

~~20.~~
No. 1304

1304

Resurvey

BOOK 1304

4-671

FIELD NOTES
GENERAL LAND OFFICE.

3rd Standard
Parallel North
through
Rs. 14 & 15 E.

No. 1304

BOOK 1304

Field Notes
of the
Reconnoissance
of the
Third Standard Parallel Route
largest ^{and 15th}
of the
Gila and Salt River Basins and Meridian
in the
United States
accomplished by
Philip Cortese
U. S. Geologist Surveyor
Under his Contract No. 3.
Dated July 10, 93.

Survey commenced Oct. 15-93.
Survey completed Oct. 16, 93.

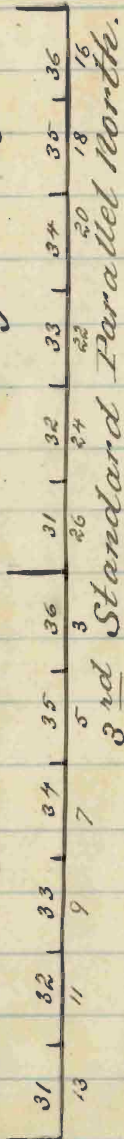
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Brewerway 3rd Standard
North Trough
Range 14 East 1
" 15 " 16

BOOK 1304
Index

Range 14 East

Range 15 East



Survey Commenced Oct. 14, '93, with
a Young and Smith Transit with a
Smith's Solar attachment

at the standard Cor to T₂₀ 13 R. 13
S. 14 E. Latitude $49^{\circ} 58' 7''$ Longitude
 $110^{\circ} 54' W$ of Survey which I
found after diligent search. I
observe Polaris at its Western e-
longation at 5.32 A.M. and find its
magnetic bearing $N 15^{\circ} 17' W$

with End of needle $15^{\circ} 17'$

The azimuth by table in Manual $1^{\circ} 32'$

The difference is the Variation $15^{\circ} 45'$

Half off the azimuth to the E. and
mark the true meridian is de-
termined by Survey a pocket 3.50
sh. N. of the cor.

at 7.30 A.M. Oct. 14 - 1893 I find the

Third Standard Parallel

magnetic bearing of the line established last night to be

$76^{\circ}13'48''$ E.

and

By the Table on page 55 of the Manual, the mean declination is $13^{\circ}45'$ E.

I begin at Standard cor. by Tps. 13 N. R. 13^{45'} and 14 E. which is ^{to be} properly marked and witnessed as described in the field notes furnished by the surveyor general thence I run

E on a random line through Range 14. The variation of my compass being $13^{\circ}45'$ E. and I find the standard line, forming the S. boundary of Tps 13 N. R. 14 E. to be 6 miles, 2 chs and 50 lbs. long, and the

North Through Range 14 East.

chain falling to be 161 chs. S. of standard cor.
to Tps. 13 N. R. 14th and 15th E. which is set in
firmly set and properly marked and
witnessed as described in the field notes
furnished by the surveyor general.

Hence from standard cor to Tps 13
N. R. 14th and 15th E. Town

S. $89^{\circ}48'$ W on a true line on S. boundary 36.
Va. $13^{\circ}45'$ E. see

Through Timber.

40.00 Set a lime stone $18 \times 10 \times 4$ ins 13 ins in the
ground for standard $\frac{1}{4}$ sec. cor marked
S. C. on N. face. from which a
A Pine 8 ins diam br. S 60° E. 36 lks
dist marked $\frac{1}{4}$ N. B. T.

A Pine 12 ins diam br. N 71° W 60 lks
dist marked $\frac{1}{4}$ L. C. B. T.

From this cor the old $\frac{1}{4}$ sec. cor. has
N $71^{\circ}22'$ W 86 lks dist. I destroyed

Third Standard Parallel

Chains to original cor. and also marks on
old bearing trees

41.00 descend into gulch

43.70 bottom and ascend course N.

45.70 top and descend

49.70 gulch course N and ascend

66.70 top

80.00 set a lime stone $31 \times 12 \times 10$ ins 14 ins
the ground for stand and cor to pccs

3 5 and 3 6 marked with 1 notch on
E. and 5 notches on W faces from which
I.C.

An Oak 13 ins diam br. N. 190° E. 67 lks

but marked Tp. 13 N.R. 14 E. S. 36 B.T.

Anne 14 ins diam br. S. 36° E. 83 lks

but marked Tp. ¹³ N.R. 14 E. ^{I.C. 35+36} V. B.T.

A Pine 16 ins diam br. N. 15° W 47 lks

but marked Tp. 13 N.R. 14 E. S. 35 B.T.

From this cor. the old stand and
sec cor. br. N. 89° $30'$ W 170 lks dist

North Through Range 14 East

Chairs "destroyed the original cor. and also
marks on old bearing trees.

Land Rough and Broken
Soil Worthless

Soils Pine Timber.

Heavily timbered land sochs

$S 89^{\circ} 48' W$ true line on boundary Sec. 35.

No. 13 $^{\circ} 46' E$.

Through Timber

- 2.00 descend into Gulch
9.70 bottom and ascend Course N
11.22 top and descend into Gulch.
14.00 bottom and ascend course N
15.22 top and descend into Gulch
22.12 bottom and ascend course N
29.22 top and descend into Gulch
29.90 bottom and ascend course N
30.30 descend into Chevron Cañon
40.00 Set a line stone 12 x 10 x 8 ins in the

Third Standard Parallel

Chains ground for standard $\frac{1}{4}$ sec corner
 set $\frac{1}{2}$ on N face and raised a mound of
 stone $\frac{1}{2}$ ft high $\frac{1}{2}$ ft base along
 side. Pit impracticable.

From this cor the old standard $\frac{1}{4}$
 sec. cor. ls. S 89° 47' W 310 lks dist
 I destroyed the original cor and
 also marks on old bearing line

~~40.20 bottom and ascend~~

~~40.21 top and descend~~

50.70 bottom of Chevron Cañon course N

53.47 Creek flows N by 50 lks wide

56.70 " " " 25 " "

62.20 leave Cañon and ascend, Old
 log Cabin ls N 7 chs.

79.00 top of bank.

80.00 Set a lime stone $15 \times 10 \times 8$ ins 10 in in
 the ground for standard corner
 34 and 35 marked ^{P.C.} with 2 notches
 ^

North Through Range 14 East

Chain on E. and 5 notches on W faces from
which.

A Pine 10 ins diam br. N. 50° E. 74 lks
Dist marked Sp 13 N R. 14 E. S. 35 B. 9.

A Pine 6 ins diam br. S. 35° W. 27 lks
Dist marked ^{P.C.} Sp 13 N R. 14 E. S. ³⁴⁺³⁵ B. 9.

A Pine 15 ins diam br. N. 120° W. 79 lks
Dist marked Sp 13 N R. 14 E. S. 34 B. 9.

From this cor the old standard sec
cor br. N. 56° 37' W. 332 dis. sub.

I destroyed the original cor. and also
marks on old bearing trees.

Land Rough and Broken
Soil Worthless

80 chs Pine Timber.

Heavily timbered land 80 chs

S. 89° 48' W on a line line on Boundary 34

N. 13° 47' E.

Through Timber.

Ohio Standard Parallel

- 1.00 descend into Gulch
- 5.30 Cattle Trail to Ny
- 33.40 bottom and ascend course Ny
- 31.40 top
- 40.00 Set a sandstone 15 x 10 x 4 ins 10 ins in
the ground for standard 1/4 sec cor.
marked 1/4 S. C. on N face from which
a Pine beam is run N 81° W 11 lks
Sist marked 1/4 S. C. B. 1.
- A Pine beam is run N 43° 30' E 52 lks
Sist marked 1/4 S. C. B. 2.
- From this cor the old standard 1/4
sec. cor is N 80° 14' W 360 lks dist.
- I destroyed the old cor and also
the marks on old bearing trees.
- 46:30 descend into Gulch
- 73.57 Bottom and Creek flows N.W. 10 lks
wide and ascend
- 80.00 Set a sandstone 15 x 10 x 4 ins 10 ins in

North Pough. Range East.

chain the ground for standard cor to pccs
 33^{and} 34 marked ^{S.C.} with 3 notches on
 E. and W faces from which

A. Pine 20 ins diam. br. N 63° E. 40 lks
 dist marked T p 13 N R. 14 E. S. 34 B. 7.

A. Pine 25 ins diam br. S. 31° E. 86 lks
 dist marked ^{S.C.} T p 13 N R. 14 E. S. ^{33 & 34} 45. 7.

A Pine 10 ins diam br. N 52° W 32 lks
 dist marked T p 13 N R. 14 E. S. 33 B. 7.

From this cor the old cor br. N. 74° 39' W
 427 lks dist

I destroyed the old cor and also
 marks on old haining trees.

Land Rough and Broken

Soil 3rd and 4th rate

no chs Pine Timber.

~~Heavily timbered land so chs~~

89° 48' W on true line on S. boundary 33

N. 13° 46' E.

Third Standard Parallel

Chains Through Timber

21.80 descend into Gulch

27.80 bottom and ascend course N_y

35.74 top and descend into Gulch

40.00 Set a sand stone 24 x 20 x 16 ins 16 ins
in the ground for standard $\frac{1}{4}$ sec
corner marked $\frac{1}{4}$ S. C. on N face from
whichA Pine cross beam br. N. 70° W 11 lks
dist marked $\frac{1}{4}$ S. C. B. T.A Pine cross beam br. S. 49° E. 36 lks
dist marked $\frac{1}{4}$ S. C. B. T.From this cor the standard $\frac{1}{4}$ sec cor
br. N. 75° 56' W 490 lks dist.I destroyed the old cor and also
marks on old framing trees.43.00 bottom and ascend course N_y

55.80 top and descend

70.00 bottom

80.00 Set a sand stone 16 x 12 x 8 ins 13 ins in

North. Through Range 14 East

chains the ground for standard cor. sec
 32nd and 33rd marked with 4 notches on
 E. and 2 notches on W faces from which
 A. Pine 15 ins diam br. N 75° E. 21 lks
 Dist. marked Tp 13 N R. 14 E. S. 33 B. 7.
 A Pine 16 ins diam br. S. 35° W 30 lks
 Dist. marked ¹³ ~~13~~ ^{32 + 33} Tp. 13 N. R. 14 E. S. 33 B. 7.
 A Pine 15 ins diam br. N 10° 30' W 1 lks
 Dist. marked Tp 13 N R. 14 E. S. 33 B. 7.
 From this cor the old standard, sec
 cor br. N 83° 25' W. 58 0 lks dist.
 I destroyed the old cor and also
 marks on old bearing trees.

Land Broken

Soil 3rd and 4th rate

80 cks Pine Timber

Heavily timbered land 80 cks

S 89° 48' W on a true line on boundary 32

N 13° 45' E

Third Standard Parallel

Chain through Timber.

18.70 Cattle trail course N.E.

40.00 Set a lime stone $12 \times 10 \times 6$ in in

the ground for standard $\frac{1}{4}$ sec cor
marked $\frac{1}{4}$ S.C. on N face from
which

A Pine 14 in diam br. N $37^{\circ}30'$ W 70 lbs
dist marked $\frac{1}{4}$ S.C. B.T.

A Pine 16 in diam br. N $35^{\circ}E$ 93 lbs
dist marked $\frac{1}{4}$ S.C. B.T.

From this cor the old standard $\frac{1}{4}$
sec cor. br. N $88^{\circ}18'$ W 610 lbs dist
I destroyed the old cor. and also the
marks on old bearing trees.

42.30 Road br. N.N.E.

80.00 Set a sandstone $18 \times 12 \times 6$ in in

in the ground for standard cor
to secs. 31 and 35, marked ^{S.C.} with 5
notches on E and notch on W

North Through Range 14 East.

Chain faces from which

A Pine 18 ins diam br. N 63° E. 75 lks
Dist marked Sp 13 N R. 14 E. S. 33 B 7.A Pine 15 ins diam br. S. 52° W 66 lks
Dist marked Sp ^{S. R. 13} 13 N R. 14 E. S. ^{31° 4' 32"} 31 B 9.A Pine 20 ins diam br. N 61° W 62 lks
Dist marked Sp 13 N R. 14 E. S. 31 B 7.

From this cor the original cor br.

N 88° 10' W 6.70 lks dist.

I destroyed the old cor and also the
marks on old bearing trees.

Land Broken

Soil Worthless

80 chs Pine Timber.

Heavily timbered land 80 chs

S 89° 48' W on a true line on S. boundary 31.

N. 13° 45' E.

Through Timber

13.50 descend into Gulch.

Third Standard Parallel

- 31.00 bottom and ascend to N.W.
- 39.50 top and descend into gulch
- 40.00 Set a Lime stone $12 \times 12 \times 10$ ins in
in the group for standard $\frac{1}{4}$ sec
cor marked $\frac{1}{4}$ on N face from
P.C.
which a Pine 12 ins diam to $N 76^\circ W$
135 lbs dist marked $\frac{1}{4}$ S.C.P.T.
A Pine 25 ins diam to S. $45^\circ 6.76$ lbs
dist marked $\frac{1}{4}$ S.C.P.T.
Using this cor the old standard $\frac{1}{4}$ sec. cor to $N 59^\circ 48' 6$ 625 lbs dist
- 48.50 bottom
- 48.60 Creek 30 lbs wide flows N.E.
and ascend
- 61.50 top
- 78.50 trail. to N
- 81.80 Trail to N
- 84.45 Trail to N.
- 86.50 The cor to $\frac{1}{4}$ sec. 12 N Ro. 13 and 14 E.
Land Rough and Broken
Soil. 4th rate

North Through Range East

86.50 chs. Pine Timber.

Heavily timbered land 86.50 chs
Oct. 15. 93.

Note: Owing to the irregularity existing in the measurements through this range I reestablished corners at 40 chains on a true line & throwing there by excess of measurement on the west half mile of this range.

Third Standard Parallel

Thence Section at stand aid cor
to Tps. 13 N. R. 14^{and} 15 East as herein
before described.

and from this cor. I run

On a random line over S. side of township
13 N. R. 15 E. the variation of my
compass being $3^{\circ}47' E.$

and I find the standard Tp. line to be
6 miles 8 chs. and 52 lks long, and the
falling to be 2.40 chs. S. of cor. to Tps. 13
N. R. 15^{and} 16 East, which is a stone
firmly set and properly marked
and witnessed as described in the
field notes furnished by the surveyor
general.

Thence from stand aid cor to Tps. 13
N. R. 15^{and} 16 I run

$S. 89^{\circ}43' W.$ on a true line to Boundary 36.
Va. $13^{\circ}47' E.$

No. 1304
 North. Through Range 15 East.

40.00 Through Timber

Set a sand stone $18 \times 12 \times 4$ ins 12 ins in the ground for standard $5\frac{1}{4}$ sec. cor marked $\frac{1}{4}$ S.C. on N. face from which

A. Pine 8 ins diam br. S. 35° E. 10 lks. dist marked $\frac{1}{4}$ S.C. B. T.

A Pine 8 ins diam br. N. $32^\circ 30'$ W. 33 lks. dist marked $\frac{1}{4}$ S. B. T.

From this cor the old cor br. S. $89^\circ 44'$ E. 87 lks. dist.

I destroyed the original cor and also mark on old bearing trees.

80.00 Set a lime stone $18 \times 10 \times 10$ ins 12 ins in the ground for standard cor to pccs 35^{and} 36. marked S.C. with notch on E. and 5 notches on W. faces from which

A Pine 15 ins diam br. N. 59° E. 148 lks. dist marked Sp 13 N.R. 15 E. S. 36 B. T.

A. Pine 16 ins diam br. S. 38° E. 72 lks.

Third Standard Parallel

Chain Dist marked ¹³ ~~13~~ ¹³ N. R. 15 E. S. 35 B. 7

A Pine 14 ins diam br N 28° W 107 lks

Dist marked ¹³ N. R. 15 E. S. 35 B. 7

From this cor the original cor. br
S 89° 44' W 169 lks Dist.

I destroyed old cor. ^{and}, also marks
on old bearing trees

Land Rolling

Soil 2nd and 3rd rate

80 chs Pine Timber

Heavily timbered land 80 chs

S 89° 43' W on a true line on Sunday 35.

N. 13° 47' E.

Through Timber

40.00 Set a Lime stone 12 x 12 x 12 ins diam in the
ground for stand aid / 4 sec cor marked
1/4 S. C. on N face ^{and} from which

A Pine 14 ins diam br N 36° W 63 lks
Dist marked 1/4 S. C. B. 7

North Through Range 15 East

Chains A Pine 16 diam brs S $35^{\circ} E$ 143 lks dist
marked $\frac{1}{4}$ S. C. B. T.

From this cor the original cor brs
S $89^{\circ} 43' W$ 236 lks dist.

I destroyed old cor^{and} also marked
old bearing trees.

52.00 Enter small Valley brs Ny

52.30 Cattle Trail brs Ny

58.00 leave Valley

80.00 Set a lime stone 24 x 12 x 8 ins 16 ins in
the ground for stand and cor to sec 34^{and}
35 marked S.C. with 3 notches on E^{and}
4 notches on W faces from which

A Pine 24 ins diam brs N. $73^{\circ} E$ 55 lks
dist marked $\frac{1}{4}$ P. 13 N. R. 15 E. S. 35 B. T.

A Pine 19 ins diam brs S $15^{\circ} 30' W$ 99 lks
dist marked $\frac{1}{4}$ P. 13 N. R. 15 E. S. 34^{34 + 35} B. T.

A Pine 12 ins diam brs N. $73^{\circ} W$ 38 lks
dist marked $\frac{1}{4}$ P. 13 N. R. 15 E. S. 34 B. T.

Third Standard Parallel

Chains from this cor the original cor br. $S 82^{\circ}$
 $57' W$ 3.39 chs 51st

I destroyed the original cor^{ns} and also
 marks on old bearing trees.

Land Rolling

Soil 1st and 2nd rate

80 cts Pine Timber.

Heavily timbered land 50 cts

$S 89^{\circ} 43' W$ on a true line on S boundary 34
 Va. $13^{\circ} 48' E$.

Through Timber

40.00. Set a sand stone $15 \times 15 \times 5$ ins 10 ins in the
 ground for stand and $1/4$ sec cor marked $1/4$

S.C. on N face from which

A Pine 5 ins diam br. $N 28^{\circ} 30' E$ 40 cts
 51st marked $1/4$ S.C.B. 1

A Pine 5 ins diam br. $S 18^{\circ} 15' W$ 19 cts
 51st marked $1/4$ S.C.B. 1

From this cor the original cor br.

North. Through. Range 15 East.

Chain S. $81^{\circ}18'W$ 4.30 chs dist.

I destroyed the old cor^{and} also marks
in old bearing trees

67.50 Road br. N.N.W.

80.00 Set a lime stone $21 \times 12 \times 10$ ins 14 ins in
the ground for standard cor to sec.
33^{and} 34 marked S.C. with 3 notches
on E^{and} W faces from which

A Pine 14 ins diam br. N. $51^{\circ}E$ 48 chs
dist marked Sp. 13 N. R. 15 E. S. 3 + B. 1

A Pine 30 ins diam br. S. $33^{\circ}W$ 58 chs
dist marked ^{S.C. 13} Sp. 13 N. R. 15 E. S. ^{33 + 34} B. 1

A Pine 7 ins diam br. N. $16^{\circ}W$ 82 chs
dist marked Sp. 13 N. R. 15 E. S. 33 B. 1

From this cor the original cor. br. S. 84°
 $33'W$ 355 chs dist.

I destroyed the old cor^{and} also old
bearing trees.

Land Rolling.

Third Standard Parallel

Chain Soil and ^{and 3rd rate}

rocks Fine Timber

Heavily timbered land rocks

189°43' W on a true line on S. boundary 33.

N 13°48' E

through timber

- 9.00 Small gulch 1 ch wide course N
- 27.00 descend into Cañon course N
- 37.00 bottom ^{and ascend}
- 37.50 Road to Casber's sheep Ranch on S.
- 40.00 A Pine tree 26 ins diam, which I marked
 1/4 S. C. on N. face ^{and raised a mound}
 of stone 1/2 ft high 2 ft base alongside
 Old impracticable standard 1/4 sec cor
 from this cor. the original cor. br. 189°49' W
 6 chs dist.
- I destroyed the old cor ^{and also mark on}
 old bearing lines.
- 50.00 top

North Through Range East.

- 5.00 descend into Cañon course N.E.
 6.00 bottom ^{and} Road br. N.E.
 66.00 ascend
 73.70 At this point the N.W. cor of Kern ^{and} Casla
 Ranches br. S. $73^{\circ}30'W$ 4.83 chs dist
 to N.W. cor of log Cabin S. $39^{\circ}15'W$
 3.77 chs dist.
 80.00 This point falling on a lime stone
 in place 2 x 3 x 1 ft. I marked a cross
 (X) at exact cor point for standard cor.
 to sec. 32 ^{and} 33 marked S. C. with 4
 notches on E. ^{and} 2 notches on W face
 from which.
 A Pine 14 ins diam br. N. $71^{\circ}30'E$ 144 chs
 dist marked Sp. 13 N.R. 15 E. S. 33 D. T.
 A Pine 18 ins diam br. S. $46^{\circ}30'E$ 86 chs
 dist marked ^{S.C.} Sp. 13 N.R. 15 E. S. ^{32 & 33} 12. T.
 A Pine 4 ins diam br. N. $71^{\circ}30'W$ 44 chs
 dist marked Sp. 13 N.R. 15 E. S. 32 D. T.

Third Standard Parallel

Chains From this cor the original cor has
 S 89° 47' W 7.03 chs dist.

I destroyed the old cor and also marks
 on old bearing trees

Land Rough and Broken

Soil 4th rate

80 chs Pine and Cedar

Heavily timbered land 80 chs

S 89° 45' W on a true line on S. boundary 32
 N 13° 47' E.

ascend through timber

14.00 top

40.00

A Pine tree 8 inches diam which I marked
 1/4 C. on N side and raised a mound
 of stone 1 1/2 ft high 2 ft base along
 side. Pitts impracticable for stan-
 dard 1/4 ac cor.

From this cor the original cor has
 N 89° 35' W 8.50 chs dist

North Branch, Range 15 East

Chains I destroyed the old cor and also marks
on old bearing trees.

51.00 Gulch 1 ch wide course S. S. E.

77.00 Gulch 1 ch wide course S. W.

78.50 Gulch 1 ch wide course S. S. E.

80.00 Set a sand stone 15 x 10 x 5 ins in
the ground for stand and con'to sec

31^{and} 32 marked S. (with 5 notches
on E. and 1 notch on W face, from which

A Pine 16 ins diam br. N. 15° 30' E. 75 lbs
dist marked Sp. 13 N. R. 15 E. S. 32 B. 7

L. ✓ A Pine 21 ins diam br. S. 50° 30' E. 105 lbs
dist marked ^{S. E. 13} Sp. 13 N. R. 15 E. S. ^{31.74 32.2} 31.74 B. 7

A Pine 30 ins diam br. N. 71° W. 56 lbs
dist marked Sp. 13 N. R. 15 E. S. 31 B. 7

From this cor the original cor br.
S. 89° 48' W. 9.30 chs Dist.

I destroyed the old cor and also marks
on old bearing trees.

Per. Standard Parallel

Chain Land Broken

Soil 3rd and 4th rate

80 chs Pine Timber

Heavily timbered & land rocks

S 89° 43' W on a true true cor. I found any 31

72 13° 46' E

Through Timber

40.00 Set sand stone 15 x 12 x 5 in 10 in in the
ground for standard 1/4 in comarked
1/4 C. on N face from which.

A Pine 8 ins diam to N 63° W 63 lks
Dist marked 1/4 C. B. T.

A Pine 7 ins diam to S. 46° E. 69 lks
Dist marked 1/4 C. B. T.

From this cor the original cor to
N. 89° 54' E. 9.77 chs Dist.

I destroyed the old cor and also
marks on old leaning trees.

45.95 Road N. N. E.

North Plough Range 15 East

88.52 The standard certificate Nos. 131, 14, 15 (and 15 C).

Land Rolling

Soil 2nd and 3rd rate

88.52 chs. Pine and Cedar Timber

Heavily timbered land. 88.52 chs. Oct. 16. 93.

Note: See Page 15.

Philip Contzer

U. S. Dep. Surveyor

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BOOK 1304

For Final Oaths see
Book No 40.

U. S. Surveyor-General's Office,

TUCSON, A. T., August 9, 1895-

The foregoing Field Notes of the ^{TE} Surveys of
the 3^d Standard Parallel
North, through Ranges
14 and 15 East of
the - Gila and Salt River Meridian
in Arizona executed by
Philip Contzen,
U. S. Deputy Surveyor, under his contract dated
February 10th 1893,
having been critically examined, the necessary correc-
tions and explanations made, the said Field Notes and
the surveys they describe are hereby approved.

Geo. H. Manning

U. S. Surveyor-General
for the Territory of Arizona.