

3561

Book "C"
4-679

BOOK 3561

CR 16
1

JUN-3 1921

FIELD NOTES

OF THE RETRACEMENT OF

Part of the Boundary of the Hualpai Indian Reservation, and

OF THE SURVEY OF

Part of the North boundary (completion), and

Part of the Subdivision lines (completion)

of

TOWNSHIP 27 NORTH, RANGE 15 WEST,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

William B. Kimmel,

U. S. Cadastral Engineer,

In the capacity of U. S. Surveyor, under instructions dated February 27, 1920, issued by the United States Surveyor General to govern surveys included in Group No. 110, Ariz., which were approved by the Commissioner of the General Land Office, March 10, 1920, and Assignment Instructions dated May 2, 1921.

Retracement & Survey commenced May 19, 1921.

Retracement & Survey completed June 30, 1921.

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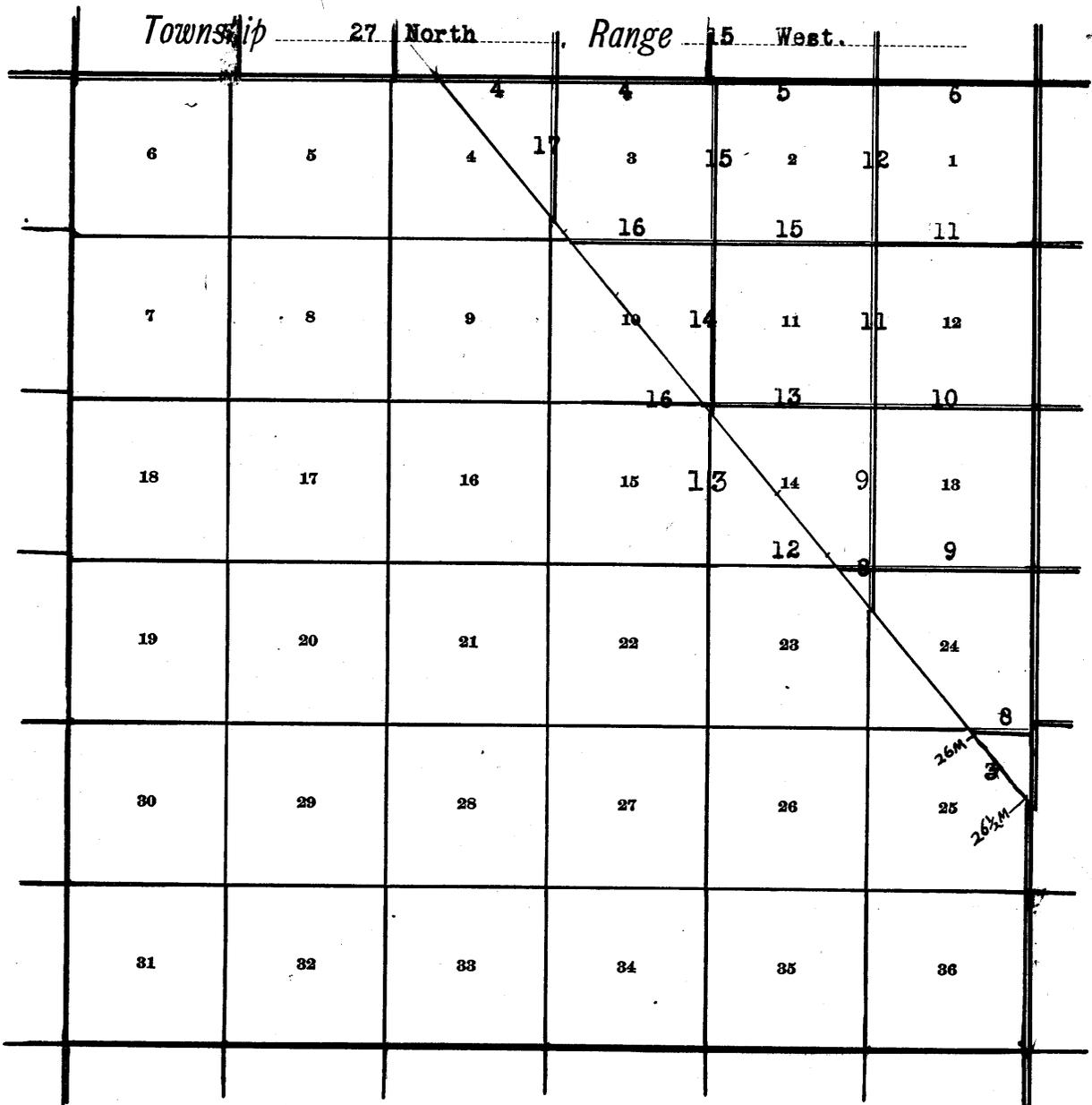
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BOOK 3561

INDEX DIAGRAM.



— Accepted surveys.

— Lines surveyed under this group.

BOOK "C"
 DATE DIAGRAM
 TOWNSHIP 27 NORTH, RANGE 15 WEST

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

FOR DATES OF SURVEY OF THIS LINE, SEE BOOK "B"

— Black lines on above diagram indicate accepted surveys.
Brown lines on above diagram indicate surveys and retracements by William B. Kimmel, U. S Cadastral Engineer, on dates shown thereon.

Retracements and surveys hereinafter described were executed by William B. Kimmel, U. S. Cadastral Engineer, on dates shown on diagram on page 1 hereof, using Young and Sons' light mountain transit No. 8540. For description of instrument and certificate of approval, see Book "B"

Test of Instrument No. 8540.

I examine the adjustments of the transit and correct all errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris at elongation, I proceed as follows:

May 12, 1921: At my camp in sec. 24, T. 27 N., R. 15 W., lat. $35^{\circ}43\frac{1}{2}'$ N., long. $113^{\circ}50'$ W., G. and S. R. B. and M., at 4 hrs. 16.3 m. a.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual of Instructions, and mark a point in the line thus determined by a tack driven in a stake, firmly set in the ground, 5 chs. N. of my station.

May 15, 1921: At 8 hrs. 0 m., a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ}22\frac{1}{2}'$ to the west and mark the true meridian thus determined by a tack in a stake, firmly set in the ground, 5 chs. N. of my station.

At 9 hrs. 0 m., a.m., l.m.t., I set off $35^{\circ}43\frac{1}{2}'$ N. on the lat. arc; $18^{\circ}51'$ N. on the decl. arc; and determine a meridian with the solar which agrees with the true meridian.

At apparent noon, with the lat. arc unchanged, I observe the sun on the meridian; the resulting decl. is $18^{\circ}53'$ N., which is the computed decl. of the sun.

At 3 hrs. 0 m., p.m., l.m.t., with the lat. arc unchanged, I set off $18^{\circ}54\frac{1}{2}'$ N. on the decl. arc and determine a meridian with the solar which agrees with the true meridian;

As all of the solar observations during the usual hours of solar work come within $1'30''$ of the true meridian, I conclude that the adjustments of the solar are satisfactory.

Unless otherwise specified, all measurements are made with a Lufkin steel tape, 5 chs. in length, compared with a Chesterman standard steel tape and found correct. The measurements are made on the slope, the vertical angles determined and the slope measurements properly reduced to true horizontal distances.

Retracement of that Part of the Hualpai Indian Reservation Boundary between the 26 and the 26 1/2 mile cors.

Chains The boundaries of the Hualpai Indian Reservation were surveyed in August and September, 1900, by Albert T. Colton, U. S. D. S. Retracements of part of the Reservation boundary forming the closing boundary under Group 45, of T. 27 N., R. 15 W., were made by S. Frank Walters, U. S. Transitman, in February and May, 1917, but no retracement of the line bet. the 26 and 26 1/2 mile cors. is of record.

The 26 1/2 mile cor. on the Hualpai Indian Reservation Boundary is a malpais rock in place, 20 x 14 x 8 ins. above ground, with cross (X) at exact cor. point, marked H I R 26 1/2 M. on NE., P L on SW. face, witnessed by a mound of stone, S. 40° E. of cor.

Thence N. 40° W., on retracement of first half of 27th mile. Over rolling land, through scattering timber and undergrowth.

Desc.

- 1.75 Road, brs. NE. to Clay Springs and SW. to Milkweed Springs
- 2.05 Draw, course NE. Asc. 115 ft.
- 12.05 Spur, slopes NE. Desc. 85 ft.
- 39.42 Fall 13 lks. N. 50° E., of the 26th mile cor., which is a malpais rock, 8 x 6 x 8 ins. above ground, marked H I R 26 M on NE. and P L on SW. face, witnessed by a mound of stone, S. 40° E. of cor.

The true course and distance of this half mile are therefore N. 40° 11' W. 39.42 chs.

Land, rolling:

Soil, rocky, 4th rate.

Timber, cedar and pine.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger and cactus.

Completion of the Survey of the North Boundary
of T. 27 N., R. 15 W.

Chains The closing cor. of secs. 4 and 33, on the N. bdy. of T. 27 N., R. 15 W., at the intersection of said bdy. with the boundary of the Hualpai Indian Reservation, established in May, 1917, by S. Frank Walters, U. S. Transitman, under Group 45, is an iron post, 2 ins. diam., set in a mound of stone, properly marked, witnessed by two bearing trees, and established 20.33 chs. East of the cor. of secs. 4 and 5.

Thence East on a random line, along the N. bdy. of T. 27 N., R. 15 W., setting a temp. $\frac{1}{4}$ sec. cor. of secs. 4 and 33 at 19.67 chs., and temp. sec. and $\frac{1}{4}$ sec. cors. at intervals of 40.00 chs. thereafter; and at 299.77 chs., intersect the E. bdy. of T. 27 N., R. 15 W., at a point 80.71 chs. North of the cor. of secs. 1, 6, 7 and 12, where I establish the cor. of Ts. 27 and 28 N., Rs. 14 and 15 W., as described in Book "B".

I return to the closing cor. of secs. 4 and 33, on the N. bdy. of T. 27 N., R. 15 W. On the side of the post which refers to the land within the reservation, I add the section numbers S 4 and S 33, and above the original date 1917, I add the year number 1921. I also engrave the letters C C on the brass cap and on the bearing trees.

Thence
East, on a true line, bet. secs. 4 and 33.
Over rolling land, through scattering timber and dense undergrowth.

19.77 (40.10 chs. East of the cor. of secs. 4 and 5, T. 27 N., R. 15 W.) Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap

| | |
|---------------|------|
| $\frac{1}{4}$ | S 33 |
| $\frac{1}{4}$ | S 4 |
| 1921 | |

From which
A cedar, 6 ins. diam., brs. N. $60\frac{1}{4}^{\circ}$ W., 71 lks.
dist., marked $\frac{1}{4}$ S 33 B T.
A cedar, 7 ins. diam., brs. S. $49\frac{3}{4}^{\circ}$ W., 19 lks.
dist., marked $\frac{1}{4}$ S 4 B T.

33.97 Draw, course NE. Asc. 45 ft.

59.77 (80.10 chs. East of the cor. of Secs. 4 and 5, T. 27 N., R. 15 W.) Set an iron post, 3 ft. long, 2 ins. diam., 20 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked on brass cap

| | |
|--------|--------|
| T 28 N | R 15 W |
| S 33 | S 34 |
| S 4 | S 3 |
| T 27 N | |
| 1921 | |

From which
A cedar, 10 ins. diam., brs. N. $84\frac{1}{4}^{\circ}$ E., 127 lks.
dist., marked T 28 N R 15 W S 34 B T.
A cedar, 6 ins. diam., brs. S. $49\frac{1}{2}^{\circ}$ E., 93 lks.
dist., marked T 27 N R 15 W S 3 B T.
A cedar, 8 ins. diam., brs. S. 29° W., 100 lks.
dist., marked T 27 N R 15 W S 4 B T.
A cedar, 14 ins. diam., brs. N. 37° W., 163 lks.
dist., marked T 28 N R 15 W S 33 B T.

Land, rolling.
Soil, rocky, 4th rate.
Timber, pine and cedar.
Undergrowth, buck brush, sagebrush, scrub oak, cedar,
Spanish dagger and cactus.

East on a true line along the N. bdy. of sec. 3

Completion of the Survey of the North Boundary
of T. 27 N., R. 15 W.

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Chains Over rolling land, through scattering timber and dense undergrowth. Desc. 100 ft.
 29.50 Draw, course NE. Asc. 25 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 18 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap

$$\frac{1}{4} \frac{S 34}{S 3}$$

1921

From which
 A cedar, 8 ins. diam., brs. N. $43\frac{1}{2}^\circ$ W., 31 lks. dist., marked $\frac{1}{4}$ S 34 B T.
 A cedar, 8 ins. diam., brs. S. $35\frac{1}{2}^\circ$ E., 170 lks. dist., marked $\frac{1}{4}$ S 3 B T.

Continue ascent, 85 ft.
 57.50 Ridge, brs. NE. and SW. Desc. 130 ft.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 14 ins. in the ground, in a mound of stone, for cor. of secs. 34 and 35, T. 28 N., R. 15 W., marked on brass cap

$$\begin{array}{r} T 28 N R 15 W \\ S 34 | S 35 \\ \hline S 3 \\ T 27 N R 15 W \\ 1921 \end{array}$$

From which
 A pine, 4 ins. diam., brs. N. $78\frac{3}{4}^\circ$ E., 28 lks. dist., marked T 28 N R 15 W S 35 B T.
 A cedar, 10 ins. diam., brs. N. 7° W., 55 lks. dist., marked T 28 N R 15 W S 34 B T.

80.56 Set an iron post, 3 ft. long, 2 ins. diam., 18 ins. in the ground, in a mound of stone, for cor. of secs. 2 and 3, T. 27 N., R. 15 W., marked on brass cap

$$\begin{array}{r} T 28 N R 15 W \\ S 35 \\ \hline S 3 | S 2 \\ T 27 N R 15 W \\ 1921 \end{array}$$

From which
 A cedar, 8 ins. diam., brs. S. $16\frac{1}{2}^\circ$ E., 54 lks. dist., marked T 27 N R 15 W S 2 B T.
 A cedar, 8 ins. diam., brs. S. $18\frac{1}{2}^\circ$ W., 78 lks. dist., marked T 27 N R 15 W S 3 B T

This cor. is necessitated by the excessive width of sec. 10, as determined in the subdivision of T. 27 N., R. 15 W., hereinafter described.

Land, rolling.
 Soil, rocky, 4th rate.
 Timber, cedar and pine.
 Undergrowth, buck brush, sagebrush, scrub oak, cedar, Spanish dagger and cactus.

East, on a true line, along the N. bdy. of sec. 2.
 Over rolling land, through scattering timber and undergrowth. Desc. 15 ft.
 7.70 Draw, course NE. Asc. 35 ft.
 14.45 Desc. 35 ft.
 18.00 Draw, course NE. Asc. 25 ft.
 24.45 Desc. 20 ft.
 25.75 Draw, course NE. Asc. 20 ft.
 29.45 Desc. 20 ft.
 32.25 Draw, course NE. Road in draw, brs. NE. to reservoirs and SW. to Clay Springs.

Completion of the Survey of the North Boundary
of T. 27 N., R. 15 W.

Chains Asc. 80 ft.
39.44 (40.00 chs. from the cor. of secs. 34 and 35, T. 28 N.,
R. 15 W.) Set an iron post, 3 ft. long, 1 in. diam.,
20 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec.
cor., marked on brass cap

$$\frac{1}{4} \begin{array}{r} S 35 \\ S 2 \\ \hline 1921 \end{array}$$

From which

A cedar, 10 ins. diam., brs. N. 38° W., 143 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

A cedar, 10 ins. diam., brs. S. 54° W., 114 lks.
dist., marked $\frac{1}{4}$ S 2 B T.

Continue ascent, 35 ft.

44.50 Desc. 50 ft.

79.44 (80.00 chs. from the cor. of secs. 34 and 35, T. 28 N.,
R. 15 W.) Set an iron post, 3 ft. long, 2 ins. diam.,
10 ins. in the ground, in a mound of stone, for cor.
of secs. 1, 2, 35 and 36, marked on brass cap

$$\begin{array}{r} T 28 N R 15 W \\ S 35 | S 36 \\ S 2 | S 1 \\ \hline T 27 N \\ 1921 \end{array}$$

From which

A pine, 14 ins. diam., brs. N. 8 $\frac{1}{2}$ ° E., 145 lks.
dist., marked T 28 N R 15 W S 36 B T.

A cedar, 8 ins. diam., brs. S. 62° E., 115 lks.
dist., marked T 27 N R 15 W S 1 B T.

A cedar, 9 ins. diam., brs. S. 5° W., 115 lks.
dist., marked T 27 N R 15 W S 2 B T.

A cedar, 10 ins. diam., brs. N. 68° W., 85 lks.
dist., marked T 28 N R 15 W S 35 B T.

Land, rolling.

Soil, rocky, 4th rate.

Timber, cedar and pine.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit
brush, Spanish dagger, cedar and cactus.

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

Over rolling land, through scattering timber and under-
growth. Desc. 100 ft.

19.35 Draw, course NE. Asc. 35 ft.

20.20 Road, brs. NE. to reservoirs and SW. to Clay Springs.

25.05 Spur, slopes NE. Desc. 25 ft.

30.00 Thence over slightly rolling land.

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

$$\frac{1}{4} \begin{array}{r} S 36 \\ S 1 \\ \hline 1921 \end{array}$$

From which

A cedar, 12 ins. diam., brs. N. 88 $\frac{1}{2}$ ° W., 118 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

A cedar, 16 ins. diam., brs. S. 19° E., 171 lks.
dist., marked $\frac{1}{4}$ S 1 B T.

48.00 Trail, brs. NE. and SW.

50.30 Draw, course NE.

65.55 Trail, brs. NE. and SW.

80.00 The cor. of Ts. 27 and 28 N., Rs. 14 and 15 W.

Land, rolling and slightly rolling.

BOOK 3501

Completion of the Survey of the North Boundary
of T. 27 N., R. 15 W.

Chains Soil, rocky, 3rd and 4th rates, limestone formation.
Timber, cedar and pine.
Undergrowth, buck brush, scrub oak, sagebrush, rabbit
brush, Spanish dagger, cedar and cactus.

Boundaries of that Part of T. 27 N., R. 15 W.
Surveyed under this Group.

Latitudes, departures and closing errors.

| Line designated | True bearing | Dist. chs. | Latitudes. | | Departures. | |
|------------------------------------|--------------------|---------------|------------|------------|-------------|------------|
| | | | N. chs. | S. chs. | E. chs. | W. chs. |
| Hualpai Indian Reservation Bdy. | N. 40° W. | 204.20 | 156.43 | | | 131.26 |
| | N.40° 11' W. | 39.42 | 30.12 | | | 25.44 |
| | N.39° 54' W. | 39.79 | 30.53 | | | 25.52 |
| | N. 40° 16' W. | 39.79 | 30.36 | | | 25.72 |
| | N.40° 2' W. | 39.73 | 30.42 | | | 25.56 |
| | N.39° 49' W. | 39.30 | 30.19 | | | 25.17 |
| | N.40° 8' W. | 39.91 | 30.51 | | | 25.72 |
| N.39° 58' W. | 25.32 | 19.41 | | | 16.26 | |
| North Boundary | East | 299.77 | | | 299.77 | |
| East Boundary | South | 357.79 | | 357.79 | | |
| Convergency | | | | | .12 | |
| Totals | | | 357.97 | 357.79 | 299.89 | 300.65 |
| | | | 357.79 | | | 299.89 |
| | Error in latitude | | .18 | | | |
| | Error in departure | | | | | .76 |

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains

The subdivision of that part of T. 27 N., R. 15 W., lying directly south of the Hualpai Indian Reservation was executed in 1917 under Group 45, by S. Frank Walters and James C. Hooper, U. S. Transitmen. The closing cors. on the Reservation Boundary are the cors. established by them.

The closing cor. of secs. 24 and 25, on the Hualpai Indian Reservation Boundary is an iron post, 2 ins. diam., set in a mound of stone, properly marked, witnessed by two bearing trees, and established 48.78 chs. East of the cor. of secs. 23, 24, 25 and 26. On that part of the brass cap referring to the areas lying within the Hualpai Indian Reservation, I add the section numbers S 24 and S 25, and above the original date 1917 I add the year number 1921. I also efface the letters C C on the brass cap and on the bearing trees.

Thence

East, on a true line, bet. secs. 24 and 25.

Over rolling land, through scattering timber and undergrowth. Desc. 40 ft.

7.02 Draw, course NE. Asc.

16.02 Desc. 35 ft.

18.12 Draw, course NE. Asc. 30 ft.

31.01 (79.79 chs. East of the cor. of secs. 23, 24, 25 and 26).

Intersect the E. bdy. of T. 27 N., R. 15 W., at a point 36.85 chs. N. of the closing cor. of secs. 25 and 30,

where I establish the cor. of secs. 24 and 25, as described in Book "B".

Land, rolling.

Soil, rocky, 4th rate; limestone and lava formations.

Timber, pine and cedar.

Undergrowth, buck brush, sagebrush, scrub oak, cedar, Spanish dagger and cactus.

The closing cor. of secs. 23 and 24, on the Hualpai Indian Reservation Boundary is an iron post, 2 ins. diam., set in a mound of stone, properly marked, witnessed by two bearing trees and established 58.40 chs. N. $0^{\circ} 1' W.$ of the cor. of secs. 23, 24, 25 and 26. On that part of the brass cap referring to the areas lying within the Hualpai Indian Reservation, I add the section numbers S 23 and S 24, and above the original date 1917 I add the year number 1921. I also efface the letters C C on the brass cap and on the bearing trees.

Thence, N. $0^{\circ} 1' W.$, bet. secs. 23 and 24.

Over mountainous land, through scattering timber and undergrowth. Asc. 115 ft.

7.30 Spur, slopes SE. Desc. 15 ft.

21.79 (80.19 chs. N. $0^{\circ} 1' W.$ of the cor. of secs. 23, 24, 25 and 26). At a point due East of the closing cor. of secs. 14 and 23, hereinafter described, set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked on brass cap

T 27 N R 15 W

S 14 | S 13

S 23 | S 24

1921

From which

A cedar, 9 ins. diam., brs. N. $44^{\circ} E.$, 65 lks. dist., marked T 27 N R 15 W S 13 B T.

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains

- A cedar, 12 ins. diam., brs. S. 73° E., 95 lks. dist. marked T 27 N R 15 W S 24 B T.
- A cedar, 8 ins. diam., brs. S. 69½° W., 58 lks. dist., marked T 27 N R 15 W S 23 B T.
- A pine, 4 ins. diam., brs. N. 25½° W., 56 lks. dist., marked T 27 N R 15 W S 14 B T.

Land, mountainous.
Soil, rocky, 4th rate.
Timber, pine and cedar.
Undergrowth, buck brush, sagebrush, scrub oak, cedar, Spanish dagger and cactus.

East on a random line, bet. secs. 13 and 24.

40.00 Set temp. ¼ sec. cor.

79.66 Fall 28 lks. S. of the cor. of secs. 13, 18, 19 and 24, on the E. bdy. of Tp., described in Book "B".

Thence

S. 89° 48' W., on a true line, bet. secs. 13 and 24.

Over rolling land, through scattering timber and dense undergrowth. Asc. 15 ft.

5.00 Desc. 15 ft.

14.30 Asc. 35 ft.

24.30 Desc. 20 ft.

31.05 Road, brs. NW. to Clay Springs and SE. to Milkweed Springs.

31.55 Draw, course SE.

36.70 Draw, course SE. Asc. 30 ft.

39.83 Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground, in a mound of stone, for ¼ sec. cor., marked on brass cap

$$\frac{1}{4} \frac{S 13}{S 24}$$

1921

From which

A cedar, 9 ins. diam., brs. N. 63¾° W., 74 lks. dist., marked ¼ S 13 B T.

A cedar, 18 ins. diam., brs. S. 3¾° W., 56 lks. dist., marked ¼ S 24 B T.

Continue ascent, 140 ft.

55.00 Desc. 15 ft.

66.40 Asc. 45 ft.

79.66 The cor. of secs. 13, 14, 23 and 24.

Land, rolling.

Soil, rocky, 3rd and 4th rates.

Timber, pine and cedar.

Undergrowth, buck brush, sagebrush, scrub oak, cedar, Spanish dagger and cactus.

N. 0° 1' W., bet. secs. 13 and 14.

Over rolling land, through scattering timber and undergrowth. Asc. 20 ft.

2.40 Desc. 50 ft.

16.20 Asc. 255 ft.

33.14 Ridge, brs. NE. and SW. Desc.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 14 ins. in the ground, in a mound of stone, for ¼ sec. cor., marked on brass cap

$$S 14 \uparrow S 13$$

1921

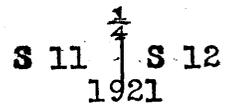
From which

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

| | |
|--------|--|
| Chains | <p>A pine, 10 ins. diam., brs. S. $37\frac{1}{2}^{\circ}$ E., 69 lks. dist., marked $\frac{1}{4}$ S 13 B T.</p> <p>A pine, 7 ins. diam., brs. N. 86° W., 15 lks. dist., marked $\frac{1}{2}$ S 14 B T.</p> <p>Asc. 140 ft.</p> <p>61.50 Ridge, brs. N. 10° W. and S. 10° E. Desc. 120 ft.</p> <p>72.35 Same ridge, brs. N. 10° E. and S. 10° W. Continue descent, 60 ft.</p> <p>80.00 Set an iron post, 3 ft. long, 2 ins. diam., on bed rock, with cross (X) at exact cor. point, in a mound of stone, for cor. of secs. 11, 12, 13 and 14, marked on brass cap</p> <p style="text-align: center;">T 27 N R 15 W S 11 S 12 S 14 S 13 1921</p> <p>From which</p> <p>A pine, 14 ins. diam., brs. N. $64\frac{3}{4}^{\circ}$ E., 66 lks. dist. marked T 27 N R 15 W S 12 B T.</p> <p>A pine, 16 ins. diam., brs. S. $53\frac{3}{4}^{\circ}$ E., 25 lks. dist., marked T 27 N R 15 W S 13 B T.</p> <p>A pine, 8 ins. diam., brs. S. $61\frac{1}{4}^{\circ}$ W., 95 lks. dist., marked T 27 N R 15 W S 14 B T.</p> <p>A pine, 8 ins. diam., brs. N. $68\frac{3}{4}^{\circ}$ W., 27 lks. dist., marked T 27 N R 15 W S 11 B T.</p> <p>Land, rolling and mountainous. Soil, rocky, 4th rate. Timber, pine and cedar. Undergrowth, buck brush, sagebrush, scrub oak, cedar, Spanish dagger and cactus.</p> |
| 40.00 | N. $89^{\circ} 48'$ E., on a random line, bet. secs. 12 and 13. Set temp. $\frac{1}{4}$ sec. cor. |
| 79.60 | Run 9 lks. N. of the cor. of secs. 7, 12, 13 and 18, on the E. bdy. of Tp., described in Book "B". Thence, S. $89^{\circ} 52'$ W., on a true line, bet. secs. 12 and 13. Over rolling hills, through scattering timber and dense undergrowth. |
| 4.30 | Draw, course NE. Asc. |
| 7.30 | Spur, slopes N. Desc. |
| 10.40 | Draw, course N. |
| 16.40 | Draw, course NE. Asc. 310 ft. |
| 38.00 | Ridge, brs. NE. and SW. Desc. |
| 39.80 | Set an iron post, 3 ft. long, 1 in. diam., 8 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap |
| | $\frac{1}{4}$ S 12 S 13 1921 |
| | From which |
| | A pine, 8 ins. diam., brs. N. 27° E., 160 lks. dist., marked $\frac{1}{4}$ S 12 B T. |
| | A pine, 10 ins. diam., brs. S. $14\frac{3}{4}^{\circ}$ W., 36 lks. dist., marked $\frac{1}{4}$ S 13 B T. |
| | Desc. 165 ft. |
| 53.60 | Road, brs. N. to Clay Springs and S. to Milkweed Springs. Thence over slightly rolling land, ascending 80 ft. |
| 63.10 | Trail, brs. NW. and SE. |
| 79.60 | The cor. of secs. 11, 12, 13 and 14. Land, rolling and mountainous. Soil, rocky, 4th rate; limestone formation. Timber, cedar and pinyon. Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus. |

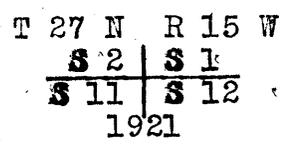
Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains N. 0° 1' W., bet. secs. 11 and 12.
Over mountainous land, through scattering timber and
undergrowth. Desc. 330 ft.
13.00 Trail, brs. E. and W.
15.75 Gulch, course SW. Asc. 305 ft.
35.80 Spur, slopes SW. Desc. 20 ft.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 18 ins. in the
ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked
on brass cap



From which
A pine, 10 ins. diam., brs. S. 80° E., 48 lks.
dist., marked $\frac{1}{4}$ S 12 B T.
A pine, 10 ins. diam., brs. S. 19° W., 63 lks.
dist., marked $\frac{1}{4}$ S 11 B T.

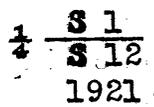
Continue descent, 75 ft.
42.30 Draw, course SW. Asc. 95 ft.
51.20 Desc. 60 ft.
54.90 Asc. 80 ft.
61.25 Ridge, brs. E. and W. Desc. 85 ft.
72.30 Road, brs. NE. to Milkweed Springs and SW. to Clay
Springs. Draw, course NW. Asc. 35 ft.
77.80 Spur, slopes NW. Desc. 10 ft.
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 20 ins. in
the ground, in a mound of stone, for cor. of secs. 1,
2, 11 and 12, marked on brass cap



From which
A cedar, 10 ins. diam., brs. N. 23° E., 94 lks.
dist., marked T 27 N R 15 W S 1 B T.
A cedar, 10 ins. diam., brs. S. 65 $\frac{1}{2}$ ° E., 42 lks.
dist., marked T 27 N R 15 W S 12 B T.
A cedar, 6 ins. diam., brs. N. 48° W., 43 lks.
dist., marked T 27 N R 15 W S 11 B T.
A cedar, 12 ins. diam., brs. N. 7 $\frac{1}{4}$ ° W., 135 lks.
dist., marked T 27 N R 15 W S 2 B T.

Land, mountainous.
Soil, rocky, 4th rate.
Timber, cedar and pine.
Undergrowth, buck brush, scrub oak, sagebrush, rabbit
brush, cedar, Spanish dagger and cactus.
Fair grazing.

N. 89° 52' E., on a random line, bet. secs. 1 and 12.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.74 Intersect the cor. of secs. 1, 6, 7 and 12, on the E.bdy.
of Tp., described in Book "B".
Thence, S. 89° 52' W., on a true line, bet. secs. 1 and 12
Over slightly rolling land, through scattering timber
and dense undergrowth.
3.70 Draw, course NW.
20.25 Trail, brs. N. and S.
39.87 Set an iron post, 3 ft. long, 1 in. diam., 8 ins. in the
ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked
on brass cap



Completion of the Survey of the Subdivision of
T. 27 N., R. 15 W.

| | |
|--------|--|
| Chains | <p>From which A cedar, 18 ins. diam., brs. N. $69\frac{3}{4}^{\circ}$ W., 57 lks. dist., marked $\frac{1}{4}$ S 1 B T. A pine, 10 ins. diam., brs. S. $3\frac{3}{4}^{\circ}$ W., 184 lks. dist., marked $\frac{1}{4}$ S 12 B T. Asc. 105 ft. 55.00 Desc. 55 ft. 69.00 Draw, course NW. Asc. 35 ft. 79.74 The cor. of secs. 1, 2, 11 and 12. Land, rolling and slightly rolling. Soil, rocky, 4th rate; limestone formation. Timber, pine and cedar. Undergrowth, scrub oak, buck brush, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.</p> |
| 40.00 | N. 0° 1' W., on a random line, bet. secs. 1 and 2. Set temp. $\frac{1}{4}$ sec. cor. |
| 80.83 | Fall 14 lks. E. of the cor. of secs. 1, 2, 35 and 36, on the N. bdy. of Tp., hereinbefore described. Thence, S. 0° 7' E., on a true line, bet. secs. 1 and 2. Over rolling hills, through scattering timber and undergrowth. Ascend. |
| 2.00 | Spur, slopes E. Desc. 110 ft. |
| 25.40 | Wash, 10 lks. wide, course N. 60° E. Thence over level land. |
| 30.10 | Wash, 10 lks. wide, course NE. |
| 40.78 | Road, brs. NE. to Reservoirs and SW. to Clay Springs. |
| 40.83 | Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap |
| | $\frac{1}{4}$ S 2 S 1 1921 |
| | <p>From which A cedar, 20 ins. diam., brs. S. $72\frac{1}{2}^{\circ}$ E., 22 lks. dist., marked $\frac{1}{4}$ S 1 B T. A cedar, 6 ins. diam., brs. S. $10\frac{1}{4}^{\circ}$ W., 232 lks. dist., marked $\frac{1}{4}$ S 2 B T</p> |
| 59.85 | Leave level land. Asc. 50 ft. |
| 75.00 | Draw, course NW. Continue ascent, 60 ft. |
| 80.83 | The cor. of secs. 1, 2, 11 and 12. Land, rolling and level. Soil, rocky, 3rd and 4th rates. Timber, cedar and pine. Undergrowth, scrub oak, buck brush, sagebrush, rabbit brush, Spanish dagger, cedar and cactus. |
| 18.35 | <p>The closing cor. of secs. 14 and 23, on the Hualpai Ind- ian Reservation Boundary is an iron post, 2 ins. diam., set in a mound of stone, properly marked, witnessed by two bearing trees, and set 61.30 chs. East of the cor. of secs. 14, 15, 22 and 23. On that part of the brass cap referring to the areas lying within the Hualpai Indian Reservation, I add the section numbers S 14 and S 23, and above the original date 1917 I add the year number 1921. I also efface the letters C C on the brass cap and on the bearing trees. Thence East on a true line, bet. secs. 14 and 23. Over rolling land, through scattering timber and dense undergrowth. Desc. 105 ft.</p> |

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains The cor. of secs. 13, 14, 23 and 24, heretofore described.
Land, rolling.
Soil, rocky, 3rd and 4th rates; limestone formation.
Timber, pine and cedar.
Undergrowth, buck brush, scrub oak, sagebrush, Spanish
dagger, cedar and cactus.
Fair grazing.

The closing cor. of secs. 14 and 15, on the Hualpai Indian Reservation Boundary is an iron post, 2 ins. diam., set in a mound of stone, properly marked, witnessed by mound of stone and set 73.57 chs. N. 0° 1' W. of the cor. of secs. 14, 15, 22 and 23. On that part of the brass cap referring to the areas lying within the Hualpai Indian Reservation, I add the section numbers S 14 and S 15, and above the original date 1917, I add the year number 1921. I also efface the letters C C on the brass cap.

Thence, N. 0° 1' W., bet. secs. 14 and 15.
Over mountainous land, through scattering timber and undergrowth. Asc. 170 ft.

6.49 (80.06 chs. N. 0° 1' W. of the cor. of secs. 14, 15, 22 and 23) A point due East of the closing cor. of secs. 10 and 15, hereinafter described. Set an iron post, 3 ft. long, 2 ins. diam., 10 ins. in the ground, in a mound of stone, for cor. of secs. 10, 11, 14 and 15, marked on brass cap

| | |
|--------|--------|
| T 27 N | R 15 W |
| S 10 | S 11 |
| S 15 | S 14 |
| 1921 | |

From which

- A pine, 5 ins. diam., brs. N. 35 $\frac{3}{4}$ ° E., 313 lks. dist., marked T 27 N R 15 W S 11 B T.
- A cedar, 8 ins. diam., brs. S. 50° E., 281 lks. dist., marked T 27 N R 15 W S 14 B T.
- A pine, 4 ins. diam., brs. S. 12 $\frac{1}{2}$ ° W., 80 lks. dist., marked B T.
- A pine, 9 ins. diam., brs. N. 40° W., 249 lks. dist., marked T 27 N R 15 W S 10 B T.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, pine and cedar.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.

Fair grazing.

East on a random line, bet. secs. 11 and 14.

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

79.58 Intersect the cor. of secs. 11, 12, 13 and 14.

Thence, west on a true line, bet. secs. 11 and 14.

Over mountainous land, through scattering timber and dense undergrowth. Desc. 585 ft.

23.40 Draw, course SW.

24.70 Same draw, course NW. Continue descent, 125 ft.

35.35 Wash, course NW. Continue descent, 65 ft.

39.79 Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains

$\frac{1}{4}$ S 11
S 14
1921

From which

A cedar, 5 ins. diam., brs. N. $81\frac{1}{2}^\circ$ E., 152 lks.
dist., marked $\frac{1}{4}$ S 11 B T.

A cedar, 7 ins. diam., brs. S. 25° W., 206 lks.
dist., marked $\frac{1}{4}$ S 14 B T.

Continue descent, 35 ft.

- 43.10 Trail, brs. NE. and SW.
- 46.10 Road, brs. NE. to Reservoirs and SW. to Clay Springs.
- 48.20 Wash, course SW. Asc. 45 ft.
- 55.00 Desc.
- 57.60 Draw, course S. Asc. 380 ft.
- 58.35 From this point, Capt. Jack's house brs. South 0.60 chs.
- 79.58 The cor. of secs. 10, 11, 14 and 15.
Land, rolling and mountainous.
Soil, rocky, 3rd and 4th rates.
Timber, cedar and pine.
Undergrowth, buck brush, scrub oak, sagebrush, rabbit
brush, Spanish dagger, cedar and cactus.
Fair grazing.

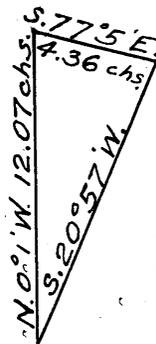
N. $0^\circ 1'$ W., bet. secs. 10 and 11.

Over mountainous land, through scattering timber and undergrowth. Asc. 445 ft.

- 0.97 Top of cliff, 20 ft. high.
- 17.75 Spur, slopes E.
- 18.20 Impossible to chain from this point. Set a flag ahead on line, from which I measure a base S. $77^\circ 5'$ E., 4.36 chs. - impracticable to secure longer base - from the E. end of which, flag at the 18.20 ch. point brs. S. $20^\circ 57'$ W. The three angles of the triangle are therefore $20^\circ 58'$, $77^\circ 4'$ and $81^\circ 58'$, the sum of which is 180° . The distance triangulated is given by the sine proportion:

$$\frac{X}{4.36} = \frac{\sin. 81^\circ 58'}{\sin. 20^\circ 58'}$$

| | | | |
|--------------------------|------|---|-----------------|
| log. | 4.36 | = | 0.639486 |
| log. sin. $81^\circ 58'$ | | = | 9.995717 |
| | | | <u>.635203</u> |
| log. sin. $20^\circ 58'$ | | = | 9.553670 |
| log. X | | = | <u>1.081533</u> |



X = 12.07 chs., which added to 18.20 chs., = 30.27 chs. The approximate topography is as follows:

- 29.00 Canyon, course E., 450. ft. below spur. Asc.
- 30.27 Triangulation point. Thence by chaining. Asc. 285 ft.
- 30.57 Trail brs. E. and W.
- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap

$\frac{1}{4}$
S 10 | S 11
1921

From which

A pine, 18 ins. diam., brs. N. $69\frac{1}{2}^\circ$ E., 84 lks.
dist., marked $\frac{1}{4}$ S 11 B T.

A pine, 10 ins. diam., brs. N. $41\frac{3}{4}^\circ$ W., 97 lks.
dist., marked $\frac{1}{4}$ S 10 B T.

BOOK 3501

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains Continue ascent, 290 ft.
48.20 Ridge, brs. E. and W. Desc. 30 ft.
55.00 Draw, course E. Asc. 85 ft.
67.00 Spur, slopes E. Desc. 140 ft.
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 6 ins. in the ground, in a mound of stone, for cor. of secs. 2, 3, 10 and 11, marked on brass cap

| | | | |
|--------|------|--------|------|
| T 27 N | | R 15 W | |
| S 3 | S 3 | S 2 | S 2 |
| S 10 | S 10 | S 11 | S 11 |
| 1921 | | | |

From which

- A pine, 6 ins. diam., brs. N. $37\frac{1}{4}^{\circ}$ E., 85 lks. dist., marked T. 27 N R 15 W S 2 B T.
- A pine, 8 ins. diam., brs. S. 83° E., 87 lks. dist., marked T 27 N R 15 W S 11 B T.
- A pine, 8 ins. diam., brs. S. 52° W., 123 lks. dist., marked T 27 N R 15 W S 10 B T.
- A cedar, 12 ins. diam., brs. N. $78\frac{1}{2}^{\circ}$ W., 23 lks. dist., marked T 27 N R 15 W S 3 B T.

Land, rolling and mountainous.

Soil, rocky, 3rd and 4th rates; limestone formation.

Timber, cedar and pine.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.

Fair grazing.

East, on a random line, bet. secs. 2 and 11
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.68 Intersect N. and S. line, 19 lks. S. of the cor. of secs. 1, 2, 11 and 12.
Thence, S. $89^{\circ} 52'$ W., on a true line, bet. secs. 2 and 11. Over rolling land, through scattering timber and dense undergrowth. Desc. 75 ft.
5.00 Trail, brs. NE. and SW.
10.60 Road, brs. N. and S.
11.00 Draw, course N. Asc. 70 ft.
39.84 Set an iron post, 3 ft. long, 1 in. diam., 19 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap

| | | |
|---------------|------|------|
| $\frac{1}{4}$ | S 2 | S 2 |
| $\frac{1}{4}$ | S 11 | S 11 |
| 1921 | | |

From which

- A cedar, 14 ins. diam., brs. N. $29\frac{1}{2}^{\circ}$ W., 87 lks. dist., marked $\frac{1}{4}$ S 2 B T.
- A pine, 8 ins. diam., brs. S. $10\frac{1}{4}^{\circ}$ E., 26 lks. dist., marked $\frac{1}{4}$ S 11 B T.

Asc. 40 ft.

53.75 Desc. 15 ft.

60.94 Draw, course NE. Asc. 120 ft.

77.50 Desc. 20 ft.

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

Land, rolling.

Soil, rocky, 3rd and 4th rates.

Timber, cedar and pine.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.

N. $0^{\circ} 7'$ W., on a random line, bet. secs. 2 and 3.

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains
40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.98 Intersect the cor. of secs. 2 and 3, on the N. bdy. of
Tp., hereinbefore described.
Thence, S. $0^{\circ} 7' E.$, on a true line, bet. secs. 2 and 3.
Over rolling land, through scattering timber and under-
growth. Desc. 30 ft.
9.50 Draw, course NE. Asc. 125 ft.
30.00 Spur, slopes NE. Desc. 20 ft.
40.98 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the
ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked
on brass cap

$\frac{1}{4}$
 S 3 | S 2
 1921

From which

A cedar, 9 ins. diam., brs. S. $43\frac{1}{4}^{\circ} E.$, 71 lks.
dist., marked $\frac{1}{4}$ S 2 B T.

A cedar, 15 ins. diam., brs. S. $33^{\circ} W.$, 176 lks.
dist., marked $\frac{1}{4}$ S 3 B T.

Continue descent, 65 ft.

70.00 Draw, course E. Asc. 75 ft.

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

Land, rolling.

Soil, rocky, 3rd and 4th rates.

Timber, cedar and pine.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit
brush, Spanish dagger, cedar and cactus.

Fair grazing.

The closing cor. of secs. 10 and 15, on the Hualpai
Indian Reservation Boundary is an iron post, 2 ins. diam.,
set in a mound of stone, properly marked, witnessed by a
mound of stone, and set 74.94 chs. East of the cor. of
secs. 9, 10, 15 and 16. On that part of the brass cap
referring to the areas lying within the Hualpai Indian
Reservation, I add the section numbers S 10 and S 15, and
above the original date 1917 I add the year number 1921.
I also efface the letters C C on the brass cap.

Thence

East, on a true line, bet. secs. 10 and 15.

Over mountainous land, through scattering timber and un-
dergrowth. Desc. 85 ft.

5.43 (80.37 chs. East of the cor. of secs. 9, 10, 15 and 16)

Intersect the cor. of secs. 10, 11, 14 and 15, herein-
before described.

Land, mountainous.

Soil, rocky, 3rd and 4th rates.

Timber, pine and cedar.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit
brush, Spanish dagger, cedar and cactus.

Fair grazing.

The closing cor. of secs. 3 and 10, on the Hualpai
Indian Reservation Boundary is an iron post, 2 ins. diam.,
set in a mound of stone, properly marked, witnessed by
two bearing trees, and set 7.55 chs. East of the Cor. of
secs. 3, 4, 9 and 10. On that part of the brass cap
referring to the areas lying within the Hualpai Indian

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

BOOK 6287

Chains Reservation, I add the section numbers S 3 and S 10, and above the original date 1917 I add the year number 1921. I also efface the letters C C on the brass cap and on the bearing trees.

Thence, East on a random line, bet. secs. 3 and 10.
32.45 (40.00 chs. East of the cor. of secs. 3, 4, 9 and 10.)

Set temp. $\frac{1}{4}$ sec. cor.
72.93 (80.48 chs. East of the cor. of secs. 3, 4, 9 and 10.)

Intersect N. and S. line, 8 lks. N. of the cor. of secs. 2, 3, 10 and 11.

I return to the original closing cor. of secs. 3 and 10. Thence East on a true line, continuing measurement, bet. secs. 3 and 10.

Over rolling hills, through scattering timber and dense undergrowth. Desc. 260 ft.

32.69 (40.24 chs. East of the cor. of secs. 3, 4, 9 and 10).

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

$\frac{1}{4}$ $\frac{S 3}{S 10}$
1921

From which

A cedar, 9 ins. diam., brs. N. $21\frac{1}{2}^{\circ}$ E., 94 lks. dist., marked $\frac{1}{4}$ S 3 B T.

A cedar, 8 ins. diam., brs. S. $36\frac{1}{2}^{\circ}$ E., 68 lks. dist., marked $\frac{1}{4}$ S 10 B T.

Thence S. $89^{\circ} 53'$ E., on a true line, bet. secs. 3 and 10, continuing measurement. Asc. 60 ft.

43.65 Desc. 115 ft.

65.35 Asc. 30 ft.

72.93 (80.48 chs. from the cor. of secs. 3, 4, 9 and 10).

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

Land, rolling hills.

Soil, rocky, 3rd and 4th rates; limestone formation.

Timber, cedar and pine.

Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.

Fair grazing.

The closing cor. of secs. 3 and 4, on the Hualpai Indian Reservation is an iron post, 2 ins. diam., set in a mound of stone, properly marked, witnessed by two bearing trees, and established 9.04 chs. N. $0^{\circ} 2'$ W. of the cor. of secs. 3, 4, 9 and 10. On that part of the brass cap referring to the areas lying within the Hualpai Indian Reservation, I add the section numbers S 3 and S 4, and above the original date 1917 I add the year number 1921. I also efface the letters C C on the brass cap and on the bearing trees.

Thence, N. $0^{\circ} 2'$ W., on a random line, bet. secs. 3 and 4.

30.96 (40.00 chs. N. $0^{\circ} 2'$ W., of the cor. of secs. 3, 4, 9 and 10.)

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

71.88 (80.92 chs. N. $0^{\circ} 2'$ W. of the cor. of secs. 3, 4, 9 and 10.)

Fall 13 lks. E. of the cor. of secs. 3, 4, 33 and 34, on the N. bdy. of Tp., hereinbefore described.

I return to the original closing cor. of secs. 3 and 4.

Thence, N. $0^{\circ} 2'$ W., on a true line, bet. secs. 3 and 4.

Completion of the Survey of the Subdivision
of T. 27 N., R. 15 W.

Chains Over mountainous land, through scattering timber and undergrowth. Desc. 310 ft.
 14.96 Spur, slopes NE. Continue descent.
 25.46 Draw, course NE. Continue descent, 45 ft.
 30.96 (40.00 chs. N. $0^{\circ} 2'$ W., of the cor. of secs. 3, 4, 9 and 10).
 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap

$\frac{1}{4}$
 S 4 | S 3
 1921

From which
 A cedar, 6 ins. diam., brs. S. $75\frac{1}{2}^{\circ}$ E., 28 lks. dist., marked $\frac{1}{4}$ S 3 B T.
 A cedar limb, 8 ins. diam., brs. S. $36\frac{1}{2}^{\circ}$ W., 87 lks. dist., marked $\frac{1}{4}$ S 4 B T.
 Thence N. $0^{\circ} 11'$ W., on a true line, bet. secs. 3 and 4, continuing measurement. Asc.

39.56 Desc. 60 ft.
 54.46 Draw, course NE. Asc. 25 ft.
 59.56 Desc. 30 ft.
 71.88 The cor. of secs. 3, 4, 33 and 34.
 Land, mountainous and rolling.
 Soil, rocky, 4th rate.
 Timber, cedar and pine.
 Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.
 Fair grazing.

The continued satisfactory adjustment of the solar during the survey of this township is indicated from field tests as described in Book "D".

GENERAL DESCRIPTION.

The portion of T. 27 N., R. 15 W., subdivided under this group is rolling and mountainous land, covered with scrubby cedar and pine timber and buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger and cactus undergrowth. The soil is rocky, 4th rate.

There is one settler in sec. 14. No water has been developed in this township inside the reservation. There are no indications of mineral.

BOOK 3561

CERTIFICATE OF UNITED STATES CADASTRAL ENGINEER.

I, William B. Kimmel, U.S. Cadastral Eng'r, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 110, Arizona, bearing date of the 27th day of February, 19 20, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, retraced all those parts or portions of the Boundary of the Hualpai Indian Reservation, and surveyed all those parts or portions of the North boundary and Subdivision lines, of

TOWNSHIP 27 NORTH, RANGE 15 WEST,

of the Gila and Salt

River Base and Meridian, in the State of Arizona, and by diagram on page 1 hereof the foregoing field notes as having been executed by me, and under my direction; and that all the corners of retracement and 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 Group 110, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such retracement and survey.

Place Dixieland, Calif.

Wm B. Kimmel

U.S. Cadastral Engineer.

Date June 7, 1923.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, JUN 30, 1923.

The foregoing field notes of the survey of retracement of part of the Boundary of the Hualpai Indian Reservation, and of the Survey of Part of the North boundary (completion), and Part of the Subdivision lines (completion) of

TOWNSHIP 27 NORTH, RANGE 15 WEST,

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

executed by William B. Kimmel, U.S. Cadastral Engineer,

under his special instructions dated Feb. 27, 1920, for Group 110, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank P. Grot

U. S. Surveyor General.

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

U. S. Surveyor General.