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-1849- BOOK 1849  
Book "K"

# FIELD NOTES

OF THE SURVEY OF THE

Subdivision lines of

T. 22 S. R. 17 E.

-1849-

1849

Of the *Gila & Salt River* Meridian,

AS SURVEYED BY

*Philip Coutzen*, United States Deputy Surveyor,

Under his Contract No. *115*, dated *March 15<sup>th</sup>*, 190*4*

Survey commenced *October 25<sup>th</sup>*, 190*4*

Survey completed *November 10<sup>th</sup>*, 190*4*

NAMES AND DUTIES OF ASSISTANTS.

John M. Trayer, chairman

H. W. Luggins, chairman

William Butler  
A. A. Speight, stewardman

Manuel Salazar, stewardman

Charles M. Pogue, axeman

Tom Jones, axeman

Arthur Pogue, flagman

BOOK 1849  
 INDEX DIAGRAM.

Township 22 S., Range 17 E.

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Meanders Page \_\_\_\_\_

105 (C) 1849  
BOOK

WE, John M. Trayer and H. W. Huggins  
do solemnly swear that we will well and faithfully execute the duties of chainmen; 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 distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

the subdivision lines of T. 22 S. R. 17 E

John M. Trayer, Chainman.  
H. W. Huggins, Chainman.

Subscribed and sworn to before me this 14<sup>th</sup>  
day of September, 1904



H. G. Power  
NOTARY PUBLIC,  
PIMA COUNTY, ARIZONA.  
MY COMMISSION EXPIRES  
April 27<sup>th</sup> 1908

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

the subdivision lines of T. 22 S. R. 17 E

Joaquin Bonillas, Moundman.  
Mannel Salazar, Moundman.

Subscribed and sworn to before me this 14<sup>th</sup>  
day of September, 1904



H. G. Power  
NOTARY PUBLIC,  
PIMA COUNTY, ARIZONA.  
MY COMMISSION EXPIRES  
April 27<sup>th</sup> 1908

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

the subdivision lines of T. 22 S. R. 17 E

Chas. M. Pogue, Axman.  
Tom Jones, Axman.

Subscribed and sworn to before me this 14<sup>th</sup>  
day of September, 1904



H. G. Power  
NOTARY PUBLIC,  
PIMA COUNTY, ARIZONA.  
MY COMMISSION EXPIRES  
April 27<sup>th</sup> 1908

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

the subdivision lines of T. 22 S. R. 17 E

Arthur Pogue, Flagman.

Subscribed and sworn to before me this 14<sup>th</sup>  
day of September, 1904



H. G. Power  
NOTARY PUBLIC,  
PIMA COUNTY, ARIZONA.  
MY COMMISSION EXPIRES  
April 27<sup>th</sup> 1908

L. W. Wain

Survey commenced October 25, 1904, and extended with Young and Sons light mountain transit, No. 5607, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reaching to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Phoenix, found correct, and was approved by the surveyor general for Arizona, June 10, 1904.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1, 2, 35 and 36, on the S. E. cor. of the 3<sup>rd</sup>, as heretofore described, latitude  $31^{\circ}28'$  N., longitude  $110^{\circ}35'$  W.; I set off  $31^{\circ}28'$  N., on the lat. arc;  $12^{\circ}11'$  on the decl. arc; and, at  $3^h 10^m$  p.m., l.m.t., determined with the solar apparatus, and mark a point thereof, on a stone set firmly in the ground, 5 chs. N. of the cor. <sup>October 25, 1904</sup>  
<sup>October 26:</sup> At  $5^h 30^m$  a.m., l.m.t., by my watch, which is correct, I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

October 26, 1904.

October 26: At  $4^h 40^m$  a.m., l.m.t., I lay off the azimuth of Polaris  $1^{\circ}25'$  to the east, and mark the meridian thus determined by cutting a small groove in the stone set October 25, on which the meridian falls 0.3 ins. East of the mark determined by the solar.

At  $8^h 5^m$  a.m., l.m.t., I set off  $31^{\circ}28'$  on the lat. arc;  $12^{\circ}24'$  on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station, this mark falls 0.3 ins. East of the meridian established by the solar observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about  $0.16'$  east and west of the meridian established by the

Chains

Below observations; therefore, I conclude that the adjustments of the instrument are satisfactory.  
The magnetic bearing of the true meridian at 8<sup>h</sup> 15<sup>m</sup> a.m. is N. 12° 33' W.; the angle thus determined gives the mag. decl. 12° 33' E

Shower Run

N. 0° 1' W., bet. sec. 35 and 36.

Over mountainous land, ascending.

- 2.00 Sp. av, extending N.; descend.
- 7.00 Enter heavy oak timber, bears E. and W.
- 13.00 Enter valley, bears N. E. and S. W.
- 20.30 Dry wash, 40 lbs. wide, crosses S. W. to N. E.
- 32.75 Cross valley; ascend.
- 33.50 Cross heavy oak, bears N. E. and S. W.
- 40.00 Set a sandstone, 20 x 6 x 6 ins., 15 ins. in the ground, for 1/4 sec. ev. marked 7 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of ev. Site impracticable.
- 48.00 Sp. av, bears N. E. and S. W.; thence over level land.
- 63.70 Enter meadow patch.
- 68.00 Cross patch; ascend along E. slope of ridge.
- 80.00 Set a sandstone, 18 x 3 x 5 ins., 12 ins. in the ground, for ev. of sec. 25, 26, 35 and 36, marked with 1 notch on E. and S. faces; from which  
An oak, 6 ins. diam., bears S. 62° 4' E., 378 lbs. dist., marked S 22 S R 17 E S 36 B S.  
An oak, 6 ins. diam., bears S. 57° W., 176 lbs. dist. marked S 22 S R 17 E S 35 B S; no other trees, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of ev. Site impracticable.  
Land, mountainous and level.  
Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.  
Timber, oak.  
Mountainous or heavily timbered land, 60.00 lbs.

S. 89° 58' E., on a random line bet. sec. 25 and 36.

4000 Set trap 7 sec. ev.

8000 Intersect E. body of Sp. 5 lbs. S. of ev. of sec. 25, 30, 31 and 36, which is a true mark and witness as described by the surveyor general.

Shower Run

N. on a true line bet. sec. 25 and 36

Over rolling land, through heavy oak timber.

- Chains  
 28.00 Broad bars N. Easterly and S. Westerly  
 38.80 Gulch, 30 lbs. wide, course S. Westerly.  
 40.00 Set a sandstone, 18 x 10 x 8 ins., 12 ins. in the ground, for  $\frac{1}{4}$   
 of sec. ev. marked  $\frac{1}{4}$  on N. face; from which  
 An oak, 6 ins. diam., bears S. 24° E., 92 lbs. dist., marked  
 $\frac{1}{4}$  S 36° E.  
 An oak, 6 ins. diam., bears N. 77 $\frac{3}{4}$ ° W., 53 lbs. dist., marked  
 $\frac{1}{4}$  S 25° E.; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft.  
 high, N. of ev.  
 43.40 Dry wash, 40 lbs. wide, course S. W.  
 52.00 Grow heavy timber, bears N. W. and S. E.  
 74.10 Gulch, 20 lbs. wide, course S.  
 80.00 Pl. ev. of secs. 25, 26, 35 and 36.  
 Land, rolling.  
 Soil, gravelly and stony; sand, and 4<sup>th</sup> water.  
 Timber, oak.  
 Barren timbered land, 52.00 acres.

N. 0° 01' W., bet. secs. 25 and 26.

Over mountainous land, along E. slope of ridge.

- 5.00 Dismant.  
 8.00 Grow heavy oak timber, bears N. W. and S. E.  
 14.50 Gulch, 20 lbs. wide, course S. E.; thinned over broken land  
 through dense brush.  
 24.80 Gulch, 20 lbs. wide, course S. E.  
 40.00 Set a granite stone, 20 x 6 x 6 ins., 15 ins. in the ground, for  
 of  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on N. face; from which  
 An oak, 6 ins. diam., bears S. 26 $\frac{1}{2}$ ° E., 140 lbs. dist., marked  
 $\frac{1}{4}$  S 25° E.  
 An oak, 6 ins. diam., bears S. 35 $\frac{1}{4}$ ° W., 89 lbs. dist., marked  
 $\frac{1}{4}$  S. 26° E.; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$   
 ft. high, W. of ev.  
 50.00 Begin strip ascent.  
 56.00 Bridge, broad E. and W., broad dense brush; dismant.  
 80.00 Set a granite stone, 18 x 10 x 8 ins., 12 ins. in the ground, for  
 ev. of secs. 23, 24, 25 and 26, marked with 2 notches on S.  
 and 1 notch on E. edge; from which  
 An oak, 6 ins. diam., bears N. 73° E., 131 lbs. dist., marked  
 S 22 S R 17 E S 24° E.  
 An oak, 6 ins. diam., bears S. 72° E., 45 lbs. dist., marked  
 S 22 S R 17 E S 25° E.

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Claim

An oak, 8 ins. diam., bears S.  $19^{\circ} \frac{3}{4}'$  N., 37 lbs. dist., marked S 22 E R 17 E S 26 B S.  
 An oak, 8 ins. diam., bears N.  $73^{\circ} \frac{1}{2}'$  W., 97 lbs. dist., marked S 22 E R 17 E S 23 B S, and raises a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
 Ground, mountainous and barren.  
 Soil, gravelly and stony; 3rd. and 4th. roots.  
 Spotted oak and scattering cedar, undergrowth, oak, mesquite, hickory, and cacti.  
 Mountains, heavily timbered or land covered with dense undergrowth, 80.00 lbs.  
 October 26: At this cor. I set off  $120^{\circ} 29'$  S. in the steel arc, and at  $12^{\text{th}}$  m. l. m. t., observe the sun on the meridian; the resulting lat is  $31^{\circ} 30'$  N or within 1' of the proper lat.

East, in a random line bet. sec. 24 and 25.

41.000 Set Trans.  $\frac{1}{4}$  sec. cor.

81.004 Entrance E. bay of S. 5 lbs. N. of cor. of sec. 19, 24, 25 and 30 which is a stone, marked and witnessed as described by the surveyor general.

Shiner Spring

N.  $89^{\circ} 58'$  W., in a true line bet. sec. 24 and 25.

Over mountainous land, ascending through scattering oak.

15.00 S. slope of high ridge, 100 ft. above sec. cor.; observed.

39.00 Gulch, 300 ft. below slope, 10 lbs. wide, course S.; ascent.

46.00 Set quartzite stone, 18 x 10 x 8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which

An oak, 12 ins. diam., bears N.  $38^{\circ}$  E., 8 lbs. dist., marked  $\frac{1}{4}$  S 24 B S.

An oak, 10 ins. diam., bears S.  $27^{\circ}$  E., 57 lbs. dist., marked  $\frac{1}{4}$  S 25 B S.; and raises a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

47.00 S. slope of ridge, 100 ft. above gulch, ascent.

59.50 Gulch, 20 lbs. wide, course S.; begin steep ascent.

62.30 Ridge, 100 ft. above gulch, bears N. and S.; observed.

70.20 Gulch, 100 ft. below ridge, 20 lbs. wide, course S.; ascent.

73.70 Emerald melon around spring, bears 150 lbs. S.

74.60 Spring, bears 150 lbs. S.

75.50 Well, bears 130 lbs. S.

78.90 Gulch, 20 lbs. wide, course E. S. E.

81.004 Set cor. of sec. 23, 24, 25 and 26.



Chains

Land, mountainous.

Soil, gravelly, stony and rocky; 3rd. and 4th rate.  
Timber, oak.

Mountainous land, 80.04 chs.

N. 0° 01' W. bet. sec. 23 and 24.

Over, plowing land, through heavy oak timber.

1.30.00 Stake, 20 lbs. wide, corner S. E.

21.00 Stake, 20 lbs. wide, corner S. E.

40.00 Set a granite stone, 18 x 12 x 8 ins., 12 ins. in the ground, for  
1/4 sec. cor. marked 1/4 NW N. face; from which  
An oak, 6 ins. diam., bears S. 21 1/2° E., 76 lbs. dist., marked  
1/4 S 24 B S.

An oak, 8 ins. diam., bears N. 57 1/2° W., 100 lbs. dist., marked  
1/4 S. 23 B S; and raised a mound of stone, 2 ft. base, 1 1/2 ft.  
high, W. of cor.

57.00 Stake, 20 lbs. wide, corner S. W.

68.00 Begin ascent s. slope of ridge; heavy oak timber,  
bears N. E. and S. W.

80.00 Set a porphyrite stone, 18 x 8 x 8 ins., 12 ins. in the ground,  
for cor. of sec. 13, 14, 23 and 24, marked with 3 notches on  
S. and 1 notch on E. edge; from which  
An oak, 18 ins. diam., bears S. 55 1/4° E., 203 lbs. dist., marked  
S 22 S R 17 E S 24 B S.

An oak, 6 ins. diam., bears N. 34 1/2° W., 165 lbs. dist., marked  
S 22 S R 17 E S 14 B S; no other trees within limit and  
raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.  
Pits impracticable.

Land, rolling, broken and mountainous.

Soil, gravelly and stony 3rd and 4th rate.

Timber, oak and scattering cedar.

Mountainous or hilly timbered land, 80.00 chs.

October 26, 1904.

October 27: At 7<sup>h</sup> 25<sup>m</sup> a.m., l.m.t., set off 31° 31' 1/2" on the  
lat. and ~~12° 44' S~~ on the decl. arc; and determine  
meridian with the solar alt the cor. of sec. 13, 14, 23  
and 24.

Plum & Run

S. 89° 58' E. on a random line bet. sec. 13 and 24.

40.00 Set. Temp. 1/4 sec. cor.

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- Chains  
811.02
- Exposure E. base of Sp. at cor. of secs. 13, 15, 19 and 24, which is a stump marked and witnessed as described by the surveyor general.
- Thru red & run  
N. 89° 58' W., in a trail line bet. secs. 13 and 24.  
Over mountainous land, ascending through scattering oak and cedar timber.
- 16.00 Ridge, 150 ft. above sec. cor., bears N. E. and S. W.; descend.
- 21.00 Gulch, 15 lbs. wide, course N. E.; ascend.
- 29.00 Ridge, 100 ft. above gulch, bears N. and S.; descend.
- 35.00 Gulch, 100 ft. below top of ridge, 10 lbs. wide, course N. E.; ascend.
- 41.00 Set a porphyritic stone, 18 x 8 x 8 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
An oak, 12 ins. diam., bears N. 8° E., 61 lbs. dist., marked  $\frac{1}{4}$  S 13 B S.  
An oak, 6 ins. diam., bears S. 57  $\frac{1}{4}$ ° W., 62 lbs. dist., marked  $\frac{1}{4}$  S 24 B S.; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.
- 52.00 S. slope of ridge, 200 ft. above  $\frac{1}{4}$  sec. cor.; descend through dense brush  
course South
- 71.00 Gulch, 150 ft. below slope, bears dense brush and ascend
- 77.00 S. slope of ridge, 140 ft. above gulch.
- 81.02 Thru cor. of secs. 13, 14, 23 and 24.  
Land, mountainous.  
Soil, gravelly and stony; 3 and 4th rate.  
Timber, oak and cedar; undergrowth, hick and laurel.  
Mountainous or land covered with dense undergrowth, so. or chas.  
October 27. At this cor. S set off.  $12^{\circ} 49' 28''$  on the decl. arc; and at 12<sup>h</sup> 4<sup>m</sup> l. m. t., observe the sun on the meridian; the resulting lat. is  $31^{\circ} 31' N.$
- 
- N. 0° 11' W., bet. secs. 13 and 14.  
Over mountainous land, ascending through scattering oak.
- 3.00 Top of N. slope of ridge; descend.
- 9.30 Gulch, 100 ft. below slope, 20 lbs. wide, course N.; ascend.
- 15.00 S. run, 130 ft. above gulch, extending N.; descend.
- 20.00 Gulch, 20 lbs. wide, course S. W.; ascend.
- 41.00 Set a porphyritic stone, 20 x 8 x 6 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
An oak, 10 ins. diam., bears N. 65  $\frac{3}{4}$ ° E., 16 lbs. dist., marked  $\frac{1}{4}$  S 13 B S.

Chain

- An oak, 11 ins. diam., bears N. 41° W., 42 lbs. dist., marked  $\frac{1}{4}$  S 14 B S.
- 50.00 Top of ridge, 300 ft. above gulch, bears N. W. and S. E.; descend.
- 71.50 Head of gulch, 200 ft. below top of ridge, course S. E.; ascend.
- 73.40 Spruce, extending N.; descend.
- 79.20 Gulch, 20 lbs. wide, course E.; ascend.
- 80.00 Stubs on a limestone in place, 4 ft. long, 12 ins. wide and 12 ins. above ground, on which  
 but a cross (x) at the exact ev. point for ev. of sres. 11, 12, 13, and 14, marked with 4 notches on S. and 1 notch on E. side of cross; from which  
 An oak, 14 ins. diam., bears S. 18° E., 70 lbs. dist., marked S 22 S R 17 E S 13 B S.
- A cedar, 24 ins. diam., bears S. 60½° W., 190 lbs. dist., marked S 22 S R 17 E S 14 B S; no other trees within limit, and across a mound of stone, 2 ft. base, 1½ ft. high, N. of ev. Sibs impracticable.
- Land, mountainous.  
 Soil, gravelly and stony; see and 4th notes.  
 Timber scattering oak and cedar; undergrowth, oak and laurel.  
 Mountainous land, 80.00 lbs.

- S. 89° 58' E., on a random line bet. sres. 12 and 13.
- 40.00 Set temp.  $\frac{1}{4}$  sec. ev.
- 80.00 Intersect E. bdy. of Sp. 5 lbs. N. of ev. of sres. 7, 12, 13 and 14, which is a stone marked cross witnessed as described by the surveyor general.
- Shawl Run  
 N. 89° 56' W., on a true line bet. sres. 12 and 13.  
 Over mountainous land, ascending through heavy oak timber and dense brush.
- 18.00 Bridge, 200 ft. above sec. ev., bears N. and S.; descend.
- 30.00 Gulch, 150 ft. below ridge, 20 lbs. wide, course S.; ascend.
- 37.20 Top of S. slope of ridge; descend.
- 39.15 Gulch, 15 lbs. wide, course S. E.; ascend.
- 40.05 Set a calcareous stone, 12x10x8, 12 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on N. face; from which  
 An oak, 9 ins. diam., bears N. 22° E., 9 lbs. dist., marked  $\frac{1}{4}$  S 12 B S.  
 An oak, 8 ins. diam., bears S. 34½° W., 44 lbs. dist., marked

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Obvious  $\frac{1}{4}$  S 13 E; and raise a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high, N. of cor.

56.00 Top of S. slope of ridge, 100 ft. above  $\frac{1}{4}$  sec. cor.; descend.

73.31 Gulch, 15 lbs. wide, course N. E.; low heavy timber and dense brush; ascend.

81.10 The cor of secs. 11, 12, 13 and 14.  
Land, mountainous.  
Soil, gravelly and stony; 3rd and 4th rate.  
Timber, oak and scattering cedar and laurel, undergrowth, oak, laurel, *Myrica*, Spanish bayonet and palm llo.  
Mountains, heavily timbered or land covered with dense undergrowth, 80.10 hrs.

October 27, 1904.

October 28: At 7<sup>h</sup> 20<sup>m</sup> a.m. l.m.t., I set off 30° 32' N on the lat. cord, ~~13.2~~ on the decl. arc, and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14.

Shiner Run

N. 0° 11' W., bet. secs. 11 and 12.

Over mountainous land, ascending.

87.00 Top of ridge, 100 ft. above sec. cor., bears N. W. and S. E. descend.

38.60 Gulch, 150 ft. below ridge, 20 lbs. wide, course E.; ascend through heavy oak timber.

40.00 Set a limestone, 20 x 8 x 6 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face; from which  
a pinon, 6 ins. diam., bears N. 76° E., 86 lbs. dist., marked  $\frac{1}{4}$  S 12 E.

An oak, 12 ins. diam., bears S. 89 $\frac{1}{4}$ ° W., 130 lbs. dist. marked  $\frac{1}{4}$  S 11 E; and raise a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high, N. of cor.

52.00 Gulch, 10 lbs. wide, course E., low heavy timber.

66.00 Ridge, 130 ft. above  $\frac{1}{4}$  sec. cor., bears N. W. and S. E.; descend

80.00 Set a limestone, 20 x 6 x 6 ins., 15 ins. in the ground, for cor. of secs. 1, 2, 11 and 12; marked with 6 notches on S. and 1 notch on E. edge; from which

An oak, 16 ins. diam., bears N. 55 $\frac{1}{2}$ ° E., 147 lbs. dist., marked S 22 E R 17 E S 1 E.

An oak, 8 ins. diam., bears S. 55 $\frac{1}{2}$ ° E., 128 lbs. dist., marked S 22 E R 17 E S 12 E; neither cross within limit, and raised a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high, N. of cor.

Chains

Sits impracticable.

Land, mountainous.

Soil, gravelly and stony; ord. and 4th rate.

Timber, oak and scattering cedar, pine and larch; undergrowth, oak and larch.

Mountainous or heavily timbered land, 80.00 chs.

X S. 89° 56' E, on a random line bet. sec. 1 and 12.

40.00 S. A. temp.  $\frac{1}{4}$  sec. cor.

79.90 Entrance to bdy. of Sp. 5 lrs. S. of cor. of sec. 1, 6, 7 and 12, which is a stone, marked and witnessed as described by the surveyor general.

Since S. 11 and

N. 89° 58' W, on a true line bet. sec. 1 and 12.

Over mountainous land, ascending through heavy oak timber.

5.50 Ridge, bears N. and S.; observed.

21.80 Entrance gulch, course S. E.

27.80 Large gulch, course E.

39.95 S. A. point for  $\frac{1}{4}$  sec. cor. falls on blanket ledge of limestone on which

but a cross (x) at the exact cor. point for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. side of cross; from which

An oak, 7 ins. diam., bears S. 20° E, 30 lrs. dist., marked  $\frac{1}{4}$  S 12 B S.

A cedar, 12 ins. diam., bears N. 47  $\frac{3}{4}$  W, 111 lrs. dist., marked  $\frac{1}{4}$  sec 1 B S; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.

46.80 Gulch, 15 lrs. wide, course N. W.

51.30 Gulch 20 lrs. wide, course N.

79.90 S. A. cor. of sec. 1, 2, 11 and 12.

Land, mountainous.

Soil, gravelly and stony; ord and 4th rate.

Timber, oak and scattering cedar, undergrowth, oak, prairie, Spanish bayonet and cacti.

Mountainous or heavily timbered land, 79.90 chs.

Detour 20: At this cor. S set off 13° 10' S on the decl. and at 12<sup>h</sup> 3<sup>m</sup> l. m. t. observe the sun on the meridian; the resulting lat. is 31° 32' N

N. 0° 01' W, on a random line bet. sec. 1 and 2.

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Chains  
41.00 Set Impv.  $\frac{1}{4}$  sec. cor.  
80.03 Enteroret N. bdy. of Sp. 21 lks. E. of cor. of secs. 1, 2, 35 and 36, as heretofore described.

Shaner & Co

S.  $0^{\circ}10'$  E. in a stone line bet. secs. 1, and 2.  
Over rolling land, through heavy oak timber.

37.80 Gulch, 25 lks. wide, course N. W.

41.03 Set a limestone,  $18 \times 10 \times 6$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face, from which  
An oak, 20 ins. diam., bears N.  $80^{\circ} \frac{3}{4}$  E., 134 lks. dist., marked  $\frac{1}{4}$  sec. 1 B S.

An oak, 12 ins. diam., bears S.  $85^{\circ} \frac{1}{2}$  W., 106 lks. dist., marked  $\frac{1}{4}$  S 2 B S.; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

44.30 Gulch, 15 lks. wide, course N. E.; as end.

81.03 The cor. of secs. 1, 2, 11 and 12.

Land, rolling.

Soil, gravelly loam and stony; end, 2nd and 4th rpts.

Timber, oak and scattering cedar; undergrowth, oak and laurel.

Barren timbered land, 81.03 chs.

October 28, 1914.

October 29: Set  $20^{\circ} 20'$  N. W. l.m.t., set off.  $31^{\circ} 28'$  on the lat. arc;  $13^{\circ} 22'$  on the decl. arc; and determine a meridian with solar at the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Sh., as heretofore described.

Shaner & Co.

N.  $0^{\circ}01'$  W., bet. secs. 34 and 35.

Low mountainous land, ascending.

2.110 Dry wash, 50 lks. wide, course  $\frac{2}{4}$  E. W., as end.

3.110 Enter heavy oak timber, bears E. and W.

14.110 Dip, bears N. E. and S. W.; as end.

31.110 Ridge, bears N. E. and S. W.; as end.

34.50 Funt, bears N. E. and S. W.; as end.

44.00 Set a porphyry stone,  $18 \times 10 \times 8$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face, from which  
An oak, 36 ins. diam., bears N.  $10^{\circ}$  E., 96 lks. dist., marked  $\frac{1}{4}$  S 35 B S.

An oak, 12 ins. diam., bears N.  $34^{\circ}$  W., 74 lks. dist., marked  $\frac{1}{4}$  S 34 B S.; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft.

Chains  
 high, N. of cor.  
 43.00 A dote house, brass about 30 chs. N.  
 43.50 N. slope of ridge; descend.  
 45.20 Gulch 20 chs. wide, course S. W.; ascend.  
 54.45 Wire fence, brass  $4^{\circ}$  and  $4^{\circ}$ ; brass heavy timber, brass E. and W.  
 56.00 Spur, brass N. W. and S. E.; thence along E. slope of ridge  
 67.50 descend.  
 69.00 Gulch, 11 chs. wide, course E.; ascend.  
 73.00 Spur, extending N. E.; descend.  
 80.00 Set a malpais stone, 18 x 12 x 11 ins., 12 ins. in the ground, for  
 cor of secs. 26, 27, 34 and 35, marked with 1 notch on S. and  
 2 notches on E. edge, from which:  
 An oak, 14 ins. diam., brass N. 21° E., 138 chs. dist., marked  
 S 22 S R 17 E S 26 B S.  
 An oak, 12 ins. diam., brass S. 81° W., 233 chs. dist., marked  
 S 22 S R 17 E S 34 B S.  
 An oak, 14 ins. diam., brass N. 3  $\frac{3}{4}$ ° W., 136 chs. dist., marked  
 S 22 S R 17 E S 27 B S; no other tree within limit, and raise  
 a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.  
 Land, mountainous.  
 Soil, gravelly loam, 2nd, 3rd and 4th rates.  
 Timber, oak.  
 Mountainous or heavily timbered land, 80.00 chs.

S. 89° 58' E, on a random line bet. secs. 26 and 35.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.00 Enter at N. and S. line 3 chs. S. of cor. of secs. 26, 26, 35  
 and 36.  
 Thence S run  
 N. 89° 59' W., on a true line bet. secs. 26 and 35.  
 Over gravelly rolling land.  
 28.27 Wire fence, brass N. and S.  
 38.55 Enter draw, course S.  
 40.00 Set a malpais stone, 18 x 8 x 8 ins., 12 ins. in the ground,  
 for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
 An oak, 12 ins. diam., brass S. 4° W., 95 chs. dist., marked  
 S 35 B S; no other tree within limit, and raise a  
 mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.  
 42.00 Draw, draw, ascend.  
 49.15 Gulch, 30 chs. wide, course S. E.; ascend steeply.  
 60.00 Ridge, 100 ft. above draw, brass N. and S.; descend.

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Chains

- 76.100 Enter draw, course S.
- 77.75 Dry wash, 20 lbs. wide, course S. E.
- 81.00 The av. of srs. 26, 27, 34 and 35.

Land, rolling and mountainous.  
 Soil, gravelly loam and stony; 2nd, 3rd, and 4th rate.  
 Timber, scattering oak.  
 Mountainous land, 34.00 chs.

October 29: At this av. I set off  $13^{\circ} 30'$  on the circ. arc and at 12<sup>h</sup> 2<sup>m</sup> 10<sup>s</sup> observe the sun in the meridian; the resulting lat. is  $31^{\circ} 29' 4''$  or within 1' of the proper lat.

N.  $0^{\circ} 01'$  W., bet. srs. 26 and 27.

Over mountainous land, ascending.

- 3.45 Gulch, 50 lbs. wide, course W. N. W.; as erod.
  - 6.00 N. slope of ridge, 75 ft. above srs. av.; ascended through heavy oak timber.
  - 6.50 Gulch, 15 lbs. wide, course S. W.; as erod along E. slope of ridge
  - 13.10 Top of slope, 100 ft. above gulch; ascended. Course N. E. & S. W.
  - 19.10 Gulch, 10 lbs. wide, course S. W.; as erod.
  - 23.50 Spur, 100 ft. above gulch, extending S. W.; ascended.
  - 35.35 Wire fence, bars E. and W.
  - 39.50 Gulch, 20 lbs. wide, course W. N. W.
  - 41.00 Set a malpais stone, 13 x 12 x 10 ins., 12 ins. in the ground, for srs. av. marked  $\frac{1}{4}$  on N. face; from which  
 An oak, 12 ins. diam., bears S.  $52^{\circ} 4'$  E., 27 lbs. dist., marked  $\frac{1}{4}$  S  $26^{\circ} 13'$  S.  
 An oak, 12 ins. diam., bears S.  $78^{\circ}$  W., 35 lbs. dist., marked  $\frac{1}{4}$  S  $27^{\circ} 13'$  S.; and raised a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of av.
  - 41.10 Gulch, 30 lbs. wide, course W.; as erod.
  - 48.50 Ridge, 100 ft. above gulch, bars E. and W.; ascended.
  - 49.00 Gulch, 10 lbs. wide, course S. W.; as erod.
  - 57.00 Spur bars E. and W.; stones over rolling land
  - 75.00 Ridge, bars E. and W.; ascended, heavy timber
  - 81.00 Set a malpais stone, 13 x 12 x 10 ins., 12 ins. in the ground, for av. of srs. 22, 23, 26 and 27, marked with  $\frac{1}{2}$  notches on S. and E. edges; and raised a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of av.
- Land, rolling and mountainous.



Chains

Soil, gravelly and stony; 3rd and 4th rates.  
Timber, oak.  
Mountainous or heavily timbered land, 80.00 chs.

40.00 S. 89° 59' E., in a random line bet. secs. 23 and 26.  
Set transp.  $\frac{1}{4}$  sec. cor.  
80.00 Enter sec. N. and S. line  $\frac{1}{2}$  lbs.  $\frac{1}{4}$  of cor. of secs. 23, 24, 25  
and 26.

Shower & run  
N. 89° 57' N. in a true line bet. secs. 23 and 26.  
Over rolling land, through heavy oak timber.  
9.00 Gulch, 20 lbs. wide, course N. E.; ascend.  
14.00 Ridge, bears N. E. and S. W.; ascend over spurs extending N.  
27.50 Gulch, 15 lbs. wide, course N. E.; ascend.  
31.00 Ridge, bears N. E. and S. W.; ascend.  
36.00 Gulch, 100 ft. below top of ridge, 15 lbs. wide, course N. E.; ascend.  
41.00 Set a sandstone, 18 x 10 x 6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec.

cor. marked  $\frac{1}{4}$  on N. face; from which  
An oak, 14 ins. diam., bears N. 65 $\frac{1}{2}$ ° E., 100 lbs. dist., marked  
 $\frac{1}{4}$  S 23 B S.  
An oak, 10 ins. diam., bears S. 61° E., 125 lbs. dist., marked  
 $\frac{1}{4}$  S 26 B S.

41.50 Ridge, bears N. and S.; ascend.  
41.50 Gulch, 10 lbs. wide, course N. E.; ascend.  
43.00 Dip, steeper along N. slope of ridge.  
49.00 Begin descent through dense brush.  
51.00 Point, 200 below slope, bears N. and S.; bears brush and ascend.  
66.00 Ridge, bears N. and S.; ascend.  
72.00 Cross heavy timber, bears N. and S.  
80.00 The cor. of secs. 22, 23, 26 and 27.

Land, mountainous and rolling.  
Soil, gravelly <sup>some</sup> and stony; 2nd, 3rd, and 4th rates.  
Timber, oak; undergrowth, oak and laurel.  
Mountainous or land covered with dense undergrowth, 80.00 chs.

October 29, 1914

October 30: At 4<sup>h</sup> 10<sup>m</sup> a.m., l.m.t., set off 31° 30' N on the  
last. arc; ~~13° 42' S~~ on the arc; and determined a  
meridian with the solar at the cor. of secs. 22, 23, 26 and 27.  
Shower & run  
N. 0° 01' N., bet. secs. 22 and 23.

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6 drains  
 8.00 Over mountainous land, descending through scattering oak  
 brush, 10 lbs. wide, course N.; ascert.  
 13.00 Bridge, bears N. E. and S. W. descends through heavy oak timber.  
 15.90 Dry wash 30 lbs. wide, course N. W. thence over rolling land.  
 28.50 Dry wash, 20 lbs. wide, course S. W.  
 41.00 Set a porphyry stone, 18 x 15 x 10 ins., 12 ins. in the ground,  
 for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
 An oak, 10 ins. diam., bears N. 20° E., 173 lbs. dist., marked  
 $\frac{1}{4}$  S. 23° B S.  
 An oak, 30 ins. diam., bears N. 20° W., 106 lbs. dist., marked  
 $\frac{1}{4}$  S 22° B S.; and raised a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high,  
 W. of cor.  
 62.00 Rare heavy timber, bears N. E. and S. W.; ascert.  
 73.00 Bridge, bears N. W. and S. E.; ascert.  
 80.00 Set a marble stone, 18 x 10 x 10 ins., 12 ins. in the ground, for  
 cor. of secs. 14, 15, 22 and 23, marked with 3 notches on S. and  
 2 notches on E. edge; from which  
 An oak, 10 ins. diam., bears N. 70° E., 113 lbs. dist., marked  
 S 22 S R 17 E S 14 B S.  
 An oak, 8 ins. diam., bears S. 70° E., 69 lbs. dist., dist., marked  
 S 22 S R 17 E S 23 B S.  
 A cedar, 9 ins. diam., bears S. 14½° W., 88 lbs. dist., marked  
 S 22 S R 17 E S 22 B S.; no other tree within limit, and raised a  
 mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
 Land, rolling and mountainous.  
 Soil, gravelly, and stony; 3rd and 4th rates.  
 Timber, oak.  
 Mountainous or heavily timbered land, 80.00 ehs.

S. 89° 57' E., 110 W. random line bet. secs. 14 and 23.  
 41.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 79.96 Intersect N. and S. lines 7 lbs. S. of cor. of secs. 13, 14, 23 and 24.  
 Shiner & Co.  
 W. line a true line bet. secs. 14 and 23.  
 Over mountainous land, descending over ridges, through heavy  
 oak timber.  
 25.60 Cont., bears 40 lbs. N.  
 36.00 Rare heavy timber, bears N. and S.  
 39.50 Begin strip descent.  
 39.98 Set a porphyry stone, 18 x 6 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,

Chains

2 ft. base, 1 1/2 ft. high, N. of cor. S. is impracticable.  
From this cor. incline shaft 8 x 6 x 50 ft. brass 115 lbs. S.; 11 from  
ent. 8 x 6 x 30 ft., brass 135 S.

41.70 Gulch; 300 ft. below cor. of sres. 13, 14, 23 and 24, 20 lbs. wide,  
course N. W.; ascernd.

49.65 Ridge, 120 ft. above gulch, brass N. and S.; ascernd.

57.00 Gulch, 130 ft. below ridge, 15 lbs. wide, course N. W.; ascernd.

62.00 Ridge, brass N. W. and S. E.; ascernd.

70.20 Gulch, 15 lbs. wide, course N. W.; ascernd.

79.96 S. cor. of sres. 14, 15, 22 and 23.

Land, mountainous.

Soil, stony and rocky; 4th rate.

Timber, oak; undergrowth, oak, trinitilla, manzanita, Arbutus,  
Spanish bayonet and cacti.

Mountainous or heavily timbered land, 79.96 chs.

October 30: At this cor. S set off 13° 50' S on the decl. arc,  
and <sup>at 1/2 m. l. m. top</sup> observe the sun on the meridian. The resulting lat is  
31° 31' N or within 1' of the proper lat.

N. 0° 11' W., bet. sres. 14 and 15.

Over mountainous land, ascending through scattering timber.

15.40 Gulch, 15 lbs. wide, course N. W.; ascernd.

39.00 N. slope of ridge, 200 ft. above gulch; ascernd over bluffs.

41.00 S. in limestone, 20 x 12 x 3 ins., 15 ins. in the ground, for 1/4 sec. cor.  
marked 1/4 on N. face; from which

An oak, 6 ins. diam., brass N. 85 1/4° E, 5 lbs. dist., marked  
1/4 S 14 B S.

An oak, 18 ins. diam., brass N. 64 1/4° W., 62 lbs. dist., marked  
1/4 S 15 B S.

44.20 Red Rock canyon, 160 ft. below ridge, 60 lbs. wide, course S. W.  
ascernd.

51.00 Dip, brass E. and W. striver along E. slope of ridge.

57.00 House, brass 3 chs. E.; gauge of shaft, turns and dunnies  
brass about 12 chs. E.

71.00 Ascernd through heavy oak timber.

73.20 Gulch 30 lbs wide, course N, striver S. W.

79.70 Gulch, 20 lbs wide, course S. W.; ascernd.

80.00 S. in porphyritic stone, 18 x 10 x 3 ins., 12 ins. in the ground,  
for cor. of sres. 10, 11, 14 and 15, marked with 4 notches on S.  
and 2 notches on E. edge; from which

An oak, 10 ins. diam., brass 62 1/2° N., 135 lbs. dist., marked

BOOK 1849

Chains

S 22 S R 17 E S 15 B S.  
An oak, 6 ins. diam., bears N. 25 1/2° W., 64 lbs. dist., marked  
S 22 S R 17 E S 10 B S.  
An oak, 8 ins. diam., bears N. 13° E., 74 lbs. dist., marked  
S 22 S R 17 E S 11 B S.; no other tree within limit, and raise  
a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits  
impracticable.  
Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, oak and scattering cedar; undergrowth, oak, scruboak,  
lunel, prairie and Spanish bayonet.  
Mountainous or heavily timbered land, 80.00 chs.

E. on a narrow line bet. sec. 11 and 14.

41.00 bet. camp 1/4 sec. cor.

81.04 Enter sec. N. and S. line at the cor. of secs. 11, 12, 13 and 14.

Show B. run

W. on a line bet. secs. 11 and 14.

Land mountainous, along S. slope of ridge, through scattering  
oak and scrub brush.

12.00 Enter heavy oak and cedar timber, bears N. and S.

17.00 Begin ascent of E. slope of ridge.

35.30 Top of ridge, bears N. W. and S. E.; heavy timber and  
scrub brush, and descend along S. W. slope.

41.02 Set a porphyritic stone, 18 x 8 x 7 ins., 12 ins. in the ground,  
for 1/4 sec. cor. marked 1/4 in N. face; from which  
An oak, 6 ins. diam., bears S. 34 1/2° W., 66 lbs. dist., marked  
1/4 sec. 24 B S.

An oak, 14 ins. diam., bears N. 54 1/2° W., 58 lbs. dist., marked  
1/4 S 11 B S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft.  
high, N. of cor.

45.00 Enter heavy oak timber, bears N. E. and S. W.

73.50 Gulch, 500 ft. below top of ridge, 40 lbs. wide, course S. W.;  
ascend.

77.00 Spur, extending S. W.; ascend.

79.80 Gulch, 20 lbs. wide, course S. W.; ascend.

81.04 The cor. of secs. 11, 12, 14, and 15.

Land, mountainous.

Soil, gravelly, stony and rocky; 3rd and 4th rates.

Timber, oak and cedar; undergrowth, oak, lunel, vinovanna,  
prairie, Spanish bayonet, myrtle and oak.

Chains  
 Mountainous, heavily timbered or land covered with dense  
 undergrowth, 81.04 chs.  
 October 30, 1904.

October 31: At 7<sup>h</sup> 20<sup>m</sup> a.m., l.m.t., I set off 31032 on the  
 lat. and ~~see 2' S~~ on the decl. arc, and determine a meri-  
 dian with the solar at the ev. of sres 10, 11, 14 and 15.  
 Shiner & run  
 N. 0° 01' W., lat. sres. 10 and 11.  
 Over mountainous land, ascending.  
 39.00 Top of E slope of mountain, 500 ft. in low sed. cov.; obs and  
 through heavy cedar and oak timber.  
 40.00 Falls on a blunt ledge of limestone, on which  
 but a cross cr at the exact ev. point for  $\frac{1}{4}$  sec. ev. marked  
 $\frac{1}{4}$  on W. side of cross, from which  
 A cedar, 12 ins. diam., bears N. 54° E., 130 lbs. dist., marked  
 $\frac{1}{4}$  S 11 B S.  
 A cedar 8 ins. diam., bears N. 10° W., 62 lbs. dist., marked  
 $\frac{1}{4}$  S 10 B S.; and raise a mound of stones, 2 ft. base,  $\frac{1}{2}$  ft. high,  
 W. of ev.  
 59.00 Gulch, 20 lbs. wide, course N. W.; descend gradually.  
 80.00 Set a limestone, 18 x 10 x 8 ins., 12 ins. in the ground, for ev.  
 of sres. 2, 3, 10 and 11, marked with 5" notches on S. and 2  
 notches on E. edge; from which  
 An oak, 6 ins. diam., bears N. 60  $\frac{1}{4}$ ° E., 98 lbs. dist., marked  
 S 22 S R 17 E S 2 B S.  
 An oak, 5 ins. diam., bears S. 44  $\frac{1}{4}$ ° E., 90 lbs. dist., marked  
 S 22 S R 17 E S 11 B S.  
 An oak, 5 ins. diam., bears S. 62  $\frac{1}{2}$ ° W., 60 lbs. dist., marked  
 S 22 S R 17 E S 10 B S.; no other trees within limit; and raise  
 a mound of stones, 2 ft. base,  $\frac{1}{2}$  ft. high, W. of ev.  
 Land, mountainous.  
 Soil, gravelly, stony and rocky; red and 4th rate.  
 Timber, oak and cedar; undergrowth, oak, linal, Spanish  
 bayonet, prairie, myrtle and cacti.  
 Mountainous or heavily timbered land, 81.00 chs.

Ev. on a random line bet. sres. 2 and 11.  
 40.00 Set trap  $\frac{1}{4}$  sec. ev.  
 80.00 Put stake N. and S. line 3 lbs. N. of ev. of sres. 1, 2, 11 and 12  
 Shiner & run

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Chains

- N. 89° 59' W., on a true line bet. sec. 2 and 11.  
Over mountainous land, ascending through heavy oak & timber  
and dense brush.
- 15.11 Ridge, 200 ft. above sec. cor, bears N. and S.; descend.
- 26.15 Gulch, 170 ft. below top of ridge, 15 lbs. wide, course N. and  
along N. slope of ridge.
- 41.03 Set a limestone, 18x9x6 ins., 1/2 ins. in the ground, for 1/4 sec.  
cor. marked 1/4 on N. face; from which  
An oak, 6 ins. diam., bears S 2° E., 165 lbs. dist., marked  
1/4 S 11 B S.
- A pale green, 9 ins. diam., bears N. 29 1/2° W., 83 lbs. dist.,  
marked 1/4 S 2 B S.; and raised a mound of stone, 2 ft. base,  
1 1/2 ft. high, N. of cor.
- 56.41 Top of slope, 200 ft. above gulch, low heavy timber, bears  
N., and S.; descend.
- 63.11 Grass dense brush, bears N. and S.
- 77.11 Gulch, 160 ft. below top of slope, 15 lbs. wide, course N.
- 81.16 The cor. of sec. 2, 3, 11 and 11.  
Ground, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th cuts.  
oak, hick and scattering red and loblolly; undergrowth,  
oak, laurel, myrtle, Spanish bayonet, hawthorn and cacti.  
Mountainous, heavily timbered or land covered with dense  
undergrowth, 80.06 lbs.
- October 31: At this cor. Set off 1409' S on the arc and  
and at 12<sup>h</sup> 6<sup>m</sup> l.m.t., observe the sun on the meridian; the  
resulting lat. is 31° 32' N.

- N. 0° 11' W., on a random line bet. sec. 2 and 3.
- 41.111 Set Famp. 1/4 sec. cor.
- 81.112 Put a set N. bay. of 8 ft. 12 lbs. E. of cor. of sec. 2, 3, 34  
and 35, as heretofore described. Bore S and  
S. 0° 06' E., on a true line bet. sec. 2 and 3.  
Over mountainous land, descending.
- 13.111 Gulch, 15 lbs. wide, course N. W. under dense brush, bears E.  
and W.
- 32.111 Gulch, 15 lbs. wide, course N. W.; steeper over rolling land.
- 41.112 Set a limestone in place, 4 x 2 ft., 6 ins., above ground,  
on which  
Set a cross (x) at the exact cor. point, for 1/4 sec. cor. marked  
1/4 on W. side of cross; from which

61.00 A cedar, 12 ins. diam., bears S.  $13\frac{1}{4}$  W., 123 lbs. dist. marked  $\frac{1}{4}$  S. 313 S; no other tree within limit, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 49.00 Gulch, 15 lbs. wide, course N. 21. W.; as usual.  
 60.00 Top of E slope of ridge, low dense brush; as usual.  
 80.00 Sth cor. of sec. 2, 3, 10 and 11.  
 Ground, mountains and rolling.  
 Soil, gravelly and stony; 3rd and 4th rate.  
 Timber, scattering oak and cedar; undergrowth, oak, laurel, yucca and Spanish bayonet.  
 Mountains or land covered with dense undergrowth, 80.00 etc.  
 October, 31, 1904.

40-23  
 November 1: At 7<sup>45</sup> a.m., l.m.t., I set off  $31^{\circ}28'$  on the lat. and  $14^{\circ}23'$  on the arb. arc; and determine a meridian with solar at the cor. of sec. 3, 4, 33 and 34, on the S. bay. of the Sp., as heretofore described.  
 Thence I run N. 11 $^{\circ}$  12' W., bet. sec. 33 and 34.  
 Over mountainous land, ascending through heavy oak timber.  
 1.00 Ridge, bears E. and W.; as usual.  
 9.00 Road, bears E. and W.; as usual.  
 15.00 Ridge, bears E. and W.; as usual.  
 22.00 Tent, bears E. and W.; as usual.  
 39.00 Ridge, bears E. and W.; as usual.  
 40.00 Set a malpais stone, 12x10x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face; from which  
 An oak, 18 ins. diam., bears N.  $40\frac{3}{4}$  E., 233 lbs. dist. marked  $\frac{1}{4}$  S 34 13 S.  
 An oak, 20 ins. diam., bears N.  $15\frac{3}{4}$  W., 168 lbs. dist., marked  $\frac{1}{4}$  S 33 13 S, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
 50.00 Small gulch, course, E. as usual.  
 70.00 Ridge, bears N. E. and S. W.; bears heavy oak timber and as usual.  
 80.00 Set a sandstone, 20x10x8 ins., 15 ins. in the ground, for cor. of sec. 27, 28, 33 and 34, marked with 1 notch on S. and 2 notches on E. ridge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
 Ground, mountainous.

BOOK 1849

Chains

Soil, gravelly loam and stony; 2nd, 3rd and 4th rats.  
Timber, oak.  
Miscellaneous or heavily timbered land, 30.00 chs.

S. 89°58' E, NW corner line bet. secs. 27 and 34.  
40.00 Set 15 mch.  $\frac{1}{4}$  sec. cor.  
80.04 Distance N. and S. line 8 hrs. N. of cor. of secs. 26, 27, 34  
and 35.

Shows 3 run.  
N. 89°55' W., NW corner line bet. secs. 27 and 34.  
Over rolling land.

30.00 Center heavy oak timber, bears N. and S.  
35.00 Burley, 20 lbs. wide, course S.  
38.50 Wire fence, bears N.E. and S.W.  
40.02 Set a sandstone, 18 x 12 x 10 ins., 12 ins. in the ground, for  $\frac{1}{4}$   
sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
An oak, 14 ins. diam., bears N. 35° E, 75 lbs. dist., marked  
 $\frac{1}{4}$  S 27 13 S.  
An oak, 10 ins. diam., bears S. 16 $\frac{1}{2}$ ° W., 91 lbs. dist., marked  
 $\frac{1}{4}$  S 34 13 S.

70.00 Shows heavy oak timber, bears N.E. and S.W.  
80.04 3 hr. cor. of secs. 27, 28, 33 and 34.

Land, rolling.  
Soil, gravelly loam and stony; 2nd, 3rd and 4th rats.  
Timber, oak.  
Heavily timbered land, 40.00 chs.

N. 11°12' W., bet. secs. 27 and 28.  
Over rolling land.

23.00 Center heavy oak timber, bears N.E. and S.W.  
40.00 Set a malpais stone, 20 x 10 x 8 ins., 15 ins. in the ground,  
for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face; from which  
An oak, 12 ins. diam., bears N. 38 $\frac{1}{2}$ ° E, 71 lbs. dist., marked  
 $\frac{1}{4}$  S 27 13 S.  
An oak, 15 ins. diam., bears N. 56° W., 75 lbs. dist., marked  
 $\frac{1}{4}$  S 28 13 S.; and raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft.  
high, W. of cor.

48.50 Burley, 50 lbs. wide, course N.W.  
80.00 Set a sandstone, 18 x 12 x 12 ins., 12 ins. in the ground, for  
cor. of secs. 21, 22, 27 and 28, marked with 2 notches on S.  
and 3 notches on E. side, from which



Chains  
M<sup>2</sup>

An oak, 14 ins. diam, bears N.  $46\frac{1}{4}^{\circ}$  E., 311 lbs. dist., marked  
S 22 S R 17 E S 22 B S.  
An oak, 12 ins. diam, bears S.  $56\frac{3}{4}^{\circ}$  E., 38 lbs. dist., marked  
S 22 S R 17 E S 27 B S.  
An oak, 15 ins. diam, bears S.  $72^{\circ}$  W., 1811 lbs. dist., marked  
S 22 S R 17 E S 28 B S.  
An oak, 16 ins. diam, bears N.  $28\frac{1}{4}^{\circ}$  W., 1611 lbs. dist., marked  
S 22 S R 17 E S 21 B S.; and raise a mound of stone, 2 ft. base,  
 $1\frac{1}{2}$  ft. high, W. of ev.  
Land, rolling.

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

Timber, oak.

Unimproved land, 57.000 chs.

November 1: At this ev. Set off  $14^{\circ}29'7''$  on the circ. arc,  
and at  $12^h 5^m$  l. m. t., observe the sun on the meridian; the  
resulting lat. is  $31^{\circ}30'31''$  within 1' of the former lat.

N  $89^{\circ}55'$  E., on a random line bet. sec. 22 and 27

411.00 Set corner  $\frac{1}{4}$  sec. ev.

811.02 Set corner N. and S. line 3 lbs. S. of ev. of sec. 22, 23, 26 and 27.

Shower & wind

N.  $89^{\circ}55'$  W., on a true line bet. sec. 22 and 27.

Over mountainous land, ascending.

611.00 Ridge, 75 ft. above s.d. ev.; ascend.

21.51 Small gulch, 1611 ft. below ridge, course S. E.; ascend.

33.51 Old road, bears N. E. and S. W.

411.01 Set a porphyry stone,  $15 \times 10 \times 8$  ins., 12 ins. in the ground, for  $\frac{1}{4}$   
s.d. ev. marked  $\frac{1}{4}$  on N. corner; from which

An oak, 13 ins. diam, bears N.  $57\frac{1}{4}^{\circ}$  W., 145 lbs. dist., marked  
 $\frac{1}{4}$  S 22 B S.; on other true vertical line, and raise a mound of  
stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of ev.

611.00 Dip, 200 ft. above gulch, thence along S. slope of ridge.

711.00 Descend.

73.51 Gulch, 15 lbs. wide, course N. W.; ascend.

811.02 S. h. ev. of sec. 21, 22, 27 and 28.

Land, mountainous.

Soil, gravelly brown and stony; 2nd, 3rd and 4th rate.

Timber, scattering oak.

Mountainous land, 80.02 chs.

N  $82^{\circ}11'$  W., bet. sec. 21 and 22.

BOOK 1849

6.0000 Cross mountainous land, descending through heavy oak timber.

1.80 Gulch, 15 lbs. wide, course N. W., thence N.

10.00 Gulch, 15 lbs. wide, course W.; ascend.

16.00 Top of W. slope of ridge, 150 ft. above gulch, descend.

22.00 Gulch, 175 ft. below slope, 20 lbs. wide, course N.; trees heavy oak timber, trees E. and W.; ascend.

38.00 Gulch, 60 lbs. wide, course W.

40.00 Set a sandstone, 20 x 12 x 10 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. on marked  $\frac{1}{4}$  on W. face; from which  
 An oak, 5 ins. diam., bears N. 38 $\frac{1}{4}$  E., 52 lbs. dist., marked  $\frac{1}{4}$  S 22 E.

An oak, 5 ins. diam., bears N. 23 $\frac{3}{4}$  W., 44 lbs. dist., marked  $\frac{1}{4}$  S 21 E.; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of ev.

46.00 Ridge, 100 ft. above gulch, bears E. and W.; descend.

54.00 Spring, bears 10 lbs. W.

58.50 Gulch, 150 ft. below ridge, 40 lbs. wide, course S. W.; ascend.

62.00 Ridge, 200 ft. above gulch, bears N. E. and S. W.; descend.

66.20 Gulch, 20 lbs. wide, course S. W.; ascend.

80.00 Set a sandstone, 18 x 8 x 8 ins., 12 ins. in the ground, for ev. of sec. 15, 16, 21, and 22, marked with 3 notches on S. and E. edges; from which  
 An oak, 10 ins. diam., bears N. 40 E., 100 lbs. dist., marked S 22 E R 17 E S 15 E.

An oak, 8 ins. diam., bears S. 71 $\frac{1}{2}$  E., 93 lbs. dist., marked S 22 E R 17 E S 22 E A

An oak, 12 ins. diam., bears S. 20 W., 79 lbs. dist., marked S 22 E R 17 E S 21 E.

An oak, 6 ins. diam., bears N. 78 W., 73 lbs. dist. dist., marked S 22 E R 17 E S 16 E., and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of ev.

Land, mountainous.

Soil, gravelly, stony and rocky; 3rd and 4th roots.

Timber, oak.

Mountainous or heavily timbered land, 80.00 chs.

Number 1, 1904

Number 2: At 25<sup>m</sup> n. w. l. m. t., 35 ft off 310317 on the lat. and ~~310317~~ on the decl. arc, and determine a meridian with the solar at the ev. of secs. 15, 16, 21 and 22.

Shaded & run

S. 89 $\frac{3}{4}$  E., on a random line bet. secs. 15 and 22

Chains  
40.00 Sat trap.  $\frac{1}{4}$  sec. cor.  
80.12 Enter sec 11. and S. line 14 lbs. S. of cor. of secs. 14, 15, 22 and 23.  
Shovel from  
S.  $89^{\circ}58' N.$ , in a trap line bet. secs. 15 and 22,  
Over mountainous land, descending.  
11.00 Enter heavy oak timber, bears N. E. and S. W.  
18.00 Gulch, 200 ft. below sec. cor., 15 lbs. wide, course N. W., ascend.  
37.00 Ridge, bears N. E. and S. W.; descend over rolling land.  
40.06 Sat a malpais stone,  $18 \times 12 \times 11$  ins., 12 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face, from which  
An oak, 12 ins. diam., bears S.  $32^{\circ} \frac{3}{4}' E.$ , 112 lbs. dist., marked  
 $\frac{1}{4}$  S 20 13 S.  
An oak, 11 ins. diam., bears N.  $34^{\circ} \frac{1}{4}' N.$ , 93 lbs. dist., marked  
 $\frac{1}{4}$  S 15 13 S; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft.  
high, N. of cor.  
80.12 The cor. of secs. 15, 16, 21 and 22.  
Ground, mountainous and rolling.  
Soil, gravelly and stony; 3rd and 4th rates,  
Timber, oak.  
Mountainous or heavily timbered land, 80.12 chs.

N.  $0^{\circ}02' N.$  bet. secs. 15 and 16.  
Over mountainous land, descending through heavy oak  
timber.  
9.00 Gulch, 20 lbs. wide, course N. E.; ascend.  
12.50 Ridge, bears N. W. and S. E.; descend.  
19.50 Gulch, 15 lbs. wide, course N. E.  
25.30 Gulch, 30 lbs. wide, course N. W.; ascend.  
30.00 Ridge, bears E. and W. descending  
40.00 Sat a sandstone,  $18 \times 10 \times 8$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec.  
cor. marked  $\frac{1}{4}$  on W. face, from which  
An oak, 18 ins. diam., bears S.  $17^{\circ} \frac{1}{2}' E.$ , 29 lbs. dist., marked  
 $\frac{1}{4}$  S 15 13 S.  
An oak, 13 ins. diam., bears S.  $81^{\circ} \frac{1}{4}' N.$ , 41 lbs. dist., marked  
 $\frac{1}{4}$  S. 16 13 S, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
N. of cor.  
43.00 Red bench dipstone, 300 ft. below ridge, 150 lbs. wide, course W, ascend  
68.00 Ridge, bears E. and W.; descend.  
70.80 Shaft, bears 10 lbs. N.; bears heavy oak timber, bears E. and W.  
71.50 Gulch, 15 lbs. wide, course N.; ascend.  
72.35 Road, bears E. and W.  
73.40 Ridge, bears E. and N.; descend  
74.00 Road, bears E. and N.

BOOK 1849

Chains  
77.60  
81.00

Swale, 10 lbs. wide, course S. W. as usual.

Set a porphyry stone, 18 x 12 x 12 ins., 12 ins. in the ground, for cor. of sres. 9, 10, 15 and 16, marked with 4 notches on S. and 3 notches on E. edge; from which

An oak, 14 ins. diam., bears S. 59 1/4 E, 280 lbs. dist., marked S 22 S R 17 E S 15 B S.

An oak, 12 ins. diam., bears S. 88 W, 216 lbs. dist., dist., marked S 22 S R 17 E S 16 B S; no notations within limit and raised mound of stone, 2 ft. base, 12 ft. high, N. of cor. Site impracticable land, mountains.

Soil, gravelly and stony; 3rd and 4th cuts.

Timber, oak.

Mountains or heavily timbered land, 81.00 chs.

November 2: At this cor. I set off 14000' in the publ. way; and at 12 1/4 m. l. m. t., observed the sun on the meridian; the resulting lat. 31° 32' N.

41.00  
81.00

N. 89° 58' E., in a random line bet. sres. 10 and 15.

Set timber 1/4 sec. cor.

Intersect N. and S. line 5 lbs. N. of cor. of sres. 10, 11, 14 and 15.

Shower & run

N. on a tree line bet. sres. 10 and 15.

41.00  
41.50

Over rolling and broken land, through heavy oak timber.

Set point for 1/4 sec. cor. falls in small gulch, course S. ascend

Set a sandstone, 18 x 14 x 5 ins., 12 ins. in the ground, for witness cor. to 1/4 sec. cor. marked N 6 1/4 on N. face; from which

An oak, 8 ins. diam., bears N. 8° E, 73 lbs. dist., marked 1/4 S 15 B S; no notations within limit; and raised a mound of stone, 2 ft. base, 12 ft. high, N. of cor. Site impracticable.

61.00

Ridge, 160 ft. above gulch, bears N. W. and S. E.; has heavy timber and descend.

71.00

Wrist, tunnels, shafts and dumps, Red Rock Mining Co. bear 10 chs S.

81.00

Set cor. of sres. 9, 10, 15 and 16.

Land, mountains, rolling and broken.

Soil, gravelly, stony and rocky; 3rd and 4th cuts.

Timber, oak.

Mountains or heavily timbered land, 81.00 chs.

N. 0° 02' N., bet. sres. 9 and 10

Over mountainous land, ascending through scattering oak timber.

6 chains  
18.00 Ridge, 300 ft. above sea level, bears E. and W.; descend.  
40.00 Set in porphyry stone, 20x15x10 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sea level, marked  $\frac{1}{4}$  on W. face; from which  
An oak, 20 ins. diam., bears S. 47° E., 23 lbs. dist., marked  $\frac{1}{4}$  S. 10° B. S.  
A mosquito, 18 ins. diam., bears N. 38° W., 30 lbs. dist., marked  $\frac{1}{4}$  S 9° B S.; and raised a mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high, W. of cor.  
43.00 Gulch, 350 ft. below ridge, 25 lbs. wide, course N. W.; ascend.  
62.00 Old cabin, bears 4 lbs. W.  
68.00 Ridge, 300 ft. above gulch, bears N. W. and S. E.; descend.  
70.00 Level course west, ascend.  
80.00 Set in sandstone, 18x10x10 ins., 12 ins. in the ground, for cor. of sres. 3, 4, 9 and 10, marked with 5 notches on S. and 3 notches on E. side; from which  
A cedar, 12 ins. diam., bears N. 13 $\frac{1}{4}$ ° E., 146 lbs. dist., marked S 22 S R 17 E S 3 B S.  
An oak, 15 ins. diam., bears S. 31° W., 102 lbs. dist., marked S 22 S R 17 E S 9 B S.  
An oak, 12 ins. diam., bears N. 85° W., 100 lbs. dist., marked S 22 S R 17 E S 4 B S.; no other tree within limit, and raised mound of stone, 2 ft. base,  $\frac{1}{2}$  ft. high, W. of cor. Site impracticable. Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th water.  
Timber, oak and scattering cedar and mosquito.  
Mountainous land, 80.00 lbs.

November 2, 1904.

November 3: At 7<sup>h</sup> 25<sup>m</sup> a.m., l.m.t., Port off 31° 32' N on the lat. and ~~15° 00' S~~ on the decl. arc; and determined a meridian with the sun at the cor. of sres. 3, 4, 9 and 10.  
Shiner & run  
E. on a random line bet. sres. 3 and 10.  
40.00 Set mark  $\frac{1}{4}$  sea level.  
80.10 Intersect N. and S. line at cor. of sres. 2, 3, 10 and 11.  
Shiner & run  
N. on a true line bet. sres. 3 and 10  
Over gently rolling land.  
16.00 Descend  
24.00 Gulch, 15 lbs. wide, course N.; ascend.  
27.00 Ridge, bears N. and S.; descend.  
31.50 Gulch, 15 lbs. wide, course N.; begin strip ascent through forest

6 hours  
 40.05 Set a calcareous stone, 18x10x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on N. face, from which  
 A rock, 8 ins. diam., bears N. 39° E., 41 lbs. dist., marked  $\frac{1}{4}$  S 3° 13 S.  
 A pale n. grn, 6 ins. diam., bears S. 67  $\frac{3}{4}$ ° W., 55 lbs. dist., marked  $\frac{1}{4}$  S 15° 13 S.; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of ev.  
 42.00 Top of N. slope of round mountain, 200 ft. above gulch,  
 47.00 Begin steep descent.  
 65.00 Gulch, 275 ft. below slope of mountain, 20 lbs. wide, course S. W.; ascend.  
 74.00 Grass dense bush, bears N. and S.  
 78.00 Ridge, 100 ft. above gulch, bears N. E. and S. W.; descend.  
 80.00 Show ev. of sres. 3, 4, 9 and 10.  
 Land, mountainous and gently rolling.  
 Soil, gravelly and stony; 3rd and 4th rates.  
 Timber, scattering oak and pale n. grn; undergrowth, oak, pale n. grn and Laurel.  
 Mountainous or land covered with dense undergrowth, 64.00 elev.

N. 0° 02' W. on a random line bet. sres. 3 and 4.  
 40.00 Set temp.  $\frac{1}{4}$  sec. ev.  
 80.00 Enter set N. body of Sp. 3 lbs. W. of ev. of sres. 3, 4, 33 and 34, as first for described.  
 Shows S. mm  
 S. 0° 01' E., on a true line bet. sres. 3 and 4.  
 Over mountainous land, ascending through heavy oak and white timber.  
 4.00 Ridge, bears E. and W.; descend.  
 6.70 Gulch, 20 lbs. wide, course N.; ascend.  
 27.00 Ridge, 300 ft. above gulch, bears N. E. and S. W.; descend.  
 35.20 Gulch, 15 lbs. wide, course S. W.; ascend.  
 40.00 Set a limestone, 18x12x10 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on W. face, from which  
 A larval, 6 ins. diam., bears S. 46  $\frac{1}{4}$ ° E., 66 lbs. dist., marked  $\frac{1}{4}$  S 3° 13 S.  
 A larval, 10 ins. diam., bears N. 52° W., 35 lbs. dist., marked  $\frac{1}{4}$  S 4° 13 S.; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, W. of ev.  
 42.00 Ridge, bears E. and W.; descend.

Chains  
59.111 Gulch, 20 lbs. wide, course W.; as end.  
65.00 Ridge, bars E. and W.; as end.  
71.85 Gulch, 130 ft. below ridge, 30 lbs. wide, course, W.; as end  
80.00 Str. ev. of sres. 3, 4, 9 and 10.  
Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rate.  
Timber, oak, cedar and laurel; mesquite, oak and laurel.  
Mountainous or heavily timbered land, 80.00 chs.  
November 3, 1904.

November 4: At 7<sup>h</sup> 25<sup>m</sup> a.m., l.m.t., I set off  $31^{\circ}28'N$  on the lat. arc;  ~~$15^{\circ}19'S$~~  on the decl. arc and determine a meridian with the solar at the ev. of sres. 4, 5, 32 and 33, on the S. bay of the Sp., as heretofore described.

Shower. From  
N.  $0^{\circ}02' W.$ , bet. sres. 32 and 33.

Over level land.

5.00 Dry wash, 30 lbs. wide, course S. E.  
15.05 Wire fence, bars E. and W.  
34.00 Dry wash, 40 lbs. wide, course S. W.; old reservoir, bars 3 chs. W.  
34.68 Wire fence, bars E. and W.  
40.00 Set a conglomerate stone,  $20 \times 5 \times 8$  ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on W. face; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of ev.  
50.00 Adobe house, bars 3 chs. W.  
52.50 Well and horse power pump, bars 120 lbs. W.  
55.00 Corral, bars 1 ch. E.  
56.17 Wire fence, bars E. and W.  
62.00 Level and enter rolling land.  
80.00 Set a conglomerate stone,  $20 \times 5 \times 5$  ins., 15 ins. in the ground, for ev. of sres. 28, 29, 32 and 33, marked with 1 notch on S. and 4 notches on E. edge; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of ev.  
Land, level and rolling.  
Soil, rich and gravelly loam and stony; 1st, 2nd and 3rd rate.  
No timber.

S.  $89^{\circ}58' E.$ , on a random line bet. sres. 28 and 33.

40.00 Set pump.  $\frac{1}{4}$  sec. ev.  
80.00 Intersect N. and S. line 15 lbs. S. of ev. of sres. 27, 28, 33 and 34.  
Shower. From

BOOK 1849

Chains  
 89°56' N. on a true line bet. sres. 28 and 33.  
 Over rolling land.  
 8.90 Old road, bears N. and S.  
 16.00 Enter heavy oak timber, bears N. W. and S. E.  
 41.02 Set a small spruce stump, 20 x 10 x 8 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on N. face, from which  
 An oak, 20 ins. diam., bears N. 10 $\frac{1}{2}$ ° E., 76 lbs. dist., marked  $\frac{1}{4}$  S 23 B S.  
 An oak 3 ins. diam., bears S. 24 $\frac{1}{2}$ ° W., 84 lbs. dist., marked  $\frac{1}{4}$  S 33 B S.  
 61.00 Enter valley, bears N. E. and S. W.; heavy oak timber.  
 62.00 Dry wash, 20 lbs. wide, course S. W.  
 73.00 Grand valley and enter rolling land.  
 80.04 The ev. of sres. 28, 29, 32 and 33.  
 Land, rolling and level.  
 Soil, rich and gravelly loam and stones; 1st, 2nd and 3rd rates.  
 Timber, oak.  
 Heavily timbered land, 45 chs.

N. 0° 02' W. bet. sres. 28 and 29.  
 Over rolling land.  
 27.00 Draw, 2 chs. wide, course S. E. ascend  
 36.00 Divide, bears E. and W. descend.  
 40.00 Set a conglomerate stone, 20 x 8 x 6 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on N. face and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of ev. Site impracticable.  
 56.00 Enter heavy oak timber, bears E. and W.  
 71.15 Bench, 200 ft. below divide, 25 lbs. wide, course N. E.; ascend. heavy timber.  
 80.00 Set a conglomerate stone, 20 x 10 x 4 ins., 15 ins. in the ground, for ev. of sres. 20, 21, 28 and 29, marked with 2 notches on S. end and 1 notch on E. edge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  high, W. of ev. Site impracticable.  
 Land rolling and mountainous.  
 Soil, gravelly loam and stones; 2nd, 3rd and 4th rates.  
 Timber, oak.  
 Mountainous or heavily timbered land, 44.00 chs.  
 November 4: At this ev. I set off <sup>15° 25' E.</sup> ~~15° 25' S.~~ on the decl. arc, and at 12<sup>h</sup> 2<sup>m</sup> l.m.t., observed the sun on the meridian; the resulting lat. is 31° 30' N

N 89° 56' E., on random line bet. sres. 21 and 28.  
 40.00 Set Imp.  $\frac{1}{4}$  sec. ev.  
 79.94 Enter set N. and S. line 12 lbs. N. of ev. of sres. 21, 22, 27 and 28.



Chains

3 pines & run  
 N. 89° 59' W., over a low hill bet. secs. 21 and 28.  
 Over rolling land, ascending through heavy oak timber.  
 37.00 Ridge, 250 ft. above sec. cor. bears E. and S.W.; ascend.  
 39.47 Set a malpais stone, 18 x 14 x 10 ins., 12 ins. in the ground, for  
 1/4 sec. cor. marked 1/4 on N. face, from which  
 An oak, 9 ins. diam., bears N. 70° E., 105 lbs. dist., marked  
 1/4 S 21 B S.  
 A pale negro, 12 ins. diam., bears S 85° W., 41 lbs. dist., marked  
 1/4 S 25 B S; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,  
 N. of cor.  
 66.00 Gulch, 200 ft. below ridge, 25 lbs. wide, course N. E.; ascend.  
 70.00 Dip, bears N. and S.; thence along S. slope of ridge.  
 74.00 Enter heavy timber, bears N. E. and S. W.  
 79.94 Set cor. of secs. 20, 21, 28 and 29.  
 Land, mountains and rolling.  
 Soil, finally, stony and rocky; 3rd and 4th rate.  
 Timber, oak and scattering pale negro.  
 Mountains or heavily timbered land, 79.94 chs.

N. 0° 02' W., bet. secs. 21 and 21.  
 Over mountains land, ascending.  
 5.00 Enter heavy oak timber, bears N. W. and S. E.  
 6.00 Ridge, bears E. and W.; ascend over broken ground.  
 16.00 Gulch, 20 lbs. wide, course E.; have heavy timber and ascend.  
 30.00 Ridge, 200 ft. above gulch, bears E. and W., ascend through  
 heavy oak timber.  
 40.00 Set a sandstone, 18 x 10 x 4 ins., 12 ins. in the ground, for 1/4 sec.  
 1/4 cor. marked 1/4 on N. face, from which  
 An oak, 12 ins. diam., bears N. 39° E., 27 lbs. dist., marked  
 1/4 S 27 B S.  
 An oak, 10 ins. diam., bears S. 42 1/2° W., 50 lbs. dist., marked  
 1/4 S 25 B S; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,  
 N. of cor.  
 47.00 Enter dense oak bush, bears E. and N.  
 52.50 Gulch, 300 ft. below ridge, 40 lbs. wide, course N. W.; have  
 heavy timber and dense bush and ascend.  
 63.60 Ridge, bears E. and N.; enter heavy oak timber, bears N. E. and S. W.  
 76.00 Ascend.  
 80.00 Set a conglomerate stone, 18 x 8 x 6 ins., 12 ins. diam., for cor. of secs. 16, 17, 20 and 21;  
 marked with 3 notches on S. face and 4 notches on E. edge, from which

Chain  
K

An oak, 9 ins. diam., bears S. 85 1/2° E, 132 lbs. dist., marked S 22 S R 17 E S 21 B S.

An oak, 6 ins. diam., bears S. 89° W, 36 lbs. dist., marked S 22 S R 17 E S 21 B S.

An oak, 8 ins. diam., bears N. 54 1/2° W, 69 lbs. dist., marked S 22 S R 17 E S 17 B S; no other trees within limit, and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.

Land, mountainous and broken.

Soil, gravelly stony and rocky; 3rd and 4th rate.

Timber, oak; undergrowth, oak.

Mountainous, heavily timbered or land covered with dense undergrowth, 80.00 lbs.

November 4, 1914.

November 5: At 7:30 a.m. l.m.t., I set off ~~15:37~~ on the lat. and on the circ. arc, and determine a meridian with the solar at the cor. of sres. 16, 17, 20 and 21.

- Phases & run  
S. 89° 59' E, on a random line bet. sres. 16 and 21.
- 41.00 Set temp. 1/4 cor. cor.
- 80.04 Intersect N. and S. line 2 lbs. N. of cor. of sres. 15, 16, 21 and 22.  
Phases & run  
N. 89° 58' W, on a true line bet. sres. 19 and 21  
Dirt mountainous land descending through heavy oak timber.
- 9.45 Gulch, 20 lbs. wide, course W. N. W.; ascend.
- 15.00 Ridge, bears N. W. and S. E.; descend.
- 31.40 ~~Gulch~~ ~~and rock canyon~~, 300 ft. below ridge, 60 lbs. wide, course N. W.; ascend.
- 41.00 Set a quartzite stone, 18 x 10 x 2 ins., 12 ins. in the ground, for 1/4 cor. cor. marked 1/4 on N. face, from which  
K  
An oak, 8 ins. diam., bears S. 45° W, 68 lbs. dist., marked 1/4 S 21 B S.
- An oak, 9 ins. diam., bears N. 3° W, 50 lbs. dist., marked 1/4 S 16 B S; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
- 47.80 Ridge, bears E. and W.; descend.
- 53.60 Gulch, 10 lbs. wide, course N. E.; ascend.
- 62.00 Ridge, bears N. E. and S. W.; descend.
- 81.04 In cor. of sres. 16, 17, 20 and 21.  
Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rate.  
Timber, oak; a few walnut and cottonwoods in canyon.

Chains

Mountainous or heavily timbered land, 80.00 chs.

N. 0° 02' N., Cr. sec. 16 and 17.

Over mountainous land, descending through heavy oak timbered

1.70 Gulch, 14 lbs. wide, course W.; ascend.

7.85 Top of hill; descend.

15.00 Gulch, 15 lbs. wide, course W.; ascend.

22.00 W. slope of ridge; descend.

28.00 Gulch, 20 lbs. wide, course N. W.; ascend.

40.00 Ridge, bears N. W. and S. E.

Set a porphyry stone, 18x16x12 ins., 12 ins. in the ground, for 1/4 sec. cr. marked 1/4 on W. face; from which  
An oak, 20 ins. diam., bears N. 86 1/2° E., 255 lbs. dist., marked 1/4 S 16 B S.

An oak, 10 ins. diam., bears S. 84 1/2° W., 70 lbs. dist., marked 1/4 S 17 B S; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cr. descend through dense oak brush.

59.00 Road, bears E. and W.

59.70 Road back canyon, 1 ch. wide, course W.; travel dense brush and ascend.

62.15 Wire fence, bears N. 55° W., and S. 55° E.

62.50 Peter Hanson's camp bears bears 6 chs. E.

68.00 Wire fence, bears N. E. and S. W.

80.00 Set a porphyry stone, 18x12x10 ins., 12 ins. in the ground, for cr. of sec. 8, 9, 16 and 17, marked with 4 notches on S. and E. rdgrs.; from which

An oak, 10 ins. diam., bears N. 10 1/2° E., 54 lbs. dist., marked S 22 S R 17 E S 9 B S.

An oak, 12 ins. diam., bears S. 85° E., 24 lbs. dist., marked S 22 S R 17 E S 16 B S.

An oak, 10 ins. diam., bears S. 47° W., 30 lbs. dist., marked S 22 S R 17 E S 17 B S.

An oak, 12 ins. diam., bears N. 87° W., 9 lbs. dist., marked S 22 S R 17 E S 8 B S; and raise a mound of stone, 2 ft. base, 1 1/2 high, W. of cr.

Land, mountainous.

Soil, gravelly, stony and rocky; 3rd and 4th rates.

Timber, oak and scattering cedar.

Mountainous, heavily timbered or land covered with dense undergrowth, 80.00 chs. Numbers: At this cr. Port off <sup>15° 43' S</sup> on the creek and under a 6" h. t. observed the sun on the meridian, the resulting latid 31° 32' N

Chains  
 S. 89° 58' E, in a random line bet. sres. 9 and 16.  
 40.00 Set a maple 3rd cor.  
 80.02 Intersect N. and S. line 5 lbs. S. of cor. of sres. 9, 10, 15 and 16.  
 Shaver's run  
 N. in a four line bet. sres. 9 and 16.  
 Over mountainous land, descending.  
 8.40 Gulch, 30 lbs. wide, course W.; ascend, through dense brush  
 22.00 Ridge, cross N. and S.; descend.  
 27.50 Gulch, 20 lbs. wide, course W. S. W.  
 29.20 Wire fence, cross N. and S.  
 40.01 Set a malpais stone, 18 x 10 x 8 ins. 12 ins. in the ground, for 1/4 cor.  
 cor. marked 1/4 on N. face, from which  
 A mosquito, 12 ins. diam., bears N. 62° E., 131 lbs. dist., marked  
 1/4 S. 9° 13 S.  
 A mosquito, 8 ins. diam., bears S. 65° W., 106 lbs. dist., marked  
 1/4 S. 16° 13 S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,  
 N. of cor. From this cor. cabin and blocks with slope bear 15  
 chs S.  
 44.15 Gulch, 15 lbs. wide, course S.  
 60.20 Gulch, 15 lbs. wide, course S. W.  
 70.00 Wire fence, fence, cross N. and S.; bear dense brush, cross N. and S.  
 80.02 Set cor. of sres. 8, 9, 16 and 17.  
 Land, mountainous.  
 Soil, gravelly and stony; 3rd and 4th cuts.  
 Timber, oak and mosquito; matorgrass, oak, mosquito and  
 Aspen.  
 Mountainous or land covered with dense undergrowth, 80.02 chs.

N. 0° 02' W., bet. sres. 8 and 9.  
 Over mountainous land, through dense brush.  
 3.50 Dry wash, 15 lbs. wide, course W.  
 16.00 Dry wash, 20 lbs. wide, course W.  
 29.00 Dry wash, 30 lbs. wide, course W.  
 35.00 Dry wash, 15 lbs. wide, course W.; bear dense brush and begin  
 ascent S. slope of ridge.  
 40.00 Set a granite stone, 18 x 12 x 10 ins. 12 ins. in the ground, for  
 1/4 cor. marked 1/4 on N. face, from which  
 A mosquito, 8 ins. diam., bears N. 33 3/4° E., 141 lbs. dist., marked  
 1/4 S. 9° 13 S.  
 A hawk, 14 ins. diam., bears S. 60° W., 70 lbs. dist., marked  
 1/4 S. 8° 13 S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,

Chain

N. of cor.  
66.00 Bridge, 500 ft. above gulch, bears N. W. and S. E., descends through heavy oak timber.  
80.00 Set a porphyrite stone, 18x10x5 ins., 1 1/2 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked with 5 notches on S. and 4 notches on E. edge; from which  
An oak, 18 ins. diam., bears N. 17 1/2° E., 47 lbs. dist. marked S 22 S R 17 E S 4 13 S.  
An oak, 7 ins. diam., bears S 58 3/4° W., 53 lbs. dist., marked S 22 S R 17 E S 8 13 S.  
An oak, 8 ins. diam., bears N. 64 1/4° W., 64 lbs. dist., marked S 22 S R 17 E S 5 13 S.; no other trees within limit; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Site impracticable.  
Ground, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, oak, undergrowth, oak and laurel.  
Mountainous <sup>heavily timbered</sup> land covered with some undergrowth, 80.00 chs.  
November 5, 1904.

November 6, 1904, 2:20<sup>pm</sup> a.m., l.m.t., set off 31032 from the last cor. <sup>15° 55' S</sup> ~~10° 22' N~~ on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 8 and 9.

Skinner & run  
E. on a random line bet. <sup>secs.</sup> 4 and 9. 110.00 bet temp. 4 sec cor. 80.00 intersect N. and S. line at cor. of secs. 3, 4, 9 and 11. Skinner & run, N. 112° a true line bet. secs 4 and 9.

Over mountainous land, descending.

7.00 Gulch, 10 lbs. wide, course S.; ascend.  
11.00 Top of S. slope of ridge, descend.  
17.00 Enter some oak brush, bears N. W. and S. E.  
20.00 Enter valley, bears N. W. and S. E.  
33.30 Gulch, 40 lbs. wide, course N. W.  
38.30 Gulch, 30 lbs. wide, course N.  
40.00 Set a porphyrite stone, 18x11x4 ins., 1 1/2 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; from which  
An oak, 6 ins. diam., bears S. 41° E., 37 lbs. dist., marked 1/4 S 9 13 S.  
An cedar, 8 ins. diam., bears N. 61° E., 66 lbs. dist., marked 1/4 S 4 13 S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.  
46.00 Loose scully; ascend.  
80.00 The cor. of secs. 4, 5, 8 and 9.

Chains

Land, mountains and level.  
Soil, gravelly and stony; 3rd and 4th roots.  
Timber, scattering oak, cedar and pine; undergrowth, mesquite,  
sage and laurel.  
Mountains or land covered with dense undergrowth, 80.00 chs.

N. 0° 02' W., on a random line bet. sres. 4 and 5.

40.00 Set trap  $\frac{1}{4}$  sec. cor.

80.00 Put a set N. body of Sp. 7 lns. E. of cor. of sres. 4, 6, 32 and 33.  
as heretofore described.

Phases & run

S. 0° 05' E., on a true line bet. sres. 4 and 5.

Over mountainous land, ascending.

2.00 Ridge, bears E. and W., descend.

9.50 Gulch, 20 lns. wide, course N.; ascend.

15.00 Ridge, bears E. and W.; descend. through dense brush

27.80 Gulch, 40 lns. wide, course N. W.; ascend.

34.50 Ridge, bears E. and W., descend.

37.50 Gulch, 20 lns. wide, course S. E.

40.00 Set a porphyry stone, 18 x 8 x 6 ins., 12 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face; from which

An oak, 5 ins. diam., bears N. 41° E., 11 lns. dist., marked.

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

An oak, 12 ins. diam., bears S. 51  $\frac{1}{2}$ ° W., 96 lns. dist., marked  
 $\frac{1}{4}$  S 5 B S; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high,  
W. of cor.

42.50 Dry wash, 40 lns. wide, course N.

55.00 Dry wash, 40 lns. wide, course N., ascend.

66.00 Ridge, bears E. and W.; descend.

78.00 Gulch, 20 lns. wide, course N.; broad dense brush, ascend.

80.00 Set cor. of sres. 4, 5, 8 and 9.

Land, mountains.

Soil, gravelly and stony; 4th roots.

Timber, scattering oak and cedar.

Mountains or land covered with dense undergrowth, 80.00 chs.

November 6, 1904.

November 7: At 7:20<sup>am</sup> p. m., l. m. t., set off 31028' on the lat  
rod; <sup>16° 13' S.</sup> set on the decl. arc; and determine azimuth  
with the solar at the cor. of sres. 5, 6, 31 and 32, on the S. body of  
the Sp. as heretofore described.

Chains  
 Placed Iron  
 N. 0° 03' W. bet. sec. 31 and 32.  
 over gently rolling land.  
 7.00 Dry wash, 15 lbs. wide, course E.  
 11.00 Enter dry wash, course S. E.  
 17.00 Leave wash, course S.  
 40.00 Set a conglomerate stone, 20 x 6 x 5 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.  
 80.00 Set a conglomerate stone, 20 x 8 x 5 ins., 15 ins. in the ground for cor. of sec. 29, 30, 31 and 32, marked with a notch on E. and a notch on E. ridge; and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.  
 Land, gently rolling.  
 Soil, gravelly loam, and rocks.  
 No timber.

S. 89° 58' E, on a random line bet. sec. 29 and 32.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 79.98 Enter sec. N. and S. line 5 lbs. S. of cor. of sec. 28, 29, 32 and 33.  
 Placed Iron  
 N. on a true line bet. sec. 29 and 32.  
 Over rolling land.  
 13.00 Dry wash, 30 lbs. wide, course S. E.  
 39.99 Set a sandstone, 20 x 10 x 10 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face; dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3  $\frac{1}{2}$  ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.  
 51.20 Dry wash, 30 lbs. wide, course S. E.  
 55.00 A sandy  
 59.00 Sup. bar. N. W. and S. E. Thence over gradually rising ground,  
 79.98 S. cor. of sec. 29, 30, 31 and 32.  
 Land, level and rolling.  
 Soil, gravelly loam; a red and red rock.  
 No timber.

N. 89° 58' W, on a random line bet. sec. 30 and 31  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 78.98 Enter sec. N. bay. of 8 lbs. S. of cor. of sec. 25, 30, 31 and 34, as front of cor. described.  
 Placed Iron

Chains

S. 89° 55' E, run up to top line bet. sec. 30 and 31.

Two spurs extending S., through scattering oak timber.

38.98  
39.98

Set a sandstone, 18 x 10 x 10 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face, from which

An oak, 20 ins. diam., bears N. 45° W., 150 lbs. dist., marked 1/4 S 30 B S; no other trees within limit, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable

45.00 Layer mountainous, there are smooth ground, sloping S. E.

78.98 In cor. of sec. 29, 30, 31 and 32.

Land, mountainous and gently rolling.

Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.

Timber, scattering oak and oak.

Mountainous land, 45.00 lbs.

Number 77 At this cor. Set off 16° 19' S on the decl. and at 12 1/2 m. l. n. t., observe the sun in the meridian; the resulting lat. is 31° 29' 7" or within 1/2 of the proper lat.

N. 0° 03' W., bet. sec. 29 and 30.

Ascending over gently rolling land.

12.30 Draw, 20 lbs. wide, course S. E. ascend.

40.00 Set a conglomerate stone, 18 x 12 x 8 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

55.00 Enter heavy oak timber, bears N. W. and S. E.

60.00 Draw, 80 lbs. wide, course S. E.; bear heavy oak timber, bears N. W. and S. E.

70.00 Top of divide, 200 ft. above sec. cor., crossed through heavy oak timber and brush.

80.00 Set a sandstone, 20 x 8 x 8 ins., 15 ins. in the ground, for cor. of sec. 19, 20, 29 and 30, marked with 2 notches on S. and 5 notches on E. edge, from which

An oak, 6 ins. diam., bears N. 56 1/2° E., 100 lbs. dist., marked S 22 S R 17 E S 20 B S.

An oak, 8 ins. diam., bears S 54° E., 13 lbs. dist., marked S 22 S R 17 E S 29 B S.

An oak, 12 ins. diam., bears S. 21° W., 18 lbs. dist., marked S 22 S R 17 E S 30 B S.

An oak, 8 ins. diam., bears N. 69 1/4° W., 97 lbs. dist., marked S 22 S R 17 E S 19 B S.

Land, gently rolling and mountainous.

Soil, gravelly loam and stony; 2nd, 3rd and 4th rate.



Chains

Timber, oak, undergrowth, oak and laurel.  
Mountains, hairy timber or land covered with dense under-  
growth, 80.00 chs.

E. on a random line bet. secs 20 and 29.

41.111 Set temp.  $\frac{1}{4}$  sec. ev.

79.98 Intersect N. and S. line 5 lbs. S. of ev. of secs. 20, 21, 28 and 29.

Shiner & run

S. 89° 58' N., on a true line bet. secs. 20 and 29.

Over mountainous land, ascending.

6.00 Enter heavy oak timber, bears N. and S.

32.111 Bridge, bears N. E. and S. W.; descend.

39.99 Set a well paired stone, 18x12x10 ins., 12 ins. in the ground, for  $\frac{1}{4}$

sec. ev. marked  $\frac{1}{4}$  on N. face, from which

An oak, 6 ins. diam., bears S. 32° W., 101 lbs. dist., marked  $\frac{1}{4}$  S 29 13 S.

An oak, 8 ins. diam., bears N. 27° W., 53 lbs. dist., marked

$\frac{1}{4}$  S 21 13 S

41.111 Gulch, 15 lbs. wide, course N.; ascend.

43.111 Spur, ex. trenching N.; descend.

47.111 Gulch, 20 lbs. wide, course N. begin ascent a long N. slope of  
ridge through dense brush.

79.98 S. W. ev. of secs. 19, 20, 29 and 30.

Land, mountainous.

Soil, gravelly, stony and rocky; 3rd and 4th rates.

Timber, oak, and scattering cedar and laurel, undergrowth,  
oak and laurel.

Mountains, hairy timber or land covered with dense  
undergrowth, 79.98 chs.

November 7, 1904.

November 8: At 7<sup>h</sup> 35<sup>m</sup> a.m., l.m.t., I set off 31° 29' on the  
lat. arc. <sup>167° 30' S</sup> ~~167° 30' S~~ on the circ. arc; and determined a meri-  
dian with the solar at the ev. of secs. 19, 20, 29 and 30.

Shiner & run

N. 89° 55' W., on a random line bet. secs. 19 and 30

41.111 Set temp.  $\frac{1}{4}$  sec. ev.  
78.88 Intersect N. body of Sp. 3 lbs. S. of ev. of secs. 19, 24, 25 and 30

Shiner & run

S. 89° 56' E on a true line bet. secs. 19 and 30.

Over mountainous land, a long N. slope of divide through heavy  
oak, timber and dense brush.

32.50 Enter heavy timber, bears N. E. and S. W.

BOOK 1849

Chains  
38.88 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face, and raised on mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. sets impracticable.

54.00 Enter heavy oak timber, bears N. and S.

78.88 In cor of secs. 19, 20, 29 and 30.  
Land, mountainous and broken.  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, oak, maple, growth, oak and larch.  
Mountainous, heavily timbered or land covered with dense undergrowth, 78.88 chs.

N. 0° 03' N., bet. secs. 19 and 20.  
Poor mountainous land, descending through heavy oak timber and dense brush.

27.40 Gulch, 300 ft. below sec. cor., 15 lbs. wide, course N. E.; bear dense brush, ascend.

30.00 Top of E. slope of quartzite ridge, descend.

40.00 Set a quartzite stone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
An oak, 24 ins. diam., bears S. 87° E., 76 lbs. dist., marked  $\frac{1}{4}$  S 20 13 S.

An oak, 8 ins. diam., bears N. 35  $\frac{3}{4}$ ° N., 85 lbs. dist., marked  $\frac{1}{4}$  S 19 13 S.

50.00 Gulch, 15 lbs. wide, course S. E.; ascend.

61.00 Bridge, bears E. and W.; descend.

70.60 Gulch, 15 lbs. wide, course N. E.; ascend.

78.00 W. slope of mountain; descend.

79.50 Set a quartzite stone, 20x8x6 ins., 15 ins. in the ground, for witness cor. to cor. of secs. 17, 18, 19 and 20, marked with 3 notches on S. and 5 notches on E. edge; from which

A cedar, 12 ins. diam., bears N. 34  $\frac{3}{4}$ ° E., 55 lbs. dist., marked W 6 S 22 S R 17 E S 17 13 S.

An oak, 6 ins. diam., bears S 57  $\frac{1}{2}$ ° E., 24 lbs. dist., marked W 6 S 22 S R 17 E S 20 13 S.

An oak, 6 ins. diam., bears S. 41° N., 40 lbs. dist., marked W 6 S 22 S R 17 E S 19 13 S.

An oak, 6 ins. diam., bears N. 65  $\frac{1}{2}$ ° W., 56 lbs. dist., marked W 6 S 22 S R 17 E S 18 13 S.

80.00 Falls in head of rocky slide, course N.  
Land, mountainous.

Soil, gravelly, stony and rocky; 3rd and 4th rates.

Chains

Timber, oak, and scattering cedar and larch; undergrowth, oak and larch.

Mountains, heavily timbered or land covered with dense undergrowth, 80.00 chs.

November 8: At this ev. I set off  $16^{\circ}57'S$  on the decl. arc, and at  $12^{\frac{1}{4}} m$  l. m. t. above the sun on the meridian, the resulting lat. is.  $31^{\circ}31'N$

40.00 N.  $89^{\circ}58'E$ , on a random line bet sres. 17 and 20, from ev point  
Set temp.  $\frac{1}{4}$  sec. ev.

80.10 Enter set N. and S. line 5-ths N. of ev. of sres 16, 17 20 and 21.

Shaded Brown

N. on a true line bet. sres. 17 and 20.

8.00 Over mountainous land, descending through heavy oak timber.  
Gulch, 10 chs. wide, course N. N.; ascend.

20.00 Bridge, bears N. E. and S. W., descend. over low spur and broken ground.

40.05 Set 2 sandstone,  $18 \times 12 \times 10$  ins, 12 ins. in the ground, for  $\frac{1}{4}$  sec. ev. marked  $\frac{1}{4}$  on N. face; from which

An oak, 25 ins, diam., bears  $S. 4^{\circ}W.$ , 153 chs. dist., marked  $\frac{1}{4} S. 21 B S.$

An oak, 6 ins. diam., bears  $N. 21^{\frac{1}{2}}W.$ , 22 chs. dist., marked  $\frac{1}{4} S. 14 B S.$ ; and raised a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of ev.

58.00 Gulch, 1 ch. wide, course N. thence over N. slope.

67.80 Gulch, 1 ch. wide, course N.; ascend.

80.10 Set ev. point of sres. 17, 18, 19 and 20.

Land, mountainous and broken.

Soil, gravelly, stony and rocky; 3rd and 4th rate.

Timber, oak and scattering cedar and larch; undergrowth, oak and larch.

Mountains or heavily timbered land, 80.10 chs.

40.00 N.  $89^{\circ}56'W.$ , on a random line bet. sres. 18 and 19, from ev point  
Set temp.  $\frac{1}{4}$  sec. ev.

78.70 Enter set N. bay. of Sp. at ev. of sres. 13, 18, 19 and 24, as heretofore described.

Shaded Brown

S.  $89^{\circ}56'E$ , on a true line bet. sres. 18 and 19.

Over mountainous land, ascending through heavy oak timber and dense brush.

BOOK 1849

- Chains
- 407.00 Ridge, bears N. W. and S. E.; descend.
- 9.80 Bear heavy timber, bears N. E. and S. W.
- 15.30 Quartzite column, 30x30 ft., 60 ft. high, bears 40 lbs. S.
- 18.25 Small gulch, 500 ft. below top of ridge, course S.; ascend.
- 35.00 Ridge, 200 ft. above gulch, bears N. W. and S. E.; descend.
- 38.70 Set a quartzite stone, 18x9x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  s.d. cor. marked  $\frac{1}{4}$  on N. face, from which  
 an oak, 9 ins. diam., bears S.  $73^{\circ}$  E., 20 lbs. dist., marked  $\frac{1}{4}$  S. 19 13 S.; no other tree within limit, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pilot impracticable.
- 48.70 Enter heavy oak timber, bears N. E. and S. W.
- 66.75 Gulch, 400 ft. below top of ridge, 15 lbs. wide; road bears N. E. and S. W.; ascend.
- 78.70 Set cor. point of s.d.s. 17, 18, 19 and 20.

Land, mountainous.  
 Soil, gravelly, stony and rocky; 3rd and 4th rate.  
 Timber, oak, and scattering cedar and larch; undergrowth, oak, larch and manzanita.  
 Mountainous, mainly timbered or land covered with dense undergrowth, 78.70 lbs.

November 8, 1914.

November 9: At 7:30 a.m., l.m.t., & set off 31° 31' N on the lat. arc. ~~16° 47' S~~ on the decl. arc; and determine a meridian with the solar at the cor. point of s.d.s. 17, 18, 19 and 20.

Placed S. run  
 N.  $0^{\circ} 03'$  W., bet. s.d.s. 17 and 18., found cor. point.

Over mountainous land, descending through heavy oak timber and dense brush,

- 9.00 Gulch, 100 ft. below s.d. cor.; 20 lbs. wide, course E.; road, bears E. and W.; ascend.
- 17.70 Ridge, bears E. and W.; timber over broken ground.
- 40.00 Set a sandstone, 20x10x10 ins., 15 ins. in the ground, for  $\frac{1}{4}$  s.d. cor. marked  $\frac{1}{4}$  on W. face;  
 an oak, 12 ins. diam., bears N.  $49^{\circ}$  E., 41 lbs. dist., marked  $\frac{1}{4}$  S 17 13 S.  
 An oak, 24 ins. diam., bears N.  $71^{\circ}$  W. 22 lbs. dist., marked  $\frac{1}{4}$  S 18 13 S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
- 52.00 Ridge, bears N. E. and S. W.; descend.

Chairs  
811.00

Set a line, 18x12x10 ins, 12 ins. in the ground, for ev. of  
sres. 7, 8, 17 and 18, marked with 4 notches on S. and 5 notches  
on E. side, from which  
An oak, 8 ins. diam., bears N. 52 1/2° E, 37 lbs. dist., marked  
S 22 S R 17 E S 8 B S.  
An oak, 10 ins. diam., bears S. 1° E, 48 lbs. dist., marked  
S 22 S R 17 E S 17 B S.  
An oak, 6 ins. diam., bears S 70° W., 28 lbs. dist., marked  
S 22 S R 17 E S 18 B S.  
An oak, 24 ins. diam., bears N. 71 3/4° W., 22 lbs. dist., marked  
S 22 S R 17 E S 17 B S.; and raise a mound of stone, 3 ft. base,  
2 ft. high, N. of ev.  
Ground, mountainous.  
Soil, gravelly and stony; 2nd and 3rd rate.  
Under, oak; undergrowth, oak and laurel.  
Mountainous, heavily timbered or land covered with dense  
undergrowth, 80.00 chs.

E. on a random line bet sres. 8 and 17.

411.00

Set temp. 1/4 sec. ev.

811.04

Intersect N. and S. line at ev. of sres. 8, 9, 16 and 17.

Shaded Brown

N. on a random line bet. sres. 8 and 17.

Over mountainous land, descending through heavy oak timber.

5.111

Gwleh, 30 lbs. wide, course S. W.; ascend.

8.111

Bridge, bears N. E. and S. W.; descend.

15.111

Gwleh, 20 lbs. wide, course S. W.; ascend.

31.111

Bridge, 300 ft. above sres. ev.; bears N. and S.; descend.

411.12

Set a sandstone, 18x12x10 ins, 12 ins. in the ground, for 1/4 sec.  
ev. marked 1/4 on N. face; from which

An oak, 6 ins. diam., bears S. 45° W.; 9 lbs. dist., marked  
1/4 S 17 B S.

An oak, 6 ins. diam., bears N. 73 3/4° W., 14 lbs. dist.; marked  
1/4 S 8 B S.; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,  
N. of ev.

48.15

Gwleh, 15 lbs. wide, course S. W.; ascend.

64.20

Bridge, 200 ft. above gwleh, bears N. W. and S. E.; descend.

71.50

Road, bears N. W. and S. W.

72.50

Gwleh, 1 ch. wide, course N. W.; ascend.

78.111

Bridge, bears E. N. E. and W. S. W.; descend.

811.14

Set ev. of sres. 7, 8, 17 and 18.

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6 chains

Land, mountainous.  
Soil, gravelly and stony; 3rd and 4th rates.  
Timber, oak; undergrowth, oak and laurel.  
Mountainous or heavily timbered land, 80.04 chs.  
Mercury: at this cor. S set off 16°54' on the decl. arc,  
and at 12°57' l.m.t., observe the sun on the meridian. The re-  
sulting lat. is 31°32' or within 1' of the proper lat.

N. 89°56' W., on a random line bet. sres. 7 and 18.

40.00 Set temp. 4 sres. cor.

78.60 Intersect N. bay. of Sp. in lts. N. of cor. of sres. 7, 12, 13 and 18.  
as heretofore described.

Stamer S run

E. on a true line bet. sres. 7 and 18.

Over mountainous land, descending through heavy oak  
timber.

12.00 Gulch, 15 lts. wide; ascend. ~~course N.~~

18.00 Ridge, bars N. and S.; descend.

24.00 Gulch, 20 lts. wide, course N.; ascend.

38.60 Set a porphyry stone, 18 x 15 x 12 ins, 18 ins. in the ground,  
for 1/4 sres. cor. marked 1/4 on N. face; from which  
An oak, 8 ins. diam., bars N. 59 1/2° 54 lts. dist., marked  
1/4 S of 13 S.

An oak, 18 ins. diam., bars S. 76° W., 42 lts. dist., marked  
1/4 S 15 1/3 S; and raise a mound of sand, 2 ft. base, 1 1/2 ft. high,  
N. of cor.

45.00 Ridge, bars SE. and NW.; descend.

46.80 Gulch, 40 lts. wide, course N. W.; ascend.

54.60 Ridge, bars N. E. and S. W.; descend.

62.60 Gulch, 1 ch. wide, course, N. E.; ascend. This gulch is about  
800 ft. below cor. of sres. 7, 12, 13 and 18.

78.60 The cor. of sres. 7, 8, 17 and 18.

Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, oak and scattering cedar, laurel and pine; under-  
growth, oak and laurel.  
Mountainous or heavily timbered land, 78.60 chs.

1 N. 0°03' W., bet. sres. 7 and 8.

Over mountainous land, descending through heavy oak  
timber and some brush.

Chains

- 7.50 Road, bears E. and N.
- 8.75 Road beyond canyon, 1 ch. wide, course N.; ascend.
- 14.00 Adobe house, bears 4 chs. N.
- 15.00 Spur extending S. W.; descend.
- 18.50 Descend abruptly 75 ft.
- 18.80 Gulch, 20 chs. wide, course S. W.; ascend.
- 30.00 Spur, extending S. W.; descend.
- 33.00 Gulch, 15 chs. wide, course W.; ascend.
- 38.90 Rocky knoll, 500 ft. above canyon; turned along N. slope of mountain.
- 40.00 Set a porphyry stone, 18 x 12 x 12 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face, from which  
An oak, 12 ins. diam., bears S.  $87\frac{1}{2}^{\circ}$  E., 32 chs. dist., marked  $\frac{1}{4}$  S 8 13 S.
- An oak, 12 ins. diam., bears S.  $43^{\circ}$  W., 332 chs. dist., marked  $\frac{1}{4}$  S 4 13 S. and raised a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 74.00 Descend.
- 78.70 Gulch, 20 chs. wide, course N.; ascend.
- 80.00 Set a sandstone, 18 x 10 x 4 ins., 12 ins. in the ground, for cor. of  
ores. 5, 6, 7 and 8, marked with 5 inches on S. and E. edges, from which.  
An oak, 8 ins. diam., bears S  $72\frac{1}{2}^{\circ}$  E., 179 chs. dist., marked S 22 S R 17 E S 8 13 S.
- An oak, 18 ins. diam., bears S.  $43\frac{1}{2}^{\circ}$  W., 266 chs. dist., marked S 22 S R 17 E S 4 13 S.
- An oak, 8 ins. diam., bears N.  $53\frac{1}{2}^{\circ}$  W., 99 chs. dist., marked S 22 S R 17 E S 6 13 S.; no other tree within limit, and raised a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high; N. of cor. Pils impracticable.

Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, oak; undergrowth, oak and laurel.  
Mountainous, heavily timbered on land covered with dense undergrowth, 80.00 chs.

November, 9, 1904.

November 10: At 7h 25<sup>00</sup> p. m., l. m. t., I set off  $31^{\circ} 32'$  on the lat and  $17^{\circ} 4' S$ . I ran the decl. arc, and determined a meridian with the solar at the cor. of ores. 5, 6, 7 and 8.  
Threw down  
E. on a random line bet. ores. 5 and 8.

Chains  
40.00

Set temp.  $\frac{1}{4}$  sec. cor.  
80.02 Enter set N. and S. line 5' lts. S. of cor. sres. 4, 5, 8 and 9.

Placed I ram  
S  $89^{\circ}58'$  W, on a true line bet. sres. 5 and 8.  
Over mountainous land, ascending through heavy oak timber and dense brush.

6.00 Top of N. slope of mountain, heavy timber, from N.E. and S.W. descend.

39.50 Set a sandstone,  $18 \times 12 \times 5$  ins., 12 ins. in the ground, for witness cor. to  $\frac{1}{4}$  sec. cor. marked W  $6\frac{1}{4}$  on N. face. from which an oak, 12 ins. diam, bears N.  $52\frac{3}{4}^{\circ}$  E, 61 lts. dist., marked W  $6\frac{1}{4}$  S  $5^{\circ}13'$  S.

An oak, 18 ins. diam, bears S.  $31\frac{3}{4}^{\circ}$  W, 58 lts. dist., marked W  $6\frac{1}{4}$  S  $8^{\circ}13'$  S.

40.01 Falls in gulch, course N.

43.80 Cross gulch, course S.W. as usual.

65.00 Along edge of bluff, bears 10 lts. N.

70.00 Cross dense brush, bears N. and S.; descend.

80.00 The cor. of sres. 5, 6, 7 and 8.

Land, mountainous.  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, oak and laurel; underground, oak and laurel.  
Mountainous, heavy timbered or land covered with dense undergrowth, 80.02 lts.

N. on a random line bet. sres. 6 and 7.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

78.59 Enter set W. bay. of Sp. 5 lts. S. of cor. of sres. 1, 6, 7 and 12, as heretofore described.

Placed I ram.  
S.  $89^{\circ}58'$  E, on a true line bet. sres. 6 and 7.

Over rolling land, through heavy oak timber.

6.18 Wire fence, bears N. and S.

26.00 Gulch, 1 ch. wide, course S.

29.00 Gulch, 30 lts. wide, course S.W.

38.59 Set a sandstone,  $20 \times 8 \times 6$  ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face. from which an oak, 14 ins. diam, bears S.  $14\frac{1}{4}^{\circ}$  E, 161 lts. dist., marked  $\frac{1}{4}$  S  $7^{\circ}13'$  S.

An oak, 8 ins. diam, bears N.  $58^{\circ}$  W; 123 lts. dist., marked  $\frac{1}{4}$  S  $6^{\circ}13'$  S.



Chains  
42.80 Gulch, 30 lbs. wide, course S. W.; ascend over broken ground  
70.80 Top of hill and descend.  
74.30 Same gulch, 1 ch. wide, course N.  
78.59 S. W. cor. of sres. 5, 6, 7 and 8.  
Land, rolling and broken.  
Soil, gravelly and stony; 3rd and 4th rates.  
Timber, oak, undergrowth, oak and laurel.  
Barren timbered, or land covered with dense undergrowth, 78.59 ch.  
November 10: At this cor. I set off  $17^{\circ} 11' 5''$  for the decl. angle,  
and at  $12^{\circ} 5''$  l. n. t., above the sun on the meridian, the  
resulting lat. is  $31^{\circ} 52' 7''$

N. 0° 03' W., on a random line bet. sres. 5 and 6.  
40.00 Set temp.  $\frac{1}{4}$  sres. cor.  
80.05 Intersect N. bdy. of Sh. 17 lbs. E. of cor. of sres. 5, 6, 81 and 82.  
as heretofore described.  
Shower  $\frac{3}{4}$  in.  
S. 0° 10' E., on a true line bet. sres. 5 and 6.  
Very mountainous land, descending.  
6.00 Gulch, 24 lbs. wide, course S. W.; ascend.  
11.00 Ridge, bears E. and W.; descend.  
19.30 Gulch, 50 lbs. wide, course N.; ascend.  
34.00 Ridge, bears N. W. and S. E.; descend.  
38.80 Set a sandstone, 20 x 10 x 10 ins., 15 ins. in the ground, for  
witness cor. to  $\frac{1}{4}$  sres. cor. marked N 6  $\frac{1}{4}$  on N. face, from which  
An oak 100 ins. diam. bears S. 83° E., 229 lbs. dist., marked  
N 6  $\frac{1}{4}$  S 5 B S. neither true section line and range a mound  
of stone, 2 ft. base 12 ft. high, N. of cor. Not interchangeable.  
41.15 Fall in small gulch, course S. W.  
49.10 Gulch, 20 lbs. wide, course N.; ascend.  
67.10 Ridge, bears E. and W.; descend.  
78.60 Gulch, 20 lbs. wide, course N.; ascend.  
80.05 S. W. cor. of sres. 5, 6, 7 and 8.  
Land, mountainous!  
Soil, gravelly, stony and rocky; 3rd and 4th rates.  
Timber, scattering oak and mesquite.  
Mountainous land, 80.05 ch.

November 10, 1904.

General Description.  
This township is mostly mountainous, the extreme

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Southwestern portion being bar and rolling. The soil of the south tier of sec. is generally loam, 2nd and 3rd. rate. The soil of the remaining portion of the sp. is stony and rocky. The greater portion of the sp. is covered with an abundant growth of rich and nutritious grasses. Oak and cedar timber abounds in nearly all parts of the sp. There are several settlers in the sp. who have made some substantial improvements. Peter Jansen lives in sec. 16; Christopher Abner camps in n.e. 1/4 of Sec. 21 (no improvements);

Miller lives in sec. 34.  
*Philip Couper*  
 U.S. Deputy Surveyor.

For authority red ink corrections see Deputy's letter of Jan'y. 26, 1905.

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BOUNDARIES OF T. 22 S. R. 17 E.  
 Latitudes, Departures and Closing Errors.

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Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
Portion of N. Bdy. T. 22 S. R. 17 E.	East	26.00 ✓			26.00 ✓	
Portion of W. Bdy. T. 21 S. R. 17 E.	South	4.44 ✓		4.44 ✓		
Portion of N. Bdy. T. 22 S. R. 17 E.	East	452.50 ✓			452.50 ✓	
3 <sup>rd</sup> Guide Meridian East	South	480.00 ✓		480.00		
South Bdy. T. 22 S. R. 17 E.	N. 89° 58' W.	479.00	.28			479.00
West Bdy. T. 22 S. R. 17 E.	North	484.50	484.50			
Convergency					44	
Totals			484.78	484.44	478.94	479.00
			484.44			478.94
Error in Latitude			0.34	Error in Departure.		0.06

LIST OF NAMES.

A list of the names of the individuals employed by *Philip Conzen*

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of *the subdivision lines of T. 22 S. R. 17 E* showing the respective capacities in which they acted:

- John M. Trayer* ..... Chainman.
- H. W. Huggins* ..... Chainman.
- Joaquin Bonillas* ..... Moundman.
- Manuel Salazar* ..... Moundman.
- Chas M. Pogue* ..... Axman.
- Tom Jones* ..... Axman.
- Arthur Pogue* ..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted *Philip Conzen*

....., United States Deputy Surveyor, in surveying all those parts or portions of the *subdivision lines of T. 22 S. R. 17 E*

..... of the *Gila* *3rd Salt River* meridian, *Territory* of *Arizona* which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for *Arizona*

SEAL

*John M. Trayer* ..... Chainman.

*H. W. Huggins* ..... Chainman.

*Joaquin Bonillas* ..... Moundman.

*Manuel Salazar* ..... Moundman.

*Chas M. Pogue* ..... Axman.

*Tom Jones* ..... Axman.

*Arthur Pogue* ..... Flagman.

Subscribed and sworn to before me this *17th* day of *December*, 190*4*



*H. G. Power*

NOTARY PUBLIC, ARIZONA

MY COMMISSION EXPIRES *April 27th 1908*

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I, Philip Contzen, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. LaGallo United States Surveyor General for Arizona, bearing date of the 15<sup>th</sup> day of March, 1904, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivision lines of T. 22 S. R. 17 E

of the Gila & Salt River meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Philip Contzen  
United States Deputy Surveyor.

Subscribed by said Philip Contzen, and sworn to before me }  
this 17<sup>th</sup> day of December, 1904



Clinton D. Hoover,  
Clerk U.S. District Court,  
First District of Arizona.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, April 31<sup>st</sup>, 1905

The foregoing field notes of the survey of the subdivisional lines of T. 22 S. R. 17 E. of the Gila and Salt River Base and Meridian, in the territory of Arizona.

executed by Philip Contzen, U. S. Deputy Surveyor under his contract No. 115, dated March 10, 1904, 1904, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. LaGallo  
United States Surveyor General.

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

~~United States Surveyor General.~~