

1313

BOOK 1313
Book No. 13

FIELD-NOTES

No. 1313

The exterior of a portion of Lines of
Township 23 North Range 8 East,
Township 24 North Range 11 East,
Township 15 North Range 9 East.

Richard M. Meridian, Oregon
4th Land Par Nth (along) S Bdy, 7 1/2 N. R 12 E
O. D. Wheeler Deputy Surveyor,

under his contract of July 17, 1883. 1883.

Survey commenced May 8, 1883. 1883.

Survey completed June 20, 1883. 1883.

Platted by

No. 1313

BOOK 1313

188

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✓ 4th Stand Parallel North
along

South Bdy T. 17 N; R. 12 E.

~~W-E + N-T. 22 N; R 8 E~~ ✓
~~NE - " 18 " " 9 "~~ ✓
~~NE - " 17 " " 11 "~~ ✓
~~E - " 16 " " 11 "~~ ✓

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BOOK 1313

4th Std. Par. N. - S. of secs 31 and 32, T. 17 N R 12 E
pages 40½ and 41

E. B. T. 22 N. R. 8 E. G. & S. R. M.

No. 1313

Chains,

Survey made with Bart's Patent Improved Solar Compass, nearly new, and in first rate order. Made by Otto Fennel of Gassel Germany in 1881

From the Cor. to Tps. 21 $\frac{3}{4}$ & 22 N. R. 8 $\frac{3}{4}$ E., previously described. I run,

North on a true line between sections 31 $\frac{3}{4}$ and 36.

Va. $14^{\circ} 07'$ East.

Descend.

- 24.00 Cross Wash, 40 lks. wide, Course S. 70° E. and ascend.
 40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.
 12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
 W. face, dug pits, 18 x 18 x 12 ins., N. and S. of
 post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.
 high, $3\frac{1}{2}$ ft. base around post. from which
 A Yellow Pine 20 ins. diam. bears S. 65° W. 16 lks. dist.
 marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

- 70.00 Top of Spur, bears N. 20° W. E. S. 20° E. and descend.
 80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.
 12 ins. in the ground, for Cor. to Secs. 25, 30, 31 $\frac{3}{4}$ & 36
 marked $\frac{1}{4}$ S. $22\frac{1}{2}$ N. S. 30 on N. E., R. 9E, S. 31
 on S. E. S. 36 on S. W. and S. 25 on N. W. faces

E. B. T. N. R. & E. G. & S. R. M.

Chains.

with 1 notch on S. and 5 notches on W. edges;
 dug pits, 18 x 18 x 12 ins. in each Sec., 5½ ft. dist.,
 and raised a mound of earth 2 ft. high, 4½ ft. base
 around post.

from which

A Yellow Pine 30 ins. diam. bears $N. 30^{\circ} E.$ 70 lks. dist.
 marked T. 22 N, R. 96, S., 30 B. T.

A Yellow Pine 24 ins. diam. bears $E. 40^{\circ} W.$ 80 lks. dist.
 marked T. 22 N, R. 86, S., 36 B. T.

* A Yellow Pine 12 ins. diam. bears $N. 25^{\circ} W.$ 140 lks. dist.
 marked T. 22 N, R. 86, S., 25 B. T.

No other tree within limits.

Land mountainous

Soil ~~dry~~ rate,

Heavy timber of Pine,

Undergrowth of same and Juniper.

E. S. T. 22 N. R. 8 E. G. & S. R. M.

Chains.

North on a true line between sections 25 and 30.

Va. 14° 37' East.

Descend.

28.00 Leave Timber, Bears. E. ~~to~~ W.

30.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.
12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
W. face, dug pits, 18 x 18 x 12 ins., N. and S. of
post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.
high, $3\frac{1}{2}$ ft. base around post.

30.00 Set a post 4 ft. long, 4 ins. square, with marked stone.
12 ins. in the ground, for Cor. to Secs. 19, 24, 25 and 30,
marked T. 22 N. S. 19, or N. E., R. 9 E., S. 30
^{R. 8 E.}
on S. E. S. 25 on S. W. and S. 24 on N. W. faces,
with 2 notches on S. and 4 notches on ~~N.~~ edges;
dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist.,
and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base
around post.

Land mountainous

Soil ~~3rd~~ rate.

Timber of Pine ~~and~~ Juniper.

Vegetation, bunch grass.

Chains.

North on a true line between sections 19 $\frac{3}{4}$ & 24.Va. $14^{\circ} 37'$ East.

Over rolling land.

- 40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone,
12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
W. face, dug pits, 18 x 18 x 12 ins., $\frac{1}{4}$ and $\frac{3}{4}$ of
post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.
high, $3\frac{1}{2}$ ft. base around post.
- 80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.
12 ins. in the ground, for Cor. to Secs. 13, 18, 19 $\frac{3}{4}$ & 24,
marked T. 22 N. S. 18, on N. E., R. 9 E., S. 19
on S. E. ^{R. 9 E.} S. 24 on S. W. and S. 13 on N. W. faces;
with 3 notches on S. and 3 notches on ~~W.~~ edges;
dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist.,
and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base
around post.
Land rolling.

Soil poor rate

Vegetation bunch grass.

E. B. T. 22 N. R. & E. G. & S. R. M.

Chains.

North on a true line between sections 13 and 18.

Va. $14^{\circ} 37'$ East.

Over rolling land.

10.00 Leave Valley, bears 71.70° E. \nearrow S. 70° W. and ascend.
and
Enter Timber, Bears. 71.70° E. \nearrow S. 70° W.

22.00 Top of round knoll, and descend.

40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.
12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
W. face, dug pits, 18 x 18 x 12 ins., N. and S. of
post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.
high, $3\frac{1}{2}$ ft. base around post. from which
1 Yellow Pine 24 ins. diam. bears S. 60° W. 43 lks. dist.
marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

50.00 Cross Ravine, Course. S. 60° E. and ascend.

80.00 Set a sand stone 20 x 10 x 14 ins. 15 ins. in
the ground for Cor. to Secs. 7, 12, 13 and 18, marked
with 4 notches on S. and 2 notches on ~~N~~ edges and
raised a mound of stone. alongside Pits impracticable.
from which

1 Yellow Pine 12 ins. diam. bears S. 35° E. 31 lks. dist.
marked T. 22 N. R. 9 E., S., 19 B. T.

E. B. T. 22 N. R. & E. G. & S. R. M.

Chains.

A Yellow Pine 40 ins. diam. bears $117 \frac{1}{4}^{\circ} W$, 117 lks. dist.

marked T. 22 $\frac{1}{4}$, R. 8 E., S., 13 B. T.

A Yellow Pine 22 ins. diam. bears $117 \frac{1}{4}^{\circ} W$, 100 lks. dist.

marked T. 22 $\frac{1}{4}$, R. 8 E., S., 12 B. T.

No other tree within limits. Corner set

on Top of Spur, bears $11.30^{\circ} E.$ $\frac{1}{2} S. / 0.30^{\circ} W.$

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same & Juniper.

E. B. T. & N. R. & E. G. & S. R. M.

Chains.

North on a true line between sections γ ~~Mar 12.~~

Va. $14^{\circ} 87'$ East.

Descend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face; from which

$\frac{1}{4}$ Yellow Pine 14 ins. diam. bears $N. 19\frac{1}{2}^{\circ} W.$, 32 lks. dist.
marked $\frac{1}{4}$ S. B. T.

$\frac{1}{4}$ Yellow Pine 8 ins. diam. bears $N. 24^{\circ} E.$, 50 lks. dist.
marked $\frac{1}{4}$ S. B. T.

50.00 Cross Ravine, Course. $S. 45^{\circ} W.$ and ascend.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 1, 6, γ ~~Mar 12.~~
marked $T. 22 N. S. C.$, on N. E., R. $9E$, S. γ
 $R. 8E.$ on S. E. S. γ on S. W. and S. / on N. W. faces,
with 5 notches on S. and 1 notch on ~~the~~ edges;
dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist.,
and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base
around post.

from which

$\frac{1}{4}$ Yellow Pine 10 ins. diam. bears $S. 57\frac{1}{2}^{\circ} E.$, 66 lks. dist.
marked $T. 22 N. R. 9E$, S., γ B. T.

$\frac{1}{4}$ Yellow Pine 10 ins. diam. bears $N. 19\frac{1}{2}^{\circ} W.$, 15 lks. dist.

T. 22 N. R. 8 E. G. & S. R. M.

hains.

marked T. 22 N. R. 8 E., S., 1 B. T.

A Yellow Pine 14 ins. diam. bears N. 35° W., 14 lks. dist.

marked T. 22 N. R. 8 E., S., 1 B. T.

Land mountainous

Soil ~~gravel~~ rate,

Heavy timber of Pine and Juniper.

Undergrowth of same.

North on a true line between sections 1 and 6.

Va. 14° 37' East.

Ascend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face; from which

A Yellow Pine 24 ins. diam. bears N. 30° W., 27 lks. dist.

marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 12 ins. diam. bears N. 25° E., 120 lks. dist.

marked $\frac{1}{4}$ S. B. T.50.00 Set a post, $4\frac{1}{2}$ ft. long, 4 ins. square, 24 ins. in the
ground, for Cor. to Tps. 22 and 23 N. R's S and
E. marked T. 23 N. S. 31 on N. E. R. SE. S.
6 on S. E. T. 22 N. S. 1 on S. W. and R. SE. S.
36 on N. W. faces, with 6 notches on each edge, from
which

E. B. T. 22 N. R. & E. G. & S. R. M.

ains.

A Yellow Pine 20 ins. diam. bears N. 29 $\frac{1}{2}$ E., 58 lks. dist.

marked T. 23 N., R. 9 E., S., 31 B. T.

A Yellow Pine 24 ins. diam. bears S. 20 $\frac{1}{2}$ E., 102 lks. dist.

marked T. 22 N., R. 9 E., S., 6 B. T.

A Yellow Pine 40 ins. diam. bears S. 29 $\frac{1}{2}$ E., 16 lks. dist.

marked T. 22 N., R. 8 E., S., 1 B. T.

A Yellow Pine 13 ins. diam. bears N. 28 W., 122 lks. dist.

marked T. 23 N., R. 8 E., S., 36 B. T.

Land mountainous

Soil good rate,

Heavy timber of Pine.

Undergrowth of same and Juniper.

I carefully examined the adjustments of my solar compass to-day, particularly the latitude and reversing apparatus, and found them correct.

May 8th 1883.

W. B. T. 22 N. R. 8 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 21 ~~and~~ 22 N. Rs. 7 & 8^E, previously described. 1 run,

North on a true line between sections 31 ~~and~~ 36.

Va. 14° 37' East.

Ascend.

- 40.00 Set a sand stone 20 x 14 x 6 ins., 15 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W. face, and raised a mound of stone alongside. Pits impracticable. from which
 * A Yellow Pine 12 ins. diam. bears $1.20^{\circ}E$, 30 lks. dist. marked $\frac{1}{2}$ S. B. T.
- A Yellow Pine 10 ins. diam. bears $1.74^{\circ}W$, 34 lks. dist. marked $\frac{1}{2}$ S. B. T.
- 44.00 Top of Mountain cross $1.20^{\circ}E$ ~~and~~ $1.20^{\circ}W$, and descend.
- 80.00 Set a sand stone 18 x 12 x 6 ins. 12 ins. in the ground for Cor. to Secs. 25, 30, 31 ~~and~~ 36, marked with 1 notch on S. and 5 notches on ~~W~~ edges and raised a mound of stone. alongside. Pits impracticable. from which
 A Yellow Pine 12 ins. diam. bears $1.32^{\circ}W$, 27 lks. dist. marked T. 22 N. R. 7^E, S., 25 B. T.
 A Yellow Pine 30 ins. diam. bears $0.2714^{\circ}E$, 33 lks. dist.

W. B. T. 22 N. R. & E. G. & S. R. M.

Chains.

marked T. 22 N. R. 8° E., S., 81 B. T.

A Yellow Pine 30 ins. diam. bears $11.44^{\circ} W.$, 43 lks. dist.

marked T. 22 N. R. 7° E., S., 86 B. T.

No other tree within limits.

Land mountainous

Soil ~~3~~² rate,

Heavy timber of Pine and Oak.

Undergrowth of Samos.

North on a true line between sections 25 and 30.

Va. $14^{\circ} 37'$ East.

Descend.

40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.

12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
W face and raised a mound of stone $1\frac{1}{2}$ ft. high,

$3\frac{1}{2}$ ft. base around post. Pits impracticable. from which
A Yellow Pine 28 ins. diam. bears $11.28^{\circ} W.$, 88 lks. dist.

marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 14 ins. diam. bears $11.36^{\circ} E.$, 42 lks. dist.

marked $\frac{1}{4}$ S. B. T.

77.00 Cross Ravine, Course. E. and ascend.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 19, 24, 25 & 30

W. B. T. 22 N. R. & E. G. & S. R. M.

Chains:

marked T. 22 N. S. 19 ^{B. 7 E.}, on N. E., R. 8 E., S. 30
on S. E., S. 25 on S. W. and S. 24 on N. W. faces,
with 2 notched on S. and 4 notched on ~~N.~~ edges;
and raised a mound of stone 2 ft. high, $4\frac{1}{2}$ ft. base
around post. Pits impracticable.

from which

A Yellow Pine 14 ins. diam. bears 7.29 W. 66 lks. dist.

marked T. 22 N. R. 7 E., S. 24 B. T.

A Yellow Pine 26 ins. diam. bears 7.42 1/2 E., 91 lks. dist.

marked T. 22 N. R. 8 E., S. 19 B. T.

A Yellow Pine 15 ins. diam. bears 8.27 1/2 E., 77 lks. dist.

marked T. 22 N. R. 8 E., S. 30 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same & Juniper.

W. B. T. 22 N. R. & E. G. & S. R. M.

Chains.

North on a true line between sections 19 ²² & 24.

Va. $14^{\circ} 37'$ East.

Ascend.

30.00 Top of Mountain, bears E. ²² and descend.

40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.

12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face, and raised a mound of stone $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base around post. Pits impracticable.

from which

A Yellow Pine 28 ins. diam. bears $N. 60^{\circ} E.$, 186 lks. dist.
marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

68.00 Cross Ravine, Course. E. and ascend.

73.00 Cross Road, bears, $N. 80^{\circ} W.$ ^{and} $S. 80^{\circ} E.$

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 13, 18, 19 ²² & 24, marked T. 22 N. S. 18, on N. E., R. & E., S. 19 ^{R. 7 E.}, on S. E. S. 24 on S. W. and S. 13 on N. W. faces, with 3 notches on S. and 3 notches on ~~W~~ edges; dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist., and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base around post.

from which

W. B. T. 22 N. R. & E. G. & S. R. M.

Chains.

A Yellow Pine 24 ins. diam. bears $\angle 44\frac{1}{2}^{\circ} W$, 25 lks. dist.

marked T. 22 N. R. 7 E., S., 24 B. T.

A Yellow Pine 24 ins. diam. bears $\angle 30^{\circ} W$, 61 lks. dist.

marked T. 22 N. R. 7 E., S., 13 B. T.

A Yellow Pine 12 ins. diam. bears $\angle 34\frac{1}{2}^{\circ} E$, 66 lks. dist.

marked T. 22 N. R. 8 E., S., 18 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~and~~ Juniper.

North on a true line between sections 13 and 18.

Va. $14^{\circ} 37'$ East.

Ascend.

40.00 Set a ~~large~~ stone 80 x 24 x 10 ins., 22 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone alongside. Pits from which impracticable.

A Yellow Pine 10 ins. diam. bears $\angle 45^{\circ} E$, 52 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 16 ins. diam. bears $\angle 45^{\circ} E$, 58 lks. dist.
marked $\frac{1}{4}$ S. B. T.

W.B. T. 22 N. R. & E. G. & S. R. M.

Chains.

80.00

Set a sand stone 20 x 24 x 2 ins. 22 ins. in
the ground for Cor. to Secs. 7, 12, 13 and 14, marked
with 4 notches on S. and 2 notches on ~~N~~ edges and
raised a mound of stone. alongside. Pits impracticable.
from which

A Yellow Pine 20 ins. diam. bears $75^{\circ}W$, 77 lks. dist.
marked T. 22 N. R. 7 E , S., 13 B. T.

A Yellow Pine 24 ins. diam. bears $75.5^{\circ}W$, 76 lks. dist.
marked T. 22 N. R. 7 E , S., 12 B. T.

A Yellow Pine 25 ins. diam. bears $76.60^{\circ}E$, 149 lks. dist.
marked T. 22 N. R. 8 E , S., 7 B. T.

No other tree within limits.

Land mountainous

Soil ~~32~~ rate,

Heavy timber of Pine.

Undergrowth of same and Juniper

W. R. T. 22 N. R. & E. G. & S. R. M.

Chains.

North on a true line between sections 7 ^{and 12}Va. $14^{\circ} 37'$ East.

Ascend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face; from which

A Yellow Pine 10 ins. diam. bears $N. 87^{\circ} W.$, 40 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 20 ins. diam. bears $N. 88\frac{1}{2}^{\circ} E.$, 11 lks. dist.
marked $\frac{1}{4}$ S. B. T.

80.00 Set a post 4 ft. long, 4 ins. square, 24 ins. in the ground,
for Cor. to Secs. 1, 6, 7 ^{and 12}, marked T. 22 N.
S. 6 on N. E., R. $8^{\circ} E.$, S. 7 on S. E., S. 12 on
S. W. and S. 1 on N. W. faces, with 5 notched on
S. and 1 notch on ~~W.~~ edges; from which

A Yellow Pine 20 ins. diam. bears $N. 65^{\circ} E.$, 119 lks. dist.
marked T. 22 N. R. $8^{\circ} E.$, S. 6 B. T.

A Yellow Pine 30 ins. diam. bears $S. 60^{\circ} E.$, 111 lks. dist.
marked T. 22 N. R. $8^{\circ} E.$, S. 7 B. T.

A Yellow Pine 20 ins. diam. bears $S. 50^{\circ} W.$, 45 lks. dist.
marked T. 22 N. R. $7^{\circ} E.$, S. 12 B. T.

A Yellow Pine 20 ins. diam. bears $N. 59\frac{1}{2}^{\circ} W.$, 40 lks. dist.

W. B. T. 22 N. R. & E. G. & S. R. M.

Chains,

marked T. 22nd R. 7^E, S., / B. T.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine,

Undergrowth of Sane and Juniper.

North on a true line between sections ~~1st~~ 6.

Va. $14^{\circ}37'$ East.

Ascend.

\$0.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face; from which

A Yellow Pine 30 ins. diam. bears $14^{\circ}37'W$, $\frac{1}{4}$ lks. dist.

marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 15 ins. diam. bears $14^{\circ}37'W$, $\frac{1}{4}$ lks. dist.

marked $\frac{1}{4}$ S. B. T.

\$0.00 Set a post, $4\frac{1}{2}$ ft. long, 4 ins. square, 24 ins. in the
ground, for Cor. to Tps. 22 and 23rd R's 7 and
 $8E$. marked T. 23rd R. S. 31 on N. E. R. 8E . S.
6 on S. E. T. 22nd R. S. 1 on S. W. and R. 7E . S.
36 on N. W. faces, with 6 notches on each edge, from
which

W.B. T. 22 N. R. & E. G. & S. R. M.

Chains,

A Yellow Pine 15 ins. diam. bears $71^{\circ} 29' \frac{1}{2} E.$, 97 lks. dist.

marked T. 23 N. R. 8 E , S., 51 B.T.

A Yellow Pine 10 ins. diam. bears $870^{\circ} E.$, 84 lks. dist.

marked T. 22 N. R. 8 E , S., 6 B.T.

A Yellow Pine 12 ins. diam. bears $79^{\circ} 15' W.$, 106 lks. dist.

marked T. 22 N. R. 7 E , S., 1 B.T.

A Yellow Pine 20 ins. diam. bears $71^{\circ} 23' 45'' W.$, 70 lks. dist.

marked T. 23 N. R. 7 E , S., 36 B.T.

* Land mountainous

Soil ~~3 or~~ rate,

Heavy timber of Pine ~~and~~ Juniper

Undergrowth of same,

I carefully examined the adjustments of my solar compass to-day, particularly the latitude and reversing apparatus, and found them correct.

May 9th, 1883.

N.B. T. 22 N. R. & E. G. & S. R. M.

ains.

Before proceeding further with the exteriors of this Tp..

I made a change of 5 minutes in the latitude arc of my solar compass by adding same to the reading previously given, and at noon verified and corrected same by observation on the sun. I also further tested instrument by reversing.

I took the latitude and found it to be $35^{\circ} 18' N.$

From the Cor. to Tps. 22 & 23 N. Rs. 7 & 8 E., previously set by me,

I run East. on a random line on W. B. of Tp.

Va. $14^{\circ} 37'$ East.

I set temporary corners at every half mile, and at 5 miles 79.00 chs. I arrive at a point 84 lks. North of Cor. to Tps.

22 and 23 N. Rs. 8 and 9 E.,

previously set by me, From which corner I run.

$118^{\circ} 54' W.$ on a true line between sections 1 and 36.

Va. $14^{\circ} 07'$ East.

Descend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ S. on N. face; from which

1 Yellow Pine 20 ins. diam. bears $74^{\circ} 49' E.$ 73 lks. dist.

T. 22 N. R. 8 E. G. & S. R. M.

(Chains,

marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 15 ins. diam. bears $0^{\circ} 37' W$, 120 lks. dist.
marked $\frac{1}{4}$ S. B. T.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone,

12 ins. in the ground, for Cor. to Secs. 1, 2, 3, 4, 5, 6,

marked T. 23^N. S. 36°, on N. E., R. 8^E, S. 1
 $\frac{1}{4}$ 22^N.

on S. E. S. 2 on S. W. and S. 35 on N. W. faces,
with 5 notches on N. and 1 notch on E. edges;
dug pits, 18 x 18 x 12 ins. in each Sec., 5½ ft. dist.,
and raised a mound of earth 2 ft. high, 4½ ft. base
around post.

from which

A Yellow Pine 40 ins. diam. bears $11.20^{\circ} E$, 123 lks. dist.

marked T. 23^N. R. 8^E, S. 36 B. T.

A Yellow Pine 38 ins. diam. bears $11.69^{\circ} W$, 123 lks. dist.

marked T. 23^N. R. 8^E, S. 35 B. T.

A Yellow Pine 18 ins. diam. bears $0^{\circ} 55' W$, 119 lks. dist.

marked T. 22^N. R. 8^E, S. 2 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Yellow Pine.

Undergrowth of same ~~or~~ Juniper.

N.B. T. 22 N. R. 8 E. G. & S. R. M.

Chains.

$71.89^{\circ} 54' W.$ on a true line between sections 2 $\frac{3}{4}$ & 3 $\frac{1}{4}$.

Va. $14^{\circ} 37'$ East.

Descend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on N. face; from which

A Yellow Pine 22 ins. diam. bears $0^{\circ} 50' W.$, 143 lks. dist. marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 15 ins. diam. bears $71.38^{\circ} W.$, 154 lks. dist. marked $\frac{1}{4}$ S. B. T.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 2, 3, $34 \frac{3}{4}$ & 35, marked T. 23 N. S. 85°, on N. E., R. 8 E., S. 2 $\frac{1}{2}$ & 3 $\frac{1}{2}$ on S. E. S. 3 on S. W. and S. $\frac{3}{4}$ on N. W. faces, with 4 notches on N. and 2 notches on E. edges; dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist., and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base around post.

from which

A Yellow Pine 18 ins. diam. bears $0^{\circ} 17\frac{1}{2}' E.$, 188 lks. dist.

marked T. 23 N. R. 8 E., S., 2 B. T.

A Yellow Pine 40 ins. diam. bears $71.59\frac{1}{2}' W.$, 162 lks. dist.

marked T. 23 N. R. 8 E., S., 34 B. T.

Ch. Chains.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~as~~ Juniper $71.89^{\circ} 54' W.$ on a true line between sections ~~3~~ ²² 34.Va. $14^{\circ} 37'$ East.

Over mountainous land

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on N. face; from which

A Yellow Pine 20 ins. diam. bears $71.10^{\circ} E.$, 30 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 22 ins. diam. bears $071\frac{1}{4}^{\circ} W.$, 44 lks. dist.
marked $\frac{1}{4}$ S. B. T.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 3, 4, ~~33~~²² 34,
marked T. 23 N. S. 34, on N. E., R. S. E., S. S.
~~E. 22 N.~~
on S. E. S. 4 on S. W. and S. S. 3 on N. W. faces,
with 3 notches on N. and 3 notches on E. edges;
dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist.,
and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base
around post.

T. N. R. E. G. & S. R. M.

Chains.

from which

A Yellow Pine 18 ins. diam. bears $N.69\frac{1}{2}^{\circ}E$, 109 lks. dist.

marked T. 23N, R. 8E, S., 34 B. T.

A Yellow Pine 20 ins. diam. bears $N.50^{\circ}W$, 77 lks. dist.

marked T. 22N, R. 8E, S., 4 B. T.

A Yellow Pine 20 ins. diam. bears $N.45^{\circ}W$, 69 lks. dist.

marked T. 23N, R. 8E, S., 33 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine,

Undergrowth of same ~~and~~ Juniper.

W.B. T. 22 N. R. 8 E. G. & S. R. M.

Cl. Chains.

 $11.89^{\circ} 54' W.$ on a true line between sections 4 and 32,

Va. 14037 East

Over mountainous land

40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.
 12 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ S. on
 $N.$ face, dug pits, 18 x 18 x 12 ins., E. and W. of
 post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.
 high, $3\frac{1}{2}$ ft. base around post. from which
 A Yellow Pine 14 ins. diam. bears $11.30^{\circ} W.$, 188 lks. dist.
 marked $\frac{1}{2}$ S. B. T.

No other tree within limits.

80.00 Set a sand stone 18 x 11 x 4 ins. 12 ins. in
 the ground for Cor. to Secs. 4, 5, 32 and 33, marked
 with 2 notches on N. and 4 notches on E. edges and
 raised a mound of stone. alongside Pits impracticable.
 from which

A Yellow Pine 24 ins. diam. bears $11.44^{\circ} 44' E.$, 72 lks. dist.
 marked T. 23 N. R. 8 E., S., 33 B. T.

A Yellow Pine 18 ins. diam. bears $11.29^{\circ} 44' E.$, 140 lks. dist.
 marked T. 22 N. R. 8 E., S., 4 B. T.

A Yellow Pine 36 ins. diam. bears $11.75^{\circ} W.$, 13 lks. dist.
 marked T. 22 N. R. 8 E., S., 5 B. T.

U. S. T. 22 N. R. 8 E. G. & S. R. M.

Chains,

No other tree within limits.

Land mountainous

Soil ~~32~~ rate,

Heavy timber of Pine,

Undergrowth of same and Juniper.

U. 89¹/₂ W. on a true line between sections 5 and 32.

Va. 14° 37' East.

Ascend.

40,00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on N. face; from which

A Yellow Pine 40 ins. diam. bears U. 49¹/₂ E, 39 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 22 ins. diam. bears U. 28¹/₂ W, 96 lks. dist.
marked $\frac{1}{4}$ S. B. T.

80.00 Set a sand stone ~~20x11~~ x 6 ins. 15 ins. in
the ground for Cor. to Secs. 5, 6, 31 and 32, marked
with 1 notch on N. and 5 notches on E. edges and
raised a mound of stone. alongside. Pits impracticable.
from which

A Yellow Pine 20 ins. diam. bears U. 88° E, 50 lks. dist.
marked T. 23¹/₂, R. 8 E, S., 32 B. T.

N.B. T. 22 N. R. 8 E. G. & S. R. M.

Chains.

A Yellow Pine 40 ins. diam. bears $8.57^{\circ}E$, 119 lks. dist.
marked T. 22 N. R. 8 E., S., 5 B. T.

A Yellow Pine 24 ins. diam. bears $8.38\frac{1}{4}W$, 100 lks. dist.
marked T. 22 N. R. 8 E., S., 6 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~as~~ Juniper.

$8.89^{\circ}54'W$, on a true line between sections 6 ~~and~~ 0,

Va. $14^{\circ}37'E$.

Ascend.

40.00 Set a sand stone 16 x 10 x 5 ins., 11
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on S.
face, and raised a mound of stone alongside. Pits
impracticable.

from which

A Yellow Pine 24 ins. diam. bears $8.914^{\circ}E$, 9 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 12 ins. diam. bears $21.70^{\circ}W$, 17 lks. dist.
marked $\frac{1}{4}$ S. B. T.

U. S. T. 22 N. R. & E. G. & S. R. M.

Chains

79.00

The Cor. to Tps. 22 & 23 N. R. 7 & 8 E.

Land mountainous

Soil ~~3rd~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~or~~ Juniper.

May 10th 1883.

E. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 17 ~~and~~ 8 N. Rs. 9 ~~and~~ 10 E.,
previously described. I run,

North on a true line between sections 31 ~~and~~ 36.

Va. 14° 45' East.

Ascend.

40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.

12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
W. face, and raised a mound of stone $1\frac{1}{2}$ ft. high,

$3\frac{1}{2}$ ft. base around post. Pits impracticable.

from which

1 Yellow Pine 24 ins. diam. bears 21.20^{m} , 118 lks. dist.

marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

80.00 Set a sand stone 18 x 12 x 5 ins. x 2 ins. in

the ground for Cor. to Secs. 25, 30, 31 ~~and~~ 36, marked
with 1 notch on S. and 5 notches on N. edges and
raised a mound of stone alongside. Pits impracticable.

from which

1 Yellow Pine 30 ins. diam. bears $21.21\frac{1}{4}^{\text{m}}$, 196 lks. dist.

marked T. 18 N. R. 9 E., S., 25 B. T.

1 Yellow Pine 36 ins. diam. bears 21.15^{m} , 277 lks. dist.

marked T. 18 N. R. 9 E., S., 36 B. T.

E. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~and~~ Juniper.

North on a true line between sections 25 and 30.

Va. $14^{\circ} 45'$ East.

Ascend.

37.00 Top of Ridge, bears $11^{\circ} E.$ ~~and~~ $S. W.$ and descend.

40.00 Set a sand stone 17 x 9 x 5 ins., 11 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

1 Yellow Pine 20 ins. diam. bears $145^{\circ} E.$ 63 lks. dist.

marked $\frac{1}{4}$ S. B. T.

1 Yellow Pine 20 ins. diam. bears $9.15^{\circ} W.$, 57 lks. dist.

marked $\frac{1}{4}$ S. B. T.

in low Sag and ascend.

50.00 Top of Ridge, bears $11. W.$ ~~and~~ $S. E.$ and descend.

~~78.80~~ Cross Road, bears, $9.60^{\circ} W.$

E. R. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

80 00

Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 19, 24, 25 & 30,

marked T. 18 N. S. 19^{R. 9 E.}, on N. E., R. 10 E., S. 30

on S. E., S. 25 on S. W., and S. 24 on N. W. face,

with 2 notches on S. and 4 notches on N. edges;

and raised a mound of stone 2 ft. high, 4½ ft. base

around post. Pits impracticable.

from which

A Yellow Pine 12 ins. diam. bears S. 40° E., 200 lks. dist.

marked T. 18 N. R. 10 E., S. 30 B. T.

No other tree within limits.

Cor. set in low bog.

Land mountainous

Soil ~~3rd~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~and~~ Juniper.

E. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

North on a true line between sections 17 ~~and~~ 24.

Va. $14^{\circ} 45'$ East.

Ascend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face; from which

A Yellow Pine 20 ins. diam. bears $U. 40^{\circ} E.$, 63 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Yellow Pine 10 ins. diam. bears $U. 27^{\circ} W.$, 136 lks. dist.
marked $\frac{1}{4}$ S. B. T.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.
12 ins. in the ground, for Cor. to Secs. 13, 18, 19 ~~and~~ 24,
marked $T. 18 U. S. 18$, on N. E., R. 10 E., S. 19
 $R. 9 E.$
on S. E., S. 24 on S. W., and S. 13 on N. W. faces,
with 3 notches on S. and 3 notches on ~~N.~~ edges;
and raised a mound of stone 2 ft. high, 4 $\frac{1}{2}$ ft. base
around post. Pits impracticable. from which

A Yellow Pine 36 ins. diam. bears $U. 25^{\circ} E.$, 210 lks. dist.
marked $T. 18 U. R. 10 E. S. 18$ B. T.

A Yellow Pine 14 ins. diam. bears $S. 45^{\circ} E.$, 115 lks. dist.
marked $T. 18 U. R. 10 E. S. 19$ B. T.

A Yellow Pine 9 ins. diam. bears $U. 38 \frac{1}{2} W.$, 196 lks. dist.

E. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains,

marked T. 18 N. R. 9 E., S., 13 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine.

Undergrowth of same ~~as~~ Juniper.

North on a true line between sections 13 ~~and~~ 18.

Va. $14^{\circ} 45'$ East.

Ascend.

40.00 Set a sand stone 16 x 12 x 5 ins., 11
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, and raised a mound of stone alongside. Pits
impracticable.

from which

A Yellow Pine 20 ins. diam. bears $Y. 40^{\circ} E.$, 200 lks. dist.
marked $\frac{1}{4}$ S. B. T.

No other tree within limits. Corner set on

Top of Spur, bears E. ~~as~~ W. and descend.

50.00 Leave Timber, Bears. E. ~~as~~ W.

56.80 Cross Ravine, Course. S. $70^{\circ} E.$ and ascend.

80.00 Set a sand stone 18 x 14 x 6 ins. 12 ins. in
the ground for Cor. to Secs. 7, 12, 18 ~~and~~ 18, marked

E. B. T. 18 N R. 9 E. G. & S. R. M.

Chains.

with 4 notches on S. and 2 notches on W edges and raised a mound of stone. alongside. Pits impracticable.

Land mountainous

Soil ~~poor~~ rate.

Timber of Pine.

Vegetation, bunchgrass.

North on a true line between sections $7 \frac{1}{2}$ and 12.

Va. $14^{\circ} 45'$ East.

Ascend.

40.00 Set a Sandstone $14 \times 11 \times 7$ ins., 9 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone. alongside. Pits impracticable. Corner set on Top of Spur, bears N. W. and S. E. and descend.

72.00 Cross Ravine, Course. S. W. and ascend.

80.00 Set a Sandstone $16 \times 10 \times 7$ ins., 11 ins. in the ground for Cor. to Secs. 1, 6, $7 \frac{1}{2}$, marked with 5 notches on S. and 1 notch on W edges and raised a mound of stone. alongside. Pits impracticable. Land mountainous.

Soil ~~poor~~ rate

Vegetation bunchgrass.

E. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6.

Va. $14^{\circ} 45'$ East.

Ascend.

40.00 Set a sand stone $18 \times 9 \times 4$ ins., 12 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

63.00 Top of Ridge, bears E. ~~on~~ W. and descend.

80.00 Set a sand stone $40 \times 24 \times 24$ ins. 30 ins. in the ground, for Cor. to Tps. 18 and 19 N. R's 9 and 10 E., marked with 6 notches on each edge, and raised a mound of stone alongside. Pits impracticable.

Land mountainous.

Soil ~~soil~~ rate

Vegetation, bunching grass.

I carefully examined the adjustments of my solar compass to-day, particularly the latitude and reversing apparatus, and found them correct.

May 28th 1880.

N.B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

Before proceeding further with the exteriors of this Tp., I made a change of 5 minutes in the latitude arc of my solar compass by adding same to the reading previously given, and at noon verified and corrected same by observation on the sun. I also further tested instrument by reversing.

I took the latitude and found it to be $34^{\circ} 58' \text{ N. Lat.}$. From the Cor. to Tps. 18 & 19 N., Rs. 8 & 9 E., previously described.

I run East. on a random line on U. B. of Tp.

Va. $14^{\circ} 45'$ East.

I set temporary corners at every half mile, and at 5 miles 79.89 chs. I arrive at a point 75 lks. South of Cor. to Tps.

18 & 19 N., Ro. 9 & 10 E.,

previously set by me. From which corner I run.

$58^{\circ} 55' W.$ on a true line between sections 1 & 36.

Va. $14^{\circ} 45'$ East.

Ascend.

40.00 Set a sand stone 16 x 14 x 8 ins., 11 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on U. face, and raised a mound of stone alongside. Pits impracticable.

U. S. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

57.00 Top of Spur, bears N. and S. and descend.

80.00 Set a sand stone $2\frac{1}{2} \times 1\frac{1}{2} \times 1\frac{1}{2}$ ins. in the ground for Cor. to Secs. 1, 2, 35 and 36, marked with 5 notches on W. and 1 notch on E. edges and raised a mound of stone. alongside. Pits impracticable. Land mountainous.

Soil $\frac{3}{4}$ m. rate

Vegetation, bunchgrass.

S. $89^{\circ} 55' W.$ on a true line between sections 2 and 35.

Va. $14^{\circ} 45'$ East.

Descend.

40.00 Set a sand stone $2\frac{1}{2} \times 1\frac{1}{2} \times 4$ ins., 15 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on E. face, and raised a mound of stone alongside. Pits impracticable.

60.00 Top of Spur, bears N. and S. and descend.

68.00 Enter Flat bears N. and S.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 2, 3, 34 and 35, marked T. 18 U. S. 35, on N. E., R. 9 E., S. 2 on S. E., S. 3 on S. W., and S. 34 on N. W. faces, with 4 notches on W. and 2 notches on E. edges; and raised a mound of stone 2 ft. high, $4\frac{1}{2}$ ft. base around post. Pits impracticable.

N.W. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

Land mountainous. and level.

Soil ~~good~~ rate

Vegetation, bunchgrass.

S. $89^{\circ} 55' W.$ on a true line between sections 3 and 34,

Va. $1404 \frac{1}{2}$ East.

Over level land

37.00 Leave Flat bears N. $10^{\circ} W.$ and S. $10^{\circ} E.$ and ascend.

40.00 Set a sand stone $16 \times 10 \times 8$ ins., 11 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on Y. face, and raised a mound of stone alongside. Pits impracticable.

80.00 Set a sand stone $24 \times 24 \times 10$ ins. 18 ins. in the ground for Cor. to Secs. 3, 4, 33 and 34, marked with 3 notches on N and 3 notches on E. edges and raised a mound of stone. alongside. Pits impracticable. Land level. and mountainous.

Soil ~~good~~ rate

Vegetation, bunchgrass and sagebrush.

U. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

$5^{\circ} 89' 55'' W.$, on a true line between sections 4 & 5 $\text{Va } 33$.

$\text{Va. } 14^{\circ} 45'$ East.

Ascend.

30.00 Top of Bluff, bears $11.45^{\circ} W.$ and $11.45^{\circ} E.$ and descend.

40.00 Set a sand stone $16 \frac{1}{2} \times 12 \times 5$ ins., 11 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, and raised a mound of stone alongside. Pits impracticable. from which

A Yellow Pine 20 ins. diam. bears $1.80^{\circ} E.$, 178 lks. dist. marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

74.00 Enter Valley, bears, $11.30^{\circ} W.$ and $11.30^{\circ} E.$

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone. 12 ins. in the ground, for Cor. to Secs. 4, 5, 32 & 33, marked T. 19 U. S. 33, on N. E., R. 9 E., S. 4 on S. E., S. 5 on S. W., and S. 32 on N. W. faces, with 2 notches on N. and 4 notches on E. edges; and raised a mound of stone 2 ft. high, $4\frac{1}{2}$ ft. base around post. Pits impracticable.

Land mountainous

Soil ~~poor~~ rate.

Timber of Pine.

Vegetation bunchgrass.

N. B. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

S. $89^{\circ} 05' W.$ on a true line between sections 5 ^{and} 32.

Va. $14^{\circ} 45'$ East.

Over level land

- 40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.
 12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on
 N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of
 post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.
 high, $3\frac{1}{2}$ ft. base around post.
- 65.00 Leave Valley, bears N. ^{SW} S. and ascend.
- 80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.
 12 ins. in the ground, for Cor. to Secs. 5, 6, 31 ^{and} 32,
 marked T. 19 N. S. 32, on N. E., R. 9 E., S. 5
^{T. 18 N.} on S. E., S. 6 on S. W., and S. 31 on N. W. faces,
 with 1 notch on N. and 5 notches on E. edges;
 and raised a mound of stone 2 ft. high, $4\frac{1}{2}$ ft. base
 around post. Pits impracticable. from which
- A Yellow Pine 24 ins. diam. bears $S. 70^{\circ} E.$, 76 lks. dist.
 marked T. 19 N. R. 9 E., S. 32 B. T.
- A Yellow Pine 40 ins. diam. bears S. $20^{\circ} E.$, 19 lks. dist.
 marked T. 18 N. R. 9 E., S. 5 B. T.
- A Burr Oak 12 ins. diam. bears S. $70^{\circ} W.$, 43 lks. dist.
 marked T. 18 N. R. 9 E., S. 6 B. T.

U. S. T. 18 N. R. 9 E. G. & S. R. M.

Chains.

*No other tree within limits.**Land mountainous**Soil ~~good~~ rate,**Heavy timber of Pine ~~and~~ Oak,**Undergrowth of same ~~and~~ Juniper.*S $89^{\circ} 55' W.$ on a true line between sections 6 and 31.

Va. 14° 45' East.

Ascend.

33.00 Top of Spur, bears N. and S. and descend.

40.00 Set a post 3 ft. long, 3 ins. diam. 24 ins. in the ground,
for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on N. face; from which

A Yellow Pine 10 ins. diam. bears S. 42° E., 140 lks. dist.

marked $\frac{1}{4}$ S. B. T.A Yellow Pine 36 ins. diam. bears S. 69 $\frac{1}{2}$ W., 100 lks. dist.marked $\frac{1}{4}$ S. B. T.

77.89 The Cor. to Tps. 18 and 19 N. R. 8 & 9 E.

*Land mountainous**Soil ~~good~~ rate,**Heavy timber of Pine ~~and~~ Oak,**Undergrowth of same ~~and~~ Juniper.*May 24th 1883.

S. W. T. 17 N. R. 12 E. G. & S. R. M.

1313

40A

No. 1313

Chains.

Standard
From the Cor. to Tops. 17 N. R. 11 E. 12 S.

previously described. I run,

East. on a true line on S. B. of Section 31 -

Va. $14^{\circ} 40'$ East,Ascend.

40.00 Set a sand stone $20 \times 11 \times 4$ ins., 15 ins. in the ground, for Standard $\frac{1}{4}$ Sec. Cor., marked S. C. $\frac{1}{4}$ on N. face, and raise a mound of stone alongside. Pits impracticable. from which A Juniper 20 ins. diam. bears $8 7\frac{1}{2}^{\circ}$ E. 56 lks. dist. marked $\frac{1}{4}$ S. B. T. No other tree within limits.

63.50 Top of Ridge, bears N. W. & S. E. and descend.

80.00 Set a sand stone $20 \times 10 \times 6$ ins. 15 ins. in the ground for Standard Cor. to Secs. 31 and 32 marked S. C., with 5 notches on E. and 1 notch on W. edges and raised a mound of stone. alongside. Pits impracticable. from which

A Juniper 20 ins. diam. bears N. 15° E. 56 lks. dist. marked T. 17 N. R. 12 E. S. 32 B. T.

No other tree within limits.

Land mountainous

Soil 2nd & 3rd rate.

Timber of Pani & Juniper.

Vegetation grass & sage

BOOK 1310 4th Standard Parallel along
S.B. T. 17 N. R. 12 E. G. & S. R. M.

Chains.

East. on a true line on S. B. of Section 8 2

Va. 14° 40' East.

Descend.

40.00

Set a ~~sand~~ stone 16 x 10 x 4 ins., 10 ins. in the ground, for ^{Standard} Sec. C. Sec. Cor., marked $\frac{1}{4}$ on N. face, and raised a mound of stone alongside. Pits impracticable. from which A Juniper 14 ins. diam. bears S. 50° N. 53 lks. dist. marked S. C. $\frac{1}{4}$ S. B. T. No other tree within limits.

80.00

Set a ~~sand~~ stone 18 x 12 x 6 ins. 12 ins. in the ground for ^{Standard} Cor. to Secs. 32 & 33 marked S. O. with 4 notches on L. and 2 notches on R. edges and raised a mound of stone. alongside. Pits impracticable. from which

A Pine 18 ins. diam. bears N. 60° N. 84 lks. dist. marked T. 17 N. R. 12 E. S. 32 B. T.

A Pine 20 ins. diam. bears N. 45° E. 143 lks. dist.

marked T. 17 N. R. 12 E. S. 33 B. T.
No other tree within limits.

Land mountainous

Soil ~~2nd~~ ~~3rd~~ rate,

Heavy timber of Pine & Juniper

Undergrowth of sage & grass

June 4, 1883.

C. R. T. 17 N. R. // E. G. & S. R. M. 41A

Chains.

Standard
From the Cor. to Tops. 17 N. R. // & 12 E,

previously described. by me I run,

North on a true line between sections 31 and 36.

Va. 14° 40' East.

Ascend.

31.00 Top of Ridge, bears $U. 60^{\circ} W.$ and $S. 60^{\circ} E.$ and descend.

40.00 Set a sand stone $1\frac{1}{4} \times 12 \times 8$ ins., 9 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Juniper 20 ins. diam. bears $S. 10 \frac{1}{2}^{\circ} W.$, 130 lks. dist.
marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

80.00 Set a sand stone $36 \times 20 \times 5$ ins. 27 ins. in the ground for Cor. to Secs. 25, 30, 31 and 36 marked with 1 notch on S. and 5 notches on ~~P~~ edges and raised a mound of stone. alongside. Pits impracticable.

from which

A Juniper 20 ins. diam. bears $S. 20^{\circ} W.$, 86 lks. dist.
marked T. 17 N. R. 11 E., S., 36 B. T.

A Pine 8 ins. diam. bears $E. 15^{\circ} E.$, 44 lks. dist.

E. B. T. 17 N. R. // E. G. & S. R. M.

Chains.

marked T. 17 N. R. 12th S., 3rd B. T.

No other tree within limits.

Land mountainous

Soil ~~so~~ rate,

Heavy timber of Pine ~~and~~ Juniper.

Undergrowth of same.

North on a true line between sections 25th & 30.

Va. 14° 35' East.

Descend.

40.00 Set a sand stone $\text{w} \times 12 \times 4$ ins., 10 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Pine δ ins. diam. bears $N. 40^{\circ} W.$ 55 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Juniper 24. ins. diam. bears $S. 24^{\circ} E.$ 53 lks. dist.
marked $\frac{1}{4}$ S. B. T.

80.00 Set a sand stone $20 \times 11 \times 4$ ins. 15 ins. in the ground for Cor. to Secs. 19, 24, 25 $\text{N} \& \text{S.}$ marked with 2 notches on S. and 4 notches on W. edges and raised a mound of stone alongside. Pits impracticable.

E. B. T. 17 N. R., E. G. & S. R. M.

Chains.

from which

A Pine 20 ins. diam. bears $N. 15^{\circ} E.$, 100 lks. dist.

marked T. 17 N. R. 12 δ , S., 19 B. T.

A Juniper 20 ins. diam. bears $S. 25^{\circ} W.$, 101 lks. dist.

marked T. 17 N. R. 11 δ , S., 25 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine and Juniper.

Undergrowth of sage.

North on a true line between sections 19 ~~and~~ 24.

Va. $14^{\circ} 35'$ East.

Descend.

20. 70 Cross Canon, 250 lks. wide, Course $N. 15^{\circ} E.$ and ascend.

40. 00 Set a sand stone 20 x 11 x 4 ins., 15 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Juniper 8 ins. diam. bears $N. 30^{\circ} E.$, 66 lks. dist.

marked $\frac{1}{2}$ S. B. T.

A Juniper 18 ins. diam. bears $N. 75^{\circ} W.$, 11 lks. dist.

C. B. T. 17 N. R. // E. G. & S. R. M.

Chains.

marked $\frac{1}{4}$ S. B. T.

80.00

Set a

Sand stone 18 x 11 x 8 ins. 12 ins. in
the ground for Cor. to Secs. 13, 18, 19 ~~to~~ 24, marked
with 3 notches on S. and 3 notches on ~~W~~ edges and
raised a mound of stone. alongside. Pits impracticable.
from which

A Juniper 12 ins. diam. bears $21.30^{\circ}E.$, 11 lks. dist.

marked T. 17 N. R. 12 $E.$, S., 18 B. T.

A Juniper 8 ins. diam. bears $014\frac{1}{2}^{\circ}E.$, 6 lks. dist.

marked T. 17 N. R. 12 $E.$, S., 19 B. T.

A Juniper 12 ins. diam. bears $012^{\circ}W.$, 22 lks. dist.

marked T. 17 N. R. 11 $E.$, S., 24 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine ~~and~~ Juniper.

Undergrowth of same!

E. S. T. 17 N. R. // E. G. & S. R. M.

45

Chains,

North on a true line between sections 13th & 18th.

Va., $4^{\circ} 30'$ East.

Ascend.

24.00 Top of Ridge, bears E. and W. and descend.

40.00 Set a post 3 ft. long, 3 ins. diam. with marked stone.

12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ S. on W. face, dug pits, 18 x 18 x 12 ins., \mathcal{H} . and \mathcal{S} . of post $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base around post. from which

A Juniper 24 ins. diam. bears $1.39 N.W.$, 45° lks. dist. marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

80.00 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 7, 12, 13th & 18th marked T. 17 N. S. 7, on N. E., R. 1/2 E., S. 18th on S. E., S. 1/2 on S. W. and S. 12 on N. W. faces, with 4 notches on S. and 2 notches on \mathcal{W} . edges; dug pits, 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist., and raised a mound of earth 2 ft. high, $4\frac{1}{2}$ ft. base around post.

from which

A Juniper 10 ins. diam. bears $21.9^{\circ} E.$, 23 lks. dist. marked T. 17 N. R. 1/2 E., S. 7 B. T.

E. 13 T. 17 N. R. // E. G. & S. R. M.

C) Chains.

A Juniper 18 ins. diam. bears $19\frac{1}{2}^{\circ}W$, 43 lks. dist.

marked T. 17 N. R. // E. S., 13 B. T.

A Juniper 20 ins. diam. bears $21.34^{\circ}W$, 60 lks. dist.

marked T. 17 N. R. // E. S., 12 B. T.

No other tree within limits.

Land mountainous

Soil ~~30x~~ rate,

Heavy timber of Pine ~~and~~ Juniper.

Undergrowth of same.

North on a true line between sections 7 and 12,

Va., $14^{\circ}05' E$.

Descend.

40.00 Set a sandstone 18 x 13 x 5 ins., 12
ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W.
face, and raised a mound of stone alongside. Pits
impracticable.

from which

A Juniper 20 ins. diam. bears $21.15\frac{1}{2}^{\circ}E$, 34 lks. dist.
marked $\frac{1}{2}$ S. B. T.

No other tree within limits.

65.00 Cross low Sag and ascend.

E. B. T. 17 N. R., E. G. & S. R. M.

Chains.

80.00

Set a

Sand stone $20 \times 11 \times 4$ ins. $\frac{1}{2}$ ins. in

the ground for Cor. to Secs. 1, 6, 7 ~~and~~ 12, marked
with 5 notches on S. and 1 notch on ~~E~~ edges and
raised a mound of stone. alongside. Pits impracticable.
from which

A Juniper 10 ins. diam. bears $11.8\frac{1}{2}^{\circ}E$, 40 lks. dist.

marked T. 17 N. R. 12 E , S., 6 B. T.

A Juniper 20 ins. diam. bears $11.1\frac{1}{2}^{\circ}W$, 70 lks. dist.

marked T. 17 N. R. 11 E , S., 12 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine ~~and~~ Juniper,

Undergrowth of same.

E. B. T. 17 N. R. // E. G. & S. R. M.

(Chains,

North on a true line between sections 1 ^{and} 6.Va. $14^{\circ} 35'$ East.

Ascend.

21.60 Cross Road, bears, E. ^{and} W.

110.00 Set a sandstone 18 x 11 x 7 ins., 12 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, and raised a mound of stone alongside. Pits impracticable. from which
 A Juniper 8 ins. diam. bears $0.12 \frac{1}{2}^{\circ} W$, 16 lks. dist. marked $\frac{1}{4}$ S. B. T.

A Juniper 12 ins. diam. bears $0.38^{\circ} E$, 96 lks. dist. marked $\frac{1}{4}$ S. B. T.

80.00 Set a post, $4\frac{1}{2}$ ft. long, 4 ins. square, with marked stone 12 ins. in the ground, for Cor: to Tps. 17 and 18 N. R's 11 and 12 E marked T, 18 N. S. 31 on N. E. R. 12 E. S: 6 on S. E. T. 17 N. S. 1 on S. W. and R. 11 E. S. 36 on N. W. faces, with 6 notches on each edge, dug, pits 24 x 18 x 12 ins., lengthwise on each line, N. S. E. and W. of post, 6 ft. dist, and raised a mound of earth $2\frac{1}{2}$ ft. high, 5 ft. base around post. from which

E. B. T. 17 N. R. // E. G. & S. R. M.

Chains,

A Pine 20 ins. diam. bears $W.50^{\circ}W$, 93 lks. dist.

marked T. 18 N. R. 11 E. S., 36 B. T.

A Pine 22 ins. diam. bears $W.39\frac{1}{2}^{\circ}E$, 100 lks. dist.

marked T. 18 N. R. 12 E. S., 31 B. T.

A Juniper 11 ins. diam. bears $W.30^{\circ}W$, 96 lks. dist.

marked T. 17 N. R. 11 E. S., 1 B. T.

No other tree within limits.

Land mountainous

Soil ~~soil~~ rate,

Heavy timber of Pine and Juniper.

Undergrowth of same.

I carefully examined the adjustments of my solar compass to-day, particularly the latitude and reversing apparatus, and found them correct.

June 5th 1883.

U.B. T. 17 N. R. // E. G. & S. R. M.

Chains.

Before proceeding further with the exteriors of this Tp., I made a change of 5 minutes in the latitude arc of my solar compass by adding same to the reading previously given, and at noon verified and corrected same by observation on the sun. I also further tested instrument by reversing.

I took the latitude and found it to be $34^{\circ} 52' N$. From the Cor. to Tps. 17 & 18 H, Rs. 10 & 11 E, previously described, by me

I run East. on a random line on U. B. of Tp.

Va. $14^{\circ} 05'$ East.

I set temporary corners at every half mile, and at 5 miles 79.90 chs. I arrive at a point 50 ls. North of Cor. to Tps.

17 and 18 H, Ro. 11 and 12 E,

previously set by me. From which corner I run.

$34^{\circ} 52' N$ on a true line between sections 1 and 36.

Va. $14^{\circ} 05'$ East.

Descend.

40.00 Set a sand stone 16 x 12 x 5 ins., 11 ins. in the ground, for 1 Sec. Cor., marked $\frac{1}{4}$ on U. face, and raised a mound of stone alongside. Pits impracticable.

W.B. T. 17 N. R. // E. G. & S. R. M.

Chains.

from which

~~A Pine~~ 14 ins. diam. bears $\text{S. } 16^{\circ} \text{ E.}$, 24 lks. dist.
marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

80.00 A Juniper 12 ins. diam. which I marked
~~T. 18 N. S. 36, on N.E.R. // E. S. / on~~
^{J. 17 N.}
S.E.S. 2, on S.W. and S. 35 on N.W. faces,
with 5 notches on ~~N and S~~ / notch on E. edges,
dug pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and
raised a mound of earth around tree, for cor. to secs.

1-2-35-36 from which

A Juniper 8 ins. diam. bears $\text{N. } 42^{\circ} \text{ E.}$, 3 lks. dist.
marked T. 18 N. R. // E. S., 36 B. T.

A Juniper 9 ins. diam. bears $\text{S. } 20^{\circ} \text{ E.}$, 20 lks. dist.
marked T. 17 N. R. // E. S., / B. T.

No other tree within limits.

Land mountainous

Soil ~~3 or~~ rate,

Heavy timber of Pine and Juniper.
Undergrowth of same.

BOOK 1010
N. B. T. 17 N. R., E. G. & S. R. M.

Chains.

 $21.89^{\circ} \text{ N. W.}$ on a true line between sections ~~2 and 35~~Va. $14^{\circ} 35'$ East.

Descend.

40.00 Set a sand stone $17 \times 11 \times 6$ ins., $1\frac{1}{2}$ ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Pine 20 ins. diam. bears $S. 20^{\circ} E.$ 20 lks. dist.
marked $\frac{1}{2}$ S. B. T.

No other tree within limits.

60.00 Descend almost.

76.00 Cross Canon, 300 lks. wide, Course 21 and ascend.

80.00 Set a sand stone $20 \times 10 \times 5$ ins. $1\frac{1}{2}$ ins. in the ground for Cor. to Secs. 2, 3, 34 ~~and 35~~ marked with 4 notches on W. and 2 notches on E. edges and raised a mound of stone alongside. Pits impracticable.

from which

A Pine 10 ins. diam. bears $21.15^{\circ} W.$ 10.3 lks. dist.
marked T. 18 N., R. 11 E., S., 34 B. T.

$\frac{1}{2}$ Juniper 8 ins. diam. bears $21.6\frac{1}{2}^{\circ} W.$ 32 lks. dist.
marked T. 18 N., R. 11 E., S., 34 B. T.

53

N. B. T. 17 N. R. // E. G. & S. R. M.

Chains,

A Juniper 9 ins. diam. bears S. $37^{\circ} 12' E.$, 92 lks. dist.
marked T. 17 $\frac{1}{4}$, R. 11 $E.$, S., 2 B. T.

No other tree within limits.

Land mountainous

Soil ~~so~~ rate,

Heavy timber of Pine ~~and~~ Juniper.
Undergrowth of same.

N. $89^{\circ} 56' W.$ on a true line between sections 3 ~~and~~ / 34,

Va. $14^{\circ} 35'$ East.

Ascend.

- 3.00 Top of Spur, bears N. $15^{\circ} W.$ ~~and~~ S. $15^{\circ} E.$ and descend.
8.50 Cross Canon, 175 lks. wide, Course S. $30^{\circ} E.$
15.00 Cross ^{valley} Canon, 175 lks. wide, Course N. $30^{\circ} E.$ and ascend.
40.00 Set a ^{stone} sand stone $1\frac{1}{4} \times 1 \frac{1}{2} \times 8$ ins., 7
ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on N. face,
and raised a mound of stone alongside. Pits
impracticable.

from which

- A Pine 20 ins. diam. bears S. $7^{\circ} 45' W.$ 34 lks. dist.
marked $\frac{1}{2}$ S. B. T.
A Pine 9 ins. diam. bears S. $29^{\circ} E.$ 34 lks. dist.

W.B. T. 17 N. R., E. G. & S. R. M.

Chains.

marked $\frac{1}{4}$ S. B. T.

80.00

Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 3, 4, 33 $\frac{3}{4}$ & 34,
 marked T. 18 N. S. 34, on N. E., R. 11 E., S. 3
 or S. E. S. 4 on S. W. and S. 33 on N. W. faces,
 with 3 notches on ~~N~~ and 3 notches on E. edges;
 dug pits, 18 x 18 x 12 ins. in each Sec., 5 $\frac{1}{2}$ ft. dist.,
 and raised a mound of earth 2 ft. high, 4 $\frac{1}{2}$ ft. base
 around post.

from which

A Juniper 20 ins. diam. bears N. 20 $\frac{1}{2}$ E., 174 lks. dist.

marked T. 18 N. R. 11 E., S., 34 B. T.

A Juniper 12 ins. diam. bears N. 37 $\frac{1}{2}$ W., 188 lks. dist.

marked T. 18 N. R. 11 E., S., 33 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,Heavy timber of Pine ~~and~~ Juniper.

Undergrowth of same.

U. B. T. 17 N. R., E. G. & S. R. M.

Chains,

$7.89^{\circ} \text{ S. W.}$ on a true line between sections $\frac{1}{4}$ $\text{S.} \frac{1}{2} \text{ S.} \frac{1}{2}$

Va. $14^{\circ} 35'$ East

Ascend.

- 40.00 Set a sand stone $14 \times 11 \times 9$ ins., 9 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone alongside. Pits impracticable. from which
- A Juniper 20 ins. diam. bears 7.20° W. 36 lks. dist. marked $\frac{1}{4}$ S. B. T.
- A Juniper 18 ins. diam. bears $5.7 1/2^{\circ} \text{ W.}$ 10 lks. dist. marked $\frac{1}{4}$ S. B. T.
- 60.00 Top of Spur, bears $W.$ and $S.$ and descend.
- 80.00 Set a sand stone $30 \times 14 \times 9$ ins. 22 ins. in the ground for Cor. to Secs. 4, 5, $\frac{1}{2}$ $\text{S.} \frac{1}{2}$ $\text{S.} \frac{1}{2}$, marked with 2 notches on W. and 4 notches on E. edges and raised a mound of stone. alongside. Pits impracticable. from which
- A Juniper 8 ins. diam. bears $9.10 1/2^{\circ} \text{ E.}$ 26 lks. dist. marked T. 18N. R. 11E. S. 33 B. T.
- A Juniper 20 ins. diam. bears $5.6 1/2^{\circ} \text{ W.}$ 30 lks. dist. marked T. 17N.R. 11E. S. 5 B. T.
- A Yellow Pine 24 ins. diam. bears 5.15° E. 123 lks. dist.

N. 13 T. 17 N. R. 11 E. G. & S. R. M.

Chains.

marked T. 17 N. R. 11 E., S., 4 B. T.

No other tree within limits.

Land mountainous

Soil ~~3 m~~ rate,

Heavy timber of Pine ~~and~~ Juniper.
Undergrowth of same.

N. 89° 36' W. on a true line between sections 5 ~~m~~ 82.

Va. 14° 35' East.

Ascend.

25.00 Top of Spur, bears N. 20° W. ~~m~~ 0.20° E. and descend.

40.00 Set a sand stone 16 x 9 x 5 ins., 11 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on N. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Juniper 20 ins. diam. bears N. 39° E. 77 lks. dist.

marked $\frac{1}{2}$ S. B. T.

No other tree within limits.

62.00 Gross Canon, 200 lks. wide, Course N. E. and ascend.

80.00 Set a sand stone 18 x 14 x 6 ins. 2 ins. in the ground for Cor. to Secs. 5, 6, 31 ~~and~~ 32 marked with 1 notch on ~~N~~ and 5 notches on E. edges and raised a mound of stone. alongside. Pits impracticable.

M.B. T. 17 N. R. 11 E. G. & S. R. M.

Chains.

from which

A Pine 8 ins. diam. bears N. $20^{\circ}W$, 33 lks. dist.

marked T. 18 N. R. 11 E., S., 31 B. T.

A Juniper 9 ins. diam. bears N. $6^{\circ}E$, 15 lks. dist.

marked T. 18 N. R. 11 E., S., 32 B. T.

A Juniper 10 ins. diam. bears S. $8^{\circ}W$, 20 lks. dist.

marked T. 17 N. R. 11 E., S., 6 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine and Juniper.

Undergrowth of Oats.

N.B. T. 17 N. R., E. G. & S. R. M.

Chains.

$W. 89^{\circ} 56' W.$ on a true line between sections 6 and 81.

Va. $140^{\circ} 05'$ East.

Ascend.

- 40.00 Set a sand stone $20 \times 12 \times 5$ ins., 15
ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on N.
face, and raised a mound of stone alongside. Pits
impracticable. from which
A Juniper 8 ins. diam. bears $W. 29^{\circ} 0^{\circ} E.$, 96 lks. dist.
marked $\frac{1}{2}$ S. B. T.
- A Juniper 12 ins. diam. bears $W. 6^{\circ} 45' W.$, 93 lks. dist.
marked $\frac{1}{2}$ S. B. T.

79.90 The Cor. to Tps. 17 and 18 N. Rs. 10 & 11 E.

Land mountainous

Soil ~~3~~ rate,

Heavy timber of Pine and Juniper.
Undergrowth of same.

June 7th 1883

E. B. T. 16 N. R. 11 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 15 $\frac{1}{2}$ to 16 N. R. 11 E. 12 E,

previously described by me I run,

North on a true line between sections 31 $\frac{1}{2}$ to 36.

Va. 14° 32' East.

Ascend.

40.00 Set a sand stone 20 x 10 x 4 ins. 15
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, and raised a mound of stone alongside. Pits
impracticable.

from which

A Pine 12 ins. diam. bears $7\frac{1}{2}^{\circ}$ E., \sim lks. dist.
marked $\frac{1}{4}$ S. B. T.

No other tree within limits.

69.00 Top of Ridge, bears E. $\frac{1}{2}$ W. and descend.

80.00 Set a sand stone 20 x 12 x 6 ins. 15 ins. in
the ground for Cor. to Secs. 25, 30, 31 $\frac{1}{2}$ to 36, marked
with 1 notch on S. and 5 notches on ~~N~~ edges and
raised a mound of stone alongside. Pits impracticable.
from which

A Pine 8 ins. diam. bears $21.9\frac{1}{2}^{\circ}$ W., $6\frac{1}{2}$ lks. dist.
marked T. 16 $\frac{1}{2}$ R. 11 E. S., 25 B. T.

A Pine 12 ins. diam. bears 21.25° E., 20 lks. dist.

E. B. T. 16 N. R. // E. G. & S. R. M.

Chains,

marked T. 16 // R. 12 E. S., 30 B. T.

No other tree within limits.

Land mountainous

Soil 30rd. rate,

Heavy timber of Pine and Juniper.

Undergrowth of same.

North on a true line between sections 25 and 30.

Va. 14° 02' East.

Descend.

34.60 Cross Wash, 80 lks. wide, Course SW and around.

40.00 Set a sand stone 24 x 14 x 7 ins., 18 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{2}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Pine 14 ins. diam. bears 27.9° W. 12 lks. dist.
marked $\frac{1}{2}$ S. B. T.

No other tree within limits.

80.00 Set a sand stone 24 x 13 x 7 ins., 18 ins. in the ground for Cor. to Secs. 19, 24, 25 and 30 marked with 2 notches on S. and 4 notches on N. edges and raised a mound of stone. alongside. Pits impracticable.

E. B. T. 16 N. R. // E. G. & S. R. M.

Chains.

from which

A Pine 17 ins. diam. bears $9.60^{\circ}E$, 130 lks. dist.

marked T. 16 N. R. 12 E , S., 19 B. T.

A Pine 18 ins. diam. bears $8.35^{\circ}E$, 175 lks. dist.

marked T. 16 N. R. 12 E , S., 30 B. T.

A Pine 8 ins. diam. bears $9.57^{\circ}W$, 170 lks. dist.

marked T. 16 N. R. 11 E , S., 24 B. T.

No other tree within limits.

Land mountainous

Soil ~~soil~~ rate,

Heavy timber of Pine ~~and~~ Juniper.

Undergrowth of same.

E. B. T. 16 N. R. // E. G. & S. R. M.

Chains.

North on a true line between sections 17 ~~2~~² & 24.

Va. 14° 32' East.

Ascend.

2.00 Top of Spur, bears N.E. ~~2~~² S.W. and descend.

28.00 Cross low Sag and ascend.

40.00 Set a sand stone 16 x 9 x 7 ins., 11 ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Pine 12 ins. diam. bears N. 15° E. 24 lks. dist. marked $\frac{1}{2}$ S. B. T.

No other tree within limits.

54.50 Top of Spur, bears E. ~~2~~² W. and descend.80.00 Set a sand stone 24 x 12 x 7 ins. 15 ins. in the ground for Cor. to Secs. 13, 16, 19 & 24, marked with 3 notch ∞ on S. and 3 notches on ~~H~~ edges and raised a mound of stone. alongside. Pits impracticable.

from which

A Juniper 18 ins. diam. bears S. 8 1/2° E. 28 lks. dist. marked T. 16 N. R. 12 E. S., 19 B. T.

A Pine 8 ins. diam. bears S. 15° W. 66 lks. dist.

E. B. T. 16 N. R. // E. G. & S. R. M.

Chains.

marked T. 16 N. R. 11 E., S., 24 B. T.

A Pine 20 ins. diam. bears $71.50^{\circ} W$ 104 lks. dist.

marked T. 16 N. R. 11 E., S., 13 B. T.

No other tree within limits.

Land mountainous

Soil ~~3 m~~ rate,

Heavy timber of Pine ~~and~~ Juniper.

Undergrowth of vine.

North on a true line between sections 13 ~~and~~ 18.

Vd. $14^{\circ} 32'$ East.

Descend.

6.00 Cross Wash, 100 lks. wide, Course E. and ascend.

37.00 Top of Mountain, cross N. W. and E. and descend.

40.00 Set a sand stone 20 $\frac{1}{2}$ x 11 x 5 ins., 15
ins. in the ground, for $\frac{1}{2}$ Sec. Cor., marked $\frac{1}{2}$ on W.
face, and raised a mound of stone alongside. Pits
impracticable. from which

A Pine 12 ins. diam. bears $71.5^{\circ} E$, 43 lks. dist.

marked $\frac{1}{2}$ S. B. T.

A Pine 15 ins. diam. bears $71.5^{\circ} W$ 33 lks. dist.

marked $\frac{1}{2}$ S. B. T.

E. S. T. 16 N. R. 11 E. G. & S. R. M.

Chains.

- 80.00 Set a Sand stone $16 \frac{1}{2} \times 7$ ins. 11 ins. in
the ground for Cor. to Secs. 7, 12, 13 ~~and 18~~, marked
with 4 notches on S. and 2 notched on ~~P~~ edges and
raised a mound of stone. alongside. Pits impracticable.
from which
- A Juniper 20 ins. diam. bears $S. 20^{\circ} W.$ 37 lks. dist.
marked T. 16 $\frac{1}{2}$, R. 11 E., S., 13 B. T.
- A Pine 10 ins. diam. bears $N. 10\frac{1}{2}^{\circ} W.$ 37 lks. dist.
marked T. 16 $\frac{1}{2}$, R. 11 E., S., 12 B. T.
- A Pine 12 ins. diam. bears $S. 8^{\circ} E.$ 33 lks. dist.
marked T. 16 $\frac{1}{2}$, R. 12 E., S., 18 B. T.

No other tree within limits.

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine and Juniper.

Undergrowth of same.

E. B. T. 16 N. R. // E. G. & S. R. M.

Chains,

North on a true line between sections $\frac{7}{2} \text{ mi } 12'$.

Via. $14^{\circ} 32'$ East.

Descend.

9.50 Descend. completely.

40.00 Set a Sand stone $16 \times 11 \times 5$ ins., 11 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, and raised a mound of stone alongside. Pits impracticable.

from which

A Pine 12 ins. diam. bears $N. 12^{\circ} E.$ 45 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Juniper 14 ins. diam. bears $S. 10^{\circ} W.$ 14 lks. dist.
marked $\frac{1}{4}$ S. B. T.

68.00 Cross Road, bears, $E. \frac{2}{3} W.$

80.00 Set a Sand stone $24 \times 10 \times 7$ ins., 18 ins. in the ground for Cor. to Secs. 1, 6. $\frac{7}{2} \text{ mi } 12'$, marked with 5 notches on S. and 1 notch on ~~W~~ edges and raised a mound of stone. Pits impracticable.

from which

A Juniper 15 ins. diam. bears $N. 20^{\circ} E.$, 12 lks. dist.
marked T. 16 N. R. 12 E., S. 6 B. T.

A Pine 8 ins. diam. bears $N. 30^{\circ} W.$, 96 lks. dist.

E. B. T. 16 N. R. // E. G. & S. R. M.

Chains.

marked T. 16th R. 11^E, S., 1 B. T.

A Juniper 8 ins. diam. bears S. 8° W. 60 lks. dist.

marked T. 16th R. 11^E, S., 12 B. T.

No other tree within limits.

Land mountainous

Soil ~~3~~^{so} rate,

Heavy timber of Pine & Juniper.

Undergrowth of some

North on a true line between sections 1 ~~and~~ 6.

Va. 14° 32' East.

Descend.

40.00 Set a sand stone $1\frac{1}{4}$ x 11 x 5 ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, and raised a mound of stone alongside. Pits
impracticable.

from which

A Juniper 10 ins. diam. bears N. 60° W. 65 lks. dist.
marked $\frac{1}{4}$ S. B. T.

A Pine 20 ins. diam. bears S. 15° 10' E. 45 lks. dist.
marked $\frac{1}{4}$ S. B. T.

42. 25 Intersect the ~~200~~ Standard Parallel North at a

E. B. T. 16 N. R., E. G. & S. R. M.

Chains.

point 31.30 chs. East of the Standard Cor. to
Secs. 32 and 33. T. 17 N. R. 11 E.
Previously set by me, and

Set a ~~dead~~ stone $15 \times 10 \times 8$ ins. 10 ins. in the
ground, for ^{Closing} Cor. to Tps. 16 N., R's 11 and
12 E., marked C. C. with 6 notches on \vee , 6 wedges,
and raised a mound of stone, alongside.

Pits impracticable,

Land mountainous

Soil ~~poor~~ rate,

Heavy timber of Pine ~~and~~ Juniper.
Undergrowth of same.

I carefully examined the adjustments of my solar
compass to-day, particularly the latitude and revers-
ing apparatus, and found them correct.

June 20th 1883.

U. S. Surveyor General's Office,

Tucson, Arizona, June 17, 1884
a portion of

The foregoing Field Notes of the Survey of the
Extreme Lines of
Township 22 N. R. 8 East
Townships 16 & 17 N. R. 11 East
Township 18 North
Range 9 East

of the Gila and Salt River Base and Meridian, Arizona, executed by

I W Wheeler

Deputy Surveyor, under his contract of the

17th

day of July, 1884, having been

critically examined and the necessary corrections and explanations made, the said Field Notes and the surveys they describe are hereby approved.

Royal E. Johnson
Surveyor General.