Volume

#

R0288

9288

BOOK A-288

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PRELIMINARY OATHS OF ASSISTANTS.

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

....., *Chainman.*

....., *Chainman.*

cribed and sworn to before me this .....
lay of ....., 189

SEAL

WE, ... and .....
olemnly swear that we will well and truly perform the duties of moundmen in the establishment
rners, according to the instructions given us, to the best of our skill and ability, in the survey of
.....

....., *Moundman.*

....., *Moundman.*

cribed and sworn to before me this .....
ay of ....., 189

SEAL

WE, ... and .....
emnly swear that we will well and truly perform the duties of axmen in the establishment of corners
ther duties, according to instructions given us, to the best of our skill and ability, in the survey of
.....

....., *Axman.*

....., *Axman.*

ribed and sworn to before me this .....
ay of ....., 189

SEAL

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

....., *Flagman.*

ribed and sworn to before me this .....
ay of ....., 189

SEAL

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PRELIMINARY OATHS OF ASSISTANTS.

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

....., *Chainman.*

....., *Chainman.*

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

SEAL

.....

.....

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

....., *Moundman.*

....., *Moundman.*

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

SEAL

.....

.....

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

....., *Axman.*

....., *Axman.*

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

SEAL

.....

.....

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

....., *Flagman.*

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

SEAL

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BOOK A-288

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PRELIMINARY OATHS OF ASSISTANTS.

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

....., *Chainman.*

....., *Chainman.*

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

SEAL

.....

.....

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

....., *Moundman.*

....., *Moundman.*

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

SEAL

.....

.....

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

....., *Axman.*

....., *Axman.*

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

SEAL

.....

.....

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

....., *Flagman.*

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

SEAL

.....

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

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

....., *Chainman.*

....., *Chainman.*

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

SEAL

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

....., *Moundman.*

....., *Moundman.*

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

SEAL

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

....., *Axman.*

....., *Axman.*

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

SEAL

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

....., *Flagman.*

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

SEAL

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Township 12 S., *Range* 20 E.

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PRELIMINARY OATHS OF ASSISTANTS.

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

.....

....., *Chainman.*

....., *Chainman.*

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

.....

SEAL

.....

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

.....

....., *Moundman.*

....., *Moundman.*

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

.....

SEAL

.....

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

.....

....., *Axman.*

....., *Axman.*

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

.....

SEAL

.....

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

....., *Flagman.*

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

.....

SEAL

.....

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BOOK A-288

H.J.B.

FIELD NOTES

OF THE RE and RETRACEMENT SURVEY OF THE

NORTH BOUNDARY OF TOWNSHIP 42 SOUTH, RANGE I5 WEST,

and

SOUTH BOUNDARY OF TOWNSHIP 42 SOUTH, RANGE I5 WEST,

Of the Salt Lake Base and *Meridian,*

in the

STATE OF UTAH

AS SURVEYED BY

Mayhew H. Dalley, *United States Deputy Surveyor,*

Under his Contract No. 224, *dated* January 23rd, *189*9.

Survey commenced January IO 1900, ~~189~~

Survey completed January I5th, 1900, ~~189~~

6—151

Retracement S Bdy 4-00.78 ✓
" N " 2.39-31 ✓
Resurvey S Bdy low 1-41-40 ✓
" " " high 39 ✓
" N Bdy high 3.34.69 ✓

BK A-288

NAMES AND DUTIES OF ASSISTANTS.

Max W.Woodbury,	Chainman.
Edward J.Higbee,	Chainman.
David Dix,	Moundman.
Thomas Urie,	Moundman.
David Dix,	Axman.
Thomas Urie,	Axman.
William Macfarlane,	Flagman.

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6—151

PRELIMINARY OATHS OF ASSISTANTS.

We, Max W. Woodbury and Edward J. Higbee

solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the re-survey & retracement of ~~S. bdy. T. 42 S. R. 15 W.~~, N. bdy. T. 42 S. R. 15 W., N. bdy. T. 42 S. R. 16 W., and ~~S. bdy. T. 42 S. R. 16 W.~~ and W. bdy. of T. 42 S., R. 16 W. of the Salt Lake Base and Meridian, State of Utah.

Max W. Woodbury, Chainman.

Edward J. Higbee, Chainman.

Subscribed and sworn to before me this 5th. day of January, A.D. 1900 189

SEAL

My Commission Expires March 20th, 1903

Senora C. Dalley
Notary Public.

We, David Dix and Thomas Urie

solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the re-survey and retracement of ~~S. bdy. T. 42 S. R. 15 W.~~, N. bdy. T. 42 S. R. 15 W., N. bdy. T. 42 S. R. 16 W., and retracement of S. bdy. T. 42 S. R. 16 W. and W. bdy. of T. 42 S., R. 16 W., of the Salt Lake Base and Meridian, State of Utah.

David Dix, Moundman.

Thomas Urie, Moundman.

Subscribed and sworn to before me this 5th. day of January, A.D. 1900 189

SEAL

My Commission Expires March 20th, 1903

Senora C. Dalley
Notary Public.

We, David Dix and Thomas Urie

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 re-survey and retracement of ~~S. bdy. T. 42 S. R. 15 W.~~, N. bdy. T. 42 S. R. 15 W., N. bdy. T. 42 S. R. 16 W., and retracement of S. bdy. T. 42 S. R. 16 W. and W. bdy. of T. 42 S., R. 16 W., of the Salt Lake Base and Meridian, State of Utah.

David Dix, Axman.

Thomas Urie, Axman.

Subscribed and sworn to before me this 5th. day of January, A.D. 1900., 189

SEAL

Senora C. Dalley
Notary Public.

I, William Macfarlane, 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 re-survey and retracement of ~~S. bdy. T. 42 S. R. 15 W.~~, N. bdy. T. 42 S. R. 15 W., N. bdy. T. 42 S. R. 16 W., and retracement of S. bdy. T. 42 S. R. 16 W. and W. bdy. of T. 42 S., R. 16 W., of the Salt Lake Base and Meridian, State of Utah.

William Macfarlane, Flagman.

Subscribed and sworn to before me this 5th. day of January, A.D. 1900., 189

SEAL

Senora C. Dalley
Notary Public.

6—M

Retracement of S.bdy.of T.42 S.,R.I5 W.

Chains.

Retracement commenced January I0,I900,and executed with a W.and L.E.Gurley Light Mountain Solar Transit,for description of which see notes of Survey of S.bdy.of Tp.42 S.,R.I4 W.,Book A.

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 true meridian determined by observation on Polaris,I proceed as follows:

January I0,I900: At the old cor.of Tps.42 and 43 S.,Rs.I4 and I5 W.,as remarked by me in Survey of S.bdy.of Tp.42 S.,R.I4 W.,for cor.of Tps.42 and 43 S.,R.I5 W.,only,See Book A ,; latitude 37° 7' N.;longitude I13° 26' W.;I set off 37° 7' N.on the lat.arc;2I° 53' S.on the decl.arc; and,at 3h p.m.,l.m.t.,determine with the solar a true meridian and mark a point thereof,on a stone firmly set in the ground,5.00 chs. N.of the cor.

At 11h 56 m p.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 wooden plug driven in the ground 5.00 chs. N.of my station.

January I0,I900.

January II,I900:At 7h a.m.,l.m.t.,I lay off the azimuth of Polaris,I° 32',to the East,and mark the True Meridian thus determined,by cutting a small groove in the stone set January I0,on which the true Meridian falls 0.4 ins.West of the mark determined by the solar.

At 8h a.m.,l.m.t.,I set off 37° 7' N. on the lat.arc;2I° 44' 30" S. on the decl.arc;and mark a point in the true meridian determined with the solar, by a cross on the stone already set 5.00 chs. N.of my station;this mark falls 0.3 ins.W.of the True Meridian established by the Polaris observation.

Chains.	
	The solar apparatus by p.m. and a.m. observations defines positions for true meridians,respectively about 0' 21" East and 0' 16" W.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° 05' E.;the angle thus determined reduced by the table,page 100,gives the mean mag. decl. 16° 03' E.
	For reasons heretofore given in Book E ,I survey this Township and make returns thereof out of the regular order of survey named in the Contract.
	By retracing the East boundary of this Township as recorded in the notes of retracement of W.bdy.of T.42 S.,R.14 W.,Book B ,I find that the exteriors of the Tp.will not close;therefore,preliminary to commencing the subdivisions of the unsubdivided portion of the Township,I retrace the old exteriors as follows:
	From the Tp.cor already described,I run West on a blank line,re-tracing S.bdy.of the Tp., bet.secs. 1 and 36.
40.00	Find no trace of the old 1/4 sec.cor.after diligent search.
79.92	Fall 52 lks.N.of the old cor.of secs.1,2,35 and 36, which is a white sandstone,5x12x4 ins.above ground, marked and witnessed as described by the Surveyor General.The course of this line is therefore S.89° 38' W.
	Thence I run N.89° 38' E.on a true line,bet.secs. 1 and 36.
	Ascend over nearly level land;in clay gravelly soil; through scattering greasewood and iron wood undergrowth.
0.46	Trail bears N.10° W.and S.10° E.
9.08	Road bears N.10° W.and S.10° E.
13.92	Enter rolling land bears N.E.and S.W.

Chains.

24.I8 Wash I5 ft.wide and 4 ft.deep drains S.40o W. about 8.00 chs.;thence N.W.;and bears N.30o.E.about I I/2 mi.

39.96 Set a yellow granite boulder stone I6xI6xI4 ins.,11 ins.in the ground,for re-established I/4 sec.cor.,marked I/4 on N.face;and raised a mound of stone 2 ft.base, I I/2 ft.high,N.of the cor. Pits impracticable. Cor.in a small wash which drains S.80o W.

55.33 Wash about IO ft.wide and 3 ft.deep,drains N.75° W. thence ascend over low broken foot hills;in clay gravelly and gypsum soil;leave clay gravelly soil bears N.E. and S.W.

79.92 The cor.of Tps.42 and 43 S.,R.I5 W.

Land level,rolling and broken.

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

No timber.

Undergrowth,scattering greasewood and iron wood.

Good grazing.

From the cor.of secs.I,2,35 and 36,heretofore described,I continue retracement of S.bdy.as follows: West,bet.secs.2 and 35.

40.00 I find no trace of the old I/4 sec.cor after diligent search.

80.20 Fall 45 lks.N.of the old.cor.of secs.2,3,34 and 35, which is a white sandstone I3xIOx4 ins.,firmly set and marked with 4 notches on the W.and 2 notches on the E.edges,in a lane running E.and W.through Washington field.

The course of this line is therefore S.89o 41' W.

Thence I run,

N.89° 41' E.on a true line bet.secs.2 and 35.

Over level ground in center of lane in Washington field;in clay soil.

20.20 Center of lane bears N.and S.

40.IO Set a gray sandstone I8xIOx4 ins.,I2 ins.in the ground for re-established I/4 sec.cor.,marked I/4 on N.

Chains.	
	face;dug pits 18x18x12 ins.,E.and W.of stone 3 ft. dist.,and raised a mound of earth,3 1/2 ft.base, 1 1/2 ft.high,N.of cor.
	Cor.in center of lane which bears E.and W.
47.75	Washington field canal about 15 ft.wide and 5 ft. deep,drains S.30° W.
51.30	Wire fence on E.side of Washington field and lane, bears N.25° E.and S.25° W.;leave field and lane.
51.50	Road bears N.25° E.and S.25° W.
80.20	The cor.of secs.1,2,35 and 36.
	Land level.
	Soil,rich clay;2nd.rate.
	No timber.
	Land in the field N.and S.of line used for farming, pasturage and fruit culture.
	I continue retracement of the S.bdy.of the Tp.from the cor.of secs.2,3,34 and 35,as follows:
	West,bet.secs.3 and 34.
40.00	Find no trace of the 1/4 sec.cor.after diligent search.Set temp.1/4 sec.cor.
80.20	Fall 50 lks.N.of the old cor.of secs.3,4,33 and 34, which is a white sandstone 20x18x12 ins.,marked and witnessed as described by the Surveyor General.
	The course of this line is therefore S.89° 39' W.
	Thence I run
	N.89° 39' E.on a true line bet.secs.3 and 34.
	Over top of broken ridges;in clay and stony ground; through scattering greasewood and ironwood undergrowth.
6.30	Hollow about 25 ft.wide and 50 ft.deep drains N.45° W.
8.26	Trail bears N.50° W.and S.50° E.
12.36	Hollow about 50 ft.wide and 50 ft.deep,drains N.55° W.
35.20	Descend E.slope of ridge bears S.55° W.and N.55° E.
39.00	Foot of ridge about 60 ft.below the top of ridge, bears N.E.and S.W.;descend more gradual.
40.10	Set a gray sandstone 20x12x5 ins.,15 ins.in the ground,

Chains. for re-established I/4 sec.cor.,marked I/4 on N.face;and raised a mound of stone 2 ft.base,I I/2 ft.high,N. of cor. Pits impracticable.

January 11,I900:At this cor.I set off 2I045' 30" S.on the decl.arc;and,at 0h 8m p.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37° 7' N.

42.24 Road on W.end of lane in Washington field bears N. I0° E. about I0.00 chs,thence N.W.along the foot of ridges;and S.I0° W.;about 7 chs.,thence S.

Thence over level land in lane;in clay soil;leave scattering undergrowth.

44.00 Cross bridge over canal about 8 ft.wide and 4 ft. deep,drains N.I0.00 chs.,thence N.W.along the foot of ridges.

60.20 Lane in Washington field bears N.and S.

80.20 The cor.of secs.2,3,34 and 35.

39/41.20 Land broken ridges and level.

Soil,W.I/2 clay,gravelly and stony;3rd.rate. E.I/2 clay;2nd.rate.

No timber. Mountainous land on 39.00 chs.

Land on N.and S.side of lane occupied and used for farming,pasturage and fruit culture,and is very rich. The land is irrigated with waters of the Rio Virgin, carried to the fields through Washington canal.

From the cor.of secs.3,4,33 and 34,I continue retracement of the S.bdy.of the Tp.as follows:

West,bet.secs.4 and 33.

Over top of mountain and broken ridges;in sandy-stony ground;through scattering sage and greasewood undergrowth.

40.I3 Fall I0 lks.N.of the old I/4 sec.cor.,which is a granite stone I4xI0x9 ins.,marked and witnessed as described by the Surveyor General.

80.23 Fall 7 lks.N.of the old cor.of secs.4,5,32 and 33, which is a white sandstone 30xI2xI0 ins.,marked and witnessed as described by the Surveyor General.

Chains.	
	The course of this line is therefore S.89° 57' W. Land,mountainous and broken. Soil,sandy and stony;3rd.and 4th.rate. Undergrowth,scattering sage and greasewood. No timber. Mountainous land on 80.23 chs. January 11,1900.
	January 12,1900:At 8h a.m.,l.m.t.,I set off 37° 7' N.on the lat.arc;21° 35' S.on the decl.arc;and determine a true meridian with the solar,at the cor. of secs.4,5,32 and 33,heretofore described. Thence I run West,retracing line bet.secs.5 and 32. Over top of mountain and broken ridges;in sandy and stony ground;through scattering sage and greasewood undergrowth.
40.02	Fall 39 lks.N.of the old 1/4 sec.cor.,which is a white sandstone 14x10x8 ins.,marked and witnessed as described by the Surveyor General.
43.00	Descend over W.slope of mountain,bears N.70° E.and S. 70° W.
44.50	Foot of mountain about 75 ft.below the top,bears N.75° E.and S.75° W.
45.11	Fall 32 lks.N.of the old meander cor.of fractl.secs. 5 and 32,on left bank of Rio Virgin,which is a blue sandstone 12x10x6 ins.,marked and witnessed as described by the Surveyor General.
80.00	Point for cor.of secs.5,6,31 and 32 falls in the Rio Virgin and is missing. Land,mountainous,broken and river bottom. Soil,sandy-stony,and sandy-gravelly;4th.and 2nd.rate. No timber. Sage and greasewood undergrowth on ridges;scattering willows in river bottom. Mountainous land on 44.50 chs. River shallow but very swift.

Retracement of S.bdy.of T.42 S.,R.I5 W.-Continued.

Chains.	
	From point for cor.secs.5,6,3I and 32,in the Rio Virgin,I continue my line West,retracing line bet.secs.6 and 3I. Over nearly level land,through scattering willows, in sandy and gravelly soil.
30.60	Fall 60 lks.N.of the old meander cor.of fractl.secs. 6 and 3I on right bank of the Rio Virgin,which is a sandstone I8xI2xI0 ins.,marked and witnessed as described by the Surveyor General.
	Enter valley of St.George which bears N.
40.60	Fall 68 lks.N.of the old I/4 sec.cor.,which is a red sandstone I8x6x5 ins.,marked and witnessed as described by the Surveyor General.
47.00	Enter field bears N.and S.
62.00	Valley bears N.and S.
68.00	Center of main avenue leading from St.George bears S.
79.00	Irrigation ditch bears N.and S.,leave field.
80.63	Intersect W.bdy.of Tp.(Pine Valley Guide Meridian), 89 lks.N.of the cor.of Tps.42 and 43 S.,Rs.I5 and I6 W.,which is a black lava stone I0x8x8 ins.above ground,firmly set,and marked with 6 notches on N.S. E.and W.edges.
	The course of the line on the last two miles is therefore S.89° 4I' W.
	Land on last mile nearly level.
	Soil in river bottom and field rich sandy,gravelly and loamy;2nd.and Ist.rate.
	No timber.
	Scattering willows along the river bottom and in the fields.
	January I2,I900:At this Tp.cor.I set off 32I° 36' S. on the decl.arc;and,at 0h 8m p.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°7' N.
	As this Tp.cor.is without witness monument,I witness same as follows:Raised a mound of stone 2 ft. base,I I/2 ft.high,S.of cor. Pits impracticable.
	[illegible] 43 S.January I2,I900.

GENERAL DESCRIPTION.

For General Description see Notes of the subdivisions of this Tp.

January I2,I900.

Mayhew H. Dalley

U.S.Deputy Surveyor.

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Retracement of N.Bdy.of T.42 S.,R.I5 W.

Chains. Retracement commenced January I3,I900,and executed with a W.and L.E.Gurley Light Mountain solar Transit,for description of which see notes of Survey of S.bdy.of T.42 S.,R.I4 W.,Book A .

For complete Solar Test see notes of Retracement of S.bdy.of T.42 S.,R.I4 W.,Book A .

By retracing the E.,S.and W.boundaries of this Township,as recorded in Notes of Retracement of W. bdy.of T.42 S.,R.I4 W.,Book B ,and in Notes of Retracement of S.and W.boundaries of T.42 S.,R.I5 W.,Books N and O respectively,I find that the Exteriors of the Tp.will not close;therefore,I continue retracement of old exteriors as follows:-

I begin at the temporary cor. to Tps.4I and 42 S., Rs.I5 and I6 W.,established by me in Retracement of W.bdy.of this Tp.,Book O ,which is I4.30 chs. E.of the old Tp.cor.,heretofore described.

Thence I run

East on a blank line bet.secs.6 and 3I.

26.68 Fall 22 lks.N.of the old I/4 sec.cor.,which is a red sandstone I0x8x7 ins.above ground,marked and witnessed as described by the Surveyor General.

69.44 Fall II lks.N.of the old Cor.of secs.5,6,31 and 32, which is a gray sandstone 12x4x7 ins.above ground, marked and witnessed as described by the Surveyor General.

I continue my line

East bet.secs.5 and 32.

40.90 Fall 2 lks.N.of the old I/4 sec.cor.,which is a red sandstone 8x6x6 ins.,above ground,marked and witnessed as described by the Surveyor General.

82.43 Fall 25 lks.N.of the old cor.of secs.4,5,32 and 33, which is a gray sandstone I0x8x7 ins.above ground, marked and witnessed as described by the Surveyor General.

East bet.secs.4 and 33.

40.64 Fall 34 lks.N.of the old I/4 sec.cor.,which is a red sandstone I2x5xI0 ins.above ground,marked and

Chains	
	witnessed as described by the Surveyor General.
82.I4	Fall 74 lks.N.of the old cor.of secs.3,4,33 and 34, which is a gray sandstone I2x6x7 ins.above ground, marked and witnessed as described by the Surveyor General.
	East bet.secs.3 and 34.
40.68	Fall 60 lks.N.of the old I/4 sec.cor.,which is a blue lava cinder I0x6x6 ins.above ground,marked and witnessed as described by the Surveyor General.
8I.I8	Fall 74.lks.N.of the old cor.of secs.2,3,34 and 35, which is a red sandstone I0x4x6 ins.above ground, marked and witnessed as described by the Surveyor General.
	East bet.secs.2 and 35.
4I.37	Fall 89 lks.N.of the old.I/4 sec.cor.,which is a red sandstone 7x5x7 ins.above ground,marked and witnessed as described by the Surveyor General.
76.86	Fall I0I lks.N.of the old cor.of secs.1,2,35 and 36, which is a red sandstone I0x4x5 ins.above ground, marked and witnessed as described by the Surveyor General.
	East bet.secs.1 and 36.
4I.2I	Fall 106 lks.N.of the old I/4 sec.cor.,which is a red sandstone I0x4x6 ins.above ground,marked and witnessed as described by the Surveyor General.
8I.95	Fall 125 lks.N.of the old cor.of Tps.4I and 42 S.,Rs. I4 and I5 W.,heretofore described.
	January I3th,I900.

I begin at the cor.of Tps.4I and 42 S.,Rs.I4 and I5 W.,heretofore described,and retrace the N.bdy.of the Tp.as follows:

January I5,I900:At this cor.I set off 37° I2' N. on the lat.arc.;2I°3' 30" S.on the decl.arc;and at 8h a.m.,l.m.t.,determine a true meridian with the solar.

Thence I run

N.89°44' W.on a true line bet.secs.I and 36.

Ascend gradually over top of sandstone mountain,in

Retracement of N.bdy.of T.42 S.,R.I5 W.

Chains. sandy,stony ground,through medium dense greasewood and iron wood,and scattering cactus undergrowth.

7.32 Road bears N.I5° E.and S.I5° W.

40.74 Intersect the I/4 sec.line at the old I/4 sec.cor. heretofore described.

I continue measurements running N.89° 52" W.on a true line,knowing that it will be necessary to set a new cor.of secs.I,2,35 and 36, on line and equi-distant bet.the I/4 sec.cors.on N. boundaries of secs.I and 2.

7I.I0 Top of ascent of mountain,about I50 ft.above the Tp. cor.,bears S.80° W.and N.85° E.;descend over N.W. slope of mountain.

79.09 Set a red sandstone I7x8x6 ins.,II ins.in the ground for new cor.of secs.I,2,35 and 36,marked with I notch on the E.and 5 notches on the W.edges;and raised a mound of stone 2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.

The cor.is on N.W.slope of high sandstone mountain, about I00 ft.below the top of mountain.

I destroy all traces of the old cor.of secs.I,2,35 and 36;which bears S.89°I8' W.,2.86 chs.distant.

Land mountainous.

Soil,sandy and stony;2nd.and 3rd.rate.

No timber.

Undergrowth and grasses afford good grazing..

Mountainous land on 79.09 chs.

N.89° 52' W.on a true line bet.secs.2 and 35.

Descend rapidly over N.W.slope of high sandstone and sandy mountain;through scattering greasewood, sage,iron wood and cactus undergrowth.

38.35 Intersect the I/4 sec.line at the old I/4 sec.cor. heretofore described.

I continue measurement running N.89° 47' W.on a true line.

59.00 Wash at foot of mountain about 8 ft.wide and 6 ft. deep drains S.80° W.Road in bottom of wash bears N.

Chains.	
61.40	80° E.winding through narrow ravine,and S.80° W. Same wash about 8 ft.wide and 4 ft.deep drains N.70 W. Road in bottom of wash follows course of wash.Descend more gradually over broken foot hills.
68.90	Wood road from Washington bears N.80° E.and enters wash about 1.00 ch.N.,and S.70° W.
69.90	Wash about 60 ft.wide and 4 ft.deep drains S.70° W.
79.72	The old cor.of secs.2,3,34 and 35,heretofore described.
	Land mountainous and broken.
	Soil sandy and stony;2nd.3rd.and 4th.rate.
	No timber.
	Vegetation,undergrowth and native grasses afford fair grazing.
	Mountainous land on 79.72 chs.
	N.89° 48' W.on a true line bet.secs.3 and 34.
	Descend gradually in sandy soil covered with sandstone and volcanic boulders;through scattering iron wood and greasewood undergrowth.
.40	Road from Washington wood hills bears N.and S.
.70	Old road bears N.and S.
2.00	Wash about 6 ft.wide and 4 ft.deep drains S.about 3.00 chs.,thence South Westerly.
	Ascend S.E.slope of foot of volcanic mountain.
12.50	Wash about 10 ft.wide and 8 ft.deep drains S.80° W.
20.00	Begin abrupt ascent over broken ridges.
29.20	Trail bears N.and S.
29.50	Wash about 20 ft.wide and 5 ft.deep drains S.
	Ascend more gradually on E.and S.E.slope of black ridge,bears N.and S.
40.50	Intersect the 1/4 sec.line at the old 1/4 sec.cor. heretofore described.
	Land mountainous and broken.
	Soil sandy stony and rocky;3rd.and 4th.rate.
	No timber.
	Shrubbery and grasses afford fair grazing.
	Mountainous land on 40.50 chs.

Resurvey of N.bdy.of T.42 S.,R.15 W.

Chains. By retracing the N.bdy.of the Tp.I find the same to be defective in alinement and measurement.No subdivisional lines having been closed.on either side of the West 3.1/2 miles thereof,I resurvey this part of the Township as follows:-

I begin at the 1/4 sec.cor.bet.secs.3 and 34,heretofore described,thence I run

West on re-survey line bet.secs.3 and 34.

Ascend on East slope of volcanic mountain;in clay, sandy and stony ground;through scattering greasewood and iron wood undergrowth.

16.50 Begin abrupt ascent of black volcanic ridge or mountain,bears N.and S.75° W.

19.50 A volcanic knoll about 300 ft.high bears N.about 30.00 chs.

32.00 Point of lava ridge about 300 ft.above the 1/4 sec. cor.,bears N.E.;thence along the S.face of volcanic ridge over large volcanic boulders.

34.50 Begin to descend over S.W.slope of ridge

40.00 Set a lava stone 18x10x4 ins.,12 ins.in the ground, for cor.of secs.3,4,33 and 34,marked with 3 notches on E.and W.edges;and raised a mound of stone,2 ft. base,1 1/2 ft.high,W.of cor.Pits impracticable.

I destroy all traces of the old cor.of secs. 3,4,33 and 34,heretofore described,which bears S.78° 22' W. 70 lks.dist.

Land mountainous and broken.

Soil,sandy,clay and stony;4th.rate.

No timber.

Mountainous land on 40.00 chs.

January 15,1900:At this cor.I set off 21° 4' S.on the decl.arc;and at 0^h 9^m,p.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°12' N.

West on Re-survey line bet.secs.4 and 33.

Over steep and broken South slope of lava bench or ridge;through scattering greasewood and ironwood

Resurvey of N.bdy.of T.42 S.,R.15 W.

Chains.	
	undergrowth.Descend.
1.25	Dugway road from Washington to the wood hills, bears N.W.and S.E.
5.68	Foot of descent about 25 ft.below the sec.cor., bears N.W.and S.E. Ascend S.E.slope of ridge.
16.00	Point of lava bench or ridge about 300 ft.high , bears N.70° E.and W.;thence along the S.and S.W. slope of ridge.
20.70	Descend abruptly on S.W.slope of ridge bears N.W.and S.70° E.
40.00	Set a lava stone 14x10x5 ins.,10 ins.in the ground, for new 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high N.of cor. Pits impracticable. I destroy all traces of the old cor.which bears N.83° 10' W.,2.20 chs.dist.
41.58	Wash about 8 ft.wide and 6 ft.deep drains S.30° W. Ascend on S.and S.E.slope of ridge.
68.50	Ravine 60 ft.wide and 20 ft.deep drains S.
73.40	Old wood road from Washington to the wood hills bears S.50° E.and N.50° W.
77.66	Wood road from Washington to the cedars bears S.50° W.about 10.00 chs.,thence S.E.;and N.50° E.and joins last named road at about 5.00 chs.dist.
80.00	Set a blue lava stone 20x10x8 ins.,15 ins.in the ground,for cor.of secs.4/5/32,and 33 ,marked with 4 notches on the E.and 2 notches on the W.edges;and raised a mound of stone 2 ft.base,1 1/2 ft.high,W. of cor. Pits impracticable. I destroy all traces of the old cor.of secs.4,5,32 and 33,which bears N.82°53' W.,2.84 chs.dist.
	Land mountainous and broken. Soil,sandy,clay and stony;4th.rate. No timber, Mountainous land on 80.00 chs.

Chains. West on Re-survey line bet.secs.5 and 32.

Over broken lava ridges on S.E.and S.slope of lava bench or ridge;in clay,sandy and stony ground;through scattering iron wood undergrowth.

21 65 Ascend.

23.65 Ravine about 60 ft.wide and 50 ft.deep drains S.

30 25

32.25 Top of ascent on E.side of lava bench about 150 ft. above the sec.cor.,bears N.and S.

Descend over top of bench and broken lava ridges.

40.00 Set a volcanic stone 18x10x8 ins.,12 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high,N. of cor.Pits impracticable.

I destroy all traces of the old 1/4 sec.cor,,which bears N.82° 35' W.,4.39 chs.dist.

48 85

50.85 Trail bears N.and S.

50 60

52.60 Creek in bottom of hollow about 4 links wide and six inches deep runs from Pine Valley Mountains South Westerly to St.George.This creek is fed by the melting of snow in the mountains.

Ascend on E.slope of hollow.

65 90

67.90 Old wood road bears N.and S.

67 65

69.65 Dry water ditch made for carrying water from Pine Valley mountains to St.George,drains S.-about 3 ft. wide and 2 ft.deep.

69 85

69.85 Road from St.George and Washington to the wood hills,bears S.20° W.and N.

72 25

72.25 Descend gradually on E.slope of hollow,bears S.10° W.and N.10° E.

75 55

77.55 Bottom of hollow about 25 ft.deep drains S.

80.00 Set a volcanic stone 17x12x4 ins.,12 ins.in the ground,for cor.of secs.5,6,31 and 32,marked with 5 notches on the E.and 1 notch on the W.edges;and raised a mound of stone 2 ft.base,1 1/2 ft.high W. of cor. Pits impracticable.

I destroy all traces of the old cor.of secs.5,6,31 and 32,which bears N.84°38' W.,5.27 chs.distant.

Land mountainous and broken ridges.

Soil,sandy,clay and stony;4th.rate.

Grasses and shrubbery on the benches afford fair

Chains.	
	grazing.
	Mountainous land on 80.00 chs.
	West on Resurvey line bet.secs.6 and 31.
	Ascend over top of lava bench;through scattering greasewood,sage and iron wood undergrowth;in sandy and clay soil and stony ground.
10.05	Begin rapid descent over volcanic ledges on W.slope of lava bench,bears N.and S.
18.25	Bottom of hollow at foot of volcanic ridge,about 100 ft.below the top of ridge,bears N.and S.
	Ascend E.slope of red sandstone ridge and ledges.
35.25	Top of ridge about 75 ft.high,bears N.and S.30° W.
38.25	Descend on W.slope of ridge.
40.00	Set a red sandstone 20x10x8 ins.,15 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high N.of cor. Pits impracticable.
	I destroy all traces of the old 1/4 sec.cor.,which bears N.87° 18' W.,8.02 chs.dist.
44.00	Hollow about 50 ft.wide and 20 ft.deep drains S.40°W.
	Ascend on E.slope of ridge and hollow.
48.01	Top of ridge about 35 ft.high,bears N.10° E.and S.10° W.;descend on W.slope of rocky ridge.
54.25	Wash near East foot of volcanic mountain or ridge, about 40 ft.wide and 10 ft.deep,drains S.40° W. Foot hills bear N.and S.40° W.;ascend rapidly over S.E.and S.slope of rocky volcanic ridge.
67.75	Top of volcanic ridge or mountain,about 150 ft.high, bears N.about 10.00 chs.,thence N.E.,and S.85° W.; thence along the S.edge of volcanic ridge or bench.
74.69	Intersect Pine Valley Guide Meridian 60 lks.S.of temporary cor.previously set,where I set a volcanic stone 20x12x5 ins.,15 ins.in the ground,for cor.of Tps.41 and 42 S.,Rs.15 and 16 W.,marked 41 S.on N.E., 15 W. on S.E.,42 S.,on S.W.,and 16 W.on N.W.faces, with 6 notches on each edge;and raised a mound of stone, 2 ft.base,1 1/2 ft.high,S.of cor. Pits

Resurvey of N.bdy.of Tp.42 S.,R.I5 W.

Chains. impracticable.

I destroy all traces of the old cor of Tps.4I and 4 S.,Rs.I5 and I6 W. Also of temporary corner.

Land mountainous and broken.

Soil sandy,clay and stony;3rd.and 4th.rate.

No timber.

Shrubbery and grasses afford good grazing when supply of moisture is sufficient.

Mountainous land on 74.69 chs.

January I5,I900.

GENERAL DESCRIPTION.

For General Description see notes of the subdivisions of this Township.

January I5,I900.

Mayhew H. Dalley
U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

....., United States Deputy Surveyor, to assist in running, measuring, a marking the lines and corners described in the foregoing field notes of the survey of .....

.....

showing the respective capacities in which they acted:

For final affidavits see book S. H. 42 S. R. 16 W.

....., *Chainman.*

....., *Chainman.*

....., *Moundman*

....., *Moundman*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in surveying al those parts or portions of the .....

.....

.....

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

..... meridian, ... of ....., which are represente 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 .....

For final affidavits see book S. H. 42 S. R. 16 W.

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

Subscribed and sworn to before me this .....

day of ....., 189

SEAL

.....

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor, do only swear that, in pursuance of a contract received from Jacob B. Blair, United States Surveyor General for Utah, bearing date of the 23 day of January, 1899, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed, retraced all those parts or portions of the North & South Boundaries of Township 42 South Range 15 West of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed, retraced by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey, retracement; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me this 31st day of May 1902, 189

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17, 1902, 189

The foregoing field notes of the survey, retracement of the North & South Boundaries of Township 42 South Range 15 West of the Salt Lake Base & Meridian Utah

executed by Mayhew H. Dalley under his contract No. 224, dated January 23, 1899, having been carefully examined, and the necessary corrections and explanations made, the said field notes, and the surveys, retracement they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

United States Surveyor General.

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BOOK A-288

FIELD NOTES

OF THE RE SURVEY and Retracement OF THE

WEST BOUNDARY OF T. 42 S., R. I5 W.

or

PINE VALLEY GUIDE MERIDIAN

Through

Townships No. 42 South

Between Ranges Nos. I5 and I6 West

of the

Of the Salt Lake Base and *Meridian,*

in the

STATE OF UTAH.

AS SURVEYED BY

Mayhew H. Dalley, *United States Deputy Surveyor,*

Under his Contract No. 224, *dated* January 23rd., *189*9

Re-Survey commenced January I2th, I900., ~~*189*~~

Re-Survey completed January I6th, I900., ~~*189*~~

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M Chs Ibs

Y. M. Resurvey high 2-42-99 ✓

" " low 2-00-20 ✓

Retracement 1-40-55 ✓

NAMES AND DUTIES OF ASSISTANTS.

Edward J.Higbee,	Chainman.
Max W.Woodbury,	Chainman.
William Macfarlane,	Chainman.
David Dix,	Chainman.
Heber Dalley,	Moundman.
Thomas Urie,	Moundman.
Heber Dalley,	Axman.
Thomas Urie,	Axman.
Hillman Dalley,	Flagman.

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INDEX DIAGRAM.

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Meanders Page

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Edward J.Higbee Max W.Woodbury and David Dix&William Macfarlane

olemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the n over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that vill report the true distances to all notable objects, and the true lengths of all lines that we assist in suring, to the best of our skill and ability, and in accordance with instructions given us, in the re survey of retracement of W.bdy.of T.42 S.,R.15 W.(Pine Valley Guide Mer- an)of the Salt Lake Base and Meridian,Utah.

ward J. Higbee (Chainman) Max W. Woodbury, Chainman.

David Dix, Chainman.

William Macfarlane Chainman

scribed and sworn to before me this 5th. day of January,A.D.1900. 189

Senora C. Dalley

Notary Public.

SEAL My Commission Expires March 20th, 1903

WE, I.Heber Dalley and Thomas Urie

olemnly swear that we will well and truly perform the duties of moundmen in the establishment orners, according to the instructions given us, to the best of our skill and ability, in the re survey of d retracement of W.bdy.of T.42 S.,R.15 W.(Pine Valley Guide Mer- ian)of the Salt Lake Base and Meridian,Utah.

Heber Dalley, Moundman.

Thomas Urie, Moundman.

scribed and sworn to before me this 5th. day of January,A.D.1900 189

Senora C. Dalley

Notary Public.

SEAL My Commission Expires March 20th, 1903

WE, I.Heber Dalley and Thomas Urie

olemnly swear that we will well and truly perform the duties of axmen in the establishment of corners other duties, according to instructions given us, to the best of our skill and ability, in the re survey of d retracement of W.bdy.of T.42 S.,R.15 W.(Pine Valley Guide Mer- ian.)of the Salt Lake Base and Meridian,Utah.

Heber Dalley, Axman.

Thomas Urie, Axman.

scribed and sworn to before me this 5th. day of January,A.D.1900. 189

Senora C. Dalley

Notary Public.

SEAL My Commission Expires March 20th, 1903

I, Hillman Dalley, do solemnly swear that I will well and truly form the duties of flagman according to instructions given me, to the best of my skill and ability, in the vey of and retracement of W.bdy.of T.42 S.,R.15 W.(Pine Valley Guide ridian),of the Salt Lake Base and Meridian,Utah.

Hillman Dalley, Flagman.

scribed and sworn to before me this 5th. day of January,A.D.1900 189

Senora C. Dalley

Notary Public.

SEAL My Commission Expires March 20th, 1903

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Retracement of W.bdy.of T.42 S.,R.I5 W.(Pine Valley Guide Meridian

Chains. Retracement commenced January I2,I900,and executed with a W.and L.E.Gurley Light Mountain Solar Transit,for description of which see notes of Survey of S.bdy.of T.42 S.,R.I4 W.,Book A .

For complete solar test see notes of Retracement of S.bdy.of T.42 S.,R.I5 W.,Book N . .

By retracing the W.bdy.of T.42 S.,R.I4 W.,and the S.bdy.of this Tp.,I find that the Exteriors of the Tp.will not close;therefore,I continue retracement of old exteriors as follows:

From the cor.of Tps.42 and 43 S.,Rs.I5 and I6 W., heretofore described in notes of Retracement of S. bdy.of T.42 S.,R.I5 W.,Book N. ,I run

North on a blank line bet.secs.31 and 36.

40.00 Find no trace of the old I/4 sec.cor.after diligent search.

80.00 No trace of the old cor.of secs.25,30,3I and 36 can be found after diligent search.

I continue my line

North bet.secs.25 and 30.

I20.00 Find no trace of the old I/4 sec.cor.after diligent search.

I60.20 Fall 2.00 chs.E.of the old cor.of secs.I9,24,25 and 30,which is the stump of a cedar post,I0 ins.diameter,about I8 ins.in the ground,and 6 ins.above ground,in Robert Mickel's City Lot in St.George City This stump,Mr.Mickel declares in positive terms is the part of the original post,and in place.Mr.Macfarlane,County Surveyor,also claims this to be the original corner post and in place.

From the cor.of secs.I9,24,25 and 30,heretofore described,I run

North,bet.secs.I9 and 24.

40.10 Fall 64 lks.E.of the old I/4 sec.cor.,which is a red sandstone I0x6x6 ins.above ground,marked and witnessed as described by the Surveyor General.

80.40 Fall 131 lks.E.of the old cor.of secs.I3,I8,I9 and

Chains.	
	24,which is a red sandstone,I2x3x7 ins.above ground, marked and witnessed as described by the Surveyor General.
	From the cor.of secs.I3,I8,19 and 24,heretofore described,I run
	North bet.secs.I3 and I8.
40.I5	Fall 50 lks.E.of the old I/4 sec.cor.,which is a red sandstone I8xI8xI2 ins.,I2 ins.deep in a mound of stone,marked and witnessed as described by the Surveyor General.
	January I2,I900.
	Knowing that no subdivisional lines have been closed on either side of the last two and one-half miles of this boundary,and that a re-survey thereof will probably be necessary,I begin at the I/4 sec. cor.bet.secs.I3 and I8,heretofore described; and retrace this portion of the line as follows:-
	January I3,I900:At this cor.I set off 37°10' N.on the lat.arc;2I° 25' S.on the decl.arc;and determine a true meridian with the solar,at 8h a.m.,l.m.t.
	Thence I run
	North,retracing line bet.secs.I3 and I8.
40.II	Fall I6 lks.E.of the old cor.of secs.7,I2,13 and I8, which is a red sandstone 30xI2x6 ins.,2I ins.deep in a mound of stone,marked and witnessed as described by the Surveyor General.
	I continue my line
	North,retracing line bet.secs.7 and I2.
80.22	Fall 53 lks.E.of the old I/4 sec.cor.,which is a red sandstone I2x5x6 ins.above ground,marked and witnessed as described by the Surveyor General.
I20.5I	Fall 70 lks.E.of the old cor.of secs.1,6,7 and I2, which is a red sandstone 30x8x3 ins.,2I ins.deep in a mound of stone,marked and witnessed as described by the Surveyor General.
	I continue my line

Chains.	
	North,retracing line bet.secs.I and 6.
I60.69	Fall 81 lks.E.of the old I/4 sec.cor.,which is a red sandstone I6x9x7 ins.,I0 ins.deep in a mound of stone,marked and witnessed as described by the Surveyor General.
203.59	Intersect the N.bdy.of the Tp.I4.30 chs.E.of the old cor.of Tps.4I and 42 S.,Rs.I5 and I6 W.,which is a trachyte stone I0x6x5 ins.above ground,marked and witnessed as described by the Surveyor General. Set temporary cor.of Tps.4I and 42 S.,R.I5 and I6 W. January I3,I900:At this temporary cor.I set off 2I°25'30" S.on the decl.arc;and at $0^h 9^m$ p.m.,l.m.t. observe the sun on the meridian;the resulting lat. is 37°I8' N.
	January I3,I900.
	January I6,I900:I return to the old cor.of Tp.42 and 43 S.,Rs.I5 and I6 W.,and set off 37°7' N.on the lat.arc;20°52' S.on the decl.arc;and at 8^h a.m.,l.m.t.,determine a true meridian with the solar; and knowing it will be necessary to Resurvey the first two and last two and one-half miles of Pine Valley Guide Meridian,through Tp.42 S.,I run North,0°43' W.,on a true line bet.secs.3I and 36, this course having been determined by blank line. Over nearly level land,gradually ascending;in sandy and stony soil;through scattering greasewood undergrowth.
2.I0	Old road bears N.E.and S.W.
9.25	Main road from St.George City to the fields bears N.20° E.and S.20° W.
I3.20	Begin to ascend point of volcanic ridge,bears N.35° E.and S.35° W.
22.40	Old road to stone quarries bears E.and W.
29.00	Top of ascent of point of ridge about 40 ft.high, bears N.E.and S.W.;descend over N.W.slope of point of ridge.
34.20	Road from St.George to stone quarries at N.W.foot of

Chains.	
	point of ridge,bears N.E.and S.W.
38.00	Begin ascent of S.E.slope of point of ridge,bers N. E.and S.W.
	Difference between measurements of 40.05 chs.,by two sets of chainmen,is 4 lks.;position of middle point
	By 1st.set,40.07 chs.
	By 2nd.set,40.03 chs.;the mean of which is
40.05	Set a basaltic stone 20x10x5 ins.,15 ins.in the ground,for re-established 1/4 sec.cor.,marked 1/4 on W.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high,W.of cor. Pits impracticable.
46.60	Old road from St.George to the quarries bears N.E. and S.W.
49.50	Top of point of ridge,about 30 ft.high,bears N.E. about 4.00 chs.;and S.W.;descend over N.W.slope of point of ridge.
58.90	N.W.foot of point of ridge bears S.30° E.and N.30° W. about 10.00 chs.,thence N.E.ascend gradually over nearly level land.
72.80	Old stone wall bears E .and W.
74.98	Road from St.George to the public fields bears N.15°W and S.15 o E.
77.50	Re-enter road bears N.and S.15° E.
	Difference between measurements of 80.10 chs.by two sets of chainmen is 4 lks.;position of middle point
	By 1st.set,80.12 chs.
	By 2nd.set,80.08 chs.;the mean of which is
80.10	The point for the cor.of secs.25,30,31 and 36,falls in the middle of the road from St.George City to the public fields.Deposit a basaltic stone 18x12x8 ins., at the exact corner point,marked with 5 notches on the North and 1 notch on the S.edges. at 6 lks.E.of this stone set a basaltic stone 16x10x4 ins.,11 ins., in the ground,for witness cor.to the cor.of secs.25, 30,31 and 36,marked W.C.on W.face;with 5 notches on N.and 1 notch on S.edges;and raised a mound of stone 2 ft.base,1 1/2 ft.high,E.of cor. Pits impracticable. Mound of stone could not be raised on W.of stone on account of obstructing the road.
	Land nearly level and broken ridges.

Chains. Soil,sandy and stony;3rd.and 4th.rate.
No timber.
Fair grazing along the low foot hills and in the valley E.of the line.

Before permanently re-establishing this cor.,I rn run from the point for cor.,E.on a random line bet. secs.30 and 3I,in R.I5 W.;at 40.00 chs.,I find no trace trace of the old I/4 sec.cor.,and at 8I.I8 chs.,intersect N.and S.line I.48 chs.S.of old cor.of Secs.29,30,31 and 32,which is a volcanic stone I0x8 x 6 ins.above ground,properly marked and witnessed with a mound of stone.

I return to the point for cor.of secs.25,30,3I and 36,Thence I run
West bet.secs.25 and 36,in R.I6 W.;at 40.00 chs.,I find no trace of the odd I/4 sec.cor. after diligent search.

I make enquiries of the County Surveyor and old citizens of St.George City acquainted with the U.S. Surveys in this vicinity,and the general opinion is that the cor.is re-established at or near its original position.I am informed that when the lines were originally run the citizens of St.George City assisted the Deputy in putting up tall cedar posts,and that he was very careful to run straight lines approaching and through St.George City.

To place the cor.at the distance and on the course from the cor.of secs.29,30,3I and 32,T.42 S.,R.I5 W. as reported in the original notes of the subdivisions thereof,would materially change the course of the lines bet.secs.3I and 36,and 25 and 30,and would not correspond with the general course of the Pine Valley Guide Meridian,through Tp.42 S.,bet.Rs.I5 and I6 W.;therefore,I conclude that the cor.of secs.25, 30,31 and 36 is properly re-established,and witnessed.

Chains.	
	From the point for the cor.of secs.25,30,3I and 36 6 lks.W.of the witness cor.already described,I run North,0°43' W.,on a true line,bet. secs.25 and 30, on Pine Valley Guide Meridian,this course having been determined by blank line.
	Gradually ascend over nearly level land;in sandy , gravelly soil with indications of alkali.
0.II	Gate and wire fence bears E.and W.
4.00	Leave road leading to St.George City bears N.4° E.
2I.30	Center of St.in St.George City,bears E.and W.
30.80	Center of Street in St.George City bears E.and W.
	Difference between measurement of 40.05 chs.by two sets of chainmen,is 2 lks.;position of middle point
	By 1st.set,40.06 chs.
	By 2nd.set,40.04 chs.;the mean of which is
40.05	Set a volcanic stone I2xI2x6 ins.,8 ins.in the ground,for re-established I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8xI2 ins.,N.and S.of stone 3 ft. dist.;and raised a mound of earth 3 I/2 ft.base, I I/2 ft.high,W.of cor.This corner is in a street in St.George City,on which there is but very little travel.
40.40	Center of Street in St.George City bears E.and W.
49.90	Center of Street in St.George City bears E.and W.
59.40	Center of Street in St.George City bears E.and W.
68.90	Center of Street in St.George City bears E.and W.
78.40	Center of Street in St.George City bears E.and W.
	Difference bet.measurements of 80.I0 chs.,by two sets of chainmen is 4 lks.;position of middle point
	By 1st.set,80.08 chs.,
	By 2nd.set,80.I2 chs.;the mean of which is
80.I0	The cor.of secs.I9,24,25 and 30,heretofore described. Land nearly level and mostly occupied by St.George City,which is laid out in blocks about 32 rods square,with streets around the blokks about 6 rods wide.
	The soil is sandy with intermixture of gravel and slight indications of alkali;Ist and 2nd.rate.it is .

Chains.	
	especially adapted for fruit culture.
	Poplar,cottonwood,box-elder,maple and other timber cultivated as shade trees in the City;also peach, apple,pear,apricot,and other fruit trees cultivated in the orchards,and grape vine cultivated in the vineyards.
	Grasses and shrubbery grow in abundance in the valley and low hills surrounding the City.
	From the cor.of secs.19,24,25 and 30,heretofore described,I run North,on retracement line,bet.secs.19 and 24,this course having been determined by blank line previously run. 0° 56' W.
	Gradually ascend over nearly level ground in St. George City.
6.78	South side of Street in St.George City,bears E. and W.
7.98	North side of same Street.
15.62	S.side of street in St.George City,bears E.and W.
16.87	N.side of same street.
18.59	South side of avenue in St.George City,bears N.W.and S.E.
20.54	North side of same avenue.
25.10	Foot hills bears N.W.and S.E.;leave St.George City and ascend S.slope of foot of mountain.
	Difference between measurements of 40.70 chs,by two sets of chainmen is 10 lks.;position of middle point
	By 1st.set,40.15 chs.,
	By 2nd.set,40.25 chs.;the mean of which is
40.70	Fall 1 1/2 links W.of the old 1/4 sec.cor.heretofore described.
	January 16,1900: At this point I set off 20° 53' S.on the decl.arc;and at 0^{h} 9^{m} p.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°9' N.
	I continue my line N.0°56' W.
50.00	Begin abrupt ascent over sandstone bluff and broken

Chains.	
	ledges bears N.W.and S.E.
52.89	Top of red sandstone bluffs about 200 ft.high,and about 300 ft.above St.George City,bears N.W.and S.E., ascend gradually over top of bluffs;through scattering greasewood and sage undergrowth.
66.00	Top of ascent about 50 ft.above top of red sandstone bluffs,bears E.and W.;descend over broken ridges on top of sandstone mountain.
	Difference between measurements of 80.40 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st.set,80.45 chs.,
	By 2nd.set,80.35 chs.;the mean of which is
80.40	The old cor.of secs.13,18,19 and 24,heretofore described.
55.30 / 25.10	First 25.10 chs.occupied by St.George City,is nearly level land;soil rich and specially adapted to the growing of fruits and early vegetables:
	No timber except shade trees and orchards.
	North of the City of St.George the land is mountainous and broken;the soil is sandy and stony;3rd.and 4th.rate.
	Undergrowth,grasses and shrubbery afford fair grazing.
	On the steep side of the mountain facing St.George City,there are several resident cabins.
	Along the foot of the sandstone bluffs facing the City are several stone quarries.
	Mountainous land on 55.30 chs.
	From the cor.of secs.13,18,19 and 24,heretofore described,I run
	North 0°43' W.on a true line bet.secs.13 and 18,this course having been determined by blank line.
	Ascend gradually over broken ridges on top of sandstone mountain;in sandy and stony ground;through scattering sage and greasewood undergrowth.
4.00	Gulley about 25 ft.wide and 20 ft.deep,drains N.75°W.

Chains.

I0.50 Begin ascent over N.E.slope of ridge,which bears N.W and S.E.

I5.60 Gulch bears [illegible] W.

23.75 Hollow about 25 ft.wide and I5 ft.deep,drains N.30° E.about II.00 chs.,thence Westerly.

33.00 Trail bears S.80° E.and N.80° W.

34.00 Center of ravine about 70 ft.wide and 30 ft.deep, drains N.80° W.about 7.00 chs.,thence S.W.

35.30 Trails bear N.75° E.and S.75° W.

38.I0 Small creek about 2 lks.wide and 4 ins.deep in bottom of ravine,runs from Pine Valley Mountains to St.George City,course S.40° W. Ravine about I00 ft.wide and 40 ft.deep,and about 200 ft.below the sec.cor.;ascend abruptly from Creek and ravine.

Difference between measurements of 40.I5 chs.,by two sets of chainmen,is 6 lks.;position of middle point

By Ist.set,40.I8 chs.,

By 2nd.set,40.I2 chs.;the mean of which is

40.I5 The old I/4 sec.cor.heretofore described.

Since there are no subdivisions depending upon the remaining portion of the Pine Valley Guide Meridian,through TP.42 S.,I re-establish same as follows,continuing measurements and running due North from the old I/4 sec.cor.above described. Gradually ascend.

65.I5 Top of ascent about I50 ft.above the I/4 sec.cor., on E.slope of sandridge,bears S.E.and N.W.;descend into ravine.

70.75 Ravine about I00 ft.wide and 60 ft.deep,drains S. 50° E.about 30.00 chs.;thence S.W.,heads N.W.about 25.00 chs.dist. Steep rocky ascent from ravine.

Difference between measurements of 80.I5 chs., by two sets of chainmen,is I2 lks.;position of middle point

By Ist.set,80.2I chs.,

By 2nd.set,80.09 chs.;the mean of which is

80.I5 Set a red sandstone 30xI2x6 ins.,2I ins.deep in a mound of stone,for cor.of secs.7,I2,I3 and I8,marked

Chains	
	with 4 notches on the S.and 2 notches on the N.edges, and raised a mound of stone,2 ft.base,I I/2 ft.high, W.of cor. Pits impracticable. I destroy all traces of the old cor.of secs.7,I2,I3 and I8,which bears N.55°29' W.I9 lks.dist. Cor.is on S.W.slope of sandridge about I00 ft.above last ravine. Land mountainous and broken . Soil,sandy and stony;3rd.and 4th.rate. No timber. Vegetation,undergrowth,shrubbery and grasses afford fair grazing. Mountainous land on 80.I5 chs.
	From the re-established cor.of secs.7,I2,I3 and I8,above described,I run North,on re-survey line bet.secs.7 and I2. Ascend abruptly over broken sandridges;through medium dense greasewood and sage undergrowth and scattering iron wood.
2.20	Top of rocky point about 35 ft.above the sec.cor., bears E.and W.;descend on N.slope of point of ridge.
I2.50	N.foot of rocky ridge about 75 ft.below top of ridge, bears N.70° E.about 4.00 chs.,and joins main ridge S.80° W.about 2.00 chs.dist. Ascend gradually over broken sandhills. Enter scattering cactus undergrowth
20.20	Top of rocky bluffs about 75 ft.high,bears E.and W.
26.00	Descend gradually over N.slope of rocky bluffs.
	Difference between measurements of 40.00 chs.by two sets of chainmen,is 4 lks.;position of middle point By Ist.Set,39.98 chs., By 2nd.set,40.02 chs.;the mean of which is
40.00	Set a red sandstone I6xI2x5 ins.,II ins.deep in a mound of stone,for I/4 sec.cor.,marked I/4 on W.face and raised a mound of stone 2 ft.base,I I/2 ft.high, W.of cor. Pits impracticable. I destroy all traces of the old I/4 sec.cor.,which bears N.67°27' W. 66 lks.dist.

Chains.

54.60 Hollow at foot of descent,about 50 ft.wide and 25 ft. deep drains S.30° E.,and heads N.30° W.about I5.00 chs.dist. Ascend gradually.

59.50 Top of ascent about 50 ft.above last hollow,bears S.E.and N.W. Descend gradually.

62.70 Hollow about 25 ft.wide and I5 ft.deep drains S.25° E.and joins last named hollow,and heads N.40° W. at top of red sandstone ridge about I5.00 chs.dist. Ascend gradually.

67.20 Begin rocky and steep ascent of red sandstone bluffs, bears S.20° E.and N.20° W.,thence S.W.

75.50 Top of red sandstone bluffs about I50 ft.high,bears N.40° W.,and S.I5° E.;descend over N.E.slope of sandstone bluffs.

Difference bet.measurements of 80.00 chs.by two sets of chainmen,is I0 lks.;position of middle point

By 1st.set,80.05 chs.,

By 2nd.set,79.95 chs.;the mean of which is

80.00 Set a red sandstone 28x8x3 ins.,2I ins.deep in a mound of stone,for cor.of secs.I,6,7 and I2,marked with 5 notches on the S.and I notch on the N.edges; and raised a mound of stone 2 ft.base,I I/2 ft.high, W.of cor. Pits impracticable.

I destroy all traces of the old cor.of secs.I,6,7, and I2,which bears N.53° 55' W. 87 links distant.

Land,mountainous and broken.

Soil,sandy and stony;3rd.and 4th.rate.

No timber.

Shrubbery,undergrowth and grasses afford fair graz, ing.

Mountainous land on 80.00 chs.

From the cor.of secs.I,6,7 and I2 above described, I run

North,on resurvey line bet.secs.1 and 6.

Ascend on E.slope of sandridge;through scattering

Chains.	
	sage,greasewood,cactus and iron wood undergrowth.
4.00	Top of rocky ascent about 30 ft.above the sec.cor., bears N.W.and S.E.;descend rapidly over N.and N.W. slope of ridge.
7.20	Ravine at foot of descent about 25 ft.wide and 10 ft. deep,and about 75 ft.below top of ridge;drains E.; thence over broken sandridges.
23.70	Ravine about 100 ft.wide and 20 ft.deep,drains S. 30° E.
	Difference between measurements of 40.00 chs.,by two sets of chainmen ,is 2 lks.;position of middle point
	By 1st.set,40.01 chs.,
	By 2nd.set,39.99 chs.;the mean of which is
40.00	Set a red sandstone 16x8x6 ins.,11 ins.deep in a mound of stone,for 1/4 sec.cor.,marked 1/4 on W. face;and raised a mound of stone 2 ft.base,1 1/2 ft. high,W.of cor. Pits impracticable.
	The cor.is near W.foot of sandridge,about 60 ft. above the last ravine.
	I destroy all traces of the old 1/4 sec.cor.,which bears N.49°29' W. 1.06 chs.dist.
	Descend.
50.60	Ravine about 60 ft.wide and 30 ft.deep,and 60 ft. below the 1/4 sec.cor.,drains S.30° W.
55.20	Begin steep rocky ascent of volcanic mountain or ridge over S.W.slope.
68.20	Top of volcanic ridge about 150 ft.high,bears S.40° E.about 8.00 chs.,and N.25° W. Ridge is covered with large volcanic boulders.
73.00	Descend over N.E.slope of ridge,bears S.E.and N.W.
80.00	Foot of descent about 25 ft.below top of last ridge, bears N.W.and S.E.;ascend S.W.slope of steep rocky volcanic ridge.
82.50	Top of volcanic ridge about 200 ft.high,bears E.and W.
	Difference between measurements of 82.99 by two sets of chainmen,is 8 lks.;position of middle point
	By 1st.set,83.03 chs.,
	By 2nd.set,82.95 chs.;the mean of which is

Resurvey of W.bdy.of T.42 S.,R.I5 W.(Pine Valley Guide Meridian.)

Chains.	
82.99	The cor.of Tps.4I and 42 S.,Rs.I5 and I6 W.,established by me in Resurvey of N.bdy.of T.42 S.,R.I5 W. as heretofore described in Book N. Land mountainous and broken. Soil,sandy and stony;3rd.and 4th.rate. No timber. Undergrowth,shrubbery and grasses afford fair grazing. Mountainous land on 82.99 chs. January I6,I900.

GENERAL DESCRIPTION:

For General Description see Notes of the Subdivisions of T.42 S.,R.I5 W.,Book P.

January I6,I900.

Mayhew H. Dalley
U.S.Deputy Surveyor.

urvey of W.bdy.of T.42 S.,R.I5 W.(Pine Valley Guide Meridian.)

BOUNDARIES OF T.42 S.,R.I5 W.

Latitudes,Departures and Closing Errors.

ne Designated.	True Bearing.	Distance.	Latitides. N.	Latitides. S.	Departures. E.	Departures. W.
		Chs.	Chs.	Chs.	Chs.	Chs.
y.T.42 S.R.I5W.						
S.bdy.sec.36	S.89°38'W.	79.92		.52		79.92
S.bdy.sec.35.	S.89°4I'W.	80.20		.45		80.20
S.bdy.sec.34.	S.89°39'W.	80.20		.50		80.20
S.bdy.sec.33.	S.89°57'W.	80.23		.07		80.23
S.bdy.sec.32.	S.89°4I'W.	80.00				
S.bdy.sec.3I.	S.89°4I'W.	80.63		.89		I60.63
y.T.42S.R.I5 W.						
Valley Guide dian.						
dys.secs.30&3I.	N.0°34'W.	I60.20	I60.20			2.00
dy.sec.I9.	N.0°56'W.	80.40	80.40			I.3I
dy.sec.I8.	N.0°43'W.	40.I5	40.I5			.50
dys.secs.I8,7&6.	North.	202.99	202.99			
y.T.42S.R.I5W.						
dy.secs.6,5,4&3.	East	274.69			274.69	
dy.sec.3.	S.89°48'E.	40.50		.I4	40.50	
dy.sec.2.	S.89°47'E.	4I.37		.I0	4I.37	
dy.sec.2.	S.89°53'E.	38.85				
dy.sec.I.	S.89°53'E.	38.85		.I0	77.70	
dy.sec.I.	S.89°44'E.	40.74		.I9	40.74	
y.T.42S.R.I5W.						
dy.sec.I.	S.9° 14' E.	40.54		40.01	6.50	
dy.sec.I.	South.	39.69		39.69		
dy.sec.I2.	S.0°I2'E.	80.46		80.46	.28	
dy.sec.I3.	S.0°20'E.	80.06		80.06	.46	
dy.sec.24.	S.0°40'E.	80.50		80.50	.94	
dy.sec.25.	S.0°24'E.	80.58		80.58	.56	
dy.sec.36.	S.0°30'E.	79.96		79.96	.70	
Convergency.					.55	
Totals			483.74	484.34	484.99	484.99
Error in lat.				483.74		
				.60		

January I6,I900.

Mayhew H. Dalley
U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H.Dalley, United States Deputy Surveyor, to assist in running, measuring, an marking the lines and corners described in the foregoing field notes of the ~~of~~ survey and retraceme of W.bdy.of T.42 S.,R.I5 W.(Pine Valley Guide Meridian),of the Salt L Base and Meridian,Utah.

showing the respective capacities in which they acted:

Edward J.Higbee	Chainman.	Max W.woodbury	Chainman.
William Macfarlane,	Chainman.	David Dix	Chainman.
		Heber Dalley	Moundman.
		Thomas Urie	Moundman.
		Heber Dalley	Axman.
		Thomas Urie	Axman.
		Hillman Dalley	Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H.Dalley, United States Deputy Surveyor, in ~~surveying~~ retracing al those parts or portions of the the W.bby.of T.42 S.,R.I5 W.(Pine Valley Guide Me idian),of the Salt Lake Base and Meridian,in the State of Utah ~~of the~~ ~~meridian~~, ~~of~~, which are represente in the foregoing field notes as having been ~~surveyed~~ retraced 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~~ retraced, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for the State of Utah.

Edward J. Higbee	Chainman.	Max H. Woodbury	Chainman.
William Macfarlane	Chainman.	David Dix	Chainman.
		Heber Dalley	Moundman.
		Thomas Urie	Moundman.
		Heber Dalley	Axman.
		Thomas Urie	Axman.
		Hillman Dalley	Flagman.

Subscribed and sworn to before me this 4th day of April A.D.1900., ~~189~~

SEAL

My Commission Expir March 20th, 1903

Senora B. Dalley
Notary Public.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for the State of Utah, bearing date of the 23rd. day of January, A.D. 189 9, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for the State of Utah, the Manual of Surveying Instructions, and the laws of the United States, re-surveyed and retraced all those parts or portions of the W. bdy. of T. 42 S., R. 15 W. (Pine Valley Guide Meridian), #

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

Mayhew H. Dalley
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me this 31st day of May 1901, 189

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17, 1902, 189

The foregoing field notes of the re-survey and retracement of the West Boundary of Township 42 South Range 15 West (Pine Valley Guide Meridian) of the Salt Lake Base & Meridian, Utah

executed by Mayhew H. Dalley under his contract No. 224, dated January 23, 1899, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the re-surveys and retracements they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

_____
United States Surveyor General.

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Subdivisions

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BOOK A-288

H.J.B.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS OF TOWNSHIP 42 SOUTH, RANGE 15 WEST,

Of the SALT LAKE BASE AND *Meridian,*

in the

STATE OF UTAH

AS SURVEYED BY

Mayhew H. Dalley, *United States Deputy Surveyor,*

Under his Contract No. 224, *dated* January 23rd., *1899*

Survey commenced January 17 1900, *189*

Survey completed January 23d 1900, *189*

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M. Ths Ho-

Sub- high 15-09-55 ✓

Desings — 29-57 ✓

Reservoir Sub-high 2-02-50 ✓

" " low 37-50 ✓

2-00-00

NAMES AND DUTIES OF ASSISTANTS.

Max W.Woodbury,	Chainman.
Edward J.Higbee,	Chainman.
Thomas Urie,	Moundman.
David Dix,	Moundman.
Thomas Urie,	Axman.
David Dix,	Axman.
William Macfarlane,	Flagman.

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BOOK A-288

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

We, Max W. Woodbury and Edward J. Higbee

[illegible] faithfully execute the duties of chainmen; that we will level the [illegible] and plumb the tally pins, either by sticking or dropping the same; that [illegible] objects, and the true lengths of all lines that we assist in [illegible] in accordance with instructions given us, in the survey of subdivisions of T.42 S., R.15 W. and subdivisions of T.42 S., R.16 W. of the Salt Lake Base and Meridian, State of Utah.

Max W. Woodbury, Chainman.

Edward J. Higbee, Chainman.

[illegible] to before me this 5th. day of January, A.D. 1900.

Senora C. Dolley
Notary Public.

We, Thomas Urie and David Dix

[illegible] that we will well and truly perform the duties of moundmen in the establishment [illegible] according to the instructions given us, to the best of our skill and ability, in the survey of subdivisions of T.42 S., R.15 W. and subdivisions of T.42 S., R.16 W., of the Salt Lake Base and Meridian, State of Utah.

Thomas Urie, Moundman.

David Dix, Moundman.

[illegible] and sworn to before me this 5th. day of January, A.D. 1900.

Senora C. Dolley
Notary Public.

We, Thomas Urie and David Dix

[illegible] that we will well and truly perform the duties of axmen in the establishment of corners [illegible] according to instructions given us, to the best of our skill and ability, in the survey of subdivisions of T.42 S., R.15 W., and subdivisions of T.42 S., R.16 W. of the Salt Lake Base and Meridian, State of Utah.

Thomas Urie, Axman.

David Dix, Axman.

[illegible] and sworn to before me this 5th. day of January, A.D. 1900.

Senora C. Dolley
Notary Public.

I, William Macfarlane, do solemnly swear that I will well and truly [illegible] instruction given me, to the best of my skill and ability, in the [illegible] of T.42 S., R.15 W. and subdivisions of T.42 S., [illegible] Salt Lake Base and Meridian, State of Utah.

William Macfarlane, Flagman

[illegible] 5th. [illegible] January, A.D. 1900.

Senora C. Dolley
Notary Public.

Chains.	
	Survey commenced January I7,I900,and executed with with a W.and L.E.Gurley Light Mountain Solar Transit,for description of which see notes of Survey of South Boundary of T.42 S.,R.I4 W.,Book A ,
	For complete test of the solar apparatus see Notes of the Retracement of S.bdy.of T.42 S.,R.I5 W. Book N ,
	For reasons heretofore given in Book E , ,I survey the subdivisions of this Township and make returns thereof out of the regular order of the Survey of Townships named in the Contract.
	I begin at the I/4 sec.cor.bet.secs.25 and 36, which is a white limestone I7x8x8 ins.,marked and witnessed as described by the Surveyor General,on W.slope,near W.foot of high ridge.
	January I7,I900:At this I/4 sec.cor.,I set off 37° 08' N.on the lat.arc;20° 40' 30" S.on the decl. arc;and,at 8h a.m.,l.m.t.,determine a true meridian with the solar.
	Thence I run
	East,on a random line,bet.secs. 25 and 36.
40.I5	Intersect E.bdy.of the Tp.I0 lks.S.of the cor.of secs.25 and 36,heretofore described.
	Thence I run
	S.89° 5I' W.on a true line bet.secs.25 and 36.
	Over high broken ridges;in sandy clay gravelly and stony soil;through scattering greasewood and iron wood undergrowth.
	Descend.
0.30	Hollow at foot of mountain,about I0 ft.below the sec.cor.,drains S.20° E.;ascend.
I2.70	Ravine I0 ft.wide and 6 ft.deep drains S.20° E.about 7.00 chs.,thence S.I00 W.
22.00	Top of ascent about 250 ft.above the sec.cor.,bearrs N.and S.;thence over flat top of mountain.
25.00	Begin abrupt descent over N.W.slope of high mountain.
40.I5	The I/4 cor.of secs.25 and 36. On steep N.W.slope

Chains.	
	about 250 ft.below the top of the mountain. Land,mountainous and broken. Soil,sandy,clay,gravelly and stony;3rd.and 4th.rate. No timber. Good grazing. Mountainous land on 40.15 chs. Washington field and canal bears W.about 50.00 chs. dist.
	January 17,1900:At the cor.of secs.11,12,13 and 14, which is a yellow sandstone 15x12x4 ins.,marked and witnessed as described by the Surveyor General,I set off 20° 41' S.on the decl.arc;and,at 0h 10m p.m.,l. m.t.,observe the sun on the meridian;the resulting latitude is 37° 10' N. At this cor.at 2h p.m.,l.m.t.,I set off 37° 13' N.on the lat.arc;20° 40' S.on the decl.arc;and determine a true meridian with the solar. Thence I run North, bet.secs.11 and 12. Ascend gradually over nearly level bottom land;in rich sandy soil;through dense greasewood and rabbit brush undergrowth.
6.00	Leave level land bears E.and W.;begin ascent of broken foot hills.Leave dense undergrowth bears E.and W.,and enter scattering gresewood,iron wood and cactus.
9.00	Top of ridge about 50 ft.above the sec.cor.,bears E. and W.;thence ascend more gradually over broken foot hills;in sandy gravelly and stony soil;leave rich sandy soil.
35.45	Cut off road from Washington to Leeds bears S.40° W. and N.40° E.
40.00	I find no trace of the old 1/4 sec.cor.after diligent search.Set a volcanic stone 16x10x6 ins.,11 ins. in the ground,for re-established 1/4 sec.cor.,;and raised a mound of stone 2 ft.base,1 1/2 ft.high,W. of cor. Pits impracticable.

Chains.	This cor.is on the W.side of a wash about I20 ft. above the sec.cor.
40.50	Wash about 25 ft.wide and 3 ft.deep,drains S.I5° E.
73.00	Begin ascent of spur of mountain bears N.W.and S.E.
78.00	Top of spur about 50 ft.high,and about I50 ft.above the I/4 sec.cor.,bears N.W.and S.E.;descend over N. E.slope of spur.About 50 lks.E.is red sandstone cliffs about 30 ft.high.
80.00	On N.E.slope of spur about 20 ft.below top of spur of mountain.
	Set a red sandstone I6xI2x5 ins.,11 ins.in the ground for cor.of secs.1,2,11 and 12,marked with 5 notches on the S.and I notch on the E.edges;and raised a mound of stone 2 ft.base,I I/2 ft.high,W.of cor.
	Pits impracticable.
	Land mountainous and broken,and nearly level.
	Soil,sandy,clay,gravelly and stony;2nd.,3rd.and 4th. rate.
	No timber.
	Dense undergrowth on 6.00 chs.
	Mountainous land on 74.00 chs.
	Broken fragments and small reefs of limestone on last45.00 chs.
	S.89° 56' E.on a random line bet.secs.I and I2.
40.00	Set temp.I/4 sec.cor.
79.62	Intersect the E.bdy.of the Tp.24 lks.S.of the cor. of secs.I,6,7 and 12,heretofore described in notes of retracement of W.bdy.of T.42 S.,R.I4 W.,Book B.
	Thence I run
	S.89° 54' W.on a true line bet.secs.I and I2.
	Ascend rapidly over broken foot hills,in sandy,gravelly and stony soil;through scattering greasewood and iron wood undergrowth.
6.40	Cut off road from Washington to Leeds and farms in adjoining Tps.,bears S.50° W.and N.50° E.
8.00	Begin ascent of sandstone mountain,about 50 ft.above the Sec.cor.,bears N.E.and S.W.

Chains.	
I3.80	Top of sandstone mountain, about 200 ft. above the sec.cor., bears N.50° E. and S.50° W.; thence over top of mountain.
29.40	Ravine I00 ft. wide and 25 ft. deep, drains S.50° W.
39.81	Set a red sandstone I8xI0x6 ins., I2 ins. in the ground for I/4 sec.cor., marked I/4 on N.face; and raised a mound of stone, 2 ft. base, I I/2 ft. high, N. of cor. Pits impracticable.
39.95	Wood road from Washington to the mountains on the N.E., bears S.I5° W. and N.45° E.
56.00	Trail bears N. and S.
73.00	Ravine about 2.25 chs. wide and 75 ft. deep, drains S.W.
75.50	Begin ascent over broken ledges on W. slope of sandstone mountain, bears N.E. and S.W.
79.62	The cor. of secs. I, 2, II and I2.
	Land, mountainous and broken.
	Soil, sandy, gravelly and stony; 3rd. and 4th. rate.
	No timber.
	Good grazing.
	Mountainous land on 79.62 chs.
	Fragments of limestone and small reefs of limestone on first 8.00 chs.
	Stone quarries along the S.E. foot of sandstone mountain.
	January I7, I900.

January I8, I900: At I0h a.m., l.m.t., I set off 37°II' N. on the lat. arc; 20° 30' S. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. I, 2, 11 and I2, heretofore described.

Thence I run

N.00°I' W. on a true line bet. secs. I and 2, knowing from previous retracement of N. and E. bdys. that the line will close on the N. bdy. out of limit.

Over broken ledges and high sandstone mountain; in sandy and stony ground; through scattering greasewood sage and iron wood undergrowth.

Chains. Descend rapidly over N.E.slope of spur of mountain.

2.00 Begin abrupt descent over broken sandstone ledges and cliffs,bears N.40° E.and S.40° W.

I0.30 Old willow fence bears N.40° E.and S.40° W.

I7.00 Deep chasm at N.W.foot of high ledges,about I50 ft. below the sec.cor.,with solid sandstone ledges on either side,drains S.40° W.;thence ascend rapidly through a narrow chasm with precipitous wall of sand stone on either side.

23.00 Leave chasm and ascend more gradually over top of hig sandstone mountain.

40.00 Set a red sandstone 24xI0x8 ins.,I8 ins.in the ground,for I/4 sec.cor.,marked I/4 on W.face;and raised a mound of stone,2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.

This cor.is on S.W.slope of ridge on sandstone mountain,about 250 ft.above the sec.cor.

55.50 Top of sandridge about 75 ft.above the I/4 sec.cor. bears N.E.and S.W.;begin gradual descent on N.W. slope of ridge.

59.60 Hollow at foot of descent about 40 ft.below top of last ridge,drains S.W.;commence steep ascent over sandstone ledges.

69.00 Top of sandstone mountain about 200 ft.above the I/ sec.cor.bears E.and W.;ascend more gradually over top of mountain on S.slope .

79.00 Summit of the sandstone mountain about 250 ft.above the I/4 sec.cor.,bears N.40° E.and S.40° W.;descend rapidly over N.W.slope of mountain.

79.88 Intersect the N.bdy.of the Tp.5.89 chs.,S.89° 52' E. of the cor.of secs.I,2,35 and 36,heretofore described in notes of retracement of N.bdy.of this Tp.,Book N

.Set a red sandstoneI7xI0x4 ins.,I2 ins.in the ground,for closing cor.of secs.I and 2,marked with C.C.on S.;with I groove on E.and 5 grooves on W.faces and raised a mound of stone 2 ft.base,I I/2 ft.high, S.of cor. Pits impracticable.

I destroy the marks on the old cor.of secs.I,2,35 and 36 that pertain to secs.I and 2,and remark same for.cor.of secs.35&36,T.4I S.,R.I5 W.,only.

Chains.	
	Land mountainous and broken. Soil,sandy and stony;2nd.,3rd.,and 4th.rate. No timber. Scattering undergrowth,native grasses and shrubbery, making good grazing when supplied with moisture. Mountainous land on 79.88 chs. January I8,I900:At this closing cor. of secs. 1 and 2,I set off 20° 29' S.on the decl.arc;and,at 0h 11m p.m.,l.m.t.,observe the sun on the meridian; the resulting lat.is 37° I2' N.
	Being unable to find the old I/4 sec.cor.bet.secs. 2 and II,I begin at the old cor.of secs.2,3,I0 and II,which is a porphyry stone I8xI2x4 ins.,marked and witnessed as described by the Surveyor General. January I8,I900:At this cor.I set off 37° II' N.on the lat.arc;20° 28' S.on the decl .arc;and,at 2h p.m.,l.m.t.,determine a true meridian with the solar. Thence I run East bet.secs.2 and II. Ascend over W.slope of sandridge;in deep red sandy soil;through medium dense greasewood,sage,cactus and iron wood undergrowth.
I4.I5	Wood road from Washington to the cedars,bears N.and S.
40.00	Set a red sandstone I8xI2x9 ins.,I2 ins.in the ground for re-established I/4 sec.cor.,marked I/4 on N. face;dug pits I8xI8xI2 ins.,E.and W.of stone,3 ft. dist.;and raised a mound of earth,3 I/2 ft.base, I I/2 ft.high,N.of cor. Cor.secs.I,2,11 and I2 visible, I continue my line East,closing cor.being necessary.
45.00	Top of ascent about I00 ft.above the sec.cor.,bears N.and S.;thence descend over E.slope of ridge. Enter sandy,stony ground and limestone formation bears N.and S.;leave deep sandy soil.
58.40	Limestone quarry bears S.about 5.00 chs. ;descend over broken ledges.

Chains.

63.I5 Ravine at foot of broken ledges about 25 ft.wide and 8 ft.deep,drains S.20° E.

Ascend over broken ledges.

67.40 Top of ascent about 50 ft.above the ravine,bears N. 20° W.and S.20° E.;descend.

70.65 Bottom of hollow about 25 ft.below top of ascent, drains S.45° W.;ascend over broken ridges.

74.00 An old lime kiln on the S.side of the line.

80.40 Intersect N.and S.line I.70 chs.S.of cor.of secs. I,2,II and I2 ,established by me under this contract

Set a red sandstone I5xI0x8 ins.,I0 ins .in the ground,for closing cor.of secs.2 and II,marked C.C. on W.;with 5 grooves on S.and I groove on E.faces; and raised a mound of stone 2 ft.base,I I/2 ft.high W.of cor. Pits impracticable.

I destroy the marks on the old cor.of secs.I 2,II and I2,that pertain to secs.2 and II,and re-establish the cor.for .cor.of secs.I and I2 only.

Land,mountainous and broken.

Soil,deep sand,sandy and stony;2nd.and 4th.rate.

No timber.

Good grazing.

Mountainous land on 80.40 chs.

Lime stone in S.E.I/4 of sec.2 and N.E.I/4 of sec. II.

Being unable after diligent search to find the old I/4 sec.cor.bet secs.3 and 4,I commence at the cor. of secs.3,4,9 and I0.

Knowing from previous retracement and re-survey of of the N.bdy.of sec.3,and retracement of E.bdy.of this sec.,that the line will close on the N.bdy.out of limit,I run

North,on a true line bet.secs.3 and 4,from said cor. which I find to be a red sandstone I2xI0x5 ins., marked and witnessed as described by the Surveyor General.

Chains.	
	Descend gradually over rolling sand hills;in sandy soil;through scattering greasewood and iron wood undergrowth;also scattering cactus.
I4.80	Trail bears N.35° W.and S.35° E.
2I.93	Wood road from Washington to the cedars bears N.75° W.and S.75° E.
37.50	Wash 20 ft.wide and 3 ft.deep,drains S.45° E. ENter sandy stony ground bears N.W.and S.E.;begin ascent of foot of volcanic mountain.
40.00	Set a volcanic boulder stone I4xI0x6 ins.,I0 ins.in the ground,for re-established I/4 sec.cor.,marked I/4 on W.face;and raised a mound of stone,2 ft.base, I I/2 ft.high,W.of cor. Pits impracticable.
58.00	Hollow about 50 ft.wide and 20 ft.deep,drains S.35° E.about 3.00 chs.,thence S.
72.00	Begin steep ascent of volcanic mountain,bears N.65° W. and S.E.
76.78	Dug way wood road from Washington to the cedars, bears S.80° E.and N.80° W.;ascend abruptly over large volcanic boulders,and broken ledges .
82.20	Intersect the N.bdy.of the Tp. 5.59 chs. E.of the cor.of secs.3,4,33 and 34,established by me in re-survey of N.bdy.of this Tp.and described in Book N .Set a lava stone I7xI2xI0 ins.,I2 ins.in the ground, for closing cor.of secs.3 and 4,marked C.C. on S.;with 3 grooves on E.and W.faces;and raised a mound of stone,2 ft.base,I I/2 ft.high,S.of cor. Pits impracticable.
	I destroy the marks on the old cor.pertaining to secs.3 and 4,and re-mark the same for cor.of secs. 33 and 34,T.4I S.,R.I5 W.,only.
	This closing cor.is on S.E.slope of volcanic mountain,near the top of mountain,about 300 ft.above the I/4 sec.cor.
	Land,rolling,mountainous and broken.
	Soil,sandy and stony;2nd.and 4th.rate.
	No timber.
	Grasses and shrubbery afford good grazing.
	Mountainous land on 44.70 chs.
	January I8,I900.

Chains.	
	January I9,I900:I set off 37° 9' 30" N.on the lat.arc;20° I7' S.on the decl.arc;and,at 9h a.m. l.m.t.,determine a true meridian with the solar at the cor.of secs.I6,I7,20 and 2I,which is a porphyry stone I6x8x8 ins.,marked and witnessed as described by the Surveyor General.
	Thence I run
	N.00 0I" W.bet.secs.I6 and I7.
	Over top of volcanic ridge;in stony ground;through scattering greasewood,sage and iron wood undergrowt
7.60	Begin abrupt descent over N.E.slope of volcanic ridge,bears S.I0o E.and N.I0o W.
23.37	Ravine at foot of volcanic ridge about 200 ft.below top of ridge,about 50 ft.wide and 20 ft.deep drains S.20° E.,Water in holes along the ravine. About I2.00 chs.dist.down the ravine is a small spring at the head of a creek taken out of the ravine and runs to Middleton fields and orchards.
	Abrupt ascent from ravine over broken ridges,and sandy stony ground.
25.40	Trail bears N.30° W.and S.30o E.
40.00	Set a red sandstone I8xI5x3 ins.,I2 ins.in the ground,for I/4 sec.cor.,marked I/4 on W.face;and raised a mound of stone 2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.
53.80	On ledge of red sandstone about I2 ft.high bears N.W.and S.E.
69.60	An old lime kiln bears W.about 2.00 chs.
7I.60	Top of ascent about I50 ft.above the ravine at foot of volcanic mountain,bears N.E.and S.W.;descend over broken ridges.
80.00	On N.W.slope of ridge about 30 ft.below the top of ascent.
	Set a red sandstone I4x8x5 ins.,I0 ins.deep in a mound of stone,for cor.of secs.8,9,I6 and I7, marked with 4 notches on the S.and E.edges;and raised a mound of stone 2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.Hard sandstone at cor. point prevented setting the corner stone deeper. Land mountainous and broken.

Chains.	
	Soil,sandy and stony;2nd.3rd.and 4th.rate. No timber. Good grazing. Mountainous land on 80.00 chs.
	From the cor.of secs.8,9,I6 and I7,I run East,on a random line bet.secs.9 and I6.
40.00	No trace of the old I/4 sec.cor.can be found after diligent search.Set temp.I/4 sec.cor.,and continue my line E.
78.53	Intersect the N.and S.line 63 lks.S.of the old cor. of secs.9,I0,I5 and I6,which is a red sandstone I8x I0x3 ins.,marked and witnessed as described by the Surveyor General.
	Thence I run West on a true line bet.secs.9 and I6. Ascend E.slope of sandridge;in sandy and stony soil; through medium dense greasewood and sage undergrowth
20.00	Top of sandridge about I00 ft.above the sec.cor. bears N.and S.;descend.
40.00	At foot of descent in hollow which drains S.,about about 50 ft.below top of ridge. Set a red sandstone I8xI0x3 ins.,I2 ins.in the ground,for re-established I/4 sec.cor.,marked I/4 on N.face;and raised a mound of stone 2 ft.base,I I/2 ft.high N.of cor. Pits impracticable.
57.00	Top of sandridge about 50 ft.above the I/4 sec.cor. bears N.30° E.and S.30° W.;descend on W.slope of ridge.
69.50	Bottom of hollow about 40 ft.below top of ridge, drains S.;ascend.
77.00	Top of ridge about 40 ft.above bottom of hollow, bears N.and S.I00 W.;descend
78.53	Intersect N.and S.line 63 lks. N.00 I' W.of the cor. of secs.8,9,I6 and I7. Set a red sandstone I4x8x5 ins.,I0 ins.in the ground for closing cor.of secs.9 and I6,marked C.C.on E.;

Chains.	
	with 4 grooves on E.and 4 grooves on S.faces;and raised a mound of stone 2 ft.base,I I/2 ft.high , E.of cor. Pits impracticable.
	I remarked the old cor.of secs.8,9,I6 and I7,for co of secs.8 and I7 only.
	Land mountainous and broken.
	Soil,sandy and stony;2nd.and 4th.rate.
	No timber.
	Undergrowth and shrubbery and grasses afford good grazing when supplied with sufficient moisture.
	Mountainous land on 78.53 chs.
	January I9,I900:At this closing cor.I set off 20° I6' 30" S.on the decl.arc;and at 0h II m p.m.,l.m.t., observe the sun on the meridian;the resulting lat. is 37° I0' N.
	From the cor.of secs.8,9,I6 and I7,as re-marked for the cor.of secs.8 and I7 only,I run
	N.0° I' W. bet.secs.8 and 9.
	Gradually ascend over top of sandridge;through scattering greasewood,sage iron wood and cactus undergrowth;in sandy and stony soil.
0.63	The closing cor.of secs.9 and I6.
22.50	Trail bears N.50° W.and S.50° E.
40.00	Set a red sandstone I8xI2x5 ins.,I2 ins.in the ground,for I/4 sec.cor .,marked I/4 on W.face; dug pits I8xI8xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high, W.of cor.
	This cor.is about 50 ft.above the sec.cor.
49.00	Trail bears N.75° E.and S.75° W.
77.00	Trail bears N.40° W.and S.40° E.
80.00	Set a red sandstone I8xI0x5 ins.,I2 ins.in the ground,for cor.of secs.4,5,8 and 9.,marked with 5 notches on the S.and 4 notches on the E.edges;and and raised a mound of stone 2 ft.base,I I/2 ft.high, W.of cor. This cor.is on top of sandstone mountain, about 50 ft.above the I/4 sec.cor.
	Land mountainous and broken.

Subdivisions of T.42 S.,R.I5 W.-Continued.

Chains.	
	Soil rich and sandy,and stony;2nd.and 3rd.rate.. Undergrowth,sage,greasewood,iron wood and cactus. No timber. Good grazing on undergrowth,grasses and shrubbery. Mountainous land on 80.00 chs. January I9,I900.
	January 20,I900:At 9h a.m.,l.m.t.,I set off 37°11' N.on the lat.arc;20° 4' 30" S.on the decl.arc; and determine a true meridian with the solar,at the cor.of secs.4,5,8 and 9.
	Thence I run
	East on a random line bet.secs.4 and 9.
40.00	Set temp.I/4 sec.cor. No trace of the old I/4 sec. cor.can be found after diligent search.
	I continue my line E.
77.80	Intersect N.and S.line 42 lks.S.of the cor.of secs. 3,4,9 and I0,heretofore described.
	Thence I run
	W.on course of the original sec.line,bet.secs.4 and 9.
	Ascend rapidly on N.E.slope of sandridge;in sandy, and stony soil;through scattering greasewood,sage, iron wood and cactus undergrowth.
I4.70	Top of ridge on N.E.slope,bears N.E.and S.W.;about I00 ft.above the sec.cor.;descend.
26.27	Foot of descent,about 75 ft.below top of ridge,bears N.and S.;ascend.
28.00	Top of ascent about 40 ft.high,bears N.and S.;descend
40.00	Set a red sandstone I8x8x4 ins.,I2 ins.in the ground for re-established I/4 sec.cor.,marked I/4 on N. face;and raised a mound of stone 2 ft.base,I I/2 ft. high,N.of cor. Pits impracticable.
	Cor.is about 40 ft.below top of last ascent.
	Ascend on E.slope of sandy and sandstone ridge.
48.70	Top of sandridge about 60 ft.above the I/4 sec.cor., bears N.40° W.and S.25° E.;descend.
55.20	Foot of descent about 30 ft.below top of sandridge,

Chains.	
	bears N.and S.;ascend.
64.20	Top of ascent about 30 ft.above foot of descent, bears N.and S.;descend.
65.22	Trail bears N.55° W.and S.55° E.
77.80	Intersect the N.and S.line 42 lks.N.0° I' W.from the cor.of secs.4,5,8 and 9,heretofore described. Set a red sandstone I8xI0x5 ins.,I2 ins.in the ground,for closing cor.of secs.4 and 9,marked C.C. on E.;with 5 grooves on S. and 4 grooves on E.faces; and raised a mound of stone 2 ft.base,I I/2 ft.high, E.of cor. Pits impracticable. I destroy the marks on the old cor.that pertain to secs.4 and 9,and re-establish same as cor.of secs. 5 and 8,only. Land,mountainous and broken. Soil,sandy and stony;2nd.and 3rd.rate. No timber. Good grazing. Mountainous land on 77.80 chs.

Knowing from previous re-survey of the N.bdy.of the Tp. that the line bet.secs.4 and 5 will close on the N.bdy.out of limit,and a closing cor.will be necessary,from the cor.of secs.4,5,8 and 9,as remarked for secs.5 and 8 only,I run N.0° I' W.on a true line bet.secs.4 and 5. Ascend gradually on top of sandstone mountain;in sandy and stony soil;through scattering sage,greasewood,cactus and iron wood undergrowth.

0.42	The closing cor.of secs.4 and 9.
I6.00	Old road from Washington to the cedars,bears S.40° E.and N.40° W.
3I.25	Old road bears S.50° E. and N.50° W.-Runs from Washington to the cedars.
3I.50	Top of ascent about 50 ft.above the sec.cor.,bears S.E.and N.W. ;descend.gradually on N.W.slope.
32.00	Begin abrupt descent over broken ledges and steep slope of mountain,bears N.W.and S.E.
40.00	Set a red sandstone I8xI5x6 ins.,I2 ins.in the

Chains.	
	ground,for I/4 sec.cor.,marked I/4 on W.face;and raised a mound of stone 2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.
	This cor.is on N.Westerly slope about 50 ft.below top of sandridge.
46.00	Foot of sandridge about 50 ft.below the I/4 sec. cor.,bears E.and W.;enter volcanic ridges and leave sandridges.;ascend.
52.00	Top of ridge about 50 ft.high,bears E.and W.;descend on N.E.slope.
65.00	Wash at foot of descent,about I0 ft.wide and 6 ft. deep drains East.;ascend over broken sandstone and volcanic stone ridges.
76.50	Old road from Washington to the Cedars bears S.45o W.,and N.45° E.about 3.00 chs.,thence N. and winds Northerly along the foot of volcanic mountains,and ascends the volcanic mountain along a ravine.
82.55	Intersect the N.bdy.of the Tp.8.II chs.E. of the cor.of secs.4,5,32 and 33,established by me in re-survey of N.bdy.of this Tp.,and described in Book N
	.Set a volcanic stone I8xI4x4 ins.,I2 ins.in the ground,for closing cor.of secs.4 and 5,marked C.C.on S.;with 4 grooves on E.and 2 grooves on W. faces;and raised a mound of stone,2 ft.base,I I/2 ft.high S.of cor. Pits impracticable.
	I destroy all marks on the cor.of secs.4,5,32 and 33 that pertain to secs.4 and 5,and establish the same for the cor.of secs.32 and 33,T.4I S.,R.I5 W.,only.
	The closing cor.is on the S.E.slope of volcanic and sandstone ridge,on S.side of an old road which bears N.60° W.about 4.00 chs.,thence N.E.;and S. 35° E.about 2.00 chs.,thence S.W.
	Land mountainous and broken.
	Soil,sandy and stony;2nd.and 4th.rate.
	No timber.
	Undergrowth,grasses and shrubbery furnish fair grazing when supplied with sufficient moisture.
	Mountainous land on 82.55 chs.
	January 20,I900:At this closing cor.I set off 20° 4' S.on the decl.arc;and,at 0h IIm p.m.,l.m.t.,ob- the sun on the meridian;the resulting lat is 37oI2'N

Chains.

January 20,I900:At 2^h p.m.,l.m.t.,I set off 37° 9' 30" N.on the lat.arc.;20° 02' 30" S.on the decl. arc;and determine a true meridian with the solar, at the cor.of secs.I7,I8,I9 and 20 ,which is a red sandstone I8xI2x4 ins.,marked and witnessed as described by the Surveyor General.

Thence I run

N.0° 0I' W. bet.secs.I7 and I8.

Descehd over N.E.slope of sandridge;in sandy stony ground;through scattering sage,greasewood and iron wood undergrowth.

3.60 Hollow at foot of sandridge about 50 ft.below the sec.cor.drains S.70° E.;ascend.

7.40 Ravine about 6 ft.wide and 4 ft.deep,drains S.50° E.

2I.09 Hollow about 25 ft.wide and I0 ft.deep,drains S.30° E.

30.40 Top of ridge about 60 ft.above the hollow,bears S.30° E.and N.30° W.;thence over top of sandridge.

33.40 Descend over N.E.slope of sandridge.

40.00 Set a trachyte stone I5xI0x4 ins.,I0 ins.in the ground,for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8xI2 ins.,N.and S.of stone 3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high, W.of cor.

Cor.is on N.E.slope of sandridge about 50 ft.below top of last ridge.

47.40 Bottom of hollow about 50 ft.below the I/4 sec.cor., at foot of sandridge,drains E.about 8.00 chs.,thence S.E.;ascend gradually over volcanic foot hills; leave sand and sandstone ridges.

60.39 Begin ascent oversteep and rocky S.E.slope of volcanic mountain,about 75 ft.above the bottom of hollow,bears N.E.and S.W.

67.40 About I.00 ch.W.is a lava knoll on top of ridge about I00 ft.high.Begin more gradual ascent along S.E.slope of ridge about I50 ft.above the foot of ridge.

77.00 Top of volcanic mountain about 200 ft.high,bears N.E.and S. 30° W.;thence over top of mountain.

Subdivisions of T.42 S.,R.I5 W.-Continued.

Chains.	
80.00	Set a volcanic stone I8xI2x5 ins.,I2 ins.in the ground,for cor.of secs.7,8,I7 and I8,marked with 4 notches on the S.and 5 notches on the E.edges; and raised a mound of stone 2 ft.base,I I/2 ft.high, W.of cor. Pits impracticable. Land,mountainous and broken ridges. Soil,sandy and stony;2nd.and 4th.rate. No timber. When supplied with sufficient moisture the undergrowth,grasses and shrubbery afford good grazing. Mountainous land on 80.00 chs. January 20,I900.
	January 22,I900:At 8h a.m.,l.m.t.,I set off 37°I0' N.on the lat.arc;I9° 37' S.on the decl.arc;and determine a true meridian with the solar at the cor. of secs.7,8,I7 and I8,heretofore described. Thence I run N.89° 57' E.on a random line bet.secs.8 and I7.
40.00	Set a temp.I/4 sec.cor.
8I.00	Intersect N.and S.line 20 lks.S.of the cor.of secs. 8 and I7,on the W.bdy.of sec.I6,heretofore described thence I run S.89° 48' W.on a true line bet.secs.8 and I7. Over broken sandstone and volcanic ridges;in sandy stony ground;through scattering greasewood,sage and medium dense iron wood undergrowth. Descend. . .
5.60	Ravine at foot of descent about 40 ft.below the sec. cor.,about 25 ft.wide and 6 ft.deep,drains S.65° W. Ascend.
I0.00	Top of ascent on red sandstone ridge about 40 ft. high,bears S.40° W.and N.40° E.;descend.
32.25	Wash at foot of descent about 20 ft.wide and 7 ft. deep,drains S.45° W.about 6.00 chs.,thence S. Begin ascent of E.slope of volcanic ridge bears N.E. and S.W.

Chains.	
40.50	Set a trachyte stone 15x10x6 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high, N.of cor. Pits impracticable. This cor.is on E.slope of volcanic ridge about 100 ft.above the foot of ridge.
46.00	Top of ridge about 60 ft.above the 1/4 sec.cor., bears S.20° E.and N.20° W.thence ascend more gradually along the top of ridge.
50.00	Descend.
60.75	Road from St.George and Washington to the wood hills branches off from main dugway road bet.Washington and St.George,bears S.30° W.and N.30° E.
71.90	Road from St.George and Washington to the wood hills,branches off from dug way road,and bears S.20° E.and N.20° W.
72.75	Creek,now dry,about 4 links.wide and 1 ft.deep,used to convey Cottonwood waters to St.George,drains S. E.foot of volcanic ridge,about 120 ft.above the 1/4 sec.cor.,bears S.30° E.and N.25° W.;ascend on steep and rocky E.slope of ridge.
79.00	Top of ridge about 150 ft.high,bears N.and S.;thence over nearly level top of ridge.
81.00	The cor.of secs.7,8,17 and 18. Land,mountainous and broken. Soil sandy and stony,and clay stony;2nd.and 4th. rate. No timber. Undergrowth,grasses and shrubbery afford fair grazing. Mountainous land on 81.00 chs. January 22,1900:At this cor.I set off 19° 37' S. on the declination arc;and,at 0h 12m p.m.,observe the sun on the meridian;the resulting lat.is 37° 10' N.

From the cor.of secs.7,8,17 and 18,heretofore described,I run

Chains.	
	N.89° 51' W.on a random line bet.secs.7 and 18.
40.00	Set temp.1/4 sec.cor.
82.00	Intersect W.bdy.of the Tp.(Pine Valley Guide Meridian) 50 lks.N.of the cor.of secs.7,12,13 and 18, heretofore described in notes of retracement and re-survey of Pine Valley Guide Meridian, through Tp. 42 S.,bet.rs.15 and 16 W.,Book O .
	Thence I run
	N.89° 48' E.on a true line bet.secs.7 and 18.
	Over broken sandstone ledges,ridges and reefs;in scattering greasewood,sage and ironwood.
	Ascend.
2.20	Top of sandstone reef and ledges about 75 ft.above the sec.cor.,bears N.30° W.and S.30° E.;descend abruptly over E.slope of reef and ledges.
5.80	Begin more gradual descent,bears N.and S.
25.30	Ravine at foot of reefs and ridges,about 100 ft. below top of sandstone reef and ridges,about 20 ft. wide and 10 ft.deep,in which runs a small stream of water,which heads in Pine Valley Mountains and flows into main creek near St.George,course S.25° W. This creek is known as the Cotton wood water, and is 2 links wide.
	Ascend.
29.30	Top of sandstone reefs about 40 ft.above the creek bears N.E.and S.W. ;descend.
35.80	Bottom of hollow at foot of sandstone reefs,about 40 ft.below the top of reefs,drains S.45° W.;ascend.
39.30	Trail bears N.E.and S.W.
42.00	Set a volcanic stone 15x12x10 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone 2 ft.base,1 1/2 high,N.of cor. Pits impracticable.
	This cor.is about 25 ft.above last hollow near N.W. foot of volcanic ridge.
	Ascend on N.W.slope of volcanic ridge or mountain, over large boulders and broken volcanic ledges.
72.00	Top of ledges on volcanic mountain,about 150 ft. abouve the 1/4 sec.cor.,bears N.E.and S.W.;thence descend gradually over top of mountain.
82.00	The cor.of secs.7,8,17 and 18.About 20 ft.below the top of ledges.
	Land mountainous and broken,very rough.

Chains. Soil,sandy-stony,clay stony;4th.rate.
No timber.
Fair grazing.
Mountainous land on 82.00 chs.

January 22,I900.

January 23,I900:At 9h a.m.,l.m.t.,I set off 37° I0' N.on the lat.arc;I9° 24' S.on the decl.arc;and determine a true meridian with the solar,at the cor. of secs.7,8,I7 and I8.
Thence I run
North,0° 0I' W.,bet.secs.7 and 8.
Over volcanic mountain and broken ridges;through scattering iron wood,greasewood and sage under-growth;in sandy-stony and clay-stony ground.
Gradually ascend over top of volcanic mountain.

I.50 Begin abrupt descent over broken ledges and lava boulders on steep N.slope of mountain,bears S.75° E.about 2.00 chs.;thence S.40° W.;and N.20° W.about I0.00 chs.;thence S.W.

20.00 Begin more graduall descent on W.slope of ridge,at foot of volcanic mountain about I50 ft.below the top,bears N.W.and S.E.

28.00 Foot of descent about 200 ft.below the sec.cor.bears N.and S.;com;mence gradual ascent on W.slope of ridge.

40.00 Set a volcanic stone I5xI2x5 ins.,I0 ins.in the ground,for I/4 sec.cor.,marked I/4 on W.face;and raised a mound of stone,2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.
This cor.is on W.slope of volcanic ridges about I70 ft.below the sec.cor.

7I.30 Road from St.George and Washington to wood hills or cedars,bears S.30° E.and N.40° W.

72.50 Enter small creek running from Pine Valley mountains to St.George,same as crossed on line bet.secs. 7 and I8,drains S.40° W.;thence along the winding creek, which is about 2 lks. wide.

Chains.	
77.40	Leave creek to left, bears N.20° W.; drains Southerly.
75.00	Begin steep ascent on S.W. slope of volcanic mountain, over lava boulders and broken ridges, bears N. 30° W. and S.30° E., about 75 ft. above the 1/4 sec. cor.
79.50	Top of volcanic mountain about 100 ft. high, bears S.E and N.W.
80.00	Set a volcanic stone 25x8x6 ins., 19 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on the S. and E. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous and broken ridges.
	Soil, sandy-stony and clay-stony; 3rd. and 4th. rate.
	No timber.
	Grasses, shrubbery and undergrowth make fair grazing.
	Mountainous land on 80.00 chs.
	From the cor. of secs. 5, 6, 7 and 8, already described, I run
	N.89° 48' E. on a random line bet. secs. 5 and 8.
40.00	Set temp. 1/4 sec. cor.
80.94	Intersect N. and S. line 14 lks. N. of the cor. of secs. 5 and 8, on W. bdy. of sec. 9, heretofore described.
	Thence I run
	S.89° 54' W. on a true line bet. secs. 5 and 8 :
	Ascend over top of sandstone and sandy mountain; in sandy and stony and clay-stony ground; through scattering sage, greasewood, cactus and iron wood undergrowth.
3.15	Trail, bears N.50° W. and S.40° E.
6.00	Top of ascent about 15 ft. above the sec. cor., bears N.E. and S.W.; descend gradually over N. slope of sand-ridge.
31.00	Wash 45 ft. wide, 15 ft. deep drains S.20° W.; leave cactus and sage undergrowth; still in greasewood and iron wood. Ascend broken ridges and foot hills.
40.47	Set a lava stone 18x12x6 ins., 12 ins. in the ground,

Chains.	
	for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high,N.of cor. Pits impracticable.
	This cor.is about 50 ft.below the sec.cor.
43.50	Top of ridge about 25 ft.above the 1/4 sec.cor., bears S.10° E.and N.10° W.;descend.
48.00	Bottom of hollow at W.foot of ridge,about 20 ft. below top of ridge,drains S.10° E.;ascend gradually.
56.00	S.E.foot of black ridge,bears S.65° W.15.00 chs., thence S.;and N.65° E.,about 8.00 chs.,thence N. Ascend rapidly over S.E.slope of rocky volcanic ridge.
67.00	Top of point of volcanic ridge about 200 ft.high, bears S.and N.60° E.;descend over point of ridge, on broken ledges and large volcanic boulders.
73.50	Foot of descent on S.E.slope of ridge bears N.E.and S.;thence ascend on S.E.slope of ridge .
76.00	Top of volcanic ridge or mountain,bears N.E.and S.; thence over top of ridge.
80.94	The cor.of secs.5,6,7 and 8.
	Land,mountainous and broken.
	Soil,sandy,sandy-stony,clay-stony;2nd.3rd.and 4th. rate.
	No timber.
	Undergrowth,native grasses and shrubbery afford fair grazing when supplied with sufficient moisture.
	Mountainous land on 80.94 chs.
	January 23,1900:At this cor.I set off 19° 23' S.on the decl.arc;and,at 0h 12m p.m.,l.m.t.,observe the sun on the meridian;the resulting lat is 37° 11' N.

From the cor.of secs.5,6,7 and 8,heretofore described I run

S.89° 48' W.on a random line bet.secs.6 and 7.

40.00	Set temp.1/4 sec.cor.
81.84	Intersect the W.bdy.of the Tp.(Pine Valley Guide Meridian)14 lks.N.of the cor.of secs.1,6,7 and 12,

Chains.	
	heretofore described in notes of retracement and resurvey of W.bdy.of this Tp.(Pine Valley Guide Meridian,through Tp.42 S.,bet.Rs.I5 and I6 W.)Book O. Thence I run N.89° 42' E.on a true line bet.secs.6 and 7. Descend over broken sandstone reefs and ridges;in sandy,stony and clay-stony ground;through scattering greasewood and iron wood undergrowth.
6.80	Begin very abrupt descent,bears N.and S.
II.I0.	Descent more gradual,bears N.and S.
I6.20	Wash at foot of descent about I00 ft.below the sec. cor., about I0 ft.wide and 6 ft.deep,drains S.
23.50	Top of sandstone reefs and ridges about 60 ft.high, bears N.and S.;descend.
26.50	Wash at foot of ridge about 8 ft.wide and 6 ft.deep, drains S.30° W.;ascend.over broken sandstone reefs and ridges.
39.60	Top of ridges about I00 ft.high;descend.
4I.84	Set a red sandstone 20x8x7 ins.,I5 ins.in the ground for I/4 sec.cor.,marked I/4 on N.face;and raised a mound of stone 2 ft.base,I I/2 ft.high,N.of cor. This cor.is on E.slope of ridges about 35 ft.below top of last ridge.
48.54	Hollow at foot of ridge,about I00 ft.below the I/4 sec.cor.,drains S.30° E.about I0.00 chs.,thence S.W. ascend.
55.50	Top of ridge about 40 ft.high,bears N.and S.;descend.
57.50	Foot of descent about 50 ft.below top of last ridge bears N.and S.;ascend gradually.
65.50	Begin steep ascent of volcanic ridge over broken ledges and large boulders,bears N.and S.
74.00	Top of ridge about I00 ft.above the I/4 sec.cor., bears S.25° E.;and N.about 2.00 chs.;thence N.E. descend gradually over top of broken ridge.
77.04	Road from St.George and Washington to the wood hills or cedars bears S.20° E.and N.
78.74	Small creek which runs from Pine Valley mountains to St.George,about 2 lks. wide drains S.20° E.;ascend W.slope of point of volcanic ridge,over large boulders and ledges.
8I.57	Top of point of volcanic ridge about I00 ft.high,

Chains.	
	bears N.and S.30° E.
8I.84	The cor.of secs.5,6,7 and 8.
	Land mountainous and broken,very rough.
	Soil,sandy,stony ,and clay-stony;4th.rate,and 2nd. rate on about I0.00 chs.along the line.
	No timber.
	Fair grazing on E.I/2 of sec.;and on W.I/2 of sec. where there is sufficient depth of soil.
	Mountainous land on 8I.84 chs.
	From the cor.of secs.5,6,7 and 8,I run N.0° I' W.,bet.secs.5 and 6. on a true line,knowing from previous re-survey of the N.bdy that a closing cor.will be necessary.
	Over point of lava or volcanic ridge;in clay-stony ground;through scattering greasewood and iron wood undergrowth.
I.84	Begin descent over N.slope of point of ridge,bears N.30° E.and S.30° W.
7.00	Foot of lava ridge about I00 ft.below the top,bears N.40° E.and S.40° W.;small creek running from Pine Valley mountains to St.George,about 2 links wide drains S.30° W.,about 2.00 chs.,thence S.30° E.,along foot of ridge;ascend
9.50	On S.W.end of reservoir site located by St.George citizens for storage of Cottonwood waters;thence along W.side of reservoir site about 30 chs.long N. Easterly and S.Westerly,and about I0.00 chs.wide.
32.00	Top of ridge on N.W.cor.of reservoir,about 50 ft. above the creek,bears E.about 2.00 chs.,thence N.E.; and S.70° W.;
40.00	Set a volcanic stone I8xI0x5 ins.,I2 ins.in the ground,for I/4 sec.cor.,marked I/4 on W.face;and raised a mound of stone 2 ft.base,I I/2 ft.high,W. of cor. Pits impracticable.
54.50	Road from St.George and Washington to the wood hills or cedars,bears S20° W.and N.I0° E.
59.00	Creek running from Pine Valley Mountains to St.George about 2 lks.wide&I8 ins.deep-water about 4 ins.deep

Chains.	
	runs S.15°W.
60.50	Old road bears S.15° W. and N.59 E.
78.50	Top of ascent, about 100 ft. above the 1/4 sec. cor., bears N.25° E. and S.W.; descend along N.W. slope of ridge.
82.64	Intersect N. bdy. of the Tp. 7.23 chs. E. of cor. of secs. 5, 6, 31 and 32, established by me in re-survey of N. bdy. of this Tp., heretofore described in notes of same Book N. Set a volcanic stone 18x12x6 ins., 12 ins. in the ground, for closing cor. of secs. 5 and 6, marked C.C. on S.; with 5 grooves on E. and 1 groove on W. faces; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.
	I obliterate all marks on the old cor. pertaining to secs. 5 and 6, and re-mark the same for cor. of secs. 31 and 32, T.41 S., R.15 W., only.
	Land mountainous.
	Soil, clay-stony; 4th. rate.
	No timber.
	Undergrowth of greasewood, and shrubbery and grasses afford fair grazing.
	Mountainous land on 82.64 chs.
	January 23, 1900.

GENERAL DESCRIPTION.

Along the E. bdy. of the Tp., the surface is composed mostly of high gravelly mountain and ridges, burnt sandstone, volcanic and red sandstone mountains and ridges, and low sandhills, cut with deep ravines and washes with general course of drainage towards the Rio Virgin; which river enters the Tp. near the N.E. cor. of sec. 24, and runs in a winding general South westerly course, leaving the Tp. on the S. bdys. of secs. 31 and 32.

On the S. bdy. of the Tp. the line passes over low ridges and bench on the S.E., through Washington field lane on S. bdys. of secs. 35 and 34, with rich cultivated farms and orchards on either side of the lane, and State experiment farm about 1/2 mile S. of line

Chains. in secs.2 and 3,in the adjoining Tp.,all irrigated from from the Washington field canal entering the Tp.on E.bdy.of sec.24;leaving the Washingon field lane,the line passes over low sandridges,crossing the Rio Virgin,and thence through pastures and farms in the St.George valley along the river bottom.

The Pine Valley Guide Meridian on the W.bdy.of the Tp.,runs along the W.side of the St.George valley at E.foot of low volcanic bench and ridges,and through St.George City in secs.I9 and 30,from which it enters and crosses high sandstone and volcanic mountains and ridges.

The N.bdy.is mostly high volcanic bench and ridridges on W.and high sandstone mountain on the E.

The parts of the Tp.subdivided under this contract are mostly red sandstone and volcanic mountains and broken ridges.

The soils on the low hills and benches are generally rich and sandy,and on the mountains and ridges gravelly and stony with sufficient rich soil to produce undergrowth,grasses and shrubbery in abundance. Owing to the mild climate,vegetation grows prolific the year round when the soil is well supplied with moisture,and affords excellent grazing for cattle and sheep ,especially during the winter months,when stock will not thrive in the higher and colder altitudes on account of the deep snows.

There is no timber in this part of the Tp.,and no minerals of any kind are visible.Along the foot of red sandstone mountains in the Northeastern part, there are several stone quarries in which is obtained good building stone,used by the inhabitants of the town of Washington in the construction of public and private buildings;lower down along the foot of the same range,the ridges are composed of limestone of medium quality,and there are a number of old lime kilns in sight.

There is a natural reservoir site covering from 25 to 30 acres,in the S.W.I/4 of sec.5,which has been located by the citizens of St.George City,

Chains.

and into which they have run what is known as the Cottonwood waters heading near Pine Valley mountains,at a considerable expense.

A small portion of the land along the S.bdy.of sec.16,is occupied by the citizens of the town of Middleton and adjoins their farms,orchards and vineyards.This soil is of a rich sandy loam and especially adapted for the raising of early fruits and vegetables.

There are several small springs in the Tp.;the Cottonwood waters running from Pine Valley mountains to St.George City,crosses the Tp.on the Northwest; and Mill Creek heads in sec.10,runs Southerly in a deep ravine to the town of Washington where it is used for milling,domestic and irrigation purposes.

There are no settlers in this portion of the Tp., but the land is occupied generally for the grazing of domestic animals,as work horses,milch cows and calves,sheep etc.,by the citizens and residents of the towns of Washington and Middleton,and St.George City.

January 23,1900.

Mayhew H. Dalley
U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

....., United States Deputy Surveyor, to assist in running, measurin

marking the lines and corners described in the foregoing field notes of the survey of .....

.....

showing the respective capacities in which they acted:

Forfinal affidavits see Cook U. Tp 42 S R 16 W

....., *Chain*

....., *Chainm*

....., *Mound*

....., *Mound*

....., *Axman.*

....., *Axman.*

....., *Flagma*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in surveyin

those parts or portions of the .....

.....

.....

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

..... meridian, ... of ....., which are represe

in the foregoing field notes as having been surveyed by him and under his direction; and that said sur

has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and

corner monuments established, according to the instructions furnished by the United States Surv

General for .....

Forfinal affidavits see Cook U. Tp 42 S R 16 W.

....., *Chainma*

....., *Chainma*

....., *Moundma*

....., *Moundma*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

Subscribed and sworn to before me this .....

day of ....., 189

SEAL

6—161

8

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for Utah, bearing date of the 23 day of January, 1899, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisions of Township 42 South Range 15 West of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me this 31st day of May 1902, ~~189~~

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17 1902, ~~189~~

The foregoing field notes of the survey of the subdivisions of Township 42 South Range 15 West of the Salt Lake Base and Meridian, Utah

executed by Mayhew H. Dalley under his contract No. 224, dated January 23, 1899, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

_____
United States Surveyor General.

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4—679.

9

BOOK A-288

FIELD NOTES

RETRACEMENT
OF THE ~~SURVEY~~ OF THE

SUBDIVISIONS OF TOWNSHIP 42 SOUTH, RANGE 15 WEST,

Of the SALT LAKE BASE AND *Meridian,*
in the
STATE OF UTAH

AS SURVEYED BY

Mayhew H. Dalley, *United States Deputy Surveyor,*

Under his Contract No. 224, *dated* January 23rd., *189*9

Retracement ~~Survey~~ *commenced* January 18th 1900, ~~189~~

Retracement ~~Survey~~ *completed* January 22nd 1900, *189*

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Retracement here 11-01-95

NAMES AND DUTIES OF ASSISTANTS.

Max W.Woodbury,	Chainman.
Edward J.Higbee,	Chainman.
Thomas Urie,	Moundman.
David Dix,	Moundman.
Thomas Urie,	Axman.
David Dix,	Axman.
William Macfarlane,	Flagman.

6—151

Volume
#
R0288

BOOK A-288

INDEX DIAGRAM.

*Township*_____, *Range*_____

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31	32	33	34	35	36

*Meanders Page*_____

6—151

PRELIMINARY OATHS OF ASSISTANTS.

E, Max W. Woodbury and Edward J. Higbee
nly swear that we will well and faithfully execute the duties of chainmen; that we will level the
er even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
report the true distances to all notable objects, and the true lengths of all lines that we assist in
ng, to the best of our skill and ability, and in accordance with instructions given us, in the ~~survey of~~
cement of subdivisions of T.42 S., R.15 W., and T.42 S., R.16 W. of
Salt Lake Base and Meridian, State of Utah.

Max W. Woodbury, *Chainman.*

Edward J. Higbee, *Chainman.*

bed and sworn to before me this 5th.
of January, A.D., 189 1900.

Senora C Dalley
Notary Public.

SEAL My Commission Expires March 20th, 1903

WE, Thomas Urie and David Dix
emnly swear that we will well and truly perform the duties of moundmen in the establishment
ners, according to the instructions given us, to the best of our skill and ability, in the ~~survey of~~
racement of subdivisions of T.42 S., R.15 W., and T.42 S., R.16 W., of
Salt Lake Base and Meridian, State of Utah.

Thomas Urie, *Moundman.*

David Dix, *Moundman.*

ribed and sworn to before me this 5th.
ay of January, A.D., 189 1900.

Senora C Dalley
Notary Public.

SEAL My Commission Expires March 20th, 1903

WE, Thomas Urie and David Dix
lemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
other duties, according to instructions given us, to the best of our skill and ability, in the ~~survey of~~
racement of subdivisions of T.42 S., R.15 W., and T.42 S., R.16 W. of
Salt Lake Base and Meridian, State of Utah.

Thomas Urie, *Axman.*

David Dix, *Axman.*

scribed and sworn to before me this 5th.
day of January, A.D., 189 1900.

Senora C Dalley
Notary Public.

SEAL My Commission Expires March 20th, 1903

I, William Macfarlane, do solemnly swear that I will well and truly
rform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
etracement of subdivisions of T.42 S., R.15 W. and T.42 S., R.16 W. of
~~rvey of~~ the Salt Lake Base and Meridian, State of Utah.

William Macfarlane, *Flagman.*

ubscribed and sworn to before me this 5th.
day of January, A.D., 189 1900.

Senora C Dalley
Notary Public.

SEAL My Commission Expires March 20th, 1903

6—151

Chains.	
	Retracements commenced January I8,I900,and executed with a W.and L.E.Gurley Light Mountain Solar Transit,for description of which see notes of Survey of South Boundary of T.42 S.,R.I4 W.,Book A
	For complete test of solar apparatus see notes of retracement of S.bdy.of T.42 S.,R.I5 W.,Book N.
	By retracing the E.bdy.of sec.I2 and surveying the W.and N.boundaries of the sec.,I find that the exteriors of the sec.will not close;therefore,I retrace the S.bdy.of the sec.as follows:
	January I8,I900:At the cor.of secs.II,I2,I3 and I4, heretofore described in notes of subdivisions of this Tp.,Book P ,I set off 37° I0' N.on the lat.arc;20° 28' 30" S.on the decl.arc;and,at 8h a. m.,l.m.t.,determine a true meridian with the solar. Thence I run
	S.89° 56' E.on retracement line bet.secs.I2 and I3. Over rolling hills and broken ridges;in sandy and stony ground;through scattering sage,rabbit brush and greasewood undergrowth.
0.72	Small creek 1½ lks wide runs S.20° E.about 5.00 chs.to reservoir at head of Mr.Bastian's orchard and farm.
0.98	Small branch of same creek about 1 link wide empties into same reservoir.
2.50	Mr.Bastian's dwelling houses bears S.about 6.00 chs. Orchard,and farm adjoining the houses;also barn,corralls,stables ,stackyard etc.
3.23	Road bears N.E. and S.W.
7.00	Trail bears N.20° E.and S.20° W.
8.I0	Irrigation ditch about 2 ft.wide and I ft.deep drains S.25° W. and empties into reservoir heretofore mentioned.
II.00	House with orchard and farm etc.adjoining bears S. about 7.00 chs. owned by Mr. Bastian Jr.
I9.00	Hollow about I00 ft.wide and 25 ft.deep,heads N.70° W.about 5.00 chs.,and drains S.70° E. about 3.00 chs. thence S. Small stream of clear water about 1 link wide and grove of

Chains.	
	cottonwoods in the hollow.
30.30	Trail bears N.E.and S.W.
39.95	Fall 3I lks. N.of the old I/4 sec.cor.,which is a red sandstone I4xllx5 ins.,marked and witnessed as described by the Surveyor General.
58.50	West side of hollow about 7.00 chs.wide and 50 ft. deep,drains S.I00 E.
60.65	Ravine in bottom of hollow about I0 ft.wide and 7 ft.deep,drains S.I0° E.
68.75	Ravine I5 ft.wide and I0 ft.deep,drains S.30° E. about 8.00 chs.,thence S.about 20.00 chs.
72.50	Begin gradual descent over nearly level land,in rich sandy soil bears N.and S.;leave broken ridges and stony ground.
80.04	Intersect the range line 2 lks.S.of the cor.of secs. I2 and I3,heretofore described in notes of subdivisions of T.42 S.,R.I4 W.,Book C.
	The course of this line is therefore S.89°57' E.
	Land nearly level,rolling and broken.
	Soil,sandy and stony;2nd.and 4th.rate.
	No timber.
	Good grazing.
	Note:For latitude observation see notes of subdivisions of this Tp.Book P.
	By surveying the N.and E.boundaries of sec.II,I find that the exteriors of the sec.will not close,therefore,I retrace the old exteriors as follows:
	January I8,I900:At 3h p.m.,l.m.t.,I set off 37° I0' N.and the lat.arc;200 27' S.on the decl.arc;and determine a true meridian with the solar,at the cor. of secs.II,I2,I3 and I4,heretofore described in notes of subdivisions of this Tp.,Book P.
	Thence I run
	S.89° 58' W.on retracement line bet.secs.II and I4.
	Over rolling sandhills;through scattering greasewood and sage undergrowth.
25.30	Road bears S.W.and N.E.

Chains.	
28.20	Spring branch about 5 lks.wide,runs S.W.
37.20	Road bears S.W.and N.E.
39.92	Fall 75 lks.N.of the old 1/4 sec.cor.,which is a red sandstone 12x8x6 ins.,marked and witnessed as described by the Surveyor General.
58.30	Road bears N.and S.
61.20	E.side of Washington St.,bears N.and S.
79.90	Fall 159 lks. N.of the old cor.of secs.10,11,14 and 15,which is a red sandstone 16x8x6 ins.,marked and witnessed as described by the Surveyor General.
	The course of this line is therefore S.88° 50' W.
	Land rolling sandhills,and low bench.
	Soil,sandy and gravelly;2nd.and 3rd.rate.
	No timber.
	Undergrowth,grasses and shrubbery afford fair grazing.
	Land N.of line in E.1/2 of sec.partly occupied for for farming. S.of line mostly covered by Washington City.
	I continue retracement of exteriors of sec.11,as follows:
	From the cor.of secs.10,11,14 and 15,already described,I run
	N.bet.secs.10 and 11.
	Over rolling sandhills;in sandy,gravelly and stony soil;through scattering sage,greasewood,cactus and and iron wood undergrowth.
3.25	Road bears E.and W.
40.02	Fall 30 lks.E.of the old 1/4 sec.cor.,which is a red sandstone 14x10x4 ins.,10 ins.in the ground, marked and witnessed as described by the Surveyor General.
60.00	Road bears N.30° W.and S.30° E.
80.00	Fall 63 lks.E. of the old cor.of secs.2,3,10 and 11,heretofore described in notes of subdivisions of this Tp.,Book P.

Chains.	
	The course of this line is therefore, N.0°27' W.
	Land rolling sandhills.
	Soil, sandy, gravelly and stony; 2nd. and 3rd. rate.
	No timber.
	By surveying the S. and E. bdy. of sec. 2 and retracing the N. bdy. thereof, I find that the exteriors of the sec. will not close, therefore, I begin at the old cor. of secs. 2, 3, 10 and 11, heretofore described, and run North, 0°25' W., retracing line bet. secs. 2 and 3.
40.93	Fall 193 lks. E. of the old 1/4 sec. cor., which is an iron stone 5x8x5 ins. above ground, marked 1/4 on W. face, with pits obliterated. Dug pits 18x18x12 ins., N. and S. of stone 3 ft. dist., and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
81.83	Intersect N. line of the Tp. at 4.30 chs., S.89°47' E. of the old cor. of secs. 2, 3, 34 and 35, heretofore described.
	January 18, 1900::At the old cor. of secs. 2, 3, 34 and 35, above described, I set off 37°12' N. on the lat. arc; 20°25' S. on the decl. arc; and at 4h p.m., l.m.t., determine a true meridian with the solar.
	Thence I run
	South, 3°44' E. on a true line bet. secs. 2 and 3.
	Ascend gradually over rolling sandhills; through scattering greasewood, sage and iron wood undergrowth.
4.07	Wash about 50 ft. wide and 5 ft. deep drains S.70° W. about 10.00 chs., thence South.
6.02	Wood road from Washington to the Cedars bears N.25° E. and S.20° W.
11.10	Top of ascent about 75 ft. above the sec. cor., bears N.E. and S.W.; descend gradually over broken sandridges.
41.00	The old 1/4 sec. cor. heretofore described.
	I continue measurement running on a true course as determined by previous blank line,
	South, 3° 7' E.
59.10	Ravine at foot of descent about 75 ft. below the 1/4 sec. cor., about 50 ft. wide and 6 ft. deep, drains S.15° W. and heads N.65° E. about 5.00 chs. dist. Ascend.

Chains.	
66.10	Ravine about 50 ft.wide and 6 ft.deep,heads N.65° E. about 10.00 chs.dist.;and drains S.65° W. about 6.00 chs.,and joins large ravine which drains S.40° W. Ascend N.W.slope of ridge which bears S.50° W.and N.20° E.
78.50	Top of ridge about 100 ft.above last ravine,bears S.50° W. and N.20° E.;thence ascend more gradually over top of sandridge.
81.98	The old cor.of secs.2,3,10 and 11,heretofore de-described.
	Land rolling and broken sandhills cut up with ravines
	Soil,sandy and gravelly;3rd.and 4th.rate.
	Vegetation,sage,greasewood,iron wood,cactus,oose, and grasses. Fair grazing.
	No timber.
	January 18,1900.

By surveying the W.bdy.and resurveying and retracing the N.and E.bdys.of sec.3,I find that the exteriors of the section will not close;therefore,I retrace the S.bdy.of this sec.as follows:-

January 19,1900:I set off 37°11' N.on the lat. ars;20°15'30" S.on the decl.arc;and at 2h p.m.,l.m.t.,determine a true meridian with the solar at the cor.of secs.2,3,10,and 11,heretofore described.

Thence I run

North 89°51' W.on retracement line bet.secs.3 and 10.

Over broken sandridges and rolling sandhills;in scattering greasewood,iron wood and cactus under-growth;through sandy and gravelly soil.

13.25	Gully about 40 ft.wide and 25 ft.deep drains S.
27.80	Road bears N.W.and S.E.
39.80	Fall 14 lks.N.of the old 1/4 sec.cor.,which is a granite 8x6x4 ins.above ground,marked and witnessed as described by the Surveyor General.
47.75	Road bears N.and S.
79.62	Fall 32 lks.N.of the old cor.of secs.3,4,9 and 10.

Chains.	
	heretofore described.
	The course of this line is therefor S.89°55' W.
	Land broken ridges and rolling sandhills.
	Soil,sandy and gravelly;3rd.and 4th.rate.
	Shrubbery and grasses afford fair grazing.
	No timber.
	Knowing from retracement of N.and E.bdy.of sec. IO that its exteriors will not now close,I retrace the S.bdy.of the sec.as follows:-
	I begin at the cor.of secs.IO,II,I4 and I5 heretofore described,and run
	S.89°4I' W.on retracement line bet.sec.Io and I5.
	Over broken and rolling sandridges;through medium dense greasewood,sage,iron wood,cactus and oose undergrowth;in sandy,gravelly and stony ground.
	Ascend.
9.70	Ridge about 50 ft.high bears N.W.and S.E. Descend.
24.65	Mill Creek in deep ravine about I5 lks.wide with water about I ft.deep,drains S. Ravine about 200 ft. wide and 75 ft.deep. Ascend E.slope of ravine and sandridge.
40.00	Fall 8 lks.N.of the old I/4 sec.cor.,which is a red sandstone IIx4x5 ins.above ground,marked and witnessed as described by the Surveyor General.
	The course of this I/2 mile is therefore S.89°34' W.
	The cor.is on top of bench about IOC ft.above the Mill Creek and Ravine.
42.60	Old road bears N.and S.
59.60	Dry Gulley about 50 ft.wide and 20 ft.deep drains S.
79.80	Fall 7 lks. S. of the old cor.of secs.9,IO,I5 and I6,heretofore described in notes of subdivisions of this Tp.
	The course of the last I/2 mile on this line is therefore, S.89°54' W.
	Land rolling and broken ridges.
	Soil,sandy,gravelly and stony;2nd.3rd.and 4th.rate.
	No timber.Shrubbery and grasses afford fair grazing.
	January I9,I900.

Retracement of Subdivisions of T.42 S.,R.I5 W.-Continued.

Chains.	
	Knowing from Retracement of S.,E.,and N.bdys.of sec.I0,and survey of S.,W.,and N.bdys.of sec.9 that the exteriors of these sections will not close,I retrace the line bet.these secs.as follows:
	January 20,I900:I set of 37°I0' N.on the lat.arc; 20°4'30" S.on the decl.arc;and at I0h a.m.,l.m.t., determine a true meridian with the solar at the cor. of secs.9,I0,I5 and I6,heretofore described in notes of subdivisions of this Tp.
	Thence I run
	North,on retracement line bet.secs.9 and I0.
	Descend gradually over broken sandridges;in sandy and stony ground;through scattering greasewood,sage, cactus and iron wood undergrowth.
9.I0	Ravine about 20 ft.wide and I5 ft.deep drains E.,and heads W.about I5.00 chs.near top of sandridge.
I6.70	Ravine about 6 ft.wide and 4 ft.deep,about 50 ft. below the sec.cor.,drains S.45° E.,and heads N.70°W. about I2.chs near top of sandridge.
	Ascend gradually.
30.I0	Begin ascent of foot of sandridge bears S.35°W.and N. 35°E.
40.00	Fall 35 lks.E.of the old point for the I/4 sec.cor., which is a cross(X)cut on the surface of a redsandstone6x4 ft.,marked and witnessed as described by the Surveyor General.
	The course of this I/2 mile is therefore N.0°30'W.
40.20	Top of point of red sandstone ridge about 75 ft.high, bears N.E.and S.W.;descend.
44.00	N.W.foot of point of ridge bears N.25°W.and S.35°E.; ascend.
57.00	S.W.foot of ridge bears N.W.and S.E.;ascend S.W. slope of ridge.
65.I0	Top of ridge about 50 ft.high,bears E.and W.;descend gradually over rolling sandhills.
80.II	Fall 54 lks.E.of the old cor.of secs.3,4,9 and I0, heretofore described.Course of this line bet sec cors is N.0°23'W.
40 / 40.II	Land mountainous and broken,and rolling sandhills.
	Soil sandy,sandy and stony;2nd.,3rd.and 4th.rate.

Chains.	
	No timber. Undergrowth,shrubbery and grasses afford fair grazing. Mountainous land on 40.00 chs.
	Knowing from survey of the W.and N.bdys.of sec. 16 that its exteriors will not close,I retrace old exteriors as follows: I begin at the cor.of 16,17,20 and 21,heretofore described,and run East,on the recorded course of original line bet. secs.21 and 16. Ascend gradually over top of volcanic ridge or bench; through clay-gravelly,sandy-gravelly and stony ground; in scattering greasewood,sage and iron wood under-growth.
3.50	Begin abrupt descent on N.E.slope of volcanic ridge
7.65	Old road near E. foot of ridge bears N.and S.
8.40	Ravine about 50 ft.wide and 25 ft.deep drains S.; spring branch and small creek in ravine about 2 lks wide drains S.to the Rio Virgin. Ravine at E.foot of volcanic ridge about 150 ft.below top of ridge.
10.00	Valley bears East.
17.00	Small resrevoir bears N.about 50 lks.
18.25	Trail from reservoir to Middleton farm house bears N.and S.
18.80	Irrigation ditch drains S.
19.35	Wire fenve bears S.and E.;enter Prince's field and vineyard;running along the N.line of fence.
25.00	Town of Middleton bears S.about 10.00 chs.
30.50	Fence bears S.and W.;leave Prince's Field & vineyard.
38.09	Fall 50 lks.S.of the old 1/4 sec.cor.,which is a red sandstone 10x12x4 ins.above ground,marked and wit-nessed as described by the Surveyor General. The course of this 1/2 mile is therefor N.89°16' East.
40.60	Road bears S.25° W.and N.25°E.
50.00	Spring branch and small reservoir bear s N.about 50 links. Begin abrupt ascent of red sandstone ledges, bears N.and S.

Chains.	
54.90	Top of red sandstone mountain about I00 ft.high, bears N.50°W.and S.50°E.
60.60	Begin steep descent on S.E.slope of sandstone ridge or mountain bears N.50°W.and S.50°E.
65.00	East foot of sandstone ridge or mountain bears N.E. and S.W. Valley bears E.
7I.05	Fence bears N.and S.
72.00	Mr.Prisby's farm house bears S.of line&adjoining same.
77.50	Road from St.George to Washington bears S.75°W.and N.75°E.
78.85	Find no trace of the old cor.of secs.I5,I6,2I and 22, 22which I afterwards re-establish at 38 lks.W.,and 73 lks.N.of this point,this being the proportionate distance bet.the I/4 sec.cors.on S.boundaries of secs.I5 and I6,and the cors.of sec 9,I0,I5 and I6, and the I/4 sec.cor.bet.secs.2I and 22,as shown by retracements hereinafter described,at
78.67	Set a red sandstone 20xI0x6 ins.,I5 ins.in the ground, for re-established cor.of secs.I5,I6,2I and 22, marked with 3 notches on the S.and E.edges;from which A cottonwood tree I5 ins.diam.,bears N.63°45°E. I5 lks.dist.,marked T.42 S.,R.I5 W.,S.I5,B.T. A cottonwood tree I2 ins.diam.bears S.77°W.54 lks. dist.,marked T.42 S.,R.I5 W.,S.2I,B.T. Telegraph line 22 lks.S.of cor.bears N.60°E.and S. 60°W. This cor.is near a row of cottonwood trees on N.side of the Main Road from St.George City to Salt Lake City. The course of last 39.78 chs.on re-established line being N.89°40' E. Land partly level,partly mountainous and broken. Soil sandy in valley,on ridges stony and gravelly; Ist.2nd.and 4th.rate. No timber. Shrubbery and grasses afford fair grazing. Mountainous land on 25.00 chs.

Chains.	
	From point for old cor.of secs.I5,I6,2I and 22, I continue my line E.bet.secs.I5 and 22.
	Over nearly level ground,in sandy soil,through scattering mosquite,iron wood and sage undergrowth.
.I5	Row of cottonwood trees on N.side of st.or road from St.George to Salt Lake City,bears S.65°W.and N.65°E.
.35.	Telegraph line bears S.65°W.and N.65°E.
4.30	Fence near N.E.cor.of Mr.Prisby's field bears S.45° E.and S.65°W.,on S.side of road from St.george to Salt Lake City. Leave sandy soil and enter sandy, clay gravelly soil.
5.25	Ravine about 20 ft.wide and I0 ft.deep drains S.45°E.
25.40	Old road bears N.I00W.and S.I0°E.
32.00	Old road bears N.35°W.and S.35°E.
34.00	Old road bears N.I0° E.and S.I0°W. Begin ascent of low ridge,bears N.I0°E.and S.I0°W.
36.00	Top of ridge or knoll about 35 ft.high bears N.E.and S.W.;descend on N.E.slope.
39.36	Fall I07 lks.S.of the old I/4 sec.cor.,which is a lime stone I0x3x5 ins.above ground,marked I/4 on N. face with pits and mound obliterated.I dug pits I8x I8xI2 ins.,E.and W.of stone 3 ft.dist.,and raised a mound of earth 3 I/2 ft.base,I I/2 ft.high N.of cor. This distance being used in the re-establishement of the cor.of secs.I5,I6,2I and 22.The course bet.cors. on the re-established line being N.89°3I'E.
	Land mostly level,part low ridges or knolls.
	Soil sandy,clay and gravelly;2nd and 3rd.rate.
	Undergrowth,sage,greasewood,ironwood,cactus and mosquite.
	No timber except row of cottonwood trees.

	From point for old cor.of secs.I5,I6,2I and 22, I run
	S.bet.secs.2I and 22.
	Over nearly level land,in sandy soil,slightly mixed with gravel,through greasewood,cactus,mosquite and iron wood undergrowth.
.25	Road from St.George to Salt Lake City bears N.E.& S.W.

CHAINS.	
.40	Telegraph line bears N.E.and S.W.
I.25	Fence N.side of Mr.Prisby's field and S.side of road from St.George to Salt Lake City,bears S.65°W.and N. 65°E. Enter field.
2I.24	Fence on S.side of Mr.Prisby's Field,bears N.30°W. about 25.00 chs.,and S.30°E.about I5.00 chs.Leave field.
22.I4	Trail along the fence bears S.35° E.and N.35°W.
3I.20	Road bears N.45°W.and S.40°E.
38.04	Wash about 6 ft.wide and 4 ft.deep drains S.25°E.
39.27	Fall 25 lks.E.of the old I/4 sec.cor.,which is a red sandstone I0x8x4 ins.above ground,marked I/4 on W.,with pits and mound obliterated.I dug pits I8xI8 xI2 ins.,N.and S.of stone 3 ft.diat,and raised a mound of earth 3 I/2 ft.base,I I/2 ft.high,W.of cor. This distance being used in the re-establishment of the cor.of secs.I5,I6,2I and 22.
	The course between cors.on re-established line is N.0°II'W. and distance 40.00 Chs.
	Land nearly level,gently descending to the S.
	Soil,rich sandy,slightly mixed with gravel;Ist.and 2nd.rate.
	Land in field and outside of field mostly covered with undergrowth of greasewood,sage,cactus,ironwood and mosquite or thornwood.
	No timber.
	From point for old cor.of secs.I5,I6,2I and 22, I run
	North on a random line bet.secs.I5 and I6.
40.00	Find no trace of the old I/4 sec.cor.
80.73	Fall 92 lks.E.of the old cor.of secs.9,I0,I5 and I6, heretofore described.
	This distance being used in the re-establishing of cor.of secs.I5,I6,2I and 22.
	Thence I run
	South 0°23' E.on true line bet.secs.I5 and I6.
	Over rolling sandhills and broken ridges;in sandy

Chains.	
	gravelly and stony ground;through medium dense grease wood,sage,iron wood,cactus and scattering mosquite undergrowth.
	Ascend gradually on N.E.slope of ridge.
4.40	Old road bears N.80°W.and S.80°E.
7.I0	Top of ascent about 50 ft.above the cor.bears S.E. and N.W. Descend gradually.
I3.60	Trail bears N.75°E.and N.65°W.
I6.00	Hollow about 25 ft.wide and 20 ft.deep drains E.
I6.36	Trail bears E.and W.
29.I0	Hollow about 50 ft.wide and 25 ft.deep drains E. Ascend.
35.I0	Top of sandridge about 60 ft.high,bears S.E.and N.W. Descend.
40.00	Set a red sandstone I5xI0x5 ins.,Io ins.in the ground for re-established I/4 sec.cor.;marked I/4 on W.face; and raised a mound of stone 2 ft.base,I I/2 ft.high, W.of cor. Pits impracticable.
	Gradually ascend over top of red sandstone ridge,on S.E.and E.slope of ridge.
52.00	Top of sandridge about I00 ft.high,descend over S.E. slope of ridge.
54.II	Foot of sandstone ridge bears S.50°W.and N.80°E.; thence gradually descend over nearly level valley.
77.56	Ravine about 20 ft.wide and I0 ft.deep drains S.[illegible]50°E.
80.00	The re-established cor.of secs.I5,I6,2I and 22,here tofore described.
	Land broken ridges and rolling sand hills.
	Soil,sandy gravelly and stony;2nd.and 4th.rate.
	No timber.
	Undergrowth,greasewood,sage,iron wood,cactus and on the last I0.00 chs.mosquite or thornwood.
	Mountainous land on 25.00.chs.
	January 20,I900.

By retracement and resurvey of W.bdy.of sec.I8, and surveying N.and E.bdy.of the sec.I find that its exteriors will not close;therefore,I retrace the S. boundary of the sec.as follows:

Chains.	
	January 22,I900:I set off 37°9'30" N on the lat.arc; I9°38'S.on the decl.arc;and,at I0h,a.m.,l.m.t., determine a true meridian with the solar at the cor. of secs.I3,I8,I9 and 24,on the W.bdy.of the Tp.and heretofore described in notes of Retracement of Pine Valley Guide Meridian,Book O .
	Thence I run,
	S.89°5I'E on retracement line bet.secs.I8 and I9.
	Over top of sandstone mountain;through scattering sage,greasewood,iron wood and cactus undergrowth.
	Ascend.
5.00	Top of ascent about 40 ft.above the cor.bears N.and S.
	Descend gradually.
I4.20	Trail bears N.55°E.and S.55°W.
I8.00	Commence gradual ascent bears N.55oE.and S.55°W.
4I.I0	Fall 30 lks.S.of the old I/4 sec.cor.,which is a red sandstone I2x3x5 ins.above ground,marked and witnessed as described by the Surveyor General.
	Ascend.
5I.00	Top of sandridge about 60 ft.high,bears N.and S.; descend gradually.
8I.67	Fall 78 lks.S.of the old cor.of secs.I7,I8,I9 and 20,heretofore described.
	The course on the Ist.I/2 mile is therefore N.89° 44'E.and the course on the last I/2 mile is N.89° 28'E.
	Land mountainous and broken.
	Soil,sandy and stony;3rd.and 4th.rate.
	No timber.
	Undergrowth,shrubbery and grasses afford fair grazing.
	Mountainous land on 8I.67 chs.

By surveying the W.,N.and E.boundaries of sec.I7, I find that the exteriors of the sec.will not close; therefore,I begin at the cor.of secs.I7,I8,I9 and 20, above described,and run

North,89°57'E.,retracing line bet.secs.I7 and 20.

Chains.	
	Over Easterly slope of sandstone mountain;through scattering greasewood,sage,cactus and iron wood undergrowth.
	Descend rapidly.
3.00	Ravine about 50 ft.wide and 25 ft.deep,drains N.65° E.about 8.00 chs.;thence S.E.
9.75	Ravine about 60 ft.wide and 30 ft.deep,drains N.50° E .about 4.50 chs.,thence S.E.
30.60	Begin abrupt descent into ravine,bears S.E.and N.W.
34.35	Ravine about I25 ft.below the sec.cor.,about I00 ft. wide and 50 ft.deep,drains S.45°E.
40.00	Trail bears N.and S.
40.65	Fall 40 lks.S.of the old I/4 sec.cor.,which is a red sandstone 5xI0x4 ins.above ground,marked and witnessed as described by the Surveyor General.
	The course of this line is therefore N.89°23'E.
42.60	Ravine ~~Ravine~~ 50 ft.wide and 30 ft.deep,drains S.25°W. N.25°E.about 2.00 chs.dist.is a small spring in the ravine. Begin ascent of N.W.slope of volcanic ridge or bench.
5I.25	Top of volcanic ridge or bench,about I00 ft.high, bears S.40°E.and N.45°W.;descend gradually over top of ridge or bench.
54.45	Old wood road bears S.45°E.and N.45°W.
54.85	Old wood road bears S.45°E.and N.45°W.
56.60	Wood road from St.George and Washington ,leading from dugway road about I0.00 chs.,S.I5°E.,N.I5°W. to the wood hills.
60.I5	Ravine about 3.00 chs.wide and 65 ft.deep,drains S.
8I.I6	Fall 53 lks.S.of the old cor.of secs.I6,I7,20 and 2I, heretofore described.
	The course o f the last 40.5I chs.is therefore N. 89°46'E.
	Land mountainous and broken ridges,ranging from I00 to 250 ft.above the St.George and Washington valleys.
	Soil on W.42.60 chs.is sandy and stony,on E.38.56 chs. clay,gravelly and stony;3rd.and 4th.rate.
	No timber.
	Undergrowth and grasses afford fair grazing.
	Mountainous land on 8I.I6 chs.
	January 22,I900.

GENERAL DESCRIPTION.

For General Description see Notes of Subdivisions of this Township.

January 22,I900 .

Mayhew H.D

U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANT

LIST OF NAMES.

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

....., United States Deputy Surveyor, to assist in running, measu

marking the lines and corners described in the foregoing field notes of the survey of .....

.....

showing the respective capacities in which they acted:

For final affidavits see book T. Tp 42 S. R 16 W.

....., *Chai*

....., *Chai*

....., *Mou*

....., *Mo*

....., *Axm*

....., *Axma*

....., *Flag*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in survey

those parts or portions of the .....

.....

.....

.....

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

..... meridian, ... of ....., which are repres

in the foregoing field notes as having been surveyed by him and under his direction; and that said su

has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, an

corner monuments established, according to the instructions furnished by the United States Surv

General for .....

For final affidavits see book T. Tp 42 S. R 16 W.

....., *Chainm*

....., *Chainm*

....., *Moundm*

....., *Moundm*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

Subscribed and sworn to before me this .....

day of ....., 189

SEAL

.....

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley United States Deputy Surveyor, do
ly swear that, in pursuance of a contract received from Jacob B. Blair
l States Surveyor General for Utah, bearing date of the
23d day of January, 1899, I have well, faithfully, and truly, in my own
person, and in strict conformity with the instructions furnished by the United States Surveyor
al for Utah, the Manual of Surveying Instructions, and the laws of the
d States, ~~surveyed~~ retraced all those parts or portions of the subdivisions of Township
2 South Range 15 West

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

Mayhew H. Dalley
United States Deputy Surveyor.

scribed by said Mayhew H. Dalley, and sworn to before me
this 31st day of May 1901, 189

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah April 17 1902

The foregoing field notes of the ~~survey~~ retracement of the subdivisions of Township
2 South Range 15 West

ecuted by Mayhew H. Dalley
nder his contract No. 224, dated January 23, 1899, having been
itically examined, and the necessary corrections and explanations made, the said field notes, and the
~~surveys~~ retracement they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

United States Surveyor General.

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BOOK A-288

FIELD NOTES

RETRACEMENT
OF THE ~~SURVEY~~ OF THE

SOUTH BOUNDARY OF TOWNSHIP 34 SOUTH, RANGE 15 WEST,

AND OF THE RESURVEY OF THE

NORTH BOUNDARY OF TOWNSHIP 34 SOUTH, RANGE 15 WEST,

Of the SALT LAKE BASE AND *Meridian,*
in the
STATE OF UTAH

AS SURVEYED BY

Mayhew H. Dalley, *United States Deputy Surveyor,*

Under his Contract No. 224, *dated* January 23rd., *189* 9

Retracement *Survey commenced* June 4, 1900, *189*

Retracement *Survey completed* June 7, 1900, *189*

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Retracement S Bdy Twp 5.78.47
Resurvey N Bdy Twp 4.18.47
" " S Bdy Twp 4.60.50
5.78.47

NAMES AND DUTIES OF ASSISTANTS.

Donald C.Urie,	Chainman.
William E.Pryor,	Chainman.
Isaac C.Haight,	Moundman.
David Dix,	Moundman.
Hillman Dalley,	Axman.
David Dix,	Axman.
William Dix,	Flagman.

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BOOK A-288

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

We, Donald C.Urie and William E.Pryor

o solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the hain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that ve will report the true distances to all notable objects, and the true lengths of all lines that we assist in neasuring, to the best of our skill and ability, and in accordance with instructions given us, in the ~~survey of~~ retracement of S.bdy.of T.34 S.,R.I5 W. and resurvey of N.bdy.of T.34 S.,R.I5 W.,of the Salt Lake Base and Meridian,State of Utah.

Donald C Urie, Chainman.
William E Pryor, Chainman.

Subscribed and sworn to before me this 2nd. day of June,A.D.I900., 189

SEAL

My Commission Expires March 29th, 1903

Senora C. Dalley
Notary Public.

We, Isaac C.Haight and David Dix

lo solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the ~~survey of~~ retracement of S.bdy.of T.34 S.,R.I5 W.,and resurvey of N.bdy.of T.34 S.,R.I5 W.,of the Salt Lake Base and Meridian,State of Utah.

Isaac C. Haight, Moundman.
David Dix, Moundman.

Subscribed and sworn to before me this 2nd. day of June,A.D.I900., 189

SEAL

My Commission Expires March 29th, 1903

Senora C. Dalley
Notary Public.

We, Hillman Dalley and David Dix

lo 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~~ retracement of S.bdy.of T.34 S.,R.I5 W.,and resurvey of N.bdy.of T.34 S.,R.I5 W.,of the Salt Lake Base and Meridian,State of Utah.

Hillman Dalley, Axman.
David Dix, Axman.

Subscribed and sworn to before me this 2nd. day of June,A.D.I900., 189

SEAL

My Commission Expires [illegible]

Senora C. Dalley
Notary Public.

I, William Dix, 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 retracement of S.bdy.of T.34 S.,R.I5 W.,and resurvey of N.bdy.of T.34 ~~survey of~~ S.,R.,I5 W., of the Salt Lake Base and Meridian,State of Utah.

William Dix, Flagman.

Subscribed and sworn to before me this 2nd. day of June,A.D.I900., 189

SEAL

My Commission Expires March 29th, 1903

Senora C. Dalley
Notary Public.

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Retracement of South Boundary of T.34 S., R.15 W.

Chains.

Retracement commenced June 4, 1900, and executed with a with a W. and L.E. Gurley Ligt Mountain Solar Transit, for description of which see Notes of Survey of S. bdy. of T.42 S., R.14 W., Book A .

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 true meridian, determined by observation of Polaris, I proceed as follows:-

I return to the Meridian established May 14, 1900, from Polaris, at the cor. of Tps. 34 and 35 S., Rs. 15 and 16 W.; latitude 37° 49' N.; longitude 113° 33' W.; and set off 37° 49' N. on the lat. arc; 22° 29' N. on the decl. arc; and, at 3h 57m p.m., l.m.t., determine with the solar a True Meridian and mark a point thereof, on the wooden plug already set firmly in the ground, 5.00 chs. N. of the cor.; this mark falls about 0.25 ins. West of the True Meridian established by Polaris observation.

June 4, 1900.

June 5, 1900: At 7h 58' a.m., l.m.t., I set off 37° 49' N. on the lat. arc; 22° 33' 30" N. on the decl. arc; and mark a point in the true meridian determined with the solar, by a cross on the wooden plug already set 5.00 chs. N. of my station; this mark falls 0.35 ins. E. of the True Meridian established by Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for true meridians, respectively about 0' 13" West and 0' 18" East of the True Meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The Magnetic Declination at 8h 30m a.m., is 15° 30' E., which reduced by the table, page 100, gives the Mean Mag. Decl. 15° 25' E.

Chains.	
	Having heretofore retraced the West bdy.of this Tp.,and finding the same defective in alinement and most of the old corners obliterated,and resurvey thereof necessary,I deem it advisable to make further tests of the courses and lengths of the old exteriors before commencing survey of subdivisions; therefore,I begin at the cor.of Tps.34 and 35 S.,Rs. I5 and I6 W.,heretofore described,and run S.89°48' E.,along S.bdy.of Tp.,retracing line bet. secs.6 and 3I.
	Over nearly level ground,through dense sage,greasewood and rabbit brush undergrowth.
37.3I	Fall I6 lks. S.of the old I/4 sec.cor.,which is a granite stone 7x3x5 ins.above ground,properly marked, with pits and mound nearly obliterated;dug pits I8x I8xI2 ins.E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor. After diligent search I find no trace of charred cedar post described by the Surveyor General as re-established I/4 sec.cor.
77.48	Fall 28 lks.S.of the old cor.of secs.5,6,3I and 32, which is a granite stone 11x7x6 ins.above ground, properly marked with witness points almost obliterated.I dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft. dist.;and raised a mound of earth,4 ft.base,2 ft. high,W.of cor.
	The course of this line bet.the sec.corners is ,therefore,due East.
	Land nearly level.
	Soil,sandy and clay loam;Ist.and 2nd.rate.
	No timber. Good grazing.
	Dense sage,greasewood or rabbit brush undergrowth on 77.48 chs.

From cor.of secs.5,6,3I and 32,above described,I run

S.89°48' E.,retracing line bet.secs.5 and 32.

Over nearly level ground,through dense sage,grease-

Retracement of S.bdy.of T.34 S.,R.I5 W.-Continued.

Chains.	
	wood and rabbit brush undergrowth.
5.60	Enter rolling sandhills,bears N.and S.
20.20	Leave rolling sandhills bears N.and S.;thence over nearly level ground.
40.II	Fall 20 lks.S.of the old I/4 sec.cor.,which is a granite stone 8x5x5 ins.above ground,properly marked, with witness points nearly obliterated;dug pits I8x I8xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.I7	Fall 39 lks.S.of the old cor.of secs.4,5,32 and 33, which is a granite stone 9x8x6 ins.above ground, properly marked,with witness points obliterated; dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft.dist.; and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Course of line bet.sec.cors.is N.89°55' E.
	Land nearly level and rolling sandhills.
	Soil,clay and sandy loam;Ist.and 2nd.rate.
	No timber.
	Good grazing.
	Dense sage,greasewood or rabbit brush undergrowth on 80.I7 chs.

From the cor.of secs.4,5,32 and 33 above described I run

S.89°48' E.,retracing line bet.secs.4 and 33.

Over nearly level land,through dense greasewood and sage undergrowth,and shadscale shrubbery.

40.II	Fall I4 lks.S.of the old I/4 sec.cor.,which is a granite 9x5x5 ins.above ground,properly marked,with witness points obliterated;dug pits I8xI8xI2 ins., E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.40	Fall 2I lks.S.of the old cor.of secs.3,4,33 and 34, which is a granite stone I0x6x6 ins.above ground, properly marked,with witness points nearly obliterated;I dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft. dist.;and raised a mound of earth,4 ft.base,2 ft. high,W.of cor. The course of this line bet.the

Chains.	
	sec.corners is,therefore,S.89°57' E. Land nearly level. Soil,clay-loam;Ist.rate. No timber. Good grazing;undergrowth,shadscale shrubbery&grasses. Dense sage or greasewood undergrowth on 80.40 chs. June 5,I900:At this sec.cor.,I set off 22° 35' N. on the decl.arc;and,at IIh58' a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°49' N.
	From the cor.of secs.3,4,33 and 34,above described, I run S.89°48' E.,retracing line bet.secs.3 and 34. Over nearly level ground;through dense sage,grease- wood and rabbit brush undergrowth.
40.00	Fall 32 lks.N.of the old I/4 sec.cor.,which is a charred cedar post,3x3 ins.,8 ins.above ground,marked and witnessed as described by the Surveyor General. Course of line on this I/2 mi. is S.89°20' E.
79.95	Fall 7 lks.S.of the old cor.of secs.2,3,34 and 35, which is a granite stone I2x7x5 ins.above ground, properly marked,with witness points nearly obliter- ated;dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft. dist.;and raised a mound of earth,4 ft.base,2 ft. high,W.of cor. The course of this line bet.the sec.corners is,there- fore,S.89°5I' E. Land nearly level. Soil,clay loam;Ist and 2nd.rate. No timber. Undergrowth,shrubbery and grasses afford fair geaz- ing. Dense sage,greasewood or rabbit brush undergrowth on 79.95 chs.

Chains.	
	From the cor.of secs.2,3,34 and 35,heretofore described,I run
	S.89°48' E.,retracing line bet.secs.2 and 35.
	Over nearly level ground;through dense sage and greasewood undergrowth.
24.00	Road from Cedar City to Pioche by way of Modena, bears S.85° E.and N.85° W.;leave dense greasewood and sage undergrowth and enter medium dense sage and greasewood,bears N.80° W.and S.80° E.
40.20	Fall 2 lks.N.of the old I/4 sec.cor.,which is a gray granite stone I0x5x5 ins.above ground,properly marked, with pits and mound almost obliterated;dug pits I8x I8xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.27	Fall 48 lks.N.of the old cor.of secs.I,2,35 and 36, which is a gray granite 7x5x5 ins.above ground,properly marked with pits and mound nearly obliterated; I dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft.dist.; and raised a mound of earth,4 ft.base,2 ft.high,W. of cor. The course of this line bet.the sec.cors. is therefore,S.89°27' E. ;and course on last I/2 mi. is S.89° 9' E.
	Land nearly level.
	Soil,clay-loam;Ist.and 2nd.rate.
	Undergrowth,greasewood and sage,which with shrubbery and grasses afford good grazing.
	Dense undergrowth on 24.00 chs.
	From the cor.of secs.I,2,35 and 36 above described, I run
	S.89°48' E.,retracing line bet.secs.I and 36.
	Over nearly level ground,through medium dense sage and greasewood undergrowth and shadscale shrubbery.
26.85	Road from Pinto to Lund by way of Webster's well, bears S.and N.
40.35	Fall II lks.S.of the old I/4 sec.cor.,which is a gray granite 8x5x5 ins.above ground,properly marked with witness points nearly obliterated;dug pits I8xI8xI2 ins.E.and W.of stone,3 ft.dist.;and raised a mound of

Chains.	
	earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.20	Intersect the E.bdy.of the Tp.50 lks.N.of the old cor. of Tps.34 and 35 S.,Rs.I4 and I5 W.,which is a volcanic stone I2xI0x6 ins.,above ground,marked and witnessed as described by the Surveyor General.
	The course of this line bet.the sec.cors.is therefore, S.89°27' E.;and course on last I/2 mi.is S.88°56' E.
	Land nearly level.
	Soil,clay and loamy;Ist.and 2nd.rate.
	Undergrowth,scattering and medium dense sage and greasewood;shadscale and white sage shrubbery,which which with grasses afford good grazing.
	June 5th,I900.

GENERAL DESCRIPTION.

For General Description see Notes of Subdivisions of this Tp.

June 5th,I900.

Mayhew H. Dalley,
U.S.Deputy Surveyor.

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Chains.

Resurvey commenced June 6,I900,and executed with a W.and L.E.Gurley Light Mountain Solar Transit,for description of which see Notes of Survey of S.bdy. of T.42 S.,R.I4 W.,Book A .

For complete solar test.see notes of retracement of S.bdy.of this Tp.,Book Z .

Having heretofore retraced the W.and S.boundaries of this Tp.,and finding same defective in alinement and measurement,and that the exteriors will not close,I make further tests of length and course of old exteriors as follows:

June 6,I900:I set off 37°54'I0" N.on the lat.arc; 22°40' N.on the decl.arc;and at 9h a.m.,l.m.t.,determine a true meridian with the solar,at the cor. of Tps.33 and 34 S.,Rs.I4 and I5 W.,which is a red granite stone 11x6x5 ins.above ground with old marks thereon,to which I restore pits and mound as follows dug pits 24x24x12 ins.,on each line N.,E.,and W.,4 ft.,and S.of stone 8 ft.,dist.;and raised a mound of earth,5 ft.base,2 I/2 ft.high,S.of cor.

Thence I run

S.89°42' W.,on blank line along N.bdy.of Tp.,bet. secs.I and 36;at 40.00 chs.,I find the old I/4 sec. cor.,S.89°22'W.,27 lks.dist.,and at 80.00 chs.,the cor.of secs.I,2,35 and 36,N.I6°22' W.,96 lks.dist.; therefore,I continue my line W.,find no part of the N.bdy. in alinement,and that many of the corners are nearly obliterated.At 5 miles 78.47 chs.,intersect N.and S.line 2.98 chs. S.of the closing cor.of Tp.34 S.,Rs.I5 and I6 W.,established by me in Resurvey of Pine Valley Guide Meridian,through Tp.34 S.,and heretofore described in notes thereof.

As the falling answers to a correction of 0°2I' or 50 lks.N.(nearly)per mile,counting from the N.E. cor.of the Tp.,and is within prescribed closing limits;and,as no subdivisional lines have been closed on this bdy.,I begin at the closing cor.of Tp.34 S.,Rs. I5 and I6 W.,above described,and resurvey the same

Chains.	
	as follows:
	S.89°57' E.on a true line bet.secs.6 and 31.
	Over low rolling sandhills;through dense sage ,greasewood and rabbit brush undergrowth.
6.10	Trail bears N.and S.
23.63	Trail bears N.and S.
38.47	Set a granite stone 14x7x6.ins.,10 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
	Find no trace of the old 1/4 sec.cor.after diligent search.Leave rolling land;enter nearly level land.
78.47	Set a granite stone 14x10x10 ins.,10 ins.in the ground,for cor.of secs.5,6,31 and 32,marked with 1 notch on W.and 5 notches on E.edges;dug pits 18x18 x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
	From this cor. the old cor.of secs.5,6,31 and 32, which is a granite stone 8x6x6 ins. above ground, properly marked,with witness points obliterated, bears N.55°13' W.,3.50 chs.dist. I destroy all traces of the old cor.
	Land low rolling sandhills,and nearly level land.
	Soil,sandy and loamy;2nd.rate.
	No timber.
	Undergrowth,shrubbery and bunch grass afford fair grazing.
	Dense undergrowth on 78.47 chs.
	June 6,1900.
	S.89°57' E.on resurvey line bet.secs.5 and 32.
	Over nearly level land;through medium dense greasewood,scattering sage;and dense shadscale shrubbery.
27.60	Horse trail running from Webster's Well to the ranges bears S.E.and N.W.
32.50	Road from Antelope to Sheep Association Well and State Line S.10° E.and N.10° W.
40.00	Set a granite stone 16x12x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18

Chains.	
	xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor. I find no trace of the old I/4 sec.cor.after diligent search.
80.00	Set a granite stone 22x8x8 ins.,I7 ins.in the ground, for cor.of secs.4,5,32 and 33,marked with 2 notches on on W.and 4 notches on E.edges;dug pits I8xI8xI2 ins., in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
	From this cor.,the old cor.,a granite 7x6x4 ins.above ground,properly marked,with witness points obliterated,bears N.57°I7' W.,2.59 chs.dist. I destroy all traces of this old cor.of secs.4,5,32 and 33.
	Land nearly level,gently sloping to N.and N.W.
	Soil,clay and loamy;Ist.and 2nd.rate.
	No timber.
	Undergrowth,shrubbery and grasses in abundance,which afford good grazing.
	S.89°57' E.on resurvey line bet.secs.4 and 33.
	Over nearly level ground;through medium dense greasewood undergrowth,scattering sage,and dense shadscale.
40.00	Set a granite stone 24xI0x6 ins.,I8 ins.in the ground, for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
	The old I/4 sec.cor.,a granite stone 7x6x4 ins.above ground,properly marked,with pits and mound obliterated, bears N.55°W.from the new cor.,2.05 chs.dist.I destroy all traces of the old I/4 sec.cor.
57.50	Trail bears N.W.and S.E.
80.00	Set a granite stone I4xI0x6 ins.,I0 ins.in the ground, for cor.of secs.3,4,33 and 34,marked with 3 notches on on E.and W.edges;dug pits I8xI8xI2 ins.,in each sec. 5 I/2 ft.dist.;and raised a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	From this cor.,the old cor.of secs.3,4,33 and 34,a granite 7x5x5 ins.above ground,properly marked,with

Chains.	
	slight traces of pits and mound,bears N.53°50' W., I.66 chs.dist. I destroy all traces of the old cor. Land nearly level,covered with dense shadscale shrubbery,medium dense greasewood and sage undergrowth, and native grasses,affording good grazing. Soil,clay loam;Ist.rate. No timber.
	S.89°57' E.on resurvey line bet.secs.3 and 34. Over nearly level ground;through dense greasewood underdergrowth and shadscale shrubbery.
I.34	Trail bears N.W.and S.E.
40.00	Set a granite stone I8xI2xI0 ins.,I2 ins.in the ground, for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 xI2 ins.,E.and W.of stone 3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor. From this point,the old I/4 sec.cor.,which is a decayed stake,with marks almost obliterated,bears N.64°40' W.,I47 lks.dist. I destroy all traces of the old I/4 sec.cor.
80.00	Set a granite stone I6x8x4 ins.,II ins.in the ground, for cor.of secs.2,3,34 and 35,marked with 4 notches on W.and 2 notches on E.edges;dug pits I8xI8xI2 ins.in each sec.,5 I/2 ft.dist.;and raised a mound of earth, 4 ft.base,2 ft.high,W.of cor. From this cor.,the old cor.of secs.2,3,34 and 35, which is a granite 7x4x5 ins.above ground,properly marked,with no traces of pits or mound,bears N.56' W. I07 lks.dist. I destroy all traces of the old sec. cor. Land nearly level,covered with short dense greasewood and shadscale shrubbery,which afford fair grazing. Soil,clay and loamy;2nd.and Ist.rate. No timber. June 7,I900:At this sec.cor.,I set off 22°46'30" N. on the decl.arc;and,at 11h59m a.m.l.m.t.,observe the sun on the meridian;the resulting lat.is 37°54' N.

Chains.	
	S.89°57' E.on resurvey line bet.secs.2 and 35. Over nearly level ground covered with short dense greasewood undergrowth and shadscale shrubbery.
9.00	Trail bears N.W.and S.E.
40.00	Set a granite stone 16x10x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x 18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor. Find no trace of the old 1/4 sec.cor.after diligent search.
60.00	Enter high dense sage and rabbit brush undergrowth, bears N.and S.;continue in greasewood and shadscale.
80.00	Set a granite stone 14x10x6 ins.,10 ins.in the ground, for cor.of secs.1,2,35 and 36,marked with 5 notches on W.and 1 notch on E.edges;dug pits 18x18x12 ins., in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high W.of cor.
30/60	From this cor.,the old cor.,which is a trachyte stone 8x6x4 ins.above ground,with old marks thereon,and witness points nearly obliterated,bears N.32°44' W., 50 lks.dist. I destroy all traces of this old cor.of secs.1,2,35 and 36.
	Land nearly level,gently sloping to N.
	Soilclay loam;1st and 2nd.rate.
	Undergrowth,sage,greasewood and rabbit brush,with shadscale shrubbery;good grazing.
	No timber.
	Dense undergrowth on 20.00 chs.

June 7,1900:I set off 37°54' N.on the lat.arc; 22°48' N.on the decl.arc;and,at 4hp.m.,l.m.t.,determine a true meridian with the solar,at the cor. of secs.1,2,35,and 36,established by me as above described.

Thence I run

S.89°57' E.on resurvey line bet.secs.1 and 36. Over nearly level ground;through short dense greasewood and shadscale,and scattering sage;leave dense

Chains.	
	sage undergrowth at corner,bears N.and S.
5.00	Road from Cedar City by way of Webster's Well, to State Line,bears S.E.and N.W.
29.55	Leave level ground and enter low rolling clay and sand hills,bears S.E.and N.W.;trail bears N.W.and S.E.
40.00	Set a lime stone I4xI2x4 ins.,I0 ins.in the ground, for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor. This cor.is on top of West bank of storm water pond. From this cor.the old I/4 sec.cor.,which is a cedar stake 3x3 ins,standing I8 ins.above ground,partly decayed,with marks and witness points almost obliterated,bears S.45°W.,58 lks.dist., I destroy all traces of the old I/4 sec.cor.
40.50	Enter W.side of storm water pond,now dry,level bottom,with banks about 5 ft.high,extend Southwesterly about one mile,and Northerly about I/2 mile,being about 40.00 chs.wide where the Tp.line crosses same. Thence over nearly level clay bottom of pond,crossing numerous horse trails,running from Webster's Well Northwesterly. Leave undergrowth and shrubbery.
65.00	Main trail bears N.40° W.and S.40° E.
80.00	The cor.of Tps.33 and 34 S.,Rs.I4 and I5 W.,heretofor described,about 2.00 W. of E.side of storm water pond.
	From this Tp.cor.Webster's Well bears S.2°40' W., 2I.00 chs.dist.This is an artesian well with a flow of about 20 gallons per minute,and is used for watering sheep.Small reservoir adjoining same on N. Cabin about 75 lks.S.from Well.
	Land nearly level and rolling land.
	Soil,clay,sandy,loamy W.of pond;Ist.and 2nd.rate; in the pond heavy clay alkaline;3rd.rate.
	Undergrowth and shrubbery with grasses on W.of pond afford fair grazing. No vegetation of any kind grows in the pond.
	No timber.
	June 7,I900.

Chains.

GENERAL DESCRIPTION.

For General Description see Notes of subdivisions of this Tp.,Book Z'.

June 7,1900.

Mayhew H Dalley
U.S.Deputy Surveyor.

BOUNDARIES OF T.34 S.,R.15 W.

Latitudes,Departures and Closing Errors.

Line Designated.	True Bearing.	Distance.	Latitudes.		Departure	
		Chs.	Chs.	Chs.	Chs.	C
S.bdy.T. 4 S.,R.15 W						
S.bdy.sec.36.	N.89°27'W	80.20	.77			0
S.bdy.sec.35	N.89°27'	80.27	.77			0
S.bdy.sec.34	N.89°51'	79.95	.21			9
S.bdy.sec.33	N.89°57'W.	80.40	.07			0
S.bdy.sec.32	S.89°55'W.	80.17		.11		0
S.bdy.sec.31	West	77.48				7
W.bdy.T.34 S.,R.15W.						
Pine Valley Guide Meridian.	North	479.88	479.88			
N.bdy.T.34 S.,R.15 W.						
	S.89°57' E.	478.47		.42	478.47	
E.bdy.T.34 S.,R.15 W.						
Convergency	South	480.00		480.00	.57	
			481.70	480.53	47 .	47
			0.5		78.47	
Error in lat.			1.17.			
Error in dep.						

June 7,1900.

Mayhew H Dalley
U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley 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~~ retracement of S.bdy. of T.34 S., R.15 W., and resurvey of N.bdy. of T.34 S., R.15 W. of the Salt Lake Base and Meridian, State of Utah, showing the respective capacities in which they acted:

Donald C. Uzie, Chainman.

William E. Pryor, Chainman.

Isaac C. Haight, Moundman.

David Dix, Moundman.

Hillman Dalley, Axman.

David Dix, Axman.

William Dix, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley United States Deputy Surveyor, in ~~surveying~~ retracing all those parts or portions of the S.bdy. of T.34 S., R.15 W., and resurveying the N. bdy. of T.34 S., R.15 W. of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been ~~surveyed~~ retraced by him and under his direction; and that said ~~survey~~ retracement has been in all respects, to the best of our knowledge and belief, well and faithfully ~~surveyed~~ retraced, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Donald C. Uzie, Chainman.

William E. Pryor, Chainman.

Isaac C. Haight, Moundman.

David Dix, Moundman.

Hillman Dalley, Axman.

David Dix, Axman.

William Dix, Flagman.

Subscribed and sworn to before me this 23rd. day of June, A.D. 1900, 189

SEAL

Senora C. Dalley
Notary Public.

6-91

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for Utah, bearing date of the 23rd day of January, A. D., 189 9, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, ~~surveyed~~ retraced all those parts or portions of S.bdy. of T. 34 S., R. 15 W. and re-surveyed the N.bdy. of T. 34 S., R. 15 W.

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

Mayhew H. Dalley
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me this 31st day of May, A. D. 1901, 189

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17 1902, 189

The foregoing field notes of the ~~survey~~ retracement of the South Boundary of Township 34 South Range 15 West and resurvey of the North Boundary of Township 33 South Range 15 West of the Salt Lake Base & Meridian, Utah

executed by Mayhew H. Dalley under his contract No. 1941, dated January 23, 189 9, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ~~survey~~ retracement they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

United States Surveyor General.

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BOOK A-288

R.3.B.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS OF TOWNSHIP 34 SOUTH, RANGE 15 WEST,

Of the SALT LAKE BASE AND *Meridian,*
in the
STATE OF UTAH.

AS SURVEYED BY

Mayhew H. Dalley, *United States Deputy Surveyor,*

Under his Contract No. 224, *dated* January 23rd., *189*9

Survey commenced June 8, 1900., *189*

Survey completed June 21, 1900., *189*

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Subs - high 28 - 79 - 36 ✓
" low - 30 - 72 - 94 ✓
Closings - 6 - 89 ✓

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BOOK A-288

NAMES AND DUTIES OF ASSISTANTS.

Donald C.Urie,	Chainman.
William E.Pryor,	Chainman.
Isaac C.Haight,	Moundman.
David Dix,	Moundman.
David Dix,	Axman.
Hillman Dalley,	Axman.
William Dix,	Flagman.

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Volume

#

R0288

BOOK A-288

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Donald C.Urie and William E.Pryor

solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the in over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that will report the true distances to all notable objects, and the true lengths of all lines that we assist in suring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of divisions of T.34 S.,R.15 W.,of the Salt Lake Base and Meridian,State Utah.

Donald C. Urie, Chainman.

William E. Pryor, Chainman.

scribed and sworn to before me this 2nd. day of June,A.D.1900, 189

Senora C. Dalley

SEAL

My Commission Expires March 20th, 1903

Notary Public.

WE, David Dix and Isaac C.Haight

solemnly swear that we will well and truly perform the duties of moundmen in the establishment corners, according to the instructions given us, to the best of our skill and ability, in the survey of divisions of T.34 S.,R.15 W.,of the Salt Lake Base and Meridian,State Utah.

David Dix, Moundman.

Isaac C. Haight, Moundman.

bscribed and sworn to before me this 2nd. day of June,A.D.1900, 189

Senora C. Dalley

SEAL

My Commission Expires [illegible]

Notary Public.

WE, David Dix and Hillman Dalley

solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners d other duties, according to instructions given us, to the best of our skill and ability, in the survey of divisions of T.34 S.,R.15 W.,of the Salt Lake Base and Meridian,State Utah.

David Dix, Axman.

Hillman Dalley, Axman.

bscribed and sworn to before me this 2nd. day of June,A.D.1900, 189

Senora C. Dalley

SEAL

My Commission Expires [illegible]

Notary Public.

I, William Dix, do solemnly swear that I will well and truly erform the duties of flagman according to instructions given me, to the best of my skill and ability, in the rvey of subdivisions of T.34 S.,R.15 W.,of the Salt Lake Base and Meri-an,State of Utah.

William Dix, Flagman.

bscribed and sworn to before me this 2nd. day of June,A.D.1900, 189

Senora C. Dalley

SEAL

My Commission Expires [illegible]

Notary Public.

Subdivisions of T.34 S.,R.I5 W.

Chains.	
	Survey commenced June 8,I900,and executed with a W.and L.E.Gurley.Light Mountain Solar Transit,for description of which see Notes of Survey of S.bdy.of T.42 S.,R.I4 W.,Book A.
	For complete solar test see Notes of Retracement of S.bdy.of this Tp.,Book Z.
	I commence at the cor.of secs.,1,2,35 and 36,on the S.bdy.of the Tp.,heretofore described in Notes of Retracement of this bdy.,Book Z.
	Thence I run
	N.0° I' W.,bet.secs.35 and 36.
	Over nearly level land;through dense sage and greasewood undergrowth.
40.00	Set a trachyte stone 24xI2x7 ins.,I8 ins.in the ground,for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
80.00	Set a granite stone I8xI2xI0 ins.,I2 ins.in the ground,for cor.of secs.25,26,35 and 36,marked with 1 notch on S.and E.edges;dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft.dist.;and raised a mound of earth 4 ft.base,2 ft.high,W.of cor..
	Land nearly level,gently sloping N.
	Soil,clay loam;Ist.rate.
	No timber.
	Fair grazing.
	Dense sage or greasewood undergrowth on 80.00 chs..

S.89°27' E.on a random line bet.secs.25 and 36.

40.00	Set temp.I/4 sec.cor.
80.24	Intersect E.bdy.of the Tp.23 lks.S.of the old cor.of secs.25,30,3I and 36,which is a granite stone 9x7x5 ins.above ground,properly marked,with pits and mound nearly obliterated;dug pits I8xI8xI2 ins.,in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft. base,2 ft.high,W.of cor.

Chains.	
	Thence I run N.89°37' W.on a true line bet.secs.25 and 36. Over nearly level ground;through dense sage and greasewood undergrowth.
37.45	Road from Pinto to Lund by way of Webster's well, bears S.10° W.and N.10° E.
40.12	Set a granite stone 16x10x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x 18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
80.24	The cor of secs.25,26,35 and 36 . Land nearly level,gently sloping N.and W. Soil,sandy and clay loams,slightly mixed with gravel; 1st.and 2nd.rate. No timber. Undergrowth,shadscale shrubbery and grasses afford good grazing. Dense sage or greasewood undergrowth on 80.24 chs.
	N.0°1' W.,bet.secs.25 and 26. Over nearly level ground,through dense sage and grease-wood undergrowth.
40.00	Set a granite stone 16x10x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x 12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
80.00	Set a granite stone 18x12x8 ins.,12 ins.in the ground, for cor.of secs.23,24,25 and 26,marked with 2 notches on S.and 1 notch on E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth, 4 ft.base,2 ft.high,W.of cor. Land nearly level,gently sloping N. Soil,clay loam with sprinkling of gravel;1st.and 2nd. rate. No timber. Undergrowth,shrubbery and grasses afford fair grazing. Dense greasewood or sage undergrowth on 80.00 chs. June 8,1900:At this sec.cor.,I set off 22°52' N.on

Chains.	
	on the decl.arc;and,at II^{h}59m,a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°50' N.
	S.89°37' E.on a random line bet.secs.24 and 25.
40.00	Set temp.I/4 sec.cor.
80.44	Fall I8 lks.S.of the old cor.of secs.I9,24,25 and 30 on E.bdy.of the Tp.,which is a granite stone 9x7x6 ins.above ground,properly marked,with witness points nearly obliterated;dug pits I8xI8xI2 ins.,in each sec., 5 I/2 ft.dist.;and raised a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Thence I run
	N.89°46' W.on a true line bet.secs.24 and 25.
	Over nearly level land,through dense sage and greasewood undergrowth.
2I.45	Road from Pinto to Lund,bears S.and N.
40.22	Set a granite stone I8x8x8 ins.,I2 ins.in the ground, for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
54.34	Road from Cedar by way of Antelope Springs to State Line,bears S.E.and N.W.
80.44	The cor.of secs.23,24,25 and 26.
	Land nearly level,gently sloping N.and N.W.
	Soil clay loam with slight intermixture of gravel; Ist.and 2nd.rate.
	No timber.
	Undergrowth,shrubbery,and grasses afford good grazing.
	Dense sage and greasewood undergrowth on 80.44 chs.
	N.0°I' W.bet.secs.23 and 24.
	Over nearly level ground,through dense sage and greasewood undergrowth.
I9.88	Road from Cedar City by way of Antelope to State Line,bears S.40° E.and N.40° W.
40.00	Set a granite stone I4xI0x8 ins.,I0 ins.in the ground,

Chains.	
	for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
43.50	Granite knoll about 150 ft.base,and 25 ft.high, with stone monument on its summit bears E.about 16.00 chains from line.
80.00	Set a granite stone 20x10x8 ins.,15 ins.in the ground, for cor.of secs.13,14,23 and 24,marked with 3 notches on on S.and 1 notch on E.edges;dug pits 18x18x12 ins., in each sec.,5 1/2 ft.dist.;and raised a mound of earth 4 ft.base,2 ft.high,W.of cor.
	Land nearly level,gently sloping N.and N.W.
	Soil,clay and clay loam;2nd.and 1st.rate.
	No timber.
	Undergrowth,shrubbery and grasses afford fair grazing.
	Dense greasewood and sage undergrowth on 80.00 chs.
	From this cor.,monument on granite knoll,bears S. 24°51' E.,about 38.00 chs.dist.
	June 8,1900:I set off 37°51' N.on the lat.arc; 22°53' 30" N.on the decl.arc;and,at 4h p.m.,l.m.t., determine a true meridian with the solar,at the cor. of secs.13,14,23 and 24,above described.
	Thence I run
	S.89°45' E.on a random line bet.secs.13 and 24.
40.00	Set temp.1/4 sec.cor.
80.68	Intersect E.bdy.of Tp.,20 lks.S.of the old cor.of secs.13,18,19 and 24,which is a granite stone 8x6x6 ins.above ground,properly marked,with pits and mound nearly obliterated;dug pits 18x18x12 ins.,in each sec. 5 1/2 ft.dist.;and raised a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Thence I run
	N.89°54' W.on a true line,bet.secs.13 and 24.
	Over almost level ground;through dense sage and greasewood undergrowth.
23.40	Road from Pinto to Lund bears S.and N.
40.34	Set a granite stone 15x10x8 ins.,10 ins.in the ground,

Chains.	
	for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
80.68	The cor of secs.13,14,23 and 24.
	Land nearly level,gently sloping N.and W.
	Soil,clay and clay loam;2nd.and 1st.rate.
	No timber.
	Undergrowth,sage and greasewood,which with shrubbery and grasses afford good grazing.
	Dense undergrowth on 80.68 chs.
	June 8,1900.
	June 9,1900:I set off 37°51'. N.on the lat.arc; 22°57' N.on the decl.arc;and,at 8h a.m.,l.m.t.,determine a true meridian with the solar,at the cor.of secs.13,14,23 and 24,above described.
	Thence I run
	N.0°1' W.,bet.secs.13 and 14;over nearly level land; through dense sage,greasewood and rabbit brush undergrowth.
40.00	Set a trachyte stone 19x8x4 ins.,13 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
67.00	Enter low rolling sand hills,bears E.and W.;leave level ground.
80.00	Set a granite stone 18x12x10 ins.,12 ins.in the ground,for cor.of secs.11,12,13 and 14;marked with 4 notches on S.and 1 notch on E.edges;dug pits 18x 18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land nearly level,and low rolling sandhills,sloping geneally W.and N.W.
	Soil,clay loam and sandy;1st.and 2nd.rate.
	Undergrowth,shrubbery and grasses afford fair grazing.
	No timber.
	Dense sage,greasewood,or rabbit brush undergrowth on 80.00 chs.

Subdivisions of T.34 S.,R.15 W.-Continued.

Chains.	
	S.89°54' E.on a random line bet.secs.12 and 13.
40.00	Set temp.1/4 sec.cor.
80.90	Intersect E.bdy.of Tp.,26 lks.S.of the old cor.of secs.7,12,13 and 18,which is a granite stone 8x6x5 ins.above ground,properly marked with pits and mound nearly obliterated. Dug pits 18x18x12 ins.in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft. base,2 ft.high,W.of cor.
	Thence I run
	S.89°55' W.on a true line bet.secs.12 and 13.
	Over nearly level land,gradually descending,through, dense greasewood,sage and rabbit brush undergrowth.
11.25	Road from Pinto to Lund by way of Webster's Well, bears S.10° W.and N.10° E.;gradually ascend over low rolling sand hills.
40.45	Set a granite stone 16x13x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x 18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
43.90	Begin ascent of E.slope of granite knoll,bears N.and S.;leave rolling sand knolls or hills.
59.00	Top of E.slope of granite knoll,about 50 ft.above beginning of ascent,bears N.E.and S.W.;begin to ascend S.E.slope of granite knoll.Leave dense undergrowth.
64.65	Top of ascent of knoll,about 50 ft.above the foot, bears N.50° E.and S.50° W. N.50° E.about 5.00 chs. dist.is highest point of this granite knoll,which about 125 ft.high. This knoll is composed of a fine quality of sharp gray granite.
	Descend over S.W.slope.
73.90	S.W.foot of knoll# about 30 ft.below the top,bears N. 50° E.and S.50° W.;Enter dense greasewood,sage and rabbit brush undergrowth,and rolling sand hills, bears N.E.and S.W.;descend.
80.90	The cor.of secs.11,12,13 and 14.
160.90	Land partly level,partly rolling and broken.
	Soil,sandy and loamy E.and W.of granite ridge;2nd. rate;on the ridge,stony;4th.rate.
	Dense sage,greasewood and rabbit brush undergrowth, E.and W.of granite knoll;shrubbery and bunch grass

Subdivisions of T.34 S.,R.I5 W.-Continued.

Chains.	
	on the knoll,which afford fair grazing.
	No timber.
	Dense undergrowth on 66.00 chs.
	N.0°I' W.,bet.secs.II and I2,descending over low rolling sand hills,through dense sage,greasewood and rabbit brush undergrowth.
26.00	Leave low rolling sand hills,bears N.E.and S.W.; thence over nearly level ground gently sloping N.and Northeasterly.Leave dense sage&rabbit brush,under-growth; continue in greasewood.
40.00	Set a granite stone.I4xI0xI0 ins.,I0 ins.in the ground, for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8x I2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
80.00	Set a granite stone I8xI2x8 ins.,I2 ins.in the ground,for cor.of secs.I,2,II and I2,marked with 5 notches on S.and I notch on E.edges;dug pits I8xI8x I2 ins.,in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
26/54	Land,partly rolling and partly nearly level.
	Soil,sandy and clay loam;2nd.and Ist.rate.
	Undergrowth,sage,greasewood and rabbit brush;shad-scale shrubbery and grasses,which afford fair grazing.
	No timber.
	Dense undergrowth on 26.00 chs.
	June 9,I900:I set off 22°57' N.on the decl.arc; and at II^{h}59^m a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.,at this sec.cor is 37° 53' N.
	N.89°55' E.on a random line bet.secs.I and I2.
40.00	Set.temp.I/4 sec.cor.
80.92	Intersect.E.bdy.of Tp.I8 lks.S.of old cor.of secs. I,6,7 and I2,which is a red granite stone I0x6x6 ins. above ground,properly marked,with pits and mound

Chains.	
	obliterated; I dug pits 18x18x12 ins.in each sec., 5 1/2 ft.dist.;and raised a mound of earth,4 ft. base,2 ft.high,W.of cor.
	Thence I run
	S.89°47' W.on a true line bet.secs.1 and 12.
	Descend over rolling low sandhills;through dense rabbit brush and greasewood undergrowth.
40.46	Set a granite stone 16x8x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x 18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
67.70	Leave rolling sandknolls and enter E.side of storm water pond,now dry,bears N.and S.;leave undergrowth; thence across level bed of pond.
73.40	West bank of pond,bears N.and S.;enter dense grease-wood and sage undergrowth;thence over nearly level ground.
78.70	Leave dense undergrowth,bears N.and S.;enter medium dense greasewood and sage undergrowth.
80.92	The cor.of secs.1,2,11 and 12.
	Land partly rolling and partly level.
	Soil,sandy,heavy clay and clay loam;2nd.3rd.and 1st. rate.
	Undergrowth,sage,greasewood and rabbit brush;shrub-bery,shadscale with native grasses.Fair grazing.
	No timber.
	Dense undergrowth on 73.00 chs.
	N.0°1' W.on a random line bet.secs.1 and 2.
40.00	Set temp.1/4 sec.cor.
80.53	Intersect N.bdy.of Tp.110 lks.,N.89°57' W.,from the cor.of secs.1,2,35 and 36,established by me in resur-vey of N.bdy.of this Tp.
	Set a granite stone 16x10x6 ins.,11 ins.in the ground for closing cor.of secs.1 and 2,marked C.C.on S., with 5 grooves on W.and 1 groove on E.faces; dug pits 24x18x12 ins.,crosswise on each line,E.and W.,3 ft., and S.of stone,7 ft.,dist.;and raised a mound of

Chains.	earth,4 ft.base,2 ft.high,S.of cor.
	I destroy the marks on the old cor.of secs.I,2,35 and 36,that pertain to secs.I and 2,and re-mark and re-establish same,as cor.of secs.35 and 36,T.33 S.,R. I5 W.,only.
	Thence I run
	S.00I' E.on a true line bet.secs.I and 2.
	Over nearly level ground;through medium dense grease wood undergrowth and dense shadscale shrubbery.
40.53	Set a granite stone I5xI0x5 ins.,I0 ins.in the ground for I/4 sec.cor.;marked I/4 on W.face;dug pits I8x I8xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
80.53	The cor.of secs.I,2,II and I2.
	Land nearly level,gently sloping N.and N.W.
	Soil,sandy and clay loam;Ist.and 2nd.rate.
	No timber.
	Greasewood undergrowth,shadscale shrubbery and sand-grass,which afford fair grazing.
	June 9,I900.
	June 11,1900:I set off 37°49' N.on the lat.arc;23°6' N.on the decl.arc;and,at 8h a.m.,l.m.t.,determine a true meridian with the solar,at the cor.of secs. 2,3,34 and 35,on the S.bdy.of the Tp.,heretofore described in retracement of this bdy.
	Thence I run
	N.0° 1' W.,bet.secs.34 and 35.
	Over nearly level ground;through,dense sage,grease-wood and rabbit brush undergrowth.
I.30	Road from Cedar City to Modena and Pioche,bears S. 80° E.and N.80° W.
40.00	Set a granite stone I6x12x4 ins.,11 ins .in the ground,for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high, W.of cor.
48.80	Leave dense rabbit brush and sage undergrowth,bears

Chains.	
80.00	S.E.and N.W.;continue in medium dense greasewood. Set a granite stone 24x10x10 ins.,18 ins .in the ground,for cor.of secs.26,27,34 and 35,marked with 2 notches on E.and 1 notch on S.edges;dug pits 18x 18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land nearly level,gently sloping N.and N.W. Soil,clay loam;1st.rate. No timber. Undergrowth,sage,rabbit brush and greasewood,which with shrubbery and grasses afford fair grazing. Dense undergrowth on 48.80 chs.
	S.89°27' E.on a random line bet.secs.26 and 35.
40.00	Set temp.1/4 sec.cor.
80.16	Intersect N.and S.line,2 lks.S.of the cor.of secs. 25,26,35 and 36,heretofore described. Thence I run N.89°28' W.on a true line bet.secs.26 and 35. Over nearly level ground;through dense sage and greasewood undergrowth.
40.08	Set a trachyte stone 16x12x6 ins.,11 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor.
75.00	Leave dense undergrowth,bears S.E.and N.W.;enter medium dense sage,greasewood and rabbit brush undergrowth and shadscale shrubbery.
80.16	The cor.of secs.26,27,34 and 35. Land nearly level,gently sloping N.and N.W. Soil,clay loam;1st.rate. No timber. Undergrowth,shrubbery and grasses afford fair grazing Dense greasewood and sage undergrowth on 75.00 chs.

Chains.	N.0° I' W.bet.secs.26 and 27.
	Over nearly level ground;through medium dense grease wood and sage undergrowth.
4.00	Leave medium dense undergrowth and enter dense sage, greasewood and rabbit brush undergrowth,bears S.E.an N.W.
I0.00	Enter low rolling sand hills,bears N.40° E.and S.40° W.;leave level ground.
35.30	Leave rolling sand hillsbears N.40° E.and S.40° W.; thence over nearly level ground.
40.00	Set a granite stone I6xI4x3 ins.,II ins.in the groun for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8x I2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
	June 11th,I900:At this I/4 sec.cor.,I set off 23° 6' 30" N.on the lat.arc;and,at IIh59' a.m.,l.m.t., observe the sun on the meridian,the resulting lat.is 37°50' N.
80.00	Set a granite stone I5xI2x8 ins.,I0 ins.,in the ground,for cor.of secs.22,23,26 and 27,marked with 2 notches on S.and E.edges;dug pits I8xI8xI2 ins.in each sec.;5 I/2 ft.dist.;and raised a mound of earth, 4 ft.base,2 ft.high,W.of cor.
	Land mostly nearly level,with 25.30 chs.rolling sand hills.
	Soil,clay loam and sandy;Ist.and 2nd.rate.
	No timber.
	Undergrowth of sage,greasewood,and rabbit brush, which with shadscale shrubbery and grasses afford fair grazing.
	Dense undergrowth on 76.00 chs.
	S.89°28' E.on a random line bet.seccs.23 and 26.
40.00,	Set temp.I/4 sec.cor.
80 I2	Intersect N.and S.line at the cor.of secs.23,24,25 and 26.
	Thence I run
	N.89°28' W.on a true line bet.secs.23 and 26.

Chains.	Over nearly level land;through dense sage and grease-wood undergrowth.
40.06	Set a granite stone 17x12x4 ins.,12 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
80.12	The cor.of secs.22,23,26 and 27. Land nearly level,gently sloping N.and N.W. Soil,sandy and clay loam;2nd.and 1st.rate. No timber. Undergrowth,sage and greasewood;shrubbery,shadscale, and native grasses,which afford good grazing. Dense undergrowth on 80.12 chs.
	N.0°1' W.,bet.secs.22 and 23,over nearly level land, slightly descending;through dense sage and grease-wood undergrowth.
40.00	Set a granite stone 16x13x4 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
80.00	Set a granite stone 24x14x6 ins.;18 ins.in the ground for cor.of secs.14,15,22 and 23,marked with 3 notch-es on S.and 2 notches on E.edges;dug pits 18x18x12 ins.in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land nearly level,gently sloping N.and N.W. Soil,clay loam;1st.and 2nd.rate. No timber. Undergrowth,dense sage and greasewood;shrubbery,shad-scale,and grasses,which afford good grazing. Dense undergrowth on 80.00 chs. June 11,1900.
	S.89°28' E.on a random line bet.secs.14 and 23.
40.00	Set temp.1/4 sec.cor.

Chains.	
80.14	Intersect N.and S.line 9 lks.S.of the cor.of secs. 13,14,23 and 24,heretofore described.
	Thence I run
	N.89°52' W.on a true line bet.secs.14 and 23.
	Over nearly level land;through dense sage and grease-wood undergrowth.
18.70	Enter low rolling sand hills or knolls,bears N.80° W.and S.80° E.;leave level ground.
30.00	Leave rolling sandknolls,bears N.80° W.and S.80° E.; thence over nearly level ground.
40.07	Set a granite stone 14x8x6 ins.,10 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face; dug pits 18x 18x12 ins.,E.and W.of stone,3 ft.dist;,and raised a mound of earth,3 1/2 ft.base, 1 1/2 ft.high,N.of cor.
74.37	Road from Cedar City by Antelope Springs to State Line bears S.40° E.and N.40° W.
80.14	The cor.of secs.14,15,22 and 23.
	Land mostly level,with 11.30 chs.low rolling sand-hills or knolls.
	Soil,clay loam and sandy;1st and 2nd.rate.
	Undergrowth of sage and greasewood with shadscale shrubbery and native grasses afford good grazing.
	No timber.
	Dense undergrowth on 80.14 chs.
	N.0°1' W.,bet.secs.14 and 15.
	Over almost level ground;through dense sage,grease-wood and rabbit brush undergrowth.
3.97	Road from Cedar city and Antelope Springs to State Line,bears S.40° E.and N.40° W.
36.00	Leave dense undergrowth and enter medium dense grease wood and shadscale,bears S.E.and N.W.
40.00	Set a granite stone 16x12x6 ins.,11 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.

Chains.	
80.00	Set a granite stone 14x14x8 ins.,10 ins.in the ground for cor.of secs.10,11,14 and 15,marked with 4 notches on S.and 2 notches on E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
36/44	Land nearly level,gently sloping N.and N.W.
	Soil,clay loam;1st.and 2nd.rate.
	No timber.
	Vegetation,sage,greasewood and rabbit brush undergrowth,shadscale shrubbery and native grasses,which afford good grazing.
	Dense undergrowth on 36.00 chs.
	June 12,1900:At this sec.cor.,I set off 23°10'30" N. on the decl.arc;and,at 12h M.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°52' N.
	S.89°32' E.on a random line bet.secs.11 and 14.
40.00	Set temp.1/4 sec.cor.
80.12	Intersect N.and S.line 4 lks.N.of the cor.of secs. 11,12,13 and 14,heretofore described.
	Thence I run.
	N.89°30' W.,on a true line bet.secs.11 and 14.
	Over rolling sand knolls;through dense greasewood and rabbit brush undergrowth.
6.00	Leave rolling sand knolls bears N.E.and S.W. ;thence over nearly level ground.Leave dense undergrowth,and medium dense greasewood and thick shadscale.
40.06	Set a lime stone 16x12x8 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
	From this cor.,a granite ridge about 5.00 chs.long. N.E.and S.W.,and about 150 lks.wide and 50 ft.high, bears S.E. about 20.00 chs.dist.
80.12	The cor.of secs.10,11,14 and 15.
6/42	Land,mostly level gently sloping N.and N.W.,with 6 chs.rolling sandknolls,sloping rapidly to N.W.

Chains.	
	Soil,sandy and heavy clay with traces of alkali;2nd. rate. No timber. Undergrowth,greasewood and rabbit brush;shrubbery dense shadscale;and grasses,which afford fair grazing. Dense undergrowth on 6.00 chs.
	N.0°I' W.,bet.secs.I0 and II. Over nearly level ground;through medium dense greasewood undergrowth and dense shadscale shrubbery.
40.00	Set a granite stone I6x8x5 ins.,II ins.in the ground, for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8 xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
80.00	Set a granite stone I7xI2xI0 ins.,I2 ins.in the ground,for cor.of secs.2,3,I0 and II,marked with 5 notches on S.and 2 notches on E.edges;dug pits I8x I8xI2 ins.,in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land nearly level,gently sloping N.and N.W. Soil,heavy clay and clay loam;2nd.and Ist.rate. Vegetation,greasewood,shad scale shrubbery and native grasses,which afford fair grazing. No timber.
	S.89°30' E.on a random line bet.secs.2 and II.
40.00	Set temp.I/4 sec.cor.
80.I4	Intersect N.and S.line,9 lks.N.of the cor.of secs.I, 2,I2 and II,heretofore described. June I2,I900:At this cor.I set off 37°13' N.on the lat.arc;23°11'30" N.on the decl.arc;and,at 4h p.m.,l.m.t.,determine a true meridian with the solar;thence I run N.89°26' W.on a true line bet.secs.2 and II. Over nearly level ground;through short dense grease-

Chains.	
	wood undergrowth and shadscale shrubbery.
37.64	Trail running from Webster's Well to the ranges, bears N.50° E.and S.50° W.
40.07	Set a granite stone 14x10x4 ins.,10 ins.in the ground for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3.1/2 ft.base,1 1/2 ft.high,N.of cor.
80.14	The cor.of secs.2,3,10 and 11.
	Land nearly level,gently sloping N.
	Soil,clay loam and heavy clay;1st.and 2nd.rate.
	Undergrowth and shrubbery afford fair grazing.
	No timber.
	June 12,1900.

June 13,1900:I set off.37°53' N.on the lat.arc; 23°13'30" N.on the decl.arc;and,at 8H a.m.,l.m.t., determine a true meridian with the solar,at the cor. of secs.2,3,10.and 11,heretofore described.

Thence I run

N.0°1' W.on a true line bet.secs.2 and 3,knowing from previous retracement and survey lines that a closing cor.will be necessary.

Over nearly level ground;through short dense greasewood undergrowth and shadscale shrubbery,and scattering sage.

40.00	Set a granite stone 15x10x5 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
50.28	Horse trail running from Webster's Well to the ranges bears E.and W.
71.70	Horse trail bears N.E.and S.W.
79.88	Intersect N.bdy.of Tp.124 lks. N.89°57' W.,from the cor.of secs.2,3,34 and 35,established by me in resurvey of this bdy.,and heretofore described.
	Set a granite stone 14x8x4 ins.,10 ins.,in the ground for closing cor.of secs.2 and 3,marked C.C.on S.,

Chains.	with 4 grooves on W.and 2 grooves on E.faces;dug pits 24x18x12 ins.,crosswise on each line,E.and W., 3 ft.,and S.of stone,7 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,S.of cor. I destroy the marks on the old cor.of secs.2,3,34 an 35,pertaining to secs.2 and 3,and re-establish the same for cor.of secs.34 and 35,T.33 S.,R.15 W.,only. Land nearly level,gently sloping N.and N.W. Soil,clay loam;1st.and 2nd.rate. No timber. Undergrowth,shrubbery and grasses afford fair grazing.
	From the cor.of secs.3,4,33 and 34,on the S.bdy.of of the Tp.as described in notes of retracement of this bdy.,I run N.0°2' W.,bet.secs.33 and 34. Over nearly level ground;through dense sage and greasewood undergrowth.
7.66	Road from Cedar city to Modena and Pioche,bears S. 80° E.and N.80° W.
40.00	Set a granite stone 16x8x4 ins.,11 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
42.03	Enter dense rabbit brush undergrowth,bears E.and W.; continue in dense sage and greasewood.
80.00	Set a granite stone 24x10x10 ins.,18 ins.in the ground,for cor.of secs.27,28,33 and 34,marked with 1 notch on S.and 3 notches on E.edges;dug pits 18x 18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land nearly level,gently sloping N.and N.W. Soil,clay loam;1st.and 2nd.rate. No timber. Undergrowth,sage,greasewood and rabbit brush;and native grasses which afford fair grazing. Dense undergrowth on 80.00 chs. June 13,1900:At this sec.cor.,I set off 23°14' N.

Chains.	
	on the decl.arc;and,at 12h M.,l.m.t.,observe the sun on on the meridian,the resulting lat.is 37°49' 30" N.
	S.89°51' E.on a random line bet.secs.27 and 34.
40.00	Set temp.1/4 sec.cor.
79.96	Intersect N.and S.line,11 lks.N.of the cor.of secs. 26,27,34 and 35,heretofore described.
	Thence I run
-	N.89°46' W.on a true line bet.secs.27 and 34.
	Over nearly level ground;through dense sage,greasewood and rabbit brush undergrowth.
34.00	South end of sand knolls bears N.about 3.00 chs.
39.98	Set a trachyte stone 17x13x8 ins.,12 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
79.96	The cor.of secs.27,28,33 and 34.
	Land nearly level,with rolling sandknolls N.of line in E.1/2 of sec.27.
	Soil,sandy,clay and loamy;2nd.and 1st.rate.
	No timber.
	Undergrowth,sage,greasewood and rabbit brush;shadscale shrubbery;and native grasses,which afford fair grazing.
	Dense undergrowth on 79.96 chs.
	N.0° 2' W.,bet.secs.27 and 28.
	Over nearly level land;through dense sage,greasewood and rabbit brush undergrowth.
40.00	Set a granite stone 16x12x6 ins.,11 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
80.00	Set a granite stone 20x12x6 ins.,15 ins.,in the ground,for cor.of secs.21,22 27 and 28;marked with 2 notches on S.and 3 notches on E.edges;dug pits 18x18

Chains.	xI2 ins.,in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land almost level,gently sloping N.and N.W. Soil,clay loam;Ist.rate. No timber. Sage,greasewood and rabbit brush undergrowth;shadscale shrubbery and native grasses.Fair grazing. Dense undergrowth on 80.00 chs.
	S.89°46' E.on a random line bet.secs.22 and 27.
40.00	Set temp.I/4 sec.cor.
79.98	Intersect N.and S.line ,4 lks.S.of the cor.of secs. 22,23,26 and 27,heretofore described. Thence I run N.89°48' W.on a true line bet.secs.22 and 27. Over nearly level ground;through dense sage,greasewood and rabbit brush undergrowth.
39.99	Set a granite stone I6xI2x5 ins.,11 ins.in the ground, for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
4I.78	Enter rolling sand knolls bears N.20° E.and S.20° W. Leave level ground.
45.98	Surface well used for watering sheep,with troughs etc. bears N.about 6.00 chs. Water is about I5 ft.below surface of ground.
72.97	Leave rolling sand knolls,bears N.20° E.and S.20° W. Thence over nearly level ground.
79.98	The cor.of secs.2I,22,27 and 28. Land partly level and partly rolling sandhills or knolls. Soil,sandy,and clay loam;2nd.and Ist.rate. No timber. Undergrowth,sage,greasewood and rabbit brush;shrubbery,shadscale,with native grasses,which afford fair grazing. Dense undergrowth on 79.98 chs.

June I3,I900.

Chains.	
	N.002' W.,bet.secs.21 and 22.
	Over nearly level ground;through medium dense sage and greasewood undergrowth.
40.00	Set a limestone I6xI4x4 ins.,II ins.In the ground, for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8 xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
54.80	S.side of hollow about.6 ft.deep,drains N.E.
58.00	N.side of hollow.
80.00	Set a granite stone 21x11x7 ins.,I6 ins.in the ground,for cor.of secs.I5,I6,2I and 22,marked 34 S. on S.W.,and I5.W.,on N.W.faces,with 3 notches on S. and E.edges;dug pits I8xI8xI2 ins. .in each sec., 5 I/2 ft.dist.;and raised a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Land nearly level,indented with small hollow.
	Soil,clay loam;Ist.and 2nd.rate.
	No timber.
	Greasewood and sage undergrowth;shadscale shrubbery; and native grasses.
	Fair grazing.
	S.89° 48' E.on a random line.bet.secs.I5 and 22.
40.00	Set temp.I/4 sec.cor.
80.04	Intersect N.and S.line 20 lks.S.of the cor.of secs. 14,15,22 and 23,heretofore described.
	Thence I run
	N.89°57' W.on a true line bet.secs.I5 and 22.
	Over nearly level ground;through short dense sage and greasewood undergrowth.
40.02	Set a trachyte stone I6xI2x6 ins.,II ins.in the ground,for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high, N.of cor.
80.04	The cor.of secs.I5,I6,2I and 22.
	Land nearly level;gently sloping N.and N.W.
	soil,clay loam;Ist.rate.

Chains. No timber.

Sage&greasewood undergrowth;shadscale shrubbery,and native grasses,which afford fair grazing.

N.0°2' W.,bet.secs.15 and 16.

Slightly descending over nearly level ground.

40.00 Set a granite stone 18x12x4 ins.,12 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.

June 14,1900:At this 1/4 sec.cor.,I set off 23°17' N.on the lat.arc;and,at 12h M.,l.m.t.,observe the sun on the meridian;the resulting lat is 37°51' N.

50.00 Storm water pond about 3 chs.long and 1.50 chs.wide, bears E.about 2.50 chs.;pond about same size with depths about 4 ft.,bears W.about 3.00 chs.dist. Both ponds now dry.

61.95 Enter dry storm water pond circular outlines,about 4 ft.deep,

65.70 Leave dry pond,circular outlines.

66.86 Road from Cedar City by way of Antelope Springs to State Line,bears S.40° E.and N.40° W.

69.00 Storm waterpond now dry ,course N.10°W.and S.10° E. about 8.00 chs.long,1.50 ch.wide and 4 ft.deep,bears E.of line about 1.00 ch# dist.

80.00 Set a granite stone 15x10x8 ins.,10 ins.in the ground, for cor.of secs.9,10,15 and 16,marked with 4 notches on S.and 3 notches on E.edges;dug pits 18x18x12 ins., in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.

Land nearly level,indented with a number of small storm water ponds.

Soil,heavy clay and clay loam;2nd.and 1st.rate.

No timber.

Greasewood and rabbit brush undergrowth,short and dense;shadscale shrubbery;and salt grass.

Fair grazing.

Subdivisions of T.34 S.,R.15 W.-Continued.

Chains.	
	S.89° 57' E.on a random line bet.secs. 10 & 15
40.00	Set temp.1/4 sec.cor.
80.06	Intersect N.and S.line,2 lks.S.of the cor.of secs. 10,11,14 and 15,heretofore described.
	Thence I run
	N.89°58' W.on a true line bet.secs.10 and 15.
	Over nearly level land,gently sloping N.
40.03	Set a granite stone 17x8x5 ins.,12 ins.,in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
80.06	The cor.of secs.9,10,15 and 16.
	Land nearly level,gently sloping N.
	Soil,clay loam;1st.rate.
	No timber.
	Undergrowth,short dense greasewood;shrubbery,shadscale and grasses,which afford fair grazing.
	June 14,1900:I set off 37°52' N.on the lat.arc;, 23°18' N.on the decl.arc;and,at 4h p.m.,l.m.t.,determine a true meridian with the solar,at the cor.of secs.9,10,15 and 16.
	Thence I run
	N.0°2' W.,bet.secs.9 and 10.
	Over nearly level ground.
40.00	Set a granite stone 14x14x10 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
80.00	Set a granite stone,16x10x8 ins.,11 ins.in the ground, for cor.of secs.3,4,9 and 10,marked with 5 notches on S.and 3 notches on E.edges;dug pits 18x18x12 ins., in each sec.,3 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land nearly level,gently sloping to N.and N.W.
	Soil,clay and loamy;2nd.and 1st.rate.
	No timber.
	Short dense greasewood undergrowth and shadscale shrub-

Chains.	
	bery,with native grasses afford fair grazing. June 14,1900.
	S.89°58' E.on a random line bet.secs. 3 and 10.
40.00	Set temp.1/4 sec.cor.
80.08	Intersect N.and S.line,23 lks.N.of the cor.of secs. 2,3,10 and 11,heretofore described. June 15,1900:At this sec.cor.,I set off 37°53' N.on the lat.arc;23°19'30" N.on the decl.arc;and,at 10h a.m.,l.m.t.,determine a true meridian with the solar. Thence I run N.89°48' W.,on a true line bet.secs.3 and 10. Over nearly level land.
40.04	Set a granite stone 15x10x6 ins.,10 ins.,in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor.
63.14	Horse trail bears N.25° E.and S.25° W.
80.08	The cor.of secs.3,4,9 and 10. Land nearly level,gently sloping to N. Soil,clay and clay loam;2nd.and 1st.rate. No timber. Short dense sage and greasewood undergrowth and shad-scale shrubbery with native grasses,which afford fair grazing.
	From the cor.of secs.3,4,9 and 10,heretofore described,I run N.0°2' W.on a true line,bet.secs.3 and 4,knowing from previous retracement and surveys that a closing cor.will be necessary. Over nearly level land.
2.37	Horse trail running from the ranges to Webster's well,bears N.E.and S.W.

Chains.	
34.92	Horse trail running from ranges to Webster's well, bears E.and W.
40.00	Set a granite stone 14x10x8 ins.,10 ins. in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3.1/2 ft.base,1 1/2 ft.high, W.of cor.
60.33	Horse trail from the Ranges to Webster's well bears W.and E.
76.00	Horse trail running from Webster's well to the ranges bears S.60° E.and N.60° W.
79.78	Intersect N.bdy.of the Tp., 134 lks.N.89°57' W. of the cor.of secs.3,4,33 and 34,established by me in Resurvey of N.bdy.of this Tp.,for description of which see notes of Book Z.
	Set a granite 20x8x6 ins.,15 ins.in the ground,for closing cor.of secs.3 and 4,marked C.C.on S.,with 3 grooves on E.and W.faces;dug pits 24x18x12 ins., crosswise on each line E.and W.,3 ft.and S.of stone 7 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,S.of cor.
	I destroy the marks on the cor.of secs.3,4,33 and 34 as established by me,that pertain to secs.3 and 4; and re-establish the same as cor.of secs.33 and 34, T.33 S.,R.15 W.,only.
	Land nearly level,gently sloping N.and N.W.
	Soil,clay and clay loam;2nd.and 1st.rate.
	No timber.
	Shadscale shrubbery and greasewood in abundance, which with grasses afford fair grazing.
	June 15,1900:At this closing cor.,I set off 23°20' N.on the decl.arc;and,at 12h,M.,l.m.t.observe the sun on the meridian;the resulting lat is 37°54' N.

From the cor.of secs.4,5,32 and 33 on the S.bdy.of the Tp.,as heretofore described in Notes of Retracement of this bdy.,I run

Chains.	N.0° 3' W.,bet.secs.32 and 33.
	Over nearly level ground;through dense sage and greasewood undergrowth.
I6.70	Road from Cedar City by Antelope Springs to Modena and and Pioche,bears S.80°.E.and N.80° W.
40.00	Set a granite stone I8xI2x6 ins.,I2 ins.in the ground, for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8xI2 I2 ins.,N.and S.of stone,3 ft.dist.,and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W..of cor.
80.00	Set a trachyte stone I8xI0x5 ins.,I2 ins.in the ground,for cor.of secs.28,29,32 and 33,marked with 1 notch on S.and 4 notches on E.edges;dug pits I8xI8 xI2 ins.,in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land nearly level,gently sloping N.
	Soil,clay loam;Ist.rate.
	No timber.
	Undergrowth,shadscale,shrubbery and native grasses afford good grazing.
	Dense greasewood and sage undergrowth on 80.00 chs.
	S.89°57' E.on a random line bet.secs.28 and 33.
40.00	Set temp.I/4 sec.cor.
80.42	Intersect N.and S.line,I6 lks. N.of the cor.of secs. 27,28,33 and 34,heretofore described.
	Thence I run
	N.89°50' W.on a true line bet.secs.28 and 33.
	Over nearly level ground,through dense sage,grease-wood and rabbit brush undergrowth.
5.00	N.end of sandknolls bears S.about I0.00 chs.
40.2I	Set a granite stone,I5xI0x8 ins.,I0 ins.in the ground, for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8xI2 xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.42	The cor.of secs.28,29,32 and 33.
	Land nearly level,along the line,with rolling sand hills or knolls in N.E.I/4 of sec.33,extending South Westerly across the sec..

Chains.	
	Soil,sandy and clay loam;2nd.and Ist.rate. No timber. Undergrowth,shadscale shrubbery and grasses afford good grazing. Dense undergrowth on 80.42 chs.
	N.0°3' W.bet.secs.28 and 29. Over nearly level ground;through dense greasewood and rabbit brush undergrowth.
40.00	Set a granite stone I6xI0x8 ins.,II ins.in the ground for I/4 sec.cor.,marked I/4 on W.face;dug pits I8xI8 xI2 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,W.of cor.
80.00	Set a granite stone I5xI2x8 ins.,I0 ins.in the ground for cor.of secs.20,2I,28 and 29,marked with 2 notches on S.,and 4 notches on E.edges;dug pits I8xI8xI2 ins, in each sec.,5 I/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land nearly level,gently sloping N.and N.W. Soil,clay loam;Ist.rate. No timber. Undergrowth,shadscale shrubbery and native grasses afford good grazing. Dense greasewood and rabbit brush undergrowth on 80.00 chs. June I5,I900.
	S.89°50' E.on a random line bet.secs.21 and 28;
40.00	Set temp.I/4 sec.cor.
80.44	Intersect N.and S.line,II lks.N of the cor.of secs. 21,22,27 and 28,heretofore described. Thence I run, N.89°45' W.on a true line bet.secs.21 and 28. Over nearly level ground;through dense sage and greasewood undergrowth.
20.40	Enter sandknolls,bears.S.50° E.and N.50° W.;thence

Subdivisions of T.34 S.-R.15 W.-Continued.

Chains.	
	over rolling land;leave level land.
25.70	Leave rolling sand knolls,bears N.50° E.and S.50°W.; thence over nearly level ground.
40.22	Set a granite stone 17x12x 6 ins.,12 ins.in the ground,marked 1/4 on N.face;dug pits 18x18x12 ins., E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
80.44	The cor.of secs.20,21,28 and 29.
	Land mostly level,gently sloping N.,with narrow strip rolling sand knolls.
	Soil,clay loam and sandy;1st.and 2nd.rate.
	No timber.
	Undergrowth,shrubbery and grasses afford fair grazing.
	Dense greasewood and sage undergrowth on 80.44 chs.
	N.0°3' W.bet.secs.20 and 21.
	Over nearly level ground;through dense greasewood and sage and rabbit brush undergrowth.
40.00	Set a granite stone 17x12x6 ins.,12 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
80.00	Set a granite stone 15x10x5 ins.,10 ins.in the ground for cor.of secs.16,17,20 and 21,marked with 3 notches on S.and 4 notches on E.edges;dug pits 18x18x12 ins., in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land almost level,gently sloping N.and N.W.
	Soil,rich clay loam;1st.rate.
	No timber.
	Undergrowth,shrubbery and grasses afford fair grazing.
	Dense greasewood,sage or rabbit brush undergrowth on 80.00 chs.

Chains.

S.89°45' E.on a random line bet.secs.16 and 21.

40.00 Set temp.1/4 sec.cor.

80.48 Intersect N.and S.line,11 lks.N.of the cor.of secs. 15,16,21 and 22.

Thence I run

N.89°40' W.on a true line bet.secs.16 and 21.

Over nearly level land;through dense sage and greasewood undergrowth.

21.50 Enter rolling sand knolls bears N.20° E.and S.20°W.; leave level ground.

38.50 Leave rolling sand knolls bears N.20° E.and S.20°W.; thence over nearly level ground.

40.24 Set a trachyte stone 14x10x6 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base;1 1/2 ft.high,N.of cor.

80.48 The cor.of secs.16,17,20 and 21.

Land mostly level with 17.00 chs.rolling sand knolls.

Soil,clay loam and sandy;1st.and 2nd.rate.

No timber.

Sage and greasewood undergrowth,shadscale shrubbery, and native grasses afford fair grazing.

Dense undergrowth on 80.48 chs.

June 16,1900:At this sec.cor.,I set off 23°22' N.on the decl.arc;and,at 12h M.,l.m.t.,observe the sun on the meridian;the resulting lat is 37°51' N.

N.0°3' W.bet.secs.16 and 17.

Over nearly level ground;through medium dense greasewood undergrowth;leave dense undergrowth at sec.cor. bears N.E.and S.W.

40.00 Set a granite stone 15x10x8 ins.,10 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.

80.00 Set a granite stone 21x13x8 ins.,16 ins.in the ground for cor.of secs.8,9,16 and 17,marked with 4 notches on S.and E.edges;dug pits 18x18x12 ins.,in each sec.

Chains.	5 I/2 ft.dist.;and raised a mound of earth,4 ft.base, 2 ft.high,W.of cor. Land nearly level,gently sloping N.and N.W. Soil,clay loam with traces of alkali;2nd.and 1st. rate. No timber. Greasewood and rabbit brush undergrowth of medium height and density;dense shadscale shrubbery;and native grasses;which afford fair grazing.
	S.89° 40' E.on a random line bet.secs.9 and I6.
40.00	Set temp.I/4 sec.cor.
80.34	Intersect N.and S.line,4 lks.S.of the cor.of secs. 9,I0,I5 and I6. June I6,I900:At this sec.cor.,I set off 37° 52' N.on the lat.arc;23° 23' N.on the decl.arc;and,at 4h p.m.,l.m.t.,determine a true meridian with the solar; thence I run N.89° 42' W.on a true line bet.secs.9 and I6. Over almost level ground;through short dense grease-wood and shadscale.
8.76	Horse trail bears N.I0° E.and S.I0°W.
I3.53	Road from Cedar City by Antelope springs to State Line,bears S.E.and N.W.
I9.90	Horse trail bears N.E.and S.W.
40.I7	Set a granite stone I4xI0x6 ins.,I0 ins.in the ground for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.34	The cor.of secs.8,9,I6 and I7. Land nearly level,gently sloping N.and N.W. Soil,clay loam;Ist.rate. No timber. Greasewood undergrowth,shadscale shrubbery and grass-es,which afford good grazing. June I6,I900.

Subdivisions of T.34 S.-R.15 W.-Continued.

Chains.	
	June 18,1900:I set off 37°52' N.on the lat.arc; 23°25'30" N.on the decl.arc;and,at 8h a.m.,l.m.t.,determine a true meridian with the solar,at the cor of secs.8,9,16 and 17,heretofore described.
	Thence I run
	N.0°3' W.,bet.secs.8 and 9.
	Over nearly level ground;through short dense greasewood undergrowth and shadscale shrubbery.
16.00	Horse trail bears N.80° E.and S.80° W.
40.00	Set a trachyte stone 16x10x4 ins.,11 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
60.00	Enter medium dense sage undergrowth bears E.and W.; continue in greasewood and shadscale.
64.93	Road from Cedar City by way of Antelope springs, to State Line,bears S.40° E.and N.40° W.
80.00	Set a granite stone 14x10x8 ins.,10 ins.,in the ground for cor.of secs.4,5,8 and 9,marked with 5 notches on S.and 4 notches on E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth, 4 ft.base,2 ft.high,W.of cor.
	Ground nearly level,gently sloping N.
	Soil,clay loam and sany loam;1st.rate.
	No timber.
	Undergrowth,shrubbery and grasses afford fair grazing.
	S.89°42' E.on a random line bet.secs.4 and 9.
40.00	Set temp.1/4 sec.cor.
80.26	Intersect N.and S.line,11 lks.S.of the cor.of secs. 3,4,9 and 10.
	Thence I run
	N.89°47' W.,on a true line bet.secs,4 and 9.
	Over nearly level ground;through medium dense sage and and greasewood undergrowth,and shadscale shrubbery.

Subdivisions of T.34 S.,R.15 W.-continued.

Chains.	
30.00	Enter dense sage and greasewood undergrowth,bears N. and S.;leave medium dense undergrowth.
40.13	Set a granite stone 15x15x5 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor.
70.00	Leave dense sage and greasewood undergrowth,bears N. W.and S.E.;enter medium dense sage and greasewood.
80.26	The cor.of secs.4,5,8 and 9.
	Land nearly level,gently sloping N. and N.W.
	Soil,sand and clay loams;1st.rate.
	No timber.
	Sage and greasewood undergrowth,shadscale shrubbery, and grasses in abundance which afford fair grazing.
	Dense undergrowth on 40.00 chs.

From the cor.of secs.4,5,8 and 9,heretofore described,I run

N.00 3' W.on a true line bet.secs.4 and 5,knowing from lines previously run that a closing cor.will be necessary.

Over nearly level ground;through medium dense sage, greasewood and rabbit brush undergrowth and shadscale shrubbery.

40.00	Set a quartzite stone 16x8x8 ins.,11 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and and raised a mound of earth,3 1/2 ft.base,1 1/2 ft. high,W.of cor.
50.00	Trail bears N.60° E.and S.60° W.
79.46	Intersect N.bdy.of Tp.156 lks.,N.89°57' W.,from the cor.of secs.4,5,32 and 33,established in re-survey of this bdy.and described in notes thereof.
	Set a granite stone 16x8x6 ins.,11 ins.in the ground, for closing cor.of secs.4 and 5,marked C.C.on S.,

Chains.	
	with 4 grooves on E.and 2 grooves on W.faces;dug pits 24x18x12 ins.,crosswise on each line E.and W.,3 ft., and S.of stone,7 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,S.of cor. I destroy the marks on the cor.of secs.4,5,32 and 33 previously established by me,that pertain to secs. 4 and 5,and re-establish same for cor.of secs.32 and 33,T.33S.,R.15 W. only. Land nearly level,gently sloping N.and N.W. Soil,rich sandy and clay loams;1st.rate. No timber. Sage,greasewood and rabbit brush undergrowth,shad-scale shrubbery and grasses afford fair grazing. June 18,1900:At this closing cor.,I set off 23° 25' 30" N.on the decl.arc;and,at 0h 1' p.m.,l.m.t., observe the sun on the meridian;the resulting lat. is 37° 54' N.
	From the cor.of secs.5,6,31 and 32,on the S.bdy. of the Tp.,heretofore described in notes of re-tracement thereof,I run N.0° 3' W.bet.secs.31 and 32. Over slightly rolling land;through dense sage,rabbit brush and greasewood undergrowth.
24.35	Road from Cedar city by way of Antelope Springs to Modena and Pioche,bears S.80° E.and N.80° W.
40.00	Set a trachyte stone 15x7x6 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
80.00	Set a trachyte stone 18x8x6 ins.,12 ins.in the ground for cor.of secs.29,30,31 and 32,marked with 1 notch on S.and 5 notches on E.edges;dug pits 18x18x12 ins., in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land partly slightly rolling and partly level. Soil,sandy and sandy loam;2nd.and 1st.rate.

Chains.	No timber. Undergrowth and shrubbery in abundance with bunch grass in medium quantity afford fair grazing. Dense sage,rabbit brush or greasewood undergrowth on 80.00 chs. June I8,I900.
	N.89°55' E.on a random line bet.secs.29 and 32.
40.00	Set temp.I/4 sec.cor.
80.I4	Intersect N.and S.line I6 lks.N.of the cor.of secs. 28,29,32 and 33,heretofore described. Thence I run N.89°58' W.on a true line bet.secs.29 and 32. Over nearly level ground;through dense sage,greasewood and rabbit brush undergrowth.
20.00	Sand knolls,N.end,bears S.about 20.00 chs.dist.
40.07	Set a trachyte stone I5x8x6 ins.,I0 ins.in the ground,for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high N.of cor.
80.I4	The cor.of secs.29,30,31 and 32. Land nearly level,slightly rolling along middle part of line. Soil,clay and sandy loams;Ist.rate. No timber. Undergrowth,shrubbery and sprinkling of bunch grass afford good grazing. Dense undergrowth on 80.I4 chs.
	West on a random line bet.secs.30 and 3I.
40.00	Set temp.I/4.sec.cor.
77.52	Intersect W.bdy.of Tp.,Pine Valley Guide Meridian,- 4 lks.S.of the cor.of secs.25,30,3I and 36,established by me in resurvey of this bdy.,and described in Notes thereof,Book W .

Subdivisions of T.34 S.,R.15 W.-Continued.

Chains.	
	Thence I run S.89°58' E.,over low rolling sand knolls;through dense sage,rabbit brush and greasewood undergrowth.
5.00	Leave sand knolls bears N.&S.;thence over level ground.
37.52	Set a granite stone 14x12x4 ins.,10 ins.in the ground for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
77.52	The cor.of secs.29,30,31 and 32.
	Land mostly almost level with narrow strip of rolling sand knolls running along W.side of secs.
	Soil,sandy and clay loam;2nd.and 1st.rate.
	Ground covered with undergrowth and shrubbery with slight sprinkling of grasses which afford fair grazing.
	No timber.
	Dense undergrowth on 77.52 chs.
	N.0°3' W.bet.secs.29 and 30.
	Over nearly level land;through dense sage,greasewood and rabbit brush undergrowth.
5.00	Leave dense undergrowth bears N.E.and S.W.;enter short thick greasewood and shadscale undergrowth and shrubbery.
40.00	Set a granite stone 19x10x6 ins.,13 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
80.00	Set a trachyte 20x10x10 ins.,15 ins.in the ground, for cor.of secs.19,20,29 and 30,marked with 2 notches on S.and 5 notches on E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
5.00 / 75.00	
	Land nearly level,gently sloping N.
	Soil,clay loam,with traces of alkali on last 16.00 chs.;1st.and 2nd.rate.
	Ground covered with undergrowth and shrubbery with very little grass,which afford fair grazing.
	Dense undergrowth on 5.00 chs.

Subdivisions of T.34 S.,R.15 W.-Continued.

Chains.	
	June 19,1900:I set off 23°26'30" N.on the decl. arc;and,at 0^h 1' p.m.,l.m.t.,observe the sun on the meridian,at the cor.of secs.19,20,29 and 30,above described;the resulting lat.is 37°50' N.
	S.89°58' E.on a random line bet.secs.20 and 29.
40.00	Set temp.1/4 sec.cor.
80.18	Intersect N.and S.line,11 lks.S.of the cor.of secs. 20,21,28 and 29,heretofore described.
	Thence I run
	S.89°57' W. on a true line bet.secs.20 and 29.
	Over nearly level ground .
40.09	Set a granite stone 16x10x6 ins.,11 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor.
80.18	The cor.of secs.19,20,29 and 30.
	Land nearly level,covered with short dense greasewood and rabbit brush undergrowth,shadscale shrubbery and very little grass,which affords fair grazing.
	Soil,sandy and clay loams,with traces of alkali; 1st.and 2nd.rate.
	No timber.
	N.89°58' W.on a random line bet.secs.19 and 30.
40.00	Set temp.1/4 sec.cor.
77.50	Intersect W.bdy.of Tp.(Pine Valley Guide Meridian), 23 lks.S.of the cor.of secs.19,24,25 and 30,established by me in resurvey of this bdy.,and described in the notes thereof.
	Thence I run
	S.89°48' E.on a true line bet.secs. 19 and 30.
	Over nearly level ground.
19.00	Enter rolling low sand knolls,bears N.E.and S.W; leave level ground.

25.00	Leave rolling sand hills or knolls bears N.E.and S.W.;thence over nearly level ground.
37.50	Set a trachyte stone 15x10x5 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor.
77.50	The cor.of secs.19,20,29 and 30, Land mostly nearly level,with narrow strip rolling sand hills,covered with short dense greasewood and rabbit brush undergrowth and shadscale shrubbery, with very little grass.Good grazing. Soil,clay loam and sandy,with traces of alkali on last 25.00 chs. No timber.
	June 19,1900:I set off 37°50' N.on the lat. arc;23°27' N.on the decl.arc;and,at 4h p.m.,l.m.t., determine a true meridian with the solar,at the cor. of secs.19,20,29 and 30,already described. Thence I run N.0°3' W.bet.secs.19 and 20. Very gradual descent over nearly level ground.
40.00	Set a granite stone 17x8x5 ins.,12 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
80.00	Set a granite stone 21x14x12 ins.,16 ins.in theground for cor.of secs.17,18,19 and 20,marked with 3 notches on S.and 5 notches on E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor. Land almost level,covered with short dense greasewood and rabbit brush undergrowth,and salt grass. Fair grazing. Soil,clay loam with traces of alkali;2nd.rate. No timber. June 19,1900.

Chains.	N.89°57' E.on a random line bet.secs.17 and 20.
40.00	Set temp.1/4 sec.cor.
80.16	Intersect.N.and S.line ,2 lks.S.of the cor.of secs. 16,17,20 and 21,heretofore described.
	Thence I run
	S.89°56' W.on a true line bet.secs.17 and 20.
	Over nearly level ground.
40.08	Set a granite stone 17x13x7 ins.,12 ins.in the ground for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
80.16	The cor.of secs.17,18,19 and 20.
	Land nearly level,gently sloping North,and producing a heavy growth of short greasewood and rabbit brush undergrowth,and salt grass,which afford fair grazing.
	Soil,clay loam with traces of alkali;1st.and 2nd. rate.
	No timber.
	June 20,1900:I set off 37°51' " N.on the lat. arc;23°27' N.on the decl.arc;and,at 10h a.m.,l.m.t., determine a true meridian with the solar,at the cor. of secs.17,18,19 and 20,heretofore described.
	Thence I run
	N.89°48' W.on a random line bet.secs.18 and 19.
40.00	Set temp.1/4 sec.cor.
77.34	Intersect W.bdy.of Tp.(Pine Valley Guide Meridian), 2 lks.S.of the cor.of secs.13,18,19 and 24,established by me in resurvey of this bdy.,and heretofore described in notes thereof.
	Thence I run
	S.89°47' E.on a true line bet.secs.18 and 19.
	Over nearly level ground.
37.34	Set a granite stone 17x9x8 ins.,12 ins.in the ground for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.

Chains.

77.74 The cor.of secs.17,18,19 and 20.
Ground nearly level,gently sloping N.and N.W.
Soil,clay loam,with traces of alkali;2nd.rate.
No timber.
Ground covered with short dense greasewood,rabbit brush and salt grass,which afford fair grazing.

N.0°3' W.bet.secs.17 and 18.
Over nearly level ground,gently sloping to N.
40.00 Set a granite stone 14x14x10 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
80.00 Set a granite stone 18x12x10 ins.,12 ins.in the ground,for cor.of secs.7,8,17 and 18,marked with 4 notches on S.and 5 notches on E.edges;dug pits 18x18 x12 ins.,in each sec.,5 1/2 ft. dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
Land nearly level,gently sloping N.and N.W.
Soil,clay loam with traces of alkali;2nd.rate.
No timber.
Ground covered with short dense rabbit brush,greasewood,and with salt grass,which afford fair grazing.
June 20,1900:I set off 23°27' N.on the decl. arc;and,at 0h1m p.m.,l.m.t.,observe the sun on the meridian;the resulting lat.at this sec.cor.is 37°52' N.

N.59°56' E.on a random line bet.secs.8 and 17.
40.00 Set temp.1/4 sec.cor.
80.14 Intersect N.and S.line,2 lks.N.of the cor.of secs.8, 9,16 and 17,heretofore described.
Thence I run
S.89°57' W.on a true line bet.secs.8 and 17.

Chains.	Over nearly level ground,gently sloping N.and N.W.
40.07	Set a granite stone I4xI0x6 ins.,I0 ins.in the ground for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8 x I2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,N.of cor.
80.I4	The cor.of secs.7,8,17 and 18.
	Land nearly level,covered with medium dense sage, greasewood and shadscale,and very little grass.
	Soil,sandy and clay loams;Ist.and 2nd.rate.
	No timber.
	Good grazing.
	N.89°47' W.on a random line bet.secs.7 and I8.
40.00	Set temp.I/4 sec.cor.
77.I4	Intersect W.bdy.of Tp.(Pine Valley Guide Meridian), I6 lks.N.of the cor.of secs.7,12,13 and 18,established by me in re-survey of this bdy.,and hereto-described in Notes thereof.
	Thence I run,
	S.89°54' E.on a true line bet.secs.7 and I8.
	Over nearly level ground.
37.I4	Set a trachyte stone I4x8x5 ins.,I0 ins.in the ground,for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high, N.of cor..
77.I4	The cor.of secs.7,8,I7 and I8.
	Land nearly level,gently sloping N.
	Soil,clay and sandy loams;Ist.rate.
	No timber.
	Ground covered with sage,greasewood,and rabbit brush undergrowth and shadscale shrubbery,and sprinkling of grass,which afford fair grazing.
	June 20,I900.

Chains.	
	June 21,1900:I set off 37°52' N.on the lat. arc;23°27'30" N.on the decl.arc;and,at 8H a.m.,l.m. t.,determine a true meridian.with the solar at the cor.of secs.7,8,17 and 18,heretofore described.
	Thence I run
	N.0°3' W.bet.secs.7 and 8.
	Over nearly level ground;through medium dense grease wood,sage and rabbit brush undergrowth and shadscale shrubbery.
40.00	Set a granite stone 16x10x6 ins.,11 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 16x. 18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor
80.00	Set a trachyte stone 18x12x8 ins.,12 ins.in the ground,for cor.of secs.5,6,7 and 8,marked with 5 notches on S.and E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth, 4 ft.base,2 ft.high,W.of cor.
	Land nearly level,gently sloping N.and N.W.
	Soil,clay loam;1st.rate.
	No timber.
	Undergrowth,shrubbery and grasses afford fair grazing.
	N.89°57' E.on a random line bet.secs.5 and 8.
40.00	Set temp.1/4 sec.cor.
80.08	Intersect N.and S.line,18 lks.N.of the cor.of secs. 4,5,8,and 9,heretofore described.
	Thence I run
	N.89°55' W.on a true line bet.secs.5 and 8.
	Over nearly level ground;through medium dense sage, greasewood,and rabbit brush undergrowth and shadscale shrubbery.
40.04	Set a granite stone 15x15x5 ins.,10 ins.in the ground for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.

Chains.	
80.08	The cor.of secs.5,6,7 and 8. Land nearly level,gently sloping N.and N.W. Soil,sand and clay loams;Ist.rate. No timber. Undergrowth,grasses and shrubbery afford good grazing
	N.89°54' W.on a random line bet.secs.6 and 7.
40.00	Set temp.I/4 sec.cor.
76.99	Intersect W.bdy.of Tp.(Pine Valley Guide Meridian), 23 lks.N.of the cor.of secs.I,6,7 and I2,established by me in resurvey of this bdy.,and herefofore described in notes thereof. Thence I.run N.89°55' E.on a true line bet.secs. 6 and 7. Over nearly level ground;through dense sage and rabbit brush undergrowth.
27.00	Leave dense undergrowth,bears N.and S.;enter scattering sage,rabbit brush,short dense greasewood and shadscale undergrowth and shrubbery.
36.99	Set a trachyte stone I8xI0x6 ins.,I2 ins.in the ground,for I/4 sec.cor.,marked I/4 on N.face;dug pits I8xI8xI2 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 I/2 ft.base,I I/2 ft.high, N.of cor.
76.99	The cor.of secs.5,6,7 and 8. Land nearly level,slightly sloping N.and N.E. Soil,clay loam;Ist.rate. No timber. Undergrowth and shrubbery with some grass,afford good grazing. Dense undergrowth on 27.00 chs. June 2I,I900: At this sec.cor.,I set off 23°27'30" N.on the decl.arc;and,at 0h Im p.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°55' N.

27.00/49.99

Chains. From the cor.of secs.5,6,7 and 8,heretofore described,I run

N.0°5' W.,on a true line,knowing from previous lines run that a closing cor.will be necessary.

Over nearly level ground;through short dense greasewood and shadscale undergrowth and shrubbery.

27.94 Trail bears N.80° E.and S.80° W.

40.00 Set a granite stone 17x11x6 ins.,12 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.

56.80 Trail bears N.E.and S.W.

57.95 Road from Cedar City by way of Antelope Springs to State Line,bears S.E.and N.W.

74.50 Trail bears N.10° E.and S.10° W.

79.54 Intersect N.bdy.of the Tp.,165 lks.,N.89°57' W.,from cor.of secs.5,6,31 and 32,established by me in resurvey of this bdy.,and heretofore described in the notes thereof.

Set a limestone 16x12x6 ins.,11 ins.in the ground, for closing cor.of secs.5 and 6,marked C.C.on S., with 5 grooves on E.and 1 groove on W.faces;dug pits 24x18x12 ins.crosswise on each line E.and W.,3 ft., and S.of stone,7 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,S.of cor.

I destroy the marks on the cor.of secs.5,6,31 and 32, established by me in resurvey of N.bdy.of this Tp., and re-establish the same for cor.of secs.31 and 32, T.33 S.,R.15 W.only.

Land almost level;gently sloping to N.and N.E.

Soil,clay loam;1st.rate.

No timber.

Undergrowth,shrubbery and grass cover the ground and afford fair grazing.

June 21,1900.

Subdivisions of T.34 S.,R.I5 W.-Continued.

Chains. June 2I,I900:I return to the meridian established May I4,I900,from Polaris,at the cor.of Tps.34 and 35 S.,Rs.I5 and I6 W.;and at 4h p.m.,l.m.t.,I set off 37°49' N.on the lat.arc;23°28' N.on the decl.arc; and test the adjustments of my solar,finding it gives the same meridian as before,and adjustments are correct.

June 2I,I900.

GENERAL DESCRIPTION.

This township lies in the Escalante Desert,which is a part of the Great American Desert,in an almost level plain,with low rolling sandknolls extending across the Tp.from S.W.to N.E. The North Easterly part of the Tp.adjoins the W.slope of foot hills from a high mountain butte known as "The Debutte". In the E.central part of the Tp.are low granite knolls and ridges on which are found a fine quality of sharp gray granite stone.

The soils in the township are generally of rich sandy and clay loams with traces of alkali in the N.central,N.and Northeastern parts,and can nearly all be classed as first rate.

There is no timber of any kind in the Tp.;but sage,greasewood and rabbit brush undergrowth grows very large and dense in the South and Easterly parts, and there is an abundance of bud sage,short greasewood and shadscale shrubbery and grasses,which afford excellent grazing for the bands of wild horses roam-over the desert and for herds of horned stock ranging in the Tp.,and also for flocks of sheep hereded here,especially during the winter season when the snows are deep in the more mountainous regions and higher altitudes.

No minerals,coal deposits,stone quarries or lime kilns are to be found in the township;and no fossils or petrefactions are visible.A few flint arrow spikes supposed to have been made and used by the native Indians were picked up in the township.

There are no lakes,rivers or streams of water in the Tp. In the N.E.corner thereof is a large storm water pond which drains an extensive area on the E., S.,and S.W. of the pond;and during the stormy season it is generally filled with water of a salty or alkaline nature. Several smaller storm water ponds in the central part of the township furnish watering places for horses,cattle and sheep,and herds of antelope which roam over the desert, during the stormy season.The waters in these ponds are slightly impregnated with alkali.

On the E.side of the N.E.1/4 of sec.1,Francis Webster and his sons of Cedar City sunk a well and obtained artesian water at a depth of bet.30 and 40 ft. with a steady flow of about 1/2 to 1 inch or about 20 gallons per.minute.This water is clear fresh and cool and seems to be fed from a large subterraneum stream.A small cabin on the S.and reservoir on the N. adjoins this well.All these improvements were made by Francis Webster and sons at a cost of about $300.00.

The lands adjoining the well are used by these claimants for grazing purposes. There are no other settlers in the township.

A well has been dug on the S.side of sec.22 and surface water obtained at a depth of about 15 ft. Water is usually found near the surface in the sand knolls.Underlying the drifted sands is a very heavy putty like clay which overlies sharp wash sand carrying the water.

The main wagon roads from Pinto to Lund,from Cedar City to Modena and from Cedar City to State Line crosses the Tp. The Utah and Pacific R.R.trains crossing the N.side of the desert Southwesterly and Northeasterly can be seen from any part of the Tp.

Owing to the mirage the reflections in the Tp.are most beautiful,consisting of large forests,beautiful crystal lakes and rivers,suspension bridges spanning deep chasms,old castles and walls,busy cities with factories smoke stacks,church spires etc.,gardens, orchards,fields,parks and groves etc.

June 21,1900. Mayhew H. Dalley, U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H.Dalley, 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 subdivisions of T.34 S.,R.15 W.,of the Salt Lake Base and Meridian,State of Utah, showing the respective capacities in which they acted:

Donald C.Urie, *Chainman.*
William E.Pryor, *Chainman.*
David Dix, *Moundman.*
Isaac C.Haight, *Moundman.*
David Dix, *Axman.*
Hillman Dalley, *Axman.*
William Dix, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H.Dalley, United States Deputy Surveyor, in surveying all those parts or portions of the subdivisions of T.34 S.,R.15 W. of the Salt Lake Base and 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.

Donald C. Urie, *Chainman.*
William E Pryor, *Chainman.*
David Dix, *Moundman.*
Isaac C Haight, *Moundman.*
David Dix, *Axman.*
Hillman Dalley *Axman.*
William Dix, *Flagman.*

Subscribed and sworn to before me this 23rd. day of June, A.D. 189 1900.

SEAL

My Commission Expires [illegible]

Senora C Dalley
Notary Public.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for Utah, bearing date of the 23rd. day of January, A.D., 189 9, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisions of T. 34 S., R. 15 W. of the Salt Lake Base and Meridian, of the meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me this 31st day of May, A.D. 1901, 189

Edward Henderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17 1902, 189

The foregoing field notes of the survey of the subdivisions of Township 34 South Range 15 West of the Salt Lake Base and Meridian, Utah

executed by Mayhew H. Dalley under his contract No. 224, dated January 23, 189 9, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward Henderson
United States Surveyor General

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

_____
United States Surveyor General

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BOOK A-288

K.J.B.

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

of

Township No. 12 South

Range No. 2 East

Of the Salt Lake base and Meridian,

I the state of Utah.

AS SURVEYED BY

Hubert D. Page, United States Deputy Surveyor,

Under his Contract No. 240, dated July 2nd, 1900

Survey commenced August 7th 1901, 189

Survey completed August 25th 1901, 189

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[illegible] 53-[illegible]-36 ✓

[illegible] [illegible]-57 ✓

NAMES AND DUTIES OF ASSISTANTS.

Jay Morrison	Chainman
Harry A. Raget	"
Varnick Hansen	mound man
Cleon Jackson	"
Varnick Hansen	axman
Cleon Jackson	"
Varnick Hansen	flagman

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BOOK A-288

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

We, Jay Morrison and Harry A Rager do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the subdivisions of T. 17 S., R. 2 E. of the Salt Lake base and meridian, State of Utah.

Jay Morrison, Chainman.
Harry A. Rager, Chainman.

Subscribed and sworn to before me this 6th day of August, 1901.

SEAL

Hubert D. Pagh
U.S. Deputy Surveyor.

We, Varnick Hansen and Cleon Jackson do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the subdivisions of T. 17 S., R. 2 E. of the Salt Lake base and meridian, State of Utah.

Varnick Hansen, Moundman.
Cleon Jackson, Moundman.

Subscribed and sworn to before me this 6th day of August, 1901.

SEAL

Hubert D. Pagh
U.S. Deputy Surveyor.

We, Varnick Hansen and Cleon Jackson 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 the subdivisions of T. 17 S., R. 2 E. of the Salt Lake base and meridian, State of Utah.

Varnick Hansen, Axman.
Cleon Jackson, Axman.

Subscribed and sworn to before me this 6th day of August, 1901.

SEAL

Hubert D. Pagh
U.S. Deputy Surveyor

I, Varnick Hansen, 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 the subdivisions of T. 17 S., R. 2 E. of the Salt Lake base and meridian, State of Utah.

Varnick Hansen, Flagman.

Subscribed and sworn to before me this 6th day of August, 1901.

SEAL

Hubert D. Pagh
U.S. Deputy Surveyor

Subdivision of T. 12 S. R. 2 E.

Survey commenced
August 7, 1901
and executed with a W. and L.
E. Gurley, light mountain
transit No. — with Solar
attachment.
The horizontal limb is
provided with two double
verniers placed opposite to
each other, reading to
single minutes of arc:
which is also the least
count of the verniers of the
latitude and declination
arcs:
The instrument was examined,
tested on the true meridian
at Salt Lake City, found
correct and was approved
by the surveyor general for
Utah, May 25, 1901.
I examine the adjustments
of the transit, and correct
the level and collimation
error: then, to test the
Solar apparatus, by
comparing its indications,
resulting from solar
observations made during
A. M. and P. M. hours, with
a true meridian determined
by observations on Polaris,
I proceed as follows:
At the cor. of Tps. 12 and 13
S., R. 2 and 3 E. which is a
stone 5 x 15 x 12 ins.
above the ground, marked
as described by the
Surveyor general,
latitude 39° 43' N.

Subdivision of T. 12 S. R. 2 E. Continued

Chains

longitude 111° 40' W.:
I set off 39° 43' N. on the lat. arc: 16° 27' N. on the decl. arc: and at 4. p. m. l. m. t. determine with the solar a true meridian and mark a point thereof, on a stone firmly set in the ground. 5 chs. N. of the Cor.

At 10h. 23m. p. m., l. m. t. I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point on the line thus determined on a plug driven in the ground, 5 chs. N. of my station

Aug. 7. 1901.

August 8: At 6 A. M. l. m. t. I lay off the azimuth of Polaris 1° 35' to the west and mark the True Meridian thus determined by cutting a small groove in the stone set Aug. 7. on which the true meridian thus determined falls on the mark made from the p. m. Solar observation.
At 7 A. M. l. m. t. I set off 39° 43' N. on the lat. arc: 16° 17' N. on the decl. arc: the true meridian thus determined falls on the mark, made from the p. m. Solar observation, and is identical

Chains

with the Polaris observation.
The solar apparatus by p. m. and a. m. observations defines true meridians, same as by the Polaris observation, therefore the adjustments of the instrument are correct.
The magnetic bearing of the true meridian, at 7h 15m A. M. is N. 16° 31' W. The angle thus determined, reduced by the table, page 100, gives the mean mag. decl. 16° 26' E.

From the Tp. Cor. already described, I run North, on the E. bdy. of T. 12 S. R. 2 E, and Sec. 36: and, at 40.00 chs., intersect the ¼ sec. Cor.: and at 80.00 chs. intersect the Cor. of secs. 25, 30, 31 and 36: thence on the sec. bears north.
From the Tp. Cor. I run S. 89° 40' W., on the S. bdy. of sec. 36: at 40.01 chs., fall 5 lks. N. of the ¼ sec. Cor.: And at 80.02 chs. fall 9 lks. N. of the Cor. of secs. 1, 2, 35 and 36: on the S. bdy. of the Tp. Consequently, the S. bdy. of sec. 36 bears S. 89° 3' W.
The bearing of the E. bdy. of sec. 36. is as stated by the surveyor general, and my chaining agrees with the field notes of the original survey.

Subdivision of T. 12 S. R. 2 E. Continued

Chains	
	The bearing of the S. bdy. of sec 36 is S. 89° 36' W. and is not within the limits, therefore I do not begin subdivisions at the cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp. but establish a Sectional Correction Line, as follows:
	I Commence, at the cor. of secs. 25, 30, 31 and 36, on the E. bdy of T. 12 S. R. 2 E. which is a quartzite stone, 6 x 10 x 10 ins. above the ground, firmly set, marked as described by the Surveyor general.
	Thence I run West, on a Sectional Correction line. bet secs. 25 and 36.
	Descend, through dense oak brush.
1.00	Ravine, 200 ft. deep. Course N. Ascend, through scattering aspen timber.
38.00	Top of Spur, projects N. Descend.
40.00	Set a sandstone 15 x 10 x 6 ins. 10 ins. in the ground, for ¼ sec. cor., marked ¼ S. 25 on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
51.50	Drain. 50 ft. deep. Obtains N. E. Ascend.
64.00	Top of Spur ridge, bears N.E. and S. W. 1000 ft. above

Subdivision of T. 12 S., R. 2 E. Cont.

Chains	
	Cor. of secs. 25, 30, 31 and 36. on E. bdy. of Tp. Descend.
	Leave timber
80.00	Set a Conglomerate Stone, 18 x 6 x 4 ins., 12 ins. in the ground, for cor. of secs. 25, 26, 35 and 36. marked with 1 notch on S. and E. edges: And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land mountainous.
	Soil stony 3rd Rate.
	Timber Aspen.
	Mountainous land, 80.00 chs.
	West, on a Sectional Correction Line, bet. secs. 26 and 35. Descend, through dense arbutus and oak brush.
31.00	Hop Creek, now dry, in Cañon 1000 ft. deep. Course S. W. ascend.
40.00	Set a Sandstone 24 x 12 x 3 ins. 18 ins. in the ground, for ¼ cor., marked ¼ S. 26. on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Pits impracticable.
60.00	Top of spur, projects S. E. Descend.
67.00	Drain, 50 ft. deep. Course S. E. Ascend.
80.00	Top of spur, projects S. E. Set a Sandstone 15 x 12 x 5 ins. 10 ins. in the ground, for Cor. secs. 26, 27, 34 and 35.

Chains	
	marked with 2 notches on the E. and 1 notch on the S. edges: and raise a mound of stone. 2 ft. base. 1½ ft. high. N. of cor. Pits impracticable. Land mountainous. Soil stony. 4th Rate. No timber. Mountainous land. 80.00 chs. August 8: At this cor. I set off 16° 12' N. on the decl. arc: and at 0h. 52m. p. m., l. m. t. observe the sun on the meridian the resulting lat. is 39° 44' N.
	West, on a Sectional Correction Line, bet. secs. 27 and 34. Ascend, through dense oak and scattering mahogany.
16.50	Top of high ridge. Dividing Hop and Pole Canons, bears N. E. and S. W. descend.
40.00	Set a sandstone, 16 x 9 x 6 ins. 11 ins. in the ground, for ¼ sec. cor. marked ¼ S. 27. on the N. face: and raise a mound of stone. 2 ft. base, 1½ ft. high. N. of cor. Pits impracticable.
44.00	Draw, 50 ft. deep. drains N. Ascend.
69.00	Top of ridge, bears N. W. and S. E. descend.
80.00	Set a trachyte stone 15 x 10 x 6 ins. 11 ins. in the ground, for

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	Cor. of secs. 27, 28, 33 and 34. marked with 3 notches on E. and 1 notch on S. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable. Land mountainous. Soil stony, 3rd and 4th Rate. No timber. Mountainous land, 80.00 chs.
	West, on a Sectional Correction Line. bet. secs. 33 and 28. Descend, through dense artimesa and oak brush.
9.00	Ravine, 250 ft. deep. Course N. 80° W. ascend.
40.00	Set a sandstone, 24 x 12 x 5 ins., 18 ins. in the ground, for ¼ sec. Cor., marked ¼ S. 28, on the N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of Cor. Pits impracticable
51.00	Top of spur ridge, bears N. W. and S. E. Descend abruptly, over trachyte ledges, 150 ft. high, bearing N. W. and S. E.
60.50	N. fork of Salt Creek, 15 lks wide, water saline, 12 ins. deep, in Cañon 400 ft. deep, Course S. W. ascend.
61.00	Wagon road from Nephi to Nebo Salt Works, bears N. E. and S. W.

Chains	
62.00	Line of the San Pete Valley. Railroad, running to a stone quarry, bears N. and S.
79.60	Intersect N. and S. line, 110 lks. N. of the Cor. of Secs. 28, 29, 32, and 33, which is a Sandstone 6 x 8 x 6 ins. above the ground, firmly set, marked as described by the Surveyor general, we destroy marks pertaining to secs. 28 & 33. Set a trachyte stone 18 x 12 x 8 ins. 12 ins. in the ground, for Closing Cor. for secs. 28 and 33. marked with C. C. on E. face, with 4 grooves on E. and 1 groove on S. faces: And raise a mound of stone, 2 ft. base, 1½ ft. high. E. of Cor. Pits impracticable. Land mountainous. Soil stony, 3rd and 4th Rate No timber. Mountainous land, 79.60 chs. August 8, 1901
	August 9: At 7 A. M., L. M. T. I set off 39° 44' N. on the lat. arc: 16° 00' N. on the decl. arc: and determine a true meridian with the Solar at the Cor. of Secs. 25, 26, 35 and 36. Thence I run S. 0° 1' E. on a random line, bet secs. 35 and 36.
40.00	Set temp. ¼ sec. cor.
80.56	Intersect S. bdy. of Tp.

Subdivision of T. 12 S. R. 2 E. Continued

Chains	
	At Cor. of secs. 1, 2, 35 and 36. which is a volcanic stone, 6 × 8 × 6 ins. above the ground, firmly set; marked as described by the surveyor general. Thence I run N. 0° 1' W. on a true line, bet. secs. 35 and 36. Descend through dense oak, artimesa, service berry and maple brush.
40.50	Ravine, 500 ft. deep, Course N. E., ascend.
40.56	Set a trachyte stone 14 × 8 × 6 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ S. 35, on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
58.40	Top of ridge, bears N. E. and S. W. descend.
80.56	The Cor. of secs. 25, 26, 35 and 36. Land mountainous. Soil stony 3rd. and 4th. Rate. No timber. Mountainous land, 80.56 chs.
	N. 0° 1' W. bet. secs. 25 and 26. Descend over broken, stony land, through dense service berry, oak and maple brush.
28.00	Hop Creek, now dry, in Canon, 1500 ft. deep. Course S. W. ascend.
40.00	Set a Conglomerate stone 15 × 10 × 6 ins., 10 ins in the ound, for ¼ sec. Cor., marked

Subdivision of T. 12 S. R. 2 E. Continued.

Chains

¼ S. 26. on W. face: and raise a mound of stone, 2 ft. base 1½ ft. high, W. of cor.
Pits impracticable.

80.00 Set a sandstone 16 x 9 x 4 ins. 11 ins. in the ground, for Cor. of secs. 23, 24, 25 and 26. marked with 2 notches on the S. and 1 notch on the E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
This cor. is 1700 ft. above the bottom of Hop Creek Cañon.
Land mountainous.
Soil stony 4th Rate.
No timber.
Mountainous land, 80.00 chs.
August 9: At this Cor. I set off 15° 55' N. on the decl. arc: and at 0h. 5m. p. m. l. m. t. observe the sun on the meridian, the resulting lat. is 39° 45' N.

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

40.00 Set temp. ¼ sec. cor.

79.78 Intersect E. bdy. of Tp. at Cor. of secs. 19, 24, 25 and 30. which is a sandstone 5 x 14 x 4 ins. above the ground, firmly set: marked as described by the Surveyor general.
Thence I run
West, on a true line,

Subdivision of T. 12 S., R 2 E. Cont.

Chains	
	bet. secs. 24 and 25;
	Ascend over broken land,
	through dense oak and
	mahogany bush.
39.89	Set a sandstone 15 x 8 x 6 ins.
	10 ins. in the ground, for ¼
	sec. cor., marked ¼ S. 24. on
	N. face; and raise a mound
	of stone, 2 ft. base, 1½ ft.
	high, N. of cor.
	Pits impracticable.
79.78	The cor. of secs. 23, 24, 25 and 26.
	1000 ft. above the cor. of secs.
	19, 24, 25 and 30 on E. bdy. of Tp.
	Land mountainous.
	Soil stony 3rd and 4th Rate.
	No timber
	Mountainous land. 79.78 chs.

	N. 0° 1' W. bet. secs. 23 and 24.
	Over broken, stony land,
	ascend through dense
	oak, service berry and
	mahogany bush.
3.00	Top of high ridge, divide
	between Hop and Pole
	Cañons, 1700 ft. above the
	bottom of Hop Creek.
	bears N. E. and S. W. descend.
40.00	Set a sandstone 14 x 10 x 4 ins.
	10 ins. in the ground, for ¼
	c. cor., marked ¼ S. 23. on
	N. face; and raise a mound
	of stone, 2 ft. base, 1½ ft.
	high, W. of cor.
	Pits impracticable.
80.00	Set a sandstone 16 x 8 x 8 ins.
	11 ins. in the ground, for

Subdivision of T. 12 E., R. 2 E. Continue

Chains	
	Cor. of secs. 13, 14, 23 and 24. marked with 3 notches on the S. and 1 notch on the E. edges: and raise a mound of stone 2 ft. base. 1½ ft. high. W. of cor. Pits impracticable. Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land. 80.00 chs. August 9. 1901
	August 10: At 7 a. m. l. m. t. I set off 39°46' N. on the lat. arc: 15°43' N. on the decl. arc: and determine a true meridian with the solar. at the Cor. of secs. 13, 14, 23 and 24. Thence I run East. on a random line. bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
79.60	Intersect E. bdy. of Tp. at Cor. of secs. 13, 18, 19 and 24. which is a sandstone 4×10×6 ins. above the ground: firmly set marked as described by the surveyor general. Thence I run West. on a true line. bet. secs. 13 and 24. Over broken, rolling land, descend along the south bank of the E. fork of of Pole Cañon through dense oak brush.

...mective ...to page 1

Subdivision of T. 12 S. R. 2 E. Continued

Chains	
2.10	Mouth of ravine, 150 ft. deep, from S. C.
38.50	Mouth of ravine, 100 ft. deep, from S.
39.80	Set a sandstone 16×12×5 ins. 11 ins. in the ground, for ¼ sec. cor., marked ¼ S. 13. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
79.60	The cor. of secs. 13, 14, 23 and 24. 600 ft. below cor. of secs. 13, 18, 19 and 24. on E. bdy. of Tp. Land mountainous. Soil stony 3rd Rate. Mountainous land, 79.60 chs.
	N. 0° 1' W. Set. secs. 13 and 14. Descend, through dense artimesa and oak brush.
6.00	Bottom of E. fork of Pole Creek. Cañon, Creek non dry, 200 ft. below sec. cor. ascend.
7.25	Old Cañon road, bears E. and W.
10.50	Top of spur, projects S. W. descend.
13.60	Ravine, 100 ft. deep, course S. W. ascend.
22.30	Top of spur, projects S. W. descend.
30.00	Ravine, 150 ft. deep, course S. W. ascend.
40.00	On S. slope of spur, projecting S. Set a trachyte stone 13×9×5 ins., 9 ins. in the ground.

Chains

for ¼ sec. cor., marked ¼ S. 14, on the west face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.

61.00 Top of ridge, bears S. W. and N. E.
Descend through scattering aspen and dense maple bush.

80.00 Set a sandstone 14 x 12 x 8 ins. 10 ins. in the ground, for Cor. of secs. 11, 12, 13 and 14, marked with 4 notches on S. and 1 notch on E. edges: from which
A maple, 7 ins. diam., bears N. 75° E. 15 lks. dist., marked T. 12 S., R. 2 E., S. 12. B. T.
A maple, 8 ins. diam., bears S. 60° E. 25 lks. dist., marked T. 12 S., R. 2 E., S. 13. B. T.
An aspen, 5 ins. diam., bears S. 30° W. 50 lks. dist., marked T. 12 S., R. 2 E., S. 14, B. T.
A maple, 6 ins. diam., bears N. 88° W. 30 lks. dist., marked T. 12 S., R. 2 E., S. 11, B. T.
Land mountainous
Soil clay, 3rd Rate.
Timber aspen.
Mountainous land. 80.00 chs.
August 10: At this cor. I set off 15° 37' N. on the elect. arc: and at 0 h. 5 m. p. m., l. m. t. observe the sun on the meridian, the resulting lat. is 39° 47' N.

Subdivision of T. 12 S., R. 2 E., Con

Chains		
	East on a random line. bet. secs. 12 and 13.	See corr notes page 1.
40.00	Set temp. ¼ sec. cor.	
79.78	Intersect E. bdy. of Tp. at cor. of secs. 7, 12, 13 and 18. which is a sandstone 5×10×8 ins. above the ground firmly set, marked as described by the surveyor general. Thence I run West, on a true line, bet. secs. 12 and 13. Over broken land, ascend through dense oak and maple brush.	
39.89	Set a sandstone 13×10×6 ins. 9 ins. in the ground, for ¼ sec. cor., marked ¼ S. 12. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.	
49.00	Top of ridge, 600 ft. above cor. of secs. 7, 12, 13 and 18. bears N.E. and S.W. descend.	
79.78	The cor. of secs. 11, 12, 13 and 14. Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land, 79.78 chs.	

N. 0° 1' W. bet. secs. 11 and 12. Descend, through dense oak, service berry and maple brush and scattering aspen timber.

25.00 N. fork of Pole Creek, 1 lk. wide,

Subdivision of T. 12 S., R. 2 E. Continued.

Chains	
	pure water, 3 ins deep, in Cañon 900 ft. deep, Course S. W. Ascend.
40.00	Set a quartzite stone 12 x 8 x 6 ins. 8 ins. in the ground for ¼ Sec. Cor., marked ¼ S. 11, on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable.
49.00	Top of Spur, projects S. E. Descend
68.00	Ravine, 500 ft. deep, Course S. E. ascend.
80.00	Set a quartzite stone, 15 x 10 x 10 ins., 10 ins. in the ground for Cor. of Secs. 1, 2, 11 and 12. marked with 5 notches on S. and 1 notch on E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable. Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land, 80.00 chs. August 10, 1901.
	August 11: At 7 A. M. L. M. T. I set of 39° 48' N. on the lat. arc: and 15° 25' N. on decl. arc: and determine a true meridian with the solar, at the Cor. of Secs. 1, 2, 11 and 12. Thence I run East, on a true line bet. Secs. 1 and 12.

Subdivision of T. 1 S. R. 2 E. Con

Chains

40.00 Set temp. ¼ sec. cor.

79.96 Intersect E. bdy. of Tp. 23 lks. S. of the cor. of secs. 1, 6, 7 and 12. which is a quartzite stone 4 x 10 x 10 ins. above the ground, firmly set, marked as described by the Surveyor general.
Thence I run S. 89° 50' W. on a true line bet. secs. 1 and 12.
Ascend through dense artimesa and scrub oak.

39.98 Top of spur ridge, projects S. W. descend.
at a quartzite stone 12 x 8 x 6 ins. 8 ins. in the ground, for ¼ sec. cor., marked ¼ S. 1, on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
Pits impracticable.

52.00 North fork of Pole Creek, now dry. in Canon 600 ft. deep
Course S. W. ascend.

76.75 Top of ridge, bears N. and S.
descend.

79.96 The cor. of secs. 1, 2, 11 and 12.
Land mountainous.
Soil stony 3rd Rate.
No timber.
Mountainous land. 79.96 chs.
August 11: At this Cor. I set off 15° 20' N. on the decl. arc: and at 0h. 5m. p. m. l. m. t. observe the sun on the meridian, the resulting lat. is 39° 48' N.

Subdivision of T. 12 S. R. 2 E. Continued.

Chains	
	N. 0° 1' W. on a random line, bet. secs. 1 and 2.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. bdy. of Tp. at cor. of secs. 1, 2, 35 and 36. which is a trachyte stone 4x10x8 ins. above the ground firmly set; marked and witnessed as returned under Contract No. 238, of James M. Lenz Dl. S.
	Thence I run S. 0° 1' E. on a true line, bet. secs. 1 and 2.
	Ascend though heavy aspen timber.
7.00	Top of ridge, bears N. E. and S. W. Descend.
12.50	Begin ascent, Leave heavy timber bears N.E. and S. W. Enter scattering aspen and pine timber
17.50	Top of spur, projects E. descend.
29.00	Begin ascent.
38.00	Top of ridge, bears N. W and S. 20° E. descend
	Leave timber enter dense oak and mahogany brush.
40.00	Set a trachyte stone 18x12x5 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ S. 2, on W. face:
	from which
	A pine, 5 ins. diam., bears N. 54 E. 43 lks. dist., marked ¼ S. 1, B. T.
	No other trees within limits.
	And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
80.00	The cor. of secs. 1, 2, 11 and 12.

Subdivision of T. 12 S. R. 2 E. Con

Chains	
	Land mountainous. Soil stony 3rd Rate. Timber aspen and pine. Mountainous land. 80.00 chs. August 11. 1901
	August 12: At 7 A. M. l. m. t. I set off 39°44' N. on the lat. arc: 15°07' N. on the decl. arc: and determine a true meridian with the solar, at the cor. of secs. 26, 27, 34 and 35.
	Thence I run S. 0°1' E. on a random line bet. secs. 34 and 35.
40.00	Set temp. ¼ sec. cor.
81.15	Intersect S. bdy. of Tp. 3 lks. W of the Cor. of secs. 2, 3, 34 and 35. which is a quartzite stone, 5 x 7 x 6 ins. above the ground; firmly set, marked as described by the Surveyor general. Thence I run N. 0°2' W. bet. secs. 34 and 35. on a true line, [illegible] stony land, descend through dense aetimesa, oak and scattering mahogany brush.
29.00	Hop Creek, non dry, in Cañon 1000 ft. deep, Course S. W. ascend.
41.15	Set a Conglomerate stone, 15 x 9 x 4 ins., 10 ins. in the ground, for ¼ sec. cor.

Subdivision of T. 12 S. R. 2 E. Continued.

Chains	
	marked ¼ S. 34. on W face: And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable.
81.15	Top of spur, projects S. E. The Cor. of secs. 26, 27, 34 and 35 heretofore described. Land mountainous. Soil stony 4th Rate. No timber. Mountainous land, 81.15 chs.
	N. 0° 1' W. bet. secs. 26 and 27. Descend through dense oak. Sawis bean and Mahogany brush.
5.00	Begin ascent, over broken land.
15.00	Top of high ridge, divide between Hop and Pole Cañons, 1200 ft. above the bottom of Hop Cañon, bears N. E and S. W. descend.
40.00	Set a Sandstone 14 x 12 x 6 ins. 10 ins in the ground, for ¼ sec. cor. marked ¼ S. 27. on W face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable.
45.00	Ravine, 600 ft. deep. Course S. W. Ascend.
62.30	Top of ridge, bears N. E. and W. descend.
80.00	Set a Sandstone. 14 x 12 x 6 ins. 10 ins. in the ground, for Cor. of secs. 22, 23, 26 and 27,

Subdivision of T. 12 S. R. 2 E. Continue

Chains	
	marked with 2 notches on S. and E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor.
	Pits impracticable.
	Land, mountainous.
	Soil, Stony 3rd Rate.
	No timber
	Mountainous land, 80.00 chs.
	August 12; At this Cor. I set off 15° 02' N. on the decl. arc: and at 0h. 5m. p. M. l. m. t. observe the sun on the meridian the resulting lat. is 39° 45' N. ✓
	East, on a random line, bet. secs. 23 and 26.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, at the Cor. of secs. 23, 24, 25 and 26.
	Thence I run
	West, on a true line, bet. secs. 23 and 26.
	Ascend, through dense oak brush.
5.00	Top of high ridge, divide between Hop and Pole Cañons 1400 ft. above the bottom of Hop Creek Cañon, bears N.E. and S.W.
	Descend, over broken land through scattering aspen timber.
40.00	Set a sandstone 12 x 12 x 6 ins. 8 ins. in the ground, for ¼ sec. cor., marked ¼ S. 23 on N. face:

See Notes pa

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	from which
	An aspen, 12 ins. diam., bears N. 10° E., 26 lks. dist., marked ¼ S. 23 B.T.
	An aspen, 12 ins. diam., bears S., 21 lks. dist., marked ¼ S. 26, B.T.
42.00	Ravine, 300 ft. deep. Course S. W. Ascend.
67.00	Top of ridge, bears N. E. and S. W. descend.
80.00	The cor. of secs. 22, 23, 26 and 27.
	Land mountainous.
	Soil Stony 3rd Rate
	Timber aspen.
	Mountainous land. 80.00 chs.
	N. 0° 1' W. bet. secs. 22 and 23.
	Descend: through dense oak brush.
13.00	Ravine, 600 ft. deep. Course W. Ascend.
32.00	Top of spur ridge, projects S. W. descend.
40.00	Set a trachyte stone 15 x 10 x 8 ins. 10 ins. in the ground, for ¼ sec. cor., marked ¼ S. 22. on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
74.75	Pole Creek, 2 lks. wide, pure water, 3 ins. deep, and Cañon, 1000 ft. deep, Course S. W. Ascend.
75.00	Cañon road bears N. E. and S. W.
80.00	Set a trachyte stone 12 x 8 x 6 ins., 8 ins. in the ground, for cor. of secs. 14, 15, 22 and 23. marked with 3 notches on

Subdivision of T. 12 S., R. 2 E. Continue

Chains	
	the S. and 2 notches on the E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land mountainous Soil stony, 3rd Rate. No timber. Mountainous land, 80.00 chs. August 12, 1901
	August 13, At 7 A. M. set m. t. I set off 39° 46' N. on the lat. arc: 14° 49' N. on the decl. arc: and determine a true meridian with the sun, at the cor. of secs. 14 15 22 and 23.
	Thence I run East on a random line, bet. secs. 14 and 23.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, at cor. of secs. 13, 14, 23 and 24.
	Thence I run West on a true line, bet. secs. 14 and 23.
	Run broken land, descend along the South bank of the E. fork of Pole Creek Canon, through dense oak brush.
40.00	at a trachyte stone 15 x 10 x 6 " 10 ins. in the ground, for ¼ sec. cor., marked ¼ S. 14, on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
43.00	Mouth of ravine, 800 ft. deep.

Subdivision of T. 12 S. R. 2 E. Continued.

Chains	
	from the S.
71.75	Cañon road, bears N. E. and S. W.
73.00	Pole Creek, 2 lks. wide, pure water, 3 ins deep, and Cañon 1000 ft. deep, Course S. W. Junction of E. and N. forks of Pole Creeks. N. E. 5 chs. dist. Ascend.
80.00	The cor. of secs. 14, 15, 22 and 23. 600 ft. below cor. of secs. 13, 14, 23 and 24. Land mountainous. Soil, Stony 3rd Rate. No timber. Mountainous land, 80.00 chs.
	N. 0° 1' W. bet. secs. 14 and 15. Ascend through dense artimesa and oak brush.
25.00	Top of spur ridge projects S. E. descend.
40.00	Set a trachyte stone 24 x 12 x 6 ins. 18 ins. in the ground, for ¼ sec. cor., marked ¼ S. 15, on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
49.00	Ravine, 200 ft. deep, Course S. E. Ascend.
80.00	Set a trachyte stone 12 x 8 x 8 ins. 8 ins. in the ground, for cor. of secs. 10, 11, 14 and 15. marked with 4 notches on S. and 2 notches on E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W of cor. Pits impracticable

Subdivision of T. 12 S., R. 2 E. Cont

Chains	
	This Cor. is 1000 ft. above the Cor. of secs. 14, 15, 22 and 23. Land mountainous Soil stony 3rd Rate. No timber. Mountainous land. 80.00 chs. August 13: At this cor. I set off 14°44' N. on the decl. arc: and at 0h. 5m. p.m. l. m. t. observe the sun on the meridian, the resulting lat. is 39°47' N.
	East, on a random line, bet. secs. 11 and 14.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, at cor. of secs. 11, 12, 13 and 14. Thence I run West, on a true line, bet. secs. 11 and 14. Descend, through dense oak and scattering aspen timber.
18.00	North fork of Pole Creek, 2 lks. wide, pure water, 2 ins. deep, in Canon 700 ft. deep. Course S. W., ascend.
18.50	Canon road, bears N. E. and S. W.
30.00	Top of spur, projects S. Descend.
38.50	pring branch, 1 lk. wide, in Ravine, 300 ft. deep. Course S. E., ascend.
40.00	Set a limestone 15 x 12 x 6 ins. 10 ins. in the ground, for ¼ sec. cor. marked ¼ S. 11. on N. face: from which

See Notes

Subdivision of T. 12 S., R. 2 E. Continued

Chains.	
	An aspen, 8 ins. diam., bears N. 5 lks. dist. marked ¼ S. 11, B. T.
	An aspen, 2 ins. diam., bears S. 10 lks. dist. marked ¼ S. 14, B. T.
65.00	Top of ridge, bears N. W. and S. E.
	Descend.
	Leave timber.
80.00	The cor. of secs. 10, 11, 14 and 15.
	Land mountainous.
	Soil stony, 3rd Rate.
	Timber: aspen.
	Mountainous land. 80.00 chs.

N. 0° 1' W. bet. secs. 10 and 11.
Ascend along the west slope of high ridge bearing N. and S. through dense maple and oak brush.

33.00	Enter heavy aspen timber, bears E. and W.
40.00	An aspen tree, 3 ins. diam. for ¼ sec. cor. mark ¼ S. 10, on W. and 11 on E. sides: from which
	An aspen, 3 ins. diam., bears N. 48° W. 13 lks. dist., marked ¼ S. 10, B. T.
	An aspen, 3 ins. diam., bears N. 69° E. 8 lks. dist., marked ¼ S. 11, B. T.
48.00	Leave timber, bears E. and W.
76.00	Enter scattering pine and aspen timber.
80.00	Set a quartzite stone, 12×10×10 ins. 8 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked with 5 notches on S. and 2 notches on E. edges: from which
	A pine, 12 ins. diam., bears N. 38° 30' E., 53 lks. dist., marked T. 12 S. R. 2 E., S. 2. B. T.

Subdivision of T. 12 S. R. 2 E. Contin

Chains		
	An aspen, 12 ins. diam., bears S. 18° E., 23 lks. dist., marked T. 12 S., R. 2 E., S. 11, B. T. A maple, 6 ins. diam., bears S. 89° W., 16 lks. dist., marked T. 12 S., R. 2 E., S. 10. B. T. A maple, 6 ins. diam., bears N. 83° W., 18 lks. dist., marked T. 12 S., R. 2 E., S. 3. B. T. Land mountainous. Soil stony 3rd Rate. Timber aspen and pine. Mountainous land, 80.00 chs. August 13. 1901	
	August 14: At 7 A. M., l. m. t. I set off 39°48' N. on the lat. arc: 14°30' N. on the decl. arc: and determine a true meridian with the solar, at the cor. of secs. 2, 3, 10 and 11. Thence I run East, on a random line, bet. secs. 2 and 11.	See cont[illegible] Notes pag[illegible]
40.00	Set temp. ¼ sec. cor.	
80.00	Intersect N. and S. line, at the cor. of secs. 1, 2, 11 and 12. Thence I run West, on a true line, bet. secs. 2 and 11. Descend through dense oak brush.	
8.50	Ravine, 700 ft. deep. Course S. ascend.	
27.00	Top of ridge, bears N. and S. descend.	
39.00	Ravine, 700 ft. deep. Course S. Ascend. Enter scattering aspen and	

Chains	
	pine timber.
40.00	Set a sandstone 15 x 10 x 5 ins. 10 ins. in the ground, for ¼ sec. cor., marked ¼ S. 2. on the N. face:
	from which
	A pine, 15 ins. diam. bears S. 30° W. 11 lks. dist. marked ¼ S. 11. B. T.
	A pine, 12 ins. diam. bears N. 20° E. 46 lks. dist. marked ¼ S. 2. B. T.
73.10	Top of ridge, bears N. E. and S. W. descend.
80.00	The cor. of secs. 2. 3. 10 and 11.
	Land mountainous.
	Soil stony 3rd Rate.
	Timber aspen and pine.
	Mountainous Land. 80.00 chs.
	August 14: At this cor. I set off 14° 25' N. on the decl. arc: and at 0h 5m p. m. l. m. t. observe the sun on the meridian. the resulting lat. is 39° 48' N.
	N. 0° 1' W. on a random line bet. secs. 2 and 3.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. bdy. of Tp.
	At cor. of secs. 2. 3. 34 and 35.
	which is a pine tree, 6 ins. diam. marked and witnessed as returned under Contract No. 238 of James M. Lentz C. S.
	Thence I run
	S. 0° 1' E. on a true line, bet. secs. 2 and 3.
	Descend through dense oak

Chains

and scattering pine and aspen timber.

24.00 Station, 400 ft. deep, course N. W. ascend.

40.00 Set a sandstone 16 x 14 x 6 ins. 11 ins in the ground, for ¼ Sec. Cor., marked ¼ S. 3. on W. face: from which
Gen aspen, 14 ins. diam., bears N. 85° W. 6 lks. dist., marked ¼ S. 3. B. T.
An ashen, 12 ins. diam., bears S. 5° E. 26 lks. dist., marked ¼ S. 2. B. T.

42.00 Top of ridge, bears N. W. and S. E.
Descend over broken, stony land

80.00 The cor. of secs. 2, 3, 10 and 11.
Land mountainous
Soil stony 3rd Rate.
Timber, aspen and pine.
Mountainous land. 80.00 chs.
August 14, 1901

August 15: At 7 A. M. A. M. T., I set off 39° 44' N. on the lat. arc: 14° 12' N. on the decl. arc: and determine a true meridian with the Solar, at the cor. of secs. 27, 28, 33 and 34. heretofore described.
Thence I run
S. 0° 2' E. on a random line, bet. secs. 33 and 34.

40.00 Set temp. ¼ Sec. cor.

81.50 Intersect S. bdy. of Tp. 3 lks. W. of the cor. of secs. 3, 4, 33 and 34. which is a sandstone 5 x 12 x 8 ins. above

Subdivision of T. 12 S., R 2 E., Continued

Chains	
	the ground, firmly set. marked as described by the Surveyor general. Thence I run N. 0° 3' W., bet. secs. 33 and 34, on a true line. Ascend through dense oak and scattering mahogany brush.
9.50	Top of high ridge, divide between Hop and Pole Cañons, 1000 ft. above bottom of Hop Creek Cañon, bears N. E. and S. W. Descend over broken land.
41.50	Set a sandstone 12 x 12 x 6 ins. 8 ins. in the ground, for ¼ sec. cor., marked ¼ S. 33, on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
44.50	Ravine, 500 ft. deep, course W. Ascend.
63.50	Top of ridge, bears N. E. and S. W. Descend.
78.50	Ravine, 250 ft. deep, course N. W. Ascend.
81.50	The cor. of secs. 27, 28, 33 and 34. Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land, 81.50 chs.
	N. 0° 2' W. bet. secs. 27 and 28. Ascend, through dense aritimesa and oak brush.

Subdivision of T. 12 S. R. 2 E. Con

Chains	
8.00	Top of ridge, bears N. W. and S. E. descend.
24.00	Ravine, 300 ft. deep, Course W. ascend.
40.00	Set a trachyte stone, 12×10×8 ins., 8 ins. in the ground for ¼ sec. cor., marked ¼ S. 28. on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
43.00	Top of spur, projects W. descend.
72.00	Pole Creek, 2 lks. wide, pure water, 3 ins. deep, in Cañon 1200 ft. deep. Course S. W. ascend.
72.30	Cañon road, bears N. E. and S. W.
80.00	Set a trachyte stone 12×10×8 ins., 8 ins. in the ground for cor. of secs. 21, 22, 27 and 28. marked with 2 notches on the S. and 3 notches on the E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land mountainous.
oil stony 4th Rate.
No timber.
Mountainous land, 80.00 chs.
August 15: At this cor.
I set off 14°07' N. on the decl. arc: and at 0h. 4' p. m., l. m. t., observe the sun on the meridian, the resulting lat. is 39°45' N.

Subdivision of T. 12 S., R. 2 E.

(4)

Chains	
	East, on a random line bet. secs. 22 and 27.
Tree 3 40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at cor. of secs. 22, 23, 26 and 27. Thence I run West, on a true line bet. secs. 22 and 27. Over rolling, stony land, descend through dense artimesa and oak brush.
40.00	Set a trachyte stone 16×10×6 ins. 11 ins. in the ground, for ¼ sec. Cor. marked ¼ S. 22. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable
70.00	Cañon road, bears N.E. and S.W.
70.50	Pole Creek, 2 lks. wide, pure water, 3 ins. deep, in Cañon 1200 ft. deep, Course S.W. Ascend.
80.00	The cor. of secs. 21, 22, 27 and 28. Land mountainous. Soil stony 3d and 4th Rate. No timber. Mountainous land, 80.00 chs.

	N. 0°.3' W. bet. secs. 21 and 22. Ascend, through dense artimesa and oak brush.
2.00	Foot of perpendicular sandstone ledges, 75 ft. high, bear N.E. and S.W.
37.40	Top of bare ridge, bears N.E. and S.W. descend.
40.00	Set a sandstone 14×12×8 ins. 10

Subdivision of T. 12 S., R. 2 E. Continued.

rains

ins. in the ground, for ¼ sec. cor.
marked ¼ S 21, on W. face:
from which
A cedar, 12 ins. diam., bears S. 73° E.
28 lks. dist., marked ¼ S. 22, B. T.
No other trees within limits.
And raise a mound of stone, 2 ft.
base, 1½ ft. high, W. of cor.
Pits impracticable.

80.00 Set a Sandstone, 18×12×10 ins., 12
ins. in the ground, for cor. of
Secs. 15, 16, 21 and 22 marked
T. 12 S., S 15, on N.E.
R. 2 E., S. 22, on S. E.
S. 21, on S. W. and
S. 16., on N. W. faces: with 3
notches on S. and E. edges:
and raise a mound of stone,
2 ft. base, 1½ ft. high, W. of cor.
Pits impracticable.
Land, mountainous.
Soil, Stony, 4th Rate
Timber, scattering cedar.
Mountainous land, 80.00 chs.
August, 15, 1901

August, 16: At 7 A.M., l. m. t.
I set off 39° 46' N. on the lat.
arc: 13° 53' N. on the decl. arc:
and determine a true meridian
with the solar, at the cor. of
Secs. 15, 16, 21 and 22.
Thence I run
East, on a random line,
Secs. 15 and 22.

40.00 t temp. ¼ sec. cor.

80.00 Intersect N. and S. line,
at the cor. of Secs. 14, 15, 22 and 23.

See notes page

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	Thence I run West, on a line line, bet. secs. 15 and 22. Ascend through dense arlitness and oak bush.
8.00	Top of spur, projects S. Descend.
14.00	Bottom of ravine, 300 ft. deep. Course S., Ascend.
40.00	Set a hachyle stone, 13 x 8 x 6 ins. 9 ins. in the ground, for ¼ sec. Cor., marked ¼ S. 15., on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
46.70	Top of ridge, bears N. and S. Descend.
58.40	Bottom of ravine, 500 ft. deep. Course S. Ascend.
70.00	Top of ridge, bears N. and S. Descend.
80.00	The Cor. of secs. 15, 16, 21 and 22. From this Cor. the U. S. Geological Station, on Mt. Nebo, which is marked by a Cairn, 7 ft. high, Latitude 39° 48' 39" N. bears N. 51° 09' W. Land, mountainous. Soil, stony. 3rd Rate. No timber. Mountainous land. 80.00 chs.
	N. 0° 2' W. bet. secs. 15 and 16. Over rolling land, descend through dense arlitness, oak and maple bush.
40.00	Set a quartzite stone 15 x 8 x 6 ins., 10 ins. in the ground, for ¼ sec. Cor., marked ¼ S. 16. on N. face: from which

Chains	
	A maple, 6 ins. diam., bears N. 62° W., 15 lks. dist., marked ¼ S. 16. B. T.
	An oak, 3 ins. diam., bears S. 34° E. 12½ lk. dist.; marked ¼ S. 15. B. T.
42.00	Cañon road, bears N. E. and S. W.
42.25	Red Creek, 1 lk. wide, pure water, 2 ins. deep, in Cañon 800 ft. deep, course S. W. descend.
80.00	Set a sandstone, 16 × 10 × 8 ins. 11 ins. in the ground, for Cor. of secs. 9, 10, 15 and 16. marked with 4 notches on the S. and 3 notches on the E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land. 80.00 chs. August 16: At this Cor. I set off 13° 48' N. on the decl. arc: and at 0h. 4m. p. m., l. m. t. observe the sun on the meridian, the resulting lat. is 39° 47' N.
	East, on a random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, at Cor. of secs. 10, 11, 14 and 15. Thence I run West, on a true line, bet. secs. 10 and 15.

Second Notes page

Subdivision of T. 12 S. R. 2 E. Continued

Chains	
	Over stony land, ascend through dense ceanothus, oak and scattering mahogany.
15.00	Top of ridge, bears N. E. and S. W. descend.
37.00	Canon road, bears N. E. and S. W.
38.00	Red Creek, 1 lk. wide, pure water, 2 ins. deep, in Canon 500 ft. deep, course S. W. ascend.
40.00	Set a sandstone 15 x 10 x 6 ins. 10 ins. in the ground, for ¼ sec. cor., marked ¼ S. 10. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
80.00	The cor. of secs. 9, 10, 15 and 16. 600 ft. above Red Creek. Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land. 80.00 chs.

N. 0° 2' W. bet. secs. 9 and 10

Chains	
	Over stony land, ascend through dense oak brush.
40.00	Set a quartzite stone 14 x 8 x 6 ins., 10 ins. in the ground for ¼ sec. cor., marked ¼ S. 9. on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
46.25	Top of ridge, 1500 ft. above Red Creek, bears N. W. and S. E. descend.

Subdivision of T. 12 S., R. 2 E. Con

Chains	
65.00	Head of ravine, course S. E. ascend.
77.50	Top of ridge, bears N. E. and S. W. descend.
	Enter heavy aspen timber, bears N. E. and S. W.
80.00	Set a quartzite stone, 12x8x8 ins. 8 ins. in the ground, for Cor. of secs. 3, 4, 9 and 10. marked with 5 notches on the S. and 3 notches on the E. edges: from which
	An aspen, 5 ins. diam., bears N. 34° E., 20 lks. dist., marked T. 12 S., R. 2 E., S. 3, B. T.
	An aspen, 4 ins. diam., bears S. 52° E., 45 lks. dist., marked T. 12 S., R. 2 E., S. 10, B. T.
	An aspen, 6 ins. diam., bears S. 46° 30' W., 16 lks. dist., marked T. 12 S., R. 2 E., S. 9, B. T.
	An aspen, 5 ins. diam., bears N. 28° W., 17 lks. dist., marked T. 12 S., R. 2 E., S. 4, B. T.
	Land mountainous.
	Soil stony 3rd Rate.
	Timber aspen
	Mountainous land, 80.00 chs.
	August 16, 1901.

August 17: At 7 A. M., L. M. A., I set off 39° 48' N. on the lat. arc: 13° 34' N. on the decl. arc: and determine a true meridian with the Solar, at the Cor. of Secs. 3, 4, 9 and 10.

Thence I run East, on a random line,

See cont. this page

Subdivision of T. 12 S., R. 28 E. Continued

Chains	
	Bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line. At cor. of secs. 2, 3, 10 and 11. Thence run West on a true line, bet. secs. 3 and 10 descend through heavy pine and aspen timber.
16.25	Ravine, 500 ft. deep, course S. W. ascend. Leave timber, bears N. E. and S. W. Enter dense artimesa and oak brush.
40.00	Top of spur ridge, projects S. E. Set a quartzite stone 15 x 10 x 6 ins. 10 ins. in the ground, for ¼ sec. cor. marked ¼ S. 3. on N. face: and raise a mound of stone. 2 ft. base. 1½ ft. high. N. of cor. Pits impracticable. Enter scattering aspen timber.
49.00	Ravine. 300 ft. deep. Course S. E. ascend.
76.00	Top of ridge, bears N. E. and S. W. descend.
80.00	The cor. of secs. 3, 4, 9 and 10. Land mountainous. Soil, stony 3rd Rate. Timber, aspen and pine. Mountainous land. 80.00 chs.

August 17. At this Cor. I set off 13°29' N. on the decl. arc: and at 0 h. 4 m. p. m., l. m. t. observe the sun on the meridian the resulting lat. is 39° 48' N.

Subdivision of T. 12 S. R. 2 E. Continued

Chains	
	N. 0° 2' W., on a random line, bet. secs. 3 and 4.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect - N. bdy. of Tp. at the cor. of Secs. 3, 4, 33 and 34. which is a quartzite stone, 6 x 14 x 10 ins., above the ground, marked and witnessed as returned under Contract - No. 238. of James M. Lentz. U. S. From this Cor. U. S. Geological Station on Mt. Hebo. which is marked by a cairn, 7 ft. high. Altitude of Mt. Hebo. 11.887 ft. latitude 39° 48' 39.5" N. bears S. 88° 23' W. Thence I run S. 0° 2' E. on a true line, bet. secs. 3 and 4. Descend through heavy aspen timber.
3.00	Bottom of ravine, 100 ft. deep, course S. W., ascend. Enter scattering aspen and pine timber.
23.50	Top of spur, projects W. descend.
32.00	Bottom of ravine, 200 ft. deep course W., ascend. Leave timber, enter dense oak, laurel and dead and fallen timber.
40.00	Set a quartzite stone, 20 x 12 x 6 ins. 15 ins. in the ground, for ¼ Sec. cor. marked S. 4 on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
44.00	Enter scattering pine timber.
48.50	Top of spur, projects S. W. Descend. Leave pine, enter heavy aspen timber, bears N. E. and S. W.
60.00	Bottom of ravine, 100 ft. deep,

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	Course S. W. Ascend.
65.50	Top of spur, projects S. W., Descend.
77.50	Head of ravine, Course W. Ascend.
80.00	The Cor. of Secs. 3, 4, 9 and 10. Land, mountainous. Soil, Stony 3rd Rate. Timber, Aspen, and pine. Mountainous land. 80.00 chs. August 17. 1901.

August 21: Knowing the line bet. Secs. 21 and 28 will not close within the limit, on the Cor. of Secs. 20, 21, 28 and 29, therefore at the Cor. of Secs. 21, 22, 27 and 28. heretofore described.
I set off 39° 45' W. on the lat. arc: 12° 16' W. on the decl. arc: and at 7 A. M., L. M. T., determine with the solar a true meridian.
Thence I run
West, on a true line,
bet. Secs. 21 and 28.
Ascend, through dense chinesa, oak, and scattering cedar timber.

2.50	Top of rocky spur, projects S. Descend.
4.50	Bottom of ravine, 100 ft. deep, Course S. Ascend.
15.60	Top of spur, projects S. Descend.
37.00	Begin ascent.
38.00	Top of ridge, bears N. E. and S. W. Begin abrupt descent.
41.00	Set a Sandstone 16 x 12 x 6 ins. 11 ins. in the ground for ¼ Sec. Cor. marked ¼ S. 21, on W. face: from which.

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	A Cedar, 6 ins. diam., bears S. 45° E. 46 lks. dist., marked ¼ S. 28, B. T. No other bearing trees available. And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
49.50	North fork of Salt Creek, 15 lks. wide, water saline, 12 ins. deep. in Canon 800 ft. deep. Course S. ascend. Leave timber.
51.25	Spur of the San Pete Valley Railroad running to a stone quarry. bears N. 7° 30' E and S. 7° 30 W.
52.50	Wagon road from Nephi to Nebo Salt Works. bears N. and S.
80.00	Set a trachyte stone 18×10×10 ins. 12 ins. in the ground for Cor. of Secs. 27 and 28, marked with 4 notches on the E. and 2 notches on the S. edges: And raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Pits impracticable Land mountainous Soil stony 3rd and 4th Rate. Timber, Scattering Cedar. Mountainous land. 80.00 chs.
	S. 0° 3' E. bet. Secs. 20 and 28 Descend through dense oak brush.
0.78	Intersect N. bdy. of Sec. 29 S. 85° 41' W. 0.75 lks. dist of Cor. of Secs. 20, 21, 28 and 29. which is a sandstone 6×10×8 ins. above the ground, firmly marked

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	As described by the surveyor general I destroy marks pertaining to secs. 20, 21 and 28. destroy the mound, and raise a mound, 2 ft. base, 1½ ft. high, S. W. of cor. Pits impracticable Set a trachyte stone 12 x 8 x 6 ins. 8 ins. in the ground, for Closing cor. of sec. 20 & 28 marked C.C. on N. face; with 4 grooves on E. and 2 grooves on S. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Land mountainous. Soil stony 3rd. Rate. No timber. Dense undergrowth 0.78 chs.
	From the cor. of secs. 21 and 28. I run N. 0° 3' W. bet. secs. 20 and 21. Over rolling, stony land. ascend through dense Artimesa and oak brush.
26.00	Top of spur ridge, projects E. descend.
32.00	Enter heavy aspen timber bears E. & W.
36.00	Leave timber bears E. and W.
36.50	Ravine, 150 ft. deep. Course E. ascend.
38.00	Road to Mountain Lake Salt Works. bears E. and W. Mountain Lake Salt Work. owned by Samuel Coulson bear West, 12 chs. dist.
40.00	Set a Sandstone 24 x 14 x 5 ins.

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
	18 ins. in the ground, for ¼ sec. cor., marked ¼ S. 20. on W. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	from this ¼ sec. cor. N. W. cor. of Hebo Salt Works, bears S. 89° 30' E., 31.00 chs. dist.
	The Inland Co. Salt Spring bears N. 65° 27' E. 32.50 chs. dist.
	Hyde and Whitmore's Salt Cave bears N. 53° 07' E. 38.00 chs. dist.
50.00	Top of spur ridge, projects E. descend.
70.00	Spring branch, 1 ft. wide, pure water, 2 ins. deep, in ravine 150 ft. deep. Course E. Ascend.
80.00	Set a sandstone 15 x 12 x 6 ins. 10 ins. in the ground, for cor. of secs. 16, 17, 20 and 21. marked with 4 notches on the E. and 3 notches on the S. edges: And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land mountainous.
	Soil stony 3rd Rate.
	Timber aspen.
	Mountainous land, 80.00 chs.
	August 21: At this cor. I set off 12° 17' N. on the decl. arc: and at 0h. 3m. p. m., l. m. t. observe the sun on the meridian, the resulting lat. is 39° 46' N.

Subdivision of T. 12 S. R. 2 E. Continued

Chains

East on a random line,
bet. secs. 16 and 21.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N. and S. line,
at cor. of secs. 15, 16, 21 and 22.
Thence I run
West on a true line,
bet. secs. 16 and 21.
Descend through dense artimesa
and oak brush.
19.75 Cañon road, bears N. E. and S. W.
20.00 Red Creek, 2 lks. wide, pure water,
3 ins. deep, in Cañon 600 ft.
deep. Course S. W.
Ascend.
40.00 Top of spur projects S. descend.
Set a quartzite stone 14 x 12 x 6 ins.
10 ins. in the ground for ¼
sec. cor., marked ¼ S. 16. on
N. face: and raise a mound
of stone, 2 ft. base, 1½ ft.
high. N. of cor.
Pits innumerable.
55.00 Spur of the San Pete Valley
Railroad running to a
stone quarry.
bears N. W. and S. E.
56.00 North fork of Salt Creek, 15 lks.
wide, pure water, 6 ins. deep,
in Cañon, 600 ft. deep. Course
S. E. ascend.
56.00 Cañon road, bears N. W. and S. E.
80.00 The cor. of secs. 16, 17, 20 and 21.
Land mountainous.
Soil stony 3rd Rate.
No timber.
Mountainous land. 80.00 chs.

Subdivision of T. 12 S. R. 23. Continue

Chains	
	N. 0° 3' W. bet. secs. 16 and 17. Ascend through dense oak bush.
8.00	Top of spur, projects S. E. descend.
24.80	Cañon road, bears N. W. and S. E.
28.30	Spur of San Luis Valley Railroad mining to a stone quarry. bears N. W. and S. E.
29.60	North fork of Salt Creek, 12 lks. wide, pure water, 6 ins. deep. in Cañon, 700 ft. deep. Course S. E. ascend.
40.00	Top of rocky spur, projects S. W. descend. Set a red sandstone 18 x 8 x 6 ins., 12 ins. in the ground. for ¼ sec. cor., marked ¼ S. 17, on W. face: from which A pinion, 15 ins. diam., bears N. 51° 30' W. 21 lks. dist., marked ¼ S. 17, B. T. No other trees within limits. And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
75.50	Ravine, 600 ft. deep. Course S. W. ascend.
80.00	Falls on a sandstone boulder 20 x 15 x 10 ft. above the ground. On which I cut a cross (X) at the exact cor. point, for cor. of secs. 8, 9, 16 and 17, marked with 4 grooves on the S. and E. sides: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Chains

Pits impracticable
Land mountainous
Soil stony 3rd and 4th Rate —
Timber scattering aspen and pinion.
Mountainous land. 80.00 chs.
August 21, 1901

August 22: At 7 A. M., L. M. T.
I set off 39° 47' N. on the
lat. arc: 11° 56' N. on the decl.
arc: and determine a true
meridian with the solar
at the cor. of secs. 8, 9, 16
and 17.
Thence I run
East, on a random line,
bet. secs. 9 and 16.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N. and S. line,
at cor. of secs. 9, 10, 15 and 16.
Thence I run
West, on a true line,
bet. secs. 9 and 16.
Descend, through dense oak
brush.
10.00 Ravine, 100 ft. deep. Course S.
Ascend.
40.00 Set a sandstone, 15 x 10 x 6 ins.
10 ins. in the ground, for
¼ sec. cor., marked ¼ S. 9, on
N. face: and raise a mound
of stone, 2 ft. base, 1½ ft.
high, N. of cor.
Pits impracticable.
45.00 Top of ridge, 800 ft. above the
Cor. of secs. 9, 10, 15 and 16.
bears N. E. and S. W. descend.
75.00 Ravine, 600 ft. deep. Course S W
Ascend.

Subdivision of T. 12 S., R. 2 E. Con.

Chains	
80.00	The Cor. of Secs. 8, 9, 16 and 17. Land mountainous. Soil stony 3rd Rate. No timber. Mountainous land. 80.11 chs.
	N. 0° 3' W. bet. secs. 8 and 9. Ascend, through dense oak maple and mahogany bush.
14.00	Top of ridge, bears N. E. and S. W. Descend.
38.20	Ravine, 500 ft. deep. Course S. W. Ascend.
40.00	Set a quartzite stone 15 x 10 x 8 ins., 10 ins. in the ground, for ¼ sec. Cor., marked ¼ S. 8, on the W. face: from which A maple 4 ins. diam., bears S. 52° W. 22 lks. dist. marked ¼ S. 8, B. T. A maple, 4 ins. diam., bears S. 89° E. 24 lks. dist. marked ¼ S. 9, B. T.
49.80	Top of ridge, bears N. E. and S. W. Descend, over broken stony land, through scattering aspen and pine timber.
79.20	Ravine, 800 ft. deep. Course S. W. Ascend. Enter heavy timber, bears N. E. and S. W.
80.00	Set a quartzite stone, 15 x 10 x 8 ins., 10 ins. in the ground, for Cor. of Secs. 4, 5, 8 and 9, marked with 5 notches on the S. and 4 notches on the E. edges: from which A maple, 6 ins. diam., bears

Chains

N. 6° E., 24½ lks. dist., marked
T. 12 S., R. 2 E., S. 4, B. T.
A pine, 30 ins. diam., bears S. 80° E.
39 lks. dist., marked
T. 12 S., R. 2 E., S. 9, B. T.
A Cottonwood, 8 ins. diam.,
bears S. 51° 30' W., 9 lks. dist.,
marked T. 12 S., R. 2 E., S. 8, B. T.
A maple, 6 ins. diam., bears N. 65° W.
15 lks. dist., marked
T. 12 S., R. 2 E., S. 5, B. T.
Land mountainous.
Soil stony 3rd Rate.
Timber, aspen, pine, maple
and Cottonwood.
Mountainous land 80.00 chs.
August 1-22: At this cor. I
set off 1° 51' N. on the decl.
arc: and at 0h. 3m. p. m.
l. m. t. observe the sun
on the meridian, the
resulting lat. is 39° 48' N.

East, on a random line,
bet. secs. 4 and 9.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N. and S. line,
at the cor. of secs. 3, 4, 9 and 10.
Thence I run
West, on a true line,
bet. secs. 4 and 9.
Over broken rocky land
descend through heavy
aspen and scattering pine
timber.
40.00 Set a quartzite stone 16 x 10 x 9
ins., 11 ins. in the ground for
¼ sec. cor., marked ¼ S. 4. on N.

Subdivision of T. 12 S. R. 2 E. Con ti

Chains

face: from which
An aspen, 4 ins. diam. bears N.
2 lks. dist., marked ¼ S. 4. B. T.
An aspen, 5 ins. diam. bears S. 22° E.
11 lks. dist., marked ¼ S. 9. B. T.
79.25 Ravine, 800 ft. deep. Course S. W.
ascend.
80.00 The cor. of Secs. 4, 5, 8 and 9.
Land mountainous.
Soil stony 3rd and 4th Rate.
Timber aspen and pine.
Mountainous land 80.00 chs.

N. 0° 3' W. on a random line,
bet. secs. 4 and 5.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N. bdy. of Tp.
at cor. of secs. 4, 5, 32 and 33.
which is a quartzite stone 6×12×8
ins. above the ground, firmly
set, marked and witnessed
as returned under Contract
No. 238 of James M. Lentz dl. s.
Thence I run
S. 0° 3' E. on a true line,
bet. secs. 4 and 5.
Ascend through dense
Arizona oak and scattering
aspen timber.
7.25 Top of ridge, bears N. E. and S. W.
Descend over broken, stony
land.
40.00 Set a quartzite stone 15×10×6 ins.
10 ins. in the ground, for ¼ sec.
Cor., marked ¼ S. 5. on W. face:
And raise a mound of stone, 2
ft. base, 1½ ft. high, W. of cor.
Pits impracticable.

Subdivision of T. 12 S., R. 2 E. Continued

Chains	
80.00	The cor. of secs. 4, 5, 8 and 9. Land mountainous. Soil stony 3rd Rate. Timber aspen. Mountainous land, 80.00 chs. August 22. 1901
	August 23: At the cor. of secs. 16, 17, 20 and 21, heretofore described: at 7 a. m., l. m. t. I set off 39°46' N. on lat. arc: 113°46' on the decl. arc: and determine a true meridian with the solar. Thence I run West, on a true line, bet. secs. 17 and 20. Over stony land, ascend through dense oak, maple and mahogany brush.
40.00	Set a sandstone 16 x 14 x 8 ins. 11 ins. in the ground, for ¼ sec. Cor. marked ¼ S. 17. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
60.30	Top of rocky ridge, bears N.E. and S.W. descend.
80.00	Set a red sandstone 16 x 8 x 5 ins. 11 ins. in the ground, for Cor. of secs. 17, 18, 19 and 20 marked with 5 notches on the E. and with 3 notches on the S. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. This cor. is 800 ft. above the Cor. of secs. 16, 17, 20 and 21. Land mountainous Soil stony 3rd and 4th Rate.

Subdivision of T. 18 S. R. 2 E. Com

Chains	
	No timber.
	Mountainous land. 80.00 chs.
	S. 0° 3' E. bet. secs. 19 and 20.
	Descend, through dense oak, maple and mahogany bush.
7.00	Dram, 50 ft. deep, drains S. E.
	Ascend.
11.00	Begin descent.
35.00	Ravine, 500 ft. deep, Course E.
	Ascend.
	Enter heavy aspen timber, bears E. and W.
40.00	Set a limestone 12 x 10 x 8 ins., 8 ins. in the ground, for ¼ sec. cor. marked ¼ S. 19. on W. face: from which
	On aspen, 8 ins. diam., bears S. 4° E. 6 lks. dist. marked ¼ S. 20. B. T.
	On aspen, 6 ins. diam., bears S. 35° W. 20 lks. dist. marked ¼ S. 19. B. T.
83.00	Leave timber, bears E. and W.
87.00	Top of ridge, bears N. W. and S. E.
	Intersect N. bdy. of sec. 29, 1.77 chs. N. 85° 41' E. of the established cor. of secs. 19, 20, 29 and 30 here to fore described.
	Solicitor all marks pertaining to secs. 19 and 20.
	Set a limestone 16 x 10 x 4 ins. 11 ins. in the ground for closing cor. of secs. 19 and 20.
	Marked C.C. on the N. 5 grooves on the E. and 2 grooves on the S. faces:
	And raise a mound of stone, 2 ft. base, 1½ ft. high. N. of cor.
	Pits impracticable
	Land, mountainous.
	Soil, stony, 3rd Rate
	Timber, aspen.
	Mountainous land, 87.00 chs.

Subdivision of T. 12 S. R. 2 E. Continued

Chains	
	August 23: At this Cor. I set off 11°31' N. on the decl. arc: and at 0h. 2m. p.m. l.m.t. observe the sun on the meridian, the resulting lat. is 39°45' N.
	From the reëstablished Cor. of secs. 29, 30, 31 and 32. heretofore described. I run N. 89°45' W. on a random line, bet. secs. 30 and 31.
40.00	Set temp. ¼ sec. cor.
108.30	Intersect W. bdy. of Tp. at the Cor. of secs. 30 and 31. heretofore described. Thence I run S. 89°45' E. on a true line bet. secs. 30 and 31. Descend through dense oak brush.
24.00	Spring branch, 1 lk. wide, 3 ins. deep, in Foote's Cañon, 500 ft. deep, Course S. W. ascend.
29.00	Road to Cleon Jackson's ranch, bears N. E. and S. W. South end of Cleon Jackson's ranch bears N. 3.00 chs. dist.
40.15	Top of ridge, bears N. E. and S. W. descend.
51.00	Dean, 50 ft. deep, Course S. W. Ascend.
61.00	Top of ridge, bears N. E. and S. W. Descend.
68.30	Set a trachyte stone 20×12×5 ins. 15 ins. in the ground for ¼ sec. cor., marked ¼ S. 30. on

Subdivision of T. 12 S. R. 2 E. Contd

Chains	
	N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of Cor.
	Pits impracticable.
92.50	Head of ravine, drains N. E. Ascend.
108.30	The reëstablished Cor. of Secs. 29 30, 31 and 32.
	Land mountainous.
	Soil, stony 3rd Rate.
	No timber.
	Mountainous land, 108.30 Chs.
	from the reëstablished Cor. of Secs. 29 and 30.
	heretofore described.
	I run
	N. 89° 45' W. on a random line.
	bet. Secs. 19 and 30.
40.00	Set temp. ¼ Sec. Cor.
108.30	Intersect W. bdy. of Tp. 22 lks. N. of the Cor. of Secs. 19 and 30
	heretofore described.
	Thence I run
	S. 89° 52' E. on a true line.
	bet. Secs. 19 and 30.
	Descend through dense oak brush.
6.25	Ravine, 500 ft. deep. Course S. E. Ascend.
21.20	Top of Spur ridge, bears N. and S.
	Begin abrupt descent.
33.00	Spring branch, 1 lk. wide, 3 ins. deep, in Foote's Cañon, 800 ft. deep, Course S.
	Ascend over broken land.
68.30	Set a track to stone 16×10×6 ins.

Chains

11 ins. in the ground, for ¼ sec. cor. marked ¼ S. 19 on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
Pits impracticable.

80.00 Top of ridge, bears N. and S. descend.

97.00 Ravine, 100 ft. deep, Course S. E. Ascend.

108.30 The reëstablished Cor. of secs. 29 and 30.
Land mountainous
Soil stony 3rd and 4th Rate.
No timber
Mountainous land, 108.30 Chs.
August 23, 1901

August 24: At 7 A.M. l.m.t I set off 39°46' N. on the lat. arc: 11°16' N. on the decl. arc: and determine a true meridian with the solar, at the cor. of secs. 17, 18, 19 and 20. heretofore described. Knowing, the line bet. secs. 18 and 19 will not close within the limits on the N. bdy. of the Tp. I run
West, on a true line, bet. secs. 18 and 19.
Over broken stony land, ascend through dense oak, maple and mahogany brush.

41.00 Set a limestone 12 x 10 x 10 ins. 8 ins in the ground, for ¼ sec. cor. marked ¼ S. 18 on the N. face: and raise a mound of stone, 2 ft. base, 1½ ft.

Subdivision of T.12 L.W. & E. Continued

Chains	
	high. N. of cor.
	Pits impracticable.
63.20	Top of ridge. 800 ft above the cor. of secs. 17.18.19 & 20.
	Descend.
110.05	Intersect W. bdy. of Tp. 6.95 chs. N. of cor. of secs. 18 & 19.
	heretofore described
	Set a limestone 16×10×10 ins. 11 ins. in the ground for Closing Cor. of secs. 18 & 19. marked C.C. on E. with 3 grooves on N. and S. faces: and raise a Mound of stone. 2 ft. base. 12 ft. high, E. of cor.
	Pits impracticable.
	Land mountainous
	Soil stony 3rd Rate.
	No timber.
	Mountainous land. 110.15 chs.
	August 22. 1901
	From the cor. of secs 17.18.19 & 20
	I run. N. 5 S.W. bet. secs. 17 & 18.
	Ascend through dense oak brush.
4.20	Top of ridge. bears N.W. & S.E. descend.
	Enter heavy aspen timber, bears N.W. & S.E.
26.00	Shung branch. 2 lks. wide, 8 ins deep in Canon, 800 ft. deep. Course E.
	Nebr. Brown Stone Co. stone quarry. bears E. 12.00 chs. dist.
	Leave timber bears E. & W.
	Ascend.
40.00	Set a sandstone 15×10×8 ins. 10 ins. in the ground, for ¼ sec cor. marked ¼ S.B. on W. face: and raise a Mound of stone. 2 ft. base. 12 ft.

Subdivision of T. 12 S., R. 2 E. Continued.

Chains	
	Pits impracticable.
55.00	Top of rocky ridge, bears E. & W.
	Descend.
80.00	Set a sandstone 18 x 10 x 8 ins. 12 ins. in the ground, for Cor. of Secs. 7, 8, 17 and 18 marked with 5 notches on the E. and 4 notches on the S. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land mountainous.
	Soil stony. 3rd and 4th Rate.
	No timber.
	Mountainous land. 80.00 chs.
	August 24: At this Cor. I set off 11°10' N. on the decl. arc: and at 0h. 2m. p. m. l. m. t. observe the sun on the meridian, the resulting lat. is 39° 47' N.
	East on a random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, at Cor. of Secs. 8, 9, 16 and 17.
	Thence I run
	West, on a true line, bet. secs. 8 and 17.
	Ascend, through dense oak and mahogany brush.
15.00	Top of spur, projects S. W.
	Descend.
34.00	North fork of Salt Creek, 12 lks. wide, pure water, 10 ins. deep, in Canon 1000 ft. deep.

Subdivision of T. 12 S. R. 2 E. Continued

chains	
	Course S. E. ascend.
37.50	Cañon road, bears N. W. and S. E.
	Begin abrupt ascent, over rocky soil.
40.00	Set a sandstone 16×11×6 ins. 11 ins. in the ground, for ¼ sec. cor., marked ¼ S. 8 on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
80.00	The cor. of secs. 7, 8, 17 and 18. 1500 ft. above Salt Creek. Land mountainous. Soil stony 3rd and 4th Rate. No timber. Mountainous land 80.00 chs. On account of high broken mountains I do not run line bet. secs. 7 and 16.
	N. 0° 3' W. bet. secs. 7 and 8. Over broken stony land; descend, along the west bank of Salt Creek Cañon, through dense laurel and oak brush.
40.00	Set a sandstone 18×12×10 ins. 12 ins. in the ground, for ¼ sec. cor., marked ¼ S. 7, on the W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
57.00	Spring branch, 1 lk. wide, in ravine, 500 ft. up. Course E. ascend.
80.00	Set a sandstone 16×10×6 ins., 11 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked with

Chains	
	5 notches on the S. and E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W of cor. Pits impracticable. Land mountainous. Soil stony 4th Rate. No timber. Mountainous land, 80.00 chs. August 24, 1901
	August 25: At 7 A.M. L.M.T. I set off 39°48' N. on the lat. arc: 10°55' N. on the decl. arc: and determine a true meridian with the solar, at the the cor. of secs. 5, 6, 7 and 8. Thence I run East, on a random line, bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, at cor. of secs. 4, 5, 8 and 9. Thence I run West, on a true line, bet. secs. 5 and 8. Ascend, through dense oak and maple brush.
40.00	Top of ridge, bears N.E. and S.W. Set a Quartzite stone 12 x 8 x 8 ins. 8 ins. in the ground, for ¼ sec. cor., marked ¼ S. 5. on the N face: and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
75.50	North fork of Salt Creek, 10 lks wide, fine water, 8 ins. deep, in Cañon 1500 ft. deep. Course S. ascend.

Subdivision of T. 12 S. R. 2 E. Cont

aims

80.00 The cor. of secs. 5, 6, 7 and 8.
Land mountainous
oil stony. 3rd and 4th Rate.
No timber.
Mountainous land. 80.00 chs.

N. 0° 3' W. on a random line,
bet. secs. 5 and 6.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N. bdy. of Tp.
at cor. of secs. 5, 6, 31 and 32,
which is a sandstone
6 x 10 x 8 ins. above the
ground, firmly set
marked as returned
under Contract No. 238 of
James M. Lentz Dep. S.
Thence I run
0° 3' E. on a true line,
bet. secs. 5 and 6.
Run broken and stony
land, descend through
dense chamel and oak
brush.
33.00 spring branch, 2 lks. wide,
in ravine, 600 ft. deep,
Course S. E. ascend
40.00 at a sandstone, 16 x 10 x 5 ins.
11 ins. in the ground, for
¼ sec. cor., marked ¼ S. 6,
on the W. face: and raise
a mound of stone, 2 ft.
base, 1½ ft. high, W. of cor.
Pits impracticable.
70.50 Top of rocky spur, projects
E. Descend.
80.00 The cor. of secs. 5, 6, 7 and 8.
Land mountainous.

Subdivision of T. 12 S. R. 2 E. Concluded.

Soil stony 4th Rate.
No timber
Mountainous land, 80.00 chs.
August 25, 1901.

General Description.
This township is entirely mountainous, and the soil is generally stony ranging from 3rd to 4th rate.
The soil of the bottom lands, in several portions of Foote's and North fork of Salt Creek Cañons, is a black loam, capable of producing crops without irrigation.
The township is covered with a dense growth of undergrowth, with scattering ashen and pine timber in the N. E. portion, and is an excellent stock range.
The township is well watered by North fork of Salt Creek, Pole and Red Creeks and several springs. Salt springs in Secs. 20 and 21 makes the water in the lower part of North fork of Salt Creek, saline.
The Mountain Lake Salt works and Spring, owned by Samuel Coulson are located in S. E. ¼ Sec. 20.
Nebo Salt works, owned by the Inland Salt Co. is

General Description of T. 12 S. R. 2 E. Concluded

located in S. W. ¼ sec. 21.
Nebo Salt Spring, owned by the Inland Salt Co., a Salt Cave, owned by Hyde and Whitmore of Nephi Utah, are located in N. W. ¼ sec. 21.
A rock quarry, owned by the Nebo Brown Stone Co. is located in S. W. ¼ sec. 17.
A broad gauge railroad runs from the rock quarry and joins the Sanpete Valley railroad, South of this township.
Clear Jackson is located in S. W. ¼ sec. 30.
There are no indications of mineral in this township.
Clear Jackson has about 30 acres under cultivation and a log house, value of improvements $200.

Hubert D. Pugh,
U.S. Deputy Surveyor.

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of the survey, I in order to waste time and expense, administered the preliminary and final oaths for the survey myself.

Hubert D. Pugh
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Hubert D Page, 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 subdivisions of T.12S.R.2E. of the Salt Lake base and meridian, state of Utah, showing the respective capacities in which they acted:

Jay Morrison, Chainman.
Harry A Rager, Chainman.
Varnick Hansen, Moundman.
Cleon Jackson, Moundman.
Varnick Hansen, Axman.
Cleon Jackson, Axman.
Varnick Hansen, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Hubert D Page, United States Deputy Surveyor, in surveying all those parts or portions of the subdivisions of T.12S.R.2E. of the Salt Lake base and 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.

Jay Morrison, Chainman.
Harry A. Rager, Chainman.
Varnick Hansen, Moundman.
Cleon Jackson, Moundman.
Varnick Hansen, Axman.
Cleon Jackson, Axman.
Varnick Hansen, Flagman.

Subscribed and sworn to before me this 26th day of August 1901

SEAL

Hubert D Page
U.S. Deputy Surveyor.

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BOOK A-288

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Hubert D. Page United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for the District of Utah, bearing date of the 2nd day of July, 1900, ~~189~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for the District of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisions of Township 12 South Range 2 East

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

Hubert D. Page
United States Deputy Surveyor.

Subscribed by said Hubert D. Page, and sworn to before me this 20th day of September, ~~189~~ 1901

Edward H. Anderson
U. S. Surveyor-General
for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 28 1902, ~~189~~

The foregoing field notes of the survey of the subdivisions of Township 12 South Range 2 East of the Salt Lake Base and Meridian Utah

executed by Hubert D. Page under his contract No. 240, dated July 2 1900, ~~189~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

United States Surveyor General.

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4—679.

I.

BOOK A-288

FIELD NOTES

OF THE SURVEY OF THE

C-O-R-R-E-C-T-E-D N-O-T-E-S

O-F

S-U-B-D-I-V-I-S-I-O-N

O-F

T- 1 2 S. R. 2 E.

Of the SALT LAKE BASE AND *Meridian,*

I-N T-H-E S-T-A-T-E O-F U-T-A-H

AS SURVEYED BY

Hubert D. Page, *United States Deputy Surveyor,*

Under his Contract No. 240, *dated* July 2, 1900, *189*—

Survey commenced, *189*—

Survey completed, *189*—

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BOOK A-288

NAMES AND DUTIES OF ASSISTANTS.

BOOK A-288

INDEX DIAGRAM.

Township 12 S., *Range* 2 E.

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

Meanders Page

6—111

PRELIMINARY OATHS OF ASSISTANTS.

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

..... *Chainman.*

..... *Chainman.*

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

SEAL

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

..... *Moundman.*

..... *Moundman.*

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

SEAL

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

..... *Axman.*

..... *Axman.*

Subscribed and sworn to before me this
day of 189

SEAL

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

..... *Flagman.*

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

SEAL

Filed Feby. 16, 1903.

CORRECTED NOTES OF SUBDIVISION OF T. 12 S. R. 2 E.

CHAINS.	
	East on a random line bet. secs. 24 and 25
40.00	Set temp. ¼ sec. cor.
79.78	Intersect E. bdy. of Tp. 3 lks. S. of the cor. to secs. 19-24-25 and 30, heretofore described.
	Thence I run
	S. 89°59'W. on a true line bet. secs. 24 and 25
39.89	¼ sec. cor. heretofore described.
79.78	The cor. of secs. 23-24-25 and 26, heretofore described.
	N. 89°59'E. on a random line bet. secs. 13 and 24
40.00	Set temp. ¼ sec. cor.
79.00	Intersect E. bdy. of Tp. 11 lks. S. of the cor. to secs. 13-18-19 and 24 heretofore described.
	Thence I run
	S. 89°54'W. on a true line bet. secs. 13 and 24
39.80	¼ sec. cor., heretofore described.
79.00	The cor. of secs. 13-14-23 and 24, heretofore described.
	N. 89°54'W. on a random line bet. secs. 12 and 13
40.00	Set temp. ¼ sec. cor.
79.78	Intersect E. bdy. of Tp. 9 lks. N. of the cor. to secs. 7 12-13 and 18, heretofore described.
	Thence I run
	S. 89°58'W. on a true line bet. secs. 12 and 13
39.89	¼ sec. cor. heretofore described.
79.78	The cor. of secs. 11-12-13 and 14 heretofore described.
	East on a random line bet. secs. 23 and 26
40.00	Set temp. ¼ sec. cor.
80.10	Intersect N. and S. line 7 lks. N. of the cor. of secs. 23-24-25 and 26, heretofore described.

CORRECTED NOTES OF SUBDIVISION OF T.12 S.R.2 E.

CHAINS.	
	Thence I run
	N.89°57'W. on a true line bet. secs. 23 and 26
40.05	¼ sec. cor. heretofore described.
80.10	The cor. of secs. 22-23-26 and 27, heretofore described.
	S.89°57'E. on a random line bet. secs. 14 and 23
40.00	Set temp. ¼ sec. cor.
80.15	Intersect N. and S. line 5 lks. S. of the cor. to secs. 13-14-23 and 24, heretofore described.
	Thence I run
	N.89°59'W. on a true line bet. secs. 14 and 23
40.07½	¼ sec. cor. heretofore described.
80.15	The cor. of secs. 14-15-22 and 23, heretofore described.
	S.89°59'E. on a random line bet. secs. 11 and 14,
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 3 lks. N. of the cor. to secs. 11-12-13 and 14, heretofore described.
	Thence I run
	N.89°58'W. on a true line bet. secs. 11 and 14
40.00	¼ sec. cor. heretofore described.
80.00	The cor. of secs. 10-11-14 and 15, heretofore described.
	S.89°58'E. on a random line bet. secs. 2 and 11
40.00	Set temp. ¼ sec. cor.
80.07	Intersect N. and S. line 5 lks. S. of the cor. to secs. 1-2-11 and 12, heretofore described.
	Thence I run
	West on a true line bet. secs. 2 and 11
40.03½	¼ sec. cor. heretofore described.

CORRECTED NOTES OF SUBDIVISION OF T.12 S.R.2 E.

CHAINS
80.07 The cor. of secs.2-3-10 and 11 heretofore described.

East on a random line bet. secs.22 and 27

40.00 Set temp. ½ sec. cor.

80.08 Intersect N. and S. line 7 lks. S. of the cor. to secs. 22-23-26 and 27, heretofore described.

Thence I run

S.89°57'W. on a true line bet. secs.22 and 27

40.04 ½ sec. cor. heretofore described.

80.08 The cor. of secs.21-22-27 and 28, heretofore described.

N.89°57'E. on a random line bet. secs.15 and 22

40.00 Set temp. ½ sec. cor.

80.00 Intersect N. and S. line 5 lks. N. of the cor. to secs. 14-15-22 and 23, heretofore described.

Thence I run

West on a true line bet. secs.15 and 22

40.00 ½ sec. cor. heretofore described.

80.00 The sec. cor. to secs.9-10-15 and 16, heretofore described.

East on a random line bet. secs.10 and 15

40.00 Set temp. ½ sec. cor.

80.02 Intersect N. and S. line 7 lks. N. of the cor. to secs. 10-11-14 and 15, heretofore described.

Thence I run

N.89°57'W. on a true line bet. secs.10 and 15

40.01 ½ sec. cor. heretofore described.

80.02 The cor. of secs.9-10-15 and 16 heretofore described

CORRECTED NOTES OF SUBDIVISION OF T. 12 S R 2 E.

CHAINS	
	S. 89°57' E. on a random line bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.11	Intersect N. and S. line 7 lks. S. of the cor. to secs. 2-3-10 and 11 heretofore described.
	Thence I run
	West on a true line
	Bet. secs. 3 and 10
40.05½	¼ sec. cor. heretofore described.
80.11	The cor. of secs. 3-4-9 and 10, heretofore described.
	East on a random line bet. secs. 4 and 9
40.00	Set temp. ¼ sec. cor.
80.03	Intersect N. and S. line 7 lks. N. of the cor. to secs. 3-4-9 and 10, heretofore described.
	Thence I run
	N. 89°57' W. on a true line bet. secs. 4 and 9
40.01½	¼ sec. cor. heretofore described.
80.03	The cor. of secs. 4-5-8 and 9 heretofore described.

Hubert D. Page
U. S. Deputy Surveyor.

Subscribed and sworn to before me this 16th. day of February 1903.

Henry R. M. Patterson
Notary Public.

::::::
:SEAL:
::::::

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ..... United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of ..... showing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

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

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

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

SEAL

.....

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Hubert D. Page, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for the District of Utah, bearing date of the 2nd day of July 1900, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for the District of Utah the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivisional lines of Township 12 South Range 2 East

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

Hubert D. Page
United States Deputy Surveyor.

Subscribed by said Hubert D. Page and sworn to before me this 16 day of February 1903

SEAL

Edward H. Anderson
U. S. Surveyor General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah March 20, 1903

The foregoing ~~field notes of the survey of~~ corrected notes of the survey of the subdivisional lines of T. 12 S. R. 2 E. of the Salt Lake Base and Meridian, Utah

executed by Hubert D. Page under his contract No. 240, dated July 2, 1900, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

United States Surveyor General.

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Chang T. L. [illegible]

BOOK A-288

K.J.B.

FIELD NOTES

OF THE SURVEY OF THE

West boundary

of

Township No. 12 South

Range No. 7 East.

Of the Salt Lake base and Meridian,

In the state of Utah.

AS SURVEYED BY

Hubert D Page, United States Deputy Surveyor,

Under his Contract No. 240, dated July 2nd 1900, 189

Survey commenced August 18th 1901, 189

Survey completed August 18th 1901, 189

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[illegible] 3-00-00

NAMES AND DUTIES OF ASSISTANTS.

Jay Morrison,	Chainman.
Harry A. Raged.	"
Varnick Hansen	Roundman
Cleon Jackson	"
Varnick Hansen	axman
Cleon Jackson	"
Varnick Hansen	flag man

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BOOK A-288

INDEX DIAGRAM.

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

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

Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

We, Jay Morrison and Harry A Rager do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the West bdy. of T. 12 S., R. 2 E. of the Salt Lake base and meridian, state of Utah.

Jay Morrison, Chainman.
Harry A. Rager, Chainman.

Subscribed and sworn to before me this 6 day of August, 1901

Hubert D. Page,
U.S. Deputy Surveyor.

SEAL

We, Varnick Hansen and Cleon Jackson do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the West bdy. of T. 12 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Moundman.
Cleon Jackson, Moundman.

Subscribed and sworn to before me this 6 day of August, 1901

Hubert D. Page,
U.S. Deputy Surveyor.

SEAL

We, Varnick Hansen and Cleon Jackson 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 the West bdy. of T. 12 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Axman.
Cleon Jackson, Axman.

Subscribed and sworn to before me this 6th day of August, 1901

Hubert D. Page,
U.S. Deputy Surveyor.

SEAL

I, Varnick Hansen, 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 the West bdy. of T. 12 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Flagman.

Subscribed and sworn to before me this 6 day of August 1901

Hubert D. Page,
U.S. Deputy Surveyor.

SEAL

6—151

Survey of the West bd. of T. 12 S. R. 2 E.

Chains

Survey commenced
August 18, 1901
and checked with the
instrument described in
Book 'A'
of this survey.
I know the instrument
to be in adjustment by
recent observations made
August 7 and 8, 1901,
and recorded in
book 'A'
of this survey.
At the Cor. of Tps. 12 and 13 S.,
R. 2 E. which is a sandstone
18×10×8 ins. lying on the ground,
with marks nearly obliterated,
25.75 chs. N. of the Cor. to
Tps. 12 and 13 S., R. 1 E.

I destroy all marks of the
old Cor. and reëstablish it
at the same point,
as follows:
Set a sandstone 20×10×8 ins.
15 ins. in the ground, for
Cor. of Tps. 12 and 13 S., R. 2 E.
marked with 6 notches
on the N., S. and E. edges:
and raise a mound of
stone, 2 ft. base, 1½ ft.
high. E. of Cor. pits unprocurable
At 7 A. M., L. M. T. I set
off 39°43' N. on the lat. arc:
13°15' N. on the decl. arc: and
determine a true meridian
with the solar.
Thence I run
North, on a true line,
along the W. bdy. of sec. 31

West boundary of T. 12 S., R. 2 E. Continued

	and Tp.
	Over a flat, through dense artemisia
7.50	Leave flat, bears E. and W.
	Enter dense oak.
	Begin steep ascent, over stony soil.
9.20	Top of spur, projects S. E. descend.
12.00	Draw 50 ft. deep, course S. E. ascend.
14.25	The ¼ sec. cor. of sec. 36, T. 12 S. R. 1 E. which is a limestone 4 x 8 x 8 ins. above the ground, marked as described by the surveyor general.
31.85	Top of ridge, bears N. E. and S. W. Thence along west slope of ridge. descend.
40.00	Set a sandstone 14 x 8 x 6 ins. 10 in the ground for ¼ sec. cor. marked ¼ S. 31. on E. face: dig pits 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, E. of cor.
54.25	The cor. of secs. 25 and 36, T. 12 S., R. 1 E. which is a limestone 4 x 12 x 5 ins. above the ground, marked as described by the surveyor general.
71.00	Head of ravine, course S. W. ascend.
80.00	Set a red sandstone 14 x 10 x 6 ins. 10 ins. in the ground, for cor. of secs. 30 and 31, marked with 1 notch on S. and 5 notches on

West bdy. of T. 12 S. R. 2 E. Con

Chains

N. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
Pits impracticable.
This cor. is 600 ft. above cor. of Tp.
Land mountainous.
oil loam and stony 2nd and 3rd R
No timber.
Mountainous land. 80.00 chs.

North, on a true line, along the west bdy. of Tp. and sec. 30.
Ascend, through dense oak brush.

14.25 The ¼ sec. cor. of sec. 25, T 12 S. R. 1 E., which is a sandstone 6×10×4 above the ground, marked as described by the Surveyor General.

19.50 Top of spur ridge, bears N. E. and S. W. descend.

28.00 Ravine, 100 ft. deep. Course E. Ascend.

40.00 Top of spur, projects E. Set a sandstone 24×16×10 ins. 18 ins. in the ground, for ¼ sec. cor., marked ¼ S. 30, on E. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
Pits impracticable.

52.25 Wash, 25 ft. deep, 50 ft. wide, ravine, 100 ft. deep.
Course S. E. ascend.

54.25 The cor. of secs. 24 and 25, T. 12 S., R. 1 E. which is a limestone

West boundary of T. 12 S. R. 2 E. Continued

Chains	
	6 x 12 x 7 ins. above the ground, marked as described by the Surveyor general.
75.50	Top of Spur ridge, projects S. E. descend.
80.00	Set a limestone 12 x 12 x 8 ins. 8 ins. in the ground, for Cor. of Secs. 19 and 30, marked with 2 notches on S. and 4 notches on N. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of Cor. Pits impracticable 1000 ft. above Cor. of Secs. 30 and 31. Land mountainous. Soil stony 3rd Rate. No timber Mountainous land. 80.00 chs. August 18: At this Cor. I set off 13° 16' N. on the decl. arc: and at 0h. 4m. p. m., l. m. t. observe the sun on the meridian, the resulting lat. is 39° 45' N.
	North, along W. bdy. of Tp. and Sec. 19. descend, through dense oak brush.
10.50	Ravine, 300 ft. deep, course S. E. ascend.
14.25	The ¼ Sec. Cor. of Sec. 24, T. 12 S., R. 1 E. which is a limestone 4 x 12 x 7 ins. above the ground, marked as described by the Surveyor general.
20.00	Top of ridge, bears N. W. and S. E. descend.

West boundary of T. 12 S. R. 2 E. Con

Chains	
37.00	Spring branch, 1 lk. wide, in Foote's Canon 1000 ft. deep, Course S. E. ascend.
40.00	Set a limestone 15×10×6 ins. 10 ins. in the ground for ¼ sec. Cor. marked ¼ S. 19. on E. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Pits impracticable. Area broken rock.
80.00	Set a limestone 16×10×10 ins. 11 ins. in the ground for cor. of secs. 18 and 19, marked with 3 notches on N. and S. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. Pits impracticable. 800 ft. above Foote's Canon. Land mountainous. Soil stony 3rd. and 4th. Rate. No timber. Mountainous land, 80.00 chs. Note: On account of high rocky and broken mountains I discontinue this line. August 18, 1901.

For General Description. See book of subdivisions of T. 12 S. R. 2 E.

Boundaries of T. 12 S. R. 2 E.
Latitudes, departures, and Closing errors.

Line designated	True bearing	Distance	Latitude N.	Latitude S.	Departure E.	Departure W.
N. bdy. of Tp.	West	400.00				400.00
" Sec. 19	West	110.05				110.05
West bdy.						
" Secs. 5, 8 and 17.	S. 0° 3' E.	240.00		240.00	.21	
" of Tp.	South	246.95		246.95		
S. bdy. Sec. 31	S. 89° 45' E.	108.30		.47	108.30	
" Sec. 32	N. 86° 16' E.	82.70	5.38		82.52	
" of Secs. 33, 34 and 35	N. 89° 40' E.	240.00	1.40		239.99	
" Sec. 36	N. 89° 36' E.	80.02	.56		80.00	
East bdy. of Tp.	North	480.00	480.00			
Convergency						.60
Totals			487.34	487.42	511.02	510.65
				487.34	510.65	
Errors in lat. and dep.				0.08	0.37	

Hubert D. Page,
U.S. Deputy Surveyor.

There being no notary public or other officer authorized to administer oaths within reasonable distance at the beginning or ending of the survey, in order to save time and expense, I administer the preliminary and final oaths for survey myself.

Hubert D. Page,
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Hubert D. Page, 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 West bdy. T. 12 S. R. 26 E. of the Salt Lake base & meridian, State of Utah.

showing the respective capacities in which they acted:

Jay Morrison, *Chainman.*
Harry A. Rager, *Chainman.*
Varnick Hansen, *Moundman.*
Cleon Jackson, *Moundman.*
Varnick Hansen, *Axman.*
Cleon Jackson, *Axman.*
Varnick Hansen, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Hubert D. Page, United States Deputy Surveyor, in surveying all those parts or portions of the West bdy. T. 12 S. R. 26 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.

Jay Morrison, *Chainman.*
Harry A. Rager, *Chainman.*
Varnick Hansen, *Moundman.*
Cleon Jackson, *Moundman.*
Varnick Hansen, *Axman.*
Cleon Jackson, *Axman.*
Varnick Hansen, *Flagman.*

Subscribed and sworn to before me this 26th day of August 1901

SEAL

Hubert D. Page
U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Hubert D. Page, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for the District of Utah, bearing date of the 9th day of July 1900, ~~189~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for the District of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the West Boundary of Township 12 South Range 2 East of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for the District of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Hubert D. Page
United States Deputy Surveyor.

Subscribed by said Hubert D. Page, and sworn to before me this 20th day of September, ~~189~~1901

Edward H. Anderson
U.S. Surveyor-General
for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 28, 1902, ~~189~~

The foregoing field notes of the survey of the West Boundary of Township 12 South Range 2 East of the Salt Lake Base and Meridian, State of Utah

executed by Hubert D. Page under his contract No. 240, dated July 9th 1900, ~~189~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

_____
United States Surveyor General.

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BOOK A-288

FIELD NOTES

OF THE SURVEY OF THE

South Boundary

of

Township 12 South Range 2 East

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

Hubert D. Page, United States Deputy Surveyor,

Under his Contract No. 240, dated July 2d 1900, ~~189~~

Survey commenced August 19 1901, ~~189~~

Survey completed August 19 1901, 189

6—151

Resurvey So. Bdry high M. Chs the 2-21-00

NAMES AND DUTIES OF ASSISTANTS.

William O. Walquist Chainman

Peter Meyer "

Varnick Hansen Mound man

Cleon Jackson "

Varnick Hansen Alman

Cleon Jackson "

Jay Morrison Flag man

C—151

BOOK A-288

INDEX DIAGRAM.

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

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30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, William O. Walquist and Peter Meyer do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the re survey of South bdy. of T. 1 & 2 S., R. 2 E. of the Salt Lake base and meridian, State of Utah.

William O. Walquist, Chainman.

Peter Meyer, Chainman.

Subscribed and sworn to before me this 6 day of August 1901.

Hubert D. Page
U.S. Deputy Surveyor

SEAL

WE, Varnick Hansen and Cleon Jackson do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the re survey of South bdy. of T. 1 & 2 S., R. 2 E. of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Moundman.

Cleon Jackson, Moundman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor

SEAL

WE, Varnick Hansen and Cleon Jackson 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 re survey of South bdy. of T. 1 & 2 S., R. 2 E., of the Salt Lake base and meridian State of Utah.

Varnick Hansen, Axman.

Cleon Jackson, Axman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor

SEAL

I, Jay Morrison, 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 re survey of the South bdy. of T. 1 & 2 S., R. 2 E., of the Salt Lake base and meridian State of Utah.

Jay Morrison, Flagman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor

SEAL

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Resurvey of the S. bdy of T. 12 S. R. 2 E.

Chains

August 19. 1901.
Preliminary to completing the subdivisions of this township I retrace the S. bdy of sec. 31. From the cor. of Tps 12 and 13 S. R. 2 E. heretofore described. I run N. 89° 50' E. on a blank line. At 67.58 chs. no trace can be found of old ¼ sec. cor. and at 108.30 chs. the cor. of secs. 5, 6, 31 and 32 bears S. 79 lks. dist. The course of this line is therefore S. 89° 45' E. and the dist. 108.30 chs. I continue my retracement. N. 89° 50' E. on a blank line bet. secs. 5 and 32, at 40.00 chs. no trace of the ¼ sec. cor. can be found, and at 82.52 chs. the cor. of secs. 4, 5, 32 and 33 bears N. 5.15 chs. dist. Therefore the course of this line is N. 86° 16' E. and the distance 82.70 chs. As the lines bet. secs. 6 and 31 and 5 and 32 are not within the limits and some corners are missing. I proceed to resurvey as follows:
At the cor. of Tps. 12 and 13 S. R. 2 E. heretofore described.
At 2 p. m. l. m. t. I set off 39° 43' N. on the lat. arc: 12° 49' N. on the decl. arc: and determine a true meridian with the solar.
Thence I run
S. 89° 45' E.
bet. secs. 6 and 31.
Over a sage brush flat.
1.25 Dry Wash. 8 ft. deep, 8 ft. wide, in bottom of Foote's Canon.
Course S. W.

Resumed of the S. bdy. of T. 12 S. R. 2 E. Continued

Chains

3.00 Road to Clem Jackson's ranch bears N.E. and S.W.
Begin ascent over broken, stony land, through dense oak brush.

17.03 Top of ridge, 200 ft. above the bottom of Foote's Canon, bears N.W. and S.E.
Set a sandstone 16×10×5 ins. 11 ins. in the ground, for reëstablished ¼ Sec. Cor. marked ¼ S. 31. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor. This is proportional monument
Pits impracticable.
No trace of old ¼ Sec. Cor. can be found.
Descend over rolling land.

168.50 The Cor. of secs. 5, 6, 31 and 32.
which is a sandstone with marks nearly obliterated and mound of stone missing.
I destroy all traces of the old Cor. and reëstablish it at the same point as follows:
Set a granite stone 15×10×8 ins. 10 ins. in the ground for reëstablished Cor. of secs. 5, 6, 31 and 32 marked with 5 notches on the E. and 1 notch on the W. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Cor.
Pits impracticable.
Land mountainous.
Soil loam and stony.
2nd and 3rd Rate.
Timber scattering cedar.
Mountainous land, and dense undergrowth. 118.30 Chs.

P

the S bdy. of T. 12 S. R. 2 E. Con

chains	
	N. 86 16 E
	bet. secs. 5 and 32.
	Over rolling land, descend through dense artimesia, scrub oak and scattering cedar timber.
7.00	Ravine, 100 ft. deep. Course S. Ascend.
24.00	Top of spur, project to S. descend.
41.35	Set a limestone 16×10×7 ins. 11 ins. in the ground, for res. established ¼ sec. cor. marked ¼ S. 32. on N. face: and raise a mound of stone, 2 ft. base, 1½ ft. high. N. of cor. Pits impracticable. After diligent search no trace of old ¼ sec. cor. can be found.
49.00	Road from Nebo Salt Works to Alpha, bears N. and S. Enter bottom land, bears N. and S.
51.00	Spur of the San Pete Valley Railroad, bears N. 10° E. and S. 10° W.
60.00	North fork of Salt Creek, 15 lks. wide, water saline, 12 ins. deep, in a wide canon, 500 ft. deep, Course S.
61.00	Leave bottom land, bears N. and S. Ascend.
82.70	The cor. of secs. 4, 5, 32 and 33. Which is a sandstone 8×15×6 ins above the ground, marked as described by the Surveyor General. Land mountainous. Soil stony 3rd Rate. Timber, scattering cedar. Mountainous land and dense undergrowth 82.70 Chs.

August 19, 1901.

For General Description see book of subdivisions of T. 12 S. R. 2 E.

Hubert D. Page
U.S. Deputy Surveyor.

There being no notary public or other officer authorized to administer oaths within reasonable distance at the beginning or ending of the survey. In order to save time and expense, I administer the preliminary and final oaths for the resurvey, myself.

Hubert D. Page
US Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Hubert D. Page, 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 South bdy. of T. 12 S., R. 2 E., of the Salt Lake base and meridian, State of Utah, showing the respective capacities in which they acted:

William O. Halquist, Chainman.
Peter Meyer, Chainman.
Vannick Hansen, Moundman.
Cleon Jackson, Moundman.
Vannick Hansen, Axman.
Cleon Jackson, Axman.
Jay Morrison, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Hubert D. Page, United States Deputy Surveyor, in surveying all those parts or portions of the South bdy. of T. 12 S., R. 2 E. of the Salt Lake base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him 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.

William O. Halquist, Chainman.
Peter Meyer, Chainman.
Vannick Hansen, Moundman.
Cleon Jackson, Moundman.
Vannick Hansen, Axman.
Cleon Jackson, Axman.
Jay Morrison, Flagman.

Subscribed and sworn to before me this 26 day of August, 1901

SEAL

Hubert D. Page,
U.S. Deputy Surveyor

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3 J

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Hubert D. Page, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for the District of Utah, bearing date of the 2d day of July 1900, ~~189~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for the District of Utah, the Manual of Surveying Instructions, and the laws of the United States, resurveyed all those parts or portions of the South Boundary of Township 12 South Range 2 East

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

Hubert D. Page.
United States Deputy Surveyor.

Subscribed by said Hubert D. Page, and sworn to before me this 20th day of September, ~~189~~ 1901

Edward H. Anderson
U.S. Surveyor General
for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 28 1902, ~~189~~

The foregoing field notes of the resurvey of the South Boundary of Township 12 South Range 2 East of the Salt Lake Base and Meridian, State of Utah

executed by Hubert D. Page under his contract No. 240, dated July 2 1900, ~~189~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the resurveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

_____
United States Surveyor General

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BOOK A-288

FIELD NOTES

K.S.B.

OF THE re SURVEY OF THE

Subdivisions
of
Township. No. 12 South.
Range no. 2 East.

Of the Salt Lake base and Meridian,
In the state of Utah

AS SURVEYED BY

Hubert D. Page, United States Deputy Surveyor,

Under his Contract No. 240, dated July 2nd 1900, 189

Re Survey commenced August 19th 1901, 189

Re Survey completed August 20th 1901, 189

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Resurvey Subs high M. [illegible] 3-02-75 ✓

Retracement Subs 2-01-19 ✓

BOOK A-288

NAMES AND DUTIES OF ASSISTANTS.

Jay Morrison, Chainman

Harry A. Rager "

Varnick Hansen Moundman

Cleon Jackson "

Varnick Hansen Axman

Cleon Jackson "

Varnick Hansen Fryman

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BOOK A-288

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31	32	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Jay Morrison and Harry A. Rogers do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the subdivision of T. 17 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Jay Morrison, Chainman.
Harry A. Rogers, Chainman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor.

SEAL

We, Varnick Hansen and Cleon Jackson do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the subdivision of T. 17 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Moundman.
Cleon Jackson, Moundman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor.

SEAL

We, Varnick Hansen and Cleon Jackson 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 the subdivision of T. 17 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Axman.
Cleon Jackson, Axman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor

SEAL

I, Varnick Hansen, 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 the subdivision of T. 17 S., R. 2 E., of the Salt Lake base and meridian, state of Utah.

Varnick Hansen, Flagman.

Subscribed and sworn to before me this 6 day of August, 1901.

Hubert D. Page
U.S. Deputy Surveyor

SEAL

6—151

Resurvey of the Subdivisions of T. 12 S. R. 2 O.

August 19, 1901
Not finding the South bdy. of this township within limits and some of the corners missing I proceed to retrace the line bet. sec. 31 and 32, as follows.
From the reëstablished cor. of secs. 5, 6, 31 and 32, heretofore described.
I run, North on a blank line, bet. secs. 31 and 32, At 40.00 chs. no trace of old ¼ sec. cor. can be found, And at 80.00 chs. after diligent search, no trace of the cor. of secs. 29, 30, 31 and 32 can be found.
Therefore I continue my line north, finding no trace of line, until at 160.00 chs. intersect the cor of secs. 19, 20, 29 and 30, which is a limestone 5×12×12 ins. above the ground, marked as described by the surveyor general.
As the corners on this line are missing I resurvey the line bet. secs. 31 and 32 and secs. 29 and 30.

August 19, 1901

August 20: At the reëstablished cor. of secs. 5, 6, 31 and 32, heretofore described.
At 7 A.M. l. m. t. I set off 39°43' N. on the lat. arc: 12°36' N. on the decl. arc: and determine a true meridian with the solar.
Thence I run
North on a true line,
bet. secs. 31 and 32.
Over rolling land, ascend through dense artimesa and scattering oak brush.

Resurvey of the Subdivisions of T. 12 S. R. 2 E. Continued

Chains	
40 00	Set a sandstone 15×10×8 ins. 10 ins. in the ground for reestablished ¼ sec. cor. marked ¼ S. 31. on W. face. And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. After diligent search no trace of old ¼ sec. cor. can be found.
51.20	Top of ridge, 500 ft. above the cor. of secs. 5, 6, 31 and 32; on S. bdy. of Tp. trans N.W. & S.E. Descend over rolling land.
80 00	Set a trachyte stone, 14×8×6 ins. 10 ins. in the ground, for reëstablished cor. of secs. 29, 30, 31 and 32 marked with 1 notch on the S. and 5 notches on the E. edges: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. After diligent search no trace of the old sec. cor. can be found. Land mountainous. Soil stony 3rd. Rate. No timber. Mountainous land. 80 00 chs.
	North on a true line bet. secs. 29 and 30 Descend through dense oak brush.
15.25	Draw, 50 ft. deep, course S. E. Ascend over rolling land.
40 00	Falls on a trachyte boulder 4×3×3 ft. above the ground, I cut a cross (X) at exact cor. point, for ¼ sec. cor. mark ¼ S. 30 on W. side: and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable No trace of old ¼ sec. cor. can be found.

Resurvey of the Subdivisions of T. 12 S. R. 2 E. Con.

Chains	
42.60	Top of ridge, bears E. and W. descend.
51.00	Ravine, 200 ft. deep. Course N. E. ascend.
	Enter tall, dense maple bush.
60.00	Top of spur projects E. descend.
64.00	Ravine, 150 ft. deep, Course S. E.
	Maple Springs, nearly dry, bear Sr. 2.00 chs. dist.
	Leave maple bush, ascend.
80.00	The cor. of secs. 19, 20, 29 and 30. heretofore described.
	800 ft. above the Cor. of secs. 29, 30, 31 and 32.
	Land Mountainous.
	Soil stony 3rd Rate
	No timber.
	Mountainous land. 80.00 chs.
	August 20: At this Cor. I set off 12° 31' N. on the decl. arc: and at 0h. 3m. p. m. l. m. t. observe the Sun on the meridian the resulting lat. is 39° 45' N.

N. 89° 50' E. on a blank line, bet. secs. 20 and 29. At 40.00 chs. no trace of ¼ sec. Cor. can be found and at 82.50 chs. intersect N. and S. line, 5.98 chs. S. of the cor. of secs. 20, 21, 28 and 29, which is a sandstone 5 × 10 × 8 ins. above the ground, marked as described by the Surveyor General.

The course of this line is therefore N. 85° 41' E. and the dist. is 82.75 chs.

Thence I run S. 85° 41' W. on a true line, bet. secs. 20 and 29.

Resumed of the Subdivisions of T. 12 S. R. 2 E. Conclude

Chains	
	Over rolling land, ascend through dense artimesia and scattering oak bush.
39.50	Top of ridge, 500 ft. above the Sec. Cor. bears N. and S. descend.
41.37½	Set a limestone 16×10×8 ins., 11 ins. in the ground, for its established ¼ Sec. Cor. marked ¼ S. 20. on N. face. And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of Cor. Pits impracticable.
68.00	Ravine, 100 ft. deep, Course N. E. Ascend.
82.75	The Cor. of Secs. 19, 20, 29 and 30. Land mountainous. Soil Stony 3rd Rate. No timber Mountainous land. 82.75 chs. August 20. 1901

From the cor. of secs. 4, 5, 32 and 33 on S. bdy. of Tp.
Run North on retracement bet. secs. 32 and 33.

40.00	After dilligent search no trace of the old ¼ sec. cor. can be found.
80.78	We find the cor. of sec. 29 and 32. Previously described E. 19 lks. dist The course of this line is therefore N. 0°08' E.

Thence Run North on retracement bet. secs 28 and 29.

40.00	After dilligent search no trace of the old ¼ sec. cor. can be found
80.41	We find the S. cor. of sec. 29. Previously described E. 16 lks. The course of this line is therefore N. 0°07' E.

Resurvey of Subdivision of T. 17 S., R. 26 E. Con

For General discription see book of subdivisions.

Hubert D. Page
U.S. Deputy Surveyor.

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of the survey, in order to save time and expense, I administer the preliminary and final oaths for the resurvey my self.

Hubert D. Page
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Hubert D. Page, 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 subdivisions of Tps. 1 & 2 S., R. 2 E. of the Salt Lake 3rd meridian, State of Utah, showing the respective capacities in which they acted:

Jay Morrison, Chainman.
Harry A. Rogers, Chainman.
Varnick Hansen, Moundman.
Cleon Jackson, Moundman.
Varnick Hansen, Axman.
Cleon Jackson, Axman.
Varnick Hansen, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Hubert D. Page, United States Deputy Surveyor, in surveying all those parts or portions of the subdivisions of Tps. 1 & 2 S., R. 2 E., of the Salt Lake base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him 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.

Jay Morrison, Chainman.
Harry A. Rogers, Chainman.
Varnick Hansen, Moundman.
Cleon Jackson, Moundman.
Varnick Hansen, Axman.
Cleon Jackson, Axman.
Varnick Hansen, Flagman.

Subscribed and sworn to before me this 26th day of August, 1901, 189

SEAL

Hubert D. Page
U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Hubert D. Page, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for the District of Utah, bearing date of the 2d day of July 1900, 189, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for the District of Utah, the Manual of Surveying Instructions, and the laws of the United States, resurveyed all those parts or portions of the subdivisions of Township 12 South Range 2 East of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been resurveyed by me, and under my direction; and I do further solemnly swear that all the corners of said resurvey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for the District of Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such resurvey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Hubert D. Page
United States Deputy Surveyor.

Subscribed by said Hubert D. Page, and sworn to before me this 26th day of September, 189 1901

Edward H. Anderson
U.S. Surveyor General
for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 28 1902, 189

The foregoing field notes of the resurvey of the subdivisions of Township 12 South Range 2 East of the Salt Lake Base and Meridian, State of Utah

executed by Hubert D. Page
under his contract No. 240, dated July 2, 1900, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the resurveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

.....
United States Surveyor General.

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BOOK A-288

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FIELD NOTES

OF THE SURVEY OF THE

GREEN RIVER GUIDE MERIDIAN

through

Townships No.15 South

Between Ranges Nos.20 and 21 East,

and

OF THE RESURVEY OF THE

GREEN RIVER GUIDE MERIDIAN

through

Townships Nos.11,12,13,and 14 South

Between Ranges Nos.20 and 21 East,

Of the SALT LAKE BASE AND *Meridian,*

in the STATE OF UTAH

AS SURVEYED BY

Scott P.Stewart and John R.Stewart, *United States Deputy Surveyor,*s

Under ~~his~~ their *Contract No.* 242, *dated* April 12,1901.

Survey commenced July 10,1901.

Survey completed July 16,1901.

NAMES AND DUTIES OF ASSISTANTS.

Andy J. Stewart	Chainman
Edwin A. Peay	Chainman
Vance Call	Chainman
Hugh Conover	Chainman
Clarence S. Jarvis	Moundman
John J. Harding	Moundman
George W. Eakins	Axman
Harry Burton	Axman
Harvey R. Booth	Flagman
Gilbert Burr	Flagman

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BOOK A-283

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31	32	33	34	35	36

Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

We, Andy J. Stewart Edwin A. Peary and Vosco Call Hugh Conover do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the Green River Guide Meridian through Tp. 15 S., bet. Rs. 20 and 21 E.; and the resurvey of the Green River Guide Meridian through Tps. 11, 12, 13, and 14 S., bet. Rs. 20 and 21 East.

Andy J. Stewart, Chainman.

Edwin A. Peary, Chainman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Vosco Call, Chainman

Hugh Conover, Chainman

Andrew J. Stewart Jr.
Notary Public

SEAL

My commission expires March 17, 1903.

We, Clarence S. Jarvis and John J. Harding do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the Green River Guide Meridian through Tp. 15 S., bet. Rs. 20 and 21 E.; and the resurvey of the Green River Guide Meridian through Tps. 11, 12, 13, and 14 S., bet. Rs. 20 and 21 East.

Clarence S. Jarvis, Moundman.

John J. Harding, Moundman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr.
Notary Public

SEAL

We, George W. Elkins and Harry Burton 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 the Green River Guide Meridian through Tp. 15 S., bet. Rs. 20 and 21 E.; and the resurvey of the Green River Guide Meridian through Tps. 11, 12, 13, and 14 S., bet. Rs. 20 and 21 East.

George W. Elkins, Axman.

Harry Burton, Axman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr.
Notary Public

SEAL

We, Harvey R. Booth and Gilbert Russ, 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 the Green River Guide Meridian through Tp. 15 S., bet. Rs. 20 and 21 E.; and the resurvey of the Green River Guide Meridian through Tps. 11, 12 and 14 S., bet. Rs. 20 and 21 East.

Gilbert Russ, Flagman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Harvey R Booth Jr.

Andrew J. Stewart Jr.
Notary Public.

SEAL

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Retracement of the Green River Guide Meridian
Between Ranges 20 and 21 East.,Through Tp.11 South.

Survey commenced July 10,1901,and executed with a W. and L.E.Gurley light mountain transit,No.3,with solar attachment.The horizontal limb is provoded with two double verniers,placed opposite to each other,reading to single minutes of arc,which is also the least count of the latitude and declination arcs; and a W.and L.E.Gurley plain transit,No2.,of which the horizontal limb is provided with one double vernier,reading to single minutes of arc.

The instruments were examined,tested on the true meridian at Salt Lake City,found correct,and were approved by the surveyor general for Utah,the former on June 6,1901,and the latter on May 29,1901.

We examine the adjustments of the instruments,and correct the level and collimation errors,then,to t test the solar apparatus,of the No.3 instrument,by comparing its indications,resulting from solar observations made during p.m.and a.m.hours,with a true meridian determined by observation on Polaris,we proceed as follows:

July 10,1901:At the closing cor.of Tps.11 S.,Rs.20 and 21 E.,which is a sandstone,6x10x3 ins.,above ground,firmly set,and marked and witnessed as described by the surveyor general,latitude 39° 54'N.,longitude 109° 39'W.,,we set off 39° 54'N.,on the lat.arc; 22° 17'N.,on the decl.arc;and at 4 h 30 m p.m.,l.m.t., determine with the solar,a true meridian,and mark a point thereof on a stone,firmly set in the ground,5.00 chs.N.of our station.

At 10. h 13 m,a.m.,l.m.t.,we observe Polaris at eastern elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined,on a plug driven in the ground,5.00 chs.N. of our station.

July 11,1901.

July 11,1901:At 6 h 30 m a.m.,l.m.t.,we lay off the azimuth of Polaris 1° 35'to the west,and mark the true meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N.of our station; on which the true meridian falls 0.32 ins.east of the mark determined by the solar.

At 7 h 0 m a.m.,l.m.t.,we set off 39° 54'N.,on the lat. arc;22° 11'N.,on the decl.arc;and mark a point in the true meridian determined with the solar,by a cross on the stone already set 5.00 chs.N.of our station;this mark falls 0.25 ins.east of the true meridian established by Polaris observation.

The solar apparatus by p.m.and a.m.observations,defines positions for true meridians respectively about 0'18"west and 0'14"east of the true meridian established by Polaris observation;therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian,at 7h 30 m a.m.,is 16° 10.6'W.,which reduced by the table on page 100 of the Manual,gives the mean mag.decl.16° 05' E.

Note:We begin our survey at the above described cor. for the reason that we were unable to find any of the corners on the Green River Guide Meridian south of this cor.;and we found this cor.only after retraceing the Green River Guide Meridian through Tps .9 and 10 S.

Thence we run

South,on a retracement line along the Green River Guide Meridian,bet.secs.1 and 6.

40.26 The ¼ sec.cor.bet.secs.1 and 6,which is a sandstone, 6x5x4 ins.,above ground,firmly set and marked and witnessed as described by the surveyor general,bears

Chains	
	E.,10 lks.dist.
80.56	The cor.of secs.1,6,7,and 12,which is a sandstone, 25x10x10 ins.,above ground,firmly set and marked and witnessed as described by the surveyor general,bears east 22 lks. dist.
	Thence continuing our own line and measurement South,on a retracement line bet.secs.7 and 12.
40.12	The ¼ sec.cor.bet.secs.7 and 12,which is a sandstone, 8x12x4 ins.,above ground,firmly set and marked and witness as described by the surveyor general,bears east 22 lks.dist.
80.61	The cor.of secs.7,12,13,and 18,which is a sandstone, 6x16x10 ins.,above ground,firmly set,and marked and witnessed as described by the surveyor general,bears west 12 lks.dist.
	Thence continuing our own line and measurement South,on a retracement line bet.secs.13 and 18.
40.00	Set temp.¼ sec.cor. Falls in original triangulation.
80.00	Set temp.cor.of secs.13,18,19,and 24. Also falls in triangulation of original survey .
	Thence continuing our own line and measurement South,on a retracement line bet.secs.19 and 24.
40.00	Find no trace of the ¼ sec.cor.bet.secs.19 and 24. Set temp ¼ sec.cor.
80.00	Find no trace of the cor.of secs.19,24,25,and 30;we set temp.cor.
	July 11,1901,At the noon hour the sky is overcast and solar observations are impossible.
	Thence continuing our own line and measurement South,on a retracement line bet.secs.25 and 30.
43.90	The ¼ sec.cor.bet.secs.25 and 30,which is a sandstone, 5x8x5 ins.,above ground,firmly set,and marked and witness as described by the surveyor general,bears west 30 lks.dist.
80.00	We find no trace of the cor.of secs.25,30,31,and 36. Set temp.cor.of secs.25,30,31,and 36.

Retracement of the Green Rive Guide Meridian

Between Ranges 20 and 21 East, Through Tp.11 S.-Concluded.

Chains	
	Thence continuing our own line and measurement, South, on a retracement line bet.secs.31 and 36.
40.00	We find no trace of the ¼ sec.cor.bet.secs.31 and 36. Set temp.¼ sec.cor.
88.64	The cor.of Tps.11 and 12 S., Rs.20 and 21 E., which is a sandstone, 6x10x10 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears west 56 lks.dist.
	July 11, 1901.
	July 12, 1901: At 7 h 0 m a.m., l.m.t., we set off 39° 54'N., on the lat. arc; 22° 03'N., on the decl.arc; and determine a true meridian with the solar, at the closing cor.of Tps.11 S., Rs.20 and 21 E., heretofore described.
	Note: We conclude from the connections made on the corners of the Green River Guide Meridian through Tp.11 S. that this Green River Guide Meridian should be resurveyed through Ts.11, 12, 13, and 14 S.
	Therefore we run
	South, on a resurvey line along the Green River Guide Meridian, through Tp.11 S., bet.secs.1 and 6.
	Over rolling mesa; through dense undergrowth of shad-scales.
	Difference bet.measurements of 40.06 chs., by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 39.96 chs.
	By 2nd set, 40.04 chs.; the mean of which is
40.00	Set a sandstone, 18x6x4 ins., 12 ins.in the ground, for ¼ sec.cor., marked ¼ on W.face; and raise a mound of stone, 2 ft.base, 1½ ft.high, W.of cor.Pits impracticable.
	The old ¼ sec.cor.bears S.21° 40'E., 29 lks.dist.We destroy all traces of the old cor.
	Difference bet.measurements of 80.00 chs., by two sets of chainmen, is 12 lks.; position of middle point
	By 1st set, 79.94 chs.

Chains	
	By 2nd set, 80.06 chs.; the mean of which is
80.00	Set a sandstone, 30x10x10 ins., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, marked with 1 notch on N. and 5 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits Impracticable.
	The old cor. of secs. 1, 6, 7, and 12 bears S. 22° E., 60 lks. dist. We destroy all traces of the old cor.
	Land, rolling mesa.
	SOil, clay and gravelly loam; 3rd rate.
	No timber.
	Undergrowth, shadscales.
	Good grass for grazing.
	Land covered with dense undergrowth, 80.00 chs.

	South, on a resurvey line bet. secs. 7 and 12.
	Over rolling land; through dense sage brush.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen, is 4 lks.; position of middle point
	By 1st set, 39.98 chs.,
	By 2nd set, 40.02 chs.; the mean of which is
40.00	Set a sand coated limestone, 30x6x5 ins., 24 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	The old ¼ sec. cor. bears S. 61° 20' E., 26 lks. dist.; we destroy all traces of the old cor.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 14 lks.; position of middle point
	By 1st set, 79.93 chs.
	By 2nd set, 80.07 chs.; the mean of which is
80.00	Set a sandstone, 20x10x10 ins., 15 ins. in the ground, for for. of secs. 7, 12, 13, and 18, marked with 2 notches on N. and 4 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	The old cor. of secs. 7, 12, 13, and 18 bears S. 11° 10' W., 63 lks. dist. We destroy all traces of the old cor.

Chains	
	Land, rolling.
	Soil, gravelly; 3rd rate.
	No timber.
	Undergrowth, sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth, 80.00 chs.
	South, on a resurvey line bet. secs. 13 and 18.
	Over rolling mesa; through dense sage brush.
13.00	Edge of mesa, bears N.W. and S.E.; descend over ledges.
22.50	Bottom of steep descent, bears N.W. and S.E.; thence along side of mountain; leave ledges.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 39.95 chs.
	By 2nd set, 40.05 chs.; the mean of which is
40.00	Set a limestone, 19x9x6 ins., 13 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	This cor. was not set in original survey.
	Difference bet. measurements of 80.00 chs. by two sets of chainmen, is 14 lks.; position of middle point
	By 1st set, 79.93 chs.
	By 2nd set, 80.07 chs.; the mean of which is
80.00	Set a limestone, 22x10x6 ins., 16 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	This cor. was not set in the original survey.
	Land, rolling and mountainous.
	Soil, clay and gravelly; 3rd rate.
	No timber.
	Undergrowth, sage brush.
	Good grass for grazing.

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Chains	
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	July 12, 1901: At this cor. we set off 22° 01' N., on the decl. arc; and at 0 h 3 m p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 51' N., which is the proper lat. nearly.
	South, on a resurvey line bet. secs. 19 and 24.
	Over mountainous land; through scattering undergrowth.
	Descend along side of mountain.
35.00	Foot of mountain, 300 ft. below cor., bears N. 20° W. and S. 20° E.. Enter bottom of Willow Creek Canyon, bears N. 20° W. and S. 20° E.. Enter dense undergrowth, bears N. 20° W. and S. 20° E.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 39.96 chs.
	By 2nd set, 40.04 chs.; the mean of which is
40.00	Set a limestone, 24x7x6 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits Impracticable.
	We find no trace of the old cor.
41.38	Old wagon road, bears N.W. and S.E.
70.12	Willow Creek bed (dry), 20 lks. wide, course N.W.
	Difference bet. measurements of 80.00 chs. by two sets of chainmen, is 12 lks.; position of middle point
	By 1st set, 79.94 chs.
	By 2nd set, 80.06 chs.; the mean of which is
80.00	Set a limestone, 60x9x5 ins., 40 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, marked with 4 notches on N. and 4 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old cor.
	Land, mountainous, and level.

Resurvey of the Green River Guide Meridian

Between Ranges 20 and 21 East Through T. 11 S.-Continued.

Chains	
	Soil,gravelly and clay loam;2nd rate.
	No timber.
	Undergrowth ,sage brush and grease-wood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	South,on a resurvey line bet.secs.25 and 30.
	Over level land;through dense undergrowth.
29.00	Leave canyon bottom,bears N.W.and S.E.;thence over rolling mountainous land .
	Difference bet.measurements of 40.00 chs.by two sets of chainmen,is 2 lks.;position of middle point
	By 1st set,39.99 chs.
	By 2nd set,40.01 chs.;the mean of which is
40.00	Set a limestone,36x6x6 ins.,26 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	The old ¼ sec.cor.bears S.4° 20'W.,391 lks.dist.We destroy all traces of the old cor.
	Difference bet.measurements of 80.00 chs.by two sets of chainmen ,is 8 lks.;position of middle point
	By 1st set,79.96 chs.
	By 2nd set,80.04 chs.;the mean of which is
80.00	Set a limestone,36x10x8 ins.,28 ins.in the ground, for cor.of secs.25,30,31,and 36,marked with 5 notches on N.and 1 notch on S.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of the old cor.after diligent search.
	Land,level and rolling.
	Soil,clay and gravelly loam;2nd and 3rd rate.
	No timber.
	Undergrowth,grease-wood.

Chains	
	Good grass for grazing. Mountainous land,or Land covered with dense undergrowth,80.00 chs.
	South,on a resurvey line bet.secs.31 and 36. Over rolling land;through dense sage brush. Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point By 1st set,39.95 chs. By 2nd set,40.05 chs.;the mean of which is
40.00	Set a limestone,12x10x10 ins.,9 ins.in the ground, for ¼ sec.cor.marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable. We find no trace of the old cor. Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 18 lks.;position of middle point By 1st set,79.91 chs. By 2nd set,80.09 chs,;the mean of which is
80.00	Set a limestone,40x10x10 ins.,30 ins.in the ground, for cor.of Tps.11 and 12 S.,R.20 and 21 E.,marked 11 S.on N.E.,21 E.on S.E.,12 S.on S.W.,and 20 E.on N.W. faces;with 6 notches on each edge;and raise a mound of stone,2 ft.base,1½ ft.high,S.of cor.Pits impracticable. The old Tp.cor.bears S.3° 40'E.,8.66 chs.dist.We destroy all traces of the old cor. Land,rolling.mountainous. Soil,clay and gravelly loam;2nd and 3rd rate. No timber . Undergrowth,sage brush. Good grass for grazing. Mountainous land,or Land covered with dense undergrowth,80.00 chs. July 12,1901.

Resurvey of the Green River Guide Meridian

Between Ranges 20 and 21 East, Through Tp.12 South.

Chains	
	July 13,1901:At 7 h 0 m a.m.,l.m.t.,we set off 39° 49 N.,on the lat.arc;21° 55'N.,on the decl.arc;and determine a true meridian with the solar,at the cor.of Tps.11 and 12 S.,R.20 and 21 E.
	Thence we run
	South,on a resurvey line bet,secs.1 and 6.
	Over mountainous land;through scattering undergrowth; descend.
16.00	Foot of mountain,bears N.20° E.and S.20° W.;enter bottom of Willow Creek Canyon.Enter dense undergrowth, bears N.20° E. and S.20° W.
18.25	Willow Creek bed,(dry) 25 lks.wide,6 ft.deep.,course N.20° E.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 12 lks.;position of middle point
	By 1st set,39.94 chs.
	By 2nd set,40.06 chs.;the mean of which is
40.00	Set a limestone,48x10x5 ins.,35 ins.in the ground , for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base.1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of old cor.after diligent search.
41.70	Willow Creek bed,(dry)30 lks.wide,8 ft.deep,course N.30° W.
74.50	Willow Creek bed,35 lks.wide,10 ft.deep,course N.30° E.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 18 lks.;position of middle point
	By 1st set,79.91 chs.
	By 2nd set,80.09 chs.;the mean of which is
80.00	Set a limestone,24x6x6 ins.,18 ins.in the ground,for cor.of secs.1,6,7,and 12,marked with 1 notch on N. and 5 notches on S.edges;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,mountainous level.
	Soil,gravelly and sandy loam;2nd and 3rd rate.

Chains	
	No timber.
	Undergrowth, sage brush and grease-wood.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	South, on a resurvey line bet. secs. 7 and 12.
	Over nearly level land; through dense undergrowth.
9.66	Old wagon road, bears N.30° E. and S.30° W.
16.00	Leave canyon bottom, bears N.20° E. and S.20° W.; ascend over broken ground.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen is 6 lks.; position of middle point
	By 1st set, 39.97 chs.
	By 2nd set, 40.03 chs.; the mean of which is
40.00	Set a limestone, 18x9x8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old cor.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 20 lks.; position of middle point
	By 1st set, 79.90 chs.
	By 2nd set, 80.10 chs.; the mean of which is
80.00	Set a limestone, 24x6x5 ins., 18 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, marked with 2 notches on N. and 4 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old cor.
	Land, mountainous and level.
	Soil, sandy loam; 2nd rate.
	No timber.
	Undergrowth, sage brush and grease wood.
	Good grass for grazing.

Resurvey of the Green River Guide Meridian

Between Ranges 20 and 21 East, Through Tp.12 South.-Continued

Chains	
	Mountainous land, or land covered with dense under-growth, 80.00 chs.
	South, on a resurvey line bet. secs. 13 and 18.
	Over mountainous land; ascend.
10.00	Top of ridge, 100 ft. above cor., bears E. and W.; descend.
34.00	Foot of descent, 300 ft. below ridge, bears N.W. and S.E.
	Enter bottom of Willow Creek Canyon. Enter dense under-growth, bears N.W. and S.E.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen is 4 lks.; position of middle point
	By 1st set, 39.98 chs.
	By 2nd set, 40.02 chs.; the mean of which is
40.00	Set a limestone, 18x10x5 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old ¼ sec. cor.
40.25	Old wagon road, bears N.20° W. and S.20° E.
60.25	Willow Creek bed (dry), 25 lks. wide, 4 ft. deep, course N.60° W.
79.25	Wash, 50 lks. wide, 4 ft. deep, from Agency Draw, course S.70° E.
	Difference bet. measurements on 80.00 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 79.95 chs.
	By 2nd set, 80.05 chs.; the mean of which is
80.00	Set a limestone, 18x10x6 ins., 12 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old cor.
	Land, mountainous and level.
	Soil, gravelly and sandy loam; 2nd and 3rd rate.

Chains	
	No timber.
	Undergrowth,sage brush and grease wood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	South,on a resurvey line bet.secs.19 and 24.
	Over level canyon bottom;through dense undergrowth.
11.00	Leave canyon,bears N.20° W.and S.20 °E.ascend gradually.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 14 lks.;position of middle point
	By 1st set,39.93 chs.
	By 2nd set,40.07 chs.;the mean of which is
40.00	Set a limestone,24x12x8 ins.,18 ins.im the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.Sulpher spring bears East 10.chs.dist.
	We find no trace of the old cor.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen is 10 lks.;position of middle point
	By 1st set,79.95 chs.
	By 2nd set,80.05 chs.;the mean of which is
80.00	Set a limestone,28x6x6 ins.,27 ins.in the ground, for cor.of secs.19,24,25,and 30,marked with 4 notches on N.and 2 notches on S.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of the old cor.after diligent search.
	Land,level and mountainous .
	Soil,sandy loam;3rd rate.
	No timber.
	Undergrowth,sage brush and grease wood.
	Good grass for grazing.
	Mountainous land,or land covered with dense under-

Resurvey of the Green River Guide Meridian

Between Ranges 20 and 21 East, Through Tp.12 South.-Continued.

Chains	
	growth, 80.00 chs.
	South, on a resurvey line bet.secs.25, and 30.
	Over mountainous land; through scattering undergrowth.
	Ascend.
32.00	Top of ascent, 300 ft.above cor.bears E.and W.; thence across mesa. Enter dense undergrowth.
	Difference bet.measurements of 40.00 chs., by two sets of chainmen, is 2 lks.; position of middle point
	By 1st set, 39.99 chs.
	By 2nd set, 40.01 chs.; the mean of which is
40.00	Set a limestone, 28x8x6 ins., 18 ins., in the ground, for ¼ sec.cor., marked ¼ on W.face; and raise a mound of stone, 2 ft.base, 1½ ft.high, W.of cor. Pits impracticable.
	We find no trace of the old cor.
41.00	Leave mesa, bears E.and W.; ascend.
	Difference bet.measurements of 80.00 chs.; by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 79.96 chs.
	By 2nd set, 80.04 chs.; the mean of which is
80.00	Set a limestone, 36x8x8 ins., 27 ins.in the ground, for cor.of secs.25, 30, 31, and 36, marked with 5 notches on N.and 1 notch on S.edges; and raise a mound of stone, 2 ft.base, 1½ ft.high, W.of cor. Pits impracticable.
	The old cor.of secs.25, 30, 31, and 36, which is a sandstone, 25x10x5 ins., above ground, firmly set, and marked and witnessed as described by the surveyor general, bears S.16° W.5.95 chs.dist. We destroy all traces of the old cor.
	Land, Mountainous and level.
	Soil, sandy and clay loam; 2nd rate.
	No timber.
	Undergrowth, sage brush and grease wood.
	Good grass for grazing.
	Mountainous land, or land covered with dense under-

Chains.	
	growth,80.00 chs.
	July 13,1901;At the noon hour the sky is overcast and solar observations are impossible.
	South,on a resurvey line bet.secs.31 and 36.
	Over mountainous land;through scattering undergrowth.
	Ascend.
18.50	Top of ridge,150 ft.above cor.,bears E.and W.;descend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 4 lks.;position of middle point
	By 1st set,39.98 chs.
	By 2nd set,40.02 chs.;the mean of which is
40.00	Set a limestone,40x8x5 ins.,30 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of the old cor.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 22 lks.;position of middle point
	By 1st set,79.89 chs.
	By 2nd set,80.11 chs.;the mean of which is
80.00	Set a limestone,36x8x5 ins.,27 ins.in the ground, for cor.of Tps.12 and 13 S.,Rs.20 and 21 E.,marked 12 S.on N.E.,21 E.on S.E.,13 S.on S.W.,and 20 E.on N.W.,faces;with 6 notches on each edge;and raise a mound of stone,2 ft.base,1½ ft.high,S.of cor.Pits impracticable.
	The old cor.of Tps.12 and 13 S.,Rs.20 and 21 E., which is a slate stone,25 x6x4 ins.,above ground, firmly set,and marked and witnessed as described by the surveyor general,bears S.20° W.7.25 chs.dist.We destroy all traces of the old cor.
	Land,mountainous.
	Soil,gravelly;3rd rate.
	No timber.

Resurvey of the Green River Guide Meridian
Thro h T .13 So h Between Ran es 20 and 21 East

Undergrowth,sage brush and grease wood.
Good grass for grazing.
Mountainous land,80.00 chs.

South,on a resurvey line bet.secs.1 and 6,through Tp.13 S.,bet.Ranges 20 and 21 East.
Over rolling mountain;through scattering undergrowth;descend gradually.
Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 12 lks.;position of middle point
By 1st set,39.94 chs.
By 2nd set,40.06 chs.;the mean of which is

40.00 Set a limestone,36x10x6 ins.,27 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;dig pits,18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
The old ¼ sec.cor.bears S.21°10'W.,6.10 chs.dist.
It is a sandstone ,8x8x6 ins.,above ground,firmly set,and marked and witnessed as described by the surveyor general.We destroy all traces of the old cor.

60.70 Bottom of hollow,150 ft.below ¼ sec.cor.,course N. W.;ascend.
Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 20 lks.;position of middle point
By 1st set,79.90 chs.
By 2nd set,80.10 chs.;the mean of which is

80.00 Set a limestone,40x10x5 ins.,30 ins.in the ground, for cor.of secs.1,6,7,and 12,marked with 1 notch on on N.and 5 notches on S.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
We find no trace of the old cor. after diligent search.
Land,mountainous.
Soil,sandy and gravelly loam;2nd

Chains	
	No timber.
	Undergrowth,dense sage brush and grease wood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	South,on a resurvey line bet.secs.7 and 12.
	Over mountainous land;through scattering timber;ascend.
35.00	Top of ridge,200 ft.above sec.cor.,bears N.W.and S.E.
	Descend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st set,39.95 chs.
	By 2nd set,40.05 chs.;the mean of which is
40.00	Set a limestone,40x10x6 ins.,30 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,8 ins.diam.,bears S.80° E.,40 lks. dist.,marked ¼ S.7,B.T.
	A cedar,6 ins.diam.,bears S.80° W.,30 lks. dist.,marked ¼ S.12 ,B.T.
	The old ¼ sec.cor.,which is a sandstone,8x10x5 ins., above ground,firmly set,and marked and witnessed as described by the surveyor general,bears S.25° W.,6.00 chs.dist.We destroy all traces of the old cor.
66.50	Bottom of hollow,200 ft.below ridge,course W.;ascend.
72.00	Top of ridge,75 ft.above hollow,bears E.and W.;descend.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 8 lks.;position of middle point
	By 1st set,79.96 chs.
	By 2nd set,80.04 chs.;the mean of which is
80.00	Set a limestone,30x10x8 ins.,24 ins.in the ground, for cor.of secs.7,12,13,and 18,marked with 2 notches on N.and 4 notches on S.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.

Chains	
	We find no trace of the old cor.
	Land,mountainous.
	Soil,gravelly loam;2nd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous land ,80.00 chs.
	South,on a resurvey line bet.secs.13 and 18.
	Over mountainous land;through scattering timber.Descend.
4.25	Bottom of hollow,100 ft.below sec.cor.,course W.; ascend.
10.00	Top of ridge,150 ft.above hollow,bears E.and W.;descend.
18.50	Bottom of hollow,150 ft.below ridge,course W.;ascend.
23.80	Top of ridge,100 ft.above hollow,bears E.and W.;descend.
30.80	Bottom of hollow,150 ft.below ridge,course W.;ascend.
	Difference bet.measurements of 40.00 chs.by two sets of chainmen ,is 4 lks.;position of middle point
	By 1st set,39.98 chs.
	By 2nd set,40.02 chs.;the mean of which is
40.00	Set a limestone,30x10x5 ins.,24 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,16 ins.diam.,bears S.70°E.,20 lks. dist.,marked ¼ S.18,B.T.
	A cedar,6 ins.diam.,bears N.80°W.,10 lks. dist.,marked ¼ S.13,B.T.
	We find no trace of the old cor.
45.50	Top of ascent,200 ft.above hollow,bears E.and W.; thence across mesa.
55.50	Edge of mesa,bears E.and W.;descend.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 14 lks.;position of middle point

Chains	
	By 1st set, 79.93 chs.
	By 2nd set. 80.07 chs.; the mean of which is
80.00	Set a limestone, 36x10x5 ins., 27 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, marked with 3 notches on N. and 3 notches on S. edges; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old cor. of secs. 13, 18, 19, and 24.
	Land, mountainous and level.
	Soil, sandy and gravelly loam; 2nd and 3rd rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	July 13, 1901.
	July 15, 1901: At 7 h 2 m a.m., l.m.t., we set off 39° 41' N., on the lat. arc; 21° 37' N., on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 13, 18, 19, and 24,
	thence we run.
	South, on a resurvey line bet. secs. 19 and 24.
	Over mountainous land; through dense undergrowth; descend.
5.65	Bottom of hollow, 50 ft. below sec. cor., course N. 20° W.
	Ascend.
32.00	Top of ridge, 100 ft. above hollow, bears E. and W.; descend.
35.75	Bottom of hollow, 150 ft. below ridge, course N. 20° E.; ascend.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 12 lks.; position of middle point
	By 1st set, 39.94 chs.

Chains	
	By 2nd set,40.06 chs.;the mean of which is
40.00	Set a limestone,20x10x5 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of the old ¼ sec.cor.
62.00	Top of ridge,100 ft.above ¼ sec.cor.,bears E.and W.; descend.
67.50	Bottom of hollow,100 ft.below ridge,course E.;ascend.
72.50	Top of ridge,100 ft.above hollow,bears N.E.and S.W.; descend.
79.00	Bottom of hollow,100 ft.below ridge,course E.;ascend.
	Difference bet.measurements of 80.00 chs.by two sets of chainmen is 18 lks.;position of middle point
	By 1st set,79.91 chs.
	By 2nd set,80.09 chs.;the mean of which is
80.00	Set a limestone,40x10x6 ins.,30 ins.in the ground, for cor.of secs.19,24,25,and 30,marked with 4 notches on N.and 2 notches on S.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of the old cor.
	Land,mountainous.
	Soil,gravelly loam;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	South,on a resurvey line bet.secs.25 and 30.
	Over mountainous land;through scattering timber and scattering undergrowth;ascend.
5.00	Top of spur,60 ft.above sec.cor.,bears E.and W.;des-

Resurvey of the Green River Guide Meridian

Through Tp.13 South, Between Ranges 20 and 21 East.-Continued.

Chains	
	cend.
18.00	Bottom of canyon, 100 ft. below ridge, course N.20° E.; ascend.
20.00	Trail, bears N.20° E. and S.20° W.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 39.96 chs.
	By 2nd set, 40.04 chs.; the mean of which is
40.00	Top of ridge, 150 ft. above canyon, bears E. and W.;
	Set a limestone, 24x8x5 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	We find no trace of the old cor.
61.00	Trail, bears N.20° W. and S.20° E.
63.54	Bottom of canyon, 100 ft. below ridge, course N.20° W.; ascend.
78.00	Enter heavy timber, bears N.W. and S.E.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 22 lks.; position of middle point
	By 1st set, 79.89 chs.
	By 2nd set, 80.11 chs.; the mean of which is
80.00	Set a limestone, 24x6x6 ins., 18 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, marked with 5 notches on N. and 1 notch on S. edges; from which
	A pinion pine, 8 ins. diam., bears N.30° E., 30 lks. dist., marked T.13 S., R.21 E., S.30, B.T.
	A pinion pine, 8 ins. diam., bears S.30° E., 5 lks. dist., marked T.13 S., R.21 E., S.31, B.T.
	A cedar, 14 ins. diam., bears S.28° W., 18 lks. dist., marked T.13 S., R.20 E., S.36, B.T.
	A pinion pine, 10 ins. diam., bears N.35° W., 40 lks. dist., marked T.13 S., R20 E., S.25, B.T.
	Land, mountainous.
	Soil, gravelly and clay loam; 2nd and 3rd rate.
	Timber, cedar and pinion pine.

Resurvey of the Green River Guide Meridian
Through Tp.13 South, Between Ranges 20 and 21 East.

Chains	
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous land, 80.00 chs.
	South, on a resurvey line bet. secs. 31 and 36.
	Over mountainous land; through scattering timber and scattering undergrowth; ascend.
9.00	Top of ridge, 150 ft. above sec. cor., bears N.E. and S.W.; descend.
17.60	Trail, bears N.20° E. and S.20° W.
24.25	Bottom of hollow, 200 ft. below ridge, course N.20° E.; ascend.
35.00	Top of ridge, 150 ft. above hollow, bears E. and W.; descend.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 4 lks.; position of middle point
	By 1st set, 39.98 chs.
	By 2nd set, 40.02 chs.; the mean of which is
40.00	Set a limestone, 36x8x8 ins., 27 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which
	A cedar, 8 ins. diam., bears E., 40 lks. dist., marked ¼ S.31, B.T.
	A cedar, 6 ins. diam., bears W., 26 lks. dist., Marked ¼ S.36, B.T.
42.80	Bottom of hollow, 160 ft. below ridge, course W.; ascend.
68.00	Top of ridge, 150 ft. above hollow, bears N.W. and S.E.; descend.
76.75	Bottom of hollow, 100 ft. below ridge, course W.; ascend.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 12 lks.; position of middle point
	By 1st set, 79.94 chs.
	By 2nd set, 80.06 chs.; the mean of which is
80.00	Set a limestone, 36x8x7 ins., 27 ins. in the ground, for cor. of Tps. 13, and 14 S., Rs. 20 and 21 East, marked 13 S. on N.E., 21 E. on S.E., 14 S. on S.W., and 20 E. on N.W. faces; with 6 notches on each edge; from which

Resurvey of the Green River Guide Meridian

Through Tp.13 South, Between Ranges 20 and 21 East.-Concluded.

Chains

A pinion pine, 6 ins.diam., bears N.20° E., 14 lks.dist., marked T.13 S., R.21 E., S.31, B.T.

A cedar, 7 ins.diam., bears S.30° E., 15 lks. dist., marked T.14 S., R.21 E., S.6, B.T.

A pinion pine, 8 ins.diam., bears S.40° W., 26 lks.dist., marked T.14 S., R.20 E., S.1, B.T.

A pinion pine, 8 ins.diam., bears N.34° W., 33 lks.dist., marked T.13 S., R.20 E., S.36, B.T.

Land, mountainous.

Soil, gravelly and clay; 3rd rate.

Timber, scattering cedar and pinion pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

South, on a resurvey line bet.secs.1 and 6; through Tp.14 S., bet.Rs.20 and 21 E.

Over mountainous land; through scattering timber and undergrowth; ascend.

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

34.20 Bottom of hollow, 125 ft.below ridge, course N.80° W.; ascend.

Difference bet.measurements of 40.00 chs., by two sets of chainmen is 14 lks.; position of middle point

By 1st set, 39.93 chs.

By 2nd set, 40.07 chs.; the mean of which is

40.00 Set a limestone, 24x7x7 ins., 18 ins.in the ground, for ¼ sec.cor., marked ¼ on W.face; from which

A cedar, 10 ins.diam., bears S.80° E., 24 lks. dist., marked ¼ S.6, B.T.

A pinion pine, 12 ins.diam., bears N.84° W., 26 lks.dist., marked ¼ S.1, B.T.

60.80 Cattle trail, bears N.80° E.and S.80° W.

69.00 Top of ridge, 250 ft.above hollow, bears E.and W.; descend.

Chains	
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen is 24 lks.;position of middle point
	By 1st set,79.88 chs.
	By 2nd set,80.12 chs.;the mean of which is
80.00	Set a limestone,18x8x5 ins.,12 ins.in the ground, for cor.of secs.1,6,7,and 12,marked with 1 notch on N.and 5 notches on S.edges;from which
	A pinion pine,24 ins.diam.,bears N.20° E.,70 lks.dist.,marked T.14 S.,R.21 E.,S.6,B.T.
	A pinion pine,8 ins.diam.,bears S.25° E.,23 lks.dist.,marked T.14 S.,R.21 E.,S.7,B.T.
	A pinion pine,8 ins.diam.,bears S.70° W.,35 lks.dist.,marked T.14 S.,R.20 E.,S.12,B.T.
	A pinion pine,8 ins.diam.,bears N.5° W.,20 lks.dist.,marked T.14 S.,R.20 E.,S.1,B.T.
	Land,mountainous
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	South,on a resurvey line bet.secs.7 and 12.
	Over mountainous land;through scattering timber and undergrowth;descend.
14.75	Bottom of hollow,200 ft.below cor.,course N.W.;ascend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 6 lks.;position of middle point
	By 1st set,39.97 chs.
	By 2nd set,40.03 chs.;the mean of which is
40.00	Set a sandstone,16x8x6 ins.,11 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,8 ins.diam.,bears S.25° E.,80 lks. dist.,marked ¼ S.7,B.T.
	A cedar,12 ins.diam.,bears S.6° W.,170 lks.

Chains dist.,marked ½ S.12,B.T.Do not find old cor.

55.00 Top of ascent,250 ft.above hollow,bears E.and W.; thence over mesa.Leave timber and enter dense undergrowth,bears E.and W.

Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 20 lks.;position of middle point

By 1st set,79.90 chs.

By 2nd set,80.10 chs.;the mean of which is

80.00 Set a limestone,36x8x8 ins.,27 ins.in the ground,for cor.of secs.7,12,13,and 18,marked with 2 notches on N.and 4 notches on S.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.

We find no trace of the old cor.

Land,mountainous and level.

Soil,gravelly and sandy;2nd and 3rd rate.

Timber,cedar and pinion pine.

Undergrowth,sage brush.

Good grass for grazing.

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

July 15,1901:At this cor.we set off 21° 34'N.,on the decl.arc;and at 0 h 3 m p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39° 36'N.

South,on a resurvey line bet.secs.13 and 18.

Over level mesa;through dense undergrowth.

18.50 Leave mesa,bears N.E.and S.W.Enter scattering timber bears N.E.and S.W.Descend.

29.50 Foot of descent,bears N.E.and S.W.;leave timber.

Thence over rolling mesa.

Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 8 lks.;position of middle point

By 1st set,39.96 chs.

By 2nd set,40.04 chs.;the mean of which is

Resurvey of the Green River Guide Meridian

Through Tp.14 South ,Between Ran es 20 and 21 East.-Continued

Chains	
40.00	Set a limestone,18x10x5 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	We find no trace of the old ¼ sec.cor.
76.00	Enter heavy cedar and pinion pine timber,bears E.and W.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 24 lks.;position of middle point
	By 1st sets,79.88 chs.
	By 2nd set,80.12 chs.;the mean of which is
80.00	Set a limestone,30x10x6 ins.,24 ins.in the ground,for cor.of secs.13,18,19,and 24,marked with 3 notches on N.and 3 notches on S.edges;from which
	A cedar,20 ins.diam.,bears N.60° E.,73 lks. dist.,marked T.14 S.,R.21 E.,S.18,B.T.
	A cedar,12 ins.diam.,bears S.30° E.,65 lks. dist.,marked T.14 S.,R.21 E.,S.19,B.T.
	A cedar,24 ins.diam.,bears S.40° W.,4 lks. dist.,marked T.14 S.,R.20 E.,S.24,B.T.
	A cedar,28 ins.diam.,bears N.30° W.,63 lks. dist.,marked T.14 S.,R.20 E.,S.13,B.T.
	Land,level and mountainous.
	Soil,sandy and gravelly loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth, 80.00 chs.
	We find no trace of the old cor.
	South,on a resurvey line bet.secs.19 and 24.
	Over level mesa;through heavy timber.
32.00	Edge of mesa,bears N.W.and S.E.;descend abruptly.

Chains	
34.25	Bottom of gulch ,150 ft.below mesa,course S.E. ;ascend abruptly.
	Difference bet.measurements of 40.00 chs.;by two sets of chainmen,is 2 lks.;position of middle point
	By 1st set,39.99 chs.
	By 2nd set,40.01 chs.;the mean of which is
40.00	Set a limestone,28x10x5 ins.,21 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,10 ins.diam.,bears S.5° E.,58 lks.dist.,marked ¼ S.19,B.T.
	A pinion pine,24 ins.diam.,bears N.80° W.,26 lks.dist.,marked ¼ S.24,B.T.
41.00	Top of ridge,150 ft.above gulch,bears E.and W.descend.
46.25	Bottom of hollow,150 ft.below ridge,course N.E. ;ascend.
54.50	Top of ascent,200 ft.above hollow,bears N.E.and S.W.; thence over mesa.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 6 lks.;position of middle point
	By 1st set,79.97 chs.
	By 2nd set,80.03 chs.;the mean of which is
80.00	Set a limestone,24x8x4 ins.,18 ins.in the ground,for cor.of secs.19,24,25,and 30,marked with 4 notches on N.and 2 notches on S.edges;from which
	A cedar,20 ins.diam.,bears N.80° E.,180 lks. dist.,marked T.14 S.,R.21 E.,S.19,B.T.
	A cedar,30 ins.diam.,bears S.15° E.,75 lks. dist.,marked T.14 S.,R.21 E.,S.30,B.T.
	A cedar,10 ins.diam.,bears S.10° W.,90 lks. dist.,marked T.14 S.,R.20 E.,S.25,B.T.
	A cedar,24 ins.diam.,bears N.30° W.,170 lks. dist.,marked T.14 S.,R.20 E.,S.24,B.T.
	We find no trace of the old cor.of secs.19,24,25,and 30.

Chains	
	Land,mountainous and level.
	Soil,clay loam and rocky;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	South,on a resurvey line bet.secs.25 and 30.
	Over rolling mesa;through heavy timber.
38.00	Edge of impassable gulch ,bears E.and W.
	Difference bet.measurements of 38.00 chs.,by two sets of chainmen,is 4 lks.;position of middle point
	By 1st set,37.98 chs.
	By 2nd set,38.02 chs.;the mean of which is
38.00	Set a limestone,50x8x8 ins.,36 ins.in the ground,for witness .cor.to ¼ sec.cor.,marked W.C.¼ on W. face;and raise a mound of stone,2 ft.base.1½ ft.high, W.of cor.Pits impracticable.
	The ¼ sec.cor.was not set in the original survey.
	To determine the distance across the gulch,we set a flag on line on the South side of the Gulch;then measure a base,East 6.00 chs.to a point,whence the flag bears S.21° 49.'W.from which we compute the distance as follows;
	Log. 6.00 = 0.778151
	Log.Cot. 21° 49.'= 0.397605 = 14.99 chs.
	1.175756
	38.00+14.99 makes
52.99	To south side of gulch,bears E.and W.;thence over rolling mesa.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 10 lks.,;position of middle point
	By 1st set,79.95 chs.
	By 2nd set,80.05 chs.;the mean of which is
80.00	Set a limestone,18x10x6 ins.,12 ins.in the ground, for cor.of secs.25,30,31,and 36,marked with 5 notches

Chains on N.and 1 notch on S.edges;from which

A pinion pine,18 ins.diam.,bears N.40° E.,70 lks.dist.,marked T.14 S.,R.21 E.,S.30,B.T.

A cedar,14 ins.diam.,bears S.30° E.,73 lks. dist.,marked T.14 S.,R.21 E.,S.31,B.T.

A cedar,18 ins.diam.,bears S.52° W.,56 lks. dist.,marked T.14 S.,R.20 E.,S.36,B.T.

A pinion pine,24 ins.diam.,bears N.38° W.,24 lks.dist.,marked T.14 S.,R.20 E.,S.25,B.T.

This cor.was not set in the original survey.

Land,mountainous and level.

Soil;sandy loam and rocky;2nd and 4th rate.

Timber,cedar and pinion pine.

Good grass for grazing.

Mountainous or heavily timbered land,80.00 chs.

South,on a resurvey line bet.secs.31 and 36.

Over rolling mesa;through heavy timber.

6.80 Edges of mesa,bears N.E.and S.W.;descend abruptly.

26.25 Bottom of canyon, 500 ft. below sec.cor.,course N.E. ascend abruptly.

Difference bet.measurements of 40.00 chs ,by two sets of chainmen,is 8 lks.;position of middle point

By 1st set,39.96 chs.

By 2nd set,40.04 chs.;the mean of which is

40.00 Set a limestone,18x10x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which

A pine,10 ins.diam.,bears N.30° E.,55 lks. dist.,marked ¼ S.31,B.T.

A cedar,14 ins.diam.,bears W.,5 lks.dist., marked ¼ S.36,B.T.

This cor.was not set in the original survey.

45.00 Top of ascent,250 ft.above canyon,bears N.E.and S.W.

Thence over rolling mesa.Leave heavy timber and enter dense undergrowth,bears N.E.and S.W.

Resurvey of the Green River Guide Meridian

Through T.14 South, Between Ranges 20 and 21 East, -Continued.

Chains	
	Difference bet. measurements of 80.00 chs. by two sets of chainmen, is 14 lks.; position of middle point
	By 1st set, 79.93 chs.
	By 2nd set, 80.07 chs.; the mean of which is
80.00	Set a limestone, 18x12x5 ins., 12 ins. in the ground, for cor. of Tps. 14 and 15 S., Rs. 20 and 21 E., marked 14 S. on N.E., 21 E. on S.E., 15 S. on S.W., and 20 E. on N.W. faces; with 6 notches on each edge; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable.
	We search diligently but find no trace of the old cor. of Tps. 14 and 15 S., Rs. 20 and 21 E.
	Land, mountainous and rolling mesa.
	Soil, clay loam and rocky; 2nd and 4th rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	July 15, 1901: At the cor. of Tps. 14 and 15 S., Rs. 20 and 21 E. latitude 39° 33' N., longitude 109° 39' W., we set off 39° 33' N., on the lat. arc; 21° 33' N., On the decl. arc; and at 5 h 4 m p.m., l.m.t., determine a true meridian with the solar, and mark a point thereof on a stone, firmly set in the ground, 5.60 chs. N. of the cor.
	At 11 h 53 m p.m., l.m.t., we observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a wooden plug driven in the ground, 5.00 chs. N. of our station.
	July 15, 1901.
	July 16, 1901: At 6 h 30 m a.m., l.m.t., we lay off the azimuth of Polaris 1° 35' to the west, and mark the true meridian thus determined by a cross on the stone

Survey of the Green River Guide Meridian,

Through Tp.15 South Between Ranges 20 and 21 East

Chains already set 5.00 chs.N.of our station;on which the the true meridian falls 0.35 ins.east of the true meridian determined with the solar.

At 7 h 2 m a.m.,l.m.t.,we set off 39° 33'N.,on the lat.arc;21° 27'N.,on the decl.arc;and mark a point in the true meridian determined with the solar,by cutting a small groove in the stone,already set,5.00 chs.N.of our station;on which the true meridian falls 0.25 ins.east of the true meridian established by Polaris observation.

The solar apparatus by p.m.and a.m.observations,defines positions for true meridians,respectivelly about 0'18"west and 0'13"east of the true meridian established by Polaris observation;therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian at 7 30 a.m.is 15° 53.6'W.,the angle thus determined,reduced by the table ,page100 of the Manual,gives the mean mag.decl.15° 48'E.

From the Tp.cor.already described we run South,bet.secs.1 and 6.

Over rolling mesa;through scattering timber and dense undergrowth.

Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 6 lks.;position of middle point

By 1st set,39.97 chs.

By 2nd set,40.03 chs.;the mean of which is

40.00 Set a limestone,30x10x5 ins.,24 ins.in the ground, for ¼ sec.cor.marked ¼ on W.face;from which

A pinion pine,24 ins.diam.,bears N.80° E.,180 lks.dist.,marked ¼ S.6,B.T.

No other trees within limits,raise a mound of stone, 2 ft.base,1½ft.high,W.of cor.Pits impracticable.

Chains	
50.00	Edge of mesa,bears E.and W.Descend abruptly over ledges.
52.60	Bottom of hollow,200 ft.below mesa,course E.;ascend.
65.00	Top of ascent ,100 ft.above hollow,bears E.and W.; thence over mesa.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 14 lks.;position of middle point
	By 1st set,79.93 chs.
	By 2nd set,80.07 chs.;the mean of which is
80.00	Set a sandstone,36x8x8 ins.,27 ins.in the ground,for cor.of secs.1,6,7,and 12,marked with 1 notch on N. and 5 notches on S.edges;from which
	A pinion pine,30 ins.diam.,bears N.87°E.,100 lks.dist.,marked T.15 S.,R.21 E.,S.6,B.T.
	A cedar,10 ins.diam.,bears S.60°E.,81 lks. dist.,marked T.15 S.,R.21 E.,S.7,B.T.
	A cedar,15 ins.diam.,bears S.15°W.,250 lks. dist.,marked T.15 S.,R.20 E.,S.12,B.T.
	A cedar,10 ins.diam.,bears N.48°W.,53 lks. dist.,marked T.15 S.,R.20 E.,S.1,B.T.
	Land,rolling mesa and mountainous.
	Soil,clay loam and rocky;2nd and 4th rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.

	South,bet.secs.7 and 12.
	Over rolling mesa;through heavy timber.
31.00	Edge of mesa,bears E.and W.;descend.
35.25	Bottom of ravine,200 ft.below mesa,course E.;ascend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 2 lks.;position of middle point

Chains	By 1st set,39.99 chs.
	By 2nd set,40.01 chs.;the mean of which is
40.00	Set a sandstone,18x10x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,6 ins.diam.,bears N.16°E.,24 lks.dist.,marked ¼ S.7,B.T.
	A pinion pine,9 ins.diam.,bears S.10°W.,15 lks.dist.,marked ¼ S.12,B. T.
45.00	Top of ascent,150 ft. above ravine,bears N.W.and S.E.
	Thence over mesa.
54.00	Leave timber ,and enter dense undergrowth,bears E.and W.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 8 lks.;position of middle point
	By 1st set,79.96 chs.
	By 2nd set,80.04 chs.;the mean of which is
80.00	Set a limestone,24x12x4 ins.,18 ins.in the ground,for cor.of secs.7,12,13,and 18,marked with 2 notches on N.and 4 notches on S.edges;dig pits.18x18x12 ins., in each sec.,5½ ft.dist.,and raise a mound of earth, 4 ft.base,2 ft.high,W.of cor.
	Land,mountainous and rolling mesa.
	Soil,clay and sandy loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	South,bet.secs.13 and 18.
	Over rolling mesa;through dense undergrowth.
12.00	Leave undergrowth and enter heavy timber,bears E.and W.
24.00	Edge of mesa,bears N.E.and S.W.;descend abruptly.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 8 lks.;position of middle point

Survey of the Green River Guide Meridian
Through Tp.15 South,Between Ranges 20 and 21 East.-Continued.

Chains	
	By 1st set,39.96 chs.
	By 2nd set,40.04 chs.;the mean of which is
40.00	Set a sandstone,20x10x4 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,10 ins.diam.,bears N.70°E.,40 lks.dist.,marked ¼ S.18,B.T.
	A pinion pine,6 ins.diam.,bears S.35°W.,60 lks.dist.,marked ¼ S.13,B.T.
56.80	Bottom of canyon, 800 ft below mesa,course E.;ascend abruptly.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 18 lks.;position of middle point
	By 1st set,79.91 chs.
	By 2nd set,80.09 chs.;the mean of which is
80.00	Set a sandstone,18x10x6 ins.,12 ins.in the ground, for cor.of secs.13,18,19,and 24,marked with 3 notches on N.and 3 notches on S.edges;from which
	A pinion pine,6 ins.diam.,bears N.10°E.,50 lks.dist.,marked T.15 S.,R.21 E.,S.18,B.T.
	A pinion pine,14 ins.diam.,bears S.45°E.,30 lks.dist.,marked T.15 S.,R.21 E.,S.19,B.T.
	A pinion pine,6 ins.diam.,bears S.20°W.,50 lks.dist.,marked T.15 S.,R.20 E.,S.24,B.T.
	A pinion pine,10 ins.diam.,bears N.50°W.,60 lks.dist.,marked T.15 S.,R.20 E.,S.13,B.T.
	Land,mountainous and level.
	Soil,sandy and gravelly loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	July 16.1901:At the noon hour the sky is overcast and solar observations are impossible.

Survey of the Green River Guide Meridian

Through Tp.15 South,Between Ranges 20 and 21 East-Continued.

Chains South,bet.secs.19 and 24.

Over mountainous land;through heavy timber;ascend abruptly.

10.00 Top of ascent,330 ft.above sec.cor.,bears N.W.and S.E.

Thence across mesa.

24.00 Edge of mesa,bears W.and E.Edge of canyon which it would be impossible to chain across.

Difference bet.measurements of 24.00 chs.,by two sets of chainmen,is 4 lks.;position of middle point

By 1st set,23.98 chs.

By 2nd set,24.02 chs.;the mean of which is

24.00 Set a limestone,40x6x5 ins.,30 ins.in the ground,for witness cor.to ¼ sec.cor.,marked W.C.¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

It is impossible to get a base for triangulation on this side of the canyon on account of the broken nature of the ground,therefore we erect a flag at this cor.and on the South side of the canyon we erect a flag on line;then,from the flag on the south side of the canyon we measure a base line,West 32.32 chs. to a point whence the flag on north side of canyon bears N.20°44'E.We compute the distance as follows:

Log.32.32 =1.509471

Log.Cot.20°44' = .421896

1.931367

=85.38 chs.

24.00 chs + 85.38 chs.makes 109.38 chs.

Therefore we chain north 29.38 chs.to point for cor. of secs.19,24,25,and 30.

Difference bet.measurements of 29.38 chs.,by two sets of chainmen,is 6 lks.;position of middle point

By 1st set,29.35 chs.

By 2nd set,29.41 chs.;the mean of which is

29.38 chs.or 80.00 chs from the cor.of secs.13,18,19, and 24.

80.00 Set a sandstone,24x12x4 ins.,18 ins.in the ground,

Chains	
	for cor.of secs.19,24,25,and 30,marked with 4 notches on N.and 2 notches on S.edges;from which
	A cedar,10 ins.diam.,bears N.80° E.,35 lks.dist. marked T.15 S.,R.21 E.,S.19,B.T.
	A cedar,20 ins.diam.,bears S.50° E.,64 lks. dist.,marked T.15 S.,R.21 E.,S.30,B.T.
	A cedar,16 ins.diam.,bears S.70° W.,16 lks. dist.,marked T.15 S.,R.20 E.,S.25,B.T.
	A pine,8 ins.diam.,bears N.30° W.,60 lks. dist.,marked T.15 S.,R.20 E.,S.24,B.T.
	This cor.is on south edge of canyon,bears E.and W.
	Land,mountainous and level.
	Soil,sandy and rocky;2nd and 4th rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	South,bet.secs.25 and 30.
	Over rolling mesa;through heavy timber.
6.00	Leave cedar and pinion pine timber and enter dense undergrowth,bears E.and W.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st set,39.95 chs.
	By 2nd set,40.05 chs.;the mean of which is
40.00	Set a limestone,24x10x6 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor .Pits impracticable.
50.50	Leave dense undergrowth and enter heavy timber,bears E.and W.
	Difference bet.measurements of 76.50 chs.,by two sets of chainmen,is 12 lks.;position of middle point
	By 1st set,76.44 chs.
	By 2nd set,76.56 chs.;the mean of which is

Chains	
76.50	Edge of impassable ravine bears N.80° E. and S.80° W. The point for cor. of secs.25,30,31, and 36, will fall in ravine therefore we Set a sandstone, 24x14x8 ins., 18 ins. in the ground, for witness cor. to cor. of secs.25,30,31, and 36, marked W.C. on S., with 5 grooves on N. and 1 groove on S. faces; from which A pinion pine, 15 ins. diam., bears N.40° E., 46 lks. dist., marked W.C. T.15 S., R.21 E., S.30, B.T. A pinion pine, 20 ins. diam., bears N.60° W., 54 lks. dist., marked W.C. T.15 S., R.20 E., S.25, B.T. and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
80.00	Corner of secs.25,30,31, and 36, falls in revine, not set. Land, rolling mesa. and mountainous.
	Soil, sandy loam; 2nd rate.
	Timber, cedar and pinion pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	From the witness cor. of secs.25,30,31, and 36, to determine the distance across the ravine we place a flag on the south side of the ravine on line, then we measure a base line west 5.00 chs. to a point, whence the flag on the south side of the ravine bears S.18° 38' E., we compute the distance as follows:
	= Log 5.00 = 0.698970 Log cot. 18° 38' = 0.472132 1.171102 = 14.83 chs.
	14.83 - 3.50 makes
11.33	South edge of ravine, bears E. and W. Set a sandstone, 30x10x10 ins., 24 ins. in the ground, for witness point to cor. of secs.25,30,31, and 36, marked W.P. on N.; with 5 notches on N. and 1 notch on S. edges;

Survey of the Green River Guide Meridian

Throu h T .15 South, Between Ranges 20 and 21 East.-Contin

Chains	
	from which
	A pine, 8 ins.diam., bears S.20° E., 13 lks.dist., marked W.P. T.15 S., R.21 E., S.31, B.T.
	A pinion pine, 24 ins.diam., bears N.70° W., 85 lks.dist., marked W.P. T.15 S., R.20 E., S.36, B.T.
	Thence continue South bet.secs.31 and 36. Over a series of ledges ; through scattering timber; descend abruptly.
34.00	Enter bottom of Willow Creek Canyon, 1000 ft.below W.C. cor. bears N.E. and S.W.
37.00	Leave canyon bottom and begin ascent, bears N.W. and S.E.
	Difference bet.measurements of 40.00 chs., by two sets of chainmen, is 14 lks.; position of middle point
	By 1st set, 39.94 chs.
	By 2nd set, 40.06 chs.; the mean of which is
40.00	Set a sandstone, 18x12x4 ins., 12 ins.in the ground, for ¼ sec.cor., marked ¼ on W.face; and raise a mound of stone, 2 ft.base, 1½ ft.high, W.of cor. Pits impracticable.
43.00	Top of spur, 25 ft.above canyon bottom, bears E. and W.; descend.
49.09	Enter bottom of Willow Creek Canyon, 50 ft.below spur, bears N.E. and S.W.
77.00	Leave canyon bottom, bears N.W. and S.E.; ascend.
	Difference bet.measurements of 80.00 chs., by two sets of chainmen, is 18 lks.; position of middle point-
	By 1st set, 79.91 chs.
	By 2nd set, 80.09 chs.; the mean of which is
80.00	Set a sandstone, 30x10x6 ins., 24 ins.in the ground, for Standard cor.of Tps.15 S., Rs.20 and 21 E., marked S.C.20 S., on N., 21 E.on E., 20 E.on W.faces; with 6 grooves on N.E. and W.faces; from which
	A pine, 10 ins.in diam., bears N.50° E., 130 lks. dist., marked T.15 S., R.21 E., S.31, ., B.T.
	No other trees within limits; and raise a mound of stone, 2 ft.base, 1½ ft.high, N.of cor. Pits impracticable.

Survey of the Green River Guide Meridian

Through Tp.15 South, Between Ranges 20 and 21 East.-Concluded

Chains Land, mountainous.

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, cedar and pine.

Good grass for grazing.

Mountainous land, 80.00 chs.

July 16, 1901.

GENERAL DESCRIPTION.

Townships 11, 12, 13, 14, and 15 S., Rs. 20 and 21 East are generally rolling mesas, producing good grass for fall and winter grazing.

Scott P. Stewart,
John R. Stewart
U.S. Deputy Surveyors.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Scott P. Stewart and John R. Stewart, United States Deputy Surveyors, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Green River Guide Meridian through Tp. 15 S., bet. Rs. 20 and 21 E.; and the resurvey of the Green River Guide Meridian through Tps. 11, 12, 13, and 14 S., bet. Rs. 20 and 21 E. showing the respective capacities in which they acted:

Andy J. Stewart, Edwin A. Peay, Chainman.
Vosco Call, Hugh Conover, Chainman.
Clarence S. Jarvis, Moundman.
John J. Harding, Moundman.
George W. Ekins, Axman.
Harry Burton, Axman.
Harvey R. Booth, Flagman.
Gilbert Burr, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Scott P. Stewart and John R. Stewart, United States Deputy Surveyors, in surveying all those parts or portions of the Green River Guide Meridian through Tp. 15 S., bet. Rs. 20 and 21 E.; and the resurvey of the Green River Guide Meridian through Tps. 11, 12, 13, and 14 S., bet. Rs. 20 and 21 East. of the Salt Lake Base and 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.

Andy J. Stewart, Edwin A. Peay, Chainman.
Vosco Call, Hugh B. Conover, Chainman.
Clarence S. Jarvis, Moundman.
John J. Harding, Moundman.
George W. Ekins, Axman.
Harry Burton, Axman.
Harvey R. Booth, Flagman.
Gilbert Burr, Flagman.

Subscribed and sworn to before me this 20th day of November 1901, ~~189~~.

SEAL

Andrew J. Stewart Jr.
Notary Public.

My commission expires March 17, 1903.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Scott P. Stewart and John R. Stewart, United States Deputy Surveyors, solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of the 12th day of April 1901, ~~189~~, we have well, faithfully, and truly, in our ~~my~~ own proper persons and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Green River Guide Meridian through T. 15 S. bet. Rs. 20 and 21 E., and the Resurvey of the Green River Guide Meridian, through Townships 11, 12, 13 and 14 South, bet. Rs. 20 and 21 East of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Scott P. Stewart
John R. Stewart
United States Deputy Surveyors

Subscribed by said Scott P. Stewart & John R. Stewart, and sworn to before me this 23d day of May, 1902

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 5th 1903, 189

The foregoing field notes of the survey of the Green River Guide Meridian through T. 15 S. between Rs. 20 & 21 E. and the Resurvey of the Green River Guide Meridian through Ts. 11, 12, 13 & 14 S. between Rs. 20 & 21 E. of the Salt Lake Base & Meridian, Utah executed by Scott P. Stewart & John R. Stewart under his contract No. 242, dated April 12, 1901, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

United States Surveyor General.

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BOOK A-288

FIELD NOTES

R.3.B.

OF THE SURVEY OF THE

THIRD STANDARD PARALLEL SOUTH,

through

Ranges Nos. 20,19,and 18 East

of the [illegible] *Meridian.*

[illegible]

AS SURVEYED BY

[illegible] *United States Deputy Surveyors.*

Under ~~*his*~~ their *Contract No.* [illegible] *dated* April [illegible] *[illegible]*

Survey commenced July [illegible] *[illegible]*

Survey completed July [illegible] *[illegible]*

NAMES AND DUTIES OF ASSISTANTS.

Andy J. Stewart, Chainman.

Edwin H. Peay, Chainman.

Vosco Cull, Chainman.

Hugh Conover, Chainman.

Clarence A. Jarvis, Moundman.

John J. Harding, Moundman.

George W. Elkins, Axman.

Henry Burton, Axman.

Harvey R. Booth, Flagman.

Gilbert Burr, Flagman.

BOOK A-288

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Andy J. Stewart Edwin A. Peary and Vosco Call Hugh Conover do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the Third Standard Parallel South, through Ranges 18, 19, and 20 East; and the remeasurement and resurvey of the Second Standard Parallel South, through Ranges 19 and 20 East. of the Salt Lake Base and Meridian Utah.

Andy J. Stewart, Chainman.

Edwin A. Peary, Chainman.

Vosco Call Chainman.

Hugh Conover Chainman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr. Notary Public.

SEAL

My commission expires March 17, 1903.

WE, Clarence S. Jarvis and John J. Harding do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the Third Standard Parallel South, through Ranges 18, 19, and 20 East; and the remeasurement and resurvey of the Second Standard Parallel South, through Ranges 19 and 20 East.

Clarence S. Jarvis, Moundman.

John J. Harding, Moundman.

Subscribed and sworn to before me this 28th day of May 1902, ~~189~~

Andrew J. Stewart Jr. Notary Public.

SEAL

WE, George W. Elkins and Harry Burton 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 the Third Standard Parallel South, through Ranges 18, 19, and 20 East; and the remeasurement and resurvey of the Second Standard Parallel South, through Ranges 19 and 20 East.

George W. Elkins, Axman.

Harry Burton, Axman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr. Notary Public.

SEAL

We Harvey R. Booth and Gilbert Burr, do solemnly swear that we will well and truly perform the duties of flagmen according to instructions given us, to the best of our skill and ability, in the survey of the Third Standard Parallel South, through Ranges 18, 19, and 20 East; and the remeasurement and resurvey of the Second Standard Parallel South, through Ranges 19 and 20 East.

Harvey R. Booth, Flagman.

Gilbert Burr Flagman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr. Notary Public.

SEAL

6-11

THIRD STANDARD PARALLEL SOUTH, THROUGH RANGE 20 EAST.

Chains Survey commenced July 18, 1901, and executed with a W. and L.E. Gurley light mountain transit, No.3, 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 latitude and declination arcs; and a W. and L.E. Gurley light mountain transit No.2. The horizontal limb is provided with one double vernier reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, found correct, and were approved by the surveyor general for Utah, the former on June 6, 1901, and the latter on May 29, 1901.

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

July 18, 1901: At the Standard cor. of Tps. 15 S., Rs. 20 and 21 E., heretofore described, latidude 39° 28' N., longitude 109° 39' W., we set off 39° 28' N., on the lat. arc; 21° 03' N. on the decl. arc; and at 4 h 0 m, p.m., l. m.t., determine with the solar, a true meridian, and mark a point thereof on a stone, firmly set in the ground, 5.00 chs. N. of the cor.

At 11 h 41 m p.m., l.m.t., we observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined on a plug driven in the ground, 5.00 chs. N. of our station.

July 18, 1901.

July 19, 1901: At 6 h 30 m, a.m., l.m.t., we lay off the azimuth of Polaris 1° 36.5' to the west, and mark the

THIRD STANDARD PARALLEL SOUTH, THROUGH RANGE 20 EAST.

True Meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N.of our station;on which the true meridian falls 0.30 ins. east of the mark determined by the solar.

At 7 h 0 m ,a.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc;20° 57'N.,on the decl.arc;and mark a point in the true meridian determined,by a cross on the stone already set 5.00 chs.N.of our station.;this mark falls 0.22 ins.east of the true meridian determined by observation on Polaris.

The solar apparatus by p.m.and a.m.observations,defines positions for true meridians respectively about 0'16""west and 0'12"east of the true meridian established by Polaris observation;therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian at 7 h 30 m,a.m.,is 15° 50.6'W.,which reduced by the table page 100 of the Manual,gives the mean mag.decl.16° 45'E.

From the Standard Cor.already described,we run West,on S.bdy.sec.35.

Over mountainous land,through scattering timber; ascend.

4.00 Enter heavy cedar timber,bears N.and S.

[illegible].00 Top of ascent,bears N.and S.;thence across mesa.

Difference bet.measurements of 40.00 chs.,by two set of chainmen,is [illegible] lks.;position of middle point

By 1st set,[illegible].34 chs.

By 2nd set,[illegible].00 chs.;the mean of which is

[illegible] Set a sandstone,[illegible] ins.,[illegible] ins.in the ground,for standard [illegible] sec.cor.,marked [illegible] on N.face;from which

A pinion pine,8 ins.diam.,bears N.[illegible]E.,[illegible] ins.dist., marked [illegible]

THIRD STANDARD PARALLEL SOUTH, THROUGH RANGE 20 EAST.

Chains	
	A pinion pine, 16 ins. in diam., bears N.40° W., 10 lks. dist., marked S.C.¼ S.36 B.T.
46.00	Leave mesa, bears N. and S.; ascend.
70.00	Top of ascent, bears N. and S.; thence across mesa.
	Difference bet. measurements of 80.00 chs., by two set of chainmen, is 16 lks.; position of middle point
	By 1st set 79.92 chs.
	By 2nd set 80.08 chs.; the mean of which is
80.00	Set a sandstone, 30x12x6 ins., 24 ins. in the ground, for standard cor. of secs. 35 and 36, marked S.C. on N., with 1 groove on E. and 5 grooves on W. faces; from which
	A cedar, 12 ins. diam., bears N.30° E., 40 lks. dist., marked T.15 S., R.20E., S.36, B.T.
	A cedar, 15 ins. diam., bears N.50° W. 30 lks. dist., marked T.15 S., R.20 E., S.35, B.T.
	Land, mountainous and nearly level.
	Soil, Clay and sandy loam; 2nd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80,00 chs.
	West, on S. bdy. sec. 35.
	Over rolling mesa; through heavy pinion pine and cedar timber.
35.00	Edge of mesa, bears N. and S.; descend into hollow.
	Difference bet. measurements of 40,00 chs., by two sets of chainmen, is 8 lks.; position of middle point
	By 1st set, 39.96 chs.
	By 2nd set, 40.04 chs.; the mean of which is
40.00	Set a sandstone, 30x10x6 ins., 24 ins in the ground, for standard ¼ sec. cor., marked S.C.¼ on N. face; from which
	A pinion pine, 6 ins. diam., bears N.40° W., 25 lks. dist., marked S.C.¼ S.35, B.T.
	A cedar, 12 ins. diam., bears S.53 lks. dist.,

Chains	
	marked S.C.¼ S.2,B.T.
43.85	Old cattle trail, bears N.20° E. and S.20° W.
46.15	Bottom of small hollow, 200 ft. below mesa, course N.20° E.; ascend.
55.00	Top of ascent, 150 ft. above hollow bears N.20° E. and S. 20° W.; thence across mesa.
	Difference bet. measurements of 80.00 chs. by two sets of chainmen, is 18 lks.; position of middle point
	By 1st set, 79.91 chs.
	By 2nd set, 80.09 chs.; the mean of which is
80.00	Set a sandstone, 24x8x6 ins., 18 ins. in the ground, for standard cor. of secs. 34 and 35, marked S.C. on N., with 2 grooves on E. and 4 grooves on W. faces; from which
	A cedar, 20 ins. diam., bears N.26° E., 55 lks.
=	dist., marked T.15 S., R.20 E., , S.35, B.T.
	A cedar, 30 ins. diam. bears N.70° W., 150 lks.,
	dist., marked , T.15 S., R.20E., S.34, B.T.
	Land, rolling and mountainous.
	Soil, sandy and clay loam; 2nd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	At this cor. I erect a signal for a test sight from some point to the west.

	West, on S. bdy. sec. 34.
	Over rolling mesa; through heavy timber.
27.00	Edge of mesa, bears N.20° E. and S.20° W.; descend into canyon.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 6 lks.; position of middle point
	By 1st set, 39.97 chs.
	By 2nd set, 40.03 chs.; the mean of which is
40.00	Set a sandstone, 30x12x5 ins., 24 ins. in the ground, for standard ¼ sec. cor., marked S.C.¼ on N. face; from which

Chains	
	A red pine, 18 ins. diam., bears N. 20° W., 90 lks. dist. marked S.C. ¼ S. 34, B.T.
	A red pine, 6 ins. diam., bears S. 4° E., 53 lks. dist., marked S.C. ¼ S. 3[illegible], B.T.
45.25	Bottom of canyon, 600 ft. below mesa, course N.; ascend.
58.00	Top of ridge, 550 ft. above canyon, bears N. 20° E. and S. 20° W.; descend.
70.15	Bottom of hollow, 150 ft. below ridge, course N.; ascend.
75.50	Top of ridge, 150 ft. above hollow, bears N. and S.; descend.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 20 lks.; position of middle point
	By 1st set, 79.90 chs.
	By 2 nd set, 80.10 chs.; the mean of which is
80.00	Set a sandstone, 30x12x5 ins., 24 ins. in the ground, for standard cor. of secs. 33 and 34, marked S.C., on N., with 3 grooves on E. and 3 grooves on W. faces; from which
	A cedar, 8 ins. diam. bears N. 40° E., 60 lks. dist. marked [illegible] .T. 15 S., R. 20 E., S. 34, B.T.
	A cedar, 8 ins. diam., bears N. 60° W., 42 lks. dist., marked [illegible] ., T. 15 S., R. 20 E., S. 33, B.T.
	Land, rolling and mountainous.
	Soil, clay and gravelly loam; 2nd rate.
	Timber, pinoin pine and cedar.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	July 19, 1901: At the noon hour the sky is overcast and solar observations are impossible.
	We are unable to see the signal erected at the standard cor. of secs. 34 and 35.

	West, on S. bdy. sec. 33.
	Over mountainous land, through heavy cedar timber; descend.
.75	Bottom of hollow, 50 ft. below cor., course N. 20° E.;

Chains ascend.

10.00 Top of ridge,200 ft.above hollow,bears N.and S.;descend.

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

By 1st set,39.98 chs.

By 2nd set,40.02 chs.;the mean of which is

40.00 Set a sandstone,30x10x10 ins.,24 ins.in the ground, for standard ¼ sec. cor.,marked S.C.¼ on N.face; from which

A pinion pine,3 ft.diam.bears N.40° W.,28 lks. dist.,marked S.C.¼ S.33,B.T.

A pinion pine,40 ins.diam.,bears S.50° E.22 lks.dist.,marked S.C.¼ S.4,B.T.

47.30 Bottom of Dry Canyon,600 ft.below ridge,course N.20° E.;ascend.

62.50 Top of ascent,600 ft.above canyon,bears N.20° E.and S.20° W.;thence across mesa.

Difference bet.meaasurements of 80.00 chs.by two sets of chainmen,is 16 lks.;position of middle point

By 1st set,79.92 chs.

By 2nd set,80.08 chs.;the mean of which is

80.00 Set a sandstone,24x14x4 ins.,18 ins.in the ground, for Standard cor.of secs.32 and 33,marked S.C.on N., with 4 grooves on E.and 2 grooves on W.faces;from which

A pinion pine,12 ins.diam.,bears N.62° E.74 lks.dist.,marked .,T.15 S.,R.20 E.,S.33,B.T.

A cedar,12 ins.diam.bears N.52° W.,120 lks. dist.,marked .T.15 S.,R.20 E.,S.32,B.T.

Land,mountainous.

Soil,clay and gravelly loam;2nd rate.

Timber,cedar and pinion pine.

Good grass for grazing.

Mountainous or heavily timbered land,80.00 chs.

THIRD STANDARD PARALLEL SOUTH, THROUGH RANGE 20 EAST.

Chains	
	West, on S.bdy.sec.32.
	Over rolling mesa; through heavy timber; ascend gently.
18.00,	Old indian trail, bears N. and S.
20.00	Begin ascent of ridge, bears N. and S.
34.00	Divide ridge, 50 ft. above mesa, bears N. and S.; descend.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 12 lks.; position of middle point
	By 1st set, 39.94 chs.
	By 2nd set, 40.06 chs.; the mean of which is
40.00	Set a limestone, 20x15x3 ins., 15 ins. in the ground, for standard ¼ sec. cor., marked S.C.¼ on N. face; from which
	A pinion pine, 16 ins. diam. bears N. 20° E. 30 lks. dist., marked S.C.¼ S.32, B.T.
	A pinion pine, 8 ins. diam. bears S. 10° E., 26 lks. dist., marked S.C.¼ S.5, B.T.
77.25	Bottom of Road Canyon, 800 ft. below ridge, course N.
	Ascend.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 20 lks.; position of middle point.
	By 1st set, 79.90 chs.
	By 2nd set, 80.10 chs.; the mean of which is
80.00	Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for standard cor. of secs. 31 and 32, marked S.C. on N. face; with 5 grooves on E. and 1 groove of W. faces; from which
	A pinion pine, 6 ins. diam. bears N. 15° E., 54 lks. dist., marked . ., T.15 S., R.20 E., S.32, B.T.
	A pinion pine, 8 ins. diam. bears N. 48° W. 22 lks. dist., marked ., T.15 S. R.20 E. S.31, B.T.
	Land, rolling and mountainous.
	Soil, sandy and clay; 3rd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	We are unable to see signal erected at the standard

Chains	
	cor. of secs. 33 and 34; therefore we erect another signal at this cor.
	West, on S. bdy. sec. 31.
	Over mountainous land, through heavy timber; ascend.
12.00	Top of ascent, bears N.W. and S.E.; thence across mesa.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 39.95 chs.
	By 2nd set, 40.05 chs.; the mean of which is
40.00	Set a sandstone, 20x12x6 ins., 15 ins, in the ground, for standard ¼ sec. cor., marked S.C.¼ on N. face; from which
	A pinion pine, 12 ins. diam. bears N.35° E., 52 lks. dist., marked S.C.¼ S.31, B.T.
	A pinion pine, 10 ins. diam. bears S.35° W. 80 lks. dist., marked S.C.¼ S.6, B.T.
66.00	Edge of mesa, bears N.W. and S.E.; descend over ledges.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 18 lks.; position of middle point
	By 1st set, 79.91 chs.
	By 2nd set, 80.09 chs.; the mean of which is
80.00	Set a limestone, 36x8x8 ins., 27 ins. in the ground, for standard cor. of Tps. 15 S., Rs. 19 and 20 E., marked S.C. 15 S., on N., 20 E. on E., and 19 E. on W. faces; with 6 grooves on N., E., and W. faces; from which
	A pinion pine, 18 ins. diam. bears N.50° E., 58 lks. dist., marked [illegible].T.15 S.R.20 E., S.31, B.T.
	A pinion pine, 14 ins. diam. bears N38° W., 20 lks. dist., marked [illegible].T.15 S., R.19 E. S.36, B.T.
	Land, mountainous and rolling.
	Soil, sandy loam; 2nd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, 80.00 chs.
	We are unable to see the signals erected for test

Chains	
	sights;therefore we are unable to test the line just run with a n observation on Polaris.
	July 19,1901:
	THIRD STANDARD PARALLEL SOUTH,THROUGH RANGE19 EAST.
	July 20,1901:At 7 h 30 m ,a.m.,l.m.t.,we set off 39° 28'N., om the lat.arc;20° 45'N.,on the decl.arc;and determine a true meridian with the solar ,at the standard cor.of Tps.15 S.,Rs.19 and 20 E.,heretofore described,thence we run
	West,on S.bdy.sec.36.
	Over mountainous land,through timber;descend.
30.00	Foot of descent,bears N.W.and S.E.;enter bottom of Hill Creek Canyon.
35.00	Cattle trail,bears N.and S.
36.90	Hill Creek,10 lks.wide,3 ins.deep,course N.
38.75	Leave canyon,bears N.and S.;ascend.
	Difference bet.measurements of 40.00 chs.by two sets of chainmen,is 2 lks.;position of middle point
	By 1st set,39.99 chs.
	By 2nd set,40.01 chs.;the mean of which is
40.00	Set a limestone,18x10x5 ins.,12 ins.in the ground, for standard ¼ sec.cor.,marked S.C.¼ on N.face;from which
	A pinion pine,8 ins.diam.bears N.30° E.,60 lks.dist.,marked S.C.¼ S.36,B.T.
	A pinion pine,12 ins.diam.bears S.18° E.,86 lks.dist.,marked S.C.¼ S.1,B.T.
58.50	Top of steep ascent,bears N.and S.;thence across mesa.
	Difference bet.measurements of 80.00 chs.by two sets of chainmen is 10 lks.;position of middle point
	By 1st set,39.95 chs.
	By 2nd set,40.05 chs.;the mean of which is
80.00	Set a limestone,20x10x6 ins.,15 ins.in the ground,for standard cor.of secs.35 and 36,marked S.C.on N.,with

Chains

1 groove on E.and 5 grooves on W.faces;from which

A pinion pine,14 ins.diam.bears N.80° E.,51 lks.dist.,marked .T.15 S.,R.19 E.S.36,B.T.

A cedar,16 ins.diam.bears N.35° W.,38 lks.dist. marked ,T.15 S.,R.19 E.,S.35,B.T.

Land,mountainous and rolling.

Soil,clay and gravelly loam;2nd rate.

Timber,cedar and pinion pine.

Good grass for grazing.

Mountainous or heavily timbered land,80.00 chs.

At this cor.we erect a signal for a test sight from some point to the west.

West,on S.bdy.sec.35.

Over rolling mesa;through heavy timber.

Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 8 lks.;position of middle point

By 1st set,39.96 chs.

By 2nd set,40.04 chs.;the mean of which is

40.00 Set a hard sandstone,20x18x8 ins.,15 ins.in the ground,for standard ¼ sec.cor.,marked S.C.¼ on N.face; from which

A cedar,20 ins.diam.bears N.5° W.,58 lks.dist. marked S.C.¼ S.35,B.T.

A cedar,8 ins.diam.bears S.65° W.,47 lks. dist.,marked S.C.¼ S.2,B.T.

65.00 Leave mesa,bears N.and S.;thence descend.

70.50 Bottom of hollow,100 ft.below mesa,course N.;ascend.

Difference bet.measurements of 80.00 chs.by two sets of chainmen,is 8 lks.;position of middle point

By 1st set,79.96 chs.

By 2nd set,80.04 chs.;the mean of which is

80.00 Set a sansstone,20x14x4 ins.,15 ins.in the ground,for the standard cor.of secs.34 and 35,marked S.C.on N., with 2 grooves on E.and 4 grooves on W.faces;from which

Chains	
	A cedar,20 ins.diam.bears N.57° E.,32 lks.dist. marked .T.15 S.,R.19 E.,S.35,B.T.
	A pinion pine,16 ins.diam.bears N.80° W.,80 lks.dist.,marked .T.15 S.,R.19 E.,S.34,B.T.
	Land,rolling and mountainous.
	Soil,clay and gravelly loam;2nd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	We are unable to see the signal erected at the standard cor.of secs.35 and 36.
	West,on S.bdy.sec.34.
	Over mountainous land;through scattering timber.
	Ascend.
10.00	Ridge,150 ft.above cor.,bears N.20° E.and S.20° W.Descend.
25.00	Bottom of hollow,250 ft.below ridge,course N.20° E.; ascend
39.00	Top of ridge,250 ft.above hollow,bears N.20° E.and S. 20° W.;descend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 12 lks.;position of middle point
	By 1st set,39.94 chs.
	By 2nd set,40.06 chs.;the mean of which is
40.00	Set a sandstone,30x10x8 ins.,24 ins.in the ground, for standard ¼ sec. cor.,marked S.C.¼ on N.face;from which
	A pinion pine,8 ins.diam.bears N.20° E.,70 lks. dist.,marked S.C.¼ S.34,B.T.
	A pinion pine,6 ins.diam.bears S.23° E.,54 lks.dist.,marked S.C.¼ S.3,B.T.
55.00	Bottom of hollow,300 ft.below ridge,course N.20° E.; ascend.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 14 lks.;position of middle point
	By 1st set,79.93 chs.

Chains	
	By 2nd set, 80.07 chs.; the mean of which is
80.00	Set a limestone, 24x13x4 ins., 18 ins. in the ground, for standard cor. of secs. 33 and 34, marked S.C. on N., with 3 grooves on E. and 3 grooves on W. faces; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, sandy loam; 2nd rate.
	Timber, cedar and pinion pine.
	Good grass for grazing.
	Mountainous land, 80.00 chs.
	We are unable to see the signal erected at the standard cor. of secs. 35 and 36.
	West, on S. bdy. sec. 33.
	Over mountainous land.
6.00	Top of ridge, 160 ft. above sec. cor., bears N. and S.; descend. Enter heavy timber.
31.00	Trail, bears N. 20° E. and S. 20° W.
31.50	Creek 1 lk. wide, 1 inch deep, in bottom of Dougy Canyon, 700 ft. below cor., course N. 20° E.; ascend.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen, is 4 lks.; position of middle point
	By 1st set, 39.98 chs.
	By 2nd set, 40.02 chs.; the mean of which is
40.00	Set a limestone, 28x12x5 ins., 22 ins. in the ground, for Standard ¼ sec. cor., marked S.C.¼ on N. face; from which
	A pinion pine, 24 ins. diam., bears N. 42° W., 59 lks. dist., marked S.C.¼ S.33, B.T.
	A pinion pine, 20 ins. diam., bears S. 30° W., 26 lks. dist., marked S.C.¼ S.4, B.T.
79.00	Top of ridge, 800 ft. above canyon, bears N. 20° E. and S. 20° W.; descend.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen is 18 lks.; position of middle point
=	By 1st set, 79.91 chs.

Chains	
	By 2nd set,80.09 chs.;the mean of which is
80.00	Set a limestone,25x14x6 ins.,18 ins.in the ground,for standard cor.of secs.32 and 33,marked S.C.on N.,with 4 grooves on E.and 2 grooves on W.faces;from which
	A pinion pine,6 ins diam.bears N.60° E.,118 lks.dist.,marked T.15 S.,R.19 E.,S.33,B.T.
	A pinion pine,8 ins.diam.,bears N.10° W.,153 lks.dist.,marked T.15 S.,R.19 E.,S.32,B.T.
	Land,mountainous.
	Soil,sandy and gravelly loam;2nd rate.
	Timber ,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	July 20,1901:At this cor. we set off 20° 43'N.,on the decl. arc;and at 0 h 2 m ,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39° 28'N.,which is the proper lat.nearly.
	We are unable to see the signal erected at the standard cor.of secs.35 and 36.
	West,on S.bdy.sec.32.
	Over mountainous land;through scattering undergrowth; ascend.
4.00	Bottom of hollow,100 ft.above cor.,cousre N.20° E.; ascend.
15.00	Top of ridge,100 ft.above hollow,bears N.10° E.and S.10° W.;descend.
31.00	Bottom of hollow,100 ft.below ridge,course N.10° E.; ascend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 8 lks.;poaition of middle point
	By 1st set,39.96 chs.
	By 2nd set,40.04 chs.;the mean of which is
40.00	Set a sandstone,16x8x6 ins.,10 ins.in the ground,for standard ¼ sec. cor., marked S.C.¼ on N.face; and raise a mound,of stone,2 ft.base, 1½ ft.high,N.of

Chains	
	cor.Pits impracticable.
45.00	Top of ridge,100 ft.above hollow,bears N.and S.;descend.
64.00	Bottom of hollow,250 ft.below ridge,course N.20° W.;ascend.
78.00	Top of ridge,250 ft.above hollow,bears N.and S.;descend. Enter scattering timber,bears N.and S.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 14 lks.;position of middle point
	By 1st set,79.93 chs.
	By 2nd set,80.07 chs.;the mean of which is
80.00	Set a sandstone,22x10x4 ins.,16 ins.in the ground, for standard cor,of secs.31 and 32.,marked S.C.,on N.,with 5 grooves onE.and 1 groove on W.faces;from which
	A pinion pine,18 ins.diam.,bears N.40° E.,64 lks.dist.,marked ,T.15 S.,R.19 E.,S.32, B.T.
	A pinion pine,20 ins.in diam.,bears N.89° W., 22 lks.dist.,marked ,T.15 S.,R.19 E.,S. 31,B.T.
	Land,mountainous.
	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Undrgrowth,sage brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	We are unable to see the signal erected at the standard cor.of secs.35 and 36.
	West,on S.bdy.sec.31.
	Over mountainous land;through scattering timber;descend.
14.10	Bottom of hollow,200 ft.below cor.,course N.;ascend.
35.50	Top of ridge,250 ft.above hollow,bears N.and S.;descend.

Chains Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point.

By 1st set,39.95 chs.

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

40.00 Set a limestone,18x9x5 ins.,12 ins.in the ground, for standard ¼ sec. cor.,marked S.C.¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable. In swale,course N.;ascend.

58.50 Top of ridge,200 ft.above swale,bears N.and S.;descend.

79.75 Creek,4 lks.wide,2 ins.deep,in bottom of canyon,500 ft.below ridge,course N.10° W.;ascend.

Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 22 lks.;position of middle point

By 1st set,79.89 chs.

By 2nd set,80.11 chs.;the mean of which is

80.00 Set a sandstone,36x10x10 ins.,25 ins.in the ground, for standard cor.of Tps.15 S.,Rs.18 and 19 E.,marked S.C.15 N.,on N.,19 E.on E.,and 18 E.on W.faces;with 6 grooves on N.,E.,and W.,faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.

Land,mountainous.

Soil,gravelly;3rd rate.

Timber,scattering cedar and pinion pine.

Good grass for grazing.

Mountainous land,80.00 chs.

We are unable to see the signal erected at the standard cor.of secs.35 and 36;therefore we cannot test the line just run with a true meridian determined by observation on Polaris.

July 20,1901:At 5 h 0 m ,p.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc;20° 41'N.,on the decl.arc;and mark the true meridian,determined with the solar , by a cross on a stone set firmly in the ground,5.00 chs N.of the standard cor.of Tps.15 S.,Rs.18 and19 E.

Chains	At 11 h 34 m,p.m.,l.m.t.,we observe Polaris at eastern elongation,and mark a point in the line thus determined by a tack driven in a wooden plug driven in the the ground,5.00 chs.N.of our station. July 20,1901.
	July 22,1901:At 6 h 30 m ,a.m.,l.m.t.,we lay off the azimuth of Polaris 1° 35'to the west,and mark the True Meridian thus determined by cutting a small groove in the stone already set ,5.00 chs.N.of our station;on which the true meridian falls 0.35 ins. east of the mark determined by the solar. At 7 h 2 m ,a.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc;20° 23'N.,on the decl.arc;and mark a point in the true meridian determined with the solar,by a cross on the stone a;ready set,5.00 chs.N.of our station;this mark falls 0.28 ins.east of the true meridian determined by observation on Polaris. The solar apparatus by p.m.and a.m.observations,defines positions for true meridians,respectively about 0'18" west and 0'15" east of the true meridian established by observation on Polaris;therefore we conclude that the adjustments of the instruments are satisfactory. The magnetic bearing of the true meridian at 7 h 30 m,15° 50'W.,which reduced by the table on page 100 of the Manual of Instructions,gives the mean mag.decl. 15° 44.5'E. From the above described cor.we run West,on S.bdy.sec.36. Over mountainous land;through scattering timber;ascend.
36.00	Top of ridge ,600 ft.above cor.,bears N.10° E.and S. 10° W.;descend. Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 6 lks.;position of middle point

Chains	
	By 1st set,39.97 chs.
	By 2nd set,40.03 chs.;the mean of which is
40.00	Set a limestone,18x18x4 ins.,12 ins.in the ground ,for standard ¼ sec.cor.,marked S.C.¼ on N.face;and raise a mound of stone, 2 ft. base,1½ ft.high,N.of cor. Pits impracticable.
58.00	Bottom of hollow,250 ft.below ridge,course N.;ascend.
72.50	Top of ridge,300 ft.above hollow,bears N.10°E.and S. 10°W.;descend.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 18 lks.;position of middle point
	By 1st set,79.91 chs.
	By 2nd set,80.09 chs.;the mean of which is
80.00	Set a sandstone,18x10x4 ins.,12 ins.in the ground,for standard cor.of secs.35 and 36,marked S.C.,on N., with 1 groove on E.and 5 grooves onW.faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Land,mountainous.
	Soil,sandy loam;2nd rate.
	Timber,scattering cedar and pinion pine.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	At this cor.we erect a signal for a test sight from some point from the west.

	West,on S.bdy.sec.35.
	Over mountainous land;through scattering undergrowth.
	Descend.
5.00	Bottom of hollow,100 ft.below cor.,course N.10°W.; ascend. Enter dense undergrowth.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st set,39.95 chs.
	By 2nd set,40.05 chs.;the mean of which is
40.00	Top of ridge,150 ft.above hollow,bears N.W.and S.E.;

THIRD STANDARD PARALLEL SOUTH,THROUGH RANGE 18 EAST.

Chains Set a limestone,24x18x4 ins.,18 ins.in the ground, for standard ¼ sec.cor.,marked S.C.¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor. Pits impracticable.Thence over rolling land.

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

By 1st set,79.92 chs.

By 2nd set,80.08 chs.;the mean of which is

80.00 Set a sandstone,20x14x3 ins.,15 ins.in the ground, for standard cor of secs.34 and 35,marked S.C.on N., with 2 notches on E.and 4 notches on W.faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor. Pits impracticable.

Land,mountainous.

Soil,sandy and clay loam;2nd rate.

No timber.

Undergrowth,sage brush.

Good grass for grazing.

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

We are unable to see the signal erected at the standard cor.of secs.35 and 36.

West,on S.bdy.sec.34.

Over rolling mesa;through dense undergrowth.

Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point

By 1st set,39.95 chs.

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

40.00 Set a sandstone,18x16x3 ins.,12 ins .in the ground, for standard ¼ sec.cor.,marked S.C.¼ on N.face;and raise mound of stone,2 ft.base,1½ ft.high,N.of cor. Pits impracticable.

Line of mesa,bears N.10° E.and S.10° W.;descend into ravine.

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

Chains	
	of chainmen,is 24 lks.;position of middle point
	By 1st set,79.88 chs.
	Byn2nd set,80.12 chs.;the mean of which is
80.00	Set a sandstone,20x8x8 ins.,15 ins.in the ground,for standard cor.of secs.33 and 34,marked S.C.on N.,with 3 grooves onE.and 3 grooves on W.faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Land,rolling and mountainous.
	Soil,sandy and clay loam;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	We are unable to see the signal erected at the stand-cor.of secs.35 and 36.
	July 22,1901:At the noon hour the sky is overcast and solar observations are impossible.
	West.on S.bdy.sec.33.
	Over mountainous land;through scattering pinion pine and cedar timber;descend.
30.00	Bottom of canyon,600 ft.below cor.course S.10° W.;ascend.
	Difference bet.measurements of 40.00 chs.,by two sets of chainmen is 6 lks.;position of middle point
	By 1st set,39.97 chs.
	By 2nd set,40.03 chs.;the mean of which is
40.00	Set a sandstone,18x10x8 ins.,12 ins.in the ground, for standard ¼ sec.cor.,marked S.C.¼ on N.face;and raise a mound,of stone,2 ft.base,1½ ft.high,N.of cor. Pits impracticable.
70.50	Top of ascent,800 ft.above canyon,bears N.10° E.and S.10° W.;thence across rolling mesa;Leave timber and enter dense undergrowth;bears N.10° E.and S.10° W.

Chains	
	Difference bet.measurements of 80.00 chs.by two sets of chainmen,is 12 lks.;position of middle point.
	By 1st set,79.94 chs.
	By 2nd set.80.06 chs.;the mean of which is
80.00	Set a sandstone,18x9x8 ins.,12 ins.in the ground,for standard cor. of secs.32 and 33,marked S.C.on N.,with 4 grooves on E.and 2 grooves on W.faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Land,mountainous and rolling.
	Soil,sandy loam;2nd rate.
	Timber,pinion pine and cedar.
	Undergrowth.sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	We are unable to see the signal erected at the standard cor.of secs.35 and 36;therefore we erect a signal at the above described cor.,for a test sight from some point to the west.
	West,on S.bdy.sec.32.
	Over rolling mesa;through dense undergrowth.
	Difference bet.measurements of 40.00 chs.by two sets of chainmen,is 4 lks.;position of middle point
	By 1st set,39.98 chs.
	By 2nd set,40.02 chs.;the mean of which is
40.00	Set a sandstone,20x9x9 ins.,15 ins.in the ground,for standard ¼ sec.cor.,marked S.C.¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Difference bet.measurements of 80.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st set,79.95 chs.
	By 2nd set,80.05 chs.;the mean of which is
80.00	Set a sandstone,20x8x5 ins.,15 ins.in the ground,for standard cor.of sec.31 and 32,marked S.C.,on N.,and

Chains	
	with 5 grooves on E.and 1 groove W.faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Land,rolling mesa.
	Soil,sandy and clay loam;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	We are unable to see the signal erected at the stand-cor.of secs.32 and 33.
	West,on S.bdy.sec.31.
	Over rolling mesa;through dense undergrowth.
26.00	Edge of mesa,bears N.10° E.and S.10° W.;thence descend.
	Difference bet.measurements of 40.00 chs.by two sets of chainmen,is 8 lks.;position of middle point
	By 1st set,39.96 chs.
	By 2nd set,40.04 chs.;the mean of which is
40.00	Set a sandstone,24x8x6 ins .,18 ins.in the ground,for standard ¼ sec.cor,,marked S.C.¼ on N.face;and raise a mound,of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
61.00	Bottom of hollow,100 ft.below mesa,course S.10° W.; ascend .
	Difference bet.measurements of 80.00 chs.by two sets of chainmen,is 18 lks.;position of middle point
	By 1st set,79.91 chs.
	By 2nd set,80.09 chs,;the mean of which is
80.00	Set a sandstone,30x24x8 ins.,24 ins.in the ground,for standard cor.of Tps.15 S.,Rs.17 and 18 E.,marked S.C. 15 S.on N.,18 E.onE.,and 17 E.on W.faces;with 6 grooves on N.,E.,and W.,faces;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Land,mountainous and rolling.

THIRD STANDARD PARALLEL SOUTH, THROUGH RANGE 18 EAST.

Chains	
	Soil, sandy loam; 2nd rate.
	No timber.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.
	We are unable to see the signal erected at the standard cor. of secs. 32 and 33; therefore we are unable to test the line just run with a true meridian determined with observation on Polaris.
	July 22, 1901.

GENERAL DESCRIPTION.

Through ranges 18, 19, and 20 this line runs across low mountains and rolling mesas; the land on both sides of the line is of the same character, containing considerable cedar and pinion pine timber; the land should be subdivided. We find no trace of the old corners on the Uncompahgre Indian Reservation Bdy., supposed to be coincident with this boundary. The cors. have been destroyed by Indians.

Scott V. Stewart
John R. Stewart
U.S. Deputy Surveyors.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ..... United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of ..... showing the respective capacities in which they acted:

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

In final affidavits see book W 2d Stand Parl South R 19 E

FINAL OATH OF ASSISTANTS.

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

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

In final affidavits see book W 2d Stand Parl South R 19 E

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

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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

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

United States Deputy Surveyor.

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL

Salt Lake City, Utah, Sunday, Sept. 1 ..., 189 .

The foregoing field notes of the survey of the Third Standard Parallel South through Ranges 20 1/2 & 18 East of the Salt Lake Base & Meridian, Utah

executed by Scott Stewart and John R. Stewart under ~~his~~ their contract No. 242, dated April 12, 1901, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Kindleberger
United States Surveyor General.

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

United States Surveyor General.

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BOOK A-288

FIELD NOTES

OF THE SURVEY OF THE

WEST AND NORTH BOUNDARIES

of

Township No. 15 South, Range No. 20 East

Of the SALT LAKE BASE AND *Meridian,*
in the
STATE OF UTAH

AS SURVEYED BY

Scott P. Stewart and John R. Stewart, *United States Deputy Surveyors*

Under his Contract No. 242, *dated* April 12, 1901, 189XX

Survey commenced July 23, 1901, x189

Survey completed July 25, 1901, x189

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W. Bdy length 6.00.00
N " " 5.78.65
11.78.65

NAMES AND DUTIES OF ASSISTANTS.

Andy J. Stewart	Chainman
Edwin A. Peay	Chainman
Vosco Call	Chainman
Hugh Conover	Chainman
Clarence S. Jarvis	Moundman
John J. Harding	Moundman
George W. Eskins	Axman
Harry Burton	Axman
Harvey R. Booth	Flagman
Gilbert Burr	Flagman

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BOOK A-288

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Andy J. Stewart / Edwin A. Peay and Vosco Call / Hugh Conover

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the W. and N. bdys. of T. 15 S., R. 20 E.; the W. and N. bdys. of T. 15 S., R. 19 E.; the W. and N. bdys. of T. 14 S., R. 20 E.; the W. and N. bdys. of T. 14 S., R. 19 E.; the W. and N. bdys. of T. 13 S., R. 20 E.; the W. and N. bdys. of T. 13 S., R. 19 E.; the W. and N. bdys. of T. 12 S., R. 20 E.; the W. and N. bdys. T. 12 S., R. 19 E.; W. bdy. T. 11 S., R. 20 E., and W. bdy. T. 11 S., R. 19 E.

Andy J. Stewart, Chainman.

Edwin A. Peay, Chainman.

Subscribed and sworn to before me this 28 day of May 1901, ~~189~~

Vosco Call, Chainman.

Hugh Conover, Chainman.

Andrew J. Stewart Jr.

Notary Public.

SEAL

My commission expires March 17, 1903.

WE, Clarence S. Jarvis and John J. Harding

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the W. and N. bdys. of T. 15 S., R. 20 E.; the W. and N. bdys. of T. 15 S., R. 19 E.; the W. and N. bdys. of T. 14 S., R. 20 E.; the W. and N. bdys. of T. 14 S., R. 19 E.; the W. and N. bdys. of T. 13 S., R. 20 E.; the W. and N. bdys. of T. 13 S., R. 19 E.; the W. and N. bdys. of T. 12 S., R. 20 E.; T. 12 S., R. 19 E.; the W. bdy. T. 11 S., R. 20 E., and the W. bdy. of T. 11 S., R. 19 E.

Clarence S. Jarvis, Moundman.

John J. Harding, Moundman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr.

Notary Public

SEAL

WE, George W. Elkins and Harry Burton

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 the W. and N. bdys. of T. 15 S., R. 20 E.; the W. and N. bdys. of T. 15 S., R. 19 E.; the W. and N. bdys. of T. 14 S., R. 20 E.; the W. and N. bdys. of T. 14 S., R. 19 E.; the W. and N. bdys. of T. 13 S., R. 20 E.; the W. and N. bdys. of T. 13 S., R. 19 E.; the W. and N. bdys. of T. 12 S., R. 20 E.; W. and N. bdys. T. 12 S., R. 19 E.; W. bdy. T. 11 S., R. 20 E.; W. bdy. T. 11 S., R. 19 E.

George W. Elkins, Axman.

Harry Burton, Axman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr.

Notary Public

SEAL

WE Harvey R. Booth and Gilbert Burr, 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 the N. and W. bdys. of T. 15 S., R. 20 E.; N. and W. bdys. of T. 15 S., R. 19 E.; N. and W. bdys. of T. 14 S., R. 20 E.; N. and W. bdys. of T. 14 S., R. 19 E.; N. and W. bdys. of T. 13 S., R. 20 E.; N. and W. bdys. of T. 13 S., R. 19 E.; N. and W. bdys. of T. 12 S., R. 20 E.; W. and N. bdys. of T. 12 S., R. 19 E.; West bdys. of T. 11 S., R. 20 E., and W. bdy. of T. 11 S., R. 19 E.

Harvey R. Booth, Flagman.

Gilbert Burr

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

Andrew J. Stewart Jr.

Notary Public

SEAL

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West Boundary of T.15 S.,R.20 E.

Chains

Survey commenced July 23,1901,and executed with a W. and L.E.Gurley light mountain transit,No.3,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 latitude and declination arcs; and a W.and L.E.Gurley plain transit,No.2,of which the horizontal limb is provided with one double vernier reading to single minutes of arc.

The instruments were examined,tested on the true meridian at Salt Lake City,found correct,and were approved by the surveyor general for Utah,the former on June 6,1901,and the latter on May 29,1901.

We examine the adjustments of the instruments and correct the level and collimation errors,then,to test the solar apparatus,of the No.3,transit,by comparing its indications,resulting from solar observations made during p.m.and a.m.hours,with a true meridian determined by observations on Polaris,we proceed as follows;

July 23,1901:At the standard cor.of Tps.15 S.,Rs.19 and 20 E.,heretofore described,latitude 39° 28'N.,longitude 109° 45'52"W.,we set off 39° 28'N.,on the lat. arc;20° 06'N.,on the decl.arc;At 3 h 0 m p.m.,l.m.t., determine a true meridian with the solar and mark a point thereof on a stone,firmly set in the ground, 5.00 chs.N.of our station.

At 11 h 22. m ,p.m.,l.m.t.,we observe Polaris at eastern elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined on a plug driven in the ground,5.00 chs.N. of our station.

July 23,1901.

July 24,1901:At 6 h 30 m ,a.m.,l.m.t.,we lay off the azimuth of Polaris 1° 35'to the west,and mark the true

Chains	
	meridian thus determined by cutting a small groove on the stone set July 23,on which the true meridian falls .25 ins.east of the mark determined with the solar.
	At 6 h 58m a.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc;19° 58'N.,on the decl.arc;and mark a point in the true meridian determined with the solar,by a cross on the stone already set 5.00 chs.N.of our station;this mark falls .18 ins.east of the true meridian determined by observation on Polaris.
	The solar apparatus by p.m;and a.m.observations, defines positions for true meridians,respectively about 0'13"west and 0'10"east of the true meridian established by Polaris observation;therefore we conclude that the adjustments of the instruments are satisfactory.
	The magnetic bearing of the true meridian,at 7 h 0 m a.m.,is 15° 51.6'W.,which reduced by the table on page 100 of the Manual,gives the mean mag.decl.15° 46' E.
	From the standard cor.of Tps.15 S.,Rs.19 and 20 E., heretofore described,we run
	North,bet.secs.31 and36.
	Over mountainous land;through heavy timber;ascend.
9.00	Top of ascent,350 ft.above cor.bears E.and N.W.;thence across mesa.
40.00	Set a limestone;20x14x6 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,8 ins.diam.bears N.40° E.,32 lks.dist, marked ¼ S.31,B.T.
	A cedar,8 ins.diam.,bears S.50° W.,60 lks. dist.,marked ¼ S.36,B.T.
46.00	Edge of mesa,bears N.W.and S.E.;descend.
58.00	Bottom of hollow,450 ft.below mesa,course N.W.;ascend.
72.00	Top of ascent,500 ft.above hollow,bears N.W.and S.E.;

West Bounds of T.15 S. R.20 E. Continued.

Chains.	
	thence across mesa.
80.00	Set a sandstone,24x12x6 ins.,18 ins.in the ground, for cor.of secs.25,30,31,and 36,marked with 5 notches on N.and 1 notch on S.edges;from which
	A pinion pine,12 ins.diam.bears N.60°E.35 lks.dist.,marked T.15 S.,R.20 E.,S.30,B.T.
	A pinion pine,8 ins.diam.bears S.55°E.,55 lks.dist.,marked T.15 S.,R.20 E.,S.31,B.T.
	A pinion pine,10 ins.diam.bears S.21°W.,60 lks.dist.,marked T.15 S.,R.19 E.,S.36,B.T.
	A pinion pine,30ins.diam.bears N.65°W.,50 lks.dist.,marked T.15 S.,R.19 E.,S.25,B.T.
	Land,mountainous.
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinion pine,
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	North,bet.secs.25 and 30.
	Over rolling mesa;through scattering cedar and pinion pine timber and dense undergrowth.
10.00	Edge of mesa,bears N.E.and S.W.;descend abruptly.
23.00	Bottom of hollow,400 ft.below mesa,course N.W.;ascend.
40.00	Set a sandstone,20x15x8 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
61.00	Top of ridge,5oo ft.above hollow,bears N.W.and S.E.; descend.
80.00	Set a sandstone,18x9x9 ins.,12 ins.in the ground,for cor.of secs.19,24,25,and 30,marked with 4 notches on N.and 2 notches on S.edges;from which
	A pinion pine,10 ins.diam.bears N.40°E.,80 lks.dist.,marked T.15 S.,R.20 E.,S.19,B.T.
	A pinion pine,20 ins.diam.bears S.30°E.,40

Chains	
	lks.dist.,marked T.15 S.,R.20 E.,S.30,B.T.
	A cedar,9 ins.diam.bears S.50° W.,60 lks.dist. marked T.15 S.,R.19 E.,S.25,B.T.
	A pinion pine,14 ins.diam.,bears N.60° W.,70 lks.dist.,marked T.15 S.,R.19 E.,S.24,B.T.
	Land,rolling and mountainous.
	Soil,sandy and gravelly;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	North,bet.secs.19 and 24.
	Over mountainous land;through scattering timber and scattering undergrowth;descend.
5.30	Bottom of hollow,200 ft.below cor,,course N.W.;ascend.
40.00	Set a sandstone,18x8x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base.1½ ft.high,W.of cor.Pits impracticable.
42.50	Top of ridge,500 ft.above hollow,bears N.W.and S.E.; descend.
55.50	Bottom of Road Canyon,600 ft.below ridge,course W.; ascend.abruptly,trail from Fullerton's to Flat Rock.
60.00	Foot of perpendicular cliff 150 ft.high,bears E.and W.
80.00	Set a sandstone,18x14x8 ins.,12 ins.in the ground, for cor.of secs.13,18,19,and 24,marked with 3 notches on N.and 3 notches on S.edges;from which
	A pinion pine,14 ins.diam.bears N.30° E.,47 lks.dist.,marked T.15 S.,R.20 E.,S.18,B.T.
	A pinion pine,6 ins.diam.bears S.30° E.,43 lks.dist.,marked T.15 S.,R.20 E.,S.19,B.T.
	A pinion pine,7 ins.diam.bears S.16° W.,147

Chains	
	lks.dist.,marked T.15 S.,R.19 E.,S.24,B.T.
	A pinion pine,16 ins.diam.bears N.60° W.,33 lks.dist.,marked T.15 S.,R.19 E.,S.13,B.T.
	Land,mountainous.
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	July 24,1901:At the noon hour the sky is overcast and solar observations are impossible.
	North,bet.secs.13 and 18.
	Over mountainous land;through scattering timber; ascend.
3.00	Ridge,50 ft.above cor.,bears E.and W.;descend.
18.00	Hollow,250 ft.below ridge,course N.80° W.;ascend.
32.00	Ridge,30 ft.above hollow,bears E.and W.;descend.
40.00	Set a sandstone,12x10x6 ins.,9 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,10 ins.diam.,bears N.75° E.,42 lks.dist.,marked ¼ S.18,B.T.
	A pinion pine,8 ins.diam.,bears S.80° W.,15 lks.dist.,marked ¼ S.13,B.T.
55.25	Bottom of hollow,350 ft.below,¼ sec.cor.,course N.W.;ascend.
80.00	Top of spur,400 ft.above hollow,bears N.60° W.and S.60° E.
	Set a sandstone,16x12x5 ins.,11 ins.in the ground, for cor.of secs.7,12,13,and 18,marked with 2 notches on N.and 4 notches on S.edges;from which
	A pinion pine,12 ins.diam.bears N.E.,45 lks. dist.,marked T.15 S.,R.20 E.,S.7,B.T.
	A pinion pine,8 ins.diam.,bears S.65° E.,50 lks.dist.,marked T.15 S.,R.20 E.,S.18,B.T.
	A pinion pine,10 ins.diam.,bears S.45° W.20

Chains	
	lks.dist.,msrked T.15 S.,R.19 E.,S.13,B.T.
	A pinion pine,6 ins.diam.bears N.60° W.,65
	lks,dist.,marked T.15 S.,R.19 E.,S.12,B.T.
	Land,mountainous and rolling.
	Soil,sandy and gravelly ;2nd and 3rd rate.
	Timber,pinion pine and red pine timber.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	North,bet.secs.7 and 12.
	Over mountainous land;through scattering pinion pine and cedar timber; ascend.
25.00	Bottom of hollow,450 ft.below sec.cor.,course N.70° W.;ascend abruptly over ledges.
40.00	Top of spur,300 ft.above hollow,bears E.and W.
	Set a sandstone,17x9x5 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound, of stone,2 ft.base.1½ ft.high,W.of cor.Pits impracticable. Descend.
57.20	Bottom of hollow,80 ft.below ridge,course W.;ascend.
80.00	Set a sandstone,24x12x4 ins.,18 ins.in the ground, for cor.of secs.1,6,7,and 12,marked with 1 notch on N.and 5 notches on S.edges;from which
	A pinion pine,6 ins.diam.bears N.33° E.,70
	lks.dist.,marked T.15 S.,R.20 E.,S.6,B.T.
	A pinion pine,6 ins.diam.bears S.62° E.,50
	lks.dist.,marked T.15 S.,R.20 E.,S.7,B.T.
	A pinion pine,6 ins.diam.bears S.78° W.,60
	lks.dist.,marked T.15 S.,R.19 E.,S.12,B.T.
	A pinion pine,6 ins.diam.,bearw N.1° W.,60
	lks.dist.,marked T.15 S.,R.19 E.,S.1,B.T.
	This cor.is on ridge,bears N.E.and S.W.
	Land,mountainous.
	Soil,gravelly and stony;3rd and 4th rate.
	Timber,pinion pine and cedar.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	North,bet.secs.1 and 6.

Chains	
	Over mountainous land;through scattering pinion pine and cedar timber;descend.
23.00	Bottom of hollow,200 ft.below sec.cor.,bears N.80° W. and S.80° E.;ascend.
40.00	Set a sandstone,15x8x60ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base.1½ ft.high,W.of cor.Pits impracticable.
80.00	Set temp. cor.of Tps.14 and 15 S.,Rs.19 and 20 E.

Note:For description of permanent cor.see notes of N.bdy. of Township,in this book.

Land,mountainous.

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

Timber,scattering cedar and pinion pine timber.

Good grass for grazing.

Mountainous land,80.00 chs.

July 24,1901.

July 25,1901:At 7 h 2 m ,a.m.,l.m.t.,we set off 39° 33'N.,on the lat.arc;19° 46'N.,on the decl.arc;and determine a true meridian with the solar ,at the temp.cor.of Tps.14 and 15 S.,Rs.19 and 20 E.

Thence we run

East,on a random line along N.bdy.of Tp.15 S.,R.20 E.;setting temp.sec.and ¼ sec.cors.at intervals of 40.00 chs.,and at 478.55 chs.intersect the Green River Guide Meridian,83 lks.South of the cor.of Tps. 14 and 15 S.,Rs.20 and 21 E.,heretofore described.

The falling answers to a correction of 06' or 14 lks. S.per mile counting from the cor of Tps.14 and 15 S., Rs.20 and 21 E.

Thence we run

S.89° 54'W.,on a true line along the N.bdy.of TP.15 S.,R.20 E.;bet.secs.1 and 36.

Over level mesa;through dense undergrowth.

20.00	Leave mesa,bears N.60° E.and S.60° W.;ascend.
30.00	Top of ridge,30 ft.above mesa,bears N.60° E.and S.60° W.;leave undergrowth and enter heavy timber;bears

Chains	
	with ridge;descend.
35.00	Begin abrupt descent,bears N.60° E.and S.60° W.
40.00	Set a sandstone,20x10x4 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A pinion pine,16 ins.diam.,bears N.15° E.,60 lks.dist.,marked ¼ S.36,B.T.
	A pinion pine,12 ins.diam.,bears S.60° W.,70 lks.dist.,marked ¼ S.1,B.T.
42.75	Bottom of canyon,250 ft.below ridge,course N.20° E.;ascend.
55.00	Top of ascent,250 ft.above canyon,bears N.E.and S.W.; thence across rolling mesa.
80.00	Set a sandstone,24x12x4 ins.,18 ins.in the ground, for cor. of secs.1,2,35,and 36,marked with 1 notch on E.and 5 notches on W.edges;from which
	A cedar,12 ins.diam.bears N.45° E.150 lks. dist.,marked T.14 S.,R.20 E.,S.36,B.T.
	A cedar,10 ins.diam.,bears S.40° E.,175 lks. dist.,marked T.15 S.,R.20 E.,S.1,B.T.
	A cedar,6 ins.diam.,bears S.50° W.,200 lks. dist.,marked T.15 S.,R.20 E.,S.2,B.T.
	A cedar,12 ins.diam.,bears N.50° W.,75 lks. dist.,marked T.14 S.,R.20 E.,S.35,B.T.
	Land,mountainous and rolling.
	Soil,gravelly and rocky;3rd and 4th rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	July 25,1901:At this cor.we set off19° 42'N.,on the decl.arc;and at 0 h 3 m ,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39° 33'N.

S.89° 54'W.,on a true line bet.secs.2 and 35.

Over rolling mesa;through dense undergrowth and scat-

Chains	
	tering timber.
10.00	Leave mesa,bears N.20° E.and S.20° W.;descend.
15.00	Bottom of hollow,50 ft.below mesa,bears N.20° E.and S.20° W.;ascend.
40.00	Set a sandstone,18x12x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which A pinion pine,16 ins.diam.,bears N.5° E.,90 lks.dist.,marked ¼ S.35,B.T. A pinion pine,16 ins.diam.,bears S.5° E.,100 lks.dist.,marked ¼ S.2,B.T.
46.50	Top of ridge,200 ft.above hollow,bears N.35° E.and S. 35° W.;descend abruptly.
54.00	Bottom of canyon,150 ft.below ridge,course N.35° E.; ascend abruptly.
66.00	Top of abrupt ascent,bears N.35° E and S.35° W.;thence across rolling mesa.
70.00	Leave timber,bears N.and S.
80.00	Set a sandstone,18x18x4 ins.,12 ins.in the ground,for cor.of secs.2,3,34,and 35,marked with 2 notches on E. and 4 notches on W.edges;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable. Land,rolling and mountainous. Soil,sandy and gravelly loam;2nd rate. Timber,cedar and pinion pine. Undergrowth,sage brush. Good grass for grazing. Mountainous land,or land covered with dense undergrowth,80.00 chs.
	S.89° 54'W.,on a true line bet.secs.3 and 34. Over gently rolling mesa;through dense undergrowth.
4.75	Indian trail,bears N.20° E.and S.20° W.
40.00	Set a sandstone,34x12x5 ins.,26 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,N.of cor.

Chains	
80.00	Set a limestone,20x20x4 ins.,15 ins.in the ground, for cor.of secs.3,4,33,and 34,marked with 3 notches on E.and W. edges;and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.Pits impracticable.
	Land,rolling.
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	S.89° 54'W.,on a true line bet.secs.4 and 33.
	Over rolling mesa;through dense undergrowth.
40.00	Set a sandstone,26x8x6 ins.,19 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face;dig pits,18x18x12 ins., E.and W.of stone,3 ft.dist.;and raise a mound of earth 4 ft.base,2 ft.high,N.of cor.
80.00	Set a sandstone,24x8x5 ins.,18 ins.in the ground,for cor.of secs.4,5,32,and 33,marked with 4 notches on E.and 2 notches on W.edges;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,rolling.
	Soil,sandy;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	S.89° 54'W.,on a true line bet.secs.5 and 32.
	Over rolling land;through dense undergrowth.
40.00	Set a sandstone,24x12x4 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound,of earth,4 ft.base, 2 ft.high,N.of cor.
63.00	Enter scattering timber,bears N.and S.

Chains	
80.00	Set a sandstone,18x10x6 ins.,12 ins.in the ground, for cor.of secs.5,6,31,and 32,marked with 5 notches on E.and 1 notch onW.edges;from which A pinion pine,6 ins,diam.bears N.50° E.,160 lks.,marked T.14 S.,R.20E.,S.32,B.T. A cedar,6 ins.diam.,bears S.37° E.,150 lks. dist.,marked T.15 S.,R.20 E.,S.5,B.T. A cedar,11 ins.diam.,bears S.28° W.,125 lks. dist.,marked T.15 S.,R.20E.,S.6,B.T. A cedar,10 ins.diam.bears N.24° W.,49 lks.dist. marked T.14 S.,R.20 E.,S.31,B.T. Land,rolling mesa. Soil,sandy loam;2nd rate. Timber,cedar and pinion pine, Undergrowth,sage brush. Good grass for grazing. Land covered with dense undergrowth,80.00 chs.
	S.89° 54'W.,on a true line bet.secs.6 and 31. Over rolling land;through dense undergrowth and scattering timber.
5.00	Edge of mesa,bears N.30° W.and S.30° E.;descend.
14.00	Bottom of canyon,150 ft.below mesa,course N.30° W.; ascend.
21.00	Top of ridge,100 ft.above canyon,bears N.and S.;descend.
28.35	Bottom of hollow ,250 ft.below ridge,course S.40° W.; ascend.
40.00	Set a sandstone,18x10x4 ins. 12 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which A cedar,10 ins.diam.bears N.45° E.20 lks. dist.,marked ¼ S.31,B.T. A pinion pine,6 ins.diam.bears S.5° W.,5 lks. dist.,marked ¼ S.6,B.T.
40.50	Top of ridge,400 ft.above hollow,bears N.and S.;des-

Chains

cend.

68.00 Bottom of canyon,200 ft.below ridge,course S.35° W.; ascend.

78.55 The temp.cor.of Tps.14 and 15 S.,Rs.19 and 20 E. Set a sandstone,18x8x8 ins.,12 ins.in the ground, for cor.of Tps.14 and 15 S.,RS.19 and 20 E.,marked 14 S.,on N.E.,20 E.,on S.E.,15 S.on S.W.,and 19 E. on N.W.;with 6 notches on each edge;from which

A pinion pine,6 ins.diam.bears N.55° E.,70 lks.dist.,marked T.14 S.,R.20 E.,S.31,B.T.

A pinion pine,10 ins.diam.,bears S.10° E.,55 lks.dist.,marked T.15 S.,R.20 E.,S.6,B.T.

A pinion pine,8 ins.diam.,bears S.80° W.,65 lks.dist.,marked T.15 S.,R.19 E.,S.1,B.T.

A pinion pine,8 ins.diam.,bears N.40° W.85 lks.dist.,marked T.14 S.,R.19 E.,S.36,B.T.

Land,rolling and mountainous.

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

Timber,pinion pine and cedar.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,78.55 chs.

July 25,1901.

BOUNDARIES OFT.15 S.,R.20 E.

Latitudes ,departures,and closing errors.

Line designated	true bearing	distance	latitudes N.	latitudes S.	departures E.	departures W.
West bdy.T15 S.,R.20 E.	North	480.00	480.00			
North bdy.T.15 S.R.20E.	N89°54'E.	478.55	.83		478.55	
East bdy.T.15 S.R.20 E.	South	480.00		480.00		
South Bdy.T.15 S.R.20E.	West	480.00				480.00
Convergency					.60	
Totals			480.83	480.00	479.15	480.00
			480.00			479.15
Error in lat.			.83	Error in dep		.85

GENERAL DESCRIPTION.

BOOK A-288

Boundaries of T.15 S. R.20 E Concluded.

This township is mostly rolling mesa land, intersperced with box canyons. The township is very well adapted for grazing and should be subdivided.

Scott P. Stewart
John R. Stewart
U.S. Deputy Surveyors.

July 25, 1901.

Volume
#
R0288

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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 .....

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of .....

.....

showing the respective capacities in which they acted:

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

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

.....

.....

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

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

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

.....

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

SEAL

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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

.....

..... of the ..... meridian, in the ..... of ....., which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict conformity with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for ....., and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 5, 1846.

United States Deputy Surveyor.

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL

Salt Lake City, Utah, February 1, 1901

The foregoing field notes of the survey of the Fifth Standard of Township 13 South Range 1 East of the Salt Lake Base & Meridian, Utah

.....

.....

.....

.....

executed by Scott P. Stewart & John H. Stewart under his contract No. 242, dated April 12, 1901, 189.., having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Rudolph
United States Surveyor General.

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

.....
United States Surveyor General.

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BOOK A-288

FIELD NOTES

OF THE SURVEY OF THE

T.S.

SUBDIVISION

of

Township No. 15 South, Range No. 20 East,

Of the SALT LAKE BASE AND *Meridian,*

in the

STATE OF UTAH,

AS SURVEYED BY

tt P. Stewart and John R. Stewart, *United States Deputy Surveyors*

der ~~his~~ their *Contract No.* 242, *dated* April 12, 1901, ~~XXX~~

vey commenced July 26, 1901, ~~XXX~~

vey completed August 3, 1901. ~~XXXX~~

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Legal 60-06.35

NAMES AND DUTIES OF ASSISTANTS.

Andy J. Stewart	Chainman
Edwin A. Peay	Chainman
Vance Call	Chainman
Hugh Conover	Chainman
Clarence S. Jarvis	Measurman
John J. Harding	Measurman
George W. Elkins	Axman
Harry Burton	Axman
Harry R. Borth	Hagman
Gilbert Burr	Hagman

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Andy J. Stewart Edwin A. Peay and Vosco Call Hugh Conover do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the subdivisions of T. 15 S., R. 20 E.; T. 15 S., R. 19 E.; T. 14 S., R. 20 E.; T. 14 S., R. 19 E. T. 13 S., R. 20 E.; T. 13 S., R. 19 E.; T. 12 S., R. 20 E.; T. 12 S., R. 19 E.; T. 11 S., R. 20 E.; and T. 11 S., R. 19 E.

Andy J. Stewart, Chainman.

Edwin A. Peay, Chainman.

Vosco Call Chainman.

Hugh Conover Chainman

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

SEAL

My commission expires March 17, 1903.

Andrew J. Stewart Jr.
Notary Public

We, Clarence S. Jarvis and John J. Harding do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the subdivisions of T. 15 S., R. 20 E.; T. 15 S., R. 19 E.; T. 14 S., R. 20 E.; T. 14 S., R. 19 E.; T. 13 S., R. 20 E.; T. 13 S., R. 19 E.; T. 12 S., R. 20 E.; T. 12 S., R. 19 E.; T. 11 S., R. 20 E.; and T. 11 S., R. 19 E.

Clarence S. Jarvis, Moundman.

John J. Harding, Moundman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

SEAL

Andrew J. Stewart Jr.
Notary Public

We, George W. Ekins and Harry Burton 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 the subdivisions of T. 15 S., R. 20 E.; T. 15 S., R. 19 E.; T. 14 S., R. 20 E.; T. 14 S., R. 19 E.; T. 13 S., R. 20 E.; T. 13 S., R. 19 E.; T. 12 S., R. 20 E.; T. 12 S., R. 19 E.; T. 11 S., R. 20 E.; and T. 11 S., R. 19 E.

Geo. W. Ekins, Axman.

Harry Burton, Axman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

SEAL

Andrew J. Stewart Jr.
Notary Public

We Harvey R. Booth and Gilbert Bus, do solemnly swear that we will well and truly perform the duties of flagman according to instructions given ~~me~~ us, to the best of ~~my~~ our skill and ability, in the survey of the subdivisions of T. 15 S., R. 20 E.; T. 15 S., R. 19 E.; T. 14 S., R. 20 E.; T. 14 S., R. 19 E.; T. 13 S., R. 20 E.; T. 13 S., R. 19 E.; T. 12 S., R. 20 E.; T. 12 S., R. 19 E.; T. 11 S., R. 20 E.; and T. 11 S., R. 19 E.

Harvey R. Booth, Flagman.

Gilbert Bus Flagman.

Subscribed and sworn to before me this 28th day of May 1901, ~~189~~

SEAL

Andrew J. Stewart Jr.
Notary Public

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Subdivision of T.15 S.,R.20 E.

Survey commenced July 26,1901,and executed with a W.and L.E.Gurley light mountain transit,No.3,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 latitude and declination arcs;and a W.and L.E.Gurley plain transit,No.2,of which the horizontal limb is provided with one double vernier reading to single minutes of arc. The instruments were examined ,tested on the true meridian at Salt Lake City,found correct,and were approved by the surveyor general for Utah,the former on June 6,1901,and the latter on May 29,1901. We examine the adjustments of the instruments and correct the level and collimation errors,then to test the solar apparatus ,of the No.3 instrument,by comparing its indications,resulting from solar observations made during p.m.and a.m.hours,with a true meridian determined by observation on Polaris, we proceed as follows:

July 26,1901:At the standard cor,of secs.35 and 36, on S.bdy.of Tp.,longitude 109° 40'W.,lat.39° 28'N.,We set off 39° 28'N.,on the lat.arc;19° 27'N.,on the decl.arc;and at 4 h 3 m,p.m.,l.m.t.,determine a true meridian with the solar and mark a point thereof on a stone, firmly set in the ground,5.00 chs.N.of our station. At 11 h 10 m ,p.m.,l.m.t.,we observe Polaris at eastern elongation,in accordance with the Manual of instructions,and mark a point in the line thus determined on a plug driven in the ground,5.00 chs.N. of our station.

July 26,1901.

July 27,1901:At 6 h 30 m ,a.m.,l.m.t.,we lay off the azimuth of Polaris 1° 35' to the west,and mark the true meridian thus determined by cutting a small

Subdivision of T.15 S.,R.20 E.,Continued.

Chains	
	groove in the stone set July 26,on which the true meridian falls 0.35 ins.east of the mark determined with the solar.
	At 7 h 2 m ,a.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc; 19° 20'N.,on the decl,arc;and mark a point in the true meridian determined with the solar,by a cross on the stone already set 5.00 chs N.of our station;this mark falls 0.30 ins.east of the true meridian established by Polaris observation.
	The solar apparatus by p.m.and a.m.observations,defines positions for true meridians ,respectively about 0'18" west and 0'16"east of the true meridian established by Polaris observation;therefore we conclude thatthe adjustments of the instruments are satisfactory.
	The magnetic bearing of the true meridian at 7 h 30 m ,a.m.,is 15° 51.6'W.,which reduced by the table on page 100 of the Manual,gives the mean mag.decl.15° 46'E.
	From the above described cor,we run N.0° 01'W.,bet.secs.35 and 36.
	Over rolling mesa;through heavy timber.
40.00	Set a limestone,18x14x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W. face;from which
	A pinion pine,8 ins.diam.,bears east 35 lks. dist.,marked ¼ S.36,B.T.
	A pinion pine,5 ins.diam.,bears W.,27 lks. dist.,marked ¼ S.35,B.T.
	Leave timber and enter dense undergrowth,bears E.and W.
60.00	Leave mesa,bears E.and W.;descend.
70.00	Bottom of hollow,150 ft.below,mesa,course N.20° E.; ascend.
80.00	Set a limestone,40x16x6 ins.,30 ins.in the ground, for cor.of secs.25,26,35,and 36,marked with 1 notch

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	on E.and 1 notch on S.edges;from which
	A cedar,8 ins.diam.,bears S.80° W.,125 lks. dist.,marked T.15 S.,R.20 E.,S.35,B.T.
	A pinion pine,12 ins.diam.,bears N.60° W.,150 lks.dist.,marked T.15 S.,R.20 E.,S.26,B.T.
	No other trees within limits;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,mountainous and rolling.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavilty timbered land,or land covered with dense undergrowth,80.00 chs.
	East,on a random line bet.secs.25 and 36.
40.00	Set temp.¼ sec.cor.
75.00	To edge of impassavle gulch;set a temp.witness point. then offset as follows:
	North 3.50 chains;;then,on offset line:
	East,5.04 chs.,(counted from sec.cor.makes)
80.04	Intersect the Green River Guide Meridian,at the witness cor.to secs.25,30,31,and 36,heretofore described.
	Thence we run
	West, on offset line bet.secs.25 and 36.
	Over rolling mesa;through dense undergrowth and scattering timber.
5.04	Offset South 3.50 chs.to true line.
	Set a sandstone,18x8x7 ins.,12 ins.in the ground,for witness point,marked W.P.,on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
	Continue over rolling mesa,through dense sage brush.
10;00	Enter heavy timber ,bears N.and S.
20.00	Leave mesa,bears N.and S.;ascend .
39.50	Top of ridge,100 ft.above mesa,bears N.and S.;descend.
40.02	Set a sandstone,18x10x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face;from which
	A pinion pine,5 ins.diam.,bears N.35° E.,60 lks.dist.,marked ¼ S.25,B.T.
	A pinion pine,8 ins.diam.,bears S.48° W.,57 lks.dist.,marked ¼ S.,36,B.T.
70.00	Leave heavy timber and enter scattering timber,bears N.E.and S.W.;
76.00	Bottom of swale,150 ft.below ridge,course N.35° E.;as-

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Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	cend.
80.04	The cor.of secs.25,26,35,and 36.
	Land,rolling mesa and mountainous.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush .
	Good grass for graaing .
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.04 chs.
	N.0°01'W.,bet.secs.25 and 26.
	Over mountainous land ;through dense undergrowth and scattering timber;ascend .
10.00	Top of ridge,200 ft.above sec.cor.,bears N.20°E.and S.20 °W.;descend .
36.00	Bottom of hollow,150 ft.below ridge,course N.E.;ascend.
40.00	Set a sandstone,20x10x4 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,6 ins.diam.,bears S.35°E.,200 lks. dist.,marked ¼ S.25,B.T.
	A cedar,10 ins.diam.,bears N.85°W.,100 lks. dist.,marked ¼ S.26,B.T.
48.00	Top of ridge,100 ft.above hollow,bears N.30°E.and S.30°W.;descend .
80.00	Set a sandstone,20x10x5 ins.,15 ins.in the ground,for cor.of secs.23,24,25,and 26,marked with 2 notches on S,and 1 notch on E.edges;from which
	A cedar,10 ins.diam.,bears N.42°E.,65 lks. dist.,marked T.15 S.,R.20 E.,S.24,B.T.
	A cedar,8 ins.diam.,bears S.47°E.,90 lks. dist.,marked T.15 S.,R.20 E.,S.25,B.T.
	A cedar,12 ins.diam.,bears S.53°W.,150 lks. dist.,marked T.15 S.,R.20 E.,S.26,B.T.
	A pinion pine,10 ins.diam.,bears N.68°W.,65 lks.dist.,marked T.15 S.,R.20 E.,S.23,B.T.
	Land,mountainous.
	Soil,gravelly loam;2nd rate.
	Timber,cedar and pinion pine.

Subdivision of T.15 S.,R.20 E.,Continued.

Chains	
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	East,on a random line bet.secs.24 and 25.
40.00	Set temp.¼ sec.cor.
79.96	Intersect E.bdy.of Tp.at the cor.of secs.19,24,25,and 30,heretofore described.
	Thence we run
	West,on a true line bet.secs.24 and 25.
	Over rolling mesa;through heavy cedar and pinion pine timber.
27.50	Edge of mesa,bears N.and S.;descend.Leave timber.
39.98	Set a sandstone,15x10x7 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft.base.1½ ft.high,N.of cor. Pits impracticable.
47.50	Bottom of hollow,250 ft.below mesa,course N.10° E.; ascend through scattering timber,bears with hollow.
60.00	Top of ridge,175 ft.above hollow,bears N.10° E.and S. 10° W.;descend.
79.96	The cor.of secs.23,24,25,and 26.
	Land,mountainous and rolling mesa.
	Soil,sandy and gravelly loam;2nd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,79.96 chs.
	N.0° 01'W.,bet.secs.23 and 24.
	Over mountainous land;through scattering cedar and pinion pine timber;descend.
40.00	Set a sandstone,16x7x5 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,10 ins.diam.,bears S.80° E.,60 lks.dist.,marked ¼ S.24,B.T.

Subdivision of T.15 S., R.20 E., G.&S.R.M.

Chains	
	A red pine,10 ins.diam.,bears N.70° W.,20 lks.dist.,marked ¼ S.23,B.T.
45.25.	Dry Canon,about 6.00 ft.below sec.cor.,course S.30° E.;ascend.
67.45	Foot of perpendicular ledge,100 ft.high,bears E.and W.
80.00	Set a limestone,30x9x5 ins.,24 ins.in the ground,for cor.of secs.13,14,23,and 24,marked with 3 notches on S.and 1 notch on E.edges;from which
	A cedar,7 ins.diam.,bears N.29° E.,119 lks. dist.,marked T.15 S.,R.20 E.,S.13,B.T.
	A cedar,5 ins.diam.,bears S.40° E.,120 lks. dist.,marked T.15 S.,R.20 E.,S.24,B.T.
	A cedar,8 ins.diam.,bears S.60° W.,167 lks. dist.,marked T.15 S.,R.20 E.,S.23,B.T.
	A cedar,9 ins.diam.,bears N.73° W.,48 lks. dist.,marked T.15 S.,R.20 E.,S.14,B.T.
	Land,mountainous.
	Soil,sandy and gravelly loam;2nd rate.
	Timber,cedar and pine.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	July 27,1901:At the noon hour the sky is overcast and solar observations are impossible.
	East,on a random line bet.secs.13 and 24.
40.00	Set temp.¼ sec.cor.
79.98	Intersect E.bdy.of Tp.39 lks.S.of the cor.of secs. 13,18,19,and 24,heretofore described.
	Thence we run
	S.89° 43'W.,on a true line bet.secs.13 and 24.
	Over mountainous land;through heavy timber;ascend.
11.50	Top of ascent,400 ft.above cor.,bears N.W.and S.E.; thence across mesa.
37.00	Edge of mesa,bears N.W.and S.E.;descend.leave heavy and enter scattering timber.

Subdivision of T.15 S.,R.20 E.,Continued.

Chains	
39.99	Set a sandstone,18x8x8 ins.,12 ins.in the ground, for ¼ sec.cor.marked ¼ on N.face;and raise a mound of stone,2 ft.base.1½ ft.high,N.of cor.Pits impracticable.
47.50	Bottom of hollow,300 ft.below mesa,course S.E.;ascend.
53.00	Top of ascent,275 ft.above hollow,bears N.W.and S.E.;thence across mesa.
70.00	Edge of mesa,bears N.W.and S.E.;descend.
79.98	The cor.of secs.13,14,23,and 24.
	Land,mountainous and rolling mesa.
	Soil,sandy loam and gravelly;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,79.98 chs.
	N.0°01'W.,bet.secs.13 and 14.
	Over mountainous land;through scattering pinion pine and cedar timber;ascend.
7.00	Top of ascent,100 ft.above cor.bears N.50°W.and S.50°E.;thence across mesa.
40.00	Set a limestone,22x8x4 ins.,19 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;dig pits,18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raise a mound of earth,2 ft.base.1½ ft.high,W.of cor.
80.00	Set a sandstone,24x14x4 ins.,18 ins.in the ground, for cor.of secs.11,12,13,and 14,marked with 4 notches on S.and 1 notch on E.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,rolling and mountainous.
	Soil,gravelly and sandy loam;2nd rate.
	Timber cedar and pinion pine.
	Good grass for grazing.

Chains	Mountainous land,80.00 chs.
	N.89° 43'E.,on a random line bet.secs.12 and 13.
40.00	Set temp. ¼ sec.cor.
79.76	Intersect E.bdy.of Tp.2 1ks.N.of the cor.of secs.7, 12,13,and 18,heretofore described.
	Thence we run
	S.89° 44'W.,on a true line bet.secs.12 and 13.
	Over rolling mesa;through scattering pinion pine and cedar timber,and dense undergrowth.
39.88	Set a limestone,14x10x5 ins.,9 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,10 ins.diam.,bears N.20°E.,60 1ks. dist.,marked ¼ S.12,B.T.
	A cedar,8 ins.diam.,bears S.15°W.,86 1ks. dist.,marked ¼ S.13,B.T.
79.76	The cor.of secs.11,12,13,and 14.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Undergrowth,sage brush.
	Land covered with dense undergrowth,79.76 chs.
	N.0° 01'W.,bet.secs.11 and 12.
	Over rolling mesa;through scattering timber and dense undergrowth.
12.00	Edge of mesa,bears E.and W.;ascend mountain.
29.00	Top of ridge,20 ft.above mesa,bears N.85°W.and S.85°E. Descend.
40.00	Set a sandstone,18x14x8 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor Pits impracticable.
49.00	Bottom of hollow,400 ft.below ridge,course S.70°E.; ascend.

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
64.00	Top of ridge,250 ft.above hollow,bears N.48° E.and S. 48° W.;descend.
78.00	Bottom of hollow,400 ft.below ridge,course N.24° E.; ascend.
80.00	Set a sandstone,22x10x4 ins.,19 ins.in the ground, for cor.of secs.1,2,11,and 12,marked with 5 notches on S.and 1 notch on E.edges;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land ,rolling and mountainous.
	Soil,sandy loam and gravelly;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense under,-growth,80.00 chs.
	N.89° 44'E.,on a random line bet.secs.1 and 12.
40.00	Set temp.¼ sec.cor.
79.70	Intersect E.bdy.of Tp.7 1ks.N.of the cor.of secs.1, 6,7,and 12,heretofore described.
	Thence we run
	S.89° 47'W.,on a true line bet.secs.1 and 12.
	Over rolling mesa;through scattering pinion pine and cedar timber and dense sage brush undergrowth.
39.85	Set a limestone,22x8x4 ins.,19 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
47.00	Leave mesa,bears N.and S.;ascend.
51.10	Top of ridge,100 ft.above mesa,bears N.and S.;descend.
61.10	Bottom of swale,50 ft.below ridge,course N.;ascend.
72.05	Top of spur,25 ft.above swale,bears N.20° E.and S.20° W.;descend.
79.05	Bottom of hollow,200 ft.below spur,course N.20° E.;

Chains ascend.

79.70 The cor.of secs.1,2,11,and 12.

Land,rolling and mountainous.

Soil,sandy and gravelly loam;2nd rate.

Timber ,cedar and pinion pine.

Good grass for grazing.

Undergrowth,sage brush.

Mountainous land,or land covered with dense undergrowth,79.70 chs.

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

40.00 Set temp.¼ sec.cor.

80.00 Intersect N.bdy.of Tp.at the cor.of secs.1,2,35,and 36,heretofore described.

Thence we run

S.0°01'E.,on a true line bet.secs.1 and 2.

Through heavy cedar and pinion pine timber;ascend.

gradually over rolling mesa.

40.00 Set a sandstone.18x8x4 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which

A pinion pine,6 ins.diam.,bears S.79°E.,32 lks.dist.,marked ¼ S.1,B.T.

A pinion pine,12 ins.diam.,bears N.82°W., 100 lks.dist.,marked ¼ S.2,B.T.

69.00 Edge of mesa,bears N.35°E.and S.35°W.;descend.

80.00 The cor.of secs.1,2,11,and 12.

Land,mountainous.

Soil,gravelly;3rd rate.

Timber,cedar and pinion pine.

Good grass for grazing.

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

July 27,1901.

July 29,1901:At 7 h.2 m ,a.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc;18°52'N.,on the decl.arc;and

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
	determine a true meridian with the solar,at the Standard cor.of secs.34 and 35,on S.bdy.of Tp.,heretofore described.
	Thence we run
	N.0° 01'W.,bet.secs.34 and 35.
	Over rolling mesa;through heavy cedar and pinion pine timber.
23.00	Edge of mesa,bears N.80° E.and S.80° W.;descend.
25.00	Leave timber and enter dense undergrowth,bears E. and W.
34.00	Bottom of hollow,250 ft.below mesa,course N.20° E.; ascend.
40.00	Set a limestone,18x10x4 ins.,12 ins.ins in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base 1½ ft.high,W.of cor.Pits impracticable.
80.00	Set a sandstone,30x12x4 ins.,24 ins.in the ground, for cor.of secs.26,27,34,and 35,marked with 1 notch on S.and 2 notches on E.edges;from which
	A cedar,10 ins.diam.,bears N.30° E.,20 lks. dist.,marked T.15 S.,R.20 E.,S.26,B.T.
	A cedar,10 ins.diam.,bears S.35° W.,130 lks. dist.,marked T.15 S.,R.20 E.,S.34,B.T.
	No other trees within limits;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,mountainous and rolling mesa.
	Soil,sandy and gravelly loam;2nd rate.
	Timber ,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	East,on a random line bet. secs.26 and 35.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line 4 lks.N.of the cor.of secs. 25,26,35,and 36.

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
	Thence we run
	N.89° 58'W.,on a true line bet.secs.26 and 35.
	Over mountainous land;through heavy timber and scattering undergrowth;ascend.
6.00	Top of ridge,75 ft.above cor.,bears N.30° E.and S.30° W.;descend.
8.00	Leave timber and enter dense undergrowth,bears N.and S.
18.00	Bottom of hollow,150 ft.below ridge,course N.30° E.; ascend.
39.00	Leave undergrowth and enter scattering cedar and pinion pine timber,bears N.30° E.amd S.30° W.
40.00	Set a sandstone,24x12x4 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,9 ins.diam.,bears N.15° E.,100 lks. dist.,marked ¼ S.,26,B.T.
	A pinion pine,10 ins.diam.,bears S.,75 lks. dist.,marked ¼ S.35,B.T.
60.00	Top of ridge,200 ft.above hollow,bears N.and S.;descend.
78.00	Bottom of hollow,250 ft.below ridge,course N.30° W.; ascend.
80.00	The cor.of secs.26,27,34,and 35.
	Land,mountainous.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	N.0° 01'W.,bet.secs.26 and 27.
	Over mountainous land;through heavy cedar and pinion pine timber;descend.
15.00	Top of perpendicular ledge 50 ft.high,bears E.and W.
16.00	Bottom of hollow [illegible],450 ft.below sec.cor.,course

Subdivision of T.15 S. R 20 E. -Continue

Chains	
	N.45° E.;ascend.
25.00	Top of ridge,200 ft.above canyon,bears N.75° E.and S. 75° W.;descend.
40.00	Set a sandstone,20x12x6 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,8 ins.diam.,bears N.45° E.,5 lks.dist.,marked ¼ S.26,B.T.
	A pinion pine,6 ins.diam.,bears N.5° W.,125 lks.dist.,marked ¼ S.27,B.T.
55.00	Bottom of Dry Canyon,450 ft.below ridge,course N.50° E. Ascend.
65.00	Foot of perpendicular cliff,100 ft.high,bears E.and W.
80.00	Set a sandstone,20x10x4 ins.,15 ins.in the ground, for cor.of secs.22,23,26,and 27,marked with 2 notches on S.and 2 notches on E.edges;from which
	A cedar,6 ins.diam.,bears N.31° E.,35 lks. dist.,marked T.15 S.,R.20 E.,S.23,B.T.
	A cedar,8 ins.diam.,bears S.37° E.,60 lks. dist.,marked T.15 S.,R.20E.,S.26,B.T.
	A cedar,7 ins.diam.,bears S.75° W.,30 lks. dist.,marked T.15 S.,R.20 E.,S.27,B.T.
	A pinion pine,10 ins.diam.,bears N.56° W.,65 lks.dist.,marked T.15 S.,R.20 E.,S.22,B.T.
	Land,mountainous.
	Soil,gravelly loam;2nd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	S.89° 58'E.,on a random line bet.secs.23 and 26.
40.00	Set temp.¼ sec.cor.
79.98	Intersect N.and S.line 7 lks.S.of the cor.of secs. 23,24,25,and 26.
	Thence we run
	S.89° 59'W.,on a true line bet.secs.23 and 26.
	Over mountainous land;through heavy cedar and pinion

Chains	
	pine timber;descend.
10.00	Bottom of swale,100 ft below cor.,course N.;ascend.
20.00	Top of ridge,200 ft.above swale,bears N.20° E.and S. 20° W.;descend.
36.00	Begin steep descent,bears N.20° E and S.20° W.
39.99	Set a sandstone,24x12x6 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which A pinion pine,10 ins.diam.,bears N30° E.,30 lks.dist.,marked ¼ S.23,B.T. A pinion pine,6 ins.diam.,bears S.40° E.,60 lks.dist.,marked ¼ S.26,B.T.
57.50	Bottom of Dry Canyon,500 ft.below ridge,course N.40° E.;ascend.
79.98	The cor.of secs.22,23,26,and 27. Land,mountainous. Soil,sandy loam and gravelly;2nd and 3rd rate. Timber,cedar and pinion pine. Good grass for grazing. Mountainous land,or land covered with dense undergrowth,79.98 chs.
	N.0° 01'W.,bet.secs.22 and 23. Over mountainous land;through scattering timber;ascend.
5.00	Top of ridge,200 ft above cor.,bears N.60° E.and S.60° W.;descend.
40.00	Set a sandstone,18x8x7 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base 1½ ft.high,W.of cor.Pits impracticable.
52.00	Bottom of branch of Dry Canyon,500 ft.below ridge, course E.;ascend.
70.50	Top of ridge,300 ft.above canyon,bears N.80° E.and S. 80° W.;descend.
80.00	Set a sandstone,24x10x6 ins.,18 ins.in the ground, for cor.of secs.14,15,22,and 23,marked with 3 notches

Subdivision of T R -C inu

Chains	
	on S.and 2 notches on E.edges;from which
	A cedar,8 ins.diam.,bears N.80° E.,55 lks. dist.,marked T.15 S.,R.20 E.,S.14,B.T.
	A pinion pine,10 ims.dia.,bears S.45° E.,30 lks.dist.,marked T.15 S.,R.20 E.,S.23,B.T.
	A cedar,12 ins.diam.,bears S.35° W.,6 lks. dist.,marked T.15 S.,R.20 E.,S.22,B.T.
	A cedar,10 ins.diam.,bears N.40° W.10 lks. dist.,marked T.15 S.,R.20 E.,S.15,B.T.
	Land,mountainous.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	July 29,1901:At this cor.we set off 18° 48'N.,on the decl.arc;and at 0 h.3 m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39° 30'N.,which is the proper lat.nearly.
	N.89° 59'E.,on a random line bet.secs.14 and 23.
40.00	Set temp.¼ sec.cor.
80.14	Intersect N.and S.line 4 lks.S.of the cor.of secs. 13,14,23,and 24.
	Thence we run
	S.89° 57'W.,on a true line bet.secs.14 and 23.
	Over mountainous land;through scattering cedar and pinion pine timber;descend.
22.00	Bottom of hollow,400 ft.below cor.,course S.30° E.; ascend.
29.33	Foot of perpendicular ledge,40 ft.high,bears N.and S.
31.00	Top of ridge,400 ft.above hollow,bears N.20° E.and S. 20° W.;descend.
40.07	Set a sandstone,30x9x6 ins.,24 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A pinion pine,12 ins,diam.,bears N.30° E.,55 lks.dist.,marked ¼ S.14,B.T.

Subdivision of T.15 S., R.20 E. Continued

Chains	
	A cedar,5 ins.diam.,bears S.,10 lks. dist., marked ¼ S.23,B.T.
49.00	Bottom of Canyon,300 ft.below ridge,course S.E.;ascend.
66.00	Top of ridge,300 ft.above canyon,bears N.30° E and S. 30° W.;descend.
80.14	The cor.of secs.14,15,22,and 23.
	Land ,mountainous.
	Soil,gravelly loam;2nd rate.
	Timber ,cedar and pinion pine.
	Good grass for grazing.
	Mountainous land.80.14 chs.
	N.0° 01'W.,bet.secs. 14 and 15.
	Over mountainous land;through scattering cedar and pinion pine timber;ascend.
10.00	Top of spur,100 ft.above cor.,bears N.W.and S.E.; descend.
25.00	Bottom of Canyon,200 ft.below spur,course E.;ascend.
40.00	Set a sandstone,18x10x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,6 ins.diam.,bears N.25° E.,75 lks.dist.,marked ¼ S.14,B.T.
	A cedar,6 ins.diam.,bears W.,50 lks.dist., marked ¼ S.15,B.T.
47.50	Top of ascent,bears N.55° W.and S.55° E.Over mesa.
80.00	Set a limestone,18x8x6 ins.,12 ins.in the ground, for cor.of secs.10,11,14,and15,marked with 4 notches on S.and 2 notches on E.edges;from which
	A cedar,14 ins.diam,bears N.56° E.,60 lks. dist.,marked T.15 S.,R.20 E.,S.11,B.T.
	A cedar,12 ins.diam.,bears S.50° E.,49 lks. dist.,marked T.15 S.,R.20 E.,S.14,B.T.
	A cedar,18 ins.diam.,bears S.10° W.,35 lks. dist.,marked T.15 S.,R.20 E.,S.15,B.T.
	A cedar,6 ins.diam.,bears N.86° W.,26 lks. dist.,marked T.15 S.,R.20 E.,S.10,B.T.

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
	Land,mountainous.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous land,80.00 chs.

	N.89° 57'E.,on a random line bet.secs.11 and 14.
40.00	Set temp.¼ sec.cor.
80.08	Intersect N.and S.line 4 lks.S.of the cor.of secs. 11,12,13,and 14.
	Thence we run
	S.89° 55'W.,on a true line bet.secs.11 and 14.
	Over rolling mesa;through heavy cedar and pinion pine timber and dense undergrowth.
40.04	Set a limestone,22x14x5 ins.,16 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,15 ins.diam.,bears N.,23 lks.dist., marked ¼ S.11,B.T.
	A pinion pine,15 ins.diam.,bears S.47°W., 47 lks.dist.,marked ¼ S.14,B.T.
80.08	The cor.of secs.10,11,14,and 15.
	Land,rolling mesa.
	Soil,sandy loam.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Heavily timbered land,or land covered with dense undergrowth,80.08 chs.

	N.0° 01'W.,bet.secs.10 and 11.
	Over rolling mesa;through scattering timber and dense undergrowth.
10.00	Edge of mesa,bears N.E.and S.W.;ascend.
25.00	Top of ascent,200 ft.above mesa,bears N.E.and S.W.; Thence across mesa.
40.00	Set a sandstone,24x10x6 ins.18 ins.in the ground,for

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	$\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;from which
	A pinion pine,12 ins.diam.,bears W.,35 lks. dist.,marked $\frac{1}{4}$ S.11,B.T.
	A cedar,8 ins.diam.bears S.84°W.,100 lks. dist.,marked $\frac{1}{4}$ S.10,B.T.
46.00	Leave timber,bears E.and W.
80.00	Set a sandstone,18x6x4 ins.,12 ins.in the ground, for cor.of secs.2,3,10,and11,marked with 5 notches on S.and 2 notches on E.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,mountainous and rolling mesa.
	Soil,sandy and gravelly loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	N.89°55'E.,on a random line bet.secs.2 and 11.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.04	Intersect N.and S.line 7 lks.N.of the cor.of secs.1, 2,11,and 12.
	Thence we run
	S.89°58'W.,on a true line bet.secs.2 and 11.
	Over mountainous land;through scattering timber and dense undergrowth;ascend.
4.00	Top of ascent,50 ft above cor.,bears N.and S.;thence across rollong mesa.
20.25	Edge of mesa,bears N.E.and S.W.;descend.
33.10	Bottom of hollow,100 ft.below mesa,course N.;ascend.
38.00	Top of ascent,100 ft.above hollow,bears N.and S.; thence across mesa.
40.02	Set a hard sandstone,15x10x5 ins.,10 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face;from which
	A cedar,12 ins.diam.,bears N.82°E.,47 lks. dist.,marked $\frac{1}{4}$ S.2,B.T.

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
	A cedar,12 ins.diam.,bears S.80° E.,72 lks. dist.,marked ¼ S.11,B.T.
41.30	Leave timber,bears N.W.and S.E.
80.04	The cor.of secs.2,3,10,and 11.
	Land,mountainous and rolling mesa.
	Soil,gravelly and sandy loam;2nd and 3rd rate.
	Timber ,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth,80.04 chs.
	N.0° 01'W.,on a random line bet.secs.2 and 3.
40.00	Set temp ¼ sec.cor.
80.20	Intersect N.bdy.of Tp.9 lks.W.of the cor.of secs. 2,3,34,and 35,heretofore described.
	Thence we run
	S.0° 03'W.,on a true line bet.secs. 2 and 3 .
	Over rolling mesa;through scattering timber and dense undergrowth;
3.00	Wash,3 ft.deep,15 lks wide,Course N.E.
40.20	Set a limestone,18x8x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
80.20	The cor.of secs. 2,3,10,and 11.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	Timber,scattering cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.20 chs.
	July 29,1901.
	July 30,1901:At 7 h 4 m a.m.,l.m.t.,we set off 39° 28' N.,on the lat.arc;18° 38'N.,on the decl.arc;and de-

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	termine a true meridian with the solar ,at the standard cor.of secs.33 and 34,on S.bdy.of Tp.,heretofore described.
	Thence we run
	N.0°02'W.,bet.secs.33 and 34.
	Over mountainous land;through scattering cedar and pinion pine timber;descend.
1.25	Bottom of hollow,20 ft.below cor.,course N.15°E.;ascend.
33.60	Top of ridge,200 ft.above hollow,bears N.35°E .and S.35°W.;descend.
40.00	Set a sandstone,18x8x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
53.50	Bottom of Dry Canyon,500 ft.below ridge,course N.50°E. Ascend.
64.00	Top ofascent,350 ft.above canyon,bears N.55°E.and S.55°W.;thence across mesa. Enter dense sage brush.
80.00	Set a sandstone,18x10x6 ins.,12 ins.in the ground, for cor.of secs.27,28,33,and 34,marked with 1 notch on S.and 3 notches on E.edges;from which
	A cedar,6 ins.diam.,bears N.45°E.,75 lks. dist.,marked T.15 S.,R.20 E.,S.27,B.T.
	A cedar,7 ins.diam.,bears S.25°E.,65 lks. dist.,marked T.15 S.,R.20 E.,S.34,B.T.
	A pinion pine,10 ins.diam.,bears S.50°W.,20 lks.dist.,marked T.15 S.,R.20 E.,S.33,B.T.
	A pinion pine,10 ins diam.,bears N.45°W.,80 lks.dist.,marked T.15 S.,R.20 E.,S.28,B.T.
	Land,mountainous and rolling mesa.
	Soil,gravelly and sandy loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
	East,on a random line bet.secs.27 and 34.
40.00	Set temp.¼ sec.cor.
79.96	Intersect N.and S.line 7 lks.S.of the cor.of secs. 26,27,34,and 35.
	Thence we run
	S.89° 57'W.,on a true line bet.secs.27 and 34.
	Over mountainous land;through scattering timber and dense undergrowth;ascend.
20.00	Top of ridge,100 ft.above cor.,bears N.and S.;descend.
39.98	Set a sandstone,20x12x8 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A pinion pine,20 ins.diam.,bears N.55° W.,55 lks.dist.,marked ¼ S.27,B.T.
	A pinion pine,12 ins.diam.,bears S.5° E.,62 lks.dist.,marked ¼ S.34,B.T.
50.00	Bottom of Dry Canyon,600 ft.below ridge,course N.; ascend.
58.00	Top of ascent,400 ft.above canyon,bears N.and S.; thence across mesa.
79.96	The cor.of secs.27,28,33,and 34,
	Land,mountainous and nearly level.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth,79.96 chs.
	N.0° 02'W.,bet.secs. 27 and 28.
	Over mesa;through scattering timber and dense undergrowth.
1.50	Edge of mesa,bears E.and W.;descend.
24.25	Bottom of canyon,500 ft.below mesa,course E.;ascend.
40.00	Set a sandstone,20x10x4 ins.,16 ins.in the ground,

Subdivision of T.15 S.,R.20 E.-Continued.

Chains for ¼ sec.cor.,marked ¼ on W.face;from which

A pinion pine,20 ins.diam.,bears N.20° E.,20 lks.dist.,marked ¼ S.27,B.T.

A cedar,8 ins.diam.,bears S.20° W.,12 lks. dist.,marked ¼ S.28,B.T.

44.00 Leave timber,bears E.and W.

46.00 Top of ridge,375 ft.above canyon,bears N.60° E.and S. 60° W.;descend.

79.80 Bottom of hollow,70 ft.below ridge,course N.45° E.; ascend.Enter scattering timber,bears with hollow.

80.00 Set a sandstone,20x12x4 ins.,15 ins.in the ground, for cor.of secs.21,22,27,and 28,marked with 2 notches on S.and 3 notches on E.edges;from which

A cedar,6 ins,diam.,bears N.50° E.,24 lks. dist.,marked T.15 S.,R.20 E.,S.22,B.T.

A cedar,5 ins.diam.,bears S.60° E.,40 lks. dist.,marked T.15 S.,R.20 E.,S.27,B.T.

A cedar,5 ins.diam.,bears S.15° W.,33 lks. dist.,marked T.15 S.,R.20 E.,S.28,B.T.

A cedar,10 ins.diam.,bears N.17° W.,42 lks. dist.,marked T.15 S.,R.20 E.,S.21,B.T.

Land,level and mountainous.

Soil,gravelly loam;3rd rate.

Timber,cedar and pinion pine.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous land,or land covered with dense under-growth,80.00 chs.

N.89° 57'E.,on a random line bet.secs.22 and 27.

40.00 Set temp.¼ sec.cor.

80.00 Intersect N.and S. line 41lks.N.of the cor.of secs. 22,23,26,and 27.

Thence we run

S.89° 59'W.,on a true line bet.secs.22 and 27.

Over mountainous land;through scattering cedar and

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	
	Pinion pine timber,and dense undergrowth;ascend.
9.00	Top of ridge,100 ft.above cor.,bears N.60° E.and S.60° W.;descend.
32.00	Bottom of hollow,100 ft.below ridge,course N.35° E.; ascend.
40.00	Set a sandstone,16x10x5 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which A cedar,10 ins.diam.,bears N.10° E.,3 lks.dist. marked ¼ S.22,B.T. A cedar,9 ins.diam.,bears S.10° W.,30 lks. dist.,marked ¼ S.27,B.T.
43.50	Top of ridge,150 ft.above hollow,bears N.and S.;descend.
47.00	Bottom of hollow,150 ft.below ridge,course N.25° E.; ascend.abruptly.
51.00	Top of abrupt ascent,bears N.25° E.and S.25° W.;ascend gradually.
75.00	Top of ridge,500 ft.above canyon,bears N. and S. ; descend.
79.75	Bottom of hollow,50 ft.below ridge,course N.E.;ascend.
80.00	The cor.of secs.21,22,27,and 28.
	Land,mountainous.
	Soil,gravelly loam and rocky;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	July 30,1901:At the noon hour the sky is overcast and solar observations are impossoble.
	N.0° 02'W.,bet.secs.21 and 22.
	Over mountainous land ;through scattering timber and dense undergrowth;ascend.
5.00	Top of ridge,25 ft.above sec.cor.,bears N.E.and S.W.; descend.

Subdivision of T.15 S.,R.20 E.,;Continued.

Chains

29.25 Begin abrupt descent,bears N.E.and S.W.

36.00 Bottom of hollow,350 ft.below ridge,course N.35° E.; ascend.

40.00 Set a sandstone,20x12x4 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which

A cedar,12 ins.diam.,bears S.80° E.,25 lks. dist.,marked ¼ S.22,B.T.

A cedar,12 ins.diam.,bears S.74° W.,30 lks. dist.,marked ¼ S.21,B.T.

47.50 Top of spur,150 ft.above hollow,bears N.E.and S.W.; descend.

54.00 Bottom of hollow,200 ft.below spur,course E.;ascend.

67.60 Top of ascent,bears E.and W.;thence over mesa.

80.00 Set a sandstone,18x14x5 ins.,12 ins.in the ground, for cor.of secs.15,16,21,and 22,marked T.15 S.,S.15 on N.E.,R.20 E.,S.22,on S.E.,S.21 on S.W.,and S.16 on N.W.faces;with 3 notches on S.and 3 notches on E. edges;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,mountainous.

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

Timber,cedar and pinion pine.

Undergrowth,sage brush.

Good grass for grazing.

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

N.89° 59'E.,on a random line bet.secs.15 and 22.

40.00 Set temp.¼ sec.cor.

80.06 Intersect N.and S.line 7 lks.S.of the cor.of secs.14, 15,22,and 23.

Thence we run

S.89° 56'W.,on a true line bet.secs.15 and 22.

Over mountainous land;through heavy timber;ascend.

Chains	
4.75	Top of sandstone ledge,100 ft.high,bears N.and S.
5.50	Bottom of hollow,250 ft.below cor.,course N.;ascend.
29.00	Top of ascent,250 ft.above hollow,bears N.and S.; thence over rolling mesa.
30.00	Leave timber and enter dense undergrowth,bears N.and S.
40.03	Set a sandstone,22x12x5 ins.,19 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft.base 1½ ft.high,N.of cor.Pits impracticable.
80.06	The cor.of secs.15,16,22,and 21.

Land,mountainous and rolling mesa.

Soil,sandy loam;2nd rate.

Timber cedar and pinion pine.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,80.06 chs.

July 30,1901:At this cor.we set off 39° 31'N.,on the lat.arc;18° 32'N.,on the decl.arc;and at 4 h 2 m p.m., l.m.t.,determine a true meridian,with the solar,mark a point thereof on a stone,firmly set in the ground, 5.00 chs.N.of our station.

At 10 h 54 m,p.m.,l.m.t.,we observe Polaris at eastern elongation,in accordance with the Manual of Instructions,and mark a point in the line thus determined on a wooden plug driven in the ground,5.00 chs. N.of our station.

July 30,1901.

July 31,1901:At 6 h 30 m,a.m.,l.m.t.,we lay off the azimuth of Polaris 1° 35' to the west,and mark the True Meridian thus determined ,by cutting a small groove in the stone,already set 5.00 chs.N.of our station;on which the true meridian falls 0.25 ins.

Subdivision of T.15 S R 20 E .-Continued

Chains	
	east of the mark determined with the solar.
	At 7 h 0 m a.m.,l.m.t.,we set off 39° 30'N.,on the lat. arc;18° 23'N.,on the decl.arc;and mark a point in the true meridian,determined with the solar,by a cross on the stone already set 5.00 chs.N.of our station;on which the true meridian falls 0.20 ins. east of the true meridian established by Polaris observation.
	The solar apparatus by p.m.and a.m.observations,defines positions for true meridians,respectively about 0'13"west and 0'11"east of the true meridian established by Polaris observation;therefore we conclude that the adjustments are satisfactory.
	The magnetic bearing of the true meridian at 7 h 30 m a.m.,is 15° 51.6'W.,the angle thus determined reduced by the table page 100 of the Manual,gives the mean mag.decl.15° 46'E.
	From the above described cor.we run N.0° 02'W.,bet.secs.15 and 16.
	Over rolling mesa;through scattering timber and dense undergrowth.
40.00	Set a limestone,16x10x4 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,18 ins.diam,bears S.60° E.,165 lks. dist.,marked ¼ S.15,B.T.
	A cedar,16 ins.diam.,bears W.,62 lks.dist., marked ¼ S.16,B.T.
40.10	Edge of mesa,bears N.W.and S.E.;descend.
50.00	Bottom of hollow,200 ft.below mesa,course S.80° E.; ascend.
56.00	Top of ascent,200 ft.above hollow,bears N.E.and S.W. Thence across rolling mesa.
62.00	Old indian trail,bears N.30° E.and S.30° W.
80.00	Set a sandstone,16x11x5 ins.,11 ins in the ground, for cor.of secs.9,10,15,and 16,marked with 4 notches on S.and 3 notches on E.edges.from which

Chains	
	A cedar,32 ins.diam.,bears N.55° E.,220 lks. dist.,marked T.15 S.,R .20 E.,S.10,B.T.
	No other trees within limits;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land ,mountainous and rolling mesa.
	Soil,sandy loam and rocky;2nd and 4th rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	N.89° 56'E.,on a random line bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
80.16	Intersect N.and S.line 35 lks.S.of the cor.of secs. 10,11,14,and 15.
	Thence we run
	S.89° 41'W.,on a true line bet.secs.10 and 15.
	Over rolling mesa;through scattering timber and dense undergrowth.
7.50	Edge of mesa,bears N.E.and S.W.; ascend.
24.00	Top of ascent,200 ft.above mesa,bears N.E.and S.W.; thence across mesa.
31.50	Leave mesa,bears N.and S.;descend over ledges.
36.50	Bottom of hollow,125 ft.below mesa,course S.;ascend.
40.08	Set a limestone,18x10x6 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on N. face;from which
	A pinion pine,10 ins.diam.,bears N.32° E., 58 lks.dist.,marked ¼ S.10 ,B.T.
	A pinion pine,18 ins.diam.,bears S.34° W.,63 lks.dist.,marked ¼ S.15,B.T.
41.00	Top of ascent,bears N.and S.;thence across mesa.
67.65	Old indian trail,bears N.30° E.and S.30° W.
80.16	The cor.of secs.9,10,15,and 16.
	Land,rolling and mountainous.

Subdivision of T.15 S.,R.20 E.,-Continued.

Chains	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.16 chs.
	N.0°02'W.,bet.secs.9 and 10.
	Over rolling mesa;through scattering timber and dense undergrowth.
40.00	Set a sandstone,24x16x5 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,10 ins.diam.,bears N.30°E., 300 lks.dist.,marked ¼ S.10,B.T.
	No other tree within limits;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
80.00	Set a sandstone,14x12x5 ins.,9 ins.in the ground, for cor.of secs.3,4,9,and10,marked with 5 notches on S.and 3 notches on E.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	Timber,scattering cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	N.89°41'E.,on a random line bet.secs.3 and 10.
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line 30lks.N.of the cor.of secs.2, 3,10,and 11.
	Thence we run
	S.89°54'W.,on a true line bet.secs.3 and 10.
	Over rolling mesa;through dense undergrowth.
34.80	Old indian trail,bears N.15°E.and S.15°W.

Chains	
40.05	Set a sandstone,16x10x4 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
48.00	Cattle trail,bears N.and S.
80.10	The cor.of secs.3,4,9,and 10.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.10 chs.
	N.0°02'W.,on a random line bet.secs.3 and 4.
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.bdy.of Tp.at the cor.of secs.3,4,33,and 34.,heretofore described.
	Thence we run
	S.0°02'E.,on a true line bet.secs.3 and 4.
	Over rolling mesa;through dense undergrowth.
40.10	Set a sandstone,16x6x5 ins.,11 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
80.10	The cor.of secs.3,4,9,and 10.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.10 chs.
	July 31,1901:At this cor.we set off 18°19'N.,on the decl.arc;and at 0 h 3 m p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 39° 32'N.
	From the Standard cor.of secs.32 and 33,on S.bdy.of

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	Tp.,heretofore described,
	We run
	N.0° 03.'W.,bet.secs.32 and 33.
	Over rolling mesa;through heavy timber.
21.75	Edge of mesa,bears N.W.and S.E.;descend.
27.00	Bottom of hollow,200 ft.below mesa,course E.;ascend.
36.00	Top of ridge,100 ft.above hollow,bears N.75° E.and S.75° W.;descend.
40.00	Set a sandstone,22x12x4 ins.,16 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,24 ins.diam.,bears E.,35 lks. dist.,marked ¼ S.33,B.T.
	A cedar,10 ins.diam.,bears N.80° W.,45 lks. dist.,marked ¼ S.32,B.T.
44.00	Bottom of hollow,150 ft.below ridge,course S.75° E.; ascend.
52.00	Old indian trail,bears N.35° E.and S.35° W.
80.00	Set a sandstone,22x14x6 ins.,11 ins.in the ground, for cor.of secs.28,29,32,and 33,marked with 1 notch on S.and 4 notches on E.edges;from which
	A pinion pine,12 ins.diam.,bears N.E.,12 lks. dist.,marked T.15 S.,R.20 E.,-S.28,B.T.
	A pinion pine,4 ins.diam.,bears S.20° E.,90 lks.dist.,marked T.15 S.,R.20 E.,S.33,B.T.
	A pinion pine,8 ins.diam.,bears S.30° W.,70 lks.dist.,marked T.15 S.,R.20 E.,S.32,B.T.
	A pinion pine,10 ins.diam.,bears N.25° W.,50 lks.dist.,marked T.15 S.,R.20 E.,S.29,B.T.
	Land,mountainous and rolling mesa.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous land,or heavily timbered land,80.00 chs.
	July 31,1901.
	August 1,1901:At 7 h 2 m a.m.,l.m.t.,we set off 39° 29'

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	N.,on the lat.arc;18° 8'N.,on the decl.arc;and determine a true meridian with the solar,at the cor.of secs.28,29,32,and 33.
	thence we run
	East ,on a random line bet.secs.28 and 33.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line at the cor.of secs.27,28,33, and 34.
	Thence we run
	West,on a true line bet.secs.28 amd 33.
	Over rolling mesa;through scattering timber and dense undergrowth.
39.97	Set a sandstone,16x12x4 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,10 ins.diam.,bears N.30° W.,150 lks. dist.,marked ¼ S.28,B.T.
	A cedar,12 ins.diam.,bears S.10° W.,75 lks. dist.,marked ¼ S.33,B.T.
60.00	Old indian trail,bears N.and S.
65.00	Foot of ascent,bears N.20° E and S.20° W.
79.94	The cor.of secs.28,29,32,and 33.
	Land,mountainous and rolling mesa.
	Soil,gravelly and sandy ;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,79.94 chs.
	N.0° 03'W.,bet.secs.28 and 29.
	Over mountainous land;through heavy timber;ascend.
5.00	Top of divide ridge,50 ft.above cor.,bears N.20° E. and S.20° W.;descend.
40.00	Set a limestone,24x10x4 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,5 ins.diam.,bears S.15° E.,170 lks.

Subdivision of T.15 S., R.20 E., G.R.M.

Chains	
	dist.,marked ¼ S.28,B.T.
	A pinion pine,8 ins.diam.,bears S.78° W.,224 lks.dist.,marked ¼ S.29,B.T.
70.00	Foot of descent,250 ft.below ridge,bears E.and W.; thence across mesa. Enter dense undergrowth.
80.00	Set a limestone,18x6x6 ins.,12 ins.in the ground, for cor.of secs.20,21,28,and 29,marked with 2 notches on S.and 4 notches on E.edges;from which
	A cedar,10 ins,diam,bears N.44° E.,300 lks. dist.,marked T.15 S.,R.20 E.,S.21,B.T.
	A cedar,12 ins.diam.,bears S.34° E.,275 lks. dist.,marked T.15 S.,R.20 E.,S.28,B.T.
	A cedar,10 ins.diam.,bears S.86° W.,298 lks. dist.,marked T.15 S.,R.20 E.,S.29,B.T.
	A cedar,12 ins.diam.,bears N.50° W.,252 lks. dist.,marked T.15 S.,R.20 E.,S.20,B.T.
	Land,mountainous and rolling mesa.
	Soil,sandy and gravelly loam;2nd rate.
	Timber ,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	East,on a random line bet.secs.21 and 28.
40.00	Set temp.¼ sec.cor.
79.88	Intersect N.and S.line at the cor.of secs.21,22,27, and 28.
	Thence we run
	West,on a true line bet.secs.21 and 28.
	Over mountainous land;through scattering timber and dense undergrowth;ascend.
5.00	Top of ascent,bears N.and S.;thence across rolling mesa.
39.94	Set a limestone,14x6x6 ins.,9 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face;from which

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	A cedar,6 ins.diam.,bears N.32° E.,44 lks. dist.,marked ¼ S.21,B.T.
	A cedar,10 ins.diam.,bears S.10° W.,88 lks. dist.,marked ¼ S.28,B.T.
55.00	Old indian trail,bears N.and S.
79.88	The cor. of secs.20,21,28,and 29.
	Land,mountainous and rolling mesa.
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing .
	Mountainous land,or land covered with dense undergrowth,79.88 chs.
	N.0° 03'W.,bet.secs.20 and 21.
	Over rolling mesa ;through scattering timber and dense undergrowth.
40.00	Set a limestone,20x6x6 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,6 ins.diam.,bears N.32 °E.,280 lks. dist.,marked ¼ S.21,B.T.
	A cedar,15 ins.diam.,bears S.6° W.,60 lks. dist.,marked ¼ S.20,B.T.
61.40	Trail from Fullerton's ranch to Flat Rock,bears E. and W.
80.00	Set a limestone,18x9x8 ins.,12 ins.in the ground, for cor.of secs.16,17,20,and 21,marked with 3 notches on S.and 4 notches on E.edges;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.

Subdivision of T.15 S.,R.20 E.,--Continued.

Chains	
	East,on a random line bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S.line 4 lks.S.of the cor.of secs. 15,16,21,and 22.
	Thence we run
	S.89° 58'W.,on a true line bet.secs.16 and 21.
	Over rolling mesa;through scattering timber and dense undergrowth.
40.02	Set a limestone,28x14x5 ins.,22 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft,base,1½ ft.high,N.of cor.Pits impracticable.
44.00	Old indian trail,bears N.and S.;on Flat Rock Pass.
80.04	The cor.of secs.16,17,20,and 21.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	Timber,cedar amd pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.04 chs.
	August 1,1901:At the noon hour the sky is overcast and solar observations are impossible.
	N.0° 03'W.,bet.secs.16 and 17.
	Over mountainous land;through scattering timber and dense undergrowth.
17.50	Edge of mesa ,bears N.80°W.and S.80°E.;descend abruptly.
21.50	Bottom of hollow,250 ft.below mesa ,course N.80°W.; ascend.
30.00	Top of ascent,bears N.80°W.and S.80°E.;thence over mesa.
40.00	Set a sandstone ,16x8x5 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;dig pits,18x18x12

Subdivision of T.15 S. R.20 E.-Continue

Chains.	
	ins.,N.and S.of stone,3 ft.dist.;and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
80.00	Set a limestone,20x10x6 ins.,15 ins.in the ground, for cor.of secs.8,9,16,and 17,marked with 4 notches on S.and 4 notches on E.edges;from which
	A cedar,10 ins.diam.,bears N.30° E.,45 lks. dist.,marked T.15 S.,R.20 E.,S.9,B.T.
	A cedar,8 ins.diam.,bears S.70° E.,22 lks. dist.,marked T.15 S.,R.20 E.,S.16,B.T.
	A cedar,12 ins.diam.,bears S.60° W.,58 lks. dist.,marked T.15 S.,R.20 E.,S.17,B.T.
	A cedar,12 ins.diam.,bears N.15° W.,18 lks. dist.,marked T.15 S.,R.20 E.,S.8,B.T.
	Land,mountainous and rolling mesa.
	Soil,gravelly and sandy loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	good grass for grazing.
	Mountainous land,or land covered with dense under-growth,80.00 chs.
	N.89° 58'E.,on a random line bet,secs.9 and 16.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line 7 lks.S.of the cor.of secs. 9,10,15,and 16.
	Thence we run
	S.89° 55'W.,on a true line bet.secs.9 and 16.
	Over rolling mesa;through scattering timber and dense undergrowth.
38.00	Edge of mesa,bears N.and S.;descend.
39.97	Set a sandstone,18x8x6 ins.,12 ins.in the ground , for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
47.50	Bottom of hollow,400 ft.below mesa,course N.60° W.; ascend.

Chains	
71.60	Top of ascent,bears N.80° W.and S.80° E.;thence over mesa.
79.94	The cor.of secs.8,9,16,and 17.
	Land,rolling mesa and mountainous.
	Soil,sandy loam and rocky;2nd and 4th rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense indergrowth,79.94 chs.
	N.0° 03'W.,bet.secs.8 and 9.
	Over rolling mesa;through dense undergrowth and scattering timber.
3.80	Edge of mesa,bears E.and W.;descend.
17.50	Bottom of hollow,350 ft.below mesa,course W.;ascend.
32.00	Top of perpendicular cliff 100 ft.high,bears E.and W. Also edge of mesa,800 ft.above hollow;thence across mesa.
40.00	Set a sandstone,24x12x6 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pinion pine,20 ins.diam.,bears N.34° E.,65 lks.dist.,marked ¼ S.9,B.T.
	A pinion pine,9 ins.diam.,bears S.51° W.,70 lks.dist.,marked ¼ S.8,B.T.
41.70	Leave mesa,bears N.10° E.and S.10° W.;descend.
47.00	Bottom of hollow,150 ft.below mesa,course S.W.;ascend.
48.50	Top of ascent,200 ft.above hollow,bears E.and S.W.; thence over mesa.
53.50	Edge of mesa,bears N.E.and S.W.;descend.
68.15	Bottom of hollow,200 ft.below mesa,course W.;ascend.
80.00	Set a limestone,16x10x4 ins.,11 ins.in the ground,for cor.of secs.4,5,8,and 9,marked with 5 notches on S.and 4 notches on E.edges;from which

Chains	
	A pinion pine,20 ins.diam.,bears N.48° E.,50 lks.dist.,marked T.15 S.,R.20 E.,S.4,B.T.
	A pinion pine,10 ins.diam.,bears S.27° E.,180 lks.dist.,marked T.15 S.,R.20 E.,S.9,B.T.
	A pinion pine,14 ins.diam.,bears S.27° W.180 lks.dist.,marked T.15 S.,R.20 E.,S.8,B.T.
	A pinion pine,12 ins.diam.,bears N.60° W.,48 lks.dist.,marked T.15 S.,R.20 E.,S.5,B.T.
	Land,mountainous and rolling mesa.
	Soil,gravelly and clay loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,80.00 chs.
	N.89° 55'E.,on a random line bet.secs.4 and 9.
40.00	Set temp.¼ sec.cor.
79.80	Intersect N.and S.line 12 lks.S.of the cor.of secs. 3,4,9,and 10.
	Thence we run
	S.89° 50'W.,on a true line bet.secs.4 and 9.
	Over rolling mesa;through dense undergrowth.
39.90	Set a sandstone,18x9x5 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face;dig pits,18x18x12 ins., E.and W.of stone,3 ft.dist.;and raise a mound of earth,4 ft.base,2 ft.high,N.of cor.
45.00	Leave undergrowth and enter heavy timber,bears N.and S.
55.25	Edge of mesa,bears N.W.and S.W.;descend.
59.00	A spring bears S.,50 lks.dist.The spring is very small . Not enough flows to water a horse.
68.25	Bottom of canyon,250 ft.below mesa,course S.W.;ascend.
79.80	The cor.of secs.4,5,8,and 9.
	Land,mountainous and rolling mesa.
	Soil,sandy and gravelly;3rd rate.

Subdivision of T.15 S.,R.20 E -Continued

Chains	
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,79.80 chs.
	N.0°02'W.,on a random line bet.secs.4 and 5.
40.00	Set temp.¼ sec.cor.
80.20	Intersect N.bdy.of Tp.at the cor.of secs.4,5,32,and 33,heretofore described.
	Thence we run
	S.0°02'E.,on a true line bet.secs.4 and 5.
	Over rolling mesa;through dense undergrowth and scattering timber.
40.20	Set a sandstone,18x11x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A red cedar,10 ins.diam.,bears S.65°E.,80 lks.dist.,marked ¼ S.4,B.T.
	A cedar,8 ins.diam.,bears S.45°W.,240 lks. dist.,marked ¼ S.5,B.T.
53.50	Edge of mesa,bears S.E.and W.;descend.
64.00	Bottom of hollow,200 ft.below mesa,course S.E.; ascend.
75.50	Top of ridge,300 ft.above hollow,bears N.W.and S.E.; Enter heavy timber,bears with ridge.
80.20	The cor.of secs.4,5,8,and 9.
	Land,mountainous and mesa.
	Soil,sandy and gravelly loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.20 chs.
	August 1,1901.

division of T.15 S.,R.20 E.-Cont

Chains	
	August 2,1901:AT 7 h 3 m a.m.,l.m.t.,we set off 39° 28'N.,on the lat.arc;17° 53'N.,on the decl.arc;and determine a true meridian with the solar,at the standard cor.of secs.31 and 32,heretofore described. Thence we run
	N.0° 03'W.,bet.secs.31 and 32.
	Over mountainous land;through heavy timber and scattering undergrowth;descend.
25.00	Wash,10 ft.wide,3 ft.deep,in bottom of Road Canyon, 100 ft.below sec.cor.,course N.40°W.;ascend.
40.00	Set a limestone,20x7x5 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face;from which
	A cottonwood,12 ins.diam.,bears N.20°W.,40 lks.dist.,marked ¼ S.31,B.T.
	A pine,16 ins.diam.,bears S.75°E.,90 lks . dist.,marked ¼ S.32,B.T.
78.00	Top of ridge,200 ft.above canyon,bears E.and W.;descend.
80.00	Set a sandstone,20x10x8 ins.,15 ins.in the ground, for cor.of secs.29,30,31,and 32,marked with 1 notch on S.and 5 notches on E.edges;from which
	A pine,8 ins.diam.,bears N.40°E.,25 lks. dist.,marked T.15 S.,R.20 E.,S.29,B.T.
	A pine,8 ins.diam.,bears S.70°E.,60 lks. dist.,marked T.15 S.,R.20 E.,S.32,B.T.
	A cedar,12 ins.diam.,bears S.45°W.,35 lks. dist.,marked T.15 S.,R.20 E.,S.31,B.T.
	A cedar,12 ins.diam.,bears N.70°W.,10 lks. dist.,marked T.15 S.,R.20E.,S.30 B.T.
	Land,mountainous.
	Soil,gravelly;3rd rate.
	Timber,cedar and pinion pine and cottonwood.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.

Subdivision of T.15 S. R.20 E.-Continued.

Chains	
	East,on a random line bet.secs.29 and 32.
40.00	Set temp.¼ sec.cor:
79.90	Intersect N.and S.line,9 lks.S.of the cor.of secs.28, 29,32,and 33.
	Thence we run
	S.89° 56'W.,on a true line bet,secs.29 and 32.
	Over mountainous land;through scattering timber and scattering undergrowth;ascend.
1.50	Top of ridge,30 ft.above cor.,bears N.10° E.and S.10° W.;descend gradually.
21.00	Leave timber,bears N.and S.
26.00	Enter timber,bears N.and S.
39.95	Set a limestone,24x8x6 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,24 ins.diam.,bears N.10° E.,70 lks. dist.,marked ¼ S.29,B.T.
	A cedar,20 ins.diam.,bears S.40° W.,65 lks. dist.,marked ¼ S.32,B.T.
79.90	The cor.of secs.29,30,31,and 32.
	Land,mountainous.
	Soil,gravelly ;3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,79,90 chs.
	West,on a random line bet.secs.30 and 31.
40.00	Set temp.¼ sec.cor.
79.76	Intersect W.bdy.of Tp.,7 lks.S.of the cor.of secs.25, 30,31,and 36,heretofore described.
	Thence we run
	S.89° 57'E.,on a true line bet.secs.30 and 31.
	Over mesa;through heavy timber.
30.00	Leave heavy and enter scattering timber,bears N.and S.
39.76	Set a sandstone,16x10x8 ins.,11 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face;from which

Chains	
	A cedar,24 ins.diam.,bears N.15° W.260 lks. dist.,marked ¼ S.30,B.T.
	A cedar,6 ins.diam.,bears S.10° W.,100 lks. dist.,marked ¼ S.31,B.T.
45.00	Enter dense undergrowth,bears N.and S.
50.00	Edge of mesa,bears N.30° W.and S.30° E.;descend.
74.00	Bottom of Road Canyon,300 ft.below mesa,course N.50° W.;ascend.
79.76	The cor.of secs.29,30,31,and 32.
	Land,mountainous and level.
	Soil,Sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,79.76 chs.

	N.0° 03'W.,bet.secs.29 and 30.
	Over mountainous land;through heavy cedar and pinion pine timber;descend abruptly.
5.25	Bottom of gulch,150 ft.below cor.,course W.;ascend over large boulders.
12.75	Top of ascent,250 ft.above hollow,bears E.and W.; thence across mesa.Leave heavy timber and enter scattering timber and dense undergrowth,bears E.and W.
40.00	Set a sandstone,18x12x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar,24 ins.diam.,bears N.50° E.,25 lks. dist.,marked ¼ S.29,B.T.
	A cedar,8 ins.diam.,bears N.40° W.,50 lks. dist.,marked ¼ S.30,B.T.
80.00	Set a sandstone,18x10x5 ins.,12 ins.in the ground, for cor.of secs.19,20,29,and 30,marked with 2 notches on S.and 5 notches on E.edges;from which
	A cedar,8 ins.diam.,bears N.75° E.,150 lks.

Chains	
	dist.,marked T.15 S.,R.20 E.S.20,B.T.
	A cedar,24 ins.diam.,bears S.31° E.,140 lks.
	dist.,marked T.15 S.,R.20 E.,S.29,B.T.
	A cedar,12 ins.diam.,bears S.30° W.,15 lks.
	dist.,marked T.15 S.,R.20 E.,S.30,B.T.
	A cedar,8 ins.diam.,bears N.65° W.,70 lks.
	dist.,marked T.15 S.,R.20 E.,S.19,B.T.
	Land,mountainous and level.
	Soil,sandy and gravelly loam;2nd and 3rd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	August 2,1901:At the noon hour the sky is overcast and solar observations are impossible.
	N.89° 56'E.,on a random line bet.secs.20 and 29.
40.00	Set temp.¼ sec.cor.
79.70	Intersect N.and S.line,14 lks.S.of the cor.of secs. 20,21,28,and 29.
	Thence we run
	S.89° 50'W.,on a true line bet.secs.20 and 29.
	Over rolling mesa;through scattering timber and dense undergrowth.
39.85	Set a limestone.16x8x5 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,16 ins.diam.,bears N.25° E.,22 lks.
	dist.,marked ¼ S.20,B.T.
	A pinion pine,24 ins.diam.,bears S.20° W.,63 lks.dist.,marked ¼ S.29,B.T.
79.70	The cor.of secs.19,20,29,and 30.
	Land,level.
	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.

Chains Land,covered with dense undergrowth,79.70 chs.

N.89° 57'W.,on a random line bet.secs.19 and 30.

40.00 Set temp.¼ sec.cor.

79.52 Intersect W.bdy.of Tp.,4 lks.N.of the cor.of secs. 19,24,25,and 30,heretofore described.

Thence we run

S.89° 59'E.,on a true line bet.secs.19 and 30.

Over mountainous land;through scattering timber and dense undergrowth;ascend.

17.50 Top of ascent,bears N.10° W.and S.30° W.;thence over mesa.

22.20 Edge of mesa,bears N.20° W.and S.20° E.;descend.

36.20 Bottom of Road Canyon,400 ft.below mesa ,course N.50° W.;ascend abruptly.

39.52 Set a sandstone,18x12x5 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;From which

A cedar,5 ins.diam.,bears N.15° W.,25 lks. dist.,marked ¼ S.19,B.T.

A pine,20 ins.diam.,bears S.35° W.,32 lks. dist.,marked ¼ S.30,B.T.

54.50 Top of ascent,450 ft.above canyon,bears N.30° W.and S.30° E.;thence across mesa.

79.52 The cor.of secs.19,20,29,and 30.

Land,mountainous and level.

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

Timber,cedar and pinion pine.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,79.52 chs.

N.0° 03'W.,bet.secs.19 and 20.

Over rolling mesa;through dense sage brush and scattering timber.

34.00 Edge of mesa,bears E.and W.descend abruptly.

Subdivision of T.15 S.,R.20 E -Continued

Chains	
40.00	Set a sandstone,20x12x4 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which A pinion pine,6 ins.diam.,bears S.80° E.,35 lks.dist.,marked ¼ S.20,B.T. A pinion pine,6 ins.diam.,bears S.85° W.,35 lks. dist.,marked ¼ S.19,B.T.
42.60	Bottom of hollow,336 ft.below mesa,course W.;ascend.
50.50	Top of ridge,150 ft.above canyon,bears E.and W.;descend.
53.50	Bottom of Canyon,150 ft.below ridge,course W.;ascend.
56.50	Top of ascent,bears E.and W.;thence across mesa.
74.50	Trail from Fullerton's ranch to flat rock,bears E. and W.
80.00	Set a sandstone,30x12x6 ins.,24 ins.in the ground, for cor.of secs.17,18,19,and 20,marked with 3 notches on S.and 5 notches on E.edges;from which A pinion pine,5 ins.diam.,bears N.30° E.,60 lks.dist.,marked T.15 S.,R.20 E.,S.17,B.T. A cedar,10 ins.diam.,bears S.35° E.,20 lks. dist.,marked T.15 S.,R.20 E.,S.20,B.T. A cedar,6 ins.diam.,bears S.85° W.,30 lks. dist.,marked T.15 S.,R.20 E.,S.19,B.T. A pinion pine,14 ins.diam.,bears N.30° W.,45 lks.dist.,marked T.15 S.,R.20 E.,S.18,B.T. Land,mountainous.and level. Soil,sandy loam and gravelly;2nd and 3rd rate. Timber,cedar and pinion pine. Undergrowth,sage brush. Good grass for grazing. Mountainous land,or land covered with dense undergrowth,80.00 chs.
	N.89° 50° E.,on a random line bet.secs.17 and 20.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S.line,11 lks.S.of the cor.of secs.

Subdivision of T.15 S. R.20 E.-Continued.

Chains	
	16,17,20,and 21.
	Thence we run
	S.89° 45'W.,on a true line bet.secs.17 and 20.
	Over rolling mesa;through scattering timber and dense undergrowth.
40.02	Set a limestone,18x8x6 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raise a mound of earth,4 ft.base,2 ft.high,N.of cor.
80.04	The cor.of secs.17,18,19,and 20.
	Land,rolling mesa.
	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.04 chs.
	N.89° 59'W.,on a random line bet.secs.18 and 19.
40.00	Set temp.¼ sec.cor.
79.29	Intersect W.bdy.of Tp.,4 lks.S.of the cor.of secs. 13,18,19,and 24,heretofore described.
	Thence we run
	S.89° 57'E.,on a true line bet.secs.18 and 19.
	Over mountainous land;through heavy timber ;ascend.
5.50	Top of ascent,30 ft.above cor.,bears N.W.and S.E.; thence over mesa.
39.29	Set a limestone,24x12x8 ins.,18 ins.in the ground, for ¼ sec.cor., marked ¼ on N.face;from which
	a cedar,10 ins.diam.,bears N.60° E.,34 lks. dist.,marked ¼ S.18,B.T.
	A cedar,4 ft.diam.,bears S.50° W.,16 lks. dist.,marked ¼ S.19,B.T.
79.29	The cor.of secs.17,18,19,and 20.
	Land,mountainous and level.
	Soil,sandy loam;2nd rate.
	Timber,cedar and pinion pine.

T.15 S., R.20 E. Continued

Chains	
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, 79.29 chs.
	August 2, 1901.

August 3, 1901: At 7 h 2 m a.m., l.m.t., we set off 39° 30'N., on the lat. arc; 17° 38'N., on the decl. arc; and determine a true meridian, with the solar, at the cor. of secs. 17, 18, 19, and 20.

Thence we run

N. 0° 03'W., bet. secs. 17 and 18.

Over rolling mesa; through heavy timber.

10.00 Edge of mesa, bears N.W. and S.E.; enter dense undergrowth. Descend.

40.00 Set a sandstone, 24x12x5 ins., 18 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face; from which

A pinion pine, 11 ins. diam., bears S. 35° E., 35 lks. dist., marked ¼ S.17, B.T.

A pinion pine, 10 ins. diam., bears N. 60° W., 40 lks. dist., marked ¼ S.18, B.T.

57.00 Bottom of canyon, 300 ft. below mesa, course N.W.; ascend.

72.00 Top of spur, 300 ft. above canyon, bears N.W. and S.E.; descend.

80.00 Set a limestone, 24x12x4 ins., 18 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, marked with 4 notches on S. and 5 notches on E. edges; from which

A cedar, 5 ins. diam., bears N. 50° E., 70 lks. dist., marked T.15 S., R.20 E., S.8, B.T.

A pinion pine, 10 ins., diam., bears S. 30° E., 60 lks. dist., marked T.15 S., R.20 E., S.17, B.T.

A pine, 15 ins. diam., bears S. 60° W., 40 lks. dist., marked T.15 S., R.20 E., S.18, B.T.

A pinion pine, 5 ins. diam., bears N. 16° W., 25 lks. dist., marked T.15 S., R.20 E., S.7, B.T.

Land, mountainous.

Chains	
	Soil,sandy and gravelly loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	N.89° 45'E.,on a random line bet.secs.8 and 17.
40.00	Set temp .¼ sec.cor.
80.08	Intersect N.and S.line,10 lks.N.of the cor.of secs. 8,9,16,and 17.
	Thence we run
	S.89° 49'W.,on a true line bet.secs.8 and 17.
	Over rolling mesa;through heavy timber and dense undergrowth.
40.04	Set a sandstone,16x10x4 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar,6 ins.diam.,bears N.E.,60 lks.dist., marked ¼ S.8,B.T.
	A pinion pine,4 ins.diam.,bears S.30°W.,50 lks.dist.,marked ¼ S.17,B.T.
52.00	Edge of mesa,bears N.and S.;descend.
72.00	Bottom of hollow,250 ft.below mesa,course N.30°W.; ascend.
80.08	The cor.of secs.7,8,17,and 18.
	Land,mountainous and mesa.
	Soil,sandy and gravelly loam;2nd and 3rd rate.
	Timber ,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.08 chs.
	N.89° 57'W.,on a random line bet.secs.7 and 18.
40.00	Set temp.¼ sec.cor.
79.04	Intersect W.bdy.of Tp.4 lks.S.of the cor.of secs.7,

Chains	12,13,and 18,heretofore described.
	Thence we run
	S.89° 55'E.,on a true lin bet.secs.7 amd 18 .
	Over mountainous land;through scattering timber;ascend.
12.00	Top of ridge;250 ft.above cor.,bears N.W.and S.E.; descend.
36.75	Bottom of hollow,500 ft.below ridge,course N.15° W.; ascend.
39.04	Set a sandstone,30x16x5 ins.,24 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.facefrom which
	A pinion pine,11 ins.diam.,bears N.65° W., 280 lks.dist.,marked ¼ S.7,B.T.
	A pinion pine,11 ins.diam.,bears South 45 lks.dist.,marked ¼ S.18,B.T.
47.70	Top of ridge,300 ft.above hollow,bears N.30° W and S. 30° E.,;descend.
53.80	Bottom of hollow,200 ft.below ridge,course N.W.;ascend.
71.70	Top of ridge,150 ft.above hollow,bears N.W.and S.E.; descend.
79.04	The cor.of secs.7,8,17,and 18.
	Land,mountainous.
	Soil,gravelly;3rd rate.
	timber,cedar and pinion pine .
	Good grass for grazing.
	Mountainous land,79.04 chs.
	N.0°03'W.,bet.secs.7 and 8.
	Over mountainous land;through scattering timber and scattering undergrowth;descend.
9.16	Bottom of hollow,250 ft.below cor.,course S.87° W.; ascend.
25.00	Top of ridge ,250 ft.above hollow,bears E.and W.;descend.
39.00	Bottom of hollow,250 ft.below ridge,course N.68° W.;

Chains	
	ascend.
40.00	Set a sandstone,18x10x6 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;and raise a mound of stone,2 ft.base,1½ ft;high,W.of cor.Pits impracticable.
47.00	Top of ridge,175 ft.above hollow,bears N.80° E.and S. 80° W.;descend.
54.00	Bottom of hollow,175 ft.below ridge,course S.80° W.; ascend.
80.00	Set a sandstone,18x8x5 ins.,12 ins.in the ground, for cor.of secs.5,6,7,and8,marked with 5 notches on S.and 5 notches on E.edges;from which
	A pinion pine,6 ins.diam.,bears N.65° E.,30 lks.dist.,marked T.15 S.,R.20 E.,S.5,B.T.
	A pinion pine,6 ins.diam.,bears S.68° E.,68 lks.dist.,marked T.15 S.,R.20 E.,S.8,B.T.
	A pinion pine,18 ins.diam.,bears S.40° W.,64 lks.dist.,marked T.15 S.,R.20 E.,S.7,B.T.
	A pinion pine,12 ins.diam.,bears N.60° W.,89 lks.dist.,marked T.15 S.,R.20 E.,S.6,B.T.
	Land,mountainous.
	Soil,gravelly;3rd rate.
	Timber,cedar.and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	August 3,1901:At this cor.we set off 17° 34'N.,on the decl.arc;and at 0 h 3 m p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 30° 32'N.

	N.89° 49'E.,on a random line bet.secs.5 and 8.
40.00	Set temp.¼ sec.cor.
80.20	Intersect N.and S.line ,7 lks.W.of the cor.of secs. 4,5,8,and 9.
	Thence we run
	S.89° 52'W.,on a true line bet.secs.5 and 8.

Chains	
	Over mountainous land;through scattering timber and dense undergrowth;descend.
4.00	Bottom of hollow,30 ft.below cor.,course S.W.;leave timber,bears N.E.and S.W.;ascend.
9.00	Leave undergrowth and enter heavy timber,bears N.E. and S.W.
16.81	Foot of perpendicular cliff,25 ft.high,bears N.30° E. and S.30° W.
21.00	Top of ridge,100 ft.above hollow,bears N.20° E.and S.20° W.;descend.
28.30	Bottom of hollow,80 ft.below ridge,course S.W.;ascend.
34.50	Top of spur,60 ft.above hollow,bears N.20° E and S. 20° W.;descend.
38.00	Bottom of swale,100 ft.below ridge,course S.W.;ascend.
40.10	Set a sandstone,20x10x8 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;from which A pinion pine,10 ins.diam.,bears N.10° E.,55 lks.dist.,marked ¼ S.5,B.T. A cedar,8 ins.diam.,bears S.11° E.,83 lks. dist.,marked ¼ S.8,B.T.
44.70	Top of spur,50 ft.above swale,bears N.20° E.and S.20° W.;descend.
63.50	Top of perpendicular cliff,20 ft.high,bears N.E.and S.W.
67.00	Bottom of hollow,80 ft.below spur,course S.W.;ascend.
80.20	The cor.of secs.5,6,7,and 8.
	Land,mountainous.
	Soil,gravelly and clay loam;2nd rate.
	Timber,cedar and pinion pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.20 chs.

Subdivision of T.15 S.,R.20 E.-Continued.

Chains	
	N.89° 55'W.,on a random line bet.secs.6 and 7.
40.00	Set temp.¼ sec.cor.
78.70	Intersect W.bdy.of Tp.,at the cor.of secs.1,6,7,and 12,heretofore described.
	Thence we run
	S.89° 55'E.,on a true line bet.secs.6 and 7.
	Overmountainous land;through scatterimg timber;descend.
12.75	Bottom of hollow,200 ft.below cor.,course S.W.;ascend.
33.50	Foot of perpendicular cliff,50 ft.high,bears N.10°E. and S.10°W.;
34.00	Top of ridge,250 ft.above hollow,bears N.10°E.and S.10°W.;descend.
36.00	Bottom of hollow,25 ft.below ridge,course S.;ascend.
38.70	Set a sandstone,18x10x5 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Pits impracticable.
40.65	Top of ridge,100 ft.above hollow,bears N.E.and S.W.; descend.
49.00	Bottom of canyon,150 ft.below ridge,course S.70°W.; ascend.
61.30	Foot of perpendicular cliff,50 ft.high,bears N.W.and S.E.
77.50	Top of ridge,250 ft.above canyon,bears N.and S.;descend.
78.70	The cor.of secs.5,6,7,and 8.
	Land,mountainous.
	Soil,gravelly;2nd rate.
	Timber,cedar and pinion pine.
	Good grass for grazing.
	Mountainous land,78.70 chs.
	N.0° 03'W.,on a random line bet.secs.5 and 6.
40.00	Set temp.¼ sec.cor.

Subdivision of T.15 S.,R.20 E.--Continued.

Chains	
80.16	Intersect N.bdy.of Tp.,2 lks.East of the cor.of secs. 5,6,31,and 32,heretofore described.
	Thence we run
	S.0°04'E.,on a true line bet.secs.5 and 6.
	Over level mesa land;through scattering timber and dense undergrowth.
10.00	Edge of mesa,bears N.W.and S.E.;descend.
36.00	Bottom of hollow,200 ft.below mesa,course S.80°W.; ascend gradually.
40.16	Set a sandstone,20x10x5 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face;from which
	A pine,12 ins.diam.,bears N.78°E.,43 lks. dist.,marked ¼ S.5,B.T.
	A cedar,10 ins.diam.,bears S.79°W.,25 lks; dist.,marked ¼ S.6,B.T.
78.00	Top of ridge,300 ft.above hollow,bears E.and W.;descend.
80.16	The cor.of secs.5,6,7,and 8.
	Land,mountainous and level.
	Soil,sandy loam and gravelly;2nd and 3rd rate.
	Timber,cedar and pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous land.or land covered with dense undergrowth,80.16 chs.
	August 3,1901.

GENERAL DESCRIPTION.

This township contains nearly every variety of land, from level mesas to high mountain ridges,and the soil ranges from rocks to rich sandy loam.

The soil of the hollows and the mesas is generally rich sandy loam capable of producing good crops without irrigation.The soil of the remaining portion of the township ,with the exception of some rocky ridges,

S vision of T O -Concluded.

is mostly gravelly loam;2nd and 3rd rate;is covered with an abundant growth of good grass and will produce good crops without irrigation.

Pinion pine and cedar timber are found all over the township.

There is no water in the township,excepting a small spring in section 9.

There are no settlers in the township.

The township is well adapted for grazing in winter and early spring.

There are no indications of mineral in the township.

Scott P. Stewart
John R. Stewart
U.S.Deputy Surveyors.

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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 ...., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of .... showing the respective capacities in which they acted:

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

For final affidavits see book X. Tp 11 S. R 19 E

FINAL OATH OF ASSISTANTS.

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

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

For final affidavits see book X. Tp 11 S. R 19 E

bscribed and sworn to before me this ..... day of ....., 189 }

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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

_____
United States Deputy Surveyor.

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 5th 1903, 189

The foregoing field notes of the survey of The Subdivisional lines of Township 15 South Range 20 East of the Salt Lake Base & Meridian, Utah

executed by Scott P. Stewart and John W. Stewart under his contract No. 242, dated April 12 1901, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

_____
United States Surveyor General

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