

Book "V"
2712

BOOK 2712

AUG 4 - 1914

FIELD NOTES

OF THE SURVEY OF THE

Subdivision lines of Tp. 22 S. Rg. 23 E.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

John F. Hesse

In the capacity of U. S. Surveyor, under instructions dated August 24, 1911, issued by the United States Surveyor General to govern surveys included in Group No. 5, which were approved by the Commissioner of the General Land Office, September 11, 1911, pursuant to authority contained in the Act of Congress dated August 23, 1912

Survey commenced January 14, 1913

Survey completed February 14, 1913

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INDEX DIAGRAM.

Township 22 South, Range 23 East.

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

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	Survey commenced January 14, 1913 and executed with a W. and L. E. Gurley transit, not numbered with solar attachment. The horizontal limb is provided with one double vernier reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.
	The instrument was approved by the supervising surveyor August 12, 1912.
	At 8h. 00m. a.m., 1.m.t., I set off 31 \checkmark 27 $\frac{1}{2}$ ' N. on the lat. arc; 21 \checkmark 17 $\frac{1}{2}$ ' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36 on the south bdy. of the Tp., as described in book "U"
	Thence I run
	N. 0 01' W. bet. secs. 35 and 36.
	Ascend.
4.00	Ridge bears N. E. and S. W. descend, through dense brush and scattering timber.
23.50	Cross road bears N. W. and S. E.
24.50	Cross wash 60 lks. wide course N. W. ascend.
27.50	Cross under telephone line bears N. W. and S. E.
39.40	Cross drain 14 lks. wide course S. 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 $\frac{1}{4}$ S35 in W. S36 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
73.00	Top high ridge bears N. W. and S. E. descend.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 25, 26, 35 and 36, marked on brass cap
	T22SR23E in N. and
	1913 in S. half;
	S26 in N. W.
	S25 in N. E.
	S36 in S. E. and
	S35 in S. W. quadrant; and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, Oak, pinon and juniper.
	Undergrowth, oak and manzanita.
	January 14: At this cor. I set off 21 17 $\frac{1}{2}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 \checkmark 28 $\frac{1}{2}$ ' N.
	East on a random line bet. secs. 25 and 36.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect E. bdy. of Tp. 14 lks. S. of the cor. of secs. 25, 30, 31 and 36, established by me, as described in book "U." Thence I run
	S. 89 \checkmark 54' W. on a true line bet. secs. 25 and 36.
	Ascend through dense brush.
8.00	Cross drain 12 lks. wide course S. E.
26.20	Ridge bears N. E. and S. W. descend through heavy timber.
39.96	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 $\frac{1}{4}$ S25 in N. S36 1913 in S. half; from which
	An oak 5 ins. diam., bears N. 87 W. 9 lks. dist., marked $\frac{1}{4}$ S25BT.
	An oak 6 ins. diam., bears S. 86 E. 24 lks. dist., marked $\frac{1}{4}$ S36BT.
	Along rough S. slope.
51.00	Timber becomes scattering.
66.10	Cross wash 15 lks. wide course S. E.
77.80	Cross wash 8 lks. wide course S. E. ascend.
79.92	The cor. of secs. 25, 26, 35 and 36.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, oak, pinon and juniper.
	Undergrowth, oak and manzanita.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

At my camp which is located near the center of Tp. 22 S. Rg. 23 E., latitude $31^{\circ}30\frac{1}{2}'$ N., longitude $110^{\circ}00'23''$ W. I set off $31^{\circ}30\frac{1}{2}'$ N. on the lat. arc; $21^{\circ}14'$ S. on the decl. arc; and at 4h. 00m. p.m., l.m.t., determine with the solar a meridian, at the S. end of the meridian established January 2, by observations on Polaris, and mark a point thereof on the stone already set 5 chs. N. of my station; this mark falls 0.3 ins. west of the meridian established by the Polaris observation.
January 14, 1913.

January 15: At 8h. 00m. a.m., at the S. end of the meridian established January 2, I set off $31^{\circ}30\frac{1}{2}'$ N. on the lat. arc; $21^{\circ}07'$ S. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.3 ins. east of the meridian determined by the Polaris observation.

The solar apparatus, by p.m., and a.m., observations, defines positions for meridians, respectively about $0^{\circ}16''$ east and west of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the transit are satisfactory.

The magnetic bearing of the true meridian at 8h. 05m. a.m., is $N. 13^{\circ}45'$ W.; the angle thus determined gives the mag. decl. $13^{\circ}45'$ E.

I commence at the cor. of secs. 25, 26, 35, and 36

Thence I run

N. $0^{\circ}01'$ W. bet. secs. 25 and 26.
Descend.
14.50 Cross wash 30 lks. wide course N. W. ascend.
36.50 Ridge bears N. W. and S. E. descend.
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 $\frac{1}{4}$ S26 in W. S25 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
49.70 Cross wash 40 lks. wide course S. W. ascend.
60.75 Ridge bears N. W. and S. E. descend.
80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 23, 24, 25 and 26, marked on brass cap
T22SR23E in N. and
1913 in S. half;
S23 in N. W.
S24 in N. E.
S25 in S. E. and
S26 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th. rate,
Timber, scattering oak.
Undergrowth, scattering oak.
January 15; At this cor. I set off $21^{\circ}07\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ}29\frac{1}{2}'$ N.

N. $89^{\circ}54'$ E. on a random line bet. secs. 24 and 25.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.88 Intersect E. bdy. of Tp. 5 lks. N. of the cor. of secs. 19, 24, 25 and 30, established by me, as described in book "U." Thence I run
S. $89^{\circ}56'$ W. on a true line bet. secs. 24 and 25.
Descend, through scattering timber and dense brush.
3.10 Cross wash 10 lks. wide course N. W. ascend.
6.30 Ridge bears N. W. and S. E. descend.

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Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
15.60	Cross wash 12 lks. wide course N. W.
22.60	Ridge bears N. W. and S. E. descend.
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 $\frac{1}{4}$ S24 in N. and S25 1913 in S. half; from which An oak 7 ins. diam., bears N. $19\frac{1}{2}$ E. 86 lks. dist., marked $\frac{1}{4}$ S24BT. An oak 5 ins. diam., bears S. 32 W. 38 lks. dist., marked $\frac{1}{4}$ S25BT.
53.10	Cross wash 12 lks. wide course N. W. ascend.
79.88	The cor. of secs. 23, 24, 25 and 26. Land, mountainous. Soil, rocky; 4th. rate. Timber, oak. Undergrowth, oak.
	January 15, 1913.
	January 20: At 8h. 00m. a.m., l.m.t., I set off 31 $29\frac{1}{2}$ ' N. on the lat. arc; 20 $06\frac{1}{2}$ ' 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 N. O. 01' W. bet. secs. 23 and 24 Descend through dense brush and scattering timber.
10.70	Cross wash 18 lks. wide course N. W. ascend.
30.60	Ridge bears N. W. and S. E. descend.
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 $\frac{1}{4}$ S23 in W. S24 in E. and 1913 in S. half; from which An oak 4 ins. diam., bears S. 45 W. 69 lks. dist., marked $\frac{1}{4}$ S23BT An oak 5 ins. diam., bears S. 70 E. 60 lks. dist., marked $\frac{1}{4}$ S24BT
71.60	Cross wash 5 lks. wide course N. E. and along E. slope
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 T22SR23E in N. and 1913 in S. half; S14 in N. W. S13 in N. E. S24 in S. E. and S23 in S. W. quadrant; from which. An oak 6 ins. diam., bears N. 78 E. 100 lks. dist., marked T22SR23ES13BT. An oak 18 ins. diam., bears S. 64 W. 114 lks. dist., marked T22SR23ES23BT.
	No other bearings available. Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. Timber, oak, pinon and juniper. Undergrowth, oak and manzanita. January 20: At this cor. I set off 20 $06'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 $30'$ N.
	January 20: At this cor. I set off 20 $06'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 $30'$ N.
40.00	N. 89 $56'$ E. on a random line bet. secs. 13 and 24.
79.96	Set temp. $\frac{1}{4}$ sec. cor. Intersect. E. bdy. of Tp. 12 lks. N. of the cor. of secs. 13, 18, 19 and 24, established by me, as described in book "U." Thence I run N. 89 $59'$ W. on a true line bet. secs. 13 and 24. Descend through dense brush and scattering timber.
0.65	Cross wash 15 lks. wide course N. ascend.
14.00	Ridge bears N. E. and S. W. descend.
23.10	Cross wash 20 lks. wide course N. W. ascend.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
34.20	Ridge bears N. W. and S. E. descend.
39.20	Cross wash 10 lks. wide course N. W. ascend.
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 $\frac{1}{4}$ S13 in N. and S24 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
54.10	Ridge bears N. W. and S. E. descend.
63.20	Cross wash 25 lks. wide course N. ascend.
79.96	The cor. of secs. 13, 14, 23 and 24. Land, mountainous. Soil, rocky; 4th. rate. Timber, oak and juniper. Undergrowth, oak and manzanita.

January 20, 1913.

January 22: At 8h. 00m. a.m., l.m.t., I set off 31' 30' N. on the lat. arc; 19' 40' 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 01' W. bet. secs. 13 and 14. Descend through scattering brush and timber.
7.70	Cross wash 4 lks. wide course N. E. ascend.
22.40	Ridge bears N. E. and S. W. descend.
26.60	Fence bears N. E. and S. W.
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 $\frac{1}{4}$ S14 in W. S13 in E. and 1913 in S. half; from which An oak 12 ins. diam., bears N. 8 E. 42 lks. dist., marked $\frac{1}{4}$ S13BT An oak 14 ins. diam., bears S. 56 W. 127 lks. dist., marked $\frac{1}{4}$ S14BT
49.10	Fence bears N. E. and S. W.
51.50	Cross wash 50 lks. wide course N. W. ascend.
79.20	Ridge bears N. W. and S. E.
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 T22SR23E in N. and 1913 in S. half; S11 in N. W. S12 in N. E. S13 in S. E. and S14 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th. rate. Timber, oak and juniper. Undergrowth, oak.
	January 22; At this cor. I set off 19' 39 $\frac{1}{2}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31' 31' N.

	S. 89 59' E. on a random line bet. secs. 12 and 13.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect E. bdy. of Tp. 5 lks. N. of the cor. of secs. 7, 12, 13 and 18, established by me, as described in book "U." Thence I run N. 89 57' W. on a true line bet. secs. 12 and 13. Ascending along N. E. slope, through scattering timber and brush.
7.60	Ridge bears N. W. and S. E. descend.
21.80	Cross wash 30 lks. wide course N. E. ascend.
39.96	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 $\frac{1}{4}$ S12 in N. and S13 1913 in S. half; from which

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Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

- An oak 13 ins. diam., bears N. 62 W. 23
lks. dist., marked $\frac{1}{4}$ S12BT.
- An oak 9 ins. diam., bears S. 74 W. 106
lks. dist., marked $\frac{1}{4}$ S13BT.
- 47.00 Ridge bears N. W. and S. E. descend.
- 62.10 Cross wash 8 lks. wide course N. W. ascend.
- 79.92 The cor. of secs. 11, 12, 13 and 14.
Land, mountainous.
Soil, rocky; 4th. rate.
Timber, oak.
Undergrowth, oak.
- January 22, 1913.
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- January 28: At 8h. 00m. a.m., l.m.t., I set off 31[✓] 31'
N. on the lat. arc; 18[✓] 12' 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 01' W. bet. secs. 11 and 12.
Descend through scattering timber and brush.
- 23.90 Cross wash 10 lks. wide course N. W.
- 36.20 Cross road bears N. E. and S. W.
- 39.00 Cross wash 35 lks. wide course N. E. ascend.
- 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 $\frac{1}{4}$ S11 in W.
S12 in E. and 1913 in S. half; and raise a mound of stone
2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 68.50 Ridge bears N. E. and S. W. almost N. descend along
ridge.
- 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
T22SR23E in N. and
1913 in S. half;
S2 in N. W.
S1 in N. E.
S12 in S. E. and
S11 in S. W. quadrant; and raise a mound of stone 2
ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th. rate.
Timber, oak.
Undergrowth, oak.
- January 28: At this cor. I set off 18[✓] 10 $\frac{1}{2}$ ' S. on the
decl. arc; and observe the sun on the meridian at noon;
the resulting lat. is 31[✓] 32' N.
-
- S. 89 57' E. on a random line bet. secs. 1 and 12.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.04 Intersect E. bdy. of Tp. 16 lks. S. of the cor. of secs.
1, 6, 7 and 12, established by me, as described in book
"U." Thence I run
- S. 89 56' W. on a true line bet. secs. 1 and 12.
Descend through scattering timber.
- 6.30 Cross wash 20 lks. wide course N. W. ascend.
- 23.50 Ridge bears N. W. and S. E. descend.
- 40.02 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 $\frac{1}{4}$ S1 in N.
and S12 1913 in S. half; and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 52.30 Cross wash 10 lks. wide course S. W.
- 63.10 Cross wash 35 lks. wide course N. W. ascend.
- 67.00 Cross road bears N. W. and S. E.
- 79.05 Ridge bears N. E. and S. W. descend.
- 80.04 The cor. of secs. 1, 2, 11 and 12.
Land, mountainous.
Soil, rocky; 4th. rate.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

Timber, oak.

January 28, 1913.

February 10:

- 40.00 N. 0 01' W. on a random line bet. secs. 1 and 2.
Set temp. $\frac{1}{4}$ sec. cor.
- 80.12 Intersect N. bdy. of Tp. 7 lks. W. of the cor. of secs. 1, 2, 35 and 36, established by me, as described in book "U." Thence I run
S. 0 02' W. bet. secs. 1 and 2.
ascend.
- 12.00 Ridge bears E. and W. descend.
- 31.00 Cross wash 40 lks. wide course W. and over level land.
- 40.12 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 $\frac{1}{4}$ S2 in W. S1 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 46.50 Cross road bears E. and W. and ascend.
- 80.12 The cor. of secs. 1, 2, 11 and 12.
Land, mountainous.
Soil, rocky; 4th. rate.
No timber.

February 10, 1913.

January 16: At 8h. 00m. a.m., l.m.t., I set off 31 27 $\frac{1}{2}$ ' N. on the lat. arc; 20 55 $\frac{1}{2}$ ' 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 Tp., described in Book "U." Thence I run

- 40.00 N. 0 01' W. bet. secs. 34 and 35.
Descend through scattering timber and brush.
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 $\frac{1}{4}$ S34 in W. S35 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 53.60 Cross wash 10 lks. wide course N. E. ascend.
- 65.10 Ridge bears N. E. and S. W. descend.
- 72.40 Cross wash 8 lks. wide course S. E.
- 77.65 Ridge bears N. E. and S. W.
- 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 26, 27, 34 and 35, marked on brass cap
T22SR23E in N. and
1913 in S. half;
S27 in N. W.
S26 in N. E.
S35 in S. E. and
S34 in S. W. quadrant; from which
An oak 9 ins. diam., bears N. 24 W. 54 lks. dist.
marked T22SR23ES27BT.
An oak 5 ins. diam., bears N. 41 E. 76 lks. dist.,
marked T22SR23ES26BT.
An oak 5 ins. diam., bears S. 86 E. 37 lks. dist.,
marked T22SR23ES35BT.
An oak 5 ins. diam., bears S. 22 W. 119 lks. dist.,
marked T22SR23ES34BT.
- Land, mountainous.
Soil, rocky; 4th. rate.
Timber, oak and juniper.
Undergrowth, oak.
- January 16; At this cor. I set off 20 55' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 28 $\frac{1}{2}$ ' N.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
	East on a random line bet. secs. 26 and 35.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. and S. line 7 lks. S. of the cor. of secs. 25, 26, 35 and 36.
	Thence I run
	S. 89 57' W. on a true line bet. secs. 26 and 35.
	Ascend through dense brush and timber.
6.00	Ridge bears N. W. and S. E. and descend.
23.70	Cross wash 70 lks. wide course N. W. ascend.
34.50	Descend.
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 $\frac{1}{4}$ S26 in N. and S35 1913 in S. half; from which
	An oak 10 in. diam. bears N. 42 E. 44 lks. dist., marked $\frac{1}{4}$ S26BT.
	An oak 5 ins. diam., bears S. 59 W. 38 lks. dist., marked $\frac{1}{4}$ S35BT.
52.10	Cross telephone line bears N. W. and S. E.
56.00	Cross road bears N. W. and S. E.
56.90	Cross telephone line bears N. W. and S. E.
58.00	Cross wash 60 lks. wide course N. W. ascend.
61.30	Ridge bears N. and S. From this point A. R. McCamly house bears N. 12 30' W. 18.50 chs. dist.
69.80	Ascend along N. E. slope.
79.90	The cor. of secs. 26, 27, 34 and 35.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, oak, juniper and pinon.
	Undergrowth, oak and manzanita.

January 16, 1913.

January 17; At 8h. 00m. a.m., l.m.t., I set off 31 28 $\frac{1}{2}$ ' N. on the lat. arc; 20 43 $\frac{1}{2}$ ' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35

	Thence I run
	N. 0 01' W. bet. secs. 26 and 27.
	Descend through scattering timber and brush.
5.50	Cross wash 12 lks. wide course N. E. ascend.
17.00	Ridge bears N. E. and S. W. descend.
21.10	Cross wash 10 lks. wide course N. E.
27.40	Ridge bears N. E. and S. W. and telephone line bears N. W. and S. E.
31.10	Cross wash 60 lks. wide course N. W. ascend.
33.60	Cross telephone line bears N. W. and S. E.
34.80	Cross road bears N. W. and S. 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 $\frac{1}{4}$ S27 in W. S26 in E. and 1913 in S. half; from which
	An oak 5 ins. diam., bears N. 34 W. 44 lks. dist., marked $\frac{1}{4}$ S27BT.
	An oak 5 ins. diam., bears S. 42 E. 11 lks. dist., marked $\frac{1}{4}$ S26BT.
45.10	Leave timber.
55.20	Ridge bears N. E. and S. W. descend.
61.50	Cross wash 20 lks. wide course S. W. ascend.
63.20	A point from which
	Chas. Hanan house bears S. 70 W.
	Geo. Hewitt house bears S. 72 10' W.
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
	T22SR23E in N. and 1913 in S. half;
	S22 in N. W.
	S23 in N. E.
	S26 in S. E. and
	S27 in S. W. quadrant; and raise a mound of stone 2 ft base 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

Land, mountainous.
Soil, rocky; 4th. rate.
Timber, oak and juniper.
Undergrowth, oak and manzanita.
January 17; At this cor. I set off 20 $43\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31\frac{1}{2}'$ N.

N. 89 $57'$ E. on a random line bet. secs. 23 and 26.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.98 Intersect N. and S. line 12 lks. N. of the cor. of secs. 23, 24, 25 and 26.
Thence I run
N. 89 $58'$ W. on a true line bet. secs. 23 and 26.
Ascend through scattering timber and brush.
15.50 Ridge bears N. W. and S. E. descend.
30.10 Cross wash .25 lks. wide course N. W. ascend.
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 $\frac{1}{4}$ S23 in N. and S26 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
49.50 Ridge bears N. W. and S. E. descend.
79.98 The cor. of secs. 22, 23, 26 and 27.
Land, mountainous.
Soil, rocky; 4th. rate.
Timber, oak.
Undergrowth, oak.

January 17, 1913.

January 23: At 8h. 00m. a.m., l.m.t., I set off $31\frac{1}{2}'$ N. on the lat. arc; $19\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26 and 27.

Thence I run
N. 0 $01'$ W. bet. secs. 22 and 23.
Descend through scattering brush and timber.
9.80 Cross wash 15 lks. wide course N. W. ascend.
17.60 Ridge bears N. W. and S. E. descend.
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 $\frac{1}{4}$ S22 in W. S23 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
48.10 Cross wash 12 lks. wide course N. W. ascend.
51.20 Ridge bears N. W. and S. E. descend.
54.80 Cross wash 20 lks. wide course N. W. ascend.
68.70 Ridge bears N. W. and S. E. descend.
80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 14, 15, 22 and 23, marked on brass cap
T22SR23E in N. and
1913 in S. half;
S15 in N. W.
S14 in N. E..
S23 in S. E. and
S22 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th. rate.
Timber, oak.
Undergrowth, oak.
January 23; At this cor. I set off 19 $25\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31\frac{1}{2}'$ N.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
	S. 89' 58' E. on a random line bet. secs. 14 and 23.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.86	Intersect N. and S. line 9 lks. N. of the cor. of secs. 13, 14, 23 and 24.
	Thence I run
	N. 89' 54' W. on a true line bet. secs. 14 and 23.
	Ascend through scattering timber and brush.
27.60	Ridge bears N. W. and S. E. descend.
36.90	Cross wash 15 lks. wide course N. ascend.
39.93	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 $\frac{1}{4}$ S14 in N. and S23 1913 in S. half; from which
	An oak 7 ins. diam., bears N. 31 W. 61 lks. dist., marked $\frac{1}{4}$ S14BT.
	An oak 10 ins. diam., bears S. 34 W. 119 lks. dist., marked $\frac{1}{4}$ S23BT.
48.00	Ridge bears N. W. and S. E. descend.
75.70	Cross wash 9 lks. wide course N. W.
79.86	The cor. of secs. 14, 15, 22 and 23.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, oak.
	Undergrowth, oak.

January 23, 1913.

January 25:

	N. 0 01' W. bet. secs. 14 and 15.
	Descending through scattering timber and brush along rough broken, general W. slope of high ridge.
4.10	Cross wash 6 lks. wide course N. W.
6.80	Ridge bears N. W. and S. E.
8.90	Cross wash 8 lks. wide course N. W.
15.55	Ridge bears N. W. and S. E.
21.10	Cross wash 8 lks. wide course N. W.
27.30	Ridge bears N. W. and S. E. 32.70.
32.70	Cross wash 6 lks. wide course N. W.
37.90	Ridge bears N. W. and S. 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 $\frac{1}{4}$ S15 in W. S14 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
43.20	Cross wash 9 lks. wide course N. W.
48.10	Ridge bears N. W. and S. E.
65.40	Cross wash 8 lks. wide course N. W.
76.00	Cross same wash course N. E.
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
	T22SR23E in N. and 1913 in S. half;
	S10 in N. W.
	S11 in N. E.
	S14 in S. E. and
	S15 in S. W. quadrant; from which
	An oak 7 ins. diam., bears N. $6\frac{1}{2}$ W. 279 lks. dist., marked T22SR23ES10BT.
	An oak 7 ins. diam., bears N. $61\frac{1}{2}$ E. 112 lks. dist., marked T22SR23ES11BT.
	An oak 9 ins. diam., bears S. $70\frac{1}{2}$ E. 186 lks. dist., marked T22SR23ES14BT.
	An oak 10 ins. diam., bears S. $70\frac{1}{2}$ W. 115 lks. dist., marked T22SR23ES15BT.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, oak.
	Undergrowth, oak.

January 25, 1913.

Subdivision of Tp. 22 S. Rg. 23 E.

chains.

January 26:
 S. 89° 54' E. on a random line bet. secs. 11 and 14.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.,
 79.90 Intersect N. and S. line 16 lks. S. of the cor. of secs.
 11, 12, 13 and 14.
 Thence I run
 S. 89° 59' W. on a true line bet. secs. 11 and 14.
 Descend through scattering timber and brush.
 7.10 Cross road bears N. E. and S. W.
 7.80 Cross wash 45 lks. wide course N. E. ascend.
 31.90 A point from which Geo. Keahey house bears S. 67° E.
 12.60 chs. dist.
 33.00 Ridge bears N. and S. descend.
 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 $\frac{1}{4}$ S11 in N.
 and S14 1913 in S. half; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 46.00 Cross wash 10 lks. wide course N. W. ascend.
 51.70 Top of N. slope of ridge bears N. and S.
 75.60 Cross wash 10 lks. wide course N. W.
 77.60 Ridge bears N. W. and S. E.
 78.40 Cross wash 5 lks. wide course N.
 79.90 The cor. of secs. 10, 11, 14 and 15.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 Timber, oak.
 Undergrowth, oak.

January 26, 1913.

February 12: At 8h. 00m. a.m., l.m.t., I set off 31° 31'
 N. on the lat. arc; 13° 42 $\frac{1}{2}$ ' 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° 01' W. bet. secs. 10 and 11.
 Over nearly level land, through dense brush.
 3.70 Cross wash 8 lks. wide course N. W.
 18.10 Cross wash 8 lks. wide course N. W.
 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 $\frac{1}{4}$ S10 in W.
 S11 in E. and 1913 in S. half; and raise a mound of stone
 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable..
 46.30 Cross wash 8 lks. wide course N. W.
 73.00 Cross wash 8 lks. wide course N. W. ascend.
 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
 T22SR23E in N. and
 1913 in S. half;
 S3 in N. W.
 S2 in N. E.
 S11 in S. E. and
 S10 in S. W. quadrant; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, level and mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, mesquite and catclaw.

N. 89° 59' E. on a random line bet. secs. 2 and 11
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.02 Intersect N. and S. line 12 lks. N. of the cor. of secs.
 1, 2, 11 and 12.
 Thence I run
 N. 89° 56' W. on a true line bet. secs. 2 and 11
 Descend.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
15.30	Cross wash 8 lks. wide course N. W. ascend.
25.50	Ridge bears N. W. and S. E. descend.
34.00	Cross wash 8 lks. wide course N. W. ascend.
40.01	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 $\frac{1}{4}$ S2 in N. and S11.1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
43.10	Ridge bears N. W. and S. E. descend.
49.50	Cross wash 6 lks. wide course N. W. ascend.
59.50	Ridge bears N. W. and S. E. descend.
80.02	The cor. of secs. 2, 3, 10 and 11. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, blackbrush. February 12; At this cor. I set off 13 $\sqrt{40}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 $\sqrt{32}$ ' N.
	N. 0 $\sqrt{01}$ ' W. on a random line bet. secs. 2 and 3.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. bdy. of Tp. 5 lks. E. of the cor. of secs. 2, 3, 34 and 35, established by me, as described in book "U." Thence I run
	S. 0 $\sqrt{03}$ ' E. on a true line bet. secs. 2 and 3. Descend
10.00	Over level land, through dense brush.
33.60	Cross wash 30 lks. wide course N. W.
40.02	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 $\frac{1}{4}$ S3 in W. S2 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
50.90	Cross road bears N. E. and S. W.
54.50	Cross wash 6 lks. wide course W. and ascend.
67.00	Ridge bears E. and W. descend.
80.02	The cor. of secs. 2, 3, 10 and 11. Land, level and mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, squaw brush, mesquite and blackbrush. February 12, 1913.
	January 18: At 8h. 00m. a.m., l.m.t., I set off 31 $\sqrt{27\frac{1}{2}}$ ' N. on the lat. arc; 20 $\sqrt{32}$ ' 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., described in Book "U" Thence I run
	N. 0 $\sqrt{02}$ ' W. bet. secs. 33 and 34. Ascending along general S. W. slope of high ridge through scattering brush and timber.
17.50	Cross wash 10 lks. wide course S. W.
28.80	Ridge bears N. E. and S. W.
33.10	Cross wash 5 lks. wide course S. W.
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 $\frac{1}{4}$ S33 in W. S34 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
54.20	Ridge bears N. W. and S. E. descend.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 27, 28, 33 and 34, marked on brass cap T22SR23E in N. and 1913 in S. half; S28 in N. W. S27 in N. E. S34 in S. E. and S33 in S. W. quadrant; and raise a mound of stone 2 ft.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

- base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 Timber oak and juniper.
 Undergrowth, oak and blackbrush.
 January 18; At this cor. I set off 20 $\sqrt{31\frac{1}{2}}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31\sqrt{28\frac{1}{2}}$ ' N.
-
- East on a random line bet. secs. 27 and 34.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.12 Intersect N. and S. line 7 lks. N. of the cor. of secs. 26, 27, 34 and 35.
 Thence I run
 N. 89 57' W. on a true line bet. secs. 27 and 34.
 Ascending rough general N. E. slope through scattering brush and timber.
 12.70 Cross wash 15 lks. wide course N. E.
 21.80 Ridge bears N. and S.
 35.90 Ridge bears N. E. and S. W.
 39.10 Cross wash 5 lks. wide course N. E.
 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 $\frac{1}{4}$ S27 in N. and S34 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 41.70 Ridge bears N. and S.
 43.80 Cross wash 5 lks. wide course N. W.
 49.40 Ridge bears N. and S.
 49.74 A point from which
 Chas. Hanan house bears N. 13 40' E.
 Geo. Hewitt house bears N. 7 40' W.
 P. B. Crane house bears N. 18 45' W.
 Shaft house Bisbee-Arizona Mine (deserted) bears N. 7 20' W.
 55.90 Cross wash 10 lks. wide course N. E.
 65.60 Ridge bears N. E. and S. W.
 80.12 The cor. of secs. 27, 28, 33 and 34.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 Timber, oak and juniper.
 Undergrowth, oak.
- January 18; 1913.
-
- January 24: At 8h. 00m. a.m., l.m.t., I set off $31\sqrt{28\frac{1}{2}}$ ' N. on the lat. arc; $19\sqrt{12}$ ' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27, 28, 33 and 34.
 Thence I run
 N. 0 02' W. bet. secs. 27 and 28.
 Descending along rough general N. E. slope of high ridge through scattering timber and brush.
 24.20 Cross wash 15 lks. wide course N. E.
 37.10 Ridge bears N. E. and S. W.
 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 $\frac{1}{4}$ S28 in W. S27 in E. and 1913 in S. half; from which
 An oak 5 ins. diam., bears N. 48 W. 43 lks. dist., marked $\frac{1}{4}$ S28BT.
 An oak 5 ins. diam., bears S. 79 E. 5 lks. dist., marked $\frac{1}{4}$ S27BT.
 41.70 Cross wash 5 lks. wide course N. E.
 55.20 Ridge bears N. E. and S. W.
 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 21, 22 27 and 28, marked on brass cap
 T22SR23E in N. and
 1913 in S. half;

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Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

S21 in N. W.
 S22 in N. E.
 S27 in S. E. and
 S28 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 Timber, oak, pinon and juniper.
 Undergrowth, oak.
 January 24: At this cor. I set off $19^{\circ} 11'$ S. on the decl. arc; and observe the sun on the meridian at noon the resulting lat. is $31^{\circ} 29\frac{1}{2}'$ N.

S. 89 $57'$ E. on a random line bet. secs. 22 and 27.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect N. and S. line 12 lks. S. of the cor. of secs. 22, 23, 26 and 27.
 Thence I run
 S. 89 $58'$ W. on a true line bet. secs. 22 and 27.
 Descend through scattering timber and brush.
 5.00 Ascend.
 16.00 Ridge bears N. W. and S. descend.
 40.03 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 $\frac{1}{4}$ S22 in N. and S27. 1913 in S. half; from which
 An oak 8 ins. diam., bears N. 87 W. 256 lks. dist., marked $\frac{1}{4}$ S22BT.
 An oak 6 ins. diam., bears S. 36 W. 185 lks. dist., marked $\frac{1}{4}$ S27BT.
 41.10 Cross wash 60 lks. wide course N. W.
 44.60 Cross telephone line bears N. W. and S. E.
 44.75 Cross telephone line bears N. W. and S. E.
 45.00 Cross road bears N. W. and S. E.
 59.00 Cross wash 15 lks. wide course N. E. ascend.
 70.80 Ridge bears N. E. and S. W. descend.
 80.06 The cor. of secs. 21, 22, 27 and 28.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 Timber, oak and pinon.
 Undergrowth, oak.

January 24; 1913.

January 25: At 8h. 00m., a.m., l.m.t., I set off $31^{\circ} 29\frac{1}{2}'$ N. on the lat. arc; $18^{\circ} 57\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.
 Thence I run
 N. $0^{\circ} 02'$ W. bet. secs. 21 and 22.
 Descending through scattering timber and brush.
 13.90 Cross wash 12 lks. wide course N. E.
 26.00 Cross wash 60 lks. wide course N. W.
 26.80 Cross road bears N. W. and S. E.
 28.60 Cross telephone line bears N. W. and S. E.
 28.95 Cross telephone line bears N. W. and S. 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 $\frac{1}{4}$ S21 in W. S22 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 From this cor. P. B. Crane house bears N. $73\frac{1}{2}'$ W.
 41.56 Ridge bears N. W. and S. E.
 Shaft house Bisbee-Arizona mine bears N. 16 $00'$ E.
 C. Thomas house bears N. 54 $45'$ W.
 52.40 Cross wash 30 lks. wide course N. W.
 54.70 Cross road bears E. and W.
 62.00 House, empty bears E. 6.50 chs.
 65.80 Road bears N. E. and S. W.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
67.50	House, empty bears E. 7.00 Chs.
68.50	Ascend steep S. slope.
80.00	Ridge bears N. W. and S. E.
	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
	T22SR23E in N. and 1913 in S. half;
	S16 in N. W.
	S15 in N. E.
	S22 in S. E. and S21 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, oak and pinon.
	Undergrowth, oak.
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	N. 89° 58' E. on a random line bet. secs. 15 and 22.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.20	Intersect N. and S. line 12 lks. N. of the cor. of secs. 14, 15, 22 and 23.
	Thence I run
	N. 89° 57' W. bet. secs. 15 and 22 on a true line.
	Ascend through scattering timber and brush.
3.30	Ridge bears N. W. and S. E. descend.
11.40	Cross wash 8 lks. wide course N. W. ascend.
25.00	Ridge bears N. W. and S. E. descend.
39.00	Cross wash 5 lks. wide course N. W. ascend.
40.10	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 $\frac{1}{4}$ S15 in N. and S22 1913 in S. half; from which
	An oak 7 ins. diam., bears N. 71° W. 18 lks. dist., marked $\frac{1}{4}$ S15BT.
	An oak 7 ins. diam., bears S. 23° E. 100 lks. dist., marked $\frac{1}{4}$ S22BT.
55.10	Ridge bears W. and S. E. and along on ridge. From this point Wm. Davis house bears N. 3° 30' E. 28.50 chs. dist.
73.70	Cross road bears N. E. and S. W.
80.20	The cor. of secs. 15, 16, 21 and 22.
	Land, mountainous.
	Soil, rocky; 4th. rate.
	Timber, oak.
	Undergrowth, oak.
	January 25: At this cor. I set off $18^{\circ} 56\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 30'$ N.
	January 25, 1913.
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	January 26: At 8h. 00m. a.m., l.m.t., I set off $31^{\circ} 30'$ N. on the lat. arc; $18^{\circ} 42\frac{1}{2}'$ 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
	N. 0° 02' W. bet. secs. 15 and 16.
	Descend.
21.30	Cross wash 6 lks. wide course N. W. ascend
30.60	Ridge bears N. W. and S. E. descend.
37.90	Cross wash 5 lks. wide course N. W. ascend.
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 $\frac{1}{4}$ S16 in W. S15 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
51.10	Ridge bears N. W. and S. E. descend.
67.75	Cross wash 6 lks. wide course N. E.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

ground for cor. of secs. 9, 10, 15 and 16, marked on brass cap

T22SR23E in N. and

1913 in S. half;

S9 in N. W.

S10 in N. E.

S15 in S. E. and

S16 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

40.00 S. 89° 57' E. on a random line bet. secs. 10 and 15.
Set temp. $\frac{1}{4}$ sec. cor.
80.08 Intersect N. and S. line 9 lks. N. of the cor. of secs. 10, 11, 14 and 15.

Thence I run

N. 89° 53' W. on a true line bet. secs. 10 and 15.
Descend through scattering brush.

2.00 Cross wash 15 lks. wide course N. W. ascend.

16.00 Ridge bears N. W. and S. E. descend.

19.30 Cross wash 5 lks. wide course N. W. ascend.

25.80 Ridge bears N. W. and S. E. descend.

34.90 Cross wash 4 lks. wide course S. W.

40.04 Ridge bears N. E. and S. W. descend.

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 $\frac{1}{4}$ S10 in N. and S15 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

47.75 Cross wash 12 lks. wide course N. W. and over nearly level land.

63.90 Cross wash 25 lks. wide course N. W.

69.20 Road bears N. W. and S. E.

71.15 Cross wash 12 lks. wide course N. and ascend.

77.05 Ridge bears N. E. and S. W. descend.

80.08 The cor. of secs. 9, 10, 15 and 16.

Land, mountainous. and level.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, mesquite.

January 26; At this cor. I set off 18° 41 $\frac{1}{2}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31° 31' N.

January 26, 1913.

February 13: At 8h. 00m. a.m., l.m.t., I set off 31° 31' N. on the lat. arc; 13° 22 $\frac{1}{2}$ ' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16.

Thence I run

N. 0° 02' W. bet. secs. 9. and 10.

Descending dense brush.

5.00 Over rolling land.

38.10 Cross road bears N. W. and S. 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 $\frac{1}{4}$ S9 in W. S10 in E. and 1913 in S. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor.

40.40 Cross road bears N. E. and S. W.

63.80 Cross road bears N. W. and S. E.

71.00 Cross road bears N. E. and S. W.

74.30 Cross wash 20 lks. wide course W.

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

Subdivision of Tp. 22 S. Rg. 23 E.

chains.

cap

T22SR23E in N. and
1913 in S. half;
S4 in N. W.
S3 in N. E.
S10 in S. E. and

S9 in S. W. quadrant; and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, level and mountainous.

Soil; Sandy loam, dry, medium texture; 1st. rate.

S. 5 chs. rocky; 4th. rate..

No timber.

Undergrowth, mesquite and blackbrush.

40.00 S. 89 $\frac{1}{2}$ 53' E. on a random line bet. secs. 3 and 10.
Set temp. $\frac{1}{4}$ sec. cor.
79.94 Intersect N. and S. line 12 lks. S. of the cor. of secs.
2, 3, 10 and 11.

Thence I run

N. 89 $\frac{1}{2}$ 58' W. on a true line bet. secs. 3 and 10.

Descend.

5.00 Over level land, through dense brush.

30.50 Cross wash 5 lks. wide course N. W.

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 $\frac{1}{4}$ S3 in N.
and S10 1913 in S. half; and raise a mound of stone 2 ft.
base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

59.90 Cross road bears N. E. and S. W.

68.15 Cross road bears N. and S.

79.94 The cor. of secs. 3, 4, 9 and 10.

Land, level and mountainous.

Soil, sandy loam, mixed with rocks and gravel; 2nd. rate.

No timber.

Undergrowth, mesquite and blackbrush..

40.00 N. 0 02' W. on a random line bet. secs. 3 and 4.
Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. bdy. of Tp. 2 lks. W. of the cor. of secs.
3, 4, 33 and 34, established by me, as described in book
"U." Thence I run

S. 0 01' E. on a true line bet. secs. 3 and 4.

Over level land, through dense brush.

29.70 Cross wash 10 lks. wide course S. W.

40.10 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 $\frac{1}{4}$ S4 in W.
S3 in E. and 1913 in S. half; and raise a mound of stone
2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

80.10 The cor. of secs. 3, 4, 9 and 10.

Land, level.

Soil, sandy loam, mixed with rocks and gravel; 2nd. rate.

No timber.

Undergrowth, mesquite and blackbrush.

February 13; At this cor. I set off 13. 20' S. on the
decl. arc; and observe the sun on the meridian at noon;
the resulting lat. is 31°32' N..

February 13, 1913.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

January 29: At 8h. 00m. a.m., l.m.t., I set off $31^{\circ} 27\frac{1}{2}'$ N. on the lat. arc; $17^{\circ} 56'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the T., described in book "U" Thence I run
 N. 0 02' W. bet. secs. 32 and 33.
 Ascend along East slope of ridge through scattering brush. Ridge bears N. E. and S. W. descend.
 32.00
 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 $\frac{1}{4}$ S32 in W. S33 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 41.90 Cross wash 8 lks. wide course S. W. ascend.
 53.00 Ridge bears N. W. and S. E. descend.
 77.50 Cross wash 12 lks. wide course N. W. ascend.
 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
 T22SR23E in N. and 1913 in S. half;
 S29 in N. W.
 S28 in N. E.
 S33 in S. E. and S32 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush.
 January 29: At this cor. I set off $17^{\circ} 54\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 28\frac{1}{2}'$ N.

East on a random line bet. secs. 28 and 33.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.,
 80.16 Intersect N. and S. line 16 lks. N. of the cor. of secs. 27, 28, 33 and 34.
 Thence I run
 N. 89 53' W. on a true line bet. secs. 28 and 33.
 Ascend Rough N. E. slope, through scattering brush.
 20.00 Cross wash 8 lks. wide course N. E.
 29.00 Ridge bears N. W. and S. E. descend.
 40.08 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 $\frac{1}{4}$ S28 in N. and S33 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 80.16 The cor. of secs. 28, 29, 32 and 33.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush.

January 29, 1913.

January 30: At 8h. 00m. a.m., l.m.t., I set off $31^{\circ} 28\frac{1}{2}'$ N. on the lat. arc; $17^{\circ} 39\frac{1}{2}'$ 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. 0 02' W. bet. secs. 28 and 29.
 Ascend through dense brush.
 8.10 Ridge bears N. W. and S. E. descend.
 18.30 Cross wash 10 lks. wide course N. W. ascend.
 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 $\frac{1}{4}$ S29 in W. S28 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

41.00 Ridge bears N. W. and S. E.
 48.00 Ridge bears N. W. and S. E. descend.
 52.60 Cross wash 6 lks. wide course N. W.
 71.60 Cross wash 10 lks. wide course S. W.
 74.40 Cross wash 8 lks. wide course S. W. ascend.
 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
 T22SR23E in N. and
 1913 in S. half;
 S20 in N. W.
 S21 in N. E.
 S28 in S. E. and
 S29 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush.

S. 89 53' E. on a random line bet. secs. 21 and 28.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.,
 80.10 Intersect N. and S. line 9 lks. S. of the cor. of secs. 21, 22, 27 and 28.
 Thence I run
 N. 89 57' W. on a true line bet. secs. 21 and 28.
 Ascending rough N. E. slope of high ridge, through dense brush.
 8.50 Cross wash 8 lks. wide course N. E.
 11.50 Cross wash 10 lks. wide course N. E.
 29.50 Ridge bears N. E. and S. W.
 35.50 Cross wash 5 lks. wide course N. E.
 40.05 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 $\frac{1}{4}$ S21 in N. S28 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 46.25 Ridge bears N. W. and S. E. descend.
 58.90 Cross wash 8 lks. wide course S. W.
 75.50 Cross wash 5 lks. wide course S. W.
 80.10 The cor. of secs. 20, 21, 28 and 29.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush.
 January 30; At this cor. I set off $17^{\circ} 38\frac{1}{2}'$ S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31^{\circ} 29\frac{1}{2}'$ N.

N. 0° 02' W. bet. secs. 20 and 21.
 Ascend through dense brush.
 20.30 Ridge bears N. W. and S. E. descend.
 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 $\frac{1}{4}$ S20 in W. S21 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 67.20 Ridge bears N. E. and S. W.
 75.00 Ridge bears N. E. and S. W.
 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 16, 17, 20 and 21, marked on brass cap
 T22SR23E in N. and
 1913 in S. half;
 S17 in N. W.
 S16 in N. E.
 S21 in S. E. and
 S20 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains

Land, mountainous.
Soil, rocky; 4th. rate.
No timber.
Undergrowth, blackbrush.

January 30, 1913.

January 31: At 8h. 00m. a.m., l.m.t., I set off 31' 30" N. on the lat. arc; 17' 23" S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21
Thence I run
S. 89' 57" E. on a random line bet. secs. 16 and 21.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.98 Intersect N. and S. line 5 lks. S. of the cor. of secs. 15, 16, 21 and 22.
Thence I run
N. 89' 59" W. on a true line bet. secs. 16 and 21.
39.99 Descend along S. W. slope.
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 $\frac{1}{4}$ S16 in N. and S21 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
41.30 Cross wash 40 lks. wide course N. W. and over level land through dense brush.
46.20 Cross telephone line bears N. W. and S. E.
47.80 Cross telephone line bears N. W. and S. E.
49.60 Cross road bears N. W. and S. E.
60.00 Brush becomes scattering. Ascend.
73.50 C. Thomas house bears N. 13' 45" E.
79.98 The cor. of secs. 16, 17, 20 and 21.
Land, mountainous and level.
Soil, Rocky; 4th. rate, except from 41.30 chs. to 60.00 chs. which is sandy loam, mixed with rocks; 2nd. rate.
Timber, walnut and cottonwood along wash.
Undergrowth, oak and blackbrush.

N. 0' 02" W. bet. secs. 16 and 17.
Descend through scattering brush.
8.00 Cross wash 8 lks. wide course N. E.
18.70 Cross wash 50 lks. wide course N. W. and over level land.
24.50 Cross telephone line bears N. W. and S. E.
25.00 Cross telephone line bears N. W. and S. E.
28.00 Cross road bears N. W. and S. E. ascend.
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 $\frac{1}{4}$ S17 in W. S16 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
57.00 Ridge bears N. W. and S. E. descend.
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
T22SR23E in N. and
1913 in S. half;
S8 in N. W.
S9 in N. E.
S16 in S. E. and
S17 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, mountainous and level.
Soil, rocky; 4th. rate.
Timber, cottonwoods and walnut along wash.
Undergrowth, blackbrush.
January 31; At this cor. I set off 17' 21 $\frac{1}{2}$ " S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31' 31" N.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

S. 89 59' E. on a random line bet. secs. 9 and 16
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.90 Intersect N. and S. line 21 lks. S. of the cor. of secs.
 9, 10, 15 and 16,
 Thence I run
 S. 89 52' W. on a true line bet. secs. 9 and 16.
 Descend through scattering brush.
 10.00 Ascend.
 20.40 Ridge bears N. E. and S. W. descend.
 28.05 Cross wash 14 lks. wide course N. E.
 37.60 Ridge bears N. W. and S. E. descend.
 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 $\frac{1}{4}$ S9 in N.
 and S16 1913 in S. half; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 48.20 Cross road bears N. E. and S. W.
 49.50 Cross wash 5 lks. wide course N. E. ascend.
 79.90 The cor. of secs. 8, 9, 16 and 17.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush.

January 31, 1913.

February 13:

N. 0 02' W. bet. secs. 8 and 9.
 Descend through scattering brush.
 13.00 Cross wash 5 lks. wide course N. E. ascend.
 19.00 Ridge bears N. W. and S. E.
 27.90 Cross wash 15 lks. wide course N. W. ascend.
 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 $\frac{1}{4}$ S8 in W.
 S9 in E. and 1913 in S. half; and raise a mound of stone
 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 42.50 Ridge bears N. W. and S. E. And along E. slope.
 70.50 Ridge bears N. E. and S. W. descend.
 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
 ground for cor. of secs. 4, 5, 8 and 9, marked on brass
 cap
 T22SR23E in N. and
 1913 in S. half;
 S5 in N. W.
 S4 in N. E.
 S9 in S. E. and
 S8 in S. W. quadrant; and raise a mound of stone 2 ft.
 base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush.

N. 89 52' E. on a random line bet. secs. 4 and 9
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.02 Intersect N. and S. line 16 lks. N. 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 brush.
 19.40 Cross wash 25 lks. wide course N. W.
 27.50 Cross wash 10 lks. wide course N. W. and over level land.
 40.01 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 $\frac{1}{4}$ S4 in N.
 and S9 1913 in S. half; dig pits 18 x 18 x 12 ins. E. and
 W. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft.
 base $1\frac{1}{2}$ ft. high, N. of cor.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains
 49.15 Cross road bears N. W. and S. E.
 53.20 Cross road bears N. W. and S. E.
 60.00 Ascend.
 73.90 Ridge bears N. and S. descend.
 80.02 The cor. of secs. 4, 5, 8 and 9.
 Land, level and rolling and mountainous.
 Soil, rocky; 4th. rate; except from 27.50 to 60.00 chs.
 which is sandy loam, dry; medium texture; 1st. rate.
 No timber.
 Undergrowth, blackbrush and mesquite.

February 13, 1913.

February 14:
 N. 0° 02' W. on a random line bet. secs. 4 and 5.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect N. bdy. of Tp. 7 lks. E. of the cor. of secs.
 4, 5, 32 and 33, established by me, as described in book
 "U." Thence I run
 S. 0° 05' E. on a true line bet. secs. 4 and 5.
 Over level land, through dense brush.
 24.25 Cross wash 20 lks. wide course N. W.
 30.00 Over rolling 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 $\frac{1}{4}$ S5 in W.
 S4 in E. and 1913 in S. half; and raise a mound of stone
 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 52.50 Cross road bears N. W. and S. E.
 53.80 Cross road bears N. W. and S. E. ascend.
 80.06 The cor. of secs. 4, 5, 8 and 9.
 Land, level, rolling and mountainous.
 Soil, rocky; 4th. rate. except N. 30 chs. which is rich
 sandy loam, dry, medium texture; 1st. rate.
 No timber.
 Undergrowth, mesquite and blackbrush.

February 14, 1913.

February 1: At 8h. 00m. a.m., l.m.t., I set off 31° 27 $\frac{1}{2}$ '
 N. on the lat. arc; 17° 06' S. on the decl. arc; and
 determine a meridian with the solar at the cor. of secs.
 5, 6, 31 and 32 on the S. bdy. of the Tp., described in
 book "U" Thence I run
 N. 0° 03' W. bet. secs. 31 and 32.
 Over rolling land, through dense brush.
 13.80 Cross wash 10 lks. wide course S. W.
 17.75 Cross road bears N. E. and S. W.
 23.15 Cross wash 13 lks. wide course S. W.
 27.65 Cross road bears N. E. and S. W.
 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 $\frac{1}{4}$ S31 in W.
 S32 in E. and 1913 in S. half; and raise a mound of stone
 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Ascend.
 49.40 Ridge bears N. W. and S. E. descend.
 60.00 Over rolling land.
 80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
 ground for cor. of secs. 29, 30, 31 and 32, marked on
 brass cap
 T22SR23E in N. and
 1913 in S. half;
 S30 in N. W.
 S29 in N. E.
 S32 in S. E. and
 S31 in S. W. quadrant; and raise a mound of stone 2
 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains

Land, rolling and mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, blackbrush and greasewood.
 February 1: At this cor. I set off 17 $\sqrt{04\frac{1}{2}}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 $\sqrt{28\frac{1}{2}}$ ' N.

East on a random line bet. secs. 29 and 32
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.98 Intersect N. and S. line 14 lks. S. of the cor. of secs. 28, 29, 32 and 33

Thence I run
 S. 89 54' W. on a true line bet. secs. 29 and 32.
 Descend along S. slope, through dense brush.
 17.90 Cross wash 8 lks. wide course N. W. ascend.
 39.60 Ridge bears N. W. and S. E. descend.
 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 $\frac{1}{4}$ S29 in N. and S32 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

58.00 Ascend.
 65.00 Ridge bears N. W. and S. E. descend.
 79.98 The cor. of secs. 29, 30, 31 and 32.

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

February 1, 1913.

February 2: At 8h. 00m. a.m., l.m.t., I set off 31 $\sqrt{28\frac{1}{2}}$ ' N. on the lat. arc; 16 $\sqrt{49}$ ' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32.

Thence I run
 West bet. secs. 30 and 31.
 Ascend along S. Slope of ridge, through dense brush.
 9.90 Ridge bears S. W. and N. E. descend.
 20.00 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 $\frac{1}{4}$ S30 in N. and S31 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 43.30 Cross wash 5 lks. wide course S. W.
 79.35 Intersect W. bdy. of Tp. 5.11 chs. S. of the cor. of secs. 25 and 36, which is a stone marked and witnessed as described by the surveyor general. At point of intersection I set and iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for closing cor. of secs. 30 and 31, marked on brass cap

CC W. of center;
 T22S in N.
 S25 S36 R22E in W. and
 1913 in S. half;
 S30 in N. E. and
 S31R23E in S. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable.
 Land, rolling and mountainous.
 Soil, rocky; 4th. rate.
 No timber.
 Undergrowth, greasewood and blackbrush.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
	N. 0 03' W. bet. secs. 29. and 30. Ascend through dense brush.
2.50	Ridge bears E. and W. descend.
7.00	Over rolling land.
38.30	Cross wash 5 lks. wide course N. W.
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 $\frac{1}{4}$ S30 in W. S29 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
63.00	Cross wash 20 lks. wide course N. W.
76.50	Cross wash 5 lks. wide course N. W..
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 T22SR23E in N. and 1913 in S. half; S19 in N. W. S20 in N. E. S29 in S. E. and S30 in S. W. quadrant; 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, rocky; 4th. rate. No timber. Undergrowth, greasewood and blackbrush. February 2: At this cor. I set off $16\sqrt{47\frac{1}{2}}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is $31\sqrt{29\frac{1}{2}}$ ' N..
	<hr/>
	N. 89 54' E. on a random line bet. secs. 20 and 29.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.94	Intersect N. and S. line 9 lks. S. of the cor. of secs. 20, 21, 28 and 29. Thence I run S. 89 50' W. on a true line bet. secs. 20 and 29. Descending along rough S. W. slope of high ridge, through dense brush.
27.00	Cross wash 10 lks. wide course S. W.
89.97	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 $\frac{1}{4}$ S20 in N. and S29 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
52.30	Cross wash 8 lks. wide course S. W.
66.70	Cross wash 6 lks. wide course S. W.
79.94	The cor. of secs. 19, 20, 29 and 30. Land, mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood and blackbrush.
	<hr/>
	February 2; 1913.
	<hr/>
	February 3: At 8h. 00m. a.m., l.m.t., I set off $31\sqrt{29\frac{1}{2}}$ ' N. on the lat. arc; $16\sqrt{31\frac{1}{2}}$ ' 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 West bet. secs. 19 and 30. Over rolling land, through dense brush.
4.30	Cross wash 6 lks. wide course N. W.
20.00	Cross wash 10 lks. wide course S. W.
39.80	Cross wash 6 lks. wide course N. W. ascend.
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 $\frac{1}{4}$ S19 in N. and S30 1913 in S. half; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
75.25	Ridge bears N. W. and S. E. descend.

Subdivision of Tp. 22 S. Rg. 23 E.

chains.	
79.20	Intersect W. bdy. of Tp. 5.09 chs. S. of the cor. of secs. 24 and 25, which is a stone marked and witnessed as described by the surveyor general; and Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for closing cor. of secs. 19 and 30, marked on brass cap CC W. of center; T22S in N. 1913 in S. and S24S25R22E in W. half; S19 in N. E. and S30R23E in S. E. quadrant; and raise a mound of stone 2 ft. base 1½ ft. high, E. of cor. Pits impracticable. Land, rolling and mountainous. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood and blackbrush. February 3: At this cor. I set off 16 ¼ 30' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 ½ 29½' N.
	N. 0 03' W. bet. secs. 19 and 20. Over rolling land, through dense brush.
3.00	Cross wash 10 lks. wide course N. W.
5.00	Cross wash 8 lks. wide course N. W. ascend.
19.00	Ridge bears N. E. and S. W. descend.
35.90	Cross wash 10 lks. wide course N. W. and over rolling land.
40.00	Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¼ S19 in W. S20 in E. and 1913 in S. half; and raise a mound of stone 2 ft. base 1½ ft. high, W. of cor. Pits impracticable.
57.20	Cross wash 8 lks. wide course W.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 17, 18, 19 and 20, marked on brass cap T22SR23E in N. and 1913 in S. half; S18 in N. W. S17 in N. E. S20 in S. E. and S19 in S. W. quadrant; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base 2 ft. high, W. of cor. Land, mountainous and rolling. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood and blackbrush.
	February 3, 1913.
	February 4: At 8h. 00m. a.m., l.m.t., I set off 31 30' N. on the lat. arc; 16 ¼ 14' 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. 89 50' E. on a random line bet. secs. 17 and 20.
40.00	Set temp. ¼ sec. cor.
79.90	Intersect N. and S. line 9 lks. N. of the cor. of secs. 16, 17, 20 and 21. Thence I run S. 89 54' W. on a true line bet. secs. 17 and 20. Ascend through scattering brush.
7.30	Ridge bears N. W. and S. E. descend.
17.60	Cross wash 8 lks. wide course N. W.
19.70	Cross wash 5 lks. wide course N. W.
21.30	Cross wash 6 lks. wide course N. W. ascend.

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.	
35.20	Ridge bears N. E. and S. W. descend.
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 $\frac{1}{4}$ S17 in N. and S20 1913 in S. half; and raise a mound of stone $2\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
65.00	Over rolling land, through dense brush.
79.90	The cor. of secs. 17, 18, 19 and 20. Land, mountainous and rolling. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood and blackbrush.
	—————
	West bet. secs. 18 and 19.
	Over rolling land, through dense brush.
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 $\frac{1}{4}$ S18 in N. and S19 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, N. of cor.
59.20	Cross road bears N. E. and S. W.
79.00	Intersect W. bdy. of Tp. 4.90 chs. S. of the cor. of secs. 13 and 24, which is a stone marked and witnessed as described by the surveyor general; and set an iron post 3 ft. long, 2 ins. diam. 24 ins. in the ground for closing cor. of secs. 18 and 19, marked on brass cap CC W. of center; T22S in N. 1913 in S. and S13S24R22E. in W. half; S18 in N. E. and S19R23E in S. E. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable. Land, rolling. Soil, rocky; 4th. rate. No timber. Undergrowth, greasewood and blackbrush. February 4: At this cor. I set off 16 $\sqrt{12}$ ' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 31 $\sqrt{30}$ ' N.
	—————
	N. 0 $\sqrt{03}$ ' W. bet. secs. 17 and 18.
	Over rolling land, through dense brush.
39.90	Cross road bears N. E. and S. W.
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 $\frac{1}{4}$ S18 in W. S17 in E. and 1913 in S. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist., and raise amount of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, W. of cor. Ascend.
49.10	Ridge bears N. W. and S. E. descend.
60.10	Cross wash 20 lks. wide course N. W. ascend.
61.60	Cross road bears N. W. and S. E.
63.20	Cross telephone line bears N. W. and S. E.
63.40	Cross telephone line bears N. W. and S. E.
77.60	Ridge bears N. E. and S. W. descend.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 7, 8, 17 and 18, marked on brass cap T22SR23E in N. and 1913 in S. half; S7 in N. W. S8 in N. E. S17 in S. E. and S18 in S. W. quadrant; and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling and mountainous.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains

Soil, rocky; 4th. rate.
No timber.
Undergrowth, greasewood and blackbrush.

February 4, 1913.

February 5: At 8h. 00m. a.m., l.m.t., I set off 31' 31' N. on the lat. arc; 15' 56' 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

N. 89' 54' E. on a random line bet. secs. 8 and 17.

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

79.88 Intersect N. and S. line 19 lks. N. of the cor. of secs. 8, 9, 16 and 17.

Thence I run

N. 89' 58' W. on a true line bet. secs. 8 and 17.

Ascend.

2.00 Ridge bears N. E. and S. W. descend.

14.30 Cross wash 6 lks. wide course N. W. ascend.

22.90 Ridge bears N. E. and S. W.

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 $\frac{1}{4}$ S8 in N. and S17 1913 in S. half; and raise amount of stone 2 ft. base $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Through dense brush.

43.40 Cross wash 5 lks. wide course N. W.

46.60 Ridge bears N. W. and S. E. descend.

58.90 Cross wash 6 lks. wide course N. W. ascend.

68.20 Ridge bears N. W. and S. E. descend.

72.00 Ascend.

76.50 Ridge bears N. W. and S. E. descend.

79.88 The cor. of secs. 7, 8, 17 and 18.

Land, mountainous.

Soil, rocky; 4th. rate.

No timber.

Undergrowth, greasewood and blackbrush.

February 5, 1913.

February 6: At 8h. 00m. a.m., l.m.t., I set off 31' 31' N. on the lat. arc; 15' 37 $\frac{1}{2}$ ' 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

West bet. secs. 7 and 18.

Over rolling land, through dense brush.

21.20 Cross telephone line bears N. E. and S. W.

24.10 Cross telephone line bears N. W. and S. E.

24.50 Cross road bears N. W. and S. E. and over level land.

30.30 Cross road bears N. W. and S. E.

33.50 Cross road bears N. W. and S. 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 $\frac{1}{4}$ S7 in N. and S18 1913 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high, N. of cor.

45.00 Ascend.

51.20 Top of round hill, descend.

60.00 Over level land.

79.02 Intersect W. bdy. of Tp. 5.16 chs. S. of the cor. of secs. 12 and 13, which is marked by a stone marked and witnessed as described by the surveyor general. I fill pits on E. of cor. and

Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for closing cor. of secs. 7 and 18, marked on brass cap

BOOK 2712

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

CC W. of center:
 T22S in N.
 1913 in S. and
 S12S13R22E in W. half;
 S7 in N. E. and
 S18R23E in S. E. quadrant; dig pits 24 x 18 x 12 ins.
 crosswise on each line, N. and S. 3 ft., and E. of post
 7 ft. dist., and raise a mound of earth 4 ft. base 2 ft.
 high, E. of cor.
 Land, mountainous, rolling and level.
 Soil, rocky; 4th. rate: Except from 24.50 chs. to 45.00
 chs. and from 60.00 chs. to 79.02 chs. which is a sandy
 loam, dry, medium texture; 1st. rate.
 No timber..
 Undergrowth, greasewood and blackbrush.

February 6, 1913.

February 14: At 8h. 00m. a.m., l.m.t., I set off 31' 31'
 N. on the lat. arc; 13' 02' 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

N. 0° 03' W. bet. secs. 7 and 8.

Over rolling land through dense brush.

12.50

Cross wash 8 lks. wide course N. W.

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 $\frac{1}{2}$ S7 in W.S8 in E. and 1913 in S. half; dig pits 18 x 18 x 12 ins.
 N. and S. of post 3 ft. dist., and raise a mound of earth
 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high, W. of cor.

Over level land.

63.10

Cross road bears N. W. and S. E.

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

T22SR23E in N. and

1913 in S. half;

S6 in N. W.

S5 in N. E.

S8 in S. E. and.

S7 in S. W. quadrant; dig pits 18 x 18 x 12 ins. in
 each sec. 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft.
 base 2 ft. high, W. of cor..

Land, rolling and level.

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

No timber.

Undergrowth, greasewood and blackbrush.

40.00

S. 89° 58' E. on a random line bet. secs. 5 and 8.

79.78

Set temp. $\frac{1}{4}$ sec. cor.Intersect N. and S. line 12 lks. S. of the cor. of secs.
 4, 5, 8 and 9.

Thence I run

S. 89° 57' W. on a true line bet. secs. 5 and 8.

Descend through dense brush.

15.00

Over level land.

39.89

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 $\frac{1}{2}$ S5 in N.
 and S8 1913 in S. half; dig pits 18 x 18 x 12 ins. E. and
 W. of post 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft.
 base 1 $\frac{1}{2}$ ft. high, N. of cor.

44.90

Cross road bears N. E. and S. W.

79.78

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

Land, mountainous and level.

Soil, E. 15.00 chs. rocky; 4th. rate.

Subdivision of Tp..22 S. Rg. 23 E.

Chains.

15.00 chs. to 79.78 chs. sandy loam, mixed with gravel;
2nd. rate.
No timber.
Undergrowth, greasewood and blackbrush.

West bet. secs. 6 and 7.
Over level land, through dense brush.

7.80 Cross road bears N. W. and S. E.
23.20 Cross telephone line bears N. and S.
39.60 Cross draw 60.lks. wide course N. W.
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 $\frac{1}{4}$ S6 in N. and
S7 1913 in S. half; and raise a mound of stone 2 ft. base
 $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
59.10 Cross wash 10 lks. wide course N. W.
78.86 Intersect W. bdy. of Tp. 5.37 chs. S. of the cor. of secs.
1 and 12, which is a stone marked and witnessed as describ-
ed by the surveyor general, and
Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
ground for closing cor. of secs. 6 and 7, marked on brass
cap.

CC W. of center;
T22S in N.
1913 in S. and
S1S12R22E. in W. half;
S6 in N. E. and.

S7R23E in S. E. quadrant; dig pits 24 x 24 x 12 ins.
crosswise on each line, N. and S..3 ft. and E. of post
7 ft. dist., and raise a mound of earth 4 ft. base 2 ft.
high, E. of cor.

Land, level.
Soil, sandy loam, mixed with gravel; 2nd. rate.
No timber.
Undergrowth, greasewood and blackbrush.

N. 0 03' W. on a random line bet. secs. 5 and 6.

40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.98 Intersect N. bdy. of Tp. 28 lks. E. of the cor. of secs.
5, 6, 31 and 32, established by me, as described in book
"U." Thence I run

S. 0 15' E. bet. secs..5 and 6. on a true line.
Over level land, through dense brush.

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 $\frac{1}{4}$ S6 in W. and
S5 in E. and 1913 in S. half; dig pits 18 x 18 x 12 ins. N.
and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$
ft. base $1\frac{1}{2}$ ft. high, W. of cor.

79.98 The cor. of secs. 5, 6, 7, and 8.
Land, level.
Soil, sandy loam, dry, medium texture; 1st. rate.
No timber.
Undergrowth, greasewood and blackbrush.

February 14, 1913.

Subdivision of Tp. 22 S. Rg. 23 E.

Chains.

GENERAL DESCRIPTION.

This township is extremely rough and mountainous, except in the extreme N. W. cor. and along the W. boundary.

The soil is generally rocky and worthless except for small tracts in Tombstone Canyon in which the soil is a rich black loam, very fertile. There is running water in Tombstone Canyon during the wet seasons.

Oak, juniper and pinon timber grows in the S. E. part of the township.

There is one settler in sec. 14, one in sec. 16, one in sec. 15, one in sec. 21 one in sec. 26 and two in sec. 27.

Mining has been carried on in secs. 4 and 22 but there seems to be no trace of mineral.

John P. Hesse
U. S. Surveyor.

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
 John F. Hesse, U. S. Surveyor, during the periods and in the capacities
 stated opposite our several signatures, in surveying all those parts or portions of the
 subdivision lines of Tp. 22 S. Rg. 23 E.

of the Gila and Salt River ^{Base and} Meridian, in the State of Arizona
 which are represented in the foregoing field notes as having been executed by him, and under his direc-
 tion; and that said survey has been, in all respects, to the best of our knowledge and belief, well and
 faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
A. F. Ridge	Dec. 23, 1912	Feb. 8, 1913	Plagman
B. Brane	Jan. 8, 1913	Feb. 8, 1913	Cornerman
W. H. Brane	Jan. 8, 1913	Feb. 8, 1913	Asman
G. E. Lang	Sept. 6, 1912	Feb. 14, 1913	Chairman
F. E. Ayers	Dec. 20, 1912	Feb. 14, 1913	Chairman
J. S. Hughes	Feb. 9, 1913	Feb. 14, 1913	Plagman
B. S. Jackson	Feb. 9, 1913	Feb. 14, 1913	Asman
E. D. Thomas	Feb. 9, 1913	Feb. 15, 1913	Cornerman

Subscribed and certified to before me on the dates of the final service as shown above.

John F. Hesse
 U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, John F. Hesse, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona, for Group 5 bearing date of the 24th day of August, 1911, 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 the subdivision lines of Tp. 22 S. Rg. 23 E.

of the Gila and Salt River Base and Meridian, in the State of Arizona, 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 Arizona, for Group 5 and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

John F. Hesse
U. S. Surveyor.

Subscribed by said John F. Hesse, and sworn to before me this 4th day of August, 1914



Frank Ingalls
Surveyor General of Arizona

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona, Nov 14, 1914

The foregoing field notes of the survey of the Subdivision lines of Township N° 22 South Range N° 23 East of the Gila and Salt River Base and Meridian in the State of Arizona

executed by John F. Hesse, U. S. Surveyor under his special instructions dated August 24, 1911 for Group 5, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank Ingalls
U. S. Surveyor General.
of ARIZONA.

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