

Book 2307
FIELD NOTES

BOOK 2307

2307

143

OF THE SURVEY OF THE

Subdivisional Series of T. 21. N. R. 16 W.

2307

Of the *G. & S. R.* Meridian,

In the State of *Territory of Arizona*

EXECUTED BY

Case B. Wright

In the capacity of U. S. Surveyor, under instructions dated *Sept. 16*, 1910, issued by the United States Surveyor General to govern surveys included in Group No. *9*, which were approved by the Commissioner of the General Land Office, *Sept. 28*, 1910, pursuant to authority contained in the Act of Congress dated *February 27*, 1899

2307

Survey commenced *March 26*, 1911

Survey completed *April 8*, 1911

2307

2307

184

For Catts, see Book B.

BOOK 2307

INDEX DIAGRAM.

Township 21 N., Range 16 W.

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

Note: For N. and E. Bds. see Book S. Group 10 6-151
 " West Bdy. " " A " "
 " South " " " B " "

Chains.

Survey commenced March 26, 1911, and executed with a W. & L. E. Gurley light mountain transit, special make, unnumbered, with Burt's patent solar attachment. The horizontal limb of the instrument is provided with two double verniers placed opposite to each other, and each reading to 1' of arc, which is also the least reading of the verniers of the latitude and declination arcs. Since it is impracticable to proceed to the Std. cor. of secs. 35 & 36, on the S. bdy. of T. 21 N., R. 16 W., in time to make a solar observation this p.m., I proceed as follows :-

At a point near my camp, near the cor. of secs. 22, 23, 26 & 27, T. 21 N., R. 15 W., I examine and test carefully all the adjustments of my transit and solar apparatus. Finding all parts of my instrument in correct adjustment as to tests; then, in order to test the solar apparatus, by comparing the results of observations on the sun, for meridians, made during p.m. & a.m. hours, respectively, with a true meridian established by Polaris observation, I proceed as follows :-

At 4h p.m., l.m.t., I set off $2^{\circ}5' S.$ on the decl. arc, and $35^{\circ}11' N.$ on the lat. arc, and determine a meridian with the solar, and mark a point in the meridian thus determined by a cross on a fixed stone 5 chs. N. of my station.

At 7h 10m. p.m., l.m.t., I observe Polaris at Western Elongation, in accordance with instructions in the "Manual", and mark the line thus determined by a tack in a stake driven firmly in the ground 6 chs. N. of my station.

March 26, 1911.

March 27, 1911.

At 8h a.m., l.m.t., I set off the azimuth of Polaris, $1^{\circ}25'$ to the East, and mark the true meridian thus determined by a cross on the fixed stone 5 chs. N. of my station, which point falls .40 ins. E. of the point in the meridian as established by the solar on preceding evening.

Then I set off $2^{\circ}21' N.$ on the decl. arc, and $35^{\circ}11' N.$ on the lat. arc, and determine a meridian with the solar, and mark a point in the meridian thus determined by a cross on the fixed stone 5 chs. N. of my station, which point falls about .40 ins. E. of the point in the true meridian as established by observation of Polaris. The solar apparatus, by p.m. & a.m. hours observations, defines positions for meridians about $21'' W.$, and $21'' E.$, respectively, of the true meridian as established by Polaris observation. These errors being probably no greater than the usual or personal errors of observation, I conclude that my instrument is in satisfactory adjustment.

The magnetic bearing of the true meridian at 8h a.m., is $N. 15^{\circ}25' W.$; the angle thus determined gives the magnetic declination as $15^{\circ}25' E.$

At 9h a.m., l.m.t., at the standard cor. of secs. 35 & 36, on the S. bdy. of T. 21 N., R. 16 W. as re-established by me, and heretofore described,

I set off $2^{\circ}21\frac{1}{2}' N.$ on the decl. arc and $35^{\circ}9\frac{1}{2}' N.$ on the lat. arc, and determine a true meridian with the solar, Thence I run, as per instructions,

Var. $15^{\circ}25' E.$,

Chains.

N. 0° 1' W., bet. secs. 35 & 36.
 Over mts. land, desc., through scattering cedar, pinon.
 5.00 Gulch, 150 lks. wide, course W., asc. broken SSW. 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,
 $\frac{1}{4}$ S. 35 in W., and
 $\frac{1}{4}$ S. 36 in E. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 No bearings available. Pits impracticable.
 47.50 Ridge, brs. W. & E., desc. steep.
 52.00 Gulch, 50 lks. wide, course W., asc.
 56.20 Ridge, brs. W. & E., desc. more gradual. Leave cedar & Pinon.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 25, 26, 35 & 36, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 26 in NW.,
 S. 25 in NE.,
 S. 36 in SE., and
 S. 35 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 No bearings available. Pits impracticable.
 Land, mts., broken. Soil, 3rd rate, stony, gravelly.
 No timber. Undergrowth, scattering cedar, pinon, palonegro.

East, on a random line, bet. secs. 25 & 36.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.04 Intersect E. bdy. of Tp. at a point 9 lks. S. of cor. of
 secs. 25, 30, 31 & 36, whence I run,
 S. 89° 56' W., on a true line, bet. secs. 25 & 36.
 Over mts. land, desc., through cedar & pinon.
 15.00 On high long rocky spur, brs. NW. & SE., desc. steep.
 32.00 Gulch, 50 lks. wide, course NW., asc.
 40.02 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,
 $\frac{1}{4}$ S. 25 in N., and
 $\frac{1}{4}$ S. 36 in S. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 41.50 Spur, brs. NW. & SE.
 52.00 Gulch, 50 lks. wide, course NNW., asc. steep.
 55.60 Rocky spur, brs. NNW. & SSE., desc. NW. slope.
 80.04 To cor. of secs. 25, 26, 35 & 36.
 Land, mts. Soil, 3rd rate, stony, dry. Cedar pinon.
 At this cor. at noon, clouds obscure the sun.
 Impracticable to observe the latitude.

N. 0° 1' W., bet. secs. 25 & 26.
 Over mts. land, desc.
 1.00 Gulch 50 lks. wide, course W., asc. steep.
 18.80 Top of high spur, brs. NW. & SE., desc. steep.
 40.00 Impracticable to set an iron post, therefore, I
 Set a malpais stone 18x12x6 ins. 12 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 42.00 Gulch, 50 lks. wide, course NW., asc. steep.
 47.00 Sharp spur, brs. NW. & SE., desc. prec.
 60.00 Gulch, 60 lks. wide, course NW., asc. steep.
 69.00 Top of high, rocky spur, brs. NW. & SE., desc. steep.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 23, 24, 25 & 26, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 23 in NW.,
 S. 24 in NE.,
 S. 25 in SE., and
 S. 26 in SW. quadrants, and
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, mts., rough, broken. Soil, 3rd rate, stony, dry.
 Palonegro, cacti. Few cedars,

Subdivision of T. 21 N., R. 16 W.

Chains.

- N. 89°56' E., on a random line, bet. secs. 24 & 25.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.02 Intersect E. bdy. of Tp. at a point 15 lks. N. of cor. of
 secs. 19, 24, 25 & 30, whence I run,
 N. 89°58' W., on a true line, bet. secs. 24 & 25.
 Over mts. land, asc. prec. NE. slope of peak.
 2.00 Top of high rocky peak, desc. prec. W. slope.
 38.00 Gulch, 50 lks. wide, course NW., asc.
 40.01 Impracticable to set an iron post, therefore, I
 Set a granite stone 18x18x8 ins. 12 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 Thence along N. slope, through dense palonegro and
 scrub oak.
 76.00 Head of gulch, course NNE., asc.
 80.02 To cor. of secs. 23, 24, 25 & 26.
 Land, mts.
 Soil, 3rd rate, stony, gravelly.
 No timber, in this Tp.
 Palonegro, scrub oak, cacti. Fair grazing.

March 27, 1911.

March 28, 1911.

- At 8h a.m., l.m.t., at the cor. of secs. 23, 24, 25 & 26,
 I set off 2°44 $\frac{1}{2}$ ' S. on the decl. arc, and 35°11' N. on the
 lat. arc, and determine a true meridian with the solar.
 Thence I run,
 N. 0° 1' W., bet. secs. 23 & 24.
 Over mts. land, asc.
 2.00 Top of rocky spur, brs. NNE. & SSW., dead.
 21.00 Foot of main slope, brs. E. & W. desc. grad.
 35.00 Wash, 30 lks. wide, course WNW.
 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,
 $\frac{1}{4}$ S. 23 in W., and
 S. 24 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth 3 $\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 13, 14, 23 & 24, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 14 in NW.,
 S. 13 in NE.,
 S. 24 in SE., and
 S. 23 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, mts., rolling. Soil, 3rd rate, stony, gravelly.
 Palonegro, cacti. Good native bunch grass.

- S. 89°58' E., on a random line, bet. secs. 13 & 24.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.02 Intersect E. bdy. of Tp. at corner of secs. 13, 18, 19 & 24,
 whence I run,
 N. 89°58' W., on a true line, bet. secs. 13 & 24.
 Over rolling, broken, land, through dense palonegro.
 3.75 Wash, 30 lks. wide, course NW.
 6.00 Asc. NE. slope of N. point of mts.
 16.00 Top of point, N. slope of mts., desc. NW. slope.
 23.50 Foot of main slope, brs. NE. & SW., desc. grad.
 40.01 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,
 $\frac{1}{4}$ S. 13 in N., and
 S. 24 in S. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 80.02 To cor. of secs. 23, 24, 13 & 14.
 Land, mts., rolling. Soil, 3rd rate, stony, gravelly.
 Palonegro, and other brush, cacti. Good grass in valley.

Chains.	N. 0° 1' W., bet. secs. 13 & 14. Over rolling land, desc. grad.
20.00	Road, brs. E. & W., Kingman to Sandy & Signal.
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, $\frac{1}{4}$ S. 14 in W., and S. 13 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
75.75	Wash, 50 lks. wide, course NW.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 11, 12, 13 & 14, marked on brass cap, T. 21 N., R. 16 W. in N. half, S. 11 in NW., S. 12 in NE., S. 13 in SE., and S. 14 in SW. quadrants, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, rolling. Soil, 3rd rate, sandy, gravelly, loose. Scattering palonegro, cacti, and other brush. Good grass.
40.00	S. 89° 58' E., on a random line, bet. secs. 12 & 13. Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect E. bdy. of Tp. at cor. of secs. 7, 12, 13 & 18, whence I run, N. 89° 58' W., on a true line, bet. secs. 12 & 13. Over gently rolling land.
32.50	Wash, 30 lks. wide, course NW.
39.98	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, $\frac{1}{4}$ S. 12 in N., and S. 13 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
68.60	Road, Berry Station to Frosts Ranch, brs. NW. & SE.
79.96	To cor. of secs. 11, 12, 13 & 14. Land, rolling. Soil, 3rd rate, gravelly, loose. Sparse palonegro, cacti. Good native grass. Few mesquite. At this cor. at noon, 1. m. t. , I set off 2° 47 $\frac{1}{2}$ ' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 35° 13' N.
10.10	N. 0° 1' W., bet. secs. 11 & 12. Over gently rolling land, desc. grad.
40.00	Road, Frosts Ranch to Berry station brs. NW. & SE. 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, $\frac{1}{4}$ S. 11 in W., and S. 12 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 1, 2, 11 & 12, marked on brass cap, T. 21 N., R. 16 W. in N. half, S. 2 in NW., S. 1 in NE., S. 12 in SE., and S. 11 in SW. quadrants, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, rolling. Soil, 3rd rate, gravelly, loose, dry. Sparse palonegro, cacti. Good native grass.

Subdivision of T. 21 N., R. 16 W.

Chains
 40.00 S. 89°58' E., on a random line, bet. secs. 1 & 12.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.02 Intersect E. bdy. of Tp. at a point $2\frac{1}{2}$ lks. S. of cor. of
 secs. 1, 6, 7 & 12, whence I run,
 N. 89°59' W., on a true line, bet. secs. 1 & 12.
 Over gently rolling land, desc. slightly.
 40.01 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,
 $\frac{1}{4}$ S. 1 in N., and
 S. 12 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 80.02 To cor. of secs. 1, 2, 11 & 12.
 Land, rolling.
 Soil, 3rd rate, gravelly, sandy, loose, dry.
 Scattering palonegro, greasewood, cacti, and other brush.
 Good native bunch grass in places.

N. 0° 1' W., bet. secs. 1 & 2.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect N. bdy. of Tp. at cor. of secs. 1, 2, 35 & 36,
 whence I run,
 S. 0° 1' E., on a true line, bet. secs. 1 & 2.
 Over level valley.
 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,
 $\frac{1}{4}$ S. 2 in W., and
 S. 1 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 80.00 To cor. of secs. 1, 2, 11 & 12.
 Land, rolling, slightly, level.
 Soil, 2nd & 3rd rate, sandy, gravelly, loose, dry.
 Sparse undergrowth, sage brush, cacti. Good grass.
 March 28, 1911.

- Chains March 29, 1911.
 At 8h a.m., l.m.t., at the Std. cor. of secs. 34 & 35,
 on the S. bdy. of the Tp.,
 I set off $3^{\circ}8'N.$ on the decl. arc, and $35^{\circ}9\frac{1}{2}'N.$ on the
 lat. arc, and determine a true meridian with the solar.
 Thence I run,
 N. $0^{\circ}1'W.$, bet. secs. 34 & 35.
 Over mts. land, desc. NE. slope.
- 36.00 Dim road, brs. WNW. & ESE.
 38.00 Wash, 100 lks. wide, course WNW., in draw 12 chs. wide, asc.
 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,
 $\frac{1}{4}$ S. 34 in W., and
 S. 35 in E. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 44.00 Asc. steep.
 50.00 Spur, brs. WNW. & ESE., near W. point, desc.
 68.00 Wash, 10 lks. wide, course NW., turns to N.
 72.00 Same wash, course NE., asc.
 80.00 Top of rise. brs. E. & W.
 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 26, 27, 34 & 35, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 27 in NW.,
 S. 26 in NE.,
 S. 35 in SE., and
 S. 34 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, mts., broken. Soil, 3rd rate, stony, gravelly.
 Palonegro, cacti, and other brush. Fair grass in places.
-
- East, on a random line, bet. secs. 26 & 35.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect N. & S. line at point 5 lks. N. of cor. of
 secs. 25, 26, 35 & 36, whence I run,
 N. $89^{\circ}58'W.$, on a true line, bet. secs. 26 & 35.
 Over broken mts. land, desc.
- 8.00 Enter wash, 30 lks. wide, from ENE., runs WBW.
 20.00 Leave wash, runs NW., asc. grad. along NE. slope.
 38.00 Wash, 20 lks. wide, near head, asc.
 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,
 $\frac{1}{4}$ S. 26 in N., and
 S. 35 in S. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 50.85 Top of flat ridge, brs. NW. & SE., in saddle, desc. grad.
 60.00 Head of small gulch, course WNW.
 68.00 Wash, 20 lks. wide, course NW., from SW., asc.
 80.00 To cor. of secs. 26, 27, 34 & 35.
 Land, rolling, broken, mts.
 Soil, 3rd rate, gravelly, stony.
 Sparse palonegro, cacti, and other brush. Fair grass.
 At this cor. at noon, l.m.t., I set off $3^{\circ}11'N.$ on the
 decl. arc, and observe the sun on the meridian.
 the resulting lat. is $35^{\circ}10\frac{1}{2}'N.$
-
- N. $0^{\circ}1'W.$, bet. secs. 26 & 27.
 Over mts., broken land, desc. grad.
- 14.74 Wash, 20 lks. wide, course NNW., asc.
 20.00 Top of round hill, on W. side, brs. WNW. & ESE., desc.
 32.00 foot of hill, brs. NE. & SW., thence over rolling land,
 32.80 Wash, 30 lks. wide, course NNE.
 35.48 Same wash, 30 lks. wide, course NNW.
 38.85 ~~Dim road, brs. NNW. & SSE.~~

Chains.

- 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,
 $\frac{1}{4}$ S. 27 in W., and
 S. 26 in E. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 57.80 Wash, 50 lks. wide, course NNE.
- 74.00 Wash, 100 lks. wide, course NNW., same as above.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 22, 23, 26 & 27, marked on brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 22 in NW.,
 S. 23 in NE.,
 S. 26 in SE., and
 S. 27 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- Land, mts., broken, rolling.
 Soil, 3rd rate, gravelly.
 Palonegro, scrub oak, cacti. Good grass in places.

- S. $89^{\circ}58'$ E., on a random line, bet. secs. 23 & 26.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.98 Intersect N. & S. line at point 2 lks. S. of cor. of secs. 23 24, 25 & 26, whence I run,
 N. $89^{\circ}59'$ W., on a true line, bet. secs. 23 & 26.
 Over mts. land, along E. slope.
- .50 Top of ridge, brs. NNE. & SSW., desc. prec.
- 4.00 Gulch, 150 ft. deep, 30 lks. wide, course NNW., asc.
- 8.80 Ridge, or spur, brs. NNW. & SSE., desc.
- 31.00 Foot of main slope, brs. N. & S.,
 Wash, 50 lks. wide, course NW.,
- 39.98 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,
 $\frac{1}{4}$ S. 23 in N., and
 S. 26 in S. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 79.98 To cor. of secs. 22, 23, 26 & 27.
 Land, mts., rolling.
 Soil, 3rd rate, stony, gravelly.
 Scattering palonegro, scrub oak, cacti. Fair grass .

- N. $0^{\circ} 1'$ W., bet. secs. 22 & 23.
 Over rolling land, desc. grad.
- 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,
 $\frac{1}{4}$ S. 22 in W., and
 S. 23 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 70.00 Wash, 30 lks. wide, course NW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground for cor. of secs. 14, 15, 22 & 23, marked on brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 15 in NW.,
 S. 14 in NE.,
 S. 23 in SE., and
 S. 22 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- Land, mts., rolling.
 Soil, 3rd rate, stony, gravelly.
 Scattering palonegro, mesquite, cacti. Good grass in N. $\frac{1}{2}$ mile. March 29, 1911.

Chains.

- March 30, 1911.
At 8h a.m., l.m.t., at the cor. of secs. 14, 15, 22 & 23,
I set off $3^{\circ}31'N.$ on the decl. arc, and $35^{\circ}12'N.$ on the
lat. arc, and determine a true meridian with the solar.
Thence I run,
S. $89^{\circ}59'$ E., on a random line, bet. secs. 14 & 23.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.00 Intersect N. & S. line at a point $2\frac{1}{2}$ lks. S. of cor. of
secs. 13, 14, 23 & 24, whence I run,
West, on a true line, bet. secs. 14 & 23.
Over rolling land, through scattering palonegro.
- 84.50 Wash, 30 lks. wide, course NNW.
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,
 $\frac{1}{4}$ S. 14 in N., and
S. 23 in S. half,
dig pits $18 \times 18 \times 12$ ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.00 To cor. of secs. 14, 15, 22 & 23.
Land, rolling. Soil, 3rd rate, sandy, gravelly, loose.
Scattering palonegro, mesquite, cacti. Good grazing.
-
- N. $0^{\circ}1'$ W., bet. secs. 14 & 15.
Over rolling land, desc. grad.
- 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,
 $\frac{1}{4}$ S. 15 in W., and
S. 14 in E. half,
dig pits $18 \times 18 \times 12$ ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 41.15 Road, Kingman to Sandy and Signal, brs. E. & W.,
80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
the ground for cor. of secs. 10, 11, 14 & 15, marked on
brass cap,
T. 21 N., R. 16 W. in N. half,
S. 10 in NW.,
S. 11 in NE.,
S. 14 in SE., and
S. 15 in SW. quadrants,
dig pits $18 \times 18 \times 12$ ins. in each sec. $5\frac{1}{2}$ ft. dist., and
raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, rolling. Soil, 3rd rate, sandy, gravelly, loose.
Scattering palonegro, cacti, mesquite. Good grass.
-
- East, on a random line, bet. secs. 11 & 14.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.02 Intersect N. & S. line at a point 2 lks. N. of cor. of
secs. 11, 12, 13 & 14, whence I run,
N. $89^{\circ}59'$ W., on a true line, bet. secs. 11 & 14.
Over rolling land, drains to NW.
- 5.00 Wash, 50 lks. wide, course NW.
36.00 Wash, 25 lks. wide, course NNW.
40.01 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,
 $\frac{1}{4}$ S. 11 in N., and
S. 14 in S. half,
dig pits $18 \times 18 \times 12$ ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 60.50 Wash, 30 lks. wide, course NNE.
80.02 To cor. of secs. 10, 11, 14 & 15.
Land, rolling. Soil, 3rd rate, sandy, gravelly.
Sparse palonegro, sage brush, cacti, mesquite. Good grass.
At this cor. at noon, l.m.t., I set off $3^{\circ}34'N.$ on the
decl. arc and observe the sun on the meridian.
The resulting lat. is $35^{\circ}13'N.$

Chains.

N. 0° 1' W., bet. secs. 10 & 11.
Over gently rolling land, desc. grad.

36.00 Wash, 80 lks. wide, 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., marked on brass cap,
 $\frac{1}{4}$ S. 10 in W., and
S. 11 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

52.25 Wash, 30 lks. wide, course WNW.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 2, 3, 10 & 11, marked on brass cap,
T. 21 N., R. 16 W. in N. half,
S. 3 in NW.,
S. 2 in NE.,
S. 11 in SE., and
S. 10 in SW. quadrants,
dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, rolling. Soil, 3rd rate, sandy, gravelly, loose, dry.
Sparse sage brush, cacti. Good native bunch grass.

S. 89° 59' E., on a random line, bet. secs. 2 & 11.

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

79.96 Intersect N. & S. line at cor. of secs. 1, 2, 11 & 12, whence I run,
N. 89° 59' W., on a true line, bet. secs. 2 & 11.
Over gently rolling land, drains to NW.

39.98 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,
 $\frac{1}{4}$ S. 2 in N., and
S. 11 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

73.50 Road, brs. NW. & SE.

79.96 To cor. of secs. 2, 3, 10 & 11.
Land, rolling.
Soil, 3rd rate, sandy, gravelly, loose, dry.
Scattering sage brush, cacti, few mesquite, good grass.

N. 0° 1' W., on a random line, bet. secs. 2 & 3.

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

79.98 Intersect N. bdy. of Tp. at a point $2\frac{1}{2}$ lks. E. of cor. of secs. 2, 3, 34 & 35, whence I run,
S. 0° 2' E., on a true line, bet. secs. 2 & 3.
Over nearly level land.

39.98 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,
 $\frac{1}{4}$ S. 3 in W., and
S. 2 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

73.90 Road, brs. NW. & SE.

79.98 To cor. of secs. 2, 3, 10 & 11.
Land, rolling, level.
Soil, 3rd rate, sandy, gravelly, loose, dry.
Sparse sage brush, cacti, mesquite, good native grass.
March 30, 1911.

Chains

- March 31, 1911.
 At 8h a.m., l.m.t., at the Std. cor. of secs. 33 & 34,
 on the S. bdy. of the Tp.,
 I set off $3^{\circ}54\frac{1}{2}'$ N. on the decl. arc, and $35^{\circ}9\frac{1}{2}'$ N. on the
 lat. arc, and determine a true meridian with the solar.
 Thence I run,
 N. $0^{\circ}2'$ W., bet. secs. 33 & 34.
 Over rough, broken, mts. land, desc.
 13.00 Canyon, 80 lks. wide, course NW., asc.
 20.00 Top of sharp ridge, brs. NW. & SE., desc.
 24.00 Head of canyon, course NW., asc.
 28.00 Top of ridge, brs. NW. & SE., desc.
 36.00 Enter draw, course NW.,
 39.00 Middle of draw 4 chs. wide, 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., marked on brass cap,
 $\frac{1}{4}$ S. 33 in W., and
 S. 34 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 44.00 Leave draw, asc.
 50.00 NW. point of ridge or spur, brs. NW. & SE., desc.
 56.25 Enter Wheeler wash, course WNW.
 60.65 Leave wash, asc.
 69.50 Wash, 20 lks. wide, course WNW.
 80.00 Set an iron post 3 ft. long, 24 ins. in diam. 24 ins. in
 the ground for cor. of secs. 27, 28, 33 & 34, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 28 in NW.,
 S. 27 in NE.,
 S. 34 in SE., and
 S. 33 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, mts., very rough and broken. Soil, 3rd rate, stony.
 Scattering palonegro, cacti, greasewood. Fair grass.
-
- East, on a random line, bet. secs. 27 & 34.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect N. & S. line at cor. of secs. 26, 27, 34 & 35,
 whence I run,
 West, on a true line, bet. secs. 27 & 34.
 Over broken, rough land,
 13.50 Wash, $1\frac{1}{2}$ lks. wide, course NW.
 16.00 Wash, 10 lks. wide, course NW.
 27.42 Wash, 20 lks. wide, course NW.
 32.50 Wash, 15 lks. wide, course NE. asc.
 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,
 $\frac{1}{4}$ S. 27 in N. and
 S. 34 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 50.00 Ridge, brs. NW. & SE., desc.
 75.50 Wash, 10 lks. wide, course NW. asc. grad.
 80.00 To cor. of secs. 27, 28, 33 & 34.
 Land, mts., broken. Soil, 3rd rate, stony, gravelly.
 Scattering palonegro, cacti, sage brush. Fair grass.
 At this cor. at noon, l.m.t., I set off $3^{\circ}57\frac{1}{2}'$ N. on the
 decl. arc, and observe the sun on the meridian.
 The resulting lat. is $35^{\circ}10'$ N.
-
- N. $0^{\circ}2'$ W., bet. secs. 27 & 28.
 Over heavily rolling, broken land, desc. grad.
 1.15 Road, brs. WNW. & ESE.
 4.00 Wash, 20 lks. wide, course NW.
 25.70 Wash, 50 lks. wide, course NW.

Chains.

- 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,
 $\frac{1}{4}$ S. 28 in W., and
 S. 27 in E. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 51.50 Wash, 30 lks. wide, course NW.
- 56.00 Wash, 30 lks. wide, course WNW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 21, 22, 27 & 28, marked on brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 21 in NW.,
 S. 22 in NE.,
 S. 27 in SE.; and
 S. 28 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- Land, rolling, broken. Soil, 3rd rate, sandy, gravelly.
 Scattering palonegro, cacti, sage brush, greasewood.
 Fair grass in draws.

- East, on a random line, bet. secs. 22 & 27.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. & S. line at cor. of secs. 22, 23, 26 & 27, whence I run,
 West, on a true line, bet. secs. 22 & 27.
 Over broken rolling land, desc. grad.
- 3.50 Wash, 30 lks. wide, 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., marked on brass cap,
 $\frac{1}{4}$ S. 22 in N. and
 S. 27 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high N. of cor.
- 63.50 Wash, 30 lks. wide, course NW.
- 80.00 To cor. of secs. 21, 22, 27 & 28.
 Land, broken, rolling.
 Soil, 3rd rate, gravelly, loose.
 Scattering palonegro, cacti, sage brush. Good grass.
 March 31, 1911.

April 1, 1911.

- At 8h a.m., l.m.t., at the cor. of secs. 21, 22, 27 & 28, I set off $4^{\circ}18'$ N. on the decl. arc, and $35^{\circ}11'$ N. on the lat. arc, and determine a true meridian with the solar. Thence I run,
 N. $0^{\circ}2'$ W., bet. secs. 21 & 22.
 Over rolling land, desc. grad.
- 26.00 Draw, 2 chs. wide, course NW.
- 33.00 Wash, 20 lks. wide, 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., marked on brass cap,
 $\frac{1}{4}$ S. 21 in W., and
 S. 22 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base, W. of cor.
- 44.55 Wash, 30 lks. wide, course NW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 15, 16, 21 & 22, marked on brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 16 in NW.,
 S. 15 in NE.,
 S. 22 in SE., and
 S. 21 in SW. quadrants,
 dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
- Land, rolling. Soil, 3rd rate, gravelly.
 Scattering palonegro, cacti. Good grazing.

Chains.
 East, on a random line, bet. secs. 15 & 22.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect N. & S. line at cor. of secs. 14, 15, 22 & 23,
 whence I run,
 West, on a true line, bet. secs. 15 & 22.
 Over rolling land, descending gently, land, drains NW.
 13.80 Wash, 10 lks. wide, course NNW.
 17.25 Wash, 20 lks. wide, course N.
 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,
 $\frac{1}{4}$ S. 15 in N. and
 S. 22 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 45.00 Head of wash, course NNW.
 58.25 Wash, 20 lks. wide, course NNW.
 67.00 Wash, 20 lks. wide, course N.
 80.00 To cor. of secs. 15, 16, 21 & 22.
 Land, rolling, broken, Soil, 3rd rate, gravelly, loose.
 Scattering palonegro, sage brush. Good native grass.

N. $0^{\circ} 2'$ W., bet. secs. 15 & 16.
 Over rolling land, desc. grad.
 35.15 Main road, Kingman, to Prescott, Sandy, and Signal,
 brs. E. & W.
 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,
 $\frac{1}{4}$ S. 16 in W., and
 S. 15 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 9, 10, 15 & 16, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 9 in NW.,
 S. 10 in NE.,
 S. 15 in SE., and
 S. 16 in SW. quadrants,
 dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, rolling.
 Soil, 3rd rate, sandy, gravelly, loose, dry.
 Sparse sage brush, cacti. Good native bunch grass.

East, on a random line, bet. secs. 10 & 15.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.04 Intersect N. & S. line at point 2 lks. N. of cor. of
 secs. 10, 11, 14 & 15, whence I run,
 N. $89^{\circ} 59'$ W., on a true line, bet. secs. 10 & 15.
 40.02 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,
 $\frac{1}{4}$ S. 10 in N., and
 S. 15 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 55.00 Wash, 30 lks. wide, course NNW.
 80.04 To cor. of secs. 9, 10, 15 & 16.
 Land, rolling.
 Soil, 3rd rate, sandy, gravelly, loose, dry.
 Sparse sage brush, mesquite, cacti. Good native, coarse
 bunch grass.
 At this cor. at noon, l.m.t., I set off $4^{\circ} 21'$ N. on the
 decl. arc, and observe the sun on the meridian.
 The resulting lat. is $35^{\circ} 13'$ N.

Chains.	
	N. 0° 2' W., bet. secs. 9 & 10.
40.00	Over gently rolling land, descending gradually. 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, $\frac{1}{4}$ S. 9 in W., and S. 10 in E. half,
	dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 3, 4, 9 & 10, marked on brass cap, T. 21 N., R. 16 W. in N. half, S. $\frac{1}{4}$ in NW., S. 3 in NE., S. 10 in SE., and S. 9 in SW. quadrants,
	dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
	Land, gently rolling. Soil, 3rd rate, sandy, gravelly, loose, dry. Sparse sage brush, cacti. few mesquite. Good native grass.
	<hr/>
40.00	S. 89° 59' E., on a random line, bet. secs. 3 & 10. Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. & S. line at a point 3 lks. N. of cor. of secs. 2, 3, 10 & 11, whence I run, N. 89° 58' W. on a true line, bet. secs. 3 & 10.
	Over gently rolling land, drains to NW.
11.50	Wash, 30 lks. wide, course NNW.
31.25	Wash, 30 lks. wide, course NW.
40.01	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, $\frac{1}{4}$ S. 3 in N., and S. 10 in S. half,
	dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
80.02	To cor. of secs. 3, 4, 9 & 10. Land, rolling. Soil, 3rd rate, sandy, gravelly, loose. Sparse sage brush, cacti, greasewood. Good bunch grass.
	<hr/>
40.00	N. 0° 3' W., on a random line, bet. secs. 3 & 4. Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect N. bdy. of Tp. at point 2 lks. W. of cor. of secs. 3, 4, 33 & 34, whence I run, S. 0° 2' E. on a random line, bet. secs. 3 & 4.
	Over gently rolling land, asc. slightly. land drains NW.
39.96	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, $\frac{1}{4}$ S. 4 in W., and S. 3 in E. half,
	dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
79.96	To cor. of secs. 3, 4, 9 & 10. Land, rolling. Soil, 3rd rate, sandy, gravelly, loose, dry. Sparse undergrowth, few mesquite, cacti. Good native grass. April 1, 1911.

198

Chains.

April 5, 1911.
 At 8h a.m., l.m.t., at the Std. cor. of secs. 32 & 33,
 on the S. bdy. of the Tp.,
 I set off 5° 50' N. on the decl. arc, and 35° 9½' N. on the
 lat. arc,, and determine a true meridian with the solar.
 Thence I run,
 N. 0° 3' W., bet. secs. 32 & 33.
 Over rolling, broken land, desc. grad.
 6.00 Gulch, 50 lks. wide, course NW., asc.
 13.00 Ridge, brs. NW. & SE., desc. NE. slope, gradually.
 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,
 ¼ S. 32 in W., and
 S. 33 in E. half,
 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
 47.00 Wash, 50 lks. wide, course NW., asc.
 65.00 Top of ridge, brs. NW. & SE., desc.
 74.00 Wash, course NW., 100 lks. wide, asc.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 28, 29, 32 & 33, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 29 in NW.,
 S. 28 in NE.,
 S. 33 in SE., and
 S. 32 in SW. quadrants,
 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
 Land, broken, heavily rolling. Soil, 3rd rate, gravelly.
 Scattering palonegro, cacti, and other brush. Fair grass.

East, on a random line, bet. secs. 28 & 33.
 40.00 Set temp. ¼ sec. cor.
 79.98 Intersect N. & S. line at a point 2½ lks. S. of cor. of
 secs. 27, 28, 33 & 34, whence I run,
 S. 89° 59' W., on a true line, bet. secs. 28 & 33.
 Over heavily rolling, broken land, drains to NW., desc.
 25.00 Old road, brs. NE. & SW.
 39.99 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for ¼ sec. cor., marked on brass cap,
 ¼ S. 28 in N., and
 S. 33 in S. half,
 raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
 70.50 Wash, 50 lks. wide, course WNW.
 77.00 Road, brs. WNW. & ESE.
 79.98 To cor. of secs. 28, 29, 32 & 33.
 Land, rolling, broken. Soil, 3rd rate, gravelly.
 Scattering palonegro, cacti, mesquite. Fair grass.

N. 0° 3' W., bet. secs. 28 & 29.
 Over broken, heavily rolling land, desc. grad.
 1.20 Road, brs. WNW. & ESE.
 12.00 Wash, 50 lks. wide, course WNW., asc. grad.
 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,
 ¼ S. 29 in W., and
 S. 28 in E. half,
 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
 Desc. grad., from cor.
 64.45 Road, brs. NW. & SE.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 20, 21, 28 & 29, marked on
 brass cap, T. 21 N., R. 16 W. in N. half,
 S. 20 in NW.,
 S. 21 in NE.,
 S. 28 in SE., and
 S. 29 in SW. quadrants,
 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
 Land, rolling, broken. Soil, 3rd rate, gravelly, loose.
 Scattering palonegro, cacti. Good grass.

Subdivision of T. 21 N., R. 16 W.

Chains.	
40.00	N. 89°59' E., on a random line, bet. secs. 21 & 28. Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect N. & S. line at a point 2 $\frac{1}{2}$ lks. N. of cor. of secs. 21, 22, 27 & 28, whence I run, West, on a true line, bet. secs. 21 & 28. Over rolling land, desc. grad.
17.50	Wash, 50 lks. wide, course NW.
39.96	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, $\frac{1}{4}$ S. 21 in N., and S. 28 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
63.00	Wash, 50 lks. wide, course NW.
79.92	To cor. of secs. 20, 21, 28 & 29. Land, rolling. Soil, 3rd rate, sandy, gravelly, loose, dry. Scattering palonegro, cacti, sage brush. Good bunch grass. At this cor. at noon, l.m.t., I set off 5°53' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 35°11' N.
N. 0° 3' W., bet. secs. 20 & 21.	
Over rolling land, desc. grad.	
8.70	Wash, 20 lks. wide, 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., marked on brass cap, $\frac{1}{4}$ S. 20 in W., and S. 21 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
65.80	Wash, 20 lks. wide, course NW.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 16, 17, 20 & 21, marked on brass cap, T. 21 N., R. 16 W. in N. half, S. 17 in NW., S. 16 in NE., S. 21 in SE., and S. 20 in SW. quadrants, dig pits 18x18x12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, rolling. Soil, 3rd rate, gravelly, dry. Scattering sage brush, greasewood, cacti. Good grass. April 5, 1911.
April 6, 1911.	
At 8h a.m., l.m.t., I set off 6°12' S. on the decl. arc, and 35°12' N. on the lat. arc, and determine a true meridian with the solar at the cor. of secs. 16, 17, 20 & 21, Thence I run,	
East, on a random line, bet. secs. 16 & 21.	
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect N. & S. line at a point 3 lks. N. of cor. of secs. 15, 16, 21 & 22, whence I run, N. 89°59' W., on a true line bet. secs. 16 & 21. Over gently rolling land, desc. grad.
13.70	Wash, 20 lks. wide, course NNW.
18.00	Wash, 20 lks. wide, in draw 6 chs. wide, course N.
39.98	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, $\frac{1}{4}$ S. 16 in N., and S. 21 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
79.96	To cor. of secs. 16, 17, 20 & 21. Land, rolling. Soil, 3rd rate, sandy, gravelly, loose, dry. Sparse palonegro, cacti, greasewood, sage brush. Good bunch grass.

Chains

N. 0° 3' W., bet. secs. 16 & 17.
 Over gently rolling land, desc. grad.

8.90 Main road, brs. WSW. & ENE.

19.00 Old road, brs. WSW. & ENE.

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, $\frac{1}{4}$ S. 17 in W., and $\frac{1}{4}$ S. 16 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 8, 9, 16 & 17, marked on brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 8 in NW.,
 S. 9 in NE.,
 S. 16 in SE., and
 S. 17 in SW. quadrants,
 dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, rolling. Soil, 3rd rate, sandy, gravelly, fertile.

S. 89° 59' E., on a random line, bet. secs. 9 & 16.

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

80.00 Intersect N. & S. line at cor. of secs. 9, 10, 15 & 16, whence I run,
 N. 89° 59' W., on a true line, bet. secs. 9 & 16.
 Over rolling land, drains to N., desc. slightly.

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, $\frac{1}{4}$ S. 9 in N., and $\frac{1}{4}$ S. 16 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

80.00 To cor. of secs. 8, 9, 16 & 17.
 Land, rolling.
 Soil, 3rd rate, sandy, gravelly, fertile, loose.

N. 0° 3' W., bet. secs. 8 & 9.
 Over gently rolling valley, desc. slightly.

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, $\frac{1}{4}$ S. 8 in W., and $\frac{1}{4}$ S. 9 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist. & raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 4, 5, 8 & 9, marked on brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 5 in NW.,
 S. 4 in NE.,
 S. 9 in SE., and
 S. 8 in SW. quadrants,
 dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, rolling.
 Soil, 2nd & 3rd rate, loose, dry, fertile, sandy.
 Sparse sage brush, cacti. Good native bunch grass.
 At this cor. at noon, l.m.t., I set off 6° 16' N. on the decl. arc, and observe the sun on the meridian.
 The resulting lat. is 35° 14' N.

Subdivision of T. 21 N., R. 16 W.

Chains.

40.00 S. $89^{\circ}59'$ E., on a random line, bet. secs. 4 & 9.
Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. & S. line at cor. of secs. 3, 4, 9 & 10,
whence I run,
N. $89^{\circ}59'$ W., on a true line, bet. secs. 4 & 9.
Over gently undulating valley, drains to NNW.

39.98 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,
 $\frac{1}{4}$ S. 4 in N., and
S. 9 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

79.96 To cor. of secs. 4, 5, 8 & 9.
Land, rolling,
Soil, 3rd rate, sandy, gravelly, loose, fertile.

40.00 N. $0^{\circ}3'$ W., on a random line, bet. secs. 4 & 5.
Set temp. $\frac{1}{4}$ sec. cor.

79.94 Intersect N. bdy. of Tp. at cor. of secs. 4, 5, 32 & 33,
whence I run,
S. $0^{\circ}3'$ W., on a true line, bet. secs. 4 & 5.
Over gently undulating plain.

39.94 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,
 $\frac{1}{4}$ S. 5 in W., and
S. 4 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

44.00 Road, brs. NE. & SW.

44.10 Telegraph line, brs. NE. & SW.

45.46 Centre of single track of Atchison, Topeka & Santa Fe R.R.,
brs. N. $38^{\circ}16'$ E. & S. $38^{\circ}16'$ W.

47.41 Telegraph line, brs. NE. & SW.

79.94 To cor. of secs. 4, 5, 8 & 9.
Land, rolling, gently undulating.
Soil, 3rd rate, loose, sandy, loam, some gravel, fertile
Scattering sage brush, cacti. Good native grass.
April 6, 1911.

Chains.

April 7, 1911.

At 8h a.m., l.m.t., at the std. cor. of secs. 31 & 32,
on the S. bdy. of the Tp.,
I set off $6^{\circ}45'$ N. on the decl. arc, and $35^{\circ}9\frac{1}{2}'$ N. on the
lat. arc, and determine a true meridian with the solar.
Thence I run,

N. $0^{\circ}3'$ W., bet. secs. 31 & 32.

Over rough, broken, land, desc.

7.00 Gulch, 150 lks. wide, course NW., asc.

13.00 Ridge, brs. NW. & SE., asc.

39.75 Wash, 50 lks. wide, course NW., asc.

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,
 $\frac{1}{4}$ S. 31 in W., and
S. 32 in E. half,

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

44.00 Top of flat mesa ridge, brs. NW. & SE.

54.00 Desc. along ENE. slope.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
the ground for cor. of secs. 29, 30, 31 & 32, marked on
brass cap,

T. 21 N., R. 16 W. in N. half,

S. 30 in NW.,

S. 29 in NE.,

S. 32 in SE., and

S. 31 in SW. quadrants,

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

Land, rough, rolling, broken. Soil, 3rd rate, stony.
Scattering palonegro, cacti, greasewood. Fair grass.

East, on a random line, bet. secs. 29 & 32.

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

79.96 Intersect N. & S. line at cor. of secs. 28, 29, 32 & 33,
whence I run,

West, on a true line, bet. secs. 29 & 32.

Over mts., broken land, desc.

17.00 Wash, 50 lks. wide, course WNW.

31.00 Wash, 50 lks. wide, course NW., asc. NE. slope.

39.98 Top of mesa, brs. NW. & SE.

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,

 $\frac{1}{4}$ S. 29 in N., and

S. 32 in S. half,

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

51.00 Desc. steep SW. slope, leave mesa, brs. NW. & SE.

78.00 Gulch, 150 lks. wide, course NW., asc.

79.96 To cor. of secs. 29, 30, 31 & 32.

Land, rough, broken, mts. Soil, 3rd rate, stony.

Scattering palonegro, cacti, greasewood. Fair grass on mesa.

West, bet. secs. 30 & 31.

Over mts., broken land, asc.

3.00 Top of mesa, brs. NW. & SSE.

30.00 Desc., leave mesa, brs. NW. & SE.

37.00 Gulch, 50 lks. wide, course NW. asc.

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,

 $\frac{1}{4}$ S. 30 in N., and

S. 31 in S. half,

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

45.00 Top of spur, brs. NW. & SE., desc. near point.

50.00 Canyon, 150 lks. wide, course NNW., asc.

56.00 Top of mesa ridge, brs. NW. & SE.,

69.29 W. rim of mesa, brs. NW. & SE., desc. steep, stony SW. slope.

80.00 Foot of main slope, brs. NNW. & SSE., desc. grad.

99.00 Canyon, 150 lks. wide, course NW., asc. steep.

Chains.

- 109.00 Ridge, brs. NW. & SE., desc.
 122.00 Canyon, 100 lks. wide, course NW., asc.
 125.00 Top of E. rim of mesa, brs. NW. & SE.
 128.80 Intersect East bdy. of T. 21 N., R. 17 W., at a point
 whence the cor. of secs. 25 & 36, on said bdy.,
 brs. N. $0^{\circ} 31'$ W., 24.22 chs. dist., as re-established
 by me and heretofore described.
 At point of intersection, I
 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for closing cor. of secs. 30 & 31, marked on
 brass cap,
 C.C., E. of centre,
 T. 21 N. in N.,
 S. 25, S. 36, R. 17 W., in W. half, and
 S. 30 in NE., and
 S. 31, R. 16 W. in SE. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, rough, broken, mts.
 Soil, 3rd rate, stony.
 Scattering palonegro, greasewood, cacti. Fair grass.
 At this cor. at noon, 1 p.m., I set off $6^{\circ} 38\frac{1}{2}'$ N. on the
 decl. arc, and observe the sun on the meridian.
 The resulting lat. is $35^{\circ} 10\frac{1}{2}'$ N.
-
- N. $0^{\circ} 3'$ W., bet. secs. 29 & 30.
 Over rough, broken mts., land, desc.
 5.10 Gulch, 50 lks. wide, course NW., asc.
 25.00 Foot of bluff, brs. NW. & SE., asc. prec.
 26.00 Top of bluff, brs. NW. & SE. asc. grad.
 30.00 Top of NW. point of mesa ridge, brs. NW. & SE., desc.
 35.50 Road, brs. NW. & SE.
 As cor. point for $\frac{1}{4}$ sec. cor. will fall in wash, at
 39.00 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,
 $\frac{1}{4}$ W.C., S. of centre.
 S. 29 in SE., and
 S. 30 in SW. quadrants, and
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 40.00 Wash, 60 lks. wide, course NW., asc.
 49.75 Foot of steep slope, brs. NW. & SE., asc. steep.
 60.00 Top of ridge, brs. NE. & SW., desc.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 19, 20, 29 & 30, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 19 in NW.,
 S. 20 in NE.,
 S. 29 in SE., and
 S. 30 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, rough, broken, mts.
 Soil, 3rd rate, stony, gravelly.
 Scattering palonegro, scrub oak, cacti, greasewood, sage
 brush, mesquite, tesseta. Good native grass on mesas.

Chains.	
	East, on a random line, bet. secs. 20 & 29.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect N. & S. line at a point 2 lks. S. of cor. of secs. 20, 21, 28 & 29, whence I run, S. $89^{\circ}59'$ W., on a true line, bet. secs. 20 & 29. Over broken, rolling land. drains to NW.
33.00	Road, brs. NW. & SE.
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, $\frac{1}{4}$ S. 20 in N., and S. 29 in S. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Enter rough malpais hills.
54.80	Gulch, 50 lks. wide, course NW., asc. along N. slope of malpais hills.
66.00	Top of N. side of hill, desc. NW. slope.
80.00	To cor. of secs. 19, 20, 29 & 30. Land, rough, broken, mts. Soil, 3rd rate, stony, gravelly. Scattering palonegro, cacti, greasewood. Fair grazing.
	West, bet. secs. 19 & 30. Over rough, rolling hills, desc.
37.00	Gulch, 50 lks. wide, 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., marked on brass cap, $\frac{1}{4}$ S. 19 in N., and S. 30 in S. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
44.50	Gulch, 50 lks. wide, course NNW. asc. NE. slope of hill.
67.39	Top of N. side of hill, desc. NW. slope.
85.00	Foot of main slope, brs. NE. & SW., desc. grad.
90.70	NE. cor. of slaughter house fence, brs. S. 18 lks. dist. fence runs S. & W. from cor.
94.00	Slaughter house of Ira George brs. S. about 8 chs. dist.
95.75	Road, brs. WSW. & ENE.
102.00	Same road, brs. WNW. & ESE.
129.25	Intersect East bdy. of T. 21 N., R. 17 W. at a point whence the cor. of secs. 24 & 25 on said bdy., as re-established by me and heretofore described, brs. N. 1° W., 23.50 chs. dist., At the point of intersection, I Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for closing cor. of secs. 19 & 30, marked on brass cap, CC. on S. of centre, T. 21 N. in N., S. 24, S. 25, R. 17 W. in W. half, S. 19 in NE., and S. 30, R. 16 W. in SE. quadrants, raise a mound of stone 3 ft. base, 2 ft. high E. of cor. Land, rough, mts., rolling. Soil, 3rd rate, stony, gravelly, dry. Scattering palonegro, cacti, mesquite, tesseta, greasewood. Sparse grass.

April 7, 1911.

Chains.

- April 8, 1911.
At 7h a.m., l.m.t., at the cor. of secs. 19, 20, 29 & 30,
I set off $6^{\circ}57\frac{1}{2}'$ N. on the decl. arc, and $35^{\circ}11'$ N. on the
lat. arc, and determine a true meridian with the solar.
Thence I run,
N. $0^{\circ}3'$ W., bet. secs. 19 & 20.
Over broken, rolling land, desc.
17.50 Wash, 50 lks. wide, course W., asc. grad.
28.00 Top of rise, brs. E. & W., road, brs. NE. & SW., desc. grad.
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,
 $\frac{1}{4}$ S. 19 in W., and
S. 20 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
Desc. grad., from cor., smooth, open land.
80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
the ground for cor. of secs. 17, 18, 19 & 20, marked on
brass cap,
T. 21 N., R. 16 W. in N. half,
S. 18 in NW.,
S. 17 in NE.,
S. 20 in SE., and
S. 19 in SW. quadrants,
dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, broken, rolling.
Soil, 3rd rate, stony, gravelly.
Scattering greasewood, tesselata, cacti. Fair grass.
-
- N. $89^{\circ}59'$ E., on a random line, bet. secs. 17 & 20.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.98 Intersect N. & S. line at a point $2\frac{1}{2}$ lks. N. of cor. of
secs. 16, 17, 20 & 21, whence I run,
West, on a true line, bet. secs. 17 & 20.
Over rolling land, drains to NW.
8.70 Wash, 20 lks. wide, course NW.
15.90 Road, brs. WSW. & ENE.
39.99 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,
 $\frac{1}{4}$ S. 17 in N., and
S. 20 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
79.98 To cor. of secs. 17, 18, 19 & 20.
Land, rolling.
Soil, 3rd rate, gravelly, sandy.
Scattering greasewood, cacti. Good native grass.
-
- West, bet. secs. 18 & 19.
Over rolling valley:
40.00 Set an iron post 3 ft. long, 1 in. in diam. 24 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 18 in N., and
S. 19 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
77.00 Road, brs. NE. & SW.
79.76 Intersect centre line of Atchison, Topeka & Santa Fe R.R.,
on curve, about 4° , to N. & W., brs. N. 30° E. & S. 30° W.
100.00 Leave valley, brs. N. & S., asc. steep SE. slope.
129.75 Intersect East bdy. of T. 21 N., R. 17 W. at a point
whence cor. of secs. 13 & 24 on said bdy.
brs. N. $0^{\circ}29'$ W. 25.75 chs. dist., as re-established
by me and heretofore described.
At the point of intersection, I

Chains.

Set an iron post 3 ft. long, 2 ins. in diam. 10 ins. in the ground, on bed-rock, in mound of stone, for closing cor. of secs. 18 & 19, marked on brass cap,
 C.C., E. of centre,
 T. 21 N., in N., and
 S. 13, S. 24, R. 17 W. in W. half,
 S. 18 in NE., and
 S. 19, R. 16 W. in SE. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 Land, rolling, mts.
 Soil, 3rd rate, stony, gravelly.
 Scattering greasewood, tesselata, cacti. Fair native grass.

N. $0^{\circ} 3'$ W., bet. secs. 17 & 18.

Over gently rolling valley, desc. grad.

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,
 $\frac{1}{4}$ S. 18 in W., and
 S. 17 in E. half,

dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 7, 8, 17 & 18, marked on brass cap,

T. 21 N., R. 16 W. in N. half,
 S. 7 in NW.,
 S. 8 in NE.,
 S. 17 in SE., and
 S. 18 in SW. quadrants,

dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land, rolling.

Soil, 3rd rate, sandy, gravelly.

Sparse greasewood, cacti. Good native grass.

At this cor. at noon, 1.m.t., I set off $7^{\circ} 1'$ N. on the decl. arc, and observe the sun on the meridian.

The resulting lat. is $35^{\circ} 13'$ N.

East, on a random line, bet. secs. 8 & 17.

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

80.02 Intersect N. & S. line at a point $2\frac{1}{2}$ lks. N. of cor. of secs. 8, 9, 16 & 17, whence I run,
 N. $89^{\circ} 59'$ W., on a true line, bet. secs. 8 & 17.

Over gently undulating valley, drains to NNW.

40.01 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,
 $\frac{1}{4}$ S. 8 in N., and
 S. 17 in S. half,

dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

80.02 To cor. of secs. 7, 8, 17 & 18.

Land, gently rolling.

Soil, 3rd rate, sandy, gravelly, loose, dry.

Sparse greasewood, mesquite, cacti. Good native grass.

Subdivision of T. 21 N., R. 16 W.

Chains
 West, bet. secs. 7 & 18.
 Over gently undulating plain, desc. slightly.
 12.18 Centre of Atchison, Topeka & Santa Fe Railroad,
 brs. N. 40°30' E. & S. 40°30' W.
 13.75 Road, parallel to R. R. brs. NE. & SW.
 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,
 ¼ S. 7 in N., and
 S.18 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
 From cor., asc. slightly, through sparse greasewood.
 1 29.30 Intersect East bdy. of T. 21 N., R. 17 W. at a point
 whence , cor. of secs. 12 & 13, on said bdy.
 brs. N. 0°17' W. 25.27 chs. dist., as re-established
 by me and heretofore described.
 At the point of intersection, I
 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in
 the ground for closing cor. of secs. 7 & 18, marked on
 brass cap,
 C.C., E. of centre,
 T. 21 N., in N., and
 S.12, S. 13, R. 17 W. in W. half,
 S. 7, in NE., and
 S.18, R. 16 W. in SE. quadrants,
 raise a mound of stone covered with earth 4 ft. base, 2
 ft. high E. of cor.
 Land, rolling.
 Soil, 3rd rate, sandy, gravelly, fertile.
 Sparse greasewood, cacti, mesquite. Good native grass.

N. 0° 3' W., bet. secs. 7 & 8.
 Over rolling land, desc. grad.
 14.28 Centre of A. T. & S. F. R.R., brs. S.40½°W. & N.40½°E.
 mile post 513 brs. S. 40°30' W. 53 lks. dist.
 16.00 Road, brs. NE. & SW., parallel to R.R.
 21.00 Asc.
 24.65 Top of hill, brs. E. & W., desc.
 28.00 Foot, brs. E. & W., desc. grad.
 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,
 ¼ S. 7 in W., and
 S. 8 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 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. in diam. 24 ins. in
 the ground for cor. of secs. 5, 6, 7 & 8, marked on
 brass cap,
 T. 21 N., R. 16 W. in N. half,
 S. 6 in NW.,
 S. 5 in NE.,
 S. 8 in SE., and
 S. 7 in SW. quadrants,
 dig pits 18x18x12 ins. in each sec. 5½ ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, rolling.
 Soil, 3rd rate, sandy, gravelly, loose, fertile in places.
 Scattering greasewood, cacti, Good native grass in places.

Chains.

S. 89°59' E., on a random line, bet. secs. 5 & 8.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.02 Intersect N. & S. line at cor. of secs. 4, 5, 8 & 9,
 whence I run,
 N. 89°59' W., on a true line, bet. secs. 5 & 8.
 Over gentl rolling land, desc. grad.
 27.36 Centre of A. T. & S.F. R.R., brs. N. 38°14' E. & S. 38°14' W.
 28.60 Road, brs. NE. & SW.
 40.01 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,
 $\frac{1}{4}$ S. 5 in N., and
 S. 8 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 80.02 To cor. of secs. 5, 6, 7 & 8.
 Land, rolling.
 Soil, 3rd rate, sandy, gravelly.
 Sparse greasewood, cacti. Good native grass.

West, bet. secs. 6 & 7.
 Over gently undulating valley or plain, desc. grad.
 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,
 $\frac{1}{4}$ S. 6 in N., and
 S. 7 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 129.98 Intersect East bdy. of T. 21 N., R. 17 W. at a point
 whence the cor. of secs. 1 & 12, on said bdy.
 brs. N. 0° 2' W., 25.25 chs. dist., as re-established
 by me, and heretofore described.
 At the point of intersection, I
 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for closing cor. of secs. 6 & 7, marked on
 brass cap,
 C.C., E. of centre,
 T. 21 N., in N., and
 S. 1, S. 12, R. 17 W. in W. half,
 S. 6 in NE., and
 S. 7, R. 16 W. in SE. quadrants,
 dig pits 24x18x12 ins. crosswise on each line, N. & S.
 3 ft. and E. of cor. 7 ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high E. of cor.
 Land, rolling.
 Soil, 2nd & 3rd rate, sandy, gravelly, loose, fertile.
 drains to N.
 Sparse greasewood, cacti. Good native grass in places.

209
25

Chains.

- 40.00 N. 0° 3' W., on a random line, bet. secs. 5 & 6.
Set temp. $\frac{1}{4}$ sec. cor.
- 79.92 Intersect N. bdy. of Tp. at a point $2\frac{3}{4}$ lks. W. of
cor. of secs. 5, 6, 31 & 32, whence I run,
S. 0° 2' E., on a true line, bet. secs. 5 & 6.
Over gently undulating plain. asc. slightly,
- 39.92 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,
 $\frac{1}{4}$ S. 6 in W., and
S. 5 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 79.92 To cor. of secs. 5, 6, 7 & 8.
Land, rolling.
Soil, 3rd rate, sandy, loose, fertile.
Sparse greasewood, cacti. Good grass in places.
April 8, 1911.

General Description.

T. 21 N., R. 16 W. is rough and mts. in the SE. part, broken by canyon, and heavily rolling in the SW. part, and smooth, or gently rolling, or undulating in the N. half. There is no timber or water in the Tp. The soil in the SE. & SW. portions is stony or gravelly, and generally worthless, except for grazing. In the SE. portion there is considerable cedar and pinon in places. There is considerable good land in the N. half of the Tp. which would produce well, if irrigated. The soil is a fertile, loose, sandy loam, with some gravel, and a little clay in places. There are no settlers in the Tp., the land being now used for grazing purposes for sheep and cattle.

Jose B. Wright
U. S. Surveyor.

240
26

APPROVAL.

BOOK 2308

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz March 75, 1912

The foregoing field notes of the survey of *the subdivisions T 21 N. R 16 W.*
G. S. R. Meridian, Arizona

executed by *Jose B. Wright, N.P. Surveyor*
under his special instructions dated *Sept. 16*, 1910, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

Frank S. Ingalls
U. S. Surveyor General.