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BOOK 2935

Book "C"

Subdivisions

# FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION LINES OF

TOWNSHIP 13 NORTH, RANGE 18 WEST,

2935

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

Albert Smith, Jr., U.S. Surveyor,

and

J. M. McKinney, Jr., U.S. Transitman,

2935

~~In the capacity of U.S. Surveyor~~, under instructions dated Dec. 28, 1915,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 42, which were approved by the Commissioner of the General Land  
Office, January 22, 1915.

Survey commenced March 8, 1915.

Survey completed March 16, 1915.

Executed under assignment  
Instructions dated Jan. 28, 1915.

(A)

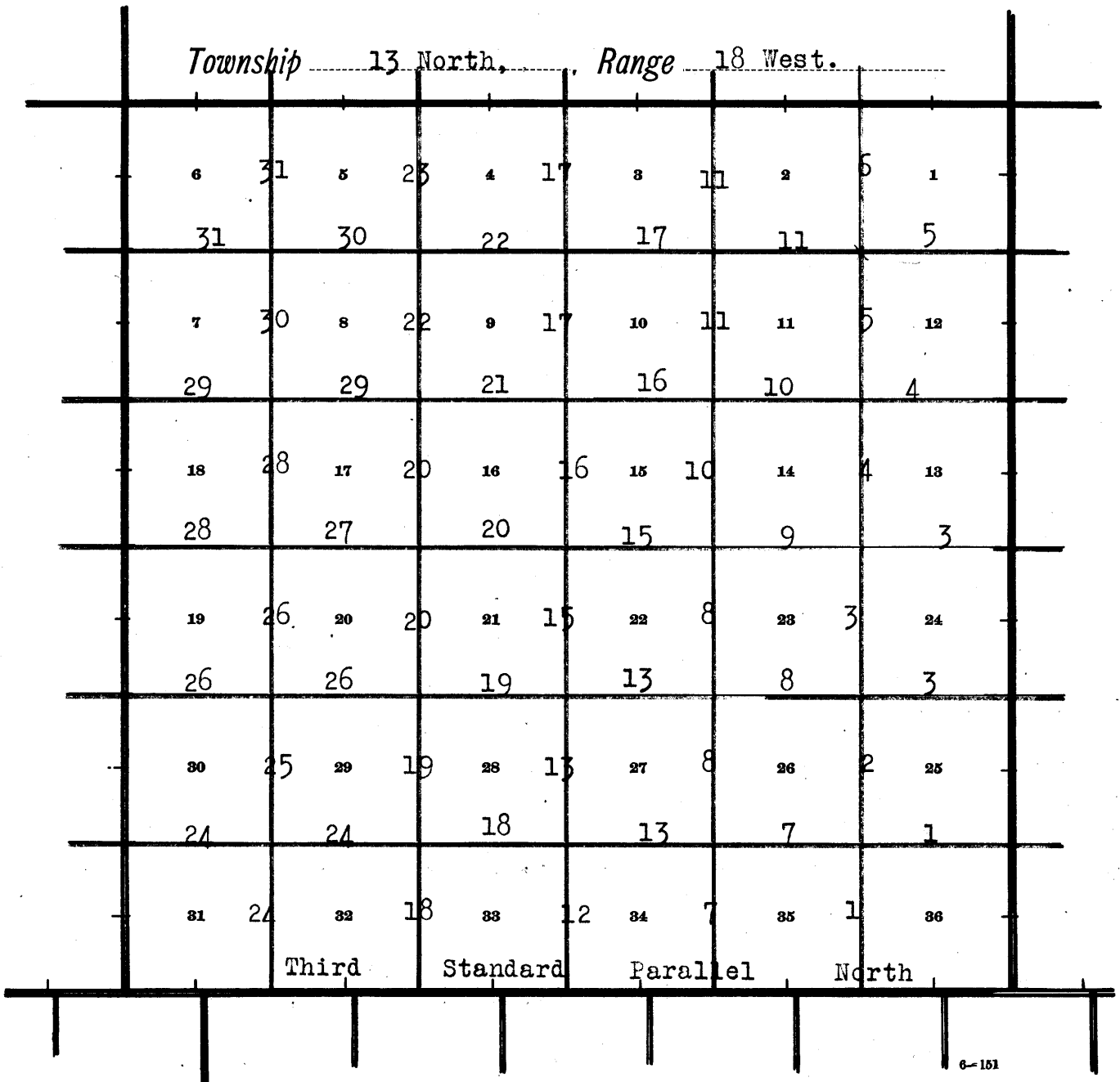
Book "C"

Group 42 Arizona

( Subdivisions )

BOOK 2935

### INDEX DIAGRAM.



- Township Exteriors. Notes in Book "A"
- Subdivision lines surveyed under this Group.
- Lines surveyed under Group 48.

1. B

Subdivision of T. 13 N., R. 18 W.

Chains.

Survey commenced Mar. 8, 1915, and executed jointly by Albert Smith, Jr., U. S. Surveyor, and J. M. McKinney, Jr., U. S. Transitman, with Young and Sons' light mountain transits Nos. 8540 and 8145, respectively, with Smith solar attachments. For description of instruments and certificate of approval, see Book "A".

In the following field notes, the initials A. S. and J. M. M. refer to Albert Smith, Jr., U. S. Surveyor, and J. M. McKinney, Jr., U. S. Transitman, respectively.

Knowing from recent and repeated tests of these instruments on a meridian established by observation on Polaris at elongation, that they are in adjustment, we proceed to the subdivision of T. 13 N., R. 18 W.

For tests of adjustment of Young and Sons' light mountain transit No. 8483, used by J. M. McKinney, Jr., U. S. Transitman, in the survey of this township after Mar. 10, see below.

A. S. and J. M. M.

A. S.

At 9 hrs. 4 m., a.m., l.m.t., I set off 34° 25' N. on the lat. arc; 5° 6' S. on the decl. arc; and determine a meridian with the solar at the std. cor. of secs. 35 and 36, on the S. bdy, of the Tp., which is an iron post, established by J. M. M., as described in Book "A".

Thence I run

N.0° 1' W., bet. secs. 35 and 36.

Over mountainous land, through dense undergrowth.

Asc. S. slope, 65 ft. to

3.05 Ridge, brs. E. and W. Thence along E. slope.

7.30 Saddle on divide bet. Williams and Colorado Rivers, brs. NE. and SW. Desc. NW. slope, 45 ft. to

11.75 Head of gulch, course NE. Asc. broken SE. slope, 45 ft. to

17.75 Desc. NE. slope, 155 ft. to

22.80 Same gulch, course NW. Asc. SW. slope, 50 ft. to

25.70 Point of spur, brs. W. Desc. NW. slope, 110 ft. to

31.00 Same gulch, 10 lks. wide, course NE. Asc. SE. slope, 10 ft. to

34.30 Desc. NE. slope, 35 ft. to

39.70 Same gulch, 15 lks. wide, course NW. Thence along W. slope.

40.00 Impracticable to set iron post at this point. Set a granite stone, 16 X 12 X 8 ins., 12 ins. in the ground, on bed rock, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

40.50 Same gulch, 15 lks. wide, course NE. Asc. slight SE. slope to

42.50 Point of spur, brs. E. Desc. NE. slope, 25 ft. to

43.10 Same gulch, 15 lks. wide, course NW. Asc. SW. slope, 30 ft. to

51.00 Spur, slopes NW. Desc. NE. slope, 105 ft. to

57.50 Same gulch, 15 lks. wide, course NE. Asc. SE. slope, 65 ft. to

64.85 Point of spur, brs. E. Desc. NE. slope, 60 ft. to

67.20 Same gulch, 15 lks. wide, course NW. Asc. SW. slope, 50 ft. to

74.00 Spur, slopes NW. Desc. broken N. slope, 25 ft. to

80.00 Impracticable to set iron post at this point. Set a granite stone, 12 X 10 X 8 ins., 8 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on S. and E. edges; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky, 4th rate.

No timber.

Undergrowth, palo verde, greasewood and ocatilla.

40.00 East on a random line, bet. secs. 25 and 36. Set temp. 1/4 sec. cor.

## 2. Subdivision of T. 13 N., R. 18 W.

Chains.	
80.12	Intersect E. bdy. of Tp., 28 lks. N. of the cor. of secs. 25, 30, 31 and 36, which is a stone, established by me, as described in Book "A". Thence I run N. 89° 48' W., on a true line, bet. secs. 25 and 36. Over mountainous land, through dense undergrowth. Asc. broken SE. slope, 60 ft. to
15.12	Spur ridge, brs. N. and S. Desc. broken NW. slope, 60 ft. to
22.12	Wash, 10 lks. wide, course N. Asc. broken SE. slope, 200 ft. to
36.07	Ridge, brs. NE. and SW. Desc. NW. slope, 90 ft.
40.06	Impracticable to set an iron post at this point. Set a granite stone, 16 X 8 X 6 ins., 11 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 impracticable.
42.92	Wash, 8 lks. wide, course N. Asc. E. slope, 65 ft. to
46.12	Spur, slopes N. Desc. W. slope, 60 ft. to
49.52	Wash, 8 lks. wide, course N. Asc. E. slope, 55 ft. to
52.72	Ridge, divide bet. Williams and Colorado Rivers, brs. N. and S. Desc. SW. slope, 40 ft. to
55.42	Head of gulch, course N. Asc. NE. slope, 30 ft. to
60.12	Spur, brs. N. Desc. NW. slope, 80 ft. to
65.27	Wash, 15 lks. wide, course NE. Asc. NE. slope, 60 ft. to
68.82	Spur, slopes N. Desc. W. slope, 120 ft. to
79.12	Gulch, course NW.
80.12	The cor. of secs. 25, 26, 35 and 36. Land, mountainous. Soil, 4th rate. No timber. Undergrowth, palo verde, cacti and greasewood. Mar. 8, 1915: The sky was cloudy at noon, making an observation for lat. impossible.
	N. 0° 1' W., bet. secs. 25 and 26. Over mountainous land, through dense undergrowth.
1.00	Gulch, 5 lks. wide, course NW. Asc. broken SW. slope, 50 ft. to
13.40	Low spur, slopes W. Desc. NW. slope, 25 ft. to
22.50	Wash, 5 lks. wide, course W. Asc. broken SE. slope, 65 ft. to
39.90	Ridge, divide between Williams and Colorado Rivers, brs. NW. and SE. Desc. NE. slope, 30 ft.
40.00	Impracticable to set an iron post at this point, as it is only 12 ins. to bed rock. Set a granite stone, 14 X 10 X 8 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
48.30	Wash, 12 lks. wide, course NE. Thence over low hills, across small draws and knolls.
80.00	Impracticable to set an iron post at this point. Set a granite stone, 17 X 15 X 10 ins., 12 ins. in the ground, on solid rock, for cor. of secs. 23, 24, 25 and 26, marked with 1 notch on E. and 2 notches on S. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling and mountainous. Soil, 4th rate. No timber. Undergrowth, palo verde, greasewood and ocatilla. Mar. 8, 1915.

## Subdivision of T. 13 N., R. 18 W.

3.

Chains.

Mar. 9, 1915: At 7 hrs. 32 m., a.m., l.m.t., I set off 34° 27' N. on the lat. arc; 4° 43' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26,

Thence I run  
S. 89° 48' E., on a random line, bet. secs. 24 and 25.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
80.14 Intersect E. bdy. of Tp., 65 lks. S. of the witness cor. to cor. of secs. 19, 24, 25 and 30, which is an iron post, established by me, as described in Book "A", 60 lks. N. of the true point for cor. of secs. 19, 24, 25 and 30.

From the true point for cor. of secs. 19, 24, 25 and 30, I run  
N. 89° 50' W., on a true line, bet. secs. 24 and 25. Over rolling land, through scattering undergrowth. Asc. NE. slope, 90 ft. to  
16.94 Low hill, brs. N., and S. Desc. SW. slope, 55 ft. to  
20.14 Wash, 8 lks. wide, course N.  
40.07 Set a granite stone, 16 X 10 X 8 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

Note: The soil is only 12 ins. deep at this cor.  
68.94 Wash, 15 lks. wide, course N.  
78.14 Wash, 12 lks. wide, course N.  
80.14 The cor. of secs. 23, 24, 25 and 26.  
Land, rolling.  
Soil, rocky, 4th rate.  
No timber.  
Undergrowth, palo verde, ocatilla and cacti.

N. 0° 1' W., bet. secs. 23 and 24.  
Over rolling land, through scattering undergrowth.  
25.20 Wash, 20 lks. wide, course E.  
40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
S24 in E. and  
S23 in W. half;  
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

48.30 Wash, 25 lks. wide, course NE.  
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked on brass cap  
1915 on S. rim;  
T13N R18W in N. half;  
S14 in NW.,  
S13 in NE.,  
S24 in SE. and  
S23 in SW. quadrant;  
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

Land, rolling.  
Soil, rocky 3rd rate.  
No timber.  
Undergrowth, palo verde, cacti, greasewood and ocatilla.

40.00 S. 89° 50' E., on a random line, bet. secs. 13 and 24.  
Set temp.  $\frac{1}{4}$  sec. cor.  
80.14 Intersect E. bdy. of Tp., 7 lks. N. of the cor. of secs. 13, 18, 19 and 24, which is a stone, established by me, as described in Book "A".

So. 14

A

4.

## Subdivision of T. 13 N., R. 18 W.

Chains.	<p>Thence I run N.89° 47' W., on a true line, bet. secs. 13 and 24. Over rolling land, through scattering undergrowth.</p> <p>3.13 Wash, 12 lks. wide, course SE. Thence across mesa. 32.48 Rim, brs. N. and S. Desc. rocky W. slope, 85 ft. to 36.13 Foot of desc.; brs. N. and S. Thence across flat. 40.07 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked on brass cap 1915 on S. rim; S13 in N., S24 in S. and <math>\frac{1}{4}</math> in W. half; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p> <p>41.13 Wash, 30 lks. wide, course S. 54.13 Wash, 20 lks. wide, course S. 68.13 Wash, 50 lks. wide, course SE. Leave flat, brs. NW. and SE. Thence over rolling land.</p> <p>80.14 The cor. of secs. 13, 14, 23 and 24. Land, level and rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, cacti, palo verde and ocatilla.</p>
	<p>N.0° 1' W., bet. secs. 13 and 14. Over rolling land, through scattering undergrowth.</p> <p>5.50 Wash, 50 lks. wide, course SE. Enter level land, brs. NW. and SE.</p> <p>40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked on brass cap 1915 on S. rim; <math>\frac{1}{4}</math> in N., S13 in E. and S14 in W. half; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p> <p>Mar. 9, 1915: At this cor., I set off 4° 40' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 28<math>\frac{1}{2}</math>' N.</p> <p>65.00 Wash, 15 lks. wide, comes from NE.; course SE. 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S11 in NW., S12 in NE., S13 in SE. and S14 in SW. quadrant; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable. Land, level and rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, palo verde, greasewood and ocatilla.</p>
	<p>S.89° 47' E., on a random line, bet. secs. 12 and 13. 40.00 Set temp. <math>\frac{1}{4}</math> sec. cor. 80.18 Intersect E. bdy. of Tp., at the cor. of secs. 7, 12, 13 and 18, which is an iron post, established by me, as described in Book "A". Thence I run N.89° 47' W., on a true line, bet. secs. 12 and 13.</p>

BOOK 1985

Subdivision of T. 13 N., R. 18 W.

5

Chains.

Over rolling land, through scattering undergrowth.

1.18 Wash, 15 lks. wide, course SE.

14.18 Wash, 12 lks. wide, course SE.

33.58 Wash, 25 lks. wide, course SE.

40.09 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S12 in N.,  
 S13 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

71.18 Wash, 40 lks. wide, course S.

76.68 Leave rolling land, brs. N. and S. Thence over level land.

76.98 Wash, 15 lks. wide, course SW.

80.18 The cor. of secs. 11, 12, 13 and 14.  
 Land, rolling and level.  
 Soil, rocky, 3rd rate.  
 No timber.  
 Undergrowth, cacti, palo verde and ocatilla.  
 Mar. 9, 1915.

Mar. 11, 1915: At 7 hrs. 58 m., a.m., l.m.t., I set off  $34^{\circ} 28\frac{1}{2}'$  N. on the lat. arc;  $3^{\circ} 56\frac{1}{2}'$  S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14.

Thence I run  
 N.  $0^{\circ} 1'$  W., bet. secs. 11 and 12.

9.00 Over level land, through scattering undergrowth.  
 Wash 15 lks. wide, course SE. Leave level land, brs. NW. and SE. Thence over rolling land.

33.90 Wash, 10 lks. wide, course SE.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S12 in E. and  
 S11 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

43.40 Low hill, brs. SE. Desc. NE. slope, 60 ft. to

47.35 Gulch, 15 lks. wide, course SE. Asc. S. slope, 70 ft. to

57.30 Low hill, brs. SE. Desc. NE. slope, 45 ft. to

64.50 Gulch, course SE. Asc. S. slope, 65 ft. to

67.70 Low hill, brs. SE. Desc. NE. slope, 65 ft. to

73.15 Wash, 15 lks. wide, course SE. Asc. S. slope, 100 ft. to

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked on brass cap  
 1915 on S. rim;  
 T13N R18W in N. half;  
 S2 in NW.,  
 S1 in NE.,  
 S12 in SE. and  
 S11 in SW. quadrant;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 Land, level and rolling.  
 Soil, rocky, 3rd rate.  
 No timber.  
 Undergrowth, cacti, ocatilla, and greasewood.

40.00 S.  $89^{\circ} 47'$  E., on a random line, bet. secs. 1 and 12.  
 Set temp.  $\frac{1}{4}$  sec. cor.

80.13 Intersect E. bdy. of Tp., 9 lks. S. of the cor. of secs.

## 6. Subdivision of T. 13 N., R. 18 W.

## Chains.

- 1, 6, 7 and 12, which is a stone, established by me, as described in Book "A".
- Thence I run  
N.89° 51' W., on a true line, bet. secs. 1 and 12.  
Over rolling land, through scattering undergrowth.
- 13.53 Wash, 15 lks. wide, course N. Asc. NE. slope, 65 ft. to  
25.73 Low hill, brs. SE. Desc. SW. slope, 70 ft. to  
31.13 Gulch, 15 lks. wide, course SE. Asc. NE. slope, 90 ft. to  
37.23 Low hill, brs. SE. Desc. SW. slope, 45 ft.  
40.06 $\frac{1}{2}$  Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
1915 on S. rim;  
S1 in N.,  
S12 in S. and  
 $\frac{1}{4}$  in W. half;  
and raise a mound of stone; 2 ft. base, 1 $\frac{1}{2}$  ft. high,  
N. of cor. Pits impracticable.
- 40.83 Gulch, 10 lks. wide, course SE. Asc. NE. slope, 70 ft. to  
51.43 Low hill, brs. SE. Desc. SW. slope, 25 ft. to  
71.73 Gulch, 10 lks. wide, course SE. Asc. NE. slope, 75 ft. to  
78.93 Low hill, brs. SE. Thence along S. slope.  
80.13 The cor. of secs. 1, 2, 11 and 12.  
Land, rolling.  
Soil, rocky, 3rd rate.  
No timber.  
Undergrowth, palo verde, cacti, ocatilla and greasewood.
- 
- N.0° 1' W., on a random line, bet. secs. 1 and 2.  
40.00 Set temp.  $\frac{1}{4}$  sec cor.  
79.80 Intersect N. bdy. of Tp., 6 lks. W. of the cor. of secs. 1, 2, 35 and 36, which is an iron post, established by me, as described in Book "A".  
Thence I run  
S.0° 2' W., on a true line, bet. secs. 1 and 2.  
Over rolling land, through scattering undergrowth. Asc. to  
12.60 Divide, between Williams and Colorado Rivers, brs. NW. and S. Thence along divide.  
24.80 Leave divide, brs. N. and SE. Desc. SW. slope.  
39.80 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
S1 in E. and  
S2 in W. half;  
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high,  
W. of cor. Pits impracticable.
- 46.50 Road, brs. E. and W. Asc. NE. slope to  
57.40 Divide between Williams and Colorado Rivers, brs. NE. and SW. Desc. to  
63.80 Head of gulch, course SE. Asc. slight NE. slope to  
78.80 Low hill, brs. SE. Desc. to  
79.80 The cor. of secs. 1, 2, 11 and 12.  
Land, rolling.  
Soil, rocky, 3rd rate.  
No timber.  
Undergrowth, cacti, palo verde, ocatilla and greasewood.  
Mar. 11, 1915: At this cor., I set off 3° 53' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 29 $\frac{1}{2}$ ' N.  
Mar. 11, 1915.  
A. S.



## Subdivision of T. 13 N., R. 18 W.

7.

Chains.	<p>Mar. 8, 1915. J. M. M.          At 9 hrs. 3 m., a.m., l.m.t., I set off <math>34^{\circ} 25'</math> N. on the lat. arc; <math>5^{\circ} 6'</math> S. on the decl. arc; and determine a meridian with the solar at the std. cor. of secs. 34 and 35, on the S. bdy. of the Tp., which is a stone, established by me, as described in Book "A".</p> <p>Thence I run  <math>N.0^{\circ} 1'</math> W., bet. secs. 34 and 35.          Over mountainous land, through scattering undergrowth.          Desc. broken NE. slope, 280 ft. to          13.80 Gulch, course NE. Asc. SE. slope, 85 ft. to          18.10 Point of spur, brs. E. Desc. NE. slope, 180 ft. to          24.70 Same gulch, course NW. Asc. broken SW. slope, 110 ft. to          35.60 Spur, brs. NW. Desc. N. slope, 170 ft.          40.00 <b>Imp</b>rac<del>t</del>icable to set iron post at this point. Set a granite stone, 18 X 7 X 6 ins., 8 ins. in the ground, in a mound of stone, for <math>\frac{1}{4}</math> sec. cor., marked <math>\frac{1}{2}</math> on W. face; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p> <p>49.50 Wash, 150 lks. wide, course SW. Asc. broken S. slope, 130 ft. to          64.50 Broken ridge, brs. NE. and SW. Desc. broken N. slope, 40 ft. to          74.80 Wash, 20 lks. wide, course SW. Asc. SE. slope, 60 ft. to          80.00 <b>Imp</b>rac<del>t</del>icable to set iron post at this point. Set a granite stone, 16 X 12 X 10 ins., 11 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, marked with 2 notches on E. and 1 notch on S. edge; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p> <p>Land, mountainous.          Soil, shallow, rocky decomposed granite, limestone and lava; 4th rate.          No timber.          Undergrowth, greasewood, palo verde, ocatilla and cacti.</p>
40.00	East on a random line, bet. secs. 26 and 35.
80.02	Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line at the cor. of secs. 25, 26, 35 and 36.
	Thence I run West on a true line, bet. secs. 26 and 35. Over rolling hills, through scattering undergrowth. Asc. NE. slope, 40 ft. to 5.82 Spur, brs. NW. Desc. W. slope, 120 ft. to 14.92 Gulch, course NW. Asc. NE. slope, 35 ft. to 19.52 Spur, brs. NW. Desc. broken W. slope, 70 ft. to 26.62 Main wash, 70 lks. wide, course SW. Asc. SE. slope, 70 ft. 40.01 <b>Imp</b> rac <del>t</del> icable to set iron post at this point. Set a granite stone, 16 X 12 X 6 ins., 11 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 impracticable.
53.00	Ridge, brs. NE. and SW. Desc. NW. slope, 25 ft. to
60.00	Wash, course NW. Asc. NE. slope, 45 ft.
60.50	Knoll brs. S. about 10 chs. dist.
66.50	Spur, brs. NW. Desc. SW. slope, 80 ft. to
76.00	Head of wash, course SW. Asc. SE. slope, 30 ft. to
80.02	The cor. of secs. 26, 27, 34 and 35. Land, rolling hills. Soil, shallow, rocky, decomposed granite and lava; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti. May 8, 1915: At this cor., I set off $5^{\circ} 3\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 27'$ N.

## 8. Subdivision of T. 13 N., R. 18 W.

Chains.	N.0° 1' W., bet. secs. 26 and 27. Over rolling hills, through scattering undergrowth. Asc. SE. slope, 45 ft. to 7.50 Spur, brs. SW. Desc. broken NW. slope, 35 ft. to 10.00 Thence along E. slope. 16.80 Spur, brs. NE. Desc. NW. slope, 130 ft. to 22.70 Wash, 30 lks. wide, course SW. Asc. broken S. slope, 110 ft. to 34.70 Spur ridge, brs. SW. Desc. NW. slope, 90 ft. 40.00 Impracticable to set an iron post at this point. Set a granite stone, 16 X 10 X 8 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. 46.20 Wash, 20 lks. wide, course SW. Asc. SE. slope, 30 ft. 55.00 Knoll, brs. E. about 4 chs. dist. 59.00 Spur, brs. SW. Desc. NW. slope, 50 ft. to 79.50 Wash, 80 lks. wide, course SW. Asc. broken S. slope to 80.00 Impracticable to set an iron post at this point. Set a granite stone, 16 X 10 X 8 ins., 11 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. and E. edges; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling hills. Soil, shallow, decomposed granite and lava; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti J. M. M.
40.00	A. S. East on a random line, bet. secs. 23 and 26. Set temp. $\frac{1}{4}$ sec. cor.
80.01	Intersect N. and S. line, 2 lks. N. of the cor. of secs. 23, 24, 25 and 26. Thence I run N.89° 59' W., on a true line, bet. secs. 23 and 26. Over rolling land, through scattering undergrowth. Asc. E. slope, to
22.00	Divide between Williams and Colorado Rivers, brs. N. and S. Desc. slight W. slope to
29.95	Wash, 10 lks. wide, course NW. Asc. NE. slope to
33.20	Low hill, brs. N. and S. Desc. W. slope to
37.20	Wash, 8 lks. wide, course N. Asc. NE. slope to
39.80	Low hill, brs. N. and S. Desc.
40.00 $\frac{1}{2}$	Impracticable to set an iron post at this point. Set a granite stone, 14 X 13 X 6 ins., 10 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 impracticable.
64.85	Enter wash, 40 lks. wide, course W. Comes from SE.
79.00	Leave wash, course SW.
80.01	The cor. of secs. 22, 23, 26 and 27. Land, rolling. Soil, rocky, 4th rate. No timber. Undergrowth, cacti, greasewood, ocatilla and palo verde. A. S.
9.50	J. M. M. N.0° 1' W., bet. secs. 22 and 23. Over rolling hills, through scattering undergrowth. Asc. broken S. slope, 155 ft.
20.50	Wash, 20 lks. wide, course SW. Continue asc.
29.80	Spur, brs. SE. Desc. NE. slope, 25 ft. to
40.00	Wash, 15 lks. wide, course SE. Asc. broken S. slope, 60 ft. Set an iron post, 3 ft. long, 1 in. diam., 18 ins. in the

Subdivision of T. 13 N., R. 18 W.

Chains.

ground, on solid rock, supported by a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S23 in E. and  
 S22 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 Mar. 8, 1915.

Mar. 11, 1915. I continue  
 N.0° 1' W., bet. secs. 22 and 23.  
 49.50 Divide, between Williams and Colorado Rivers, brs. N. and SE. Thence along top of divide.  
 58.80 Leave top of divide, brs. NE. and S. Desc. NW. slope, 70 ft. to  
 79.50 Wash, 50 lks. wide, course NW.  
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, marked on brass cap  
 1915 on S. rim;  
 T13N R18W in N. half;  
 S15 in NW.,  
 S14 in NE.,  
 S23 in SE. and  
 S22 in SW. quadrant;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 Land, rolling hills.  
 Soil, shallow, sandy, decomposed granite, sandstone and lava; 3rd and 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.

S.89° 59' E., on a random line, bet. secs. 14 and 23.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.03 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 13, 14, 23 and 24.  
 Thence I run  
 S.89° 59' W., on a true line, bet. secs. 14 and 23.  
 Over rolling hills, through scattering undergrowth.  
 9.23 Wash, course SE.  
 40.01 $\frac{1}{2}$  Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground, on solid rock, supported by a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S14 in N.,  
 S23 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.  
 43.83 Wash, 30 lks. wide, course SE.  
 59.53 Wash, 30 lks. wide, course SE. Asc. SE. slope, 30 ft. to  
 63.83 Divide, between Williams and Colorado Rivers, brs. NE. and SW. Desc. NW. slope, 40 ft. to  
 80.03 The cor. of secs. 14, 15, 22 and 23.  
 Land, rolling hills.  
 Soil, shallow, sandy, decomposed granite and lava; 3rd and 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.

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Subdivision of T. 13 N., R. 18 W.

10

## Chains.

N.0° 1' W., bet. secs. 14 and 15.  
 Over rolling hills, through scattering undergrowth.  
 29.25 Wash, 50 lks. wide, course W. Asc. S. slope, 45 ft.  
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S14 in E. and  
 S15 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 40.50 Spur, brs. W. Desc. N. slope, 30 ft. to  
 52.20 Wash, 40 lks. wide, course W. Asc. S. slope, 70 ft. to  
 59.20 Spur, brs. SE. Desc. NE. slope, 45 ft. to  
 63.00 Wash, 40 lks. wide, course SE. Thence in wash.  
 70.80 Leave wash, comes from NE. Asc. SE. slope, 40 ft. to  
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the  
 ground, for cor. of secs. 10, 11, 14 and 15, marked on  
 brass cap  
 1915 on S. rim;  
 T13N R18W in N. half;  
 S10 in NW.,  
 S11 in NE.,  
 S14 in SE. and  
 S15 in SW. quadrant;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 Land, rolling hills.  
 Soil, shallow, decomposed granite, sandstone and lava; 3rd  
 and 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 J. M. M.  
 Mar. 11, 1915.

Mar. 9, 1915. A. S.  
 N.89° 59' E., on a random line, bet. secs. 11 and 14.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.07 Intersect N. and S. line, 5 lks. S. of the cor. of secs.  
 11, 12, 13 and 14.  
 Thence I run  
 S.89° 57' W., on a true line, bet. secs. 11 and 14.  
 Over level land, through scattering undergrowth.  
 4.00 Wash, 20 lks. wide, course S.  
 27.00 Wash, 15 lks. wide, course SE. Leave flat, brs. NW. and  
 SE. Thence over rolling hills.  
 40.03 $\frac{1}{2}$  Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S11 in N.,  
 S14 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 N. of cor. Pits impracticable.  
 49.90 Wash, 10 lks. wide, course SE. Asc. to  
 62.80 Divide, between Williams and Colorado Rivers, brs. N. and  
 S. Desc. slight W. slope. to  
 66.70 Wash, 25 lks. wide, course SW.  
 78.00 Wash, 20 lks. wide, course S.  
 80.07 The cor. of secs. 10, 11, 14 and 15.  
 Land, level and rolling.  
 Soil, rocky, 3rd rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 A. S.  
 Mar. 9, 1915.

Subdivision of T. 13 N., R. 18 W.

11. 1935

Chains.	
	<p>Mar. 11, 1915. J.M.M.  N.0° 1' W., bet. secs. 10 and 11.  Over rolling hills, through scattering undergrowth.  Desc. to  11.50 Wash, 30 lks. wide, course SE. Asc. SW. slope, 80 ft. to  29.50 Spur, brs. SE. Thence along E. slope.  40.00 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the  ground, on solid rock, supported by a mound of stone,  for <math>\frac{1}{4}</math> sec. cor., marked on brass cap  1915 on S. rim;  <math>\frac{1}{4}</math> in N.,  S11 in E. and  S10 in W. half;  and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high,  W. of cor. Pits impracticable.</p>
41.20	Ridge, brs. NE. and SW. Desc. broken NW. slope, 160 ft. to
68.00	Foot of desc.; brs. NE. and SW. Thence over level land
73.00	On this line, washed out, at approximately
80.00	Old road, brs. NE. and SW. Impracticable to set an iron post at this point. Set a granite stone, 14 X 10 X 8 ins., 10 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked with 2 notches on E. and 5 notches on S. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracti- cable.
	<p>Land, level and rolling.  Soil, shallow, sandy, decomposed granite and lava; 3rd and  4th rate.  No timber.  Undergrowth, greasewood, palo verde, ocatilla and cacti.</p>
40.00	N. 89° 57' E., on a random line, bet. secs. 2, and 11. Set temp. $\frac{1}{4}$ sec. cor.
80.25	Intersect N. and S. line, 2 3 lks. N. of the cor. of secs. 1, 2, 11 and 12. Thence I run N. 89° 53' W., on a true line, bet. secs. 2 and 11. Over rolling land, through scattering undergrowth. Desc. to
12.05	Head of gulch, course SE. Asc. SE. slope, 50 ft. to
18.65	Spur, brs. S. Desc. W. slope, 30 ft. to
22.45	Head of wash, course S. Asc. SE. slope, 55 ft. to
32.45	Divide between Williams and Colorado Rivers, brs. NE. and SW. Desc. NW. slope, 270 ft.
40.12 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S2 in N., S11 in S. and $\frac{1}{4}$ in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
65.25	Foot of desc., brs. NE. and SW. Thence over level land.
74.05	Old road, brs. NE. and SW.
80.25	The cor. of secs. 2, 3, 10 and 11. Land, level and rolling. Soil, shallow, sandy, decomposed granite and lava; 3rd and 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti.
	<p>J. M. M.  Mar. 11, 1915.</p>
40.00	<p>Mar. 15, 1915. A. S.  N.0° 1' W., on a random line, bet. secs. 2 and 3.  Set temp. <math>\frac{1}{4}</math> sec. cor.</p>

12 Subdivision of T. 13 N., R. 18 W. 12,

Chains.  
 79.77 Intersect the N. bdy. of the Tp., 5 lks. E. of the witness cor. to cor. of secs. 2, 3, 34 and 35, which is a stone, established by me, 30 lks.  $S89^{\circ}59'W.$  of true point for cor. of secs. 2, 3, 34 and 35, as described in Book "A". Thence I run, from the true point for cor. of secs. 2, 3, 34 and 35,  $S.0^{\circ}10'W.$ , on a true line, bet. secs. 2 and 3. Over rolling land, through scattering undergrowth. Asc. NW. slope, 35 ft. to  
 14.12 Low hill, brs. SW. Desc. SE. slope, 145 ft.  
 39.77 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S2 in E. and  
 S3 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 49.77 Wash, 20 lks. wide, course SW. Foot of desc., brs. E. and W.; then over  
 78.17 Wash, 30 lks. wide, course SW.  
 79.77 The cor. of secs. 2, 3, 10 and  
 Land, level and rolling.  
 Soil, rocky, 4th rate.  
 No timber.  
 Undergrowth, greasewood, ocatilla, cacti and  
 A. S.  
 Mar. 15, 1915

Mar. 9, 1915. J. M. M.  
 At 9 hrs. 5 m., a.m., l.m.t., I set off  $34^{\circ}25'N.$  on the lat. arc;  $4^{\circ}43'S.$  on the decl. arc; and determine a meridian with the solar at the std. cor. of secs. 33 and 34, which is an iron post, established by me, as described in Book "A".  
 Thence I run  
 $N.0^{\circ}2'W.$ , bet. secs. 33 and 34.  
 Over mountainous land, through scattering undergrowth. Asc. SE. slope, 50 ft. to  
 3.00 Spur, brs. SW. Desc. NW. slope, to  
 10.50 Gulch, course SW. Asc. SE. slope, 130 ft. to  
 15.50 Spur ridge, brs. SW. Desc. NW. slope, 110 ft. to  
 20.40 Gulch, course SW. Asc. S. slope, 160 ft. to  
 25.10 Spur, brs. SW. Desc. broken NW. slope, 145 ft. to  
 39.50 Wash, 20 lks. wide, course SW. Asc. SE. slope, 80 ft.  
 40.00 Impracticable to set an iron post at this cor. Set a granite stone, 16 X 10 X 6 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 46.80 Point of spur, brs. SW. Desc. NW. slope, 75 ft. to  
 53.20 Wash, 40 lks. wide, course SW. Asc. S. slope, 15 ft. to  
 56.00 Point of spur, brs. SW. Desc. NW. slope, 25 ft. to  
 66.20 Wash, 80 lks. wide, course SW. Asc. SE. slope, 25 ft. to  
 78.90 Spur, brs. SW. Desc. NW. slope, 10 ft. to  
 80.00 Impracticable to set an iron post at this point. Set a granite stone, 16 X 12 X 6 ins., 11 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 3 notches on E. and 1 notch on S. edge; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 Land, mountainous.  
 Soil, shallow, decomposed granite and lava; 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.

Subdivision of T. 13 N., R. 18 W.

Chains.

40.00 East, on a random line, bet. secs. 27 and 34.  
Set temp.  $\frac{1}{4}$  sec. cor.

79.94 Intersect N. and S. line at the cor. of secs. 26, 27, 34 and 35.  
Thence I run  
West on a true line, bet. secs. 27 and 34.  
Over rolling hills, through scattering undergrowth.  
Asc. E. slope to

.74 Spur, brs. SW. Desc. W. slope, 175 ft. to

15.14 Wash, 20 lks. wide, course NW.

26.74 Wash, 20 lks. wide, course NW. Joins other wash 150 lks. NW. Asc.

39.97 Impracticable to set an iron post at this point. Set a granite stone, 16 X 12 X 6 ins., 11 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 impracticable.

41.77 Top of knoll. Desc. W. slope, 75 ft. to

46.14 Wash, 30 lks. wide, course SW. Asc.

77.94 Spur, brs. SW. Desc. NW. slope, 35 ft. to

79.94 The cor. of secs. 27, 28, 33 and 34.  
Land, rolling hills.  
Soil, shallow, rocky, decomposed granite and lava; 4th rate.  
No timber.  
Undergrowth, greasewood, palo verde, ocatilla and cacti.  
Mar. 9, 1915: At this cor., I set off  $4^{\circ} 40'$  S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is  $34^{\circ} 26'$  N.

N.  $0^{\circ} 2'$  W., bet. secs. 27 and 28.  
Over rolling hills, through scattering undergrowth.

3.20 Wash, 50 lks. wide, course SW.

30.50 Wash, 70 lks. wide, course SW.

34.50 Wash, 60 lks. wide, course SW. Joins other wash about 2 chs. SW.

40.00 Impracticable to set an iron post at this point. Set a granite stone, 16 X 10 X 8 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face; and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

58.00 Knoll brs. W. about 5 chs. dist.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked on brass cap

1915 on S. rim;  
T13N R18W in N. half;  
S21 in NW.,  
S22 in NE.,  
S27 in SE. and  
S28 in SW. quadrant;

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
Land, rolling hills.  
Soil, sandy, decomposed granite and lava; 4th rate.  
No timber.  
Undergrowth, greasewood, palo verde, ocatilla and cacti.

40.00 East on a random line, bet. secs. 22 and 27.  
Set temp.  $\frac{1}{4}$  sec. cor.

79.95 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 22, 23, 26 and 27.  
Thence I run  
S.  $89^{\circ} 58'$  W., on a true line, bet. secs. 22 and 27.  
Over rolling hills, through scattering undergrowth.

14.

Subdivision of T. 13 N., R. 18 W.

14

Chains  
 34.35 Wash, 20 lks. wide, course SW.  
 39.97 $\frac{1}{2}$  Impracticable to set an iron post at this point. Set a granite stone, 16 X 10 X 5 ins., 11 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 impracticable.  
 Asc. E. slope, 85 ft. to  
 44.75 Top of knoll. Desc. W. slope, 110 ft. to  
 57.75 Wash, 50 lks. wide, course SW. Continue desc.  
 71.75 Wash, 20 lks. wide, course SW. Asc. SE. slope, 35 ft. to  
 79.95 The cor. of secs. 21, 22, 27 and 28.  
 Land, rolling.  
 Soil, shallow, sandy, decomposed granite and lava; 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 Mar. 9, 1915.

All lines in this Tp., surveyed by me after Mar. 10, 1915, were surveyed with Young and Sons' light mountain transit No. 8483, with Smith solar attachment. The horizontal limb of the instrument is provided with two double verniers, placed opposite to each other, and reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs; This instrument was approved Mar. 5, 1915, by the Assist. Supervisor of Surveys for Arizona and California, subject to satisfactory field performance.  
 I examine the adjustments of the transit, and find them satisfactory; then to test the solar 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:-  
 Mar. 9, 1915: At 8 hrs. 18 M., p.m., l.m.t., by my watch, which is set to correct local mean time, at my camp, in sec. 15, T. '13 N., R. 18 W., lat. 34° 28' N., long. 114° 7 $\frac{1}{2}$ ' W., I observe Polaris at western elongation, in accordance with the 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.  
 Mar. 9, 1915.

Mar. 10, 1915: At 7 hrs. 45 m., a.m., l.m.t., I lay off the azimuth of Polaris, 1° 23', to the east, and mark the meridian thus determined by a nail driven in a peg, 5 chs. N. of my station.  
 At 8 hrs. a.m., l.m.t., I set off 34° 28' N. on the lat. arc; 4° 20' S. on the decl. arc; and determine a meridian with the solar. The meridian thus determined departs less than 1' from the meridian determined by observation on Polaris at elongation.  
 At apparent noon, I set off 4° 16 $\frac{1}{2}$ ' S. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 34° 28' N.  
 At 4 hrs. p.m., l.m.t., I set off 34° 28' N. on the lat. arc; 4° 12' S. on the decl. arc; and determine a meridian with the solar; the meridian thus determined departs less than 1' from the meridian determined by observation on Polaris at elongation.  
 The solar, by a.m. and p.m. observations, defines positions for meridians which depart less than 1' from the true meridian determined by observation on Polaris at elongation; I therefore conclude that the instrument is in satisfactory adjustment.  
 Mar. 10, 1915.



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Subdivision of T. 13 N., R. 18 W.

15.

Chains.	<p>Mar. 11, 1915: At 7 hrs. 32 m., a.m., l.m.t., I set off 34° 27' N. on the lat. arc; 3° 56½' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.</p> <p>Thence I run N.0° 2' W., bet. secs. 21 and 22. Over rolling land, through scattering undergrowth.</p> <p>18.20 Wash, 20 lks. wide, course SW. Asc. S. slope, 100 ft. to 39.50 Saddle in ridge, brs. E. and W. Desc. NW. slope. 40.00 Butte brs. E. about 20 chs. dist. Impracticable to set an iron post at this point. Set a granite stone, 18 X 10 X 8 ins., 10 ins. in the ground, on solid rock, in a mound of stone, for ¼ sec. cor., marked ¼ on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.</p> <p>65.80 Wash, course SW. 75.00 Wash, 30 lks. wide, course SW. Joins other wash about 4 chs. SW. 80.00 Point for cor. of secs. 15, 16, 21 and 22 falls where it would be destroyed, in wash, course SW. 80.10 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for witness cor. to cor. of secs. 15, 16, 21 and 22, marked on brass cap 1915 on S. rim; WC N. of center; T13N R18W in N. half; S16 in NW., S15 in NE., S22 in SE. and S21 in SW. quadrant; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.</p> <p>Land, rolling. Soil, shallow, sandy, decomposed granite, sandstone and lava; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti.</p>
40.00 79.92 .42 9.92 28.42 39.96 49.42 79.92	<p>N.89° 58' E., from the true point for cor. of secs. 15, 16, 21 and 22, on a random line, bet. secs. 15 and 22.</p> <p>40.00 Set temp. ¼ sec. cor. 79.92 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 14, 15, 22 and 23. Thence I run S.89° 59' W., on a true line, bet. secs. 15 and 22. Over rolling hills, through scattering undergrowth.</p> <p>.42 Wash, 50 lks. wide, course NW. 9.92 Wash, 20 lks. wide, course NW. 28.42 Knoll brs. S. about 5 chs. dist. 39.96 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim; S15 in N., S22 in S. and ¼ in W. half; dig pits, 18 X 18 X 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor. Asc. to</p> <p>49.42 Spur, brs. NW. Desc. to 79.92 The point for cor. of secs. 15, 16, 21 and 22. Land, rolling. Soil, shallow, sandy, decomposed granite, sandstone and lava; 3rd and 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti. Mar. 11, 1915: At this point I set off 3° 53' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 28' N. J. M. M. Mar. 11, 1915.</p>

## 16. Subdivision of T. 13 N., R. 18 W.

Chains.	Mar. 13, 1915: A. S.
0.10	N. $0^{\circ} 2'$ W. bet. secs. 15 and 16, from true point for cor. Witness cor. to cor. of secs. 15, 16, 21 & 22, hereinbefore described.
10.00	Over rolling land, through scattering undergrowth. Asc. to Low hill, brs. E. and W. Desc. NE. slope, 180 ft.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ in N., S15 in E. and S16 in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
42.60	Wash, 75 lks. wide, course SW.
61.60	Wash, 40 lks. wide, course SW.
72.50	Road, brs. NE. and SW.
75.00	Wash, 30 lks. wide, course SW.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S9 in NW., S10 in NE., S15 in SE. and S16 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, cacti, palo verde, greasewood, cact claw and ocatilla.
	Mar. 13, 1915: At this cor., I set off $3^{\circ} 6'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 28\frac{1}{2}'$ N.
40.00	N. $89^{\circ} 59'$ E., on a random line, bet. secs. 10 and 15. Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect N. and S. line, 7 lks. N. of the cor. of secs. 10, 11, 14 and 15. Thence I run N. $89^{\circ} 58'$ W., on a true line, bet. secs. 10 and 15. Over rolling land, through scattering undergrowth. Asc. to
2.20	Low hill brs. S. Desc. SW. slope, to
5.20	Gulch, course S. Asc. SE. slope, to
8.15	Low hill, brs. S. Desc. SW. slope to
32.00	Wash, 30 lks. wide, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S10 in N., S15 in S. and $\frac{1}{4}$ in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
55.50	Wash, 20 lks. wide, course S.
73.40	Road, brs. NE. and SW.
75.30	Wash, 30 lks. wide, course SW.
80.00	The cor. of secs. 9, 10, 15 and 16. Land, rolling. Soil, rocky 3rd rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti.

Chains.	
5.00	N.0° 2' W., bet. secs. 9 and 10. Over rolling land, through scattering undergrowth.
40.00	Wash, 5 chs. wide, course SW. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
80.00	1915 on S. rim; $\frac{1}{4}$ in N., S10 in E. and S9 in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S 4 in NW., S 3 in NE., S10 in SE. and S9 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling. Soil, 3rd and 4th rate; rocky. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti. Mar. 13, 1915.
	Mar. 15, 1915.
40.00	S.89° 58' E., on a random line, bet. secs. 3 and 10. Set temp. $\frac{1}{4}$ sec. cor.
79.85	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 2, 3, 10 and 11. Thence I run
	West on a true line, bet. secs. 3 and 10. Over rolling land, through scattering undergrowth.
35	Wash, 30 lks. wide, course SW.
31.75	Wash, 40 lks. wide, course SW. Asc. to
34.85	Top of flat hill, brs. S.
39.30	Top of rim, brs. N. and S. Desc. W. slope, 75 ft.
39.92 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
43.75	1915 on S. rim; S3 in N., S10 in S. and $\frac{1}{4}$ in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
46.95	Wash, 15 lks. wide, course S. Asc. E. slope, 40 ft. to
50.10	Low hill, brs. S. Desc. W. slope, 50 ft. to
60.05	Gulch, course S. Asc. SE. slope, 45 ft. to
73.05	Low hill, brs. S. Desc. W. slope, 40 ft. to
79.85	Wash, 20 lks. wide, course S. Asc. E. slope, 65 ft. to The cor. of secs. 3, 4, 9 and 10.
	Land, rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, greasewood, palo verde and cacti.
40.00	N.0° 2' W., on a random line, bet. secs. 3 and 4. Set temp. $\frac{1}{4}$ sec. cor.
79.76	Intersect N. bdy. of Tp., 9 lks. W. of the cor. of secs. 3, 4, 33 and 34, which is an iron post, established by me, as described in Book "A".
	Thence I run
	S.0° 2' W., on a true line, bet. secs. 3 and 4.

18.

Subdivision of T. 13 N., R. 18 W.

19.

Chains.	Over rolling land, through scattering undergrowth.
15.56	Wash, 20 lks. wide, course SW.
39.76	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ in N., S3 in E. and S4 in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
79.76	The cor. of secs. 3, 4, 9 and 10. Land, rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti. Mar. 15, 1915: At this cor., I set off $2^{\circ} 19'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 29\frac{1}{2}'$ N. Mar. 15, 1915.
	Mar. 12, 1915: At 7 hrs. 54 m., a.m., l.m.t., I set off $34^{\circ} 25'$ N. on the lat. arc; $3^{\circ} 33'$ S. on the decl. arc; and determine a meridian with the solar at the std. cor. of secs. 32 and 33, on the S. bdy. of the Tp., which is an iron post, established by J. M. M., as described in Book "A". Thence I run N. $0^{\circ} 2'$ W., bet. secs. 32 and 33. Over broken land, through scattering undergrowth.
3.00	Wash, 50 lks. wide, course SW. Asc. S. slope, 75 ft. to
13.70	Low hill, brs. SW. Desc. N. slope 20 ft. to
16.00	Wash, 50 lks. wide, course SW. Asc. S. slope, to
32.00	Low hill, brs. E. and W. Desc. N. slope, 40 ft. to
39.20	Wash, 25 lks. wide, course SW. Asc. S. slope, 80 ft.
40.00	Impracticable to set iron post at this point. Set a granite stone, 14 X 8 X 6 ins., 10 ins. in the ground, on solid rock, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
47.70	Low hill, brs. E. and W. Desc. N. slope to
67.80	Wash, 70 lks. wide, course SW.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S29 in NW., S28 in NE., S33 in SE. and S32 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling. Soil, rocky, 4th rate. No timber. Undergrowth, cacti, greasewood, palo verde and catclaw.
40.00	East on a random line, bet. secs. 28 and 33. Set temp. $\frac{1}{4}$ sec. cor.
79.91	Intersect N. and S. line, 14 lks. S. of the cor. of secs. 27, 28, 33 and 34. Thence I run S. $89^{\circ} 54'$ W., on a true line, bet. secs. 28 and 33.
5.00	Over rolling land, through scattering undergrowth. Wash, 40 lks. wide, course SW.

## Subdivision of T. 13 N., R. 18 W., 19.

19.

Chains.	
34.90	Wash, 60 lks. wide, course SW.
39.95 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S28 in N. and S33 in S. and $\frac{1}{4}$ in W. half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
51.80	Wash, 20 lks. wide, course SW.
79.91	The cor. of secs. 28, 29, 32 and 33. Land, rolling. Soil, rocky, 4th rate. No timber. Undergrowth, greasewood, cacti, and palo verde. Mar. 12, 1915: At this cor., I set off 3° 29 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 26' N.
N.0° 2' W., bet. secs. 28 and 29. Over rolling land, through scattering undergrowth.	
9.70	Wash, 40 lks. wide, course SW.
24.80	Rocky butte, brs. W. about 15 chs. dist.
29.90	Wash, 40 lks. wide, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ in N., S28 in E. and S29 in W. half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
59.50	Wash, 20 lks. wide, course SW. Asc. SW. slope, 120 ft. to
74.70	Top of W. slope of butte. Desc. NW. slope, 120 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S20 in NW., S21 in NE., S28 in SE. and S29 in SW. quadrant; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling. Soil, rocky, 4th rate. No timber. Undergrowth, cacti, palo verde and ocatilla.
40.00	N.89° 54' E., on a random line, bet. secs. 21 and 28. Set temp. $\frac{1}{4}$ sec. cor.
79.81	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 21, 22, 27 and 28. Thence I run S.89° 56' W., on a true line, bet. secs. 21 and 28. Over rolling land, through scattering undergrowth.
15.10	Wash, 20 lks. wide, course SW. Asc. to
35.50	Low hill, brs. N. and S. Desc. slight W. slope
39.90 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S21 in N., S28 in S. and $\frac{1}{4}$ in W. half;

Chains	Subdivision of T. 13 N., R. 18 W.
	<p>and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, N. of cor. Pits impracticable.</p>
64.30	Wash, 20 lks. wide, course SW.
79.81	<p>The cor. of secs. 20, 21, 28 and 29. Land, rolling. Soil, rocky, 4th rate. No timber. Undergrowth, cacti and palo verde.</p>
	Mar. 12, 1915.
	<p>Mar. 13, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off <math>34^{\circ} 27'</math> N. on the lat. arc; <math>3^{\circ} 9\frac{1}{2}'</math> E. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.</p>
21.80	<p>Thence I run N.<math>0^{\circ} 2'</math> W., bet. secs. 20 and 21. Over rolling land, through scattering undergrowth.</p>
40.00	<p>Wash, 50 lks. wide, course SW. Asc. Impracticable to set an iron post at this point. Set a granite stone, 14 X 10 X 8 ins., 10 ins. in the ground, on solid rock, for <math>\frac{1}{4}</math> sec. cor., marked <math>\frac{1}{4}</math> on W. face; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p>
40.50	Low hill, brs. E. and W. Desc. to
80.00	<p>Impracticable to set an iron post at this point. Set a granite stone, 18 X 10 X 6 ins., 12 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked with 4 notches on E. and 3 notches on S. edge; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p>
	<p>Land, rolling. Soil, 3rd and 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti.</p>
40.00	<p>N.<math>89^{\circ} 56'</math> E., on a random line, bet. secs. 16 and 21. Set temp. <math>\frac{1}{4}</math> sec. cor.</p>
79.76	<p>Intersect N. and S. line, 36 lks. S. of the witness cor. to cor. of secs. 15, 16, 21 and 22, which is an iron post, set 10 lks. N. of the true point for cor. of secs. 15, 16, 21 and 22.</p>
	<p>Thence I run, from the true point for cor. of secs. 15, 16, 21 and 22, S.<math>89^{\circ} 45'</math> W., on a true line, bet. secs. 16 and 21. Over rolling land, through scattering undergrowth. Asc. to</p>
5.76	Low hill, brs. NW. and SE.
39.88	<p>Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked on brass cap 1915 on S. rim; S16 in N., S21 in S. and <math>\frac{1}{4}</math> in W. half;</p>
	<p>and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, N. of cor. Pits impracticable.</p>
64.85	Asc. E. slope, 170 ft. to
79.76	<p>Knoll. Desc. W. slope, 175 ft. to The cor. of secs. 16, 17, 20 and 21 Land, rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, cacti, palo verde, and ocatilla.</p>
	Mar, 13, 1915.
	<p>Mar. 14, 1915: At 8 hrs. 6 m., a.m., l.m.t., I set off <math>34^{\circ} 28'</math> N. on the lat. arc; <math>2^{\circ} 46'</math> S. on the decl. arc;</p>

Chains

and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.

Thence I run

N.0° 2' W., bet. secs. 16 and 17.

Over broken land, through scattering undergrowth.

Desc. NW. slope, 60 ft. to

5.40 Gulch, course SW. Asc. S. slope, 40 ft. to

7.25 Low hill, brs. SW. Desc. N. slope, 80 ft. to

11.60 Gulch, course SW. Asc. S. slope, 55 ft. to

15.35 Top of butte. Thence along broken W. slope.

26.97 Intersect side line 4-5 of Manitowoc No. 1 Mining Claim at a point from which Cor. No. 5, which is a stone, 10 X 8 X 6 ins. above ground, with a mound of stone, marked 5-2825 M. No. 1, with cross (X) at exact point, brs. N.88° 4' W. 7.23 chs. dist.

Thence across Manitowoc No. 1 Mining Claim.

30.40 Point of spur, brs. W. Desc. NW. slope, 45 ft. to

34.40 Wash, 80 lks. wide, course SW. Asc. SW. slope, 45 ft.

35.95 Intersect side line 2-3 Manitowoc No. 1 Mining Claim, at a point from which Cor. No. 2, which is a pine post, 4 X 6 ins. square, 12 ins. above ground, scribed 2-2825 M. No. 1, brs. N.88° 4' W., 5.42 chs. dist.

Leave Manitowoc No. 1 Mining Claim.

37.85 Spur, brs. W. Thence along W. slope.

40.00 Point for 1/4 sec. cor. falls on rotten granite ledge. I return to

39.75 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for witness cor. to 1/4 sec. cor., marked on brass cap

- 1915 on S. rim;
- WC S. of center;
- 1/4 in N.,
- S16 in E. and
- S17 in W. half;

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

From this witness cor., U. S. M. M. No. 2825, which is a quartzite peak, chiseled cross (X) for initial point, U. S. M. M. No. 2825, with a monument of stone alongside, brs. N. 59° 36' W., 10.55 chs. dist.

46.40 Wash, 80 lks. wide, course SW. Asc. SE. slope, 55 ft. to

52.75 Low hill, brs. E. Desc. NE. slope, 20 ft. to

56.65 Wash, 30 lks. wide, course SE. Asc. along point of spur, 70 ft. to

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked on brass cap

- 1915 on S. rim;
- T13N R18W in N. half;
- S8 in NW.,
- S9 in NE.,
- S16 in SE. and
- S17 in SW. quadrant;

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Land, rolling; small gulches, low, broken hills and knolls. Soil, rocky, 3rd rate.

No timber.

Undergrowth, greasewood, palo verde and ocatilla.

Mar. 14, 1915: At this cor., I set off 2° 42 1/2' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 28 1/2' N.

N.89° 45' E., on a random line, bet. secs. 9 and 16.

40.00 Set temp. 1/4 sec. cor.

79.80 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 9, 10, 15 and 16.

Thence I run

22.

Subdivision of T. 13 N., R. 18 W.

23.

Chains.

S.89° 46' W., on a true line, bet. secs. 9 and 16.  
 Over rolling land, through scattering undergrowth.  
 5.00 Wash, 5 chs. wide, course SW.  
 22.20 Wash, 30 lks. wide, course S.  
 39.90 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S9 in N.,  
 S16 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 Asc. SE. slope, 35 ft. to  
 55.80 Low hill, brs. S. Desc. W. slope, 30 ft. to  
 61.80 Wash, 50 lks. wide, course S. Asc. SE. slope, 105 ft. to  
 72.60 Low hill, brs. S. Desc. W. slope, 70 ft. to  
 77.30 Gulch, course S. Asc. E. slope, 20 ft. to  
 79.80 The cor. of secs. 8, 9, 16 and 17.  
 Land, rolling.  
 Soil, rocky, 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 A. S.  
 Mar. 14, 1915.

Mar. 15, 1915. J. M. M.  
 N.0° 2' W., bet. secs. 8 and 9.  
 Over rolling hills, through scattering undergrowth.  
 2.40 Prospect hole brs. W. 1 ch. dist.  
 5.00 Small knoll brs. W. about 150 lks. dist.  
 9.80 Gulch, course SW. Asc. broken SW. slope, 95 ft. to  
 34.00 Spur, brs. SE. Asc. SE. slope, 45 ft. to  
 39.00 Same spur, brs. SW. Thence along W. slope.  
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S9 in E. and  
 S8 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 56.50 Wash, 20 lks. wide, course SW. Asc. SE. slope, 90 ft.  
 76.60 Old road, brs. NW. and SE.  
 77.00 Spur, brs. SE.  
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the  
 ground, for cor. of secs. 4, 5, 8 and 9, marked on brass  
 cap  
 1915 on S. rim;  
 T13N R18W in N. half;  
 S5 in NW.,  
 S4 in NE.,  
 S9 in SE. and  
 S8 in SW. quadrant;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 Land, rolling hills.  
 Soil, shallow, sandy, decomposed granite and lava; 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 J. M. M.

A. S.  
 At 7 hrs. 54 m., a.m., l.m.t., I set off 34° 29 $\frac{1}{2}$ ' N. on the  
 lat. arc; 2° 22' S. on the decl. arc; and determine a  
 meridian with the solar at the cor. of secs. 4, 5, 8



Chains.

and 9.  
 Thence I run  
 N.89° 46' E., on a random line, bet. secs. 4 and 9.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 79.98 Intersect N. and S. line, 16 lks N. of the cor. of secs.  
 3, 4, 9 and 10.  
 Thence I run  
 S.89° 53' W., on a true line, bet. secs. 4 and 9.  
 Over rolling land, through scattering undergrowth.  
 17.30 Wash, 1 ch. wide, course S.  
 32.40 Wash, 15 lks. wide, course S.  
 37.50 Wash, 25 lks. wide, course SE.  
 39.99 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S4 in N.,  
 S9 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 N. of cor. Pits impracticable.  
 45.40 Wash, 15 lks. wide, course S.  
 58.00 Wash, 35 lks. wide, course SE.  
 79.00 Wash, 50 lks. wide, course SE.  
 79.98 The cor. of secs. 4, 5, 8 and 9.  
 Land, rolling.  
 Soil, rocky, 3rd rate.  
 No timber.  
 Undergrowth, cacti, palo verde and ocatilla.  
 A. S.

J. M. M.  
 N.0° 2' W., on a random line, bet. secs. 4 and 5.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.04 Intersect N. bdy. of Tp., 2 lks. E. of the cor. of secs.  
 4, 5, 32 and 33, which is an iron post, established  
 by me, as described in Book "A".  
 Thence I run  
 S.0° 3' E., on a true line, bet. secs. 4 and 5.  
 Over rolling land, through scattering undergrowth.  
 Desc. S. slope of small knoll in  $\frac{1}{4}$  sec. cor., 75 ft. to  
 .54 Enter wash, course SE.  
 10.64 Leave wash, course SE. Thence along E. slope.  
 22.00 Spur, brs. SE. Desc.  
 40.04 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S4 in E. and  
 S5 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 44.54 Wash, 40 lks. wide, course SE.  
 71.00 Enter wash, course SE.  
 79.74 Leave wash, course SE.  
 80.04 The cor. of secs. 4, 5, 8 and 9.  
 Land, rolling.  
 Soil, shallow, sandy, decomposed granite, and lava; 3rd  
 and 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 Mar. 15, 1915.

## 24. Subdivision of T. 13 N., R. 18 W.

Chains.	<p>Mar. 12, 1915. At 7 hrs. 54 m., a.m., l.m.t., I set off <math>34^{\circ} 25' N.</math> on the lat. arc; <math>3^{\circ} 33' S.</math> on the decl. arc; and determine a meridian with the solar at the std. cor. of secs. 31 and 32, which is an iron post, established by me, as described in Book "A".</p> <p>Thence I run <math>N.0^{\circ} 3' W.</math>, bet. secs. 31 and 32. Across bottom of wash, through scattering undergrowth.</p> <p>22.50 Leave bottom of wash, course SW. Thence over rolling land. 25.00 Wash, 50 lks. wide, course SW. 40.00 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked on brass cap 1915 on S. rim; <math>\frac{1}{4}</math> in N., S32 in E. and S31 in W.half; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p> <p>62.60 Wash, 50 lks. wide, course SW. 72.20 Enter wash, course SW. 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, marked on brass cap 1915 on S. rim; T13 N R18W in N. half; S30 in NW., S29 in NE., S32 in SE. and S31 in SW. quadrant; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable.</p> <p>Land, level and rolling. Soil, sandy, decomposed granite and sandstone; 3rd rate. No timber. Undergrowth, greasewood, palo verde, mesquite and cacti.</p>
40.00	East, on a random line, bet. secs. 29 and 32. Set temp. $\frac{1}{4}$ sec. cor.
80.11	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 28, 29, 32 and 33. Thence I run $S.89^{\circ} 57' W.$ , on a true line, bet. secs. 29 and 32. Over rolling land, through scattering undergrowth.
20.30	Wash, 50 lks. wide, course SW.
40.05 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S29 in N., S32 in S. and $\frac{1}{4}$ in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
41.60	Wash, 50 lks. wide, course SW. Asc.
54.60	Knoll brs. N. about 8 chs. dist.
58.00	Spur, brs. SW. Desc. NW. slope, 40 ft. to
78.90	Enter wash, course SW.
80.11	The cor. of secs. 29, 30, 31 and 32. Land, rolling. Soil, sandy, decomposed granite and sandstone; 3rd rate. No timber. Undergrowth, scattering mesquite, cat claw, and cacti. Mar. 12, 1915.
	<p>Mar. 13, 1915. At 8 hrs. 30 m., a.m., l.m.t., I set off <math>34^{\circ} 26' N.</math> on the lat. arc; <math>3^{\circ} 9\frac{1}{2}' S.</math> on the decl. arc;</p>

Chains.

and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32.  
 Thence I run  
 West, on a random line, bet. secs. 30 and 31.  
 40.00 Set temp  $\frac{1}{4}$  sec. cor.  
 79.88 Intersect W. bdy. of Tp., 2 lks. N. of the cor. of secs. 25, 30, 31 and 36, which is an iron post, established by me, as described in Book "A".  
 Thence I run  
 N.89° 59' E., on a true line, bet. secs. 30 and 31.  
 Over rolling land, through scattering undergrowth.  
 25.08 Wash, 150 lks. wide, course SW.  
 37.68 Enter wash, course SW.  
 39.88 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S30 in N.,  
 S31 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.  
 61.68 Leave wash, course SW.  
 72.68 Enter wash, course SW. Thence across wash.  
 79.88 The cor. of secs. 29, 30, 31 and 32.  
 Land, rolling.  
 Soil, shallow, sandy, decomposed, granite, sandstone and lava; 3rd rate.  
 No timber.  
 Undergrowth, scattering mesquite, cacti and palo verde.  
 Mar. 13, 1915.

Mar. 12, 1915.  
 N.0° 3' W., bet. secs. 29 and 30.  
 Over rolling land, along bottom of wash, through scattering undergrowth.  
 4.80 Leave wash, course SW.  
 8.50 Wash, 60 lks. wide, course SW. Joins other wash about 4 chs. SW.  
 20.00 Enter wash, course SW.  
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S29 in E. and  
 S30 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 61.50 Leave wash, course SW. Asc. S. slope, 85 ft. to  
 72.00 Top of knoll. Desc. slight N. slope to  
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked on brass cap  
 1915 on S. rim;  
 T13N R18W in N. half;  
 S19 in NW.,  
 S20 in NE.,  
 S29 in SE. and  
 S30 in SW. quadrant;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.  
 Land, rolling.  
 Soil, sandy, 3rd rate; and rocky, 4th rate.  
 No timber.  
 Undergrowth, scattering mesquite, cacti and greasewood.

## 26. Subdivision of T. 13 N., R. 18 W.

Chains.

N.  $89^{\circ} 57'$  E., on a random line, bet. secs. 20 and 29.

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

80.20 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 20, 21, 28 and 29.

Thence I run

S.  $89^{\circ} 56'$  W., on a true line, bet. secs. 20 and 29.

Over rolling hills, through scattering undergrowth, Asc. to

3.20 Top of small knoll. Desc. SW. slope, 80 ft. to

15.00 Thence along S. slope.

38.70 Low ridge, brs. NE. and SW. Desc.

40.10 Impracticable to set iron post at this point. Set a granite stone, 14 X 12 X 10 ins., 8 ins. in the ground, on solid rock, in a mound of stone, 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 impracticable.

52.70 Butte brs. S. about 8 chs. dist.

55.70 Enter wash, course SW.

68.70 Leave wash, course SW. Thence along broken S. slope.

80.20 The cor. of secs. 19, 20, 29 and 30.

Land, rolling and broken.

Soil, shallow, decomposed granite, sandstone and lava; 4th rate.

No timber.

Undergrowth, scattering mesquite, greasewood, palo verde, ocatilla and cacti.

Mar. 12, 1915.

Mar. 13, 1915.

S.  $89^{\circ} 59'$  W., on a random line, bet. secs. 19 and 30.

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

79.83 Intersect W. bdy. of Tp., at the cor. of secs. 19, 24, 25 and 30, which is an iron post, established by me, as described in Book "A".

Thence I run

N.  $89^{\circ} 59'$  E., on a true line, bet. secs. 19 and 30.

Over rolling land, through scattering undergrowth.

Asc. W. slope, 80 ft. to

5.00 Ridge, brs. SW. Desc. broken SE. slope, 65 ft. to

16.28 Wash, 60 lks. wide, course S.

30.00 Wash, 2 chs. wide, course SW. Joins other wash about 1.5 chs. SW.

39.83 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap

1915 on S. rim;

S19 in N.,

S30 in S. and

$\frac{1}{4}$  in W. half;

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

65.00 Wash, 120 lks. wide, course SW.

71.60 Wash, 15 lks. wide, course SW.

79.83 The cor. of secs. 19, 20, 29 and 30.

Land, rolling.

Soil, shallow, sandy, decomposed granite, sandstone and lava; 3rd and 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocatilla and cacti.

Mar. 13, 1915: At this cor., I set off  $3^{\circ} 6'$  S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is  $34^{\circ} 27'$  N.

Mar. 13, 1915.

Mar. 12, 1915: At the cor. of secs. 19, 20, 29 and 30, I set off  $3^{\circ} 29\frac{1}{2}'$  S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is  $34^{\circ} 27'$  N.

Subdivision of T. 13 N., R. 18 W.

Chains.

Thence I run  
 N.0° 3' W., bet. secs. 19 and 20.  
 Over rolling hills, through scattering undergrowth.  
 3.80 Wash, 15 lks. wide, course SW.  
 10.00 Same wash, course SE. Asc. SW. slope, 145 ft.  
 23.00 Knoll brs. E. about 3 chs. dist.  
 25.00 Knoll brs. W. about 6 chs. dist.  
 29.80 Ridge, brs. E. and W. Desc. NE. slope, 40 ft. to  
 33.20 Enter wash, course SW.  
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
 S20 in E. and  
 S19 in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 66.10 Leave wash, course SW. Asc. S. slope, 40 ft. to  
 79.80 Spur, brs. SE.  
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 18 ins. in the  
 ground, on solid rock, supported by a mound of stone,  
 for cor. of secs. 17, 18, 19 and 20, marked on brass  
 cap  
 1915 on S. rim;  
 T13N R18W in N. half;  
 S18 in NW.,  
 S17 in NE.,  
 S20 in SE. and  
 S19 in SW. quadrant;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 W. of cor. Pits impracticable.  
 Land, rolling hills.  
 Soil, shallow, sandy, decomposed granite and lava; 3rd  
 and 4th rate.  
 No timber.  
 Undergrowth, scattering mesquite, greasewood, palo verde,  
 ocatilla and cacti.

40.00 N.89° 56' E., on a random line, bet. secs. 17 and 20.  
 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.00 Intersect N. and S. line, 5 lks. N. of the cor. of secs.  
 16, 17, 20 and 21.  
 Thence I run  
 S.89° 58' W., on a true line, bet. secs. 17 and 20.  
 Over rolling hills, through scattering undergrowth.  
 Desc. broken W. slope, 165 ft. to  
 18.90 Enter wash, course SE.  
 27.60 Leave wash, course SE. Thence along S. slope.  
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the  
 ground, on solid rock, supported by a mound of stone,  
 for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S17 in N.,  
 S20 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 N. of cor. Pits impracticable.  
 71.80 Enter wash, course SW.  
 78.60 Leave wash, course SW.  
 80.00 The cor. of secs. 17, 18, 19 and 20.  
 Land, rolling hills.  
 Soil, shallow, sandy, decomposed granite, sandstone and  
 lava; 3rd and 4th rate.  
 No timber.  
 Undergrowth, mesquite, greasewood, palo verde and cacti.  
 Mar. 12, 1915.

## 28. Subdivision of T. 13 N., R. 18 W.

33.

Chains.

	<p>Mar. 13, 1915. S. <math>89^{\circ} 59'</math> W., on a random line, bet. secs. 18 and 19. Set temp. <math>\frac{1}{4}</math> sec. cor. 79.79 Intersect W. bdy. of Tp., 3 lks. N. of the cor. of secs. 13, 18, 19 and 24, which is an iron post, established by me, as described in Book "A". Thence I run N. <math>89^{\circ} 57'</math> E., on a true line, bet. secs. 18 and 19. Over rolling hills, through scattering undergrowth. Desc. broken SE. slope, 75 ft. to 12.80 Wash, 60 lks. wide, course SW. Asc. NW. slope, 90 ft. to 16.40 Top of knoll on spur, brs. SW. Desc. SE. slope, 56 ft. to 21.20 Wash, 40 lks. wide, course SW. Thence along broken S. slope. 28.50 Low saddle in spur, brs. SW. Asc. 38.80 Top of knoll. Desc. broken SE. slope, 65 ft. 39.79 Impracticable to set iron post at this point. Set a limestone, 16 X 8 X 8 ins., 8 ins. in the ground, on solid rock, in a mound of stone, 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. 44.50 Wash, 80 lks. wide, course SW. Asc. broken W. slope, 45 ft. to 51.20 Spur, brs. SW. Thence along broken S. slope 58.20 Wash, 30 lks. wide, course SW. 79.79 The cor. of secs. 17, 18, 19 and 20. Land, rolling hills. Soil, shallow, sandy, decomposed granite, sandstone and lava; 3rd and 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti. Mar. 13, 1915.</p>
	<p>Mar. 15, 1915: At 8 hrs. 30 m., a.m., l.m.t., I set off <math>34^{\circ} 28'</math> N. on the lat. arc; <math>2^{\circ} 21\frac{1}{2}'</math> S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20. Thence I run N. <math>0^{\circ} 3'</math> W., bet. secs. 17 and 18. Over rolling hills, through scattering undergrowth. 7.50 Wash, 70 lks. wide, course SE. 20.00 Knoll brs. W. about 10 chs. dist. 21.00 Enter wash, course SE. 40.00 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked on brass cap 1915 on S. rim; <math>\frac{1}{4}</math> in N., S17 in E. and S18 in W. half; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable. 50.20 Leave wash, course SE. 79.90 Wash, 30 lks. wide, course SW. 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 20 ins. in the ground, on solid rock, in a mound of stone, for cor. of secs. 7, 8, 17 and 18, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S7 in NW., S8 in NE., S17 in SE. and S18 in SW. quadrant; and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor. Pits impracticable. Land, rolling hills. Soil, shallow, sandy, decomposed granite and sandstone, 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and cacti.</p>

Chains

N.89° 58' E., on a random line, bet. secs. 8 and 17.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.12 Intersect N. and S. line, at the cor. of secs. 8, 9, 16 and 17.  
 Thence I run  
 S.89° 58' W., on a true line, bet. secs. 8 and 17.  
 Over rolling land, through scattering undergrowth.  
 7.00 Wash, 20lks. wide, course SE. Asc. to  
 12.80 Low hill, brs. SE. Desc. to  
 14.80 Wash, 15 lks. wide, course SE. Asc. NE. slope, 95 ft. to  
 28.80 Desc. SW. slope, 50 ft. to  
 40.06 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S8 in N.,  
 S17 in S. and  
 $\frac{1}{4}$  in W half;  
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.  
 Mar. 15, 1915: At this cor., I set off 2° 19' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 28 $\frac{1}{2}$ ' N.  
 52.32 Wash, 60 lks. wide, course SE.  
 61.92 Wash, 70 lks. wide, course SE. Asc. E. slope, 20 ft. to  
 67.92 Top of knoll; desc. SW. slope, 35 ft. to  
 79.92 Wash, 30 lks. wide, course SW.  
 80.12 The cor. of secs. 7,8, 17 and 18.  
 Land, rolling.  
 Soil, shallow, sandy, decomposed granite and lava; 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.

S.89° 57' W., on a random line, bet. secs. 7 and 18.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 79.70 Intersect W. bdy. of Tp., 13 lks. S. of the cor. of secs. 7, 12, 13 and 18, which is a stone, established by me, as described in Book "A".  
 Thence I run  
 S. 89° 57' E., on a true line, bet. secs. 7 and 18.  
 Over rolling hills, through scattering undergrowth.  
 Asc. W. slope, 40 ft. to  
 3.30 Top of small knoll. Thence along broken S. slope.  
 9.20 Spur, brs. SW. Desc. E. slope, 40 ft. to  
 12.80 Wash, 20 lks. wide, course SW. Asc. NW. slope, 40 ft.  
 14.70 Knoll brs. S. about 10 chs. dist.  
 22.60 Spur, brs. SW. Desc. SE. slope, 55 ft.  
 24.90 Knoll brs. N. about 5 chs. dist.  
 34.50 Wash, 20 lks. wide, course S.  
 38.10 Wash, 20 lks. wide, course S.  
 39.70 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
 1915 on S. rim;  
 S7 in N.,  
 S18 in S. and  
 $\frac{1}{4}$  in W. half;  
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.  
 49.90 Wash, 20 lks. wide, course S.  
 69.30 Wash, 250 lks. wide, course SE. Asc. SW. slope, 40 ft. to  
 72.60 Top of small knoll. Desc. SE. slope, 75 ft. to  
 79.70 The cor. of secs. 7, 8, 17 and 18.  
 Land, rolling hills.  
 Soil, shallow, sandy, decomposed granite and lava; 4th rate.  
 No timber.  
 Undergrowth, greasewood, palo verde, ocatilla and cacti.  
 J. M. M.  
 Mar.15, 1915.

Chains.	<p>Mar. 16, 1915: A. S.            At 7 hrs. 55 m., a.m., l.m.t., I set off <math>34^{\circ} 28\frac{1}{2}'</math> N. on the lat. arc; <math>1^{\circ} 58\frac{1}{2}'</math> S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.            Thence I run  <math>N.0^{\circ} 3' W.</math>, bet. secs. 7 and 8.            Over rolling land, through scattering undergrowth.</p>
35.00	Leave rolling land, brs. NW. and SE. Thence over level land,
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ in N., S8 in E., and S7 in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
45.00	Wash, 25 lks. wide, course SW.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked on brass cap 1915 on S. rim; T13N R18W in N. half; S6 in NW., S5 in NE., S8 in SE. and S7 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, level and rolling. Soil, rocky, 3rd rate. No timber. Undergrowth, cacti, palo verde, greasewood and ocatilla.
	<p>Mar. 16, 1915: At this cor., I set off <math>1^{\circ} 55'</math> S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is <math>34^{\circ} 29\frac{1}{2}'</math> N.</p>
40.00	N. $89^{\circ} 58'$ E., on a random line, bet. secs. 5 and 8, Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 4, 5, 8 and 9. Thence I run $S.89^{\circ} 55'$ W., on a true line, bet. secs. 5 and 8. Over rolling land, through scattering undergrowth.
4.40	Asc. E. slope, 65 ft. to Low hill, brs. S.
5.50	Old road, brs. NW. and SE. Desc. W. slope, 20 ft. to
10.15	Gulch, course S. Asc. E. slope, 35 ft. to
14.80	Low hill, brs. S. Desc. W. slope, 15 ft. to
19.80	Gulch, course S. Asc. broken SE. slope, 150 ft.
40.00	Rocky butte, brs. S. about 10 chs. dist.
40.01	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, on solid rock, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S5 in N., S8 in S. and $\frac{1}{4}$ in W. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
42.00	Low hill, brs. S. Desc. slight W. slope to
45.00	Gulch, course S. Asc. E. slope, 70 ft. to
48.25	Top of butte. Desc. W. slope, 110 ft. to
52.50	Wash, 12 lks. wide, course S. Thence over level land, brs. N. and S.
80.02	The cor. of secs. 5, 6, 7 and 8.



Chains.

Land, rolling.  
Soil, rocky, 3rd rate.  
No timber.  
Undergrowth, cacti, palo verde and ocatilla.

40.00 N.89° 57' W., on a random line, bet. secs. 6 and 7.  
Set temp.  $\frac{1}{4}$  sec. cor.  
79.72 Intersect W. bdy. of Tp., 14 lks. N. of the cor. of secs. 1, 6, 7 and 12, which is an iron post, established by J. M. M., as described in Book "A".  
Thence I run  
N.89° 57' E., on a true line, bet. secs. 6 and 7.  
Over rolling land, through scattering undergrowth.  
4.22 Wash, 15 lks. wide, course SE. Asc. to  
10.12 Low hill, brs. S. Desc. E. slope, 65 ft. to  
16.52 Gulch, course S. Asc. W. slope, 75 ft. to  
20.12 Low hill, brs. S. Desc. E. slope, 40 ft. to  
22.62 Gulch, course S. Asc. W. slope, 40 ft. to  
25.02 Low hill, brs. S. Desc. E. slope, 45 ft. to  
28.27 Wash, 15 lks. wide, course S. Asc. W. slope, 50 ft. to  
31.42 Low hill, brs. S. Desc. E. slope, 50 ft. to  
34.82 Gulch, course S. Asc. W. slope, 40 ft. to  
37.72 Low hill, brs. S. Desc. broken SE. slope, 30 ft.  
39.72 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, on solid rock, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
1915 on S. rim;  
S6 in N.,  
S7 in S. and  
 $\frac{1}{4}$  in W. half;  
and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.  
44.72 Wash, 20 lks. wide, course SW.  
49.72 Leave rolling land, brs. NW. and SE. Thence over level land,  
74.87 Wash, 50 lks. wide, course S.  
79.72 The cor. of secs. 5, 6, 7 and 8.  
Land, level and rolling.  
Soil, rocky, 3rd rate.  
No timber.  
Undergrowth, cacti, palo verde, ocatilla and greasewood.

40.00 N.0° 3' W., on a random line, bet. secs. 5 and 6.  
Set temp.  $\frac{1}{4}$  sec. cor.  
80.06 Intersect N. bdy. of Tp., 12 lks. E. of the cor. of secs. 5, 6, 31 and 32, which is a stone, established by J. M. M., as described in Book "A".  
Thence I run  
S.0° 8' E., on a true line, bet. secs. 5 and 6.  
Over mountainous land, through scattering undergrowth.  
Asc. NW. slope, 50 ft. to  
4.96 Spur, slopes SW. Desc. S. slope, 115 ft. to  
11.16 Draw, course SE. Asc. N. slope, 80 ft. to  
18.66 Spur, slopes SE. Desc. S. slope, 290 ft. to  
39.06 Foot of desc.; brs. E. and W. Thence over level land.  
40.06 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap  
1915 on S. rim;  
 $\frac{1}{4}$  in N.,  
S5 in E. and  
S6 in W. half;  
and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. Pits impracticable.

32.

Subdivision of T. 13 N., R. 18 W.

Chains.

45.06

Wash, 40 lks. wide, course SW.

74.86

Wash, 20 lks. wide, course SW.

80.06

The cor. of secs. 5, 6, 7 and 8.

Land, level and mountainous.

Soil, rocky, 3rd rate.

No timber.

Undergrowth, cacti, palo verde, greasewood and ocatilla.

A. S.

Mar. 16, 1915.

## General Description.

The land in this Tp. is principally rough and mountainous; the soil is very rocky and is unfit for agricultural purposes.

U. S. M. M. No. 2825 is located in Sec. 17. The Manitowoc group of patented claims is located in secs. 16 and 17.

There are no settlers in this Tp. There are considerable indications of mineral in Secs. 16 and 17.

U. S. Surveyor,

U. S. Translator,

262  
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For Certificate of U.S. Surveyor & U.S. Transitman  
see page II, book "B" of this Group

**FINAL OATH OF UNITED STATES SURVEYOR.**

I, \_\_\_\_\_, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for \_\_\_\_\_ bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 191 \_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_ of the \_\_\_\_\_ Meridian, in the State of \_\_\_\_\_, which are represented in the foregoing field notes as having been executed 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 U. S. Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 191 \_\_\_\_\_



**APPROVAL.**

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona. April 10, 1917.

The foregoing field notes of the survey of the Subdivision Lines of

Township 13 North, Range 18 West,

of the Gila and Salt River Base and Meridian,  
in the State of Arizona

executed by Albert Smith, Jr. U.S. Surveyor, & J.M. McKinney, Jr., U.S. Transitman under special instructions dated December 28, 1914 for Group 42, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Surveyor General.  
of Arizona.

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