

1870

Book "D"

BOOK 1870

1905

# FIELD NOTES

OF THE SURVEY OF THE

*Subdivisions*

*of*

*T. 10 S., R. 9 E.*

*1870*

1870

Of the *Gila and Salt River Basin* Meridian,

AS SURVEYED BY

*Edgar C. Dietrich*, United States Deputy Surveyor,

Under his Contract No. *137*, dated *August 15*, <sup>1905</sup>~~189~~

Survey commenced *October 30*, <sup>1905</sup>~~189~~

Survey completed *November 12*, <sup>1905</sup>~~189~~

Sipriana Villa, Chairman

Fred. Tagles, Chairman

Juan Sanchez, Moundman

Wiley Box, Axman

Mannel Salazar, Fryman

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INDEX DIAGRAM.

Township 10 S, Range 9 E

6	X	5	34	4	25	3	X	2	9	1
16	X	11	33		24	X		10		9
7	X	8	32	9	23		X	11	10	12
13	X	14	31		22	X		15		8
18	X	17	30	16	21	X		14	X	13
11	X	12	29		20	X		13		8
19	39	20	28	21	19	X		23	3	24
29	38		27	20				12		7
30	37	29	26	28	X		X	26	3	25
36	36		25		18			11		6
31	35	32	24	33	X		X	35	10	36

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PRELIMINARY OATHS OF ASSISTANTS.

BOOK 1870

WE, Sipriana Villa and Fred. Eagles  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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

Subdivisions of T. 10 S. R. 9 E.  
Sipriana Villa, Chainman.  
Fred Eagles, Chainman.

Subscribed and sworn to before me this 20<sup>th</sup>  
day of October, 1905

W. G. Power



I, Juan Sanchez and  
do solemnly swear that ~~we~~ <sup>me</sup> will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given ~~us~~ <sup>me</sup>, to the best of ~~our~~ <sup>my</sup> skill and ability, in the survey of

the Subdivisions of T. 10 S. R. 9 E.  
Juan Sanchez, Moundman.  
Juan Sanchez, Moundman.

Subscribed and sworn to before me this 20<sup>th</sup>  
day of October, 1905

W. G. Power



I, Wiley Box and  
do solemnly swear that ~~we~~ <sup>me</sup> will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given ~~us~~ <sup>me</sup>, to the best of ~~our~~ <sup>my</sup> skill and ability, in the survey of

the Subdivisions of T. 10 S. R. 9 E.  
Wiley Box, Axman.  
Wiley Box, Axman.

Subscribed and sworn to before me this 20<sup>th</sup>  
day of October, 1905

W. G. Power



I, Manuel Salazar, 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 Subdivisions of T. 10 S. R. 9 E.  
Manuel Salazar, Flagman.

Subscribed and sworn to before me this 20<sup>th</sup>  
day of October, 1905

W. G. Power



Chains

Owing to the East boundary of this township being out in alignment and measurement, I find it necessary to establish a sectional guide meridian.

Survey commenced October 30, 1905, and executed with a 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, reading 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.

In making 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 Solaris, I proceed as follows:

At the standard cor. of secs. 35 and 36, as hereinafter described; latitude  $32^{\circ} 20' 25''$ , longitude  $111^{\circ} 22' 56''$  W.;  $111^{\circ} 14'$  N.; I set off  $32^{\circ} 30'$  N. on the lat. arc;  $13^{\circ} 47'$  S. on the decl. arc, and, at 3:20 p. m. l. m. t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

October 30, 1905.

October 31: At ~~4~~ ~~4:30~~ ~~4:40~~ a. m. l. m. t., by my watch, which is correct, I observe Solaris 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.

At 8:00 a. m. l. m. t., I lay off the azimuth of Solaris,  $7^{\circ} 25'$  to the East, and mark the meridian thus determined, by cutting a small

Chain groove in the stone set October 30, 1871 which (determined by the meridian falls 0.4 ins. West of the mark the solar. At 9<sup>h</sup> 40<sup>m</sup> a.m., l.m.t., I set off <sup>32° 30'</sup> ~~32° 32'~~ on the lat. arc; 14° 01' 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 0.2 ins. West of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 16" and 8" East of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 9<sup>h</sup> 00<sup>m</sup> a.m., is N. 132° 11' W.; the angle thus determined gives the mag. decl. 13° 46' E.

Shower & rain

North, on sectional guide meridian bet. ores. 35 and 36.

Over level land, through dense grasswood and mesquite brush.

- 21.00 Dry wash, 10 lbs. wide, course N. E.
- 40.00 Set a mesquite post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. enr. marked 4 & 35 on N. and 36 on E. face; dig pits, 18x18x12 ins., N. and E. of post, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
- 65.00 Dry wash, 10 lbs. wide, course N. E.
- 67.70 Road, bears N. W. and S. E.
- 80.00 Set a mesquite post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of ores. 25, 26, 35 and 36, marked S 10 S & 25 on N. E., R. 9 E & 36 on S. E., S 35 on S. W., and S 26 on N. W. face with 1 notch on S. and E. edges; dig pits, 18x18x12 ins., in each ore, 5½ ft. dist.; and raise a mound of earth, 4 ft.

Chains		BOOK 1870
	East, 2 ft. high, W. of cor. Land, level. Soil, sandy loam; 2nd and 3rd rate. Timber, scattering mesquite, underground; grasswood and mesquite. Dense underground, 80.00 chs.	
	North, on sectional guide meridian bet. secs. 25 and 26.	
	Over level land.	
	Through scattering mesquite timber and dense mesquite brush.	
9.80	Set AVRA arroyo, 30 lbs. wide, banks 10 ft. high, course N. W.	
13.00	Grow mesquite timber and brush, bear N. W. and S. E.; water tall and dense sunflowers and cockleburrs.	
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; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.	
70.00	Set, bears W., about 20 chs. dist.	
80.00	Set a malpais stone, 18 x 18 x 8 ins., 12 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on S. and 1 notch on E. edge; dig pits, 18 x 18 x 12 ins., in each sec. 5 $\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.	
	Land, level.	
	Soil, alluvial, sandy loam and sandy; 2nd, 3rd and 4th rate.	
	Timber, scattering mesquite; underground, mes- quite, grasswood, sunflowers and cockleburrs.	
	Dense underground, 80.00 chs.	
	North, on sectional guide meridian bet. 23 and 24.	
	Over level land.	
	Through dense sunflowers.	
40.00	Set a malpais stone, 20 x 7 x 7 ins., <del>15</del> <sup>15</sup> ins. in the	

Chains

ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; dig pits, 18x18x12 ins., N. and S. 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.

42.00 Enter dense mosquito bush, bears E. and W.

43.50 Santa Cruz river, dry, 80 lbs. wide, course N.N.W.

50.00 Set a malpais stone, 20x6x6 ins., ~~15~~ 14 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on S. and 1 notch on E. edge; dig pits, 18x18x12 ins., in each sec. 5 $\frac{1}{2}$  ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

Land, level.

Soil, alluvial, sandy and gravelly; 2nd and 3rd yats.

Timber, a few mosquito; undergrowth, mosquito, grasswood, sunflowers and cocklebur.

Dense undergrowth, 80.00 chs.

October 31: At this cor. I set off 14° 04' S. on the decl. arc; and, at 12<sup>h</sup> 4<sup>m</sup> l.m.t. observed the sun on the meridian; the resulting lat. is ~~32° 00'~~ <sup>32° 33' 7"</sup> or within 1' of the proper lat.

North, on sectional girdle meridian bet. secs. 13 and 14.

Over level land, through dense grasswood.

34.50 Sulphur line from Red Rock to Silver Ball, bears N. 59 $\frac{1}{4}$ ° E. and S. 59 $\frac{1}{4}$ ° W.

40.00 Set a malpais stone, 20x8x8 ins., <sup>15</sup> 14 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; dig pits, 18x18x12 ins., N. and S. 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.

49.15 Middle of single track of the Silver Ball railroad, bears N. 66° 41' E. and S. 66° 41' W.

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

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

50.00 Set a malpais stone, 18x10x8 ins., 12 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on S. and 1 notch on E. edge; from which



Chains  
 A mosquito, 8 ins. diam. bears N. 20° 40' E., 270 lbs.  
 dist. marked S 10 S R 9 E S 12 B S.  
 A mosquito, 8 ins. diam. bears S. 52 1/4° E., 115 lbs.  
 dist. marked S 10 S R 9 E S 13 B S.  
 A mosquito, 12 ins. diam. bears S. 65° 10' N., 242 lbs.  
 dist. marked S 10 S R 9 E S 14 B S.; no other trees  
 within limit; dig pit, 18 x 18 x 12 ins., N. W.  
 of stone, 5 1/2 ft. dist. and raise a mound of  
 earth, 4 ft. base, 2 ft. high, W. of cor.  
 Sand, gravel.  
 Soil, sandy and gravelly loam. 2nd and 3rd rates.  
 Timber, scattering mosquito, undergrowth,  
 grassweed and mosquito.  
 Denser undergrowth, 80.00 chs.

North, on sectional guide meridian lat.  
 secs. 11 and 12.

Over level land, through scattering mosquito  
 timber and dense brush.

26.00 Road, bears E. and W.

40.00 Set a malpais stone, 18 x 8 x 5 ins., 12 ins. in the  
 ground, for 1/4 sec. cor. marked 4 on N. face,  
 from which

A mosquito, 5 ins. diam. bears N. 75° 20' E., 135 lbs.  
 dist. marked 4 S 12 B S.

A mosquito, 6 ins. diam. bears N. 76 1/4° N., 151 lbs.  
 dist. marked 4 S 11 B S.

80.00 Set a malpais stone, 20 x 8 x 8 ins., <sup>15</sup> 14 ins. in the  
 ground, for cor. of secs. 1, 2, 11 and 12, marked  
 with 5 notches on S. and 1 notch on E. edge,  
 from which

A mosquito, 8 ins. diam., bears S. 9° 10' N., 144 lbs.  
 dist. marked S 10 S R 9 E S 11 B S.

A mosquito, 8 ins. diam., bears N. 73 1/4° N., 190 lbs.  
 dist. marked S 10 S R 9 E S 2 B S.; no other trees  
 within limit; dig pits, 18 x 18 x 12 ins., N. E. and  
 S. E. of stone, 5 1/2 ft. dist. and raise a mound  
 of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Sand, gravel.

Soil, sandy loam; 2nd and 3rd rates.  
 Timber, scattering mosquito; undergrowth,

Subdivision of S. 10 S., R. 9 E.

Chains  
 grassland, mesquite and trestle.  
 Dense undergrowth, 30.00 chs.

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North <sup>line</sup> on sectional guide meridian bet. secs. 1 and 2.  
 Over level land, through scattering mesquite timber and dense brush.

12.95 Road, bears E. and W.

40.00 Set a malpais stone, 18 x 10 x 5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked 4 on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

81.37 Intersect N. Edy. of Sp. at a point from which cor. of secs. 35 and 36, S. 9 S., R. 9 E., <sup>bears N. 89° 02' E. 23 lbs dist</sup> is marked.  
 Set a malpais stone, 18 x 10 x 8 ins., 12 ins. in the ground, for closing cor. of secs. 1 and 2, marked 6 on S.; with 1 groove on E. and 5 grooves on W. face; from which  
 A mesquite, 6 ins. diam., bears S. 23° 10' E., 60 lbs. dist., marked S 10 S R 9 E S 1 B S.  
 A mesquite, 15 ins. diam., bears S. 34° N., 148 lbs. dist., marked S 10 S R 9 E S 2 B S.  
 Land, level.  
 Soil, sandy loam; 2nd and 3rd rate.  
 Timber, scattering mesquite; undergrowth, grassland, mesquite and trestle.  
 Dense undergrowth, ~~31.45~~ <sup>81.52</sup> chs.

October 31, 1905.

November 1: At 8<sup>41</sup> a.m., l.m.t., Port off on the lat. arc; ~~74° 21'~~ <sup>14° 20'</sup> on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36, on the sectional guide meridian.  
 Shovel P run  
 East on a random line bet. secs. 25 and 36.

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

81.17 Intersect the E. Edy. of the Sp. 24 lbs. <sup>m.</sup> of the cor. of secs. 25, 30, 31 and 36, as marked on described.  
 Shovel P run

Chains N. 89° 50' W., on a true line bet. secs. 25 and 36.  
 Over level land.  
 31.25 Enter dense mosquito brush, bars N. and S.  
 37.25 Dry wash, 10 lbs. wide, course S.  
 41.17 Set a mosquito post, 3 ft. long, 4 ins. sq., with  
 various studs, 24 ins. in the ground, for  $\frac{1}{4}$  sec.  
 cor. marked  $\frac{1}{4}$  S 25 on N. and 36 on S. face; dig  
 pits 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.  
 and raise a mound of earth, 3  $\frac{1}{2}$  ft. base, 1  $\frac{1}{2}$   
 ft. high, N. of cor.  
 75.15 The Arroyo, 30 lbs. wide, banks 10 ft. high,  
 course N. W.  
 76.85 Dry arroyo, 15 lbs. wide, course N. W.  
 81.17 The cor. of secs. 25, 26, 35 and 36.  
 Land, level.  
 Soil, sandy loam; good and good water.  
 Timber, section. mesquite, arroyo wood,  
 mesquite and grassland.  
 Dense mangrove with, ~~50.00~~ 49.92

From cor. of secs. 23, 24, 25 and 26, on the sec-  
 tional guide meridian, S 77°  
 S. 89° 50' E., on a random line bet. secs. 24 and 25.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 84.02 Intersect the E. body of the S. 14 lbs. S. of  
 cor. of secs. 19, 24, 25 and 30, as heretofore described.  
 Thence S 77°  
 N. 89° 56' W., on a true line bet. secs. 24 and 25.  
 Over level land.  
 Through scattering brush.  
 12.90 Enter dense sunflowers and cocklebur.  
 48.60 ~~Set a true line N. W. 180 lbs. side S. W.~~  
 44.02 Set a malpais 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,  
 dig pits, 15 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.  
 46.00 Enter mosquito timber and dense mosquito  
 brush, bars N. and S.  
 73.00 Low timber and brush, bars N. W. and S. E.  
 84.02 The cor. of secs. 23, 24, 25 and 26.  
 Land, level.

Subdivision of S. 10 S., R. 9 E.

6 chains Soil, sandy loam and sandy; 2nd, 3rd and 4th rates.  
Timber, mosquito; undergrowth, mosquito, grasswood, sunflowers and cacti.  
Dense undergrowth 60.10, chs.

40.00 From the cor. of secs. 13, 14, 23 and 24, on the sectional guide meridian, S 77m  
S. 89° 56' E., on a random line bet. secs. 13 and 24.  
Set temp. 4 sec. cor.

83.96 Enter set the E. cdy. of the S. 19 lbs. S. of cor. of secs. 13, 18, 19 and 24, as heretofore described.  
Bearing S 77m  
S. 89° 56' W., on a true line bet. secs. 13 and 24.

43.96 Over level land, through dense grasswood. Set a malpais stone, 18 x 8 x 5 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face, from which  
A mosquito, 10 ins. diam. bears N. 25 1/4° W., 256 lbs. dist., marked 1/4 S 13 B S.; in other corner dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

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

83.96 The cor. of secs. 13, 14, 23 and 24.  
Land, level.

Soil, sandy and gravelly loam; 2nd and 3rd rates.  
Timber, scattering mosquito; undergrowth, grasswood and mosquito.  
Dense undergrowth, 83.96 chs.

November 17. At this cor. I set off, 14° 24' S. on the circ. arc; and, at 12 h 6 m l. m. t., observed the sun on the meridian; the resulting lat. is 32° 33' N

From the cor. of secs. 11, 12, 13 and 14, on the sectional guide meridian, S 77m  
N. 89° 56' E., on a true line bet. secs. 12 and 13.  
Over level land, through scattering mosquito timber and dense brush.

- 6 chains  
41.00 Set a malpais stone, 18x10x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
A mesquite, 8 ins. diam., bears S.  $17\frac{1}{4}^{\circ}$  W., 82 lbs. dist., marked  $\frac{1}{4}$  S 13 B S.  
A mesquite, 10 ins. diam., bears N.  $23^{\circ} 10'$  W., 324 lbs. dist., marked  $\frac{1}{4}$  S 12 B S.
- 71.65 Road, bears NW. and S. W.
- 72.30 Middle of single track of the Silver Ball railroad, bears N.  $66^{\circ} 41'$  E. and S.  $66^{\circ} 41'$  W.
- 75.98 Sulphur line from Red Rock to Silver Ball, bears N.  $59\frac{1}{4}^{\circ}$  E. and S.  $59\frac{1}{4}^{\circ}$  W.
- 83.20 Intersect the E. cor. of the Sp. 176 lbs. S  $49^{\circ}$  E. of the cor. of secs. 7 and 12, S. 10 S., R. 10 E., as heretofore described.  
Set a malpais stone, 21x8x6 ins., ~~12~~<sup>15</sup> ins. in the ground, for closing cor. of secs. 12 and 13, marked 66 on N.; with 4 grooves on S. and 2 grooves on N. face; dig pits, 24x18x12 ins. crosswise on each line, N. and S. 3 ft., and W. of stone, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Sand, gravel.  
Soil, sandy and gravelly loam; red and 3rd rate.  
Timber, scattering mesquite; underground, grasswood and mesquite.  
Dense underground, <sup>83.20</sup> ~~83.20~~ chs. ?
- From the cor. of secs. 1, 2, 11 and 12, on the sectional guide meridian, I run N.  $89^{\circ} 46'$  E., on a true line bet. secs. 1 and 12. Over level land, through scattering mesquite timber and dense brush.
- 40.00 Set a malpais stone, 18x10x7 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
A mesquite, 7 ins. diam., bears S.  $28\frac{1}{2}^{\circ}$  W., 155 lbs. dist., marked  $\frac{1}{4}$  S 12 B S.  
A mesquite, 18 ins. diam., bears N.  $22^{\circ} 20'$  W., 265 lbs. dist., marked  $\frac{1}{4}$  S 1 B S.
- 82.23 Intersect the E. cor. of the Sp. 114 lbs. S. 10 E.

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Chains of the cor. of sres. 6 and 7, <sup>T10S., R10E,</sup> as heretofore described.

Set a malpais stone, 20 x 10 x 6 ins., <sup>15</sup> ins. in the ground, for closing cor. of sres. 1 and 12, marked 66 on N.; with 5 grooves on S. and 1 groove on N. face; dig pits, 24 x 18 x 12 ins., crosswise on each line, N. and S., 3 ft., and N. of stone, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

Land, bare.

Soil, sandy loam; 2nd and 3rd rate.

Timber, scattering mesquite; undergrowth, grasswood, mesquite and yucca.

Dense undergrowth, ~~82.32~~ <sup>82.33</sup> chs.

November 1, 1905.

November 2: At 8<sup>h</sup> 45<sup>m</sup> a. m., l. m. t., I set off 32<sup>o</sup> 32' on the lat. arc; 14<sup>o</sup> 40' S. on the decl. arc; and determine meridian with the solar at the standard cor. of sres. 34 and 35, as heretofore described.

Thence I run

N. 0° 1' N., bet. sres. 34 and 35.

Over bare land, through scattering mesquite and palm rock timber and dense brush.

25.70 Dry wash, 1 ch. wide, course S. E.

40.00 Set a malpais 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; dig pits, 18 x 18 x 12 ins., N. and S. 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.

80.00 Set a malpais stone, 18 x 12 x 6 ins., 12 ins. in the ground, for cor. of sres. 26, 27, 34 and 35, marked with 1 notch on S. and 2 notches on E. edge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

Land, bare.

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

Timber, scattering palm rock and mesquite; undergrowth, grasswood, palm rock and cacti.

Chains

Giant cactus.  
Dense undergrowth, 80.00 chs.

East on a random line bet. secs. 26 and 35.  
40.00 Set trap.  $\frac{1}{4}$  sec. cor.  
80.04 Intersect sectional guide meridian 7 chs. N. of  
corp of secs. 25, 26, 35 and 36.

Shower Pan  
N. 89° 57' W., on a true line bet. secs. 26 and 35.  
Over brush land, through scattering mesquite  
timber and dense grasswood.  
14.70 Road, bears N. W. and S. E.  
40.02 Set a malpais stone, 15 x 6 x 6 ins., 12 ins. in the  
ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from  
which

A palo verde, 6 ins. diam., bears S. 19° 40' W., 141 chs.  
dist., marked  $\frac{1}{4}$  S. 35 B S.  
A mesquite, 10 ins. diam., bears N. 10° W., 118 chs. dist.,  
marked  $\frac{1}{4}$  S. 26 B S.

45.00 Begin ascent, bears N. and S.  
57.00 Top of ridge, bears N. W. and S. E.; descend.

79.00 Foot, thence over brush land

80.04 In cor. of secs. 26, 27, 34 and 35.  
Land, brush and mountains.  
Soil, sandy loam and stony; 2nd, 3rd and 4th  
rate.

Timber, scattering palo verde and mesquite; un-  
dergrowth, grasswood, palo verde and cacti.  
Giant cactus.

Mountains or land covered with dense under-  
growth, 80.04 chs.

N. 0° 1' W., bet. secs. 26 and 27.  
Over brush land, through dense palo verde.

2.00 Ascent.

10.00 Top of malpais ridge, bears E. and W.

19.00 Descend along N. W. slope.

28.00 Foot, bears E. and W.; low palo verde and inter-  
dense grasswood.

40.00 Set a malpais stone, 20 x 8 x 6 ins., <sup>15</sup> 7 ins. in the  
ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face; dig

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Chains pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

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

80.00 Set a malpais stone, 18x7x6 ins., 12 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. and E. edges; from which a mesquite, 5 ins. diam., bears N. 33° 20' E., 216 lbs. dist., marked S 10 S R 9 E S 23 B S.; no other trees; dig pits, 18x18x12 ins., S. E., S. W. and N. W. of stone, 5 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, barl and mountainous.

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

Timber, scattering palo verde and mesquite; undergrowth, grasswood, palo verde, mesquite and cacti.

Giant cactus.

Mountainous or land covered with dense undergrowth, 80.00 chs.

40.00 S. 89° 57' E., on a random line bet. secs. 23 and 26.

Set Stamp. 4 sec. cor.

79.96 Enter sectioned guide meridian 12 lbs. N. of cor. of secs. 23, 24, 25 and 26.

Turner Cross

N. 89° 57' W., on a true line bet. secs. 23 and 26.

Over barl land, through dense grasswood.

39.98 Set a malpais stone, 18x8x6 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

45.26 Wire fence, bears N. 26° W. and S. 26° E.

45.45 Road, bears N. W. and S. E.; with dense mesquite brush.

78.30 Dry Arava arroyo, 20 lbs. wide, course N. N. W.

79.96 Set cor. of secs. 22, 23, 26 and 27.

Land, barl.

Soil, sandy loam; 2nd and 3rd rate.



Chains  
 Timber, scattering mesquite; undergrowth, grass-  
 wood and mesquite.  
 Dense undergrowth, 79.96 chs.  
 November 2. At this cor. I set off  $14^{\circ}43'S.$  on the  
 chel. cor; and, at  $12^h3^m$  l. m. t., observe the sun  
 on the meridian; the resulting lat. is  $32^{\circ}32'N$  or  
 within of the proper lat.

N. 0' N., lat. sres. 22 and 23.

Over level land, through scattering mesquite  
 timber and dense grassland.

- 30.00 Enter dense mesquite brush, bars E. and N.  
 30.60 Str. Nova arrosa, 25 chs. wide, course N. N.  
 39.96 Wire fence, bars E. and N.  
 40.00 Set a malpais stone,  $18 \times 12 \times 6$  ins., 12 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face;  
 dig pits,  $18 \times 18 \times 12$  ins., N. and S. 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.  
 42.00 Leave dense brush, bars E. and N.; enter culti-  
 vated land.  
 50.00 House, bars E., about 17.00 chs. dist.  
 58.60 Road, bars N. N. and S. E.  
 60.00 Blacksmith shop, bars N., 10.00 chs. dist.  
 64.00 Grass field; enter tall and dense sunflowers  
 and cactaburrs.  
 67.10 Sulphur line from Red Rock to Silver Bell,  
 bars N.  $59\frac{1}{4}^{\circ}E.$  and S.  $59\frac{1}{4}^{\circ}N.$   
 80.00 Set a malpais stone,  $20 \times 8 \times 6$  ins.,  $15$  ins. in the  
 ground, for cor. of sres. 14, 15, 22 and 23, marked  
 with 3 notches on S. and 2 notches on E. edge; dig  
 pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft. dist.; and  
 raise a mound of earth, 4 ft. base, 2 ft. high,  
 N. of cor.  
 Sand, brk.  
 Soil, sandy loam and sandy; 2nd, 3rd and 4th  
 rats.  
 Timber, scattering mesquite; undergrowth, grass-  
 land, mesquite, sunflowers and cactaburrs.  
 Dense undergrowth, 58.00 chs.

## Subdivision of S. 10 S., R. 9 E.

BOOK 1870

- 6 chains S.  $89^{\circ}52'E$ , or a random line bet. secs. 14 and 23.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.05 Enter set sectional grid meridian 5 lks. N. of  
 cor. of secs. 13, 14, 23 and 24  
 Plumer Run  
 N.  $89^{\circ}50'N$ , on a true line bet. secs. 14 and 23.  
 Over level land, through dense grasswood.  
 40.02 $\frac{1}{2}$  Set a malpais stone,  $20 \times 10 \times 10$  ins., ~~12~~<sup>15</sup> ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  mi N. face; dig  
 pits,  $18 \times 18 \times 12$  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.; enter dense mesquite brush.  
 58.67 Siphon line from Red Rock to Silver Ball,  
 bears N.  $59\frac{1}{4}^{\circ}E$  and S.  $59\frac{1}{4}^{\circ}N$ .  
 64.65 Branch Santa Cruz river, 20 lks. wide, course N. W.  
 65.85 Santa Cruz river, 30 lks. wide, course N. W.  
 72.05 Branch Santa Cruz river, 25 lks. wide, course N. W.  
 75.00 Enter mesquite brush; enter dense sunflowers.  
 79.35 Road, bears N. W. and S. E.  
 79.50 Wire fence, bears N. W. and S. E.  
 80.05 Str. cor. of secs. 14, 15, 22 and 23.  
 Land, level.  
 Soil, alluvial, sandy loam and sandy; 2nd,  
 3rd and 4th rate.  
 Timber, scattering mesquite; undergrowth, mes-  
 quite, grasswood and sunflowers.  
 Dense undergrowth, 80.05 lks.  
 November 2, 1905.

- November 3: At 8<sup>h</sup> 35<sup>m</sup> a.m., l.m.t., set off <sup>32° 33' m</sup> ~~32° 35' m~~  
 on the lat. arc;  $14^{\circ}59'S$  on the decl. arc; and  
 determine a meridian with the solar at the cor.  
 of secs. 14, 15, 22 and 23.  
 Plumer Run  
 N.  $0^{\circ}1'N$ , bet. secs. 14 and 15.  
 Over level land, through dense sunflowers.  
 .54 Wire fence, bears E. and W.  
 .70 Road, bears E. and W.  
 5.00 Enter dense grasswood, bears N.E. and S. W.  
 15.15 Middle of single track of the Silver Ball rail-  
 bears N.  $66^{\circ}41'E$  and S.  $66^{\circ}41'N$ .

- Chains  
15.40 Road, bears N. 66° 41' E. and S. 66° 41' W.  
16.00 Section house and Well bear S 67° W. about 10.00  
chs. dist.; bare sunflowers.  
40.00 Set a malpais stone, 18 x 10 x 5 ins., 12 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., N. and S. of stone, 3 ft.  
dist.; and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  
 $1\frac{1}{2}$  ft. high; W. of cor.  
45.00 Low grassland and winter dense sunflowers.  
65.00 Santa Cruz river, 80 lbs. wide, course N. W.  
72.00 Low sunflowers; winter dense grassland.  
80.00 Set a malpais stone, 20 x 10 x 8 ins., <sup>15</sup> ins. in  
the ground, for cor. of secs. 10, 11, 14 and 15  
marked with 4 notches on S. and 2 notches  
on E. side; dig pits, 18 x 18 x 12 ins., in each sec.  
 $5\frac{1}{2}$  ft. dist.; and raise a mound of earth, 4 ft.  
base, 2 ft. high, N. of cor.  
Land, level.  
Soil, alluvial and sandy; 2nd and 4th rates.  
Timber, a few mesquite; undergrowth, grass-  
land, sunflowers and oak trees.  
Dense undergrowth, 80.00 chs.
- 
- S. 89° 50' E., on a random line bet. secs. 11 and 14.  
40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
79.94 Entwined sectional guide meridion 21 lbs. S. of  
cor. of secs. 11, 12, 13 and 14.  
Placed  $\frac{1}{4}$  pm  
N. 89° 59' W., on a true line bet. secs. 11 and 14.  
Over level land, through scattering mesquite  
timber and dense grassland.  
39.99 Set a malpais stone, 18 x 8 x 5 ins., 12 ins. in the  
ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face;  
from which  
A mesquite, 8 ins. diam., bears N. 4° E., 130 lbs.  
dist., marked  $\frac{1}{4}$  S 11 B S.  
A mesquite, 7 ins. diam., bears S. 4° 17' E., 140 lbs.  
dist., marked  $\frac{1}{4}$  S. 14 B S.  
60.00 Low dense grassland, bears N. and S.  
75.35 Road, bears N. W. and S. E.  
79.94 The cor. of secs. 10, 11, 14 and 15.

Subdivision of S. 10 S., R. 9 E.

Chain  
 Sand, gravel.  
 Soil, sandy and gravelly loam; 2nd and 3rd rate.  
 Timber, scattering mesquite; undergrowth,  
 grasswood.  
 Dense undergrowth, 20.00 chs.

N. 0° 1' W., bet. secs. 10 and 11.  
 Over level land, through dense grasswood.  
 5.20 Road, bears E. and N.  
 40.00 Set a malpais 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;  
 dig pits, 18 x 18 x 12 ins., N. and S. 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.

46.10 Road, bears E. and W.  
 80.00 Set a malpais stone, 20 x 8 x 8 ins., <sup>15</sup> 7  $\frac{1}{2}$  ins. in the  
 ground, for cor. of secs. 2, 3, 10 and 11, marked  
 with 5 notches on S. and 2 notches on E. edge;  
 dig pits, 18 x 18 x 12 ins., in each sec. 5  $\frac{1}{2}$  ft. dist.;  
 and raise a mound of earth, 4 ft. base, 2 ft.  
 high, N. of cor.

Sand, gravel.  
 Soil, sandy and gravelly loam, 2nd and  
 3<sup>rd</sup> rate  
 Timber, a few mesquite; undergrowth, grass-  
 wood.  
 Dense undergrowth, 80.00 chs.

November 3: At this cor. I set off 15° 02' S. on the  
 level. and, at 12<sup>h</sup> 4 m l. m. t., observed the  
 sun on the meridian; the resulting lat. is  
 32° 35' or within 1' of the proper lat.

S. 89° 59' E., on a random line bet. secs 2 and 11.  
 40.00 Set a sample  $\frac{1}{4}$  sec. cor.  
 80.14 Enter set sectional guide meridian 5 chs. N. of cor.  
 of secs. 1, 2, 11 and 12.  
 Runner I run

○ N. 89° 59' N., on a true line bet. secs. 2 and 11.  
 Over level land, through scattering mes-  
 quite timber and dense grasswood.  
 40.07 Set a malpais stone, 18 x 8 x 6 ins., 12 ins.

Chains in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
 A mosquito, 10 ins. diam., S.  $55^{\circ}$  E., 288 lbs.  
 dist. marked  $\frac{1}{4}$  S. 11 B S.

A mosquito, 12 ins. diam., bears N.  $24^{\circ} 36'$  W.,  
 153 lbs dist., marked  $\frac{1}{4}$  S 2 B S.

80.14 The cor. of secs. 2, 3, 10 and 11.

Land, level.

Soil, sandy loam; 2nd and 3rd rate.

Timber, scattering mosquito; undergrowth,  
 grasswood and mosquito.

Dense undergrowth, 80.14 chs.

N. 10<sup>th</sup> W., on a line bet. secs. 2 and 3.

Over level land, through dense grasswood.

12.15 Road, bears E. and W.

40.00 Set a malpais stone, 18 x 6 x 5 ins., 12 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., N.  
 and S. of stone, 3 ft. dist., and raise  
 a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft.  
 high, W. of cor.

80.90 Entrance to N. edge of Sp. at a point from which  
 the cor. of secs. 34 and 35, S. 9 S., R. 9 E., as her-  
 tofore described, bears N.  $89^{\circ} 12'$  E., 279 lbs. dist.

Set a malpais stone, 18 x 12 x 8 ins., 12 ins.  
 in the ground, for closing cor. of secs.  
 2 and 3, marked C 6 on S.; with 2 grooves  
 on E. and 4 grooves on W. face; dig pits,  
 24 x 18 x 12 ins., crosswise on each line  
 E. and W., 3 ft., and S. of stone, 7 ft. dist.;  
 and raise a mound of earth, 4 ft. base,  
 2 ft. high, S. of cor.

Land, level.

Soil sandy and gravelly loam; 2nd and 3rd  
 rate.

Timber, scattering mosquito; undergrowth, grass-  
 wood and mosquito.

Dense undergrowth, 81.10 chs.

November 3, 1905

Chains

November 4: At 8<sup>h</sup> 50<sup>m</sup> a.m. l.m.t., I set off <sup>32°30'27"</sup> ~~32°30'~~ on the lat. arc; 15-17' S. on the elev. arc, and determine a meridian with the solar at the standard eq. of secs. 33 and 34 on the S. edge of the Sp., as heretofore described.

Shaner Pynn

N. 0° 2' W., bet. secs. 33 and 34.

Over gently rolling land, through dense grasswood.

7.00 Enter old string mesquite and palo verde timber.

29.20 Dry wash 40 lbs. wide, course N. E.

40.00 Set a malpais stone, 18x8x5 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; from which

A palo verde, 8 ins. diam. bears N. 20° E., 145 lbs. dist. marked 1/4 S. 34 B S.; no other trees; dig pits, 18x18x12 ins. N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.00 Set a malpais stone, 20x10x5 ins., 14 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on S. and 3 notches on E. edge; from which

A palo verde, 12 ins. diam. bears N. 3° 5' W., 123 lbs. dist. marked S 10 S R 9 E S 28 B S.; no other trees within limit; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Land, gently rolling and level.

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

Timber, scattering mesquite and palo verde; undergrowth, palo verde, grasswood, mesquite, yucca and cacti.

Giant cactus.

Dense undergrowth, 80.00 chs.

East on a random line bet. secs. 27 and 34.

40.00 Set temp. 1/4 sec. cor.

79.92 Enter sect N. and S. line 5 lbs. N. of cor. of secs. 26, 27, 34 and 35.

Shaner Pynn

N. 89° 58' W., on a true line bet. secs. 27 and 34.

Over level land, through scattering brush.

6 chains  
8.00 Ascend, bears N. and S.  
21.40 Top of stony ridge, bears N. and S.; descend.  
28.00 Gulch 20 lbs. wide course S.; ascend.  
39.96 Set a malpais stone, 18x7x7 ins., 12 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. Bits impracticable.  
49.60 Ridge, bears N. and S.; descend.  
68.00 Foot, bears N. and S.; enter dense brush.  
79.92 Set cor. of secs. 27, 28, 33 and 34.  
Land, mountainous and level.  
Soil, gravelly and stony; 3rd and 4th rates.  
Timber, scattering palm vider and mesquite; undergrowth, palm vider, mesquite and cacti.  
Giant cactus.  
Mountainous or land covered with dense undergrowth, 71.92 chs.

N. 72° W. bet. secs. 27 and 28.  
Overgrown rolling land, through scattering palm vider timber and dense brush.  
12.80 Dry wash, 15 lbs. wide, course N.W.  
21.20 Wood road, bears N. N. W. and E. S. E.  
37.20 Wood road, bears N.E. and S. W.  
40.00 Set a malpais stone, 18x18x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which  
A palm vider, 12 ins. diam., bears N. 64 $\frac{3}{4}$ ° W. 160 lbs. dist. marked  $\frac{1}{4}$  S 28 B S.; no other trees; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
80.00 Set a malpais stone, 20x10x8 ins., <sup>15</sup>17 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked with 2 notches on S. and 3 notches on E. edge; from which  
A palm vider, 15 lbs. diam., bears S. 73° 10' E, 87 lbs. dist. marked S 10 S R 9 E S 27 B S.  
A palm vider, 8 ins. diam., bears S. 26° 40' N. 101 lbs. dist. marked S 10 S R 9 E S 28 B S.; no other trees within limit; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

6 chains

Sand, gently rolling.  
Soil, gravelly and stony; 3rd and 4th rates.  
Timber, scattering palm woods; undergrowth,  
palm woods, mosquitos and cacti.  
Giant cactus.

Dense undergrowth, 80.00 chs.  
November 4: At this pt. I set off  $15^{\circ}20' S.$  in the  
dial. arc; and, at  $11^h 56^{m}$  l. m. t., observed the  
sun on the meridian; the resulting lat. is  $32^{\circ}32' N$   
 ~~$32^{\circ}34' N$~~

40.00 S.  $89^{\circ}58' E.$ , on a random line bet. sres. 22 and 27.  
Set timber  $\frac{1}{4}$  sec. cor.  
80.04 Intersect N. and S. line at the cor. of sres. 22, 23,  
26 and 27.

Turner S. 4 m  
N.  $89^{\circ}58' W.$ , on a true line bet. sres. 22 and 27.  
Over low land, through dense grasswood.

35 Road, bears N. W. and S. E.  
26.30 Dry wash, 15 lbs. wide, course N. E., enter  
gently rolling land

40.02 Set a malpais stone,  $18 \times 8 \times 6$  ins., 12 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.

46.10 Dry wash, 40 lbs. wide, course N.

65.80 Road road, bears N. and S.

68.40 Dry wash, 40 lbs. wide, course N.

80.04 Str. cor. of sres. 21, 22, 27 and 28.

Sand, gently rolling and low.  
Soil, sandy loam, gravelly and stony; 2nd, 3rd  
and 4th rates.  
Timber, scattering palm woods; undergrowth,  
palm woods, grasswood, mosquitos and tussock.  
Giant cactus.

Dense undergrowth, 80.04 chs.

N.  $10^{\circ} \frac{1}{2}' W.$ , bet. sres. 21 and 22.

Over gently rolling land, through scattering  
palm woods timber and dense grasswood.

40.00 Set a malpais stone,  $21 \times 6 \times 6$  ins., <sup>15</sup> 15 ins. in  
the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face.

18.00 x Subdivision line from Red Bench to Silver Ball, bears N.  $59\frac{1}{4}' E.$  and S.  $59\frac{1}{4}' W.$



- Chains from which
- A pale wood, 6 ins. diam., bears N. 10° 5' E., 123 lbs. dist., marked  $\frac{1}{4}$  S 22 B S.
  - A pale wood, 6 ins. diam., bears N. 49 $\frac{3}{4}$ ° W., 65 lbs. dist., marked  $\frac{1}{4}$  S 21 B S. and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
  - 57.30 Area, bears E. and W.
  - 58.00 Wall, bears 3 chs. N.
  - 59.20 Wire fence, bears E. and W.; bear grassmud and inter dense smflowers and buckwheats.
  - 60.65 Middle of single track of the Silver Bell rail road, bears N. 66° 41' E. and S. 66° 41' W.
  - 61.47 Wire fence, bears N. E. and S. W.
  - 70.00 Renter grassmud.
  - 80.00 Set a walrus stone, 18 x 10 x 8 ins., 12 ins. in the ground, for cor. of sres. 15, 16, 21 and 22, marked 10 S on N.E., and 9 E. on S. E. face; with 3 notches on S. and E. edges; dig pits, 18 x 18 x 12 ins. in each sres. 5 $\frac{1}{2}$  ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
- Land, gently rolling and level.  
 Soil, sandy loam, gravelly and stony; and, 3rd and 4th rate.  
 Timber, scattering pale woods; undergrowth, pale woods, grassmud, smflowers and buckwheats.  
 Dense undergrowth, 80.00 chs.
- November 4., 1905.

November 5. At 8<sup>38</sup> a.m. l.m.t., set off <sup>32° 33' N</sup> on the lat. arc, <sup>82° 54' W</sup> on the decl. arc, and determine a meridian with the solar at the cor. of sres. 15, 16, 21 and 22.

Shower 8 am

S. 89° 55' E., on a random line bet. sres. 15 and 22.

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

79.92 Enters at N. and S. line 3 chs. S. of cor. of sres. 14, 15, 22 and 23.

Shower 9 am

N. 89° 59' W., on a true line bet. sres. 15 and 22.

Over level land, through dense grassmud and

Chains	sunflowers.
21.30	Road, bears N. W. and S. E.
31.54	Wire fence, bears N. E. and S. W.
35.60	Middle of single track of the Silver Lake railroad, bears N. 66° 41' E. and S. 66° 41' W.
37.50	Wire fence, bears N. E. and S. W.; enter scattering mesquite timber and brush
39.96	Set a malpais stone, 20 x 10 x 8 ins., <sup>15</sup> ins. in the ground, for 4 sec. cor. marked $\frac{1}{4}$ on N. face; from which A mesquite, 5 ins. diam., bears N. 61° 20' E., 84 lbs. dist., marked $\frac{1}{4}$ S 15 B S.; another tree within limit; 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.
56.00	Wire fence, bears N. and S.
61.00	Shr Area across, 25 lbs. wide, courses N. W.
79.92	Shr cor. of secs. 15, 16, 21 and 22. Good, level. Soil, sandy loam and sandy; 2nd, 3rd and 4th water. Timber, scattering mesquite, undergrowth, mesquite, grasswood, sunflowers and creek grass. Dense undergrowth, 79.92 chs.
	N. 0° x W., bet. secs. 15 and 16. Over level land, through dense grasswood.
16.13	Wire fence, bears E. and W.
19.00	House and cor. <sup>Clapnet unknown</sup> bear 4 chs. N.; enter scattering mesquite timber and dense mesquite brush. <sup>Clapnet</sup> <del>grass</del> unknown
19.65	Shr Area across, 20 lbs. wide, courses N. W.
23.00	Grass mesquite, bears E. and W.
25.90	Road, bears E. and W.
28.30	Enter open field, bare grasswood.
34.00	Grass field; enter dense sunflowers!
40.00	Set a malpais stone, 18 x 8 x 6 ins., 12 ins. in the ground, for 4 sec. cor. marked $\frac{1}{4}$ on W. face; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
41.05	Wire fence, bears N. E. and S. W.; enter dense

Chains  
 42.85 grassland.  
 Road, bears N.E. and S. W.  
 44.67 Wire fence, bears N.E. and S. W.; lower dense  
 brush and inter cultivated land.  
 59.42 Wire fence, bears W. N. W. and E. S. E.; lower  
 field and upper dense brush.  
 60.70 Arroyo, 30 lbs. wide, course N. W.  
 80.00 Set a malpais stone, 21 x 8 x 6 ins., <sup>15</sup> ins. in the  
 ground, for cor. of <sup>sec</sup> 9, 11, 15 and 16, marked  
 with 4 notches on S. and 3 notches on E. edge;  
 dig pits, 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist.  
 and raise a mound of earth, 4 ft. base, 2 ft.  
 high, N. of cor.  
 Land, level.  
 Soil, alluvial, sandy loam and sandy; 2nd,  
 3rd and 4th rates.  
 Timber, scattering mesquite; undergrowth, grass-  
 land, mesquite and sunflowers.  
 Dense undergrowth, 59.55 chs.

40.00 S. 89° 59' E., in a random line bet. secs. 10 and 15.  
 Set temp. 1/4 sec. cor.  
 80.02 Intersect N. and S. line, 3 lbs. N. of cor. of  
 secs. 10, 11, 14 and 15.

Shiner Pond  
~~N. 89° 58' W.~~  
~~N. 89° 57' W.~~  
 N. 89° 57' W., in a true line bet. secs. 10 and 15.  
 Over level land, through dense grassland.  
 40.01 Set a malpais stone, 18 x 11 x 8 ins., 12 ins. in  
 the ground, for 1/4 sec. cor. marked 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 1/2  
 ft. base, 1 1/2 ft. high, N. of cor.

49.51 Santa Cruz river, 20 lbs. wide, course N. W.  
 80.02 In cor. of secs. 9, 10, 15 and 16.  
 Land, level.  
 Soil, alluvial and sandy loam; 2nd and 3rd  
 rates.  
 Timber, a few mesquite; undergrowth, grass-  
 land and mesquite.  
 Dense undergrowth, 80.02 chs.  
 November 5. At this loc. I set off 15-39's. in the

Subdivision of S. 10 S., R. 9 E.

Chains

are. and, at the ~~end~~ <sup>of</sup> corner the sum of the meridian; the resulting lat. is ~~32° 34' N.~~ <sup>32° 34' N.</sup> within 1' of the proper lat.

N. 00° W., bet. secs. 9 and 10.

29.50 Over level land, through dense grassland, enter scattering mesquite timber and brush, bet. E. and W.

30.00 Santa Cruz river 50 lbs. wide, course N. W.

39.85 Arroyo, 8 lbs. wide, course N. W.

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

A mesquite, 6 ins. diam., bears S. 85° E., 10 lbs. dist., marked  $\frac{1}{4}$  S. 10 B S.

A mesquite, 6 ins. diam., bears N. 34° 50' W., 57 lbs. dist., marked  $\frac{1}{4}$  S 9 B S.

41.30 Arroyo, 10 lbs. wide, course N. W.

44.00 Enter dense brush, bears N. W. and S. E.

76.55 Road bears E. and W.

80.00 Set a malpais stone, 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked with 5 notches on S. and 3 notches on E. edge; from which

A mesquite, 14 ins. diam., bears S. 22° E., 369 lbs. dist., marked S 10 S R 9 E S 10 B S.

A mesquite, 8 ins. diam., bears S. 66° 12' W., 315 lbs. dist., marked S 11 S R 9 E S 9 B S. in

other trees; dig pits, 18 x 18 x 12 ins., N. W. and N. W. of stone, 5 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. land, level.

Soil, alluvial and sandy loam; 2nd and 3rd rate.

Timber, scattering mesquite; undergrowth, grasswood and mesquite.

Dense undergrowth, 44.00 lbs.

~~S. 29° 58' E.~~  
S. 29° 54' E., in a random line bet. secs. 3 and 10.

41.00 Set & mark  $\frac{1}{4}$  sec. cor.

79.96 Enter set N. and S. line 5 lbs. S. of cor. of

Chains

secs. 2, 3, 10, and 11.

Traverse from West.

~~N. 89° 59' W.~~, on a true line bet. secs. 3 and 10.

Over level land, through scattering grass-wood.

39.98 Set a malpais stone, 18 x 8 x 5 ins., 12 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 ft. base, 1 1/2 ft. high, N. of cor.

79.96 Set cor. of secs. 3, 4, 9 and 11.

Level, level.

Soil, sandy and gravelly loam; 2nd and 3rd rate.

No timber underground, scattering grass-wood.

N. 10° 1/2' W. on a true line bet. secs. 3 and 4. Over level land.

16.30 Road, bears E. and N.

40.00 Set a malpais 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; from which a monument, 6 ins. diam., bears N. 62° 35' E., 117 lbs. dist. marked  $\frac{1}{4}$  S 3 B S.; no other true within limit; dig pits, 18 x 18 x 12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

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

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

80.92 Enters at the N. end of the Sp. at a point from which cor. of secs. 33 and 34, S. 9 S., R. 9 E., as heretofore described, bears N. 89° 46' E., 282 lbs. dist.

Set a malpais stone, 18 x 10 x 8 ins., 12 ins. in the ground, for closing cor. of secs. 3 and 4, marked C C on S.; with 3 grooves on E. and W. faces; dig pits, 24 x 18 x 12 ins. crosswise on each line, E. and W., 3 ft., and S. of stone, 7 ft. dist.; and raise a mound

Subdivision of S. 10 S., R. 9 E.

6 chains of earth, 4 ft. base, 2 ft. high, S. of cor. Land, level.  
 Soil, sandy and gravelly loam; 2nd and 3rd rate.  
 Timber, a few mesquites; undergrowth, grasswood.  
 November 5, 1905.

November 6: At 8<sup>h</sup> 50<sup>m</sup> a. m. l. m. t., I set off <sup>32° 30'</sup> ~~32° 32'~~ on the lat. arc; 15°-34' S. in the decl. arc; and determine a meridian with the solar at the standard cor. of srs. 32 and 33, in the S. body of the S. p., as heretofore described.

Shaner § run N. 0° 2' N., bet. srs. 32 and 33. Over mountainous land, ascending through scattering palm wood timber and cacti.

- 2.11.11 Ridge, bears E. and W.; descend through cactus palm wood undergrowth.
- 7.50 Dry wash, 30 lbs. wide, bears E.
- 10.60 Dry wash, 40 lbs. wide, bears E.
- 17.30 Dry wash, 20 lbs. wide, bears E.; begin steep ascent.
- 27.50 Ridge, bears E. and W.; descend.
- 41.00 Set a malpais stone, 18 x 8 x 6 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. Pits impracticable; bear cactus palm wood.
- 44.50 Dry wash, 30 lbs. wide, bears E.; ascend.
- 61.10 Ridge, bears N. W. and S. E.; descend.
- 81.00 Set a malpais stone, 18 x 8 x 6 ins., 12 ins. in the ground, for cor. of srs. 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 1/2 ft. high, N. of cor. Pits impracticable.  
 Land, mountainous and level.  
 Soil, stony; 4th rate.  
 Timber, palm wood; undergrowth, palm

Chains

woods, grass and cacti.  
Giant cactus.

Mountains or land covered with dense  
undergrowth, 80.00 chs.

411.111 East on a random line bet. sres. 28 and 33.

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

Set on a N. and S. line of lks. 11. of  
cor. of sres. 27, 28, 33 and 34.

Stump Iron

N. 89° 56' W. on a true line bet. sres. 28 and 33.

Over level land, through scattering  
palo verde timber and dense brush.

13.000 Lower palo verde and dense brush;  
begin steep ascent.

19.000 Ridge, bears N. and S.

22.000 Drivend.

36.000 Gulch, 30 lks. wide, course S.; ascend.

39.94 Set a malpais 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 raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits in

practically a pale verde line in diam. sres. 28 B. T. a pale verde line in  
diam. sres. 28  $14\frac{1}{2}$ ° E 145 lks. dist. 4 inches  $\frac{1}{4}$  S. 33 B. T.

53.000 Ridge, bears N. W. and S. E.; descend.

75.000 79.88 <sup>Drush N.W. 20 lks wide</sup>  
Set cor. of sres. 28, 29, 32 and 33.

Level, mountains and level.

Soil, stony; 4th rate.

Timber, scattering palo verde; under-  
growth, palo verde and cacti.

Giant cactus.

Mountains or land covered with  
dense undergrowth, 79.88 chs.

November: At this cor. I set off 15°-57' S.  
on the circ. arc; and, at 12<sup>h</sup> 6 m l.m.t.,

observed the sun on the meridian; the re-  
sulting lat. is  $32^{\circ} 31' 17''$   
 ~~$32^{\circ} - 33' 4''$~~

N. 102° W., bet. sres. 28 and 29.

Over mountains land, descending  
through scattering palo verde timber.

9.000 Gulch, 30 lks. wide, course N. W.; ascend.

6 chains  
 17.00 Ridge, bears N. W. and S. E.; as usual.  
 35.00 Gulch, 20 lbs. wide, course N. W.; as usual.  
 40.00 Set a malpais stone, 18x8x7 ins., 12 ins. in  
 the ground, for 4 s.e. cor. marked 4 on  
 N. face; and raise a mound of stone,  
 2 ft. base, 1 1/2 ft. high, W. of cor. Pits  
 impracticable.

41.00 Spur, extending W.; as usual.  
 40.50 Salphure line from Red Rock to Silver  
 Ball, bears N. 59 1/4° E. and S. 59 1/4° W.

71.00 Soil, bears E. and W.; the more or gently  
 rolling land, through course brush.

80.00 Set a malpais stone, 18x9x6 ins., 12 ins.  
 in the ground, for cor. of s.e.s. 20, 21, 28  
 and 29, marked with 2 notches on S.  
 and 4 notches on E. edge; from which  
 A palm vord, 12 ins. diam. bears N. 40 1/2° E.,  
 227 lbs. dist., marked S 10 S R 9 E S 21 B S.  
 A palm vord, 7 ins. diam. bears S 19 3/4° E., 229  
 lbs. dist., marked S 10 S R 9 E S 28 B S.  
 A palm vord, 9 ins. diam. bears S. 39 3/4° W.  
 287 lbs. dist., marked S 10 S R 9 E S 29 B S.  
 A palm vord, 12 ins. diam. bears N. 44 3/4° W.  
 372 lbs. dist., marked S 10 S R 9 E S 21 B S;  
 and raise a mound of stone, 2 ft. base,  
 1 1/2 ft. high, W. of cor.  
 Land, the mountains and gently rolling.  
 Soil, gravelly and stony; 3rd and 4th  
 rather  
 Timber, scattering palm vord; undergrowth,  
 palm vord, grass and weeds and cacti.  
 Grint cacti.

Maintainance of land covered with dense  
 undergrowth, 80.00 lbs.

40.00 S. 89° 56' E., on a random line bet. s.e.s. 21 and 28.

79.86 Set a vord. 4 s.e. cor.  
 Intersect N. and S. line 7 lbs. S. of cor.  
 of s.e.s. 21, 22, 27 and 28.

Runner S run  
 N. 89° 59' W., on a true line bet. s.e.s. 21 and 28.



6 trains Over gently rolling land, through scattering palo verde timber and dense brush.

3.00 Dry wash, 20 lbs. wide, runs N.

13.15 Wood road, bears N. W. and S. E.

30.00 Sulphur line from Red Rock to Silver Ball, bears N.  $59\frac{1}{4}^{\circ}$  E. and S.  $59\frac{1}{4}^{\circ}$  W.

39.93 Set a malpais stone,  $18 \times 8 \times 7$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which

A rail road, 10 ins. diam., bears S.  $40^{\circ}$  W., 110 lbs. dist., marked  $\frac{1}{4}$  S 28 B S.

A palo verde, 10 ins. diam., bears N.  $64^{\circ} 10'$  W., 46 lbs. dist., marked  $\frac{1}{4}$  S 21 B S.

79.86 Set cor. of secs. 20, 21, 28 and 29.  
Land, gently rolling.  
Soil, gravelly and stony; 3rd and 4th rates.  
Timber, scattering palo verde, underground, grasswood, palo verde, mesquite, Yucca and cacti.  
Giant cactus.  
Dense underground, 79.86 chs.  
November 6, 1905.

November 7: At 8<sup>h</sup> 48<sup>m</sup> a. m., l. m. t., I set off <sup>32° 32' 7"</sup> ~~32° 34' 7"~~ in the lat. arc;  $16^{\circ} 12'$  S. in the arc, and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.

Stoned Pyramid  
N.  $0^{\circ} 2'$  W., bet. secs. 20 and 21.  
Over gently rolling land, through dense grass-wood.

25.00 Middle of single track of the Silver Ball railroad, bears N.  $66^{\circ} 41'$  E. and S.  $66^{\circ} 41'$  W.

40.00 Set a malpais stone,  $20 \times 8 \times 6$  ins., <sup>15</sup> 14 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face; dig pits,  $18 \times 18 \times 12$  ins. N. and S. of stone, 3 ft. dist.; and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a malpais stone,  $20 \times 8 \times 7$  ins., <sup>15</sup> 14 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked

Subdivision of S. 10 S., R. 9 E.

Chains

with 3 notches on S. and 4 notches on E. edge;  
 from which  
 A mosquito, 8 ins. diam., bears S  $70^{\circ}$  W., 47 lks. dist.,  
 marked S 10 S R 9 E S 20 B S.  
 A mosquito, 8 ins. diam., bears N.  $17^{\circ}$  40' W., 85 lks.  
 marked S 10 S R 9 E S 14 B S.; no other trees; dig  
 pits, 18 x 18 x 12 ins., N. E. and S. E. of stone,  $5\frac{1}{2}$   
 ft. dist.; and raise a mound of earth, 4 ft.  
 base, 2 ft. high, W. of cor.  
 Land, gently rolling and level.  
 Soil, sandy loam; 2nd and 3rd rate.  
 Timber, a few mosquitoes; undergrowth, grass-  
 wood, mosquito and sunflowers.  
 Dense undergrowth, 80.00 chs.

S.  $89^{\circ}$  59' E., on a random line bet. secs. 16 and 21.  
 40.00 Set corner  $\frac{1}{4}$  sec. cor.  
 79.98 Intersect N. and S. line 3 lks. N. of cor. of  
 secs. 15, 16, 21 and 22.

Shiner Run  
 N.  $89^{\circ}$  58' W., on a random line bet. secs. 16 and 21.  
 Over level land through dense grasswood.

3.28 Road, bears N. W. and S. E.  
 30.00 Enter dense sunflowers.

39.99 Set a malpais stone, 18 x 8 x 6 ins., 12 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face;  
 from which  
 A mosquito, 5 ins. diam., bears N.  $81^{\circ}$  50' E., 137 lks.  
 dist., marked  $\frac{1}{4}$  S. 16 B S.; no other trees within  
 limit; dig pits, 18 x 18 x 12 ins., E. and N. 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.

50.00 High fence, bears N. W. and S. E.  
 79.98 In cor. of secs. 16, 17, 20 and 21.  
 Land, level.  
 Soil, sandy loam; 2nd and 3rd rate.  
 No timber; undergrowth, grasswood, sunflowers  
 and cockleburrs.

Dense undergrowth, 79.98 chs.  
 November 7: At this cor. I set off 15°-15' S. on the  
 decl. arc; and, at 12<sup>h</sup> 3<sup>m</sup> l. m. t., observed the sun

<p>Chains</p>	<p>meridian; the resulting lat. is <sup>32° 33' 7"</sup> <del>32° 34' 11"</del> or within 1 minute of the proper latitude</p> <hr/> <p>N. 0° 2' N., bet. sres. 16 and 17. Over level land, through dense grasswood.</p> <p>18.0 Dry wash, 20 lbs. wide, course E.</p> <p>11.83 Road, bears N. N. W. and E. S. E.</p> <p>20.00 Wire fence, N. and S., bears 1 ch. N. enter mesquite timber and dense mesquite brush, bear E. and W.</p> <p>24.27 Wire fence, bears N. N. W. and S. S. E.</p> <p>24.60 The Avra arroyo, 30 lbs. wide, course N. W.</p> <p>26.70 Branch of the Avra, 20 lbs. wide, course N. W.</p> <p>28.67 Road, bears E. and W.</p> <p>30.00 Arroyo, 10 lbs. wide, course N. W.</p> <p>34.00 Dense mesquite timber and brush, bear E. and W.; enter dense sunflowers.</p> <p>40.00 Set a malpais stone, 18x7x7 ins., 19 ins. in the ground, for 4 sec. cor. marked <math>\frac{1}{4}</math> on W. face; dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 <math>\frac{1}{2}</math> ft. base, 1 <math>\frac{1}{2}</math> ft. high, N. of cor.</p> <p>45.50 Wire fence, bears N. W. and S. E.</p> <p>50.70 Grow dense brush; enter pasture.</p> <p>69.05 Wire fence, bears N. W. and S. E.; leave pasture.</p> <p>69.50 Enter grain field.</p> <p>69.65 Road, bears N. W. and S. E.</p> <p>80.00 Set a malpais stone, 20x8x6 ins., <sup>15</sup> <del>14</del> ins. in the ground, for cor. of sres. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges; dig pits, 18x18x12 ins., in each sec. 5 <math>\frac{1}{2}</math> ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.</p> <p>Land, level. Soil, alluvial and sandy loam; and and 3rd rate. Timber, mesquite; undergrowth, grasswood and sunflowers. Dense undergrowth, 50.70 chs.</p> <hr/> <p>8.29° 58' E., on a random line bet. sres. 9 and 16.</p> <p>40.00 Set temp. <math>\frac{1}{4}</math> sec. cor.</p>
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Subdivision of S. 10 S., R. 9 E.

Chains  
49.94 Enter sect N. and S. line 9 lks. N. of cor. of secs.  
9, 10, 15 and 16.  
Planned P 4 m  
N. 89° 54' W. on a true line bet. secs. 9 and 16.  
Over brush land, through dense grasswood.  
21.00 Wire fence, bears N. W. and S. E.  
24.00 Straps 20 lks. wide, course N. W.  
39.97 Set a mosquito stake, 3 ft. long, 3 ins. sq., with  
marked stone, 24 ins. in the ground, for 1/4 sec.  
cor. marked 1/4 S 9 on N. and 16 on S. face; dig  
pits, 18x18x12 ins., E. and W. of stake, 3 ft. dist.  
and raise a mound of earth, 3 1/2 ft. base,  
1/2 ft. high, N. of cor.  
53.00 Grow dense brush, bears N. and S.; enter  
grain field  
79.94 Str. cor. of secs. 8, 9, 16 and 17.  
Land, brush.  
Soil, sandy loam; 2nd and 3rd cuts.  
Timber, scattering mosquito; marginal,   
grasswood, mosquito and sycamores.  
Dense undergrowth, 53.00 chs.  
November 7, 1905.

November 8: At 8<sup>h</sup> 35<sup>m</sup> a.m., l.m.t., I set off  
32° 34' N. in the lat. arc; 16° - 30' in the decl. arc;  
and determine a meridian with the solar at  
the cor. of secs. 8, 9, 16 and 17. Planned P 4 m  
22.0° 29' W. bet. secs. 8 and 9.  
Over brush land, in grain field.  
13.00 House, bears 7 chs. E.  
14.70 Road, bears N. E. and S. W.  
14.85 Wire fence, bears N. E. and S. W.; leave grain  
field and enter cleared ground.  
21.90 Wire fence, bears N. N. W. and S. S. E.; leave cleared  
ground.  
22.00 Road, bears N. N. W. and S. S. E.; enter mos-  
quito timber and dense brush  
32.00 Grow mosquito, bears E. and W.; enter dense  
grasswood.  
40.00 Set a malpais stone, 18x10x7 ins., 12 ins. in the  
ground, for 1/4 sec. cor. marked 1/4 on W. face;  
dig pits, 18x18x12 ins., N. and S. of stone, 3 ft.

Chains	dist.; and raised mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
48.00	Arroyo, 40 lbs. wide, course N. W.
50.75	Wier fence, bars N. W. and S. E.; bare dense brush and entry cultivated land; this tract extends E. N. E. about 35.00 chs., S. E. about 60.00 chs. and W. 3 chs.
54.50	Wier fence, bars N. E. and S. W.; bare field and winter dense brush.
73.33	Wier fence, bars N. W. and S. E.
79.00	Branch of the Santa Cruz river, 40 lbs. wide, course N. N. W.
80.00	Set a malpais stone, $20 \times 8 \times 5$ ins., $1\frac{1}{2}$ ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked with 5 notches on S. and 4 notches on E. side; from which
	A mosquito, 7 ins. diam., bars N. $84\frac{1}{2}^\circ$ E., 96 lbs. dist., marked S 10 S R 9 E S 4 B S.
	A mosquito, 5 ins. diam., bars S. $52\frac{1}{2}^\circ$ E., 14 lbs. dist., marked S 10 S R 9 E S 9 B S.
	A mosquito, 5 ins. diam., bars S. $10\frac{1}{2}^\circ$ W., 55 lbs. dist., marked S 10 S R 9 E S 5 B S.
	A mosquito, 5 ins. diam., bars N. $7\frac{3}{4}^\circ$ W., 71 lbs. dist., marked S 10 S R 9 E S 5 B S.
	Sand, brk.
	Soil, alluvial and sandy loam; and and soil rather.
	Timber, mosquito; undergrowth, mosquito, grassland and <del>forest</del>
	Dense undergrowth, 54.28 chs.
40.00	S. $89^\circ 54'$ E., on a random line bet. secs. 4 and 9. Set temp. $\frac{1}{4}$ sec. cor.
79.87	Intersect N. and S. line 10 lbs. S. of cor. of secs. 3, 4, 9 and 10. Shore of <del>river</del>
7.00	N. $89^\circ 58'$ W. on a true line bet. secs. 4 and 9. Over level land, through scattering brush.
39.93 $\frac{1}{2}$	Road, bars N. W. and S. E. Set a malpais stone, $18 \times 7 \times 6$ ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N. face; dig

Sub-division of S. 10 S., R. 9 E.

Chains pits, 18 x 18 x 12 ins., E. and W. of stump, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of ev.

70.00 Enter in pits, timber and former mesquite brush, bears N.W. and S.E.

74.35 Santa Cruz river, 45 lbs. wide, course N. N. W.

79.87 Str. ev. of sres. 4, 5, 8 and 9.

Land, level.

Soil, sandy loam; 2nd and 3rd rate.

Timber, scattering mesquite; undergrowth, grassmud and mesquite.

Dense undergrowth, 10.00 lbs.

N. 10° 2' N., on a spur line bet. sres. 4 and 5  
Over level land, through scattering mesquite  
timber and dense brush.

90 Santa Cruz river, 40 lbs. wide, course N.

3.00 Sparse mesquite, bears E. and W.

10.20 Road, bears E. and W.

16.00 Sparse dense brush, bears N. E. and S. W.

40.00 Set a malpais stone, 20 x 6 x 6 ins., 1 1/4 ins. in the  
ground, for 1/4 sec. ev. marked 4 on W. face;  
dig pits, 18 x 18 x 12 ins., N. and S. of stump, 3  
ft. dist.; dense brush

A mesquite, 7 ins. diam., bears N. 9° E., 114 lbs.  
dist., marked 4 8 4 B S.

A mesquite, 6 ins. diam., bears N. 17° 40' N., 125  
lbs. dist., marked 4 8 5 B S.

80.97 Enter at the N. edge of the Str., at a point from  
which ev. of sres. 32 and 33, S. 9 S., R. 9 E., as  
part for described, bears S. 88° 25' E., 337 lbs. dist.

Set a malpais stone, 18 x 10 x 8 ins., 12 ins. in  
the ground, for closing ev. of sres. 4 and 5,  
marked 6 6 on S.; with 4 grooves on E. and  
2 grooves on N. face; dig pits, 24 x 18 x 12 ins.  
crosswise on each line, E. and W., 3 ft., and  
S. of stump, 7 ft. dist.; and raise a mound  
of earth, 4 ft. base, 2 ft. high, S. of ev.

Land, level.

Soil, sandy and gravelly loam; 2nd and 3rd rate  
Timber, scattering mesquite; undergrowth, mes-  
quite and grassmud.

Dense undergrowth, 16.00 lbs.

Chains

November 5, 1905.

November 9: At 8<sup>h</sup> 48<sup>m</sup> a.m., l.m.t., I set off  
<sup>32° 30' N</sup>  
~~32° 32' N~~ in the lat. arc; 16° 47' S. on the decl. arc,  
 and determine a meridian with the solar  
 at the standard cor. of secs. 31 and 32, on the  
 S. side of the Sp., as heretofore described.  
 Thence I run  
 N. 0° 3' W., bet. secs. 31 and 32.  
 Over mountainous land, descending through  
 scattering palo verde timber.  
 9.50 Gulch, 20 lbs. wide, course N.; ascend.  
 13.40 Spur, extending N.; descend.  
 38.00 Gulch, 20 lbs. wide, course N.; thence over  
 gently rolling land through dense brush.  
 39.00 Set a sandstone, 18 x 8 x 5 ins., 12 ins. in the  
 ground, for witness cor. to 4 sec. cor. marked  
 N 6 1/4 W. face, and raise a mound of  
 stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits im-  
 practicable.  
 40.00 Falls in gulch, 60 lbs. wide, course N. N. E.  
 52.80 Same gulch, 60 lbs. wide, course N. W.  
 68.00 Same gulch, 60 lbs. wide, course N. E.  
 71.40 Same gulch, 50 lbs. wide, course N. N. W.  
 72.00 Along E bank of same gulch.  
 80.00 Set a malpais stone, 18 x 8 x 6 ins., <sup>set in a mound</sup> ~~12 ins. in~~  
<sup>stones</sup> ~~the ground~~, for cor. of secs. 29, 30, 31 and 32,  
 interbed with 1 notch on S. and 3 notches  
 and raised a mound of stone, 2 ft. base 1 1/2 ft. high W. of cor.  
 on E. side; from which  
 A palo verde, 5 ins. diam., bears N. 82 1/4° E., 76 lbs.  
 dist., marked S 10 S R 9 E S 29 B S.  
 A palo verde, 5 ins. diam., bears S. 58 3/4° E. 35  
 lbs. dist., marked S 10 S R 9 E S 32 B S.  
 A palo verde, 5 ins. diam., bears S. 36° 18' E., 145  
 lbs. dist., marked S 10 S R 9 E S 32 B S. W. 90 lbs.  
 A palo verde, 5 ins. diam., bears S. 24 1/2° N., 71 lbs.  
 dist., marked S 10 S R 9 E S 31 B S. No other trees within  
<sup>limits.</sup>  
~~A palo verde, 6 ins. diam., bears N. 85 1/4° W., 54~~  
~~lbs. dist., marked S 10 S R 9 E S 30 B S. (Pits impracticable~~  
 Land, gently rolling and mountainous.  
 Soil, gravelly and stony; 3rd and 4th marks.  
 Timber, scattering palo verde, yucca, and  
 ironwood; undergrowth, palo verde, mes-

Subdivision of S. 10 S., R. 9 E.

6 chains  
 gnats, tussocks and cacti.  
 Giant cacti.  
 Mountains or land covered with dense undergrowth, 80.00 chs.

East on a random line bet. secs. 29 and 32.  
 40.00 Set camp. 4 sec. cor.  
 79.96 Intersect N. and S. line 5 lbs. N. of cor. of  
 secs. 28, 29, 32 and 33.

Shaner Run  
 N. 89° 58' W., on a true line bet. secs. 29 and 32.  
 Over mountainous land, ascending through scattering palo verde.

17.00 Ridge, bears N. W. and S. E.; descend.

33.00 Gulch, 40 lbs. wide, crosses N. W.; ascend.

39.98 Set a malpais stone, 18 x 12 x 7 ins. in  
 the ground, for 1/4 sec. cor. marked 4 on N.  
 face; and raise a mound of stone, 2 ft.  
 base, 1 1/2 high, N. of cor. Pits impracticable.

51.70 Spur extending N.; descend.

66.00 Top, bears N. and S.; enter dense brush.

79.96 The cor. of secs. 29, 30, 31 and 32.

Land, mountainous and hilly.  
 Soil, gravelly, stony and rocky; 3rd and  
 4th data.

Timber, scattering palo verde, undergrowth,  
 palo verde, mesquite and cacti.  
 Mountains, or land covered with dense  
 undergrowth, 79.96 chs.

Number 9: At this cor., I set off 160-50' S. on  
 the dial. arc; and, at 12 h 5 m. p. m. t., observed  
 the sun on the meridian; the resulting  
 lat. is 32°-33'

West on a random line bet. secs. 30 and 31.  
 40.00 Set camp. 4 sec. cor.

79.15 Intersect the W. ldy. of the S. 10 lbs. S. of cor.  
 of secs. 25, 30, 31 and 36, as heretofore described.

Shaner Run  
 S. 89° 56' E., on a true line bet. secs. 30 and 31.  
 Over gently rolling land, through scattering



Chains	<p>39.15 Palo verde timber and brush.</p> <p>Get a malpais stone, 18x10x6 ins., 12 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor. marked <math>\frac{1}{4}</math> on N. face; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, N. of cor. Pits impracticable.</p> <p>79.15 1<sup>st</sup> cor. of secs. 29, 30, 31 and 32                  Sand, gently rolling and level.                  Soil, gravelly and stony; 3<sup>rd</sup> and 4<sup>th</sup> rate.                  Timber, scattering palo verde, mesquite and ironwood; underground, palo verde, mesquite, tronta and cacti.                  Dense underground, 79.15 chs.</p>
	<p>N. <math>0^{\circ} 3' W.</math>, bet. secs. 29 and 30.                  Over level land, through scattering timber and dense brush.</p> <p>3.00 Dry wash, 100 lbs. wide, course N. N. W.</p> <p>7.20 Same wash, 100 lbs. wide, course N. N. E.</p> <p>13.50 Same wash, 130 lbs. wide, course N. N. W.</p> <p>30.50 Same wash, 120 lbs. wide, course N. N. E.</p> <p>33.18 Sulfur line from Red Rock to Silver Ball, bears N. S. W. and E. N. E.</p> <p>38.30 Ascend.</p> <p>39.50 Top of E. slope of round mountain.</p> <p>40.00 Scale on E. face of high ledge, on which get a cross (x) at the exact cor. point for <math>\frac{1}{4}</math> sec. cor. marked <math>\frac{1}{4}</math> above cross; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, 6 lbs. E. of cor. Pits impracticable.</p> <p>44.00 Descend.</p> <p>53.00 Spot, bears E. and W.</p> <p>69.70 Enter dry wash, course N.</p> <p>74.05 Middle of single track of the Silver Ball railroad, bears N. <math>26^{\circ} 41' E.</math> and S. <math>26^{\circ} 41' W.</math></p> <p>75.10 Same wash, course N. N. W.</p> <p>76.00 <del>Top</del> <sup>N. E. &amp; S. W.</sup></p> <p>80.00 Get a malpais stone, 18x8x6 ins., 12 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on S. and 5 notches on E. edge; from which a palo verde, 8 ins. diam., bears <math>S. 51\frac{1}{2}^{\circ} W. / 169</math>  <del>S. <math>57\frac{1}{4}^{\circ} W. / 184</math></del></p>

Subdivision of S. 10 S., R. 9 E.

6 chains  
 lbs. dist. marked S 10 S R 9 E S 30 B S.  
 A palm rock, 8 ins. diam. bears N. ~~48° W.~~ <sup>37° W.</sup> 116  
 lbs. dist. marked S 10 S R 9 E S 19 B S.; no other  
 trees; and raise a mound of stone, 2 ft. base,  
 1 1/2 ft. high, W. of cor.  
 Land, level, mountains and gently rolling.  
 Soil, gravelly, stony and rocky; 3rd and  
 4th rates.  
 Timber, scattering palm rock, mesquite  
 and ironwood; undergrowth, palm rock,  
 mesquite and yucca.  
 Mountains or land covered with dense  
 undergrowth, 80.00 lbs.  
 November 9, 1905.

November 10: At 8<sup>h</sup> 45<sup>m</sup> a.m., l.m.t., I set  
 off <sup>32° 32' N</sup> ~~32° 34' N~~ in the lat. arc; 17<sup>h</sup> 04<sup>m</sup> s. in the merid.  
 arc; and determined a meridian with the  
 solar at the cor. of sves. 19, 20, 29 and 30.

Shaner P. run  
 S. 89° 58' E., on a random line bet. sves. 20 and 29.  
 40.00 Set trap. 1/4 sves. cor.  
 79.98 Intersect N. and S. line 3 lbs. S. of cor. of sves.  
 20, 21, 28 and 29.

Shaner P. run  
 N. 89° 59' W., on a true line bet. sves. 20 and 29.  
 Over gently rolling land, through scattering palm  
 rock timber and dense brush.

14.00 Dry wash, .40 lbs. wide, course N.  
 39.50 Dry wash, 20 lbs. wide, course N.  
 39.99 Set a malpais stone, 18x6x6 ins., 12 ins. in the  
 ground, for 1/4 sves. cor. marked 1/4 on N. face;  
 and raise a mound of stone, 2 ft. base, 1 1/2 ft.  
 high, N. of cor.

62.95 Middle of single track of the Silver Ball rail-  
 road, bears N. 66° 41' E. and S. 66° 41' W.

64.10 Road, bears N. W. and S. W.  
 79.98 The cor. of sves. 19, 20, 29 and 30.  
 Land, gently rolling.  
 Soil, gravelly and stony; 3rd and 4th rates.  
 Timber, scattering palm rock and mesquite;

Chains

undergrowth, palm vrd, grasswood, kasota,  
 mesquite and caeli.  
 Bright caetns.  
 Dense undergrowth, 79.98 chs.

N. 89° 56' N., on a random line bet. sres. 19 and 30.

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

79.08 Enter set W. body of the Sp. 5 lbs. N. of enr. of  
 sres. 19, 24, 25 and 30.

Shiner Pine

N. 89° 58' N., on a true line bet. sres. 19 and 30.

Over brush land, through scattering timber and  
 dense brush.

12.10 Dry wash, 10 lbs. wide, course N. N. E.

15.00 Ascend.

21.00 Slope S. slope of mountain; ascend.

28.00 Spot, Grass N. and S.

39.08 Set a malpais stone, 18 x 8 x 6 ins., 12 ins. in  
 the ground, for  $\frac{1}{4}$  sec. enr. 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 enr.

43.50 Ascend, Grass N. and S.

61.00 S. slope of mountain; ascend.

76.50 Dry wash, 40 lbs. wide, course N. N. E.

79.08 The enr. of sres. 19, 20, 29 and 30.

Land, mountainous and level.

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

Timber, scattering palm vrd and ironwood;  
 undergrowth, palm vrd, grasswood and caeli.  
 Bright caetns.

Mountainous or level course with dense un-  
 dergrowth, 79.08 chs.

November 10: At this enr. Set off 17° - 57.5' 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  
 $32^{\circ} 32' 7''$   
 ~~$32^{\circ} 35' 4''$~~   
 or within 1' of the proper lat.

Y

N. 0° 2' N., bet. sres. 19 and 20.

Over brush land, through scattering palm vrd

Subdivision of S. 10 S., N. 9 E.

Chains) Timber, and dense brush.

5.30 Dry wash, 70 lbs. wide, course N.

40.00 Set a malpais stone, 18x8x6 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

62.00 Ascend.

69.00 Ridge, bars E. and W.; ascend.

75.00 Foot, bars E. and W.

79.85 Road, bars N. and S. W.

80.00 Set a malpais stone, 18x8x8 ins., 12 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, marked with 3 notches on S. and 5 notches on E. edge; dig pits, 18x18x12 ins., in each sec. 5 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

Land, gently rolling, mountainous and level. Soil, gravelly and stony; 3rd and 4th rate. Timber, scattering pine wood; undergrowth, hawthorn and grasswood. Mountainous, or land covered with dense undergrowth, 80.00 chs.

S. 89° 59' E., on a random line bet. secs. 17 and 20.

40.00 Set a trip. 1/4 sec. cor.

80.00 Put a set N. and S. line at the cor. of secs. 16, 17, 20 and 21.

Shiner Run

N. 89° 59' W., on a true line bet. secs. 17 and 20. Over level land, through scattering mesquite timber and dense grasswood.

50 Road, bars N. and S. W.

33.90 Dry wash, 20 lbs. wide, course N.

40.00 Set a malpais stone, 18x10x5 ins., 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face; from which a mesquite 9 ins. diam., bars S. 2 3/4° W., 195 lbs. dist., marked 1/4 S 20 B S.; no other trees; dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high,

Chains  
79.50  
80.00

N. of <sup>P. 117</sup> ~~Coal~~ NE. and SW. 1/4, 18, 19 and 20.  
Land, level.  
Soil, sandy loam and gravelly; 2nd and 3rd  
rate.  
Timber, scattering mesquite; undergrowth,  
grasswood.  
Dense undergrowth, 80.00 chs.  
November, 1905.

November 11: At 8<sup>h</sup> 50<sup>m</sup> a.m., l.m.t., I set off  
<sup>32° 33' 27"</sup>  
~~32° 33' 27"~~ on the lat. arc; 17°-21' S. on the mer. arc;  
and determine a meridian with the solar at  
the cor. of secs. 17, 18, 19 and 20.  
Turner P. run  
N. 89° 58' W. on a random line bet. secs. 18 and 19.  
40.00 Set temp. 1/4 sec. cor.  
79.00 Enter set the W. bay. of the Sp. 3 lbs. S. of cor.  
of secs. 13, 18, 19 and 24.  
Turner P. run  
S. 89° 57' E. on a true line bet. secs. 18 and 19.  
Over level land, through scattering timber and  
dense grasswood.  
39.00 Set a small pine stump, 20 x 8 x 6 ins., <sup>15</sup> 14 ins. in the  
ground, for 1/4 sec. cor. marked 1/4 on N. face;  
from which:  
A mesquite, 10 ins. diam., bears N. 73° 10' E., 82  
lbs. dist., marked 1/4 S 18 B S.  
A mesquite, 6 ins. diam., bears S. 38° E., 92 lbs.  
dist., marked 1/4 S 19 B S.  
59.35 Dry wash, 20 lbs. wide, across N.W.  
79.00 Set cor. of secs. 17, 18, 19 and 20.  
Land, level.  
Soil, sandy loam and gravelly; 2nd and 3rd  
rate.  
Timber, scattering mesquite and ironwood;  
undergrowth, grasswood.  
Dense undergrowth, 79.00 chs.

N. 0° 3' W., bet. secs. 17 and 18.  
Over level land, through dense grasswood.

Subdivision of S. 10 S., R. 9 E.

chains  
19.00 Enter scattering mesquite timber, bears N. E  
and S. W.  
21.20 Dry wash, 30 lbs. wide, course N. E.  
40.00 Set a malpais stone, 18x10x8 ins., 12 ins. in the  
ground, for 4 sec. 117. marked 4 on N. face;  
from which  
A mesquite, 12 ins. diam. bears N. 64° 40' N., 19  
lbs. dist. marked 4 & 18 B S.; no other trees  
within limit; dig pits, 18x18x12 ins., N. and  
S. of stone, 3 ft. dist., and raise a mound of  
earth, 3 1/2 ft. base, 1 1/2 ft. high N. of ev.  
42.20 Dry wash, 30 lbs. wide, course N. N. E.  
47.20 Road, bears N. and S. W.  
80.00 Set a malpais stone, 18x10x8 ins., 12 ins. in the  
ground, for ev. of secs. 7, 8, 17 and 18, marked  
with 4 notches on S. and 5 notches on E. edge;  
from which  
A mesquite, 15 ins. diam., bears N. 74° N., 383 lbs.  
dist., marked S 11 S R 9 E 8 7 B S.; no other trees;  
dig pits, 18x18x12 ins., N. E., S. E. and S. W. of stone,  
5 1/2 ft. dist.; and raise a mound of earth, 4 ft.  
base, 2 ft high, N. of ev.  
Land, level.  
Soil, sandy loam; 2nd and 3rd rates.  
Timber, scattering mesquite; undergrowth,  
grass-wood, mesquite, sunflowers and cocklebur.  
Dense undergrowth, 80.00 lbs.  
November: At this ev. I set off ~~17° 23' 8~~<sup>17° 23' 8</sup> ~~17° 24' 5~~ in the  
dial. arc; and, at 12<sup>h</sup> 3<sup>m</sup> l. m. t., observe the sun  
in the meridian; the resulting lat. is ~~32° 34' 7~~<sup>32° 34' 7</sup> ~~32° 35' 4~~

X

S. 89° 59' E., in a random line bet. secs. 8 and 17.  
40.00 Set temp. in sec. ev.  
80.06 Intersect N. and S. line 3 lbs. N. of ev. of secs.  
8, 9, 16 and 17.  
Plumer P run  
N. 89° 58' N., in a true line bet. secs. 8 and 17.  
Over level land, in grain field.  
11.75 Road, bears N. and S.  
15.05 Wire fence, bears N. and S.; enter stubble field.  
28.00 Enter dense sunflowers and cocklebur.

6 chains  
40.03 ✓ Set a malpais stone, 18 x 8 x 7 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; dig pits, 18 x 15 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.

45.60 With corner bars N. W. and S. E.

45.73 Round bars N. W. and S. E.

23.00 ✓ Set 4 CORNER PARROYS, 30 lbs. each, corners N. W. N. E.

80.06 ✓ Set cor. of secs. 7, 8, 17 and 18.

Land, rural.  
Soil, sandy loam; 2nd and 3rd rates.  
Timber; undergrowth, sunflowers, ene herbars and grasswood.  
Woods undergrowth, 52.06 chs.

40.00 N. 89° 57' W., on a random line bet. secs 7 and 18.

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

78.96 Enter set the N. body of the S. 5 lbs. S. of cor. of secs. 7, 12, 13 and 18.

Turner P run

34.00 S. 89° 55' E., on a true line bet. secs. 7 and 18.

Over best land, through dense grasswood.

Enter scattering mesquite timber and brush, bear N. and S.

38.96 ✓ Set a malpais stone, 18 x 10 x 5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which

A mesquite, 6 ins. diam.; bears S. 20° 2' E., 351 lbs. dist., marked  $\frac{1}{4}$  S 18 B D.

A mesquite, 6 ins. diam., bears N. 20° 40' W., 172 lbs. dist., marked  $\frac{1}{4}$  S 7 B D.

68.00 ✓ Green mesquite, bears N. E. and S. W.

78.96 ✓ Set cor. of secs. 7, 8, 17 and 18.

Land, rural.

Soil, sandy loam; 2nd and 3rd rates.

Timber, scattering mesquite; undergrowth, grasswood, mesquite and *Cochata*.

Woods undergrowth, 78.90 chs.

November 11, 1905.

November 12: At 8<sup>h</sup> 45<sup>m</sup> a.m., l.m.t., I set off <sup>32° 33' N</sup> ~~32° 35' N~~ on the lat. arc; 17° 07' S. on the decl. arc; and

Subdivision of S. 10 S., R. 9 E.

Chains  
 determine a meridian with the solar at the  
 top of srs. 7, 8, 17 and 18.  
 Thru P gun  
 N. 0° 3' W., bet. srs. 7 and 8.  
 Over level land, through scattering mesquite  
 timber and dense grasswood.  
 8.30 Thru Ara arroyo, 20 lks. wide, course N. N. W.  
 20.00 Scarce timber, bars E. and W.  
 40.00 Set a malpais stone, 18 x 6 x 6 ins., 12 ins. in the  
 ground, for  $\frac{1}{4}$  srs. cor. marked  $\frac{1}{4}$  on N. face.  
 Dig pits, 18 x 18 x 12 ins., N. and S. 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.  
 61.00 Enter dense sunflowers and cecropias, bars  
 E. and W.  
 77.00 Scarce sunflowers, bar E. and W.  
 80.00 Set a malpais stone, 20 x 6 x 6 ins., <sup>15</sup> 14 ins. in the  
 ground, for cor. of srs. 5, 6, 7 and 8, marked  
 with 5 notches on S. and E. sides; dig pits,  
 18 x 18 x 12 ins., in each srs. 5  $\frac{1}{2}$  ft. dist. and raise  
 a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Level, level.  
 Soil, alluvial and sandy loam; 2nd and 3rd  
 cuts.  
 Timber, scattering mesquite, underground, grass-  
 wood, mesquite, sunflowers and cecropias.  
 Dense undergrowth, 80.00 lks.

S. 89° 58' E., on a random line bet. srs. 5 and 8.  
 40.00 Set  $\frac{1}{4}$  srs. cor.  
 79.94 Intersect N. and S. line 3 lks. N. of cor. of srs.  
 4, 5, 8 and 9.  
 Thru P gun  
 N. 89° 57' W., on a true line bet. srs. 5 and 8.  
 Over level land, through scattering mesquite  
 timber and dense brush.  
 4.00 Branch of Santa Cruz river, 30 lks. wide, course N. W.  
 34.00 Eugenio Aguirre's ranch house, outbuildings and  
 corals bar 6 lks. N.  
 35.00 Road, bars N. and S.  
 35.36 Wire fence, bars N. and S.



6 chains  
35.45 Road, bars N. and S.  
38.75 Slanaher house, bars 3 and 8.  
39.97 Sycamore stump, 18 x 6 x 6 ins., 12 ins. in  
the ground, for 4 sec. cor. marked 4 on N.  
face; from which  
A mosquito, 12 ins. diam., bars S 40° E., 241  
lbs. dist., marked 4 S. 8 B. S.  
A mosquito, 5 ins. diam., bars N. 10° 50' W., 290  
lbs. dist., marked 4 S 3 13 B.  
79.94 Str. cor. of secs. 5, 6, 7 and 8.  
Land, level.  
Soil, alluvial and sandy loam; 2nd and  
3rd rate.  
Timber, scattering mosquito; undergrowth,  
grasswood and mosquito.  
Dense undergrowth 79.94 chs.  
November 17. At this cor. I set off 12°-40' S.  
on the decl. arc; and, at 12<sup>h</sup> 4<sup>m</sup>. p. I  
observe the sun on the meridian; the true  
sinking lat. is ~~32°-36'~~ 32° 35' N

40.00 N. 89° 55' W., on a random line bet. secs. 6 and 7.  
Set temp. 4 sec. cor.  
78.98 Intersect the N. bay. of the sp. 5 lbs. S. of  
cor. of secs. 1, 6, 7 and 8, as heretofore described  
Thence I run  
S. 89° 53' E., on a long line bet. secs. 6 and 7.  
Over level land, through dense grasswood.  
15.00 Centaurea uniflora, bar N. and S.  
32.00 Grass uniflora; quarter grasswood,  
bars N. and S. W.  
38.00 Spruce, 15 lbs. wood, across N. W.  
38.98 Sycamore stump, 18 x 8 x 6 ins., 12 ins. in  
the ground, for 4 sec. cor. marked 4 on N.  
face; dig pits, 18 x 18 x 12 ins., E. and W. of  
stump, 3 ft. dist. and raise a mound of  
earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.  
78.98 Str. cor. of secs. 5, 6, 7 and 8.  
Land, level.  
Soil, sandy loam; 2nd and 3rd rate.  
Timber, a few mosquito; undergrowth,

Subdivision of S. 10 S., R. 9 E.

6 hands  
grassmud, sunflowers and creek bars.  
Dense undergrowth, ~~78.98~~ chs.

1.70 N. ~~no~~ <sup>2</sup> N., on a trap line bet. sres. 5 and 6.  
Over level land, through dense grassmud.  
Road, bears N. and S. W.

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

A mosquito, 6 ins. diam., bears N.  $83^{\frac{3}{4}}$  E., 29  
lbs. dist., marked  $\frac{1}{4}$  5 5 B S.

A mosquito, 6 ins. diam., bears N.  $87^{\frac{1}{2}}$  W., 75  
lbs. dist., marked  $\frac{1}{4}$  8 6 B S.

41.65 Santa Cruz river, 60 lbs. wide, course N. W.

48.00 Dense grass, grassmud, bears E. and W. -

79.58 Intersect the N. bdy. of the Sp. 502 lbs. - ~~78.98~~ <sup>78.98</sup> chs.  
W. of the cor. of sres. 31 and 32, S. 9 S., R. 9 E.,  
as here to for described.

Set a malpais stone, 18 x 11 x 5 ins., 12 ins. in  
the ground, for closing cor. of sres. 5 and  
6, marked 6 6 on S.; with 5 grooves on E.  
and 1 groove on W. face; dig pits, 24 x 18 x 12  
ins., E. and W., 3 ft. and S. of stone, 7 ft. dist.;  
and raise a mound of earth, 4 ft. base,  
2 ft. high, S. of cor.

Soil, loam.

Soil, alluvial and sandy loam; 2nd and  
3rd rate.

Timber, a few mosquitoes and juncos in  
river bottom; undergrowth, grassmud.  
Dense undergrowth, 48.00 chs.

November, 1905

General Description.

This Sp. is level in the north and center, and  
gently rolling and mountainous in the southern  
part. The soil of the level portions is generally  
sandy loam, 2nd and 3rd rate. The northernmost  
part of the Sp. is covered with a good growth  
of grass. On the bottom lands along the Santa  
Cruz river and ARA arroyo, good crops are

chains

raised without irrigation. During the rainy season these bottom lands are subject to overflow from two to four inches. Mesquite timber is found in nearly all parts of the Sp. The Santa Cruz river and Arroyo Arroyo run through the Sp. from southwest to northeast. Fresh water courses are generally dry. The Silver Ball railroad and the phone line traverse the Sp. from northeast to southwest. There are two good wagon roads crossing the Sp., one from Red Rock to Silver Ball, and the other from Engenio Aguirre's ranch to Dresden. There are several settlers in this Sp., who have made some substantial improvements.

Edgar L. Dietrich  
U. S. Deputy Surveyor.

Boundaries of Tp. 10 S. R. 9 E.  
Table of Latitudes, Departures and Closing Errors.

COURSE.	Distance.	Latitudes.		Departures.	
		N.	S.	E.	W.
North,	483.92	483.92			
East,	3.38			3.38	
S. 89° 39' E.	41.93		2.45	41.86	
S. 89° 48' E.	38.28		2.14	38.21	
N. 85° 48' E.	39.02	2.86		38.92	
S. 83° 26' E.	39.57		1.08	39.56	
S. 89° 13' E.	39.33		.54	39.83	
N. 89° 46' E.	39.79	.16	.00	39.79	
S. 89° 19' E.	39.95		.48	39.95	
N. 89° 19' E.	40.06	.48		40.06	
N. 89° 31' E.	39.80	.34		39.80	
N. 89° 07' E.	39.92	.62		39.92	
S. 89° 43' E.	39.51		.20	39.51	
N. 89° 06' E.	39.62	.62		39.63	
S. 1° 45' W.	39.92		39.90		0.12
S. 2° 13' E.	40.69		40.66	1.57	
S. 1° 04' E.	39.11		39.10	.73	
S. 0° 13' E.	40.10		40.10	.15	
S. 00° 49' E.	40.33		40.33	.58	
S. 0° 26' E.	41.47		41.47	.31	
S. 0° 15' E.	40.09		40.09	.18	
S. 0° 22' W.	40.10		40.10		.26
S. 1° 11' W.	40.13		40.12		.83
S. 2° 46' W.	40.04		39.99		1.93
S. 0° 18' W.	39.85		39.85		.21
S. 1° 16' W.	39.89		39.88		.88
West,	479.25				479.25
Convergency,	.45			.45	
		488.99	488.48	484.39	483.48
		488.48			483.39
	Error in lat.,	.51	Error in dep.		.09

LIST OF NAMES.

BOOK 1870

A list of the names of the individuals employed by Edgar C. Dietrich, 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 Subdivisions of T. 10 S. R. 9 E. showing the respective capacities in which they acted:

Siriana Villa, Chainman.

Fred. Tagler, Chainman.

Juan Sanchez, Moundman.

Wiley Box, Axman.

Mannel Salazar, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Edgar C. Dietrich, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivisions of T. 10 S. R. 9 E.

of the Gila and Salt River base & 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

Siriana Villa, Chainman.

Fred Tagler, Chainman.

Juan Sanchez, Moundman.

Wiley Box, Axman.

Mannel Salazar, Flagman.

Subscribed and sworn to before me this 22nd day of November, 1905

W. G. Powers



54  
BOOK 1870

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Edgar C. Dietrich, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from J. S. Angall, United States Surveyor General for Arizona, bearing date of the

15<sup>th</sup> day of August, 1905, 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 Subdivisions of T. 10 S., R. 9 E.

of the Gila & Salt River Base & 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; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Edgar C. Dietrich  
United States Deputy Surveyor.

Subscribed by said Edgar C. Dietrich, and sworn to before me }  
this 2<sup>nd</sup> day of July, 1906

Roscoe Hale  
Commissioner



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

(Phoenix, Arizona, April 20, 1897 1906)

The foregoing field notes of the survey of the subdivisional lines of T. 10 S., R. 9 E., of the Gila and Salt River Base, and Meridian, in the Territory of Arizona;

executed by Edgar C. Dietrich, U. S. deputy surveyor under his contract No. 137, dated August 15, 1905, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank Angall  
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.