

V. J. Branches

18. 7. 12. Street

9

TRANSIT

F. B. 708

708

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

Minutes.	Lks.	Minutes.	Lks.	Minutes.	Lks.
1	2½	21	49	41	95½
2	4½	22	51½	42	98
3	7	23	53½	43	100½
4	9½	24	56	44	102½
5	11½	25	58½	45	105
6	14	26	60½	46	107½
7	16½	27	63	47	109½
8	18½	28	65½	48	112
9	21	29	67½	49	114½
10	23½	30	70	50	116½
11	25½	31	72½	51	119
12	28	32	74½	52	121½
13	30½	33	77	53	123½
14	32½	34	79½	54	126
15	35	35	81½	55	128½
16	37½	36	84	56	130½
17	39½	37	86½	57	133
18	42	38	88½	58	135½
19	44½	39	91	59	137½
20	46½	40	93½	60	140

PUBLISHED BY

EDWARD DENNY & CO.

DRAWING PAPER & MATERIAL, MATHEMATICAL INSTRUMENTS, ETC.,

STATIONERS AND PRINTERS,

SAN FRANCISCO, CAL.

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

18th street - running North from N

W	W	E	
			5+77
		2+78	5+75
2+71			5+52 ¹ / ₂
		2+47	5+50 ¹ / ₂
2+45			5+28
		2+23	5+26
2+21			5+02 ¹ / ₂
		1+96 ¹ / ₂	5+00 ¹ / ₂
1+94 ¹ / ₂			4+77 ¹ / ₂
		1+72	4+75 ¹ / ₂
1+70			4+58
		1+48	4+51
1+46			4+27 ¹ / ₂
		1+22	4+25 ¹ / ₂
1+20			
		0+97 ¹ / ₂	South line N6
0+95 ¹ / ₂		3+48	Line
		0+73	3+23
0+71			3+21
		0+48	2+99 ¹ / ₂
0+46			2+95 ¹ / ₂

18th Street North of N

W	E		
		South line of	
		11408	Ins
	8+57 1/2		10+83
8+55 1/2		10+81	
	8+33		10+57
8+31		10+55	
	8+07		10+33
8+05		10+31	

area

7+46 going East for S. N

W	E		
		South line of	
	7+28		10+07
		10+05	
	7+02		9+83
7+60		9+81	
	6+78		9+56
6+74		9+54	
	6+53		9+32
6+51		9+30	
	6+27 1/2		9+08
6+25 1/2		9+06	
	6+02		8+82
6+00		8+80	

18th Street running North from N street

W	E
	14+13
14+11	13+88
13+86	13+62½
18+60	13+38
19+26	18+12
18+10	12+88
12+84	12+62
12+60	12+38
12+36	14+88
	12+12½
12+10½	14+61
	11+88
11+84	14+35
11+25½	9 m of East for N street

End of pipe South line of J

20th Street running North from N Street

W	E
	5+98
	5+98
2+66	5+72
	5+70
	5+47
2+40	5+45
	5+23
2+15 $\frac{1}{2}$	5+21
	4+98
1+90	4+98
	4+72
1+66	4+70
	4+48
1+41	4+48
	4+23
1+15	4+21
	3+49
0+91	3+49
	3+18
0+65	3+16
	2+93
0+41	2+91

South line N Street

Inst

20th Street North from W

W	E		
			12+08
	9+01	12+05	
8+99			11+83
	8+75	11+81	
8+73		11+21	6 in E East for K street
	8+51	South line K	
8+49		11+09	Ans
	8+29		10+79
8+24		10+74	
	8+00		10+51
7+98		10+49	
	7+99	6 in E East for L street	
South line L street			10+25
Ans 7+21		10+23	
	6+97		10+01
6+95		9+99	
	6+72 $\frac{1}{2}$		9+74 $\frac{1}{2}$
6+70 $\frac{1}{2}$		9+72 $\frac{1}{2}$	
	6+48		9+50 $\frac{1}{2}$
6+46		9+48 $\frac{1}{2}$	
	6+22 $\frac{1}{2}$		9+26
6+20 $\frac{1}{2}$		9+24	

20th Street North from K Street

90	E	W	E	W	E
----	---	---	---	---	---

14+58

14+56

14+32 1/2

14+30 1/2

14+08

14+06

13+82

13+80

13+57 1/2

13+55 1/2

13+33

13+31

13+08

13+06

12+82 1/2

12+80 1/2

12+56 1/2

12+54 1/2

12+32 1/2

12+30 1/2

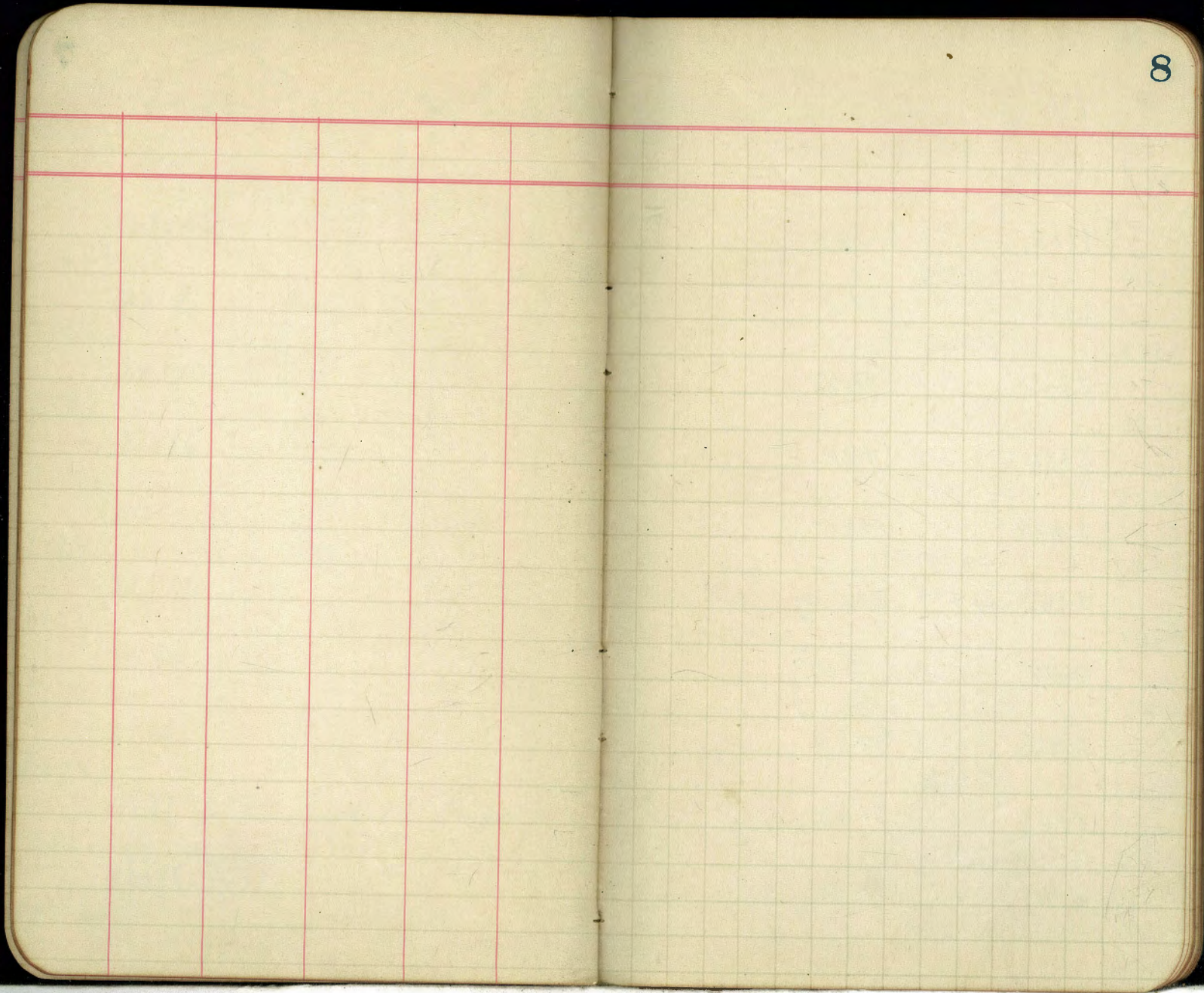
14+83 End of Pipe

Flush Tank

20[#] Street running South from I to J street

7

East	West			
	27842			
27822				
	2760			
2768				
	2735			
2733			+	
	27092			
27072				
	1785			
1783				
	17592			
17572				
	1735			
1733				
	1710			
1708				
	0787	3760	End of pipe for Fibert Tank	
0785			3735-	
	07692	3733		
07592			3710	
		3708		



17th Street running North from G. Street

West	East		
	3+09		5+74 $\frac{1}{2}$
3+07		5+72 $\frac{1}{2}$	
	2+84		5+75-0
2+82		5+748	
	2+58		5+725-
2+56		5+728	
	2+34		5+700
2+32		4+98	
	2+09		4+95-
2+07		4+73	
	1+83	4+13	6 in of East for G. Street -
1+81			
	1+59	South-line G. St	
1+57		8+95 Ins	
	1+32 $\frac{1}{2}$		3+84
1+30 $\frac{1}{2}$		3+82	
	1+08		3+58
1+06		3+56	
	0+83		3+33
0+81		3+31	

17th street running North from L

W	E	W	E
8+75 $\frac{1}{2}$	8+78 $\frac{1}{2}$	11+65	End of Pipe for 11+30
	8+55	11+28	flush Tank
8+53			
Youth Home F. St.		11+04	
7+75	Ins	11+02	
	7+50	10+79 $\frac{1}{2}$	
7+48		10+77 $\frac{1}{2}$	
	7+25	10+53 $\frac{1}{2}$	
7+23		10+51 $\frac{1}{2}$	
	6+99	10+29	
6+97		10+27	
	6+75	10+05	
6+73		10+03	
	6+49	9+80	
6+47		9+78	
	6+25	9+54	
6+23		9+52	
	6+00	9+30	
5+98		9+28	
		9+03 $\frac{1}{2}$	
		9+01 $\frac{1}{2}$	

20th Street North from A to J

11

	W	E	
			6x15
8		2784	6x13
	2784		5x89
8		27512	5x87
	27592		5x65
		2787	5x63
	2735		5x39
		2711	5x37
	2709		5x15
		17852	5x13
	17832		4x90
		1762	4x88
	1760		4x65
		1736	4x63
	1734		3x88 5m of East
		1712	South line H
	1710		3x65 J
		1787	3x86
	1785		3x34
		17602	3x12
	17582		3x10

for 16 Street

20th Street running North from J Street

West	East	
		11+56 End of Park
		11+54 Corn by East
	9+07	11+34
9+05		11+32
	8+82	11+05 $\frac{1}{2}$
8+80		11+03 $\frac{1}{2}$
	8+56 $\frac{1}{2}$	10+81 $\frac{1}{2}$
8+54 $\frac{1}{2}$		10+79 $\frac{1}{2}$
7+95		Corn by East for J Street

North	South	
		10+57
7+77	8ms	10+55
	7+40	10+32
7+38		10+30
	7+14	10+07
7+12		10+05
	6+90	9+82
6+88		9+80
	6+55	9+56
6+53		9+54
	6+39 $\frac{1}{2}$	9+31 $\frac{1}{2}$
6+37 $\frac{1}{2}$		9+29 $\frac{1}{2}$

20th Street - South from C Street

E	W			
	2+65 $\frac{1}{2}$		5+21	North line E St
2+63 $\frac{1}{2}$		5+19		7+21 Ins
	2+41		4+95-	6+93 $\frac{1}{2}$
2+39		4+93		6+93 $\frac{1}{2}$
	2+14 $\frac{1}{2}$		4+71	6+71
2+12 $\frac{1}{2}$		4+69		6+69
	1+91		4+46	6+46
1+89		4+44		6+44
	1+65-		4+20 $\frac{1}{2}$	6+20 $\frac{1}{2}$
1+63		4+18 $\frac{1}{2}$		6+18 $\frac{1}{2}$
	1+40 $\frac{1}{2}$	3+59	6+3	West for D
1+38 $\frac{1}{2}$		3+57	6+3	East " "
	1+16	South line D St		5+99
1+14		3+41	9	5+94
	0+90		3+16	5+69 $\frac{1}{2}$
0+88		3+14		5+67 $\frac{1}{2}$
	0+66		2+90	5+45
6+64		2+88		5+43
	0+40	South line C Street		
6+38				

20th Street South from E.

14

E	W		
	10+26		
10+24			
	9+99½		
9+97½			
	9+75½		
9+73½			
	9+51		
9+49			
	9+26		
9+24			
	9+00		
8+98			
	8+76	11+02	End of fur
8+74		11+00	of 4½ for
	8+49½	10+76	Small East
8+47½		10+74	
	8+25-	10+51	
8+23		10+49	
	8+01		South line E
7+99			
7+89			Com by East for East

X

Flush Tank 20th and F

17th Street North Spring St. Mo. I. B.

W	E		
			5789
		5787	
	2785-		6765-
2783		5763	
	2769½		5740
2757½		5738	
	2735-		5714½
2733		5712½	
	2709		4790
2707		4788	
	1785-		4765-
1783		4763	
	1758		4739½
1756		4737½	
	1735-	3778	6m. E. East. for S street
1733			
	1710	South line Sp. St.	
1708		3760	9
	0784		3735-
0782		3733	
	0759		3709½
0757		3707½	

17th Street running

North from W

W	E		
	8+70		
8+68		11+20	End of pipe
	8+49 $\frac{1}{2}$		10+95-
8+41 $\frac{1}{2}$		10+93	
	8+19 $\frac{1}{2}$		10+68 $\frac{1}{2}$
8+17 $\frac{1}{2}$		10+66 $\frac{1}{2}$	
7+57	6+17	East foot St	
			10+44 $\frac{1}{2}$
South line St		10+42 $\frac{1}{2}$	
7+40	7+15		10+20
	7+15-	10+18	
7+13			9+94 $\frac{1}{2}$
	6+89	9+92 $\frac{1}{2}$	
6+87			9+70
	6+65-	9+68	
6+53			9+44
	6+38 $\frac{1}{2}$	9+42	
6+35 $\frac{1}{2}$			9+20
	6+15-	9+18	
6+13			8+94
		8+92	

South line of St

+

21th morning North from J

W	E			
			6+44	
	3+13	5+42		
3+11			6+18	9+11
	2+89	5+16		9+09
2+87			5+94	8+84
	2+64	5+92		8+84
2+62			5+68	8+94
	2+38	5+66		6m
2+36			5+44	
	2+14	5+42		
2+12			5+19	7+69
	1+89	5+17		7+67
1+87			4+94	7+44
	1+64	4+92		7+42
1+62		4+21		
	1+38			
1+36				
	1+14	3+94		7+17
1+12			3+68	6+94
	0+88	3+66		6+92
0+86			3+39	6+68
		3+37		6+66

South line J
8+66 J

6m by East for J street

6m by East for H

South line H
3+94 J

21st Street North from J

W	E				
	11+60				
11+58					
	11+35 ¹ / ₂				
11+33 ¹ / ₂					
	11+11				
11+09					
	10+85				
10+83					
	10+60 ¹ / ₂		+		
10+58 ¹ / ₂					
	10+34				
10+34					
	10+11				
10+09					
	9+86				
9+84					
	9+61				
9+59					
	9+36				
9+34					
	11+85	End of Pipe Along Tank South line of street			

17th Street South

from D Street

E	W		
	2+63		
2+61			
	2+89		
2+97			
	2+13		
2+11			
	1+89	X	
1+87			
	1+62		
1+60			
	1+99		
1+37			
	1+13		
1+11	-	3+67	End of pipe
	0+89	3+99	
0+87		3+37	
	0+64	3+13	
0+62		3+11	
		2+89	
	2+87		

North line E at Eldest Tank

Union Street South of Ash

E W

2
2
2

+

1+89 End of pipe flange Tank
 1+78
 1+74
 1+64
 1+52
 1+28
 1+24
 1+04
 1+02
 0+99½
 0+99½
 0+58
 0+51

19th Street North from H

W	E	W	E
	3+02		5+90E
3+00		5+88E	
	2+79		5+65- 8+43E
2+74		5+63	7+84E
	2+57E		5+40
2+49E		5+38	South line J
	2+27		5+16 7+67 Jms
2+25		5+14	
	2+01		4+90E 7+38
1+99		4+88E	
	1+77		4+66 7+13E
1+75		4+64	
	1+50E		6+89
1+48E		4+03E	6m by East for
	1+26E		
1+24E		Youth line J	
	1+02	3+86	Jms 6+63
1+00			3+52
	0+76E	3+50	
0+74E			3+26
		3+24	
			6+12E

East for H Street

19th North from H

W	E		
			13+94
10+92 ^{1/2}	10+94 ^{1/2}	13+94	13+50
	10+70	13+48	15+25
10+68			13+23 ^{1/2}
	10+45 ^{1/2}	13+23 ^{1/2}	14+98
10+43 ^{1/2}			13+01
	10+21	12+99	14+74
10+19			12+75
	9+94	12+73 ^{1/2}	14+49
9+94			12+51
	9+70 ^{1/2}	12+49	14+23
9+68 ^{1/2}			12+25
	9+45 ^{1/2}	12+23	13+99
9+43 ^{1/2}			
	9+19 ^{1/2}	11+64	5m of East
9+17 ^{1/2}			for East
	8+93 ^{1/2}	South line E	
8+93 ^{1/2}		11+46	
	8+69 ^{1/2}		11+20 ^{1/2}
8+67 ^{1/2}		11+18 ^{1/2}	

South line Det
 End of pipe flush tank

15+00
 14+74
 14+51
 14+25
 14+03

Columbia Street south of H

E

E

W

+

1+30 End of trip

1+24

1+22

1+00

0+98

0+75.2

0+73.2

0+50

0+48

L Street running West from 15th to 14

South	W		
	2+91 $\frac{1}{2}$		
2+89 $\frac{1}{2}$			
	2+64		
2+64			
	2+4 $\frac{1}{2}$		
2+39 $\frac{1}{2}$			
	2+17	+	
2+15			
	1+92	ii	ii
1+90		min. bridge	165
	1+64		
1+64	4+34	End of Pipe Thrush Tank	
	1+41 $\frac{1}{2}$	4+17	
1+39 $\frac{1}{2}$	4+15		
	1+17	3+91	
1+15	3+89		
	0+91	3+66 $\frac{1}{2}$	
0+89	3+64 $\frac{1}{2}$		
	0+67	3+42	
0+65	3+40		
	0+40	3+14	
0+38	3+14		

21st Street South from J

E	W		
	2+84		
2+82			
	2+60		
2+58			
	2+35-	X	
2+33			
	2+09+		
2+07+			
	1+85-		
1+83			
	1+59		
1+57			
	1+35-		
1+33			
	1+09		
1+07		3+60	End of trip Filish Tank North line J
	0+84+		3+35-
0+82+		3+33	
	0+60+		3+10
0+58+		3+08	

26

Street running East from 22nd to 24th

N S

2+663

2+642

2+442

2+40

2+14

1+912

1+892

1+67

1+65

1+41

1+39

1+162

1+142

0+92

0+90

0+64

0+41

0+39

+

4+44

4+17

4+15

3+92

3+90

3+64

3+42

3+40

3+17

3+15

2+91

2+89

End of pipe

Flux Tank

Street running West from 15th to 14

South	North		
	2+71		
2+09			
	2+46		
2+44		+	
	2+20		
2+18			
	1+96		
1+94	4+43	End of Pipe	Flush Tank East line 14 th St
	1+71	4+21	
1+69	4+19		
	1+45	3+93 $\frac{1}{2}$	
1+43	3+99 $\frac{1}{2}$		
	1+21	3+71	
1+19	3+69		
	0+96	3+44 $\frac{1}{2}$	
0+94	3+42 $\frac{1}{2}$		
	0+69 $\frac{1}{2}$	3+20	
0+67 $\frac{1}{2}$	3+18		West line of Bridge
	0+46	3+05	
0+44	3+03		

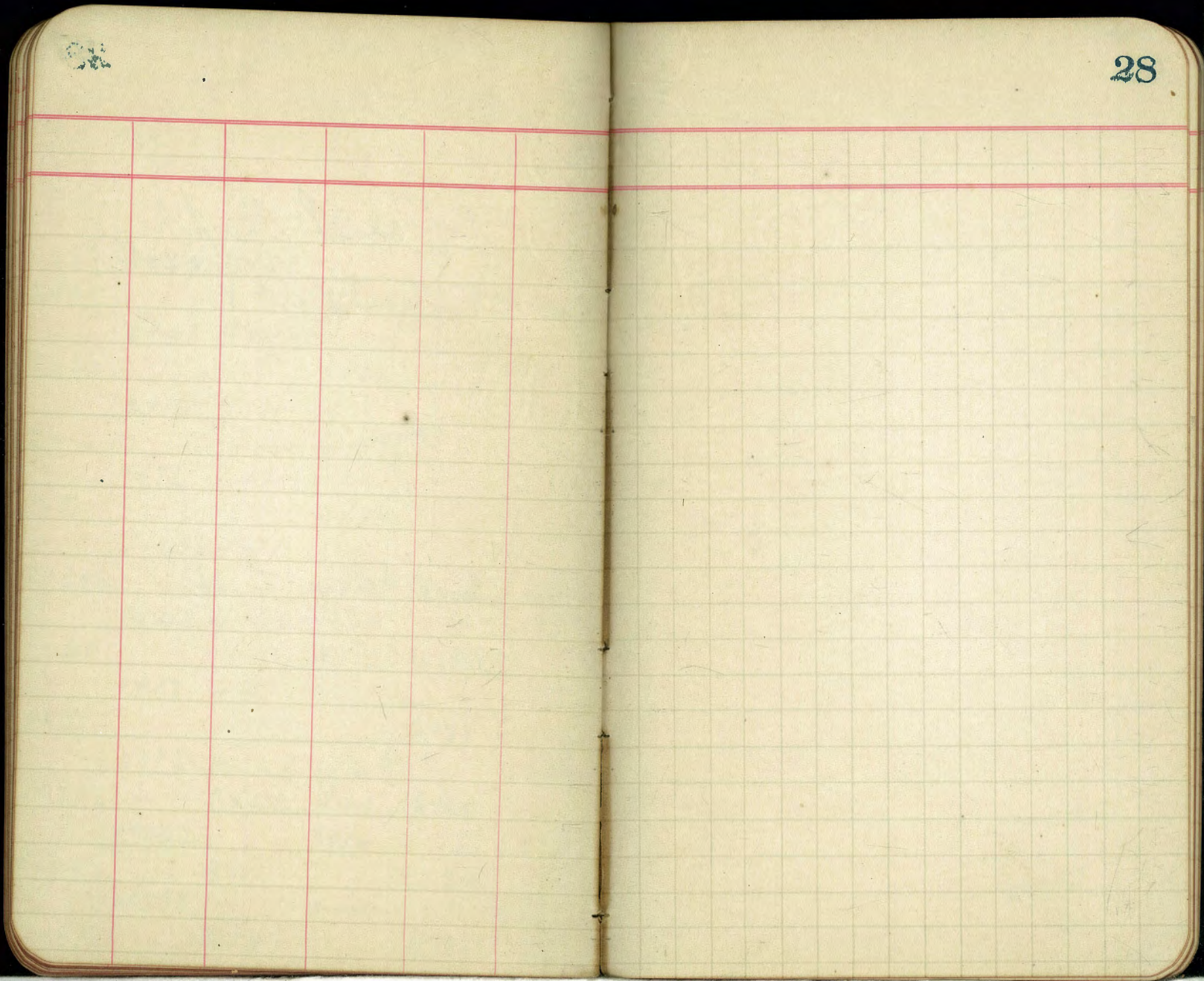
13th Street North from N to S

W	E			
			5+72	
2+65	2+67	5+70	5+48	
	2+43	5+44		
2+41			5+22	
	2+16	5+20		
2+14			4+97 1/2	
	1+92	4+95 1/2		
1+90			4+78	
	1+67 1/2	4+71		
1+65 1/2			4+47	7+23
	1+48	4+45		6+97 1/2
1+41			4+22 1/2	6+95 1/2
	1+17	4+20 1/2		6+93
1+15			6+91	
	0+92 1/2	South line N th		6+47
0+90 1/2		3+43	6+45	
	0+66 1/2	3+18		6+22
0+64 1/2		3+16	6+20	
	0+39 1/2	2+91		5+97 1/2 -
0+37 1/2		2+89	5+95 1/2	

Finish the pipe
June 28th / 88
on 13th Street East Y

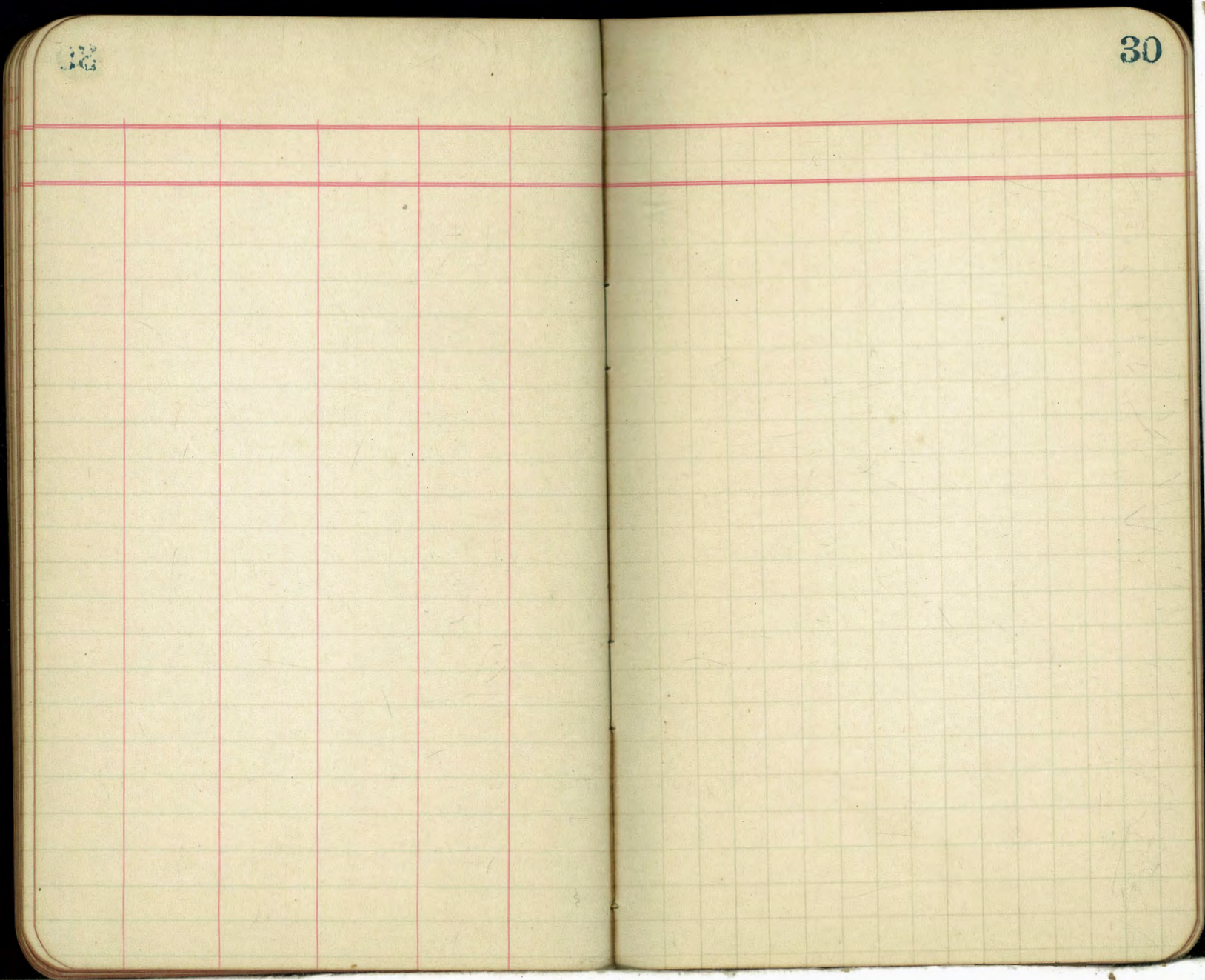
*

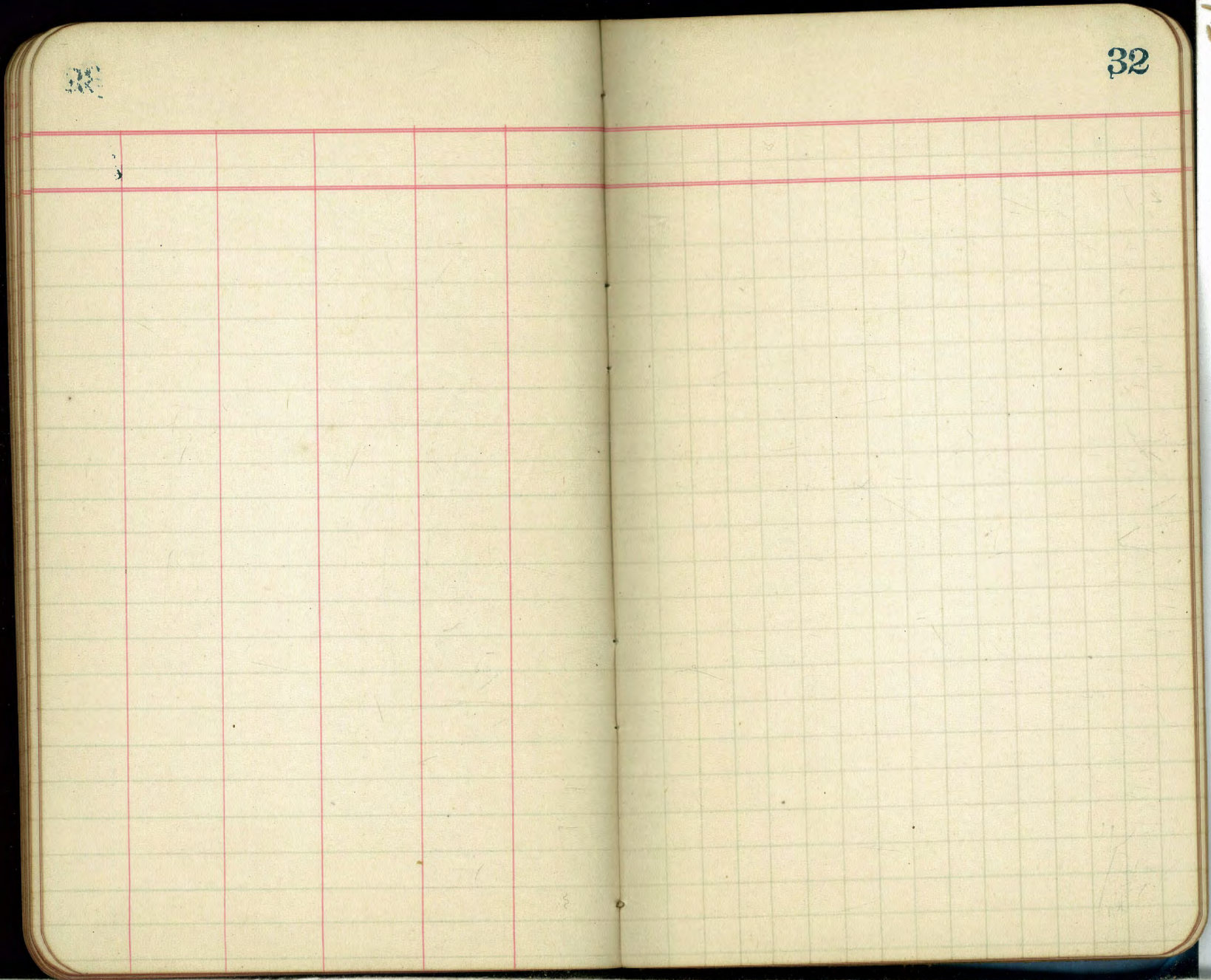
Pipe South line L Street for
Flush Tank



28

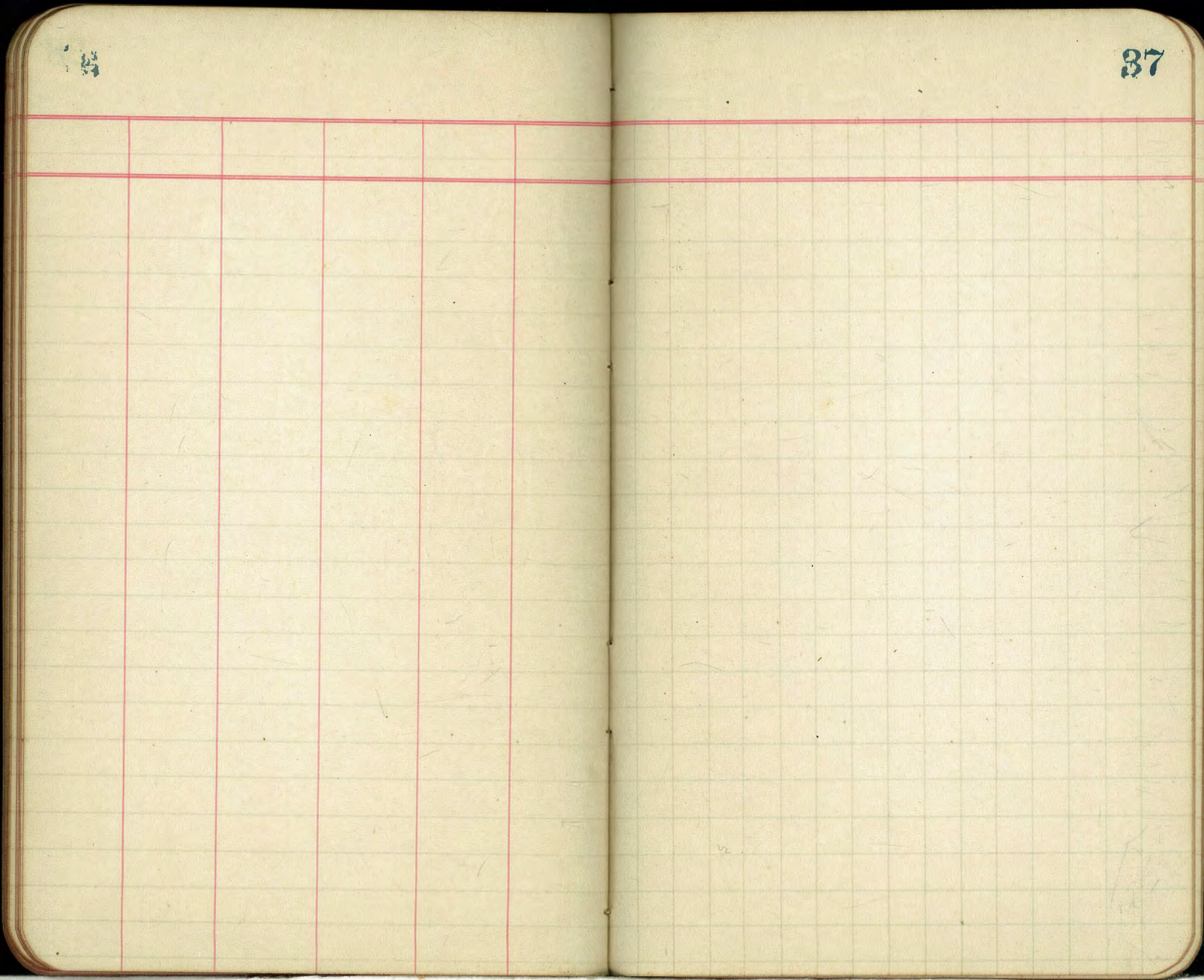
30





32

32



14

37

37

38

The notebook is open to two pages. The left page, numbered 37, features a table with 6 columns and 18 rows. The right page, numbered 38, features a grid with 18 columns and 18 rows. Both pages are otherwise blank.

UP

3rd/₄ North of Hawthorn Street

off	£
	3130
3+28	2+80
2+78	2+30
2+28	1+80
1+78	1+30
1+28	0+80
0+78	

From Hawthorn this 0+20 6 in of

Lords for 3rd/₄

3rd Street North of

Hawthorn

W

E

	6+99		
6+91			
	6+07		
6+05		+	
	5+80		
5+78			
	5+56 $\frac{1}{2}$		
5+54 $\frac{1}{2}$		7+5 $\frac{1}{2}$	End of pipe
	5+32		7+32 $\frac{1}{2}$
5+30		7+30 $\frac{1}{2}$	
	5+06		7+06 $\frac{1}{2}$
5+04		7+04 $\frac{1}{2}$	
	4+82		6+82
4+80		6+80	
	4+57		6+56
4+55		6+54	
	3+7 $\frac{1}{2}$	4 $\frac{1}{2}$ m of	Ordered by
	3+55		Hamilton
3+53			

flush Fork

Hamilton

3rd Youth from Hawthorn Street

E	W		
	2+87		
2+85			
	2+62		
2+60			
	2+87½		
2+35½			
	2+11	x	
2+09			
	1+86		
1+84			
	1+62		
1+60			
	1+36		
1+34			
	1+11		
1+09		3+61	End of pipe first tank
	0+88	3+86½	
0+86		3+84½	
	0+63	3+12	
0+61		3+10	

2nd/₄ Street North from Hawthorn

W E

3+70 $\frac{1}{2}$ 6 in 3 East for Jay

South line Jay

3+51 $\frac{1}{2}$

3+24 $\frac{1}{2}$

3+22 $\frac{1}{2}$

7+32 $\frac{1}{2}$

End of pipe South line Jimmie flush tank
6 in by East for Jimmie
6 in by West for Jimmie

2+74 $\frac{1}{2}$

7+27 $\frac{1}{2}$

2+72 $\frac{1}{2}$

7+25 $\frac{1}{2}$

2+22 $\frac{1}{2}$

6+80 $\frac{1}{2}$

2+22 $\frac{1}{2}$

6+78 $\frac{1}{2}$

1+75 $\frac{1}{2}$

6+31 $\frac{1}{2}$

1+73 $\frac{1}{2}$

6+29 $\frac{1}{2}$

1+25 $\frac{1}{2}$

5+80 $\frac{1}{2}$

1+23 $\frac{1}{2}$

5+78 $\frac{1}{2}$

1+00

5+30 $\frac{1}{2}$

0+98

5+28 $\frac{1}{2}$

0+75

4+81 $\frac{1}{2}$

0+73

4+79 $\frac{1}{2}$

0+49

4+29 $\frac{1}{2}$

0+47

4+27 $\frac{1}{2}$

Hawthorne street East from First street

S

N

4+98 P C 27 ft West of Third

3+48

3+46

2+38 6 in N of North for 2nd street

2+36 6 in S of South for 2nd street

2+14

2+14

2

1+91

1+89

1+66

1+64

1+41

1+39

1+14

1+14

0+92

0+90

0+67

0+65

0+40

0+38

California Street running North from H

W	E	
	27+87½	+
27+85½		
	27+81	
27+59	80+10½	End of Ave
	27+37	29+87½
27+35		29+85½
	27+11	29+62½
27+09		29+60½
26+50	6 in of East for A	29+36
South line A	29+34	
26+32	Ins	29+11½
	26+06	29+09½
26+04		28+87½
	25+82	28+85½
25+80		28+62
	25+56	28+60
25+54		28+39½
	25+32	28+35½
25+30		28+11½
		28+09½

South line Ash

California Street North from H

	19+51 $\frac{1}{2}$	22+02	25+07 $\frac{1}{2}$
19+49 $\frac{1}{2}$	22+00	25+05 $\frac{1}{2}$	
18+90	6 mi y East from C st	24+81 $\frac{1}{2}$	
		21+78 24+79 $\frac{1}{2}$	
South line C st	21+75	24+57	
18+72	7 mi	21+52 24+55	
	18+55	21+50	24+31 $\frac{1}{2}$
18+53		21+25 24+29 $\frac{1}{2}$	
	18+29	21+24	24+07
18+27		21+02 24+05	
	18+05	21+00	23+80
18+03		20+76 23+78	
	17+81	20+74	23+57
17+79		20+52 23+55	
	17+54 $\frac{1}{2}$	20+50	23+31
17+52 $\frac{1}{2}$		20+28 23+29	
	17+30 $\frac{1}{2}$	20+25	22+70 6 mi by East from B West
17+28 $\frac{1}{2}$		20+02 South line B	
	17+04 $\frac{1}{2}$	20+00	22+52 8
17+02 $\frac{1}{2}$		19+75	22+24 $\frac{1}{2}$
	19+73		22+24 $\frac{1}{2}$

California Street running North from H Street

W	E			
			13+78 $\frac{1}{2}$	
10+77	10+79	13+76 $\frac{1}{2}$		16+80
	11+55-		13+55	16+78
10+53		13+53		16+54 $\frac{1}{2}$
	10+30		13+30	16+52 $\frac{1}{2}$
10+28		13+28		16+30
	10+05-		13+04 $\frac{1}{2}$	16+28
10+08		13+02 $\frac{1}{2}$		16+04
	9+78		12+80	16+02
9+76		12+78		14+98 $\frac{1}{2}$ $\frac{1}{2}$ m for D Street East
	9+55-		12+55-	South line D
9+53		12+53		14+80 8
	9+29		12+29	14+55-
9+27		12+27		14+53
	9+05		12+04 $\frac{1}{2}$	14+29
9+03		12+02 $\frac{1}{2}$		14+27
	8+79		11+80 $\frac{1}{2}$	14+05-
8+77		11+78 $\frac{1}{2}$		14+03
	8+54 $\frac{1}{2}$	11+22		6 in of East for E Street
8+52 $\frac{1}{2}$				
	8+30 $\frac{1}{2}$	South line E		
8+28 $\frac{1}{2}$		11+05		J

California Sheet numbering

North from #

					8+05-
	2+81	5+54	8+03		
2+79	6+52				
	2+55 $\frac{1}{2}$	5+80	7+48	6 mi by	East from #
2+54 $\frac{1}{2}$	5+28				
	2+91 $\frac{1}{2}$	5+05	South line	File	
2+28 $\frac{1}{2}$	5+03		7+30	Ins	
	2+06	4+80		7+04 $\frac{1}{2}$	
2+04	4+78		7+02 $\frac{1}{2}$		
	1+82 $\frac{1}{2}$	4+54 $\frac{1}{2}$		6+80	
1+79 $\frac{1}{2}$	4+52 $\frac{1}{2}$		6+78		
	1+55 $\frac{1}{2}$	4+29		6+54 $\frac{1}{2}$	
1+53 $\frac{1}{2}$	4+27		6+52 $\frac{1}{2}$		
	1+31	3+72	6 mi by East from	Sheet	
1+29				6+30	
	1+06	South line	Sheet	6+26	
1+04	3+55	Ins		6+04	
	0+80 $\frac{1}{2}$	3+81	6+02		
0+78 $\frac{1}{2}$	3+29			5+80	
	0+55	3+05	5+78		
0+53	3+03				

Ash running East from Atlantic
N S

2+7

2+5

2+2

2+04 / +20

1+79 / +44

1+53

1+29

1+04

0+78

0+5

1+22 on Plan

0+47

San Diego June 25th 1888
Mr. Donald
Commenced to take
up pipe on Ash street 222 ft -
up 10 in pipe taken up and
laid again after preparing
Dick for pipe

11+01

M. G. Wheeler sewer

7 1/2 fall of sewer

11+65

214
181
90

499
948
148

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	1.81	84
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	83
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	82
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	81
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	80
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	79
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	78
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	77
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	76
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	75
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	74
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	73
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	72
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	71
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	70
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	69
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	68
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	67
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	66
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	65
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	64
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	63
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	62
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	61
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	60
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	59
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	58
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	57
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	56
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	55
30	86.60	50.00	86.38	50.88	86.16	50.75	85.94	51.13	54
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	53
32	84.80	52.99	84.57	53.36	84.84	53.73	84.10	54.10	52
33	83.87	54.46	83.63	54.83	83.89	55.19	83.15	55.56	51
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	50
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	49
36	80.90	58.78	80.64	59.13	80.89	59.48	80.13	59.83	48
37	79.86	60.18	79.60	60.53	79.84	60.88	79.07	61.22	47
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	46
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	45
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	44
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	43
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	42
43	73.14	68.20	72.84	68.52	72.84	68.84	72.24	69.15	41
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	40
45	70.71	70.71							39
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		

Published by Edward Denny & Co., Stationers, Drawing Materials,
Mathematical Instruments, Etc., San Francisco.