

Retrocure Book

See Index
Field Notes

Retrocure BOOK 1355
OF THE SURVEY OF

5th Auxiliary Meridian

through

and establishment of 5th Aux Meridian through
Tps 12-13-14 and 15 - N. Rs

20. and 21 E.

(For survey of 5th Mer. - See Expts 10 to 20
Rgs 10 to 20)

Gila and Salt River Base and Meridian

ARIZONA. BOOK 1355

By M. H. Grant. E.S.

Under contract dated Aug 5th 1882.

Survey commenced Feb 19th 1883.

Survey completed Feb 21st 1883.

No. 1355

Index of Field Notes

No. 1355

1355

Preliminary Oaths of Assistants.

I, A. H. Arnold, do solemnly

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

3rd Stand. Par^l North along S. B. 5, 13 & R 20 E, The 4th Stand. Par^l North along S. B. Tps 17 & R 17, 18 & 19 E, The 4th Auxiliary Guide Meridian West along W. B. Tps 17 & R 17 E, the 5th Auxiliary Guide Mer. West along W. B. Tps 12, 13, 14 & 15 & R 21 E, The Exterior and Subdivision lines of T 17 & R 17 E, Tps 13, 14 & 16 & R 19 E, Tps 12, 13, 14 & 15 & R 20 E, and T 12 & R 22 E S. & S. R. 5th

A. H. Arnold, Compassman.

Subscribed and sworn to before me this 17th day of February, 1883.

A. E. Shoemaker

U. S. Commissioner, 3d Judicial District, Arizona Territory.

We, L. M. Conklin, David Clayton
and James W. Peckham & Patrick Kearney
do solemnly swear that we will well and faithfully execute the

duties of chain carriers; that we will level the chain upon even and uneven ground and plumb the tally pins, either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true length of all lines that we assist in measuring, to the best of our skill and ability, and in accordance

with instructions given us, in the survey of the 3rd Stand, Part North along S. B. T. 13 N. R. 20 E., The 4th Stand, Part North, along S. B. T. 17 N. R. 17, 18, + 19 E. The 4th Auxiliary Guide Trus. West along N. B. T. 17 N. R. 17 E. The 5th Auxiliary Guide West East along N. B. T. 12, 13, 14, + 15 N. R. 21 E. The extreme and Subdivision lines of T. 17 N. R. 17 E. T. 13, 14 + 16 N. R. 19 E. T. 12, 13, 14 + 15 N. R. 20 E. and T. 12 N. R. 22 E. and S. R. M.

L. M. Conklin, Chainman.

David Clayton, Chainman.

James W. Peckham, Chainman.

Patrick Leary, Chainman.

Subscribed and sworn to before me this 14th day of February, 1883.

A. E. Shoemaker

U. S. Commissioner, 3d Judicial District, Arizona Territory.

We, *C. N. Wilkinson*

and

do solemnly swear that *I* will well and truly perform the duties of axemen, in the establishment of corners and other duties, according to instructions given ~~us~~ ^{me}, and to the best of ~~our~~ ^{my} skill and

ability, in the survey of *the 3rd Stand, Parcel North along B. N. 130^t. R 20^E, The 4th Stand, Parcel North, along S. B. Tps 17^t. R 17, 18 + 19^E, The 4th Auxiliary Guide Mer. about along N 13 Tps 17^t. R 17^E, The 5th Auxiliary Guide Mer. about along N 13, Tps 12, 13, 14 + 15^t. R 21^E. The Exterior and subdivision lines of T. 17^N. R 17^E, Tps 13, 14 + 16^t R 19^E, Tps 12, 13, 14 + 15^t A. R 20^E and T. 12^t. R 22^E G. & S. R. M*

C. N. Wilkinson, Axeman.

, Axeman.

Subscribed and sworn to before me this

17th

day of *February*, 1883.

A. C. Shaemaker

*U. S. Commissioner, 3d Judicial District,
Arizona Territory.*

I, Thomas Morris

I, do solemnly swear that I will well and truly perform the duties of flagman, according to instructions given me, and to the best of

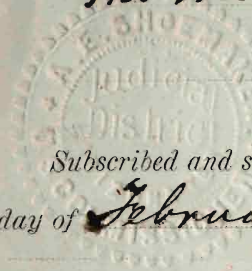
my skill and ability, in the survey of the 3rd Standard Mer. 1st North along S.B. 7 13 A. R 20 E. The 4th Standard Mer. 1st North along S.B. 7's 17 A. R. 18 + 19 E. The 4th Auxiliary Guide Mer. West along N.B. 7's 17 A. R 17 E. The 5th Auxiliary Guide Mer. West along N.B. 7's 12, 13, 14 + 15 A. R 21 E. The Extension and Subdivision lines 7's 17 A. R 17 E. 7's 13, 14 + 16 A. R 19 E. 7's 14 + 15 A. R 20 E and T. 12 A. R 22 E 4th mer.

Thomas Morris, Flagman.

Subscribed and sworn to before me this 17th day of February, 1883.

A. E. Shoemaker

U. S. Commissioner, 3d Judicial District, Arizona Territory.



1E

BOOK 1355

Book No 1355

Indexed

5th and M. through 9122. 1 - 9
 " " " " " 13, 10 - 19
 " " " " " 14, 18 = 23
 " " " " " 15, 24 - 30

Bet. Re. 20 and 21 E.

<u>5122</u>	<u>5132</u>	<u>5142</u>	<u>5152</u>
1 8 6	1 16 6	1 23 6	1 29 6
12 7 7	12 15 7	12 22 7	12 28 7
13 5 18	13 14 18	13 21 18	13 27 18
24 4 19	24 13 19	24 20 19	24 26 19
25 3 30	25 11 30	25 19 30	25 25 30
36 1 31	36 10 31	36 18 31	36 24 31

No. 1355

The instrument which I used in making this Survey was a Burt's improved Solar compass nearly new and in first rate order. Made by Otto Frenkel of Cassel Germany, in 1881; and which was examined May 26th 1882 on the true Meridian at Tucson Ar. by Deputy Surveyor Milton Sauter. The compassman used the same kind of instrument; which he ^{frequently} compared with mine.

Re-tracing of the 5th Aux - Meridian E.
Through Tps 12 N.

From the Cor. to Tps. 11+12 N.
 R.S. 20 + 2, E. which is a
 Post 4 ins square ^{firmly set in the ground} & properly marked & notched
 from which, a Cedar 2 ins diam bears S 50° W. 126 chs dist.
 A Cedar 1 9/16 ins diam bears N 25° W. 194 chs dist
 A Cedar 2 2/8 ins diam bears N 16° E. 200 chs dist
 A Cedar 1 8/16 ins diam bears S 17° E. 107 chs dist.
 I retrace North ^{no marks on ~~top~~ of post and on line} ~~to~~ Sec 31 ^{to} 36
 Va. 13 1/2 E.

Descent gradually

39.65 Cross Wash 13 chs. wide Co. N. 12 E.
& ascent.

40.00 To a point 15 chs. E. of ^{at} 1/4 Sec.
Cor. which is a post set firmly
in a mound of earth Marked
1/2 S. on N. face with pits 18 x
18 x 2 ins. N.W.S. of post. 5 1/2 ft. dist.

75.00 Top of Spur bis. N. 35° E. 90 ft high and
descent gradually

80.35 To a point 13 chs. E. of ^{at} Cor.

Retracing of the 5th Aux Meridian C.
 Through T. 12 N.

to Secs. 25, 30, 31-36. Which is
 a post set firmly in a mound
 of earth Marker T. 12 N. S. 30 on N.E.
 R. 21 E. S. 31 on S.E.

R. 20 E. S. 36 on S.W. and S. 35 on N.W.
 faces, and with 1 notch on S. &
 5 notches on N. edges. with pits
 18x18x12 ins. in each Sec. 5/4
 ft. dist. from which
 a Juniper 9 ins. diam. br. N 50° E. 41
 lbs. dist. marked T. 12 N. R. 21 E. S. 30 B. T.
 a Juniper 10 ins. diam. br. S 5° W. 18 lbs. dist.
 marked T. 12 N. R. 20 E. S. 36. B. T.
 Surface slopes gradually to S.
 Soil 3^d rate.
 Good grass
 Scattering Pines & Juniper.

Re-tracing of the 5th Aux. Meridian
 chs through T_p. 12 N.

North ^{up rapids on line} bet. Secs. 25 ^{and} 31.
 Va. 13° 45' E.

Descend gradually

40.00 To a point 24 lks. E. of ^{at} 1/4 Sec.

Cor. which is a post set firmly
 in a mound of earth marked

1/4 S. on N. face, with pits 18x18x
 12 ins. N. & S. of post, 5 1/2 ft. dist.

From which
 a Juniper 10 ins. diam. brs. S. 45° E.
 34 lks. dist. Marked 1/4 S. B. T.

a Juniper 8 ins. diam. brs. S 57° N. 23 lks.
 dist. Marked 1/4 S. B. T.

80.35 To a point 17 lks. E. of ^{at} Cor. to Secs.
 19-24-25+30. which is a post. Set
 firmly in an earth mound marked

T. 12 N. S. 19 on N. E.

R. 21 E. S. 30 on S. E.

R. 20 E. S. 25 on S. W. and

S. 24 on N. W. faces, with

Tracing of the 5^m Aux. Meridian C.
 through Sp. 12 N.

2 notches on S. + 4 notches on N.
 edges + pits, 8x18x12 ins. in
 each Sec. 5 1/2 ft. dist.

Surface rolling

Soil 3^d rate

Good grass.

Scattering Juniper + Pinions

North, on a random line bet Secs 19th & 24th
 Va. 13 + 5' E.

Descent gradually

34.40

Cross Wash 30 Ecs. wide Co.

N 14° E. and ascend.

40.00

Found no Corner. Continue North.

53.00

Top of Spur. brs. N 44° E. 200 ft. high + descent.

71.50

Cross Wash 10 Ecs. wide Co. E. + ascend.

81.00

To the Cor. to Secs. 13-18-19 + 24,

which is a Sand stone 10x3 ins.

marked with 3 notches on N. + S.

Re-tracing of the 5th Aux-Meridian E.
Chs through T^p. 12 N.

edges & a mound of stone alongside
from this corner, Iron
S. on the ~~xxx~~^{same} line and at

40.50 Set a Sand Stone 16x9x7 ins. 11 ins.
in the ground for $\frac{1}{4}$ Sec. Cor. Marked
 $\frac{1}{4}$ on N. face and raised a mound
of stone alongside. 13x18

81.00 The Cor. to Secs. 19-24-25-30.

Surface rolling

Good grass,

Soil 3^d rate

Scattering Juniper Brush.

From the Cor. to Secs. 13-18-19

24

Iron

North on a random line bet Secs 13²⁴ & 18

at $13^{\circ}45' E$,

Ascend gradually

17.00 Top of Ridge bet. E. & N. 245 ft high & descen

Re-tracing of the 5th Aux-Meridian E.
Chs Through T. 12 N.

40.10 To a point 10 lks. E. of ^{NO. 4} Sec. Cor.
which is a post set firmly in
an earth mound marked 4 S.
on N. face ^{with} pits 18x18x12 ins. N.E.
of post 5 pft. dist. from which
a Juniper 6 ins. diam. br. S. 43° E. 14 lks.
dist. marked 4 S. B. T.

78.60 Cross Track 10 lks. Nide Co. N. 10° E.

80.20 To a point 35 lks. E. of ^{Ar. to} Secs.
7-12-13+18. which is a post set
firmly in a mound of earth marked
T. 12 N. S. 7 on N.E.

R. 21 E.S. 18 on S.E.

R. 20 E.S. 13 on S.W. and

S. 12 on N.W. faces, with 4
notches on S. and 2 notches on N.
edges, and pits 18x18x12 ins in
each Sec. 5 pft. dist.

Surface rolling
Soil 3rd rate
Good grazing

Re-Tracing of the 5th Aux-Meridian E.
 Chs Through Sp. 12 N.

North on a random line but Secs 7^{and} 12
 Va. $13^{\circ} 45' E.$

Descend gradually

31.48 Cross Road br. N. $40^{\circ} E.$

40.10 To a point 6 lks. E. of ^{ad} 1/4 Sec. Cor.
 which is a post set firmly in an
 earth mound marked 1/4 S. on N.
 face + with pits 18x18x12 ins. N. & S.
 of post 5 1/2 ft. dist.

80.15 To a point 14 lks. E. of ^{ad} Cor. to Secs.
 1-6-7-12. which is a post 4 ins. sq.
 set firmly in an earth mound. Mark
 S. 12 N. S. 6 on N. E.

R. 21 E. S. 7 on S. E.

R. 20 S. 12 on S. W. and

S. 1 on N. W. faces. + with 5
 notches on S. + 1 notch on N. edge
 pits 18x18x12 ins. in each Sec.

5 1/2 ft. dist.

Surface slopes north
 Soil 3. rate
 Good grass

Re-tracing of the 5th Amer-Meridian E.
Through Tps. 12 N.
Chs

North, on a sandstone hill bet Secs ^{5 and 6}
Va. 13° 45' E.

Descend gradually

40.10 To a point 10 lbs. E. of $\frac{1}{4}$ Sec. Cor. which
is a post 4 ins. sq. set firmly in an
earth mound marked $\frac{1}{4}$ S. on N.
face, with pits 18x18x12 ins N. & S.
of post 5 ft. dist.

59.11 Cross Snowflake Wash 70 lbs. Wide Co.
N. 88° E. & ascend.

76.90 To Closing Cor. to Tps. 12 N.
Rs 20 + 21 E. on 3rd Stand. Parallel
North, which is a post set firmly
in a mound of earth marked,
C.C. 5. 12 N. on S.

R. 21 E.S. 6 on E. +

R. 20 E.S. 1 on N. faces, with
6 notches on S. E. & N. faces,
and pits 24x18x12 ins. S.E. & N.
of post 6 ft. dist.

Re-Tracing of the 5th Aux-Meridian E.
Chs Through Tps. 13 N.

From the Stand. Cor. to Tps.
13 N. Rs 20 + 21 E ~~recently~~^{just}
~~discovered~~^{re-established} by me, I retrace
North lat. Secs. 31 + 36.
on the 5th Aux-Meridian E.
Va. 140 E.

Ascend gradually

87. 33 To a point 37 lks. E. of ^{at} $\frac{1}{4}$ Sec. Cor.
which is a post 4 ins. sq. set
firmly in a mound of earth Mar^1
lat $\frac{1}{4}$ S. on N. face with bits N + S.
of post 5 $\frac{1}{2}$ ft. dist. from which
a Juniper 4 ins. diam. br. N. 55° W. 38 lks.
dist. Marked $\frac{1}{4}$ S. B. T.
a Juniper 7 ins. diam. br. S 35° W. 7 lks.
dist. Marked $\frac{1}{4}$ S. B. T.

78. 64 Cross Road br. N 40° E.

79. 30 To a point 30 lks. E. of ^{at} Cor. to Secs.
25-30-31+36 which is a post 4
ins sq. set firmly in the ground

Re-tracing of the 5th Aux-Meridian E.
 Chs Through T_h. 1 3 4 5

Marker 5, 13 N.S. 30 on N.E.,
 R. 21 E.S. 31 on S.E.,
 R. 20 E.S. 36 on S.W. and
 S. 25 on N.W. faces, and
 with 1 notch on S. and 5 notches on
 N. edges + with pits 1x1, 1x2 ins. in
 each Sec. 5 1/2 ft. dist.

Land rolling

Soil 3rd rate

Poor grass.

Scattering Juniper.

North ^{gravelly dome like} bet. Secs. 25 + 30.
 Va 14° E.

Ascend gradually

28.00 Top of Ridge bet. S. 70° E. 60 ft. high + descend
 gradually

39.40 To a point 30 lks. E. of ^{top of} 1/4 Sec. Cor.
 which is a post set firmly in a

12
 Re-tracing of the 5th Aux Meridian C.
 Chs Through Tr. 13 N.

Mound of earth marked $\frac{1}{4}$ S. on N. face + with pits 18x18x12 ins. N. + S. of post. 5 $\frac{1}{2}$ ft. dist.

79.33 To a point 30 lks. E. of ^{1st} Cor. to Secs. 19-24-25+30, which is a post 4 ins. sq. Set firmly in a mound of earth marked T. 13 N. S. 19 on N.E., R. 21 E.S. 30 on S.E.,

R. 20 E.S. 25 on S.W. and S. 24 on N.W. faces, + with 2 notches on S. + 4 notches on N. edges, and pits 18x18x12 ins. in each Sec. 5 $\frac{1}{2}$ ft. dist.

Surface rolling

Soil 3rd rate

Poor grass.

Scattered Juniper

Feb 19th 1883.

Re-tracing of the 5th Aux-Meridian E.
 chs Through Twp. 13. N.

North, ^{or as shown by} Sect. 19 + 24.

va. 14° 15' E.

Descent gradually.

39. 31 To a point 35 Chs. E. of ^{old} $\frac{1}{4}$ Sec. Cor.,
 which is a Sand stone 10x5 ins.
 Set firmly in the ground marked
 $\frac{1}{4}$ on N. face, with pits 1x1x2 ins
 N. & S. of stone 5 ft. dist. and
 mound of earth 1 1/2 ft. high 3 1/2 ft.
 base alongside

79. 56 To a point 35 Chs. E. of ^{old} Cor. to Secs.
 13-18-19-24. which is a Sand stone
 10x16 ins. Set firmly in the ground
 marked with 3 notches on N. & S. edges
 and pits 1x1x2 ins. in each Sec.
 5 1/2 ft. dist. and mound of earth 2 ft.
 high 4 1/2 ft. base alongside.

Surface rolling

Soil 3^d rate

Fair grass.

Scattering Juniper.

Re-tracing of the 5th Aux. Meridian E.
Through T_p. 13 N.
Chs

on a random line
North, Cut. Secs. 13 & 18
Ta. 14° 20' E.

ascend gradually.

39.60 To a point 36 lbs. E. of ^{old} 1/4 Sec.
Cor. which is a post 3 ins. dia. set
firmly in a mound of earth marked
4 S. on N. face. with pits 1x1x2
ins. N. & S. of post 5 1/2 lb. dist.

51.60 Cross track 17 lbs. wide, a. N 60° E +
over level land.

79.51 To a point 54 lbs. E. of ^{old} Cor. to Secs.
7-12-13 & 18 which is a Sand stone
12x4 ins. set firmly in the ground
marked with 4 notches on S. and 2
notches on N. edges + a mound of
earth alongside -

Surface rolling

Soil 3rd rate

Fair grass.

Scattering Juniper

Re-tracing of the 5th Aux-Meridian E
Obs through Sp. 13 N.

on a random line
North, let. Sec. 7 + 12,
Va. 14° 10' E,

Over level land.

40.00 To a point 41 lks. E. of ^{1/4} Sec. Cor.
which is a post 3 ins. sq. set firmly
in a mound of earth marked $\frac{1}{4}$ S.
on N. face, with pits 18 x 18 x 12 ins.
N. + S. of post, 5 ft. dist.

79.60 To a point 34 lks. E. of ^{1/4} Cor.
to Secs. 1-6-7 + 12. which is a
same stone 11 x 7 ins. set firmly
in the ground marked with 5
notches on S. and 1 notch on
N. edges. and with mound
of stone alongside.

Surface rolling
Soil 3^d rate
Good grass.

Re-tracing of the 5th Aux-Meridian E.
 Cts Through Tr. 13 N.

^{on a grander line}
 North, bet. Secs. 1 + 6,
 Va. 14 E.

Ascend gradually

79.08 To a point 60 lks. E. of ^{old} 4 Sec.
 Cor. which is a post 3 ins. sq. Set
 firmly in a mound of earth marked
 4 S. on N. face, with pits 18 x 18 x 12 in
 N. & S. of post. 5 1/2 ft. dist.

79.10 To a point 30 lks. E. of ^{old} Cor. to Tr. 13
 + 14 N. Rs. 20 + 21 E. which is
 a sand stone 16 x 7 ins. Set
 firmly in the ground ^{marked} with 6 notches
 on each edge and a mound of
 stone alongside

Surface rolling

Soil 3^d rate

Fair grass.

Scattering Juniper

I carefully examined the
 adjustments of my Solar Compass

Re-tracing of the 5th Aux-Meridian
Chs through the 13th.

today, particularly the latitude
and reversing apparatus.
and found them correct.

Survey of the
~~Re tracing of the~~ 5th Aux. Meridian E.
 Chs Through Tps. 14 N.

From the Cor. to Tps. 13 + 14 N.
 Rs. 20 + 21 E. Just ~~at~~ ^{disregard} ~~at~~ ^{at} ~~the~~ ^{the}
 by one. From
 North, bet Secs. 31 + 36.
 Va. $13^{\circ} 30' E.$

Ascend gradually

27.40

40.00

Top of Ridge 20 ft. high brs. $78^{\circ} W.$ + down

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. 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.

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. 14 N. S. 30 on
 N. E. R. 21 E S. 31 on S. E, R 20 E S 36 on
 S, W. and S, 25 on N, W, face, 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. around post.

Survey of the
~~Recovery of the 5th~~ Aux-Meridian E.
 Chs. Through T_h. 14 N.

Land rolling
 Soil 3^d rate.
 Good grass.

North lat. Secs. 25 + 30.
 Va. 18° 51' S.

40.00 *Secs. gradually*
 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. 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.

80.00 Set a post 4 ft. long 4 ins. square, with marked
 stone, 12 ins, in the ground for Cor, to Secs,
 19-24-25+30 marked T₁₄ N S. 19 on
 N. E. R. 21 E S. 30 on S. E, R₂₀ E S₂₅ on
 S, W, and S, 24 on N, W, face with 2 notch
 -es on S. and 4 notches on N edges, dug
 pits 18 x 18 x 12 ins. in each Sec., $5\frac{1}{2}$ ft. dist.
 and raised a mound of earth 2 ft. high. $4\frac{1}{2}$ ft.
 base. around post.

Survey of the

~~Re. Tracing~~ of the 5th Aux-Meridiana E.
Chs Through T.P. & N.

Surface rolling
Soil 3^d. rate
Good grass.

North, bet Secs. 19-24,
Na. $13^{\circ} 51' E$.

Descend gradually.

.21 Cross Creek 15 lks. Nide. Co. $S 87^{\circ} E$, + es and grad.
40.00 Set a Sand stone, $17 \times 12 \times 4$ ins., 12 ins.
in the ground for $\frac{1}{2}$ Sec, Cor, marked $\frac{1}{2}$ 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
 $2\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base. alongside.

80.00 Set a Sand stone $15 \times 10 \times 3$ ins., 10 ins. in
the ground for Cor, to Secs, 13-18-19+24 marked
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. alongside.

Surface rolling
Soil 3^d. rate
Good grass.

Survey of the
~~Retracing of the 5th~~ Aux. Meridian E
 ch through T_p. 14. N.

North lat. Secs 13-18.
 Va. 13° 51' E.

Ascend gradually.

40.00 Set a Sand stone, 8 x 11 x 5 ins., 12 ins.
 in the ground for $\frac{1}{2}$ Sec, Cor, marked $\frac{1}{2}$ 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.

50.00 Ascend gradually.

80.00 Set a Sand stone, 8 x 12 x 5 ins., 12 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.

Surface rolling
 Soil 3^d rate
 Good grass.

Feb. 20th 1883

Survey of the

~~Ac. Survey~~ of the 5th Aves. Meridian to
Chs through T^h 14 N.

40.00

North. cut Secs. 7 + 12.
Va. $13^{\circ} 5' E$.

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. 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.

80.00

Set a sand stone $20 \times 13 \times 6$ ins, 15 ins. in the ground for Cor. to Secs, 1-6-7+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.

Surface rolling
Soil 3^d. rate
Good grass

Survey of the
~~Re. Facing of the~~ 5th Aux. Meridian
 Chs Through Tps 14 N.

North lat. Secs. 1 + 6.
 Va. $135^{\circ}1'E$.

Descend gradually

40.00

Set a Sand stone, $16 \times 10 \times 4$ ins., 11 ins.
 in the ground for $\frac{1}{2}$ Sec, Cor, marked $\frac{1}{2}$ on W.
 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.

42.10

Cross track 8 Chs. Twp. Co. E. + ascend gra

80.00

Set a Sand Stone $22 \times 10 \times 3$ ins. 16
 ins. in the ground for Cor. to Tps. 14
 + 15 N. Rs. 20 x 21. E. marked with
 6 notches on each edge. dug pits
 $24 \times 18 \times 12$ ins. lengthwise on each
 line 6 ft. dist. and raised a
 mound of earth $2\frac{1}{2}$ ft. high 5 ft
 base alongside.

Surface rolling

Soil 3^d rate.

Good grass.

Survey of the
~~Retra~~ of the 5th Aux. Meridian E.
 Chs Through Tps. 15 N.

From the Cor. to Tps. 14 + 15 N.
 Rs. 20 + 21 E. just established
 by me I own
 North. bet. Secs. 31 + 36
 Va. 13° 5' E.

Ascend gradually

40.00

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

68.00

Top of Hill + descend, gradually

80.00

Set a Sand stone 18 x 13 x 4 ins., 12 ins. in
 the ground for Cor, to Secs. 25-30-31+36 marked
 with notch 1 on S. and 5 notches on N edges,
 dug pits 18 x 18 x 12 ins. in each Sec., $3\frac{1}{2}$ ft.
 dist. and raised a mound of earth 2 ft. high,
 $4\frac{1}{2}$ ft. base, alongside.

Surface rolling
 Soil 3^d rate
 Good grazing

Survey of the
~~Re tracing~~ of the 5th Aux Meridian
 Chs through Tp. 15 N.

North lat. Secs. 25 + 30.
 Ra. 13° 54' E.

Descend gradually.

40.00

Set a Sand stone 16 x 9 x 3 ins., 11 ins. in the ground for $\frac{1}{2}$ Sec, Cor, marked $\frac{1}{2}$ 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 7 x 9 x 7 ins., 12 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 ft. base. alongside.

Surface rolling
 Soil 3rd rate
 Good grass.

Survey of the
~~Re-tracing of the 5th Aux Meridian E~~
 Chs Through Sp. 15 N.

North lat. Secs. 19 + 24.

Va. 13° 54' E.

31.00 Descend gradually
 Enter level Flat.
 40.00 Set a Sand stone, 18 x 10 x 4 ins., 12 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 54 ft. dist. and raised a mound of earth
 14 ft. high, 34 ft. base. alongside.

80.00 Set a Sand stone 21 x 10 x 5 ins., 16 ins. in
 the ground for Cor, to Secs, 13-18-19+24 marked
 with 3 notches on S. and 3 notches on N edge,
 dug pits 18 x 18 x 12 ins. in each Sec., 54 ft.
 dist. and raised a mound of earth 2 ft. high
 44 ft. base. alongside.

Surface rolling
 Soil 3^d rate
 Good grazing

Survey of the
~~Re-Setting of the 5th Aux. Meridian~~
 Chs through Sp. 15 N.

North. Cut. Secs. 13 + 18.

N. $13^{\circ} 54' E.$

Over level land.

40.00

Set a Sand stone, $22 \times 10 \times 3$ ins. 16 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.

77.35 Cross Wash 15 Cts. Wide Co. N. $13^{\circ} E.$ + 0 sec

80.00

Set a Sand Stone $20 \times 9 \times 4$ ins. 15
 ins. in the ground for Cor to Secs
 7-12-13-18 marked with 4 notches
 on S. + 2 notches on N. edges.
 and raised a mound of stone
 alongside - Pits impracticable
 Surface nearly level
 Soil 2^o. rate
 Good grazing

Survey of the
~~Re. Sta.~~ of the 5th Aux. Meridian E.
 Chs Through Tp. 15 N.

North. bet. Sec. 7 + 12,
 Va. $13^{\circ}54' E.$

Ascend gradually

18.00 Top of Hill + descend gradually

40.00 Set a Sand Stone $20 \times 13 \times 4$ 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 along

Side. Pits impracticable

80.00 Set a Sand stone $17 \times 15 \times 5$ ins. 12 ins. in

the ground for Cor. to Secs. 1-6-7-12 marked

with 5 notches on S. and 1 notch on N. edges.

dug pits $18 \times 18 \times 12$ ins. in each Sec. at $\frac{1}{4}$ Sec.

dist. and raised a mound of earth 2 ft. high

$4\frac{1}{2}$ ft. base. alongside.

Surface nearly level

Soil 3^d rate

Good grass

Survey of the
~~Re-locating~~ of the 5th Aux. Meridian E.
 Chs through Tps. 15 N.

North lot Sec. 1 + 6.
 Va. $13^{\circ} 54' E$,
 over nearly level land.

40.00 Set a Sand stone, $14 \times 11 \times 3$ 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.

50.00 Set a Sand Stone $22 \times 10 \times 3$ ins.
 16 ins. in the ground for Cor. to
 Tps. 15 + 16 N. Rs 20 + 21 E. Mark
 with 6 notches on each edge, dug
 pit $24 \times 18 \times 12$ ins. lengthwise on
 each line 6 ft. dist. and raise
 a mound of earth 2 ft high
 5 ft. base alongside.

Surface greatly rolling
 Soil 3^d. Grade

boas grazing

I carefully examined the

Survey of the

~~Retracing~~ of the 5th Aux-Meridian E.
through Sp 15 N.

Adjustments of my Solar Compass
today, particularly the latitude
and reversing apparatus, and
found them correct

Feb. 21st 1883.

For final oath see book
No 13.

No. 1355

U. S. Surveyor General's Office,

Tucson, Arizona, July 17, 1884

The foregoing Field Notes of the Survey of the
 Retracing of 5th Auxiliary
 Meridian E. through Tps. 12, 13
 14 and 15 North
 Ranges 20 & 21 East

Of the Gila and Salt River Base and Meridian, Arizona, execu-
 ted by M. W. Grant

Deputy Surveyor, under his contract of the Seventh
 day of August, 1882, having been

critically examined and the necessary corrections and explana-
 tions made, the said Field Notes and the surveys they describe
 are hereby approved

Royant Johnson
 Surveyor General.