 B T.

60 ft.above gulch.

Land,mountainous.

Soil,dark sandy loam,1st.rate.

Timber,quaking aspen and pine.

Dense timber on 70.10 chs.

Undergrowth,oak,sarvis berry and sage brush.

July 20,1911.

Robert E. R. Collins

U.S.Transitman.

Resurvey of the 2nd. Standard Parallel S. through R.7.E.

Preliminary to commencing the subdivision of this, T.11 S., R.7 E. as the courses and distances bet. secs. 33 and 34, 27 and 28, 21 and 22, 15 and 16, 9 and 10, and 3 and 4 are more than the allowable limit of error allowed by the Manual of Instructions, and as the Second Standard parallel south through range 7 East was run by the same deputy I conclude to retrace a portion of ths line.

July 6: At 10h 00m a.m. l.m.t. I set off 39°54'N. on the lat. arc. and 22°47'N. on the decl. arc; and determine a meridian with the solar, at the closing cor. of secs. 3 and 4 of T.11 S., R.7 E. heretofore described,

Thence I run W. on retracement line on S. bdy. sec. 33; at 18.80 chs. I find no trace of the 1/4 standard cor. I return to the closing Cor. of secs. 3 and 4 and run east on a blank retracement line on the S. bdy. sec. 33 and at 21.20 chains I make dilligent search I failed to find any trace of old standard cor. of secs. 33 and 34, I set temporary sec. cor.; therefore I continue my line east, and am unable to find any of the corners along the standard line until at 257.21 chs. I find the standard Tp. cor. for T.10 S., Rs. 7 and 8 E. South 4.05 chs. dist.

The distance from the closing cor. of secs. 3 and 4 to the Standard cor. of secs. 33 and 34 is as X to the following proportion: X : 21.20 :: 257.21 : 260.20 = 20.87 chs.

This line is therefore S.89°06'E. and each mile is 78.78 chains in length, I therefore resurvey this line.

July 6, 1911

July 20: At 9h. a.m. l.m.t., I set off 39°54'N. on the lat arc and 20°49'N. on the decl. arc and determine a meridian with the solar at the Closing cor. of secs. 3 and 4 on the Second standard parallel south in range 7 E.

Thence I run S.89°06'E. on Resurvey line on Second Standard Parallel South in range 7 E. on S. side of sec. 33 over

Resurvey of Second Standard Parallel South through R.7 E.

Chains	
	slightly ascending land through quaking aspen timber.
3.00	Top of spur, projects north 4 chs. 35 ft. above sec. cor.
	Descend.
8.00	Wash 5 lks. wide, 1 ft. deep, drains N.45°W. 35 ft. below top of spur.
	Leave dense timber, enter undergrowth of aspen, oak and sarvis berry brush, 3 to 8 ft. high brs. N.30°W. Ascend.
	Difference between measurements of 20.87 chs., by two sets of chainmen, is 4 lks.; position of middle point
	By 1st. set 20.85 chs.
	By 2nd set 20.89 chs.; the mean of which is
20.87	No trace of old standard sec. cor.
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for standard cor. of secs. 33 and 34, marked on brass cap
	T 10 S S 33 S in NW.
	R 7 E S 34 C in NE. quadrant; dig pits 24x18x12 ins. crosswise on each line, E. and W. 3 ft., and N. of post 7 ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high N. of cor. 200 ft. above wash.
	Land, mountainous.
	Soil, dark sandy loam, 1st. rate.
	Timber, quaking aspen on 8. chs.
	Undergrowth, oak and sarvis berry brush.
	S.89°06'E. on resurvey line on S. bdy. sec. 34 over ascending land.
11.00	Leave dense undergrowth of oak and sarvis berry. brs. N. & S.
38.51	S.W. cor. of sheep corral brs. N. 30 lks. dist.
	Top of ridge brs. N.45°W. and S.45°E. 500 ft. above standard sec. cor.
39.39	Difference between measurements of 39.39 chs. by two sets of chainmen, is 6 lks.; position of middle point [illegible]
	for 1/4 [illegible] By 1st set 39.42 chs., [illegible] on brass cap 1/4 S
	34 S By 2nd set 39.36 chs. [illegible] the mean of which is 39.39

Resurvey of the Second Standard Parallel South through R.7 E.

Chains	
39.39	No trace of old 1/4 sec.cor.
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 34 S C on N. half;raise a mound of earth and stone 2 ft.base 1 1/2 ft. high N.of cor.Pits impracticable,
	A quaking aspen 5 ins.dia.brs.N.58°25'E.49 links dist.marked 1/4 S 34 B T
39.70	Enter dense quaking aspen timber brs.N.and S.75 lks.thence S.75°E.
	Difference bet.measurements of 78.78 chs.;by two sets of chainmen,is 8 lks.;position of middle point
	By 1st set 78.82 chs.
	By 2nd set 78.74 chs.the mean of which is
78.78	No trace of old standard sec.cor.could be found.
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for standard cor.for secs.34 and 35,marked on brass cap
	T 10 S S 34 S in N W.
	R 7 E S S 35 C in N E.quadrant;from which
	An aspen 9 ins.dia.brs.N.42°25'W.57 lks.dist. marked T 10 S R 7 E S 34 B T.and
	An aspen 7 ins.dia.brs.N.18°50'E.1.13 chs.dist. marked T 10 S R 7 E S 35 B T.
	330 ft. below top of ridge.
	Land ,mountainous.
	Soil,dark sandy loam,1st.rate
	Timber,quaking aspen on 39.08 chs.
	Undergrowth,light growth of sage brush and buck brush.
	July 20:At this cor.I set off 20°48'N.on decl.arc; and at 12h.6m.p.m.l.m.t.,I observe the sun on the meridian,the resulting lat.is 39°54'
	S.89°06'E.on a resurvey line on the S.side of Sec.35 over descending land

Resurvey of the Second Standard Parallel South through R.7 E.

Chains.	
0.40	Wash 1 chain wide2 ft. deep drains N.45°E. 10 ft.below sec.cor. Thence slight ascent.
19.00	Top of spur brs.N.and S. 60 ft.above wash.
36.00	Wash 5 lks.wide 1 ft.deep drains N.45°E.95 ft.below top of spur. Ascend.
	Difference bet.measurements of 39.39 chs.by two sets of chainmen,is 6 lks.;position of middle point
	By 1st.set,39.36 chs.
	By 2nd.set,39.42 chs.;the mean of which is
39.39	I again make dilligent search for old 1/4 sec.cor.but am unable to find any trace of it.
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 35 S C.on N.half,from which
	An aspen 8 ins.dia.brs.N.56°10'E.2.80 chs.dist.and
	An aspen 12 ins.dia.brs.N.56°20'W.1.97 chs,dist.
	each tree marked 1/4 S 35 B T.
	Difference bet.measurements of 78.78 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st set 78.73 chs.
	By 2nd set 78.83 chs.;the mean of which is
78.78	I again make dilligent search for the old standard cor. to secs. but am unable to find any trace of it.
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for standard cor.of secs.35 and 36,marked on brass cap
	T 10 S S 35 S in the NW.and
	R 7 E S 36 C in N E.quadrant,from which
	An aspen 5 ins.dia.brs.N.60°15'W.22 lks.dist.
	marked T10 S S 35 B T.and
	An aspen 12 ins.dia.brs.N.35°E.30 lks.dist.marked
	T 10 S R 7 E S 36 B T.
	Land, Mountainous.
	Soil,dark sandy loam, 1st.rate.
	Timber,quaking aspen and an occasional pine.
	Good growth of bunch grass.

Resurvey of the Second Standard Parallel South through R.7 E.

Chains.	
	S.89°06'E.on resurvey line on the S.bdy.sec.36
	Difference bet.measurements of 39.39 chs.by two sets of chainmen,is 8 lks.;position of middle point
	By 1st set,39.43 chs.
	By 2nd set,39.35 chs.;the mean of which is
39.39	I again make dilligent search for the old 1/4 sec.cor but am unable to find any trace of it.
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 36 S C.on N. half half,from which
	An aspen 8 ins.dia.brs.N.35°10'W.48 lks.dist.and
	A pine 48 ins.dia.brs.N.86°E.32 lks.dist.each tree marked 1/4 S 36 B.T.
68.00	Wash 18 lks.wide,18 feet deep drains N.45°E.
	Difference bet.measurements of 78.78 chs.,by two sets of chainmen,is 12 lks.;position of middle point
	By 1st set,78.84 chs.
	By 2nd set,78.72 chs.;the mean of which is
78.78	Cor.of T.10 S,Rs.7 and 8 E.which is a cedar stake 2x2x15 ins.above ground set in a small mound of stone,marked and witnessed as described by the surveyor general,in its place,set an iron post 3 ft.long 3 ins.dia.24 ins. in the ground for standard Tp.cor.of T.10 S.Rs.7 and 8 E.marked on brass cap
	T 10 S in N.half
	R 7 E S 36 S in N W.
	R 8 E S 31 C in N E.quadrant,from which
	An aspen 8 ins.dia.brs.N.78°15'E.12 lks.dist. marked T 10 S R 8 E S 31 B T. and
	An aspen 8 ins.dia.brs.N.28°30'W.11 lks.dist. marked T 10 S R 7 E S 36 B T.
	Land,mountainous.
	Soil,dark sandy loam,1st.rate.
	Timber,quaking aspen and pine.
	Undergrowth,some sage brush. July 20, 1911.

BOOK A-395

For general description see notes of the subdivision of this township.

Robert E. R. Reed

U.S.Transitman.

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Robert E.L.Collier and George C.Swan, U. S. ~~Surveyor~~ Transitmen, during the periods and in the capacities d opposite our several signatures, in surveying all those parts or portions of Township No. South, Range No. 7 East

e Salt Lake Base and Meridian, in the State of Utah

n are represented in the foregoing field notes as having been executed by him, and under his direc- and that said survey has been, in all respects, to the best of our knowledge and belief, well and fully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
n G. Kiesenburger	June 27,1911	Oct.30, 1911	Chainman.
Hugo Price	July 13,1911	Oct.30, 1911	Chainman.
old C. Mandell	June 27,1911	Sept. 3,1911	Chainman
wrence C. Swan	July 13,1911	Sept.6, 1911	Chainman.
letcher Barton	June 27,1911	Sept.3, 1911	Axman.
Roy Francom	June 27,1911	July 18,1911	Moundman.
bert J Collier.	June 27,1911	Sept. 3,1911	Flagman.
rd Ashby Merriott	July 13,1911	Aug. 19,1911	Flagman
y Francom	July 19,1911	Sept. 6,1911	Axman.
letcher Barton	Sept. 4,1911	Sept.19,1911	Chainman.
ank C Johnson Jr.	July 13,1911	Sept. 6,1911	Moundman.
G Olmstead	Sept. 4,1911	Sept.19,1911	Flagman.
liam E Boy	Sept. 7,1911	Sept.19,1911	Flagman.
w W. Stevenson	Sept. 7,1911	Sept.19,1911	Moundman
rd McClure	July 19,1911	Sept. 3,1911	Moundman.

ubscribed and certified to before me on the dates of the final service as shown above.

Robert E.L. Collier

~~U.S. Surveyor.~~
U.S.Transitman.

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuan of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 , I have well, faithfully, and tru in my own proper person, and in strict conformity with said instructions, the Manual of Surveyi Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of Transitmen see book "G" T.11 S., R.9 E.

_____ of the _____ Meridian, in the State of _____, which are represented the foregoing field notes as having been executed by me, and under my direction; and I do furtl solemnly swear that all the corners of said survey have been established and perpetuated in strict acco ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Survey General for _____ and in the specific manner described in the field notes, and tl the foregoing are the original field notes of such survey.

_____
U. S. Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, _____, 191

The foregoing field notes of the re survey of the East, retracement and resurvey of the South Boundaries; and retracement and survey of the subdivisional lines of Township No. 11 South, Range No. 9 East of the Salt Lake Base and Meridian, Utah

executed by Robert E.L. Collier and George C. Swan under their special instructions dated May 23, 191 1, having be critically examined, and the necessary corrections and explanations made, the said field notes, and t surveys they describe, are hereby approved.

_____
U. S. 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.

_____
U. S. Surveyor General.

6—2761

4—680

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities ted opposite our several signatures, in surveying all those parts or portions of .....

.....

.....

.....

.....

.....

.....

he ..... Meridian, in the State of .....

ich are represented in the foregoing field notes as having been executed by him, and under his direc- n; and that said survey has been, in all respects, to the best of our knowledge and belief, well and hfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

6—2764 *U. S. Surveyor.*

FINAL OATH OF UNITED STATES SURVEYOR.

I, ... U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for ..... bearing date of the ..... day of ..... 191 , I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oaths of Transitmen see book "E" T.11 S., R.9 E.

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

..... Meridian, in the State of ....., which are represented in the foregoing field notes as having been executed 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 U. S. 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.

.....
U. S. Surveyor.

Subscribed by said ....., and sworn to before me this ..... day of ....., 191

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Aug. 8, 1914

The foregoing field notes of the survey of the East and retracement of the South Boundaries of Township No. 11 South, Range No. 7 East; and resurvey of the Second Standard Parallel South, through Range No. 7 East of the Salt Lake Base and Meridian, Utah

executed by Robert T. L. Collier under his special instructions dated May 23, 1913, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A. C. Thorsen
U. S. 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.

.....
U. S. Surveyor General.

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BOOK A-395
C.

EW.

FIELD NOTES

OF THE SURVEY OF THE

EAST BOUNDARY

AND

RETRACEMENT AND RESURVEY OF THE SOUTH AND WEST BOUNDARIES

OF

TOWNSHIP NO. 12 SOUTH, RANGE NO. 8 EAST,

AND

TRACEMENT OF SOUTH BOUNDARY OF TOWNSHIP 11 SOUTH, RANGE 8 EAST

Of the SALT LAKE BASE AND *Meridian,*

e State of UTAH

EXECUTED BY

ROBERT E.L. COLLIER AND GEORGE C. SWAN,

e capacity of U. S. ~~*Surveyor*~~ Transitmen, *under instructions dated* May 23, *191*1.

d by the United States Surveyor General to govern surveys included in

p No. 13, *which were approved by the Commissioner of the General Land*

e, July 3, *191*1, *pursuant to authority contained in the Act of*

ress dated , *191*

Survey commenced July 22, *191*1

Survey completed August 30, *191*1.

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BOOK A-395

INDEX DIAGRAM.

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Retracement South Boundary T.11 S., R.8 E.

Survey commenced July 22, 1911, and executed with a Young & Sons transit No.8517. For complete test see book "B", page 5.

July 22: At 10h a.m.l.m.t., I set off 39° 49' on the lat. arc; 20° 25.5' on the decl.arc; and determine a meridian with the solar, at the cor.of secs.31 and 32 on the S.bdy.of Tp., which is a sandstone 26 x 14 x 7 ins. marked and witnessed as described by the surveyor general. I destroy this cor., and at this point,

Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of secs.31 and 32, marked on brass cap

T 11 S S 31 in NW.

R 8 E S 32 in NE.quadrant,

T 12 S on S.half; from which

An aspen, 8 ins.dia., brs.N.41° 35'W.,35 lks. dist., marked T 11 S R 8 E S 31 B T

An aspen, 8 ins.dia., brs.N.7°30'E.,95 lks.dist. marked T 11 S R 8 E S 32 B T

Raise a mound of stone 3 ft.base, 2 ft.high W.of cor.

Pits impracticable.

Thence I run S.89° 55'W.on a retracement line on S.bdy. of sec.31.

9.89 Intersect the ¼ sec.cor.on S.side of sec.31, which is an aspen post, 4 ft.long,4 ins.square, badly decayed, marks not legible; at this point I

Set an iron post, 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 31 on N.half, and S 6 on S.half; from which

An aspen, 10 ins.dia., brs.S.16°15'W.17 lks.dist. marked ¼ S 6 B T.

An aspen, 10 ins.dia., brs.N.62° 50'W. 30 lks. dist., marked ¼ S 31 B T

Raise a mound of stone 3 ft.base, 2 ft.high N.of cor.

July 22: At this cor.I set off 20° 24.5'N.on the decl. arc; and at 12h 06m p.m.l.m.t., observe the sun on the

Retracement South Boundary T.11 S., R.8 E.

Chains.	
	meridian; the resulting lat.is 39°49'.
56.50	Intersect the E.bdy.T.11 S., R.7 E.10.47 chs.N.of the cor.of Tps.11 and 12 S., R.7 E., heretofore described.
	At this point I
	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for closing cor.of Tps.11 and 12 S., R.8 E., marked on brass cap
	T 11 S on N.half,
	R 8 E on E.half,
	T 12 S on S.half,
	C C R 7 E on W.half,
	S 31 in NE.; and
	S 6 in SE.quadrant; from which
	An aspen, 8 ins.dia., brs.S.70° 40'E. 50 lks.dist. marked C C T 12 S R 8 E S 6 B T
	An aspen, 4 ins.dia., brs.N.70°30'E.45 lks.dist. marked C C T 11 S R 8 E S 31 B T
	July 22, 1911.
	Robert E. R. Cullen
	U.S.Transitman.

Survey commenced August 6, 1911,and executed with the solar compass described in book "A", page 13, of this survey. I examine the adjustments of the instrument, find them correct; then,to test the solar apparatus,by comparing its indications resulting from solar observations made during a.m.and p.m.hours, with a meridian determined by observation on Polaris,I proceed as follo

At my camp at the cor.of secs.10,11,14,and 15,T.11 S.R.8 E.,in approximate lat.39°52', long.111°02'07"W.I set of: 39°52' on the lat.arc;16°55'N.on the decl.arc;and at 9h a.m.l.m.t.determine a meridian with the solar,and mark a point on the stake previously set by Polaris observation 5 chs.N.of my station;this point falls 0.20 ins.E. of the nail set by Polaris.

Retracement South Boundary of T.11 S., R.8 E.

Chains. At 3h p.m.l.m.t., I set off 39° 52' on the lat.arc; 16° 51'N.on the decl.arc, determine a meridian with the solar, and mark a point on the stake set by Polaris observation;this mark falls 0.15 ins.W.of nail set by Polaris observation.

The solar apparatus by a.m.and p.m.observations defines positions for meridians, respectively about 0'12" east and 0' 8" west of the meridian previously established by Polaris in the subdivision of T.11 S., R.8 E.;therefore I conclude that the adjustments of the instrument are satisfactory. August 6, 1911.

August 7: At 8h 30m a.m.l.m.t., I set off 39° 49' on the lat.arc; 16° 38.5' N.on the decl.arc; and determine a meridian with the solar at the cor.of secs.31 and 32 on the S.bdy.of T.11 S., R.8 E., which is an iron post 3 ins.dia., heretofore described. Thence I run N.89°55'E.on a retracement line on S.bdy.of sec.32, Over descending land; through service berry brush.

0.00 Leave service berry brush, brs.N.45° E. and S.45° W.

3.60 Old wagon road brs.N.45° E. and S.45° W.

8.00 Enter aspen timber brs.N.and S.

0.83 The ¼ sec.cor.on S.bdy.of sec.32 brs.S.18 lks.,which is a limestone 10 x 8 x 6 ins.above ground, marked and witnessed as described by the surveyor general. I destroy this cor., and at this point

Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 32 on N.half, and S 5 on S.half; from which

An aspen, 5 ins.dia., brs.N.22° 25'W.25 lks.dist. marked ¼ S 32 B T

An aspen, 5 ins.dia., brs.N.70° 30'E.29 lks.dist. marked ¼ S 32 B T

350 ft.below sec.cor.

This line is S.89° 49'E.40.83 chs., instead of N.89°55'E.

Retracement South Boundary of T.11 S., R.8 E.

Chains.	
	as given by the surveyor general.
	I continue my line N.89°55'E.on retracement line,
76.00	Leave aspen timber, brs.N.and S.;enter sagebrush.
81.62	The cor.of secs.32 and 33 brs.S.75.5 lks.dist., which is a quartzite stone 12 x 12 x 8 ins.above ground, marked and witnessed as described by the surveyor general. I destroy this cor.; and in its place
	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of secs.32 and 33,marked on brass cap
	T 11 S S 32 in NW.
	R 8 E S 33 in NE.quadrant; and
	T 12 S in S.half; raise a mound of stone 3 ft base, 2 ft.high W.of cor. Pits impracticable; 125 ft. below ¼ sec.cor.
	From the ¼ sec.cor.on S side of sec.32 to the cor.of secs 32 and 33 is S.89°16'E.40.79 chs., instead of N.89°55' E.40 chs.as given by the surveyor general.
	Land, mountainous.
	Soil, sandy loam, but stony; 3rd rate.
	Timber, aspen on 49.62 chs.
	Undergrowth, service berry and sagebrush.
	August 7: At this cor.I set off 16° 36'N.on the decl.arc; and at 12h 6m p.m.l.m.t., observe the sun on the meridian; the resulting lat.is 39°49'.
	N.89°55'E.on a retracement of S bdy.sec.33,
17.00	Abrupt descent brs.N.45° E.
25.00	Bottom of canyon, 100 ft.below sec.cor., drains N.45° E. Ascend.
38.00	Top of ridge, brs.N.45°E.and S.45°W.,165 ft.above canyon.
40.26	The ¼ sec.cor.on the S.side of sec.33 brs.S.43.5 lks., which is a limestone 10 x 8 x 6 ins., marked and witnessed as described by the surveyor general, I destroy this cor., and at this point,

Retracement South Boundary of T.11 S.,R.8 E.

Chains.	
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 33 on N.half and S.4 on S.half,raise a mound of stone 3 ft.base 2 ft. high N.of cor.Pits impracticable.
	105 ft.below top of ridge
	From the cor.of secs.32 and 33 to the 1/4 sec.cor.on the S.side of sec.33 is S.89°27'E.40.26 chs.instead of N.89° 55'E.40.00 chs.as given by the surveyor general.
49.00	Bottom of canyon drains N.45°E.
	125 ft.below top of ridge.ascend.
59.00	Top of ridge brs.N.45°E.100 ft.above bottom of canyon, descend.
64.00	Bottom of canyon,water 4 lks.wide 2 ins.deep course N.45°E. 100 ft.below top of ridge. Ascend through dense serviceberry and sage brush.
80.90	The cor.of secs.33 and 34 brs.S.42 lks.dist.which is a lime-stone 12x12x6 ins.above ground marked and witnessed as described by the surveyor general,I destroy this cor. and at this point
	Set an iron post 3 ft.long 3 ins.dia.34 ins.in the ground for cor.of secs.33 and 34.marked on brass cap
	T 11 S S 33 in N W
	R 8 E S 34 in N E.quadrants and
	T 12 S on S half,and raise a mound of stone 3 ft.base 2 ft.high W.of cor.Pits impracticable.
	170 ft.above canyon.
	Line from the 1/4 sec.cor.on the S.bdy.sec.33 to the cor. of secs.33 and 34 is N.89°54'E.40.64 chs.instead of N.89°55'E.40.00 chs.as given by the surveyor general.
	Land,mountainous.
	Soil,sandy loam with some stone 2nd.rate.
	Timber,a few scattering patches of aspen timber.
	Undergrowth,serviceberry and sage brush.
	Scant growth of bunch grass.
	August 7,1911.

Retracement South Boundary of T.11 S.,R.8 E.

chains.	
	August 8: At 8h.30m.a.m.l.m.t.I set off 39°49'on the lat. arc;16°22'N.on the decl.arc,and determine a meridian with the solar at the cor.of secs.33 and 34;
	Thence I run
	N.89°55'E.on retracement line on S.bdy.of sec.34
21.50	Enter scrub aspen timber brs.N. and S.
25.00	Leave scrub aspen timber brs.N.and S.
25.50	Top of ridge brs.N. and S. 35 ft.above sec.cor.Descend.
40.88	The 1/4 sec.cor.on S.side of sec.34 brs.S.20 lks.which is a limestone 12x6x5 ins.above ground marked and witnessed as described by the surveyor general, I destroy this cor. and at this point
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor;marked on brass cap 1/4 S 34 on N.half and S 3 on S.half,raise a mound of stone 3 ft.base 2 ft. high N. of cor. Pits impracticable.
41.00	Begin steep descent.
49.50	Bottom of gulch 400 ft.below top of ridge drains N.45°E. Ascend.
60.00	Top of ascent, 50 ft.above gulch,N.45°E.Descend.
71.20	Center of Fish creek,50 lks.wide,water 1 ft.deep course N.45°E. 10 ft.below top of ascent. Ascend.
71.50	Scofield branch of the D.and R.G.R.R.from Scofield to Colton brs.N.45°E. and S.45° W.
81.06	The cor.of secs.34 and 35 brs.S.41 lks.dist.which is a limestone 14x8x8 ins.above ground marked and witnessed as described by the surveyor general,I destroy this cor. and at this point
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor. of secs.34 and 35,marked on brass cap
	T 11 S S 34 in N W
	R 8 E S 35 in N E,quadrant and
	T 12 S on S.half,raise a mound of stone 3 ft.base 2 ft.high W.of cor.Pits impracticable.
	150 ft.above Fish creek.
	The S.bdy of Sec.34 is S.89°48'E.81.06 chs.in stead of

Retracement South Boundary of T.11 S.,R.8 E.

Chains.	
	N.89°55'E.80.00 chs.as given by the surveyor general.
	Land.mountainous.
	Soil,sandy loam but stony,2nd.rate.
	Timber, a few scattering bunches of aspen.
	Undergrowth,service berry and sage brush.
	scant growth of bunch grass.
	August 8: At this cor.I set off 16°19'N.on the decl.arc, and at 12h.6m.l.m.t.observe the sun on the meridian,the resulting lat.is 39°49'.

	N.89°55'E.on retracement line on the S.side of sec.35
	Over steep ascending N W slope of mountain.
20.00	Top of ridge brs.northerly. 290 ft.above Fish Creek.desc.
39.98	The 1/4 sec.cor.brs.S.22 lks.which is a lime stone 14x12x 8 ins.above ground,marked and witnessed as described by the surveyor general, I destroy this cor.and at this point
	Set an iron post 3 ft.long 1 in dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 35 on N.half and S 2 on S.half,raise a mound of stone 3 ft.base 2 ft. high N.of cor.Pits impracticable.
	From the cor.of secs.34 and 35 to the 1/4 sec.cor.on S. Side of sec.35 is S.89°46'E.39.98 chs.instead of N.89°55' E. 40.00 chs.as given by the surveyor general.
48.00	Bottom of gulch drains N.45°E. 100 ft.below top ofridge.Asc.
76.00	Top of ridge bears N. 25° E. and S.25° W.
80.86	The cor.of secs.35 and 36 brs.S.57 lks.dist.which is a limestone 18x14x8 ins.above ground,marked and witnessed as described by the surveyor general,I destroy this cor. and at this point
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor.of secs.35 and 36,marked on brass cap
	T 11 S S 35 in N W
	R 8 E S 36 in N E.quadrant,and
	T 12 S on S.half,raise a mound of stone 3 ft. base 2 ft.high W.of cor.Pits impracticable.

Chains.	
	35 ft.above bottom of gulch.
	From the 1/4 sec.cor.on the S.side of sec.35 to the cor.
	of secs.35 and 36 is S.89°35'E.40.88 chs.instead of
	N.89°55'E.40.00 chs.as given by the surveyor general.
	Land,mountainous
	Soil,sandy loam with some stone 2nd.rate.
	Timber,an occasional patch of scrub aspen.
	Undergrowth,sage,service berry and some oak brush.
	scant growth of bunch grass.
	August 8,1911.

	August 9:At 9h.a.m.l.m.t.I set off 39°49'on the lat.arc:
	16°04.5'N.on the decl.arc.and determine a meridian at
	the cor.of secs.35 and 36.
	Thence I run,
	N.89°55'E.on retracement of S.bdy.Sec.36.
	Over descending land.
16.25	Wagon road,Colton to Scofield brs.N.45°W.and S.45°E.
20.00	Center of Beaver creek,5 lks.wide,2 ins.deep course
	N.45°W. 400 ft.below sec.cor. Ascend.
23.00	Heavy oak brush,brs.N.and S. [illegible]
36.00	Top of ridge projects N. 400 ft.above Beaver creek.
	Enter dense aspen and oak brush,brs.N.and S.
	Thence over nearly level line.
39.80	The 1/4 sec.cor.on S.side of sec.36 brs.S.35 lks.dist.
	Which is a limestone 16x8x6 ins.above ground,marked and
	witnessed as described by the surveyor general,I destroy
	this cor, and at this point I
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground
	for 1/4 sec.cor.on the S.side of sec.36,marked on brass
	cap 1/4 S 36 on N.half and S 1 on S.half from which
	An aspen 4 ins.dia.brs.N.64°05'E.23 lks.dist.marked
	1/4 S 36 B T and
	An aspen 4 ins.dia.brs.N.19°20'W.9 lks.dist.marked
	1/4 S 36 B T.

South Boundary of T.11S.,R.8 E.

Chains	
	From the Cor.of Secs.35 and 36 to the 1/4 sec.cor.on the S.side of sec.36 is S.89°35'E.39.80 chs.instead of N.89° 55'E.40.00 chs.as given by the surveyor general.
44.00	Leave aspen timber,continue in oak brush,brs.N.and S.
80.30	The Cor.of Tps.11 and 12 S.,Rs.8 and 9 E.brs.S.63 lks. Which is a sandstone 16x14x6 ins.above ground,marked and witnessed as described by the surveyor general, I destroy this cor.and at this point I
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor.of Tps.11 and 12 S.,Rs.8 and 9 E.marked on brass cap T 11 S On N half T 12 S on S half R 8 E S 36 in N.W. R 9 E S 31 in N.E. S 6 in S.E.and S 1 in S.W.quadrant,raise a mound of stone 3 ft.base 2 ft.high S.of cor.Pits impracticable.
	From the 1/4 sec.cor.on the S.side of sec.36 to the cor. of Tps.11 and 12 S.,Rs.8 and 9 E.is S.89°41'E.40.50 chs. instead of N.89°55'E.40.00 chs.as given by the surveyor general.
	Land,mountainous.
	Soil,loam with some stone 2nd.rate.
	Timber,scattering patches of scrub aspen.
	Undergrowth,oak and service berry and sage brush.
	Scant growth of bunch grass.
	25 ft.below top of ridge

August 9,1911

George E. Swan

U.S.Transitman.

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Retracement of South Boundary T.12 S.,R.8 E.

Survey commenced August 7,1911,and executed with the instrument described in book ''A ''of this survey.

I examine the adjustments of the transit,find them correct;then,to test the solar apparatus,by comparing its indications,resulting from solar observations made during a.m.and p.m.hours,with a meridian determined by observation on Polaris,I proceed as follows:-

At my camp at the Cor.of Secs.10,11,14,and 15,T.11S. R.8 E. in approximate Lat.39°52'N. Long.111°02'07''W.; I set off 39°52'on the lat.arc;16°34'N.on the decl.arc; and at 5h.00m.p.m.l.m.t.,determine a meridian with the solar and mark a point on the stake previously set for the Polaris observation 5 chs.N.of my station,point falls 0.25 ins.W.

August 7,1911

August 8; At 8h 10m.a.m.l.m.t.,I set off 39°52'on the lat. arc;16°22'N.on the decl.arc,and determine with the solar a meridian and mark a point on stake set by Polaris observation,this mark fall 0.15 ins.E.

The solar apparatus,by p.m.and a.m.observations,defines positions for meridians,respectively about 13''west and 8''east of the meridian established by the Polaris observations;therefore I conclude that the adjustments of the instrument are satisfactory.

August 8,1911

August 9.:At 10 a.m.l.m.t.,I set off 39°44'on the lat. arc;16°04'N.on the decl.arc;and determine a meridian with the solar at the 1/4 sec.cor.bet.secs.3 and 34 on the S.bdy.of T.12 S.,R.8 E.which is a sandstone 14 x 10 4 ins.marked and witnessed as described by the surveyor general.

Thence I run

East on a retracement line bet.secs.3 and 34.

Retracement of South Boundary T.12 S.,R.8 E.

Survey commenced August 7,1911,and executed with the instrument described in book ''A ''of this survey.

I examine the adjustments of the transit,find them correct;then,to test the solar apparatus,by comparing its indications,resulting from solar observations made during a.m.and p.m.hours,with a meridian determined by observation on Polaris,I proceed as follows:-

At my camp at the Cor.of Secs.10,11,14,and 15,T.11S. R.8 E. in approximate Lat.39°52'N. Long.111°02'07''W.; I set off 39°52'on the lat.arc;16°34'N.on the decl.arc;, and at 5h.00m.p.m.l.m.t.,determine a meridian with the solar and mark a point on the stake previously set for the Polaris observation 5 chs.N.of my station,point falls 0.25 ins.W.

August 7,1911

August 8; At 8h 10m.a.m.l.m.t.,I set off 39°52'on the lat. arc;16°22'N.on the decl.arc,and determine with the solar a meridian and mark a point on stake set by Polaris observation,this mark fall 0.15 ins.E.

The solar apparatus,by p.m.and a.m.observations,defines positions for meridians,respectively about 13''west and 8''east of the meridian established by the Polaris observations;therefore I conclude that the adjustments of the instrument are satisfactory.

August 8,1911

August 9.:At 10 a.m.l.m.t.,I set off 39°44'on the lat. arc;16°04'N.on the decl.arc;and determine a meridian with the solar at the 1/4 sec.cor.bet.secs.3 and 34 on the S.bdy.of T.12 S.,R.8 E.which is a sandstone 14 x 10 4 ins.marked and witnessed as described by the surveyor general.

Thence I run

East on a retracement line bet.secs.3 and 34.

Retracement South Boundary T.12 S.,R.8 E.

Chains	
38.64	Fall 34 lks.S.of Cor.to secs.2,3,34 and 35 which is a sandstone 18x12x8 ins.marked and witnessed as described by the surveyor general,in its place
	Set an iron post,3 ft.long 3 ins.dia.,24 ins.in the ground for Cor.of secs.2,3,34 and 35 marked on brass cap
	T 12 S S 34 in N.W.
	R 8 E S 35 in NE
	S 2 R 8 E in SE.,and
	S 3 T 13 S in SW.quadrant,raise a mound of stone 3 ft.base 2 ft.high W.of cor.pits impracticable.
	This line is therefore N.89°30'E. 38.64 chs.
	August 9:At this cor.I set off 16°02'N.,on the decl.arc; and ,at 12h.05m.l.m.t.observe the sun on the meridian; the resulting lat.is 39°44'
	East on a retracement line bet.Secs.2 and 35
40.00	Find no trace of old 1/4 sec. cor .
	Set temp 1/4 sec.cor.
78.82	Fall 92 lks.N.of the cor.of secs.1,2,35 and 36 which is a sandstone 20 x 12 x 5 ins.marked and witnessed as described by the surveyor general, in its place I set
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the groun for cor.of secs.1,2,35 and 36,marked on brass cap
	T 12 S S 35 in NW,
	R 8 E S 36 in NE
	S 1 in SE and
	S 2 T 13 S in SW.quadrant,raise a mound of stone 3 ft.base 2 ft.high W.of cor.Pits impracticabl
	This line is S.89°20'E. 78.82 chs.
	From this cor. I run
	N.89°20'W. on a true resurvey.line bet.secs.2 and 35,
39.41	Set an iron post 3 ft.long 1 in. in dia. 26 ins in the ground for 1/4 sec.cor.bet.secs.2 and 35,marked on brass cap
	1/4 S 35 on N.half and
	S 2 on S half,raise a mound of stone

Retracement of the South Boundary T. 12 S., R. 8 E.

Chains	
	2 ft. base, 1½ ft. high N. of cor.
	Pits impracticable.
	August 9, 1911.
	August 10: At 10h a.m., l.m.t., I set off 39°44' on the lat. arc, 15°46'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36, heretofore described.
	Thence I run
	East on a retracement line bet. secs. 1 and 36.
39.86	Fall 1.01 chs. S. of ¼ sec. cor. which is a sandstone 10x12x6 ins. above ground marked and witnessed as described by the surveyor general.
	I destroy this cor. and
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S 36 on N half and S 1 on S. half, from which
	A pinon pine, 10 ins. dia., brs. S 45°E., 36 lks. dist., marked ¼ S 1 B T
	No other bearing tree within limits, raise a mound of stone, 2½ ft. base, 2 ft. high N. of cor.
	This line is therefore N 88°33'E., 39.86 chs.
	From this ¼ sec. cor. I run
	East on a retracement line
39.93	Fall 5 lks. S. of cor. of Tps. 12 and 13 S., Rs. 8 and 9 E.
	Which is a pinon pine, 16 ins. dia., marked T C on N. side, mound of stone N.,
	I made diligent search over an area of 10 chains in every direction but was unable to find sandstone as described by the surveyor general.
	The course of this half mile is therefore N 89°56'E., 39.93 chs.
	At this point,
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of Tps. 12 and 13 S., Rs. 8 and 9 E.,

R3tracement of South Boundary T. 12 S., R. 8 E.

Chains

S 4 T 13 S in SW, quadrant, from which

An aspen, 5 ins. dia., brs. S 46°55'E., 29 lks. dist., marked T 13 S R 8 E S 3 B T

A balsam, 6 ins. dia., brs. S 23°30'W., 9 lks. dist., marked T 13 S R 8 E S 4 B T

The course of this half mile is therefore N 89°40'W.39.86 chs.

Note: August 10: At 12h 05m p.m., l.m.t., sky overcast and observation for lat. impossible.

West on retracement line bet. secs. 4 and 33.

39.88 Fall 1.04 chs. N. of the ¼ sec. cor. bet. secs. 4 and 33, which is a sandstone 10x8x3 ins. above ground marked and witnessed as described by the surveyor general.

I destroy this cor. and in its place

Set an iron post, 3 ft. long, 1 in dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S 33 on N. half and S 4 on S. half, from which

An aspen, 6 ins. dia., brs. N 33°55'W., 5 lks. dist., marked ¼ S 33 B T

An aspen, 5 ins. dia., brs. S 45°W., 5 lks. dist., marked ¼ S 4 B T

This line is therefore S 88°30'W.39.88 chs.

80.82 Fall 68 lks. N. of the cor. of secs. 4, 5, 32 and 33, which is a sandstone 12x6x4 ins. marked ¼ on S face.

I destroy this corner and in its place

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 4, 5, 32 and 33, marked on brass cap

T 12 S S 32 in NW

R 8 E S 33 in NE

S 4 R 8 E in SE, and

S 5 T 13 S in SW, quadrant, from which

Retracement of the South Boundary T. 12 S., R. 8 E.

Chains

An aspen, 10 ins. dia., brs. S 43°12'W., 2.55 chs. dist., marked T 13 S R 8 E S 5 B T

A white pine, 8 ins. dia., brs. S 9°46'E., 2. chs. dist., marked T 13 S R 8 E S 4 B T

From the ¼ sec. cor. bet. secs. 4 and 33 to the cor. of secs. 4, 5, 32 and 33 is therefore N. 89°30'W. 40.94 chs.

August 10, 1911.

August 11: At 8h 20m a.m., l.m.t., I set off 39°44' on the lat. arc, 15°31'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33.

Thence I run

West on a retracement line.

Bet. secs. 5 and 32.

40.00 After diligent search for the ¼ sec. cor. I was unable to find any trace of it,

I set a temporary ¼ sec. cor.

79.39 Fall 37 lks. N. of the cor. of secs. 5, 6, 31 and 32, which is a sandstone 10x7x7 ins. above ground, marked and witnessed as described by the surveyor general.

I destroy this cor. and in its place I

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 5, 6, 31 and 32 marked on brass cap.

T 12 S S 31 in NW.

R 8 E S 32 in NE

S 5 R 8 E in SE, and

S 6 T 13 S in SW, quadrant,

from which

Chains.

An aspen 4 ins.dia.brs.S.38°45'W.3 lks.dist.marked
T 13 S R 8 E S 6 B T and
An aspen 4 ins.dia.brs.S.34°55'E.21 lks.dist.marked
T 13 S R 8 E S 5 B T.
Raise a mound of stone 3 ft.base 2 ft.high W.of cor.
Thence I run,
N.89°44'E.on a true resurvey line,bet.secs.5 and 32
39.70 Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 32 on N.half and S 5 on S.half,from which
An aspen 5 ins.dia.brs.N.35°30'W.99 lks.dist marked
1/4 S 32 B T and
An aspen 5 ins.dia.brs.S.3°45'E.42 lks.dist.marked
1/4 S 5 B T
August 11: At 12h 5m.sky over cast,caused by heavy rain, observation for lat.impossible.

West on retracement line bet.secs.6 and 31.
40.55 Fall 26 lks.N.of the 1/4 sec.cor.bet.secs.6 and 31,which is a sandstone 14x12x3 ins.above ground,marked and witnessed as described by the surveyor general,I destroy this cor.and in its place
Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 31 on N.half and S 6 on S.half,from which
An aspen 4 ins.dia.brs.S.56°45'E.25 lks.dist.marked
1/4 S 6 B T.and
An aspen 4 ins.dia.brs.S.43°55'W.34 lks.dist.marked
1/4 S 6 B T.

August 11,1911

August 12:At 9h.a.m.l.m.t.I set off 39°44'on the lat.arc: 15°12' on the decl.arc.and determine a meridian with the solar at the 1/4 sec.cor.bet.secs.6 and 31,

Retracement of the South Boundary of T.12 S.,R.8 E.

Chains	
	I continue my line W.bet.secs.6 and 31
80.68	Fall 52 lks.N.of the C.C.of Tps.12 and 13,S., R.8 E.
	At this point I find a sandstone 12x10x6 ins.above ground marked C C on E.and 6 grooves on N.,E.,and S.faces.
	Also and old aspen post 4 ft.long 4 ins.square,badly decayed,marks not legible,I destroy this stone and post and in their place I
	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for C.C.of Tps.12 and 13,S.R.8 E.,marked on brass cap
	T 12 S on N.half
	C C R 7 E S.36 S.1 on W.half
	R 8 E S 31 in N E
	S 6 R 8 E in S E quadrant,and
	T 13 S on S half,from which
	An aspen 5 ins.dia.brs.N.2°15'E.9 lks.dist.marked
	C C T.12 S R 8 E S 31 B T and
	An aspen 5 ins.dia.brs.S.20°45'E.34 lks.dist.marked
	C C T 13 S R 8 E S 6 B.T .
	The course of this mile is therefore S.89°38'W.80.68 chs.
	Thence I run
	North on retracement of E.bdy.T.12 S.,R.7 E.
9.04	Fall 7 lks.W.of the 1/4.Sec.cor.on E.side of sec.36
	which is a sandstone 14x10x3 ins.marked 1/4 on W.face,
	also a quaking aspen post 4 ft.long 4 ins.square,badly decayed,marks not legible,I destroy this stone and post and in their place I
	Set an iron post 3 ft.long 1 in dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 36 on W.half
	from which
	An aspen 5 ins.dia.brs.S.62°08'W.3.23 chs.dist.marked
	1/4 S 36 B T.
	August 12; At this point I set off 15°09.5'on the dec arc and at 12h 5m 1. m. t. observe the sun on the meridian,the resulting lat.39°44'.
	From the above described 1/4 sec.cor.I continue a retracment line

Retracement of the East Bdy.T.12 S.,R.7 E.

Chains	
	N.on the E.side of sec.36
40.00	After dilligent search I was unable to to find any trace of old cor.of secs.25 and 36,I set temp.sec.cor.

From the temp Cor.of secs.25 and 36 I run
North on retracement line on E. side of sec.25
0.00 After dilligent search I was unable to find any trace of old 1/4 sec.cor.on the E.side of sec.25.I set temp.1/4 sec.cor.

August 12,1911
George L. Brown

August 28:At 8h.30m.a.m.l.m.t.I set off 39°44'on the lat: arc:9°59'N.on the decl.arc.and determine a meridian at the 1/4 sec.cor.on the E.side of sec.36 heretofore described,
Thence I run
South on E.side of sec.36
9.04 Closing Cor.of Townships 12 and 13 S.; Range 8 E.,7 lks. W. of line.
0.18 The cor.of T.12 and 13 S.R.7 E.33 lks.W.which is a sandstone 14x12x8 ins.above ground,marked 6 notches on N.E.S. and W.edges,set in a mound of stone ,from which a dead aspen 10 ins.dia.brs.S.18°E.21 lks.dist.marked S.C in the bark;other markings have disappeared.The three other bearing trees given by the surveyor general have blown down and partially decayed,I mark new bearing trees for secs. 1 and 36
An aspen 5 ins.dia.brs.N.30°30'W.40 lks.dist.marked
T 12 S R 7 E S 36 B T and
An aspen 7 ins.dia.brs.S.46°W.35 lks.dist.marked
T 13 S R 7 E S 1 B T
The course and distance from the 1/4 sec.cor.on the E. bdy.of sec.36 to the Tp.cor of Tps.12 and 13 S.R.7 E.

RETRACEMENT East Boundary of T.12 S R.,7 E.

Chains	
	is therefore S.0°28'W.40.18 chs.instead of South 40 chs. as given by the surveyor general.
	August 28,1911
	August 29:At 8h.30m.a.m.l.m.t.I set.off 39°45'on the lat arc:9°38'N.on the decl.arc;and determine a meridian with the solar at the temp.1/4 sec.cor.on the E.side of sec. 25 as set.by U.S.Transitman George C.Swan on August 12. I continue the retracement line North setting temporary 1/4 sec.and sec.cors.at intervals of 40 chs.,making di diligent search at each temporary cor.for the old cor. and at 241.92 chs.intersect the 1/4 sec.cor.at the 1/4 sec.cor.on the E.side of sec.13.
	August 29:At this cor.I set off 9°34.5'N.on the decl.arc and at 12h.1m.l.m.t.observe the sun on the meridian;the resulting lat.39°47'
	The 1/4 sec.cor.on the E.side of sec.13 is a sandstone 15x10x6 ins.above ground marked 1/4 S.on W.face but do not find the bearing trees as given by the surveyor general,I destroy this stone and in its place
	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S.13 on W.half from which
	An aspen 5 ins.dia.brs.S.40°17'W.56 lks.dist.and a
	An aspen 4 ins.dia.brs.S.39°10'W.22 lks.dist.each tree marked 1/4 S 13 B.T.
	I continue line North on E.side of sec.13 beginning at the 1/4 sec.cor.
40.05	Cor.of secs.12 and 13,which is a sandstone ledge 20x4 f above ground,brs.E.57 lks.dist.marked 2 notches on S. face,small mound of stone on top of ledge,by the side of the ledge.
	Set an iron post 3 ft.long 13 ins.dia.24 ins.in the ground for cor.of secs.12 and 13,marked on brass cap

Retracement East Boundary of T. 12 S., R. 7 E.

Chains	
	T 12 S on N half
	R 7 E S 12 in NW
	S 13 in SW quadrant, and
	R 8 E in E half, raise a mound of stone
	3 ft. base, 2 ft. high W. of cor.
	Thence I run
	S 0°49'W. over rough descending land.
6.70	Wash heads NE. 75 ft. below sec. cor.
18.30	Scofield branch of the D. and R.G.RR. from Colton to Scofield, brs. S.60°E. and N.60°W. Enter Fish Creek Flat.
	130 ft. below sec. cor.
25.80	Fish Creek, 50 lks. wide, 1 ft. deep, course N 80°E. Ascend
28.00	Leave Fish Creek Flat. Enter pine and aspen timber, brs. E. and W.
40.05	The ¼ sec. cor on E. side of sec. 13, heretofore described.
	390 ft. above Fish Creek. Ascend.
	Thence I run
	South on E. side of sec. 13.
52.20	Top of rocky ridge, brs. N.60°W. and S.60° E.
	265 ft. above ¼ sec. cor. Descend.
63.10	Bottom of timbered gulch, brs. N 45°W. Leave pine timber.
	90 ft. below top of rocky spur. Ascend.
68.70	Leave aspen timber, brs. E. and W.
69.20	Top of sage brush covered spur, brs. N 45°W.& S 45°E. Desc.
80.37	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 13 and 24, marked on brass cap
	T 12 S on N half
	R 7 E S 13 in NW
	S 24 in SW quadrant, and
	R 8 E in E half, raise a mound of stone
	3 ft. base, 2 ft. high W. of cor. Pits impracticable.
	A recent fire destroyed all bearing trees.
	Land, mountainous.
	Soil, black loam but rocky, 3d rate.
	Timber, aspen and pine on 33.60 chs.
	Undergrowth, sage brush and bunch grass.
	August 29, 1911.

Resurvey: East Boundary of T. 12 S., R. 7 E.

Chains	
	August 30: At 8h 30m a.m., l.m.t., I set off 39°46' on t lat. arc, 9°17'N. on the decl. arc, and determine a mer idian with the solar at the cor. of secs. 13 and 24.
	Thence I run
	South on a true resurvey line on E. side of sec. 24.
	Over descending land.
8.20	Enter dense aspen and pine timber, brs. E. and W.
16.32	Bottom of gulch 3 ft. deep 6 lks. wide drains N 45°W. Asc
20.00	Top of ascent, brs. NW.
31.90	Bottom of gulch 10 ft. deep 30 lks. wide, drains N 45°W.
40.32	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap ¼ S 24 on W. half, from which
	An aspen, 6 ins. dia., brs. S 3°W., 1.52 chs. dist. and
	An aspen, 5 ins. dia., brs. S 35°W., 62 lks. dist., each tree marked ¼ S 2 B T
	280 ft. above gulch.
52.80	Top of ridge, brs. E. and W.
	225 ft. above sec. cor. Descend.
69.50	Leave dense pine and aspen timber, brs. E. and W.
78.00	Wash, 1 ft. deep, 8 lks. wide, drains E.
	175 ft. below top of ridge. Ascend.
80.64	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground for cor. of secs. 24 and 25, marked on brass cap T 12 S on N half
	R 8 E on E half
	R 7 E S 24 in NW, and
	S 25 in SW quadrant, from which
	An aspen, 10 ins. dia., brs. S 15°50'W., 3.5 chs. dist., marked T 12 S R 7 E S 25 B T
	An aspen, 8 ins. dia., brs. S 30°30'W., 4.40 chs. dist., marked T 12 S R 7 E S 25 B T
	An aspen, 7 ins. dia., brs. N 5°10'W., 8.00 chs. dist., marked T 12 S R 7 E S 24 B T
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Resurvey of East Boundary T.12 S.,R.7 E.

Chains.	
	Land,mountainous.
	Soil,black loam but stony 3rd.rate.
	Timber,pine and aspen on 61.30 chs.
	Undergrowth,sage brush and bunch grass.
	South on E.Side of Sec.35.
4.50	Leave sage brush,enter aspen timber brs.E.and W.
17.50	Top of.ridge brs.E.and W.165 ft.above sec.cor.Descend.
23.80	Spring branch,water clear and cold,3 lks.wide,2 ins.deep course N.70°E. 45 ft.below top of ridge,ascend.
40.32	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 25 on W.half from which
	An aspen 12 ins.dia.brs.N.18°W.95 lks.dist.marked 1/4 S 25 B T and
	An aspen 14 ins.dia.brs.S.77°50'W.51 lks.dist.marked 1/4 S 25 B T.
	110 ft.above spring branch.
67.00	Top of ridge brs.E.and W. Leave timber brs.E.& W. 100 ft.above 1/4 sec.cor.Descend.
80.64	Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor.of secs.25 and 36,marked on brass cap T 12 S on N half R 8 E on E half R 7 E S 25 in N W. and S 36 in S W quadrant,raise mound of stone 3 ft. base 2 ft.high W.of cor.Pits impracticable.
	Land,mountainous.
	Soil,dark sandy loam with some stone,2nd.rate.
	Timber,aspen on 62.50 chs.
	Undergrowth,sage brush.

Resurvey of West Boundary of T.12 S.,R.7 E.

Chains

South on the E.side of sec.36

2.35 Enter small aspen timber brs.E.& W.

3.06 Lake Creek,in bottom of canyon course E.water clear and cold, 4 ins.deep 4 lks.wide. Ascend.

28.35 Top of spur brs.N.45° W. and S.45°E.300ft.above Lake creek. Descend.

40.32 The 1/4 Sec.Cor.on E.side of sec.36 heretofore described.

Land,mountainous.

Soil,dark loam.1st.rate.

Timber,aspen'

Undergrowth,sage brush.

August 30,1911

Robert E.L. Collins

U.S.Transitman.

Aug.29: At 10h a.m.l.m.t. I set off 39°49'on the lat.arc:9°36'N.on the decl.arc.and determine a meridian with the solar at the Cor.of of T.11 and 12 S.,R.7 E.which is an iron post described in the notes of S.bdy.of T.11 S.,R.7 E. Thence I run South,on retracement line on E. .bdy.sec.1.

40.00 After making dilligent search I was unable to find any trace of old 1/ 4 sec.cor.set temp.1/4 sec.cor.

79.86 Fall 44 lks.E.of the cor.of secs.1 and 12.which is an aspen post 4 ft.long 4 ins.square,marked as described by the surveyor general but the bearing trees have decayed and fallen.I destroy this post and at this point Set an iron post 3 ft.long 3 ins.dia.24 ins.in the ground for cor.of secs.1 and 12 marked on brass cap

T 12 S on N.half

R 8 E on E half,

R 7 E S 1 in N W and

S 12 in S W quadrant,from which

An aspen 8 ins.dia.brs.S.68°35'W.70 lks.dist.marked

Retracement East Boundary of T.12 S.,R.7 E.

Chains.	
	T 12 S R 7 E S 12 B T and
	An aspen 10 ins.dia.brs.N.27°35'W.1.03 chs.dist.marked
	T 12 S R 7 E S 1 B T.
	Raise a mound of stone 3 ft.base 2 ft.high W.of cor.
	Thence I run N.0°19'E.on a true line on the E.side of Sec.1.
14.00	Enter burnt and fallen timber brs.E. and W.
39.93	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 1 on W.half from which
	An aspen 4 ins.dia.brs.S.54°30'W.25 lks.dist.marked
	1/4 S 1 B T.and
	A pine 6 ins.dia.brs.N.29°50'W.28 lks.dist.marked
	1/4 S 1 B T.
ug.29:	At this cor.I set off 9°34.5'N.on the decl.arc.and at 12h 1m.l.m.t.observe the sun on the meridian,the resulting lat.is 39°48'
50.00	Bottom of hollow drains N.45°E.ascend
50.70	Top of ledge,15 ft.high brs.N.45°E. and S.45° W.
64.35	Leave scattering pine and aspen timber
77.00	Top of ridge brs.N.45°E.and S.45°W.
	350 ft.above bottom of hollow. Slight descent.
79'86	The cor.of Tps.11 and 12 S.R.7 E.heretofore described.
	Land,mountainous.
	Soil,sandy loam but stony, 3rd.rate.
	Timber,scattering pine and aspen.
	Undergrowth,sage brush.
	20 ft.below top of ridge.
	From Cor.of secs.1 and 12 on E.bdy.
	I run South on retracement line on E.side of sec.12
40.00	At this point I make diligent search for the old 1/4sec. cor.but am unable to find any trace of it.
	Set temp.1/4 sec.cor.

Retracement East Boundary of T.12 S.,R.7 E.

Chains.	
75.62	Fall 1.48 chs.W.of the cor.of secs.12 and 13 heretofore described in the survey of this boundary.
	Thence I run N.1°07'W.on a true line on E.side of Sec.12
3.11	Top of ledge 10 ft.high brs.N.45°E. and S.45°W.
23.45	Top of sandstone ledge 10 ft.high brs.N.45°W.& S.45°E,
37.81	Set an iron post 3 ft.long 1 in.dia.26 ins.in the ground for 1/4 sec.cor.marked on brass cap 1/4 S 12 on W.half Raise a mound of stone 3 ft.base 2 ft.high W.of cor.
48.60	Top of spur brs.S.30°W.
75.62	The Cor.of secs.1 and 12 heretofore described.
	Land,mountainous,
	Soil,black loam,but stony,3rd.rate.
	Timber,an occasional bunch of aspen.
	Undergrowth,sage brush and bunch grass.

August 30,1911.

George L. Swan

U.S.Transitman.

EAST BOUNDARY OF T.12 S.,R.8 E.

CHAINS

Survey commenced August 10,1911, and executed with the instrument described in book "A" of this survey.

I examine the adjustments of the transit, find them correct; then, to test the solar apparatus, by comparing its indications , resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of Tps.12 and 13 S.,Rs. 8 and 9 E., heretofore described, in approximate latitude 39°43'27"N., longitude 110°59'55"W.;I set off 39°43' on the lat. arc; 15°43'N. on the decl. arc; and, at 4h. 5m.,p.m.l.m.t., determine with the solar a meridiam and mark a point thereof, on a stake firmly set in the ground, 5 chns.N. of the cor.

At 10h. 18m.,p.m.l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions and mark a point in the line thus determined, on a peg driven in the ground, 5 chns. N. of my station.

August 10,1911.

August 11:- At 8 a.m.,l.m.t., I lay off the azimuth of Polaris, 1°31'to the west,and mark the meridian thus determined, by driving a tack in the stake set Aug.10, on which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 9h. 5m.,a.m.,l.m.t.,I set off 39°43' on the lat. arc; 15°30'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a tack in the stake ,already set 5 chs. N. of my station; this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'11" west and 0'16" east of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

EAST BOUNDARY OF T.12 S.,R.8 E.

CHAINS	
	The magnetic bearing of the true meridian, at 9h.15m., is N.16°40'W.,the angle thus determined gives the mag. decl. 16° 40'E.
	From the Tp. cor. already described, I run North, bet. secs. 31 and 36. on E. bdy. of Tp.
	Over mountainous land, through scattering timber and scattering undergrowth of oak and mahogany brush.
	Ascend.
1.65	Top of rocky spur, 80 ft. above Tp. cor., projects SW.
	Descend.
5.50	Ravine, 40 ft. deep, course W.
	Ascend.
8.60	Top of ridge, 50 ft. high, bears NE. and SW.
	Descend.
22.20	Hollow, 185 ft. deep, course SW.
	Ascend.
29.65	Top of ridge, 30 ft. high, bears NE. and SW.
	Descend.
40.00	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in th ground, for ¼ sec. cor., marked on brass cap ¼ S 36 on W. half, and S 31 on E. half; from which
	A balsam pine, 18 ins. dia.,bears S.41°30'E.,21 lk dist., marked ¼ S 31 B T.
	A balsam pine, 14 ins. dia.,bears N.19°E.,42 lks. dist.,marked ¼ S 36 B T.
41.40	Hollow, 100 ft. deep, course SW.
	Ascend.
80.00	Set an iron post 3 ft. long, 3 ins. dia.,24 ins. in th ground, for cor. of secs. 25-30-31 and 36, marked on brass cap
	T 12 S on N. half.
	R 8 E S 25 in NW.
	R 9 E S 30 in NE.
	S 31 in SE., and
	S 36 in SW., quadrant; from which
	A pine, 30 ins. dia.,bears N.42°E.,405 lks.di marked T 12 S R 9 E S 30 B T.

EAST BOUNDARY OF T.12 S.,R.8 E.

CHAINS	
	A cedar, 30 ins. dia.,bears N.44°W.,207 lks. dist.,marked T12 S R 8 E S 25 B T.
	There being no other trees suitable for bearing trees, I raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	Cor. stands on E. slope of mountain, 825 ft. above bottom of hollow.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering pine and cedars.
	Undergrowth, scattering oak and mahogany brush, 8 to 10 ft. high.
Aug.11:	At this cor. I set off 15°27'N. on the decl. arc; and at 12h. 5m.,l.m.t., observe the sun on the meridian.The resulting lat. is 39°44'.

	North, bet. secs. 25 and 30.
	Over mountainous land, through scattering timber and scattering undergrowth of sage, oak and mahogany brush.
	Ascend,
14.45	Ledge outcropping,20 ft. high, 150lks long, bears E. and W.
21.85	Ledge outcropping,4 chs. long, 20 ft. high, bears E.and W.
23.15	Top of ridge, 550 ft. above sec. cor., bears N.70°E. and S. 70°W. Descend.
27.10	Enter dense timber, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 25 on W. half, and S 30 on E. half; from which
	A pine, 14 ins. dia.,bears S.58°15'W.,28 lks. dist., marked ¼ S 25 B T.
	A balsam, 8 ins. dia.,bears N.47°50'E.,24 lks. dist., marked ¼ S 30 B T.
	Cor. stands on NW. slope of mountain, 200 ft. below top. Descend.
80.00	Set an iron post, 3 ft. long, 3 ins.dia., 24 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked on

EAST BOUNDARY OF T.12 S., R.8 E.

CHAINS	
	brass cap
	T 12 S on N. half
	R 8 E S 24 in NW.
	R 9 E S 19 in NE.
	S 30 in SE., and
	S 25 in SW., quadrant; from which
	A balsam, 10 ins. dia.,bears N.31°E., 140 lks. dist.,marked T12 S R 9 E S 19 B T.
	A pine, 10 ins. dia.,bears S.19°45'E., 90 lks. dist.,marked T 12 S R 9 E S 30 B T.
	A pine, 16 ins. dia.,bears S.28°W., 93 lks. dist.,marked T 12 S R 8 E S 25 B T.
	A balsam, 16 ins..dia.,bears N.1°W.,171 lks. dist.,marked T 12 S R 8 E S 24 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, balsam, pine and aspen.
	Undergrowth, scattering sage, oak and mahogany brush.
	August 11,1911.

	August 12:- At 9h.5m.,a.m.,l.m.t., I set off 39°45' on the lat. arc; 15°12'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19-24-2 and 30.
	Thence I run
	North, bet. secs. 19 and 24.
	Over mountainous land, through timber and scattering undergrowth of serviceberry brush and sage brush,
	Descend.
4.75	Hollow, 700 ft. deep, stream of fresh water 10 lks. wi 2 ins. deep, course N.30°E.
	Ascend.
14.00	Enter scattering timber and dense growth of oak brush, bears NE. and SW.
25.20	Top of spur, 275 ft. high, projects E.
	Descend.

CHAINS	
35.00	Ravine, 90 ft. deep, course SE.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 24 on W. half, and S 19 on E. half, from which
	A aspen, 7 ins. dia.,bears S.80°W., 225 lks. dist., marked ¼ S 24 B T.
	There being no other trees suitable for bearing trees, I raise a mound of stone 2½ ft. base, 2 ft. high, W. of cor. Pits impracticable.
54.65	Leave timber and oak brush, enter sage brush and bunch grass, bears E. and W.
62.55	Top of ridge, 500 ft. high, bears NE. and SW.
	Descend.
77.00	Enter timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 3 ins. dia.,24 ins. in the ground, for cor. of secs. 13-18-19 and 24, marked on brass cap
	T 12 S on N. half.
	R 8 E S 13 in NW.
	R 9 E S 18 in NE.
	S 19 in SE., and
	S 24 in SW., quadrant; from which
	A aspen, 12 ins. dia. bears N.14°50'E., 52 lks. dist.,marked T 12 S R 9 E S 18 B T.
	An aspen, 8 ins. dia.,bears S.62°35'E., 20 lks. dist.,marked T 12 S R 9 E S 19 B T.
	An aspen, 10 ins. dia.,bears S.15°05'W.,180 lks. dist.,marked T 12 S R 8 E S 24 B T.
	An aspen, 10 ins. dia.,bears N.19°10'W.,33 lks. dist.,marked T 12 S R 8 E S 13 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, aspen, pine and balsam.
	Undergrowth, oakbrush, sage brush,service berry brush and bunch grass.

EAST BOUNDARY OF T. 12 S.,R.8 E.

CHAINS	
	August 12:- At this cor. I set off 15°10'N. on the dec arc; and at 12h. 5m., l.m.t., observe the sun on the meridian. The resulting lat. is 39°46'.
	North, bet. secs. 13 and 18.
	Over mountainous land, through timber and scattering undergrowth of sage brush and bunch grass.
	Descend.
4.00	Leave, timber, and enter undergrowth of sage brush and bunch grass, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in th ground, for ¼ sec. cor. marked on brass cap ¼ S 13 on half, and S 18 on E. half; raise a mound of stone 2½ f base, 2 ft. high W. of cor.Pits impracticable.
50.60	Enter heavy timber and scattering under growth, bears NE. and SW.
67.70	Hollow, 600 ft. deep, stream of fresh water 10 lks. wi 2 ins. deep, course NE.
	Ascend.
80.00	Set an iron post, 3 ft. long, 3 ins. dia.,24 ins. in t ground, for cor. of secs. 7-12-13 and 18, marked on brass cap T 12 S on N. half R 8 E S 12 in NW. R 9 E S 7 in NE. S 18 in SE., and S 13 in SW., quadrant; from which An aspen, 12 ins. dia.,bears N.31°10'E.,42 lks dist.,marked T 12 S R 9 E S 7 B T. An aspen, 16 ins. dia, bears S.23°25'E.,53 lks dist.,marked T 12 S R 9 E S 18 B T. An aspen, 8 ins. dia.,bears S.2°45'W.,100 lks. dist.,marked T 12 S R 8 E S 13 B T. An aspen, 4 ins, dia.,bears N.50°50'W.,45 lks. dist.,marked T 12 S R 8 E S 12 B T.
	Land, mountainous.

CHAINS.	
	Soil, light sandy loam and loose rock, 4th. rate.
	Timber, aspen.
	Undergrowth, sage brush, oak brush, serviceberry brush and bunch grass.
	August 12,1911
	August 14:-At 9h. 5m.,a.m.,l.m.t.,I set off 39°47' on the lat. arc; 14°36'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7-12-13 and 18.
	Thence I run
	North, bet. secs. 7 and 12.
	Over mountainous land, through heavy timber and undergrowth of oak brush.
	Ascend.
2.50	Enter scattering timber and oak brush, bears E. and W.
19.00	Top of ridge, 250 ft. high, bears NE. and SW.
	Descend.
26.60	Leave timber and oak brush, enter dense growth of service brush, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 12 on W. half, and S 7 on E. half; raise a mound of stone 2½ ft. base, 2 ft. high W. of cor.Pits impracticable.
48.00	Enter scattering serviceberry brush and sage brush, bears NE. and SW.
59.00	Enter scattering timber, bears NE. and SW.
62.00	Hollow, 325 ft. deep, course NE.
	Ascend.
64.50	Leave timber and enter dense growth of oak and service berry brush, bears NE. and SW.
72.00	Top of ridge, 25 ft. high, bears NE. and SW.
	Descend.
80.00	Set an iron post, 3 ft. long, 3 ins. dia.,18 ins. in the ground to bed rock, and raise a mound of stone around post for cor. of secs. 1-6-7 and 12, marked on brass cap

CHAINS	
	T 12 S on N. half.
	R 8 E S 1 in NW.
	R 9 E S 6 in NE.
	S 7 in SE., and
	S 12 in SW., quadrant; raise a mound of stone 2½ f
	base, 2 ft. high W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, dark rich loam and sandy loam with loose rock,
	3rd. and 4th. rate.
	Timber heavy and scattering aspen.
	Undergrowth, oak,service berry brush and scattering sa
	brush.
	August 14:-At this cor. I set off 14°33'N. on the decl
	arc; and at 12h.5m.,l.m.t., observe the sun on the mer
	idian. The resulting lat. is 39°48'.
	North, bet. secs. 1 and 6.
	Over mountainous land, through undergrowth of oak and
	serviceberry brush and scattering sage brush,
	Descend.
23.40	Hollow,350 ft. deep, stream of fresh water 10 lks. wi
	2ins. deep, in bottom, course N.25°E.
	Ascend.
29.00	Top of spur,75 ft. high, projects E., 4 chs. dist.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in t
	ground, for ¼ sec. cor., marked on brass cap ¼ S 1 on
	half, and S 6 on E. half; raise a mound of stone 2½ f
	base, 2 ft. high W. of cor. Pits impracticable.
52.65	Hollow,110 ft. deep, with stream of fresh water 10 l
	wide. 2 ins. deep, course NW.
	Ascend.
54.03	Intersect N. bdy. of Tp., 16.70 chs. dist.S.89°43'E.,
	the cor. ofTps. 11 and 12 S., Rs. 8 and 9 E.I destroy
	the marks on the old cor. pertaining to Tps. 12 S.,Rs
	and 9 E.

EAST BOUNDARY OF T.12 S., R.8 E.

CHAINS

Set an iron post, 3 ft. long, 3 ins.dia.,24 ins. in the ground, for closing Tp. cor. of Tps.12 S.,Rs.8 and 9 E., marked on brass cap

T 11 S R8 E R 9 E S 36 S 31 CC on N. half, and

S 6 R 9 E in SE., and

S 1 R 8 E in SW., quadrant.

T 12 S on S. half; raise a mound of stone 2½ ft. base, 2 ft. high S. of cor.Pits impracticable.

Land, mountainous.

Soil, dark rich loam, light sandy loam and loose rock, 3rd. and 4th rate.

No timber.

Undergrowth, dense oak and service berry brush and scattering sage brush.

August 14,1911

Robert E. L. Callicoat

U. S. Transitman.

For general description see notes of the subdivision of this township.

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Page

Boundaries of T.12 S.,R.8 E.

Latitudes, departures, and closing errors.

Line designated		True bearing	Distance	Latitudes		Departures	
				N.	S.	E.	W.
			Chs.	Chs.	Chs.	Chs.	Chs.
North	Boundary	N.89°55'E.	56.50	.08		56.50	
"	"	S.89°49'E.	40.83		.13	40.83	
"	"	S.89°16'E.	40.79		.52	40.79	
"	"	S.89°27'E.	40.26		.38	40.26	
"	"	N.89°54'E.	40.64	.07		40.64	
"	"	S.89°48'E.	81.06		.28	81.06	
"	"	S.89°46'E.	39.98		.16	39.98	
"	"	S.89°35'E.	40.88		.29	40.88	
"	"	S.89°35'E.	39.80		.29	39.80	
"	"	S.89°41'E.	40.50		.22	40.50	
"	"	S.89°43'E.	16.70		.08	16.70	
East	Boundary	South	454.03		454.03		
South	Boundary	S.89°56'W.	39.93		.05		39.93
		S.88°33'W.	39.86		1.01		39.85
"	"	N.89°20'W.	78.82	.92			78.82
"	"	S.89°30'W.	38.64		.34		38.64
"	"	N.89°40'W.	39.86	.23			39.86
"	"	S.88°30'W.	39.88		1.04		39.88
"	"	N.89°30'W.	40.94	.35			40.94
"	"	S.89°44'W.	79.39		.37		79.39
"	"	S.89°38'W.	80.68		.51		80.68
West	Boundary	N.0°28'E.	9.04	9.04		.08	
"	"	North	241.92	241.92			
"	"	N.0°49'E.	40.05	40.05		.57	
"	"	N.1°07'W.	75.62	75.61			1.47
"	"	N.0°19'E.	79.86	79.86		.44	
"	"	North	10.47	10.47			
Convergency						.58	
Totals				458.60	459.70	479.61	479.46
					458.60	479.46	
Error in lat. and dep.					1.10	0.15	Er. in dep.

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Page

4—680

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities ted opposite our several signatures, in surveying all those parts or portions of .....

.....

br certificate of assistants see book "F" T.12 S., R.8 E.

.....

.....

.....

.....

he ..... Meridian, in the State of .....

ich are represented in the foregoing field notes as having been executed by him, and under his direc- n; and that said survey has been, in all respects, to the best of our knowledge and belief, well and hfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

6—2761

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pursu
of special instructions received from the U. S. Surveyor General for .....
bearing date of the ..... day of ....., 191 , I have well, faithfully, and t
in my own proper person, and in strict conformity with said instructions, the Manual of Surve
Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oaths of Transitmen see book "H" T.11 S., R.9 E.

..... of the .....
..... Meridian, in the State of ....., which are represen
the foregoing field notes as having been executed by me, and under my direction; and I do fu
solemnly swear that all the corners of said survey have been established and perpetuated in strict a
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Sur
General for ..... and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey.

.....
U. S. Surve

Subscribed by said ....., and sworn to before me
this ..... day of ....., 191

SEAL

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, August 8 1

The foregoing field notes of the survey of ... the East, and retracement and re
vey of the south and west boundaries of Township No.12 South, Ra
No.8 East; and retrac ment of south boundary of Township No.11 S
Range No.8 East, of the Salt Lake Base and Meridian, Utah,

executed by ..... Robert F.L.Collier and George C.Swan
under their special instructions dated ..... May 23 ....., 1911 , havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
retracements, resurveys and
surveys they describe, are hereby approved.

[signature]
U. S. 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 o

.....
U. S. Surveyor Ge

6—2701

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Page

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Page

Filed Apr.25, 1912.

4—679

BOOK A-395

F.

H67r.

FIELD NOTES

OF THE SURVEY OF THE

S U B D I V I S I O N

O F

TOWNSHIP NO.12 SOUTH,

RANGE NO.8 EAST

Of the SALT LAKE BASE AND *Meridian,*

e State of U T A H

EXECUTED BY

ROBERT E.L.COLLIER AND GEORGE C.SWAN

e capacity of U. S. ~~*Surveyor*~~ Transitmen, *under instructions dated* May 23, *1911,*

d by the United States Surveyor General to govern surveys included in

p No. 13, *which were approved by the Commissioner of the General Land*

, July 3, *1911, pursuant to authority contained in the Act of*

ress dated ....., *191*....

Survey commenced August 13, *1911*

Survey completed September 2, *1911.*

6—161

Subm. 58-24-01

Clas. 1-65-82

BOOK A-395

INDEX DIAGRAM.

Township ....., *Range* .....

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

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BOOK A-395

INDEX DIAGRAM.

Township 12 S, *Range* 8 E

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

6—161

ments of the instrument are satisfactory.

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 upon wet 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*

..... *Chainm*

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

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
.....

..... *Moundm*

..... *Moundm*

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

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 surve
.....

..... *Axm*

..... *Axm*

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

SEAL

I, ..., do solemnly swear that I will well and t
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 ....., 190

SEAL

CHAINS

Survey commenced August 13,1911, and was executed with the instrument described in book "A " of this survey.
I examine the adjustments of the compass, find them correct; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:
At the cor. of secs. 25-30-31 and 36 on the E. bdy. of T.12 S.,R.8 E.,heretofore described, in approximate latitude 39° 44' 19"N,, longitude 110° 59' 55"W.; I set off 39° 44' on the lat. arc; 14° 49'N. on the decl. arc;and, at 3h. 5m.,p.m.,l.m.t., determine with the solar a meridian and mark a pointthereof , on a stake firmly set in the ground, 5 chs. N. of the cor.
At 10h 7m, p.m.,l.m.t.,I observe Polaris at eastern elongation, in accordance with the Manual of Instructions and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

August 13, 1911.

August 14:-At 8h a.m.,l.m.t.,I lay off the azimuth of Polaris, 1° 31' to the west, and mark the meridian thus determined, by driving a tack in the stake set Aug. 13, on which the meridian falls 0.3 ins. west of the mark determined by the solar.
At 9h 5m, a.m.,l.m.t., I set off 39° 44' on the lat. arc; 14° 36'N. on the decl. arc; and mark a point in the meridian determined with the solar, by driving a tack in the stake already set 5 chs. N. of my station; this mark falls 0.2 ins. west of the meridian established by the Polaris observation.
The solar apparatus by p.m. and a.m. observations, defines positions for meridians, respectively about 0'16" east and 0'11" west of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	The magnetic bearing of the true meridian, at 9h 15m,a. m.,is N.16° 40'W.; the angle thus determined gives the mag. decl. 16° 40'E.
	From the cor. of secs. 25-30-31 and 36, heretofore described, I run
	West, on sectional correction line bet. secs 25 and 36.
	Over mountainous land, through undergrowth of oak and mahogany brush.
	Ascend .
5.60	Top of ridge,120 ft. above sec. cor., bears N. and S.
	Descend.
21.00	Ravine, 325 ft. deep, course S.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 25 on N. half and S 36 on S. half; from which
	A sandstone ledge, 6 ft. high, bears N.45°W.,7 lks. dist., marked cross B O.
	Raise a mound of stone 2½ ft. base, 2 ft. high N. of cor. Pits impracticable.
45.50	Top of spur, 600 ft. high, projects S.
	Descend.
46.35	Sandstone ledge, 35 ft. high, bears N. and S.
66,20	Canyom, 800 ft. deep, course SE.
	Ascend.
80.00	Set an iron post 3ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked on brass cap
	T 12 S S 26 in NW.
	R 8 E S 25 in NE.
	S 36 in SE., and
	S 35 in SW., quadrant; raise a mound of stone 2½ ft. base, 2 ft. high, W. of cor.Pits impracticable.
	Land, mountainous, rough and broken by sand stone outcropings.
	Soil, light sandy loam and loose rock and sandstone, 4th rate.

INS	
	No timber.
	Undergrowth,oak and mahogany brush.
	August 14: At this cor. I set off 14° 33'N.,on the decl. arc; and at 12h 5m, l.m.t., observe the sun on the meridian. the resulting lat. is 39° 44'.

	West, on a sectional correction line bet. secs. 26 and 35.
	Over mountainous land, through undergrowth of oak brush.
	Ascend.
.80	Top of ridge, 725 ft. high, bears N. and S.
	Descend.
.50	Hollow. 625 ft. deep, course S.
	Ascend.
.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 26 on N. half and S. 35 on S. half; raise a mound of stone 2½ ft. base, 2 ft. high N. of cor. Pits impracticable.
	August 14,1911.
	August 15:- At 9h 5m, a.m.l.m.t., I set off 39° 44' on the lat. arc; 14° 17'N. on the decl. arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 26 and 35.
	Thence I continue.
	West, on sectional correction line bet, secs. 26 and 35.
	Ascend.
35	Top of ridge, 900 ft. high, bears NE. and SW.
	Enter scattering timber, bears N. and S. Descend.
00	Set an iron post 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked on brass cap
	T 12 S S 27 in NW.
	R 8 E S 26 in NE.
	S 35 in SE., and
	S 34 in SW., quadrant; from which
	An aspen, 4 ins. dia.,bears N.46°43'E., 59 lks. dist.,marked T 12 S R 8 E S 26 B T.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	An aspen, 4 ins. dia.,bears S.48°10'E., 26 lks. dist.,marked T 12 S R 8 E S 35 B T.
	An aspen, 4 ins. dia.,bears S.34° 08'W.,295 lks dist.,marked T 12 S R 8 E S 34 B T.
	An aspen, 4 ins. dia.,bears N.57°32'W., 25 lks. dist.,marked T 12 S R 8 E S 27 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen.
	Undergrowth, oakbrush and grass.
	West, on a sectional correction line bet. secs.27 and 3
	Over mountainous land, through scattering timber and undergrowth of sage brush and bunch grass.
	Ascend.
15.80	Top of ridge,200 ft. high, bears N. and S.
	Leave timber, bears N. and S.
	Descend, along top of ridge bearing E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 27 on N. half and S 34 on S. half; raise a mound of stone 2½ ft. base, 2 ft. high N. of cor. Pits impracticable.
	August 15:- At this cor. I set off 14° 15'N., on the decl. arc; and at 12h 5m, l.m.t., observe the sun on th meridian. The resulting lat. is 39° 44'.
62.05	Descend into ravine, ridge bears to the NW.
	Enter dense aspen timber, bears NW. and SE.
75.75	Ravine, 200 ft. deep, course NW.
	Ascend.
80.00	Set an iron post 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked on brass cap
	T 12 S S 28 in NW.
	R 8 E S 27 in NE,
	S 34 in SE., and
	S 33 in SW., quadrant; from which

INS

An aspen,6 ins. dia.,bears N.52°58'E.,85 lks. dist.,marked T 12 S R 8 E S 27 B T.

An aspen, 8 ins. dia.,bears S.36°15'E., 15 lks. dist.,marked T 12 S R 8 E S 34 B T.

An aspen, 4 ins. dia.,bears S.40°42'W.,21 lks. dist.,marked T 12 S R 8 E S 33 B T.

An, aspen, 5 ins. dia.,bears N.30° 50'W.,21 lks. dist.,marked T 12 S R 8 E S 28 B T.

Land, mountainous.

Soil light sandy loam and loose rock, 4th rate.

Timber, scattering and heavy aspen.

Undergrowth, sage brush and bunch grass.

West, on a sectional correction line bet. secs.28 and 33.

Over mountainous land,through heavy growth of aspen and bunch grass.

Ascend.

25 Top of spur, 200 ft. high, projects NW.

Leave timber,enter sage brush, bears N. and S.

Descend.

00 Beaver Creek Canyon,200 ft. deep, course N.

Enter dense willows, bears N. and S.

Thence over nearly level bottom land.

45 Beaver creek, stream of fresh water, 10 lks. wide, 3 ins. deep, course N.Leave willows bears N. and S.

83 Road, from Schofield to Colton, bears N. and S.

Enter oak brush.

Ascend.

00 Set an iron post 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 28 on N. half and S 33 on S. half; from which

The face of sandstone ledge, 8 ft. high, bears N.69° 26'E.,115 lks. dist.,marked X B O.

The face of sandstone ledge,6 ft. high, bears S.73° 18'W.,dist., 31 lks. dist.,marked X B O

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
49.12	Top of ridge, 225 ft. high,bears NE. and SW.
	Descend.
57.60	Sandstone ledge, 20 ft. high, bears N. and S.
60.00	Enter heavy aspen, bears N. and S.
	Set temp. flag at this point.
	August 15,1911.
	August 16:- At 9h 4m, a.m.,l.m.t.,I set off 39°44' on the lat. arc; 13°59'N. on the decl. arc; and determine a meridian with the solar at the temp. flag set Aug 15.
	Thence I continue
	West, bet. secs. 28 and 33.
78.00	Enter scattering aspen.
80.00	Set an iron post 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked on brass cap
	T 12 S S 29 in NW.
	R 8 E S 28 in NE.
	S 33 in SE., and
	S 32 in SW.,quadrant; from which
	An aspen, 6 ins. dia.,bears N.41°10'E.,41 lks. dist.,marked T 12 S R 8 E S 28 B T.
	An aspen, 4 ins. dia.,bears S.69°30'E.,42 lks. dist.,marked T 12 S R 8 E S 33 B T.
	An aspen,20 ins. dia.,bears S.67°10'W.,370 lks dist.,marked T 12 S R 8 E S 32 B T.
	An aspen, 4 ins. dia.,bears N.42°50'W.,399 lks dist.,marked T 12 S R 8 E S 29 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock,4th rate.
	Timber, aspen.
	Undergrowth,sage brush, willows and bunch grass.

	West, on sectional correction line bet. secs. 29 and 3
	Over mountainous land,through scattering timber and undergrowth of sage brush and bunch grass.
	Descend.

SUBDIVISION OF T.12 S.,R.8 E.

INS	
.53	Hollow, 200 ft. deep, stream of fresh water, 6 lks. wide 2 ins. deep, course S.15°W.
	Thence over nearly level bottom land.
.87	Creek, fresh water, 10 lks. wide, 2 ins. deep, course SE.
	Dense growth of willows along creek bottom.
	Ascend, through scattering pine and aspen.
00	A point, 100 ft. above creek. Leave pine, bears N. and S.
	Descend.
50	Ravine,30 ft. deep, course N.
	Ascend.
00	Set an iron post 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 29 on N, half and S 32 on S. half; from which
	An aspen, 3 ins. dia.,bears N.33°50'E.,5 lks. dist.,marked ¼ S 29 B T.
	An aspen, 3 ins. dia., bears S.39°10'W., 26 lks. dist.,marked ¼ S 32 B T.
	August 16:- At this cor. I set off 13° 56'N. on the decl. arc; and at 12h 4m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 44'.
	Cor. stands on top of ascent, 150 ft. above ravine.
	Descend.
73	Ravine, 50 ft. deep, course N.
	Ascend.
39	Small spring of fresh water.
00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 29-30-31- and 32, marked on brass cap
	T 12 S S 30 in NW.
	R 8 E S 29 in NE.
	S 32 in SE., and
	S 31 in SW., quadrant; from which
	An aspen, 4 ins. dia.,bears N.32°40'E.,29 lks. dist.,marked T 12 S R 8 E S 29 B T.
	An aspen, 5 ins. dia.,bears S.63°45'E.,23 lks. dist.,marked T 12 S R 8 E S 32 B T.

CHAINS	
	An aspen, 5 ins. dia.,bears S.38°18'W.,23 lks. dist.,marked T 12 S R 8 E S 31 B T.
	An aspen, 3 ins. dia.,bears N.11°W., 28 lks. dist.,marked T 12 S R 8 E S 30 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, aspen and pine.
	Undergrowth, sage brush, bunch grass and willows.
	West, on sectional correction line bet. secs, 30 and 31
	Over mountainous land, through aspen timber and scatter ing undergrowth of sage brush and bunch grass.
	Descend.
18.12	Ravine, 50 ft. deep, stream of fresh water in bottom, 6 lks. wide, 2 ins. deep, course N.60°E.
	Ascend.
20.00	Set temp. flag.
	August 16.1911.
	August 17:- At 8h 34m, a.m.l.m.t., I set off 39°44'on the lat. arc; 13°40'N. on the decl. arc; and determine a meridian with the solar at the temp flag set Aug.16.
	Thence I continue
	West, bet. secs, 30 and 31.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 30 on N. half and S 31 on S. half; from which
	An aspen, 3 ins. dia.,bears N.53°50'E., 92 lks. dist.,marked ¼ S 30 B T.
	An aspen, 3 ins. dia.,bears S.4°50'E.,56 lks. dist.,marked ¼ S 31 B T.
43.12	Leave timber, enter sage brush, bears N. and S.
54.62	Enter aspen, bears N. and S.
59.60	Top of spur., 150 ft. high, projects S.
	Descend.
78.05	Intersect W. bdy. of Tp., ~~8.07~~ chs. S. of the ¼ sec. c

SUBDIVISION OF T.12 S.,R.8 E.

INS

bet. secs. 25 and 30, heretofore described.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 30 and 31, marked on brass cap

T 12 S on N.

CC S 25 S 36 R 7 E on W. half.

S 30 in NE., and

S 31 R 8 E.,in SE.,quadrant; from which

An aspen, 4 ins. dia.,bears N.30°12'E., 157 lks. dist.,marked T 12 S R 8 E S 30 B T.

An aspen, 6 ins. dia.,bears S.32°30'E.,76 lks. dist.,marked T 12 S R 8 E S 31 B T.

Land, mountainous.

Soil, light sandy loam and loose rock, 4th rate.

Timber, aspen and pine.

Undergrowth of sage brush and bunch grass.

August17: At this cor. I set off 13° 37'N. on the decl. arc; and at 12h 4m.,l.m.t., observe the sun on the meridian. The resulting lat. is 39° 44'.

August 17,1911.

George L. Smith
U.S.Transitman

Survey commenced August 12,1911, and was executed with the instrument described in book " A" of this survey.

I examine the adjustments of the transit, find them correct; then, to test the solar apparatus , by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, wiyh a meridian determined by observations on Polaris, I proceed as follows:

At camp in the NE. quarter of sec. 22, in approximate latitude 39° 46' 05"N.,longitude 111° 03' [illegible] W.; I observe Polaris at eastern elongation, at 10h 11m, p.m.,l.m.t.,in accordance with the Manual of Instructions and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

August 12,1911.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	August 13:- At 8h,a.m.,l.m.t.,I lay off the azimuth of Polaris, 1° 31' to the west, and mark the meridian thus determined , on a stake firmly set in the ground, 5 chs N. of my station.
	At 9h 5m, a.m.,l.m.t., I set off 39° 46' on the lat. ar 14° 54'N. on the decl. arc; and mark a point in the me idian determined with the solar, by driving a tack in the stake already set 5 chs. N. of my station; this mar falls 0.2 ins. east of the meridian established by the Polaris observation.
	At 3h 5m, p.m.,l.m.t., I set off 39° 46' on the lat. ar 14° 49'N. on the decl. arc; and mark a point in the mer idian determined with the solar, by driving a tack in t stake already set 5 chs. N. of my station; this mark falls 0.3 ins. west of the meridian established by the Polaris observation.
	The solar apparatus by a.m. and p.m. observations,defi positions for meridians, respectively about 0'11" east and 0'16" west of the meridian established by the Pola is observations; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian, at 3h 30m,p m. is N.16°40'W., the angle thus determined gives the mag. decl. 16°40°E.
	August 13,1911.
	August 15; At 9h 5m, a.m.,l.m.t.,I set off 39°44' on the lat. arc; 14° 17'N. on the decl. arc; and determin a meridian with the solar at the cor. of secs. 25-26-3 and 36.
	Thence I run
	S.0° 01'E.,on a random line bet. secs. 35 and 36.
40.00	Set temp. ¼ sec. cor.
81.15	Intersect S. bdy. of Tp. 32 lks.W. of the cor. of secs 1-2-35 and 36, heretofore described.
	Thence I run

SUBDIVISION OF T.12 S.,R.8 E.

INS	
	N.0° 15'W., on a true line bet. secs. 35 and 36.
	Over mountainous land, through scattering timber and undergrowth of oak, sage and serviceberry brush.
	Descend.
.15	Hollow, 100 ft. below, sec. cor., course S.30°E.
	Thence across bottom land.
.00	Wash, 10 lks. wide, 3 ft. deep, course S.30°E.
.00	Ascend, E. slope of ridge.
.15	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 35 on W. half and S 36 on E. half; from which
	A pine, 4 ins. dia., bears N.8°W., 243 lks. dist., marked ¼ S 35 B T.
	There being no other trees available for bearing trees, I raise a mound of stone 2½ ft. base, 2 ft, high W. of cor. Pits impracticable.
	August 15: At this cor. I set off 14° 15'N. on the decl. arc; and at 12h 5m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 44'.
	Continue ascending along E. slope of ridge, Leave scattering timber bears E. and W.
.15	The cor. of secs. 25-26-35 and 36.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering pine.
	Undergrowth, scattering oak, sage and sarvis berry brush.

	N.0° 01'W., bet. secs. 25 and 26.
	Over mountainous land, through scattering timber and scattering undergrowth of sage, oak and sarvis brush.
	Ascend.
.00	Top of ridge, 570 ft. above sec. cor, bears N.70°E., and S.70°W.
	Set temp. flag at this point.
	August 15, 1911.
	August 16:- At 9h 4m, a.m., l.m.t., I set off 39°45' on

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	the lat. arc; 13° 59'N. on the decl.arc; and determine a meridian with the solar at the temp. flag set Aug.15.
	Thence I continue
	N.0° 01'W.,bet. secs. 25 and 26.
	Enter dense timber, bears E. and W.
	Descend.
31.90	Leave pine and enter aspen timber, bears E. and W.
34.70	Ravine, 200 ft. deep, course N.60°E.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 26 on W half and S 25 on E. half;from which
	A pine, 24 ins. dia.,bears S.43°55'E., 450 lks. dis marked ¼ S 25 B T.
	An aspen, 5 ins. dia.,bears N.1°30'W.,865 lks. dist marked ¼ S 26 B T.
71.50	Leave timber and undergrowth,bears E. and W.
	Thence over loose rock and ledge outcroppings.
74.00	Top of rocky ridge, 450 ft. high, bears N.60°E. and S. 60°W.
	Descend.
80.00	Set an iron post, 3ft. long, 2 ins. dia.,24 ins. in th ground, for cor. of secs. 23-24-25 and 26, marked on brass cap
	T 12 S S 23 in NW.
	R 8 E S 24 in NE.
	S 25 in SE., and
	S 26 in SW.,quadrant; raise a mound of stone 2½ ft base, 2 ft. high W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, light sandy loam, rock and loose rock, 4th rate.
	Timber, pine and aspen.
	Undergrowth, scattering sage oak and sarvis berry brus
	East, on a random line bet. secs. 24 and 25.
40.00	Set temp. ¼ sec. cor.

AINS	
.00	Intersect E. bdy. of Tp. 28 lks. N. of the cor. of secs. 19-24-25 and30, heretofore described.
	Thence I run
	N.89° 48'W., on a true line bet. secs. 24 and 25.
	Over mountainous land, through dense aspen and pine and scattering sage brush and bunch grass.
	Descend.
.00	Hollow, 25 ft. below sec. cor., stream of fresh water in bottom, 10 lks. wide. 2 ins. deep, course NE.
	Ascend.
.40	Leave timber and enter scattering growth of choke cherry, and wild goose berry brush, bear s NW. and SE.
.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 24 on N. half and S 25 on S. half; raise a mound of stone 2½ ft. base, 2 ft. high N. of cor.Pits impracticable.
.65	Top of ridge,800 ft. high, bears S.15°E. and N.15°W.
	Descend.
.00	Ravine, 200 ft. deep, course S.
	Ascend.
.50	Leave undergrowth of choke cherry and goose berry brush and enter sage brush and bunch grass, bears N. and S.
.00	Top of ridge, 50 ft. above ravine, bears NE. and SW.
	Descend.
.00	The cor. of secs. 23-24-25 and 26.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, pine and aspen, on 28.40 chns.
	Undergrowth, choke cherry, goose berry and sage brush and bunch grass.
	August 16: At this cor. I set off 13° 56'N. on the decl. arc; and at 12h 4m, l.m.mt.,observe the sun on the meridian. The resulting lat. is 39° 45'.

	N.0° 01'W.,bet. secs. 23 and 24.
	Over mountainous land, through undergrowth of grass and

CHAINS	
	sage brush.
	Descend.
15.85	Ravine, 300 ft. deep, course NE.
	Ascend.
32.00	Enter scattering aspen, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 23 on W. half, and S 24 on E. half; from which
	An aspen, 5 ins. dia.,bears S.33°35'E.,745 lks. dist.,marked ¼ S 24 B T.
	There being no other trees suitable for bearing tree I raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
52.00	Top of ridge,100 ft. high, bears NE. and SW.
	Descend.
80.00	Set an iron post, 3 ft. long, 2ins. dia.,24 ins. in th ground, for cor. of secs. 13-14-23 and 24, marked on brass cap
	T 12 S S 14 in NW.
	R 8 E S 13 in NE.
	S 24 in SE., and
	S 23 in SW., quadrant.,raise a mound of stone 2½ f base, 2 ft. high W. of cor.Pits impracticable.
	Land, mountainous.
	Soil, dark rich loam and light sandy loam and loose r 3rd and 4th rate.
	Timber, scattering aspen.
	Undergrowth, grass and sage brush.

	S.89° 48'E., on a random line bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
	August 16,191
	August 17: At 9h 4m, a.m.,l.m.t., I set off 39° 46' o the lat. arc; 13° 40'N.on the decl. arc; and determin a meridian with the sodar at the temp. ¼ sec. cor.
	Thence I continue

AINS	
	S.89° 48'E., on random line bet. secs. 13 and 24.
9.84	Intersect E. bdy. of Tp.21 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.
	Thence I run
	N.89° 57'W., on a true line bet. secs. 13 and 24.
	Over mountainous land, through scattering bunches of aspen and scattering sarvis berry brush and sage brush and grass.
	Ascend.
3.00	Top of N. end of ridge,100 ft. high.
	Descend.
9.92	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for. $\frac{1}{4}$ sec. cor.,marked on brass cap $\frac{1}{4}$ S 13 on N. half and S 24 on S. half; from which
	An aspen, 5 ins. dia.,bears N.78°07'E.,629 lks. dist., marked $\frac{1}{4}$ S 13 B T.
	There being no other trees suitable for bearing trees, I raise a mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high N. of cor.Pits impracticable.
9.90	Hollow, 350 ft. deep, with stream of fresh waterin bottom, 10 lks. wide, 2 ins. deep, course N.20°E.
	Ascend.
.50	Enter heavy growth of aspen, bears NE. and SW. Leave sage brush and scattering sarvis berry brush.
.00	Leave aspen and enter sage brush and bunch grass.bears NE. and SW.
.00	Top of ridge,360 ft. high, bears N.30°E. and S.30°W.
	Descend.
9.84	The cor. of secs. 13-14-23 and 24.
	Land,mountainous.
	Soil, dark rich loam and sandy loam with loose rock, 3rd and 4th rate.
	Timber,aspen.
	Undergrowth, sage brush, grass and scattering sarvis berry brush.

CHAINS	
	N.0° 01'W., bet. secs. 13 and 14.
	Over rolling mountainous land, through sage brush and grass.
	Descend.
40.00	Set na ironpost, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 14 on W half, and S 13 on E. half; from which
	A lone aspen, 8 ins. dia.,bears N.23°24'W.,616 lks. dist.,marked ¼ S 14 B T.
	Raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
56.50	Enter heavy growth of aspen,bears NE. and SW.
61.95	Hollow, 575 ft. deep, with stream of fresh water in bottom, 8 lks. wide, 2 ins. deep, course NE.
	Ascend.
68.25	Enter scattering aspen ,timber and undergrowth of oak, sarvis berry and choke cherry brush, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in th ground, for cor. of secs. 11-12-13 and 14, marked on brass cap
	T 12 S S 11 in NW,
	R 8 E S 12 in NE.
	S 13 in SE., and
	S 14 in SW., quadrant; from which
	An aspen, 4 ins. dia.,bears S.10°50'E.,48 lks. dist.,marked T 12 S R 8 E S 13 B T.
	An aspen, 6 ins. dia.,bears S.19°W., 64 lks. dist.,marked T 12 S R 8 E S 14 B T.
	There being no other trees suitable for bearing trees, I raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	Land,rolling mountains.
	Soil, dark rich loam and loose rock, 3rd rate.
	Timber, heavy and scattering aspen.
	Undergrowth, sage brush and grass and scattering oak, sarvis berry and choke cherry brush.
	August 17: At this cor. I set off 13° 37'N. on the dec

CHAINS.	
	arc; and at 12h 4m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 47'.

	S.89°57'E., on a random line bet. secs. 12 and 13.
40.00	Set temp. ¼ sec. cor.
79.80	Intersect E. bdy. of Tp. 12 lks. S. of the cor. of secs. 7-12-13 and 18, heretofore described.
	Thence I run
	S.89° 58'W., on a true line bet. secs. 12 and 13.
	Over mountainous land, through heavy growth of aspen, and scattering sage brush and grass.
	Ascend.
6.50	Leave timber, enter sage brush and scattering choke cherry brush.
36.00	Top of ridge, 260 ft. above sec. cor., bears N.25°E. and S.25°W.
	Descend.
39.90	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 12 on N. half and S 13 on S. half; from which
	A lone pine, 10 ins. dia., bears N.2°W., 368 lks. dist., marked ¼ S 12 B T.
	Raise a mound of stone 2½ ft. base, 2 ft. high N. of cor. Pits impracticable.
69.15	Hollow, 250 ft. deep, with stream of fresh water, 6 lks. wide, 2 ins. deep, course N.30°E.
	Ascend.
79.80	The cor. of secs. 11-12-13 and 14.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd. rate.
	Timber, heavy growth of aspen, on 6.50 chs.
	Undergrowth, sage brush, grass and choke cherry brush.

	N.0° 01'W., bet, secs. 11 and 12.
	Over rolling mountainous land, through undergrowth of

CHAINS	
	sage,and sarvis berry brush and grass.
	Ascend.
8.50	Top of ridge, 175 ft. high, bearsNE. and SW.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground,for ¼ sec. cor.,marked on brass cap ¼ S 11 on W. half and S 12 on E. half,;raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
53.10	Enter dense growth of sarvis berry brush and scattering sage brush, bears E. and W.
80.00	Set an iron post,3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked on brass cap
	T 12 S S 2 in NW.
	R 8 E S 1 in NE.
	S 12 in SE., and
	S 11 in SW.,quadrant; from which
	A lone aspen,5 ins. dia.,bears S.63°30'E.,223 lks. dist.,marked T 12 S R 8 E S 12 B T.
	Raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	Cor. is 290 ft. below top of ridge.
	Land, rolling mountains.
	Soil,dark rich loam and loose rock, 3rd. rate.
	No timber.
	Undergrowth, sage brush, sarvis berry brush, choke cherr brush and grass.
	August 17,1911.

August 22: At 9h 3m,a.m.,l.m.t., I set off 39° 48' on the lat. arc; 12° 02'N. on the decl. arc;and determine a meridian with the solar at the cor. of secs. 1-2-11 and 12.

Thence I run

N.89° 58'E., on a random line bet. secs. 1 and 12.

40.00 Set temp. ¼ sec. cor.

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CHAINS	
79.88	Intersect E.Bdy. of Tp. 23 lks. S. of the cor.of secs. 1, 6, 7 and 12, heretofore described.
	Thence I run
	S.89°48'W. on a true line bet.secs. 1 and 12.
	Over rolling hills, through service berry brush, sage brush and grass. Descend.
8.75	Enter heavy growth of aspen and scattering sage brush and service berry brush, bears N. and S.
14.30	Hollow, 50 ft. below sec.cor., stream of water, 6 lks. wide, 2 ins.deep, in bottom, course NE.
	Leave timber, enter sage brush, bears NE and SW. Ascend.
34.00	Top of ridge, 400 ft. high, bears N.20°E. and S. 20° W.
	Descend gradually.
39.94	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground for ¼ sec.cor., marked on brass cap ¼ S 1 on N. half and S. 12 on S. half; from which
	A-lone pine, 16 ins.diam. bears S. 74°15'W., 18 lks. dist., marked ¼ S 12 B T.
	Raise a mound of stone 2½ ft. base, 2 ft. high, N. of cor. Pits impracticable.
74.00	Enter heavy growth of aspen, bears NE and SW.
77.40	Leave aspen, bears NE and SW.
79.88	The cor. of secs. 1, 2, 11 and 12.
	Land, rolling hills.
	Soil, dark, rich loam and loose rock, 3rd rate.
	Timber, aspen, on 9.00 chs.
	Undergrowth, sagebrush, service berry brush and grass.
	N. 0° 01' W. bet. secs. 1 and 2.
	Over mountainous land, through service berry, oak and sage brush and grass.
	Descend.
0.00	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground for ¼ sec.cor., marked on brass cap ¼ S 2 on W. half and S 1 on E. half; from which

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CHAINS	
	A lone birch, 8 ins.diam. bears N. 78°10'W. 290 lks. dist., marked ¼ S 2 B T.
	Raise a mound of stone 2½ ft. base, 2 ft. high, W. of cor. Pits impracticable.
49.30	Beaver Creek, 675 ft. below sec.cor., stream of water 10 lks. wide, 3 ins, deep, course N. 70°E.
	Ascend.
49.50	Road, Scofield to Colton, bears NE and SW.
51.00	Top of spur, 30 ft. high, projects NE.
	Enter scattering aspen, bears E.and W.
	Descend.
54.25	Road, Scofield to Colton, bears NW and SE.
54.92	Intersect N.Bdy. of Tp. 17.43 chs. dist., S.89°35'E. of the cor.of secs. 1, 2, 35 and 36, heretofore described. I destroy the marks on old cor. pertaining to secs. 1 and 2.
	Set an iron post, 3 ft. long, 2 ins.diam., 24 ins.in the ground for closing cor. of secs. 1 and 2, marked on brass cap
	T 11 S R 8 E S 36 C C in N. half,
	T 12 S R 8 E in S. half,
	S 1 in SE and
	S 2 in SW quadrant; from which
	An aspen, 6 ins.diam. bears S. 23°10'E. 170 lks. dist., marked T. 12 S R 8 E S 1 B T.
	An aspen, 6 ins.diam. bears S. 3° 10'W., 124 lks. dist., marked T 12 S R 8 E S 2 B T.
	Land, mountainous.
	Soil, rich dark loam and loose rock, 3rd rate.
	No timber.
	Undergrowth, service berry, sage and oak brush and grass
	August 22: At this cor, I set off 11°59' N.on the decl. arc; and at 12 h. 4 m., l.m.t. observe the sun on the meridian, The resulting lat. is 39°50'.

Robert E. L. Collied

U. S. Transitman.

SUBDIVISION OF T.12 S.,R.8 E.

AINS	
	August 18: At 9h 4m,a.m.,l.m.t.,I set off 39° 44' on the lat. arc; 13° 21'N. on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 26-27-34 and 35.
	Thence I run
	S.0° 15'E.,on a random line bet. secs. 34 and 35.
0.00	Set temp. ¼ sec. cor.
0.13	Intersect S. bdy. of Tp.94 lks. S.89° 30'W. of the cor. of secs. 2-3-34 and 35, heretofore described.
	I destroy the marks on old cor. pertaining to secs. 34 and 35, and
	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 34 and 35, marked on brass cap
	T 12 S S 34 in NW., and
	R 8 E S 35 in NE.,quadrant, and
	T13SCC S 2 S 3 on S. half;raise a mound of stone 2½ ft. base, 2 ft. high,N. of cor. Pits impracticable.
	Thence I run
	N.0° 15'W.,on a true line bet. secs. 34 and 35.
	Over mountainous land, through oak brush and grass.
	Ascend.
4.00	Top of spur, 120 ft above sec. cor, projects E.
	Descend.
7.00	Enter scattering aspen, bears E. and W.
7.00	Hollow, 300 ft. deep, course SE.
	Ascend mountain.
9.00	Leave aspen, bears E. and SW.
9.00	Leave oak brush enter sage brush, bears E. and W.
0.13	Set an iron post, 3 ft. long, 1 in dia.,26 ins. in the ground, for ¼ sec.cor., marked on brass cap ¼ S 34 on W. half and S 35 on E. half; raise a mound of stone, 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
3.50	Cross top of ridge, 600 ft. high, bears SE. and NW.
	Continue, ascending mountain.
1.50	Enter scattering aspen, bears E. and W.

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CHAINS

68.00 Leave aspen, bears E. and W.

75.00 Top of mountain, 350 ft. above ridge, bears E. and W.

Descend.

80.13 The cor. of secs. 26-27-34 and 35.

Land, mountainous.

Soil, lightsandy loam and loose rock, 4th. rate.

Timber, scattering aspen.

Undergrowth, oak brush and grass.

August 18:- At this cor. I set off 13° 18'N. on the dec arc; and at 12h. 4m, l.m.t.,observe the sun on the mer dian. The resulting lat. is 39°44'.

N.0° 01'W., bet. secs. 26 and 27.

Over mountainus land, through aspen timber, and scatte ing undergrowth of sage brush and grass.

Descend.

40.00 Set an iron post 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 27 on W. half and S 26 on E. half; From which

An aspen, 3 ins. dia.,bears S.47°46'W.,45 lks. dist.,marked ¼ S 27 BT.

An aspen, 3 ins. dia.,bears S.88°23'E., 68 lks. dist.,marked ¼ S 26 B T.

August 18,1911

George [illegible]

U.S.transitman.

August 19:- At 8h 4m, a.m.,l.m.t.,I set off 13° 02'N.o the decl. arc; 39°45' on t he lat. arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs 26 and 27.

Thence I run

N.0° 01'W., bet. secs. 26 and 27.

Over mountainous land, through heavy growth of aspen a scattering sage brush and grass.

Descend.

45.25 Leave aspen, enter sage brush and grass, bears NW. and

SUBDIVISION OF T.12 S.,R.8 E.

MAINS	
63.20	Wash, 15 lks. wide, 6 ft. deep, in hollow 473 ft. deep course, N.10°W.
	Thenc along bottom of hollow. Enter aspen and pine timber, bears E. and W.
38.60	Recross wash, course N.10°E.
71.00	Recross wash, course N.10°W.
72.65	Recross wash, course N.15°E.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked on brass cap
	T 12 S S 22 in NW.
	R 8 E S 23 in NE.
	S 26 in SE., and
	S 27 in SW., quadrant;from which
	An aspen, 6 ins. dia., bears N.17°E.,78 lks. dist.,marked T 12 S R 8 E S 23 B T.
	An aspen, 4 ins. dia.,bears S.38°45'E.,51 lks. dist.,marked T 12 S R 8 E S 26 BT.
	A red pine, 24 ins. dia.,bears S.15°50'W.,132 lks. dist.,marked T 12 S R 8 E S 27 B T.
	A red pine, 24 ins. dia.,bears N.65°20'W.,128 lks. dist.,marked T 12 S R 8 E S 22 B T.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd. rate.
	Timber, aspen and red pine.
	Undergrowth, sage brush and grass.

	East, on a random linebet. secs. 23 and 26.
0.00	Set temp. $\frac{1}{4}$ sec. cor.
0.02	Intersect N. and S. line, 19 lks. S. of the cor. of secs. 23-24-25 and 26.
	Thence I run
	S.89° 52'W., on a true line bet. secs. 23 and 26.
	Over mountainous land, through sage brush and grass.
	Ascend.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
14.50	Top of ridge, 60 ft. above sec. cor.,bears N. and S.
	Descend.
26.65	Enter scattering timber , bears NW. and SE.
40.01	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 23 on N half and S 26 on S. half; from which
	An aspen, 4 ins. dia., bears S.10°W., 35 lks. dist. marked ¼ S 26 B T.
	There being no other trees suitable for bearing trees, I raise a mound of stone 2½ ft. base, 2 ft. high N. of cor. Pits impracticable.
	August 19:-At this cor. I set off 12° 59'N. on the decl arc; and at 12h 4m, l.m.t., observe the sun on the meri dian. The resulting lat. is 39°45'.
42.40	Hollow, 750 ft. deep, course N.
	Ascend.
44.40	Spur, 20 ft. high, projects N.
	Descend.
61.50	Enter dense timber, bears N. and S.
79.40	Wash, 15 lks. wide, 6 ft. deep, in bottom of hollow, 375 ft. deep, course N.
	Ascend.
80.02	The cor. of secs. 22-23-26 and 27.
	Land, mountainous.
	Soil, dark rich loam, and loose rock, 3rd. rate.
	Timber, heavy aspen and scattering pine and aspen.
	Undergrowth, sage brush and grass.
	August 19, 19

August 21:- At 8h 3m,a.m.,l.m.t.,I set off 39°45' on the lat. arc; 12°23'N. on the decl. arc; and determin a meridian with the solar at the cor. of secs. 22-23-2 and 27.

Thence I run

N.0° 01'W., bet. secs. 22 and 23.

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CHAINS	
	Over mountainous land, through scattering timber and undergrowth of sage brush and grass.
	Descend gradually along W. side of hollow.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 22 on W. half and S 23 on E. half; from which
	A red pine, 12 ins. dia.,bears S.77°W.,33 lks. dist.,marked ¼ S 22 B T.
	A red pine, 10 ins. dia.,bears N.88°40'E., 145 lks. dist.,marked ¼ S 23 B T.
1.50	Wash, 20 lks. wide, 6 ft. deep, in bottom of hollow, course, NW.
	Ascend.
4.40	Top of ridge, 130 ft. high,bears NW. and SE.
	Descend.
5.20	Enter heavy aspen, bears NW. and SE.
2.50	Enter scattering timber, bears NW. and SE.
0.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 14-15-22 and 23. marked on brass cap
	T 12 S S 15 in NW.
	R 8 E S 14 in NE.
	S 23 in SE., and
	S 22 in SW., quadrant; from which
	An aspen, 6 ins. dia.,bears N.81°50'E.,41 lks. dist.,marked T 12 S R 8 E S 14 B T.
	An aspen, 6 ins.dia.,bears S.44°15'E.,42 lks. Dist.,marked T 12 S R 8 E S 23 B T.
	An aspen, 6 ins. dia.,bears S. 20° W.,48 lks. dist.,marked T 12 S R 8 E S 22 B T.
	An aspen, 6 ins. dia.,bears N.81°50'E.,41 lks. dist.,marked T 12 S R 8 E S 15 B T.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 4th rate.
	Timber, heavy growth of aspen and scattering aspen and pine. Undergrowth, sage.

CHAINS	
	August 21: The sky is over cast and solar observations are impossible.
	N.89° 52'E., on a random line bet, secs. 14 and 23.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S. line 17 lks. N. of the cor. of secs. 13-14-23 and 24.
	Thence I run
	S.89° 59'W., on a true line bet. secs. 14 and 23.
	Over mountainous land,through sage brush and grass.
	Descend.
19.80	Ravine, 175 ft. below sec. cor., course NE.
	Ascend.
39.00	Top of ridge, 160 ft. high, bears NE. and SW.
	Descend.
39.98	Set an irom post, 3ft. long 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 14 on N half and S 23 on S. half; raise a mound of stone 2½ ft base, 2 ft. high N. of cor. Pits impracticable.
54.50	Enter scattering timber, bears NW. and SE.
65.45	Hollow, 900 ft. deep, course NW.
	Ascend.
79.96	The cor. of secs. 14-15-22 and 23.
	Land, mountainous.
	Soil dark rich loam and loose rock, 3rd. rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush and grass.
	August 21,191
	August 22:- At 2h.3m,p.m.,l.m.t.,I set off 39° 46' on the lat. arc; 11° 58'N. on the decl. arc; and determin a meridian with the solar at the cor. of secs. 14-15-2 and 23.
	Thence I run
	N.0° 01'E.,bet. secs. 14 and 15.
	Over rolling land, through scattering aspen and under-

MAINS	
	growth of sage brush and grass.
	Descend.
3.40	Wash, 15 lks. wide, 6 ft. deep, in bottom of hollow, 300 ft. deep, course W.
	Ascend.
.00	Apoint, 30 ft. above hollow.
	Descend.
0.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 15 on W. half and S 14 on E. half; from which
	An aspen, 6 ins. dia.,bears N.13°W.,304 lks. dist., marked ¼ S 15 B T.
	An aspen, 6 ins. dia.,bears N.28°15'E.,275 lks. dist.,marked ¼ S 14 B T.
1.75	Road, from Scofield to Colton, bears N.80°W. and S.80°E.
2.80	Beaver creek, 275 ft. below point of descent, stream of water, 10 lks. wide, 3 ins. deep, course S.80°E.
	Ascend.
5.10	Sandstone ledge, 30 ft. high, 4 chs. long, bears N. and S.
9.35	Enter scattering pine, bears E. and W.
8.00	Leave timber, bears NE. and SW.
0.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked on brass cap
	T 12 S S 10 in NW.
	R 8 E S 11 in NE.
	S 14 in SE., and
	S 15 in SW., quadrant; raise a mound of stone 2½ ft. base , 2 ft. high W. of cor. Pits impracticable.
	Land mountainous.
	Soil, dark rich loam and loose rock, 3rd. rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush and grass.
	N.89° 59'E., on a random line bet. secs. 11 and 14.
0.00	Set temp. ¼ sec. cor.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS.	
80.12	Intersect N. and S. line 5 lks. S. of the c or. of secs 11-12-13 and 14.
	Thence I run
	S.89° 57'W., on a true line bet, secs. 11 and 14.
	Over mountainous land, throughsage brush and grass, and scattering serviceberry brush.
	Ascend.
7.15	Top of ridge, 25 ft. above sec. cor.,bears N.30°E and S.30°W.
	Descend.
19.25	Leave serviceberry brush and enter scattering timber, bears NW. and SE.
40.06	Set an iron post, 3ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec.cor., marked on brass cap ¼ S 11 on N half and S 14 on S. half; from which
	An aspen, 5 ins. dia.,bears N.15°10'W., 18 lks. dist.,marked ¼ S 11 B T.
	A red pine, 10 ins. dia.,bears S.37°30W.,63 lks. dist.,marked ¼ S 14 B T.
49.40	Beaver Creek,875 ft. below top of ridge, stream of wat 10 lks. wide, 3 ins. deep, course N.15°E.
	Ascend.
51.00	Leave timber, bears NE. and SW.
53.70	Road, from Scofield to Colton, bears NE. and SW.
80.12	The cor. of secs. 10-11-14 and 15.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd. rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush, grass and scattering service-berry brush.
	August 22,19

August 23:-AT 8h 3m, a.m.,l.m.t.,I set off 39° 47' on the lat. arc; 11° 42'N. on the decl. arc; and determin a meridian with the solar at the cor. of secs. 10-11-1 and 15.

AINS	
	Thence I run
	N.0° 01'W., bet. secs. 10 and 11.
	Over mountainous land, through sage brush, grass and scattering bunches of serviceberry brush.
	Ascend.
9.35	Top of ridge,800 ft. high, bears N.20°E. and S.20°W.
	Descend along W. side of ridge.
0.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 10 on W. half and S 11 on E. half; raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
0.00	Enter heavy growth of service berry brush, leave sage brush bears E. and W.
1.00	Leave servic berry brush and enter choke cherry brush, bears E. and W.
0.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked on brass cap
	T 12 S S 3 in NW.
	R 8 E S 2 in NE.
	S 11 in SE., and
	S 10 in SW., quadrant; from which
	A lone pine, 8 ins. dia.,bears S.4°45'E., 915 lks. dist.,marked T 12 S R 8 E S 11 B T.
	Raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd. rate.
	No timber.
	Undergrowth, sage brush, serviceberry brush, choke cherry brush and grass.

	N.89° 57'E.,on a random line bet. secs. 2 and 11.
0.00	Set temp. ¼ sec. cor.
0.02	Intersect N. and S. line 7 lks. N. of the cor. of secs. 1-2-11 and 12.

SUBDIVISION OF T. 12 S., R. 8 E.

CHAINS	
	Thence I run
	West, on a true line bet. secs. 2 and 11.
	Over mountainous land, through sage brush and grass.
	Descend.
13.45	Ravine, 300 ft. below sec. cor., course NW.
	Ascend.
16.00	Top of ascent, 20 ft. above ravine,
	Descend.
31.40	Beaver creek, 600 ft. below, sec. cor., stream of water,
	8 lks. wide, 6 ins. deep, course N.10°E.
	Ascend.
32.20	Road, Scofield to Colton, bears N.10°E. and S.10°W.
40.01	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the
	ground, for ¼ sec. cor., marked on brass cap ¼ S 2 on N
	half and S 11 on S. half; raise a mound of stone 2½ ft
	base, 2 ft. high N. of cor. Pits impracticable.
	August 23: At this cor. I set off 11° 39'N. on the dec.
	arc; and at 12h 3m, l.m.t., onserve the sun on t he mer
	idian. The resulting lat. is 39° 48'.
64.50	Top of ridge, 600 ft. high, bears N.15°W. and S.15°E.
	Descend.
80.02	The cor. of secs. 2-3-10 and 11.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd. rate.
	No timber.
	Undergrowth, sage brush and grass.
	———
	N.0° 01'W., bet. secs. 2 and 3.
	Over rolling hills, through sage brush, grass and scat
	ering oak and sarvis berry brush.
	Descend.
6.00	Ravine, 50 ft. below sec. cor., course NW.
	Ascend.
11.50	A point, on NW. slope of spur, 20 ft. above ravine,
	Descend.
23.65	Ravine, 100 ft. deep, course NW.

SUBDIVISION OF T. 12 S., R. 8 E.

CHAINS	
	Ascend.
33.25	Top of spur, 125 ft. high, projects NW.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground for $\frac{1}{4}$ sec.cor., marked on brass cap $\frac{1}{4}$ S 3 on W. half and S. 2 on E. half; raise a mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high, W. of cor. Pits impracticable.
40.50	Ravine, 70 ft. deep, course NW.
	Ascend.
48.00	Top of ridge, 75 ft. high, bears NE and SW.
	Descend.
55.34	Intersect N.Bdy. of Tp. 18.09 chs. S.89°46'E., of the cor.of secs. 2, 3, 34 and 35, heretofore described. I destroy the marks pertaining to secs.2 and 3, and Set an iron post, 3 ft. long, 2 ins.in diam., 24 ins.in the ground for closing cor. of secs. 2 and 3, marked on brass cap.
	CC T 11 S R 8 E S 35 in N. half,
	T 12 S R 8 E in S. half
	S 2 in SE and
	S 3 in SW quadrant;
	raise a mound of stone, $2\frac{1}{2}$ ft. base, 2 ft. high, S. of cor. Pits impracticable.
	Land, mountainous.
	Soil, dark, rich loam and loose rock; 3rd rate.
	No timber.
	Undergrowth, sagebrush, grass and scattering service berry and oak brush.
	August 23, 1911.

August 18: At 8 h. 4 m., a.m.l.m.t. I set off 39°44' on the lat. arc; 13°22'N. on the decl. arc; and determine a meridian with the solar at the cor.of secs.27, 28, 33 and 34. Thence I run.

S. 0° 16' E. bet.secs. 33 and 34.

Over mountainous land, through heavy growth of aspen, and grass.

SUBDIVISION OF T. 12 S., R. 8 E.

CHAINS	
	Ascend.
3.25	Spur, 25 ft. above sec.cor., projects NW.
	Descend.
19.50	Ravine, 75 ft. deep, course N.20° E.
	Small spring bears E. 10 lks. dist.
	Ascend.
22.25	Leave timber, enter sage brush and grass, bears NW & SE.
29.30	Top of ridge, 550 ft. high, bears NW and SE.
	Leave sage brush and enter dense oak brush and scattering aspen, bears E. and W.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground for ¼ sec.cor., marked on brass cap ¼ S 33 on W. half and S 34 on E. half; from which
	An aspen, 5 ins.diam. bears S. 5°45' W. 175 lks.dist. marked ¼ S 33 B T.
	An aspen, 5 ins.diam. bears S. 7°10'E. 130 lks.dist. marked ¼ S 34 B T.
41.00	Enter heavy growth of aspen, pine and scattering oak, bears E. and W.
45.75	Ravine, 230 ft. deep, course N. 60°W.
	Ascend.
58.80	Leave timber, enter sage and service berry brush, bears E. and SW.
59.80	Top of ridge, 265 ft. high, bears N.60°W. and S.60°E.
	Descend.
77.70	Leave sage and service berry brush; enter timber bears E. and W.
78.00	Hollow, 450 ft. deep, course N.75°W.
	Ascend.
80.20	Intersect S.Bdy. of Tp. 2.69 chs. S.88°30'W. of the cor.of secs. 3, 4, 33 and 34, heretofore described. I destroy the marks on cor.pertaining to secs. 33 & 34.
	Set an iron post, 3 ft. long, 2 ins.diam., 24 ins.in the ground, for closing cor. of secs. 33 and 34, marked on brass cap

SUBDIVISION OF T.12 S., R.8 E.

CHAINS.	
	T 12 S S 33 in NW., and
	R 8 E S 34 In NE., quadrant.
	CC T 13 S R 8 E S 3 S; 4 in S. half; from which
	A balsam, 6 ins. dia; bears N.65°70'E., 13 lks. dist., marked CC T 12 S R 8 E S 34 B T.
	An aspen, 8 ins. dia., bears N.20°40'W., 48 lks. dist., marked CC T 12 S R 8 E S 33 B T.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd rate.
	Timber, aspen and pine.
	Undergrowth, sage oak and sarvis brush and grass.
	August 18; At this cor., I set off 13°18'N. on the decl. arc; and 12h 4m, l.m.t., observe the sun on the meridian. The resulting lat. is 39°43'.

	N.0° 02'W., bet. secs. 27 and 28.
	Over mountainous land, through heavy aspen and scattering, sage brush and grass.
	Descend.
3.00	Hollow, 25 ft. below sec. cor., stream of water, 10 lks. wide, 2 ins. deep, course NW.
	Ascend.
10.35	Ridge, 75 ft. high, bears NW. and SE.
	Enter scattering timber, bears NW. and SE.
	Descend.
17.65	Ravine, 65 ft. deep, course W.
	Ascend.
24.10	A point, on W. end of spur, 65 ft. above ravine,
	Descend.
33.85	Ravine, 65 ft, deep, course W.
	Ascend.
40.00	Top of spur, 25 ft. high, projects W.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 28 on W. half and S 27 on E. half; from which
	An aspen, 4 ins, dia., bears S.83°15'E., 15 lks. dist., mkd. ¼ S 27 B T

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	An aspen, 6 ins. dia., bears S. 74°20'W.,9 lks. dist., marked ¼ S 28 B T.
	Descend.
51.40	Ravine, 55 ft. deep, course N.80°W.
	Ascend.
54.90	Ridge, 30 ft. high, bears N.60°W. and S.60°E. Descend.
79.20	Road, Scofield to Colton, bears NE. and SW.
79.80	Leave timber, enter willows, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked on brass cap
	T 12 S S 21 in NW.
	R 8 E S 22 in NE.
	S 27 in SE., and
	S 28 in SW.,quadrant; from which
	An aspen, 4 ins. dia.,bears N.82°20'E.,93 lks. dist.,marked T 12 S R 8 E s 22 B T.
	An aspen, 8 ins. dia, bears S.86°20'E.,95 lks. dist.,marked T 12 S R 8 E S 27 B T.
	There being no other trees suitable for bearing trees, I raise a mound of s tone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, dark rich loam and sandy loam with loose rock,3rd. rate.
	Timber, aspen and pine.
	Undergrowth,sage brush and grass.

August 18,1911.

Robert E. L. Beckwith

U.S.Transitman.

August 19:-At 8h 4m;a.m.,l.m.t.,I set off 39° 45' on the lat. arc; 13° 02'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21-22-27 and 28.

Thence I run

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	East on a random line bet. secs. 22 and 27.
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. and S. line 15 lks. N. of the cor. of secs. 22-23-26 and 27.
	Thence I run
	N.89°54'W. on a true line bet. secs. 22 and 27.
	Over mountainous,land, through heavy aspen, scattering pine, and scattering sage brush and grass.
	Ascend.
12.00	Leave timber, enter sage brush and grass, bears N. and S.
19.00	Top of ridge,400 ft. high, bears NW. and SE.
	Descend.
27.60	Enter timber and scattering sage brush and grass, bears N. and S.
40.01	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 22 on N. half and S 27 on S. half; form which
	An aspen, 4 ins. dia.,bears N.72°26'E.,47 lks. dist., marked ¼ S 22 B T.
	An aspen, 5 ins. dia.,bears S.26°50'E.,44 lks.dist., marked ¼ S 27 B T.
	August 19; At this cor. I set off 12° 59'N. on the decl. arc; and at 12h 4m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 45'.
45.10	Ravine, 625 ft. deep, course NW.
	Ascend.
51.10	Top of spur, 70 ft. high, projects N. Descend.
79.50	Road, Scofield to Colton, bears NE. and SW.
77.50	Leave timber and enter willows, bears NE. and SW.
80.02	The cor. of secs. 21-22-27 and 28.
	Land, mountainous.
	Soil, dark rich loam and light sandy loam with loose rock, 3rd. rate.
	Timber, aspen and scattering pine.
	Undergrowth, sage brush and grass.
	August 19,1911.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	August 22: At 8h 3m, a.m.,l.m.t.,I set off 39° 45' on the lat. arc;12° 03'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21-22-27 and 28.
	Thence I run
	N.0° 02'W., bet. secs. 21 and 22.
	Along bottom of Beaver creek, canyon, through dense willows.
2.90	Beaver creek, with stream of water 10 lks. wide, 3 ins. deep, course NE.
8.11	Recross Beaver creek, course NW.
10.22	Road, Scofield to Colton, bears NW. and SE.
11.77	Wash, 25 lks. wide 6 ft. deep, course W.
13.70	Road, Scofield to Colton, bears NE. and SW.
18.07	Recross Beaver creek, course NE.
18.50	Leave willows, enter sage brush and grass, bears E. and Ascend.
40.00	Set an iron post, 3 ft, long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on Brass cap ¼ S 21 on W. half and S 22 on E. half; raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
66.50	Sandstone ledge 20 ft. high, bears E. and W.
80.00	Set an iron post 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked on brass cap T 12 S S 16 in NW. R 8 E S 15 in NE. S 22 in SE., and S 21 in SW., quadrant; raise a mound of stone 2½ ft. base, 2 ft. high, W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, dark rich loam , light sandy loam and loose rock, 3rd. rate.
	No timber.
	Undergrowth, sage brush,grass and willows.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	S.89° 54'E., on a random line bet. secs. 15 and 22.
40.00	Set temp. ¼ sec. cor.
80.16	Intersect N. and S. line 19 lks. S. of the cor. of secs. 14-15-22 and 23.
	Thence I run
	S.89° 58'W., on a true line bet. secs. 15 and 22.
	Over mountainous land, through scattering aspen and ungrowth of sage brush and grass.
	Descend.
28.40	Enter Beaver creek canyon,200 ft. below sec. cor.,bears N. and S.
29.30	Wash, 20 lks. wide, 4 ft. deep, course, N.35°W.
	Thence over nearly level bottom land.
39.88	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for witness cor. to ¼ sec. cor., marked on brass cap T 12 S S 15 ¼ on N half and WC S 22 R 8 E on S. half from which
	An aspen, 3 ins. dia.,bears N.8°10'E.,115 lks. dist.,marked WC ¼ S 15 B T.
	An aspen, 4 ins. dia.,bears S.82°20'E.,122 lks. dist.,marked WC ¼ S 22 B T.
	August 22: At this cor. I set off11° 59'N. on the decl. arc; and at 12h 3m, l.m.t.,observe the sun on the meridian. The resulting lat.is 39° 46'.
40.08	Point for ¼ sec. cor. falls in road from Scofield to Colton, bears NE. and SW.
40.75	Enter dense willows, leave sage brush and grass, bears NE. and SW.
41.13	Beaver creek, stream of water, 10 lks. wide, 3 ins. deep course NE.
	Leave willows, enter sage brush and grass bears NE. andSW
42.30	Fence of J.A.Richards field, bears NW. and SE.
44.66	Cabin, ofJ.A. Richards bears N. 10 lks. dist.
	Ascend.
80.16	The cor. of secs. 15-16-21 and 22.
	Land mountainous.
	Soil, dark rich loam and loose rock, 2nd and 3rd, rate.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS.	
	Timber, scattering aspen.
	Undergrowth, sage brush,grass and willows.
	N.0° 02'W., bet. secs. 15 and 16.
	Over mountainous land, through sage brush and grass.
	Ascend.
6.80	Top of ridge, 625 ft. high,bears N.20°E. and S.20°W.
	Descend.
28.50	Enter aspen timber, bears E. and W.
30.00	Leave aspen, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 16 on W. half and S 15 on E. half; raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	August 22.1911.
	August 23:- At 8h 3m, a.m.,l.m.t.,I set off 39° 47' on the lat. arc; 11° 42'N. on the decl. arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 15 and 16.
	Thence I continue
	N.0° 02'W.,bet. secs. 15 and 16.
	Descend.
54.00	Enter heavy growth of aspen and scattering sage brush bears E. and W.
73.00	Enter scattering aspen and sagebrush, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground for cor. of secs. 9-10-15 and 16, marked on brass cap
	T 12 S S 9 in NW.
	R 8 E S 10 in NE.
	S 15 in SE., and
	S 16 in SW., quadrant; from which
	An aspen, 3 ins. dia.,bears N.81°05'E.,92 lks. dist.,marked T 12 S R 8 E S 10 B T.
	An aspen, 4 ins. dia.,bears S.51°42'E.,110 lks. dist.,marked T 12 S R 8 E S 15 B T.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	An aspen, 3 ins. dia.,bears S.75°20'W.,59 lks. dist.,marked T 12 S R 8 E S 16 B T.
	A sand stone, 20 x 5 x 5 ft. above ground,bears N.29°42'W.,16 lks. dist.,marked + B O.
	Land, mountainous.
	Soil light sandy loam and loose rock, 4th rate.
	Timber, aspen.
	Undergrowth, sage brush and grass.

	N.89° 58'E., on a random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
80.14	Intersect N. and S. line 24 lks. N. of the cor. of secs. 10-11-14 and 15.
	Thence I run
	N.89° 52'W., on a true line bet. secs. 10 and 15.
	Over mountainous land, through sage brush and grass.
	Ascend.
2.50	Top of ridge,60 ft. above sec, cor.,bears N. and S.
	Descend.
24.00	Hollow, 280 ft. deep, course N.
	Ascend.
37.00	Enter aspen and scattering sage brush, bears N. and S.
40.07	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 10 on N. half and S 15 on S. half; from which
	An aspen, 3 ins. dia.,bears N.3°E.,44 lks. dist., marked ¼ S 10 B T.
	An aspen, 4 ins. dia.,bears S.58°04'E.,9 lks.dist., marked ¼ S 15 B T.
	August 23: At this cor. I set off 11° 39'N. on the decl. arc; and at 12h 3m, l.m.mt., observe the sun on the meridian. The resulting lat. is 39°47'.
41.75	Top of ridge, 130 ft. high, bears N. and S.
	Leave timber enter sage brush and grass, bears N. and S.
	Descend.
50.00	Enter oak and sarvis berry brush, bears N. and S.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
56.00	Leave oak and sarvis berry brush, enter scattering timber bears N. and S.
80.14	The cor. of secs.9-10-15 and 16.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber aspen and scattering aspen and pine.
	Undergrowth, sage, oak and sarvis berry brush and grass.
	N.0° 02'W.,bet. secs. 9 and 10.
	Over mountainous land, through sage brush and grass.
	Descend.
8.00	Ravine,175 ft. deep, course W.
	Ascend.
12.00	Spur, 75 ft. high, projects W.
	Descend.
35.25	Fish creek, 275 ft. deep, stream of water 10 lks. wide, 3 ins. deep, course NE.
	Ascend.
36.60	Scofield branch line of the D & R G R R., bears NE. and SW.
40.00	Set an iron post 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 9' on W. half and S 10' on E. half; From which
	A sandstone, 12 x 10 x 8 ft., bears E. 3 lks. dist., marked + B O.
	Raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
	August 23,191
	August 28: At 8h 1m,a.m.,l.m.t.,I set off 39° 47' on the lat. arc; 10° 00'N.on the decl arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 9 and 10.
	Thence I run
	N.0°02'W.,bet. secs. 9 and 10 .
	Ascend.
68.00	Top of ridge, 75 ft. high, bears NE. and SW.

SUBDIVISION OF T.12 S., R.8 E.

Chains.	
	Descend .
0.00	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground, for cor.of secs.3,4,9 and 10, marked on brass cap T 12 S S 4 in NW. R 8 E S 3 in NE. S 10 in SE.; and S 9 in SW.quadrant; raise a mound of stone; $2\frac{1}{2}$ ft.base, 2 ft.high W.of cor. Pits impracticable.
	Land, mountainous.
	Soil, light, sandy loam and loose rock; 4th rate.
	No timber.
	Undergrowth, sagebrush and grass.
	S.89° 52'E.on a random line bet.secs.3 and 10,
0.00	Set temp.$\frac{1}{4}$ sec.cor.
0.06	Intersect N.and S.line, 19 lks.N.of the cor.of secs.2,3, 10, and 11.
	Thence I run
	N.89° 44'W.on a true line bet.secs.3 and 10,
	Over mountainous land; through service berry brush and scattering sagebrush and grass.
	Descend.
.00	Hollow, 675 ft.deep, course NW.
	Enter oak brush, bears N.and S.
	Ascend.
.75	Spur, 160 ft.high, projects NW.
	Leave service berry and oak brush; enter sagebrush, bears N.and S.
	Descend.
.00	Fish Creek, 200 ft.below spur, stream of water, 10 lks. wide, 3 ins.deep, course NW.
	Ascend.
.65	Branch line of the D.& R.G.R.R.to Scofield, bears NE.

SUBDIVISION OF T.12 S., R.8 E.

Chains.	
	and SW.
40.03	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 3 on N.half, and S 10 on S.half; raise a mound of stone 2½ ft.base, 2 ft.high N.of cor.Pits impracticable.
	August 28: Sky overcast making it impossible to take observation for lat.
70.00	Top of ridge, 675 ft.high, bears NE. and SW.
	Enter scattering service berry brush, bears NE. and SW.
	Descend.
80.06	The cor.of secs.3,4,9, and 10.
	Land, mountainous.
	Soil, light sandy loam and loose rock; 4th rate.
	No timber.
	Undergrowth of sage, oak and service berry brush and grass.

N.0° 02'W.bet.secs.3 and 4,

	Over mountainous land; through sagebrush, grass and sca tering service berry brush. Descend.
17.00	Ravine, 350 ft.deep, course NE. Ascend.
40.00	Top of ridge, 275 ft.high, bears NE. and SW.
	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 4 on half, and S 3 on E.half; raise a mound of stone 2½ ft base, 2 ft.high W.of cor.Pits impracticable. Descend.
55.49	Intersect N.bdy.of Tp. 19.39 chs.S.89°48'E.of the cor.o secs.3,4,33, and 34, heretofore described. I destroy the marks on cor.pertaining to secs.3 and 4, and
	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground, for closing cor.of secs.3 and 4, marked on brass cap
	T 11 S S 33 S 34 on N.half T 12 S R 8 E in S.half C C S 3 in SE.; and S 4 in SW.quadrant;raise a mound of stone 2

SUBDIVISION OF T. 12 S., R. 8 E.

CHAINS	
	base, 2 ft. high, S. of cor. Pits impracticable.
	Land, mountainous.
	Soil, light, sandy loam and loose rock, 4th rate.
	No timber.
	Undergrowth, sage brush, grass and scattering service berry brush.
	August 28, 1911.
	George C. Grant
	U. S. Transitman.
	August 24: At 8 h. 2 m., a.m.l.m.t. I set off 39°44' on the lat. arc; 11°23'N. on the decl. arc; and determine a meridian with the solar at the cor.of secs. 28, 29, 32 and 33.
	Thence I run
	S. 0° 17'E. bet.secs. 32 and 33.
	Over mountainous land, through heavy timber and scattering sagebrush and grass.
	Descend.
3.30	Hollow, 20 ft. below sec.cor., with stream of water, 6 lks. wide, 2 ins. deep, course SE.
	Ascend.
13.50	Top of spur, 35 ft. high, projects NE.
	Descend.
16.00	Ravine, 25 ft. deep, course N.70° E.
	Ascend.
21.50	Enter scattering timber and sage brush and grass.
40.00	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground for ¼ sec.cor., marked on brass cap ¼ S 32 on W. half and S 33 on E. half; from which
	An aspen, 10 ins.diam. bears N. 54°40'E. 307 lks. dist., marked ¼ S 33 B T.
	An aspen, 7 ins.diam., bears S. 17°20'E., 285 lks. dist., marked ¼ S 32 B T.
48.00	Top of ridge, 360 ft. high, bears E. and W.
	Descend.

SUBDIVISION OF T. 12 S., R. 8 E.

CHAINS	
81.12	Intersect S.Bdy. of Tp. 1.71 chs.S.89°44'W. of the cor. of secs. 4, 5, 32 and 33, heretofore described. I destroy the marks on old cor. pertaining to secs. 32 and
	Set an iron post, 3 ft. long, 2 ins.diam., 24 ins. in t ground for closing cor. of secs. 32 & 33, marked on brass cap
	T 12 S S 32 in NW and
	R 8 E S 33 in NE quadrant;
	T 13 S R 8 E C C S 4 S 5 on S. half; from whic
	An aspen, 6 ins.diam., bears N.36°25'E. 117 lks. dist., marked T 12 S R 8 E S 33 B T.
	An aspen, 8 ins.diam. bears N. 22° 30'W., 98 lks. dist., marked T 12 S R 8 E S 32 B T.
	Land, mountainous.
	Soil, light, sandy loam and loose rock, 4th rate.
	Timber, heavy scattering aspen and balsam.
	Undergrowth, sage brush and grass.
	August 24: At this cor. I set off 11° 19' N. on the decl. arc; and at 12 h. 3 m., l.m.t. observe the sun on the meridian. The resulting lat. is 39°43'.
	N. 0°03'W. bet.secs. 28 and 29.
	Over mountainous land, through scattering aspen and sage brush and grass. Descend.
4.00	Ravine, 20 ft. below sec.cor., stream of water 4 lks. wide, 2 ins. deep, course SW.
	Ascend.
33.00	Top of ridge, 485 ft. high, bears E. and W.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 29 on W. half and S 28 on E. half; from which
	An aspen, 6 ins.diam. bears N. 48° E., 266 lks. dist., marked ¼ S 28 B T.
	An aspen, 5 ins.diam., bears N. 36° 10'W., 143 lks. dist., marked ¼ S29 B T.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
49.10	Ravine, 75 ft. deep, course NE.
	Ascend.
59.00	Leave scattering timber, bears E, and W.
68.00	Top of ridge,25 ft. above ravine, bears NE. and SW.
	Enter scattering timber, bears NE. and SW.
	Descend.
80.00	Set an iron post 3 ft. long, 2 ins. dia.,26 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked on brass cap
	T 12 S S 20 in NW.
	R 8 E S 21 in NE.
	S 28 in SE., and
	S 29 in SW., quadrant; from which
	A red pine, 12 ins. dia.,bears N.1°30'E.,176 lks. dist.,marked T 12 S R 8 E S 21 B T.
	A red pine, 28 ins. dia.,bears S.34°50'E.,367 lks. dist.,marked T 12 S R 8 E S 28 B T.
	A red pine, 6 ins. dia.,bears S.66°30'W.,300 lks.,dist.,marked T 12 S R 8 E S 29 B T.
	A red pine, 12 ins. dia.,bears N.16°30'W.,218 lks. dist.,marked T 12 S R 8 E S 20 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen and red pine.
	Undergrowth, sage brush and grass.
	August 24, 1911.

August 25: At 8h 2m, a.m.,l.m.t.,I set off 39° 46' on the lat. arc; 11° 02'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20-21-28 and 29.

Thence I run

East, on a random line bet. secs. 21 and 28.

40.00	Set temp. ¼ sec. cor.
80.28	Intersect N. and S. line 14 lks. S. of the of secs. 21-22-27 and 28.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	Thence I run
	S.89° 54'W., on a true line bet. secs. 21 and 28.
	Over mountainous land, through scattering timber and sage brush and grass.
	Descend.
0.18	Beaver creek,with stream of water, 10 lks. wide, 10 lks. deep, 3 ins. deep, course N.
	Ascend.
23.20	Leave timber, bears N. and S.
30.30	Top of ridge,600 ft. high, bears N.20°E. and S.20°W.
	Descend.
40.14	Set an iron post, 3ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 21 on N. half and S 28 on S. half; raise a moun d of stone 2½ ft. base, 2 ft, high N. of cor. Pits impracticable.
51.50	Enter scattering timber, bears N. and S.
61.10	Ravine, 225 ft, deep, course NW.
	Ascend.
80.28	The cor. of secs. 20-21-28 and 29.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush and grass.
	N.0° 03'W., bet. secs. 20 and 21.
	Over mountainous land, through scattering timber and undergrowth of sage brush and grass.
	Descend.
12.80	Ravine,150 ft. below sec. cor., course NW.
	Ascend.
33.10	Ridge, 150 ft. high, bears NW. and SE.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 20 on W. half and S 21 on E. half; from which

CHAINS	
	A red pine, 30 ins. dia.,bears S.70°05'W.,320 lks. dist.,marked ¼ S 20 B T.
	A red pine, 16 ins. dia.,bears S.28°10'E.,292 lks. dist.,marked ¼ S 21 B T.
44.00	Ravine,50 ft. deep, course W.
	Ascend.
56.00	Top of rolling ridge, 25 ft. above ravine, bears NW. and SE.
	Descend.
65.00	Enter heavy timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked on brass cap
	T 12 S S 17 in NW.
	R 8 E S 16 in NE.
	S 21 in SE., and
	S 20 in SW., quadrant; from which
	An aspen, 5 ins. dia.,bears N.60°10'E.,35 lks. dist.,marked T 12 S R 8 E S 16 B T.
	A balsam, 12 ins. dia.,bears S.7°05'E.,215 lks. dist.,marked T 12 S R 8 E S 21 B T.
	A red pine, 36 ins. dia.,bears S.14°55'W.,210 lks.,dist.,marked T 12 S R 8 E S 20 B T.
	An aspen, 6 ins. dia.,bears N.37°30'W.,56 lks. dist.,marked T 12 S R 8 E S 17 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber scattering aspen, balsam and red pine.
	Undergrowth, sage brush and grass.
	August 25:At this cor. I set off 10° 58'N. on the lat. arc; and at 12h 2m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 47'.

	N.89° 54'E., on a random line bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.
80.30	Intersect N. and S. line 16 lks.S. of the cor. of secs.

CHAINS	
	15-16-21 and 22.
	Thence I run
	S.89° 47'W., on a true line bet. secs. 16 and 21.
	Over mountainous land, through sage brush and grass.
	Ascend.
5.00	Top of ridge, 25 ft above sec. cor., bears NE, and S.20°W
	Descend.
13.50	Enter scattering sarvis berry brush, bears N. and S.
29.50	Hollow, 250 ft. deep, course N.
	Ascend.
37.50	Top of ridge, 100 ft. high, bears NE. and SW.
	Descend. Enter scattering timber, bears N. and S.
40.15	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 16 on N. half and S 21 on S. half; from which
	An aspen, 6 ins. dia., bears N.45°55'W., 286 lks. dist., marked ¼ S 16 B T.
	An aspen, 6 ins. dia., bears S.60°40'W., 376 lks. dist., marked ¼ S 21 B T.
54.00	Leave timber, bears N. and S.
54.50	Ravine, 50 ft. deep, course N.
	Small spring bears N. 75 lks. dist.
	Ascend.
80.30	The cor. of secs. 16-17-20 and 21
	Land, mountainous.
	Soil, light sandy loam and loose, rock, 4th rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush and grass.
	August 25,191

August 30:-At 2h 1m, l.m.t., I set off 39°46' on the lat. arc; 8° 12'N. on the decl. arc; and determine a meridia with the solar at the cor. of secs. 16-17-20 and 21.

Thence I run

N.0° 03'W., bet. secs. 16 and 17.

Over mountainous land, through timber, and scattering

SUBDIVISION OF T. 12 S.,R. 8 E.

CHAINS	
	sage brush and grass.
	Descend.
15.80	Enter scattering timber and sage brush and grass, bears E. and W.
28.90	Leave timber, bears E. and W.
30.70	Fish creek, 600 ft. below sec. cor.,stream of water,10 lks. wide, 3 ins. deep, course E.
	Dense growth of willows along creek.
	Ascend.
31.72	Branch line of the D.& R.G.R.R. to Scofield, bears N.65°E. and S.65°W.
39.70	Sandstone ledge, 30 ft. high, bears E. and W.
40.00	Set an iron post, 12 ins. in the ground and raise a mound of stone around post for ¼ sec. cor.,marked on brass cap ¼ S 17 on W. half and S 16 on E. half; raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.(Post 3 ft.long, 1 in.dia.)
45.75	Ledge, 70 ft. high, bears E. and W.
67.20	Top of ridge, 850 ft. high, bears N.60°E. and S.60°W.
	Descend.
76.00	Enter scattering timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked on brass cap
	T 12 S S 8 in NW.
	R 8 E S 9 in NE.
	S 16 in SE., and
	S 17 in SW., quadrant; from which
	An aspen, 4 ins. dia.,bears N.14°50'E.,143 lks. dist.,marked T 12 S R 8 E S 9 B T.
	An aspen, 4 ins. dia.,bears S.34°10'E.,75 lks. dist.,marked T 12 S R 8 E S 16 B T.
	An aspen, 12 ins. dia.,bears S.59°W.,243 lks. dist.,marked T 12 S R 8 E S 17 B T.
	An aspen, 4 ins. dia.,bears N.40°15'W.,71 lks. dist.,marked T 12 S R 8 E S 8 B T.
	Land, mountainous.

CHAINS

Soil, light sandy loam, loose rock and ledges, 4th rate.

Timber, scattering aspen and pine.

Undergrowth, sage brush and grass.

August 30,19

August 31: At 8h 31m,a.m.,l.m.t.,I set off 39° 47' on the lat. arc; 8° 55'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8-9-16 and 17.

Thence I run

N.89° 47'E., on a random line bet. secs. 9 and 16.

40.00 Set temp. ¼ sec. cor.

80.12 Intersect N. and S. line 15 lks. N. of the cor. of secs. 9-10-15 and 16.

Thence I run

S.89° 53'W., on a true line bet. secs. 9 and 16.

Over mountainous land, through scattering cedars and sage brush, grass and scattering sarvis berry brush.

Descend.

16.80 Fish Creek, 280 ft. below sec. cor, stream of water,10 lks. wide, 2 ins. deep, course N.20°E.

Thence over nearly level bottom land.

17.93 Branch line of the D.& R.G.R.R. to Scofield, bears N.30°E. and S.30°W.

18.75 Ascend mountain,bears N.30°E. and S.30°W.

29.35 Spur,100 ft. high, projects S.

Descend over ledge, 70 ft. high.

38.30 Ravine, 75 ft. deep, course S.10°E.

Ascend.

40.06 Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 9 on N. half and S 16 on S. half; from which

A cedar, 12 ins. dia.,bears N.63°30'W.,187 lks. dist.,marked ¼ S 9 B T.

A cedar, 12 ins. dia.,bears S.39°30'W.,93 lks. dist.,marked ¼ S 16 B T.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
60.50	Top of ridge, 800 ft. high, bears NE. and SW.
	Leave sarvis berry brush and cedars, enter aspen bears N. and S.
	Descend.
80.12	The cor. of secs. 8-9-16 and 17.
	Land, mountainous.
	Soil,light sandy loam and loose rock, 4th rate.
	Timber, scattering cedars and aspen.
	Undergrowth, sage brush, grass and scattering sarvis berry brush.
	———————————
	N.0º 03'W.,bet. secs. 8 and 9.
	Over mountainous land, through sage brush and scattering aspen.
	Descend.
4.50	Ravine, 140 ft. deep, course NE.
	Ascend.
12.00	Top of ridge,25 ft. above ravine, bears N.50°E. and S50°W.
	Descend.
37.80	NW. cor. of sheep corral.
38,40	Ravine,180 ft. deep, course N.75°E.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 8 on W. half and S 9 on E. half; from which
	An aspen, 7 ins. dia.,bears S.80°45'W.,64 lks. dist.,marked ¼ S 8 BT.
	An aspen, 6 ins. dia.,bears N.82°E.,178 lks. dist.,marked ¼ S 9 B T.
	August 31: Sky is overcast making it impossible to take observation for lat.
52.50	Top of ridge,100 ft. high, bears N.60°E. and S.60°W.
	Descend.
67.20	Hollow, 130 ft. deep, course,NE.
	Ascend.
72.00	Top of ridge,25 ft. above hollow, bears NE.
	Descend.

CHAINS.	
80.00	Set an iron post, 3 ft. long, 2 ins.dia.,24 ins. in the ground,for cor. of secs. 4-5-8 and 9, marked on brass cap
	T 12 S S 5 in NW.
	R 8 E S 4 in NE.
	S 9 in SE., and
	S 8 in SW., quadrant; from which
	An aspen, 4 ins. dia.,bears N.27°30'E.,73 lks. dist.,marked T 12 S R 8 E S 4 B T.
	An aspen, 9 ins. dia.,bears S 74°15'E.,170 lks. dist.,marked T 12 S R 8 E S 9 B T.
	An aspen, 9 ins. dia.,bears S.23°20'W.,363 lks. dist.,marked T 12 S R 8 E S 8 B T.
	An aspen, 4 ins. dia.,bears N.27°30'W.,107 lks. dist.,marked T 12 S R 8 E S 5 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock 4th rate.
	Timber, scattering aspen.
	Undergrowth, sage brush and grass.

	N.89° 53'E., on a random line bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line 20 lks.S. of the cor. of secs. 3-4-9 and 10.
	Thence I run
	S.89° 44'W., on a true line bet. secs. 4 and 9.
	Over mountainous land, through sage brush,grass and scattering sarvis berry brush.
	Descend.
9.30	Hollow, 100 ft. below sec. cor.,course N.
	Ascend.
24.50	Top of ridge,350 ft. high, bears N.20°E. and S.20°W.
	Descend.
39,99	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec.cor., marked on brass cap ¼ S 4 on N.

SUBDIVISION OF T.12 S.,R8 E.

CHAINS	
	half and S 9′ on S. half; raise a mound of stone, 2½ ft. base, 2 ft. high, N. of cor. Pits impracticable.
52.40	Leave scattering sarvis berry brush and enter scattering aspen, bears N. and S.
	Hollow, 225 ft. deep, course N.
	Ascend.
59.00	Top of ridge, 75 ft. high; bears N. and S.
	Descend.
71.10	Hollow, 100 ft. deep, course, N.20°E.
79.98	The cor. of secs. 4-5-8 and 9.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen.
	Undergrowth, sage brush, grass and scattering sarvis berry brush.

	N.0° 03'W., bet. secs. 4 and 5.
	Over mountainous land, through scattering aspen and sage brush and grass.
	Descend.
4.20	Hollow, 125 ft. deep, course N.70°E.
	Ascend.
14.00	Top of ridge, 40 ft. high, bears NE. and SW.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 5′ on W. half and S 4′ on E. half; raise a mound of stone, 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
44.75	Hollow, 200 ft. deep, course NE.
	Ascend.
48.00	Top of ridge, 40 ft. high, bears N.10°E. and S.10°W.
	Descend.
52.00	Ravine, 40 ft. deep, course NE.
	Ascend.
55.81	Intersect N. bdy. of Tp. 20.49 chs. S.89°27'E., of the cor. of secs. 4-5-32 and 33, heretofore described. I des-

CHAINS.

troy the marks on the old cor. pertaining to secs. 4 and 5 and

Set an iron post, 3 ft. long,2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 4 and 5,marked on brass cap

COT 11 S R 8 E S 33 in N.half, half.
T 12 S R 8 E in S.half
S 4 in SE., and

S 5 in SW., quadrant; raise a mound of stone 2½ ft. base, 2 ft. high S. of cor. Pits impracticable.

Land, mountainous.

Soil, light sandy loam and loose rock, 4th rate.

Timber scattering aspen.

Undergrowth, sage brush and grass.

August 31,1911

Robert E. L. Collins

U.S.Transitman.

August 24:-At 8h 3m, a.m.,l.m.t.,I set off 39° 44' on the lat. arc; 11° 23'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29-30-31 and 32.

Thence I run

S.0° 17'E., bet. secs.31 and 32.

Over mountainous land, throughheavy aspen and scattering sage brush and grass.

Ascend.

17.00 Top of spur, 275 ft. above sec. cor, projects NE.

Ascend ridge.

31.50 Top of ridge, 125 ft. above spur,bears NW. and SE.

Descend.

40.00 Set an iron post, 3 ft. long,1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 31 on W. half and S 32 on E. half; from which

An aspen, 5 ins. dia.,bears N.83°50'W.,109 lks. dist.,marked ¼ S 31 B T.

An aspen, 5 ins. dia.,bears N.72° 15'E.,149 lks. dist.,marked ¼ S 32 B T.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	August 24:-At this cor. I set off 11° 19'N. on the decl. arc; and at 12h 3m,l.m.t., observe the sun on the meridian. The resulting lat. is 39° 44'.
	Leave aspen and enter oak brush, bears E. and W.
53.36	Ravine,400 ft. deep, course SE.;Lake Cr.5 lks.wide, in bottom. Ascend.
72.00	Top of spur, 175 ft. high, bears SE.
	Leave oak brush and enter aspen and choke cherry brush, bears E. and W.
	Descend.
81.45	Intersect S. bdy.of Tp. 2.24 chs. S.89° 38'W. of the cor. of secs. 5-6-31 and 32, heretofore described. I destroy the marks on old cor. pertaining to secs. 31 and 32. Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 31 and 32, marked on brass cap
	T 12 S S 31 in NW.
	R 8 E S 32 in NE., and T 13 S R 8 E CC S 5 S 6 on S. half; from which
	An aspen, 3 ins. dia.,bears N.32°52'E.,113 lks. dist.,marked T 12 S R 8 E S 32 B T.
	An aspen, 3 ins. dia.,bears N.62°25'W.,33 lks. dist.,marked T 12 S R 8 E S 31 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, aspen.
	Undergrowth, sage brush, oak and choke cherry brush and grass.
	August 24,1911.

August 25:-At 8h2m, a.m.,l.m.t., I set off 39° 44' on the lat. arc; 11° 02'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29-30-31 and 32.

Thence I run

N.0° 03'W., bet. secs. 29 and 30.

SUBDIVISION OF T. 12 S., R.8 E.

CHAINS	
	Over mountainous land, through scattering aspen, and sage brush and grass.
	Descend.
5.50	Hollow, 90 ft. below sec. cor., stream of water, 5 1 ks. wide, 1 in. deep, course NE.
	Dense growth of willows along bottom of hollow.
	Ascend.
9.00	Sandstone ledge, 20 ft. high, bears E. and W.
14.00	Top of spur, 125 ft. high, projects NE.
	Descend.
23.75	Ravine, 125 ft. deep, stream of water, 4 lks. wide, 1 in. deep, course NE.
25.34	Hollow, 125 ft. deep, course, E.
	Ascend.
40.00	Set an iron post, 3ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap ¼ S 30 on W. half and S 29 on E. half; from which
	An aspen, 3ins. dia., bears N.10°25'W., 140 lks. dist., marked ¼ S 30 B T.
	An aspen, 3 ins. dia., bears N.84°20'E., 128 lks. dist., marked ¼ S 29 B T.
56.00	Top of ridge, 400 ft. high, bears N.60°W. and S.60°E.
	Descend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked on brass cap
	T 12 S S 19 in NW.
	R 8 E S 20 in NE.
	S 29 in SE., and
	S 30 in SW., quadrant; from which
	An aspen, 4 ins. dia., bears N.27°48'E., 182 lks. dist., marked T 12 S R 8 E S 20 B T.
	An aspen, 3 ins. dia., bears S.58°15'E., 231 lks. dist., marked T 12 S R 8 E S 29 B T.
	An aspen, 5 ins. dia., bears S.72°52'W., 388 lks. dist., marked T 12 S R 8 E S 30 B T.

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CHAINS.	
	An aspen, 6 ins. dia.,bears N.33°W., 210 lks. dist.,marked T 12 S R 8 E S 19 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4 th rate.
	Timber, scattering aspen.
	Undergrowth, sage brush and grass.
	East, on a random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 19 lks. N. of the cor. of secs. 20-21-28 and 29.
	Thence I run
	N.89° 52'W., on a true line bet. secs. 20 and 29.
	Over mountainous land, through scattering aspen and sage brush and grass.
	Descend.
35.00	Hollow, 100 ft. below sec. cor., course NE.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 20 on N. half and S 29 on S. half; from which
	An aspen, 3 ins. dia.,bears N.45°04'E.,18 lks. dist., marked ¼ S 20 B T.
	An aspen, 3 ins. dia.,bears S.16°25'E., 12 lks. dist.,marked ¼ S 29 B T.
	August 25: At this cor. I set off 10° 58'N. on the decl. arc; and at 12h 2m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 45'.
80.00	The cor. of secs, 19-20-29 and 30.
	Land mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen.
	Undergrowth, sage brush and grass.
	West, bet. secs. 19 and 30, on true line,

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	Over mountainous land, through scattering aspen and undergrowth of sage brush and grass.
	Ascend,
10.00	Top of ridge, 50 ft. above sec. cor., bears NE. and SW.
	Descend.
32.00	Ravine, 75 ft. deep, course NE.
	Ascend.
40.00	Set an iron post,3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 19 on N. half and S 30 on S. half; from which
	An aspen, 6 ins. dia.,bears N.8°E.,31 lks. dist., marked ¼ S 19 BT.
	An aspen, 5 ins. dia.,bears S.19°W.,14 lks. dist., marked ¼ S 30 B T.
	August 25,1911.
	August 26: -At 8h 2m, a.m.,l.mt.,I set off 39°45' on the lat. arc; 10° 41'N. on the decl. arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 19 and 30.
	Thence I continue
	West, bet. secs. 19 and 30.
44.00	Enter scattering growth of choke cherry brush, bears N. and S.
58.00	Top of ridge,600 ft. high, bears NE. and SW.
	Descend.
78.15	Intersect W. bdy. of Tp.8.97 chs. S. of the ¼ sec. cor. bet. secs. 19 and 24, heretofore described.
	Set an iron post, 3ft. long, 2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 19 and 30, marked on brass cap
	T 12 S on N. half,
	S 19 in NE.
	S 30 T 8 E in SE. quadrant, and
	CC S 24 S 25 R 7 E on W half; from which
	An aspen, 5 ins. dia.,bears N.55°30' E.,31 lks. dist.,marked T 12 S R 8 E S 19 B T.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	An aspen, 5 ins. dia.,bears S.40°E., 14 lks. dist.,marked T 12 S R 8 E S 30 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen.
	Undergrowth, sage brush and grass.
	N.0° 03'W.,bet. secs. 19 and 20.
	Over mountainous land, through scattering aspen and undergrowth of sage brush and grass.
	Ascend.
1.00	Head of ravine, course NE.
10.00	Top of ridge,50 ft. above sec. cor.,bears NE. and SW.
	Descend, along top of ridge, bearing N. and S.
24.00	Enter scattering pine, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 19 on W. half and S 20 on E. half; from which
	A balsam, 10ins. dia.,bears N.40°00'E.,72 lks. dist.,marked ¼ S 20 B T.
	A balsam,10 ins. dia.,bears S.76°W.,13 lks. dist., marked ¼ S 19 B T.
60.00	Set temp. flag.
	August 26.1911.
	August 30:-At 8h 1m, a.m.,l.m.t., I set off 39°47' on the lat. arc; 9° 18'N. on the decl. arc; and determine a meridian with the solar at the temp. flag set August 26.
	Thence I continue
	N.0° 03'W., bet. secs. 19 and 20.
	Descend from ridge, bears to the NE.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked on brass cap
	T 12 S S 18 in NW.
	R 8 E S 17 in NE.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	S 20 in SE., and
	S 19 in SW., quadrant; from which
	An aspen, 15 ins. dia.,bears N.27°30'E.,262 lks. dist.,marked T 12 S R 8 E S 17 B T.
	An aspen, 3 ins. dia.,bears S.28°40'E.,42 lks. dist.,marked T 12 S R 8 E S 20 B T.
	An aspen, 3 ins.,dia.,bears S.32°25'W., 18 lks. dist., marked T 12 S R 8 E S 19 B T.
	An aspen, 4 ins. dia.,bears N.63°05'W.,10 lks. dist.,marked T 12 S R 8 E S 18 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush and grass.

	West, bet. secs. 18 and 19, on true line
	Over mountainous land, through scattering timber and undergrowth of sage brush and grass.
	Descend.
7.00	Ravine,50 ft. below sec. cor.,course NE.
	Ascend.
13.00	Top of spur, 125 ft. high, projects N.
	Descend.
25.00	Ravine, 200 ft. deep, course N.
	Ascend.
36.50	Spur, 250 ft. high, projects N.
	Descend.
40.00	Set a n iron post, 3ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 18 on N. half and S 19 on S. half; from which
	An aspen, 3 ins. dia.,bears N.13°27'E.,194 lks. dist.,markdd ¼ S 18 B T.
	An aspen, 3 ins. dia.,bears S.19°12'E.,80 lks. dist.,marked ¼ S 19 B T.
	August 30; At this cor. I set off 9° 14'N. on the decl.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	arc; and at 12h 1m,l.m.t., observe the sun on the meridian. The resulting lat. is 39° 46'.
46.60	Ravine, 200 ft. deep, course N.
	Ascend.
77.97	Intersect W. bdy. of Tp. 9.85 chs. South[illegible]., of the ¼ sec. cor. bet. secs.13 and 18,heretofore described.
	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 18 and 19, marked on brass cap
	T 12 S on N. half
	S 18 in NE.,
	S 19 R 8 E in SE.,quadrant, and
	CC S 13 S 24 R 7 E on W. half; from which
	An aspen, 5 ins. dia.,bears N.74°50'E.,9 lks. dist.,marked T 12 S R 8 E S 18 B T.
	An aspen, 6 ins. dia,,bears S.74°10'E.,23 lks. dist.;marked T 12 S R 8 E S 19 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber scattering aspen and pine.
	Undergrowth, sage brush and grass.
	August 30,1911.

August 31:- At 8h 1m,a.m.,l.m.t., I set off 39° 46' on the lat. arc; 8° 56'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs.17-18-19 and 20.

Thence I run

S.89° 52'E., on a random line bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

80.14 Intersect N. and S. line 19 lks. S. of the cor. of secs. 16-17-20 and 21.

Thence I run

West, on a true line bet. secs. 17 and 20.

Over mountainous land, through scattering timber and undergrowth of sage brush and grass.

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CHAINS	
	Ascend.
11.00	Top of spur, 150 ft. above sec. cor.,projects N.
	Descend.
15.75	Leave timber, bears N. and S.
29.00	Enter scattering timber, bears N. and S.
30.00	Hollow, 475 ft. deep, course N.
	Ascend.
40.07	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 17 on N. half and S 20 on S. half; from which
	An aspen, 3 ins. dia.,bears N.23°E.,7 lks. dist. marked ¼ S 17 B T.
	An aspen,4 ins. dia.,bears S.11°E.,13 lks. dist., marked ¼ S 20 B T.
	August 31:-At this cor. I set off 8° 51'N. on the decl. arc; and at 12h 1m, l.m.t., observe the sun on the meridian. The resulting lat. is 39° 46'.
41.00	Top of spur, 250 ft. high, projects N.
	Descend.
66.00	Hollow, 275 ft. deep, course N.
69.75	Spring branch, water 4 lks. wide, 1 in. deep, course NE.
	Ascend.
74.00	Top of spur, 150 ft. high, projects N.
	Descend.
80.14	The cor. of secs. 17-18-19 and 20.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, scattering aspen and pine.
	Undergrowth, sage brush and grass.
	August 31,1911.

September 1:-At 8h, a.m.,l.m.t.,I set off 39° 46' on the lat. arc; 8° 34'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17-18-19 and 20.

Thence I run

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	N.0° 03'W.,bet. secs. 17 and 18.
	Over mountainous land, through scattering timber and undergrowth of sage brush and grass.
	Descend.
16.00	Leave timber, bears E. and W.
17.20	Branch line of the D.& R.G.R.R.,to Scofield, bears E. and W.
17.77	Fish Creek, 200 ft. below sec. cor.,stream of water,10 lks. wide, 3 ins. deep, course E.
	Ascend.
25.72	Sandstone ledge, 100 ft high, bears E. and W.
31.00	Sandstone ledge, 30 ft. high bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 18 on W. half and S 17 on E. half; raise a mound of stone, 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
73.00	Top of ridge, 900 ft. high, bears E. and W.
	Descend.
76.00	Enter timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked on brass cap
	T 12 S S 7 in NW.
	R 8 E S 8 in NE.
	S 17 in SE., and
	S 18 in SW.,quadrant; from which
	An aspen, 8 ins. dia.,bears N.75°04'E.,67 lks. dist.,marked T 12 S R 8 E S 8 B T.
	An aspen, 8 ins, dia,,bears S.55°56'E.,94 lks. dist.,marked T 12 S R 8 E S 17 B T.
	An aspen, 5 ins. dia.,bears S.45°40'E.,69 lks. dist.,marked T 12 S R 8 E S 18 B T.
	An aspen, 6 ins. dia.,bears N.56°45'W.,25 lks. dist.,marked T 12 S R 8 E S 7 B T.
	Land, mountainous.
	Soil, light sandy loam and loose rock 4th rate.

CHAINS

Timber, scattering aspen and pine.

Undergrowth, sage brush and grass.

September 1: At this cor. I set off 8° 30'N. on the decl.arc; and at 12hM. l.m.t., observe the sun on the meridian. The resulting lat. is 39° 47'.

West, bet. secs. 7 and 18, on true line

Over mountainous land, through scattering timber and undergrowth of sage brush and grass.

Ascend.

2.35 Leave timber, bears NW. and SE.

16.40 Top of mountain, 50 ft. above sec. cor.,bears NW. and SE.

Descend.

30.00 Ravine, 50 ft. deep, course S.

Ascend.

38.50 Top of spur, 70 ft. high, projects SE.

Descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for 1/4 sec. cor.,marked on brass cap 1/4 S 7 on N. half and S 18 on S. half; raise a mound of stone 2½ ft. base, 2 ft, high N. of cor. Pits impracticable.

73.75 Hollow, 550 ft. deep, course S.

Ascend.

78.17 Intersect W. bdy. of Tp. 8.06 chs. S.1° 07'E.,of the 1/4 sec. cor. bet. secs. 7 and 18, heretofore described.

Set an iron post, 3 ft..long, 2 ins. dia.,24 ins. in the ground for closing cor. of secs. 7 and 18, marked on brass cap

T 12 S on N. half

S 7 in NE.

S 18 R 8 E in SE.,quadrant, and

CC S 12 S 13 R 7 E on W. half; raise a mound of stone 2½ ft. base, 2 ft. high,E. of cor. Pits impracticable.

Land, mountainous.

Soil, light sandy loam, clay and loose rock, 4th rate.

Timber, scattering aspen and pine.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	Undergrowth, sage brush and grass.
	September 1,1911.
	George C. Swan
	U . S Transitman .
	September 1: At 8h, a.m.,l.m.t.,I set off 39° 47' on the lat. arc; 8° 34'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8-9-16 and 17.
	Thence I run
	West, on a random line bet. secs, 8 and 17.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.22	Intersect N. and S. line 23 lks. S. of the cor. of secs. 7-8 17 and 18.
	Thence I run
	S.89°50'E., on a true line bet. secs. 8 and 17.
	Over mountainous land, through scattering aspen and undergrowth of sage brush and grass.
	Descend.
11.50	Ravine, 50 ft. deep, course NE.
	Ascend, gradually.
40.11	Set an iron post,3 ft. long, 1 in. dia.,26 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked on brass cap $\frac{1}{4}$ S 8 om N. half and S 17 on S. half; from which
	An aspen, 5 ins. dia.,bears N.11°21'E.,198 lks. dist.,marked $\frac{1}{4}$ S 8 B T.
	An aspen, 10 ins. dia.,bears S.10° 17'E., 110 lks. dist.,marked $\frac{1}{4}$ S 17 B T.
61.50	Top of ridge,200 ft. high, bears NE. and SW.
	Descend.
69.80	Ravine, 150 ft. deep, course NE.
	Ascend.
80.22	The cor. of secs.8-9-16 and 17.
	Land, mountainous.
	Soil, lightsandy loam and loose rock, 4th rate.
	Timber, scattering aspen.

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	Undergrowth, sage brush and grass.
	September 1:At this cor. I set off 8° 30'N. on the decl. arc; and at 12h,M,.l.m.t.,observe the sun on the meridian. The resulting lat. is 39° 47'.
	From cor.of secs.7,8,17 and 18, I run
	N.0° 03'W., bet. secs. 7 and 8.
	Over mountainous land, through sage brush and grass, and aspen. Descend.
13.30	Ravine,200 ft. deep, course N.60°E.
	Ascend.
19.00	Top of ridge, 25 ft. above ravine, bears NE. and SW.
	Descend.
26,50	Ramine, 50 ft. deep, course,E.
	Ascend,
34.40	Top of ridge, 50 ft. high, bears N.75°E. and S.75°W.
	Descend, leave timber, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 7 on W. half and S 8 on E. half; raise a mound of stone 2½ ft. base, 2 ft. high W. of cor. Pits impracticable.
46.80	Leve sage brush, enter heavy aspen, bears E. and W.
53.00	Enter scattering timber, and sage brush, bears SE. and W
70.60	Hollow, 325 ft. deep, course NE.
	Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked on brass cap
	T 12 S S 6 in NW.
	R 8 E S 5 in NE.
	S 8 in SE. and
	S 7 in SW.,quadrant; from which
	An aspen, 5 ins. dia.,bears N.21°30'E.,8 lks. dist.,marked T 12 S R 8 E S 5 B T.
	An aspen, 5 ins. dia.,bears S.75°30'E.,18 lks. dist.,marked T 21 S R 8 E S 8 B T

SUBDIVISION OF T.12 S.,R.8 E.

CHAINS	
	An aspen, 5 ins. dia.,bears S.49°20'W.,100 lks. dist.,marked T 12 S R 8 E S 7 B T.
	An aspen, 5 ins. dia.,bears N.55°30'W.,11 lks. dist.,marked T 12 S R 8 E S 6 B T.
	Land, mountainous.
	Soil,light sandy loam and loose rock, 4th rate.
	Timber, aspen.
	Undergrowth, sage brush and grass.

	S.89° 50'E., on a random line bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
79.94	Intersect N. and S. line 5 lks. S. of the cor. of secs. 4-5-8 and 9.
	Thence I run
	N.89° 52'W., on a true line bet. secs. 5 and 8.
	Over mountainous land, through scattering aspen and undergrowth of sage brush and grass.
	Descend.
11.50	Enter heavy aspen and scattering sage brush,bears N. andS.
12.90	Hollow, 75 ft. below sec. cor.,course N.80°E.
	Ascend.
20.00	Enter scattering timber, and undergrowth of sage brush and scattering sarvis berry brush, bears N. and S.
39.97	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor. marked on brass cap ¼ S 5 on N. half and S 8 on S. half; from which
	An aspen, 5 ins. dia.,bears N.10°30'E.,103 lks. dist.,marked ¼ S 5 B T.
	An aspen, 5 ins. dia.,bears N.50°20'W., 63 lks. dist.,marked ¼ S 5 BT.
	Ascend along S. side of ridge.
79.94	The cor. of secs. 5-6-7 and 8.
	Land, mountainous.
	Soil, light sandy loam and loose rock, 4th rate.
	Timber, aspen.
	Undergrowth, sage brush, grass and scattering sarvis

CHAINS	
	berry brush.
	September 1,1911.
	Robert E. L. Cottrell
	U .S . Transitman .
	September.2: At.8h, a.m.,l.m.t.,I set off 39° 48' on the lat. arc; 8° 12'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5 - 6 - 7 and 8.
	Thence I run
	West, bet. secs. 6 and 7, on true line,
	Over mountainous land, through scattering aspen and undergrowth of sage brush and grass.
	Ascend.
5.00	Top of ridge,20 ft. above, sec. cor.,bears N.60°E. and S.60°W.
	Thence along N. side of mountain, ascending slightly.
22.00	Enter heavy timberand scattering sage brush, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. dia.,26 ins. in the ground, for ¼ sec. cor.,marked on brass cap ¼ S 6on N. half and S 7 on S. half; from which
	An aspen, 8 ins. dia.,bears N.5°55'E., 12 lks.dist., marked ¼ S 6 B T.
	An aspen, 6 ins. dia.,bears S.4°51'E.,32 lks. dist., marked ¼ S 7 BT.
	September 2: At this cor. I set off 8° 08 'N. on the decl arc; and at 12h,M.l.m.t.,observe the sun on the meridian The resulting lat. is 39° 48'.
66.00	Enter scattering timber and choke cherry brush, bear N. and S.
78.83	Intersect W. bdy of Tp. 5.83 chs. S.0° 19'W., of the ¼ sec. cor., on E. bdy. of sec. 1, heretofore described.
	Set an iron post, 3 ft. long, 2 ins. dia.,24 ins. in the ground, for closing cor. of secs. 6 and 7 marked on brass cap

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CHAINS	
	T 12 S on N. half,
	S 6 in NE
	S 7 R 8 E in SE quadrant and
	CC R 7 E S 1 S 12 on W. half; from which
	A pine, 10 ins.diam., bears S. 21°30'E., 116 lks. dist., marked T 12 S R 8 E S 7 B T.
	There being no other trees suitable for bearing trees, I raise a mound of stone, 2½ ft. base, 2 ft. high, E. of cor. Pits impracticable.
	Land, mountainous.
	Soil, dark rich loam and loose rock, 3rd rate.
	Timber, aspen and scattering pine.
	Undergrowth, sage brush, grass and scattering choke cherry brush.
	September 2, 1911.
	George C Swan
	U. S. Transitman.
	September 2: At 8 h. a.m.l.m.t. I set off 39°48' on the lat. arc; 8°12'N. on the decl. arc; and determine a meridian with the solar at the cor of secs. 5, 6, 7 and 8. Thence I run
	N. 0° 03' W. bet. secs. 5 and 6.
	Over mountainous land, through scattering timber and undergrowth of sage brush and grass.
	Ascend.
3.00	Top of ridge, 20 ft. above sec.cor., bears N.60°E. and S. 60° W.
	Descend.
12.80	Enter heavy timber, and leave sagebrush, bears NE & SW.
32.00	Hollow, 425 ft. deep, course E.
	Leave timber, enter sage brush, bears E. and W.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in.diam., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 6 on

SUBDIVISION OF T. 12 S., R. 8 E.

CHAINS	
	W. half and S 5 on E. half; raise a mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high, W. of cor. Pits impracticable.
44.20	Top of ridge, 425 ft. high, bears N.80°E. and S. 80° W.
	Descend.
46.50	Enter scattering timber, bears E. and W.
56.23	Intersect N.Bdy. of Tp. 22.06 chs. S.89°49'E. of the cor. of secs. 5, 6, 31 and 32, heretofore described, I destroy the marks pertaining to secs. 5 and 6, and
	Set an iron post, 3 ft. long, 2 ins.diam., 24 ins.in the ground for closing cor. of secs. 5 and 6, marked on brass cap
	CC T 11 S R 8 E S 32 in N. half,
	T 12 S R 8 E in S. half,
	S 5 in SE and
	S 6 in SW quadrant; from which
	An aspen, 4 ins.diam. bears S. 22°40'E. 25 lks. dist., marked T 12 S R 8 E S 5 B T.
	An aspen, 4 ins.diam. bears S. 79°45'W. 50 lks. dist., marked T 12 S R 8 E S 6 B T.
	Land, mountainous.
	Soil, light, sandy loam and loose rock, 4th rate.
	Timber, aspen.
	Undergrowth, sage brush and grass.
	September 2: At this cor. I set off 8°08' N.on the decl. arc; and at 12 h. m., l.m.t. observe the sun on the meridian. The resulting lat. is 39°49'.
	September 2, 1911.
	Robert E. L. Callied
	U. S. Transitman.

Note: All the corners, as purported to have been set by Byron S. Kershaw under his Contract No.297 were found and destroyed as per instructions.

The work of Deputy Kershaw seems to have been carelessly done and differs widely from the lines established by us.

GENERAL DESCRIPTION OF T.12 S., R.8 E.

This township is mostly rough mountainous land, draining to the north and northeast; the soil of which is a light sandy loam, and dark rich loam with loose rock, and can mostly be classed as 3d and 4th rate.

The township is generally covered with a scattering growth of aspen and pine timber, and undergrowth of oak, serviceberry, and sagebrush and nutritious grasses; and is only fit for grazing purposes.

Water is found in Beaver Creek, flowing through secs. 33,28,22,15,14,11 and 2; Fish Creek flowing through secs. 18,17,16,9,10, and 3, and in many of the ravines and hollows draining into these two creeks.

There is no indication of mineral found in this township.

The branch line of the D.& R.G.R.R., from Colton to Scofield, passes through this township, running along Fish Creek.

The wagon road, from Colton to Scofield, crosses this township, running along Beaver Creek.

J.A.Richards, whose house is near the line, in sec. 15, has about 40 acres of land under cultivation along Beaver Creek in sec.22.

Robert E. L. Callard
George C Swan
U.S.Transitmen.

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Page

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BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Robert E.L.Collier and Transitmen George C. Swan, U. S. ~~Surveyor~~, during the periods and in the capacities d opposite our several signatures, in surveying all those parts or portions of Townships 11 d 12 South, Range No. 8 East

e Salt Lake Base and Meridian, in the State of Utah

h are represented in the foregoing field notes as having been executed by him, and under his direc- and that said survey has been, in all respects, to the best of our knowledge and belief, well and fully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
n G. Kimenberger.	June 27, 1911	Oct. 30, 1911	Chainman. ✓
Hugo Price	July 13, 1911	Oct. 30, 1911	Chainman. ✓
			~~Chainman.~~
arold Mandell	June 27, 1911	Sept. 3, 1911	Chainman. ✓
Fletcher Barton	June 27, 1911	Sept. 3, 1911	Axman. ✓
Ray Francis	July 19, 1911	Sept. 6, 1911	Axman ✓
obert J. Collier	June 27, 1911	Sept. 3, 1911	Flagman ✓
ichard Ashby Marriott	July 13, 1911	August 19, 1911	Flagman ✓
Frank C. Johnson Jr.	July 13, 1911	Sept. 6, 1911	Moundman ✓
Fred McClure	July 19, 1911	Sept. 3, 1911	Moundman. ✓
arold Mandell	June 27, 1911	Sept. 3, 1911	Chainman. ✓

ubscribed and certified to before me on the dates of the final service as shown above.

Robert E. L. Collier

~~U. S. Surveyor.~~
U.S.Transitman.

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pur
of special instructions received from the U. S. Surveyor General for .....
bearing date of the ..... day of ....., 191 , I have well, faithfully, and
in my own proper person, and in strict conformity with said instructions, the Manual of Surv
Instructions, and the laws of the United States, surveyed all those parts or portions of .....
.....
For final oaths of Transitmen see book " H" T.11 S., R.9 E.
.....
.....
..... of the .....
..... Meridian, in the State of ....., which are represen
the foregoing field notes as having been executed by me, and under my direction; and I do f
solemnly swear that all the corners of said survey have been established and perpetuated in strict a
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Su
General for ..... and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey.

.....
U. S. Surve

Subscribed by said ....., and sworn to before me
this ..... day of ....., 191

SEAL

.....
.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, August 8 , 1

The foregoing field notes of the survey of the Subdivisional lines of Townsh
No.12 South, Range No.8 East of the Salt Lake Base and Meridian, Ut
.....
.....
.....
.....
.....

executed by Robert E.L.Collier and George C.Swan
under ~~his~~ their special instructions dated May 23, , 191 1, having
critically examined, and the necessary corrections and explanations made, ~~the~~ said field notes, a
surveys they describe, are hereby approved.

.....
U. S. Surveyor Gene

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

.....
U. S. Surveyor Gene

6—2761

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Filed March 19, 1913.

4—679

BOOK A-395
O.

M.S.B.

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RETRACEMENT, RESURVEY, AND SURVEY OF THE SOUTH,

RETRACEMENT OF THE WEST AND NORTH,

AND

RETRACEMENT AND RESURVEY OF THE EAST BOUNDARIES

O F

TOWNSHIP NO.14 SOUTH, RANGE NO.2 WEST,

Of the SALT LAKE BASE AND *Meridian,*

the State of U T A H

EXECUTED BY

JOHN R.STEWART AND CLAUDE L.HEIST,

the capacity of U. S. Surveyor and Transitman *under instructions dated* May 23, *1911,*
d Supplemental Special Instructions Dated July 22, 1911
ed by the United States Surveyor General to govern surveys included in

up No. 13, *which were approved by the Commissioner of the General Land*
ce, July 3, *1911* and Sept.8, 1911, respectively *pursuant to authority contained in the Act of*

gress dated _____, *191*

Survey commenced November 21, *1912*

Survey completed December 2, *1912.*

6—151

5-60-95 S. Bdy. Res. 1-00-46
6-35-98 " " Ret. 2-00-83
" 57-87 " " Ore. 3-02-00

BOOK A-395

INDEX DIAGRAM.

Township ....., *Range* .....

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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

6—151

BOUNDARIES OF T.14 S.,R.2 W.

CHAINS

Survey commenced November 21,1912,and executed with the instrument described in book"A" of this survey.
I examine the adjustments of the transit and correct the level and collimation errors:then,to test the solar apparatus,by comparing its indications,resulting from solar observations made during a.m.and p.m.hours,with a meridian determined by observations on Polaris,I proceed as follows:
At the closing cor.of Tp.14 S.,Rs.1 and 2,W.,which is a trachyte stone,10x8x4 ins.above ground,firmly set,marked and witnessed as described by the surveyor general,in approximate latitude 39°38'N.,longitude 112°02'W.;I set off 39°38'N.,on the lat.arc,19°56'S.,on the decl.arc,and at 3h.46m.,p.m.,l.m.t.,determine with the solar a meridian and mark a point thereof,on a stone firmly set in the ground,5 chs.N.of the cor.

November 21,1912.

November 22: At 3h.22m.,a.m.,l.m.t.,I observe Polaris at western elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined on a peg driven in the ground,5 chs.N.of my station.
At 7h.30m.,a.m.,l.m.t.,I lay off the azimuth of Polaris, 1°30'to the east,and mark the meridian thus determined,by cutting a small groove in the stone set November 21,on which the meridian falls 0.4 ins.east of the mark determined by the solar.
At 7h.46m.,a.m.,l.m.t.,I set off 39°38'N.,on the lat.arc 20°04'S.,on the decl.arc,and mark a point in the meridian determined with the solar,by a cross on the stone already set 5 chs.N.of my station;this mark falls 0.3 ins.east of the meridian established by the Polaris observation.
The solar apparatus by p.m.and a.m.observations,defines positions for meridians,respectively about 0'21"west and

CHAINS	
	0'16"east of the meridian established by the Polaris observations:therefore,I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian,at 8h.30m., a.m.,is N.17°W.,the angle thus determined gives the mag. decl.17°E.
	Thence I retrace,
	West,along the S.bdy.of sec.35,T.13 S.,R.2 W.
	Over gently rolling land in Dog Valley.Dense undergrowth
1.49	Fall 1 lk.N.of the ¼ sec.cor.,which is a quartzite stone 12x8x4 ins.above,ground,firmly set,marked and witnessed as described by the surveyor general.
41.77	Fall 11 lks.N.of the cor.of secs.2-3-34 and 35,which is quartzite,10x10x6 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this line is therefore S.89°50'W.,and the distance 41.77 chs.
	Land,gently rolling.
	Soil,clay and sandy loam,24 ins.deep,1st rate.
	Subsoil,clay and gravel.
	No timber.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 41.77 chs.
	West,retracing along the S.bdy.of sec.34.
	Over gently rolling land in Dog Valley,through dense und growth.
23.10	Wash,15 lks.wide,6 ft.deep,course NW.
	Leave gently rolling land in Dog Valley,Ascend over roll mountainous land.
40.10	Wire fence bears N.
	Fall 7 lks.N.of the ¼ sec.cor.,which is a trachyte stone 10x8x4 ins.above ground,firmly set.marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore S.89°54'W.,and

BOUNDARIES OF T.14 S.,R.2 W.

CHAINS	
	the distance 40.10 chs.
	I continue West,with continuous measurement.
44.00	Enter scattering timber,bears N.and S.
45.00	Ridge,bears N.and S.
	Descend.
50.00	Hollow,50 ft.deep,course N.
	Ascend.
57.50	Ridge,bears NWand SE.
	Descend.
80.08	Fall 30 lks.N.of the cor.of secs.3-4-33 and 34,which is a trachyte stone,12x10x6 ins.above ground,firmly set, marked and witnessed as described by the surveyor general. The course of the last half mile is therefore S.89°40'W., and the distance of the mile is 80.08 chs.
	Land,rolling and ,mountainous.
	Soil,clay loam with sand and gravel,24 ins.deep,1st and 2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.08 chs.
	November 22: At this cor.I set off 20°10'S.,on the decl. arc,and at 11h.46m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°38'N.
	West,retracing along the S.bdy.of sec.33.
	Descend over rolling,mountainous land,through scattering timber and dense undergrowth.
1.50	Hollow,50 ft.deep,course NE.
	Ascend.
4.00	Ridge,bears NE.and SW.
	Descend.
38.80	Wood road,bears NE.and SW.,in bottom of hollow,50 ft. deep,course NW.
	Ascend.

N.BOUNDARIES OF T.14 S.,R.2 W.

CHAINS

40.00 Fall 37 lks.N.of the ¼ sec.cor.,which is a trachyte stone 11x8x6 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.

The course of this half mile is therefore S.89°28'W.,and the distance 40.00 chs.

I continue west,with continuous measurement.

42.00 Spur,projects NE.

Descend.

63.00 Hollow,30 ft.deep,course N.

Ascend.

71.50 Ridge,bears N.and S.

Descend.

78.25 Hollow,25 ft.deep,course N.

Ascend.

79.70 Fall 35 lks.N.of the cor.of secs.4-5-32 and 33,which is trachyte stone,18x15x6 ins.above ground,firmly set, marked and witnessed as described by the surveyor genera

The course of this half mile is therefore N.89°58'W.,and the distance of the mile is 79.70. chs.

Land,rolling,mountainous.

Soil,clay loam with sand and gravel,24 ins.deep,2nd rate

Subsoil,clay and gravel.

Timber,cedar.

Undergrowth,sage brush and grass.

Dense undergrowth on 79.70 chs.

November 22,1912.

November 23: At 7h.46m.,a.m.,l.m.t.,I set off 39°38'N., on the lat,arc,20°17'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.4-5-32 and 33

Thence I run

West,retracing along the S.bdy.of sec.32.

Ascend over rolling,mountainous land,through scattering timber and dense undergrowth.

N.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
1.25	Ridge,bears NE.and SW.
	Descend.
10.90	Hollow,50 ft.deep,course NW.
	Ascend.
20.00	Ridge,bears NE.and SW.
	Descend.
24.00	Hollow,70 ft.deep,course NW.
	Ascend.
32.50	Ridge,bears NW.and SE.
	Descend.
36.50	Hollow,25 ft.deep,course NW.
	Ascend.
39.52	Fall 30 lks.S.of the ¼ sec.cor.,which is a granite stone, 10x7x6 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore N.89°34'W.,and the distance 39.52 chs.
	I continue on same line,with continuous measurement.
44.00	Spur,projects NW.
	Descend.
50.00	Head of hollow,50 ft.deep,course NW.
	Ascend.
53.50	Spur,projects NW.
	Descend.
70.40	Hollow,50 ft.deep,course NW.
	Ascend.
79.32	Fall 55 lks.S.of the cor.of secs.5-6-31 and 32.,which is quartzite,11x10x8 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore N.89°38'W.,and the distance of the mile is 79.32 chs.
	Land,rolling,mountainous.
	Soil,clay loam with sand and gravel,24 ins.deep,2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.

N.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	Dense undergrowth on 79.32 chs.
	West,retracing along the S.bdy.of Sec.31.
	Ascend over rolling mountainous land,through dense undergrowth.
5.40	Ridge,bears NW.and SE
	Descend.
21.00	Wood road,bears NWand SE.
39.74	Fall 88 lks.S.of the ¼ sec.cor.,which is a trachyte,10x10 x6 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.88°44'W.,and the distance 39.75chs.
	November 23: At this cor.I set off 20°23'S.on the decl. arc,and at 11h.46m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°38'N.
	I continue west,with continuous measurement.
57.80	Hollow,150 ft.deep,course SW.
	Ascend.
78.00	Spur,projects SE.
	Descend.
86.25	Hollow,75 ft.deep,course NW.
	Ascend.
89.00	Wood road,bears NWand SE.
108.20	Ridge,bears NW.and SE.
	Descend.
126.00	Foot of descent,leave rolling and mountainous land,bears NE and SWEnter Tintic Valley.
128.50	Road,Nephi to Leamington,bears NE.and SW.
133.00	Wash,6 chs.wide,2 ft.deep,course SW.
163.00	Wash,1 ch.wide,8 ft.deep,course SW.
166.00	Wash,2 chs.wide,16 ft.deep,course S.
171.80	Road,bears N.and S.
173.50	Wash,3 chs.wide,40 ft.deep,course S.
180.07	Fall 54 lks.S.of the closing cor.of Tps.13 and 14 S.,R.

N.BOUNDARY OF T.14 S.,R.2 W.

CHAINS

2 W.,which is a granite stone,12x10x6 ins.above ground, firmly set,marked and witnessed as described by the surveyor general.

The course of the last half of this mile is therefore S.89°52'W.,and the distance of the mile is 180.08 chs.

Land,gently rolling and mountainous.

Soil,clay loam with sand and gravel,24 ins,deep,1st and 2nd rate.

Subsoil,clay and gravel.

No timber.

Undergrowth,sage brush and grass.

Dense undergrowth on 180.08 chs.

November 23,1912.

W.BOUNDARY OF T.14 S.,R.2 W.

November 25: At 7h.47m.,a.m.,l.m.t.,I set off 39°38'N., on the lat.arc,20°41'S.,on the decl.arc,and determine a meridian with the solar at the closing cor.of Tps.13 and 14 S.,R.2 W.

Thence I run

South,retracing along the E.bdy.of sec.1.

Over gently rolling land in Tintic Valley.

11.95 Fall 104 lks.E.of the cor.of secs.1-6-7 and 12,which is a limestone,10x10x5 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.

The course of this line is therefore S.5°00'W.,and the distance 12.00 chs.

Land,gently rolling.

Soil,clay loam with sand and gravel,1st rate.

Subsoil,clay and gravel.

No timber.

Undergrowth,sage brush and grass.

Dense undergrowth on 12.00 chs.

W.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	South,retracing along the E.bdy.of sec.12.
	Over gently rolling land in Tintic Valley,through dense undergrowth.
2.25	Road,bears E.and W.
4.60	Road,bears NW.and SE.
12.50	Road,bears NE.and SW.
17.50	Wash,200 lks.wide,20 ft.deep,course SE.
20.20	Road,bears NW.and SE.
28.60	Wash,150 lks.wide,20 ft.deep,course SW.
40.00	Wash,60 lks.wide,8 ft.deep,course NW.
41.04	Fall 38 lks.E.of the ¼ sec.cor.,which is a limestone,12x 6x5 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore S.0°32'W.,and the distance 41.04 chs.
	I continue South,with continuous measurement.
45.00	Leave Tintic Valley,bears NE.and SW.Ascend over rolling mountainous land.
60.00	Enter heavy timber,bears NE.and SW.
78.50	Ridge,bears NW.and SE.
	Descend.
81.76	Fall 139 lks.E.of the cor.of secs.7-12-13 and 18,which is a limestone,11x10x6 ins.above ground,firmly set,marked an witnessed as described by the surveyor general.
	The course of this line is therefore S.1°25'W.,and the distance of the mile is 81.77 chs.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 60.00 chs.Heavily timbered land on 21.77 chs.
	November 25: At this cor.I set off 20°47'S.,on the decl. arc,and at 11h.47m.,a.m.,l.m.t.,observe the sun on the

CHAINS	
	meridian, the resulting lat. is 39°37'N.
	South, retracing along the E.bdy. of sec.13.
	Descend over rolling mountainous land, through heavy timber.
6.00	Hollow, 200 ft. deep, course W.
	Ascend.
25.10	Ridge, bears NW. and SE.
	Descend.
32.00	Hollow, 120 ft. deep, course SW.
	Ascend.
37.00	Spur, projects W.
	Descend.
40.60	Fall 36 lks. E. of the ¼ sec. cor., which is a sand stone, 10x 10x6 ins. above ground, firmly set, marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore S.0°31'W., and the distance 40.60 chs.
	I continue south, with continuous measurement.
45.00	Hollow, 50 ft. deep, course SW.
	Ascend.
58.60	Spur, projects W.
	Descend.
67.50	Hollow, 150 ft. deep, course SW.
	Ascend.
80.00	Ridge, bears E. and W.
	Descend.
81.80	Fall 8 lks. E. of the cor. of secs. 13-18-19 and 24, which is granite stone, 15x11x6 ins. above ground, firmly set, marked and witnessed as described by the surveyor general.
	The course of the last half mile is therefore S.0°24'E., and the distance of the mile is 81.80 chs.
	Land, rolling and mountainous.
	Soil, clay loam with gravel and sand, 24 ins. deep, 2nd rate.
	Subsoil, clay and gravel.

W?BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	Timber,cedars.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 81.80 chs.
	November 25,1912.
	November 26: At 7h.47m.,a.m.,l.m.t.,I set off 39°36'N., On the lat.arc,20°53'S.on the decl.arc,and determine a meridian with the solar at the cor.of secs.13-18-19 and 24.
	Thence I run
	South,retracing along the E.bdy.of sec.24.
	Descend over mountainous land,through heavy timber.
11.25	Hollow,175 ft.deep,course NW.
	Ascend.
29.00	Ridge,bears NE.and SW.
	Descend.
40.35	Fall 34 lks.E.of the ¼ sec.cor.,which is a granite stone 11x9x5 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore S.0°29'W.,and the distance 40.35.chs.
	I continue south,with contnuous measurement.
40.75	Hollow,100 ft.deep,course W.
	Ascend.
53.00	Spur,projects NW.
	Descend.
62.00	Head of hollow,50 ft.deep,course SE.
	Ascend.
73.50	Ridge,bears NW.and SE.
	Descend.
81.63	Fall 82 lks.E.of the cor.of secs.19-24-25 and 30,which i granite stone,14x14x5 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of the last half of this mile is therefore S.0°41'W.,and the distance of the mile is 81.63 chs.

W.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep,2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 81.63 chs.
	November 26: At this cor.I set off 20°58'S.on the decl. arc,and at 11h.47m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°35'N.
	South,retracing along the E.bdy.of sec.25.
	Descend over mountainous land,through heavy timber.
5.25	Hollow,60 ft.deep,course SW.
	Ascend.
3.60	Ridge,bears NE and SW.
	Descend.
7.60	Hollow,225 ft.deep,course SW.
	Ascend.
0.99	Fall 6 lks.E.of the ¼ sec.cor.,which is a flint stone, 9x7x5 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this half mile is therefore S.0°05'W.,and the distance 40.99 chs.
	I continue south,with continuous measurement.
3.00	Ridge,bears E.and W.
	Descend.
9.50	Hollow,250 ft.deep,course SW.
	Ascend.
9.00	Ridge,bears NE.and SW.
	Descend.
0.39	Fall 7 lks.W.of the cor.of secs.25-30-31 and 36,which is a sandstone,11x10x8 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of the last half mile is therefore S.0°11'E., and the distance of the mile is 80.39 chs.

CHAINS	
	Land,mountainous.
	Soil,clay with gravel and sand,24 ins.deep,2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 80.39 chs.
	November 26,1912.
	November 27: At 7h.48m.,a.m.,l.m.t.,I set off 39°34'N., on the lat.arc,21°04'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.25-30-31 & 36.
	Thence I run
	South,retracing along the E.bdy.of sec.36.
	Descend over mountainous land,through heavy timber.
25.00	Hollow,150 ft.deep,course W.
	Ascend.
40.00	Ridge,bears NE.and SW.
	Descend.
41.83	Fall 208 lks.W.of the ¼ sec.cor.,which is a granite st 14x11x7 ins.above ground,firmly set,marked and witness as described by the surveyor general.
	The course of this half mile is therefore S.2°51'E.,an the distance 41.83 chs.
	I continue south,with continuous measurement.
54.40	Hollow,125 ft.deep,course SW.
	Ascend.
82.79	Ridge,bears NE.and SW.
	Fall 177 lks.W.of the cor.of Tp. 14 S.,Rs.2 and 3 W.,which a granite stone,12x11x10 ins.,above ground,firmly set, marked and witnessed as described by the surveyor gene
	The course of the last half of this mile is therefore S.0°27'W.,and the distance of the mile is 82.84 chs.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep,

W.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 82.84 chs.
	November 27: At this cor.I set off 21°09'S.,on the decl. arc,and at 11h.48m.,a.m.,l.m.t.,observe the sun on the meridian.the resulting lat.is 39°33'N.
	West,retracing along the S.bdy.of sec.36.
	Descend over mountainous land,through heavy timber.
14.50	Road,bears NE.and SW.,in hollow,100 ft.deep,course SW.
	Ascend.
21.45	FAll 30 lks.S.of the closing cor.of Tp.15 S.,Rs.2 and 3 W.,which is a granite stone,14x10x6 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.89°12'W.,and the dist distance 21.45 chs.
	Land,mountainous.
	Soil,clay and sandy loam with gravel and loose rock,24 ins. deep,2nd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 21.45 chs.
	Knowing from the length of the west boundary that a closing cor.,for Tps.14 and 15 S.,R.2 W.,is necessary,
	Therefore I retrace
	South,on a blank line,along the E.bdy.of sec.1,bet.Rs. 2 and 3 W.
74.10	Fall 53 lks.E.of the ¼ sec.cor.,which is a quartzite,10x 8x6 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.

E.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	The course of this line is therefore S.0°25'W.,and the distance 74.10 chs.
	November 27,1912.
	E.BOUNDARY OF T.14 S.,R.2 W.
	November 28, Thanksgiving day.
	November 29: At 7h.48m.,a.m.,l.m.t.,I set off 39°38'N.,on the lat.arc,21°25'S.,on the decl.arc,and determine a meridian with the solar at the closing cor.of T.14 S.,R. 1 and 2 W.,heretofore described,
	Thence I run
	South,retracing along the E.bdy.of sec.1.
12.08	Fall 2 lks.W.of the ¼ sec.cor.,which is a trachyte,10x8x 4 ins.,above ground,firmly set,marked,and witnessed as described by the surveyor general,
	The course of this line is therefore S.0°05'E.,and the distance 12.08 chs.
	I continue South,with continuous measurement.
52.00	After diligent search can find no trace of the cor.of secs.1 and 12.
	I continue South,with continuous measurement.
92.23	Fall 12 lks.W.of the ¼ sec.cor.,which is a quartzite, 12x6x4 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	I continue south,with continuous measurement.
132.35	Fall 19 lks.W.of the cor.of secs.12 and 13,which is a trachyte 10x8x4 ins.above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this line is therefore S.0°05'E.,and the distance 132.35chs.
	November 29: At this cor.I set off 21°30'S.,on the decl. arc,and at 11h.48m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°37'N.
	N.0°05'W.,retracing along the E.bdy.of sec.12.

E.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	Descend over rolling land,through scattering timber and dense undergrowth.
39.94	Road,bears NW.andSE.
40.12	The ¼ sec.cor.,heretofore described. Leave scattering timber,bears E.and W. From this ¼ sec.cor.,I run
	N.0°05'W.,on a resurvey,along the E.bdy.of sec.12.
49.01	Intersect the closing cor.of secs.6 and 7,T.14 S.,R.1 W., which is a sandstone,8x6x4 ins.above ground,firmly set, marked and witnessed as described by the surveyor general. Enter Dog Valley,bears NW.and SE.
80.19	By proportionate measurement
	Set an iron post,3 ft.long,3 ins.in diam.,24 ins.in the ground,for the reestablished cor.of secs.1 and 12,with brass cap,marked

T 14 S

S 1 | S 12

R 2 W

1912

dig pits 24x24x12 ins.,in each sec.,6 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.

Land,rolling.

Soil,clay loam with gravel,24 ins.deep,2nd rate.

Subsoil,clay and gravel.

Timber,cedar.

Undergrowth,sage brushand grass.

Dense undergrowth on 80.19 chs.

	N.0°05'W.,along the E.bdy.of sec.1.
	Over gently rolling land in Dog Valley,through dense undergrowth.
15.98	Wash,10 lks.wide,4 ft.deep,course W.
17.08	Road,bears NW.and SE.
36.00	Same road,bears NE and SW.

E.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
40.08	Intersect the ¼ sec.cor.,heretofore described.
	I abandon theresurvey line at this cor.and continue
	N.0°05'W;on a retracement,with continuous measurement.
41.58	Same road,bears NW.and SE.
52.16	The closing cor.of Tp.14 S.,Rs.1 and 2 W.
	Land,gently rolling.
	Soil,clay loam with gravel,24 ins.deep,2nd rate.
	Subsoil,clay and gravel.
	No timber.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 52.16 chs.
	November 29,1912.
	November 30: At 7h.49m.,a.m.,l.m.t.,I set off 39°37'N.,
	on the lat.arc.21°35'S.,on the decl.arc,and determine a
	meridian with the solar at the cor.of secs.12 and 13.
	Thence I run
	South,retracing along the E.bdy.of sec.13.
	Ascend over rolling land,through heavy timber.
17.60	Road,bears NE.and SW.
20.00	Wash,10 lks.wide,3 ft.deep,course NE.
26.50	Low spur,projects NE.
	Descend.
31.00	Fall 4 lks.W.of the closing cor.of secs.7 and 18,which i
	a trachyte,12x8x8 ins.above ground,firmly set,marked and
	witnessed as described by the surveyor general.
37.90	Hollow,50 ft.deep,course E.
	Ascend.
40.00	Fall 6 lks.W.of the ¼ sec.cor.,which is a trachyte stone
	12x10x6 ins.,above ground,firmly set,marked and witnesse
	as described by the surveyor general.
	Leave heavy timber,bears E.and W.Enter scattering timber
	and dense undergrowth.
50.90	Ridge,bears NE.and SW.
	Descend.

E.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
68.20	Hollow,75 ft.deep,course SE.
	Ascend.
80.12	Fall 9 lks.W.of the cor.of secs.13 and 24,which is a sand stone 18x6x6 ins.,above ground,firmly set,marked and witnessed as described by the surveyor general.
	The course of this line is therefore S.0°04'E.,and the distance 80.12.chs.
	Land,rolling.
	Soil,clay loam with gravel,24 ins.deep,2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.12 chs.
	In orderto properly identify the cors.on the E.bdy.of the Tp.,I run
	S.0°21'W.on retracement line,along the E.bdy.of sec.24.
40.00	Fall 25 lks.W.of the ¼ sec.cor.,which is a sandstone, 12x10x8 ins.above ground,firmly set,properly marked and witnessed.
	November 30: At this cor.I set off 21°40'S.,on the decl. arc,and at 11h.49m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°35'N.
80.20	Fall 50 lks.W.of the cor.of secs.24 and 25,which is a quartzite,8x8x4 ins.above ground,firmly set,properly marked and witnessed.
	The course of this line is therefore south,and the dist. ~~80.20.chs.~~
	S.0°38'W.,on retracement line,along the E.bdy.of sec.25.
40.16	Fall 8 lks.W.of the ¼ sec.cor.,which is a quartzite,12x 10x8 ins.above ground,firmly set,properly marked and witnessed.
80.26	Fall 16 lks.W.of the cor.of secs.25 and 36,which is a quartzite,8x8x6 ins.above ground,firmly set,properly marked and witnessed.
	The course of this line is therefore S.0°31'W.,and the

CHAINS	
	distance 80.26 chs.
	November 30,1912.
	December 2: At 7h.49m.,a.m.,l.m.t.,I set off 39°34'N.,on the lat.arc,21°54'S.on the decl.arc,and determine a meridian with the solar at the cor.of secs.25 and 36.
	Thence I run
	S.0°36'W.on retracement line,along the E.bdy.of sec.36.
40.15	Intersect the ¼ sec.cor.,which is a sand stone,8x6x6 ins. above ground,firmly set,properly mar ked and witnessed.
80.09	Intersect the closing cor.of Tps.14 and 15 S.,R.2 W., which is a quartzite,10x8x6 ins.above ground,firmly set, properly marked and witnessed.
	The course of this line is therefore S.0°36'W.,and the distance 80.09 chs.
	S.BOUNDARY OF T.14 S.,R.2 W.
	In order to properly identify the cors.along the S.bdy. of the Tp.
	I run
	West,on a blank line,retracing
	Bet.secs.1 and 36.
40.00	After diligent search I can find no trace of the ¼ sec. cor.
80.46	Fall 16 lks.N.of the cor.of secs.1-2-35 and 36,which is a sandstone,12x6x4 ins.,poorly marked and lying loose on top of the ground.
	I reestablish this cor.at this point by setting an iron post,3 ft.long,3 ins.in diam.,24 ins.in the ground,for th cor.of secs.1-2-35 and 36,with brass cap,marked

T 14 S R 2 W

S 35	S 36
S 2	S 1

T 15 S R 2 W

S.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	dig pits,18x18x12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth 4 ft.base,2 ft.high,W.of cor. The course of this line is therefore S.89°53'W.and the dist.80.46 chs. December 2: At this cor.I set off 21°59'S.,on the decl. arc,and at 11h.49m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°33'N.
	N.89°53'E.,on a resurvey line
	Bet.secs.1 and 36.
	Over gently rolling land in Sage Valley,through dense undergrowth.
28.96	Wash,40 lks.wide,10 ft.deep,course SW.
40.23	Set a limestone,24x12x8 ins.,10 ins.in the ground,for the reestablished 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.
60.45	Ascend from valley.
71.15	Spur,projects S.
	Descend.
77.50	Foot of descent.
80.46	The closing cor.of Tps.14 and 15 S.,R.2 W.
	Land,gently rolling.
	Soil,clay and sandy loam,36 ins.deep,1st rate.
	Subsoil,clay and gravel.
	No timber.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.46 chs.
	West,on a blank line,retracing
	Bet.secs.2 and 35.
40.23	Fall 8 lks.S.of the ¼ sec.cor.,which is a sandstone, 14x12x6 ins.above ground,firmly set,properly marked and witnessed.
80.45	Fall 15 lks.S.of the cor.of secs.2-3-34 and 35,which is a sandstone,14x12x10 ins.,poorly marked and lying on top of the ground.

CHAINS

I reestablish this cor.as follows;

Set an iron post,3 ft.long,3 ins.in diam.,24 ins.in the ground for the reestablished cor.of secs.2-3-34 and 35, with brass cap,marked

T 14 S R 2 W

S 34	S 35
S 3	S 2

T 15 S R 2 W

1912

raise a mound of stone,2 ft.base,1½ ft.high,W.ofcor.

The course of this line is therefore N.89°53'W.,and the distance 80.45 chs.

West,on a blank line,retracing

Bet.secs.3 and 34.

40.20 Fall 1 lk.S.of the ¼ sec.cor.,which is a sandstone,12x 8x6 ins.lying on the surface of the ground.

I perpetuate this cor.by setting it firmly in the ground and raise a mound of stone,2 ft.base,1½ ft.high,N.of the cor. Stone marked ¼ on N.face.

80.38 Fall 3 lks.S.of the cor.of secs.3-4-33 and 34,which is a sandstone,4x3x4 ins.,poorly marked and lying on the surface of the ground.

I reestablish this cor.as follows:

Set an iron post,3 ft.long,3 ins.in diam.,24 ins.in the ground,for the reestablished cor.of secs.3-4-33 and 34, with brass cap,marked

T 14 S R 2 W

S 33	S 34
S 4	S 3

T 15 S R 2 W

1912

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

The course of this line is therefore N.89°59'W.,and the distance 80.38 chs.

S.BOUNDARY OF T.14 S.,R.2 W.

CHAINS

December 2,1912.

John P.Stewart
U.S.Surveyor.

Survey commenced November 29,1912,and executed with the instrument described in book"A"of this survey.
I examine the adjustments of the transit and correct the level and collimation errors;then,to test the solar apparatus,by comparing its indications ,resulting from solar observations made during a.m.and p.m.hours,with a meridian determined by observations on Polaris,I proceed as follows:
At the reestablished cor.of secs.3-4-33 and 34,T.14 and 15 S.,R.2 W.,heretofore described in approximate lat. 39°33' N.,longitude 112°05'W.,I set off 39°33'N.,on the lat.arc,21°29'S.,on the decl.arc,and at 3h.48m.,p.m.,l.m.t.,determine with the solar a meridian and mark a point thereof on a stone firmly set in the ground,5 chs.N.of the cor.

November 29,1912.

November 30: At 2h.50m.,a.m.l.m.t.,I observe Polaris at western elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined on a peg driven in the ground,5 chs.N.of my station.
At 7h.30m.,a.m.,l.m.t.,I lay off the azimuth of Polaris, 1°30'to the east,and mark the meridian thus determined,by cutting a small groove in the stone set November 29,on which the meridian falls 0.4 ins.east of the mark determined by the solar.
At 7h.49m.,a.m.,l.m.t.,I set off 39°33'N.,on the lat.arc 21°35'S.,on the decl.arc,and mark a point in the meridian determined with the solar,by a cross on the stone already

CHAINS	
	set 5 chs.N.of my station;this mark falls 0.3 ins.east of the meridian established by the Polaris observation.
	The solar apparatus by p.m.and a.m.observations,defines positions for meridians,respectively about 0'21"west and 0'16"east of the meridian established by the Polaris observations;therefore,I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian,at 8h.30m.,a.m. is N.17°W.,the angle thus determined gives the mag.decl. 17°E.
	Thence I run
	West,bet.secs.4 and 33.
	Ascend over gently rolling land in Sage Valley,through dense undergrowth.
2.50	Old road,bears NE.and SW.
23.00	Leave Sage Valley,bears NE.and SW.Ascend abruptly.
26.00	Ridge,bears N.and S.
	Descend.
31.00	Hollow,175 ft.deep,course SE.
	Ascend.
35.00	Ridge,bears N.and S.
	Descend.
40.00	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 33 / S 4 1912
	from which
	A cedar,8 ins.diam.,bears N.16°30'E.,413 lks.dist. marked ¼ S 33 BT.
	A cedar,6 ins.diam.,bears S.37°E.,119 lks.dist., marked ¼ S 4 BT.
52.50	Hollow,50 ft.deep,course NE.
	Ascend.
64.00	Foot of perpendicular trachyte ledge,30 ft.high,bears

S.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
	N.10°E.and S.10°W.
65.00	Ridge,bears NE.and SW.
	Descend.
80.00	Set an iron post,3 ft.long,3 ins.in diam.,24 ins.in the ground,for the cor.of secs.4-5-32 and 33,with brass cap, marked

T 14 S R 2 W
S 32 | S 33
S 5 | S 4
T 15 S R 2 W
1912

from which

A cedar,6 ins.diam.,bears N.34°E.,189 lks.dist., marked T 14 S R 2 W S 33 BT.

A cedar,5 ins.diam.,bears S.5°30'E.,140 lks.dist., marked T 15 S R 2 W S 4 BT.

A cedar,6 ins.diam.,bears S.56°W.,12 lks.dist., marked T 15 S R 2 W S 5 BT.

A cedar,4 ins.diam.,bears N.5°W.,333lks.dist., marked T 14 S R 2 W S 32 BT.

Land,rolling and mountainous.

Soil,sandy and clay loam,30 ins.deep,2nd rate,

Subsoil,gravel and clay.

Timber,cedar.

Undergrowth,sage bruah and grass.

Dense undergrowth on 80.00 chs.

	West,bet.secs.5 and 32.
	Descend over rolling mountainous land,through scattering timber and dense undergrowth.
4.50	Road,in bottom of hollow,75 ft.deep,course S.
	Ascend.
6.00	Ridge,bears NW.and SE.
	Descend.

S.BOUNDARY OF T.14 S.,R.2 W.

CHAINS	
29.50	Hollow,25 ft.deep,course SE,
	Ascend.
31.00	Enter heavy timber,bears N.and S.
37.40	Ridge,bears N.and S.
	Descend,over broken trachyte ledges.
40.00	Set an iron post,3 ft.long, 1 in .in diam.,20 ins.in th ground,surrounded by a mound of earth and stone,for the ¼ sec.cor.,with brass cap,marked
	¼ S 32 / S 5 / 1912
	from which
	A cedar,14 ins.diam.,bears N.78°W.,175 lks.dist. marked ¼ S 32 BT.
	A cedar,12 ins.diam.,bears S.42°E.,110 lks.dist. marked ¼ S 5 BT.
	Note: On account of natural obstacles it is impossible to set this post over 20 ins.in theground.
	November 30: At this cor.I set off 21°40'S.,on the dec arc,and at 11h.49m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°33'N.
55.50	Hollow,50 ft.deep,course SW. Leave heavy timber,bears Ascend.Enter scattering timber and dense undergrowth.
63.60	Ridge,bears N.and S.
	Descend.
78.80	Hollow,140 ft.deep,course SW.
	Ascend.
80.00	Set an iron post,3 ft.long, 3 ins.in diam.,24 ins.in t ground,for the cor.of secs.5-6-31 and 32,with brass ca marked

T 14 S R 2 W

S 31	S 32
S 6	S 5

T 15 S R 2 W

1912

S.BOUNDARY OF T.14 S.,R 2 W.

CHAINS	
	raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous.
	Soil,clay and sandy loam with gravel,24 ins.deep,2nd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 24.50 chs.
	West,bet.secs.6 and 31.
	Ascend over mountainous land,through scattering timber and dense undergrowth.
13.00	Ridge,bears N.and S.
	Descend.
17.40	Enter heavy timber,bears N.and S.
25.50	Leave timber,bears NE.and SW.Enter dense undergrowth.
30.20	Hollow,125 ft.deep,course SW.
	Ascend.
34.00	Ridge,bears N.and S.
	Descend.
40.00	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 31 / S 6 1912
	raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
60.30	Wire fence bears N.30°W.,and S.30°E.
62.36	San Pedro,Los angeles and Salt Lake Railroad track, bears N.46°30'W.,and S.46°30'E.
63.98	East bank of Sevier River,2 chs.wide,2 ft.deep,course N.45°W.
82.00	Intersect the E.bdy.of sec.1,T.15 S R 3 W.,33.16 chs. S.0°25'W.,of the closing cor.of T.15 S.,Rs.2 and 3 W.
	Set an iron post,3 ft.long, 3 ins.in diam.,24 ins.in the

CHAINS

ground,for the closing cor.of Tps.14 and 15 S.,R.2 W.,

with brass cap,marked

T 14 S

R 3 W | R 2 W

S 36 | S 31

S 1

CC

R 3 W | S 6

R 2 W

T 15 S

1912

raise a mound of stone,2 ft.base,1½ ft.high,E.of cor .

I destroy all marks on the cor.of Tp.14 S.,Rs.2 and 3 W

pertaining to R 2 W.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep,

2nd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 8.10 chs.

November 30,1912.

Claude L. Hist.

U.S.Transitman.

BOUNDARIES OF T.14 S., R.2 W.

LATITUDES, DEPARTURES, AND CLOSING ERRORS.

Line Designated	True Bearing	Dist.	Latitudes, N.	Latitudes, S.	Departures, E.	Departures, W.
		chs.	Chs.	chs.	chs.	chs.
S.Bdy.	S.89°53'W.	80.46	.....	.16	.....	80.46
	S.89°53'W.	80.45	.....	.16	.....	80.45
	N.89°59'W.	80.38	.02	.....	.....	80.38
	West	242.00	.....	.....	.....	242.00
W.Bdy.	N.00°25'E.	33.16	33.16	.....	.24	.....
	S.89°18'E.	81.45	.....	.30	81.45	.....
	N.00°27'E.	40.96	40.96	.....	.32	.....
	N.02°51'W.	41.88	41.83	.....	.....	2.08
	N.00°11'W.	39.40	39.40	.....	.....	.13
	N.00°05'E.	40.99	40.99	.....	.06	.....
	N.00°41'E.	41.28	41.28	.....	.49	.....
	N.00°29'E.	40.35	40.35	.....	.34	.....
	N.00°24'W.	41.20	41.20	.....	.....	.29
	N.00°31'E.	40.00	40.00	.....	.37	.....
	N.01°28'E.	40.73	40.72	.....	1.01	.....
	N.00°32'E.	41.04	41 04	.....	.38	.....
	N.05°00'E.	12.00	11.95	.....	1.05	.....
N.Bdy.	N.89°52'E.	140.33	.33	.....	140.33	.....
	S.88°44'E.	39.75	.....	.88	39.74	.....
	S.89°58'E.	39.80	.....	.25	39.80	.....
	S.89°34'E.	39.52	.....	.30	39.52	.....
	S.89°58'E.	39.70	.....	.02	39.70	.....
	N.89°38'E.	40.00	.37	.....	40.00	.....
	N.89°40'E.	39.98	.23	.....	39.98	.....
	N.89°54'E.	40.10	.07	.....	40.10	.....
	N.89°50'E.	41.77	.12	.....	41.77	.....
E.Bdy.	S.00°05'E.	132.35	.....	132.35	.19	.....
	S.00°04'E.	80.12	.....	80.12	.09	.....
	South	80.20	.....	80.20	.....	.....
	S.00°31'W.	80.26	.....	80.26	.....	.72
	S.00°32'W.	80.09	.....	80.09	.....	.84
Convergency					.60	
Totals			454.62	485.09	487.53	487.35
				454.62	487.35	
Error in lat.				.47		
Error in dep.					0.18	

For general description of Tp., see Subdivisions of T.14 S., R.2 W.

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Page

4—680

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities ited opposite our several signatures, in surveying all those parts or portions of .....

For Certificate of Assistants see book "P" T.14 S., R.2 W.

the ..... Meridian, in the State of .....

ich are represented in the foregoing field notes as having been executed by him, and under his direc- n; and that said survey has been, in all respects, to the best of our knowledge and belief, well and thfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

6—2761 *U. S. Surveyor.*

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in purs
of special instructions received from the U. S. Surveyor General for .....
bearing date of the ..... day of ....., 191 , I have well, faithfully, and
in my own proper person, and in strict conformity with said instructions, the Manual of Surv
Instructions, and the laws of the United States, surveyed all those parts or portions of .....
.....
.....
For final oaths of U.S.Surveyor and Transitman see book "P" T.14
R.2 W.
..... of the .....
..... Meridian, in the State of ....., which are represen
the foregoing field notes as having been executed by me, and under my direction; and I do f
solemnly swear that all the corners of said survey have been established and perpetuated in strict a
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Su
General for ..... and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey.

.....
U. S. Surve

Subscribed by said ....., and sworn to before me
this ..... day of ....., 191

SEAL

.....
.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, August 8, 1

The foregoing field notes of the ~~xxxxxxx~~ retracement, resurvey and survey
the South; retracement of the West; retracement of the North; and
retracement and resurvey of the East boundaries of Township No.14
South, Range No.2 West of the Salt Lake Base and Meridian, Utah,
.....
.....
.....
executed by John R.Stewart and Claude L.Heiat
under ~~his~~ special instructions dated May 23, 1911, and supplemental special instructions dated July 1, 1911, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
retracements, resurveys and
surveys they describe, are hereby approved.

.....
U. S. 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 o

.....
U. S. Surveyor Gen

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U. S. Surveyor General's Office
MAR 19 1913
SALT LAKE CITY, UTAH.

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GN.

4—679

BOOK A-395

P.

FIELD NOTES

RESURVEY AND
OF THE SURVEY OF THE

H.J.B.

SUBDIVISIONS

OF

TOWNSHIP NO. 14 SOUTH,

RANGE NO. 2 WEST,

Of the SALT LAKE BASE AND *Meridian,*

the State of UTAH

EXECUTED BY

JOHN R. STEWART AND CLAUDE L. HEIST

the capacity of U. S. Surveyor and Transitman *under instructions dated* May 23, *1911*, Supplemental Special Instructions dated July 22, 1911

ed by the United States Surveyor General to govern surveys included in

up No. 13, *which were approved by the Commissioner of the General Land*

e, July 3, *1911* and Sept. 8, 1911, respectively *pursuant to authority contained in the Act of*

gress dated , *191*

Survey commenced November 21, *1912*

Survey completed December 11, *1912*.

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Res. Subs 14-03-34
Sur. " 31-11-39

BOOK A-395

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RESURVEY OF THE SUBDIVISIONS OF T.14 S.,R.2 W.

Survey commenced November 21,1912,and executed with the instrument described in book"A"of this survey.
I examine the adjustments of the transit and correct the level and collimation errors;then,to test the solar apparatus,by comparing its indications,resulting from solar observations made during a.m.and p.m.hours,with a meridian determined by observations on Polaris,I proceed as follows:
At the cor.of secs.13 and 24,T.14 S.,R.2 W.,which is a sand stone 18x6x6ins.above ground,firmly set,marked and witnessed as described by the surveyor general,in approximate latitude39°36'N.,longitude 112°02'W.;I set off 39°36'N.,on the lat.arc,19°56'S.,on the decl.arc,and at 3h.46m.,p.m.,l.m.t.,determine with the solar a meridian and mark a point thereof,on a stone firmly set in the ground,5 chs.N.of the cor.

November 21,1912.

November 22: At 3 h.22m.,a.m.,l.m.t.,I observe Polaris at Western elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined on a peg driven in the ground,5 chs.N.of my station.
At 7h.30m.,a.m.,l.m.t.,I lay off the azimuth of Polaris, 1°30'to the east,and mark the meridian thus determined,by cutting a small groove in the stone set November 21,on which the meridian falls 0.4 ins.east of the mark determined by the solar.
At 7h.46m.,a.m.,l.m.t.,I set off 39°36'N.,on the lat.arc 20°04'S.,on the decl.arc,and mark a point in the meridian determined with the solar,by a cross on the stone already set 5 chs.N.of my station;this mark falls 0.3 ins.east of the meridian established by the Polaris observation.
The solar apparatus by p.m.and a.m.observations,defines positionsfor meridians,respectively about 0'21"west and 0'16"east of the meridian established by the Polaris

CHAINS	
	observations;therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian,at 8h.30m.,a.m. is N.17°W.,the angle thus determined gives the mag,decl. 17°E.
	Thence I run
	N.89°42'W.on a blank line,retracing
	Bet.secs.13 and 24.
40.11	After diligent search,I can find no trace of the ¼ sec. cor.
	I continue west with continuous measurement.
80.49	Fall 53 lks.N.of the cor.of secs.13-14-23 and 24,which is a sandstone,8x6x4 ins.,poorly marked and lying on the surface of the ground.
	I re-establish this cor.as follows;
	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the reestablished cor.of secs.13-14-23 and 24 with brass cap,marked

T 14 S R 2 W

S 14	S 13
S 23	S 24

1912

from which

A cedar,10 ins,diam.,bears N.43°30'E.,13 lks.dist marked T 14 S R 2 W S 13 BT.

A cedar,12 ins.diam.,bears S.50°E.,186 lks.dist., marked T 14 S R 2 W S 24 BT.

A cedar,4 ins.diam.,bears S.18°W.,8 lks.dist., marked T 14 S R 2 W S 23 BT.

A cedar,4 ins.diam.,bears N.59°30'W.,69 lks.dist. marked T 14 S R 2 W S 14 BT.

The course of this line is therefore S.89°55'W.,and the distance 80.49.chs.

November 22: At this cor.I set off 20°10'S.,on the decl. arc,and at 11h.46m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°36'N.

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS

N89°49'W.,on a blank line,retracing.

Bet.secs.14 and 23.

39.92½ After diligent search,I can find no trace of the ¼ sec. cor.

80.49 Fall 37 lks.N.of the cor.of secs.14-15-22 and 23,which is a sandstone,10x6x4 ins.,poorly marked and lying on the surface of the ground.

I reestablish this cor.as follows:

Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the reestablished cor.of secs.14-15-22 and 23,with brass cap,marked

T 14 S R 2 W

S 15	S 14
S 22	S 23

1912

dig pits,18x18x12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.

The course of this line is therefore S.89°55'W.,and the distance 80.49 chs.

November 22,1912.

November 23: At 7h.46m.,a.m.,l.m.t.,I set off 39°36'N., on the lat.arc,20°17'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.14-15-22 and 23.

Thence I run

West,on a blank line,retracing

Bet.secs.15 and 22.

40.06 After diligent search,I can find no trace of the ¼ sec. cor.

80.50 Fall 5 lks.S.of the cor.of secs.15-16-21 and 22,which is a sandstone,16x8x6 ins.,poorly marked and lying on the surface of the ground.

I reestablish this cor.as follows.

CHAINS

Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the reestablished cor.of secs.15-16-21 and 22, with brass cap,marked

T 14 S R 2 W

S 16	S 15
S 21	S 22

1912

from which

A cedar,9 ins.diam.,bears S.71°W.,235 lks.dist., marked T 14 S R 2 W S 21 BT.

A cedar,6 ins,dism .bears N.27°W.,277 lks.dist., marked T 14 S R 2 W S 16 BT.

no other trees available,raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.

The course ofthis line is therefore S.89°58'E.,and the distance 80.50 chs.

S.89°51'W.,on a blank line,retracing

Bet.secs.16 and 21.

39.96 After diligent search,I can find no trace of the ¼ sec. cor.

November 23: At this cor I set off 20°23'S.,on the decl arc,and at 11h.46m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°36'N.

79.92 After diligent search I can find no trace of the cor.of secs.16-17-20 and 21.

From this point I run

N.89°44'W.,with continuous measurement.

120.15 After diligent search I can find no trace of the ¼ sec.c of secs.17 and 20. I continue on the same course with continuous measurement.

160.38 After diligent search I can find no trace of the cor.of secs.17-18-19,and 20.

I set a flag at this point.

November 23,1912.

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS	
	November 25: At 7h.47m.,a.m.,l.m.t.,I set off 39°36'N., on the lat.arc,20°41'S.,on the decl.arc,and determine a meridian with the solar at the flag left at the probable point of the cor.of secs.17-18-19 and 20.
	Thence I run
	South,on a blank line,retracing bet.secs.19 and 20,
40.00	After diligent search I can find no trace of the ¼ sec. cor.of secs.19 and 20.
80.00	After diligent search I can find no trace of the cor.of secs.19-20-29 and 30.
	November 25: At this point I set off 20°47'S.,on the decl. arc,and at 11h.47m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°35'N.
	Thence I run
	East,retracing on a blank line.
40.00	After diligent search I can find no trace of the ¼ sec.cor bet.secs.20 and 29.
80.00	After diligent search I can find no trace of the cor.of secs.20-21-28 and 29.
	I set a flag at this point.
	November 25,1912.
	November 26: At 7h.47m.,a.m.,l.m.t.,I set off 39°35'N., on the lat.arc,20°53'S.,on the decl.arc.and determine a meridian with the solar at the flag I left at the probable point for secs.20-21-28 and 29.
	Thence I run
	South,retracing on a blank line,
40.00	After diligent search I can find no trace of the ¼ sec.cor of secs.28 and 29.
79.69	Fall 7 lks.E.of the cor.of secs.28-29-32 and 33,which is a sand stone 12x12x6 ins.poorly marked and lying on the surface of the ground.
	I reestablish this cor.as follows:
	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the

CHAINS	
	ground,for the reestablished cor.of secs.28-29-32 and 33, with brass cap,marked

T 14 S R 2 W

S 29	S 28
S 32	S 33

1912

from which

A cedar,6 ins,diam,,bears N.5°30'E.,102 lks.dist. marked T 14 S R 2 W S 28 BT.

A cedar,4 ins.diam.,bears S.85°30'E.,183 lks.dist. marked T 14 S R 2 W S 33 BT.

A cedar,4 ins,diam.,bears S.51°30'W.,290 lks.dist. marked T 14 S R 2 W S 32 BT.

A cedar,5 ins.diam.,bears N.81°30'W.,305 lks.dist marked T 14 S R 2 W S 29 BT.

November 26: At this cor.I set off 20°58'S.,on the decl. arc,and at 11h.47m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°34'N.

East,on a blank line,retracing

Bet.secs.28 and 33.

40.00 After diligent search I can find no trace of the ¼ sec.c

80.00 After diligent search I can find no trace of the cor.of secs.27-28-33 and 34.

November 26,1912.

November 27: At 7h.48m.,a.m.,l.m.t.,I set off 39°33'N., on the lat.arc,21°04'S.,on the decl.arc,and determine a meridian with the solar at the reestablished cor.of secs 3-4-33 and 34.

Thence I run

North,on a blank line,retracing

Bet.secs.33 and 34.

40.00 After diligent search I can find no trace of the ¼ sec.c

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS

80.00 After diligent search I can find no trace of the cor.of secs.27-28-33 and 34.

I continue north,with continuous measurement,

120.00 After diligent search I can find no trace of the ¼ sec. cor.of secs.27 and 28.

160.24 Fall 19 lks.W.of the cor.of secs.21-22-27 and 28,which is a sandstone 8x8x6 ins.,poorly marked and lying on the surface of the ground.

I reestablish this cor.as follows:

Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the reestablished cor.of secs.21-22-27 and 28, with brass cap,marked

T 14 S R 2 W

S 21	S 22
S 28	S 27

1912

from which

A cedar,4 ins.diam.,bears N.65°E.,130 lks.dist., marked T 14 S R 2 W S 22 BT.

A cedar,5 ins.diam.,bears S.23°E.,23 lks.dist., marked T 14 S R 2 W S 27 BT.

A cedar,6 ins.diam.,bears S.81°W.,91 lks.dist., marked T 14 S R 2 W S 28 BT.

A cedar,5 ins.diam.,bears N.36°30'W.,138 lks.dist., marked T 14 S R 2 W S 21 BT.

The course of this line is therefore N.0°04'E.,and the distance 160.24 chs.

November 27: At this cor.I set off 21°09'S.,on the decl. arc,and at 11h.48m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°35'N.

North,on a blank line,retracing

Bet.secs.21 and 22.

0.00 After diligent search I can find no trace of the ¼ sec,cor

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS	
80.20	Fall 7 lks.W.of the reestablished cor.of secs.15-16-21 and 22.
	The course of this line is therefore N.0°03'E.,and the distance 80.20 chs.
	November 27,1912.

	November 28,1912, Thanksgiving day.
	November 29: At 7h.48m.,a.m.,l.m.t.,I set off 39°35'N., on the lat.arc,21°25'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.21-22-27 and 28.
	Thence I run
	West,on a blank line,retracing
	Bet.secs.21 and 28.
40.00	After diligent search I can find no trace of the ¼ sec.
80.00	After diligent search I can find no trace of the cor.of secs.20-21-28 and 29.
	November 29: At this point I set off 21°30'S.,on the decl. arc,and at 11h.48m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°35'N.
	Thence I run
	North,on a blank line,retracing bet.secs.20 and 21,
40.00	After diligent search I can find no trace of the ¼ sec cor.of secs.20,and 21.
80.00	After diligent search I can find no trace of the cor.of secs.16-17-20 and 21.
	November 29,1912.

	December 2: At 7h.49m.,a.m.,l.m.t.,I set off 39°33'N., the lat.arc,21°54'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.3-4-33 and 34 on the S.bdy.of the Tp., heretofore described.
	Thence I run

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS	
	N.0°04'E.,on a resurvey
	Bet.secs.33 and 34.
	Ascend over gently rolling land in Sage Valley,through dense undergrowth.
8.00	Wash,5 lks.wide,2 ft.deep,course SE.
23.00	Enter scattering timber,bears NE.and SW.
34.00	Enter heavy timber,bears NW.and SE.
37.50	Wash,10 lks.wide,12 ins.deep,course SE.
40.06	By proportionate measurement
	Set a sandstone 16x12x6 ins.,10 ins.in the ground,for the ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar,24 ins.diam.,bears S.29°30'E.,28 lks.dist., marked ¼ S 34 BT.
	A cedar,8 ins.diam.,bears N.76°W.,16 lks.dist., marked ¼ S 33 BT.
48.20	Wash,5 lks.wide,12 ins.deep,course E.
56.40	Leave heavy timber,bears NW.and SE.Enter scattering timber and dense undergrowth.
78.00	Leave gently rolling land in Sage Valley,bears E.and W.
	Ascend over broken sandstone boulders.
79.00	Rocky spur,projects E.
	Descend.
80.12	By proportionate measurement
	Set an iron post,3 ft.long,2 ins.in diam.,18 ins.in the ground,surrounded by a mound of earth and stone,for the cor.of secs.27-28-33 and 34,with brass cap,marked

T 14 S R 2 W

S 28	S 27
S 33	S 34

1912

from which

A cedar,12 ins.diam.,bears N.30°30'E.,25 lks.dist., marked T 14 S R 2 W S 27 BT.

A cedar,6 ins.diam.,bears S.6°E.,28 lks.dist., marked T 14 S R 2 W S 34 BT.

A cedar,10 ins.diam.,bears S.41°W., 54 lks.dist.,

CHAINS	
	A cedar,10 ins.diam.,bears N.26°W.,83 lks.dist., marked T 14 S R 2 W S 28 BT.
	Note: On account of natural obstacles it is impossible to set this cor.over 18 ins.in the ground.
	Land,rolling and mountainous.
	Soil,clay and sandy loam with gravel and loose rock,24 ins.deep,1st and 2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 22.40 chs.
	N.0°04'E.,on a resurvey
	Bet.secs.27 and 28.
	Descend along the E.slope of rocky spur,over mountainous land,through heavy timber.
8.50	Hollow,50 ft.deep,course E.
	Ascend.
14.50	Spur,projects E.
	Descend.
19.00	Leave heavy timber,bears NW.and SE.Enter scattering timbe and dense undergrowth.
31.00	Wash,7 lks.wide,2 ft.deep,in bottom of hollow,50 ft.deep, course E.
	Ascend.
35.00	Enter heavy timber,bears E.and W.
36.00	Spur,projects E.
	Descend.
40.06	By proportionate measurement
	Set a sandstone 12x12x10 ins.,8 ins.in the ground,for th ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar,5 ins diam.,bears N.13°E.,155 lks.dist., marked ¼ S 27 BT.
	A cedar,8 ins.diam.,bears N.11°W.,13 lks.dist., marked ¼ S 28 BT.

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS	
	December 2: At this cor.I set off 21°58'S.,on the decl. arc,and at 11h.49m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°34'N.
44.10	Wash,10 lks.wide,12 ins.deep,in bottom of hollow,75 ft. deep,course E.
	Ascend.
49.40	Rocky spur,projects E.
	Descend.
61.00	Leave heavy timber,bears NW.and SE.,enter scattering timber and dense undergrowth.
65.00	Wood road,bears NW.and SE.
68.00	Wash,10 lks.wide,3 ft.deep,in bottom of hollow,150 ft. deep,course E.
	Ascend.
73.70	Wood road,bears NE.and SW.
76.00	Spur,projects SE.
	Descend.
80.12	The cor.of secs.21-22-27 and 28.
	Land,rolling and mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil, clay and gravel with loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 45.00 chs.
	N.0°03'E.,on a resurvey
	Bet.secs.21 and 22.
	Descend over mountainous land,through scattering timber and dense undergrowth.
3.20	Wash,20 lks.wide,5 ft.deep,in bottom of hollow,25 ft.deep, course SE
	Ascend.
27.00	Spur,projects SE.
	Descend.

CHAINS	
40.10	By proportionate measurement
	Set a limestone 18x12x8 ins.,12 ins.in the ground,for the ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar,4 ins.diam.,bears S.81°E.,108 lks.dist., marked ¼ S 22 BT
	A cedar,5 ins.diam.,bears N.26°30'W.,187 lks.dist., marked ¼ S 21 BT.
49.20	Hollow,50 ft.deep,course SE.
	Ascend.
64.00	Spur,projects SE.
	Descend.
70.00	Foot of descent.Enter gently rolling valley,bears NW.and SE.
80.20	The reestablished cor.of secs.15-16-21 and 22,heretofore described.
	Land,rolling and mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.20 chs.
	December 2,1912.
	December 3: At 7h.50m.,a.m.,l.m.t.,I set off 39°36'N.,on the lat.arc,22°02'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.15-16-21 and 22.
	Thence I run
	S.89°58'E.,on a resurvey
	Bet.secs.15 and 22.
	Descend over rolling land,through scattering timber and dense undergrowth.
8.00	Foot of descent,enter Sage Valley,bears NE.and SW.

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS	
11.55	Road,bears NW.and SE.Leave scattering timber bears N.and S.
25.80	Wash,15 lks.wide,5 ft.deep,course SE.
40.25	By proportionate measurement
	Set a limestone 14x8x4 ins.10 ins.in the ground,for the ¼ sec.cor.,marked ¼ on N.face,raise a mound of stone,2 ft. base,1½ ft.high,N.of cor.
47.50	Wash,50 lks.wide,6 ft.deep,course S.
80.50	The reestablished cor.of secs.14-15-22 and 23,heretofore described.
	Land,gently rolling.
	Soil,clay loam with sand and gravel,24 ins.deep,1st and 2nd rate.
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage bruah and grass.
	Dense undergrowth on 80.50 chs.
	N.89°55'E.,on a resurvey
	Bet.secs.14 and 23.
	Over gently rolling land in Sage Valley,through dense undergrowth.
5.60	Road,bears N.and S.
10.70	Leave Sage Valley,bears N.and S.Ascend over mountainous land.Enter heavy timber bears NW.and SE.
40.24½	By proportionate measurement
	Set a granite 18x12x10 ins.,10 ins.in the ground,for the ¼ sec.cor.,marked ¼ on N.face,from which
	A cedar,12 ins.diam.,bears N.55°E.,62 lks.dist., marked ¼ S 14 BT.
	A cedar,6 ins.diam.,bears S.46°E.,20 lks;dist., marked ¼ S 23 BT.
42.30	Spur,projects SW.
	Descend.
60.50	Hollow,250 ft.deep,course SE.
	Ascend.

CHAINS	
73.00	Spur,projects SE.
	Descend.
76.50	Hollow,75 ft.deep,course SE.
	Ascend.
80.49	The reestablished cor.of secs.13-14-23 and 24,heretofore described.
	Land,rolling and mountainous.
	Soil,clay loam with sand and gravel,24 ins.deep,1st and 2nd rate.
	Subsoil,gravel and clay with loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 69.79 chs.
	December 3; At this cor.I set off 22°07'S.,on the decl. arc and at 11h.50m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°36'N.
	N.89°55'E.,on a resurvey
	Bet.secs.13 and 24.
	Ascend over mountainous land,through heavy timber.
4.80	Spur,projects SE.
	Descend.
7.85	Hollow,100 ft.deep,course SE.
	Ascend.
15.80	Spur,projects SE
	Descend.
27.90	Hollow,50 ft.deep,course SE.
	Ascend.
33.80	Spur,projects SE.
	Descend.
40.24½	Set a granite stone 18x10x8 ins.,8 ins.in the ground,for the ¼ sec.cor.,marked ¼ on N.face,from which
	A cedar,8 ins.diam.,bears N.76°E.,70 lks.dist., marked ¼ S 13 BT.
	A cedar,16 ins.diam.,bears S.71°W.,198 lks.dist., marked ¼ S 24 BT.
55.10	Hollow,100 ft.deep,course SE.
	Ascend.

CHAINS	
60.50	Spur,projects SE
	Descend.
70.00	Leave heavy timber,bears N.and S.,enter scattering timber and dense undergrowth.
72.00	Hollow,50 ft.deep,course S.
	Ascend.
80.49	The cor.of secs.13 and 24 on the E.bdy.of the Tp.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 80.49 chs.
	December 3,1912.
	December 4 :At 7h.50m.,a.m.,l.m.t.,I set off 39°36'N., on the lat.arc,22°11'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.13-14-23 and 24.
	Thence I run
	N.0°05'W.,bet.secs.13 and 14.
	Descend over mountainous land,through heavy timber.
3.00	Hollow,75 ft.deep,course SW.
	Ascend.
11.10	Ridge,bears NW.and SE.
	Descend.
15.50	Hollow,100 ft.deep,course NW.
	Ascend.
20.00	Spur,projects W.
	Descend.
40.00	Set an iron post,3 ft.long,1 in.in diam.,18 ins.in the ground,surrounded by a mound of earth and stone,for the ¼ sec.cor.,with brass cap,marked

CHAINS	
	$\frac{1}{4}$ S 14 | S 13 1912
	from which
	A cedar,5 ins.diam.,bears S.17°E.,53 lks.dist., marked $\frac{1}{4}$ S 13 BT.
	A cedar,10 ins.diam.,bears N.1°W.,95 lks.dist., marked $\frac{1}{4}$ S 14 BT.
	Note: On account of natural obstacles it is impossible to set this cor.over 18 ins.in the ground.
42.40	Hollow,150 ft.deep,course SW.
	Ascend.
53.10	Ridge,bears NE.and SW.
	Descend.
61.60	Hollow,175 ft.deep,course SW.
	Ascend.
70.00	Ridge,bears NE.and SW.
	Descend.
72.00	Leave timber,bears NE.and SW.Enter dense undergrowth.
80.00	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the cor.of secs.11-12-13 and 14,with brass c marked
	T 14 S R 2 W S 11 | S 12 S 14 | S 13 1912
	raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush andgrass.
	Heavily timbered land on 72.00 chs.
	December 4; At this cor.I set off 22°15'S.,on the decl. arc,and at 11h.50m.,a.m.,l.m.t.,observe the sun on the

CHAINS	
	meridian, the resulting lat. is 39°37'N.
	N.89°55'E., on a random line
	Bet. secs. 12 and 13.
40.00	Set temp. ¼ sec. cor.
80.44	Intersect the E. bdy. of the Tp. 9 lks. S. of the cor. of secs. 12 and 13, heretofore described.
	Thence I run
	S.89°51'W., on a true line
	Bet. secs. 12 and 13.
	Ascend over gently rolling land, through scattering timber and dense undergrowth.
9.00	Enter heavy timber, bears NE. and SW.
27.80	Spur, projects NE.
	Descend. leave heavy timber, bears NW. and SE. Enter scattering timber and dense undergrowth.
34.75	Hollow, 75 ft. deep, course NW.
	Ascend. Enter heavy timber, bears NW. and SE.
40.22	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for the ¼ sec. cor., with brass cap, marked
	¼ S 12 / S 13 / 1912
	from which
	A cedar, 8 ins. diam., bears S.50°E., 14 lks. dist., marked ¼ S 13 BT.
	A cedar, 6 ins. diam., bears N.49°E., 30 lks. dist., marked ¼ S 12 BT.
41.00	Spur, projects N.
	Descend. Leave heavy timber, bears N. and S. Enter scattering timber and dense undergrowth.
48.00	Hollow, 150 ft. deep, course NE.
	Ascend. Enter heavy timber, bears NE. and SW.

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS

54.90 Ridge,bears N.and S.

Descend. Leave timber,bears NE.and SW.Enter dense undergrowth.

60.10 Hollow,75 ft.deep,course SW.

Ascend.

67.40 Wood road,bears NW.and SE.

70.00 Ridge,bears N.and SW.

Descend.

80.44 The cor.of secs.11-12-13 and 14.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins,deep, 3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 31.95 chs.

December 4,1912.

December 5: At 7h.51m.,a.m.,l.m.t.,I set off 39°37'N.,on the lat.arc,22°18'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.11-12-13 and 14.

Thence I run

N.0°06'W.,bet.secs.11 and 12.

Descend over rolling,mountainous land,through dense undergrowth.

1.50 Hollow,50 ft.deep,course SW.

Ascend.

1.60 Wood road,bears NE.and SW.

8.00 Spur,projects SE.

Descend.

9.00 Enter heavy timber,bears NW.and SE.

17.10 Hollow,60 ft.deep,course SE.

Ascend.Leave heavy timber,bears NW.and SE.Enter scatter timber and dense undergrowth.

SUBDIVISIONS OF T.14 S.,R.2 W.

CHAINS	
26.70	Ridge,bears NW.and SE.
	Descend.
40.00	Enter heavy timber,bears NW.and SE.
	Set an iron post,3 ft.long, 1in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 11 | S 12 1912
	from which
	A cedar,10 ins.diam.,bears N.10°W.,68 lks.dist., marked ¼ S 11 BT.
	A cedar,6 ins.diam.,bears N.83°E.,37 lks.dist., marked ¼ S 12 BT.
56.40	Hollow,100 ft.deep,course E.
	Ascend.Leave heavy timber,bears NW.and SE.Enter scattering timber and dense undergrowth.
56.60	Wood road,bears E.and W.
65.00	Ridge,bears NE and SW.
	Descend.
80.00	Set an iron post,3 ft.long,2 ins.in diam.,16 ins.in the ground,surrounded by a mound of earth and atone,for the cor.of secs.1-2-11 and 12,with brass cap,marked
	T 14 S R 2 W S 2 | S 1 S 11 | S 12 1912
	from which
	A cedar,4 ins.diam.,bears N.84°30'E.,130 lks.dist., marked T 14 S R 2 W S 1 BT.
	A cedar,6 ins.diam.,bears S.40°E.,106 lks.dist., marked T 14 S R 2 W S 12 BT.
	A cedar,5 ins.diam.,bears S.30°W.,45 lks.dist., marked T 14 S R 2 W S 11 BT.
	A cedar,4 ins.diam.,bears N.21°W.,121 lks.dist., marked T 14 S R 2 W S 2 BT.
	Note: On account of natural obstacles it is impossible

CHAINS	
	to set this cor.over 16 ins.in the ground.
	Land,rolling,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep.
	3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 24.50 chs.
	N.89°51'E.,on a random line.
	Bet.secs.1 and 12.
40.00	Set temp.¼ sec.cor.
80.40	Intersect the E.bdy.of the Tp.14 lks.S.of the reestablish cor.of secs.1 and 12, heretofore described.
	December 5 : At this cor.I set off 22°23' S.,on the decl arc,and at 11h.51m.,a.m.,l.m.t.,observe the sunon the meridian,the resulting lat.is 39°37'N.
	Thence I run
	S.89°45'W.,on a true line
	Bet.secs.1 and 12.
	Over gently rolling land in Dog Valley,through dense undergrowth.
6.50	Road,bears N.and S.
13.60	Wash,15 lks.wide,4 ft.deep,course NW.
40.20	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 1 / S 12 / 1912
	dig pits,18x18x12 ins.,E.and W.,of post,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,N.ofcor.
46.20	Wood road,bears NE.and SW.
48.00	Leave Dog Valley,bears NE.and SW.Ascend over mountainou land.Enter heavy timber,bears NE.and SW.

CHAINS	
64.80	Spur,projects SE.
	Descend. Leave heavy timber,bears NW.and SE.Enter scatter/
	ing timber and dense undergrowth.
67.00	Hollow,50 ft.deep,course SE.
	Ascend.
76.00	Spur,projects NE.
	Descend.
80.40	The cor.of secs.1-2-11 and 12.
	Land,gently rolling and mountainous.
	Soil,clay loam and gravel with loose rock.24 ins.deep,
	3rd rate.
	Subsoil,gravel and clay.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 16.80 chs.

Knowing from the previous retracement of the N.bdy.of the Tp.that the line bet.secs.1 and 2,will fall out of the prescribed limits with the cor.of secs.1-2-34 and 35. Therefore I run

N.0°06'W.,on a true line

Bet.secs.1 and 2.

Descend over mountainous land,through scattering timber and dense undergrowth.

18.00 Foot of descent,enter Dog Valley,bears NE.and SW.

35.90 Leave Dog Valley,bears NE.and SW.Ascend over mountainous and rolling land.

40.00 Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 2 | S 1
1912

from which

A cedar,6 ins.diam.,bears S.64°E.,56 lks.dist., marked ¼ S 1 BT.

CHAINS

no other trees available,raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.

42.30 Spur,projects NE.

Descend.

52.31 Intersect the N.bdy.of the Tp.1.65 chs.N.89°54'E.,of the ¼ sec.cor.,on the S.bdy.of sec.34,heretofore described.

Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the closing cor.,bet.secs.1 and 2,with brass cap,marked

T 13 S R 2 W
S 34 | S 35
CC
S 2 | S 1
T 14 S R 2 W
1912

from which

A cedar,6 ins.diam.,bears S.59°30'E.,297 lks.dist marked T 14 S R 2 W S 1 BT.

A cedar,10 ins.diam.,bears S.38°W.,72 lks.dist., marked T.14 S R 2 W S 2 BT.

I destroy all markings on the cor.of secs.1-2-34 and 35 pertaining to T.14 S.

Land,mountainous.,and rolling.

Soil,clay loam with gravel and loose rock,24 ins.deep, 2nd and 3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Dense undergrowth on 52.31 chs.

December 5,1912.

Claude L. Hist
U.S. Transitman.

Survey commenced December 2,1912,and executed with the instrument described in book "A"of this survey.

I examine the adjustments of the transit and correct the level and collimation errors;then,to test the solar

CHAINS

apparatus,by comparing its indications,resulting from solar observations made during a.m.and p.m.hours,with a meridian determined by observations on Polaris,I proceed as follows:

At the cor.of secs.4-5-32 and 33,on the S.bdy.of the Tp. heretofore described,in approximate latitude 39°33'N., longitude 112°06'W.,I set off 39°33'N.,on the lat.arc, 21°56'S.,on the decl.arc,and at 3h.49m.,p.m.,l.m.t., determine with the solar a meridian and mark a point thereof,on a stone firmly set in the ground,5 chs.N.of the cor.

December 2,1912.

December 3:At 2h.38m.,a.m.,l.m.t.,I observe Polaris at western elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined on a peg driven in the ground,5 chs.N.of my station.

At 7h.30m.,a.m.l.m.t.,I lay off the azimuth of Polaris, 1°30' to the east,and mark the meridian thus determined, by cutting a small groove in the stone set December 2,on which the meridian falls 0.4 ins.east of the mark determined by the solar.

At 7h.50m.,a.m.,l.m.t.,I set off 39°33'N.,on the lat.arc 22°02'S.,on the decl.arc,and mark a point in the meridian determined with the solar,by a cross on the stone already set,5 chs.N.of my station;this mark falls 0.3 ins.east of the meridian established by the Polaris observation.

The solar apparatus by pm.and a.m.observations,defines positions for meridians,respectively about 0'21"west and 0'16"east of the meridian established by the Polaris observations;therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian,at 8h.30m.,a.m., is N.17°W.,the angle thus determined gives the mag.decl. 17°E.

Thence I run

CHAINS	
	N.0°03'E.,on a random line
	Bet.secs,32 and 33.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.08	Fall 14 lks.E.of the reestablished cor,of secs.28-29-32
	and 33.
	Thence I run
	S.0°03'E.,on a true line
	Bet.secs.32 and 33.
	Descend over rolling,mountainous land,through scattering
	timber and dense undergrowth.
2.45	Hollow,50 ft.deep,course NE.
	Ascend.
38.00	Ridge,bears NE.and SW.
	Descend.
40.04	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the
	ground,for the $\frac{1}{4}$ sec.cor.,with brass cap,marked
	$\frac{1}{4}$ S 32 | S 33
	1912
	dig pits,18x18x12 ins.,N.and S.of post,3 ft.dist.,and
	raise a mound of earth,3$\frac{1}{2}$ ft.base,1$\frac{1}{2}$ ft.high,W.of cor.
48.00	Hollow,25 ft.deep,course E.
	Ascend.
72.10	Spur,projects W.
	Descend.
80.08	The cor.of secs.4-5-32 and 33.
	Land,rolling and mountainous.
	Soil,clay loam with sand and gravel,24 ins.deep,2nd rate
	Subsoil,clay and gravel.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.08 chs.
	East,on a random line,resurveying
	Bet.secs.28 and 33.

CHAINS	
40.00	Set temp.¼ sec.cor.
80.30	Intersect N.and S.line,9 lks.S.of the reestablished cor. of secs.27-28-33 and 34.
	Thence I run
	S.89°56'W.,on a true line,resurveying
	Bet.secs.28 and 33.
	Ascend over mountainous land,over broken sandstone boulder s through heavy timber.
3.50	Spur,projects SE.
	Descend.
12.30	Hollow,50 ft.deep,course SE.
	Ascend.
20.00	Spur,projects SE.
	Descend.
22.35	Hollow,50 ft.deep,course SE.
	Ascend.
28.00	Ridge,bears NE.and SW.
	Descend.
36.90	Hollow,75 ft.deep,course NE.
	Ascend.
40.15	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 28 / S 33 / 1912
	from which
	A cedar,6 ins.diam.,bears S.47°W.,132 lks.dist., marked ¼ S 33 BT.
	A cedar,8 ins.diam.,bears N.36°E.,37 lks.dist., marked ¼ S 28 BT.
	December 3: At this cor.I set off 22°07'S.,on the decl. arc,and at 11h.50m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°34'N.
46.20	Spur,projects NE.
	Descend.

CHAINS	
48.80	Hollow,50 ft.deep,course NE.
	Ascend.
52.00	Ridge,bears NE.and SW.
	Descend.Leave heavy timber,bears NE.and SW.Enter scatter
	ing timber and dense undergrowth.
66.00	Hollow,75 ft.deep,course NE.
	Ascend.
80.30	The cor.of secs.28-29-32 and 33.
	Land,mountainous.
	Soil,clay with gravel and loose rock,24 ins.deep,3rd rat
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 52.00 chs.
	N.0°03'E.,bet.secs.28 and 29,on a resurvey,
	Ascend over rolling,mountainous land,through scattering
	timber and dense undergrowth.
26.30	Ridge,bears NE.and SW.
	Descend.
38.50	Hollow,25 ft.deep,course NE.
	Ascend.
40.00	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the
	ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 29 | S 28
	1912
	from which
	A cedar,12 ins.diam.,bears N.2°E.,285 lks.dist.,
	marked ¼ S 28 BT.
	A cedar,8 ins.diam.,bears N.80°W.,83 lks.dist.,
	marked ¼ S 29 BT.
46.00	Spur,projects NE.
	Descend.
49.00	Hollow,25 ft.deep,course NE.

HAINS

Ascend.

1.60 Road,bears E.and W.

7.80 Ridge,bears NE.and SW.

Descend.

0.00 Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the cor.of secs.20-21-28 and 29,with brass cap,marked

T 14 S R 2 W

S 20	S 21
S 29	S 28

1912

from which

A cedar,4 ins.diam.,bears N.53°E.,228 lks.dist., marked T 14 S R 2 W S 21 BT.

A cedar,6 ins.diam.,bears S.4°E.,248 lks.dist., marked T 14 S R 2 W S 28 BT.

A cedar,10 ins.diam.,bears N.23°W.,146 lks.dist., marked T 14 S R 2 W S 20 BT.

no other trees available,dig pits,18x18x12 ins.in each sec.5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft high,W.of cor.

Land,rolling and mountainous.

Soil,clay loam with gravel and sand,24 ins,deep,3rd rate.

Subsoil,clay and gravel.

Timber,cedar.

Undergrowth,sage brush and grass.

Dense undergrowth on 80.00 chs.

December 3,1912.

December 4: At 7h.50m.,a.m.,l.m.t.,I set off 39°35'N.,on the lat.arc,22°11'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.20-21-28 and 29.

CHAINS	
	Thence I run
	N.89°56'E.,on a random line
	Bet.secs.21 and 28.
40.00	Set temp.¼ sec.cor.
80.34	Intersect N.and S.line 16 lks.S.of the cor.of secs.21,
	27 and 28.
	Thence I run
	S.89°49'W.,on a true line,resurveying
	Bet.secs.21 and 28.
	Ascend over rolling and mountainous land,through sact
	timber and dense undergrowth.
7.00	Spur,projects NW.
	Descend.Leave scattering timber,bears NW.and SE.
10.00	Hollow,50 ft.deep,course SE.
	Ascend.
40.17	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in t
	ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 21
	S 28
	1912
	raise a mound of stone,2 ft.base,1½ ft.high,N.of cor
56.00	Low spur,projects SE.
	Descend.
61.65	Hollow, 50 ft.deep,course SE.
	Ascend.
64.45	Wood road,bears NW.and SE.
78.00	Spur,projects NE,
	Descend.
80.34	The cor.of secs.20-21-28 and 29.
	Land,rolling and mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.dee
	3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.

HAINS	
	Dense undergrowth on 80.34 chs.
	N.0°02'E.,bet.secs.20 and 21, resurveying,
	Descend over rolling mountainous land,through scattering timber and dense undergrowth.
9.00	Hollow,50 ft.deep,course SE.
	Ascend.
1.40	Low spur,projects SE.
	Descend.
9.50	Hollow,50 ft.deep,course SE.
	Ascend.
3.25	Ridge,bears NW.and SE.
	Descend.
7.40	Hollow,25 ft.deep,course SE.
	Ascend.
1.60	Spur,projects SE.
	Descend.
0.00	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 20 | S 21 1912
	from which
	A cedar,10 ins.diam.,bears S.8°E.,467 lks.dist., marked ¼ S 21 BT.
	A cedar,8 ins.diam.,bears S.3°30'W.,475 lks.dist., marked ¼ S 20 BT.
	December 4: At this cor.I set off 22°15'S.,on the decl. arc,and at 11h.50m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°35'N.
2.00	Hollow,25 ft.deep,course SE.
	Ascend.
3,00	Enter heavy timber,bears NW.and SE.
0.00	Spur,projects SE.
	Descend.

CHAINS	
	Leave heavy timber,bears E.and W.Enter scattering timb and dense undergrowth.
80.00	Set an iron post,3 ft.long, 2 ins.in diam.,24 ins.in ground,for the cor.of secs.16-17-20 and 21,with brass marked

T 14 S R 2 W

S 17	S 16
S 20	S 21

1912

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

Land,rolling and mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep 2nd rate.

Subsoil,clay and gravel.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 2.00 chs.Dense undergrowth o the rest.

	N.89°49'E.,on a random line
	Bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
80.48	Fall 21 lks.S.of the reestablished cor.of secs.15-16 22.
	Thence I run
	S.89°40'W.,on a true line,resurveying
	Bet.secs.16 and 21.
	Ascend over rolling land,through scattering timber a dense undergrowth.
10.00	Spur,projects N.
	Descend.
17.00	Foot of descent.Enter gently rolling land,bears N.an
18.35	Old road,bears NE.and SW.
40.24	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in

SUBDIVISIONS OF T.14 S., R.2 W.

Chains.

ground, for the $\frac{1}{4}$ sec.cor., with brass cap marked

$\frac{1}{4}$ S 16

S 21

1912

from which

A cedar 6 ins.dia.bears N.24° W. 74 lks.dist. marked $\frac{1}{4}$ S 16 B T

A cedar 6 ins.diam.bears S.44° W.59 lks.dist. marked $\frac{1}{4}$ S 21 B T

Enter heavy timber bears N.and S.

76.00 Leave heavy timber, bears N.and S.;enter scattering timber and dense undergrowth.

30.48 The cor.of secs.16,17,20 and 21.

Land, gently rolling and mountainous.

Soil, clay loam with sand and gravel, 24 ins.deep, 2d and 3d rate. Subsoil, gravel and clay.

Timber, cedar. Undergrowth, sagebrush and grass.

Heavily timbered land on 35.76 chs.

December 4, 1912.

December 5: At 7h 51m a.m.l.m.t., I set off 39° 36'N.on the lat.arc; 22° 18'S.on the decl.arc; and determine a meridian with the solar at the cor.of secs.14,15,22, and 23. Thence I run

N.0° 05'W.bet.secs.14 and 15,

Over gently rolling land in Sage Valley;through dense undergrowth.

11.40 Road, bears NW. and SE.

15.00 Enter scattering timber, bears NW. and SE.

30.00 Leave Sage Valley,bears NW. and SE. Asc.over rolling land.

40.00 No trace of old $\frac{1}{4}$ sec. cor.

Set an iron post 3 ft.long, 1 in.in dia., 12 ins.in the ground, surrounded by a mound of earth and stone for the re-established $\frac{1}{4}$ sec. cor. with brass cap marked

$\frac{1}{4}$ S 15 | S 14
1912

from which

SUBDIVISION OF T.14 S., R.2 W.

Chains.

A cedar 6 ins.diam.bears N.26° E. 110 lks.d
marked ¼ S 14 B T

A cedar 8 ins.diam.bears N.18°30'W.111 lks.
dist.,marked ¼ S 15 B T

Note: On account of natural obstacles it is impossible to set this corner over 12 ins.in the ground.

58.50 Spur,projects NW. Descend.

64.00 Hollow, 60 ft.deep, course W. Ascend.

68.00 Spur, projects W. Descend.

80.00 **No trace of old sec. cor.**

Set an iron post 3 ft.long, 2 ins.in diam., 24 ins.in the ground, for the re-established cor.of secs.10,11,14, and 15,with brass cap marked

T 14 S R 2 W
S 10 | S 11
S 15 | S 14
1912

from which

A cedar 6 ins.diam.bears N.41°30'E.96 lks.dist.
marked T 14 S R 2 W S 11 B T

A cedar 8 ins.diam.bears S.81° E. 170 lks.dist.
marked T 14 S R 2 W S 14 B T

A cedar 6 ins.diam.bears S.18° 45'W.81 lks.dist.
marked T 14 S R 2 W S 15 B T

A cedar 6 ins.diam.bears N.9° 15'W.118 lks.dist.
marked T 14 S R 2 W S 10 B T

Land, rolling.

Soil, clay and sandy loam with gravel,24 ins.deep,2d rat

Subsoil, gravel and clay.

Timber, cedar. Undergrowth sagebrush and grass.

Dense undergrowth on 80.00 chs.

December 5:At this cor.I set off 22°23'E on the decl.arc; and at 11h 51m a.m.l.m.t., observe the sun on the meridian; the resulting lat.is 39° 37'N.

N.89°55'E.on a random line bet.secs.11 and 14,

40.00 Set temp.¼ sec.cor.

80.50 Intersect N.and S.line 14 lks.N.of the cor.of secs.11,12,

SUBDIVISIONS OF T.14 S., R.2 W.

Chains.	
	13 and 14. Thence I run
	N.89° 59'W.on a true line bet.secs.11 and 14,
	Descend over mountainous land; through scattering timber and dense undergrowth.
3.50	Wood road, bears NE. and SW.
31.70	Hollow, 50 ft.deep, course SW. Ascend.
37.00	Enter heavy timber, bears N.and S.
38.70	Spur, projects S.
	Descend.
40.25	Set an iron post 3 ft.long, 1 in.in diam.26 ins.in the ground, for the ¼ sec.cor., with brass cap marked
	¼ S 11
	S 14
	1912
	from which
	A cedar 6 ins.diam.bears N.56° E. 117 lks.dist. marked ¼ S 11 B T
	A cedar 8 ins.diam.bears S.43° W. 89 lks.dist. marked ¼ S 14 B T
42.50	Leave heavy timber, bears N.and S.Enter scattering timber and dense undergrowth.
51.00	Wood road,. bears NW. and SE.
64.00	Hollow, 60 ft.deep, course SW. Ascend.
71.00	Spur, projects SW. Descend .
74.00	Perpendicular trachyte ledge, 60 ft.high, bears N.25° E. and S.25° W.
74.50	Hollow 75 ft.deep, course NW. Ascend.
76.50	Top of knoll, 30 ft.high.
	Descend.
80.50	The cor.of secs.10,11,14, and 15.
	Land, mountainous.
	Soil, clay loam with sand and gravel, 24 ins.deep, 3rd rate. Subsoil, gravel and loose rock.
	Timber, cedar.

SUBDIVISIONS OF T.14 S., R.2 W.

Chains.	
	Undergrowth, sagebrush and grass.
	Heavily timbered land on 5.50 chs.
	December 5, 1912.
	December 6: At 7h 51m a.m.l.m.t, I set off 39° 37'N.on the lat.arc; 22° 26'S.on the decl.arc; and determine meridian with the solar at the cor.of secs.10,11,14 and 15. Thence I run
	N.0° 06'W.bet.secs.10 and 11,
	Descend over mountainous land; through scattering timbe and dense undergrowth.
2.20	Hollow, 25 ft.deep, course SW.
	Ascend.
9.50	Ridge, bears NE. and SW. Descend.
16.90	Hollow, 50 ft.deep, course SW.
	Ascend.
19.80	Road, bears NE. and SW.
40.00	Set an iron post 3 ft.long, 1 in.in diam., 26 ins.in t ground, for the ¼ sec.cor., with brass cap marked
	¼ S 10 | S 11 1912
	from which
	A cedar 7 ins.diam.bears N.1° E. 100 lks.dist. marked ¼ S.11 B T
	A cedar 10 ins.diam.bears N.18° W. 50 lks.dist. marked ¼ S 10 B T
55.70	Ridge, bears NW. and SE. Descend.
75.20	Hollow, 75 ft.deep, course NW.
	Ascend.
80.00	Set an iron post 3 ft.long, 2 ins.in diam., 24 ins.in ground, for the cor.of secs.2,3,10, and 11, with bra cap marked

CHAINS

T 14 S R 2 W

S 3	S 2
S 10	S 11

1912

from which

A cedar,12 ins.diam.,bears N.20°45'E.,183 lks.dist., marked T 14 S R 2 W S 2 BT.

A cedar,16 ins.diam.,bears S.20°45'E.,70 lks.dist., marked T 14 S R 2 W S 11 BT.

A cedar,6 ins.diam.,bears S.26°W.,142 lks.dist., marked T 14 S R 2 W S 10 BT.

A cedar,4 ins.diam.,bears N.9°30'W.,84 lks.dist., marked T 14 S R 2 W S 3 BT.

Land,mountainous.

Soil,clay and sand,with gravel,24 ins.deep,3rd rate.

Subsoil,gravel and loose rock.

Timber,cedars.

Undergrowth,sage brush and grass.

Dense undergrowth on 80.00 chs.

S.89°59'E.,on a random line

Bet.secs.2 and 11.

0.00 Set a temp.$\frac{1}{4}$ sec.cor.

0.48 Intersect N.and S.line,2 lks.N.of the cor.of secs.1-2-11 and 12.

Thence I run

N.89°58'W.,on a true line

Bet.secs.2 and 11.

Descend over mountainous land,through scattering timber and dense undergrowth.

4.00 Hollow,75 ft.deep,course N.

Ascend,

3.00 Ridge,bears N.and S.

Descend.

CHAINS	
39.70	Enter heavy timber,bears NW.and SE.
40.24	Set an iron post,3 ft.long,1 in.in diam.,18 ins.in the ground,surrounded by a mound of earth and stone,for the ¼ sec.cor.,with brass cap,marked ¼ S 2 ——— S 11 1912 from which A cedar,4 ins.diam.,bears N.32°E.,75 lks.dist. marked ¼ S 2 BT. A cedar,5 ins.diam.,bears S.67°30'W.,96 lks.di marked ¼ S 11 BT. Note: On account of natural obstacles it is impossibl to set this cor.over 18 ins.in the ground. December 6: At this cor.I set off 22°30'S.,on the dec and at 11h.51m.,a.m.,l.m.t.,observe the sun on the m the resulting lat.is 39°37'N.
44.00	Head of hollow,50 ft.deep,course N. Ascend.
51.00	Spur,projects NW. Descend.Leave heavy timber,bears NW.and SE.Enter scattering timber and dense undergrowth.
61.50	Road,in hollow,125 ft.deep,course N. Ascend.
68.75	Ridge,bears NW.and SE. Descend.
80.48	The cor.of secs.2-3-10 and 11. Land,mountainous. Soil,clay loam with gravel and loose rock,24 ins.dee 3rd rate. Subsoil,gravel and loose rock. Timber,cedar. Undergrowth,sage brush and grass. Heavily timbered land on 11.30 chs.

CHAINS	
	For reasons explained on page 21 of this book,I run N.0°06'W.,on a true line
	Bet.secs.2 and 3.
	Ascend over mountainous land,through scattering timber and dense undergrowth.
6.00	Ridge,bears NW.and SE.
	Descend.
9.00	Foot of descent,leave mountainous land,bears NE.and SW.
	Enter gently rolling land.
0.00	Set an iron post,3 ft.lon g,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 3 | S 2 1912
	from which
	A cedar,5 ins.diam.,bears S.70°E.,408 lks.dist., marked ¼ S 2 BT.
	A cedar,6 ins.diam.,bears N.10°W.,200 lks.dist., marked ¼ S 3 BT.
1.82	Intersect the N.bdy.of the Tp.1.23 chs.N.89°28'E.,of the ¼ sec.cor.,on the S.bdy.of sec.33,heretofore described.
	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the closing cor.of secs.2 and 3,with brass cap,marked
	T 13 S R 2 W S 33 | S 34 CC S 3 | S 2 T 14 S R 2 W 1912
	raise a mound of stone,2 ft.base,1½ ft.high,S.of cor.
	I destroy all markings on the cor.of secs.2-3-33 and 34,pertaining to T.14 S.
	Land,mountainous and gently rolling.
	Soil,clay and sandy loam with gravel,24 ins.deep,2nd and 3rd rate.
	Subsoil,gravel and loose rock.

CHAINS	
	Timber,cedar.
	Undergrowth,sage brush,and grass.
	Dense undergrowth on 51.82 chs.
	December 6,1912.
	John R. Stewar
	U.S.Surveyor.

December 6: At 7h.51m.,a.m.,l.m.t.,I set off 39°36'E.,
on the lat.arc,22°26'S.,on the decl.arc,and determine
meridian with the solar at the cor.of secs.15-16-21 an
22.

Thence I run

N.0°06'W.,bet.secs.15 and 16.

Over gently rolling land in Sage Valley,through scatte
timber and dense undergrowth.

22.90	Wood road,bears NE.and SW.
26.20	Road,bears NE.and SW.
35.10	Road,bears NE.and SW.
38.40	Road,bears E.and W.
40.00	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in t ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 16 | S 15
1912

from which

A cedar,6 ins.diam.,bears N.76°W.,110 lks.dist
marked ¼ S 16 BT.

A cedar,12 ins.diam.,bears S.89°E.,255 lks.dis
marked ¼ S 15 BT.

46.00	Enter heavy timber,bears NE.and SW.
48.00	Road,bears E.and W.
80.00	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in t ground,for the cor.of secs.9-10-15 and 16,with brass marked,

AINS

T 14 S R 2 W

S 9	S 10
S 16	S 15

1912

from which

A cedar,6 ins.diam.,bears N.57°E.,102 lks.dist., marked T 14 S R 2 W S 10 BT.

A cedar,5 ins.diam.,bears S.71°E.,121 lks.dist., marked T 14 S R 2 W S 15 BT.

A cedar,6 ins.diam.,bears S.80°W.,74 lks.dist., marked T 14 S R 2 W S 16 BT.

A cedar,4 ins.diam.,bears N.53°W.,9 lks.dist., marked T 14 S R 2 W S 9 BT.

Land,gently rolling.

Soil,clay and sandy loam with gravel,1st and 2nd rates,

Subsoil,gravel and clay.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 34.00 chs.

December 6: At this cor.I set off 22°30'S.,on the decl.arc and at 11h.51m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°37'N.

S.89°58'E.,on a random line

Bet.secs.10 and 15.

.00 Set temp.¼ sec.cor.

50 Intersect N.and S.line,2 lks.S.of the cor.of secs.10-11-14 and 15.

Thence I run

N.89°59'W.,on a true line

Bet.secs.10 and 15.

Descend over mountainous land,through scattering timber and dense undergrowth.

80 Hollow,50 ft.deep,course SW.

CHAINS	
	Ascend.
8.00	Spur,projects SW.
	Descend.
19.60	Wood road,bears NE.and SW.,in hollow,60 ft.deep,course SW.
	Ascend.
22.00	Wood road,bears NE.and SW.
23.20	Spur,projects SW.
	Descend.
25.00	Foot of descent,leave mountainous land,bears NE.and SW. Enter rolling land in Sage Valley.
31.30	Wood road,bears N.and S.,in wash,20 lks.wide,3 ft.deep, course S.
38.40	Wood road,bears NE.and SW. Ascend from Sage Valley.
40.25	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 10

S 15

1912

from which

A cedar,6 ins.diam.,bears N.60°30'E.,150 lks.dist marked ¼ S 10 BT.

A cedar,6 ins.diam.,bears S.37°E.,404 lks.dist marked ¼ S 15 BT.

80.50	The cor.of secs,9-10-15 and 16.

Land,mountainous and rolling.

Soil,clay loam with gravel and loose rock,24 ins.deep and 3rd rate.

Subsoil,gravel and clay.

Timber,cedar.

Undergrowth,sage brush and grass.

Dense undergrowth on 80.50 chs.

December 6,1912.

AINS

December 7 : At 7h.52m.,a.m.l.m.t.,I set off 39°37'N.,on the lat.arc,22°33'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.9-10-15 and 16.

Thence I run

N.0°07'W.,bet.secs.9 and 10.

Ascend over rolling land through heavy timber.

.00 Leave heavy timber,bears NW.and SE.Enter scattering timber and dense undergrowth.

.00 Leave rolling land in Sage Valley,bears NE.and SW.Ascend over mountainous land.

.00 Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 9	S 10

1912

from which

A cedar,6 ins.diam.,bears S.54°E.,39 lks.dist., marked ¼ S 10 BT.

A cedar,16 ins.diam.,bears S.60°W.,140 lks.dist., marked ¼ S 9 BT.

40 Junction of ridges,bears NE.,SW.,and N.

Descend along the top of ridge.

00 Set an iron post,3 ft.long,2 ins.in diam.,20 ins.in the ground,surrounded by a mound of earth and stone,for the cor.of secs.3-4-9 and 10,with brass cap,marked

T 14 S R 2 W

S 4	S 3
S 9	S 10

1912

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

Note: On account of natural obstacles it is impossible to set this cor.over 20 ins.in the ground.

Land,rolling and mountainous.

Soil,clay loam with sand and gravel,24 ins,deep,2nd and 3rd rates.

Subsoil,gravel and clay.

CHAINS	
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.00 chs.
	S.89°59'E.,on a random line
	Bet.secs.3 and 10.
40.00	Set temp.¼ sec.cor.
80.48	Intersect the N.and S.lines,9 lks.N.of the cor.of secs. 2-3-10 and 11.
	December 7: At this cor.I set off 22°37'S.,on the decl arc,and at 11h.52m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°37'N.
	Thence I run
	N.89°55'W.,on a true line
	Bet.secs.3 and 10.
	Descend over mountainous land,through scattering timbe and dense undergrowth.
4.00	Hollow,60 ft.deep,course NW.
	Ascend.
6.00	Enter heavy timber,bears N.and S.
12.20	Spur,projects N.
	Descend.
15.00	Leave heavy timber,bears N.and S.,Enter scattering tim and dense undergrowth.
17.80	Wood road,bears NE.and SW.,in hollow,50 ft.deep,course
	Ascend.
20.00	Enter heavy timber,bears N.and S.
32.40	Leave heavy timber,bears N.and S.
40.24	Set an iron post,3 ft.long,1 in.in diam.,18 ins.in the ground,surrounded by a mound of earth and stone,for th ¼ sec.cor.,with brass cap,marked

¼ S 3

S 10

AINS	
	from which
	A cedar,6 ins.diam.,bears N.7°30'E.,66 lks.dist., marked ¼ S 3 BT.
	A cedar,12 ins.diam.,bears S.28°30'W.,148 lks.dist., marked ¼ S 10 BT.
	Note: On account of natural obstacles it is impossible to set this cor.over 18 ins.in the ground.
00	Ridge,bears N.and S.
	Descend.
60	Hollow,65 ft.deep,course N.
	Ascend.
60	Ridge,bears NE.and SW.
	Descend.
00	Hollow,60 ft.deep,course N.
	Ascend.
48	The cor.of secs.3-4-9 and 10.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,2nd and 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 21.40 chs.
	For reasons explained on page 21 of this book,I run N.0°07'W.,on a true line
	Bet.secs.3 and 4.
	Descend over rolling,mountainous land,through scattering timber and dense undergrowth.
90	Wash,10 lks.wide,4 ins.deep,in hollow,50 ft.deep,course NW.
	Ascend.
00	Set an iron post,3 ft.long,1 in.in diam.,18 ins.in the ground,surrounded by a mound of earth and stone,for the

CHAINS	
	¼ sec.cor.,with brass cap,marked
	¼ S 4 | S 3
	1912
	fromwhich
	A cedar,5 ins.diam.,bears N.40°E.,48 lks.dist., marked ¼ S 3 BT.
	A cedar,6 ins.diam.,bears S.63°W.,266 lks.dist. marked ¼ S 4 BT.
	Note: On account of natural obstacles it is impossible to set this cor.Over 18 ins.in the ground.
45.20	Ridge,bears NW.and SE.
	Descend.
51.97	Intersect the N.bdy.of the Tp.54 lks.N.89°38'W.,of the ¼ sec.cor.,on the S.bdy.of sec.32, heretofore describe Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in th ground,for the closing cor.of secs.3 and 4,with brass marked
	T 13 S R 2 W
	S 32 | S 33
	CC
	S 4 | S 3
	T 14 S R 2 W
	1912
	from which
	A cedar,4 ins.diam.,bears S.24°E.,200 lks.dist. marked T 14 S R.2 W S 3 BT.
	A cedar,6 ins.diam.,bears S.64°W.,111 lks.dist. marked T 14 S R.2 W S 4 BT.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 51.97 chs. December 7, 1912.
	Claude L. Hest. U.S.Transitman.

hains.

December 4, 1912

N.0° 07'W.bet.secs.16 and 17,

Descend over rolling land;through scattering timber and dense undergrowth.

1.10 Hollow, 25 ft.deep, course SE. Ascend.

3.00 Spur, projects SE. Descend.

5.40 Hollow, 25 ft.deep, course SE. Ascend.

8.00 Ridge, bears NW. and SE. Descend.

0.00 Set an iron post 3 ft.long, 1 in.in diam.26 ins.in the ground, for the ¼ sec.cor.with brass cap marked

¼ S 17 | S 16
1912

from which

A cedar 6 ins.diam.bears N.13° E. 110 lks.dist. marked ¼ S 16 B T

A cedar 14 ins.diam.bears N.37° W. 300 lks.dist. marked ¼ S 17 B T

0.43 Wood road, bears NW. and SE. Enter heavy timber, bears NW. and SE.

3.40 Hollow, 75 ft.deep, course NW. Ascend.

0.00 Spur projects NW.

Set an iron post 3 ft.long, 2 ins.in diam., 24 ins.in the ground, for the cor.of secs.8,9,16, and 17, with brass cap marked

T 14 S R 2 W
S 8 | S 9
S 17 | S 16
1912

from which

A cedar 13 ins.diam.bears N.45° 30'E.102 lks.dist. marked T 14 S R 2 W S 9 BT

A cedar 8 ins.diam.,bears S.65°E.97 lks.dist. marked T 14 S R 2 W S 16 B T

A cedar 6 ins.diam.bears N.19° W.132 lks.dist. marked T 14 S R 2 W S 8 B T

No other suitable trees available, raise a mound of

Chains.	
	stone 2 ft.base, 1½ ft.high W.of cor.
	Land, rolling.
	Soil, sandy and clay loam with gravel and loose rock, 24 ins.deep, 2nd and 3rd rate.
	Subsoil, gravel and clay.
	Timber, cedar. Undergrowth, sagebrush and grass.
	Heavily timbered land on 39.57 chs.
	December 4, 1912.
	December 7: At 7h 52m a.m.l.m.t., I set off 39° 37'N.on the lat.arc; 22° 33'S.on the decl.arc; and determine a meridian with the solar at the cor.of secs.8,9,16 and 17. Thence I run
	N.89°40'E.on a random line bet.secs.9 and 16,
40.00	Set temp.¼ sec.cor.
80.50	Intersect N.and S.line 2 lks.S.of the cor.of secs.9,10, 15 and 16. Thence I run
	S.89° 39'W.on a true line bet.secs.9 and 16,
	Ascend over mountainous land; through heavy timber.
6.40	Ridge, bears N.and S. Descend.
	Leave heavy timber, bears N.and S.Enter scattering timbe and dense undergrowth.
17.50	Hollow, 100 ft.deep, course SE. Ascend.
24.00	Spur, projects SE. Descend.
40.25	Set an iron post 3 ft.long, 1 in.in dia., 14 ins.in the ground, surrounded by a mound of earth and stone for the ¼ sec.cor., with brass cap marked
	¼ S 9 / S 16 / 1912
	from which
	A cedar, 10 ins.diam.bears N.84° W. 379 lks.dist. marked ¼ S 9 B T
	No other trees available; raise a mound of stone 2 ft. base, 1½ ft.high N.of cor.
	Impossible to set post over 14 ins.in ground, on account of natural obstacles.

AINS	
.00	Hollow,150 ft.deep,course NE.
	Ascend.
.00	Ridge,bears NE.and SW.
	Descend.
.80	Hollow,200 ft.deep,course NW.
	Ascend.
	Enter heavy timber,bears NW.and SE.
.00	Leave heavy timber,bears NW.and SE.Enter scattering timber and dense undergrowth.
.50	The cor.of secs.8-9-16 and 17.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 2nd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 14.20 chs.

	N.0°08'W.,bet.secs.8 and 9.
	Descend over mountainous land,through scattering timber and dense undergrowth.
.00	Hollow,100 ft.deep,course NW.
	Ascend.
.30	Ridge,bears NW.and SE.
	Descend.
.00	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 8 | S 9
1912

from which

A cedar,12 ins.diam.,bears S.3°E.,47 lks.dist., marked ¼ S 9 BT.

A cedar,8 ins.diam.,bears S.78°W.,37 lks.dist., marked ¼ S 8 BT.

CHAINS	
	December 7: At this cor.I set off 22°37'S.,on the decl
	and at 11h.52m.,a.m.,l.m.t.,observe the sun on the mer-
	idian,the resulting lat.is 39°37'N.
62.00	Hollow,50 ft.deep,course NW.
	Ascend.
75.30	Ridge,bears NW.and SE.
	Descend.
80.00	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in th
	ground,for the cor.of secs.4-5-8 and 9,with brass cap,
	marked

T 14 S R 2 W

S 5	S 4
S 8	S 9

1912

from which

A cedar,6 ins.diam.,bears N.35°E.,35 lks.dist.,
marked T 14 S R 2 W S 4 BT.

A cedar,8 ins.diam.,bears S.55°30'E.,22 lks.dis
marked T 14 S R 2 W S 9 BT.

A cedar,6 ins.diam.,bears S.1°30'W.,28 lks.dist
marked T 14 S R 2 W S 8 BT.

A cedar,12 ins.diam.,bears N.61°W.,89 lks.dist.
marked T 14 S R 2 W S 5 BT.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep,
3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Dense undergrowth on 80.00 chs.

N.89°39'E.,on a ramdom line

Bet.secs.4 and 9.

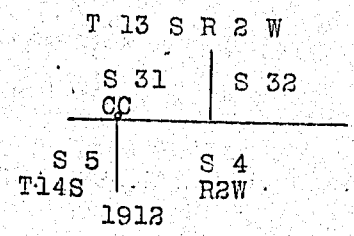
40.00 Set temp.$\frac{1}{4}$ sec.cor.

AINS	
.48	Intersect N.and S.line,11 lks.N.of the cor.of secs.3-4-9 and 10.
	Thence I run
	S.89°44' W.,on a true line
	Bet.secs.4 and 9.
	Descend over mountainous land,through scattering timber and dense undergrowth.
.00	Hollow,300 ft.deep,course NW.
	Ascend.
.00	Ridge,bears NW.and SE.
	Descend.
.24	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 4 / S 9 / 1912
	from which
	A cedar,8 ins.diam.,bears N.48°E.,167 lks.dist., marked ¼ S 4 BT.
	A cedar,10 ins.diam.,bears S.82°E.,179 lks.dist., marked ¼ S 9 BT.
.60	Enter heavy timber,bears N.and S.
.50	Hollow,60 ft.deep,course NW.
	Ascend.
.48	The cor.of secs.4-5-8 and 9.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 23.88 chs.

December 7,1912.

CHAINS	
	December 9: At 7h.52m.,a.m.,l.m.t.,I set off 39°37'N.,
	on the lat.arc,22°45'S.,on the decl.arc,and determine a
	meridian with the solar at the cor.of secs.4-5-8 and 9
	For reasons explained on page 21,of this book,I run
	N.0°08'W.,on a true line
	Bet.secs.4 and 5.
	Descend over mountainous land,through scattering timbe
	and dense undergrowth.
5.00	Hollow,50 ft.deep,course NW.
	Ascend.
11.10	Ridge,bears NW.and SE.
	Descend.
17.40	Hollow,25 ft.deep,course NW.
	Ascend.
20.80	Spur,projects NW.
	Descend.
28.85	Hollow,50 ft.deep,course NW.
	Ascend.
40.00	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the
	ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 5 | S 4
	1912
	from which
	A cedar,12 ins.diam.,bears N.82°W.,62 lks.dist.
	marked ¼ S 5 BT.
	A cedar,8 ins.diam.,bears N.72°E.,185 lks.dist.
	marked ¼ S 4 BT.
49.10	Spur,projects W.
	Descend.
53.42	Intersect the N.bdy.of the Tp.164 lks.S.89°52'W.,of th
	¼ sec.cor.on the S.bdy.of sec.31, heretofore described
	Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in th
	ground,for the closing cor.of secs.4 and 5,with brass
	cap,marked

hains.



from which

A cedar 6 ins.diam.bears S.34° E. 161 lks.dist. marked T 14 S R 2 W S 4 B T

A cedar 8 ins.diam.bears S.60° W. 163 lks.dist. marked T 14 S R 2 W S 5 B T

I destroy all marks on the cor.of secs.4,5,31 and 32 pertaining to T.14 S.

Land, mountainous.

Soil, clay loam with gravel and loose rock,24 ins.deep, 3rd rate. Subsoil, gravel and loose rock.

Timber, cedar. Undergrowth, sagebrush and grass.

Dense undergrowth on 53.42 chs. December 9, 1912.

John R Stewart
U.S.Surveyor.

December 9, 1912: At 7h 52m a.m.l.m.t., I set off 39° 33' N.on the lat.arc; 22° 45'S.on the decl.arc; and determine a meridian with the solar at the cor.of secs.5,6, 31 and 32 on the S.bdy.of the Tp.heretofore described.

Thence I run

N.0° 04'W.bet.secs.31 and 32,

Ascend over mountainous land; through scattering timber and dense undergrowth.

.50 Ridge, bears E. and W. Descend.

.00 Hollow, 50 ft.deep, course W. Ascend.

.00 Ridge, bears E. and W. Descend.

.20 Hollow, 160 ft.deep, course W. Ascend.

.00 Set an iron post 3 ft.long, 1 in.in diam., 16 ins.in the ground, surrounded by a mound of earth and stone, for the ¼ sec.cor., with brass cap marked

Chains.	
	$\frac{1}{4}$ S 31 | S 32 1912
	from which
	A cedar 8 ins.diam.bears N.59° E. 273 lks.dist. marked $\frac{1}{4}$ S 32 B T
	A cedar 8 ins.diam.bears N.75° W. 39 lks.dist. marked $\frac{1}{4}$ S 31 B T
	Note: On account of natural obstacles it is impossible to set this cor.over 16 ins.in the ground.
49.70	Spur, projects E. Descend.
63.30	Hollow, 100 ft.deep, course SE. Ascend.
77.20	Ridge, bears NE. and SW. Descend.
80.00	Set an iron post 3 ft.long, 2 ins.in diam., 24 ins.in tl ground, for the cor.of secs.29,30,31, and 32, with brass cap marked

T 14 S R 2 W
S 30 | S 29
S 31 | S 32
1912

	from which
	A cedar 6 ins.diam.bears N.34°30'E.81 lks.dist. marked T 14 S R 2 W S 29 B T
	A cedar 6 ins.diam.bears S.81° E. 109 lks.dist. marked T 14 S R 2 W S 32 B T
	A cedar 4 ins.diam.bears S.31° 30'W. 38 lks.dist marked T 14 S R 2 W S 31 B T
	A cedar 5 ins.diam.bears N.33° W. 83 lks.dist. marked T 14 S R 2 W S 30 B T
	Land, mountainous.
	Soil, clay and gravel with loose rock, 24 ins.deep,2nd rate. Subsoil, gravel and loose rock.
	Timber, cedar. Undergrowth, sagebrush and grass.
	Dense undergrowth on 80.00 chs.

hains.	
	East on a random line bet.secs.29 and 32,
0.00	Set temp.¼ sec.cor.
0.16	Intersect N.and S.line 9 lks.S.of the cor.of secs.28,29, 32, and 33. Thence I run
	S.89° 56'W.on a true line bet.secs.29 and 32,
	Ascend rolling mountainous land; through scattering timber and dense undergrowth.
0.00	Ridge, bears NE. and SW. Descend.
3.00	Hollow, 50 ft.deep, course NE. Ascend.
3.65	Spur, projects SE. Descend.
0.08	Set an iron post 3 ft.long, 1 in.in diam., 26 ins.in the ground, for the ¼ sec.cor., with brass cap marked
	¼ S 29
	S 32 1912
	from which
	A cedar 6 ins.diam.bears N.87°30'W.196 lks.dist. marked ¼ S 29 B T
	A cedar 4 ins.diam.bears S.52° E. 169 lks.dist. marked ¼ S 32 B T
.00	Head of hollow, 50 ft.deep, course SE. Ascend.
.70	Ridge, bears NE. and SW. Descend.
.50	Hollow, 75 ft.deep, course NE.
	Ascend; through heavy timber, bearing NE. and SW.
.75	Ridge, bears NE. and SW. Descend.
	Leave heavy timber, bearing NE. and SW.; enter scattering timber and dense undergrowth.
.16	The cor.of secs.29,30,31, and 32.
	Land, mountainous.
	Soil, clay and sandy loam with gravel and loose rock, 24 ins.deep, 2d rate.
	Timber, cedar. Undergrowth, sagebrush and grass.
	Heavily timbered land on 16.25 chs.
	December 9: At this cor.I set off 22° 50'S.on the decl. arc; and at 11h 52m a.m.l.m.t., observe the sun on the

SUBDIVISIONS OF T.14 S , R.2 W.

Chains.	
	meridian; the resulting lat.is 39° 34'N.
	Claude L. Hirst.
	U.S.Transitman.
	December 9, 1912:
	From retracements on the W.bdy.of the Tp. I find that th line bet.secs.30 and 31 will not intersect within the prescribed limits of the cor.of secs.25,30,31, and 36, therefore I run
	West on a true line bet.secs.30 and 31,
	Descend over mountainous land; through heavy timber.
10.90	Hollow, 160 ft.deep, course SW. Ascend.
17.80	Spur, projects SW. Descend.
24.80	Hollow, 100 ft.deep, course SW. Ascend.
36.00	Spur, projects SW. Descend.
40.00	Set an iron post 3 ft.long, 1 in.in diam. 26 ins.in the ground, for the ¼ sec.cor., with brass cap marked
	¼ S 30 / S 31 1912
	from which
	A cedar 12 ins.diam.bears N.78° W.27 lks.dist. marked ¼ S 30 B T
	A cedar 14ins.diam.bears S.33° W. 23 lks.dist. marked ¼ S 31 B T
49.20	Hollow, 140 ft.deep, course SW. Ascend.
57.00	Ridge, bears NE. and SW. Descend.
60.22	Intersect the W.bdy.of the Tp.6.23 chs.N.2° 51'W.of the ¼ sec.cor.on the E.bdy.of sec.36,heretofore described
	Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in th ground, for the closing cor.of secs.30 and 31 with br cap marked

T 14 S
S 25 | S 30
S 36 CC S 31
R3 W R 2 W

ains.

from which

A cedar, 8 ins.diam., bears N.20° E. 36 lks.dist. marked T 14 S R 2 W S 30 B T

A cedar, 8 ins.diam., bears S.25° E. 79 lks.dist. marked T 14 S R 2 W S 31 B T

I destroy all markings on the cor.of secs.25,30,31, and 36 pertaining to R 2 W.

Land, mountainous.

Soil, clay loam, with gravel and loose rock, 24 ins.deep, 3rd rate.

Subsoil, gravel and loose rock.

Timber, cedar. Undergrowth, sagebrush and grass.

Heavily timbered land on 60.22 chs.

December 9: At this cor.I set off 22° 50'S.on the decl. arc; and at 11h 52m a.m.l.m.t., observe the sun on the meridian; the resulting lat.is 39° 34'N.

John R Stewart
U.S.Surveyor.

N.0° 03'E.bet.secs.29 and 30,

Descend over mountainous land; through heavy timber.

.00 Hollow, 50 ft.deep, course W. Ascend.

.00 Ridge, bears E.and W. Descend.

.00 Head of hollow, 30 ft.deep, course W. Ascend.

.00 Set an iron post 3 ft.long, 1 in.in diam., 16 ins.in the ground, for the $\frac{1}{4}$ sec.cor., with brass cap marked

$\frac{1}{4}$ S 30 | S 29
1912

from which

A cedar, 6 ins.diam.bears S.43° E. 49 lks.dist. marked $\frac{1}{4}$ S 29 B T

A cedar, 12 ins.diam.bears S.83° W. 63 lks.dist. marked $\frac{1}{4}$ S 30 B T

Note: On account of natural obstacles it is impossible

SUBDIVISIONS OF T.14 S, R.2 W.

Chains.	
	to set this post over 16 ins.in the ground.
43.20	Leave heavy timber, bears NW. and SE.Enter scattering timber and dense undergrowth.
43.50	Ridge, bears NW. and SE.
	Ascend gradually along the E.slope of ridge.
51.40	Same ridge, bears NE. and SW.
67.80	Same ridge, bears NW. and SE. Descend.
80.00	Set an iron post 3 ft.long, 2 ins.in diam., 24 ins.in the ground, for the cor.of secs.19,20,29 and 30, with brass cap marked

T 14 S R 2 W

S 19	S 20
S 30	S 29

1912

from which

A cedar, 8 ins.diam., bears N.62° 30'E.110 lks. dist., marked T 14 S R 2 W S 20 B T

A cedar, 8 ins.diam.bears S.65°30'E.172 lks. dist., marked T 14 S R 2 W S 29 B T

A cedar, 6 ins.diam., bears S.36°30'W.202 lks. dist., marked T 14 S R 2 W S 30 B T

A cedar, 4 ins.diam., bears N.29° 15'W.112 lks.dist., marked T 14 S R 2 W S 19 B T

Land, mountainous.

Soil, clay loam with gravel and loose rock, 24 ins.deep, 3rd rate. Subsoil, gravel and loose rock.

Timber, cedar. Undergrowth, sagebrush and grass.

Heavily timbered land on 43.20 chs.

N.89° 56'E.on a random line bet.secs.20 and 29,

40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.20	Intersect N.and S.line 2 lks.N.of the cor.of secs.20,21, 28 and 29.

AINS

Thence I run

S.89°57'W.,on a true resurvey line

Bet.secs.20 and 29.

Descend over mountainous land,through scattering timber and dense undergrowth.

50 Hollow,50 ft.deep,course N.

Ascend.

40 Ridge,bears NW.and SE.

Descend.

40 Hollow,50 ft.deep,course SE.

Ascend.

50 Ridge,bears NW.and SE.

Descend.

10 Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 20

S 29

1912

from which

A cedar,6 ins.diam.,bears N.13°E.,87 lks.dist., marked ¼ S 20 BT.

A cedar,6 ins.diam.,bears S.52°W.,82 lks.dist., marked ¼ S 29 BT.

20 Hollow,50 ft.deep,course SE.

Ascend.

30 Ridge,bears NW.and SE.

Descend.

00 Hollow,75 ft.deep,course SE.

Ascend.

00 Ridge,bears NW.and SE.

Descend.

00 Hollow,75 ft.deep,course SE.

Ascend.

20 The cor.of secs.19-20-29 and 30.

Land,mountainous.

CHAINS	
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.20 chs.
	Claude L. Ha[illegible]
	U.S.Tra nsitman.
	For reasons explained on page 54 of this book,I run West,on a true line
	Bet.secs.19 and 30.
	Ascend over mountainous land,through scattering timber and dense undergrowth.
2.00	Ridge,bears N.and S.
	Descend.
24.00	Hollow,175 ft.deep,course SW.
	Ascend.
28.50	Spur,projects S.
	Descend.
38.50	Hollow,180 ft.deep,course S.
	Ascend.
40.00	Set an iron post,3 ft.long,1 in.in diam.,16 ins.in the ground,surrounded by a mound of earth and stone,for th ¼ sec.cor.,with brass cap,marked

¼ S 19

S 30

1912

from which

A cedar,10 ins.diam.,bears N.30°W.,5 lks.dist. marked ¼ S 19 BT.

A cedar,14 ins.diam.,bears S.78°E.,14 lks.dist marked ¼ S 30 BT.

AINS

Note: On account of natural obstcales it is impossible to set this cor.over 16 ins.in the ground.

.00 Ridge,bears NE.and SW.

Descend.

60 Hollow,225 ft.deep,course SW.

Ascend.

03 Intersect the W.bdy.of the Tp.4.51 chs.N.0°05'E.,of the ¼ sec.cor.on the E.bdy.of sec.25,heretofore described.

Set an iron post,3 ft.long,2 ins.in diam.,24 ins.in the ground,for the closing cor.of secs.19 and 30,with brass cap,marked

T 14 S

S 24 | S 19

S 25 | CC | S 30

R 3 W | R 2 W

1912

from which

A cedar,4 ins.diam.,bears N.60°E.,154 lks dist., marked T 14 S R 2 W S 19 BT.

A cedar,14 ins.diam.,bears S.20°E.,34 lks.dist., marked T 14 S R 2 W S 30 BT.

I destroy all markings on the cor.of secs.19-24-25 and 30,pertaining to R.2 W.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Dense undergrowth on 62.03 chs.

December 9,1912.

John R Stewart

U.S.Surveyor.

CHAINS	
	N.0°02'E.,bet.secs.19 and 20, resurveying
	Descend over mountainous land,through scattering timber and dense undergrowth.
13.40	Hollow,75 ft.deep,course E.
	Ascend.
21.50	Ridge,bears NW.and SE.
	Descend.
28.50	Hollow,50 ft.deep,course SE.
	Ascend.
40.00	Set an iron post,3 ft.long,1 in.in diam.,14 ins.in the ground,surrounded by a mound of earth and stone,for the ¼ sec cor.,with brass cap,marked
	¼ S 19 | S 20 1912
	from which
	A cedar,4 ins.diam.,bears N.63°E.,80 lks.dist., marked ¼ S 20 BT.
	A cedar,4 ins.diam.,bears S.34°W.,135 lks.dist. marked ¼ S 19 BT.
	Note: On account of natural obstacles it is impossible to set this cor.over 14 ins.in the ground.
43.10	Ridge,bears E.and W.
	Descend.
49.50	Hollow,90 ft.deep,course E.
	Ascend.
55.00	Enter heavy timber,bears E.and W.
66.50	Ridge,bears E.and W.
	Descend.
76.00	Leave heavy timber,bears E.and W.,Enter scattering tim and dense undergrowth.
80.00	Set an iron post,3 ft.long,2 ins.in diam.,18 ins.in th ground,surrounded by a mound of earth and stone,for th cor.of secs.17-18-19 and 20,with brass cap,marked
	T 14 S R 2 W S 18 | S 17 S 19 | S 20

AINS

from which

A cedar,10 ins.diam.,bears N.75°E.,230 lks.dist., marked T 14 S R 2 W S 17 BT.

A cedar,6 ins.diam.,bears S.76°E.,281 lks.dist., marked T 14 S R 2 W S 20 BT.

A cedar,6 ins.diam.,bears S.3°15'W.,210 lks.dist., marked T 14 S R 2 W S 19 BT.

A cedar,6 ins.diam.,bears N.64°30'W.,310 lks.dist., marked T 14 S R 2 W S 18 BT.

Note: On account of natural obstacles it is impossible to set this cor.over 18 ins.in the ground.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.

Subsoil,gravel and loose rock,

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 21.00 chs.

December 9,1912.

Claude L. Hoot

U.S.Transitman.

December 10: At 7h.53m.,a.m.,l.m.t.,I set off 39°36'N., on the lat.arc,22°51'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.17-18-19 and 20.

Thence I run

N.89°57'E.,on a random line

Bet.secs.17 and 20.

00 Set a temp.¼ sec.cor.

10 Intersect N.and S.line,2 lks.S.of the cor.of secs.16-17-20 and 21.

CHAINS	
	Thence I run
	S.89°56'W.,on a true line,resurveying
	Bet.secs.17 and 20.
	Over gently rolling land,through scattering timber and dense undergrowth.
28.00	Leave gently rolling land,bears NE.and SW.Ascend over mountainous land.
40.05	Set an iron post,3 ft.long,1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 17 / S 20 / 1912
	raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
48.00	Ridge,bears NE.and SW.
	Descend.
64.00	Enter heavy timber,bears N.and S.
67.75	Hollow,75 ft.deep,course NW.
	Ascend.
72.00	Leave heavy timber,bears NE.and SW.
73.50	Spur,projects NW.
	Descend.
80.10	The cor.of secs.17-18-19 and 20.
	Land,gently rolling and mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 2nd and 3rd rate.
	Subsoil,gravel and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 8.00 chs.

For reasons explained on page 54 of this book,I run

West,on a true line

Bet.secs.18 and 19.

INS

Descend over mountainous land, through scattering timber and dense undergrowth.

50 Enter heavy timber, bears N. and S.

00 Hollow, 40 ft. deep, course NE.

Ascend.

10 Leave heavy timber, bears N. and S. Enter scattering timber and dense undergrowth.

40 Ridge, bears N. and S.

Descend.

00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for the ¼ sec cor., with brass cap, marked

¼ S 18

S 19

1912

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

10 Hollow, 200 ft. deep, course SW.

Ascend.

00 Enter heavy timber, bears N. and S.

37 Intersect the W. bdy. of the Tp. 2.36 chs. N. 0°29'E., of the ¼ sec. cor. on the E. bdy. of sec. 24, heretofore described.

Set an iron post, 3 ft. long, 2 in. in diam., 24 ins. in the ground, for the closing cor. of secs. 18 and 19, with brass cap, marked

T 14 S

S 13 | S 18

S 24 | CC | S 19

R 3 W | R 2 W

1912

from which

A cedar, 10 ins. diam., bears N. 57°E., 28 lks. dist., marked T 14 S R 2 W S 18 BT.

A cedar, 12 ins. diam., bears S. 35°E., 44 lks. dist., marked T 14 S R 2 W S 19 BT.

CHAINS

I destroy all markings on thecor.of secs.13-18-19 and 24,that pertain to R.2 W.

Land,mountainous.

Soil,clay loam with gravel andloosr rock,24 ins.deep, 3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 16.97 chs.

December 10: At this cor.I set off 22°55'S.,on the decl and at 11h.53m.,a.m.,l.m.t.,observe the sun on the meri the resulting lat.is 39° 36'.

John R Steus

U.S.Surveyor.

December 10: At 7h.53m.,a.m.,l.m.t.,I set off 39°36'N., on the lat.arc,22°51'S.,on the decl.arc,and determine a meridian with the solar at the cor.of secs.17-18-19 and 20.

Thence I run

N.0°07'W.,bet.secs.17 and 18.

Descend over mountainous land,through scattering timber and dense undergrowth.

12.00 Hollow,60 ft.deep,course NE.

Ascend.

17.50 Spur,projects NE.

Descend.

36.00 Hollow,60 ft.deep,course NE.

Ascend.

40.00 Set an iron post,3 ft.long; 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 18 | S 17

1912

AINS

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

.00 Ridge,bears NE.and SW.

Descend.

.10 Enter heavy timber,bears E.and W.

.80 Hollow,50 ft.deep,course NE.

Ascend.

.00 Set an iron post,3 ft.long, 2 ins.in diam.,24 ins.in the ground,for the cor.of secs.7-8-17 and 18,with brass cap, marked,

T 14 S R 2 W

S 7	S 8
S 18	S 17

1912

from which

A cedar,7 ins.diam.,bears N.32°E.,160 lks.dist., marked T 14 S R 2 W S 8 BT.

A cedar,6 ins.diam.,bears S.61°E.,110 lks.dist., marked T 14 S R 2 W S 17 BT.

A cedar,10 ins.diam.,bears S.30°W.,181 lks.dist., marked T 14 S R 2 W S 18 BT.

A cedar,10 ins.diam.,bears N.57°W.,142 lks.dist., marked T 14 S R 2 W S 7 BT.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins,deep, 3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 10.90 chs.

December 10+ At this cor.I set off 22°55'S.,on the decl. arc,and at 11h.53m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°37'N.

CHAINS	
	N.89°56'E.,on a random line
	Bet.secs.8 and 17.
40.00	Set a temp.¼ sec.cor.
80.24	Intersect N.and S.line,5 lks N.of thecor.of secs.8-9-16 and 17.
	Thence I run
	S.89°58'W.,on a true line
	Bet.secs.8 and 17.
	Descend over mountainous land through scattering timber and dense undergrowth.
12.00	Road,bears NW.and SE.,in hollow,200 ft.deep,course NW.
	Ascend.
21.00	Spur,projects NE.
	Descend.
33.00	Hollow,50 ft.deep,course NE.
	Ascend.
40.12	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 8 / S 17 1912
	from which
	A cedar,6 ins.diam.,bears N.33°W.,175 lks.dist., marked ¼ S 8 BT.
	A cedar,8 ins.diam.,bears S.67°W.,193 lks.dist., marked ¼ S 17 BT.
57.50	Hollow,75 ft.deep,course NE.
	Ascend.
66.00	Spur,projects NE.
	Descend, through heavy timber bearing NE. and SW.
79.20	Bottom of hollow,50 ft.deep, course NE.
80.24	The cor.of secs.7-8-17 and 18.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.

AINS

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 14.24 chs.

December 10,1912.

Claude L. Hoit.

U.S.Transitman.

For reasons explained on page 54 of these notes,I run

West,on a true line

Bet.secs.7 and 18.

Ascend over mountainous land,through heavy timber.

.50 Ridge,bears N.and S.

Descend.

.00 Hollow,100ft.deep,course SW.

Ascend.

.00 Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked

¼ S 7

S 18

1912

from which

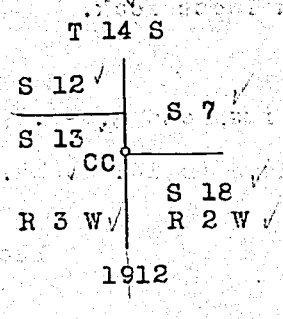
A cedar,16 ins.diam.,bears N.38°30'W.,80 lks.dist., marked ¼ S 7 BT.

A cedar,14 ins.diam.,bears S.42°W.,26 lks.dist., marked ¼ S 18 BT.

.23 Intersect the W.bdy.of the Tp.98 lks.N.0°31'E.,of the ¼ Sec.cor.,on the E.bdy.of secs.13,heretofore described.

Set an iron post,3 ft.long, 2 ins.in diam.,24 ins.in the ground,for the closing cor.of secs.7 and 18,with brass cap,marked

CHAINS



from which

A cedar,6 ins.diam.,bears N.19°E.,37 lks.dist.,

marked T 14 S R 2 W S 7 BT.

A cedar,8 ins.diam., bears S.28°E.,31 lks.dist.,

marked T 14 S R 2 W S 18 BT.

I destroy all markings on the cor.of secs.7-12-13 and 1

that pertain to R.2 W.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep,

3rd rate.

Subsoil,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavy timber on 61.23 chs.

December 10,1912.

John R. Stewar

U.S.Surveyor.

December 11: At 7h.53m.,a.m.,l.m.t.,I set off 39°37'N.

on the lat.arc,22°56'S.,on the decl.arc,and determine

meridian with the solar at the cor.of secs.7-8-17 and

Thence I run

N.0°08'W.,bet.secs.7 and 8.

Ascend over mountainousland,through heavy timber.

7.00 Spur,projects NE.

Descend.

AINS	
.30	Hollow,50 ft.deep,course E.
	Ascend.
.60	Ridge,bears E.and W.
	Descend.
.00	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 7 | S 8 1912
	from which
	A cedar,6 ins.diam.,bears S.35°E.,32 lks.dist., marked ¼ S 8 BT.
	A cedar,24 ins.diam.,bears S.51°W.,19 lks.dist., marked ¼ S 7 BT.
.30	Leave heavy timber,bears NE.and SW.Enter scattering timber and dense undergrowth.
.40	Hollow,50 ft.deep,course NE.
	Ascend.
.00	Ridge,bears NE.and SW.
	Descend.
.00	Set an iron post,3 ft.long,2 ins.diam.,18 ins.in the ground,surrounded by a mound of earth and stone,for the cor.of secs.5-6-7 and 8,with brass cap,marked
	T 14 S R 2 W S 6 | S 5 S 7 | S 8 1912
	from which
	A cedar,8 ins.diam.,bears N.73°E.,78 lks.dist., marked T 14 S R 2 W S 5 BT.
	A cedar,5 ins.diam.,bears S.56°E.,52 lks.dist., marked T 14 S R 2 W S 8 BT.
	A cedar,8 ins.diam.,bears S.34°30'W.,19 lks.dist., marked T 14 S R 2 W S 7 BT.
	A cedar,16 ins.diam.,bears N.24°W.,29 lks.dist., marked T 14 S R 2 W S 6 BT.

CNS

Note: On account of natural obstacles it is impossible to set this cor.over 18 ins.in the ground.

Land,mountainous.

Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.

Subsoil,gravel and clay.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 51.30 chs.

December 11: At this cor.I set off 23°00'S.,on the decl arc,and at 11h.53m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39°37'N.

Claude L. Hes

U.S.Transitman.

December 11: At 7h.53m.,a.m.,l.m.t.,I set off 39°37'N., on the lat.arc,22°56'S.,on the decl.arc,and determine a a meridian with the solar at the cor.of secs.5-6-7 and

Thence I run

N.89°58'E.,on a random line

Bet.secs.5 and 8.

40.00 Set temp.$\frac{1}{4}$ sec.cor.

80.20 Intersect N.and S.line,7 lks.S.of the cor.of secs.4-5-8 and 9.

Thence I run

S.89°55'W.,on a true line

Bet.secs.5 and 8.

Ascend over mountainous land,through scattering timber and dense undergrowth.

4.00 Spur,projects NW.

Descend.

5.00 Hollow,50 ft.deep,course NW.

Ascend.

AINS	
.80	Ridge,bears NW.and SE.
	Descend.
.10	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 5 / S 8 / 1912
	from which
	A cedar,14 ins.diam.,bears N.60°W.,217 lks.dist., marked ¼ S 5 BT.
	A cedar,6 ins.diam.,bears S.64°E.,332 lks.dist., marked ¼ S 8 BT.
.50	Road,bears NE.and SW.
.00	Road,bears NE and SW.
.40	Hollow,50 ft.deep,course SW.
	Ascend.
.20	Spur,projects SW.
	Descend.
.50	Road,bears NW and SE.,in hollow,75 ft.deep,course NW.
	Ascend.
.20	Ridge,bears NW and SE.
	Descend.
.70	Hollow,50 ft.deep,course NW.
	Ascend.
.20	The cor.of secs.5-6-7 and 8.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins.deep, 3rd rate.
	Subsoil,gravel and clay.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Dense undergrowth on 80.20 chs.
	December 11: At this cor.I set off 23°S.,on the decl.arc, and at 11h.53m.,a.m.,l.m.t.,observe the sun on the mer-

CHAINS

idian, the resulting lat. is 39°37'N.

For reasons explained on page 54 of this book, I run West, on a true line

Bet. secs. 6 and 7.

Ascend over mountainous land, through heavy timber.

4.00 Leave heavy timber, bears N. and S. Enter scattering timbe and dense undergrowth.

10.00 Spur, projects NE.

Descend.

15.00 Hollow, 60 ft. deep, course NE.

Ascend.

28.40 Ridge, bears NE. and SW.

Descend.

Enter heavy timber, bears NE. and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 18 ins. in th ground, surrounded by a mound of serth and stone, for th ¼ sec. cor., with brass cap, marked

¼ S 6

S 7

1912

from which

A cedar, 4 ins. diam., bears N.66°E., 76 lks. dist., Marked ¼ S 6 BT.

A cedar, 10 ins. diam., bears S.43°E., 14 lks. dist marked ¼ S 7 BT.

Note: On account of natural obstacles it is impossible set this cor. over 18 ins. in the ground.

45.00 Foot of descent, leave mountainous land, bears NE. and SW

Enter gently rolling land in Tintic Valley.

Leave timber, bears NE. and SW. Enter dense undergrowth.

59.92 Intersect the W. bdy. of the Tp. 26 lks. S.1°25'W., of the ¼ sec. cor., on the E. bdy. of sec. 12, heretofore described

CHAINS

Set an iron post,3 ft.long, 2 ins.in diam.,24 ins.in the ground,for the closing cor.of secs.6 and 7,with brass cap,marked

T 14 S

S 1	
S 12	S 6
CC	
	S 7
R 3 W	R 2 W

1912

raise a mound of stone,2 ft.base,1½ ft.high.E.of cor.

I destroy all markings on the cor .of secs.1-6-7 and 12, that pertain to R.2 W.

Land,gently rolling and mountainous.

Soil,clay loam with gravel and sand,24 ins.deep,2nd and 3rd rate.

Subsoil,clay,gravel and loose rock.

Timber,cedar.

Undergrowth,sage brush and grass.

Heavily timbered land on 20.60 chs.

December 11,1912.

John R Stewart

U.S.Surveyor.

For reasons explained on page 21,of this survey,I run N.0°08'W.,on a true line

Bet.secs.5 and 6.

Descend over mountainous land,through heavy timber.

1.00 Hollow,25 ft.deep,course NW.Leave heavy timber,bears E.& W.

Ascend.Enter scattering timber and dense undergrowth.

7.70 Spur,projects NW.

Descend.

CHAINS	
11.50	Road,bears NW.and SE.,in hollow,60 ft.deep,course NW.
	Ascend.
21.00	Spur,projects NW.
	Descend.
40.00	Set an iron post,3 ft.long, 1 in.in diam.,26 ins.in the ground,for the ¼ sec.cor.,with brass cap,marked
	¼ S 6 | S 5 1912
	raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
47.50	Hollow,50 ft.deep,course NW.
	Ascend.
53.34	Intersect the N.bdy.of the Tp.58.44 chs.N.89°52'E.,of the closing cor.of Tps.13 and 14 S.,R.2 W.,heretofore describe Set an iron post,3 ft.long, 2 ins.in diam.,20 ins.in the ground,surrounded by a mound of earth and stone,for the closing cor.of secs.5 and 6,with brass cap,marked
	T 13 S R 2 W R 3 W S 1 S 31 CC S 6 S 5 T 14 S R 2 W 1912
	raise a mound of stone,2 ft.base,1½ ft.high,S.of cor.
	Note: On account of natural obstacles it is impossible to set this cor.over 20 ins.in the ground.
	Land,mountainous.
	Soil,clay loam with gravel and loose rock,24 ins,deep, 3rd rate.
	Subsoil,gravel,and loose rock.
	Timber,cedar.
	Undergrowth,sage brush and grass.
	Heavily timbered land on 1.00 ch.Dense undergrowth on the rest.

December 11,1912.

Claude L. Hast

U.S. Transitman.

GENERAL DESCRIPTION OF T.14 S.,R.2 W.

This fractional Tp,is in general,mountainous in character and unfit for agricultural purposes,with the exception of the SE portion which lies in Dog Valley,and the NW.cor. or sec.6,which lies in Tintic Valley.Both of these Valleys are very fertile and capable of producing crops without irrigation.

The mountainous portion of this fractional Tp,however,is very suitable for grazing purposes,there being an abundant growth of rich and nutricious grasses,and is used as a winter range by the stock men og Nephi and vicinity.

The soil,ranges from a mixture of clay and gravel with loose rock,in the mountainous portion,to a rich sandy loam in the valleys.

There is no water in any portion of this Tp.

A heavy growth of scub cedars covers the major portion of this fractional Tp.,but they are unfit for any commercial purposes other than fire wood or fence posts.

No indications of coal,oil or mineral of any description were found.

Several wood roads traverse this fractional Tp.leading up into thetimber in the mountainous portion.

There are no settlers nor any improvements in any part of this Tp.

John R. Stewart

U.S.Surveyor.

Claude L. Hoot.

U.S.Transitman.

For table of Latitudes and Departures,see Boundaries of T.14 S.,R.2 W.

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BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, J. P. Stewart and Claude L. Heist, U. S. Transitmen, U. S. Surveyor, during the periods and in the capacities d opposite our several signatures, in surveying all those parts or portions of Tp. 11 S., R. 10 E. 12 S., R 9 E.; Tp. 10 S., R 3 E., and Tp. 14 S., R. 2 W.

e Salt Lake Base & Meridian, in the State of Utah
In books "J." to "P" inclusive

h are represented in the foregoing field notes as having been executed by him, and under his direc- and that said survey has been, in all respects, to the best of our knowledge and belief, well and fully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
T. Harris	Sept. 13, 1912	November 2, 1912	Chainman
Harrison Hurst	Sept 13, 1912	October 5, 1912	Cornerman
Lamball Young	Sept 13 1912	October 31, 1912	Chainman
Stan W. Riley	Sept 13 1912	Dec. 13, 1912	Chainman
Philip Brother	Sept. 13 1912	Dec. 13, 1912	Cornerman
William Stewart	Nov. 1 1912	Dec. 13, 1912	Chainman
Morgan Hurst	Oct. 8, 1912	Dec. 13, 1912	Cornerman
Irvin Stewart	Sept 13 1912	Dec. 13, 1912	Axman
Earl Snelgrove	Sept 13, 1912	Dec. 13, 1912	Flagman
Harold Hyde	Sept. 13 1912	Dec. 13, 1912	Axman
Clarence Clark	Sept 13 1912	Dec. 13, 1912	Chainman
Edward W. Sugamon	Sept 13 1912	Dec. 13, 1912	Flagman

ubscribed and certified to before me on the dates of the final service as shown above.

John P. Stewart
U. S. Surveyor.

6—2761

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FINAL OATH OF UNITED STATES SURVEYOR.

I, John R. Stewart, U. S. Surveyor, do solemnly swear that, in pursu
of special instructions received from the U. S. Surveyor General for Utah
and supplemental special instructions dated July 22, 1911
bearing date of the 25 day of May, 191 1, I have well, faithfully, and tr
in my own proper person, and in strict conformity with said instructions, the Manual of Surve
Instructions, and the laws of the United States, surveyed all those parts or portions of Tp. 11 S.,
Tp. 12 S., R 9 E., Tp. 10 S., R. 3 E., and
Tp. 14 S., R. 2 W.

of the Salt Lak
Base and Meridian, in the State of Utah, which are represent
in books "I" to "P" inclusive
the foregoing field notes as having been executed by me, and under my direction; and I do fur
solemnly swear that all the corners of said survey have been established and perpetuated in strict acc
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surv
General for Utah and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey.

John R. Stewart
U. S. Surveyo

Subscribed by said John R. Stewart, and sworn to before me
this 11 day of April, 191 3

Thomas H
U. S. Surveyor-Gene
for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 191

The foregoing field notes of the survey of

executed by

under his special instructions dated , 191 , having
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

U. S. 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 offi

U. S. Surveyor Gener

6—2761

BOOK A-395

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities ted opposite our several signatures, in surveying all those parts or portions of .....

he ..... Meridian, in the State of .....

ch are represented in the foregoing field notes as having been executed by him, and under his direc- ; and that said survey has been, in all respects, to the best of our knowledge and belief, well and hfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

ubscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

FINAL OATH OF UNITED STATES ~~SURVEYOR~~ TRANSITMAN.

I, Claude L. Heist, U. S. ~~Surveyor~~ Transitman, do solemnly swear that, in pursua
of special instructions received from the U. S. Surveyor General for Utah
bearing date of the 23 day of May, 1911 and supplemental special instructions dated July 22, 1911 I have well, faithfully, and tru
in my own proper person, and in strict conformity with said instructions, the Manual of Survey
Instructions, and the laws of the United States, surveyed all those parts or portions of Township
South, R.10 E.; Township 12 South, R.9 E.; Township 10 South, R.3 E.
and Township 14 South, R.2 West

of the Salt Lake Bas
and Meridian, in the State of Utah, which are represente
the foregoing field notes in books "I" to "P" inclusive as having been executed by me, and under my direction; and I do furt
solemnly swear that all the corners of said survey have been established and perpetuated in strict acc
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surve
General for Utah, and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey.

Claude L. Heist
~~U.S. Surveyor~~
U.S. Transitman.

Subscribed by said Claude L. Heist, and sworn to before me
this 10th day of July, 1913

SEAL

Thomas Bell
U.S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, August 8, 191

The foregoing field notes of the resurvey and survey of the Subdivisional lines of Townshi
No. 14 South, Range No. 2 West of the Salt Lake Base and Meridian,
Utah,

executed by John R. Stewart and Claude L. Heist
under ~~his~~ special instructions dated May 23, 1911, and supplemental special instructions dat July 22, 1911, having
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved. resurveys and

A. C. Thorsen
U. S. 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 offi

U. S. Surveyor Gener

C—2761