

IF FOUND RETURN TO
ERWIN U. MOSER
P. O. BOX 454
BOGAN MICH

7.

Smithfield

Curb & Gutter #8

K & E
REG. U. S. PAT. OFF.

COLLEGE FIELD BOOK

360 R

1-16 Curb & gutter on
South Main Street
West side of Main Str
from 4th to point
1900' South

17-18 Entrance to Ball
Park from Center Str
NAME _____

CLASS _____

COURSE CHECKED

7-14-69

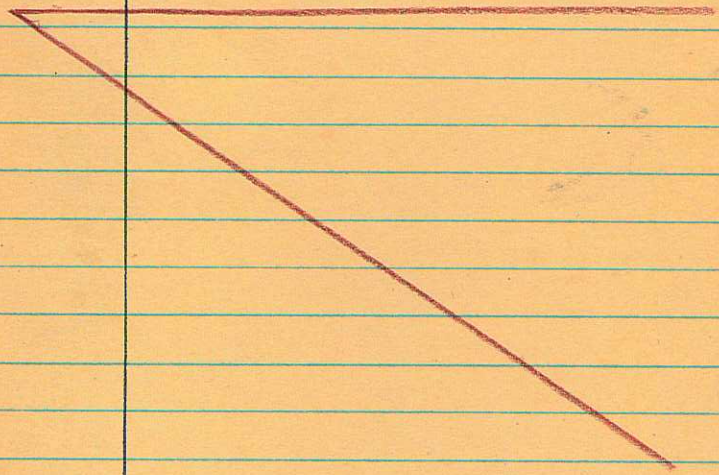
ERWIN U. MOSER
P. O. BOX 454
BOGAN MICH

Full

27307.9

K+M

Page	Subject
1-16 ✓	Smithfield C. & G. on West of S. Main from 4 th South South
17-18 ✓	Smithfield Entrance to Ball Park



Full

ERWIN U. MOBER
P. O. BOX 404
ECBAN, UTAH

FIELD BOOK
Anderson
Broudine
1st House East of
1st Ward Church

16
550 / 150.00
932
932
1025.2
5126

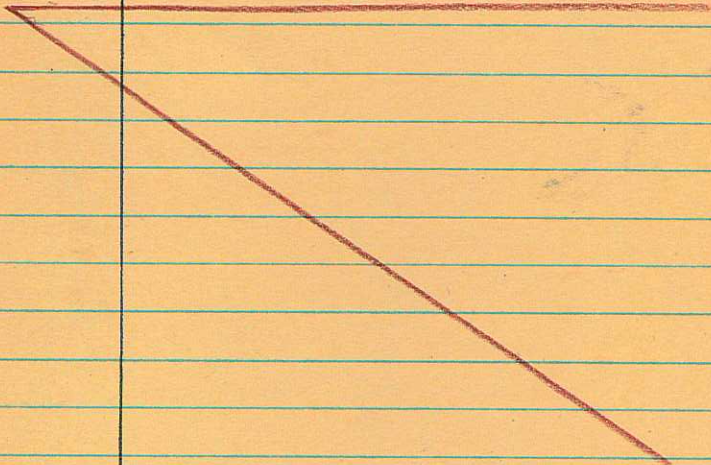
3,380	2
136	2
204	2
204	2
33	2
459.68	

SA
Dran

27307.9



Page	Subject
1-16	Smithfield C. & G. on West of S. Main from 4 th South South
17-18	Smithfield Entrance to Ball Park



Full

ERWIN U. MOSER
P. O. BOX 454
COBAN, UTAH

9' 10" Spec
2 1/2" clear
6' 3" W
16' bridge
2 1/2" fence
Curb to wall
bridge rail (min)

165.8 NS
37 1/2 EW

will site
11' 11"

11' 11" 11' 11" 11' 11" 11' 11"

11' 11" 11' 11" 11' 11" 11' 11"

OK

nd
ks.
he
ing

D.

DETROIT
MONTREAL

at and Materials.
uring Tapes

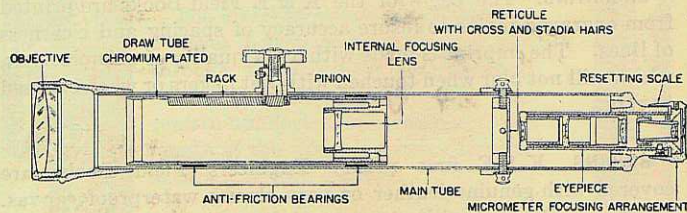
K+E SURVEYING INSTRUMENTS.

The line includes every type of instrument from the Precise Theodolite to the Builders' Level.

K & E Surveying Instruments are in use by the U. S. Coast and Geodetic Survey, the U. S. Geological Survey, the U. S. Engineers, the U. S. Army, the U. S. Navy, the U. S. Forest Service; by most State and Municipal Departments; by Engineers, Surveyors, Architects, Colleges and Schools.

Among the improvements which have created the wide demand for K & E Surveying Instruments, is the K & E Internal Focusing Telescope shown below.

The K & E Internal Focusing Telescope was first incorporated in K & E instruments in 1925 and is now standard construction on most transits and levels of the better grades.



One of the many advantages of this construction is as follows:

When the conventional type of telescope is focused by the movement of the objective lens, the volume of air in the telescope is changed, since air is pumped in or out of the telescope as the space within is increased or decreased by the change in position of the lens. Dust and moisture present in the air thus find their way into the telescope.

The illustration above plainly shows that the Internal Focusing Telescope has a one-piece main tube closed at one end by the objective lens, and at the other by the eyepiece. Focusing is accomplished by means of the internal lens, the movement of which does not change the volume of air within the tube, so that this type of telescope can be made practically dust and moisture proof.

333700

{ 4' E 47.5 from E Prop
51.5 " W Prop.

344741

{ 50.5 " E Prop
65.0 " W Prop.

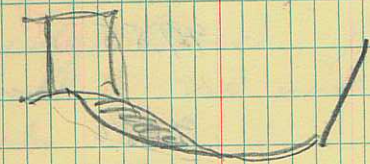
3527807

{ Sidelength is 57.5 E of L
" " 57.3 W of L

3527807

{ 44.5 to curb line, curb way
E and W
To face of curb.

.02' per ft.
to keep from
edge of pavement
asphalt will be 2 1/2 to 3"



Sta	Road	HT	Elev	FS	BS
		100.08			
3+00	5.41	100.08	94.67		
	5.76		94.32		
	4.20		95.88	95.28	
350+00	4.44		95.64		
3+50	5.46		94.62		
	5.69		94.39		
	4.87		95.21	94.61	
4+00	6.57		93.51		
	6.81		93.27		
	5.74		94.34	93.74	
4+50	6.51		93.57		
4+50	7.06		93.02		
	8.56		91.22	90.62	
	6.67		93.41	92.81	
5+00	7.97		92.11		
	8.81		91.27		
	7.38		92.70	92.10	
5+50	8.51		91.57		
	9.45		90.63		
	8.20		91.88	91.28	
6+00	9.19		90.89		
	10.30		89.78		
	9.00		91.08	90.48	
6+50	9.80	100.08	90.28	89.68	0.21
347+00	7.33	100.08	90.75		
	0.31	90.49	90.18		
	1.84	90.49	88.65		

3

Hub
Ditch Bot
Cone pavement (W. edge of Rd)
Road
Hub
Ditch
Cone Bot
Hub
ditch
Cone Bot
Hub Top of Concrete Culvert
ditch Hub
Cone ditch
Cone
Hub
ditch
Cone
Hub
ditch
Cone
Hub
ditch
Cone
Hub
ditch
Cone
Hub
Cone
State Road 75' + Mq
Hub
Ditch 20' Sta 6+50

lip of gutter

Sta	Prod	HI	Elev	FS	BS
7+00	1.18	90.49	89.31		
	2.53		88.96		
	1.10		89.37	89.79	
7+50	2.20		88.29		
	3.37		87.12		
	1.87		88.62	89.02	
	2.29		88.20		
8+00	2.34		88.15		
	3.81		86.68		
	2.80		87.69	87.09	
8+50	3.15		87.34		
	3.15		87.34		
9+00	4.52		85.97		
	5.49		85.00		
	4.41		86.08	85.44	
9+50	5.45		85.04		
	6.24		84.25		
	5.13		85.36	84.76	
10+00	3.49		85.00		
10+50	6.00		84.49		
	6.95		83.54		
	5.97		84.52	83.92	
	6.20		84.29		
10+50	6.57		83.92		
	7.85		82.64		
	7.05		83.44	82.84	

4

Hub
Ditch
Cone
Hub
ditch
Paint
N. end of cone culvert
Hub
ditch
Paint
Top of culvert
Hub
ditch
Paint
Hub
ditch
Paint
Hub
Top of Culvert
Hub
Hub
Cone
Top of culvert
Hub
ditch
Paint

Lip of Gutter

Sta	Red	HT	Elev	FS	BS
11+00	7.06	90.49	83.43		
	8.55		81.94		
	7.62		82.87	82.27	
11+50	7.15		83.34		
342+00	7.83		82.66		
11+50	7.83		82.66		
	9.21		81.28		
	8.41		82.08	81.48	
12+00	8.81		81.68		
	10.12		80.39		
	9.09		81.40	80.80	
12+50	9.81		80.69		
	11.00		79.49		
	10.05		80.44	79.84	
13+00	10.62		79.87		
	11.74		78.75		
	10.85		79.64	79.04	
13+50	11.45		79.04		
	12.50		77.99		
	11.64		78.85	79.25	
14+00	12.40	90.49	78.09	77.49	0.79
339+00	12.78	90.49	77.71	12.78	2.25
	1.52	78.88	77.41		
	2.50		76.38		
14+50	2.16		76.72		
	3.23		75.65	76.67	
	2.66		76.22	75.67	

Hub
 ditch
 Conc
 Top of Culvert
 State Rd
 Hub
 ditch
 Conc
 Hub
 ditch
 Conc
 Hub
 ditch
 Conc
 Hub
 ditch
 Conc
 Hub
 ditch
 Conc
 West edge of Pavement
 State Rd
 Hub
 Ditch Bot
 Hub
 ditch
 Conc

X

Lip of Gutter

Sta	Rod	Ht	Elev	FS	BS
15+00	2.75	78.88	77.20		
	3.73		76.13		
	3.47		76.20		
15+14	3.89		75.41	75.86	
	6.25		74.99	74.91	
	6.73		73.68		
15+50	3.85		74.63		
	4.92		73.20		
	4.36		72.15		
15+60	4.73		71.11		
16+00	4.30		75.03		
	5.76		73.96	74.97	
	5.08		75.57	75.10	
	4.62		74.15		
16+50	5.41		75.63		
	6.63		74.58		
	6.05		74.17		
	7.54		73.17	74.25	
	6.73		74.85	74.20	
	6.70		75.31		
17+00	5.95		74.26		
	7.163		73.47		
	6.80		73.20		
	6.95		72.25	73.28	
	8.56		73.88	72.20	
	7.160		72.83		
			72.39		
			71.34		
			73.26		
			72.15		
			73.23		
			72.18		
			73.88		
			72.93		
			72.30		
			71.25	72.53	
			73.13	71.44	
			72.08		
			72.98		
			71.93		
			71.37		
			70.32	71.73	
			72.33	71.50	
			71.28		

Hub
 ditch
 Conc
 Bot of ditch to west
 Invert at Culv. crossing lane
 Bot. of Ditch entering Prop off lane
 Hub
 ditch
 Conc
 Bot of ditch to west
 Hub
 Ditch
 Conc
 Top of Culvert
 Hub
 Ditch
 Conc
 Bot. of ditch at outlet
 Bot of Pipe to west
 50' West of Prop line
 Hub
 ditch
 Conc
 Hub
 ditch
 Conc

to be abandoned

Sta	Road	HT	Elev	FS	B.S.
18+00	8.13	78.88	71.30 70.75		
	9.73		70.15 69.15	70.96	
	8.37		71.56 70.51	69.91	
18+50	9.65		70.28 69.23		
	10.5		69.43 68.38		
	9.25		70.68 69.63	70.08	
19+00	3.93		68.53 67.48	69.13	
	11.4		69.73 68.68	68.00	
T.P.	10.2		69.42 68.37	10.2	3.96
334+00	10.51	78.88	69.41 68.37	10.51	4.31
19+50	4.97	72.33	69.41 67.36		
	6.20		69.41 67.18		
	4.82		69.53 67.51	69.96	
	4.94		69.44 67.39		
20+00	5.91		69.47 66.42		
	7.05		66.33 65.28		
	5.72		69.26 66.21	67.06	
333+38	5.42		69.96 66.91		
	1.94		71.44 70.39		

7

Hub
 ditch
 Cone
 Hub
 ditch
 Cone
 Hub
 ditch
 Cone
 Hub
 ditch
 Cone
 * State Rd -
 Hub
 ditch
 Cone
 Walk by days
 Hub
 ditch gas vent
 Cone
 * of State Road
 SE Cor of Cone Pond on
 brick house

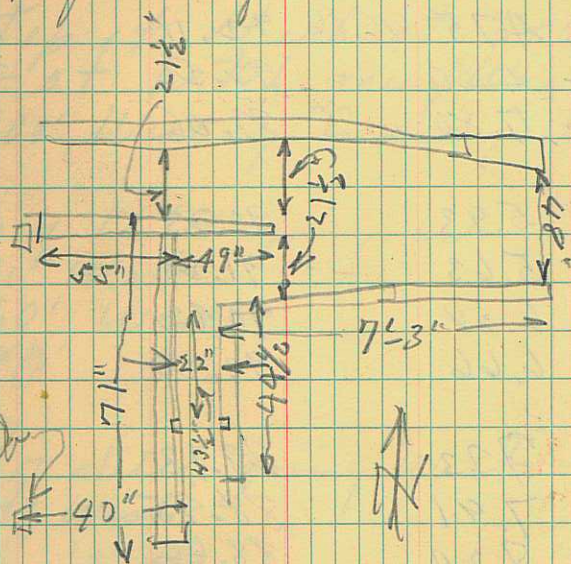
65
23
415

2450-3' S end of driveway
 Part 33.2' E of curb
 19+10 ✓ N end of driveway
 18+59 ✓ N " " " "
 17+80 ✓ " " " " "
 16+06 ✓ " " " " "
 15+70 ✓ N end of 30° lane culvert, Lane is 36' wide
 11+10 ✓ N. end of 40° drain at Cal part
 10+41.5 " " " 23.5 " " "
 9+87.3 " " " 6.7 foot walk
 8+74 ✓ " " 16 " driveway
 8+43.3 ✓ " " 13.7 " " "
 7+86 ✓ " " 15 " " Cal part
 6+89.3 ✓ W end of pt driveway
 6+41 ✓ E of water way street
 6+27 ✓ N end of pt driveway
 5+39 ✓ E of waterway
 4+74 ✓ N end of driveway
 4+42 ✓ E of water way
 3+53 ✓ E of 2nd perpendicular St.
 Part is 22.5' E of Hub at Sta. (1+00)
 0+96.4 = E of part going west
 0+85.5 = E of cone ditch west

15+07 ✓ E ditch to west
 15+56 ✓ E ditch to W
 16+97 ✓ E " to west

8

Radius of curb at corner
 3'6" to face of curb
 13' from E edge of wall
 to face of curb



Cover 100' N + 75' South

Check on location
 of shut off valves.

	Rod	HT	Elev	FS	B.S.
B.M. 5+00			92.11		
4+50					
B.M. ⁵⁺⁰⁰	4.75	96.86	92.11		4.25
4+42	4.60		92.26		
	7.80		89.06		
5+39	5.93		90.93		
	5.63		91.23		
	6.24		90.82		
	6.66		90.20		
6+42	7.73		89.13		
	7.91		88.95		
	8.20		88.66		
13+00	3.36	81.05	77.69		
13+50	2.01	81.05	79.04		
14+00	2.64		78.41		
14+50	3.26		77.79		
15+00	3.85		77.20		
15+50	4.94		76.11		
Ditch	7.48		73.57		
"	7.90		73.15		

Correction
for
grads
from
13+50
to end

Top of Hub at 5+00
 E of Ditch going West
 100' West of E end of Ditch

E of Ditch going W
 30' West
 60' West
 90' W

E of ditch going West
 30' West
 70' West

E State Road
 Hub
 "
 "
 "
 "
 Bottom of ~~ditch~~ box in ditch
 Crossing lane at S fence
 Bot. of Ditch 100' West

4-13-53

10

0+00 }
to
11+00 }

1.629%

11+00 }
to
14+50 }

1.6025%

14+50 }
to
16+50 }

1.695%

16+50 }
to
18+50 }

1.60%

18+50 }
to
19+00 }

1.90%

19+00 }
to
20+00 }

2.07%

Sta	Rod	HI	Elev	F.S.	BS
B.M.	0.57	100.57	100		
0+00	0.58		99.99		
352+80	0.24		100.33		
0+86.16	3.70		96.87		
Divider	2.55		98.02		
1+00	2.93		97.64		
Ditch	4.02		96.55		
W. Road	1.36		99.21		
1+50	3.56		97.01		
Ditch	4.79		95.78		
Rd	2.08		98.49		
2+00	3.91		96.66		
Ditch	4.28		96.29		
Rd	2.91		97.66		
2+50	4.92		95.65		
Ditch	5.47		95.09		
Rd	3.79		96.78		
3+00	5.75		94.82		
no dist					
Rd.	4.51		96.06		
3+50	5.92		94.65		
no dist	5.98		94.59		
Rd	5.26		95.31		

Cold, Cloudy

Apr 14 1953

EUM.

K 11

M.M. Marler

Rod

end of Crabtree & So
 Hub
 West edge of Pav't 32.5' to Hub
 E State Road
 Bot of Divider
 Top of Divider
 Hub
 West edge of pav't
 Hub
 West edge of Rd
 Hub
 West edge of rd,
 Hub
 W. edge of Rd,
 Hub
 W. edge of Rd
 Hub
 ground
 West edge of pav't

Sta	Prod	H.I.	Elev	F.S.	B.S.
4+00	6.91	100.57	93.66		
ground	7.17		93.40		
Rd	6.16		94.41		
4+50	8.63		91.94 ✓		
ditch	8.95		91.62		
4+40	8.00		92.57		
Rd	7.08		93.49 ✓		
5+00	9.00		91.57 ✓		
ditch	9.17		91.40 ✓		
Rd	7.78		92.77 ✓		
5+40	9.27		91.30		
5+50	9.67		90.90		
ditch	9.85		90.72		
Rd	8.60		91.77		
6+00	10.38		90.19		
ditch	10.63		89.94		
Rd	9.38	100.57	91.19	9.38	0.38
6+40	2.23	91.57	89.34		
6+50	2.80		88.77		
ditch	2.90		88.67		
Rd	1.16		90.41		
7+00	3.36		88.21		
ditch	3.45		88.12		
Rd	2.1		89.47		

91.19
9.38
5.77

91.19
3.8
3.7

Hub
ground
West edge of Road
Hub
Ditch
Ditch
West edge of Rd
Hub
Hub
W. edge of Road 32' to hub.
Ditch
Hub
Hub
W. edge Rd - Cant
Hub
Ditch
West edge of Rd.
Ditch
Hub
Hub
West edge Road
Hub
Hub
West edge Road

Sta	Road	Ht	Elev	FS	Bs
11+55	10.22	91.57	81.35		
Mitch	10.30		81.27		
Road	9.41		82.16		
12+00	10.08		81.47		
Mitch	11.03		80.54		
Rd	10.06		81.51		
12+50	10.77		80.80		
Mitch	11.98		79.59		
Rd	14.01	91.57	80.56	11.01	0.21
13+00	1.01	80.77	79.76		
Mitch	1.91		78.86		
Rd	1.02		79.75		
13+50	1.25		79.52		
Mitch	2.66		78.11		
Rd	1.87		78.90		
14+00	2.00		78.77		
Mitch	3.55		77.22		
Rd	2.65		78.12		
14+50	2.80		77.97		
Mitch	3.98		76.79		
Rd	3.44		77.33		
15+00	3.70		77.07		
Mitch	4.50		76.27		
Rd	4.22		76.55		

79.54
11.88 157

14

West edge of Road Point
Mitch
Rd
West edge of Road
Mitch
Rd
West edge of Road
Mitch
Rd
West edge of Road
Mitch
Rd
West edge of Road 27'E
Mitch
Rd
West edge of Road
Mitch
Rd
West edge of Road
Mitch
Rd
West edge of Road
Mitch
Rd
West edge of Road

Sta	Road	H.T.	Elev	FS	BS.
15+50	4.39	80.77	76.38		
ditto	5.74		75.03		
Rd.	5.10		75.67		
15+58	5.56		75.21		
	6.82		73.95		
	7.20		73.57		
16+00	4.89		75.68		
ditto	6.5		74.27		
Rd.	5.85		74.72		
16+50	6.36		74.41		
ditto	7.5		73.27		
Rd.	6.7		74.07		
17+00	7.1		73.67		
ditto	8.47		72.30		
Rd.	7.52		73.25		
17+50	8.61		72.16		
ditto	9.36		71.41		
Rd.	8.35		72.42		
18+00	9.99		70.78		
ditto	10.3		70.47		
Rd.	9.14		71.63		
16+97	7.31		73.46		
	7.50		73.27		
	8.00		72.77		

Club 1500
 ditch is
 W. edge of Road
 ditch about going west
 distance of culvert 160' West
 ditch about 115' W under fence
 Club
 ditch
 W. edge of Road
 Club
 ditch
 W. edge of ditch
 Club
 ditch
 West edge of Rd
 Club
 West edge of Rd
 Club
 W. edge of Road
 ditch going west
 50' West
 50' W and 50' South

Sta	Prod	HT	Elev	FS	BS
18+50	10.9	80.77	69.87		
Retch	11.2		69.57		
Std	9.95		70.82		
19+00	11.71		69.06		
Retch	12.2		68.57		
Std	10.92	80.77	69.85	10.92	2.71
19+50	4.72	72.56	67.84		
Retch	4.74		67.82		
Std	3.52		69.04		
20+00	5.73		66.83		
Retch	5.79		66.77		
	4.65		67.91		
B.M.	0.70		72.86		
Rd	4.39		68.17		

16

Hub

W edge of Rd

Hub

Retch

W edge of Point 26'E

Hub

Retch

W edge of Point

Hub

Retch

Old abandoned hub

S.E. Cor. of Conc. Form

W edge of Point

Center St.
at Main

Smithfield

4-15-53

17

49.13' N. of S. Prop Line to Base Line
46.2' N. of Base Line N. edge of N. Walk
369' W of 4W to N-S fence

660' W. of West side of 4W
873.3 W " " " " " "

660' West of 4W

884 West to 2nd fence

873.3 49.13' offset to South

1320' West of 4th West

116.8
1436.8 W. to W. Line of Ball Park

660
213.3
446.7

Above Notes are on
E of Center Street
projected West to
Ball Park

See following sheet
for Cor. Tie

E of Center Str. Projected
West to Ball Park from 4 West

on Center Str. Hub with pin
" " " " " pin

107' ← Ditch E West → Pole Line
36.7'

36.6' Hub in E to N side of Pole

Stake in Ditch is 34.45'
N. of Hub in S. Line of
Road
N. side of Pole line is 14.5'
N of Stake in S line of Road

884
36.7
517.3

11

Smithfield

462' (7ch) of Record

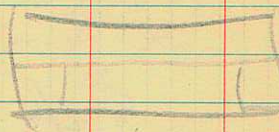
455.6' (Measured)

702'

35.3

	Road	
16+00	4.71	Top of

5.50
6.54
6.29



= Record Dis. South from NE Cor of Lot 5, Blk 13 to NE Cor of Forester Prop.

= Measured Dist. of above. to NE Cor of Forester Prop.

= Dist S. from NE Cor of Lot 5 Blk 13 to Hub in $\frac{1}{4}$ of Road.

= Dist South from Hub in $\frac{1}{4}$ of Road to North Side of Pole Line

Top of Hub at 16+00

Top of Curb at 16+00
ground at Stake
Top of Stake

8-4-53

Laid out N. Line of Road from Center $\frac{1}{4}$ West to Ball Park. South line of Road is 35.3' S. of Hub, N. line is 30.7' N. of Hub. Road to be 49.5' wide.

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UNRIE

Naphi Spring estate
11-4-50

4.085ch (268.61) 285.25
2.63ch (173.58) 194.0'
1.391 }
1.92 } 340.0'
1.96 } (347)

5.261
1.92 (126.72) (162)
1.50 (99)

along creek 280'

2.13 (140.58) (152)

8

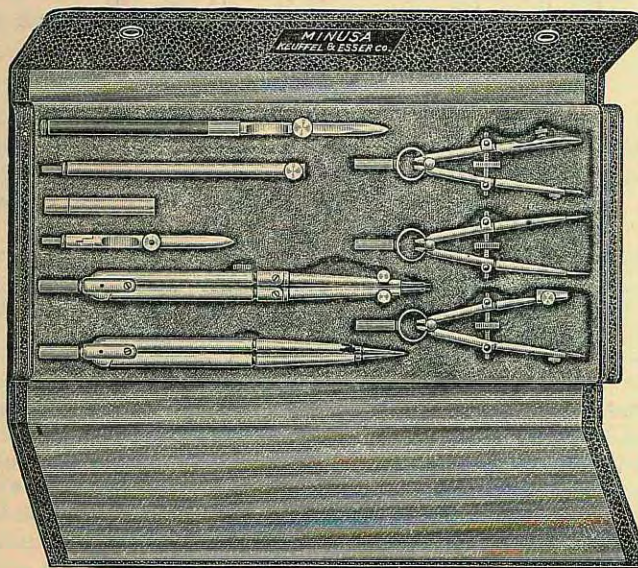
(.88)	120	(55.91)
3.44		(228.51)
2.572		387.5
6.892		(177)
5.566		387
413.52		(564)
413.52		

454.872

1.13	1.92	5.261
66	66	66
78	1152	31566
78	152	31566
8.58	126.72	347.22
264		.085
40		66
368		5103
		510
		526.22

MINUSA
REG. U. S. PAT. OFF.

DRAWING INSTRUMENTS



MINUSA instruments demonstrate their quality in their construction. Leg connectors and needle holders are tight, and stay tight. Head and elbow joints are firm, free from play, yet smooth acting. All working joints have provision for adjustment, so that they may be kept in perfect operating condition for years of continuous use.

The tapering round leg design offers a neat appearance, easy manipulation, a well balanced feel in the hand, free from the harshness of shary corners.

In manufacturing these instruments, methods of precise machine construction have replaced laborious hand work, with a resultant uniform standard of excellence in each assembly.

MINUSA instruments measure up to the most meticulous requirements of the draftsman, and their precision even after years of continuous use.