

143

6-879.

RECEIVED WITH
SUR. GEN'L'S LETTER
OCT 9 1897

Ref. 924, March 16, 1898

I

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION LINES

O.F.

TOWNSHIP 153 NORTH

O.F.

RANGE 96

WEST

Of the FIFTH PRINCIPAL Meridian,
NORTH DAKOTA,

AS SURVEYED BY

WALTER R. VEIGEL, United States Deputy Surveyor,

Under his Contract No. 43, dated March 28, 1896.

Survey commenced October 5., 1896.

Survey completed October 12., 1896.

NAMES AND DUTIES OF ASSISTANTS.

John S. Lusk Chairman
Virgil Cragun Chairman

Henry L. Nizel Flagman

Donit Stone Woundedman

Joseph Parker Woundedman

INDEX DIAGRAM.

Township No. 153 74. , Range No. 96. 94.

• 23	• 17	• 13	• 7	• 5	•
23	22	17	13	9	5
• 22	• 16	• 12	• 8	• 4	•
21	21	16	12	8	11
• 21	• 16	• 12	• 8	• 4	•
20	21	15	11	7	2
• 20	• 15	• 11	• 7	• 3	•
19	19	15	11	7	2
• 19	• 14	• 10	• 6	• 2	•
18	8	10	10	6	2
• 18	• 14	• 10	• 6	• 2	•

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, John S. Rucke and Virgil Crayon
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the subdivision lines of township No. 153 North of Range No. 96, West of the fifth principal meridian, North Dakota
John S. Rucke Chainman
Virgil Crayon Chainman

Subscribed and sworn to before me this 5th day of August, 1896.
No other officer being present. Walter R. Veigel U.S. Deputy Surveyor

We, Donit Flou and Joseph Parker
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the subdivision lines of township No. 153 North of Range No. 96, West of the fifth principal meridian, North Dakota
Donit Flou Moundman
Joseph Parker Moundman

Subscribed and sworn to before me this 5th day of August, 1896.
No other officer being present. Walter R. Veigel U.S. Deputy Surveyor

We, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

Subscribed and sworn to before me this _____ day of _____, 189 _____

I, Henry L. Veigel, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the subdivision lines of township No. 153 North of Range No. 96, West of the fifth principal meridian, North Dakota
Henry L. Veigel Flagman
Subscribed and sworn to before me this 5th day of August, 1896.
No other officer being present. Walter R. Veigel U.S. Deputy Surveyor

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

Survey commenced October 5, 1896, and executed with a Burt's improved solar compass with telescopic attachment, made by Young and Sons of Philadelphia, numbered 4705.

The instrument was examined, tested on the meridian established by the U. S. Coast and Geodetic survey at the State University of Minnesota, found correct and was approved by the surveyor general for North Dakota, May 8, 1896.

Preliminary to commencing the subdivision of this Tp., I test my compass on the true meridian established by Polaris observation, September 24 and 25, near the cor. of secs. 22, 23, 26 and 27, Tp. 155 N., R. 96 W. heretofore described as follows:-

At 4h. 30m. p.m., l.m.t., having examined the level and collimation adjustments and found them correct, I set off $48^{\circ}02'30''$ on the lat. arc, $5^{\circ}09'S.$ on the decl. arc, and determine a true meridian with the solar, which I find at 10.00 chs. N. of station, falls 1 inch west of the true meridian established by Polaris observation.

October 5, 1896.

October 6, At 8h. a.m., l.m.t., I set off $5^{\circ}25' S.$ on the decl. arc, lat. arc, unchanged, and determine a true meridian with the solar, which I find at 10.00 chs. N. of station, falls .5 inches W. of the true meridian established by Polaris observation.

October 6, 1896.

October 7; At 7h. a.m., l.m.t., I set off $48^{\circ}02'$ on the lat. arc, $5^{\circ}43' S.$ on the decl. arc, and at the cor. of secs. 25, 30, 31 and 36, on the 14th. Guide Meridian and E. bdy. of the Tp. determine a true meridian with the solar, thence I run S., retracing the 14th. Guide Meridian and E. bdy. of sec. 36, and at 39.94 chs. I find the $\frac{1}{4}$ sec. cor., which is a stone, firmly set, marked and witnessed as described by the surveyor general, on line and at 79.90 chs. the standard cor. of Tps. 153 N., Rgs. 95 and 96 W., on the 13th. Standard Parallel, which is a stone firmly set, marked and witnessed as described by the surveyor general, on line, lat. $48^{\circ}01'$, long. $103^{\circ}02'$, At 7h. 30m. a.m., l.m.t., the mag. bearing of the true meridian at this Tp. cor. is N. $16^{\circ}43'W.$, which reduced by the table on page 100 in the Manual gives the mean mag. decl. $16^{\circ}40'E.$

From the Tp. cor. already described, I run W., retracing the 13th. standard parallel and S. bdy. of sec. 36, and at 40.01 chs. I find the standard $\frac{1}{4}$ sec. cor. which is a stone firmly set, marked and witnessed as described by the surveyor general on line, and at 80.02 chs. the standard sec. cor. on line.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

From the Standard Cor. of secs. 35 and 36 on the 13th. Standard Parallel and S. bdy. of the Tp., which is a stone firmly set, marked and witnessed as described by the surveyor general,

1 run
N.0°1'W. bet. secs. 35 and 36.

40.00 Set a granite stone 15x12x8 ins., 10 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 $\frac{1}{4}$ ft. high W. of cor. Pits impracticable.

80.00 Set a limestone 15x10x6 ins., 10 ins. in the ground for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on S. and E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{4}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.
Soil, sandy loam, 1st. rate.

East on a random line bet. secs. 25 and 36.

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

80.02 Intersect the 14th. Guide Meridian and E. bdy. of the Tp., 9 lks. S. of cor. of secs. 25, 30, 31 and 36, which is a stone firmly set, marked and witnessed as described by the surveyor general,

Thence 1 run,

40.01 S.89°56'W. on a true line bet. secs. 25 and 36.

Set a granite stone 15x10x4 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{4}$ ft. high N. of cor. Pits impracticable.

80.02 The cor. of secs. 25, 26, 35 and 36.

Land, prairie, rolling.
Soil, gravelly loam, 2nd. rate.

N.0°1'W. bet. secs. 25 and 26.

40.00 Set a granite stone 15x12x7 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{4}$ ft. high W. of cor.

80.00 Set a limestone 18x14x8 ins., 12 ins. in the ground for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on S. and 1 notch on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{4}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.
Soil, sandy loam, 1st. rate.

N.89°56'E. on a random line bet. secs. 24 and 25.

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

80.02 Intersect 14th. Guide Meridian and E. bdy. of Tp. 18 lks. N. of cor. of secs. 19, 24, 25 and 30, which is a stone firmly set, marked and witnessed as described by the surveyor general,

Thence 1 run,

N.89°56'W. on a true line bet. secs. 24 and 25.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- 11.5: A ravine 100 ft. deep, course N. W.
 40.01 Set a granite stone 15x3x5 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, $1\frac{1}{4}$ ft. high N. of cor. Pits impracticable.
 49.00 A grassy drain, 20 lks. wide, course N.
 51.00 Recross drain, 20 lks. wide, course S.
 53.00 Recross drain, 20 lks. wide, course N. W.
 58.70 A grassy drain, 20 lks. wide, course N. E.
 65.50 A grassy drain, 20 lks. wide, course N. E.
 80.02 The cor. of secs. 23, 24, 25 and 26.

Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

- 40.00 N.0°1'W. bet. secs. 23 and 24.
 Set a sandstone 18x3x6 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, $1\frac{1}{4}$ ft. high W. of cor. Pits impracticable.
 October 7: At this $\frac{1}{4}$ sec. cor., I set off 5°53'S. on the decl. arc, and at 11h.48m. a.m., l.m.t., observe the sun on the meridian, resulting lat. 48°03'.
 77.50 Enter side of bluffs, sloping E.
 80.00 Set a granite stone 15x10x7 ins., 10 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on S. and 1 notch on E. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{4}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

- 40.00 S.89°56'E. on a random line bet. secs. 13 and 24.
 80.02 Set temp. $\frac{1}{4}$ sec. cor. Intersect 14th. Guide Meridian and E. bdy. of Tp. 4 lks. S. of cor. of secs. 13, 18, 19 and 24, which is a stone firmly set, marked and witnessed as described by the surveyor general. Thence I run,
 40.01 N.89°58'W. on a true line bet. secs. 13 and 24.
 Set a granite stone 15x12x7 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, $1\frac{1}{4}$ ft. high N. of cor. Pits impracticable.
 58.00 Begin to descend bluffs, bearing N.
 61.00 Foot of bluffs, 60ft. high, bearing N.
 68.65 A creek drain, 15 lks. wide, course N.
 79.75 Begin to ascend bluffs, bearing N.
 80.02 The cor. of secs. 13, 14, 23 and 24.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- N.0°1'W. bet. secs. 13 and 14.
 Over side of bluffs, sloping E.
 Foot of bluffs, and a creek drain, 40 lks. wide,
 course W.
 16.60
 22:20 Begin to ascend bluffs, bearing E.
 25.40 Top of bluffs, 100 ft. high, bearing E.
 40.00 Set a limestone 15x12x6 ins., 10 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x
 12 ins. N. and S. of stone 3 ft. dist., and raise a
 mound of earth 5ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 45.70 A boggy drain, 220 lks. wide, course W.
 80.00 Set a granite stone 18x10x8 ins., 12 ins. in the
 ground for cor. of secs. 11, 12, 13 and 14, marked
 with 4 notches on S. and 1 notch on E. edges, and
 raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W.
 of cor.
 Pits impracticable.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

- S.89°58'E. on a random line bet. secs. 12 and 13.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.94 Intersect 14th. Guide Meridian and E. bdy. of Tp. 2
 lks. N. of cor. of secs. 7, 12, 13 and 18, which is
 a stone firmly set, marked and witnessed as described
 by the surveyor general,
 Thence I run,
 N.89°57'W. on a true line bet. secs. 12 and 13.
 1.40 A grassy drain, 80 lks. wide, course S. W.
 39.97 Set a limestone 18x14x6 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.
 Pits impracticable.
 56.00 A grassy drain, 15 lks. wide, course S.
 68.10 A grassy drain, 15 lks. wide, course S.
 79.94 The cor. of secs. 11, 12, 13 and 14.

Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

- N.0°1'W. bet. secs. 11 and 12.
 40.00 Set a granite stone 12x10x7 ins., 8 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.
 Pits impracticable.
 65.00 Enter side of ravine, sloping W. and bearing N. N. E.
 80.00 Set a sandstone 15x10x8 ins., 10 ins. in the ground
 for cor. of secs. 1, 2, 11 and 12, marked with 5
 notches on S. and 1 notch on E. edges, and raise a
 mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 Pits impracticable.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.	
	S. 89° 57' E. on a random line bet. secs. 1 and 12.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.06	Intersect 14th. Guide Meridian and E. bdy. of Tp. at cor. of secs. 1, 6, 7 and 12, which is a stone firmly set, marked and witnessed as described by the surveyor general.
	Thence I run,
	N. 89° 57' W. on a true line bet. secs. 1 and 12.
	Ascending side of ravine.
6.50	Leave ravine, bearing N., have ascended 100 ft. and enter a ravine, bearing N.
9.00	Bottom of ravine 175 ft. deep, course N.
15.50	Over ravine, bearing N.
38.00	Enter a ravine, bearing N.
40.03	Set a limestone 15x10x8 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
43.25	Bottom of ravine, 125 ft. deep, course N.
48.50	Over ravine, bearing N. and enter 3rd. ravine bearing N.
53.00	Bottom of ravine, 250 ft. deep, course N.
57.00	Over ravine, bearing N.
61.60	Enter a ravine, bearing N.
64.50	Bottom of ravine, 150 ft. deep, course N.
70.00	Over ravine, bearing N.
75.20	Enter ravine, bearing N.
80.06	The cor. of secs. 1, 2, 11 and 12.

Land, prairie, broken.
Soil, clay loam, 4th. rate.

October 7, 1896.

	N. 0° 1' W. on a random line bet. secs. 1 and 2.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.60	Intersect N. bdy. of Tp. 6 lks. W. of cor. of secs. 1, 2, 35 and 36, heretofore described,
	Thence I run,
	S. 0° 2' W. on a true line bet. secs. 1 and 2.
	Ascending bluffs.
3.50	Top of bluffs, bearing N. E.
29.40	A ravine 100 ft. deep, course N. E.
33.10	Recross ravine, course N.
37.70	Recross ravine, course N. E.
39.60	Set a granite stone 15x12x6 ins., 10 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. Pits impracticable.
66.50	Enter a ravine, bearing N. E.
71.40	Bottom of ravine, 200 ft. deep, course N. E.
79.60	The cor. of secs. 1, 2, 11 and 12.

Land, prairie, rolling and broken.
Soil, clay loam, 2nd. and 4th. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- October 8; At 7h. 30m, a.m., l.m.t., I set off $48^{\circ}01'$ on the lat. arc, $6^{\circ}09'S$, on the decl. arc, and at the Standard cor. of secs. 34 and 35 on the 13th. Standard Parallel and S. bdy. of Tp., which is a stone firmly set, marked and witnessed as described by the surveyor-general, determine a true meridian with the solar. Thence I run,
 $N.0^{\circ}2'W.$ bet. secs. 34 and 35.
- 39.85 A grassy drain, 40 lks. wide, course S. W.
 40.00 Set a granite stone $15 \times 10 \times 8$ ins., 10 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. Pits impracticable.
- 51.45 A grassy drain, 15 lks. wide, course N. N. W.
 73.05 A grassy drain, 30 lks. wide, course W.
 80.00 Set a granite stone $15 \times 10 \times 10$ ins., 10 ins. in the ground for cor. of secs. 26, 27, 34 and 35, marked with 1 notch on S. and 2 notches on E. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.
-
- East on a random line bet. secs. 26 and 35.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect N. and S. line 2 lks. S. of cor. of secs. 26, 27, 34 and 35, Thence I run,
 $S.89^{\circ}59'W.$ on a true line bet. secs. 26 and 35.
- 39.65 A grassy drain, 40 lks. wide, course S. W.
 40.03 Set a granite stone $18 \times 12 \times 10$ ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, $18 \times 18 \times 12$ ins. E. and W. of stone 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 61.00 A grassy drain, 15 lks. wide, course S. W.
 80.06 The cor. of secs. 26, 27, 34 and 35.
- Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.
-
- $N.0^{\circ}2'W.$ bet. secs. 26 and 27.
- 40.00 Set a granite stone $15 \times 8 \times 7$ ins., 10 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. Pits impracticable.
- 80.00 Set a granite stone $15 \times 8 \times 6$ ins., 10 ins. in the ground for cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. and E. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- N. 89° 59' E. on a random line bet. secs. 23 and 26.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect N. and S. line at cor. of secs. 23, 24, 25 and 26,
 Thence I run,
 S. 89° 59' W. on a true line bet. secs. 23 and 26.
 40.03 Set a granite stone 15x10x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
 67.50 A grassy drain, 25 lks. wide, course N. E.
 80.06 The cor. of secs. 22, 23, 26 and 27.

Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

- N. 0° 2' W. bet. secs. 22 and 23.
 23.30 A grassy drain, 25 lks. wide, course N. N. W.
 37.75 Enter a ravine, bearing E.
 40.00 Set a granite stone 15x10x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 41.25 Bottom of ravine, 150 ft. deep, course E.
 45.20 Top of ridge, 200 ft. high, bearing E. and reenter ravine bearing N. W.
 64.75 Bottom of ravine, 200 ft. deep, course N. N. W.
 80.00 Set a granite stone 18x6x6 ins., 12 ins. in the ground for cor. of secs. 14, 15, 22 and 23, marked with 3 notches on S. and 2 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 Pits impracticable.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

- N. 89° 59' E. on a random line bet. secs. 14 and 23.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.04 Intersect N. and S. line 14 lks. N. of cor. of secs. 13, 14, 23 and 24,
 Thence I run,
 N. 89° 59' W. on a true line bet. secs. 14 and 23.
 Ascending bluffs.
 1.00 Top of bluffs bearing N.
 14.00 A ravine, 50 ft. deep, course N.
 29.50 A ravine, 60 ft. deep, course N.
 38.50 A gravelly alkali drain, 15 lks. wide, course N.
 40.02 Set a granite stone 20x16x5 ins., 15 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
 October 8; At this $\frac{1}{4}$ sec. cor., I set off 6° 16' S. on the decl. arc, and at 11h. 47m. a.m., 1.m.t., observe the sun on the meridian, resulting lat. 48° 03' 30".
 52.50 Enter a ravine bearing N.
 57.00 Bottom of ravine, 200 ft. deep, course N.
 64.00 Over ravine, bearing N.
 70.00 Enter ravine bearing N. N. W.
 80.04 The cor. of secs. 14, 16, 22 and 23.

Land, prairie, rolling and broken.
 Soil, clay loam, 3rd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

N.0°2'W. bet. secs. 14 and 15.
 Ascending side of ravine.
 Leave ravine bearing N. W.
 7.75 Set a granite stone 15x12x7 ins., 10 ins. in the
 40.00 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.
 Pits impracticable.
 Thence descend bluffs bearing W.
 50.00 Foot of bluffs, 80 ft. high, bearing W.
 59.20 A creek drain, 20 lks. wide, course W.
 62.25 Begin to ascend a ridge bearing E.
 63.60 Top of ridge, 100 ft. high, bearing E.
 68.75 Over ridge and bottom of ravine, course S. W.
 80.00 Set a granite stone 15x12x8 ins., 10 ins. in the
 ground for cor. of secs. 10, 11, 14 and 15, marked
 with 4 notches on S. and 2 notches on E. edges, and
 raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of
 cor.
 Pits impracticable. and over ravine, bearing S. W.
 Land, prairie, rolling.
 Soil, sandy loam, 2nd. and 3rd. rate.

S.89°55'E. on a random line bet. secs. 11 and 14.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.98 Intersect N. and S. line 4 lks. S. of cor. of secs.
 11, 12, 13 and 14,
 Thence I run,
 N.89°57'W. on a true line bet. secs. 11 and 14.
 27.50 A ravine, 60 ft. deep, course S.S.W.
 39.99 Set a granite stone 15x10x7 ins., 10 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a
 mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
 52.60 A ravine, 50 ft. deep, course N. W.
 56.20 A ravine, 100 ft. deep, course S. W.
 73.20 A ravine, 100 ft. deep, course S. W.
 79.98 The cor. of secs. 10, 11, 14 and 15.
 Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

N.0°2'W. bet. secs. 10 and 11.
 40.00 Set a limestone 15x15x7 ins., 10 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.
 Pits impracticable.
 67.25 A ravine, 100 ft. deep, course S. W.
 74.75 A ravine, 100 ft. deep, course S. W.
 80.00 Set a granite stone 18x8x8 ins., 12 ins. in the
 ground for cor. of secs. 2, 3, 10 and 11, marked with
 5 notches on S. and 2 notches on E. edges, and raise
 a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 Pits impracticable.
 Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

Township 153 North of Range 96 West of the 6th. Principal Meridian.

Chains. S. 89° 57' E. on a random line bet. secs. 2 and 11.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.88 Intersect N. and S. line 2 lks. S. of cor. of secs.
 1, 2, 11 and 12.
 Thence I run,
 N. 89° 58' W. on a true line bet. secs. 2 and 11,
 descending side of ravine.
 5.50 Bottom of ravine, 200 ft. deep, course N.
 21.50 Over ravine bearing S. E. and N. E.
 25.00 Enter a ravine, bearing N.
 31.80 Bottom of ravine, 150 ft. deep, course N.
 39.94 Set a sandstone 12x10x5 ins., 8 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.
 Pits impracticable.
 41.50 2nd. bottom in ravine, course N.
 57.00 Over ravine, bearing N.
 78.60 A ravine, 100 ft. deep, course S. W.
 79.88 The cor. of secs. 2, 3, 10 and 11.
 Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

October 8, 1896.

40.00 N. 0° 2' W. on a random line bet. secs. 2 and 3.
 79.56 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. bdy. of Tp. 8 lks. E. of cor. of secs.
 2, 3, 34 and 35, heretofore described,
 Thence I run,
 S. 0° 5' E. on a true line bet. secs. 2 and 3.
 4.60 Ascending side of ravine.
 19.80 Leave ravine, bearing N. E.
 29.60 Enter a ravine, bearing N. E.
 36.00 Bottom of ravine, 175 ft. deep, course N. E.
 39.56 Over ravine bearing N. E.
 Set a limestone 15x8x8 ins., 10 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x
 12 ins. N. and S. of stone 3 ft. dist., and raise a
 mound of earth 3 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 79.56 The cor. of secs. 2, 3, 10 and 11.
 Land, prairie, rolling.
 Soil, sandy loam, 3rd. rate.
 Some cedar brush in ravines.

Township 163 North of Range 96 West of the 6th. Principal Meridian.

Chains.

October 9; At 7h. 15m. a.m., l.m.t., I set off 48° 01' on the lat. arc, 6°30'S. on the decl. arc, and at the Standard Cor. of secs. 33 and 34 on the 13th. Standard Parallel and S. bdy. of the Tp., which is a stone, firmly set, marked and witnessed as described by the surveyor general, determine a true meridian with the solar.

Thence I run,

N.0°3'W. bet. secs. 33 and 34.

Ascending side of ravine.

2.00

Leave ravine, bearing E.

13.45

A ravine, 70 ft. deep, course E.

24.55

A ravine, 50 ft. deep, course E.

40.00

Set a limestone 15x10x4 ins., 10 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. Pits impracticable.

80.00

Set a granite stone 12x10x5 ins., 8 ins. in the ground for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on S. and 3 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.

Soil, gravelly loam, 2nd. rate.

40.00

East on a random line bet. secs. 27 and 34.

80.04

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

Intersect N. and S. line 9 lks. N. of cor. of secs. 26, 27, 34 and 35,

Thence I run,

40.02

N.89°56'W. on a true line bet. secs. 27 and 34.

Set a granite stone 15x8x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.

44.00

A creek drain, 50 lks. wide, course N.

80.04

The cor. of secs. 27, 28, 33 and 34.

Land, prairie, rolling.

Soil, gravelly loam, 2nd. rate.

22.70

N.0°3'W. bet. secs. 27 and 28.

40.00

A brushy ravine, 75 ft. deep, course N. E.

Set a limestone 20x9x4 ins., 15 ins. in the ground

for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor., and a ravine 60 ft. deep, course N. E.

80.00

Set a granite stone 15x12x8 ins., 10 ins. in the ground for cor. of secs. 21, 22, 27 and 28, marked with 2 notches on S. and 3 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.

Soil, gravelly loam, 2nd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.
 40.00 S. 89°56'E. on a random line bet. secs. 22 and 27.
 80.10 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. and S. line 4 lks. S. of cor. of secs.
 22, 23, 26 and 27,
 Thence I run,
 N. 89°58'W. on a true line bet. secs. 22 and 27.
 15.16 A grassy drain, 15 lks. wide, course N.
 40.05 Set a granite stone 15x10x10 ins., 10 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and
 raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of
 cor.
 Pits impracticable.
 70.70 A creek drain, 30 lks. wide, course N. N. W.
 80.10 The cor. of secs. 21, 22, 27 and 28.
 Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

N. 0°3'W. bet. secs. 21 and 22.
 8.95 A creek drain, 20 lks. wide, course W.
 19.95 A brushy drain, 10 lks. wide, course W.
 40.00 Set a granite stone 15x8x8 ins., 10 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.
 Pits impracticable.
 71.45 A grassy drain, 20 lks. wide, course W.
 80.00 Set a granite stone 20x12x6 ins., 15 ins. in the
 ground for cor. of secs. 15, 16, 21 and 22, marked,
 $\frac{1}{4}$ 1E3 N. on N. E.
 $\frac{1}{4}$ 96 W. on S. E. faces,
 with 3 notches on S. and E. edges, and raise a mound
 of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 Pits impracticable.
 Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

S. 89°56'E. on a random line bet. secs. 15 and 22.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.10 Intersect N. and S. line at cor. of secs. 14, 15, 22
 and 23,
 Thence I run,
 N. 89°58'W. on a true line bet. secs. 15 and 22.
 Descending side of ravine.
 6.40 Foot of ravine, course N. N. W.
 24.00 Over ravine, 150 ft. deep, bearing N.
 40.05 Set a granite stone 15x10x8 ins., 10 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise
 a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
 75.00 Begin to descend bluffs, bearing N.
 77.50 Foot of bluffs, 100 ft. high, bearing N.
 80.10 The cor. of secs. 15, 16, 21 and 22.
 Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.	N.0°3'W. bet. secs. 15 and 16. Over rolling ground, gradually descending.
40.00	Set a granite stone 15x8x8 ins., 10 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. Pits impracticable.
80.00	October 9; At this $\frac{1}{4}$ sec. cor., I set off 6°39'S. on the decl. arc, and at 11h. 47m. a.m., 1.m.t., observe the sun on the meridian, resulting lat. 48°04'. Set a limestone 15x8x5 ins., 10 ins. in the ground for cor. of secs. 9, 10, 15 and 16, marked with 4 notches on S. and 3 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land, prairie, rolling. Soil, sandy loam, 2nd. rate.
40.00	S.89°58'E. on a random line bet. secs. 10 and 15. Set temp. $\frac{1}{4}$ sec. cor.
80.12	Intersect N. and S. line 12 lks. S. of cor. of secs. 10, 11, 14 and 15, Thence I run, S.89°57'W. on a true line bet. secs. 10 and 15.
14.00	Begin to descend bluffs, bearing N.
24.00	Foot of bluffs, 100 ft. high, bearing N.
40.06	Set a granite stone 18x12x6 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits. 18x18x12 ins. E. and W. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high N. of cor.
45.20	A creek drain, 160 lks. wide, course W.N.W.
61.60	Recross creek drain, 20 lks. wide, course S.
63.00	Recross creek drain, 20 lks. wide, course N. W.
67.00	Recross creek drain, 20 lks. wide, course S. W.
68.6	Recross creek drain, 15 lks. wide, course N.
76.00	A creek drain, 20 lks. wide, course N.
80.12	The cor. of secs. 9, 10, 15 and 16.
	Land, prairie, rolling. Soil, sandy loam, 2nd. rate.
18.95	N.0°3'W. bet. secs. 9 and 10. A creek drain, 10 lks. wide, course W., thence gradually ascend over rolling land.
27.60	A brushy ravine, 10 lks. wide, course S. W.
40.00	Set a granite stone 12x10x8 ins., 8 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
47.30	A grassy drain, 10 lks. wide, course W.S.W.
80.00	Set a granite stone 12x10x7 ins., 8 ins. in the ground for cor. of secs. 3, 4, 9 and 10, marked with 5 notches on S. and 3 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land, prairie, rolling. Soil, gravelly loam, 3rd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- 40.00 N. 89° 57' E. on a random line bet. secs. 3 and 10.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.12 Intersect N. and S. line 8 lks. S. of cor. of secs.
 2, 3, 10 and 11,
 Thence I run,
 S. 89° 54' W. on a true line bet. secs. 3 and 10.
 16.15 A ravine, 60 ft. deep, course S. E.
 40.06 Set a limestone 15x10x4 ins., 10 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x
 12 ins. E. and W. of stone 3 ft. dist., and raise a
 mound of earth $3\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 40.20 A ravine, 50 ft. deep, course W. N. W.
 49.30 Recross ravine, 50 ft. deep, course W. S. W.
 55.90 Recross ravine, 50 ft. deep, course N.
 80.12 The cor. of secs. 3, 4, 9 and 10.

Land, prairie, rolling.
 Soil, gravelly loam, 3rd. rate.

- 40.00 N. 0° 3' W. on a random line bet. secs. 3 and 4.
 79.68 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. bdy. of the Tp., 14 lks. W. of cor. of
 secs. 3, 4, 33 and 34, heretofore described,
 Thence I run,
 S. 0° 3' W. on a true line bet. secs. 3 and 4.
 Descending ridge.
 5.10 Foot of ridge and gravelly drain 10 lks. wide, course
 N. W., thence ascend bluffs, bearing E.
 11.20 Top of bluffs.
 39.68 Set a granite stone 12x10x9 ins., 8 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.
 Pits impracticable.
 63.20 Enter a ravine, bearing W.
 67.20 Bottom of ravine, 175 ft. deep, course W.
 74.60 Over ravine, bearing W.
 79.68 The cor. of secs. 3, 4, 9 and 10.

Land, prairie, broken or bad
 Soil, clay loam, 3rd. and 4th. rate.

October 9, 1896.

Township 153 North of Range 96 West of the 6th. Principal Meridian.

Chains.

- From the Standard Cor. of secs. 32 and 33 on 13th. Standard Parallel and S. bdy. of the Tp., which is a stone firmly set, marked and witnessed as described by the surveyor general,
I run,
N.0°4'W. bet. secs. 32 and 33.
- 40.00 Set a limestone 12x10x5 ins., 8 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. Pits impracticable.
- 46.85 A grassy drain, 15 lks. wide, course N. W.
- 59.85 A grassy drain, 15 lks. wide, course W.
- 80.00 Set a limestone 18x9x6 ins., 12 ins. in the ground for cor. of secs. 28, 29, 32 and 33, marked with 1 notch on S. and 4 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- Land, prairie, rolling.
Soil, sandy loam, 2nd. rate.

- East on a random line bet. secs. 28 and 33.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.12 Intersect N. and S. line 10 lks. N. of cor. of secs. 27, 28, 32 and 34.
Thence I run,
N.89°56'W. on a true line bet. secs. 28 and 33.
- 10.50 A brushy ravine, 125 ft. deep, course N.
- 37.20 A brushy ravine, 70 ft. deep, course N. E.
- 40.05 Set a granite stone 15x9x9 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
- 45.80 A brushy ravine, 50 ft. deep, course N. E.
- 50.50 Recross brushy ravine, 50 ft. deep, course E. S. E.
- 51.25 Recross brushy ravine, 50 ft. deep, course N. E.
- 80.12 The cor. of secs. 28, 29, 32 and 33.
- Land, prairie, rolling.
Soil, gravelly loam, 2nd. rate.

- October 10; At 9h. a.m., l.m.t., I set off 48°02' on the lat. arc, 6°58'S. on the decl. arc, and at this cor. determine a true meridian with the solar.
- Thence I run,
N.0°4'W. bet. secs. 28 and 29.
- 33.10 A brushy ravine, 25 ft. deep, course N. E.
- 40.00 Set a granite stone 15x12x3 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
- 73.20 A brushy ravine, 25 lks. wide, course E.
- 80.00 Set a granite stone 15x10x6 ins., 10 ins. in the ground for cor. of secs. 20, 21, 28 and 29, marked with 2 notches on S. and 4 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
- Land, prairie, rolling.
Soil, sandy loam, 2nd. rate.

Township 163 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- S.89°56'E. on a random line bet. secs. 21 and 28.
 Set temp. $\frac{1}{4}$ sec. cor.
 40.00 Intersect N. and S. line at cor. of secs. 21, 22, 27
 80.08 and 28.
 Thence I run,
 N.89°56'W. on a true line bet. secs. 21 and 28.
 20.10 A brushy ravine, 60 ft. deep, course N. N. E.
 40.04 Set a granite stone 18x15x7 ins., 12 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits,
 18x18x12 ins. E. and W. of stone 3 ft. dist., and raise
 a mound of earth $3\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 64.90 A brushy ravine, 15 ft. deep, course N.
 80.08 The cor. of secs. 20, 21, 28 and 29.

Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

- N.0°4'W. bet. secs. 20 and 21.
 9.10 A gravelly drain, 15 lks. wide, course E.
 40.00 Set a granite stone 15x10x10 ins., 10 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits,
 18x18x12 ins. N. and S. of stone 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 a granite stone 15x9x4 ins., 10 ins. in the ground
 for cor. of secs. 16, 17, 20 and 21, marked with 3
 notches on S. and 4 notches on E. edges, 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, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

- S.89°56'E. on a random line bet. secs. 16 and 21.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.10 Intersect N. and S. line 3 lks. S. of cor. of secs.
 15, 16, 21 and 22.
 Thence I run,
 N.89°57'W. on a true line bet. secs. 16 and 21.
 19.00 Enter a level valley bearing N.
 26.70 A creek drain, 15 lks. wide, 7 ft. banks, course N.
 31.00 Leave level valley and begin to ascend bluffs bearing
 N.
 40.05 Set a granite stone 15x10x5 ins., 10 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits,
 18x18x12 ins. E. and W. of stone 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of
 cor.
 59.00 Top of bluffs, 175 ft. high, bearing N.
 66.00 A brushy ravine, 75 ft. deep, course N.
 80.10 The cor. of secs. 16, 17, 20 and 21.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

October 10; At this cor. I set off 7°01'30"S. on the
 decl. arc, and at 11h.47m. a.m., 1.m.t., observe the
 sun on the meridian, resulting lat. 48°03'30".

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- N. 0°4' W. bet. secs. 16 and 17.
 9.00 Enter head of a ravine, course N. N. E.
 26.00 Enter wide bottom of ravine from S. S. E.
 30.00 Leave bottom of ravine, from W., course N. N. E.
 38.00 Reenter bottom of ravine, course N. N. W.
 40.00 Set a granite stone 12x10x8 ins., 8 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. Pits impracticable.
 43.80 Leave bottom of ravine, course N. E.
 47.40 Over ravine, 100 ft. deep, bearing E.
 58.00 A ravine, 50 ft. deep, course E.
 80.00 Set a granite stone 18x12x10 ins., 12 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.
 Soil, gravelly loam, 3rd. rate.

- S. 89°57' E. on a random line bet. secs. 9 and 16.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect N. and S. line at cor. of secs. 9, 10, 15 and 16.
 Thence I run,
 N. 89°57' W. on a true line bet. secs. 9 and 16.
 22.70 Enter a level valley bearing N.
 24.50 A creek drain, 30 lks. wide, course N. E.
 40.03 Set a limestone 15x9x4 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins. E. and W. of stone 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 43.00 Leave valley bearing N. W. and ascend bluffs.
 80.06 The cor. of secs. 8, 9; 16 and 17.
 Have ascended 150 ft.

Land, prairie, rolling and level.
 Soil, sandy loam, 2nd. rate.

- N. 0°4' W. bet. secs. 8 and 9.
 24.00 A ravine, 100 ft. deep, course E.
 28.50 A ravine, 100 ft. deep, course E.
 33.00 Begin to descend bluff, bearing N. W.
 40.00 Set a granite stone 12x10x8 ins., 8 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. Pits impracticable.
 44.20 A ravine, 140 ft. deep, course E.
 75.00 Foot of bluffs, 140 ft. high, and enter level valley bearing N. W.
 80.00 Set a granite stone 12x9x6 ins., 8 ins. in the ground for cor. of secs. 4, 5, 8 and 9, marked with 6 notches on S. and 4 notches on E. edges, 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, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

40.00 S. 89° 57' E. on a random line bet. secs. 4 and 9.
 80.00 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. and S. line 5 lks. N. of cor. of secs. 3, 4, 9 and 10,
 Thence I run,
 N. 89° 55' W. on a true line bet. secs. 4 and 9.
 17.75 Enter a ravine, bearing S. W.
 27.80 Bottom of ravine, 125 ft. deep, course S. W.
 32.75 Over ravine bearing S. W.
 40.00 Set a granite stone 15x10x4 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins. E. and W. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 47.00 Begin to descend bluffs, bearing N.
 50.00 Foot of bluffs, 75 ft. high and enter a level valley bearing N.
 65.70 A creek drain, 30 lks. wide, course N.
 80.00 The cor. of secs. 4, 5, 8 and 9.

Land, prairie, level and rolling.
Soil, clay loam, 2nd. rate.

40.00 N. 0° 4' W. on a random line bet. secs. 4 and 5.
 79.60 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. bdy. of Tp. at cor. of secs. 4, 5, 32 and 33, heretofore described,
 Thence I run,
 S. 0° 4' E. on a true line bet. secs. 4 and 5.
 2.10 Descending side of ravine.
 22.40 Bottom of ravine, course E.
 26.00 A creek drain, 25 lks. wide, course E.
 39.60 Recross creek drain, 20 lks. wide, course W.
 Set a granite stone 15x9x9 ins., 10 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.
 44.35 A grassy drain, 30 lks. wide, course E.
 79.60 The cor. of secs. 4, 5, 8 and 9.

Land, prairie, level.
Soil, alluvial, 2nd. rate.

October 10, 1896.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- October 11; At 7h. 15m. a.m., l.m.t., I set off $48^{\circ} 01'$ on the lat. arc, $7^{\circ} 15' S.$ on the decl. arc, and at the Standard cor. of secs. 31 and 32 on the 13th. Standard Parallel and S. bdy. of Tp., which is a stone firmly set, marked and witnessed as described by the surveyor general, determine a true meridian with the solar.
- Thence I run,
 $N. 0^{\circ} 5' W.$ bet. secs. 31 and 32.
 Ascending side of ravine.
 Leave ravine, bearing $S. E.$
 2.00 A brushy drain, 15 lks. wide, course $W.$
 12.70 A grassy drain, 30 lks. wide, course $W. S. W.$
 27.20 Set a granite stone $12 \times 10 \times 10$ ins., 8 ins. in the
 40.00 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.
 Pits impracticable.
 67.00 A ravine, 60 ft. deep, course $N. W.$
 80.00 Set a granite stone $18 \times 10 \times 5$ ins., 12 ins. in the ground
 for cor. of secs. 29, 30, 31 and 32, marked with 1
 notch on $S.$ and 5 notches on $E.$ edges, and raise a
 mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high $W.$ of cor.
 Pits impracticable.
- Land, prairie, rolling.
 Soil, gravelly loam, 3rd. rate.
-
- East on a random line bet. secs. 29 and 32.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.12 Intersect $N.$ and $S.$ line 15 lks. $S.$ of cor. of secs.
 28, 29, 32 and 33,
 Thence I run,
 $S. 89^{\circ} 54' W.$ on a true line bet. secs. 29 and 32.
 12.40 A grassy drain, 20 lks. wide, course $N. N. W.$
 40.06 Set a granite stone $12 \times 10 \times 10$ ins., 8 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on $N.$ face, dig pits,
 $18 \times 18 \times 12$ ins. $E.$ and $W.$ of stone 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high $N.$ of
 cor.
 56.30 A grassy drain, 75 lks. wide, course $N. W.$
 80.12 The cor. of secs. 29, 30, 31 and 32.
- Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.
-
- West on a random line bet. secs. 30 and 31.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.92 Intersect $W.$ bdy. of Tp. 9 lks. $S.$ of cor. of secs.
 25, 30, 31 and 36, which is a stone firmly set, marked
 and witnessed as described by deputy surveyor George
 K. Dike,
 Thence I run,
 $S. 89^{\circ} 56' E.$ on a true line bet. secs. 30 and 31.
 9.40 A ravine, 140 ft. deep, course $N.$
 27.90 Enter a ravine, bearing $N. W.$
 34.30 Bottom of ravine, 150 ft. deep, course $N. W.$
 39.92 Set a limestone $15 \times 10 \times 4$ ins., 10 ins. in the ground
 for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on $N.$ face, and raise a
 mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high $N.$ of cor.
 Pits impracticable.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- 40.50 Over ravine, bearing N. W.
56.40 A ravine, 100 ft. deep, course N.
75.40 A ravine, 75 ft. deep, course N. W.
79.92 The cor. of secs. 29, 30, 31 and 32.

Land, prairie, rolling.
Soil, gravelly loam, 2nd. rate.

- 19.20 N.0°5'W. bet. secs. 29 and 30.
40.00 A ravine, 50 ft. deep, course W.
Set a granite stone 15x12x4 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.

- 45.50 Pits impracticable.
75.00 A ravine, 50ft. deep, course W.
80.00 A brushy drain, 30 lks. wide, course W.
Set a granite stone 15x10x9 ins., 10 ins. in the
ground for cor. of secs. 19, 20, 29 and 30, marked
with 2 notches on S. and 5 notches on E. edges, and
raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of
cor.
Pits impracticable.

Land, prairie, rolling.
Soil, sandy loam, 2nd. rate.

- 40.00 N.89°54'E. on a random line bet. secs. 20 and 29.
80.04 Set temp. $\frac{1}{4}$ sec. cor.
Intersect N. and S. line 8 lks. N. of cor. of secs.
20, 21, 28 and 29.
Thence $\frac{1}{4}$ run,
7.65 S.89°57'W. on a true line bet. secs. 20 and 29.
40.02 A ravine, 50 ft. deep, course N. E.
Set a granite stone 15x10x7 ins., 10 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits,
18x18x12 ins. E. and W. of stone 3 ft. dist., and
raise a mound of earth 3 $\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N.
of cor.
80.04 The cor. of secs. 19, 20, 29 and 30.

Land, prairie, rolling.
Soil, sandy loam, 2nd. rate.

- 40.00 N.89°56'W. on a random line bet. secs. 19 and 30.
79.88 Set temp. $\frac{1}{4}$ sec. cor.
Intersect W. bdy. of Tp. 15 lks. N. of cor. of secs.
19, 24, 25 and 30, which is a stone firmly set, marked
and witnessed as described by deputy surveyor George
K. Dika.
Thence $\frac{1}{4}$ run,
10.20 N.89°58'E. on a true line bet. secs. 19 and 30.
22.40 A grassy drain, 50 lks. wide, course S. W.
Junction of grassy drain from N. and from S. 110 lks.
wide, course N. "
Thence ascend bluffs, bearing N.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

- 28.50 Top of bluffs, 150 ft. high, bearing N. N. W.
 39.88 Set a granite stone 18x8x8 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.
 Pits impracticable.
- 43.20 A grassy drain, 20 lks. wide, course N.
 62.50 A brushy drain, 15 lks. wide, course N.
 64.60 Recross drain, 20 lks. wide, course S. W.
 69.60 Recross drain, 20 lks. wide, course N. W.
 79.88 The cor. of secs. 19, 20, 29 and 30.

Land, prairie, rolling.
 Soil, gravelly loam, 2nd. rate.

October 11; At this cor. I set off 7°24' S. on the decl. arc; and at 11h.47m. a.m. l.m.t., observe the sun on the meridian, resulting lat. 48°02'30".

- N.0°5'W. bet. secs. 19 and 20.
 18.80 A ravine, 75 ft. deep, course W.
 40.00 Set a granite stone 15x10x5 ins., 10 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.
 Pits impracticable.
- 80.00 Set a granite stone 12x8x8 ins., 8 ins. in the ground for cor. of secs. 17, 18, 19 and 20, marked with 3 notches on S. and 5 notches on E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 Pits impracticable.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

- N.89°57'E. on a random line bet. secs. 17 and 20.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.98 Intersect N. and S. line 7 lks. N. of cor. of secs. 16, 17, 20 and 21,
 Thence I run,
 West on a true line bet. secs. 17 and 20.
- 21.00 Enter a ravine, bearing N. E.
 27.80 Bottom of ravine, 150 ft. deep, course N. E.
 38.00 Over ravine, bearing N.
 39.99 Set a limestone 15x10x10 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 Pits impracticable.
- 79.98 The cor. of secs. 17, 18, 19 and 20.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

- S.89°58'W. on a random line bet. secs. 18 and 19.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect W. bdy. of Tp. 17 lks. N. of cor. of secs. 13, 18, 19 and 24, which is a stone firmly set, marked and witnessed as described by deputy surveyor George K. Dike,
 Thence I run,
 N.89°51'E. on a true line bet. secs. 18 and 19.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

- Chains.
 6.55 A grassy drain, 30 lks. wide, course N. N. W.
 37.00 A ravine, 100 ft. deep, course N. W.
 39.96 Set a granite stone 15x9x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
 61.00 A ravine, 50 ft. deep, course S. W.
 79.96 The cor. of secs. 17, 18, 19 and 20.

Land, prairie, rolling.
 Soil, gravelly loam, 3rd. rate.

- 40.00 N.0°5'W. bet. secs. 17 and 18.
 Set a granite stone 15x12x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 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 a granite stone 15x8x8 ins., 10 ins. in the ground for cor. of secs. 7, 8, 17 and 18, marked with 4 notches on S. and 5 notches on E. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

- 40.00 East on a random line bet. secs. 8 and 17.
 80.00 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect N. and S. line 11 lks. N. of cor. of secs. 8, 9, 16 and 17,
 thence $\frac{1}{4}$ run,
 N.89°55'W. on a true line bet. secs. 8 and 17.
 33.10 A ravine, 50 ft. deep, course N.
 40.00 Set a granite stone 15x10x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins. E. and W. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 64.00 Enter a ravine, bearing N.
 70.00 Bottom of ravine, 140 ft. deep, course N. N. E.
 80.00 The cor. of secs. 7, 8, 17 and 18. and over ravine.

Land, prairie, rolling.
 Soil, sandy loam, 2nd. rate.

October 11, 1896.

- 40.00 S.89°51'W. on a random line bet. secs. 7 and 18.
 79.96 Set temp. $\frac{1}{4}$ sec. cor.
 Intersect W. bdy. of Tp. 3 lks. N. of cor. of secs. 7, 12, 13 and 18, which is a stone firmly set, marked and witnessed as described by deputy surveyor George K. Dike,
 thence $\frac{1}{4}$ run,
 N.89°50'E. on a true line bet. secs. 7 and 18.
 35.50 Over side of bluffs, sloping N.
 A grassy drain, 30 lks. wide, course N. W. and slope changes to E. ascent.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.	
39.96	Set a granite stone 15x12x8 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
53.00	Top of bluffs, bearing N.
79.96	The cor. of secs. 7, 8, 17 and 18.
	Land, prairie, rolling. Soil, sandy loam, 2nd. rate.
40.00	N.0°5'W. bet. secs. 7 and 8. Set a granite stone 18x9x7 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins. N. and S. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
72.75	Enter a ravine, bearing N. E.
79.25	Bottom of ravine, 80 ft. deep, course N. E.
80.00	Set a granite stone 15x8x8 ins., 10 ins. in the ground for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on S. and E. edges, and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land, prairie, rolling. Soil, sandy loam, 2nd. rate.
	October 12: At 9h. a.m., 1.m.t.. I set off 48°05' on the lat. arc, 7°43'S, on the decl. arc, and at the cor. of secs. 5, 6, 7 and 8, determine a true meridian with the solar.
	Thence I run, S.89°55'E, on a random line bet. secs. 5 and 8.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line 12 lks. S. of cor. of secs. 4, 5, 8 and 9,
	Thence I run, West on a true line bet. secs. 5 and 8. Over level valley land.
2.00	Leave valley and begin to ascend bluffs, bearing N.
40.02	Set a granite stone 20x10x6 ins., 15 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins. E. and W. of stone 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
47.00	Top of bluffs, 275 ft. high, bearing N.
57.00	Enter a ravine, bearing N. ... E.
62.70	Bottom of ravine, 175 ft. deep, course N.
70.20	2nd. bottom in ravine, 100 ft. deep, course N. E.
79.50	3rd. bottom in ravine, 75 ft. deep, course N. E.
80.04	The cor. of secs. 5, 6, 7 and 8.
	Land, prairie, rolling. Soil, sandy loam, 2nd. rate.

Township 153 North of Range 96 West of the 10th. Principal Meridian.

- Chains.
- 40.00 S. 89° 50' W. on a random line bet. secs. 6 and 7.
80.04 Set temp. $\frac{1}{4}$ sec. cor.
Intersect W. bdy. of Tp. 5 lks. N. of cor. of secs. 1, 6, 7 and 12, which is a stone firmly set, marked and witnessed as described by deputy surveyor George K. Dike.
Thence $\frac{1}{4}$ run,
40.04 N. 89° 48' E. on a true line bet. secs. 6 and 7.
Set a granite stone 18x10x4 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.
Pits impracticable.
45.50 Enter a ravine, bearing N. N. W.
53.50 Bottom of ravine, 100 ft. deep, course N. N. W.
61.50 Over ravine, and top of bluffs, 200 ft. high, bearing N.
70.00 Enter ravine, bearing N. E.
80.04 The cor. of secs. 5, 6, 7 and 8.

Land, prairie, rolling.
Soil, sandy loam, 2nd. and 4th. rate.

- 40.00 N. 0° E' W. on a random line bet. secs. 5 and 6.
79.72 Set temp. $\frac{1}{4}$ sec. cor.
Intersect N. bdy. of Tp. 1 lk. W. of cor. of secs. 5, 6, 31 and 32, heretofore described,
Thence $\frac{1}{4}$ run,
14.60 S. 0° 5' E. on a true line bet. secs. 5 and 6.
39.72 A wagon road bearing N. N. E.
Set a granite stone 15x10x10 ins., 10 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.
Pits impracticable.
59.00 Enter a ravine, bearing E.
63.50 Bottom of ravine, 75 ft. deep, course E.
68.50 Over ravine, bearing E.
73.75 Enter ravine, bearing N. E.
79.72 The cor. of secs. 5, 6, 7 and 8.

Land, prairie, rolling.
Soil, sandy loam, 2nd. rate.

October 12, 1896.

Township 153 North of Range 96 West of the 5th. Principal Meridian.

Chains.

General Description.

The land in this Township is prairie, surface rolling, and soil, sandy loam, gravelly loam, and clay loam, 2nd. and 3rd. rate.

The Township is covered with rich nutritious grasses, affording good pasturage.

The water courses are generally in deep ravines, generally brushy with scattering trees, cottonwood ash and elm.

No settlements were found.

Walter R. Veigel,

U. S. Deputy Surveyor.

177

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Walter B. Vogel
 United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of the sub-
division line of township 15 33 North of Range
at 15 33 North of Range No. 96 principal meridian in North Dakota
 during the respective seasons in which they acted:

- John S. Lucke Chairman.
- Virgil Casum Chairman.
- Donit Steen Moundman.
- Joseph Parker Moundman.
- _____ Arman.
- _____ Arman.
- Henry A. Vogel Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Walter B. Vogel
 United States Deputy Surveyor, in surveying all
 those parts or portions of the subdivision line of township
No. 15 33 North of Range No. 96

Principal meridian, State of North Dakota which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for North Dakota

- John S. Lucke Chairman.
- Virgil Casum Chairman.
- Donit Steen Moundman.
- Joseph Parker Moundman.
- _____ Arman.
- _____ Arman.
- Henry A. Vogel Flagman.

Subscribed and sworn to before me this 24th
 day of November, 1896



John Lucke
 Clerk of Dist. Court -
 Grand Co. North Dak.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mattew A. Veigel, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Andrew Blewett United States Surveyor General for North Dakota, bearing date of the 25th day of November, 1896, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for North Dakota, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the widening lines lines of township No. 153 North of Range No. 96

West of the fifth Principal meridian, in the State of North Dakota, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for North Dakota and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1844.

Mattew A. Veigel
United States Deputy Surveyor.

Subscribed by said Mattew A. Veigel, and sworn to before me }
this 24 day of November, 1896



John Lynch
Jud. of Dist. Court,
Grand County, in Dak.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Washington, D. C. August 18, 1897

The foregoing field notes of the survey of the widening lines of township No. 153 North of Range No. 96 West of the fifth principal meridian in North Dakota

executed by Mattew A. Veigel - U. S. Deputy Surveyor under his contract No. 43 dated March 25th, 1896, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Andrew Blewett
United States Surveyor General.

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

Andrew Blewett
United States Surveyor General.