

Subdivisions BOOK 2950

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION LINES OF

TOWNSHIP 15 NORTH RANGE 19 WEST

2950

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Albert Smith Jr., U.S. Surveyor

and

Deane J. Wolff and Ray D. Armstrong, U. S. Transitmen

2950

~~In the capacity of U. S. Surveyor~~, under instructions dated December 28, 1914,

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 February 10, 1916

Survey completed February 25, 1916

88
1A

Book "R"

Group 42 Arizona

(Subdivisions)

BOOK 2950

INDEX DIAGRAM.

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

———— Township Exteriors. Notes in Book "A"

———— Subdivision lines surveyed under this Group.

Subdivision of T. 15 N., R. 19 W.

1.B

Chains.

Survey commenced Feb. 10, 1916, and executed jointly by Albert Smith, Jr., U. S. Surveyor, and D. J. Wolff and Ray D. Armstrong, U. S. Transitmen, with Young and Sons' light mountain transits Nos. 8583 and 8396, with Smith solar attachments. Transit No. 8583 was used by Albert Smith, Jr., U. S. Surveyor. Transit No. 8396 was used by D. H. Wolff, and Ray D. Armstrong, U. S. Transitmen. For description of instruments and certificate of approval, see subdivision of T. 13 N., R. 19 W. in book "F". For tests of adjustment, see subdivision of T. 16 N., R. 19 W. in book "S".

In the following field notes, the initials A. S., D. J. W., and R. D. A. refer to Albert Smith, Jr., U. S. Surveyor, and D. J. Wolff and Ray D. Armstrong, U. S. Transitmen, respectively.

Feb. 18, 1916: A. S.

At 8 hrs. 0 m., a.m., l.m.t., I set off $34^{\circ} 35\frac{1}{2}'$ N. on the lat. arc; $11^{\circ} 54'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., which is a stone, established by me, as described in Book "A".

Thence I run

N. $0^{\circ} 1'$ W., bet. secs. 35 and 36.

Over mountainous land, through scattering undergrowth.

Asc. 445 ft., over broken W. slope.

8.48 Arrastre Wells br. S. $12\frac{3}{4}^{\circ}$ E.

24.00 Spur, slopes NW. 40 chs. Desc. 105 ft. to

30.85 Head of gulch, course W. Asc. 40 ft. to

32.20 Spur, slopes NW. From this point, top of rocky butte brs. SE. 10 chs. dist. Desc. N. slope, 210 ft. to

40.00 Point for $\frac{1}{4}$ sec. cor. falls in gulch, course NW. Asc. 30 ft. to.

42.10 Impracticable to set an iron post, at this point. Set a granite stone, 18 X 12 X 6 ins., 16 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Continue along broken W. slope to

49.80 Spur, extends 25 chs. NW. Desc. 805 ft. to

80.00 Impracticable to set an iron post, at this point. Set a granite stone, 12 X 8 X 18 ins., 16 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked with a notch on S. and E. edges; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

Soil, granite and malpais rock; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.

Feb. 18, 1916: The sky was overcast at noon, making an observation for lat. impossible. Feb. 18, 1916.

Feb. 19, 1916: At 8 hrs. 7 m., a.m., l.m.t., I set off $34^{\circ} 36\frac{1}{2}'$ N. on the lat. arc; $11^{\circ} 33'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36.

Thence I run

N. $89^{\circ} 58'$ E., on a random line, bet. secs. 25 and 36.

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

79.98 Intersect E. bdy. of Tp., 11 lks. S. of the cor. of secs. 25, 30, 31 and 36, which is a stone, established by J. M. McKinney, Jr., U. S. Transitman, as described in Book "A".

Thence I run

S. $89^{\circ} 53'$ W., on a true line, bet. secs. 25 and 36.

Over mountainous land, through dense undergrowth.

Desc. 35 ft. to

5.55 Gulch, 30 lks. wide, course NW. Asc. 40 ft. to

9.50 Spur, slopes N. Desc. 20 ft. to

13.00 Gulch, 30 lks. wide, course N. Asc. 135 ft. to

27.20 Spur, extends 10 chs. N. Desc. 95 ft. to

2.

Subdivison of T. 15 N., R. 19 W.

Chains.

32.20 Gulch, 10 lks. wide, course N. Asc. 70 ft. to
 39.99 Impracticable to set an iron post at this point. Set a
 granite stone, 18 X 10 X 8 ins., 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.

Desc. 70 ft. to
 51.00 Gulch, course NE. Asc. 235 ft. to
 62.20 Spur, slopes NE. Desc. 25 ft. to
 65.20 Head of gulch, course N. Asc. 20 ft. to
 72.50 Spur, slopes NW. Desc. 65 ft. to
 76.00 Gulch, 30 lks. wide, course NW. Asc. 25 ft. to
 79.98 The cor. of secs. 25, 26, 35 and 36.

Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, ocotillo and sagebrush.

N.0° 1' W., bet. secs. 25 and 26.
 Over mountainous land, through dense undergrowth.
 Desc. 70 ft. to

4.90 Gulch, 20 lks. wide, course NW. Asc. 65 ft. to
 9.80 Spur, slopes NW. Desc. 365 ft. to
 33.00 Gulch, 50 lks. wide, course NE. Leave mountainous land,
 brs. NE. and SW. Thence over rolling land.
 40.00 Impracticable to set an iron post, at this point. Set a
 malpais stone, 15 X 12 X 8 ins., 12 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.

58.00 Gulch, 60 lks. wide, 50 ft. deep, course NE.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the
 ground, for cor. of secs. 23, 24, 25 and 26, marked on
 brass cap

1916 on S. rim;
 T15N R19W in N. half;
 S23 in NW.,
 S24 in NE.,
 S25 in SE. and
 S26 in SW. quadrant;

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

Land, rolling and mountainous.
 Soil, rocks and gravel; 3rd and 4th rate.
 No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 19, 1916: At this cor., I set off 11° 31' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 37 $\frac{1}{2}$ ' N.
 Feb. 19, 1916.

Feb. 22, 1916: At 8 hrs. 30 m., a.m., l.m.t., I set off
 34° 37 $\frac{1}{2}$ ' N. on the lat. arc; 10° 29' 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

40.00 N. 89° 53' E., on a random line, bet. secs. 24 and 25.
 Set temp. $\frac{1}{4}$ sec. cor.

79.71 Intersect E. bdy. of Tp., 2 lks. S. of the cor. of secs.
 19, 24, 25 and 30, which is a stone, established by
 J. M. McKinney, Jr., U. S. Transitman, as described in
 Book "A".

Thence I run

4.50 S. 89° 52' W., on a true line, bet. secs. 24 and 25.
 Over rolling and hilly land, through scattering undergrowth.
 Desc. 45 ft. to
 Wash, 20 lks. wide, 1 ft. deep, course NW. Asc. 50 ft. to

Subdivision of T. 15 N., R. 19 W.

3.

Chains.

10.95 Desc. 65 ft. to
 14.85 Asc. 40 ft. to
 29.80 Thence over rolling land, descending 80 ft. to
 39.85½ Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 ground, for ¼ sec. cor., marked on brass cap
 1916 on S. rim;
 ¼S24 in N. and
 S25 in S. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 N. of cor.
 45.70 Desc. 60 ft. to
 54.70 Center of wash, 3 chs. wide, 25 ft. deep, course N. Asc.
 30 ft. to
 77.70 Desc. 10 ft. to
 79.71 The cor. of secs. 23, 24, 25 and 26.
 Land, rolling and hilly.
 Soil, rocky and gravelly; 3rd and 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

40.00 N.0° 1' W., bet. secs. 23 and 24.
 Over rolling land, through scattering undergrowth.
 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 ground, for ¼ sec. cor., marked on brass cap
 1916 on S. rim;
 ¼S23 in W. and
 S24 in E. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 W. of cor.
 65.00 Center of wash, 2 chs. wide, 15 ft. deep, course NW.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the
 ground, for cor. of secs. 13, 14, 23 and 24, marked on
 brass cap
 1916 on S. rim;
 T15N R19W 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, 1½ ft. high,
 W. of cor.
 Land, rolling desert.
 Soil, gravel; 3rd and 4th rate.
 No timber.
 Undergrowth, greasewood, sagebrush, palo verde, ocotillo and
 cacti.

40.00 N.89° 52' E., on a random line, bet. secs. 13 and 24.
 Set temp. ¼ sec. cor.
 79.76 Intersect E. bdy. of Tp., 14 lks. N. of the cor. of secs.
 13, 18, 19 and 24, which is a stone, established by J. M.
 McKinney, Jr., U. S. Transitman, as described in Book
 "A".
 Thence I run
 S.89° 58' W., on a true line, bet. secs. 13 and 24.
 Over rolling land, through scattering undergrowth.
 Desc. 90 ft. to
 29.75 Asc. 10 ft. to
 31.75 Desc. 30 ft. to
 39.88 Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the
 ground, 16 ins. in a mound of stone, for ¼ sec. cor.,
 marked on brass cap
 1916 on S. rim;
 ¼S13 in N. and
 S24 in S. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,

4.

Subdivision of T. 15 N., R. 19 W.

Chains.

N. of cor.
 Desc. to
 42.90 Center of wash, 2 chs. wide, 30 ft. deep, course NW. Asc.
 10 ft. to
 45.75 Desc. 50 ft. to
 67.20 Wash, 25 lks. wide, 30 ft. deep, course NW. Asc. to
 68.50 Desc. 10 ft. to
 69.75 Asc. 30 ft. to
 74.75 Desc. 35 ft. to
 79.76 The cor. of secs. 13, 14, 23 and 24.
 Land, rolling desert.
 Soil, gravel; 3rd and 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo, sagebrush
 and cacti.
 Feb. 22, 1916: At this cor., I set off $10^{\circ} 26\frac{1}{2}'$ S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is $34^{\circ} 38' N.$
 Feb. 22, 1916.
 A. S.

Feb. 23, 1916: R. D. A.
 At 9 hrs. 4 m., a.m., l.m.t., I set off $34^{\circ} 38\frac{1}{2}'$ N. on the
 lat. arc; $10^{\circ} 6\frac{1}{2}'$ S. on the decl. arc; and determine a
 meridian with the solar at the cor. of secs. 13, 14,
 23 and 24.
 Thence I run
 N. $0^{\circ} 1'$ W., bet. secs. 13 and 14.
 Over rolling land, through dense undergrowth.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 22 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1916 on S. rim;
 $\frac{1}{4}$ S14 in W. and
 S13 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 65.00 Center of wash, 1.00 chs. wide, 10 ft. deep, course NW.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the
 ground, for cor. of secs. 11, 12, 13 and 14, marked on
 brass cap
 1916 on S. rim;
 T15N R19W 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, $1\frac{1}{2}$ ft. high,
 W. of cor.
 Land, rolling desert.
 Soil, gravelly; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

N. $89^{\circ} 58'$ E., on a random line, bet. secs. 12 and 13.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.88 Intersect E. bdy. of Tp., 21 lks. N. of the cor. of secs.
 7, 12, 13 and 18, which is a stone, established by J. M.
 McKinney, Jr., U. S. Transitman, as described in Book
 "A".
 Thence I run
 N. $89^{\circ} 53'$ W., on a true line, bet. secs. 12 and 13.
 Over rolling land, through dense undergrowth.
 25.00 Road, brs. NW. to Franconia, and SE. to Arrastre Wells.
 36.90 Wash, 25 lks. wide, 30 ft. deep, course NW.
 39.94 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
 1916 on S. rim;
 $\frac{1}{4}$ S12 in N. and
 S13 in S. half;

Subdivision of T. 15 N., R. 19 W.

5.

Chains.	
79.88	and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. The cor. of secs. 11, 12, 13 and 14. Land, rolling desert. Soil, gravelly; 3rd rate. No timber. Undergrowth, greasewood, palo verde, ocotillo and cacti.
40.00	N.0° 1' W., bet. secs. 11 and 12. Over rolling land, through dense undergrowth. 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 1916 on S. rim; $\frac{1}{4}$ S11 in W. and S12 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked on brass cap 1916 on S. rim; T15N R19W 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. Land, rolling desert. Soil, gravel; 3rd rate. No timber. Undergrowth, greasewood, palo verde, ocotillo and cacti. Feb. 23, 1916: At this cor., I set off 10° 4 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 40' N.
40.00	S.89° 53' E., on a random line, bet. secs. 1 and 12. Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. bdy. of Tp., 5 lks. N. of the cor. of secs. 1, 6, 7 and 12, which is a stone, established by J. M McKinney, Jr., U. S. Transitman, as described in Book "A". Thence I run
39.95	N.89° 51' W., on a true line, bet. secs. 1 and 12. Over rolling land, through dense undergrowth. 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 1916 on S. rim; $\frac{1}{4}$ S1 in N. and S12 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
51.00	Road, brs. N. to Franconia, and S. to Arrastre Wells.
70.40	Box canyon, 50 lks. wide, 100 ft. deep, course NW.
79.90	The cor. of secs. 1, 2, 11 and 12. Land, rolling desert. Soil, gravelly; 3rd rate. No timber. Undergrowth, greasewood, palo verde, ocotillo and cacti.
40.00	N.0° 1' W., on a random line, bet. secs. 1 and 2. Set temp. $\frac{1}{4}$ sec. cor.
79.60	Intersect N. bdy. of Tp., 18 lks. E. of the cor. of secs.

6.

Subdivision of T. 15 N., R. 19 W.

Chains.

1, 2, 35 and 36, which is an iron post, established by me, as described in Book "A".

Thence I run
S.0° 9' E., on a true line, bet. secs. 1 and 2.
Over rolling land, through scattering undergrowth.

39.60 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
1916 on S. rim;
 $\frac{1}{4}$ S2 in W. and
S1 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

49.70 Box canyon, 30 lks. wide, 50 ft. deep, course NW.
79.60 The cor. of secs. 1, 2, 11 and 12.
Land, rolling desert.
Soil, gravel; 3rd rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and cacti.
R. D. A.
Feb. 23, 1916.

A. S.
Feb. 16, 1916: At 8 hrs. 10 m., a.m., 1.m.t., I set off
34° 35 $\frac{1}{2}$ ' N. on the lat. arc; 12° 36' S. on the decl.
arc; and determine a meridian with the solar at the
cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the
Rp., which is a stone, established by me, as described
in Book "A".

Thence I run
N.0° 1' W., bet. secs. 34 and 35.
Over mountainous land, through scattering undergrowth.
Desc. 225 ft. to

8.70 Gulch, 10 lks. wide, course NW. Asc. 45 ft. to
18.20 Spur, extends 40 chs. NW. Desc. 560 ft.
40.00 Impracticable to set an iron post at this point. Set a
granite stone, 16 X 6 X 4 ins., 8 ins. in the ground,
in a mound of stone, 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.

Continue descent to

65.45 Gulch, 25 lks. wide, course NW. Asc. 110 ft. to
71.50 Spur, extends 8 chs. W. Desc. 90 ft. to
75.00 Asc. 35 ft. to
80.00 Impracticable to set an iron post at this point. Set a
granite stone, 12 X 10 X 12 ins., on ledge rock, in a
mound of stone, 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, $1\frac{1}{2}$ ft. high,
W. of cor.

Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, greasewood, ocotillo, sagebrush and cacti.
Feb. 16, 1916: At this cor., I set off 12° 33 $\frac{1}{2}$ ' S. on the
decl. arc; and at apparent noon, I observe the sun on
the meridian; the resulting lat. is 34° 36 $\frac{1}{2}$ ' N.
Feb. 16, 1916.

Feb. 18, 1916.
N.89° 58' E., on a random line, bet. secs. 26 and 35.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.00 Intersect N. and S. line, at the cor. of secs. 25, 26, 35
and 36.
Thence I run
S.89° 58' W., on a true line, bet. secs. 26 and 35.

Subdivision of T. 15 N., R. 19 W.

7.

Chains.

Over mountainous land, through scattering undergrowth.
 Desc. 30 ft. to
 11.00 Asc. 55 ft. to
 15.90 Spur, slopes N. Desc. 155 ft. to
 23.55 Gulch, 20 lks. wide, course N. Asc. 130 ft. to
 33.80 Spur, slopes N. Desc. 205 ft.
 40.00 Impracticable to set an iron post at this point. Set a
 granite stone, 18 X 12 X 10 ins., 16 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.
 47.90 Wash, 60 lks. wide, course N. Asc. 160 ft. to
 55.90 Spur, slopes N. Desc. 110 ft. to
 61.90 Gulch, 10 lks. wide, course N. Asc. 95 ft. to
 72.60 Spur, slopes NW. Desc. 20 ft. to
 75.05 Asc. 30 ft. to
 79.30 Spur, slopes N. Desc. 10 ft. to
 80.00 The cor. of secs. 26, 27, 34 and 35.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 18, 1916.

Feb. 19, 1916.
 N.0° 1' W., bet. secs. 26 and 27.
 Over mountainous land, through scattering undergrowth.
 Desc. 210 ft. to
 19.60 Center of wash, 2.50 chs. wide, course NE. Thence over
 hilly land. Asc. 20 ft. to
 28.20 Desc. 20 ft. to
 29.55 Asc. 40 ft. to
 34.50 Desc. 170 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
 1916 on S. rim;
 $\frac{1}{4}$ S27 in W. and
 S26 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 49.90 Asc. 20 ft. to
 51.90 Desc. 75 ft. to
 64.80 Asc. 25 ft. to
 75.00 Thence over rolling land.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
 ground, for cor. of secs. 22, 23, 26 and 27, marked on
 brass cap
 1916 on S. rim;
 T15N R19W in N. half;
 S22 in NW.,
 S23 in NE.,
 S26 in SE. and
 S27 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 Land, rolling, hilly and mountainous.
 Soil, sandy and rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde and cacti.

N.89° 58' E., on a random line, bet. secs. 23 and 26.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.93 Intersect N. and S. line, 14 lks. N. of the cor. of secs.
 23, 24, 25 and 26.
 Thence I run
 N.89° 56' W., on a true line, bet. secs. 23 and 26.
 Over rolling land, through scattering undergrowth.
 39.96 $\frac{1}{2}$ 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

8. Subdivision of T. 15 N., R. 19 W.

Chains.

1916 on S. rim;
 $\frac{1}{4}$ S23 in N. and
 S26 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor.
 45.90 Wash, 30 lks. wide, 50 ft. deep, course NW.
 55.00 Desc. 60 ft. to
 61.85 Gulch, 60 lks. wide, 100 ft. deep, course NW. Heads 20
 chs. SE. Asc. 85 ft. to
 68.55 Desc. 15 ft. to
 73.30 Gulch, 60 lks wide, 100 ft. deep, course N. Asc. to
 79.93 The cor. of secs. 22, 23, 26 and 27.
 Land, rolling desert.
 Soil, gravel; 3rd and 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo, sagebrush
 and cacti.
 Feb. 19, 1916.

Feb. 22, 1916.
 N.0° 1' W., bet. secs. 22 and 23.
 Over rolling land, through scattering undergrowth.
 Desc. 115 ft. to
 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
 1916 on S. rim;
 $\frac{1}{4}$ S22 in W. and
 S23 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 Desc. 95 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the
 ground, for cor. of secs. 14, 15, 22 and 23, marked on
 brass cap
 1916 on S. rim;
 T15N R19W 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.
 Land, rolling desert.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde and cacti.

S.89° 56' E., on a random line, bet. secs. 14 and 23.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.85 Intersect N. and S. line, at the cor. of secs. 13, 14,
 23 and 24.
 Thence I run
 N.89° 56' W., on a true line, bet. secs. 14 and 23.
 Over rolling land, through scattering undergrowth.
 Desc. 25 ft. to
 10.00 Center of wash, 1 ch. wide, course NW. Asc. 85 ft. to
 29.99 Desc. 55 ft. to
 34.80 Asc. 70 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
 1916 on S. rim;
 $\frac{1}{4}$ S14 in N. and
 S23 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor.
 Thence over gently rolling land.

Subdivision of T. 15 N., R. 19 W.

9.

Chains.

50.00 Desc. 45 ft. to
 54.95 Asc. 30 ft. to
 56.95 Desc. 15 ft. to
 59.90 Asc. 20 ft. to
 61.85 Desc. 50 ft. to
 64.75 Asc. 55 ft. to
 68.65 Desc. to
 78.70 Wash, 50 lks. wide, course NW. Asc. to
 79.85 The cor. of secs. 14, 15, 22 and 23.
 Land, rolling desert.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 22, 1916.

Feb. 23, 1916.
 N.0° 1' W., bet. secs. 14 and 15.
 Over rolling land, through dense undergrowth.
 4.50 Center of wash, 60 lks. wide, course NW.
 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
 1916 on S. rim;
 $\frac{1}{2}$ S15 in W. and
 S14 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor.
 78.00 Center of wash, 2 chs. wide, course NW.
 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
 1916 on S. rim;
 T15N R19W 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.
 Land, rolling desert.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

40.00 S.89° 56' E., on a random line, bet. secs. 11 and 14.
 Set temp. $\frac{1}{4}$ sec. cor.
 79.94 Intersect N. and S. line, 7 lks. S. of the cor. of secs.
 11, 12, 13 and 14.
 Thence I run
 N.89° 59' W., on a true line, bet. secs. 11 and 14.
 Over rolling land, through dense undergrowth.
 14.95 Center of wash, 1.50 chs. wide, 20 ft. deep, course NW.
 39.97 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
 1916 on S. rim;
 $\frac{1}{2}$ S11 in N. and
 S14 in S. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 N. of cor.
 79.94 The cor. of secs. 10, 11, 14 and 15.
 Land, rolling desert.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, ocotillo, palo verde and cacti.
 A. S.
 Feb. 23, 1916.

10.

Subdivision of T. 15 N., R. 19 W.

Chains.

Feb. 24, 1916: R. D. A.
At 8 hrs. 0 m., a.m., l.m.t., I set off $34^{\circ} 39'$ N. on the lat. arc; $9^{\circ} 45'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15.

Thence I run

N. $0^{\circ} 1'$ W., bet. secs. 10 and 11.

Over rolling land, through dense undergrowth.

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
1916 on S. rim;
 $\frac{1}{4}$ S10 in W. and
S11 in E. half;

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

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked on brass cap

1916 on S. rim;
T15N R19W in N. half;
S3 in NW.,
S2 in NE.,
S11 in SE. and
S10 in SW. quadrant;

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

Land, rolling desert.

Soil, gravelly; 3rd rate.

No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.
Feb. 24, 1916.

Feb. 23, 1916.

S. $89^{\circ} 59'$ E., on a random line, bet. secs. 2 and 11.

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

79.86 Intersect N. and S. line, 11 lks. S. of the cor. of secs. 1, 2, 11 and 12.

Thence I run

S. $89^{\circ} 56'$ W., on a true line, bet. secs. 2 and 11.

Over rolling land, through dense undergrowth.

39.93 Set an granite stone, 14 X 8 X 8 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.

50.00 Center of wash, 3 chs. wide, 25 ft. deep, course NW.

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

Land, rolling desert.

Soil, gravelly; 3rd rate.

No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.
Feb. 23, 1916.

Feb. 24, 1916.

N. $0^{\circ} 1'$ W., on a random line, bet. secs. 2 and 3.

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

79.70 Intersect N. bdy. of Tp., 23 lks. E. of the cor. of secs. 2, 3, 34 and 35, which is an iron post, established by me as described in Book "A".

Thence I run

S. $0^{\circ} 11'$ E., on a true line, bet. secs. 2 and 3.

Over rolling land, through dense undergrowth.

.10 Enter wash, course NW. Comes from S.

6.10 Leave wash, course N. Comes from SE.

39.70 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

1916 on S. rim;
 $\frac{1}{4}$ S3 in W. and
S2 in E. half;

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

Subdivision of T. 15 N., R. 19 W.

BOOK 2850
II.

Chains.

48.20 W. of cor.
 Wash, 50 lks. wide, course NW.
 79.70 The cor. of secs. 2, 3, 10 and 11.
 Land, rolling desert.
 Soil, gravel; 3rd rate.
 No timber.
 Undergrowth, greasewood, ocotillo and palo verde.
 Feb. 24, 1916.

Feb. 16, 1916: At 9 hrs. 0 m., a.m., l.m.t., I set off
 34° 35½' N. on the lat. arc; 12° 36' S. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., which
 is a stone, established by A. S., as described in Book
 "A".

Thence I run
 N.0° 2' W., bet. secs. 33 and 34.
 Over mountainous land, through dense undergrowth.
 Desc. to
 23.00 Gulch, course NE. Asc.
 40.00 Set a granite stone, 18 X 13 X 8 ins., 15 ins. in the
 ground, for ¼ sec. cor., marked ¼ on W. face; and raise
 a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
 41.70 Spur, slopes NE. Desc. 235 ft. to
 51.00 Gulch, course N.30° E. Asc. to
 53.90 Desc. 180 ft. to
 65.60 Asc. 55 ft. to
 69.00 Spur, slopes NNE. Desc. on spur, 70 ft. to
 80.00 Set a granite stone, 18 X 12 X 10 ins., 8 ins. in the ground,
 on bed rock, in a mound of stone, 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, 1½
 ft. high, W. of cor.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 16, 1916: At this cor., I set off 12° 33½' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 36' N.
 Feb. 16, 1916.
 R. D. A.

Feb. 16, 1916; A. S.
 N.89° 58' E., on a random line, bet. secs. 27 and 34.
 40.00 Set temp. ¼ sec. cor.
 79.92 Intersect N. and S. line, 16 lks. N. of the cor. of secs.
 26, 27, 34 and 35.
 Thence I run
 N.89° 55' W., on a true line, bet. secs. 27 and 34.
 Over mountainous land, through dense undergrowth.
 Desc. 100 ft. to
 5.20 Gulch, 50 lks. wide, course N. Asc. 115 ft. to
 13.65 Desc. 10 ft. to
 15.15 Asc. 105 ft. to
 25.00 Spur, slopes NE. Desc. 40 ft. to
 28.75 Enter bed of wash, course NE.
 29.90 Leave bed of wash, course NE. Asc. 60 ft.
 39.96 Set a granite stone, 16 X 6 X 5 ins., 13 ins. in the ground,
 for ¼ sec. cor., marked ¼ on N. face; and raise a mound
 of stone, 2 ft. base, 1½ ft. high, N. of cor.
 45.00 Spur, extends 10 chs. N. Desc. 90 ft. to
 51.30 Gulch, 20 lks. wide, course N. Asc. 165 ft. to
 62.30 Spur, extends 10 chs. N. Desc. 65 ft. to
 67.60 Gulch, 15 lks. wide, course N. Asc. 250 ft. to
 76.70 Spur, extends 15 chs. N. Desc. 50 ft. to

12.

Subdivision of T. 15 N., R. 19 W.

Chains. 79.92	<p>The cor. of secs. 27, 28, 33 and 34. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, sagebrush and cacti. A S.</p>
18.50 20.95 31.60 40.00	<p>R. D. A. N.0° 2' W., bet. secs. 27 and 28. Over mountainous land, through dense undergrowth. Desc. N. slope, 395 ft. to Gulch, 15 lks. wide, course NW. Asc. 20 ft. to Point of spur, slopes W. 3 chs. Desc. 140 ft. to Gulch, 1 ch. wide, course NE. Asc. slightly to Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground, on bed rock, 12 ins. in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap 1916 on S. rim; $\frac{1}{4}$S28 in W. and S27 in E. half; and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, W. of cor.</p>
41.50 54.35 58.70 71.70 80.00	<p>Low hill, brs. NE. and SW. Desc. to Gulch, course NE. Asc. to Thence along top of spur, brs. N. and SW. Leave spur, brs. NE. Desc. 65 ft. to Set an iron post, 3 ft. long, 2 ins. diam., 19 ins. in the ground, on bed rock, 7 ins. in a mound of stone, for cor. of secs. 21, 22, 27 and 28, marked on brass cap 1916 on S. rim; T15N R19W 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. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, ocotillo and cacti. R. D. A. Feb. 16, 1916.</p>
40.00 80.06	<p>Feb. 19, 1916: A. S. S.89° 55' E., on a true line, bet. secs. 22 and 27. Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 11 lks. N. of the cor. of secs. 22, 23, 26 and 27. Thence I run</p>
40.03	<p>N.89° 50' W., on a true line, bet. secs. 22 and 27. Over hilly land, through scattering undergrowth. Set an iron post, 3 ft. long, 1 in. diam., 10 ins. in the ground, 20 ins. in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap 1916 on S. rim; $\frac{1}{4}$S22 in N. and S27 in S. half; and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, N. of cor.</p>
46.00 62.00 76.96 80.06	<p>Desc. 55 ft. to Center of wash, 70 lks. wide, course NE. Asc. 55 ft. to Desc. 15 ft. to The cor. of secs. 21, 22, 27 and 28. Land, hilly; Soil, rocky; 4th rate.</p>

Subdivision of T. 15 N., R. 19 W.

Chains.

No timber.
Undergrowth, greasewood, palo verde and cacti.
Feb. 19, 1916.
A. S.

Feb. 17, 1916: R. D. A.
N.0° 2' W., bet. secs. 21 and 22.
Over mountainous land, through dense undergrowth.
Desc. NW. slope, 125 ft. to
12.15 Wash, 25 lks. wide, course NE Asc. SE. slope, 20 ft. to
17.30 Desc. 125 ft. to
35.30 Center of wash, 1 ch. wide, course N.55° W.
39.00 Leave mountainous land, brs. E. and W. Thence over rolling
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
1916 on S. rim;
 $\frac{1}{4}$ S21 in W. and
S22 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
W. of cor.
80.00 Desc. 140 ft. to
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
ground, for cor. of secs. 15, 16, 21 and 22, marked on
brass cap
1916 on S. rim;
T15N R19W 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, $1\frac{1}{2}$ ft. high,
W. of cor.
Land, rolling and mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and cacti.
Feb. 17, 1916: At this cor., I set off 12° 13' S. on the
decl. arc; and at apparent noon, I observe the sun on
the meridian; the resulting lat. is 34° 38 $\frac{1}{2}$ ' N.
Feb. 17, 1916.
R. D. A.

Feb. 23, 1916: A. S.
At 8 hrs. 30 m., a.m., 1.m.t., I set off 34° 38 $\frac{1}{2}$ ' N. on the
lat. arc; 10° 7' S. on the decl. arc; and determine a
meridian with the solar at the cor. of secs. 15, 16, 21
and 22.
Thence I run
S.89° 50' E., on a random line, bet. secs. 15 and 22.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.85 Intersect N. and S. line, 7 lks. S. of the cor. of secs.
14, 15, 22 and 23.
Thence I run
N.89° 53' W., on a true line, bet. secs. 15 and 22.
Over rolling land, through dense undergrowth.
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
1916 on S. rim;
 $\frac{1}{4}$ S15 in N. and
S22 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
N. of cor.
63.20 Desc. slightly to
Center of wash, 1 ch. wide, course NW. Asc. to
72.85 Desc. 45 ft. to
79.85 The cor. of secs. 15, 16, 21 and 22.

14. Subdivision of T. 15 N., R. 19 W.

Chains.

Land, rolling desert.
Soil, gravel; 4th rate.
No timber.
Undergrowth, greasewood, ocotillo, sagebrush and cacti.

40.00 N.0° 2' W., bet. secs. 15 and 16.
Over rolling land, through dense undergrowth.
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
1916 on S. rim;
 $\frac{1}{4}$ S16 in W. and
S15 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

45.00 Center of wash, 1.50 chs. wide, course NW.
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked on brass cap
1916 on S. rim;
T15N R19W 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.

Land, rolling desert.
Soil, gravel; 4th rate.
No timber.
Undergrowth, greasewood, ocotillo and cacti.
Feb. 23, 1916: At this cor., I set off 10° 4 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 39' N.

40.00 S.89° 53' E., on a random line, bet. secs. 10 and 15.
79.90 Set temp. $\frac{1}{4}$ sec. cor.
Intersect N. and S. line, 21 lks. S. of the cor. of secs. 10, 11, 14 and 15.

Thence I run
S.89° 58' W., on a true line, bet. secs. 10 and 15.
Over rolling land, through dense undergrowth.
Desc. to
5.00 Center of wash, 2 chs. wide, course NW. Asc. 70 ft. to
19.90 Desc. 20 ft. to
24.90 Asc. 35 ft. to
39.95 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
1916 on S. rim;
 $\frac{1}{4}$ S10 in N. and
S15 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

45.00 Desc. 15 ft. to
58.00 Asc. 20 ft. to
59.85 Desc. 40 ft. to
67.65 Asc. 30 ft. to
69.80 Desc. 20 ft. to
71.35 Asc. 25 ft. to
74.70 Desc. 45 ft. to
79.90 Asc. 40 ft. to
The cor. of secs. 9, 10, 15 and 16.

Land, rolling desert.
Soil, gravel; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and cacti.

Subdivision of T. 15 N., R. 19 W.

15.

Chains.

A. S.
Feb 23, 1916.

Feb. 24, 1916: R. D. A.
 N.0° 2' W., bet. secs. 9 and 10.
 Over rolling land, through dense undergrowth.
 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
 1916 on S. rim;
 $\frac{1}{4}$ S9 in W. and
 S10 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 80.00 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
 1916 on S. rim;
 T15N R19W in N. half;
 S4 in NW.,
 S3 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.
 Land, rolling desert.
 Soil, gravelly; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 24, 1916: At this cor., I set off 9° 42 $\frac{1}{2}$ ' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 40' N.

N.89° 58' E., on a random line, bet. secs. 3 and 10.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.90 Intersect N. and S. line, 5 lks. N. 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 dense undergrowth.
 35.00 Center of wash, 3 chs. wide, course N.
 39.95 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
 1916 on S. rim;
 $\frac{1}{4}$ S3 in N. and
 S10 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor.
 79.90 The cor. of secs. 3, 4, 9 and 10.
 Land, rolling desert.
 Soil, gravelly; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

N.0° 2' W., on a random line, bet. secs. 3 and 4.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.68 Intersect N. bdy. of Tp., 11 lks. E. 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° 7' E., on a true line, bet. secs. 3 and 4.
 Over rolling land, through dense undergrowth.
 39.68 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

16. Subdivision of T. 15 N. R. 19 W.

Chains.

1916 on S. rim;
 $\frac{1}{4}$ S4 in W. and
 S3 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 79.68 The cor. of secs. 3, 4, 9 and 10.
 Land, rolling desert.
 Soil, gravelly; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 R. D. A.
 Feb. 24, 1916.

Feb. 10, 1916: A. S.
 At 8 hrs. 30 m., a.m., l.m.t., I set off $34^{\circ} 35\frac{1}{2}'$ N. on the
 lat. arc; $14^{\circ} 35\frac{1}{2}'$ S. on the decl. arc; and determine
 a meridian with the solar at the cor. of secs. 4, 5,
 32 and 33, which is a stone, established by D. J. W.,
 as described in Book "A".
 Thence I run
 N. $0^{\circ} 2'$ W., bet. secs. 32 and 33.
 Over mountainous land, through scattering undergrowth.
 Desc. 60 ft. to
 2.00 Gulch, course W. Asc. to
 7.00 Spur, extends 15 chs. W. Desc. to
 20.00 Gulch, course SW. Asc. S. slope to
 25.00 Main divide, brs. NW. and SE. Desc. 555 ft.
 40.00 Impracticable to set an iron post at this point. Set a
 malpais stone, 18 X 15 X 10 ins., 14 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.
 71.00 Center of gulch, 70 lks. wide, course SW. Asc. 45 ft. to
 78.00 Hill. Desc. NE. slope, 50 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the
 ground, for cor. of secs. 28, 29, 32 and 33, marked on
 brass cap

1916 on S. rim;
 T15N R19W 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.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, ocotillo, sagebrush and cacti.
 Feb. 10, 1916: The sky was overcast at noon, making an
 observation for lat. impossible. Feb. 10, 1916.
 A. S.

Feb. 15, 1916: R. D. A.
 At 10 hrs. 0 m., a.m., l.m.t., I set off $34^{\circ} 36\frac{1}{2}'$ N. on the
 lat. arc; $12^{\circ} 56'$ S. on the decl. arc; and determine
 a meridian with the solar at the cor. of secs. 28, 29,
 32 and 33.
 Thence I run
 N. $89^{\circ} 58'$ E., on a random line, bet. secs. 28 and 33.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.14 Intersect N. and S. line, 9 lks. N. of the cor. of secs.
 27, 28, 33 and 34.
 Thence I run
 N. $89^{\circ} 58'$ W., on a true line, bet. secs. 28 and 33.
 Over mountainous land, through scattering undergrowth.
 Along N. slope.
 3.30 Spur, extends 10 chs. N. Desc. 115 ft. to

Subdivision of T. 15 N., R. 19 W.

Chains.
 10.15 Gulch, 15 lks. wide, course N. Asc. 245 ft. to
 27.00 Spur, extends 10 chs. N. Desc. 355 ft.
 40.07 Impracticable to set an iron post at this point. Set a
 granite stone, 18 X 12 X 7 ins., 15 ins. in the ground,
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound
 of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 40.65 Gulch, 15 lks. wide, course NE. Asc. 55 ft. to
 43.55 Spur, slopes N. Desc. to
 47.85 Gulch, 10 lks. wide, course N. Asc. 115 ft. to
 52.35 Spur, slopes N. Desc. 225 ft. to
 65.35 Gulch, 50 lks. wide, course NE. Asc. 50 ft. to
 71.30 Spur, hrs. NW. and SE. Desc. 70 ft. to
 79.15 Gulch, 10 lks. wide, course NW. Asc. to
 80.14 The cor. of secs. 28, 29, 32 and 33.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 R. D. A.
 Feb. 15, 1916.

Feb. 10, 1916: A. S.
 N.0° 2' W., bet. secs. 28 and 29.
 Over mountainous land, through scattering undergrowth.
 Desc. to
 .30 Gulch, course NW. Asc. 190 ft. to
 8.70 Spur, hrs. NW. and SE. Desc. 140 ft. to
 15.85 Gulch, 10 lks. wide, course E. Asc. 30 ft. to
 17.80 Spur, extends 5 chs. E. Desc. 25 ft. to
 20.10 Gulch, 15 lks. wide, course SE. Asc. 220 ft. to
 29.80 Spur, extends 20 chs. SE. Thence along broken E. slope.
 Desc. 35 ft. to
 32.00 Asc. 35 ft. to
 34.45 Desc. 30 ft. to
 36.95 Asc. 45 ft. to
 38.00 Desc. 35 ft. to
 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
 1916 on S. rim;
 $\frac{1}{4}$ S29 in W. and
 S28 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 Feb. 10, 1916.

Feb. 13, 1916: At 10 hrs. a.m., l.m.t., I set off 34° 37'
 N. on the lat. arc; 13° 36' S. on the decl. arc; and
 determine a meridian with the solar at the $\frac{1}{4}$ sec. cor.
 bet. secs. 28 and 29.
 Thence I continue measurement
 N.0° 2' W., bet. secs. 28 and 29.
 Asc. to
 42.80 Ridge, hrs. E. and W. Desc. N. slope, 530 ft. to
 77.60 Gulch, 10 lks. wide, course NE. Asc. S. slope, 70 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., on bed rock,
 26 ins. in a mound of stone, for cor. of secs. 20, 21,
 28 and 29, marked on brass cap
 1916 on S. rim;
 T15N R19W 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.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

18.

Subdivision of T. 15 N., R. 19 W.

Chains.

Feb. 13, 1916: At this cor., I set off $13^{\circ} 34\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 37\frac{1}{2}'$ N.

A. S.

Feb. 13, 1916.

Feb. 17, 1916: R. D. A.

At 8 hrs. 30 m., a.m., l.m.t., I set off $34^{\circ} 37\frac{1}{2}'$ N. on lat. arc; $12^{\circ} 15'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.

Thence I run

S. $89^{\circ} 58'$ E., on a random line, bet. secs. 21 and 28.

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

80.14 Intersect N. and S. line, 21 lks. N. of the cor. of secs. 21, 22, 27 and 28.

Thence I run

N. $89^{\circ} 49'$ W., on a true line, bet. secs. 21 and 28.

Over mountainous land, through scattering undergrowth.

Desc. 45 ft. to

4.95 Wash, 30 lks. wide, course NE. Asc. 90 ft. to

9.70 Spur, slopes N. 10° E. Desc. 70 ft. to

14.60 Ravine, course N. Asc. 270 ft. to

37.10 Spur, slopes N. Desc. 150 ft.

40.07 Impracticable to set an iron post at this point. Set a granite stone, 20 X 10 X 10 ins., 6 ins. in the ground, 12 ins. 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.

44.00 Gulch, course N. Asc. 65 ft. to

48.25 Spur, slopes N. Desc. 105 ft. to

69.55 Wash, 50 lks. wide, course NE. Asc. 125 ft. to

80.14 The cor. of secs. 20, 21, 28 and 29.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.

Feb. 17, 1916.

Feb. 14, 1916: At 8 hrs. 30 m., a.m., l.m.t., I set off $34^{\circ} 37\frac{1}{2}'$ N. on the lat. arc; $13^{\circ} 16\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.

Thence I run

N. $0^{\circ} 2'$ W., bet. secs. 20 and 21.

Over mountainous land, through scattering undergrowth.

Asc. 70 ft. to

5.80 Ridge, brs. E. and W. Desc. 385 ft. to

18.60 Gulch, course NW. Asc. 30 ft., along W. slope, to

26.75 Desc. 40 ft. to

28.50 Asc. 55 ft. to

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

1916 on S. rim;

 $\frac{1}{4}$ S20 in W. and

S21 in E. half;

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

Desc. 90 ft. to

49.75 Gulch, course NW. Asc. 65 ft. to

59.00 Spur, slopes NW. Desc. 215 ft. to

79.20 Wash, course NW. Leave mountainous land, thence over rolling land.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked on brass cap

Subdivision of T. 15 N., R. 19 W.

Chains.

1916 on S. rim;
T15N R19W in N. half;
S17 in NW.,
S16 in NE.,
S21 in SE. and
S20 in SW. quadrant;

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

Land, rolling and mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.

Feb. 14, 1916: At this cor., I set off 13° 14 1/2' S. on the
decl. arc; and at apparent noon, I observe the sun on
the meridian; the resulting lat. is 34° 38 1/2' N.

Feb. 14, 1916.

Feb. 17, 1916:

S. 89° 49' E., on a random line, bet. secs. 16 and 21.

40.00

Set temp. 1/4 sec. cor.

80.24

Intersect N. and S. line, 16 lks. S. of the cor. of secs.
15, 16, 21 and 22.

Thence I run

N. 89° 56' W., on a true line, bet. secs. 16 and 21.

Over rolling land, through dense undergrowth.

35.00

Center of wash, 1 ch. wide, course N.

40.12

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

1916 on S. rim;
1/4 S16 in N. and
S21 in S. half;

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,
N. of cor.

53.50

Center of wash, 4 chs. wide, course N. 30° W.

80.24

The cor. of secs. 16, 17, 20 and 21.

Land, rolling desert.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotillo and cacti.

R. D. A.

Feb. 17, 1916.

Feb. 23, 1916: A. S.

N. 0° 2' W., bet. secs. 16 and 17.

40.00

Over rolling land, through dense undergrowth.

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

1916 on S. rim;
1/4 S17 in W. and
S16 in E. half;

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

50.00

Center of wash, 60 lks. wide, course NW.

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

1916 on S. rim;
T15N R19W 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.

Land, rolling desert.

Soil, gravel; 4th rate.

20.

Subdivision of T. 15 N., R. 19 W.

Chains.

No timber.
Undergrowth, greasewood, ocotillo, palo verde and cacti.

- 40.00 S.89° 56' E., on a random line, bet. secs. 9 and 16.
Set temp. $\frac{1}{4}$ sec. cor.
79.98 Intersect N. and S. line, 9 lks. S. of the cor. of secs. 9, 10, 15 and 16.
Thence I run
West on a true line, bet. secs. 9 and 16.
Over rolling land, through dense undergrowth.
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
1916 on S. rim;
 $\frac{1}{4}$ S9 in N. and
S16 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
65.00 Center of wash, 1 ch. wide, course NW.
79.98 The cor. of secs. 8, 9, 16 and 17.
Land, rolling desert.
Soil, gravelly; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and cacti.
Feb. 23, 1916.

- Feb. 24, 1916.
N.0° 2' W., bet. secs. 8 and 9.
Over rolling land, through dense undergrowth.
14.00 Wash, 15 lks. wide, 10 ft. deep, course NW.
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
1916 on S. rim;
 $\frac{1}{4}$ S8 in W. and
S9 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
75.00 Center of wash, 1 ch. wide, 10 ft. deep, course NW.
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked on brass cap
1916 on S. rim;
T15N R19W 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.
Land, rolling.
Soil, gravel; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and cacti.

- 40.00 East on a random line, bet. secs. 4 and 9.
Set temp. $\frac{1}{4}$ sec. cor.
80.05 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 3, 4, 9 and 10.
Thence I run
S.89° 59' W., on a true line, bet. secs. 4 and 9.
Over rolling land, through dense undergrowth.
17.00 Center of wash, 1.50 chs. wide, 70 ft. deep, course NW.
40.02 $\frac{1}{2}$ 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
1916 on S. rim;

Chains.

$\frac{1}{4}$ S4 in N. and
 $\frac{1}{4}$ S9 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor.
 42.05 Wash, 25 lks. wide, 20 ft. deep, course NW.
 80.05 The cor. of secs. 4, 5, 8 and 9.
 Land, rolling.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo, sagebrush
 and cacti.

40.00 N.0° 2' W., on a random line, bet. secs. 4 and 5.
 79.74 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. bdy. of Tp., 11 lks. E. of the cor. of secs.
 4, 5, 32 and 33, which is an iron post, established by
 R. D. A., as described in Book "A".
 Thence I run
 S.0° 7' E., on a true line, bet. secs. 4 and 5.
 Over rolling land, through dense undergrowth.
 4.75 Wash, 25 lks. wide, 30 ft. deep, course NE.
 29.75 Wash, 30 lks. wide, 25 ft. deep, course NW.
 39.74 Set an iron post, 3 ft. long, 1 in. diam., 24 ins in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1916 on S. rim;
 $\frac{1}{4}$ S5 in W. and
 S4 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 54.75 Wash, 50 lks. wide, course NW.
 79.74 The cor. of secs. 4, 5, 8 and 9.
 Land, rolling desert.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo, sagebrush
 and cacti.
 Feb. 24, 1916: At this cor., I set off 9° 42 $\frac{1}{2}$ ' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 40' N.
 A. S.
 Feb. 24, 1916.

Feb. 10, 1916: D. J. W.
 At 8 hrs. 30 m., a.m., 1.m.t., I set off 34° 35 $\frac{1}{2}$ ' N. on
 the lat. arc; 14° 35 $\frac{1}{2}$ ' S. on the decl. arc; and deter-
 a meridian with the solar at the cor. of secs. 5, 6, 31
 and 32, on the S. bdy. of the Tp., which is a stone,
 established by me, as described in Book "A".
 Thence I run
 N.0° 3' W., bet. secs. 31 and 32.
 Over rolling and hilly land, through scattering undergrowth.
 1.00 Wash, 50 lks. wide, 15 ft. deep, course SW. Asc. 125 ft.
 to
 11.65 Low hill brs. E. and W. Desc. 75 ft. to
 14.90 Ravine, course W. Asc. 80 ft. to
 19.85 Low red knoll. Desc. 50 ft. to
 26.50 Wash, 50 lks. wide, course S.55° W. Thence along W. slope.
 35.95 Wash, 15 lks. wide, 30 ft. deep, course S.60° W. Asc. 25
 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 23 ins. in the
 ground, on bed rock, for $\frac{1}{4}$ sec. cor., marked on brass
 cap
 1916 on S. rim;
 $\frac{1}{4}$ S31 in W. and
 S32 in E. half;

22. Subdivision of T. 15 N., R. 19 W.

Chains.

and raise a mound of stone, 2 ft. base, 1½ ft. high,
W. of cor.
45.00 Desc. to
46.60 Wash, 25 lks. wide, 15 ft. deep, course SW. Asc. 115 ft.
to
59.90 Desc. to
62.10 Gulch, 10 ft. deep, course SW. Asc. 365 ft. to
64.80 Main divide, brs. E. and W. Desc. 90 ft. to
78.75 Ravine, course NW. Asc. 30 ft. to
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the
ground, for cor. of secs. 29, 30, 31 and 32, marked on
brass cap
1916 on S. rim;
T15N R19W 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, 1½ ft. high,
W. of cor.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and cacti.
D. J. W.

A. S.
N. 89° 58' E., on a random line, bet. secs. 29 and 32.
40.00 Set temp. ¼ sec. cor.
79.72 Intersect N. and S. line, 5 lks. S. of the cor. of secs.
28, 29, 32 and 33.
Thence I run
S. 89° 56' W., on a true line, bet. secs. 29 and 32.
Over mountainous land, through scattering undergrowth.
Asc. 30 ft. to
5.00 Hill. Desc. 70 ft. to
13.53 Center of gulch, 75 lks. wide, course NW. Asc. 70 ft. to
18.80 Spur, brs. NW. Desc. 75 ft. to
29.75 Asc. 15 ft. to
30.70 Desc. 110 ft. to
34.80 Gulch, course NE. Asc. 40 ft. to
38.30 Spur, extends 10 chs. NW. Desc. 20 ft.
39.86 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for ¼ sec. cor., marked on brass cap
1916 on S. rim;
¼ S29 in N. and
S32 in S. half;
and raise a mound of stone, 2 ft. base, 1½ ft. high,
N. of cor.
40.50 Gulch, course N. Asc. 45 ft. to
42.95 Spur, extends 7 chs. N. Desc. 45 ft. to
47.80 Gulch, course NE. Asc. 65 ft. to
50.80 Spur, brs. NE. Desc. 30 ft. to
52.15 Gulch, course NE. Asc. 110 ft. to
58.30 Spur, slopes NE. Desc. 190 ft. to
62.00 Gulch, course NW. Asc. 190 ft. to
76.50 Spur, slopes N. Desc. 70 ft. to
79.72 The cor. of secs. 29, 30, 31 and 32.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, greasewood, sagebrush, ocotillo and cacti.
Feb. 10, 1916: The sky was over cast at noon, making an
observation for lat. impossible.
A. S.

Chains.

	D. J. W.
	S.89° 58' W., on a random line, bet. secs. 30 and 31.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.02	Intersect W. bdy. of Tp., 9 lks. N. of the cor. of secs. 25, 30, 31 and 36, which is an iron post, established by John Gonin, U. S. Transitman, as described in Book "A".
	Thence I run
	N.89° 54' E., on a true line, bet. secs. 30 and 31.
	Over mountainous land, through dense undergrowth.
	Desc. to
.85	Gulch, 10 lks. wide, course SW. Asc. 545 ft. to
27.90	Spur, brs. NE. and SW. Desc. 115 ft. to
34.15	Ravine, course S. Asc. 40 ft. to
35.30	Spur, slopes S. Desc. 20 ft.
39.02	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
	1916 on S. rim;
	$\frac{1}{4}$ S30 in N. and
	S31 in S. half;
	and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
44.75	Ravine, course SW. Asc. 85 ft. to
47.90	Main divide, brs. NW. and SE. Desc. 55 ft. to
53.55	Ravine, course NE. Asc. 75 ft. to
68.35	Low spur, slopes N. Desc. 100 ft. to
73.50	Gulch, course NW. Asc. 105 ft. to
79.02	The cor. of secs. 29, 30, 31 and 32.
	Land, mountainous.
	Soil, rocky; 4th rate.
	No timber.
	Undergrowth, greasewood, ocotillo and cacti.
	Feb. 10, 1916: The sky was overcast at noon, making an observation for lat. impossible.
	N.0° 3' W., bet. secs. 29 and 30.
	Over mountainous land, through dense undergrowth.
	Asc. SW. slope, 40 ft. to
1.90	Spur, slopes NW. Desc. 150 ft. to
7.00	Ravine, course NW. Asc. 60 ft. to
12.40	Spur, slopes NW. Desc. 220 ft. to
33.70	Center of wash, 1 ch. wide, course W. Asc. 50 ft. to
35.75	Low hill, brs. W. Desc. N. slope, 55 ft. to
38.80	Ravine, course NW. Asc. 45 ft.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 13 ins. in the ground, on bed rock, 12 ins. in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap
	1916 on S. rim;
	$\frac{1}{4}$ S30 in W. and
	S29 in E. half;
	and raise a mound of stone, 2ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
43.00	Low hill brs. NW. Desc. 100 ft. to
46.40	Center of wash, 70 lks. wide, course W. Asc. 70 ft. to
51.40	Low hill, brs. NW. Desc. 50 ft. to
63.10	Ravine, course NW. Thence along W. slope.
68.00	Gulch, 30 lks. wide, 20 ft. deep, course SW. Asc. slightly to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked on brass cap
	1916 on S. rim;
	T15N R19W 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.
	Land, mountainous.

Chains.

Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, ocotillo, palo verde and cacti.
 D. J. W.
 Feb. 10, 1916.

Feb. 13, 1916: A. S.
 N.89° 56' E., on a random line, bet. secs. 20 and 29.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.90 Intersect N. and S. line, at the cor. of secs. 20, 21, 28 and 29.
 Thence I run
 S.89° 56' W., on a true line, bet. secs. 20 and 29.
 Over mountainous land, through scattering undergrowth.
 Asc. 15 ft. to
 5.87 Spur, slopes NW. Desc. 80 ft. to
 9.10 Gulch, course NW. Asc. 585 ft. to
 32.30 Spur, extends 15 chs. NE. Desc. 70 ft. to
 39.95 Impracticable to set an iron post at this point. Set a granite stone, 16 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.
 Asc. 45 ft. to
 42.40 Spur, extends 15 chs. N. Desc. 290 ft. to
 48.50 Head of gulch, course N. Asc. 55 ft. to
 55.10 Spur, slopes NW. Desc. 220 ft. to
 61.75 Asc. 245 ft. to
 75.50 Point of spur, slopes N. Desc. 110 ft. to
 79.90 The cor. of secs. 19, 20, 29 and 30.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, ocotillo, sagebrush and cacti.

S.89° 54' W., on a random line, bet. secs. 19 and 30.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 78.70 Intersect W. bdy. of Tp., 23 lks. N. of the cor. of secs. 19, 24, 25 and 30, which is an iron post, established by John Gonin, U. S. Transitman, as described in Book "A".
 Thence I run
 N.89° 44' E., on a true line, bet. secs. 19 and 30.
 Over mountainous land, through scattering undergrowth.
 Asc. 140 ft. to
 9.50 Spur, slopes NW. Desc. 75 ft. to
 19.40 Asc. 35 ft. to
 24.95 Spur, slopes N. Desc. 90 ft. to
 33.80 Gulch, course NW. Asc. 145 ft. to
 37.70 Spur, slopes NE. Desc. 40 ft.
 38.70 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
 1916 on S. rim;
 $\frac{1}{4}$ S19 in N. and
 S30 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 43.40 Gulch, course NW. Asc. 55 ft. to
 45.70 Spur, slopes NW. Desc. 40 ft. to
 49.85 Center of draw, 3 chs. wide, course NW. Asc. 195 ft. to
 58.90 Spur, extends 20 chs. NW. Desc. 170 ft. to
 64.00 Gulch, 25 lks. wide, course NW. Asc. 105 ft. to
 67.40 Point of spur, slopes NW. Desc. 15 ft. to
 70.20 Enter bed of wash, course NW.
 75.55 Leave bed of wash, course NW. Asc. 65 ft. to
 78.70 The cor. of secs. 19, 20, 29 and 30.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.

Subdivision of T. 15 N., R. 19 W.

Chains.

Undergrowth, greasewood, palo verde, ocotillo and cacti.
Feb. 13, 1916.

Feb. 14, 1916: At 9 hrs. 0 m., a.m., l.m.t., I set off
34° 37 $\frac{1}{2}$ ' N. on the lat. arc; 13° 16 $\frac{1}{2}$ ' S. on the decl.
arc; and determine a meridian with the solar at the
cor. of secs. 19, 20, 29 and 30.

Thence I run
N.0° 3' W., bet. secs. 19 and 20.
Over mountainous land, through dense undergrowth.
Desc. 40 ft. to

- 2.75
- 9.70
- 12.00
- 18.40
- 24.00
- 28.50
- 40.00

Ravine, course W. Asc: 100 ft. to
 Spur, slopes W. Desc. to
 Asc. 55 ft. to
 Spur, slopes W. Desc. 180 ft. to
 Gulch, course W. Asc. 60 ft. to
 Spur, slopes NW. Desc. 415 ft.
 Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the
 ground, on bed rock, 10 ins. in a mound of stone, for
 $\frac{1}{4}$ sec. cor., marked on brass cap
 1916 on S. rim;
 $\frac{1}{4}$ S19 in W. and
 S20 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor.

- 45.00
- 50.90
- 62.70
- 73.10
- 80.00

Leave mountainous land, brs. E. and W. Thence over rolling
 land.
 Wash, 15 lks. wide, course NW.
 Enter wash, course N. Comes from SE.
 Leave wash, 20 lks. wide, 10 ft. deep, course NW.
 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the
 ground, for cor. of secs. 17, 18, 19 and 20, marked on
 brass cap
 1916 on S. rim;
 T15N R19W 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.

Land, rolling and mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 14, 1916: At this cor., I set off 13° 14 $\frac{1}{2}$ ' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 38 $\frac{1}{2}$ ' N.
 A. S.

- 40.00
- 80.02
- .20
- 20.80
- 36.75
- 40.01

R. D. A.
 N.89° 56' E., on a random line, bet. secs. 17 and 20.
 Set temp. $\frac{1}{4}$ sec. cor. on line, bet. sec.
 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 land, through dense undergrowth.
 Wash, course NW.
 Wash, 20 lks. wide, 30 ft. deep, course NW.
 Center of wash, 3 chs. wide, 10 ft. deep, course NW.
 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
 1916 on S. rim;
 $\frac{1}{4}$ S17 in N. and
 S20 in S. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,

26.

Subdivision of T. 15 N., R. 19 W.

Chains.

N. of cor.
 47.50 Center of wash, 1 ch. wide, 40 ft. deep, course N.
 80.02 The cor. of secs. 17, 18, 19 and 20.
 Land, rolling.
 Soil, gravelly and rocky; 3rd and 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 R. D. A.

A. S.
 S. 89° 44' W., on a random line, bet. secs. 18 and 19.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 78.97 Intersect W. bdy. of Tp., 11 lks. S. of the cor. of secs.
 13, 18, 19 and 24, which is an iron post, established
 by John Gonin, U. S. Transitman, as described in Book
 "A".
 Thence I run
 N. 89° 49' E., on a true line, bet. secs. 18 and 19.
 Over rolling land, through dense undergrowth.
 14.15 Center of wash, 1 ch. wide, course NW.
 38.97 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
 1916 on S. rim;
 $\frac{1}{4}$ S18 in N. and
 S19 in S. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 N. of cor.
 55.75 Wash, 20 lks. wide, course NE.
 77.95 Wash, 50 lks. wide, 10 ft. deep, course NE.
 78.97 The cor. of secs. 17, 18, 19 and 20.
 Land, rolling and broken.
 Soil, gravelly and rocky; 3rd and 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

N. 0° 3' W., bet. secs. 17 and 18.
 Over rolling land, through dense undergrowth.
 2.20 Wash, 50 lks. wide, 10 ft. deep, course NE.
 8.70 Center of wash, 60 lks. wide, 10 ft. deep, course NW.
 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
 1916 on S. rim;
 $\frac{1}{4}$ S18 in W. and
 S17 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the
 ground, for cor. of secs. 7, 8, 17 and 18, marked on
 brass cap
 1916 on S. rim;
 T15N R19W in N. half;
 S7 in NW.,
 S8 in NE.,
 S17 in NE. and
 S18 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor.
 Land, rolling desert.
 Soil, sand and gravel; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 14, 1916.

Subdivision of T. 15 N., R. 19 W.

Chains.

Feb. 24, 1916: Cloudy. Run back and foresight line from line previously established.
 N.89° 58' E., on a random line, bet. secs. 8 and 17.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 8, 9, 16 and 17.
 Thence I run
 S.89° 57' W., on a true line, bet. secs. 8 and 17.
 Over rolling land, through dense undergrowth.
 39.98 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
 1916 on S. rim;
 $\frac{1}{4}$ S8 in N. and
 S17 in S. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
 41.00 Wash, 3 chs. wide, 15 ft. deep, course N.
 70.00 Wash, 20 lks. wide, 15 ft. deep, course NW.
 79.96 The cor. of secs. 7, 8, 17 and 18.
 Land, rolling.
 Soil, gravel; 4th rate.
 No timber.
 Undergrowth, greasewood, ocotillo, sagebrush and cacti.
 Feb. 24, 1916.

Feb. 14, 1916.
 S.89° 49' W., on a random line, bet. secs. 7 and 18.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 78.86 Intersect W. bdy. of Tp., 11 lks. S. of the cor. of secs. 7, 12, 13 and 18, which is an iron post, established by John Gonin, U. S. Transitman, as described in Book "A".
 Thence I run
 N.89° 54' E., on a true line, bet. secs. 7 and 18.
 Over rolling land, through dense undergrowth.
 6.80 Wash, course N.
 15.95 Center of wash, 60 lks. wide, course N.
 38.86 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
 1916 on S. rim;
 $\frac{1}{4}$ S7 in N. and
 S18 in S. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
 44.75 Wash, 50 lks. wide, course NE.
 49.95 Center of wash, 60 lks. wide, course N.
 54.75 Center of wash, 1 ch. wide, course NW.
 78.86 The cor. of secs. 7, 8, 17 and 18.
 Land, rolling desert.
 Soil, gravelly; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

N.0° 3' W., bet. secs. 7 and 8.
 Over rolling land, through dense undergrowth.
 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
 1916 on S. rim;
 $\frac{1}{4}$ S7 in W. and
 S8 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

A. S.
Feb. 14, 1916.

Feb. 25, 1916: R. D. A.
At 8 hrs. 30 m., a.m., l.m.t., I set off 34° 39 $\frac{1}{2}$ ' N. on

28.

Subdivision of T. 15 N., R. 19 W.

Chains.

the lat. arc; $9^{\circ} 23'$ S. on the decl. arc; and determine a meridian with the solar at the $\frac{1}{4}$ sec. cor. bet. secs. 7 and 8.

Thence I continue measurement
 $N.0^{\circ} 3'$ W., bet. secs. 7 and 8.

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

1916 on S. rim;
 T15N R19W 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.

Land, rolling desert.
 Soil, gravel; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 R. D. A.
 Feb. 25, 1916.

Feb. 24, 1916: A. S. and R. D. A.
 $N.89^{\circ} 57'$ E., on a random line, bet. secs. 5 and 8.

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

79.80 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 4, 5, 8 and 9.

Thence I run Feb. 25, 1916.
 $S.89^{\circ} 54'$ W., on a true line, bet. secs. 5 and 8.
 Over rolling land, through dense undergrowth.

4.00 Center of wash, 1 ch. wide, 10 ft. deep, course NW.

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

1916 on S. rim;
 $\frac{1}{4}$ S5 in N. and
 S8 in S. half;

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

69.90 Center of wash, 2 chs. wide, course NW.

79.80 The cor. of secs. 5, 6, 7 and 8.
 Land, rolling desert.
 Soil, gravel; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo, sagebrush and cacti.
 Feb. 25, 1916.
 A. S. and R. D. A.

Feb. 25, 1916: R. D. A.
 $S.89^{\circ} 54'$ W., on a random line, bet. secs. 6 and 7.

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

78.76 Intersect W. bdy. of Tp., 2 lks. N. of the cor. of secs. 1, 6, 7 and 12, which is an iron post, established by John Gonin, U. S. Transitman, as described in Book "A".

Thence I run
 $N.89^{\circ} 53'$ E., on a true line, bet. secs. 6 and 7.
 Over rolling land, through scattering undergrowth.

8.76 Wash, 50 lks. wide, course N.

38.76 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

1916 on S. rim;
 $\frac{1}{4}$ S6 in N. and
 S7 in S. half;

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

78.76 The cor. of secs. 5, 6, 7 and 8.
 Land, rolling desert.
 Soil, gravel; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.

Subdivision of T. 15 N., R. 19 W. 29.

Chains.

40.00 N.0° 3' W., on a random line, bet. secs. 5 and 6.
 Set temp. $\frac{1}{4}$ sec. cor.
 79.85 Intersect N. bdy. of Tp., 26 lks. E. of the cor. of secs.
 5, 6, 31 and 32, which is an iron post, established
 by me, as described in Book "A".
 Thence I run
 S.0° 14' E., on a true line, bet. secs. 5 and 6.
 Over rolling land, through dense undergrowth.
 2.05 Center of wash, 70 lks. wide, course NE.
 39.85 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
 1916 on S. rim;
 $\frac{1}{4}$ S6 in W. and
 S5 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor.
 59.85 Center of wash, 2 chs. wide, course NW.
 79.85 The cor. of secs. 5, 6, 7 and 8.
 Land, rolling desert.
 Soil, gravel; 3rd rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and cacti.
 Feb. 25, 1916.
 R. D. A.

GENERAL DESCRIPTION.

The land in this township varies from rough mountains in the southern portion to rolling benches in the north. The soil is principally of rocky formation, which supports no vegetation, except a growth of greasewood, palo verde and cacti. There is no water, except in tanks which are dry during the summer months. There are numerous indications of different kinds of metals in the mountain regions. There are no settlers.

Stone was set in place of iron posts, for corners in this township, where the cost of packing the posts was prohibitive.

For Certificate of U.S. Surveyor and U.S. Transitman
see page II, Book "B" of this Group.

FINAL OATH OF UNITED STATES SURVEYOR.

30

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 accord-
ance 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 15 North, Range 19 West
of the Gila & Salt River Base & Meridian
in the State of Arizona

executed by Albert Smith Jr., U.S. Surveyor and
Deane J. Wolff and Ray D. Armstrong, U.S. Transitmen.
under special instructions dated December 28, 1914 for Group 42, Arizona, 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 "B" Group 42~~, has been correctly copied from the original notes on file in this office.