

BOOK 1253

1253

1253

BOOK 1253

P. I.

F I E L D N O T E S
OF A PORTION OF THE
EXTERIOR LINES OF

Townships 21, 22, 23 & 24 North,
Ranges 18, 19, 20, & 21 East.

Gila and Salt River Base and
Meridian,

ARIZONA.

By A. P. Johnson, D. S., under
Contract dated August 5, 1882.
Survey commenced Jan. 15, 1883.
Survey completed Feby. 3, 1883.

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E. B. T. 23 N R. 21 E. G. & S. R. M.

No. 1253

Chains.

~~Before proceeding farther with the exteriors of this Tp., I made a change of 6 minutes in the latitude arc of my solar compass by subtracting same from the reading previously given, and at noon verified and corrected same by observation of the sun. I also further tested instrument by reversing.~~

From the Cor. to Tps. 22 & 23 N. Rs. 21 & 22 E., which is a lava stone, $14 \times 10 \times 3$ ins., set firmly in the ground, marked with 6 notches on each edge; with pits $24 \times 18 \times 12$ ins. lengthwise on each line, N., S., E. and W. of stone, 6 ft. dist., and a mound of earth $2\frac{1}{2}$ ft. high, 6 ft. base along side, 3 m.

North on a true line between sections 31 and 36.

Va. $140^{\circ} 55'$ East.

Over level land

40.00 Set a Sandstone $20 \times 12 \times 8$ ins., 10 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, dug pits, $18 \times 18 \times 12$ ins., 21. and 5. of stone 6 ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, 3 ft. base alongside

For preliminary notes and description of instrument used see book No. 1

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BOOK 253

E. B. T. 23 N. R. 21 E. G. & S. R. M.

Chains.

80.00 Set a sand, stone 20 x 10 x 8 ins., 15 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, 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. alongside Land level.

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

North on a true line between sections 25 and 30.
Va. 14° 00' East.

Over level land

40.00 Set a sand stone 14 x 12 x 8 ins., 9 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, dug pits, 18 x 18 x 12 ins., N. and S. of stone 5 $\frac{1}{2}$ ft. dist., and raised a mound of earth 1 $\frac{1}{2}$ ft. high, 3 $\frac{1}{2}$ ft. base. alongside

60.00 Leave Valley, bears N. W. ~~and~~ S. E. and ascend.

80.00 Set a sand stone 14 x 12 x 8 ins., 9 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, 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. alongside

E. B. T. 23 N. R. 21 E. G. & S. R. M.

Chains.

Land level. and mountainous.

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

North on a true line between sections 19 and 24.

Va. 14° 00' East.

Ascend.

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

29.00 Enter Valley, bears, E. ~~and~~ W.

40.00 Set a sand stone 20 x 10 x 6 ins., 15 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, dug pits, 18 x 18 x 12 ins., N. and S. of stone 5 $\frac{1}{2}$ ft. dist., and raised a mound of earth 1 $\frac{1}{2}$ ft. high, 3 $\frac{1}{2}$ ft. base. alongside

80.00 Set a sand stone 20 x 10 x 8 ins., 15 ins. in the ground for Cor. to Secs. 13, 18, 19 and 24, marked with 3 notches on S. and 3 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. alongside Land mountainous. and level.

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

E. B. T. 23 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections 13 and 18.

Va. $14^{\circ} \text{ or } 15^{\circ}$ East.

Over level land

67.00 Leave Valley, bears E. and W. and ascend.

40.00 Set a lava stone $20 \times 12 \times 4$ ins., 15
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, $18 \times 18 \times 12$ ins., $\frac{1}{2}$ and $\frac{1}{2}$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

55.68 Top of Hill bears E. and W. and descend.

80.00 Set a lava stone $24 \times 12 \times 7$ ins. 18 ins. in
the ground for Cor. to Secs. 7, 12, 18 and 19 marked
with 4 notches on S. and 2 notches on ~~N~~ edges, dug pits
 $18 \times 18 \times 12$ 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. alongside

Land level and hilly

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

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E. B. T. 23 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections 7 Nov 12,

Va. $14^{\circ} 55'$ East.

Over rolling land.

- 40.00 Set a lava stone $4 \times 7 \times 5$ 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.
- 80.00 Set a sand stone $20 \times 12 \times 8$ ins. $\sqrt{5}$ ins. in the ground for Cor. to Secs. 1, 6, 7 Nov 12, marked with ~~s~~ notch ~~s~~ on S. and 1 notch on ~~R.~~ edges, dug pits $18 \times 18 \times 12$ 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. alongside Land rolling.

Soil 3rd rate

Vegetation, bunch grass and sagebrush.

E. B. T. 23 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6.

Va. 14° vv' East.

Over rolling land.

- 40.00 Set a ~~lava~~ stone $14 \times 10 \times 4$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., N . and S . of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
- 80.00 Set a sandstone $18 \times 12 \times 10$ ins. 12 ins. in
the ground, for Cor. to Tps. 23 and 24 N. R's 21 and
22 E., marked with 6 notches on each edge, dug pits, $24 \times 18 \times 12$ ins. lengthwise on each line, N. S. E. and W.
of stone, 6 ft. dist., and raised a mound of earth $2\frac{1}{2}$ ft.
high, 5 ft. base. alongside

Land rolling.

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

E. B. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

Before proceeding further with the exteriors of this Th., I made a change of 6 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.

From the Cor. to Tps. 23 & 24 N. Rs. 21 & 226, just established run,

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

Va. $14^{\circ} 58'$ East.

Ascend.

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

40.00 Set a sand stone $14 \times 10 \times 6$ ins., 9 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, dug pits, $18 \times 18 \times 12$ ins., $\frac{1}{2}$ and $\frac{1}{2}$ of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base, alongside

80.00 Set a sand stone $14 \times 10 \times 6$ ins., 9 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, dug pits $18 \times 18 \times 12$ 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. alongside Land mountainous.

Soil 3rd rate

Vegetation, bunch grass ~~and~~ oagomeric.

6. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections 25 & 30
Va. 14° 58' East.

Descend.

- 27.00 Enter Valley, bears, N. W. and S. E.
40.00 Set a sand stone 20 x 10 x 8 ins., 10
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, 18 x 18 x 12 ins., N. and S. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
80.00 Set a sand stone 14 x 14 x 8 ins. 9 ins. in
the ground for Cor. to Secs. 19, 24, 25 & 30, marked
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. alongside

Land level.

Soil ~~3rd~~ rateVegetation, bunchgrass ~~and~~ sagebrush.

E. B. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

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

V. 14° 58' East.

Over level land

27.00 Leave Valley, bears N. E. and S. W. and ascend.

35.00 Top of Spur, bears N. E. and S. W. and descend.

40.00 Set a ~~lava~~ stone $13 \times 7 \times 4$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, $18 \times 18 \times 12$ ins., W. and S. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 Set a ~~orange~~ stone $20 \times 9 \times 4$ ins. 16 ins. in
the ground for Cor. to Secs. 13, 18, 19 ~~Sec 24~~, marked
with 3 notches on S. and 3 notches on ~~Wedges~~, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land level. and mountainous.

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

E. B. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections. 13 ^{quad} 1/8

Va. 14° 58' East.

Over rolling land.

- 40.00 Set a ~~lava~~ stone $14 \times 10 \times 3$ ins., 7
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on ~~W.~~
face, dug pits, $18 \times 18 \times 12$ ins., ~~W.~~ and ~~S.~~ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
- 80.00 Set a ~~lava~~ stone $11 \times 7 \times 2$ ins. 7 ins. in
the ground for Cor. to Secs. 7, 12, 13 ^{quad} 1/8, marked
with 4 notches on S. and 2 notches on ~~W.~~ edges, dug pits
 $18 \times 18 \times 12$ 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. alongside

Land rolling.

Soil $3^{\prime \prime}$ rate

Vegetation, bunchgrass and sagebrush

E. B. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections 7 and 12.

Va. $14^{\circ} 58'$ East.

Over rolling land.

27.00 Enter Valley, bears, N. E. and S. W.

40.00 Set a sand stone $20 \times 12 \times 8$ ins., 10
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, $18 \times 18 \times 12$ ins., \mathcal{M} . and \mathcal{S} . of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 Set a lava stone, $4 \times 9 \times 4$ ins. 9 ins. in
the ground for Cor. to Secs. 1, 6, 7 and 12, marked
with 5 notches on S. and 1 notch on ~~N~~ edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land level.

Soil $3 \frac{1}{2}$ rate

Vegetation, bunchgrass and sargomel.

E. B. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

North on a true line between sections 1 ^{Sec} 6.

Va. $14^{\circ} 58'$ East.

Over level land

19.00 Leave Valley, bears $N. E.$ and $S. W.$ and ascend.

40.00 Set a sandstone $14 \times 10 \times 4$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on $N.$
face, dug pits, $18 \times 18 \times 12$ ins., $N.$ and $S.$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.36 Intersect the 6th Standard Parallel North at a
point 13.00 chs. West of the Standard Cor. on
boundary of previously set by me.
Sec. 36. T. 25 N. R. 21 E. at which
point I.

Set a sandstone $20 \times 12 \times 8$ ins. 10 ins. in the
ground for Closing Cor. to Tps. 24 N., R's 21
and 22 E., marked C. C., with 6 notches on S., E. & W.
edges, dug pits $24 \times 18 \times 12$ ins. crosswise on each line,
 $S.$, $E.$ & $W.$ of stone 6 ft. dist. and raised a mound of
earth, $2\frac{1}{2}$ ft. high, 5 ft. base. alongside

Land rolling.

Soil ~~soil~~ rate

Vegetation, bunch grass and sagebrush.

January 15th 1883

S. B. T. 24 N. R. 21 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 23 & 24 N. R. 21 & 22 E.,
previously set by me.
I run West. on a random line on N. B. of Tp.

Va. $14^{\circ} 58'$ East.

I set temporary corners at every half mile, and at .5 miles
25.51 chs. I arrive at a point 30 lks. South of Cor. to Tps.,
previously set by me.
23 & 24 N. R. 20 & 21 E. from which corner I run
 $1.87^{\circ} 58'$ E. on a true line between sections 6 & 8.

Va. $14^{\circ} 58'$ East.

Over rolling land.

35.51 Set a lava stone $24 \times 10 \times 4$ ins., 18
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.

75.51 Set a lava stone $20 \times 9 \times 7$ ins. 16 ins. in
the ground for Cor. to Secs. 5, 6, 31 ~~32~~ 32, marked
with 1 notch on N. and 5 notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside from which
a Juniper 16 ins. diam. bears N. $40^{\circ} W.$ 86 lks. dist.
marked T. 24 N. R. 21 E. S., 31 B. T.

No other trees within limits.
Land mountainous

Soil ~~3 m~~ rate

Timber of Junipers.

Vegetation, bunch grass and sagebrush.

S. B. T. 34 N. R. 21 E. G. & S. R. M.

Chains.

 $\sqrt{.87^{\circ}58'}$ E. on a true line between sections 5 ~~and~~ 32.Va. $14^{\circ}55'$ East.

Ascend.

40.00 Set a lava stone $12 \times 12 \times 4$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

45.00 Top of Spur, bears N. ~~and~~ S. and descend.

80.00 Set a lava stone $24 \times 14 \times 4$ ins. 18 ins. in
the ground for Cor. to Secs. 4, 5, 32 ~~and~~ 33, marked
with 2 notches on W. and 4 notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land mountainous.

Soil $\frac{2}{3}$ rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

S. B. T. 24 N R. 21 E. G. & S. R. M.

Chains.

S. $89^{\circ} 58'$ E. on a true line between sections 14 ~~and~~^{and} 33.

Va. $14^{\circ} 58'$ East.

Ascend.

30.00 Top of Mountain, bears N. and S.

40.00 Set a lava stone $12 \times 7 \times 2$ ins., 8
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.

80.00 Set a lava stone $20 \times 12 \times 6$ ins. 15 ins. in
the ground for Cor. to Secs. 3, 4, 33 ~~and~~^{and} 34, marked
with 3 notches on W 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. alongside

Land rolling.

Soil ~~soil~~ rate

Vegetation, bunchgrass and sagebrush.

S. B. T. 24 N. R. 21 E. G. & S. R. M.

ains,

 $58^{\circ} 58' E$, on a true line between sections 3 and 34.Va. $14^{\circ} 55'$ East.

Over rolling land.

- 40.00 Set a ~~lava~~ stone $12 \times 9 \times 4$ ins., $\frac{1}{2}$ ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. alongside
- 80.00 Set a ~~lava~~ stone $14 \times 9 \times 8$ ins. 9 ins. in the ground for Cor. to Secs. 2, 3, 34 ~~and 35~~ marked with 4 notches on ~~N~~ and 2 notches on E. edges, dug pits $18 \times 18 \times 12$ 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. alongside
Land rolling.

Soil $3\frac{1}{2}$ rateVegetation, bunchgrass ~~and~~ sagebrush

S. B. T. 24 N. R. 21 E. G. & S. R. M.

ains.

$89^{\circ} 58' E.$ on a true line between sections 2 ~~and~~ 3 S. 8 E.

Va. $14^{\circ} 55'$ East

Over rolling land.

40.00 Set a lava stone $14 \times 9 \times 4$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N .
face, dug pits, $18 \times 18 \times 12$ ins., $E.$ and $W.$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

68.00 Enter Valley, bears, $Y.$ ~~and~~ $S.$

80.00 Set a sand stone $20 \times 10 \times 8$ ins. 10 ins. in
the ground for Cor. to Secs. 1, 2, 3 ~~and~~ 4, marked
with 5 notches on W . and 1 notch on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land rolling.

Soil 3rd rate

Vegetation, bunchgrass and sagebrush.

S. B. T. 24 N. R. 21 E. G. & S. R. M.

chains.

Lat. $89^{\circ} 58' E.$ on a true line between sections 1 and 86.Va. $140^{\circ} 55'$ East.

Over scrub land

40.00 Set a ~~stone~~ sand stone $14 \times 12 \times 8$ ins., 9 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base alongside

51.00 Leave Valley, bears $N. \text{ by } S.$ and ascend.

50.00 The Cor. to Tps. 23 & 24 N. Rs. 21 & 22 E.
on which I started
Land level. and rolling.

Soil good rate

Vegetation, bunchgrass and sagebrush

January 17^m 1883.

Y. 13. T. 22 N. R. 21 E. G. & S. R. M.

hains.

Before proceeding further with the exteriors of this Tp., I made a change of 6 minutes in the latitude arc of my solar compass by subtracting same from the reading previously given, and at noon verified and corrected same by observation on the sun. I also ~~adjusted~~ instrument by reversing.

From the Cor. to Tps. 22 & 23 N, Rs. 21 & 22 E,
~~previously described~~, I run West on a random line on N. B. of Tp.

Va. $14^{\circ} 58'$ East.

I set temporary corners at every half mile, and at 5 miles 76.09 chs. I arrive at a point 160 lks. North of Cor. to Tps, previously set by me.

22 & 23 N, Rs. 20 & 21 E, from which corner I run
71.89 $\frac{1}{4}$ E. v. a true line between sections 6 & 31,

Va. $14^{\circ} 55'$ East.

Over level land

36.09 Set a sand stone $12 \frac{1}{2} \times 12$ ins., 8 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and N. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. alongside

76.09 Set a sand stone $20 \times 12 \times 8$ ins. 10 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, dug pits $18 \times 18 \times 12$ 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. alongside

M. B. T. 22 N. R. 21 E. G. & S. R. M.

ains.

Land level.

Soil ~~3rd~~ rateVegetation, bunchgrass ~~and~~ sagebrush.21.89° 48' E. on a true line between sections 5 ~~and~~ 32.

Va. 14° 51' East.

Ascend.

13.00 Top of Mountain, cross N. ~~and~~ S. to descend.40.00 Set a sand stone 20 x 10 x 6 ins., 15
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, 18 x 18 x 12 ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside80.00 Set a sand stone 30 x 12 x 8 ins. 15 ins. in
the ground for Cor. to Secs. 4, 5, 22 ~~and~~ 33 marked
with 2 notch ~~s~~ on N. and 4 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. alongside

Land mountainous.

Soil ~~3rd~~ rateVegetation, bunchgrass ~~and~~ sagebrush

U.B. T. 22 N. R. 21 E. G. & S. R. M.

ins.

$1189^{\circ} 48' E.$, on a true line between sections 4 ~~and~~ 3,

Va. $14^{\circ} 51'$ East.

Over broken land.

- 40.00 Set a lava stone $12 \times 10 \times 7$ ins., 8
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
- 0.00 Set a lava stone $24 \times 10 \times 6$ ins. 18 ins. in
the ground for Cor. to Secs. 3, 4, 33 & 34, marked
with 3 notches on W. and 3 notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside from which
A Juniper 10 ins. diam. bears S. $5^{\circ} W.$, 18 ft. dist.
marked T. 23 U.R. 21 E., S., 4 B.T.

No other trees within limits.

Land mountainous

Soil 3rd rate

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

T. 22 N. R. 21 E. G. & S. R. M.

Chains.

N. $89^{\circ} 48' E.$ on a true line between sections 3 and 84,Va. $14^{\circ} 51' E.$

Over broken land.

- 40.00 Set a sand stone $12 \times 10 \times 8$ ins., 8
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
- 80.00 Set a sand stone $20 \times 12 \times 8$ ins. 15 ins. in
the ground for Cor. to Secs. 2, 3, 34 and 85, marked
with 4 notches on W. and 2 notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land mountainous.

Soil $3\frac{1}{2}$ rate

Vegetation, bunchgrass and sagebrush.

Y. B. T. 22 N. R. 21 E. G. & S. R. M.

Chains.

$71.89^{\circ} 48' E.$, on a true line between sections 2 ~~and~~ 3 v.

Vd. $14^{\circ} 57'$ East.

Over broken land.

30.00 Enter Valley, bears, $21. \text{ N. } 1.$

40.00 Set a sand stone $12 \times 10 \times 10$ ins., 8
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 Set a sand stone $20 \times 12 \times 10$ ins. 15 ins. in
the ground for Cor. to Secs. 1, 2, 3 v ~~and~~ 3 b, marked
with 5 notches on N. and 1 notch on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land level.

Soil 3rd rate

Vegetation, bunchgrass ~~and~~ sagebrush,

W. B. T. 22 N. R. 21 E. G. & S. R. M.

Chains.

$W. 89^{\circ} 48' E.$ on a true line between sections 1 and 36.

Va. $14^{\circ} 57'$ East.

Over level land

40.00 Set a sand stone $20 \times 10 \times 8$ ins., 10
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 The Cor. to Tps. 22 & 23 N. Rs. 21 & 22 E.
from which I started -
land level.

Soil 30d rate

Vegetation, bunchgrass and sagebrush.

January 18th, 1883.

N. B. T. 21 N. R. 21 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 subtracting same from the reading previously given, and at noon verified and corrected same by observation on the sun. I also further tested instrument by resounding.

From the Cor. to Tps. 21 & 22 N, Rs. 21 & 22 E,

which is a lava stone, $14 \times 10 \times 6$ ins, set firmly in the ground, marked with crostices on each edge; with pits $24 \times 18 \times 12$ ins. being otherwise on each line, N., S., E. & W. of stone, 6 ft. dist, and a mound of earth, $2\frac{1}{2}$ ft. high, 5 ft. base along sides,

I run West. on a random line on N. B. of Tp.

Va. $14^{\circ} 51'$ East.

I set temporary corners at every half mile, and at 5 miles 77.60 chs. I arrive at a point 80 lks. South of Cor. to Tps, previously set by me. 21 & 22 N. Rs. 20 & 21 E. from which corner I run $5.89052'E.$ on a true line between sections 6 & 31,

Va. $14^{\circ} 51'$ East.

Over rolling land.

26 BOOK 12
U. S. T. 21 N. R. 21 E. G. & S. R. M.

C Chains.

- 87.60 Set a sand stone $20 \times 12 \times 5$ ins., 10 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. alongside
- 41.00 Cross N. E. Fork of Cottonwood Creek, 70 lks. wide, Course S. W.
- 77.60 Set a lava stone $16 \times 12 \times 6$ ins. 11 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, dug pits $18 \times 18 \times 12$ 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. alongside Land rolling.
Soil 2^{nd} ~~and~~ ^{3rd} rate
Vegetation, bunchgrass ~~and~~ sagebrush.

1203

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

Chains.

S. $89^{\circ} 54'$ E. on a true line between sections 5 and 82.

Va. $14^{\circ} 51'$ East.

Over rolling land.

40.00 Set a lava stone $10 \times 12 \times 6$ ins., 11
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{2}$ on W.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 Set a lava stone $24 \times 14 \times 7$ ins. 18 ins. in
the ground for Cor. to Secs. 4, 5, 32 and 33, marked
with 2 notches on W. and 4 notches on E. edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.

Soil 3rd rate

Vegetation, sagebrush.

U. S. T. 2, N. R. 2, E. G. & S. R. M.

Chains.

S. $89^{\circ} 52'$ E. on a true line between sections 14 and 32.Va. $14^{\circ} 51'$ East.

Over broken land.

40.00 Set a ~~lara~~ stone $20 \times 12 \times 7$ ins., 10 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. alongside

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

80.00 Set a ~~sand~~ stone $16 \times 12 \times 7$ ins. 11 ins. in the ground for Cor. to Secs. 8, 14, 33 and 34, marked with 3 notches on N. and 3 notches on E. edges, dug pits $18 \times 18 \times 12$ 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. alongside
Land mountainous.

Soil 3 m rate

Vegetation, sagebrush.

T. 21 N. R. 21 E. G. & S. R. M.

Chains.

S $69^{\circ} 57'$ E. on a true line between sections 3rd and 34th.

Va. $14^{\circ} 57'$ East.

Over broken land.

40.00 Set a ~~lava~~ stone $24 \times 12 \times 7$ ins., 18
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

47.00 Lean broken lava, ~~lava~~ N.E. ~~W.S.W.~~ Over level land

80.00 Set a ~~lava~~ stone $16 \times 13 \times 5$ ins., 11 ins. in
the ground for Cor. to Secs. 2, 3, 34 ~~and~~ 35 marked
with 4 notches on ~~N~~ and 2 notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside

Land mountainous. and level.

Soil $2\frac{1}{2}$ in ~~aa~~ 3rd rate

Vegetation, bunchgrass ~~and~~ sagebrush.

U. S. T. 2, N. R. 2, E. G. & S. R. M.

Chains.

S. $89^{\circ} 57' E.$ on a true line between sections 2 and 35,

Va. $14^{\circ} 51'$ East.

Over rolling land.

40.00 Set a sand stone $13 \times 10 \times 4$ ins., 7
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

46.00 Lean rolling land and descend.

80.00 Set a lava stone, $14 \times 12 \times 6$ ins. 9 ins. in
the ground for Cor. to Secs. 1, 2, 35 and 36 marked
with S notch on W and J notch on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land rolling. and mountainous.

Soil 2nd or 3rd rate

Vegetation, bunchgrass and sagebrush.

U. S. T. 21 N. R. 21 E. G. & S. R. M.

Chains.

$6.89^{\circ} 57' E.$ on a true line between sections 1 ~~now~~ 36.

Va. $14^{\circ} 51'$ East.

Descend.

40.00 Set a lava stone $14 \times 10 \times 6$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 The Cor. to Tps. 21 & 22 N. Rs. 21 & 22 E.
~~front~~ vehicle I started -
land mountainous.

Soil ~~3 m~~ rate

Vegetation, sagebrush ~~now~~ bunchgrass

January 19th 1888.

W. B. T. 21 N. R. 20 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 subtracting same from the reading previously given, and at noon verified and corrected same by observation on the sun. I also further tested instrument by reversing.~~

~~Standard~~ From the Cor. to Tps. 21 N. R. 17 & 20 E,

which is a sandstone, $24 \times 10 \times 3$ ins., set firmly in the ground, marked S. E. with 6 notches on N, E $\frac{1}{2}$ W. edges, with pits $24 \times 18 \times 12$ ins. crosswise on each line, N, E, S, W. of stone, 6 ft. dist., and with a mound of earth, $2\frac{1}{2}$ ft. high, 6 ft. base along side, 3 m.

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

Va. $14^{\circ} 18'$ East.

Descend.

- | | | |
|-------|-------------|--|
| 4.20 | Cross Wash. | 10 lks. wide, Course S. 60° W. |
| 19.00 | Cross Wash. | 19 lks. wide, Course S. W. |
| 40.10 | Set a | sand stone $15 \times 13 \times 9$ ins., |

W. B. T. 21 N. R. 20 E. G. & S. R. M.

Chains.

ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, 18 x 18 x 12 ins., $\frac{1}{2}$ and $\frac{1}{2}$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

66.50 same
Cross Wash. 20 lks. wide, Course S.E.
77.00 same
Cross Wash. 20 lks. wide, Course S.W.
80.00 Set a sand stone 20 x 14 x 9 ins. 15 ins. in
the ground for Cor. to Secs. 25, 30, 3, and 36 marked
with $\frac{1}{4}$ notch on S. and $\frac{1}{2}$ notches on E edges, dug pits
18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ fl. dist., and raised a
mound of earth 2 ft. high $4\frac{1}{2}$ ft. base. alongside
Land rolling.

Soil ~~poor~~ rate

Vegetation bunch grass and sagebrush

W. B. T. 21 N. R. 20 E. G. & S. R. M.

Chains,

North on a true line between sections 25 and 30.

Va. $14^{\circ} 00'$ East.

Over rolling land.

- 17.30 Cross Wash. 20 lks. wide, Course S. E.
- 29.00 Cross Wash. 20 lks. wide, Course S. W.
- 40.00 Set a sand stone $\frac{1}{3} \times \frac{1}{2} \times 10$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., $\frac{1}{2}$ and $\frac{1}{4}$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
- 42.00 ^{same} Cross Wash. 20 lks. wide, Course S. E.
- 80.00 Set a sand stone $\frac{1}{2} \times 10 \times 10$ ins. 8 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, dug pits
 $18 \times 18 \times 12$ 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. alongside
- Land rolling.
- Soil 30 rate
- Vegetation, bunch grass and sagebrush.

W. B. T. 27 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 17 $\frac{3}{4}$ 24.

Va. 14^{000'} East.

Over rolling land.

39.00 Cross Wash. 15' lks. wide, Course S. W.

40.00 Set a basalt stone 13 x 10 x 9 ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, 18 x 18 x 12 ins., $\frac{3}{4}$ in. and $\frac{1}{2}$ in. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 Set a basalt stone 17 x 14 x 10 ins. 11 ins. in
the ground for Cor. to Secs. 13, 15, 19 $\frac{3}{4}$ 24, marked
with 3 notches on S. and 3 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. alongside

Land rolling.

Soil ~~3rd~~ rate

Vegetation bunchgrass and sagebrush.

W. B. T. 21 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 13 and 15.

Va. 18° 45' East.

Over rolling land.

40.00 Set a sand stone 12 x 12 x 6 ins., 8
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, 18 x 18 x 12 ins., $\frac{1}{2}$ and $\frac{1}{2}$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

51.50 Cross Wash. 15 lks. wide, Course S. 20° E.

80.00 Set a sand stone 14 x 11 x 8 ins. 9 ins. in
the ground for Cor. to Secs. 7, 12, 13 & 18, marked
with 4 notches on S. and 2 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. alongside
Land rolling.

Soil 3rd rate

Vegetation, bunch grass and sagebrush.

W. R. T. 21 N. R. 20 E. G. & S. R. M.

No. 1253

Chains.

North on a true line between sections 7 and 12.

Va. 14° 00' East.

Over rolling land.

- 40.00 Set a sandstone 17 x 11 x 8 ins., 11
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W.
face, dug pits, 18 x 18 x 12 ins., $\frac{M}{2}$ and $\frac{N}{2}$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
- 80.00 Set a sandstone 23 x 16 x 12 ins. 17 ins. in
the ground for Cor. to Secs. 1, 6, 7 and 12, marked
with 5 notches on S. and 1 notch 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. alongside
- Land rolling.

Soil ~~3rd~~ rate

Vegetation, bunchy grass and sagebrush.

W. B. T. 21 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6.

Va. $14^{\circ} 15'$ East.

Over rolling land.

Bl. 40 Cross Wash. 20 lks. wide, Course S. W and ascend.

40.00 Set a sand stone $1\frac{3}{4}$ x 10 x 3 ins., 8 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, 18 x 18 x 12 ins., $\text{M. and } \text{S.}$ of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $5\frac{1}{2}$ ft. base. alongside

80.00 Set a sand stone $20 \frac{1}{2}$ x $17\frac{1}{2}$ x 11 ins. W ins. in the ground, for Cor. to Tps. 21 and 22 N R's 19 and 20 E., marked with 6 notches on each edge, dug pits, 24 x 18 x 12 ins. lengthwise on each line, N. S. E. and W. of stone, 6 ft. dist., and raised a mound of earth $2\frac{1}{2}$ ft. high, 5 ft. base. alongside

Land rolling.

Soil 3 rate

Vegetation, bunch grass and sagebrush.

January 20th 1883.

N. B. T. 21 N. R. 20 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.~~

~~From the Cor. to Tps. 21 & 22 N., Rs. 19 & 20 E.,
I run East on a random line on 21. B. of Tp.~~

Va. $13^{\circ} 30'$ East.

I set temporary corners at every half mile, and at 5 miles 7&75 chs. I arrive at a point 47 lks. North of Cor. to Tps, previously set by me.
21 & 22 N. Rs. 20 & 21 E. from which corner I run
 $21.89^{\circ} 57' N$ on a true line between sections 1 & 36.

Va. $14^{\circ} 51'$ East.

Over level land

40.00 Set a sand stone $20 \times 12 \times 8$ ins., 15 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and N. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. alongside

80.00 Set a sand stone $14 \times 12 \times 8$ ins. 7 ins. in the ground for Cor. to Secs. 1, 2, 35 & 36, marked with 5 notches on N. and 1 notch on E. edges, dug pits $18 \times 18 \times 12$ 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. alongside

N. B. T. 21 N. R. 20 E. G. & S. R. M.

hains.

Land level.Soil ~~2 ad~~ rateVegetation, bunchgrass ~~and~~ sagebrush.N. $89^{\circ} 57'$ W. on a true line between sections ~~2 and 30.~~Va. $14^{\circ} 51'$ East.

Over level land

Cross Wash. 1ks. wide, Course

40.00 Set a sand stone $20 \times 10 \times 8$ ins., 15
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., $\frac{1}{2}$ E. and $\frac{1}{2}$ W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

Leave Valley, bears

80.00 Set a sand stone $20 \times 10 \times 8$ ins., 15 ins. in
the ground for Cor. to Secs. 2, 3, 34 ~~and~~ 30, marked
with 4 notches on N. and 2 notches on E. edges and
raised a mound of stone. alongside Pits impracticable.
Land level.

Soil ~~2 ad~~ rateVegetation, bunchgrass ~~and~~ sagebrush.

W. B. T. 21 N. R. 20 E. G. & S. R. M.

chains.

71.89° 57' W. on a true line between sections 3 and 34.

Over level land Va. 14° 51' East.

8.30 Cross Wash, 130 lks. wide, Course S. 10° E.

40.00 Set a sand stone 18 x 16 x 15 ins., 12
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, 18 x 18 x 12 ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

40.50 Leave Valley, bears 71. and 0. and ascend.

80.00 Set a sand stone $1\frac{1}{4}$ x 12 x 6 ins. 9 ins. in
the ground for Cor. to Secs. 3, 14, 23 or 34, marked
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. alongside

Land level. And mountainous.

Soil 2nd, 3rd rate

Vegetation, bunchgrass and sagebrush.

N. B. T. 21 N. R. 20 E. G. & S. R. M.

Chains.

W. 89° 57' W. on a true line between sections 14 ~~and~~ 15 & 16.

Va. 14° 51' East.

Ascend.

Enter Timber,

34.00 Top of Bluff bears W. and S. to descend.

40.00 Set a sandstone 24 x 18 x 4 ins., 18
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, 18 x 18 x 12 ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside80.00 Set a sandstone 20 x 12 x 8 ins. 15 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, 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. alongside
Land mountainousSoil ~~so~~ rateTimber ofVegetation, bunchgrass ~~and~~ sagebrush.

43
U. S. T. 21 N. R. 20 E. G. & S. R. M.

Chains.

$W. 89^{\circ} 57' W.$ on a true line between sections 5 and 32

Ascend.

$N. 14^{\circ} 51' E.$

- 28.00 Enter Timber, Bears. $W. \text{ and } S.$
33.00 Top of Hill bears $W. \text{ and } S.$ and descend.
40.00 Set a sand stone $14 \times 10 \times 8$ ins., 9
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on $W.$
face, dug pits, $18 \times 18 \times 12$ ins., $E.$ and $W.$ of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside
80.00 Set a sand stone $30 \times 18 \times 12$ ins., 22 ins. in
the ground for Cor. to Secs. 5, 6, 31 or 32, marked
with $\frac{1}{4}$ notch on $W.$ and $S.$ notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land mountainous.
Soil 3^{rd} rate
Vegetation, bunch grass and sagebrush.
Timber of Juniper cedar.

N. B. T. 21 N. R. 20 E. G. & S. R. M.

Chains.

$W. 59^{\circ} 57' N.$ on a true line between sections 6 and 31.

Va. $14^{\circ} 51'$ East.

Descend.

40.00 Set a sand stone $15 \times 13 \times 6$ ins., 10 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $8\frac{1}{2}$ ft. base, alongside

41.75 Leave Timber, Bears. N. W. sec. S. E.

76.75 Cross Wash, 100 lks. wide, Course S. and ascend.

76.75 The Cor. to Tps. 21 & 22 N. Rs. 19 & 20 E.
from which I started
this mountainous

Soil 3 m rate

Timber of Sono Cedars.

Vegetation, bunchgrass and sagebrush.

January 22nd 1888.

BOOK 1200
45

W. S. T. 22 N. R. 20 E. G. & S. R. M.

Chains.

From the Cgr. to Tps. 21 & 22 N. Rs. 17 & 20 E.,
recently established by me -
I run,

North on a true line between sections 31 and 36.

Va. $13^{\circ} 30'$ East.

Ascend.

40.00 Set a ~~basalt~~ stone $16 \times 10 \times 6$ 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.

80.00 Set a ~~basalt~~ stone $19 \times 12 \times 8.14$ ins. in
the ground for Cor. to Secs. 25, 30, 31 & 36, marked
with 1 notch on S. and 5 notches on ~~N~~ edges and
raised a mound of stone. alongside Pits impracticable.
Land mountainous

Soil ~~soil~~ rate

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

W. B. T. 22 N. R. 20 E. G. & S. R. M.

Chains,

North on a true line between sections 25-50.

Va. $13^{\circ} 25'$ 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, dug pits, 18 x 18 x 12 ins., ~~W.~~ 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.
- 80.00 Set a basalt stone 25 x 10 x 10 ins. 18 ins. in
 the ground for Cor. to Secs. 19, 24, 25-50, marked
 with 2 notches on S. and 4 notches on ~~P~~ edges and
 raised a mound of stone. alongside Pits impracticable.
 Land mountainous.

Soil poor rate

Vegetation, bunchgrass and sagebrush.

W. B. T. 22 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 17 and 24.

Va. 13° 21' East.

Ascend.

10.00 Top of flat Butte, bears E. $\frac{1}{2}$ W.

30.00 Descend.

40.00 Set a basalt stone $20 \times 16 \times 10$ 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.

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 & 24, marked T. 22 N. S. 18^{R. 19 E.}, or N. E., R. 20 E., S. 19 on S. E. S. 24 on S. W. and S. 13 on N. W. face, with 3 notches on S. and 3 notches on ~~N.~~ edges; dug pits, $18 \times 18 \times 12$ 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 ~~poor~~ rate

Timber of Juniper,

Vegetation, bunchgrass ~~and~~ sagebrush.

BOOK 1253
W. B. T. 22 N. R. 20 E. G. & S. R. M.

Chains,

North on a true line between sections 13 and 15.

Va. 10° 20' East.

Descend.

34.40 Cross Wash. 20 lks. wide, Course c. 64° 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., M. 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.

80.00 Set a basalt stone $14 \times 12 \times 8$ ins. 9 ins. in
the ground for Cor. to Secs. 7, 12, 13 or 18, marked
with 4 notches on S. and 2 notches on ~~E~~ edges and
raised a mound of stone. alongside Pits impracticable.
Land mountainous

Soil poor rate.

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

W. B. T. 22 N. R. 20 E. G. & S. R. M.

chains.

North on a true line between sections $7 \frac{2}{3} \text{ mi } 12$.

Va. $13^{\circ} 30'$ East.

Ascend.

- 40.00 Set a basalt stone $25 \times 20 \times 10$ ins., 19
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.
- 80.00 Set a basalt stone $24 \times 10 \times 6$ ins. 18 ins. in
the ground for Cor. to Secs. 1, 6, 7 $\frac{2}{3} \text{ mi } 12$, marked
with $\frac{1}{4}$ notch on S. and $\frac{1}{4}$ notch on $\frac{1}{4}$ edges and
raised a mound of stone. alongside Pits impracticable.
Land mountainous.
- Soil $3 \frac{1}{2}$ rate
- Vegetation, bunchgrass and sagebrush.

W. R. T. 22 N. R. 20 E. G. & S. R. M.

chains,

North on a true line between sections 1 and 6.

Va. 18° 30' East.

Ascend.

15. 28 Top of flat Butte, bears E. by W. Va second.
40. 00 Set a basalt stone $20\frac{1}{2}$ ft. x 7 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.
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. 2 2
and 23 $\frac{1}{2}$ R's 19 and 20 $\frac{1}{2}$ marked T, 23 $\frac{1}{2}$ S. 31
on N. E. R. 20 E S: 6 on S. E. T. 22 $\frac{1}{2}$ S. 1 on S,
W, and R, 19 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
aronnd post,

Land mountainous and rolling.

Soil ~~soil~~ rate

Timber of Juniper.

Vegetation, bunchgrass ~~and~~ sagebrush.
January 23rd 1883.

N. B. T. 22 N. R. 20 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.

From the Cor. to Tps. 22 & 23 $\frac{1}{4}$ Rs. 19 . & 20 E.
~~just established -~~
 I run East. on a random line on N. B. of Tp.

Va. $13^{\circ} 30'$ East.

I set temporary corners at every half mile, and at 5 miles 77.00 chs. I arrive at a point 19 $\frac{1}{4}$ lks. South of Cor. to Tps, previously set by me. 22 & 23 $\frac{1}{4}$ Rs. 20 & 21 $\frac{1}{4}$ from which corner I run S. $87^{\circ} 46'$ W. on a true line between sections 1 & 36.

Va. $14^{\circ} 55'$ East.

Descend.

37.00 Cross Wash. 20 lks. wide, Course S. and ascend.

40.00 Set a basalt stone $20 \times 10 \times 4$ ins., N
 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.

80.00 Set a basalt stone $20 \times 10 \times 10$ ins. N ins. in
 the ground for Cor. to Secs. 1, 2, 35 $\frac{1}{4}$ & 36, marked
 with 5 notches on N and, notch on E. edges and
 raised a mound of stone. alongside Pits impracticable.

N. B. T. 22 N. R. 20 E. G. & S. R. M.

Chains.

Land mountainous

Soil ~~3 m~~ rate

Timber of Juniper

Vegetation, bunchgrass and sagebrush.

S. 89° 46' W. on a true line between sections 2 and 35.

Va. 10° 00' East.

Ascend.

5.00 Cross Wash, 20 lks. wide, Course S. E. and ascend.

40.00 Set a basalt stone 20 x 20 x 10 ins., 15
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.

70.00 Enter rolling mesa and continue ascent.

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 & 35,
marked T. 23 N. S. 35, on N. E., R. 20 E., S. 2
 $\frac{1}{2} 22$ n. on S. E.. S. 3 on S. W. and S. 34 on N. W. face,
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.

M. B. T. 22 N R. 20 E. G. & S. R. M.

Chains,

Land mountainous and rolling.

Soil ~~soil~~ rate

Timber of Juniper.

Vegetation, bunch grass and sagebrush

S. 87° 46' W. on a true line between sections 3 and 34.

Va. 12030', East.

Ascend.

30.00 Top of Ridge, bears N. and S. 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 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.

70.00 Cross Wash. 2 or 3ks. wide, Course N. 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. 3, 4, 33 & 34, marked T. 2 S. 34, on N. E., R 20 E., S. 3 on 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.

N. B. T. 22 N. R. 20 E. G. & S. R. M.

Chains.

Land mountainous

Soil 3 or rate.

Timber of Juniper

Vegetation, bunchgrass ~~and~~ sagebrush.

$589^{\circ} 46'$ W on a true line between sections 4 ~~and~~ 83,

Va. $7^{\circ} 00'$ East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on W. face.

80.00 Set a base stone $20 \times 20 \times 20$ ins. in
 the ground for Cor. to Secs. 4, 5, 82 & 83, marked
 with 2 notches on W. and 4 notches on E. edges and
 raised a mound of stone. Pits impracticable.

Land rolling.

Soil 3 or rate.

Timber of Juniper.

Vegetation, bunchgrass ~~and~~ sagebrush.

U. S. T. 22 N. R. 20 E. G. & S. R. M.

Chains,

S. $89^{\circ} 46'$ W. on a true line between sections 5 and 32.

Va. $13^{\circ} 33'$ East.

Ascend.

40.00 Set a basalt stone $20 \times 10 \times 10$ ins., 15 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.

52.00 Enter Mesa, bears N. W. $\text{and } 0.6^{\circ}$.

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. 23 N. S. 32, on N. E., R. 20 E., S. 5 on S. E. S. 6 on S. W. and S. 31 on N. W. face, with 1 notch on ~~N~~ and 5 notches on ~~E~~ edges; dug pits, $18 \times 18 \times 12$ 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 3 m rate.

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

U. B. T. 22 N. R. 20 E. G. & S. R. M.

Chains.

$\text{S} 89^{\circ} 46' \text{W}$. on a true line between sections 6 and 31.

Va. 13000' East.

Over Mesa.

14.00 Descend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N. face.

77.00 The Cor. to Tps. 22 & 23 N. Rs. 19 & 20 E.
 from which I started -
 Land rolling.

Soil 3rd rate.

Timber of Juniper.

Vegetation, bunchgrass & sagebrush.

January 24th 1883.

W. B. T. 23 N. R. 20 E. G. & S. R. M.

Chains,

*From the Cor. to Tps. 22 & 23 N. Rs. 19 & 20^E,
previously established by me
Tran,*

North on a true line between sections 31 and 36,

Va. 13° 30' East.

Descend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In N. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N. face.

80.00 Deposited a marked stone, 12 ins. in the ground, for
 cor. to secs. 25, 30, 31 & 36, dug pits 18x18x12
 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 over it. In S. E. pit drove
 a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
 marked T. 23 N. S. 30 on N. E. R. 20 & N. 31 on
 S. E. S. 36 on S. W. and S. 25 on N. W. pits,
 with 1 notch on S. and 5 notch 30 on N. edges.
 Land rolling.

Soil 3 m rate.

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

W. B. T. 23 N. R. 20 E. G. & S. R. M.

Chains,

North on a true line between sections 25580.

Va. $13^{\circ} 30'$ East.

Descend.

38.97 Gross Wash. 18 lks. wide, Course 087° E. and ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits $18 \times 18 \times 12$ 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 over it. In N . pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N face.

80.00 Deposited a marked stone, 12 ins. in the ground, for
 cor. to secs. 19, 24, 25580, dug pits $18 \times 18 \times 12$
 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 over it. In S. E. pit drove
 a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
 marked T. 23 N. S. 19 on N. E. R. 20 E. S. 20 on
 $\text{S. E. S. } 25$ on S. W and S. 24 on N. W faces,
 with 2 notch es on S. and 2 notch es on E edges.
 Land rolling.

Soil 3 rd rate.

Timber of Juniper.

Vegetation, bunchgrass sagebrush.

W.B. T. 23 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 19 and 24,

Va. 13° 30' East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. *M* and *C* 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 over it. In *M* pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on *W.* face.

80.00 Set a basalt stone 20 x 20 x 18 ins. 10 ins. in the ground for Cor. to Secs. 12, 14, 19-24, marked with 3 notch \circ on S. and 3 notch \circ on *PL* edges and raised a mound of stone. alongside Pits impracticable. Land rolling.

Soil ~~soil~~ rate.

Timber of Juniper.

Vegetation, bunchgrass sagebrush.

W. B. T. 23 N. R. 20 E. G. & S. R. M.

ains.

North on a true line between sections 13518,

Va. 13000' East.

Ascend.

24.26 Top of Ridge, bears E. ~~and W.~~ and descend.140.00 Set a ~~boulder~~ stone 20 x 10 x 10 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.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, 13518, marked T. 23 N. S. 7 on N. E., R. 20 E., S. 18 on S. E. ¹⁷⁶ S. 13 on S. W. and S. 12 on N. W. faces, with 4 notches on S. 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.

Land mountainous and rolling.

Soil 3rd rate.

Timber of Juniper.

Vegetation, bunchgrass & sagebrush.

(1)

W. B. T. 23 N. R. so E. G. & S. R. M

ains.

North on a true line between sections \nearrow ~~Sec. 12,~~
Va., $3^{\circ} 30'$ East.

Descend.

3.15 Cross Wash. 20 lks. wide, Course W. 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., $\frac{1}{2}$ and $\frac{1}{2}$ 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.

63.25 Cross Wash. 29 lks. wide, Course S. 25° W. and ascend.

80.00 Deposited a marked stone, 12 ins. in the ground, for
cor. to secs. 1, 6, 7 \nearrow ~~Sec. 12~~, 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 over it. In S. E. pit drove
a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
marked T. 23 N. S. 6 on N. E. R. 20 E. S. \nearrow ~~Sec. 12~~
 $3^{\circ} 30'$ on S. W. and S. I. on N. W. face
with 5 notches on S. and 1 notch on ~~E. face~~
Land rolling.

Soil $3\frac{1}{2}$ rate.

Timber of Juniper.

Vegetation, bunchgrass or sagebrush.

W. B. T. 23 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 1 ^{and 16}.

Va. $13^{\circ} 30'$ East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits $18 \times 18 \times 12$ 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 over it. In N pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N face.

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. 23
 and 24 N. R's 19 and 20 E marked T, 24 N S. 31
 on N. E. R. 20 E S: 6 on S. E. T. 23 N S. 1 on S.
 W, and R, 19 E S, 36 on N, W, faces, with 6 notches
 on each edge, dug, pits $24 \times 18 \times 12$ 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.
 Land rolling.

Soil 3 in rate

Vegetation, bunchgrass & sagebrush.

W. B. T. 23 N. R. 20 E. G. & S. R. M.

Chains.

~~Before proceeding further with the exteriors of this Tps., I made a change of 6 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.~~

~~From the Cor. to Tps. 23 & 24 N. Rs. 19 & 20 E.
not established
I run East on a random line on W. B. of Tp.~~

Va. $13^{\circ} 30'$ East.

I set temporary corners at every half mile, and at 5 miles 77.50 chs. I arrive at a point 96 lks. North of Cor. to Tps, previously set by me.

23 & 24 N. Rs. 20 & 21 E. from which corner I run $21.89^{\circ} 53'$ N. on a true line between sections F & 26,

Va. $14^{\circ} 58'$ 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 N. face, dug pits, 18 x 18 x 12 ins., E. and N. 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.

78.12 Top of Ridge, bears N. and S. and descend.

80.00 Set a base set stone 20x20x10ins. 15 ins. in the ground for Cor. to Secs. 1, 2, 35 & 36, marked with 5 notches on N. and 1 notch on E. edges and raised a mound of stone. alongside Pits impracticable.

T. 23 N. R. 20 E. G. & S. R. M.

Chains.

Land mountainous

Soil ~~poor~~ rate

Timber of Juniper.

Vegetation, bunchgrass & sagebrush.

W. 89° 0' W. on a true line between sections 2 ~~sq~~ 35.

Va. 13° 27' East.

Descend.

10.00 Gross Wash. 29 lks. wide, Course S. and ascend.

40.00 Set a basalt stone $\frac{1}{2} \times 1 \frac{1}{2} \times 6$ ins., 10
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.

80.00 Set a basalt stone $\frac{1}{2} \times 10 \times 4$ ins., 12 ins. in
the ground for Cor. to Secs. 2, 3, 34 & 35, marked
with 4 notches on N. and 2 notches on E. edges and
raised a mound of stone. alongside Pits impracticable.
Land mountainous.

Soil ~~poor~~ rate

Timber of Juniper.

Vegetation, bunchgrass & sagebrush.

U. S. T. 23 N. R. 20 E. G. & S. R. M.

Chains.

N. $89^{\circ} 57'$ W. on a true line between sections 3 and 34.

Via. $13^{\circ} 40'$ East.

Descend.

40.00 Set a ~~ba~~ed stone $20 \times 10 \times 10$ ins., 10
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.

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 and 34,
marked T. 24 N. S. 34, 04 N. E., R. 20 E., S. 3
 $5.20 N.$
on S. E. S. 4 on S. W. and S. 33 on N. W. face,
with 3 notches on N. and 3 notches on E. edges;
dug pits, $18 \times 18 \times 12$ 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 3 ~~m~~ rate.

Timber of Juniper.

Vegetation, bunchgrass sagebrush.

U. S. T. 23 N. R. 20 E. G. & S. R. M.

Chains.

U. 89° 53' W. on a true line between sections 4 and 5, 3.

Va. 18° 88' East.

Descend.

400.00

Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N. face.

80.00

Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 4, 5, 32 & 33, dug pits 18x18x12 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 24 N. S. 33 on N. E. R. 20 E. S. 4 on S. E. S. 5 on S. W. and S. 32 on N. W. faces, with 2 notches on W. and 4 notches on E. edges. Land rolling.

Soil $\frac{1}{4}$ to rate.

Timber of Junipers.

Vegetation, bunchgrass & sagebrush.

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N. B. T. 23 N. R. 20 E. G. & S. R. M.

ains.

11.89° SSW on a true line between sections 5th & 32,

Va. 13030, East.

Descend.

Deposited a marked stone, 12 ins. in the ground, for
1/4 sec. cor., dug pits 18x18x12 ins. E, and W of
post 5 1/2 ft. dist. and raised a mound of earth 1 1/2 ft.
high, 3 1/2 ft. base over it. In E. pit drove a stake 2
ft. long, 2 in. square, 12 ins. in the ground, marked 1/4
s. on N, face.

Deposited a marked stone, 12 ins. in the ground, for
cor. to secs. 5, 6, 31 and 32, dug pits 18x18x12
ins. in each sec. 5 1/2 ft. dist., and raised a mound of
earth 2 ft. high, 4 1/2 ft. base over it. In S. E. pit drove
a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
marked T. 244. S. 32 on N. E. R. 208 5 m
S. E. S. on S. W and S. 31 on N. W faces,
with 1 notch on N and 5 notches on S. edges.
Land rolling.

Soil ~~so~~ rate

Vegetation, bunchgrass & sagebrush.

N. B. T. 23 N. R. 20 E. G. & S. R. M.

Chains.

N. $89^{\circ} 58'$ W. on a true line between sections $6 \frac{1}{2}$ and $5 \frac{1}{2}$,Va. $13^{\circ} 58'$ East.

Descend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N. face.

66.50 Cross Wash. 20 lks. wide, Course S.W. and ascend.

77.00 The Cor. to Tps. 23 & 24 N. Rs. 19 & 20 E.
 from which I started -
 Land rolling.

Soil 3 or rate

Vegetation, bunchgrass and sagebrush.

January 25th 1883.

W. R. T. 24 N. R. 20 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 23 & 24 N. Rs. 19 & 20,
recently established by me.
I run,

North on a true line between sections 31 and 36.

Via. $13^{\circ} 30'$ 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, dug pits, 18 x 18 x 12 ins., ~~M.~~ and $\frac{1}{2}$ 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 ~~base~~ stone 18 x 13 x 12 ins. 12 ins. in
the ground for Cor. to Secs. 25, 20, 31 & 36, marked
with 1 notch on S. and 5 notches on ~~M~~ edges and
raised a mound of stone. Pits impracticable.
Land rolling.

Soil 3^{rd} rate

Vegetation, bunchgrass and vegetation.

W.B. T. 24 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 25 and 30.

Va. $13^{\circ} 30'$ 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, dug pits, 18 x 18 x 12 ins., ~~M~~ 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.

62.90 Cross Wash 25 lks. wide, Course $N 20^{\circ} E$. 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 and 30,
 marked T. 24 N. S. 19 ^{R. 196.}, on N. E., R. 20 E., S. 30
 on S. E., S. 25 on S. W. and S. 24 on N. W. faces,
 with 2 notches on S. and 4 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 $3\frac{1}{2}$ rate

Vegetation, bunchgrass + sagebrush,
 Thickets of juniper.

BOOK 1205
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W. B. T. 24 N. R. 20 E. G. & S. R. M.

Chains.

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

Va. 13° 20' East.

Ascend.

- 40.00 Set a base~~s~~ stone 20 x 20 x 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.
- 80.00 Set a base~~s~~ stone 6 x 10 x 6 ins. 11 ins. in the ground for Cor. to Secs. 13, 14, 19 & 24, marked with 3 notches on S. and 3 notches on ~~N.~~ edges and raised a mound of stone. alongside Pits impracticable. Land rolling.

Soil 3rd rate

Vegetation, bunchgrass & sagebrush.

W. B. T. 24 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 18 or 18,

Va. $120^{\circ} 40'$ East.

Ascend.

- 80.00 Top of Ridge, bears E. near W. and descend.
 140.00 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., H. and $\frac{1}{2}$ 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.
 70.10 Cross Wash. 100 lks. wide, 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. 7, 12, 10 or 18,
 marked T. 24 N. S. 7, on N. E., R. 20 E., S. 18
^{R. 19 E.}
 on S. E. S. 13 on S. W. and S. 12 on N. W. faces,
 with 4 notches on S. 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.
 Land mountainous.
 Soil 3rd rate
 Vegetation, bunchgrass or oages more.

W. B. T. 24 N. R. 20 E. G. & S. R. M.

Chains

North on a true line between sections 7 and 12.

Vt. 13° 30' 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, dug pits, 18 x 18 x 12 ins., \mathcal{M} . and \mathcal{N} . 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 basalt stone 18 x 12 x 7 ins. 12 ins. in
the ground for Cor. to Secs. 1, 6, 7 or 12, marked
with σ notch σ on S. and ρ notch on \mathcal{M} edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.
- Soil 3^{soil} rate
- Vegetation, bunchgrass sagebrush,

W. B. T. 24 N. R. 20 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6.

Va. 12° 30' East.

Ascend.

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
 $W.$ face, dug pits, 18 x 18 x 12 ins., $W.$ 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.

70.12 Top of Ridge, bears $E.$ ~~and~~ $N.$ and descend.

79.54 Intersect the ~~6th~~ Standard Parallel North at a
 point 8.5-8 chs. West of the Standard Cor. ^{$\frac{1}{4}$ sec.} ~~now~~
 S. 1/2 Sec. 36 and . T. 24 N. R. 20 E. ^{previously set by me} at which
 point I.

Set a base set stone 20 x 16 x 10 ins. $N.$ ins. in the
 ground, for ^{Closing} Cor. to Tps. 24 N., R's 19 and
 20 E., marked C. O. with 6 notches on S. E. r. wedges,
 and raised a mound of stone, ^{alongside} Pits impracticable,
 Land mountainous.

Soil $3\frac{1}{2}$ in. rate

Vegetation, bunch grass or sagebrush,

January 26th 1883

W. B. T. & N. R. 19 E. G. & S. R. M.

Chains.

Before proceeding further with the exteriors of this Tps., I made a change of 16 minutes in the latitude arc of my solar compass by subtracting same from the reading previously given, and at noon verified and corrected same by observation on the sun. also further tested instrument by reversing.

Standard
From the Cor. to Tps. 21 N. R. 18 & 19 E.,

which is a sandstone, $20 \times 12 \times 12$ ins.
set firmly in the ground
marked S. E. with 6 notches
on N. E. and W. edges and
with a mound of stone
along side,

I run

North on a true line between sections 31 & 36

Va. $14^{\circ} 18'$ 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, dug pits, $18 \times 18 \times 12$ 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.

W.B. T. 2, N. R. 19 E. G. & S. R. M.

Chains.

56.00 Cross Wash. 20 lks. wide, Course S. 20° E. and ascend.

80.00 Set a lime stone 25x20x10ins. 18 ins. in
the ground for Cor. to Secs. 25, 30, 31 & 36, marked
with 1 notch on S. and 5 notches on ~~E~~ edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.

Soll 3 m rate.

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

W. B. T. 21 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 20-30.

Va. 130 3d' East.

Ascend.

40.00 Set a lime stone 19 x 12 x 7 ins., 14

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.

80.00 Set a lime stone 23 x 16 x 7 ins. 17 ins. in
the ground for Cor. to Secs. 19, 24, 20-30, marked
with 2 notch \circ s on S. and 4 notches on ~~E~~ edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.

Soil $\mathcal{S} \text{ on}$ rate

Vegetation, bunchgrass sagebrush.

Chains.

North on a true line between sections 19 and 24.

Va. 12° 30' East

Ascend.

40.00 Set a lime stone 10 x 20 x 19 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. Pits
impracticable.

79.00 Top of Ridge, bears $21.79^{\circ} E.$ or $67.78^{\circ} W.$ 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. 13, 18, 19 & 24,
marked T. 21 S. 18^{E.}, on N. E., R. 19 E., S. 19
on S. E. S. 24 or S. W. and S. 13 on N. W. faces,
with 3 notches on S. and 3 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 rolling.

Soil ~~poor~~ rate.

Timber of Juniper.

Vegetation, bunchgrass & sagebrush

W. B. T. 21 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 13 ~~and~~ 1st.
 Va. 13° 30' East.

Descend.

140.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In N. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on W. face.

80.00 Set a ~~lime~~ stone ~~21 x 21 x 4~~ ins. 18 ins. in
 the ground for Cor. to Secs. 7, 12, 13 & 14, marked
 with 4 notches on S. and 2 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.

Land rolling.

Soil ~~3 or~~ rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

W.B. T. 21 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 7 and 12.

Va. 13° 30' East

Descend.

140.00 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., \mathcal{M} . 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.

70.00 Cross low Sag and ascend.

80.00 Set a line stones 20 x 20 x 6 ins. 15 ins. in
the ground for Cor. to Secs. 1, 6, 7 and 12, marked
with 3 notches on S. and 1 notch on ~~N.~~ edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.

Soil 3 $\frac{1}{2}$ rate

Vegetation, bunchgrass or sagebrush.

Timber of Junipers

W. B. T. 2, N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6.

No. 13° 30' 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, 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.

55.37 Top of hill and descend.

50.00 Set a lime stone 30 x 20 x 10 ins. 22 ins. in the
ground, for Cor. to Tps. 21 and 22 N.R.'s 18 and
19 E., marked with 6 notches on each edge, and raised a
mound of stone. Pits impracticable.
Land rolling.

Soil ~~3 rd~~ rate

Vegetation, bunch grass and sagebrush.

Timber of Juniper.

T. 21 N. R. 19 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.

*From the Cor. to Tps. 21 & 22 N.Rs. 18 & 19 E.,
not established
I run East. on a random line on T. B. of Tp.*

Va. $13^{\circ} 30'$ East.

I set temporary corners at every half mile, and at 5 miles 77.82 chs. I arrive at a point 140 lks. South of Cor. to Tps. previously set by me. 21 & 22 N.Rs. 19 & 20 E. from which corner I run S. $89^{\circ} 50'$ W. on a true line between sections 1 & 36.

Va. $12^{\circ} 30'$ East.

Descend.

88.25 Cross Wash. 20 lks. wide, Course S. and ascend.

40.00 Set a basalt stone 14x10x4 ins. 7 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, and raised a mound of stones alongside Pits impracticable.

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

53.10 Cross Wash. 18 lks. wide, Course S. and ascend.

80.00 Set a basalt stone 16x10x6 ins. 11 ins. in

W. B. T. 2, N. R. 19 E. G. & S. R. M.

Chains.

the ground for Cor. to Secs. 1, 2, 34 & 36, marked with 3 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.
Land mountainous

Soil ~~4th~~ rate.

Timber of Juniper.

Vegetation Sagebrush.

5.89° SW' on a true line between sections 2 ~~and~~ 85.

Via 13°30' East.

Ascend.

40.00 Set a Basalt stone 14 x 8 x 4 ins., 9 ins. in the ground, for ¼ Sec. Cor., marked ¼ on N. face, and raised a mound of stone. alongside Pits impracticable.

80.00 Set a Limestone 20 x 12 x 8 ins., 5 ins. in the ground for Cor. to Secs. 2, 3, 34 & 36, marked with 1 notch on ~~N~~ and 2 notches 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. alongside

Land rolling. Timber of Juniper.

Soil ~~4th~~ rate

Vegetation sagebrush.

hains.

S. $87^{\circ} 57' W.$ on a true line between sections 3 and 34,Va. $13^{\circ} 30'$ 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. onN. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. ofpost $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft.high, $3\frac{1}{2}$ ft. base around post.78.15 Cross Wash. 100 lks. wide, Course $87^{\circ} 57'$ and ascend.80.00 Set a basalt stone $20 \times 16 \times 10$ ins. 10 ins. in
the ground for Cor. to Secs. 3, 4, 33 & 34, marked
with 3 notches on N. and 3 notches on E. edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.Soil ~~400~~ rate

Vegetation, sagebrush.

Timber of Juniper.

N. B. T. 21 N. R. 19 E. G. & S. R. M.

chains.

S. $89^{\circ} 50'$ W. on a true line between sections 4 ~~and~~ 33,

Va. $13^{\circ} 38'$ East.

Ascend.

- 40.00 Set a ~~basalt~~ stone $14 \frac{1}{2} \times 10 \frac{1}{2} \times 4$ ins., 9 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.
- 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. 224 S. 33, on N. E., R. 19 E., S. 4 ^{0.21 N.} on S. E. S. 5 on S. W. and S. 32 on N. W. faces, with 2 notch es on S. E. and 4 notch es on E. edges, dug pits, $18 \times 18 \times 12$ 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 $3\frac{1}{2}$ rate

Vegetation, bunchgrass ~~the~~ sagebrush.

Timber of Juniper.

N. B. T. 21 N. R. 19 E. G. & S. R. M.

hains.

S. $89^{\circ} 50'$ W. on a true line between sections 5 and 32.Va. $13^{\circ} 30'$ East

Ascend.

12. 11 Top of Divide bears N. $24^{\circ} 30'$ 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
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.

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 & 32,
marked T. 22 N. S. 32, on N. E., R. 19 E., S. 5
on S. E., S. 6 on S. W. and S. 32 on N. W. face,
with $\frac{1}{4}$ notch on N. and $\frac{1}{4}$ 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 2 ft. high, $4\frac{1}{2}$ ft. base
around post.

Land rolling.

Soil $\frac{3}{2}$ m. rate

Vegetation, bunchgrass & sagebrush,

Timber of Juniper.

BOOK 1200
W. B. T. 21 N. R. 19 E. G. & S. R. M.

ains.



S. $89^{\circ} 58' W.$ on a true line between sections 6 and 31.

Vn. $13^{\circ} 20'$ 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, 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.

77.82 The Cor. to Tps. 21 & 22 N. Rs. 18 & 19 E.
from which I started -
Land rolling.

Soil ~~soil~~ rate

Vegetation, bunchgrass,

Timber of Juniper.

January 29th 1883.

Chains.

From the Cor. to Tps. 2¹/₂ & 2²/₄ Rs. 18 & 19 E,
recently established by me,
I run West on a random line on N. B. of Tp.

Va. 13° 30' East.

I set temporary corners at every half mile, and at 5 miles
77.96 chs. I arrive at a point 98.1ks. North of Cor. to Tps,

21²/₄ & 22 N., Rs. 17²/₄ & 18 E., which
is a limestone 16 x 10 x 6 ins., set
firmly in the ground, marked with
6 notches on each edge; with pits
24 x 18 x 12 ins. lengthwise on each line
N., S. E. and W. of stone, 6 ft. dist., & a mound
of earth 3¹/₂ ft. high, 5 ft. base, alongside;

From which corner I run.

71.89° 53' E. on a true line between sections 6²/₄ & 81.

Va. 10° 30' East.

Ascend.

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

23.96 Enter drain, course N. E.

27.66 Leave drain, course N. E. and ascend.

37.96 Set a lime stone 11 x 7 x 5 ins., 10

89

N. B. T. 21 N. R. 18 E. G. & S. R. M.

Chains.

ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base, alongside

70.66 Cross Wash, 160 lks. wide, Course N. 25° W.

77.96 Deposited a marked stone, 12 ins. in the ground, for
cor. to secs. 5, 6, 31 & 32, dug pits $18 \times 18 \times 12$
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 over it. In S. E. pit drove
a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
marked T. 22 N. S. 32 on N. E. R. 18 E. S. 5 on
S. E. S. 6 on S. W. and S. 31 on N. W. faces,
with 1 notch on S. and 5 notch es on E. edges.
Land mountainous.

Soil 3 m rate

Vegetation, bunchgrass.

N. B. T. 21 N. R. 18 E. G. & S. R. M.

Chains:

N. $89^{\circ} \sqrt{3}' E.$ on a true line between sections 5^{and} 32.Va. $13^{\circ} 15' E.$

Descend.

2.30 Cross Wash. 50 lks. wide, Course N. $45^{\circ} W.$ and
Over level land

32.70 Ascend.

40.00 Set a lime stone $10 \times 8 \times 4$ ins., 10
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.

80.00 Set a sand stone $13 \times 9 \times 3$ ins. $\frac{1}{2}$ ins. in
the ground for Cor. to Secs. 4, 5, 32 + 33, marked
with 2 notches on ~~N~~ and 4 notches on E. edges, dug pits
 $18 \times 18 \times 12$ 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. alongside
Land rolling, and level.

Soil $2\frac{1}{2}$ rate

Vegetation, bunchgrass.

U. B. T. 21 N. R. 18 E. G. & S. R. M.

Chains.

$11.89^{\circ} 58' E.$ on a true line between sections 4 and 33.

Va. 130 20' East.

Descent.

14.00 Enter nearly level land.

37.80 Leave nearly level land.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N face.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 3, 4, 33 and 34, dug pits $18 \times 18 \times 12$ 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 22 N S. 34 on N. E. R. 18 E S 3 on 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.

Land rolling. and level.

Soil 2nd rate

Vegetation, bunchgrass.

T. 21 N R. 18 E. G. & S. R. M.

Chains.N. $89^{\circ} 50' E.$ on a true line between sections 3 ~~and~~ 34.Va. $13^{\circ} 25'$ East

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In $E.$ pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on $W.$ face.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 2, 3, 34 & 35, dug pits 18x18x12 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 22 N S. 35 on N. E. R. 18 E S 2 m S. E. S. 3 on S. W and S. 34 on N. W faces, with 4 notches on ~~N.~~ and 2 notches on E. edges.
Land rolling.

Soil 2 na rate

Vegetation, burning grass.

N. R. T. 21 N. R. 18 E. G. & S. R. M.

Chains.

$W. 89^{\circ} 53' E.$ on a true line between sections 21 and 30.

Va. 13° 30' East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N. face.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 1, 2, 35 & 36, dug pits 18x18x12 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 22 N. S. 36 on N. E. R. 18 E. S. 1 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.

Land rolling.

Soil 2nd rate

Vegetation, bunch grass.

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N. 18. T. 21 N. R. & E. G. & S. R. M.

Chains.

N. $89^{\circ} 53' E.$ on a true line between sections 1 ^{quad} 86.

Va. 13° 08' East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2
ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
S. on N. face.

80.00 The Cor. to Tps. 21 & 22 N. Rs. 18 & 19 E.
from which I started -
land rolling.

Soil 2nd rate

Vegetation, bunchgrass.

January 30th 1883.

W. B. T. 22 N. R. 19 E. G. & S. R. M.

Chains,

From the Cor. to Tps. 21 & 22 N. Rs. 18 & 19 E.
recently established by me.
I run,

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

Va. $13^{\circ} 80'$ 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 $\frac{1}{2}$ S. on
W. face, dug pits, 18 x 18 x 12 ins., 1 $\frac{1}{2}$ and 5 ft. 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 ~~stone~~ ⁵ ~~stone~~ 20 x 16 x 4 ins. / 5 ins.
the ground for Cor. to Secs. 25, 80, 31 & 36, marked
with 1 notch on S. and 5 notches on P/ 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. alongside
Land rolling.

Soil ~~2~~^{aa} rate

Vegetation, bunch grass.

Timber of Juniper.

W. B. T. 22 N R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 25 and 30.

Va. $10^{\circ} 30'$ 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, 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.
- 66.20 Cross Wash, 20 lks. wide, Course N. 76° W.
- 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 and 30,
marked T. 22 N. S. 19, on N. E., R. 19 E., S. 30
R. 18 E. on S. E. S. 25 on S. W. and S. 24 on N. W. face,
with 2 notches on S. and 4 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 3rd rate

Vegetation, bunch grass.

Chains.

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

Va. $13^{\circ} 30'$, East.

Descend.

40.00 Set a sandstone 20 x 16 x 4 ins., 15 ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on W. face, dug pits, 18 x 18 x 12 ins., \mathcal{M} . and \mathcal{S} . of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. alongside

58.20 Cross Wash, 15 lks. wide, Course S.E. and ascend.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor to secs. 13, 18, 19 ~~quad~~ 24, 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 22 N S. 18 on N. E. R. 19 E. S. 19 on S. E. S. 24 on S. W and S. 13 on N. W faces, with 3 notches on S. and 3 notch ∞ on ~~W~~ edges. Land rolling.

Soil 2 $\frac{1}{4}$ rate

Vegetation, bunch grass.

Timber of Juniper.

Chains.

North on a true line between sections 13 and 18,

Va. 13° 30' East.

Ascend.

40.00 Set a basalt stone 22 x 16 x 9 ins., 16
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.

41.20 Descend.

80.00 Deposited a marked stone, 12 ins. in the ground, for
cor. to secs. 7, 12, 13 & 18, dug pits 18x18x12
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 over it. In S. E. pit drove
a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
marked T. 22 N. S. 7 on N. E. R. 19 E S. 18 on
S. E. S. 13 on S. W and S. 12 on N. W faces,
with 4 notches on S. and 2 notches on ~~N~~ edges.

Land rolling.

Soil 2 $\frac{1}{2}$ rate

Vegetation, bunchgrass.

Timber of Juniper.

W. B. T. 22 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections $7 \frac{9}{16} \text{ sec. 12.}$

Va. $13^{\circ} 30'$ East.

Descend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits $18 \times 18 \times 12$ ins. \mathcal{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 over it. In \mathcal{N} . pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on \mathcal{W} . face.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 1, 6, $7 \frac{9}{16} / 12$, dug pits $18 \times 18 \times 12$ 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked $T. 22 N. S. 6$ on N. E. R. $17 E. S. 7$ m $R. 18 E.$ on S. W and S. 1 on N. W faces, with 5 notches on S. and 1 notch on \mathcal{W} edges.

Land rolling.

Soil 3rd rate

Vegetation, bunchgrass.

W.B. T. 22 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6,

Va. 18° 30' East.

Descend.

39.20 Cross Wash, 30 lks. wide, Course N.W. and ascend.

40.00 Set a basalt stone $21 \frac{1}{2} \times 20 \times 10$ ins., 16
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.80.00 Set a basalt stone $20 \frac{1}{2} \times 12 \frac{1}{2} \times 6$ ins. 15 ins. in the
ground, for Cor. to Tps. 22 and 23 N, R's 18 and
19 E., marked with 6 notches on each edge, and raised a
longer mound of stone. Pits impracticable.
Land rolling.Soil 2 aa rate

Vegetation, bunchgrass.

N. B. T. 22 N. R. 19 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.

From the Cor. to Tps. 22 & 23 N. Rs. 18 & 19 E., I run East on a random line on N. B. of Tp.

Va. $18^{\circ} 30'$ East.

I set temporary corners at every half mile, and at 5 miles

78.47 chs. I arrive at a point 13 lks. South of Cor. to Tps. previously set by me.

22 & 23 N. Rs. 19 & 20 E., from which corner I run

S. $89^{\circ} 59'$ W. on a true line between sections 1 & 36.

Va. $13^{\circ} 30'$ East.

Over level land

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N. face.

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, 35 & 36, marked T. 23 N. S. 36, on N. E., R. 19 E., S. 1 on S. E., S. 2 on S. W. and S. 35 on N. W. face,

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BOOK 1253

N. B. T. 22 N. R. 19 E. G. & S. R. M.

(Chains.

S. 69° 59' W. on a true line between sections 4 and 38,

Va. 13° 03' East.

Descend.

40.00 Set a basalt stone 14 x 10 x 4 ins., 9
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.

80.00 Set a basalt stone 6 x 10 x 10 ins. 11 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.
Land rolling.

Soil 2nd rate

Vegetation, bunchgrass.

Timber of Juniper.

N. B. T. 22 N. R. 19 E. G. & S. R. M.

Chains.

S. $89^{\circ} 57'$ W. on a true line between sections 5 ~~and~~^{near} 32,

Va. $130^{\circ} 30'$ East.

Descend.

40.00 Set a ~~line~~ stone 20 x 20 x 16 ins., 10 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.

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 & 32, marked T. 23 N. S. 32, on N. E., R 19 E., S. 5 ~~T. 22 N.~~ on S. E. S. 6 on S. W. and S. 3, on N. W. faces, with 1 notch on ~~N~~ and 5 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.
Land rolling.

Soil ~~24~~ rate

Vegetation, bunchgrass.

Timber of Juniper.

U. B. T. 22 N. R. 19 E. G. & S. R. M.

(Chains.

S. $89^{\circ} 59'$ W. on a true line between sections 6 ~~and~~ 31,

Va. 13° 30' East.

Descend.

40.00 Set a basalt stone 12 x 6 x 4 ins., 8
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.

78.47 The Cor. to Tps. 22 & 23 N. Rs. 18 & 19 E.
from which I started.
~~and~~ rolling.

Soil 2nd rate

Vegetation, bunchgrass.

Timber of Juniper.

January 31st 1880

N. B. T. 22 N. R. 18 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 22 & 23 N., Rs. 18. & 19 E.,
recently established by me -
I run West on a random line on N. B. of Tp.

Va. $13^{\circ} 30'$ East.

I set temporary corners at every half mile, and at 5 miles
77.00 chs. I arrive at a point 42 lks. South of Cor. to Tps,

22 and 23 N., Rs. 17 and 18 E.,
which is a limestone,
 $10 \times 9 \times 4$ ins., set firmly in the
ground, marked with crevices
on each edge; with pits
 $24 \times 18 \times 12$ ins., being otherwise on each
line, N., S., E. and W. of stone, 6 ft.
diam., and a mound of earth,
 $2 \frac{1}{2}$ ft. high, $4 \frac{1}{2}$ ft. base along sides.

From which corner I run.

S. $89^{\circ} 57'$ E. on a true line between sections 6 and 31.

Va. $13^{\circ} 20'$ East.

Descend.

37.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., 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.

N. B. T. 22 N. R. 18 E. G. & S. R. M.

Chains.

high, $3\frac{1}{2}$ ft. base over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N. face.

77.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 5, 6, 31 & 32, dug pits $18 \times 18 \times 12$ 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 22 N. S. 32 on N. E. R. 18 & S. 5 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.
Land rolling.

Soil 2 ~~as~~ rate

Vegetation, bunch grass.

N. B. T. 22 N. R. 18 E. G. & S. R. M.

Chains,

 $S.89^{\circ}57'6''$ on a true line between sections 5 ~~2~~ 32,

Va. 13°28' East.

Over level land

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In E. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N. face.

80.00 Deposited a marked stone, 12 ins. in the ground, for
 cor. to secs. 4, 5, 22 & 33, dug pits 18x18x12
 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 over it. In S. E. pit drove
 a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
 marked T. 22 N. S. 33 on N. E. R. 18 E. S. 4 m
^{T. 22 N.} on S. W. and S. 32 on N. W. faces,
 with 2 notches on W. and 4 notches on E. edges,

Land level.

Soil ~~2 aa~~ rate

Vegetation, bunchgrasses.

N. B. T. 22 N. R. 18 E. G. & S. R. M.

Chains.

S. 89° 57' E. on a true line between sections 4 ~~and~~ 33.

Va. 18° 20' East.

Over level land

30.00 Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. E and W of
 post 5½ ft. dist. and raised a mound of earth 1½ ft.
 high, 3½ ft. base over it. In E, pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on W. face.

80.00 Deposited a marked stone, 12 ins. in the ground, for
 cor. to secs. 3, 4, 38 & 4, dug pits 18x18x12
 ins. in each sec. 5½ ft. dist., and raised a mound of
 earth 2 ft. high, 4½ ft. base over it. In S. E. pit drove
 a stake 2 ins. square, 2 ft. long, 12 ins. in the ground,
 marked T. 23 N. S. 34 on N. E. R. 18 E S 3 on
 $\frac{1}{4}$ sec. cor. S. 4 on S. W and S. 33 on N. W faces,
 with 3 notch es on W and 3 notch es on E edges.
 Land rolling.

Soil $2\frac{1}{2}$ rate

Vegetation, bunchy grass.

W. 13. T. 22 N R. 18 E. G. & S. R. M.

ains.

S. 89° 57' E. on a true line between sections 3 ^{2nd} & 34.

Va. 13° 20' East

Ascend.

40.00 Set a basalt stone 15 x 12 x 10 ins., 10 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.

80.00 Set a sand stone 17 x 12 x 6 ins., 11 ins. in the ground for Cor. to Secs. 2, 3, 34 & 35, marked with 4 notches on N. and 2 notches on E. edges and raised a mound of stone. alongside Pits impracticable.

Land rolling.

Soil 2nd rate

Vegetation, bunchgrass.

N.B. T. 22 N R. 18 E. G. & S. R. M.

Chains.

$5.89^{\circ} 07' E.$ on a true line between sections 2 ~~and~~ 3 & 4.

Va. $13^{\circ} 20'$ East

Ascend.

17.20 Top of Spur, bears 22° S. E. and descend.

40.00 Set a sand stone / $8 \times 12 \times 12$ 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.

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, marked T. 23 N. S. 86°, or N. E., R. 18 E., S. 1. on S. E. S. 2 on S. W. and S. 3 on N. W. faces, with 5 notch \angle on N. and 1 notch on E. edges; dug pits, $18 \times 18 \times 12$ 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 $2\frac{1}{2}$ rate

Vegetation, bunchgrass.

Y. B. T. 22 N. R. 18 E. G. & S. R. M.

Chains.

S. $89^{\circ} 57' E.$ on a true line between sections 1 and 36.

Va. $13^{\circ} 20'$ East.

Descend.

35.50 Cross Wash. 30 lks. wide, Course $21.50^{\circ} W$ and ascend.

40.00 Set a ~~orange~~ stone $20 \times 20 \times 4$ ins., $\frac{1}{5}$ ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N. face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base.

50.00 The Cor. to Tps. 22 & 23 N. Rs. 18 & 19 E.
~~from which I started~~
 Land rolling.

Soil 2^{nd} rate

Vegetation, bunch grass. *

Timber of Juniper.

February 1st 1883.

W. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains,

From the Cor. to Tps. 22 & 23 N. Rs. 18 & 19 E.,
recently established by me - I run,

North on a true line between sections 31 & 36.

Va. 13° 30' East.

Ascend.

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

410.00 Set a base of stone 16 x 10 x 10 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.

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 & 36, marked T. 23 N. S. 30, on N. E., R. 19 E., S. 31 on S. E. S. 36 on S. W. and S. 25 on N. W. faces, with 1 notch on S. and 5 notches on ~~N.~~ 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.

Land rolling.

Soil ~~2nd~~ rate

Vegetation, bunchgrass.

W 13. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 25 ~~and~~^{near} 30.

Va. 13° 30' East.

Descend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. \mathcal{W} , 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 over it. In \mathcal{W} . pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on \mathcal{W} . face.

54.70 Cross Wash, 20 lks. wide, Course \mathcal{W} and ascend.

80.00 Set a Basalt stone 20x16x6 ins. 15 ins. in the ground for Cor. to Secs. 19, 24, 25-100, marked with 2 notch soon S. and 4 notches on \mathcal{W} edges, dug pits 18x18x12 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. alongside Land rolling.

Soil $2 \frac{1}{2}$ rate

Vegetation, bunch grass.

W. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

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

Va. 13° 38' East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. \mathcal{W} , 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 over it. In \mathcal{W} . pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on \mathcal{W} face.

87.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 13, 18, 19 ~~quad~~ 24, dug pits 18x18x12 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 23 N. S. 18 on N. E. R. 19 E. S. 19 on S. E. S. $\frac{1}{4}$ on S. W and S. 13 on N. W faces, with 3 notches on S. and 3 notches on ~~W~~ edges.

Land rolling.

Soil 2 ~~quad~~ rate

Vegetation, bunchgrass.

W.B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

~~North~~ on a true line between sections 13 and 14.

Va. 13° 30' East.

North on a true line between sections 13 and 15.

Va. 13° 30' East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. U. 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 over it. In U. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on W. face.

80.00 Set a basalt stone, $1\frac{1}{2}$ x 11 x 5 ins. 11 ins. in the ground for Cor. to Secs. 7, 12, 13 and 14, marked with 4 notches on S. and 2 notches on P. edges and raised a mound of stone. alongside Pits impracticable. Land rolling.

Soil ~~2nd~~ rate

Vegetation, bunch grass.

N. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 7 and 12.

Var. 10° 24' East.

Ascend.

40.00 Set a basalt stone 20 x 10 x 10 ins., 10 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.

60.15 Top of Spur, bears E. $\frac{1}{4}$ W. and descend.

80.00 Set a basalt stone 32 x 19 x 6 ins. 24 ins. in the ground for Cor. to Secs. 1, 6, 7 and 12, marked with 5 notches on S. and 1 notch on W. edges and raised a mound of stone. alongside Pits impracticable. Land mountainous

Soil 3rd rate.

Timber of Juniper.

Vegetation, bunch grass and sagebrush.

W. B. T. 23 N R. 19 E. G. & S. R. M.

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Chains.

North on a true line between sections 1 and 6.

Via 13° 24' East

Descend.

10. 28 Cross Wash, 20 lks. wide, Course S.W. and ascend.

30. 90 Top of Butte, bears E. ~~and~~ W.

40. 00 Set a basalt stone 16 x 12 x 9 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.

43. 10 Descend.

50. 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. 23
and 24 N, R's 18 and 19 E, marked T, 24 N S. 31
on N. E. R. 19 E, S: 6 on S. E. T. 23 N S. 1 on S,
W, and R, 18 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,
Land rolling.

Soil ~~3~~ ² rate

Vegetation bunch grass ~~and~~ sagebrush,
Juniper of Juniper

U. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

Before proceeding further with the exteriors of this Tp., I made a change of 6 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.

From the Cor. to Tps. 23. & 24 N. Rs. 18. & 19 E.
~~not established~~
 Run East. on a random line on N. B. of Tp.

Va. $13^{\circ} 20'$ East.

I set temporary corners at every half mile, and at 5 miles 77.10 chs. I arrive at a point 73 lks. South of Cor. to Tps, previously set by me.

23 & 24 N. Rs. 19 & 20 E. from which corner I run $5.89^{\circ} 55' W.$ on a true line between sections 1 & 36.

Va. $13^{\circ} 30'$ East.

Ascend.
 40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{2}$ sec. cor., 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{2}$ s. on N. face.

80.00 Set a basalt stone, $8 \times 18 \times 10$ ins. 12 ins. in the ground for Cor. to Secs. 1, 2, 35 & 36, marked with 5 notches on N and 1 notch on E. edges and raised a mound of stone. alongside Pits impracticable

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N. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

Land rolling.

Soil 3 ~~rd~~ rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

S. 89° 55' W. on a true line between sections 2 and 35.

Va. 130.30' East.

Ascend.

18.00 Descend.

40.00 Set a basalt stone 18 $\frac{1}{2}$ x 12 x 6 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. Pits impracticable.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 2, 3, 34 & 35, dug pits 18x18x12 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins; in the ground, marked T. 24 N. S. 88 $\frac{1}{4}$ on N. E. R. 19 E. S. 2 m 6.23 m. S. E. S. 3 on S. W. and S. 34 on N. W. faces, with 4 notches on N. and 2 notches on E. edges.
Land rolling. Timber of Juniper.

Soil 3 ~~rd~~ rate

Vegetation, bunchgrass and sagebrush.

T. 23 N. R. 19 E. G. & S. R. M.

Chains.

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

Lat. $13^{\circ} 30'$ East.

Descend.

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., dug pits $18 \times 18 \times 12$ ins. E, and $\frac{1}{4}$ 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on N. face.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 3, 4, 33 & 34, dug pits $18 \times 18 \times 12$ 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 over it. In S. E. pit drove a stake 2 ins. square, 2 ft. long, 12 ins. in the ground, marked T. 24 N. S. 34 on N. E. R. 19 E. S. 3 on 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. Land rolling.

Soil $3\frac{1}{2}$ in. rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

N. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

S. 69° 55' W. on a true line between sections ~~4 and 33.~~

Va. 13030' East.

Descend.

19.50 Gross Wash, 10 lks. wide, Course S. a

40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on W. face.

80.00 Deposited a marked stone, 12 ins. in the ground, for cor. to secs. 4, 5, 32 & 33, dug pits $18 \times 18 \times 12$ 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 over it. In S. E. pit drove a stake 18 in. square, 2 ft. long, 12 ins. in the ground, marked T. 24 N. S. 33 on N. E. R. 19 & S. 4 on S. E. S. 5 on S. W. and S. 32 on N. W. faces, with 2 notches on W. and 4 notches on E. edges. Land rolling.

Soil ~~2nd~~ rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

N. B. T. 23 N. R. 19 E. G. & S. R. M.

Chains.

S. 89° 05' W. on a true line between sections 5 - ~~2a~~ 32.

Va. 13° 20' East.

Ascend.

47 Cross Wash, 26 lks. wide, Course S. and ascend.

40.00 Set a basalt stone $1\frac{1}{2} \times 10 \times 7$ ins., 11
ins. in the ground, for $\frac{1}{4}$ Sec. Cor., marked $\frac{1}{4}$ on N.
face, dug pits, $18 \times 18 \times 12$ ins., E. and W. of stone
 $5\frac{1}{2}$ ft. dist., and raised a mound of earth $1\frac{1}{2}$ ft. high,
 $3\frac{1}{2}$ ft. base. alongside

80.00 Set a basalt stone $30 \times 2\frac{1}{2} \times 20$ ins. 20 ins. in
the ground for Cor. to Secs. 5, 6, 3, r 32, marked
with 1 notch on N. and 5 notches on E. edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.

Soil $2\frac{1}{2}$ na rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

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N. B. T. & N. R. 19 E. G. & S. R. M.

Chains.

S. 89° 55' W. on a true line between sections 6 ~~and~~ 31.

Va., 13° 30' East.

Ascend.

4000 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 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.

7710 The Cor. to Tps. 23 & 24 N. Rs. 18 & 19 E.
~~from which I started~~
Land rolling.

Soil ~~2~~ nd rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

February 2nd 1883.

U. B. T. 23 N. R. 18 E. G. & S. R. M.

Chains.

From the Cor. to Tps. 23 & 24 N., Rs. 18 & 19 E.;
~~recently established by me~~
 I run West. on a random line on U. B. of Tp.

Va. $13^{\circ} 20'$ East.

I set temporary corners at every half mile, and at 5 miles
 76.55 chs. I arrive at a point $8\frac{1}{4}$ lks. North of Cor. to Tps.
 23 and 24 N., Rs. 17 and 18 E.,

which is a basalt stone, $20 \times 10 \times 10$ ins.,
 set firmly in the ground, marked
 with 6 notches in each
 edge and with a mound
 of stone alongside;

From which corner I run.

$71.89^{\circ} 57' E.$ on a true line between sections 6 and 31.

Va. $13^{\circ} 20'$ East.

Descend.

36.55 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N. face.

BOOK 1200
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N. B. T. 23 N. R. 18 E. G. & S. R. M.

Chains.

76. 55 Set a post 4 ft. long, 4 ins. square, with marked stone.

12 ins. in the ground, for Cor. to Secs. 5, 6, 31 & 32,
marked T. 24 N. S. 32, on N. E., R. 18 E., S. 5
¹²³⁴ 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;
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 ~~2~~ ¹ ~~ha~~ rate

Vegetation, bunchgrass ~~and~~ sagebrush.

N. B. T. 23 N. R. 18 E. G. & S. R. M.

Chains.

Y. 89° 54' E. on a true line between sections 5 ~~and~~ 32,

Va. 18° 30' East.

Descend.

30.50 Cross Winslow ~~on~~ Moquin road, bears N. ~~and~~ S.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. E. and W. of
 post 5½ ft. dist. and raised a mound of earth 1½ ft.
 high, 3½ ft. base over it. In E. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N. face.

45.00 Cross low Sag 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. 4, 5, 32 ~~and~~ 33,
 marked T. 24 N. S. 33, on N. E., R. 18 E., S. 4
 on S. E. S. 5 on S. W. and S. 32 on N. W. face,^{Q. 22 N.},
 with 2 notch es on N. and 4 notch es 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.
 Land rolling.

Soil 2 ~~nd~~ rateVegetation, bunchgrasses ~~on~~ sagebrush.

N. B. T. 23 N R. 18 E. G. & S. R. M.

Chains.

 $11.89^{\circ} \text{ N } 114^{\circ} \text{ E.}$ on a true line between sections 4 ~~Sec~~ 33,Va. $13^{\circ} 30'$ East.

Ascend.

- 40.00 Deposited a marked stone, 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., 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 over it. In E. pit drove a stake 2 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$ s. on W. face.
- 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 & 34, marked T. 24 N. S. 34, on N. E., R. 18 E., S. 3 on S. E., S. 4 on S. W. and S. 33 on N. W. face, with 3 notches on W. and 3 notches on E. edges; dug pits, $18 \times 18 \times 12$ 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 ~~dark~~ rate
- Vegetation, bunchgrass & sagebrush.

N. B. T. 23 N. R. 18 E. G. & S. R. M.

Chains.

W. $89^{\circ} 54' E.$ on a true line between sections 3 ~~and~~ 34,Va. $13^{\circ} 30'$ East

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits $18 \times 18 \times 12$ ins. E. and $\frac{1}{4}$ 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 over it. In E. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on N. face.

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 - 35,
 marked T. 24 N. S. 35, on N. E. R. 18 E., S. 2
^{G. 23 N.} on S. E. S. 3 on S. W. and S. 34 on N. W. faces,
 with 4 notches on N. and 2 notches on E. edges;
 dug pits, $18 \times 18 \times 12$ 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 2nd rateVegetation, bunch grass no sagebrush.

W. B. T. 23 N. R. 18 E. G. & S. R. M.

Chains.

$W. 89^{\circ} 54' E.$ on a true line between sections 2 & 3,

Va. 13° 30' East.

Ascend.

40.00 Set a ~~basalt~~ stone $20 \times 10 \times 6$ ins., 15
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.

80.00 Set a ~~sand~~ stone $25 \times 10 \times 10$ ins. 18 ins. in
the ground for Cor. to Secs. 1, 2, 3 & 4, marked
with 5 notch ∞ on N. and 1 notch on E. edges and
raised a mound of stone. alongside Pits impracticable.
Land rolling.

Soil 2^{nd} rate

Vegetation, bunchgrass ~~was~~ sagebrush.

Timber of Juniper

T. 23 N. R. 18 E. G. & S. R. M.

Chains.

$789^{\circ} 54' E.$ on a true line between sections 1 $\frac{2}{4}$ miles 36 ,

Va. 13030' East.

Ascend.

40.00 Set a line stone $30 \times 20 \times 4$ ins., 20
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.

80.00 The Cor. to Tps. 23 & 24 N. Rs. 18 & 19 E,
~~some~~ which I started
and rolling.

Soil $2 \frac{1}{4}$ rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

Chains.

From the Cor. to Tps. 23 & 24 N. R. 18 & 19 E.
recently established by me
I run,

North on a true line between sections 31 & 36.

Vd. 13° 20' East.

Ascend.

- 40.00 Set a sand stone 25 x 20 x 10 ins., 19
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.
- 50.00 Top of Spur, bears E. ~~and~~ W. and descend.
- 80.00 Set a basalt stone 22 x 20 x 15 ins. 16 ins. in
the ground for Cor. to Secs. 25, 30, 31 & 36, marked
with 7 notch on S. and 5 notches on ~~N.~~ edges and
raised a mound of stone. alongside Pits impracticable.
Land mountainous

Soil 3rd rate.

Timber of Juniper.

Vegetation, bunchgrass ~~and~~ sagebrush.

W. B. T. 24 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 25 ~~and~~ 30,

Va. 18° 20' East.

Descend.

40.00 Set a ~~sand~~ stone $20 \times 20 \times 6$ ins., 20ins. 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.

64.10 Gross Wash, 30 lks. wide, Course S. W. and ascend.

80.00 Set a lime stone $28 \times 20 \times 4$ ins. 21 ins. in the ground for Cor. to Secs. 19, 24, 25 - 30, marked with 2 notches on S. and 4 notches on ~~N.~~ edges and raised a mound of stone. alongside Pits impracticable. Land mountainousSoil 3rd rate.

Timber of Juniper.

Vegetation, bunchgrass & sagebrush.

W. B. T. 24 N. R. 19 E. G. & S. R. M.

Chains,

North on a true line between sections 19 and 24,

Va., $3^{\circ} 20'$ East.

Ascend.

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

40.00 Set a sandstone $30 \times 30 \times 3$ ins., 20 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.

80.00 Set a basalt stone $25 \times 13 \times 10$ ins. 18 ins. in the ground for Cor. to Secs. 13, 18, 19 & 24, marked with 3 notches on S. and 3 notches on ~~N~~ edges and raised a mound of stone. alongside Pits impracticable. from which,

A Spring, bears S. W., 15.00 chs. dist.

Land mountainous

Soil 3 rd rate.

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

Chains.

North on a true line between sections 7 and 18.

Va. 13° 28' 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, dug pits, 18 x 18 x 12 ins., $\frac{1}{2}$ in. and $\frac{1}{2}$ in. 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.

61.40 Cross Wash, 24 lks. wide, Course N. 10° 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. 7, 12, 18 and
marked T. 24 N. S. 7, on N. E., R. 19 E., S. 18
on S. E. S. 13 on S. W. and S. 12 on N. W. face,
with 1 notch on S. and 2 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 rolling.

Soil 2 in rate

Vegetation, bunchgrass and sagebrush.

W. B. T. 24 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 7 and 12,

Va 13° 20' East.

Ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 ins. \mathcal{N} . 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 over it. In \mathcal{N} . pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked $\frac{1}{4}$
 s. on \mathcal{W} . face.

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, 7 & 12,
 marked T. 24 N. S. 6 , on N. E., R. 19 E., S. 7
^{R. 16 E.} on S. E.. S. 12 on S. W. and S. 1 on N. W. face,
 with 5 notches on S. and 1 notch 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 rolling.

Soil 2 nd rate

Vegetation, bunchgrass and sagebrush.

Timber of Juniper.

W. B. T. 24 N. R. 19 E. G. & S. R. M.

Chains.

North on a true line between sections 1 and 6,

Va. 13° 20' East.

Ascend.

20.00 Descend.

25.00 Gross Wash, 20 lks. wide, Course S. 80° W. and ascend.

40.00 Deposited a marked stone, 12 ins. in the ground, for
 $\frac{1}{4}$ sec. cor., dug pits 18x18x12 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 over it. In N. pit drove a stake 2
 ft. long, 2 in. square, 12 ins. in the ground, marked
 S. on W. face.

81.20 Intersect the 6th Standard Parallel North at a
 point 5.78 chs. West of the Standard Cor. ^{4000'}
 σ . B. Secg. 36 and T. 25 N. R. 18 E.

previously set by me.

Set a post 4 $\frac{1}{2}$ ft. long, 4 ins. square, with marked
 stone 12 ins. in the ground, for Closing Cor. to
 Tps. 24 N., R's 18 and 19 E. marked O. C.
 T: 24 N. on S. R. 19 E. S. 6 , on
 E. and R. 18 E S. 1 on W. faces with 6
 notches on S. E. & W. faces, dug pits, 24 x 18 x
 12 ins, crosswise on each line, S. E. & W. of post, 6
 ft. dist, and raised a mound of earth 2 $\frac{1}{2}$ ft. high, 5

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W.B. T. 24 N. R. 19 E. G. & S. R. M.

ft, base, around post,

Land mountainous

Soil 3rd rate.

Timber of Juniper.

Vegetation, bunchgrass and sagebrush.

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

February 3rd 1883.

For final oaths, see book no. 19.

U. S. Surveyor General's Office,
Tucson, Arizona, July 26, 1883,

The foregoing Field Notes of the survey of a
portion of the exterior lines
of Townships 21, 22, 23 & 24 North,
Ranges 18, 19, 20 & 21 East,

of the Gila and Salt River Base and Meridian, Arizona,
executed by A. P. Johnson,
D. S., under his contract of the 5th. day of
August, 1882, having been critically ex-
amined and the necessary corrections and explanations
made, the said Field Notes and the surveys they de-
scribe, are hereby approved.

J. W. Robbins

Surveyor General.