Engineers Office
San Diego, Cal.

400
LEVEL

F.B. 433

Published by H. S. CROCKER COMPANY, Stationers, Drawing Materials, and Mathematical Instruments, San Francisco.

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

433
MICROFILMED
DEC 10 1964

MINUTES.	LKS.	MINUTES.	LKS.	MINUTES.	LKS.
1	$2\frac{2}{3}$	21	49	41	$95\frac{2}{3}$
2	$4\frac{2}{3}$	22	$51\frac{1}{3}$	42	98
3	7	23	$53\frac{2}{3}$	43	$100\frac{1}{3}$
4	$9\frac{1}{3}$	24	56	44	$102\frac{2}{3}$
5	$11\frac{2}{3}$	25	$58\frac{1}{3}$	45	105
6	14	26	$60\frac{2}{3}$	46	$107\frac{1}{3}$
7	$16\frac{1}{3}$	27	63	47	$109\frac{2}{3}$
8	$18\frac{2}{3}$	28	$65\frac{1}{3}$	48	112
9	21	29	$67\frac{2}{3}$	49	$114\frac{1}{3}$
10	$23\frac{1}{3}$	30	70	50	$116\frac{2}{3}$
11	$25\frac{2}{3}$	31	$72\frac{1}{3}$	51	119
12	28	32	$74\frac{2}{3}$	52	$121\frac{1}{3}$
13	$30\frac{1}{3}$	33	77	53	$123\frac{2}{3}$
14	$32\frac{2}{3}$	34	$79\frac{1}{3}$	54	126
15	35	35	$81\frac{2}{3}$	55	$128\frac{1}{3}$
16	$37\frac{1}{3}$	36	84	56	$130\frac{1}{3}$
17	$39\frac{2}{3}$	37	$86\frac{1}{3}$	57	133
18	42	38	$88\frac{2}{3}$	58	$135\frac{1}{3}$
19	$44\frac{1}{3}$	39	91	59	$137\frac{2}{3}$
20	$46\frac{2}{3}$	40	$93\frac{1}{3}$	60	140

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS
°		°		°		°	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

Crocker Quality

LEVEL BOOK

No. 400

COMMUNI CONSENSU PRIMO

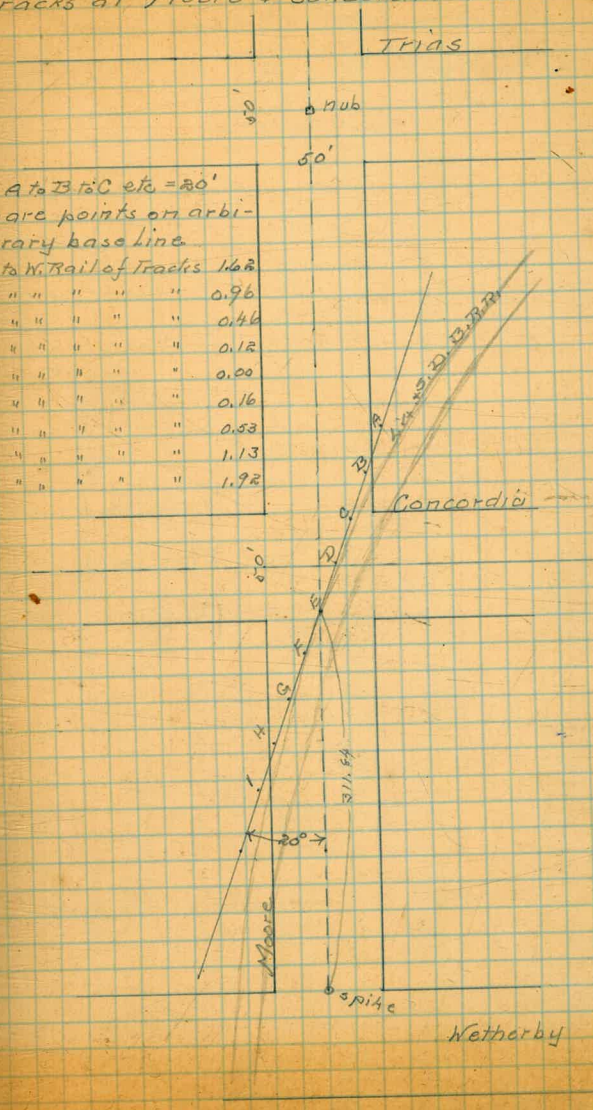
FROM
Loring's Book Store

MANUFACTURED BY

A. S. Crocker Co.

SAN FRANCISCO
and
SACRAMENTO

Platt showing Location of La Jolla tracks at Moore & Concordia Sts.



A to B to C etc = 20'
& are points on arbitrary base line.

A to W. Rail of Tracks	1.62
B " " " " "	0.96
C " " " " "	0.46
D " " " " "	0.12
E " " " " "	0.00
F " " " " "	0.16
G " " " " "	0.53
H " " " " "	1.13
I. " " " " "	1.92

351.42 BM Spk Pole NW Mad - Blvd.

340.11 Cr lower Cement Step House NW Cor.
Rhode Island - Madison

311.88 Hub SF Garfield - Madison

Park.

North Ave

Campus

Cleaveland

Maryland

Delaware

New York

Rhode Island

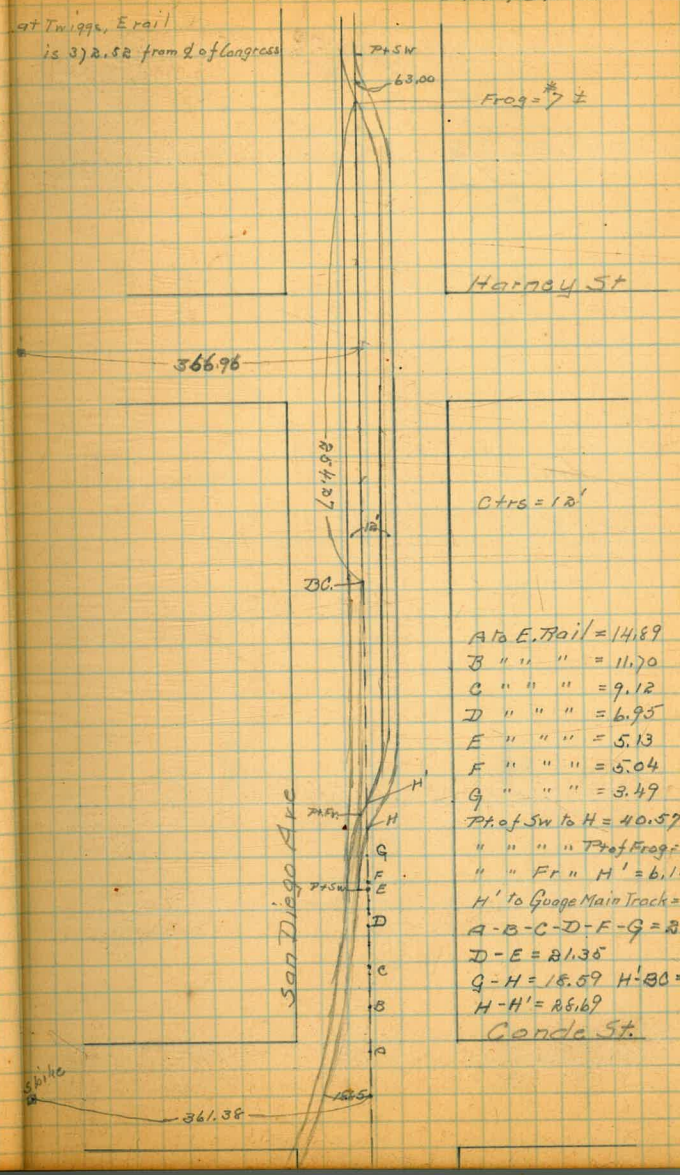
Massachusetts

New Hampshire

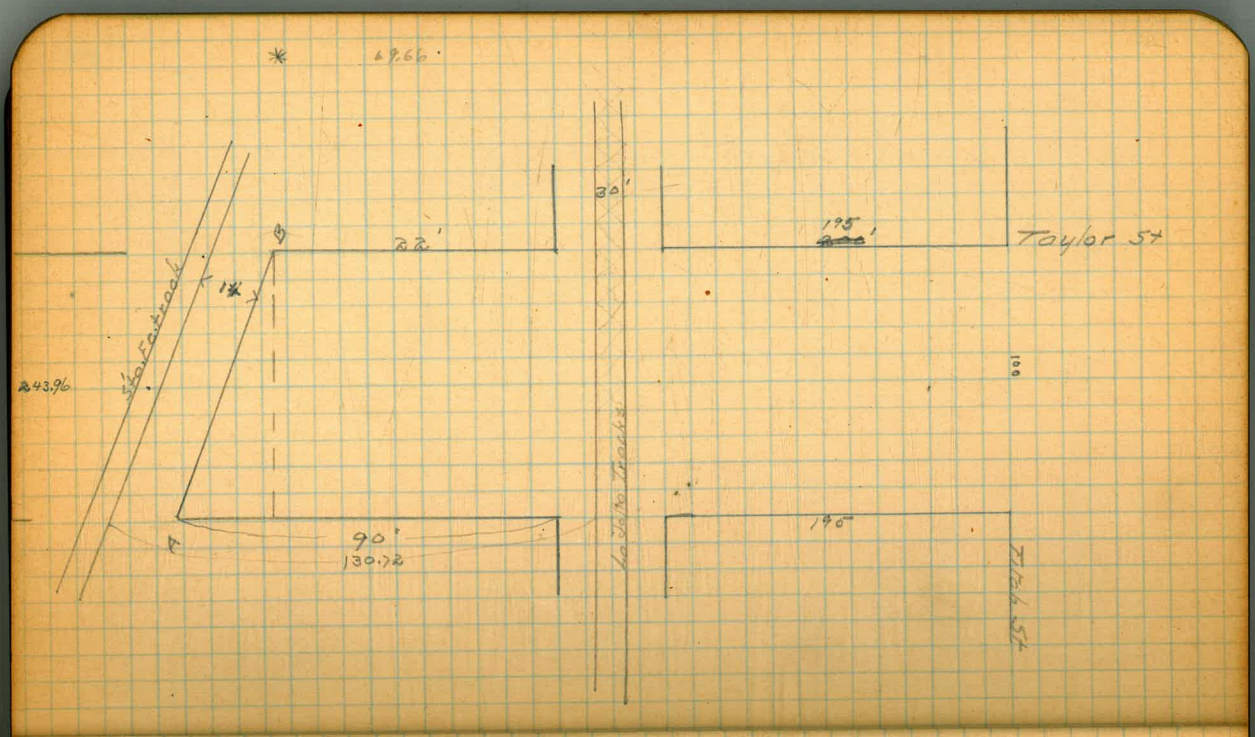
Garfield

Location of La Jolla tracks on San Diego Ave
Old Town.

at Twiggs, E rail
is 32.58 from ℄ of Congress



A to E. Rail = 14.89
B " " " = 11.70
C " " " = 9.12
D " " " = 6.95
E " " " = 5.13
F " " " = 5.04
G " " " = 3.49
Pt. of Sw to H = 40.57
" " " " Pt of Frog = 63.00
" " Fr " H' = 6.13
H' to Gauge Main Track = 0.90
A-B-C-D-F-G = 30'
D-E = 21.35
G-H = 18.59 H'-BC = 71.67
H-H' = 26.69



69.66
30'
22'
195
Taylor St
Sta. Fe Track
243.96
90'
130.72
195
Titch St

Whittelsey
Taylor
Churchman

Xsection of Conde St

Congress to Juan

E. Line of Congress (40.524) O.T. Jail BM

	0.63	41.15	11.43	29.78
TP	3.05	32.77	12.42	20.35
N	9.11	29.46	10.10	
C			9.80	
¼			9.40	
℄			8.80	
¼			8.70	
C			8.70	
S			8.70	

P

50' E of Congress

S	7.50
C	7.80
¼	7.60
℄	7.90
¼	8.00
C	8.60
N	9.00

100' E of Congress

N	6.20
C	6.60
¼	6.20
℄	6.10
¼	5.80
C	5.30
S	5.10

127' E of Congress = W.L. of Church

S	4.50
C	5.20
¼	5.30
℄	5.30
¼	5.20
C	5.00
N	5.00

P

All streets in Old Town = 50' wide except San-Diego Ave which is 75' wide (s.g.h.)

150' E of Congress

N	29.46	4.50
C		4.70
1/4		4.70
℄		4.80
1/4		5.00
S		

184' E of Congress = E.L. of Church

S	3.40
C	3.50
1/4	2.90
℄	2.80
1/4	2.90
C	3.30
N	3.60

200' E of Congress

N	3.40
C	3.30
1/4	3.20
℄	3.00
1/4	2.90
C	2.80
S	2.60

250' E of Congress

S	2.00
C	2.10
1/4	2.20
℄	2.10
1/4	2.20
C	2.20
N	2.10

300' E of Congress = W.L. of San Diego Ave

N		29.46	0.40	
C			0.50	
1/4			0.50	
℄			0.50	
1/4			0.40	
C			0.40	
S			0.00	
TP		2	0.00	29.46

2' W. of La Jolla tracks (For location of tracks see front pages

S	8.43	37.89	6.40	
C			6.40	
1/4			6.30	
℄			6.30	
1/4			6.40	
C			6.40	
N			6.40	

W. Rail of Tracks

N	5.83
C	5.83
1/4	5.83
℄	5.82
1/4	5.80
C	5.79
S	5.78

2' E of Track

S	5.80
C	5.90
1/4	5.60
℄	5.70
1/4	6.00
C	6.00
N	6.30

Superel = 0.40

6' E of E. rail of Track

N	37.89	8.30
C		8.20
1/4		8.10
℄		8.00
1/4		8.40
C		8.50
S		8.30

W 1/4 of San Diego Ave

S	6.20
C	6.50
1/4	6.60
℄	6.70
1/4	6.80
C	6.90
N	6.60

℄ of San Diego Ave

N	5.60
C	5.50
1/4	5.30
℄	5.20
1/4	5.20
C	5.20
S	5.20

E 1/4 of San Diego Ave

S	7.20
C	7.30
1/4	7.60
℄	7.80
1/4	7.80
C	8.00
N	8.10

E. Curb of San Diego Ave

N	37.89	6.90
C		6.80
1/4		6.70
℄		6.50
1/4		6.40
C		6.20
S		6.00

E. L. of San Diego Ave

S	5.90
C	6.00
1/4	6.20
℄	6.40
1/4	6.60
C	6.80
N	6.90

50' E of San Diego Ave

N	4.80	
C	4.70	
1/4	4.70	
℄	4.50	
1/4	4.20	
C	3.70	
S	3.50	

100' E. of San Diego Ave

S	0.90	
C	1.40	
1/4	1.50	
℄	1.70	
1/4	2.10	
C	1.90	
N	2.20	
T.P.	0.52	37.37

125' E of San Diego Ave

				37.37
N	12.33	49.70	12.30	
C			12.10	
1/4			12.10	
℄			11.80	
1/4			11.30	
C			10.90	
S			9.70	

150' E of San Diego Ave

S			5.00	
C			5.80	
1/4			6.90	
℄			7.60	
1/4			8.10	
C			8.10	
N			10.10	
TP			0.00	49.70

200' E of San Diego

N		49.70	0.70	(49.70)
C	12.14	62.84	13.40	
1/4			12.40	
℄			11.40	
1/4			9.80	
C			9.80	
S			8.30	
TP			0.41	62.43

250' E of San Diego

S	12.46	74.89	5.00	
C			5.00	
1/4			5.80	
℄			7.60	
1/4			9.00	
C			10.00	
N			11.70	
TP.			1.33	73.56

300' E of San Diego (13.56)

N	13.22	86.78	4.20	
C			3.20	
1/4			2.80	
℄			1.50	
1/4			0.20	
TP			0.29	86.49
C	13.20	99.69	12.30	
S			11.10	
TP			0.10	98.99

350' E of San Diego

S	13.11	112.10	5.60	
C			6.30	
1/4			6.60	
℄			7.60	
1/4			8.00	
C			9.20	
N			10.40	
TP			0.96	111.14

400' E of San Diego (111.14)

N	12.33	123.47	7.00	
C			6.60	
1/4			5.80	
℄			5.20	
1/4			5.50	
C			5.30	
S			5.00	

445± E of San Diego = E.L. of Jean

S			5.50	
C			6.10	
1/4			6.60	
℄			6.90	
1/4			7.40	
C			8.00	
N			9.10	
TP				

TP		123.47	13.11	110.36	
	0.47	110.83	13.02	97.81	
	0.40	98.21	13.23	84.98	
	2.60	87.66	13.20	74.36	
	0.53	74.91	12.03	62.88	
			12.66	68.20	E non-Fence

P

X section of HARNEY St - Juan to Congress

445± E of S.D. Ave = W.L. of Juan St (62.66)

N	4.63	67.51	5.00	67.5	PLOTTED
C			4.60		
1/4			3.90		
¢			2.60	44.9	
1/4			1.60		
C			0.80		
S			+0.20	67.70	
		400' E of S.D. Ave			
S			8.20	59.3	X
C			9.00		
1/4			9.20		
¢			9.30	58.3	
1/4			9.30		
C			9.40		
N	PLOTTED		9.60	57.9	

350' E of S.D. Arc

N		47.81	14.10	√3.4
C			14.10	
1/4			14.20	
℄			14.20	√3.3
1/4			14.30	
C			14.20	
S			13.50	√4.0
T.P.			13.11	54.40

300' E of S.D. Arc

S	0.47	54.87	5.60	49.3
C			5.40	
1/4			5.50	
℄			5.50	49.4
1/4			5.50	
C			5.30	
N			5.10	49.8

PLOTTED

200' E of S.D. Arc

N		54.87	8.50	46.4
C			8.90	
1/4			9.30	
℄			9.50	45.4
1/4			9.50	
C			9.40	
S			9.40	45.5

200' E of S.D. Arc

S			11.70	43.2
C			12.00	
1/4			12.20	
℄			12.10	42.8
1/4			11.90	
C			11.90	
N			11.80	43.1
TP			13.15	41.72

150' E of S.D. Arc 41.72

N	0.24	41.96	1.20	40.8
C			1.60	
1/4			1.70	
℄			1.60	40.4
1/4			1.50	
C			1.40	
S			1.20	40.8

100' E of S.D. Arc

S			3.50	38.5
C			3.60	
1/4			3.60	
℄			3.60	38.4
1/4			3.60	
C			3.50	
N			3.60	38.4

PLOTTED

41.96

50' E of S.D. Arc

N			5.90	36.1
C			6.00	
1/4			6.10	
℄			6.00	36.0
1/4			5.90	
C			5.70	
S			5.70	36.3

E.L. of San Diego Arc 75' ST

S			8.60	33.4
C			8.80	
1/4			9.00	
℄			8.80	33.2
1/4			9.00	
C			9.20	
N			9.20	32.8

E. Curb of S.D. Ave

N	41.96	9.50	32.5
C		9.60	
1/4		9.50	
℄		9.30	32.7
1/4		9.20	
C		9.10	
S		9.10	32.9

2' E. of Siding (L.A. & S.D.B.Ry)

S		9.70	32.3
C		9.80	
1/4		9.80	
℄		9.80	32.2
1/4		9.80	
C		9.80	
N		9.70	32.3

PLOTTED

41.96

W. Rail of Siding

N	9.80	32.2
C	9.78	
1/4	9.75	
℄	9.73	32.3
1/4	9.75	
C	9.82	
S	9.75	32.3

W. Rail of Main track

S	9.64	32.32
C	9.64	
1/4	9.65	
℄	9.66	32.30
1/4	9.67	
C	9.70	
N	9.70	32.26

a' W of Siding

N	41.96	10.50	31.5
C		10.50	
1/4		10.60	
℄		9.90	32.1
1/4		9.80	
C		9.80	
S		9.80	32.2

W. 1/4 of S.D. Arc

S		10.50	31.5
C		10.40	
1/4		10.30	
℄		10.30	31.7
1/4		10.30	
C		10.20	
N		10.40	31.6

PLOTTED

41.96

W. Curb of S.D. Arc

N		10.90	31.1
C		10.90	
1/4		10.90	
℄		10.80	31.2
1/4		10.80	
C		10.90	
S		10.90	31.1

X

W.L. of S.D. Arc

S		11.80	30.2
C		12.00	
1/4		12.00	
℄		12.30	29.7
1/4		12.20	
C		12.10	
N		11.90	30.1

50' W of S.D. Arc

N	41.96	12.70	29.3	
C		12.90		
1/4		12.80		
℄		13.10	28.9	
1/4		13.30		
C		13.20		
S		12.90	29.1	
TP.		13.16	26.60	

100' W. of S.D. Arc

S	1.54	30.34	3.00	27.3
C			3.00	
1/4			3.30	
℄			3.40	24.9
1/4			3.40	
C			3.50	
N			3.50	24.8

PLOTTED

150' W of S.D. Arc

N	30.34	4.30	24.0
C		4.50	
1/4		4.70	
℄		4.80	25.5
1/4		5.00	
C		5.20	
S		5.10	25.3

200' W of S.D. Arc

S	6.10	24.2
C	6.00	
1/4	6.10	
℄	5.90	24.4
1/4	5.50	
C	5.30	
N	5.00	25.3

250' W of S.D. Arc

N	30.34	6.70	23.6
C		6.90	
1/4		7.20	
℄		7.10	23.2
1/4		7.10	
C		6.80	
S		6.80	23.5

300' W of S.D. Arc = E.L. of Congress

S		7.30	23.0
C		7.60	
1/4		7.60	
℄		7.50	22.8
1/4		7.60	
C		7.60	
N		7.30	23.0
T.P.	PLOTTED	6.50	23.84

PLOTTED

Xsection of Twiggs St - Congress to Juan

E.L. of Congress (23.84)

S	6.64	30.48	8.00	22.48
C			8.60	
1/4			8.50	
℄			8.70	21.78
1/4			8.90	
C			8.90	
N			8.50	21.98

50' E of Congress

N		8.30	22.18
C		8.10	
1/4		8.10	
℄		8.10	22.38
1/4		8.20	
C		8.10	
S		8.20	22.28

100' E of Congress

S	~~40~~	~~30.48~~	7.10	23.38
C			7.20	
1/4			7.20	
℄			7.80	23.68
1/4			6.70	
C			6.60	
N			6.60	23.88

150' E of Congress

N			5.80	24.68
C			6.10	
1/4			6.10	
℄			6.10	24.38
1/4			6.00	
C			5.90	
S			5.90	24.58

200' E of Congress

S			3.50	26.98
C			3.80	
1/4			4.10	
℄			4.40	26.08
1/4			4.30	
C			4.10	
N			4.00	26.48

250' E of Congress

N			2.80	27.68
C			2.50	
1/4			3.00	
℄			2.80	27.68
1/4			2.40	
C			2.00	
S			1.80	28.68

300' E of Congress - W.L. of S.D. Arc

S		30.48	0.40	30.08
C			1.00	29.48
1/4			0.60	29.88
℄			0.70	29.78
1/4			0.80	
C			1.10	
N			1.30	29.18
T.P.			0.21	30.27

W. Curb of S.D. Arc

N	13.05	43.32	14.10	29.22
C			14.00	
1/4			13.90	
℄			13.40	29.92
1/4			13.30	
C			13.30	
S			13.10	30.22

W. 1/4 of S.D. Arc

S		43.32	13.00	30.32
C			13.00	
1/4			13.10	
℄			13.20	30.12
1/4			13.30	
C			13.50	
N			13.70	29.62

2' W of tracks

N			13.60	29.72
C			13.30	
1/4			13.30	
℄			13.20	30.12
1/4			13.30	
C			13.30	
S			13.20	30.12

W. Rail of La Jolla tracks

S	43.32	12.40	30.9v
C		12.48	
1/4		12.55	
℄		12.64	30.68
1/4		12.73	
C		12.80	
N		13.02	30.30

2' E of La Jolla tracks

N		13.40	29.9v
C		13.20	
1/4		13.20	
℄		13.00	30.3v
1/4		13.00	
C		13.10	
S		13.10	30.2v

E. Curb of S.D. Arc

S		11.40	31.9v
C		11.40	
1/4		11.40	
℄		11.50	31.8v
1/4		11.60	
C		12.00	
N		12.70	30.6v

E.L. of S.D. Arc

N		11.70	31.6v
C		11.10	
1/4		10.80	
℄		10.60	32.7v
1/4		10.60	
C		10.50	
S		10.50	32.8v

X

50' E of S.D. Ave

S	43.32	9.30	34.1
C		9.30	
1/4		9.30	
℄		9.30	
1/4		9.30	
C		9.50	
N		9.90	33.4

100' E of S.D. Ave

N		7.70	35.6
C		7.90	
1/4		7.90	
℄		7.80	
1/4		7.90	
C		7.70	
S		7.40	35.9

150' E of S.D. Ave

S		5.60	37.7
C		5.70	
1/4		5.80	
℄		6.00	
1/4		6.00	
C		6.10	
N		6.20	37.1

160 E of S.D. Ave = W.L. Couts = 40' Wide

N		6.00	37.3
C		5.70	
1/4		5.60	
℄		5.40	37.9
1/4		5.40	
C		5.30	
S		5.20	38.1

℄ of Coults

S	43.32	5.20	38.1
C		5.40	
1/4		5.70	
℄		5.90	
1/4		6.30	
C		6.40	
N		6.90	36.4

E. L. of Coults

N		6.40	37.9
C		4.70	
1/4		4.50	
℄		4.30	
1/4		4.00	
C		3.80	
S		3.80	39.5

50' E of Coults

S		0.90	42.4
C		1.10	
1/4		1.50	
℄		1.60	
1/4		1.80	
C		2.00	
N		1.90	41.4
T.P.		0.02	43.30

100' E of Coults

N	10.13	53.43	9.30	44.1
C			9.80	
1/4			9.00	
℄			8.70	
1/4			8.30	
C			7.70	
S			7.20	46.2

150' E of Couts

S	53.43	3.70	49.7	
C		4.20		
1/4		4.60		
℄		5.10		
1/4		5.50		
C		6.00		
N		6.40	47.0	

200' E of Couts

N		3.40	50.0	
C		2.80		
1/4		2.40		
℄		2.10		
1/4		1.70		
C		1.30		
S		0.40	53.0	
TP.		1.54	51.89	

245'± E of Couts = W.L. of Juan

				51.49
S	5.42	57.31	1.40	55.9
C			2.20	
1/4			2.80	
℄			3.70	
1/4			4.70	
C			5.40	
N			6.00	51.3
TP			5.42	51.89
TP	0.34	52.23	13.25	38.98
TP	1.11	40.09	10.56	29.53
B.M.	6.02	35.55	2.68	32.87
"	0.69	30.22	10.77	19.45
	0.11	19.56	7.01	12.55
	0.23	12.78		

O.T. Check
32.88 ✓

Xsection of Taylor St- Fitch to Sta Fetrack

W.L. of Fitch

N	12.78	11.70
C		11.70
1/4		12.10
℄		12.40
1/4		11.70
C		11.70
S		11.20

50' W of Fitch

S	12.00
C	11.80
1/4	11.60
℄	11.60
1/4	12.20
C	12.30
N	12.00

100' W of Fitch

N	12.40
C	12.50
1/4	12.50
℄	12.40
1/4	12.40
C	12.50
S	12.20

150' W. of Fitch

S	11.80
C	12.40
1/4	12.50
℄	12.50
1/4	12.50
C	12.60
N	12.70

VOID

SEE PAGE 25

185' W of Fitch = E.L. Rt of Way

N	12.78	12.60
C		12.20
1/4		12.10
℄		12.10
1/4		12.10
C		11.80
S		11.50

194' W of Fitch

S	6.70
C	6.90
1/4	7.00
℄	6.90
1/4	7.20
C	7.20
N	7.20

2' E of La Jolla tracks

N	7.30
C	7.10
1/4	7.00
℄	7.00
1/4	6.90
C	6.80
S	6.60 6.03

W. Rail of La Jolla tracks = 204' W. of

S	5.82
C	6.00
1/4	6.10
℄	6.24
1/4	6.41
C	6.50
N	6.60

22' W of La Jolla tracks

N	(22)E	7.20
C		7.10
1/4		7.00
℄		6.80
1/4		6.80
C		6.70
S		6.70

212' W of Fitch

S	6.90
C	6.70
1/4	6.80
℄	6.90
1/4	7.00
C	7.30
N	7.30

217' W of Fitch

N	10.80
C	11.00
1/4	10.60
℄	10.80
1/4	11.00
C	11.50
S	11.10

250' W of Fitch

S	11.40
C	11.20
1/4	11.00
℄	10.80
1/4	11.00
C	11.80
N	12.10

20' W of Fitch

N	10.90
C	12.40
1/4	12.30
℄	12.20
1/4	11.80
C	11.60
S	11.00

(see sketch front of Book) on Line AB - 17' from Sta Fe tracks

S.	9.80
C	10.00
1/4	10.10
℄	10.70
1/4	11.20
C	11.10
N	10.90

2' E of Sta. Fe tracks

N	7.80
C	7.70
1/4	7.80
℄	7.80
1/4	7.80
C	7.90
S	7.90

W. Rail of Santa Fe tracks

S	7.37
C	7.35
1/4	7.35
℄	7.35
1/4	7.35
C	7.35
N	7.34

Rexsection of Taylor St Fitch to Sta Fe tracks

N. Line of Fitch - Taylor = 100' wide
12.55

N	0.18	12.73	11.40
C			11.40
1/4			11.60
℄			12.00
1/4			12.50
C			11.50
S			11.20

16' walks 17 1/4's

50' W of Fitch

S			11.90
C			11.70
1/4			11.50
℄			12.30
1/4			12.00
C			11.80
N			11.80

X

100' W. of Fitch

N			12.00
C			12.40
1/4			12.40
℄			12.30
1/4			12.50
C			12.30
S			12.10

X

150' W of Fitch

S			11.70
C			12.30
1/4			12.40
℄			12.40
1/4			12.40
C			12.30
N			12.40

185' W of Fitch

N	12.73	12.40
C		12.50
1/4		12.20
℄		11.90
1/4		11.90
C		12.20
S		11.70

195' W. of Fitch = E.L. of Garden Place

S	6.60
C	6.70
1/4	6.70
℄	7.00
1/4	7.20
C	7.30
N	7.40

8' W of La Jolla Tracks

N	7.20
C	7.30
1/4	7.10
℄	7.00
1/4	6.80
C	6.70
S	6.50

W. Bail of La Jolla tracks

S	5.80
C	6.02
1/4	6.20
℄	6.41
1/4	6.52
C	6.65
N	6.76

2' W of tracks

N	12.73	7.60
C		7.30
1/4		7.20
℄		7.00
1/4		6.90
C		6.90
S		6.70

15' W of E L. of Garden Pl. = 6' W of W. Rail

S	6.80
C	6.60
1/4	6.80
℄	7.20
1/4	7.50
C	7.40
N	7.80

W. L. of Garden Place

N	12.30
C	11.80
1/4	11.70
℄	11.40
1/4	11.20
C	11.40
S	11.50

22 W of Garden place

S	11.20
C	10.90
1/4	10.80
℄	11.90
1/4	12.30
C	11.10
N	10.40

on line A.B. (see sketch front of Book

N	12.23	10.40
C		10.30
1/4		10.30
℄		10.60
1/4		10.90
C		10.50
S		10.00

2' ⊠ of Sta Fe tracks

S	7.90
C	7.90
1/4	7.80
℄	7.90
1/4	7.70
C	7.70
N	7.80

W. Rail of Sta Fe tracks

N	7.25	
C	7.30	
1/4	7.30	
℄	7.30	
1/4	7.31	X
C	7.31	
S	7.33	

1 Hatch
15 Moore
19 Deziel

X sec. Madison
Park Blvd to Garfield

NW Madison & Park Blvd.
BM Spk. Pole 426 355.68 351.42

W.L. Park Blvd.

S			5.1	350.6
cb			5.2	350.5
1/4			5.3	350.4
c			5.0	350.7
1/4			5.2	350.5
cb			4.8	350.9
N			5.2	350.5
	25' W			
N			4.0	351.7 POSTED
cb			3.7	352.0
+7			4.0 5.0	351.7 350.7
1/4			5.1	350.6
c			4.8	350.9
1/4			5.1	350.6
cb			5.2	350.5
S			5.2	350.5

Note { All elevations are 0.1 high by change in benchmark 355.68

	50' W			
S			5.2	350.5
cb			5.0	350.7
1/4			4.8	350.9
c			4.7	351.0
1/4			5.0	350.7
cb			5.1	350.6
N.			5.1	350.6 POSTED
	100' W			
N			3.6	352.1
cb			5.0	350.6
1/4			5.1	350.6
c			4.6	351.1
1/4			4.6	351.1
cb			4.9	351.8
S			5.2	350.5

35568

140' W

S	4.8	350.9
cb	4.8	350.9
1/4	4.5	351.2
c	4.4	351.3
1/a	4.9	350.8
cb	5.0	350.7
N	4.4	351.3

160' W

N	4.5	351.2
cb	4.8	350.9
1/4	4.8	350.9
c	4.4	351.3
1/a	4.7	351.0
cb	4.6	351.1
S	4.6	351.1

35568

200' W

S	4.5	351.2
cb	4.6	351.1
1/a	4.4	351.3
c	4.4	351.3
1/4	4.5	351.2
+4	4.0	351.7
cb	3.7	352.0
N	4.0	351.7

250' W

N	4.2	351.5
cb	3.7	352.0
1/4	4.1	351.6
c	3.8	351.9
1/4	4.1	351.6
cb	4.3	351.4
S	4.3	351.4

		357.68		
	300' W = El. North Ave.			
S			3.9	351.8
cb			3.9	351.8
1/2			4.3	351.4
c			3.9	351.8
1/2			3.8	351.9
cb			3.8	351.9
N			3.6	352.1
	W.L. North Ave			
N			1.9	353.8
cb			3.4	352.3
1/4			4.0	351.7
c			3.5	352.2
1/4			3.8	351.9
cb			2.5	353.2
S			3.2	352.5
T.P.	5.49	357.64	3.53	352.15

		357.64		
	50' W			
S			5.3	352.3
cb			5.4	352.2
1/2			5.2	352.4
c			4.9	352.7
1/2			4.9	352.7
cb			4.8	352.8
N			4.9	352.7
	100' W			
N			5.2	352.4
cb			4.3	353.6
+9'			4.4 5.2	353.2 352.4
1/2			5.2	352.4
c			4.9	352.7
1/4			5.0	352.6
cb			5.5	352.1
S			4.6	352.0

357.64

140 W

S	4.2	3√3.4
ch.	5.2	352.4
1/a	5.0	352.6
c	4.8	3√2.8
1/a	5.2	352.4
ch	5.1	352.5
N	5.1	3√2.√

160 W

N.	5.1	3√2.√
ch	5.1	3√2.5
1/a	5.1	352.5
c	4.6	3√3.0
1/a	4.6	353.0
ch	4.7	352.9
S	4.7	3√2.9

357.64

200 W

N	4.5	3√3.1
ch	4.8	352.8
1/a	4.9	352.7
c.	4.6	3√3.0
1/4	5.0	352.6
+4	4.6	353.0
ch.	4.5	353.1
S	5.2	3√2.4

POSTED

250 W

S	5.1	3√2.√
ch	4.7	352.9
1/a	5.4	352.2
c	5.0	3√2.6
1/4	5.2	352.4
ch	5.3	352.3
N	4.5	3√3.1

POSTED

		357.64			
	300' W =	EL. Campus			
S			4.6	353.0	
BM			5.01	352.63	whalers bend 352.53
cb			4.9	352.8	
1/4			5.3	352.3	
c			5.1	352.5	
1/4			5.4	352.2	
cb			4.7	352.9	
N			4.3	353.3	
	WL Campus				
N			5.9	351.7	
cb			5.6	352.0	
1/4			5.2	352.4	
c			5.1	352.5	
1/4			5.6	352.0	
cb			5.8	351.9	
S			5.4	352.2	

	357.64			
	50' W			
S			6.2	351.4
cb			6.3	351.3
1/4			6.1	351.5
c			6.1	351.5
1/4			6.3	351.3
cb			5.7	351.9
N			5.6	352.0
	100' W			
N			6.8	350.8
cb			6.0	351.6
+9			5.7	351.9
1/4			6.5	351.1
c			6.2	351.4
1/4			6.4	351.2
cb			6.5	351.1
S			6.6	351.0

		357.64		
	140' W			
S			6.9	350.7
cb			7.0	350.6
1/4			6.5	351.1
c			6.8	350.8
1/4			6.8	350.8
cb			6.8	350.8
N			7.0	350.6
	160' W			
N			7.0	350.6
cb			7.2	350.4
1/4			7.2	350.4
c			7.0	350.6
1/4			7.2	350.4
cb			7.3	350.3
S			7.3	350.3
T.P.	2.77	354.09	6.32	351.32

		354.09		
	200' W			
S			3.6	350.5
cb			3.8	350.3
1/4			3.6	350.5
c			3.7	350.4
1/4			3.9	350.2
cb			3.2	350.9
N			3.3	350.8
	250' W			
N			4.2	349.9
cb			4.5	349.6
1/4			4.6	349.5
c			4.0	350.1
1/4			3.6	350.5
cb			4.3	349.8
S			4.9	349.2

POSTED

35409

300' W = EL. Cleveland

S	4.3	349.8
cb	4.7	349.4
1/4	4.5	349.6
c	4.4	349.7
1/4	4.9	349.2
cb	5.1	349.0
N	4.4	349.7

WL. Cleveland

N	5.1	349.0
cb	5.3	348.8
1/4	5.0	349.1
c	4.4	349.7
1/4	5.1	349.0
cb	5.1	349.0
S	5.0	349.1

35409

50' W

S	5.2	348.9
cb	5.3	348.8
1/4	4.9	349.2
c	4.8	349.3
1/4	5.2	348.9
cb	5.3	348.8
N	4.9	349.2

100' W

N	5.5	348.6
cb	5.6	348.5
1/4	5.2	348.9
c	4.7	349.4
1/4	5.1	349.0
cb	5.3	348.8
S	5.6	348.5

35409

140 W

S	5.2	348.9
cb	5.2	348.9
1/4	5.4	348.7
c	5.1	349.0
1/4	5.3	348.8
cb	5.4	348.7
N	5.4	348.7

160 W

N	5.4	348.7
cb	4.5	349.6
1/4	5.2	348.9
c	5.0	349.1
1/4	5.5	348.6
cb	5.7	348.4
S	5.9	348.2

35409

200 W

S	5.5	348.6
cb	6.9	347.2
1/4	5.6	348.5
c	5.1	349.0
1/4	5.4	348.7
cb	5.6	348.5
N	5.1	349.0

250 W

N	3.9	350.2
cb	3.8	350.3
+5	4.2	349.9
+10	5.6	348.5
1/4	5.7	348.4
c	5.3	348.8
1/4	5.6	348.5
cb	5.8	348.3
S	6.2	347.9

POSTED

35409

300 W = EL. Maryland

S	6.4	347.7
cb	5.3	348.8
1/2	4.9	349.2
c	5.6	348.5
1/2	5.9	348.2
cb	5.6	348.5
N	5.8	348.3

E cb. Maryland

N	6.1	348.0
cb	6.2	347.9
1/4	5.9	348.2
c	5.4	348.7
1/4	5.6	348.5
cb	6.3	347.8
S	6.2	347.9

35409

E 1/2 Maryland

S	6.7	347.4
cb	6.4	347.7
1/2	6.0	348.1
c	5.9	348.2
1/2	5.8	348.3
cb	5.8	348.3
N	5.9	348.2

C2

N	5.5	348.6
cb	5.5	348.6
1/4	5.5	348.6
c	5.6	348.5
1/4	5.6	348.5
cb	6.1	348.0
S	6.2	347.9

35409

W/a Maryland

S	6.7	347.4
cb	6.5	
1/a	5.8	
c	6.2	347.9
1/a	6.2	
cb	6.2	
N	6.2	347.9

W. cb

N	3.9	350.2
cb	5.9	
1/a	6.3	
c	5.9	348.2
1/a	4.5	
cb	4.9	
S	6.7	347.4

35409

W. Maryland

S	7.3	346.8
cb	6.3	347.8
1/a	5.4	348.7
c	5.8	348.3
1/a	6.4	347.7
cb	6.9	347.2
N	6.2	347.9

40 W

N	6.6	347.5
cb	7.3	346.8
1/a	6.9	347.2
c	6.5	347.6
1/a	6.9	347.2
cb	6.3	347.8
S	5.2	348.9

POSTED

35409

100' W

S	8.2	345.9
cb	7.8	346.3
1/4	6.6	347.5
c	7.1	347.0
1/4	7.5	346.6
cb	7.3	346.8
N	7.6	346.5

140' W

N	8.3	345.8
cb	7.0	347.1
+7	6.4	347.7
1/4	8.0	346.1
c	7.5	346.6
1/4	7.5	346.6
cb	8.4	345.7
S	8.6	345.5

35409

160' W

S	7.8	346.3
cb	6.9	347.2
1/4	7.4	346.7
c	8.0	346.1
1/4	8.2	345.9
cb	7.7	346.4
N	8.4	345.7

200' W

N	8.6	345.5
cb	8.6	345.5
1/4	8.5	345.6
c	8.1	346.0
1/4	7.4	346.7
cb	8.6	345.5
S	9.0	345.1
T.P.	192	347.83 8.18 345.91

POSTED

34783

250 W

S	2.8	345.0
cb	1.2	346.6
1/a	1.6	346.2
c	2.2	345.6
1/a	2.5	345.3
cb	2.6	345.2
N	2.7	345.1

300 W = EL Delaware

N	1.5	346.3
cb	2.3	345.5
1/a	2.9	344.9
c	2.4	345.4
1/a	2.4	345.4
cb	3.6	344.2
S	3.6	344.2

from EL. Delaware the N and S halves of Madison are sectioned separately.

34783

E cb Delaware (South)

S	3.6	344.2
cb	3.4	344.4
1/a	1.8	346.0
c	2.5	345.3

E 1/4

c	2.6	345.2
1/a	2.4	345.4
cb	3.0	344.8
S	3.2	344.6

C.

S	2.9	344.9
cb	2.6	345.2
1/a	2.1	346.7
C	2.5	345.3

W 1/4

C	2.8	345.0

34783

1/4	2.5	345.2
cb	3.0	344.8
S	3.4	344.4
W cb		
S	4.0	343.8
cb	3.0	344.8
1/4	2.4	345.4
C	2.9	344.9
WL.		
C	3.0	344.8
1/4	3.5	344.3
cb	3.9	343.9
S	4.2	343.6
50' W of Delaware		
S	4.2	343.6
cb	4.1	343.7
1/4	3.1	344.7
C	3.5	344.3

34783

100' W		
C	4.1	343.7
1/4	3.1	344.7
cb	4.0	343.8
S	5.3	342.5
140' W		
S	4.4	343.4
cb	5.1	342.7
1/4	3.9	343.9
C	4.3	343.5
160 W		
C	4.4	343.4
1/4	4.7	343.1
cb	5.3	342.5
S	5.2	342.6
200' W		
S	5.9	341.9

POSTED

	347.83		
cb		5.5	342.3
1/4		5.0	342.8
c		4.7	344.1
	250' W		
c		5.1	342.7
1/4		5.8	342.0
cb		4.4	343.4
s		4.5	343.3
	300' W = El New York		
s		6.7	341.1
cb		5.3	342.5
1/4		5.5	342.3
c		5.8	342.0
	E cb New York		
c		5.9	341.9
1/4		5.3	342.5
cb		6.0	341.8

	347.83		
s		6.2	341.6
	E 1/4		
s		6.1	341.7
cb		5.8	342.0
1/4		5.6	342.2
c		6.0	341.8
	Cr.		
c		6.0	341.8
1/4		5.5	342.3
cb		5.7	342.1
s		5.7	342.1
	W 1/4		
s		6.0	341.8
cb		5.8	342.0
1/4		5.6	342.2
c		6.0	341.8

POSTED

34783

W ch.

c	6.3	341.5
1/a	6.1	341.7
ch	5.8	342.0
s	6.0	341.8

W L. New York.

s	6.5	341.3
ch	6.5	341.3
1/4	6.5	341.3
c	6.3	341.5

E ch. Delaware (North)

N	3.1	344.7
ch	2.9	344.9
1/a	3.0	344.8
c	2.6	345.2

E 1/4

c	2.5	345.3

34783

1/a	3.0	344.8
ch	3.0	344.8
N	2.9	344.9

cr

N.	2.9	344.9
ch	2.9	344.9
1/a	3.2	344.6
c	2.8	345.0

W 1/4

c	2.9	344.9
1/a	3.3	344.5
ch	3.4	344.8
N	3.3	344.5

W ch.

N	3.0	344.8
ch	3.1	344.7
1/a	3.4	344.4
c	3.0	344.8

POSTED

347.83

W/. Delaware

c	3.2	344.6
1/a	3.7	344.1
cb	3.0	344.8
N	3.0	344.8
50' W		
N	3.0	344.8
cb	3.2	344.6
1/a	4.1	343.7
c	3.7	344.1
100' W		
c	4.1	343.7
1/a	4.6	343.2
cb	4.1	343.7
N	4.0	343.8
140' W		
N	4.5	343.3

347.83

cb	4.8	343.0
1/a	4.8	343.0
c	4.4	343.4
160' W		
c	4.5	343.3
1/a	5.0	342.8
cb	4.6	343.2
N	4.7	343.1
200' W		
N	5.2	342.6
cb	5.2	342.6
1/a	5.0	342.8
c	5.0	~~342.8~~
250' W		
c	5.6	342.2
1/a	6.2	341.6
cb	6.1	341.7
N	5.6	342.2

POSTED

34783

300 W = El. New York

N	5.9	341.9
cb	6.2	341.6
1/4	6.5	341.3
c	6.0	341.8

E cb New York

c	6.0	341.8
1/4	6.5	341.3
cb	6.5	341.3
N	6.4	341.4

E 1/4

N	7.0	340.8
cb	6.8	341.0
1/4	6.7	341.1
c	6.2	341.6

34783

c2

c	6.2	341.6
1/4	6.7	341.1
cb	6.8	341.0
N	7.2	340.6

W 1/4

N	6.6	341.2
cb	5.8	342.0
1/4	6.7	341.1
c	6.2	341.6

W cb.

c	6.2	341.6
1/4	6.8	341.0
1/4	5.4	342.4
cb	5.2	342.6
N	6.1	341.7

W h. New York.

N	5.4	342.4

POSTED

		34783		
cb			5.4	342.4
1/4			6.8	341.0
c			6.2	341.6
T.P.	0.83	34553	3.13	344.70
	50' W of New York			
s			4.2	341.3
cb			4.2	341.3
1/4			2.5	343.0
+9			2.8	342.7
c			4.2	341.3
	100' W			
c			4.3	341.2
1/4			4.9	340.6
cb			4.9	340.6
s			4.6	340.9
	140' W			
s			4.2	341.3

1 Hatch
16 Moore
09 Dezid

		34553		
cb			5.1	340.4
1/4			4.7	340.8
c			4.4	341.1
	160' W			
c			4.4	341.1
1/4			4.7	340.8
cb			5.6	339.9
s			5.2	340.3
	200' W			
s			5.5	340.0
cb			5.1	340.4
1/4			5.3	340.2
c			4.8	340.7
	250' W			
c			5.0	340.5
+5			4.0	341.5
1/4			4.3	341.2

34553

cb	5.1	340.4
S	5.1	340.4
300 W = El. Rhode Island		
S	6.0	339.5
cb	6.0	339.5
1/4	5.9	338.6
C	5.0	340.5
E cb.		
C	5.1	340.4
1/4	5.4	340.1
cb	5.9	339.6
S	6.1	339.4
E 1/4		
S	5.6	339.9
cb	5.4	340.1
1/4	5.1	340.4
C	5.1	340.4

34553

cr		
C	5.1	340.4
1/4	4.9	340.6
cb	5.1	340.4
S	5.2	340.3
W 1/4		
S	5.7	339.8
cb	5.6	339.7
1/4	5.3	340.2
C	5.2	340.3
W cb.		
C	5.4	340.1
1/4	5.9	339.6
cb	6.2	339.3
S	6.4	339.1
Wh. Rhode Island		
S	6.1	339.4

POSTED

	34553		
cb		6.3	339.2
1/4		5.1	340.4
c		5.6	339.9
	50' W of Rhode Island		
c		5.7	339.8
1/4		6.0	339.5
cb		6.4	339.1
s		6.3	339.2
	100' W		
s		5.6	339.9
cb		4.9	340.3
1/4		5.8	339.7
c		5.9	339.6
	140' W		
c		6.3	339.2
1/4		6.4	339.1
cb		6.6	338.9
s		6.7	338.8

	34553		
	160' W		
s		7.9	337.6
cb		7.3	338.2
1/4		6.4	339.1
c		6.6	338.9
	200' W		
c		7.4	338.1
1/4		6.7	338.8
cb		7.3	338.2
s		8.6	336.9
	250 W		
s		9.0	336.5
cb		9.1	339.4
1/4		8.4	337.1
c		8.4	337.1
	300' W = 1st. Massachusetts		
c		9.6	335.9

POSTED

		34553			
1/4			10.2	335.3	
cb			10.8	334.7	
S			11.5	334.0	
BM	℄ Lower Cement step of House NW Cor Rhode Island		5.39	340.14	340.11
	50' W of New York.				
N			4.0	341.5	
cb			3.2	342.3	
+7			3.5	342.0	
1/4			4.8	340.7	
c			4.4	341.1	
	100' W				
c			4.4	341.1	
1/4			4.8	340.7	
cb			5.2	340.3	
N			5.5	340.0	
	140' W				
N			5.6	339.9	

		34553			
cb			5.4	340.1	
1/4			5.1	340.4	
c			4.5	341.0	
	160' W				
c			4.8	340.7	
1/4			5.2	340.3	
+8			4.1	341.4	
cb			4.2	341.3	
N			5.2	340.3	
	200' W				
N			4.9	340.6	
cb			5.7	339.8	
1/4			5.4	340.1	POSTED
c			5.1	340.4	
	250' W				
c			5.0	340.5	
1/4			5.4	340.1	

34553

cb	5.8	339.7
N	5.8	339.7
300 W = E L. Rhode Island.		
N	6.0	339.5
cb	5.7	339.8
1/a	5.7	339.8
c	5.3	340.2
E cb.		
c	5.5	340.0
1/a	5.9	339.6
cb	5.9	339.6
N	6.0	339.5
E 1/a		
N	5.4	340.1
cb	5.9	339.6
1/a	6.0	339.5
c	5.6	339.9

34553

cr.		
c	5.7	339.8
1/a	6.1	339.4
cb	5.9	339.6
N	5.4	340.1
W 1/4		
N	5.4	340.1
cb	6.0	339.5
1/a	6.2	339.3
c	5.6	339.9
W cb		
c	5.7	339.8
1/a	6.1	339.4
cb	5.6	339.9
N	5.4	340.1
W L.		
N	5.5	340.0

POSTED

34553

cb	5.7	339.8
1/4	6.0	339.5
c	5.8	337.7
50' W of Rhode Island.		
c	6.1	339.4
1/4	6.2	339.3
cb	5.7	339.8
N	5.9	339.6
100' W		
N	6.4	339.1
cb	6.6	338.9
1/4	6.9	338.6
c	6.6	338.9
140' W		
c	7.5	338.0
1/4	7.8	337.7
cb	7.2	338.3
N	6.9	338.6

34553

160' W		
N	7.1	338.4
cb	7.5	338.0
1/4	8.0	337.5
c	7.9	337.6
200' W		
c	8.7	336.8
1/4	8.8	336.7
cb	8.1	337.4
N	8.1	337.4
250' W		
N	9.3	336.7
cb	9.6	335.9
1/4	10.2	335.3
c	9.9	335.6
300' W - El Mass.		
c	11.9	333.6

POSTED

		334.83		
1/4			11.8	333.7
cb			11.2	334.3
N			10.8	334.7
T.P.	071	334.94	11.30	334.23
	E cb Mass.			
N			0.6	334.3
cb			0.9	334.0
1/4			2.0	332.9
c			1.9	333.0
	E 1/4			
c			2.4	332.5
1/4			2.4	332.5
cb			1.6	333.3
N			1.2	333.7
	C.			
N			1.6	333.3
cb			2.4	332.5

		334.94		
1/4			3.0	331.9
c			2.7	332.2
	W 1/4			
c			3.4	331.5
1/4			3.5	331.4
cb			3.0	331.9
N			2.2	332.7
	W cb.			
N.			2.2	332.7
cb			3.0	331.9
1/4			4.0	330.9
c			4.3	330.6
	W L. Mass			
c			4.7	330.2
1/4			4.5	330.4
1/4			4.4	330.5
			3.6	331.3
cb			3.1	331.8
N			2.2	332.7

POSTED

334.94

50 'W

N	5.2	329.7
cb	5.6	329.3
1/4	6.7	328.2
c	6.7	328.2

100 'W

c	8.3	326.6
1/4	8.4	326.5
+4	8.6 7.9	326.3 327.2
cb.	7.3	327.6
N.	6.4	328.5

140 'W

N.	8.5	326.4
cb	9.4	325.5
1/a	10.1	324.8
c	10.5	324.4

334.94

160 'W

c	10.8	324.1
1/a	10.7	324.2
cb	10.2	324.7
N	9.4	325.5

200 'W

N.	10.8	324.1
cb	11.4	323.5
1/a	12.3	322.6
c	12.4	322.5

E cb. Mass.

S	1.5	333.4
cb.	0.6	334.3
1/a	0.0	334.9
c	+0.8	335.7

E 1/a

c	+0.3	335.2

POSTED

33494

1/4	0,2	334.7
cb	1.0	333.9
S	1.9	333.0
Ch.		
S	1.9	333.0
cb	0,8	334.1
1/4	0,2	334.7
c	+0.2	335.1
W 1/4		
c	0,3	334.6
1/4	0,6	334.3
cb	1,8	333.1
S	2,5	332.4
W cb.		
S	3,3	331.1
cb	2,0	332.9
1/4	0.9	334.0
c	0,8	334.1

33494

W L. Mass.

c	1,4	333.5
1/4	1,5	333.4
cb	2,4	332.5
S	3.8	331.1
50' W		
S	5,4	329.5
cb	4,2	330.7
1/4	3,3	331.6
c	3.1	331.8
100' W		
c	5.4	329.5
1/4	5.9	329.0
cb	7.0	327.9
S	7.8	327.1

POSTED

	334.94			
	125' W			
S			8.2	326.7
			8.5	326.4
cb			7.4	327.5
			7.8	327.1
1/a			7.0	327.9
c			6.6	328.3
	145' W			
c			7.4	327.5
1/4			7.6	327.3
cb			8.3	326.6
S			8.7	326.2
	170' W			
S			8.9	326.0
cb			8.9	326.0
1/a			8.5	326.4
c			7.8	327.1

	334.94			
	220' W			
c			10.5	324.4
1/a			10.2	324.7
cb			10.6	324.3
S			11.2	323.7
	270' W = El. New Hampshire			
S			13.4	321.5
cb			12.8	322.1
1/a			12.6	322.3
c			11.7	323.2
TP.	1.68	324.82	11.80	323.14
	≡ cb.			
c			2.0	322.8
1/a			2.8	322.0
cb			3.2	321.6
S			3.8	321.0

POSTED

32482

E 1/4

S	4.4	320.4
cb	3.5	321.3
1/a	2.7	322.1
C	2.2	322.6

Cr.

C	2.2	322.6
1/a	2.7	322.1
cb	3.4	321.4
S	4.1	320.7

W 1/4

S	4.6	320.2
cb	3.9	320.9
1/a	3.1	321.7
C	2.6	322.2

W. cb.

C	3.1	321.7

32482

1/a	3.6	321.2
cb	4.5	320.3
S	5.1	319.7

W. L. New Hampshire

S	5.3	319.5
cb	4.7	320.1
1/a	4.1	320.7
C	3.3	321.5

50' W

C	4.6	320.2
1/a	5.4	319.4
cb	5.9	318.9
S	6.5	318.3

100' W

S	4.6	317.2
cb	7.0	317.8
1/a	6.4	318.4
C	5.6	319.2

POSTED

32482

150' W

c	7.4	317.4	
1/a	7.9	316.9	
cb	8.5	316.3	
s	9.4	315.4	

200' W

s	10.8	314.0	
cb	10.2	314.6	
1/a	9.6	315.2	
c	9.1	315.7	

W = El. Garfield

c	11.4	313.4	
1/a	11.9	312.9	
	13.0	311.8	
cb	12.2	312.6	
s	12.9'	311.91	314.58

32482

250' W of Mass

N.	1.4	323.4
cb.	2.1	322.7
1/a	3.2	321.6
c	3.2	321.6

300' W = El. New Hampshire

c	4.5	320.3
1/a	4.6	320.2
cb	3.1	321.7
N.	2.4	322.4

E Cl. New Hampshire

N.	2.7	322.1
cb	3.4	321.4
1/a	4.8	320.0
c	4.7	3201

32482

E 1/4

C	4.7	320.1
1/4	5.0	319.8
cb	3.6	321.2
N	3.4	321.4

Cr.

N	3.3	321.5
cb	4.0	320.8
1/4	5.3	319.5
C	5.1	319.7

W 1/4

C	5.6	319.2
1/4	5.5	319.3
cb	4.3	320.5
N	3.7	321.1

32482

W cb.

N	4.5	320.3
cb	4.7	320.1
1/4	5.9	318.9
C	6.0	318.8

W. New Hampshire

C	6.4	318.4
1/4	6.4	318.4
cb	5.3	319.5
N	4.6	320.2

S 1/4 W

N	6.6	318.0
cb	7.2	317.6
1/4	8.4	316.4
C	8.6	316.2

POSTED

35482

100' W

c	10.0	314.8
1/4	10.0	314.8
cb	5.5	316.0
N	8.5	316.3

120' ± W = El. Garfield

N	9.5	315.3
cb	10.7	314.1
1/c	11.4	313.4
c	11.5	313.3

POSTED

2/5/09 Hatch Moore Deziel

Xsec Massachusetts St from North -

Madison

from Xsec Madison St		80' Street		
TP	7.57	341.70		334.13
		NL Madison		
E			7.0	334.7
cb			7.5	
1/4			8.1	
c			8.6	333.1
1/4			9.0	
cb			9.1	
W			9.0	332.7
		25' N		
W			8.4	333.3
cb			8.1	
1/4			8.0	
c			7.2	334.5
1/4			6.9	
cb			6.8	
E			6.2	335.5

POSTED

		341.70		
		50' N		
E			5.8	335.9
cb			6.2	
1/4			6.4	
c			6.8	334.9
1/4			6.9	
cb			7.0	
W			7.0	334.7
		75' N		
W			6.3	335.4
cb			6.4	
1/4			6.4	
c			6.0	335.7
1/4			5.8	
cb			5.9	
E			5.7	336.0

POSTED

34170

100' N

E	5.1	336.6
cb	5.8	
1/a	5.9	
c	5.9	335.8
1/a	6.1	
cb	5.9	
W	6.0	335.7

125' N

W	5.8	335.9
cb	6.0	
1/a	6.0	
c	5.3	336.4
1/a	5.3	
cb	5.2	
E	4.7	337.0

34170

150' N

E	4.9	336.8
cb	5.1	
1/a	5.1	
c	4.9	336.8
1/a	4.9	
cb	4.9	
W	5.0	336.7

175' N

W	4.9	336.8
1/a	4.1	337.6
c	4.9	336.8
1/a	5.2	
cb	4.8	
E	4.7	337.0

	341.70		
	200' N		
E		4.8	336.9
cb		4.8	
1/a		5.1	
c		5.3	336.4
1/a		5.2	
cb		5.2	
W		5.2	336.7
	225' N		
W		4.9	336.8
cb		4.6	
1/a		5.0	
a		5.6	336.1
1/a		5.5	336.2
cb		5.0	
E		4.9	336.8

	341.70		
	250' N		
E		4.8	336.9
cb		5.2	
1/a		5.4	
c		5.5	336.2
1/a		6.0	
cb		5.5	
W		5.7	336.0
	275' N		
W		6.5	335.2
cb		6.5	
1/a		6.3	
a		6.3	335.4
1/a		6.3	
cb		5.7	
E		5.3	336.4

341.70

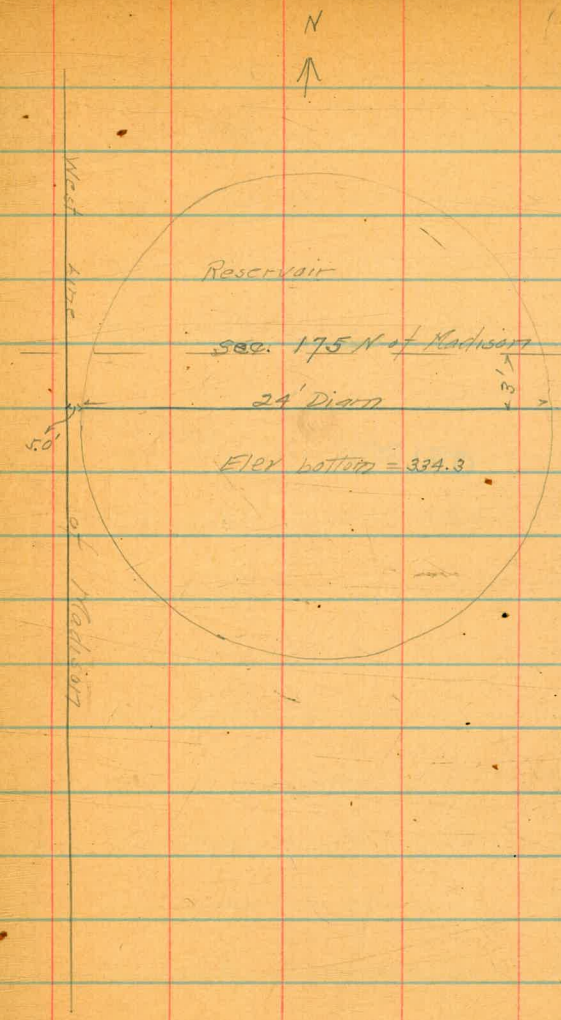
300 N - SL Garfield

E		5.8	335.9
S		6.8	
1/4		7.0	
C		7.1	334.6
1/4		7.1	
S		7.2	
W	= edge of Bluff	7.3	334.4

332 N Cor East line

E	edge of Bluff	7.1

POSTED



B.M. 30th + National N.W. Brs Pig 64.938
" " Logan " " " " 70.913

9.47 80.38
TP 0.33 74.96 5.75 74.63

Xsec. of Martin (30th to 32nd)
80' wide

E.L. of 30th

N 74.96 5.50 69.5
C 5.00
1/4 4.10
℄ 3.90 71.1
1/4 3.70
C 3.80
S 3.00 72.0

25' E

S 3.90 71.1
C 4.30
1/4 4.30
℄ 4.40 70.6
1/4 5.00
C 6.30
N 6.40 68.6

50' E

N 74.96 7.70 67.3
C 7.50
1/4 6.30
℄ 5.20 69.8
1/4 4.60
C 5.20
S 4.50 70.5

75' E

S 6.10 68.9
1/4 6.00
1/4 6.20
℄ 6.10 68.9
1/4 7.40
C 9.00
N 8.20 66.8

POSTED
POSTED

	1+00			
N	24.96	9.70	6√.3	
C		10.70		
1/4		9.50		
℄		7.60	67.4	
1/4		7.70		
C		7.30		
S		6.70	68.3	
	1+25			
S		7.60	67.4	
C		8.70		
1/4		9.70		
℄		9.60	6√.4	
1/4		11.40		
C		13.30		
N		12.90	62.2	

	1+50			
N	24.96	15.80	√9.2	
C		16.60		
1/4		12.90		
℄		12.00	63.0	
1/4		11.70		
C		11.20		
S		9.90	6√.1	
	1+75			
S		12.90	62.1	
TP	0.62	62.51	13.07	61.89
C		1.80		
1/4		2.00		
℄		2.30	60.2	
1/4		2.30		
C		4.90		
N		7.30	√√.2	

	2+00		
N	62.5	10.4	✓2.1
C		9.2	
¼		7.6	
℄		6.6	✓✓.9
¼		6.5	
C		6.2	
S		4.9	✓7.6
	2+25		
S		8.1	✓4.4
C		8.5	
¼		8.7	
℄		8.7	✓3.8
¼		10.5	
C		11.7	
N		12.3	✓0.2

	2+50			
N	62.✓1	13.1	49.4	
C		12.1		
¼		11.3		
℄		10.0	✓2.✓	
¼		10.0		
C		9.8		
S		7.6	✓2.9	
	2+75			
S		10.9	✓1.6	
C		11.2		
¼		11.3		
℄		11.5	✓1.0	
¼		11.4		
C		10.7		
N		11.2	✓1.3	
T.P.	3)5	54.92	11.34	51.17

	3+00		
N	54.92	10.3	44.6
C		9.4	
¼		8.1	
℄		5.4	49.5
¼		5.0	
C		4.6	
S		4.3	50.6
	3+25		
S		4.5	50.4
C		5.7	
¼		5.9	
℄		6.4	48.5
¼		9.2	
C		10.2	
N		11.1	43.8

	3+50		
N	54.92	11.7	43.2
C		10.9	
¼		9.7	
℄		7.5	47.4
¼		7.1	
C		6.4	
S		5.6	49.3
	3+75		
S		4.10	50.8
C		6.1	
¼		7.3	
℄		7.6	47.3
¼		10.1	
C		11.3	
N		12.2	42.7

4+00

N	54.92	9.9	45.0
C		9.0	
1/4		8.5	
℄		7.0	47.9
1/4		6.4	
C		4.2	
S		4.0	50.9

4+25

S		2.8	51.1
C		4.1	
1/4		6.3	
℄		6.4	48.5
1/4		7.1	
C		6.5	
N		6.9	48.0

4+50

N	54.92	5.2	49.7
C		6.1	
1/4		5.8	
℄		4.7	50.2
1/4		3.8	
C		3.3	
S		1.6	53.3

4+75

S		1.0	53.9
C		1.6	
1/4		1.7	
℄		2.3	52.6
1/4		2.9	
C		4.0	
N		3.4	51.5

5+00

N	5 4.92	4.2	5 0.7
C		3.6	
1/4		1.8	
℄		0.4	5 4.5
1/4		0.4	
C		1.1	
S		0.7	5 4.2

5+25

S		1.4	5 3.5
C		2.3	
1/4		1.3	
℄		1.5	5 3.4
1/4		2.9	
C		5.0	
N		6.7	48.2

5+50

N	5 4.92	7.5	47.4
C		6.7	
1/4		5.6	
℄		4.2	5 0.7
1/4		4.0	
C		4.0	
S		4.5	5 0.4

5+75

S		7.1	47.8
C		6.9	
1/4		6.5	
℄		6.6	48.3
1/4		8.0	
C		9.3	
N		9.3	45.6

		6+00 = W.L. 30th		
N		54.92	11.9	43.0
C			11.9	
1/4			9.9	
℄			8.6	46.3
1/4			8.2	
C			8.6	
S			10.0	44.9
TP	0.82	43.96	11.78	43.14
	E.L. 30th = 0+0			
S			2.30	41.7
C			2.0	
1/4			1.6	
℄			0.2	43.8
1/4			1.1	
C			1.6	
N			1.1	42.9

		0+25		
N		43.96	4.1	39.9
C			5.0	
1/4			2.9	
℄			0.7	43.3
1/4			1.2	
C			1.8	
S			1.7	42.3
		0+50		
S			1.6	42.4
C			1.7	
1/4			1.4	
℄			3.5	40.5
1/4			5.2	
C			6.9	
N			7.3	36.7

	0+75			
N	43.96		11.6	32.4
cb			11.1	
1/4			9.1	
ct			7.7	36.3
1/4			5.9	
cb			4.0	
S			2.5	41.5
	1+00 = A. LINE			
S			6.8	37.2
cb			9.2	
1/4			11.9	
cm			12.0	32.0
1/4			13.2	
cb			14.0	
N			13.6	30.4

X sec B = 4' W of Rail + ‖ bit

N	0.78	43.92		43.14
TP	1.17	32.50	12.59	31.33
N			2.40	30.1
C			2.9	29.6
1/4			3.5	
¢			4.0	28.5
1/4			4.5	
C			5.1	
S			6.9	25.6

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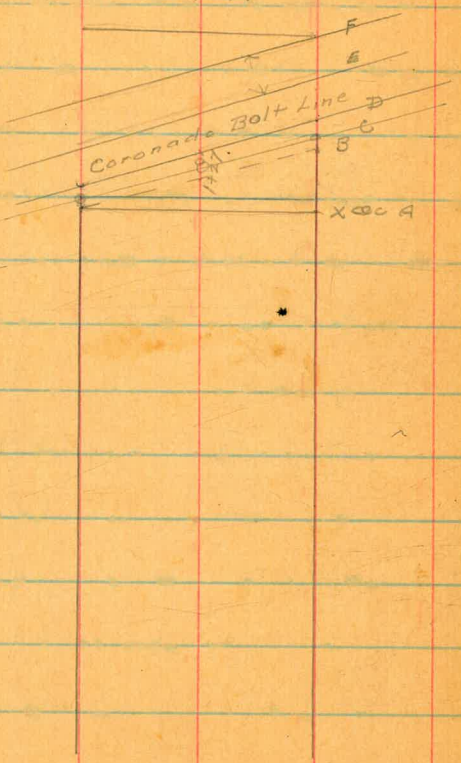
X sec C = 2' W of Rail

S			4.3	28.2
C			3.9	
1/4			3.6	
¢			3.1	29.4
1/4			3.0	
C			2.4	
N			1.8	30.7

1+71.6 = W. Rail on S.

1+04. = W " on N



"D" W. Rail of Tracks

N	32.50	1.20	31.3
C		1.60	
1/4		2.02	
℄		1.48	31.0
1/4		2.93	
C		3.33	
S		3.67	28.8

"E" W. E of Rail

S		4.9	27.6
C		4.4	
1/4		4.1	
℄		3.9	28.6
1/4		3.6	
C		3.2	
N		2.9	29.6

"F" = 1+56 on N + 5+0 2+00 on S

N	22.50	10.3	22.2	
C		10.7		
1/4		11.0		
¢		11.4	21.1	
1/4		12.0		
C		12.3		
S		12.5	20.0	
	2+00			
S		12.5	20.0	
C		13.6		
1/4		13.2		
¢		11.8	20.7	
1/4		10.8		
C		9.0		
N		7.8	24.7	

POSTED

2+25

N	32.50	3.8	28.7	
C		6.4		
1/4		7.9		
¢		9.2	23.3	
1/4		11.2		
C		14.1		
S		13.5	19.0	
	2+50			
S		11.2	21.3	
C		10.3		
1/4		7.5		
¢		5.9	26.6	
1/4		3.7		
C		1.1		
N		0.0	32.5	

2+75

N	43.92	8.0	36.0	
C		9.1		
1/4	32.50	+0.3		
℄		2.2	30.3	
1/4		4.6		
C		7.5		
S		10.1	22.4	
	3+00			
S		8.8	23.7	
C		5.8		
1/4		3.4		
℄		1.4	31.1	
1/4	43.92	10.3		
C		8.9		
N		6.6	37.3	

3+25

N	43.92	5.2	38.7	
C		7.0		
1/4		8.3		
℄		10.7	33.2	
1/4	32.50	1.4		
C		3.9		
S		6.6	25.9	
	3+50			
S		3.4	29.1	
C		1.3		
TP	12.30	43.92	0.88	31.62
1/4		10.8		
℄		9.1	34.8	
1/4		7.1		
C		6.1		
N		4.6	39.3	

		3+75		
N		43.92	4.1	39.8
C			6.0	
1/4			6.6	
℄			7.2	36.7
1/4			8.4	
C			10.5	
S			10.8	33.1
		4+00		
S			8.3	35.6
C			6.3	
1/4			7.0	
℄			6.2	37.7
1/4			5.2	
C			4.8	
N			3.0	40.9

		4+25		
N		43.92	2.0	41.9
C			3.6	
1/4			4.5	
℄			5.2	38.7
1/4			5.8	
C			7.0	
S			7.0	36.9
		4+50		
S			6.2	37.7
C			5.8	
1/4			4.6	
℄			4.1	39.8
1/4			3.0	
C			2.5	
N			0.7	43.2
TP	5.82	42.41	2.33	41.59

	4+75		
	47.41		
N		8.1	44.3
C		4.9	
1/4		5.6	
E		6.4	41.0
1/4		7.4	
C		9.0	
S		9.3	38.1
	5+00		
S		8.5	38.9
C		8.1	
1/4		6.6	
E		5.5	41.9
1/4		4.4	
C		3.8	
N		1.9	45.5

	5+25		
N	47.41	2.0	45.4
C		3.6	
1/4		4.3	
E		4.8	42.6
1/4		6.0	
C		7.8	
S		8.6	38.8
	5+50		
S		8.3	39.1
C		7.6	
1/4		5.5	
E		4.9	42.5
1/4		3.9	
C		3.7	
N		3.0	44.4

POSTED

		5+75			
N		47.41	5.1	42.3	
C			5.1		
1/4			5.1		
℄			5.6	41.8	
1/4			6.6		
C			7.5		
S			7.4	40.0	
		6+00			
S			6.7	40.7	
C			6.2		
1/4			6.4		
℄			5.7	41.7	
1/4	POSTED		5.8		
C			6.0		
N			6.2	41.2	
TP	4.06	44.81	6.66	40.75	
BM			8.82	35.99	32nd + Alley Greeley

				18
	18.78	0.83	18.55	
6.99	19.54	0.09	19.45	
10.67	30.18	0.59	29.53	
5.91	35.44	2.57	32.87	32.88 L

#400

Brk. chc. dpk in pole	32,880
O.T. Jail.	40,52.5

Published by H. S. CROCKER COMPANY, Stationers, Drawing Materials, Mathematical Instruments, etc., San Francisco.

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees
	DEGREES		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		