

97
Accepted GLO. letter "E"
Apr. 28-1915

BOOK 2691

4-679

2691

2691

BOOK "M"
Exteriors
FIELD NOTES

OF THE SURVEY OF THE

North bdy of T. 23 N. ~ R. 5 W.

" " " T. 25 N. ~ R. 5 W.

" " " T. 26 N. ~ R. 5 W.

" " " T. 27 N. ~ R. 5 W.

South " " T. 22 N. ~ R. 7 W.

East " " T. 21 N. ~ R. 8 W.

West " " T. 21 N. ~ R. 9 W.

West & South bdrs. of T. 22 N. ~ R. 10 W.

& North, West, & South bdrs. of T. 23 N. ~ R. 11 W.

of the Gila & Salt River Base & Meridian,

In the State of ARIZONA

EXECUTED BY

H. N. BRADSTREET, U.S. Transitman

&

WILLIAM B. KIMMEL, U.S. Surveyor

In the capacity of U. S. Surveyor, under instructions dated October 18, 1912,

issued by the United States Surveyor General to govern surveys included in

Group No. 24, which were approved by the Commissioner of the General Land

Office, November 5, 1912, pursuant to authority contained in the Act of

Congress dated June 25, 1910

Survey commenced Dec. 6, 1912

Survey completed April 22, 1913

INDEX DIAGRAM.

Township _____, Range _____

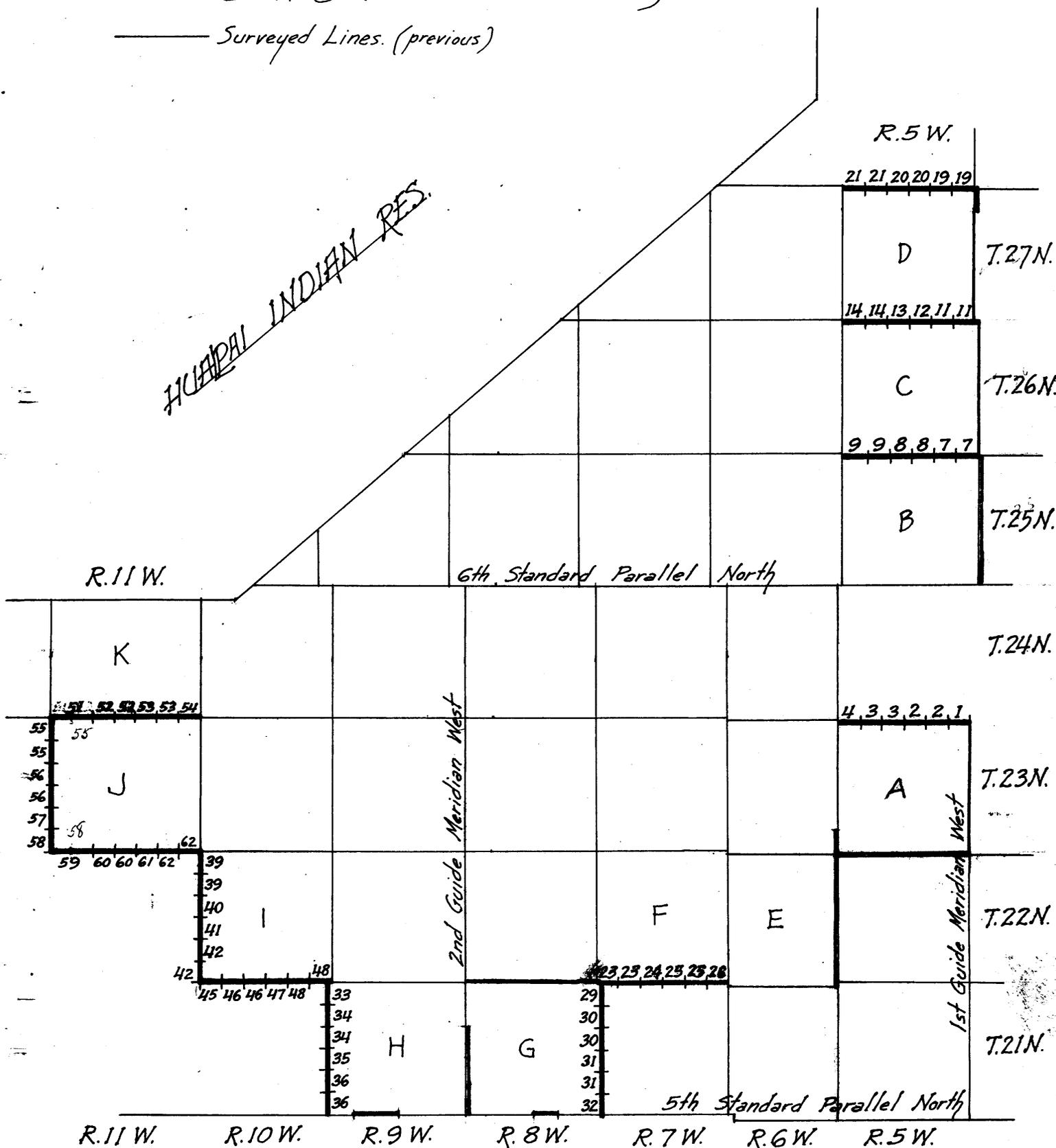
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

GROUP 24 ARIZONA SURVEY OF EXTERIORS INDEX DIAGRAM

⇒ SYMBOLS ⇒

BOOK 2691

- This Book
- Book "N" (STANDARD LINES)
- Book "O" (RESURVEYS & RETRACEMENTS)
- Surveyed Lines. (previous)



North Boundary of T. 23 N., R. 5 W.

Chains.

Note: Initials "W. B. K." and "H. N. B." throughout the following notes indicate surveys by W. B. Kimmel, U. S. Surveyor, and H. N. Bradstreet, U. S. Transitman, respectively.

Dec. 6, 1912. W. B. K.
From the cor. of Tps. 23 and 24 N., Rs. 4 & 5 W., established by me this day, as described in Book "N" (Standard lines), page 4, I run West, on a random line, along the N. bdy. of T. 23 N., R. 5 W., setting temp. 1/4 sec. and sec. cors. at intervals of 40 chains; and at 479.08 chs., intersect the W. bdy. of Tp. 23 N., R. 5 W., 354 lks. S. of the old cor. of Tps. 23 & 24 N., Rs. 5 & 6 W., which is a lava stone, 8x10x8 ins., above ground, marked and witnessed as described by the Surveyor General. I change this old cor. to refer to Tps. 23 & 24 N., R. 6 W. only, by obliterating the notches on the east edge of the stone, and building a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor., demolishing the mound of stone S. of the cor.

16.00
18.25
29.75
31.75
40.00

I return to the cor. of Tps. 23 & 24 N., Rs. 4 & 5 W.; Thence I run West, on a true line, bet. secs. 1 and 36. Over gently rolling rocky land, no timber. Enter heavy timber, brs. N. & S. Edge of rim rock. Desc. precipice, 25 ft. high. Then desc. W. slope, 155 ft. Leave heavy timber, brs. NE. & SW. Foot of desc., brs. N. & S. Continue over rolling land. Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1912; 1/4 S36 in N., and S1 in S. half, from which A cedar, 14 ins. in diam., brs. N. 75° E., 125 lks. dist., marked 1/4 S36 BT. No other trees within limits. Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. W. B. K.

41.52
48.55
48.75
51.45
53.55
64.25
65.95
80.00

H. N. B.
Note: At this corner, I set off 22° 30 1/2' S. on the decl. arc, and at noon, I observe the sun on the meridian; the resulting lat. is 35° 25' N., which is slightly less than the correct lat. Thence I run West, continuing measurement Furrow in draw, brs. N. & S. Ditch, 8 lks. wide, course SW. Wagon road, brs. NE. & SW. Enter heavy timber, brs. NE. & SW. Brush fence, brs. NE. & SW. Asc. SE. slope, 40 ft. Edge of rim rock, brs. NE. & SW. Brush fence along edge of rock, brs. NE. & SW. Top of asc. Thence along rolling bench. Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35, & 36, marked on brass cap, 1912; T24N in N., T23N in S., and R5W in W. half; S35 in NW., S36 in NE., S1 in SE., and S2 in SW. quadrant; from which A cedar, 7 ins. in diam., brs. N. 34 1/2° E., 9 1/2 lks. dist., marked T24N R5W S36 BT. A cedar, 16 ins. in diam., brs. S. 11 1/4° E., 37 lks. dist., marked T23N R5W S1 BT. A cedar, 14 ins. in diam., brs. S. 65 1/4° W., 48 lks. dist., marked T23N R5W S2 BT. A cedar, 14 ins. in diam., brs. N. 65 1/2° W., 23 lks. dist., marked T24N R5W S35 BT.

Land, level and rolling. Soil, volcanic, rocky, 4th rate. Timber, scrub cedar and scattering pinion. H. N. B.

BOOK 2691

2.

North Boundary of Tp. 23 N., R. 5 W.

Chains.	W. B. K.
	West, on true line, bet. secs. 2 & 35.
	Over rolling, rocky land, through heavy cedar.
22.00	Leave heavy timber, brs. NE. & SW.
23.23	Wire fence, brs. NE. & SW.
30.25	Road, brs. NE. & SW. Desc. W. slope, 105 ft.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912; $\frac{1}{4}$ S35 in N., and S2 in S. half; from which A cedar, 8 ins. in diam., brs. S. $32\frac{1}{2}^{\circ}$ E., 204 lks. dist., marked $\frac{1}{4}$ S2 BT. No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Dec. 6, 1912.
	Dec. 10, 1912: At 8H 15M a. m., 1. m. t., I set off $35^{\circ} 25'$ N. on the lat. arc, $22^{\circ} 52'$ S. on the decl. arc, and determine a meridian with the solar at the $\frac{1}{4}$ sec. cor. bet. secs. 2 & 35. Thence I continue
	West, on a true line, bet. secs. 2 & 35.
60.00	Foot of desc. Thence over level land.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34, & 35, marked on brass cap, 1912; T24N in N., T23N in S., and R5W in W. half; S34 in NW., S35 in NE., S2 in SE., and S3 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. No bearing trees within limits. Land, rolling. Soil, rocky, 4th rate. Timber, scattering cedar.

	West, on true line, bet. secs. 3 & 34.
	Over level land, through scattering sage brush.
32.65	Wash, 20 lks. wide, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912; $\frac{1}{4}$ S34 in N., and S3 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits, impracticable. No bearing trees within limits.
44.35	Wash, 10 lks. wide, course SW. Asc. slight SE. slope, 25 ft.
50.00	Thence along S. slope.
72.75	Road, brs. NW. & SE.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33, & 34, marked on brass cap, 1912: T24N in N., T23N in S., and R5W in W. half; S33 in NW., S34 in NE., S3 in SE., and S4 in SW. quadrant; from which A cedar, 10 ins. in diam., brs. S. 2° E., 218 lks. dist., marked T23N R5W S3 BT. A cedar, 7 ins. in diam., brs. S. $67\frac{3}{4}^{\circ}$ W., 146 lks. dist., marked T23N R5W S4 BT. No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits, impracticable.

North Boundary of T23N, R5W.

Chains.

Land, level.
Soil, volcanic formation, rocky 4th rate.
Timber, scattering cedar.
Undergrowth, scattering sage brush.

West, on true line, bet secs. 33 & 4.
Over rolling land, through scattering cedar and sage-brush.

1.00 Edge of ravine, course S. Desc SW.slope, 70 ft.
7.68 Cement dam brs. N. about 8 chs.
8.00 Bottom of ravine, 10 lks. wide, course S. Asc. N. slope, 125 ft.

12.49 Reed and Evans Cattle Co's cabin brs. N. 70 lks. dist.
15.60 Top of asc. Thence over rolling land.
40.00 Set an iron post, 3 ft. long, 1 in.ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912;
 $\frac{1}{4}$ S33 in N., and
S4 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N of cor. P its impracticable. *No bearing trees within limits.*

NOTE: - At this corner I set off $22^{\circ} 55\frac{1}{2}'$ S. on the decl. arc, and at noon I observe the sun on the meridian; the resulting lat. is $35^{\circ} 25\frac{1}{2}'$ N. which is slightly higher than the true lat.

80.00 Set an iron post, 3 ft. long, 3 ins.ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 32, 33, 4 & 5, marked on brass cap, 1912;
T24N in N,
T23N in S, and
R5W in W. half;
S32 in NW,
S33 in NE,
S4 in SE, and
S5 in SW quadrant; from which
A cedar, 12 ins.ⁱⁿdiam, brs. S14° E., 81 lks. dist., marked T23N R5W S4 BT.
A cedar, 10 ins.ⁱⁿdiam, brs. S9 $\frac{1}{2}$ ° W., 87 lks. dist., marked T23N R5W S5 BT.
No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. P its impracticable.
Land level and rolling.
Soil, rocky 4th rate.
Timber, scattering cedar.
Undergrowth, sage brush.

West, on true line, bet. secs. 5 & 32.
Over rolling, rocky land, through scattering cedar and sage brush ,.

0.10 Edge of rim rock. Desc NW slope, 235 ft.
3.09 Trail, brs. NE & SW.
10.38 Top of precipice, 15 ft. high.
12.29 Top of precipice, 40 ft. high.
14.69 Bottom of ravine, 20 lks. wide, course SW. Asc. SE.slope, 150 ft.

22.98 Top of cliff, 20 ft. high; brs. N. & S.
27.21 Top of rim rock, brs. NW & SE. Desc. SW. slope, 140 ft.
40.00 Set an iron post, 3 ft. long, 1 ins.ⁱⁿdiam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912;
 $\frac{1}{4}$ S32 in N. and
S5 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. P its impracticable. *No bearing trees within limits.*

44.94 Gulch, course SE. Asc. NE.slope 130 ft.
51.36 Road brs. NW. & SE.
57.79 Top of asc., brs. N. & S.; continue rolling.
75.20 Top of precipice, 25 ft. high, brs NW. & SE. Desc. SW. slope, over slide rock, 120 ft.
80.00 Set an iron post, 3 ft. long, 3 ins.ⁱⁿdiam, 24 ins. in the

Chains.

ground, for cor. of secs. 5, 6, 31 & 32, marked on brass cap, 1912;

T24N in N.,
T23N in S., and
R5W in W. half;
S31 in NW.,
S32 in NE.,
S5 in SE., and
S6 in SW. quadrant;

and raise a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. *No bearing trees within limits.*

Land rolling and mountainous.

Soil, rocky 4th rate.

Timber, very scattering cedar.

Undergrowth, scattering sage brush.

Mountainous land, 45 chs.

West, on true line, bet. secs. 6 & 31.

Desc. SW slope, over slide rock. No timber.

2.00 Foot of descent, leave slide rock, brs. NW. & SE.

4.25 Wash, 20 lks. wide, course SE. Asc. NE slope, 175 ft.

5.15 Road, brs. NW. & SE.

33.13 Edge of rim rock, and top of asc., brs. NW. & SE. Thence over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912;

$\frac{1}{4}$ S31 in N., and
S6 in S. half;

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*

Desc. W. slope, 115 ft.

56.64 Trail, brs. NW. & SE.

57.00 Wash, 5 lks. wide, course NW. Asc. NE. slope, 35 ft.

79.08 Intersect W. bdy. of T23N R5W 3.54 chs. S. of the cor. of Tps. 23 & 24N, R6W., hereinbefore described.

At the point of intersection, set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for closing cor. to Tps. 23 & 24N., R5W, on E. bdy of Tp. 23N., R6W, marked on brass cap, 1912;

CC, W. of centre;

R5W in E, and

T24N,

S36,

S1,

T23N, and

R6W in W half;

T24N,

S31 in NE., and

T23N, S6 in SE. quadrant;

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable. *No bearing trees within limits.*

Land rolling and hilly.

Soil, volcanic, rocky 4th rate.

Timber, very scattering cedar.

Undergrowth, scattering sagebrush.

Dec. 10, 1912. *W.B.K.*

Boundaries of T23N, R5W
Latitudes, departures & Closing Errors.

Line designated.	True bearing.	Dist.	Latitude		Departure.	
			N.	S	E	W
South boundary	S89° 45' W	40.97		0.18		40.97
	S89° 50' W	40.11		0.12		40.11
	N88° 50' W	40.24	0.82			40.23
	N89° 08' W	40.41	0.61			40.41
	S89° 45' W	40.21		0.18		40.21
	N89° 16' W	40.08	0.51			40.08
	N89° 44' W	40.11	0.18			40.11
	N89° 48' W	40.12	0.14			40.12
	N89° 39' W	40.12	0.25			40.12
	N89° 20' W	40.00	0.47			40.00
	N89° 37' W	40.13	0.27			40.13
N89° 24' W	37.69	0.39			37.69	
West boundary	N0° 02' W	79.88	79.88			0.05
	North	396.46	396.46			
North boundary	East	479.08			479.08	
EAST BOUNDARY (1st Guide Meridian West)	South	480.00		480.00		
Convergency					.51	
Totals			479.98	480.48	479.59	480.23
				479.98		479.59
	Error in latitude			.50	Error dep	.64

William B. Kimmel.

U. S. Surveyor.
Henry Badstreet
U. S. Transitman.

North Bdy. of Tp25N.,R5W.

7

Chains

H.N.B.

Dec. 19, 1912. I set off 23°24½'S. on the decl. arc; and at noon — I observed the sun on the meridian at the cor. of Tps. 25 and 26 N. Rs 4 and 5 W. which is a malpais stone described in book "O", page 16; the resulting latitude is 35°36'N. which is slightly higher than the correct lat.

From the cor. of Tps. 25 and 26 N. Rs 4 and 5 W. I run West, on a random line, along the N. bdy. of T25N.,R5W, setting temp. ¼ sec. and sec. cor. at intervals of 40.00 chains; and at 476.58 chains, intersect the W. bdy. of T25N.,R5W. 5.54 chains S. of the cor. of Tps. 25 and 26 N. Rs. 5 and 6 W., which is an iron post, 3 ins. in diam. marked and witnessed as described by the Surveyor General.

I return to the cor. of Tps. 25 and 26 N., Rs. 4 and 5 W.

Thence I run, West, on a true line, bet. secs. 1 and 36. Desc. gentle W. slope over rocky land, No timber. Draw, course SW. Thence over level land.

20.00
27.00
40.00

Asc. SE. slope 25 ft. Set an iron post 3 ft. long, 1 in. diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1912; ¼S36 in N. half;

from which

A cedar, 30 ins. diam, brs. N. 65½°E., 92 lks. dist., marked ¼S36 BT.

A cedar, 12 ins. diam, brs. N. 34°W., 81 lks. dist., marked ¼S36 BT.

55.90

Desc. SW. slope 85 ft. Enter cedar timber, brs. NE. and SW. Wash 75 lks. wide, 7 ft. deep, course NW. Leave cedar timber, brs. NE. and SW. Over level land.

59.65
80.00

Road, brs. NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 35 and 36 T. marked on brass cap, 1912;

T26N in N.,
S1, S2, T25N in S.,
R5W in W. half;
S35 in NW. and
S36 in NE. quadrant; from which

A cedar 18 ins. diam, brs. N. 63¾°E., 192 lks. dist., marked T26N R5W S36 BT.

No other trees within limits. Raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Land rolling and hilly. Soil, rocky, 4th rate, gumbo. Timber and undergrowth, scrub cedar.

9.75
40.00

West, bet. secs. 2 and 35. Over rolling, rocky land, through cedar timber. Draw, course SW. Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1912; ¼S35 in N. half; from which

A cedar, 12 ins. diam, brs. N. 50¼°E., 67 lks. dist., marked ¼S35 BT.

A cedar 10 ins. diam, brs. N. 31°W., 35 lks. dist., marked ¼S35 BT.

55.00
80.00

Leave timber, brs. N. and S. Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 34 and 35 T. marked on brass cap, 1912; T26N in N.
S2, S3, T25N in S. and
R5W in W. half;
S34 in NW. and S35 in NE. quadrant;

And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. No bearing trees within limits. Land, level and rolling. Soil, rocky, 4th rate, gumbo. Timber and undergrowth, scrub cedar. Dec. 19, 1912.

Chains.

- Dec. 20, 1912, At 7 h. 35 m. a. m., l.m.t., I set off
 $35^{\circ} 36' N.$ on the lat. arc; $23^{\circ} 18' S.$ on the decl. arc;
 and determine a meridian with the solar at the cor.
 of secs. 34 and 35, above described,
 Thence I run,
 West, on a true line, bet. secs. 3 and 34
 Over rolling land, no timber.
- 26.00 Enter cedar timber brs. N. and S.
 38.00 Leave cedar timber brs. WNW and ESE.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912;
 $\frac{1}{4}$ S34 in N. half; from which
 A cedar, 15 ins. in diam, brs. N. $22\frac{1}{4}^{\circ} E.$, 92 lks. dist.,
 marked $\frac{1}{4}$ S34 BT.
 A cedar, 24 ins. in diam, brs. N. $21\frac{1}{4}^{\circ} W.$, 149 lks. dist.,
 marked $\frac{1}{4}$ S34 BT.
 Descend gradual SW. slope.
- 46.00 End of desc. Wash 20 lks. wide, 3 ft. deep, course
 NW.; thence over level land.
 72.95 Road, brs. NE. and SW.
 73.50 Wash, 10 lks. wide, 3 ft. deep, course SW. Asc.
 gradual SE. slope.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in
 the ground, for cor. of secs. 33 and 34, marked
 on brass cap, 1912;
 T26N in N.,
 S3, S4, T25N in S. and
 R5W in W. half;
 S33 in NW. and
 S34 in NE. quadrant;
 And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor. Pits impracticable. *No bearing trees within limits.*
 Land, level and rolling.
 Soil, rocky, 4th rate gumbo.
 Timber, scrub cedar and scattering pinion.
-
- West, bet. secs. 4 and 33.
 Desc. gradually along SW. slope.
- 14.00 Enter dense cedar timber, brs. N. & S.
 16.00 Leave cedar timber, brs. NW. & SE.
 18.00 Dam with water hole, fenced in, brs. S. 4 chs. dist.
 Desc. slight W. slope.
- 30.00 End of desc., thence over level land.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1912;
 $\frac{1}{4}$ S33 in N. half;
 And raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high
 N. of cor. Pits impracticable. *No bearing trees within limits.*
 Thence across level valley, which extends 8 miles S.
 and 5 miles N., ending in Red Lake.
- 48.00 Enter wash, course WSW, 30 lks. wide, 3 ft. deep
 74.00 Leave wash, asc. slight E. slope.
 80.00 Set an iron post 3 ft. long, 3 ins. in diam, 24 ins. in
 the ground, for cor. of secs. 32 and 33, marked on
 brass cap, 1912;
 T26N in N.
 S4, S5, T25N in S. and
 R5W in W. half;
 S32 in NW. and
 S33 in NE. quadrant
 And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor. Pits impracticable. *No bearing trees within limits.*
 Land, level and rolling.
 Soil, very rocky, 4th rate gumbo.
 Timber, scattering cedar.
- NOTE: At this corner, I set off $23^{\circ} 25' S.$ on the decl. arc;
 and at noon ————— I observe the sun
 on the meridian. The resulting lat. is $35^{\circ} 35\frac{1}{2}' N.$, which
 is slightly less than the correct lat.
-
- West, on a true line, bet. secs. 5 and 32.
 Asc. rocky, E. slope 85 ft.

North Bdy. T25N R5W.

Chains.

23.90 Enter cedar timber, brs. N. and S.
 Top of asc. Thence over level land.
 35.90 Leave cedar timber, brs. N. and S.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. ^{sec. 32} marked on brass cap, 1912;
 $\frac{1}{4}$ S32 in N. half;
 And raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 N. of cor. Pits impracticable. *No bearing trees within limits.*
 50.00 Enter scattering timber, brs. N. and S.
 63.00 Leave timber brs. N. 20°W and S20°E.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the
 ground, for cor. of secs. 31 and 32, ^{T26N R5W} marked on brass
 cap, 1912;
 T26N in N.
 S5, S6, T25N in S. and
 R5W in W. half;
 S31 in NW. and
 S32 in NE. quadrant; from which
 A cedar, 24 ins. in diam., brs. N. 30°E, 5 lks. dist., marked
 T26N R5W S32 BT.
 A cedar 20 ins. in diam., brs. N. 81°W, 41 lks. dist., marked
 T26N R5W S31 BT.
 Land, level and rolling.
 Soil, rocky, 4th rate, gumbo.
 Timber, a heavy and scattering cedar.

West, bet. secs. 6 and 31
 Over gently rolling land.
 No timber.

14.00 Enter cedar and pinion timber, brs. N. and S.
 27.00 Leave timber, brs. N. and S.
 31.00 Enter timber brs. N. and S.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor. ^{sec. 31} marked on brass cap, 1912;
 $\frac{1}{4}$ S31 in N. half; from which
 A cedar 20 ins. in diam., brs. N. 80 $\frac{1}{2}$ °E, 183 lks. dist., marked
 $\frac{1}{4}$ S31 BT.
 A cedar 8 ins. in diam., brs. N. 35 $\frac{1}{4}$ °W, 422 lks. dist., marked
 $\frac{1}{4}$ S31 BT.
 44.00 Leave timber, brs. N. and S.
 50.00 Enter timber, brs. N. and S.
 76.58 Intersect the W. bdy. of the Tp. 5.54 chains S. of
 the cor. of Tps. 25 and 26 N., Rs. 5 and 6 W., which
 is an iron post 3 ins. in diam., 12 ins. above ground, marked
 on brass cap and witnessed as described by the Surveyor General.
 I change ^{markings on the} the cor. of Tps. 25 and 26 N., Rs. 5 and 6 W.
 to refer to Tps. 25 and 26 N. R6W. only., and obliterate
 the markings on the tree in sec. 6.
 At the point of intersection, I set an iron post, 3 ft.
 long, 3 ins. in diam., 24 ins. in the ground, for closing cor.
 to Tps. 25 and 26 N., R5W., marked on brass cap, 1912;
 CC, W. of center.
 R5W in E. and
 T26N, S36, S1, T25N, and
 R6W in W. half;
 T26N, S31, in NE. and
 T25N, S6 in SE. quadrant; from which
 A cedar, 7 ins. in diam., brs. N. 6 $\frac{1}{4}$ °E, 69 lks. dist., mkd.
 T26N R5W S31 BT.
 A cedar, 18 ins. in diam., brs. S. 71 $\frac{1}{4}$ °E, 143 lks. dist., mkd.
 T25N R5W S6 BT.
 Land, level,
 Soil, rocky, 4th rate, gumbo.
 Timber, cedar and pinion.

H. N. B.
 Dec. 20, 1912.

10

Line designated	True bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
South boundary 6th Standard Parallel North	West	480.00				480.00
West boundary	North	474.46	474.46			
North boundary	East	476.58			476.58	
East boundary (1st Guide Meridian West)	S.0° 42' E.	41.88		41.88	.751	
	S.0° 59' E.	39.67		39.66	.68	
	S.0° 35' W.	39.91		39.91		.41
	S.0° 31' E.	40.30		40.30	.36	
	S.2° 47' E.	41.15		41.10	2.00	
	S.2° 47' W.	39.81		39.79		1.93
	S.4° 05' E.	38.33		38.23	2.72	
	S.1° 27' W.	40.45		40.44		1.02
	S.1° 19' W.	36.64		36.63		.84
	S.2° 13' E.	40.49		40.40	1.56	
S.0° 34' E.	36.73		36.73	.33		
S.0° 39' W.	40.01		40.01		.46	
Convergency					.51	
Totals			474.46	475.11	485.28	484.36
				474.46	484.36	
		Error in Lat.		.55	.62	Error Dep

William B. Mimmel

U. S. Surveyor

Hub Bodinet

U. S. Transitman

North Bdy. of T26N.R5W.

//

Chains. *W.B.K.*

Jan. 13, 1913. At 3 hrs. 20 m. p.m., l.m.t., I set off $35^{\circ}41'N$. on the latl. arc; $21^{\circ}24'S$. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 26N.Rs. 4 and 5 W, recently established by me as described in book "N", page 9.

Thence I run, West, on a random line, along the N. bdy. of T26N.R5W., setting temp. $\frac{1}{4}$ sec. and secs. cors. to T26N.R5W. at intervals of 40 chs. and also setting temp. $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs. from the cor. of Tps. 27 N. Rs. 4 and 5 W., which is 11.94 chs. W. of the cor. of Tps. 26 N. Rs. 4 and 5 W.; and at 476.10 chs. from the cor. of Tps. 26 N., Rs. 4 and 5 W., intersect the W. bdy. of Tps. 26 N. R5W. $6.09\frac{1}{2}S$. of the cor. of Tps. 26 and 27 N., Rs. 5 and 6 W., which is an iron post 3 ins. in diam, 12 ins. above ground, marked and witnessed as described by the Surveyor General. I return to the cor. of Tps. 26N, Rs. 4 and 5 W., Thence I run, West, on a true line, on N. bdy of Sec. 1, T26N.R5W. Over rolling land, through scattering cedar timber. Desc. NW slope, 55 ft. Foot of desc. Enter draw. Center of draw, course N. Leave draw, asc. SE slope. 285 ft. The cor. of Tps. 27N., Rs. 4 and 5 W. established by me this day as described in Book "N" page 14.

27.25 Spur ridge, brs. NW. and SE.
29.75 Enter heavy timber, brs. N. and S.
40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap, 1913; $\frac{1}{4}S1$ in S half; from which
A pinion, 5 ins. in diam, brs. $S85\frac{1}{2}^{\circ}E$., 55 lks. dist., marked $\frac{1}{4}S1$ BT.
A cedar limb, 8 ins. in diam, brs. $S41^{\circ}W$., 28 lks. dist., marked $\frac{1}{4}S1$ BT.

40.55 Edge of rim rock, brs. NE and SW. Thence along S slope.
44.00 Desc. SW slope, .
45.02 Draw, 2 chs. wide, course SE. Asc. NE slope, 70 ft.
51.94 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap, 1913; $\frac{1}{4}S36$ in N, half; from which
A pinion, 8 ins. in diam, brs. $N41^{\circ}E$., 27 lks. dist., marked $\frac{1}{4}S36$ BT.
A pinion, 7 ins. in diam, brs. $N29^{\circ}W$., 40 lks. dist., marked $\frac{1}{4}S36$ BT.

57.00 Ridge, brs. NW. and SE.
60.00 Desc. W. slope, 130 ft.
79.70 Foot of desc.
80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 1 and 2, marked on brass cap, 1913; T27N, S35, S36 in N; T26N in S. and R5W in W. half; S1 in SE, and S2 in SW. quadrant; from which
A pinion, 12 ins. in diam, brs. $S.21\frac{1}{2}^{\circ}E$., 91 lks. dist., marked T26N R5W S1 BT.
A cedar, 20 ins. in diam, brs. $S28\frac{1}{2}^{\circ}W$., 190 lks. dist., marked T26N R5W S2 BT.

Land, mountainous and hilly.
Soil, volcanic, very rocky 4th rate.
Timber, sdrub cedar and pinion.
Mountainous land, 26 chs.

West, on a true line, on N. bdy. of sec. 2, T26N.R5W. Over rolling land, through heavy cedar and pinion timber. Draw, course NW.
3.00
11.94 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 35 and 36, marked on brass cap, 1913;

Chains.

- T27N in N;
S1, S2, T26N in S, and
R5W in W. half;
S35 in NW, and
S36 in NE. quadrant; from which
- A cedar, 24 ins. in diam, brs. N25 $\frac{1}{4}$ ° E., 333 lks. dist.,
marked T27N R5W S36 BT.
- A cedar, 35 ins. in diam, brs. N48 $\frac{3}{4}$ ° W., 286 lks. dist.,
marked T27N R5W S35 BT.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
the ground, for $\frac{1}{4}$ sec. cor. ^{sec. 2}; marked on brass cap, 1913;
 $\frac{1}{4}$ S2 in S half; from which
- A pinion, 9 ins. in diam, brs. S45 $\frac{3}{4}$ ° E., 86 lks. dist.,
marked $\frac{1}{4}$ S2 BT.
- A pinion, 12 ins. dia., brs. S77 $\frac{1}{2}$ ° W., 30 lks. dist.,
marked $\frac{1}{4}$ S2 BT.
- 46.50 Leave heavy timber, enter scattering timber, brs. N
and S.
- 51.94 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
the ground, for $\frac{1}{4}$ sec. cor. ^{sec. 35}; marked on brass cap, 1913;
 $\frac{1}{4}$ S35 in N half; from which
- A cedar, 40 ins. in diam, brs. N.77° E., 13 lks. dist.,
marked $\frac{1}{4}$ S 35 BT.
- A cedar, 30 ins. in diam, brs. N6° W., 398 lks. dist.,
marked $\frac{1}{4}$ S35 BT.
- 75.50 Enter heavy cedar timber, brs. N and S.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in
the ground, for cor. of secs. 2 and 3, ^{T26N, R.5W} marked on
brass cap, 1913;
T27N, S34; S35 in N. half;
T26N in S, and
R5W in W. half;
S2 in SE, and
S3 in SW. quadrant; from which
- A cedar, 10 ins. in diam, brs. S75° E., 15 lks. dist.,
marked T26N R5W S2 BT.
- A cedar, 8 ins. in diam, brs. S.34° W., 6 lks. dist.,
marked T26N R5W S3 BT.
- Land rolling and hilly.
Soil volcanic, rocky 4th rate.
Timber, scrub cedar and pinion.

W.B.K.
Jan. 13, 1913.

H.N.B.

- Jan. 14, 1913. At 7h 54m a.m., l.m.t., I set off 35° 41' N.
on the lat. arc; 21° 13 $\frac{1}{2}$ ' S. on the decl. arc, and
determine a meridian with the solar at the cor. of secs.
2 and 3, T.26N. R.5W, above described,
Thence I run,
West, on a true line, along the N. bdy. of sec. 3, T.26N. R.5W.
Desc. gradual SW. slope, through dense cedar timber and
undergrowth.
- 11.94 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in
the ground, for cor. of secs. 34 and 35, ^{T27N, R.5W} marked on
brass cap, 1913;
T27N in N;
S2, S3, T26N in S, and
R5W in W half;
S34 in NW, and
S35 in NE. quadrant; from which
- A pinion, 5 ins. in diam, brs. N.64° E., 36 lks. dist.,
marked T27N R5W S35 BT.
- A cedar, 6 ins. in diam, brs. N54 $\frac{1}{2}$ ° W., 54 lks. dist.,
marked T27N R5W S34 BT.
- 18.00 Leave timber, brs. NW and SE. Enter draw, course NW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
the ground, for $\frac{1}{4}$ sec. cor. ^{sec. 3}; marked on brass cap, 1913;
 $\frac{1}{4}$ S3 in S half;
- And raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
S. of cor. Pits impracticable. *No bearing trees within limits.*
- 44.00 Leave draw, asc. NE slope.

North Boundary of T26N., R. 5W.

Chains.

51.94 Set an iron post, 3 ft. long, 1 in.ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.^{sec 34}; marked on brass cap, 1913; $\frac{1}{4}$ S34 in N. half; from which
 A cedar, 30 ins.ⁱⁿdiam, brs. N. $12\frac{3}{4}^{\circ}$ E., 695 lks. dist., marked $\frac{1}{4}$ S34 BT.
 A cedar, 8 ins.ⁱⁿdiam, brs. N. 22° W., 285 lks. dist., marked $\frac{1}{4}$ S34 BT.

58.00 Top of asc., 50 ft. above $\frac{1}{4}$ cor. sec. 3.

60.00 Desc. gradual. NW. slope.

80.00 Set an iron post, 3 ft. long, 3 ins.ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 3 and 4,^{T26N. R. 5W} marked on brass cap, 1913;
 T27N, S33, S34 in N;
 T26N in S; and
~~R5W~~ in W. half;
 S3 in SE., and
 S4 in SW. quadrant; from which
 A cedar, 30 ins.ⁱⁿdiam, brs. S. $58\frac{3}{4}^{\circ}$ E., 271 lks. dist., marked T26N R5W S3 BT.
 A pinion, 15 ins.ⁱⁿdiam, brs. S $20\frac{1}{4}^{\circ}$ W., 310 lks. dist., marked T26N R5W S4 BT.
 Land, rolling and hilly.
 Soil, rocky 4th rate gumbo.
 Timber, scattering and heavy cedar and pinion.

6.00 West, on true line, on N.bdy. of sec. 4, T.26N.R.5W.
 Over level, rocky land, through scattering cedar timber.
 Desc SW. slope, 30 ft.

11.94 Set an iron post, 3 ft. long, 3 ins.ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 33, and 34,^{T27N. R. 5W} marked on brass cap, 1913;
 T27N in N;
 S4, S3, T26N in S., and
 R5W in W. half;
 S33 in NW., and

S34 in NE quadrant;
 And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
 Continue to desc. SW. slope.

24.50 Wash, 11 ch. wide, 7 ft. deep, in bottom of Rodger's draw, 6 chs. wide, course NW.

26.00 Asc. gradual NE. slope.

34.00 Enter timber, brs. N. and S.

40.00 Set an iron post, 3 ft. long, 1 in.ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.^{sec 4}; marked on brass cap, 1913;
 $\frac{1}{4}$ S4 in S. half; from which
 A cedar, 12 ins.ⁱⁿdiam, brs. S. 42° E., 73 lks. dist., marked $\frac{1}{4}$ S4 BT.
 A cedar limb, 18 ins.ⁱⁿdiam, brs. S. $3\frac{1}{2}^{\circ}$ W., 96 lks. dist., marked $\frac{1}{4}$ S4 BT.

46.00 Top of asc. Leave timber, brs. N. and S

51.94 Set an iron post, 3 ft. long, 1 in.ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor.^{sec 33}; marked on brass cap, 1913;
 $\frac{1}{4}$ S33 in N. half;

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*

80.00 Set an iron post, 3 ft. long, 3 ins.ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 4 and 5,^{T26N. R. 5W} marked on brass cap, 1913;

T27N, S32, S33 in N;

T26N in S; and

R5W in W half;

S4 in SE., and

S5 in SW. quadrant;

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. Pits impracticable. *No bearing trees within limits.*

Land, level and rolling.

Soil, rocky 4th rate gumbo.

Timber, scattering scrub cedar.

- Chains West, on a true line, on the North Bdy. of sec. 5, T26N. R.5W.
Over level land.
- 10.95 Road, from Seligman to Rodger's Ranch, brs. NE. and SW.
- 11.94 Set an iron post, 3 ft. long, 3 ins. ^{indiam}, 24 ins. in the ground, for cor. of secs. 32 and 33, ^{T27N. R.5W.} marked on brass cap, 1913;
T27N. in N;
S5, S4, T26N in S., and
R5W in W. half;
S32 in NW. and,
S33 in NE. quadrant;
And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
- 40.00 Set an iron post, 3 ft. long, 1 in. ^{indiam}, 26 ins. in the ground, for ¼ sec. cor. ^{sec 32} marked on brass cap, 1913;
½ S 5 in S. half;
And raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable. *No bearing trees within limits.*
- 51.94 Set an iron post, 3 ft. long, 1 in. ^{indiam}, 26 ins. in the ground, for ¼ sec. cor. ^{sec 32} marked on brass cap, 1913;
½ S32 in N. half;
And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
- 60.00 Enter dry bed of Red Lake, brs. N. and S.
- 80.00 Set an iron post, 3 ft. long, 3 ins. ^{indiam}, 24 ins. in the ground, for cor. of secs. 5 and 6, ^{T26N. R.5W.} marked on brass cap, 1913;
T27N, S31, S32, in N. ,
T26N in S., and
R5W. in W. half;
S5 in SE., and
S6 in SW. quadrant;
And raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor. Pits impracticable. *No bearing trees within limits.*
Land level and rolling.
Soil, rocky 4th rate gumbo; subsoil, hardpan at 2 ft.
Timber, scattering cedar.
- NOTE—The sky was overcast at noon, making an observation for lat. impossible.

Jan. 14, 1913.

- Jan. 15, 1913: At 2h. 25m. p.m., l.m.t., I set off 3541' N. on the lat arc; 21° 4½' S on the decl. arc and determine a meridian with the solar at the cor. of secs. 5 and 6, ^{above described}
- Thence I run,
West, on a true line, on the N. bdy. of sec. 6, T26N. R.5W.
Over level land, through scattering cedar timber.
- 11.94 Set an iron post 3 ft. long, 3 ins. ^{indiam}, 24 ins. in the ground for cor. of secs. 31 and 32, ^{T27N. R.5W.} marked on brass cap, 1913;
T27N in N,
S6, S5, T26N in S. and
R5W in W. half ;
S31 in NW. and
S32 in NE. quadrant;
And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
- 20.00 Leave Red Lake, brs. N. and S. Asc. gradually E. slope
- 40.00 Set an iron post, 3 ft. long, 1 in. ^{indiam}, 26 ins. in the ground, for ¼ sec. cor. ^{sec 31} marked on brass cap, 1913;
½ S6 in S. half; from which
A cedar, 18 ins. ^{indiam}, brs. S. 57° E., 639 lks. dist., marked ½ S6 BT.
A cedar, 20 ins. ^{indiam}, brs. S. 77½° W., 462 lks. dist., marked ½ S6 BT.
- 44.00 Enter scattering cedar timber, brs. N. and S.
- 51.90 Wash 5 lks. wide, 1 ft. deep, course ENE.
- 51.94 Set an iron post, 3 ft. long, 1 in. ^{indiam}, 26 ins. in the ground, for ¼ sec. cor. ^{sec 31} marked on brass cap, 1913;

Chains.

76.10

$\frac{1}{4}$ S31 in N. half; from which
 A cedar, 30 ins. ^{indiam}, brs. N. 47° E., 162 lks. dist.,
 marked $\frac{1}{4}$ S31 BT.
 A cedar, 36 ins. ^{indiam}, brs. N. 34 $\frac{1}{2}$ ° W., 433 lks. dist.,
 marked $\frac{1}{4}$ S31 BT.
 Intersect the W. bdy. of the Tp., 6.09 chs. S. of the old
 cor. of Tps. 26 and 27 N., Rs. 5 and 6 W., which is
 an iron post, 3 ins. ^{indiam}, 12 ins. above ground,
 marked ^{brass cap} and witnessed as described by the Surveyor Gen-
 eral. I alter the markings on the brass cap to refer to
 Tps. 26 and 27 N., R. 6 W. only, and destroy the
 markings on the bearing trees in sec. 6 and sec. 31.
 At the point of intersection, I set an iron post, 3 ft.
 long, 3 ins. ^{indiam}, 24 ins. in the ground, for closing
 cor. of Tps. 26 and 27 N., R. 5 W., marked on brass cap, 1913;
 CC, W. of center.
 R5W in E. and
 T27N, S36, S1, T26N, R6W, in W. half;
 T27N, S31 in NE. and
 T26N, S6 in SE. quadrant; fr,m which
 A cedar, 14 ins. ^{indiam}, brs. N. 34 $\frac{3}{4}$ ° E., 34 lks. dist.,
 marked T27N R5W S31 BT.
 A cedar, 12 ins. ^{indiam}, brs. S. 41 $\frac{1}{2}$ ° E., 85 lks. dist.,
 marked T26N R5W S6 BT.
 Land, level and rolling.
 Soil, 3rd and 4th rate gumbo; subsoil, gravel.
 Timber; scrub cedar and pinion.
 Undergrowth, scrub oak.

H.N.B.
 Jan. 15, 1913.

William B. Kimmel,
 U. S. Surveyor
John Bradstreet
 U. S. Transitman.

Boundaries of T.26 N., R. 5 W.
Latitudes, Departures and Closing Errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			Chains	Chains	Chains. w.	
South boundary	West	476.58	N.	S.	E.	476.58
West boundary	North	479.45	479.45			
North boundary	East	476.10			476.10	
East boundary (476.10 West)	South	480.00		480.00		
Convergency					.51	
Totals			479.45	480.00	476.62	476.58
			479.45	476.58		
Error in Lat.			.55	.04	<i>Error in Dep.</i>	

William B. Kimmel,

U. S. Surveyor

Heubert

U. S. Transitman

North Bdy. of T. 27 N., R. 5 W.

Chains.

W.B.K.

Jan. 24, 1913. At 2 hrs. 30 m. p.m., l.m.t., I set off 35°46' N. on the lat. arc; 19°9' S. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 27 and 28 N., Rs. 4 and 5 W, which is a stone 12X10X8 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I run, West, on a random line, along the N. bdy. of Tp. 27 N. R5W, setting temp. 1/4 sec. and sec. cors., at intervals of 40 chs.; and at 463.63 chs., intersect the E. bdy. of Tp. 27 N., R. 6 W., 16.33 chs. S. of the cor. of Tps. 27 and 28 N., Rs. 5 and 6 W., which is an iron post, 3 ins. in diam, 12 ins. above ground, marked and witnessed as described by the Surveyor General.

I return to the cor. of Tps. 27 and 28 N., R. 4 and 5 W.,

Thence I run, West, on a true line, bet. secs. 1 and 36.

Over gently rolling land, through scattering undergrowth.

Magnetic decl. 15°5' E.

40.00

Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1913; 1/4 S36 in N. and S1 in S. half;

And raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. No bearing trees within limits.

80.00

Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked on brass cap, 1913;

- T28N in N.,
- T27N in S. and
- R5W in W. half;
- S35 in NW.,
- S36 in NE.,
- S1 in SE. and
- S2 in SW. quadrant;

And raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. No bearing trees within limits.

Land, level and rolling. Soil, sandy clay formation, 2nd rate. Undergrowth, greasewood.

40.00

West, on a true line, bet. secs. 2 and 35. Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground for 1/4 sec. cor., marked on brass cap, 1913; 1/4 S35 in N. and S2 in S. half;

And raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. No bearing trees within limits.

51.45

Road, brs. NW. and SE.

64.00

Enter scattering timber.

80.00

Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 2, 3, 34 and 35., marked on brass cap, 1913;

- T28N in N.,
- T27N in S., and
- R5W in W. half;
- S34 in NW.,
- S35 in NE.,
- S2 in SE., and
- S3 in SW. quadrant; from which

A cedar, 12 ins. in diam, brs. N. 30 1/4 E., 221 lks. dist. marked T28N R5W S35 BT.

A pinion, 12 ins. in diam, brs. S85° E., 210 lks. dist., marked T27N R5W S2 BT.

A pinion, 28 ins. in diam, brs. S. 76° W., 358 lks. dist., marked T27N R5W S3 BT.

A cedar, 8 ins. in diam, brs. N. 39° W., 233 lks. dist., marked T28N R5W, S34 BT.

Land, level and rolling. S

Chains

	<p>Soil, sandy clay, 2nd rate, 1st 60 chs.; last 20 chs. very rocky. Timber, scrub cedar and pinion. Undergrowth, greasewood.</p> <p style="text-align: right;">Jan. 24, 1913.</p>
40.00	<p>Jan. 25, 1913, At 9 h 20m a.m., l.m.t., I set off 35° 48' N. on the lat. arc; 18° 57½' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35, on the N. bdy of the Tp, above described. Thence I run, West, on a true line, bet. secs. 3 and 34. Over rolling land, draining NE., through scattering timber and undergrowth.</p>
36.15	<p>Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913; ¼ S34 in N. and ¼ S3 in S. half from which A cedar, 20 ins. diam, brs. S. 15½° W., 269 lks. dist., marked ¼ S3 BT. No other trees within limits. Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.</p>
80.00	<p>Wash, 5 lks. wide, 3 ft. deep, course NE. Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked on brass cap, 1913; T28N in N., T27N in S., and R5W in W. half; S33 in NW., S34 in NE., S3 in SE. and S4 in SW. quadrant; from which A cedar, 10 ins. diam, brs. N. 26¼° E., 319 lks. dist., marked T28N R5W S34 BT. A cedar, 16 ins. diam, brs. S. 72½° E., 320 lks. dist., marked T27N R5W S3 BT. No other trees within limits. Raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, level and rolling. Soil, volcanic, very rocky, 4th rate. Timber, scrub cedar and pinion. Undergrowth, greasewood.</p>
20.00	<p>West, on a true line, bet. secs. 4 and 33 Over rolling land, through scattering timber. Desc. NW. slope 35 ft.</p>
24.00	<p>Foot of desc.; thence over level land.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground for ¼ sec. cor., marked on brass cap, 1913; ¼ S33 in N. and ¼ S4 in S. half; And raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. <i>No bearing trees within limits.</i></p>
58.00	<p>Enter heavy timber, brs. NE. and SW.</p>
66.00	<p>Leave timber, brs. NW. and SE.</p>
80.00	<p>Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground for cor. of secs. 32, 33, 4 and 5, marked on brass cap, 1913; T28 in N., T27N in S., and R5W in W. half; S32 in NW., S33 in NE., S4 in SE. and S5 in SW. quadrant; And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. <i>No bearing trees within limits.</i> Land, level and rolling. Soil, volcanic, very rocky, 4th rate. Timber, pinion and scattering cedar. Undergrowth, greasewood.</p>
NOTE	<p>At this corner, I set off 18° 56½' S. on the decl. arc;</p>

North Bdy. of T. 27 N., R. 5 W.

Chains.

and at noon— I observe the sun on the meridian. The resulting lat. is, $35^{\circ}46\frac{1}{2}'$ N., which slightly higher than the correct lat.

West, on a true line, bet. secs. 5 and 32.
Over rolling land, through scattering undergrowth.
10.75 Road, brs. NE. and SW.
34.00 Desc. W. slope, 140 ft.
40.00 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S32 in N. and
S5 in S. half;
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
52.00 Slope changes to NW.
55.92 Wash, 20 lks. wide, 3 ft. deep, course SW. Asc. SE. slope 120 ft.
71.75 Top of asc.; thence over rolling land.
80.00 Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32., marked on brass cap, 1913;
T28N in N.,
T27N in S. and
R5W in W. half;
S31 in Nw.,
S32 in NE.,
S5 in SE., and
S6 in SW. quadrant;
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable. *No bearing trees within limits.*
Land, rolling and hilly.
Soil, volcanic, rocky, 4th rate.
Undergrowth, greasewood.

40.00 West on a true line, bet. secs. 6 and 31.
Over rolling land, through scattering underbrush.
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, 1913;
 $\frac{1}{4}$ S31 in N. and
S6 in S. half;
And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
54.00 Enter scattering timber, brs. NW. and SE.
63.63 Intersect the E. bdy. of Tp. 27 N., R. 6 W., 16.33 chs. S. of the cor. of Tps. 27 and 28 N., Rs. 5 and 6 W., hereinbefore described.
I alter this cor. to refer to Tps. 27 and 28 N., R. 6 W. only, by changing the markings on the brass cap and by obliterating the markings on the bearing trees NE. and SE. of the cor.
At the point of intersection, I set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for closing cor. to Tps. 27 and 28 N. R. 5 W., marked on brass cap, 1913;
CC, W. of center.
R5W in E. and
T28N S36 R6W S1 T27N in W. half;
T28N S31 in NE. and
S6 T27N in SE. quadrant; from which
A pinion, 24 ins. diam, brs. N $61\frac{1}{2}^{\circ}$ E., 118 lks. dist., marked T28N R5W S31 BT.
A pinion, 16 ins. diam, brs. S. $59\frac{1}{4}^{\circ}$ E., 170 lks. dist., marked T27N R5W S6 BT.
Land, level and rolling.
Soil, volcanic, very rocky 4th rate.
Timber, scrub cedar and pinion.
Undergrowth, greasewood.

W.B.K.
Jan. 25, 1913.

William B. Kimmel,

U. S. Surveyor

S. bdy. of T. 22 N., R. 7 W.

Chains. W.B.K.

Survey commenced Feb. 6, 1913, and executed with Young and Sons Light Mountain Transit No. 8541, with Smith Solar Attachment. For description of Instrument, and Certificate of Approval, see book "O", page 1. Knowing from repeated tests of this instrument on a true meridian established by observations on Polaris, that it is in adjustment, I proceed to the survey of the South Bdy. of T. 22 N., R. 7 W.

At the ^{1st} Cor. of Tps. 21 and 22 N., Rs. 7 and 8 W., which is an iron post, 3 ins. in diam., 12 ins. above ground, marked ^{ON BRASS CAP} and witnessed as described by the Surveyor General, I set off 35° 15' N. on the lat. arc; 15° 37 1/2' S. on the decl. arc; and determine a meridian with the solar at 8 hrs. 32 m., a.m., l.m.t.

Thence I run, East, on a true line, bet. secs. 6 and 31. Desc. SE. slope, 80 ft., through heavy timber.

10.60 Gulch, course SW. Asc. SW. slope, 180 ft.

17.70 Spur ridge, brs. NE. and SW. Thence along S. slope.

32.70 Spur ridge, brs. N. and S. Desc. E. slope, 140 ft.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1913; 1/4 S31 in N. and 1/4 S6 in S. half; from which

A cedar, 14 ins. in diam., brs. N. 29 1/4 E., 22 lks. dist., marked 1/4 S31 BT.

A cedar, 12 ins. in diam., brs. S. 65 W., 21 lks. dist., marked 1/4 S6 BT.

45.90 Gulch, course S. Asc. W. slope, 190 ft.

62.00 Main ridge, brs. N. and S. Desc. E. slope, 160 ft.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked on brass cap, 1913;

T22N in N., T21N in S. and R7W in W. half; S31 in NW., S32 in NE., S5 in SE. and S6 in SW. quadrant; from which

A cedar, 8 ins. in diam., brs. N. 67 E., 18 lks. dist., marked T22N R7W S32 BT.

A cedar, 10 ins. in diam., brs. S. 44 1/4 E., 9 lks. dist., marked T21N R7W S5 BT.

A cedar, 16 ins. in diam., brs. S. 72 1/2 W., 30 lks. dist., marked T21N R7W S6 BT.

A pinion, 7 ins. in diam., brs. N. 56 1/4 W., 34 lks. dist., marked T22N R7W S31 BT.

Land, mountainous and hilly. Soil, very rocky 4th rate. Timber, scrub cedar and pinion. Undergrowth, scrub oak.

Mountainous land, 70 chs. Heavily timbered land, 80 chs.

East, on a true line, bet. secs. 5 and 32. Continue to desc. E. slope, 120 ft., through heavy timber and scattering undergrowth.

5.30 Gulch, course S. Asc. W. slope, 90 ft.

20.70 Spur ridge, brs. N. and S. Desc. E. slope, 35 ft.

28.20 Draw, course NE. Thence along N. slope.

34.70 Leave heavy, enter scattering timber, brs. NE. and SW. Desc. NE. slope, 65 ft.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1913;

Chains	
43.35 48.70 55.60 56.70 70.00 75.70 80.00	<p> $\frac{1}{4}$S32 in N. and S5 in S. half; from which A cedar, 14 ins. ⁱⁿdiam, brs. N. $79\frac{1}{2}^{\circ}$ W., 78 lks. dist., marked $\frac{1}{4}$S32 BT. A cedar, 6 ins. ⁱⁿdiam, brs. S. $24\frac{1}{2}^{\circ}$ W., 24 lks. dist., marked $\frac{1}{4}$S5 BT. Draw, course S. Asc. W. slope, 30 ft. Spur ridge, brs. N. and S. Desc. E. slope, 80 ft. Gulch, course SE. Asc. SW. slope, 25 ft. Thence along S. slope. Asc. rocky SW. slope, 45 ft. Spur ridge, brs. NW. and SE. Desc. NE. slope, 40 ft. Set an iron post, 3 ft. long, 3 ins. ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked on brass cap, 1913; T22N in N., T21N in S. and R7W in W. half; S32 in NW., S33 in NE., S4 in SE. and S5 in SW. quadrant; from which A cedar, 8 ins. ⁱⁿdiam, brs. N. 39° E., 296 lks. dist., marked T22N R7W S33 BT. A cedar, 40 ins. ⁱⁿdiam, brs. S. 58° E., 129 lks. dist., marked T21N R7W S4 BT. A cedar, 12 ins. ⁱⁿdiam, brs. S. $64\frac{1}{2}^{\circ}$ W., 188 lks. dist., marked T21N R7W S5 BT. A cedar, 20 ins. ⁱⁿdiam, brs. N. $86\frac{1}{4}^{\circ}$ W., 64 lks. dist., marked T22N R7W S32 BT. Land, rolling and mountainous. Soil, rocky 4th rate. Timber, scrub cedar and pinion. Undergrowth, scattering scrub oak. Mountainous land, 10 chs. Heavily timbered land, 34 chs. NOTE: The sky was overcast at noon, making an observation for latitude impossible. </p>
5.70 11.00 15.70 24.70 30.00 40.00 80.00	<p> East, on a true line, bet. secs. 4 and 33. Over rolling land, through scattering timber and under- growth. Asc. NW. slope, 55 ft. Spur ridge, brs. NE. and SW. Desc. rocky E. slope, 150 ft. Desc. SE. slope. Thence along S. slope. Spur ridge, brs. N. 5° W., and S. 5° E. Desc. E. slope, 50 ft. Foot of desc.; thence over rolling land. Set an iron post, 3 ft. long, 1 in. ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$S33 in N. and S4 in S. half; from which A cedar, 10 ins. ⁱⁿdiam, brs. N. $43\frac{3}{4}^{\circ}$ W., 372 lks. dist., marked $\frac{1}{4}$S33 BT. A pinion, 7 ins. ⁱⁿdiam, brs. S. $47\frac{3}{4}^{\circ}$ W., 86 lks. dist., marked $\frac{1}{4}$S4 BT. Set an iron post, 3 ft. long, 3 ins. ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked on brass cap, 1913; T22N in N., T21N in S., and R7W in W. half; </p>

South Bdy. of T. 22 N., R. 7 W.

Chains.

S33 in NW.,
 S34 in NE.,
 S3 in SE. and
 S4 in SW. quadrant; from which
 A cedar, 8 ins. diam., brs. N. 4° E., 182 lks. dist.,
 marked T22N R7W S34 BT.
 A cedar limb, 20 ins. diam., brs. N. 58½° W., 105 lks. dist.,
 marked T22N R7W S33 BT.
 No other trees within limits. Raise a mound of stone, 2
 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
 Land, rolling.
 Soil, first 40 chs., rocky 4th rate; last 40 chs., sandy
 loam, 3 rd rate.

Feb. 6, 1913.

Feb. 10, 1913: At 8 hrs. 53 m., a.m., l.m.t., I set off
 35° 15' N. on the lat. arc; 14° 21½' 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. above described

Thence I run,
 East, on a true line, bet. secs. 3 and 34.
 Over gently rolling land, through scattering timber.

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, 1913;

¼ S34 in N. and
 S3 in S. half; from which
 A cedar, 28 ins. diam., brs. N. 63½° W., 210 lks. dist.,
 marked ¼ S34 BT.

A cedar, 14 ins. diam., brs. S. 31° W., 143 lks. dist.,
 marked ¼ S3 BT.

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the
 ground, for cor. of secs. 2, 3, 34 and 35, marked on
 brass cap, 1913;

T22N in N.,
 T21N in S., and
 R7W in W. half:
 S34 in NW.,
 S35 in NE.,
 S2 in SE. and
 S3 in SW. quadrant; from which
 A cedar, 15 ins. diam., brs. N. 22½° E., 59 lks. dist.,
 marked T22N R7W S35 BT.
 A cedar, 8 ins. diam., brs. S. 69° E., 86 lks. dist.,
 marked T21N R7W S2 BT.
 A cedar, 6 ins. diam., brs. S. 42½° W., 123 lks. dist.,
 marked T21N R7W S3 BT.
 A cedar, 6 ins. diam., brs. N. 53° W., 309 lks. dist.,
 marked T22N R7W S34 BT.

Land, rolling.
 Soil, sandy loam, 3rd rate.
 Timber, scrub cedar and pinion.
 Undergrowth, rabbit brush and greasewood.

East, on a true line, bet. secs. 23 and 35
 Over rolling land, through scattering timber and under-
 growth.

2.00 Asc. NW. slope, 35 ft.
 8.70 Spur ridge, brs. NE. and SW. Desc. SE. slope, 55 ft.
 21.00 Foot of desc.; thence across level land.
 23.00 Center of draw, 4 chs. wide, course NE.
 29.00 Thence over rolling land.
 35.00 Leave timber, brs. NE. and SW.
 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, 1913;

Chains.

$\frac{1}{4}$ S35 in N. and
S2 in S. half;

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.
of cor. Pits impracticable. *No bearing trees within limits.*

NOTE: - At this corner I set off $14^{\circ} 19\frac{1}{2}'$ S. on the decl. arc; and
at noon I observe the sun
on the meridian, the resulting lat. is $35^{\circ} 15'$ N., which is
correct.

80.00

Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in
the ground, for cor. of secs. 2, 2, 35 and 36,
marked on brass cap, 1913;

T22N in N.,
T21N in S., and
R7W in W. half;
S35 in NW.,
S36 in NE.,
S1 in SE. and
S2 in SW. quadrant;

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W.
of cor. Pits impracticable. *No bearing trees within limits.*

Land, level and rolling.

Soil, sandy loam, 3rd rate.

Timber, scattering scrub cedar.

Undergrowth, scrub oak.

16.45

East, on a true line, bet. secs. 1 and 36.

Over rolling land, through scattering undergrowth.

29.80

Old fence, brs. NE. and SW.

40.00

Wagon road, brs. NE. and SW.

Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;

$\frac{1}{4}$ S36 in N. and
S1 in S. half;

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.
of cor. Pits impracticable. *No bearing trees within limits.*

89.65

Road, brs. N. and S.

92.73

Intersect. the E. bdy. of the Tp., 19.62 chs. N. of the
cor. of Tps. 21 and 22 N., R. 6 W., which is a lava
stone, 4x12x12 ins. above ground, marked and witnessed
as described by the Surveyor General.

At the point of intersection, I set an iron post, 3 ft.
long, 3 ins. in diam, 24 ins. in the ground, for closing
cor. of Tps. 21 and 22 N., R. 7 W., marked on brass cap, 1913;
CC, E. of center.

T22N, S31, S6, T21N, R6W in E; and
R7W in W. half.

T22N, S36 in NW., and
T21N, S1 in SW. quadrant;

And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of
cor. Pits impracticable. *No bearing trees within limits.*

Land, level and rolling.

Soil, sandy loam, 3rd rate.

Undergrowth, rabbit brush.

W.B.K.
Feb. 10, 1913.

William B. Himmel

U. S. Surveyor.

Boundaries of T. 22 N., R. 7 W.

BOOK 2691

Latitudes, Departures and Closing Errors

Line designated	True Bearing	Distance	Latitudes		Departures	
			Chains		Chains	
			N.	S.	E.	W.
South boundary	West.	492.73				492.73
West boundary	North	480.00	480.00			
North boundary	East.	491.56			491.56	
East boundary	South	479.14		479.14		
Convergency.					.53	
Totals.			480.00	479.14	492.09	492.73
			479.14			492.09
Error in lat.			.86	Error dep.		.64

William B. Kimmel.

U. S. Surveyor

East Boundary of T.21 N., R. 8 W.

Chains.

W.B.K. & H.N.B.

Survey commenced Feb. 26, 1913, and executed with Young and Sons Light Mountain Transits Nos. 7695 and 8541, with Smith Solar Attachments. For descriptions of instruments, and certificate of Approval see book "O", page 1. Knowing from recent and repeated tests of these instruments on a meridian established by Polaris observation that they are in adjustment, we proceed to the survey of T.21 N., R. 8 W.

H.N.B.

W.B.K. & H.N.B.

At 8 hrs. 5 m., a.m., l.m.t., I set off $35^{\circ} 9\frac{1}{2}' N.$ on the lat. arc; $8^{\circ} 45' S.$ on the decl. arc; and determine a mer. with the solar, at the $\frac{1}{4}$ Standard Cor. of Tps. 21 N., Rs. 7 and 8 W., which is a stone, 8 X 6 X 8 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I run,

North, on a random line, along the E. bdy. of T.21 N., R. 8 W., setting temporary $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs.; and at 474.61 chs., intersect the S. bdy of T.22 N., R.7 W., 4.92 chs. E. of the $\frac{1}{4}$ Cor. of Tps. 21 and 22 N., Rs. 7 and 8 W., which is an iron post, 3 ins. $\frac{1}{2}$ diam, 12 ins. above ground, marked and witnessed as described by the Surveyor General.

I alter the $\frac{1}{4}$ cor. of Tps. 21 and 22 N., Rs. 7 and 8 W., to refer to Tps. 22 N., Rs. 7 and 8 W. only, by altering the markings on the brass cap to read as follows:-

- T22N in N. and
- S1, R8W, S6, R7W, T21N in S. half;
- R8W S36 in NW., and
- R7W S31 in NE. quadrant; and obliterate the markings on the bearing trees SE. and SW. of the cor.

At the point of intersection, I set an iron post, 3 ft. long, 3 ins. $\frac{1}{2}$ diam, 24 ins. in the ground, for closing cor. of Tps. 21N., Rs. 7 and 8 W., marked on brass cap, 1913; CC, S. of center;

- T22N, R8W, S36, R7W, S31, in N. and
- T21N in S. half;
- S6, R7W in SE., and
- S1, R8W., in SW. quadrant; from which

- A pinion, 12 ins. $\frac{1}{2}$ diam, brs. S. $30\frac{1}{4}^{\circ} E.$, 11 lks. dist., marked $\frac{1}{4}$ T21N R7W S6 BT.
- A cedar, 12 ins. $\frac{1}{2}$ diam, brs. S. $28\frac{1}{4}^{\circ} W.$, 93 lks. dist., marked T21N R8W S1 BT.

February 26, 1913.

Feb. 28, 1913. At 7hrs. 30 m., a.m., l.m.t., I set off $35^{\circ} 15' N.$ on the lat. arc; $7^{\circ} 59' S.$ on the decl. arc; and determine a meridian with the solar at the Closing cor. of Tps. 21N., Rs. 7 and 8 W., above described.

Thence I run,

South, on a true line, bet. secs. 1 and 6. Desc. SE. slope, 110 ft., through heavy timber and scattering undergrowth.

16.00

Draw, course SW. Thence along W. slope.

34.00

Desc. gentle SW. slope.

40.00

Set an iron post, 3 ft. long, 1 in. $\frac{1}{2}$ diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S1 in W., and

- S6 in E. half; from which
- A cedar, 12 ins. $\frac{1}{2}$ diam, brs. N. $45\frac{1}{2}^{\circ} E.$, 85 lks. dist., marked $\frac{1}{4}$ S6 BT.

A cedar limb, 16 ins. $\frac{1}{2}$ diam, brs. N. $15\frac{1}{4}^{\circ} W.$, 305 lks. dist., marked $\frac{1}{4}$ S1 BT.

H.N.B.

42.00

W.B.K.

Foot of desc.; Thence across level land. Leave heavy, enter scattering timber, brs. NW. and SE.

Chains.

80.00

Set an iron post, 3 ft. long, 3 ins.ⁿdiam, 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked on brass cap, 1913;
 T21N in N. half;
 R8W S1 in NW.,
 R7W S6 in NE.,
 S7 in SE., and
 S12 in SW. quadrant; from which
 A cedar, 30 ins.ⁿdiam, brs. S.84° W., 233 lks. dist., marked T21N R8W S12 BT.
 A cedar, 40 ins.ⁿdiam, brs. N.83° W., 298 lks. dist., marked T21N R8W S1 BT.
 No other trees within limits. 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, rolling and level.
 Soil, 1st 40 chs., rocky 4th rate; last 40 chs., sandy loam and gumbo, 2nd and 3rd rate.
 Timber, scrub cedar and scattering pinion.
 Undergrowth, buck brush.

3.00

South, bet. secs. 7 and 12.
 Over level land, through scattering timber and undergrowth.
 Leave timber, brs. E. and W.

40.00

Set an iron post, 3 ft. long, 1 in.ⁿdiam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913;
 ¼ S12 in W. and
 S7 in E. half;

Dig pits, 18 X 18 X 12 ins., N and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

80.00

Set an iron post, 3 ft. long, 2 ins.ⁿdiam, 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked on brass cap, 1913;

T21N in N half;
 R8W S12 in NW.,
 R7W S7 in NE.,
 S18 in SE., and
 S13 in SW. 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, level.

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

Timber, scattering scrub cedar.

Undergrowth, greasewood.

40.00

South, bet. secs. 13 and 18.
 Over level land, through scattering undergrowth.
 Set an iron post, 3 ft. long, 1 in.ⁿdiam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913;
 ¼ S13 in W. and
 S18 in E. half;

Dig pits, 18 X 18 X 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

80.00

Set an iron post, 3 ft. long, 3 ins.ⁿdiam, 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, marked on brass cap, 1913;

T21N in N. half;
 R8W S13 in NW.,
 R7W S18 in NE.,
 S19 in SE., and
 S24 in SW. quadrant; from which,

East Boundary of T.21 N., R. 8 W.

Chains

A cedar, 30 ins. diam, brs. N.58° E., 210 lks. dist., marked T21N R7W S18 BT.
 No other trees within limits. Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
 Land, level.
 Soil, sandy loam and gumbo, 2nd and 3rd rate.
 Undergrowth, rabbit brush.

NOTE - A this corner, I set off 7° 57' S. on the decl. arc; and at noon I observe the sun on the meridian, the resulting lat. is 35° 12' N. which is slightly less than the correct lat.

6.00 South, bet. secs. 19 and 24.
 16.00 Over rolling land, through scattering undergrowth.
 30.00 Drain, 5 lks. wide, course NW.
 34.15 Enter scattering timber, brs. E. and W.
 38.40 Enter heavy timber, brs. E. and W.; desc. S. slope, 25 ft.
 40.00 Foot of desc.; tank brs. S.44½ W.
 Draw, course NW. Asc. NW. slope, 30 ft.
 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913; ¼ S24 in W. and ¼ S19 in E. half; from which
 A pinion, 9 ins. diam, brs. N.35° E., 90 lks. dist., marked ¼ S19 BT.
 A cedar, 20 ins. diam, brs. S.47° W., 60 lks. dist., marked ¼ S24 BT.
 44.00 Top of asc. Thence over rolling land.
 74.00 Desc. rocky SE slope. 50 ft.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, marked on brass cap, 1913;
 T21N in N. half;
 R8W S24 in NW.,
 R7W S19 in NE.,
 S30 in SE., and
 S25 in SW. quadrant; from which
 A cedar, 6 ins. diam, brs. N.56° E., 71 lks. dist., marked T21N R7W S19 BT.
 A cedar, 14 ins. diam, brs. S.57° E., 187 lks. dist., marked T21N R7W S30 BT.
 A cedar, 10 ins. diam, brs. S.38° W., 107 lks., dist., marked T21N R8W S25 BT.
 A cedar, 10 ins. diam, brs. N.23° W., 90 lks. dist., marked T21N R8W S24 BT.
 Land, level and rolling.
 Soil, rocky 3th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, rabbit brush, greasewood and buck brush.

.85 South, bet. secs. 25 and 30.
 Over rolling and hilly land, through heavy timber and dense undergrowth.
 12.00 Drain, 8 lks. wide, 1 ft. deep, course SW. Thence along W. slope.
 16.00 Desc. rocky SW. slope, 40 ft.
 20.00 Draw, course W. Asc. NW. slope, 20 ft.
 30.10 Thence along W. slope.
 32.00 Draw, course W.
 40.00 Asc. NW. slope, 65 ft.
 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913; ¼ S25 in W. and ¼ S30 in E. half; from which,

East Boundary of T.21 N., R. 8 W.

Chains.

A pinion, 7 ins.^mdiam, brs. N.52° E., 18 lks. dist., marked $\frac{1}{4}$ S30 BT.
 A cedar, 12 ins.^mdiam, brs. N.40° W., 31 lks. dist., marked $\frac{1}{4}$ S25 BT. W.B.K.
 H.N.B. Thence along W. slope.
 68.00 Desc. rocky SW. slope, 100 ft.
 72.00 Desc. S. slope.
 76.00 Desc. SE. slope.
 76.25 Draw, course SW.
 80.00 Set an iron post, 3 ft. long, 3 ins.^mdiam, 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked on brass cap, 1913;
 T21N in W. half;
 R8W S25 in NW.,
 R7W S30 in NE.,
 S31 in SE., and
 S36 in SW. quadrant; from which
 A cedar, 10 ins.^mdiam, brs. N.39 $\frac{1}{2}$ ° E., 78 lks. dist., marked T21N R7W S30 BT.
 A cedar, 12 ins.^mdiam, brs. S. 6° E., 49 lks. dist., marked T21N R7W S31 BT.
 A pinion, 14 ins.^mdiam., brs. S. 63° W., 67 lks. dist., marked T21N R8W S36 BT.
 A cedar, 16 ins.^mdiam, brs. N. 18° W., 102 lks. dist., marked T21N R8W S25 BT.
 Land, rolling and hilly.
 Soil, rocky 4th rate.
 Timber, pinion and scrub cedar.
 Undergrowth, greasewood and buckbrush.

South, bet. secs. 31 and 36.
 Over rolling land, through heavy timber and undergrowth.
 6.75 Draw, course SW.
 13.05 Draw, course W.
 23.75 Asc. NW. slope, 125 ft.
 35.80 Spur ridge, brs. NE. and SW. Thence along W. slope.
 40.00 Set an iron post, 3 ft. long, 1 in.^mdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S36 in W. and
 S31 in E. half; from which
 A cedar limb, 8 ins.^mdiam, brs. S.86° E., 87 lks. dist., marked $\frac{1}{4}$ S31 BT.
 A cedar, 10 ins.^mdiam, brs. S.53 $\frac{1}{2}$ ° W., 92 lks. dist., marked $\frac{1}{4}$ S36 BT.
 42.00 Desc. rocky SE. slope, 225 ft.
 60.00 Leave heavy, enter scattering timber.
 64.65 Gulch, 15 lks. wide, course W. Asc. N. slope, 30 ft.
 74.61 The ^{STANDARD} cor. of Tps. 21 N., Rs. 7 and 8 W., hereinbefore described.
 Land, mountainous and hilly.
 Soil, rocky 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, buck brush and greasewood.
H.N.B.
Feb. 28, 1913.

William B. Himmel

U. S. Surveyor.

Hubert

U. S. Transitman.

West Bdy. of T. 21 N., R. 9 W.

Chains

H.N.B

Survey commenced March 22, 1913, and executed with a Young and Sons Light Mountain Transit No. 8541 with Smith Solar Attachment. For description of Instrument and certificate of approval, see book "O", page 1. Knowing from recent and repeated observations on a mer. established by Polaris observations, that my transit is in adjustment, I proceed to the survey of T 21 N., R. 9 W.

At 9 hrs. 30 m. a.m., l.m.t., I set off 35° 9½' N. on the lat. arc; 0° 36' N. on the decl. arc; and determine a meridian with the solar, at the Standard Corner of Tps 21 N., Rs. 9 and 10 W., which is a stone, 24X20X20 ins., in a mound of stone, marked and witnessed as described by the Surveyor General.

Thence I run, North, on a random line, along the W. bdy. of T. 21 N. R. 9 W., setting temp. ¼ sec. and sec. cors. at intervals of 40 chs., and at 488.26 intersect the S. bdy. of T. 21 N., R. 10 W., 6.04 chs. W. of the cor. of Tps. 21 and 22 N. Rs. 9 and 10 W., which is an iron post, 3 ins. in diam., 12 ins. above ground, marked and witnessed as described by the Surveyor General.

I alter this cor. to refer to Tps. 22 N., Rs. 9 and 10 W. only, by changing the markings on the brass cap, and obliterating the markings on the bearing trees SE. and SW. of the cor.

At the point of intersection I set an iron post, 3 fts. long, 3 ins. in diam., 24 ins. in the ground, for closing cor. of Tps. 21 N. Rs. 9 and 10 W., marked on brass cap, 1913; CC, S. of center

T22N, R10W, S36, R9W, S31, in N. and T21N in S. half; S6 R9W in SE. and S1 R10W in SW. quadrant; from which

A cedar, 12 ins. in diam., brs. S. 25° E. 36 lks. dist., marked T21N R9W S6 BT.

A cedar, 28 ins. in diam., brs. S. 11¼° W. 48 lks. dist., marked T21N R10W S1 BT.

March 22, 1913.

March 24, 1913, At 8 hrs. 30 m. a.m., l.m.t., I set off 35° 15' N. on the lat. arc; 1° 22½' N. on the decl. arc; and determine a meridian with the solar, at the closing cor. of Tps. 21 N. Rs. 9 and 10 W., above described.

Thence I run, South, bet. secs. 1 and 6. Over rolling land, through scattering timber and undergrowth.

9.00 Wash, 8 lks. wide, 3 ft. deep, course NE. Asc. gradual NW slope.

16.00 Slope changes to W.

28.50 Wash, 12 lks. wide, 3 ft. deep, course NW. Asc. NW. slope 40 ft.

36.00 Top of asc. Thence along W. slope.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913; S1 in W. and S6 in E. half; from which

A cedar limb, 7 ins. in diam., brs. S. 38° E., 36 lks. dist., marked S6 BT.

A cedar limb, 5 ins. in diam., brs. N. 35½° W., 25 lks. dist., marked S1 BT.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked on brass cap, 1913; T21N in N. half; R10W S1 in NW., R9W S6 in NE., S7 in SE. and S12 in SW. quadrant; from which,

Chains

A cedar, 40 ins in diam, brs. N. $73\frac{1}{2}$ E., 117 lks. dist., marked T21N R9W S6 BT.
 A pinion, 10 ins in diam, brs. S. 79° E., 81 lks. dist., marked T21N R9W S7 BT.
 A cedar, 20 ins in diam, brs. S. 34° W., 62 lks. dist., marked T21N R10W S12 BT.
 A cedar, 10 ins in diam, brs. N. 62° W., 156 lks. dist., marked T21N R10W S1 BT.
 Land, rolling.
 Soil, rocky, 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, buck brush and scrub oak.

South, bet. secs. 7 and 12.
 Over rolling land, through scattering timber and undergrowth.

8.00 Desc. rocky, SE. slope, 300 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S12 in W. and $\frac{1}{4}$ S7 in E. half; from which
 A cedar, 14 ins in diam, brs. S. $83\frac{1}{4}$ E., 222 lks. dist., marked $\frac{1}{4}$ S7 BT.
 A cedar, 32 ins in diam, brs. S. $89\frac{1}{4}$ W., 189 lks. dist., marked $\frac{1}{4}$ S12 BT.
 42.00 Draw, course SW. Asc. NW. slope 30 ft.
 46.00 Thence along W. slope,
 50.00 Desc. SW. slope 20 ft.
 52.30 Draw, course W. Asc. NW. slope 50 ft.
 52.95 ~~Old road, brs. NE. and SW.~~
 62.00 ~~Top of asc.~~
 64.00 Desc. gradual SW. slope.
 80.00 Set an iron post, 3 ft. long, 3 ins in diam, 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked on brass cap, 1913;
 T21N in N.,
 R10W S12 in NW.,
 R9W S7 in NE.,
 S18 in SE. and
 S13 in SW. quadrant; from which
 A cedar, 20 ins in diam, brs. N. 14° E., 10 lks. dist., marked T21N R9W S7 BT.
 A pinion, 8 ins in diam, brs. S. $49\frac{1}{4}$ E., 50 lks. dist., marked T21N R9W S18 BT.
 A cedar, 16 ins in diam, brs. S. $84\frac{1}{4}$ W., 108 lks. dist., marked T21N R10W S13 BT.
 A pinion, 7 ins in diam, brs. N. $30\frac{1}{4}$ W., 44 lks. dist., marked T21N R10 W S12 BT.
 Land, rolling and hilly.
 Soil, rocky, 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, buck brush and scrub oak.

H.N.B.

W.B.K.

South, bet. secs. 13 and 18.
 Over rolling land, through scattering timber and undergrowth
 4.00 Desc. SW. slope 35 ft.
 9.25 Draw, course SW. Asc. NW. slope, 25 ft.
 11.15 Spur ridge, brs. E. and W. Desc. gradual SW. slope.
 14.82 Trail, brs. NW. and SE. Wash, 50 lks. wide, 3 ft. deep, course NW. Asc. gradual NE. slope.
 30.00 Top of asc. Thence over rolling land.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S13 in W. and
 S18 in E. half; from which
 A cedar, 7 ins in diam, brs. N. $79\frac{1}{2}$ E., 55 lks. dist., marked $\frac{1}{4}$ S18 BT.
 A pinion, 14 ins in diam, brs. S. $53\frac{1}{2}$ W., 121 lks. dist., marked $\frac{1}{4}$ S13 BT.
 45.30 Draw, course E. Asc. NE. slope 40 ft.

Chains
 50.95 Rocky, spur ridge, brs. E. and W. Desc. S.E slope 30 ft
 60.00 Draw, course E.
 72.75 Rocky, ridge, brs. NW. and SE. Continue over rolling
 land, draining W.
 80.00 Set an iron post, 3 ft. long, 3 ins^m diam, 24 ins. in
 the ground, for cor. of secs. 13, 18, 19 and 24,
 marked on brass cap, 1913;
 T21N in N.,
 R10W S13 in NW.,
 R9W S18 in NE.,
 S19 in SE. and
 S24 in SW. quadrant; from which
 A pinion, 8 ins^m diam, brs. N. 51° E., 138 lks. dist.,
 marked T21N R9W S18 BT.
 A pinion, 10 ins^m diam, brs. S. 43½° E., 90 lks. dist.,
 marked T21N R9W S19 BT.
 A pinion, 6 ins^m diam, brs. S. 84° W., 81 lks. dist.,
 marked T21N R10W S24 BT.
 A pinion, 5 ins^m diam, brs. N. 33¾° W., 68 lks. dist.,
 marked T21N R10W S13 BT.
 Land, rolling.
 Soil, rocky clay and gumbo, 2nd to 4th rate.
 Timber, cedar and pinion.
 Undergrowth, scrub oak.

NOTE - At this corner I set off 1° 25½' N. on the decl' arc;
 and at noon I observe the
 sun on the meridian. The resulting lat. is 35° 12' N., which
 is slightly less than the correct lat.

South, bet. secs. 19 and 24.
 Over granite boulders, through heavy timber and dense
 undergrowth.
 10.00 Leave granite boulders, br. NE. and SW.
 26.00 Desc. SW. slope 50 ft.
 31.75 Draw, course W. Asc. NW. slope 30 ft.
 37.00 Top of asc. brs. E. and W. Continue over rolling land.
 40.00 Set an iron post, 3 ft. long, 1 in.^m diam, 26 ins. in
 the ground, for ¼ sec. cor., marked on brass cap, 1913;
 ¼ S24 in W. and
 S19 in E. half; from which
 A cedar, 8 ins^m diam, brs. N. 2¼° E., 82 lks. dist.,
 marked ¼ S19 BT.
 A cedar, 12 ins^m diam, brs. N. 13° W., 121 lks. dist.,
 marked ¼ S24 BT.
 58.00 Desc. S. slope 50 ft.
 63.15 Wash, 3 lks. wide, 1 ft. deep, course W. Thence over
 rolling land.
 80.00 Set an iron post, 3 ft. long, 3 ins^m diam, 24 ins. in
 the ground, for cor. of secs. 19, 24, 25 and 30,
 marked on brass cap, 1913;
 T21 in N. half;
 R10W S24 in NW.,
 R9W S19 in NE.,
 S30 in SE., and
 S25 in SW. quadrant; from which
 A pinion, 8 ins^m diam, brs. N. 65½° E., 226 lks. dist.,
 marked T21N R9W S19 BT.
 A cedar 16 ins^m diam, brs. S. 15½° E., 381 lks. dist.,
 marked T21N R9W S30 BT.
 A cedar, 14 ins^m diam, brs. S. 35¼° W., 376 lks. dist.,
 marked T21N R10W S25 BT.
 A pinion, 12 ins^m diam, brs. N. 14° W., 181 lks. dist.,
 marked T21N R10W S24 BT.
 Land, rolling and hilly.
 Soil, rocky, 4th rate.
 Timber, scrub cedar.
 Undergrowth, buckbrush and scrub oak.

Mar. 24, 1913.

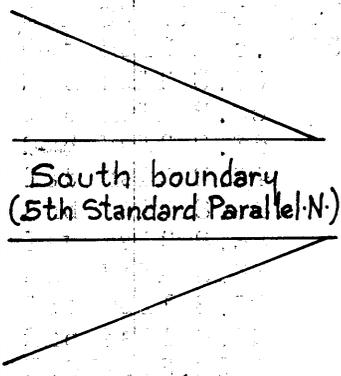
Chains. *Mar. 26, 1913,*
 South, bet. secs. 25 and 30.
 Over rolling land, through heavy timber and dense
 undergrowth. Asc. NW. slope 100 ft.
 23.00 Top of asc. Thence over rolling land, sloping West.
 Enter scattering timber, and dense undergrowth, brs.
 N. and S.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S25 in W. and
 $\frac{1}{4}$ S30 in E. half; from which
 A pinion, 7 ins. diam., brs. S. $86\frac{1}{2}$ E., 38 lks. dist.,
 marked $\frac{1}{4}$ S30 BT.
 A pinion, 9 ins. diam., brs. N. $83\frac{1}{4}$ W., 77 lks. dist.,
 marked $\frac{1}{4}$ S25 BT.
 43.10 Draw, course W. Asc. N. slope 50 ft.
 48.00 Ridge brs. E. and W. Desc. S. slope 90 ft.
 64.20 Draw, course W. Asc. N. slope, 60 ft.
 71.00 Top of asc. Desc. SW slope 50 ft.
 78.00 Foot of desc. brs. NW. and SE.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
 the ground, for cor. of secs. 25, 30, 31 and 36,
 marked on brass cap, 1913;
 T21N in N. half;
 R10W S25 in NW.
 R9W S30 in NE.,
 S31 in SE. and
 S36 in SW. quadrant; from which
 A cedar, 10 ins. diam., brs. N. $28\frac{1}{2}$ E., 163 lks. dist.,
 marked T21N R9W S30 BT.
 A pinion, 7 ins. diam., brs. S. $63\frac{1}{2}$ E., 160 lks. dist.,
 marked T21N R9W S31 BT.
 A cedar, 6 ins. diam., brs. S. $77\frac{1}{4}$ W., 111 lks. dist.,
 marked T21N R10W S36 BT.
 A cedar, 9 ins. diam., brs. N. $60\frac{1}{4}$ W., 143 lks. dist.,
 marked T21N R10W S25 BT.
 Land, rolling and hilly.
 Soil, gumbo with basalt, granite and sandstone rock,
 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak.

NOTE.—At this corner I set off $2^{\circ} 12\frac{1}{2}'$ N. on the decl. arc;
 and at noon ————— I observe the sun
 on the meridian. The resulting lat. is $35^{\circ} 10\frac{1}{2}'$ N., which is
 correct

South, bet. secs. 31 and 36.
 Along W. slope, through scattering timber and dense
 undergrowth.
 4.00 Enter draw, course S.
 8.20 Leave draw, course SW.
 10.00 Asc. NW. slope, 110 ft.
 20.00 Ridge, brs. NE. and S. 15° W. Thence along E. slope.
 35.40 Same ridge, brs. N. 10° W. and S. 10° E. Desc. SW. slope
 170 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S36 in W. and
 $\frac{1}{4}$ S31 in E. half; from which
 A cedar, 4 ins. diam., brs. N. $23\frac{1}{2}$ E., 95 lks. dist.,
 marked $\frac{1}{4}$ S31 BT.
 A cedar, 7 ins. diam., brs. S. $57\frac{3}{4}$ W., 79 lks. dist.,
 marked $\frac{1}{4}$ S36 BT.
 48.00 Saddle in same ridge, brs. N. 10° E., and S. 10° W.
 Asc. NE. slope 25 ft.
 52.00 Top of asc. Desc. SE. slope, 110 ft.
 70.90 Gulch, course SW. Asc. NW. slope 75 ft.
 79.50 Top of asc. Desc. SW. slope 40 ft.
 88.26 The Standard Corner of Tps. 21 N., Rs. 9 and 10 W., hereinbefore
 described.
 Land, mountainous.
 Soil, very rocky, 4th rate.
 Timber, scattering cedar and pinion.
 Undergrowth, scrub oak and buck brush.

Mar. 26, 1913
W.B.K

Boundaries of T.21 N., R. 9 W.
 Latitudes, Departures and Closing Errors.

Line designated.	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
			Chains		Chains	
 South boundary (5th Standard Parallel N.) West boundary	S. 89° 15' W.	40.36		.52		40.36
	S. 89° 18' W.	40.54		.49		40.54
	S. 89° 35' W.	40.35		.29		40.35
	West	40.67				40.67
	S. 89° 00' W.	40.94		.71		40.93
	N. 89° 53' W.	40.89	.08			40.89
	S. 83° 13' W.	39.84		4.72		39.56
	S. 89° 01' W.	41.17		.71		41.16
	N. 87° 41' W.	41.42	1.67			41.39
	S. 89° 46' W.	40.59		.17		40.59
N. 89° 48' W.	81.24	.28			81.24	
West boundary	North	488.26	488.26			
North boundary	East	485.53			485.53	
East boundary (2nd Guide Meridian W.)	South	160.00		160.00		
	S. 0° 07' W.	321.44		321.44	.66	
Convergency					.51	
Totals.			490.29	489.05	486.70	487.68
			489.05			486.70
Error in Lat.			1.24	Error in Dep. .98		

William B. Himmel

U. S. Surveyor

John Braustree

U. S. Transitman.

West Bdy. of T.22 N., R. 10 W.

Chains.

H.N.B.

Survey commenced Mar. 29, 1913, and executed with Young and Sons Light Mountain Transit No 7895, with Smith Solar Attachment. For description of instrument and certificate of approval, see book "O", page 1. Knowing from recent and repeated tests of my instrument on a meridian established by observations on Polaris, that it is in adjustment, I proceed to the survey of the W. Bdy. of T.22 N., R. 10 W. At 9hrs. 3 m., a.m., l.m.t., I set off 35° 20' N. on the lat. arc; 3° 20½' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 22 and 23 N., Rs. 10 and 11 W., which is an iron post, 3 ins. in diam, 12 ins. above ground, marked ^{IN BRASS CAP} and witnessed as described by the Surveyor General.

Thence I run

South, bet. secs. 1 and 6.

Desc. SW. slope, 40 ft. through scattering timber and undergrowth.

4.00 Leave timber, brs. NW. and SE. Thence over rolling land.
11.00 Wash, 30 lks. wide, 3 ft. deep, course E. Thence along slight SE. slope.

22.50 Centre of draw, 50 lks. wide, course SE.

31.00 Enter scattering timber, brs. NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913;

¼ S1 in W. and

¼ S6 in E. half; from which

A cedar, 9 ins. in diam, brs. N. 74½° E., 19 lks. dist., marked ¼ S6 BT.

A cedar, 11 ins. in diam, brs. N. 22° W., 62 lks. dist., marked ¼ S1 BT.

The point for sec. cor. at 80.00 falls in a wash therefore, at

79.50 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for witness cor. to cor. of secs. 1, 6, 7, and 12, marked on brass cap, 1913;

WC, S. of center;

T22 N. in N. half;

R11W S1 in NW.,

R10 W S6 in NE.,

S7 in SE. and

S12 in SW. quadrant; from which

A cedar, 15 ins. in diam, brs. N. 38° E., 167 lks. dist., marked WC T22N R10W S6 BT.

No other trees within limits. Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

80.00 Wash, 32 lks. wide, 2 ft. deep, course SE. Leave timber. Land, rolling.

Soil, rocky 4th rate.

Timber, scrub cedar.

Undergrowth, scrub oak.

South, bet. secs. 7 and 12.

Over rolling land.

2.00 Leave wash, course SE. Asc. slight N. slope, 30 ft.

14.00 Low ridge, brs. E. and W. Desc. SW. slope, 40 ft.

28.75 Draw, 50 lks. wide, course SE. Thence over rolling land.

40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913;

¼ S12 in W. and

¼ S7 in E. half;

And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. *No bearing trees within limits. H.N.B.*

56.00 ^{W.B.K.} Enter scattering timber, brs. E. and W.

Chains	
60.00	Desc. SW. slope, 40 ft.
63.00	Gulch, 15 lks. wide, course SE. Asc. NE. slope, 50 ft.
66.89	Top of asc. John Mund's House brs. N.65° 32'E. Well and red wooden tank br. N.73° 35'E. Desc. rocky SE. slope, 65 ft.
70.00	Foot of desc; thence in draw.
80.00	Set an iron post, 3 ft. long, 3 ins. ⁱⁿ diam, 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked on brass cap, 1913; T22N in N. half; R11W S12 in NW., R10W S7 in NE., S18 in SE. and S13 in SW. quadrant; And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. <i>No bearing trees within limits.</i> Land, rolling and hilly. Soil, rocky 4th rate. Timber, scattering cedar.
	<i>NOTE</i> - At this corner I set off 3° 23' N. on the decl. arc; and at noon ————— I observe the sun on the meridian, the resulting lat. is 35° 18½' N. which is slightly higher than the correct lat.
	South, bet. secs. 13 and 18. Over rolling land, through sagebrush undergrowth.
1.80	Road, brs. NE. and SW.
7.10	Wash, 10 lks. wide, 2 ft. deep, course SW. Leave draw, asc. NW. slope, 60 ft.
12.40	Broken dirt dam, still holding water, brs. S.78° W., about 14 chs. dist.
13.00	Top of ridge, brs. E. and W. Desc. SW. slope, 35 ft.
24.00	Foot of desc.; wash, 15 lks. wide, 6 ft. deep, course NW. Asc. NE. slope, 35 ft.
30.00	Enter scattering timber and dense undergrowth.
40.00	Set an iron post, 3 ft. long, 1 in. ⁱⁿ diam, 26 ins. in the ground; for ¼ sec. cor., marked on brass cap, 1913; ¼ S13 in W. and S18 in E. half; from which A cedar, 9 ins. ⁱⁿ diam, brs. S.60° E., 44 lks. dist., marked ¼ S18 BT. A cedar, 24 ins. ⁱⁿ diam, brs. S.70° W., 66 lks. dist., marked ¼ S13 BT.
42.00	Enter heavy timber. Asc. NE. slope, 120 ft.
52.00	Top of asc. ; E. side of hill. Desc. SE. slope, 80 ft.
53.00	Along edge of precipice, 150 ft. high.
60.00	Leave timber, brs. NE. and SW.
63.50	Wash, 24 lks. wide, 4 ft. deep, course NE.
65.00	Enter timber, brs. NE. and SW. Asc. NW. slope, 90 ft.
74.00	Ridge, brs. E. and W. Desc. slight SW. slope,
80.00	Set an iron post, 3 ft. long, 3 ins. ⁱⁿ diam, 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, marked on brass cap, 1913; T22N in N. half; R11W S13 in NW., R10W S18 in NE., S19 in SE. and S24 in SW. quadrant; from which A cedar, 15 ins. ⁱⁿ diam, brs. N.25° E., 10 lks. dist., marked T22N R10W S18 BT. A cedar, 12 ins. ⁱⁿ diam, brs. S.68° E., 137 lks. dist., marked T22N R10W S19 BT.

West Edy. of T.22 N., R.10 W.

Chains.

A cedar, 40 ins. indiam, brs. S.70 $\frac{3}{4}$ °W, 53 lks. dist., marked T22N R11W S24 BT.
 A cedar, 9 ins. indiam, brs. N.41 $\frac{1}{4}$ °W., 116 lks. dist., marked T22N R11W S13 BT.
 Land, rolling and hilly.
 Soil, rocky 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.
 Dense undergrowth and heavy timber, 45.00 chs.

South, bet. secs. 19 and 24.
 Over rolling land, through scattering timber and undergrowth. Desc SW. slope, 35 ft.
 4.00 Foot of desc., thence over level land. Leave timber.
 6.50 Center of draw, 3 chs. wide, course NW. Asc. NW. slope, 50 ft.
 11.00 Enter scattering timber and dense undergrowth.
 16.00 Top of asc.; rocky ridge, brs. E. and W. Thence over rolling land.

March 29, 1913.

March 31, 1913. At 8hrs. 2 m., a.m., l.m.t., I set off 35° 17 $\frac{1}{2}$ ' N. on the lat. arc; 4° 6 $\frac{1}{2}$ ' N. on the decl. arc; and determine a meridian with the solar at this point.

Thence I continue South, bet. secs. 19 and 24.
 Over rolling land, through scattering timber and dense undergrowth.

18.00 Enter heavy timber, brs. E. and W.
 32.20 Wash, 30 lks. wide, 3 ft. deep, course W.
 40.00 Set an iron post, 3 ft. long, 1 in. indiam, 25 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S24 in W. and S19 in E. half; from which
 A pinion, 6 ins. indiam, brs. S.25° E., 95 lks. dist., marked $\frac{1}{4}$ S19 BT.
 A cedar, 5 ins. indiam, brs. S.43° W., 20 lks. dist. marked $\frac{1}{4}$ S24 BT.
 57.75 Draw, 40 lks. wide, course NW. Asc. NW. slope, 55 ft.
 64.00 Top of asc.: desc. SW. slope, 15 ft.
 66.00 Head of gulch, 10 lks. wide, course W. Asc. NW. slope, 135 ft.

73.75 Gulch, 8 lks. wide, course W. Continue to asc. NW. slope.
 80.00 Set an iron post, 3 ft. long, 3 ins. indiam, 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, marked on brass cap, 1913;
 T22N in N. half;
 R11W S24 in NW.,
 R10W S19 in NE.,
 S30 in SE., and
 S25 in SW. quadrant; from which
 A pinion, 10 ins. indiam, brs. N.67 $\frac{1}{2}$ ° E., 117 lks. dist., marked T22N R10W S19 BT.
 A cedar, 5 ins. indiam, brs. S.64 $\frac{1}{4}$ ° E., 57 lks. dist., marked T22N R10W S30 BT.
 A cedar, 16 ins. indiam, brs. S.69 $\frac{1}{2}$ ° W., 68 lks. dist., marked T22N R11W S25 BT.
 A pinion, 6 ins. indiam, brs. N.34 $\frac{1}{2}$ ° W., 86 lks. dist., marked T22N R11W S24 BT.
 Land, rolling and hilly.
 Soil, very rocky 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.
 Dense undergrowth and heavy timber, 70 chs.

Chains	
	South, bet. secs. 25 and 30. Over mountainous land, through heavy timber and dense undergrowth. Desc. SE. slope, 105 ft. Draw, 50 lks. wide, course SE. Asc. NE. slope, 125 ft. Ridge, brs. NW. and SE. Desc. SW. slope, 40 ft. Bottom of desc.; asc. NW. slope, 60 ft. Ridge, brs. NW. and SE. Desc. SW. slope, 170 ft. 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, 1913; $\frac{1}{4}$ S25 in W. and S30 in E. half; from which A cedar, 10 ins. diam, brs. N.80° E., 79 lks. dist., marked $\frac{1}{4}$ S30 BT. A cedar, 30 ins. diam, brs. N.28° W., 19 lks. dist., marked $\frac{1}{4}$ S25 BT. Foot of desc.; thence over rolling land. Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked on brass cap, 1913; T22N in N. half; R11W S25 in NW., R10W S30 in NE., S31 in SE., and S36 in SW. quadrant; from which A cedar, 14 ins. diam, brs. N.24° E., 101 lks. dist., marked T22N R10W S30 BT. A cedar, 14 ins. diam, brs. S.32° E., 34 lks. dist., marked T22N R10W S31 BT. A cedar, 12 ins. diam, brs. S.50° W., 22 lks. dist., marked T22N R11W S36 BT. A cedar, 10 ins. diam, brs. N.26 $\frac{1}{4}$ ° W., 91 lks. dist., marked T22N R11W S25 BT. Land, mountainous and hilly. Soil, rocky 4th rate. Timber, scrub cedar and pinion. Undergrowth, buck brush and scrub oak. NOTE - At this corner, I set off 4° 9 $\frac{1}{2}$ ' N. on the decl. arc; and at noon ————— I observe the sun on the meridian, the resulting lat. is. 35° 15 $\frac{1}{2}$ ' N., which is slightly less than the correct lat.
8.80	
21.00	
28.00	
37.00	
40.00	
75.00	
80.00	
	South, bet. secs. 31 and 36. Over rolling land, through heavy timber and dense undergrowth. Leave heavy, enter scattering timber. Enter heavy timber. Low ridge, brs. NE. and SW. Thence along E. 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, 1913; $\frac{1}{4}$ S36 in W. and S31 in E. half; from which A cedar, 8 ins. diam, brs. N.14° E., 12 lks. dist., marked $\frac{1}{4}$ S31 BT. A cedar, 24 ins. diam, brs. N.60° W., 12 lks. dist., marked $\frac{1}{4}$ S36 BT. Asc. NE. slope, 30 ft. Ridge, brs. E. and W. Desc. SE. slope, 180 ft. Wash, 15 lks. wide, 4 ft. deep, course E. Asc. NE. slope, 60 ft. Top of asc.; thence along E. slope of hill. Desc. SE. slope, 40 ft. Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of Tps. 21 and 22 N., Rs. 10 and 11 W., marked on brass cap, 1913;
2.00	
15.00	
26.00	
40.00	
44.00	
48.00	
52.75	
74.00	
76.00	
80.00	

West Bdy. of T. 22 N., R. 10 W

Chains.

T22N in N.,
 R10W in E.,
 T21N in S., and
 R11W in W. half;
 S36 in NW.,
 S31 in NE.,
 S6 in SE., and
 S1 in SW. quadrant; from which
 A cedar, 12 ins. in diam, brs. N.50° E., 120 lks. dist.,
 Marked T22N R10W S31 BT.
 A cedar, 16 ins. in diam, brs. S.60° E., 63 lks. dist.,
 marked T21N R10W S6 BT.
 A cedar, 12 ins. in diam, brs. S.45° W., 64 lks. dist.,
 marked T21N R11W S1 BT.
 A cedar, 10 ins. in diam, brs. N.5° W., 135 lks. dist.,
 marked T22N R11W S36 BT.
 Lava boulder in place, 6 X 6 X 6 ft above ground,
 brs. N.10° W. 35 lks. dist.
 Land, mountainous and hilly.
 Soil, rocky 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.

W.B.K.
 March 31, 1913.

William B. Himmel

U.S. Surveyor.

800 Broadway

U. S. Transitman.

South Boundary of T. 22 N., R. 10 W.

Chains

W. B. K. and H. N. B.
Survey commenced March 29, 1913, and executed with Young and Sons Light Mountain Transits Nos. 7695 and 8541, with Smith Solar Attachment. For description of instruments and certificate of approval, see book "O," page 1.

Knowing from recent and repeated tests of these transits on a meridian established by observations on Polaris, that they are in adjustment, we proceed to the survey of the South Bdy. of T. 22 N., R. 10 W.

W. B. K. and H. N. B.

W. B. K.

At 9 hrs. a. m., l. m. t., I set off 35° 15' N. on the lat. arc; 3° 20½' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 22 N., Rs. 9 and 10 W., originally cor. of Tps. 21 & 22 N., Rs. 9 & 10 W., but recently changed by H. N. Bradstreet to refer to Tps. 22 N., Rs. 9 and 10 W. only, as hereinbefore described on page 33.

Thence, I run

West, on a random line, along the South Bdy. of Tp. 22 N., R. 10 W., setting temp. ¼ sec. and sec. cors. at intervals of 40 chs.; and at 480.09 chs., fall 14 lks. S. of the cor. of Tps. 21 and 22 N., Rs. 10 and 11 W., recently established by me as hereinbefore described on page 42.

The falling answers to a correction of 0° 01', or 2 lks. N. per mile, counting from the SE. cor. of the Tp.

March 29, 1913.

April 1, 1913. At 7 hrs. 46 m., a. m., l. m. t., I set off 35° 15' N. on the lat. arc; 4° 29½' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 21 and 22 N., Rs. 10 and 11 W., recently estab. by me as hereinbefore described on page 42.

Thence, I run

S. 89° 59' E., bet. secs. 6 and 31, marking and blazing true line.

Desc. SE. slope, through scattering timber and undergrowth.

13.00 Foot of desc.; leave timber, brs. N. and S.; thence across draw, course S.

16.00 Low ridge, brs. N. and S. Leave draw.

38.00 Desc. SE. slope, 25 ft.

38.60 Wash, 60 lks. wide, 3 ft. deep, course SW. Asc. NW. slope, 30 ft.

40.00 Top of asc.; thence over rolling land.

40.09 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913;

¼S31 in N. and S6 in S. half; from which

A cedar, 9 ins. in diam., brs. N. 17° E., 15 lks. dist., marked ¼S31 BT.

A cedar, 20 ins. in diam., brs. S. 14½° W., 279 lks. dist., marked ¼S6 B. T.

53.35 Road, brs. N. and S.

57.00 Desc. SE. slope, 20 ft.

60.00 Wash, 45 lks. wide, 3 ft. deep, course SW. Asc. NW. slope, 20 ft.

66.00 Top of asc., thence over rolling land.

76.00 Enter wash, 20 lks. wide, 3 ft. deep, course W. and SW.

80.09 Point for cor. falls in wash. No suitable palce to set cor. E. or W. of point; therefore I run

N. 0° 3' W., 1.50 chs. and

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for witness cor. to cor. of secs. 5, 6, 31, and 32, marked on brass cap, 1913;

WC S. of center;

T22N in N.,

T21N in S. and

R10W in W. half;

Chains.

S31 in NW.,
 S32 in NE.,
 S5 in SE. and
 S6 in SW. quadrant; from which
 A cedar, 8 ins. in diam., brs. N. 65° E., 81 lks.
 dist., marked WC T22N R10W., S32 BT.
 A cedar, 9 ins. in diam., brs. N. 66° W., 119 lks.
 dist., marked WC T22N R10W S31 BT.
 No other trees within limits. Raise a mound of stone,
 2 ft. base, 1½ ft. high, W. of cor. Pits, impracticable.
 Land, rolling and hilly.
 Soil, decomposed granite, 3rd rate.
 Timber, scattering cedar.
 Undergrowth, scrub oak and buck brush.
 Undergrowth, 70 chs.

 From the point for cor. of secs. 5, 6, 31, and 32, I run
 S. 89° 59' E., bet. secs. 5 and 32.

In wash, course W.

3.00 Leave wash, course SW. and W. Thence over rolling land.
 6.00 Asc. NW. slope, 165 ft. Enter dense undergrowth.
 20.00 Top of asc.; rocky ridge, brs. NW. and SE. Desc. NE.
 slope, 150 ft.
 32.50 Center of draw, 3 chs. wide, course NW. Thence over
 rolling land.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for ¼ sec. cor., marked on brass cap, 1913;
 ¼S32 in N. and
 S5 in S. half; from which
 A cedar, 18 ins. in diam., brs. N. 9° W., 42 lks.
 dist., marked ¼S32 BT.
 A cedar, 18 ins. in diam., brs. S. 48½° E., 66 lks.
 dist., marked ¼S5 B.T.
 74.00 Asc. NW. slope, 80 ft.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins.
 in the ground, for cor. of secs. 4, 5, 32, and 33,
 marked on brass cap, 1913;
 T22N in N.,
 T21N in S., and
 R10W in W. half;
 S32 in NW.,
 S33 in NE.,
 S4 in SE., and
 S5 in SW. quadrant, from which
 A cedar, 8 ins. in diam., brs. S. 85¾° E., 128 lks.
 dist., marked T21N R10W S4 BT.
 No other trees within limits. Raise a mound of stone,
 2 ft. base, 1½ ft. high, W. of cor.
 Pits, impracticable.
 Land, rolling and hilly.
 Soil, decomposed granite, rocky, 4th rate.
 Timber, scattering scrub cedar.
 Undergrowth, dense scrub oak and buck brush.
 Dense undergrowth, 75 chs.

W. B. K.

 H. N. B.

S. 89° 59' E., bet. secs. 4 and 33.

Over hilly land, through scattering timber and dense
 undergrowth.

2.00 Desc. NE. slope, 50 ft.
 8.00 Gulch, course N. Asc. NW. slope, 60 ft.
 13.00 Ridge, brs. N. and S. Desc. SE. Slope, 70 ft.
 20.00 Foot of desc.; thence over rolling land.
 Leave undergrowth, brs. N. and S.

South Bdy. of T. 22 N., R. 10 W.

Chains.

28.00 Enter scattering timber and undergrowth, brs. N. and S.
 34.00 Asc. W. slope, 225 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. ^{indiam}, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S33 in N. and S4 in S. half; And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. *No bearing trees within limits.*
 46.00 Top of asc.; thence over level land.
 Enter heavy timber, brs. N. and S.
 70.00 Desc. E. slope, 90 ft.
 80.00 Set an iron post, 3 ft. long, 3 ins. ^{indiam}, 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked on brass cap, 1913; T22N in N., T21N in S. and R10W in W. half; S33 in NW., S34 in NE., S3 in SE., and S4 in SW. quadrant; from which
 A cedar, 7 ins. ^{indiam}, brs. N. 27° E., 44 lks. dist., marked T22N R10W S34 BT.
 A cedar, 10 ins. ^{indiam}, brs. S. 24° W., 150 lks. dist., marked T21N R10W S4 BT.
 No other trees within limits. 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. Timber, scrub cedar and pinion. Undergrowth, scrub oak and buck brush. Mountainous land, 15 chs.; dense undergrowth, 70.00 chs.
 NOTE - At this corner, I set off 4° 33' N. on the decl. arc; and at noon - - - - - I observe the sun on the meridian, the resulting lat. is 35° 15' N., which is slightly higher than the correct lat.

H.N.B.

W.B.K.

S. 89° 59' E., bet. secs. 3 and 34.
 Desc. NE. slope, 30 ft., through scattering timber and dense undergrowth.
 7.00 Gulch, 5 lks. wide, course NE. Continue to desc. E. slope, 90 ft.
 12.00 Foot of desc.; thence over level land.
 40.00 Set an iron post, 3 ft. long, 1 in. ^{indiam}, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S34 in N. and S3 in S. half; from which
 A cedar, 28 ins. ^{indiam}, brs. N. 5 $\frac{1}{4}$ ° E., 169 lks. dist., marked $\frac{1}{4}$ S34 BT.
 A cedar, 26 ins. ^{indiam}, brs. S. 67° W., 219 lks. dist., marked $\frac{1}{4}$ S3 BT.
 42.50 Leave scattering ^{enter heavy} timber and undergrowth.
 44.00 Foot of hill, brs. NW. and SE. Asc. W. slope, 130 ft.
 55.00 Ridge, brs. N. and S. Desc. E. slope, 155 ft.
 78.10 Draw, course SE.
 79.30 Rocky spur ridge, brs. NW. and SE.
 80.00 Set an iron post, 3 ft. long, 3 ins. ^{indiam}, 24 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, marked on brass cap, 1913; T22N in N., T21N in S., and R10W in W. half; S34 in NW., S35 in NE., S2 in SE., and S3 in SW. quadrant, from which

Chains.

A cedar, 16 ins. indiam, brs. N. 56° E., 346 lks. dist., marked T22N R10W S35 BT.
 A cedar, 6 ins. indiam, brs. S. $10\frac{1}{2}^{\circ}$ E., 209 lks. dist., marked T21N R10W S2 BT.
 A pinion, 12 ins. indiam, brs. S. $73\frac{3}{4}^{\circ}$ W., 74 lks. dist., marked T21N R10W S3 BT.
 A cedar, 10 ins. indiam, brs. N. $78\frac{3}{4}^{\circ}$ W., 49 lks. dist., marked T22N R10W S34 BT.
 Land, rolling and mountainous.
 Soil, decomposed granite, gravelly, 3rd rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.
 Mountainous land, 15 chs. Dense undergrowth, 40 chs.

S. $89^{\circ} 59'$ E., bet. secs. 2 and 35.
 Over rolling land, through heavy timber and dense undergrowth.
 2.00 Wash, 3 lks. wide, 1 ft. deep, course SE.
 12.00 Asc. SW. slope, 55 ft.
 17.40 Spur ridge, brs. NW. and SE. Desc. NE. slope, 35 ft.
 22.45 Draw, course SE. Asc. SW. slope, 20 ft.
 25.50 Spur ridge, brs. N. and S. Desc. SE. slope, 25 ft.
 27.40 Draw, course SW. Asc. NW. slope, 75 ft.
 36.00 Top of asc.; desc. NE. slope, 60 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. indiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S35 in N. and S2 in S. half; from which
 A pinion, 7 ins. indiam, brs. N. 9° E., 79 lks. dist., marked $\frac{1}{4}$ S35 BT.
 A cedar, 18 ins. indiam, brs. S. $73\frac{1}{2}^{\circ}$ E., 108 lks. dist., marked $\frac{1}{4}$ S2 BT. W.B.K.
 46.10 H.N.B. Draw, course SE. Thence over rolling land.
 53.30 Draw, course S. Asc. SW. slope, 85 ft.
 80.00 Set an iron post, 3 ft. long, 3 ins. indiam, 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked on brass cap, 1913;
 T22N in N.,
 T21N in S., and
 R10W in W. half;
 S35 in NW.,
 S36 in NE.,
 S1 in SE. and
 S2 in SW. quadrant; from which
 A cedar, 17 ins. indiam, brs. N. $80\frac{3}{4}^{\circ}$ E., 64 lks. dist., marked T22N R10W S36 BT.
 A cedar, 12 ins. indiam, brs. S. $51\frac{1}{4}^{\circ}$ E., 74 lks. dist., marked T21N R10W S1 BT.
 A pinion, 10 ins. indiam, brs. S. $69\frac{3}{4}^{\circ}$ W., 38 lks. dist., marked T21N R10W S2 BT.
 A cedar, 8 ins. indiam, brs. N. $8\frac{1}{2}^{\circ}$ W., 60 lks. dist., marked T22N R10W S35 BT.
 Land, rolling.
 Soil, gumbo and clay, rocky, 3rd and 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.

S. $89^{\circ} 59'$ E., bet. secs. 1 and 36.
 Over rolling land, through heavy timber and dense undergrowth.
 4.00 Ridge, brs. N. and S.
 15.70 Wash, 5 lks. wide, 1 ft. deep, course SE.

South Bdy. of T. 22 N., R. 10 W.

Chains.

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, 1913; $\frac{1}{4}$ S36 in N. and S1 in S. half; from which
 A cedar, 17 ins. diam, brs. N. $61\frac{1}{4}^{\circ}$ E., 11 lks. dist., marked $\frac{1}{4}$ S36 BT.
 A cedar, 6 ins. diam, brs. S. $4\frac{1}{2}^{\circ}$ E., 44 lks. dist., marked $\frac{1}{4}$ S1 BT.

54.00 Desc. SE. slope, 50 ft.

66.00 Foot of desc.; thence over rolling land.

73.96 The closing cor. of Tps. 21N., Rs. 9 and 10 W. recently established by me as hereinbefore described on page 33.

80.00 The cor. of Tps. 22 N., Rs. 9 and 10 W. originally cor. of Tps. 21 and 22 N., Rs. 9 and 10 W. but recently changed by me as hereinbefore described on page 33.
 Land, level and rolling.
 Soil, rocky 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.
 Heavy timber and dense undergrowth, 80 cms. H.N.B.
 April 1, 1913.

William B. Himmel.

U. S. Surveyor.

H. B. Bradstreet

U. S. Transitman.

Boundaries of T. 22 N., R. 10 W.

Line designated	True Bearing	Distance.	Latitudes		Departures	
			N. <small>chains</small>	S.	E. <small>chains</small>	W.
South boundary	N. 89° 59' W.	480.09	.14			480.09
West boundary	North	480.00	480.00			
North boundary	East	478.98			478.98	
East boundary	South	480.00		480.00		
Convergency					.51	
Totals			480.14	480.00	479.49	480.09
			480.00			479.49
Error in lat.			.14	Error dep.		.60

William B. Himmel.

U. S. Surveyor

Geo. Bradstreet

U. S. Transitman.

North Bdy. of T. 23 N., R. 11 W.

Chains.	W.B.K.
	Survey commenced April 19, 1913, and executed with a Young and Sons Light Mountain Transit, number 8541, with a Smith Solar Attachment. For description of instrument, and certificate of approval, see book "O", page 1. Knowing from recent and repeated observations on a meridian established by Polaris observations, that my transit is in adjustment, I proceed to the survey of the N. bdy. of T. 23 N., R. 11 W.
	At 9 hrs. 10 m. a.m. l.m.t., I set off 35° 25' N. on the lat. arc; 11° 8' N. on the decl. arc; and determine a mer. with the solar, at the ^{old} cor. of Tps. 23 and 24 N., Rs. 10 and 11 W., which is an iron post, 3 ins. in diam, 12 ins. above ground, marked ^{ON BRASS CAP} and witnessed as described by the Surveyor General.
	Thence I run, West, on a random line, along the N. bdy. of T. 23 N. R. 11 W., setting temp. $\frac{1}{4}$ sec. and sec. cors., at intervals of 40 chs., and at 563.42 chs. fall 49 lks. S. of the ^{old} cor. of Tps. 23 and 24 N., Rs. 11 and 12 W., which is an iron post, 3 ins. in diam, 12 ins. above ground, marked ^{ON BRASS CAP} and witnessed as described by the Surveyor General. The falling answers to a correction of 0° 03', or 7 lks. N. per mile, counting from the NE. cor. of the Tp.; therefore I run S. 89° 57' E., bet. secs. 6 and 31, marking and blazing true line.
	Desc. SE. slope 280 ft. over rocky, land.
14.40	Enter scattering timber, brs. N. and S.
22.40	Leave scattering timber, brs. NE. and SW.
31.40	Foot of desc., thence over rolling land.
39.90	Wash, 23 lks. wide, 4 ft. deep, course NE.
41.65	Wash, 20 lks. wide, 5 ft. deep, course NE.
43.65	Wash, 7 lks. wide, 1 ft. deep, course NE.
44.95	Road, brs. NE. and SW.
55.40	Asc. W. slope 90 ft.
64.75	Ridge, brs. N. and S. Desc. NE. slope 55 ft.
73.80	Trail brs. N. and S. Foot of desc., thence over rolling land.
74.50	Wash, 9 lks. wide, 4 ft. deep, course N.
75.55	Trail, brs. N. and S.
81.42	Asc. W. slope 60 ft.
90.00	Low ridge, brs. N. and S. Desc. E. slope 60 ft.
99.40	Foot of desc., thence over rolling land.
101.80	Road brs. N. and S.
103.40	Broken dam, about 6 chs. S.
103.55	Wash, 7 lks. wide, 5 ft. deep, course N.
104.00	Trails brs. N. and S.
107.40	Asc. W. slope 50 ft.
116.90	Low ridge, brs. N. and S., thence over rolling land.
123.42	Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S31 in N. and S6 in S. half; from which A cedar, 7 ins. in diam, brs. N. 75° E., 98 lks. dist., marked $\frac{1}{4}$ S31 BT. A cedar, 9 ins. in diam, brs. S. 55° E., 59 lks. dist., marked $\frac{1}{4}$ S6 BT.
124.40	Rocky point.
130.10	Trail, brs. NW. and SE.
130.60	Draw, course NW. Asc. SW. slope 50 ft.
141.40	Top of asc., thence over rolling land.
163.42	Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked on brass cap, 1913; T24N in N., T23N in S. and R//Win W. half; S31 in NW., S32 in NE., S5 in SE. and S6 in SW. quadrant; And raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. <i>No bearing trees within limits.</i>

Chains.

Land, rolling and hilly.
Soil, rocky, clay and gumbo, 2nd to 4th rate.
Timber, scrub cedar.
Undergrowth, rabbit brush and greasewood.
April 19, 1913.

April 20, 1913. At 8 hrs. 10 m. a.m. l.m.t., I set off
35°25' N. on the lat. arc; 11°28½' N. on the decl.
arc; and determine a meridian with the solar, at the cor.
of secs. 5, 6, 31 and 32, above described.

Thence I run,
S. 89°57' E., on a true line, bet. secs. 5 and 32.
Over rolling land.

18.80

40.00

Trail, brs. NW. and SE.

Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in
the ground, for ¼ sec. cor., marked on brass cap, 1913;
T24N in N. and
S5 in S. half;

And raise a mound of stone, 2 ft. base, 1½ ft. high, N.
of cor. Pits impracticable. *No bearing trees within limits.*

80.00

Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in
the ground for cor. of secs. 32, 33, 4 and 5, marked
on brass cap, 1913;

T24N in N.,
T23N in S. and
R11W in W. half;
S32 in NW.,
S33 in NE.,
S4 in SE. and
S5 in SW. quadrant;

And raise a mound of stone, 2 ft. base, 1½ ft. high,
W. of cor. Pits impracticable. *No bearing trees within limits.*

Land, level and rolling.

Soil, clay and gumbo, 2nd and 3rd rate.

No timber.

Undergrowth, rabbit brush and greasewood.

S. 89°57' E., on a true line, bet. secs. ~~31~~ and 33.

Over rolling land.

4.50

40.00

Trails, br. NW. and SE.

Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in
the ground, for ¼ sec. cor., marked on brass cap, 1913;
T24N in N. and
S4 in S. half;

And raise a mound of stone, 2 ft. base, 1½ ft. high,
N. of cor. Pits impracticable. *No bearing trees within limits.*

43.95

72.00

80.00

Trail, brs. NW. and SE.

Enter timber, brs. NE. and SW.

Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in
the ground, for cor. of secs. 33, 34, 3 and 4.
marked on brass cap, 1913;

T24N in N.,
T23N in S.,
R11W in W. half;
S33 in NW.,
S34 in NE.,
S3 in SE. and
S4 in SW. quadrant; from which

A pinion, 18 ins. diam, brs. N.29½° E., 239 lks. dist.,
marked T24N R11W S34 BT.

A cedar, 15 ins. diam, brs. S.84½° E., 34 lks. dist.,
marked T23N R11W S3 E.

A pinion, 6 ins. diam, brs. S.64½° W., 96 lks. dist.,
marked T23N R11W S4 BT.

A cedar, 16 ins. diam, brs. N.4° W., 171 lks. dist.,
marked T24N R11W S33 BT.

Land, rolling.

Soil, clay and gumbo, 2nd and 3rd rate.

Timber, scrub cedar and pinion.

Undergrowth, rabbit brush and greasewood.

Chains. S. 89° 57' E., on a true line, bet. secs. 31 and 34
 Over rolling land through heavy timber.
 32.00 Asc. SW. slope, 300 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S34 in N. and
 S3 in S. half; frpm which
 A pinion, 12 ins. diam, brs. N. 58° W., 115 lks. dist.
 marked $\frac{1}{4}$ S34 BT.
 A pinion, 7 ins. diam, brs. S. 14 $\frac{3}{4}$ ° W., 40 lks. dist.,
 marked $\frac{1}{4}$ S3 BT.
 46.00 Spur ridge, brs. NW. and SE.
 Desc. NE. slope, 170 ft.
 60.00 Foot of desc. Thence over rolling land.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in
 the ground, for cor. of secs. 34, 35, 2 and 3.,
 marked on brass cap, 1913;
 T24N in N.
 T23N in S. and
 R11W in W. half;
 S34 in NW.,
 S35 in NE.,
 S2 in SE. and
 S3 in SW. quadrant; from which
 A cedar, 7 ins. diam, brs. N. 80° E., 315 lks. dist.,
 marked T24N R11W S35 BT.
 A pinion, 14 ins. diam, brs. S. 19° E., 284 lks. dist.,
 marked T23N R11W S2 BT.
 A pinion, 14 ins. diam, brs. S. 80 $\frac{1}{2}$ ° W., 197 lks. dist.,
 marked T23N R11W S3 BT.
 A cedar, 18 ins. diam, brs. N. 61 $\frac{1}{2}$ ° W., 79 lks. dist.,
 marked T24N R11W S34 BT.
 Land, rolling and mountainous.
 Soil, rocky, clay and gumbo, 3rd and 4th rate.
 Timber, cedar and pinion.
 Undergrowth, scrub oak.
 Mountainous and heavily timbered land, 80.00 chs.

S. 89° 57' E., on a true line, bet. secs. 25 and 35.
 Over rolling land, through scattering timber and dense
 undergrowth.
 4.00 Asc. W slope, 500 ft., first over rolling land.
 12.00 Foot of mountains, asc. steeper.
 26.25 Foot of cliff, 65 ft. high.
 27.80 Top of cliff, brs. N. and S.
 28.40 Ridge, brs. N. and S. Desc. SE. slope, 165 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S35 in N. and
 S2 in S. half; from which
 A cedar, 12 ins. diam, brs. N. 54 $\frac{1}{4}$ ° E., 74 lks. dist.,
 marked $\frac{1}{4}$ S35 BT.
 A cedar, 18 ins. diam, brs. S. 46 $\frac{3}{4}$ ° W., 129 lks. dist.,
 marked $\frac{1}{4}$ S2 BT.
 40.25 Gulch, course NE. Asc. NW. slope, 190 ft.
 41.00 Leave scattering timber, enter heavy timber, brs. N.
 and S.
 50.00 Top of asc.; thence over rolling land.
 70.00 Ridge, brs. NE. and SW. Desc. SE. slope 90 ft.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in
 the ground, for cor. of secs. 35, 36, 1 and 2, marked
 on brass cap, 1913;
 T24N in N.,
 T23N in S.,
 R11W in W. half;
 S35 in NW.,
 S36 in NE.,
 S1 in SE. and
 S2 in SW. quadrant; from which
 A cedar, 8 ins. diam, brs. N. 40 $\frac{1}{2}$ ° E., 42 lks. dist.,
 marked T24N R11W S36 BT.
 A cedar, 12 ins. diam, brs. S. 13 $\frac{1}{4}$ ° E., 154 lks. dist.,
 marked T23N R11W S1 BT.
 A cedar, 16 ins. diam, brs. S. 1° W., 121 lks. dist.,

Chains.

marked T23N R11W S2 BT.
 A cedar limb, 5 ins. diam, brs. N.80° W., 50 lks. dist.,
 marked T24N R11W S35 BT.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, cedar and pinion.
 Undergrowth, buck brush and scrub oak.

9.75
 22.50
 26.20
 36.00
 40.00

S. 89° 57' E., on a true line, bet. secs. 1 and 36.
 Over mountainous land, through heavy timber.
 Desc. SE. slope 115 ft.
 Gulch, course NE. Asc. NW. slope 35 ft.
 Top of asc. Desc. NE. slope 50 ft.
 Gulch, course N. Asc. W. slope 175 ft.
 Top of asc.
 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, 1913;
 $\frac{1}{4}$ S36 in N. and
 S1 in S. half; from which
 A cedar, 8 ins. diam, brs. N. 48 $\frac{1}{4}$ ° W., 70 lks. dist.,
 marked $\frac{1}{4}$ S36 BT.
 A cedar, 8 ins. diam, brs. S. 35 $\frac{1}{2}$ ° E., 202 lks. dist.,
 marked $\frac{1}{4}$ S1 BT.
 Desc. E. slope 90 ft.
 Draw, course NE. Asc. NW. slope, 70 ft.
 Spur ridge, brs NW. and SE. Desc. E. slope 50 ft.
 Draw, course NE. Asc. NW. slope 60 ft.
 Top of asc. Thence along N. slope.
 The cor. of Tps. 23 and 24 N., Rs. 10 and 11 W., herein before
 Land, mountainous. described.
 Soil, rocky, 4th rate.
 Timber, cedar and pinion.
 Undergrowth, buck brush.

51.05
 60.00
 68.05
 75.00
 80.00

NOTE: At this corner, I set off 11° 31' N. on the decl. arc;
 and at noon I observe the sun
 on the meridian. The resulting lat. is 35° 25' N., which is
 slightly less than the correct lat. W.B.K.
 April 20, 1913.

William B. Kimmel.

U. S. Surveyor.

West Bdy. of T. 23 N., R. 11 W.

Chains April 20, 1913. *W.B.K.*
 I begin at the ^{1st} Cor. of Tps. 23 and 24 N., Rs. 11 and 12 W., hereinbefore described.
 Thence I run,
 South, bet. secs. 1 and 6.
 Desc. SE. slope 160 ft. through scattering undergrowth.
 11.30 Gulch, course E. Asc. N. slope, 55 ft.
 15.75 Spur ridge, brs. E. and W. Desc. SE. slope 60 ft.
 24.15 Gulch, course NE. Asc. N. slope, 95 ft.
 31.00 Spur ridge, brs. E. and W. Desc. SE. slope 130 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S1 in W. and S6 in E. half;
 And raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. *No bearing trees within limits.*
 46.00 Foot of desc., brs. NE. and SW.
 49.20 Road, brs. NE. and SW.
 51.30 Wash, 15 lks. wide, 3 ft. deep, course NE.
 52.00 Road, brs. NE. and SW. Asc. N. slope 80 ft.
 70.00 Top of asc. Thence over rolling land.
 71.00 Enter scattering timber, brs. E. and W.
 80.00 Set an iron post, 3 ft. long, 3 ins. ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12; marked on brass cap, 1913;
 T23N in N.,
 R12W S1 in NW.,
 R11W S6 in NE.,
 S7 in SE., and
 S12 in SW. quadrant; from which
 A cedar, 28 ins. ⁱⁿdiam, brs. N. $37\frac{3}{4}^{\circ}$ E., 335 lks. dist., marked T23N R11W S6 BT.
 A cedar limb, 7 ins. ⁱⁿdiam, brs. S. $15\frac{3}{4}^{\circ}$ E., 18 lks. dist., marked T23N R11W S7 BT.
 A cedar, 36 ins. ⁱⁿdiam, brs. S. $44\frac{3}{4}^{\circ}$ W., 140 lks. dist., marked T23N, R12W S12 BT.
 A cedar limb; 6 ins. ⁱⁿdiam, brs. N. $52\frac{1}{2}^{\circ}$ W., 139 lks. dist., marked T23N R12 W S1 BT.
 Land, rolling and hilly.
 Soil, rocky, clay and gumbo, 2nd to 4th rate.
 Timber, cedar.
 Undergrowth, rabbit brush and greasewood.
 April 20, 1913.

April 21, 1913. At 8 hrs. 30 m. a.m. l.m.t., I set off $35^{\circ}24\frac{1}{2}'$ N. on the lat. arc; $11^{\circ}49'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 6, 7 and 12, above described,
 Thence I run,
 South, bet. secs. 7 and 12.
 Over rolling land.
 Asc. NW. slope, through scattering timber.
 14.00 Top of asc., 55 ft. above cor. Thence along W. slope.
 36.00 Head of draw, course NW. Asc. NE. slope 45 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. ⁱⁿdiam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S12 in W. and S7 in E. half; from which
 A cedar, 6 ins. ⁱⁿdiam, brs. S. 64° E. 35 lks. dist., marked $\frac{1}{4}$ S7 BT.
 A cedar, 8 ins. ⁱⁿdiam, brs. S. $60\frac{1}{2}^{\circ}$ W., 128 lks. dist., marked $\frac{1}{4}$ S12 BT.
 45.00 Ridge, brs. NW. and SE. Thence over rolling land.
 47.50 Trails, br. E. and W.
 51.40 Wash, 7 lks. wide, 4 ft. deep, course NW.
 56.00 Spur ridge, brs. NW. and SE.
 68.00 Draw, course NW. Asc. NE. slope, 50 ft.
 80.00 Top of ridge, brs. NW. and SE.
 Set an iron post, 3 ft. long, 3 ins. ⁱⁿdiam, 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked on brass cap, 1913;
 T23N in N. half;
 R12W S12 in NW.,
 R11W S7 in NE.,
 S18 in SE. and

Chains

S13 in SW. quadrant, from which
 A cedar, 14 ins. in diam., brs. N. 57° E., 174 lks. dist.,
 marked T23N R11W S7 BT.
 A cedar, 14 ins. in diam., brs. S. $33\frac{1}{2}^{\circ}$ E., 185 lks. dist.,
 marked T. 23N R11W S18 BT.
 A cedar, 7 ins. in diam., brs. S. $33\frac{1}{2}^{\circ}$ W., 242 lks. dist.,
 marked T23N R12W S13 BT.
 A cedar, 9 ins. in diam., brs. N. $32\frac{1}{2}^{\circ}$ W., 250 lks. dist.,
 marked T23N R12W S12 BT.
 Land, rolling.
 Soil, clay and gumbo, gravelly in places, 2nd and
 3rd rate.
 Timber, scrub cedar and pinion.
 Undergrowth, rabbit brush and Spanish dagger.

South, bet. secs. 13 and 18.
 Desc. SW. slope, 55 ft. through scattering timber.
 13.00 Foot of desc. brs. NW. and SE. Thence over rolling
 W. slope.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor. marked on brass cap, 1913;
 $\frac{1}{4}$ S13 in W. and
 S18 in E. half; from which
 A cedar, 12 ins. in diam., brs. N. $59\frac{1}{2}^{\circ}$ E., 87 lks. dist.,
 marked $\frac{1}{4}$ S18 BT.
 A cedar limb, 10 ins. in diam., brs. S. $71\frac{1}{4}^{\circ}$ W., 78 lks.
 dist., marked $\frac{1}{4}$ S13 BT.
 51.00 Prospect hole about 5 chs. W.
 56.50 Prospect Hole, about 3 chains W.
 58.00 Trail, brs. E. and W.
 67.00 Prospect Hole, about 6 chs. W.
 68.30 Wash, 5 lks. wide, 1 ft. deep, course NW.
 69.00 Enter heavy timber, brs. E. and W. Asc. rolling NE.
 slope, 45 ft.
 78.00 Top of asc. Thence along rolling E slope.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 13, 18, 19 and 24,
 marked on brass cap, 1913;
 T23N in N. half;
 R12W S13 in NW.,
 R11W S18 in NE.,
 S19 in SE., and
 S24 in SW. quadrant; from which
 A cedar, 10 ins. in diam., brs. N. $73\frac{1}{4}^{\circ}$ E., 178 lks. dist.,
 marked T23N R11W S18 BT.
 A cedar limb, 6 ins. in diam., brs. S. $27\frac{1}{2}^{\circ}$ E., 42 lks. dist.,
 marked T23N R11W S19 BT.
 A cedar, 10 ins. in diam., brs. S. $81\frac{1}{4}^{\circ}$ W., 107 lks. dist.,
 marked T23N R12W S24 BT.
 A cedar, 8 ins. in diam., brs. N. $70\frac{1}{4}^{\circ}$ W., 27 lks. dist.,
 marked T23N R12 W S13 BT.
 Land, rolling.
 Soil, rocky clay, 3rd and 4th rate.
 Timber, cedar and pinion.
 Undergrowth, scrub oak.

NOTE:— At this corner, I set off $11^{\circ} 51\frac{1}{2}'$ N. on the decl. arc,
 and at noon ————— I observe the
 sun on the meridian; the resulting lat. is $35^{\circ} 22\frac{1}{2}'$ N.,
 which is slightly less than the correct lat.

South, bet. secs. 19 and 24.
 Over rolling land, along E. slope, through heavy timber
 and scattering undergrowth.
 9.00 Desc. S. slope, 35 ft.
 13.50 Draw, course E. Asc. N. slope, 55 ft.
 22.00 Top of asc.; brs. E. and W.
 28.00 Desc. SE. slope 55 ft.
 34.00 Enter scattering cedar timber, brs. NE. and SW.
 39.15 Trails, bear NE. and SW.
 39.80 Wash, 8 lks. wide, 2 ft. deep, course NE.

West Bdy. of T.23 N., R. 11 W.

Chains.

4 0.00 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, 1913; $\frac{1}{4}$ S24 in W., and $\frac{1}{4}$ S19 in E. half; from which
 A cedar, 7 ins. diam, brs. S. $52\frac{1}{2}^{\circ}$ E., 260 lks. dist., marked $\frac{1}{4}$ S19 BT.
 A cedar, 7 ins. diam, brs. S. $86\frac{3}{4}^{\circ}$ W., 259 lks. dist., marked $\frac{1}{4}$ S24 BT.
 Asc. NW. slope 75 ft.
 44.00 Enter heavy timber, brs. NE. and SW.
 53.70 Rocky ridge, brs NE. and SW. Desc. SE. slope 40 ft.
 60.00 Foot of desc. Thence over rolling E. slope.
 Leave heavy timber, enter scattering timber, and dense undergrowth.
 71.40 Road, brs. NE. and SW.
 77.50 Draw, course W.
 78.20 Wire fence brs. NE. and SW.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, marked on brass cap, 1913;
 T23N in N. half;
 R12W S24 in NW.,
 R11W S19 in NE.,
 S30 in SE. and
 S25 in SW. quadrant; from which
 A cedar, 22, ins. diam, brs. N. 17° E., 78 lks. dist., marked T23N R11W S19 BT.
 A cedar, 10 ins. diam, brs. S. 70° E., 61 lks. dist., marked T23N R11W S30 BT.
 A cedar, 12 ins. diam brs. S. $53\frac{1}{2}^{\circ}$ W., 169 lks. dist., marked T23N R12 W. S25 BT.
 A cedar, 22 ins. diam, brs. N. $60\frac{1}{4}^{\circ}$ W., 185 lks. dist., Marked T23N R12W S24 BT.
 A wind mill brs. S. $62\frac{1}{2}^{\circ}$ W., about 10 chs. dist. Belongs to Carrow Bros. The place is known as the Haskin place.
 Land, rolling and hilly.
 Soil, rocky, 4th rate.
 Timber, cedar and pinion.
 Undergrowth, scrub oak and buck brush.
 April 21, 1913.

April 22, 1913. At 9 hrs. 10 m. a.m. l.m.t., I set off $35^{\circ}21\frac{1}{2}'$ N. on the lat. arc; $12^{\circ}9\frac{1}{2}'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19, 24, 25 and 30, above described,

Thence I run
 South, bet. secs. 25 and 30.
 Asc. NW. slope 80 ft. through scattering timber and dense undergrowth.
 9.00 Top of asc., brs. NE. and SW.
 14.00 Desc. SW. slope 50 ft.
 16.55 Fence, brs. NW and SE.
 22.90 Foot of desc. Asc. NW. slope 100 ft.
 28.50 Fence, brs. NE. and SW.
 34.00 Top of asc. brs. NE. and SW. Thence over rocky mesa.
 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, 1913; $\frac{1}{4}$ S25 in W. and $\frac{1}{4}$ S30 in E. half; from which
 A cedar, 6 ins. diam, brs. S. $66\frac{1}{4}^{\circ}$ E. 43 lks. dist., marked $\frac{1}{4}$ S30 BT.
 A cedar, 7 ins. diam, brs. S. $75\frac{1}{4}^{\circ}$ W., 32 lks. dist., marked $\frac{1}{4}$ S25 BT.
 58.00 Desc. S. slope 25 ft.
 61.30 Foot of desc. Asc. NW. slope 60 ft.
 72.00 Top of asc. Thence over rolling west slope.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam, 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked on brass cap, 1913;
 T23N in N. half;

Chains.

R12W S25 in NW.,
 R11W S30 in NE.,
 S31 in SE., and
 S36 in SW. quadrant; from which
 A cedar, 9 ins. in diam, brs. N. $21\frac{3}{4}^{\circ}$ E., 153 lks. dist.,
 marked T23N R11W S30 BT.
 A cedar, 12 ins. in diam, brs. S. 40° E., 133 lks. dist.,
 marked T23N R11W S31 BT.
 A cedar, 16 ins. in diam, brs. S. 30° W., 255 lks. dist.,
 marked T23N R12W S36 BT.
 A cedar, 10 ins. in diam, brs. N. $7\frac{1}{4}^{\circ}$ W., 150 lks. dist.,
 marked T23N R12W S25 BT.

Land rolling and hilly.
 Soil, rocky, 4th rate.
 Timber, cedar and pinion.
 Undergrowth, scrub oak.

NOTE - At this corner, I set off $12^{\circ}12'$ N. on the lat. arc;
 and at noon ————— I observe the sun
 on the meridian. The resulting lat. is $35^{\circ}21'$ N., which is
 slightly higher than the correct lat.

South, bet. secs. 31 and 36.
 Over rolling, rocky, W. slope, through scattering timber
 and dense undergrowth.

8.00 Desc. SW. slope 110 ft.
 16.00 Foot of desc. brs. NE. and SW.
 19.00 Wash, 60 lks. wide, 2 ft. deep, in bottom of canyon, its
 course NW. Asc. NE. slope, 65 ft.
 25.00 Top of asc. Desc. SE. slope 40 ft.
 29.40 Gulch, course NE. Asc. NW. slope 165 ft. Enter heavy
 timber, brs. NE. and SW.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913;
 $\frac{1}{4}$ S31 in W. and
 $\frac{1}{4}$ S36 in E. half; from which
 A cedar limb, 8 ins. in diam, brs. S. 21° E., 29 lks. dist.,
 marked $\frac{1}{4}$ S36 BT.
 A cedar, 10 ins. in diam, brs. S. 36° W., 98 lks. dist.,
 marked $\frac{1}{4}$ S31 BT.
 60.00 Asc. gradual N. slope.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in
 the ground, for cor. of Tps. 22 and 23 N., Rs. 11
 and 12 W., marked on brass cap, 1913;
 T23N in N.,
 R11W in E.,
 T22N in S. and
 R12W in W. half;
 S36 in NW.,
 S31 in NE.,
 S6 in SE., and
 S1 in SW. quadrant; from which
 A cedar, 8 ins. in diam, brs. N. $55\frac{3}{4}^{\circ}$ E., 45 lks. dist.,
 marked T23N R11W S31 BT.
 A cedar, 12 ins. in diam, brs. S. $22\frac{3}{4}^{\circ}$ E., 34 lks. dist.,
 marked T22N R11W S6 BT.
 A cedar, 10 ins. in diam, brs. S. $31\frac{1}{2}^{\circ}$ W., 21 lks. dist.,
 marked T22N R12W S1 BT.
 A cedar, 10 ins. in diam, brs. N. 29° W., 169 lks. dist.,
 marked T23N R12W S36 BT.
 Land, rolling.
 Soil, rocky, 4th rate.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak.

W.B.K.
 April 22, 1913.

Chains

W.B.K.

Survey commenced April 20, 1913, and executed with a Young & Sons Light Mountain Transit No. 7695 with Smith Solar Attachment. For description of instrument and certificate of approval, see book "O", page 1. Knowing from recent and repeated observations on a meridian determined by observations on Polaris, that my instrument is in adjustment, I proceed to the survey of the S. bdy. of T. 23 N., R. 11 W.

At the cor. of Tps. 22 and 23 N., Rs. 10 and 11 W, which is an iron post, 3 ins. in diam, 1 ft. above ground, marked and witnessed as described by the Surveyor General, I set off 35° 20' N. on the lat. arc; 11° 33' N. on the decl. arc; and at 2 hrs. 3 m., p.m., l.m.t., I determine a meridian with the solar.

Thence I run, West, on a random line, along the S. bdy. of the Tp., setting temp. 1/4 sec. and sec. cors., at intervals of 40 chs. And at 563.85 chs.

fall 131 lks. S. of the cor. of Tps. 22 and 23 N., Rs. 11 and 12 W, established by me as, hereinbefore described. The falling answers to a correction of 0.08' or 19 lks. N. per mile, counting from the SW. cor. of the Tp.

April 20, 1913.

April 21, 1913. At 8 hrs. 47 m. a.m. l.m.t., I set off 35° 20' N. on the lat. arc; 11° 49' N. on the decl. arc; and determine a meridian with the solar, at the cor. of Tps. 22 and 23 N., Rs. 11 and 12 W, hereinbefore described page 58

Thence I run S. 89° 52' E., on a true line, bet. secs. 6 and 31. Over rolling land, through scattering cedar timber.

7.00
33.85
37.85
39.00
43.35
57.90
64.10
67.85

Desc. E. slope, 150 ft.
Wash, 30 lks. wide, 1 ft. deep, course N. Thence over rolling land.
Low ridge, brs. N. and S.
Two strand wire fence, brs. N. and S.
Wash, 12 lks. wide, 2 ft. deep, course N.
Wash, 45 lks. wide, 5 ft. deep, course NW.
Wash, 61 lks. wide, 4 ft. deep, course NW.

94.85
109.85
118.00
123.85

Asc. SW. slope, 355 ft..
Head of rocky, gulch, 20 lks. wide, course S.
Top of asc. Thence along S. slope
Top of ridge, brs. N. and S. Line goes bet. two hills.
Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in the ground, for 1/4 sec. cor., marked on brass cap, 1913; 1/4 S31 in N. and S6 in S. half; from which
A cedar, 10 ins. in diam, brs. N. 14° E., 73 lks. dist., marked 1/4 S31 BT.
A cedar limb, 8 ins. in diam, brs. S. 47° E., 30 lks. dist., marked 1/4 S6 BT.

137.85
141.85
153.35
159.25
163.85

Thence along N. slope.
Asc. slight NW. slope.
Asc. steep NW. slope, 165 ft.
Top of asc. ridge, brs. SW. and NE. Desc. SE. slope 60 ft.
Leave scattering timber, brs. N. and S.
Gulch, 40 lks. wide, course SE.
Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the ground, for the cor. of secs. 31, 32, 5 and 6, marked on brass cap, 1913;
T23N in N.,
T22N in S., and
R11W in W. half;
S31 in NW.,
S32 in NE.,
S5 in SE. and
S6 in SW. quadrant; from which
A cedar limb, 10 ins. in diam, brs. N. 73 1/4° E., 183 lks. dist., marked T23N R11W S32 BT.
A cedar limb, 7 ins. in diam, brs. S. 37 3/4° E., 61 lks. dist.,

Chains.

marked T22N R11W S5 BT.
 A cedar, 16 ins. ⁱⁿdiam, brs. S. 29½° W., 144 lks. dist.,
 marked T22N R11W S6 BT.
 A cedar, 8 ins. ⁱⁿdiam, brs. N. 20½° W., 151 lks. dist.,
 marked T23N R11W S31 BT.
 Land, mountainous and hilly.
 Soil, rocky, 4th rate, gumbo.
 Timber, scrub cedar and pinion.
 Undergrowth, scrub oak and buck brush.

NOTE - At this corner I set off, 11° 51½' N. on the decl. arc:
 and at noon ————— I observe the
 sun on the meridian. The resulting lat. is 35° 20' N., which
 is . . . correct.

S. 89° 52' E., on a true line, bet. secs. 35 and 32.
 Along S. slope, over rolling land, through heavy timber
 and dense undergrowth

6.00 Gulch, 15 lks. wide, 3 ft. deep, course S.
 18.00 Gulch, 10 lks. wide, 3 ft. deep, course S.
 34.00 Spur ridge, brs. N. and S. Desc. E. slope 65 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. ⁱⁿdiam, 26 ins. in
 the ground for ¼ sec. cor., marked on brass cap, 1913;
 ¼ S32 in N. and
 S5 in S. half; from which
 A cedar, 10 ins. ⁱⁿdiam, brs. N. 4° W., 16 lks. dist.,
 marked ¼ S32 BT.
 A cedar, 8 ins. ⁱⁿdiam, brs. S. 18° E., 25 lks. dist.,
 marked ¼ S5 BT. W.B.K.

40.50 H.N.S. Head of gulch, 3 ft. wide, course NE.
 46.00 Leave scattering cedar, brs. N. and S. Desc. E. slope
 135 ft.
 58.00 Wash, 10 lks. wide, 3 ft. deep, course S. Asc. gentle
 SW. slope 95 ft.
 72.00 Ridge, brs. N. and S. Thence over rolling land.
 80.00 Set an iron post, 3 ft. long, 3 ins. ⁱⁿdiam, 24 ins. in
 the ground, for cor. of secs. 32, 33, 4 and 5, marked
 on brass cap, 1913;
 T23N in N.,
 T22N in S.,
 R11W in W. half;
 S32 in NW.,
 S33 in NE.,
 S4 in SE. and
 S5 in SW. quadrant; from which
 A cedar, 16 ins. ⁱⁿdiam, brs. N. 61° E., 31 lks. dist.,
 marked T23N R11W S33 BT.
 A cedar, 6 ins. ⁱⁿdiam, brs. S. 46° E., 14 lks. dist.,
 marked T22N R11W S4 BT.
 A cedar, 8 ins. ⁱⁿdiam, brs. S. 17° W., 40 lks. dist.,
 marked T22N R11W S5 BT.
 A cedar, 11 ins. ⁱⁿdiam, brs. N. 18° W., 73 lks. dist.,
 marked T23N R11W S32 BT.
 Land, rolling and mountainous.
 Soil, rocky, 4th rate, gumbo.
 Timber, cedar and pinion.
 Undergrowth, buck brush and scrub oak.
 Mountainous land, 20 chs.

S. 89° 52' E., on a true line, bet. secs. 4 and 33.
 Over rolling land, through heavy timber and scattering
 undergrowth.

6.15 Wash, 5 lks. wide, 2 ft. deep, course SE.
 14.00 Leave timber and undergrowth, brs. NE. and SW.
 20.00 Enter timber, brs. N. and S.
 21.00 Wash, 30 lks. wide, 6 ft. deep, course S. Top of hill,
 brs. N. 10 cha. dist.,
 28.50 Wash, 30 lks. wide, 5 ft. deep, course S.
 34.00 Asc. SW. slope, 40 ft.
 39.00 Ridge, brs. N. and S.
 40.00 Set an iron post, 3 ft. long, 1 in. ⁱⁿdiam, 26 ins. in
 the ground for ¼ sec. cor., marked on brass cap, 1913;
 ¼ S33 in N. and

South Bdy. of T. 23 N., R. 11 W.

Chains

S4 in S. half; from which
 A cedar, 17 ins. in diam, brs. N. 37° W., 112 lks. dist.,
 marked 1/4 S33 BT.
 A pinion, 8 ins. in diam, brs. S. 85° W., 64 lks. dist.,
 marked 1/4 S4 BT.
 Desc. E. slope, 155 ft.
 56.00 Wash, 60 lks. wide, 4 ft. deep, course S. Asc. E. slope
 100 ft.
 63.00 Ridge, brs. N. and S. Thence over rolling land.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in
 the ground for cor. of secs. 33, 34, 3 and 4, marked
 on brass cap, 1913;
 T23N in N.,
 T22N in S. and
 R11W in W. half;
 S33 in NW.,
 S34 in NE.,
 S3 in SE. and
 S4 in SW. quadrant; from which
 A cedar, 13 ins. in diam brs. N. 44 1/4° E., 53 lks. dist.,
 marked T23N R11W S34 BT.
 A cedar, 20 ins. in diam, brs. S. 60 1/4° E., 27 lks. dist.,
 marked T22N R11W S3 BT.
 A cedar, 40 ins. in diam, brs. S. 54 1/2° W., 110 lks. dist.,
 marked T22N R11W, S4 BT.
 A cedar, 6 ins. in diam, brs. N. 31 1/4° W., 31 lks. dist.,
 marked T23N, R11W S33 BT.
 Land, mountainous and hilly.
 Soil, rocky, 4th rate, gumbo.
 Timber, scrub cedar and pinion.
 Undergrowth, buck brush and scrub oak.
 April 21, 1913.

April 22, 1913, At 8 hrs. 53 m. a.m. l.m.t., I set off
 35° 20' N. on the lat. arc; 12° 9 1/2' N. on the decl.
 arc; and determine a meridian with the solar, at the cor.
 of secs. 33, 34, 3 and 4, above described.
 Thence I run
 S. 89° 52' E., on a true line, bet. secs. 3 and 34.
 Over rolling land, through scattering timber and dense
 undergrowth.
 6.80 Gulch, 10 lks. wide, course SE.
 8.00 Gulch, 15 lks. wide, course S.
 16.00 Gulch, 8 lks. wide, course SW.
 Asc. W. slope, 230 ft.
 22.00 Leave cedar timber, brs. N. and S.
 32.65 Rocky cliff, 22 ft. high, brs. NW. and SE.
 38.00 Top of asc. Ridge, brs. NE. and SW.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam, 26 ins. in
 the ground for 1/4 sec. cor., marked on brass cap, 1913;
 1/4 S34 in N. and
 S3 in S. half; from which
 A cedar, 8 ins. in diam, brs. S. 61 1/4° E., 125 lks. dist.,
 marked 1/4 S3 BT.
 No other trees within limits. Raise a mound of stone,
 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
 Desc. SE. slope 70 ft.
 48.50 Ravine, 50 lks. wide, course SW. Asc. NW. slope, 70 ft.
 57.00 Ridge, brs. N. and S. Desc. SE. slope, 100 ft.
 67.55 Gulch, 20 lks. wide, course S. Asc. SW. slope, 115 ft.
 80.00 Set an iron post, 3 ft. long, 3 ins. in diam, 24 ins. in the
 ground, for cor. of secs. 34, 35, 2 and 3, marked on
 brass cap, 1913;
 T23N in N.,
 T22N in S., and
 R11W in W. half;
 S34 in NW.,
 S35 in NE.,
 S2 in SE., and
 S3 in SW. quadrant; from which
 A cedar, 15 ins. in diam, brs. N. 61 1/2° E., 257 lks. dist.,
 marked T23N R11W S35 BT.

Chains.

A cedar, 10 ins.ⁱⁿ diam, brs. S. 57½° E., 75 lks. dist., marked T22N R11W S2 BT.

A cedar, 35 ins.ⁱⁿ diam, brs. S. 4° W., 163 lks. dist., marked T22N R11W S3 BT.

A cedar, 10 ins.ⁱⁿ diam, brs. N. 51° W., 206 lks. dist., marked T23N R11W S34 BT.

Land, mountainous and hilly.

Soil, very rocky 4th rate gumbo.

Timber, scrub cedar and pinion.

Undergrowth, scrub oak and buck brush.

S. 89° 52' E., on a true line, bet. secs. 2 and 35.

Along S. slope, through scattering timber, and dense undergrowth.

2.00 Desc. E. slope, 215 ft.

14.00 Ravine, 15 lks. wide, course S. Asc. W. slope, 45 ft.

20.00 Ridge, brs SE. and NW. Thence over rolling land.

36.00 Draw, 1 ch. wide, course SE.

40.00 Set an iron post, 3 ft. long, 1 in.ⁱⁿ diam, 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, 1913; ¼ S35 in N. and S2 in S. half; from which

A cedar, 28 ins.ⁱⁿ diam, brs. N. 65° W., 110 lks. dist., marked ¼ S35 BT.

A cedar, 26 ins.ⁱⁿ diam, brs. S. ¼° W., 48 lks. dist., marked ¼ S2 BT.

NOTE:— At this corner, I set off 12° 12' N. on the decl. arc; and at noon ————— I observe the sun on the meridian. The resulting lat. is 35° 20' N., which is correct.

41.40 Draw, 1 ch. wide, course SE.

48.00 Low ridge, brs. NW. and SE.

61.00 Draw, 2 chs. wide, course SE.

62.00 Leave scattering timber, brs. N. and S.

64.00 Wash, 20 lks. wide, 4 ft. deep, course SE. Asc. SW. slope, 75 ft.

66.00 Enter timber, brs. N. and S.

74.00 Leave timber, brs. N. and S.

80.00 Set an iron post, 3 ft. long, 3 ins.ⁱⁿ diam, 24 ins. in the ground, for cor. of secs. 35, 36, 1 and 2, marked on brass cap, 1913;

T23N in N.

T22N in S.,

R11W in W. half;

S35 in NW.,

S36 in NE.,

S1 in SE. and

S2 in SW. quadrant; from which

A cedar, 18 ins.ⁱⁿ diam, brs. N. 37¼° E., 82 lks. dist., marked T23N R11W S36 BT.

A cedar, 6 ins.ⁱⁿ diam, brs. S. 59¼° E., 69 lks. dist., marked T22N R11W S4 BT.

A cedar limb, 12 ins.ⁱⁿ diam, brs. S. 7¼° W., 146 lks. dist., marked T22N R11W S2 BT.

No other trees within limits. Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous and hilly.

Soil, rocky, 4th rate, gumbo.

Timber, scrub cedar and pinion.

Undergrowth, scrub oak and buck brush.

S. 89° 52' E., on a true line, bet. secs. 1 and 36.

Over mountainous land, through scattering timber and dense undergrowth.

1.00 Top of asc. South end of spur ridge, brs. N. and S. Thence over rolling land.

5.00 Head of draw, course SE.

10.00 Rocky, ridge, brs. NW. and SE. Desc. slight NE. slope.

20.00 Foot of desc. Head of draw, course NE.

23.50 Rocky, spur ridge, brs. N. and S. Extends 1 ch. N.

Desc. NE. slope, 45 ft.

South Bdy. of T. 23 N., R. 11 W.

Chains.
35.00 Draw, 3 chs. wide, course SE.
40.00 Set an iron post, 3 ft. long, 1 in. diam, 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913; $\frac{1}{4}$ S36 in N. and S1 in S. half; from which
A cedar, 36 ins. diam, brs. N. $68\frac{1}{2}^{\circ}$ W., 231 lks. dist., marked $\frac{1}{4}$ S36 BT.
A cedar, 25 ins. diam, brs. S. $74\frac{1}{2}^{\circ}$ E., 359 lks. dist., marked $\frac{1}{4}$ S1 BT.
44.00 Leave timber, brs. N. and S.
55.65 Five strand, wire fence, brs. N. and S. Thence across corral.
63.20 Drainage ditch, 15 lks. wide, 3 ft. deep, course S.
66.75 Earth dam, brs. S. 4 chs. dist.,
68.30 Four strand, wire fence, brs. NW. and SE. Cors. about 2 chs. N., and runs W. to other fence.
72.00 Draw, 4 chs. wide, course SE. Asc. SW. slope 35 ft.
80.00 The cor. of Tps. 22 and 23 N., Rs. 10 and 11 W., hereinbefore described
Land, rolling and hilly.
Soil, rocky, 4th rate, gumbo.
Timber, scrub cedar and pinion.
Undergrowth, scrub oak and buck brush. *H.N.B.*
April 22, 1913.

William B. Kimmel

U. S. Surveyor.

Herbert Street

U. S. Transitman.

Boundaries of T. 23 N., R. 11 W.
Latitudes, Departures and Closing Errors.

Line designated.	True Bearing	Distance.	Latitudes.		Departures.	
			Chains		Chains	
			N.	S.	E.	W.
South boundary	N. 89° 52' W.	563.85	1.31			563.85
West boundary	North.	480.00	480.00			
North boundary	S. 89° 57' E.	563.42		.49	563.42	
East boundary	South	480.00		480.00		
Convergency						.61
Totals.			481.31	480.49	564.03	563.85
			480.49		563.85	
Error in lat.			.82	Error Dep 18		

William B. Kimmel,

U. S. Surveyor

San Francisco

U. S. Transitman.

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
H. N. BRADSTREET, U.S. Transitman
 and *WILLIAM B. KIMMEL*, U. S. Surveyor, during the periods and in the capacities

stated opposite our several signatures, in surveying all those parts or portions of *the North bdy.*
of T. 23 N., R. 5 W., the North bdy. of T. 25 N., R. 5 W., the North bdy. of T. 26 N.,
R. 5 W., the North bdy. of T. 27 N., R. 5 W. the South bdy. of T. 22 N., R. 7 W.,
the East bdy. of T. 21 N., R. 8 W. and the West bdy. of T. 21 N., R. 9 W.

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~~ ^{them}, and under ~~his~~ ^{their} 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.	
<i>Jas. A. Le Gros</i>	Nov. 29, 1912.	Dec. 31, 1912.	Axman
<i>John T. Carmody</i>	Nov. 29, 1912	Jan. 31, 1913.	Axman
<i>W. J. Tammner</i>	Nov. 29, 1912.	Jan. 31, 1913.	Chainman
<i>B. E. Gilpin</i>	Nov. 29, 1912.	Jan. 31, 1913.	Chainman
<i>Carley Mirt</i>	Nov. 29, 1912.	Feb. 7, 1913.	Moundman
<i>Alonzo W. Whitlock</i>	Nov. 29, 1912.	Feb. 13, 1913.	Flagman
<i>William J. Clark</i>	Feb. 19, 1913.	March 15, 1913.	Axman
<i>Charles R. Smith</i>	Dec. 6, 1912.	March 16, 1913.	Flagman
<i>Joseph H. Fadden</i>	Feb. 11, 1913.	March 16, 1913.	Moundman
<i>Heath Sebern</i>	Nov. 27, 1913.	March 23, 1913.	Chainman
<i>Orrin K. Beckus</i>	Feb. 18, 1913.	March 28, 1913.	Axman, Flagman, Chainman
<i>Orrin M. ...</i>	March 18, 1913.	March 28, 1913.	Moundman
<i>Dean J. Simkins</i>	Jan. 2, 1913.	March 28, 1913.	Axman Chainman
<i>Harvey J. Buller</i>	Feb. 2, 1913.	March 28, 1913.	Flagman, Moundman, Chainman
<i>Clifford ...</i>	Feb. 6, 1913.	March 28, 1913.	Axman, Flagman, Chainman

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

William B. Kimmel.
 U. S. Surveyor.

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,
H. N. BRADSTREET, U.S. Transitman
 and *WILLIAM B. KIMMEL*, U. S. Surveyor, during the periods and in the capacities

stated opposite our several signatures, in surveying all those parts or portions of *the South and West bdrs of T.22N., R.10W. and the South, West and North bdrs. of T.23N.-R.11W.*

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 ~~them~~ ^{them}, and under ~~the~~ ^{their} direction; and that said surveys ~~have~~ been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
<i>Glyde Stewart</i>	March 25, 1913.	March 31, 1913.	Moundman
<i>Joseph L. Barber</i>	March 19, 1913.	April 29, 1913.	Axman, Chainman
<i>Ross D. Carpenter</i>	April 11, 1913.	May 10, 1913.	Axman, Chainman
<i>Frank Pierce</i>	March 25, 1913.	May 12, 1913.	Axman, Chainman
<i>Johnny Shannon</i>	March 18, 1913.	May 16, 1913.	Flagman
<i>Ralph Ortega</i>	May 21, 1913.	May 26, 1913.	Flagman
<i>Thomas West</i>	April 4, 1913.	May 18, 1913.	Moundman
<i>Hal Grimsman</i>	April 4, 1913.	May 26, 1913.	Chainman
<i>H. M. Tompkins</i>	April 4, 1913.	May 26, 1913.	Moundman
<i>Wesley Bullenax</i>	April 4, 1913.	May 26, 1913.	Flagman, Chainman
<i>E. L. Mosner</i>	May 20, 1913.	May 26, 1913.	Chainman
<i>Samuel V. Palled</i>	Nov. 26, 1912.	May 26, 1913.	Chainman

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

William B. Kimmel.
U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR & TRANSITMAN

We, H. N. BRADSTREET, U.S. Transitman and WILLIAM B. KIMMEL, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona for Group 24 bearing date of the 18th day of October, 1912, we have well, faithfully, and truly, in our own proper persons 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 North bdrs. of Tps. 23, 25, 26 and 27 N., R. 5 W., the South bdy. of Tp. 22 N., R. 7 W., the East bdy. of Tp. 21 N., R. 8 W., the West bdy. of Tp. 21 N., R. 9 W., the South and West bdrs. of Tp. 22 N., R. 10 W., and the South, West and North bdrs. of Tp. 23 N., R. 11 W.

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 us, and under our direction; and we 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 24 and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

William B. Kimmel, U. S. Surveyor.

Subscribed by said H. N. Bradstreet and sworn to before me this 4th day of October, 1913. H. N. Bradstreet U.S. Transitman

Frank A. Ingalls SURVEYOR-GENERAL OF ARIZONA



Subscribed by said William B. Kimmel, U.S. Surveyor, this 2nd day of July, 1914.

Franklin L. Torrance

APPROVAL.

U. S. Commissioner District of Arizona.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona, OCT 5, 1914

The foregoing field notes of the survey of the North boundaries of Tps. 23, 25, 26 and 27 N., R. 5 W., the South bdy. of Tp. 22 N., R. 7 W., the East bdy. of Tp. 21 N., R. 8 W., the West bdy. of Tp. 21 N., R. 9 W., the South and West bdrs. of Tp. 22 N., R. 10 W. and the South, West and North bdrs. of Tp. 23 N., R. 11 W. of the Gila and Salt River Base and Meridian, in the State of Arizona

executed by H. N. BRADSTREET, U.S. Transitman and executed by WILLIAM B. KIMMEL, U.S. Surveyor under their special instructions dated October 18, 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank A. Ingalls 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.

U. S. Surveyor General.