

Front Street  
S.F. Goldthwait.

9

TRANSIT

and Union!!

F.B. 729



729

showing the difference of latitude and  
parture 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

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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	22-67

*J B Post*  
*Slender Area*  
*Cal*



Front

9W	E	9W	6+50	
	3+25	6+48		
3+23			6+23	
	2+99	6+21		
2+97			6+00	
	2+74	5+98		
2+72			5+74	
	2+50	5+72		
2+48			5+49	
	2+24	5+47		
2+22			5+25	
		5+23		
1+99	1+99		4+99	North line of H street
1+97		4+97		
	1+75			
1+73				
	1+50	<span style="border: 1px solid black; padding: 2px;">Inst 4+00</span>		South side of H street
1+48				
	1+24		3+73	
1+22		3+71		
			3+49	
	1+02	3+47		
1+00				



Front 18

2

W	E	W	E
	9+55		12+50½ North line of F Street
9+58		12+58½	
	9+30		
9+28		11+80	South line of E Street
	9+05		
9+83			11+54½
	8+80½	11+52½	
8+78½			11+30
		11+28	
		8+00	11+05
		11+03	
	9+74		10+80
9+72		10+78	
	9+49½		10+53½
9+49½		10+53½	
	9+24		10+28½
9+22		10+28½	
	9+99½		10+05
9+99½		10+03	
	9+75		9+80
9+73		9+78	



Jim  
15x59 1/2

B. front St

West	East	91	92
	15x95		18x90
15x93		18x88	
	15x10		18x64 1/2
15x08		18x92 1/2	
	14x85		18x39
14x83		18x87	
	14x60		18x15
14x58		18x13	
	14x95		17x90
14x33		17x88	
	14x10		17x65
14x08		17x63	
	13x85		17x40
13x83		17x38	
	13x60		17x15
13x58		17x13	
	13x95		16x90
13x93		16x88	
	13x10		16x65
13x08		16x63	
	12x85 1/2		16x40 North line of E street
12x83 1/2		16x38	



of  
Sum

15-591

4

W	E	
	22+00	
21+98		
	21+75	
21+73		
	21+50	
21+48		
	21+25	
21+23		
2	21+00	
20+98		
	20+75	
20+73		
	20+50	North line of D in et
20+48		
	19+20	South line of " "
	19+19 1/2	E + tray
19+19 1/2		

line is 25' between plus or by silver way

1720  
37  
83

1720  
1862.5  
58.5



Front of

	25+01½	28+05-
24+99½	28+03	
24+75	27+80	North line of B street
24+74	27+78	
24+49½	24+49½	
24+49½	27+00	8m 17
24+24½		
24+22½	26+75-	
N.Y.C. mt → 24+00	26+73	
23+98	25+50½	
23+20	26+48½	
	25+23-	
	25+23	
22+98½	28+00½	26+00
	25+98	
22+74½	25+75-	
22+72½	25+70	
22+49½		
22+47½	25+49	
	25+47	
22+25-	25+25-	
22+23	25+23	



eas		Front	
30x79			South line of A street
	30x54		85x40 North line of Ash street
30x52		35x30	
	30x30		
30x28		34x50	South line of Ash street
	30x05		
30x09			
	29x80		34x34
29x78		34x32	
	29x54		34x11
29x52		34x09	
	29x30		32x50
29x28		32x38	
	29x04		32x09
29x02		33x07	
	28x99½		32x60
28x97½		32x58	
	28x53½		32x10
28x51½		32x08	
	28x29½		31x60 North line of A street
28x27½		31x58	



Sum

40x70

40x68

45x50

40x20 45x48

40x18

45x00

39x99 44x98

39x67 1/2

44x50

N line Beech

39x19 44x48

39x17

43x99

Beech  
38x40  
not finished

43x99

43x50

43x48

43x50 North - line of Cedar

37x90 42x98

37x88

37x40

42x20

South line of Cedar

37x38

35x90 1/2

36x88 1/2

41x90

35x99 41x68

35x99

41x20

35x90 41x18

35x88



Front

49+80

54+64

end of Pipe on Front North side  
240' North of North line of

49+53

49+55

54+40

54+38

49+28

49+30

plus 5'

48+80

53+60

South line Front

48+78

53+35

48+90

53+33

48+28

53+09

47+79

53+07

47+77

52+59

47+90

52+57

47+28

52+09

46+79

52+07

46+77

51+60

51+58

46+00

51+08

67+10

45+95

51+60

45+75

50+58

Front

Front

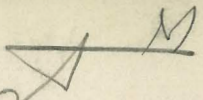
the y are taken down



From 9/11

9



From  M



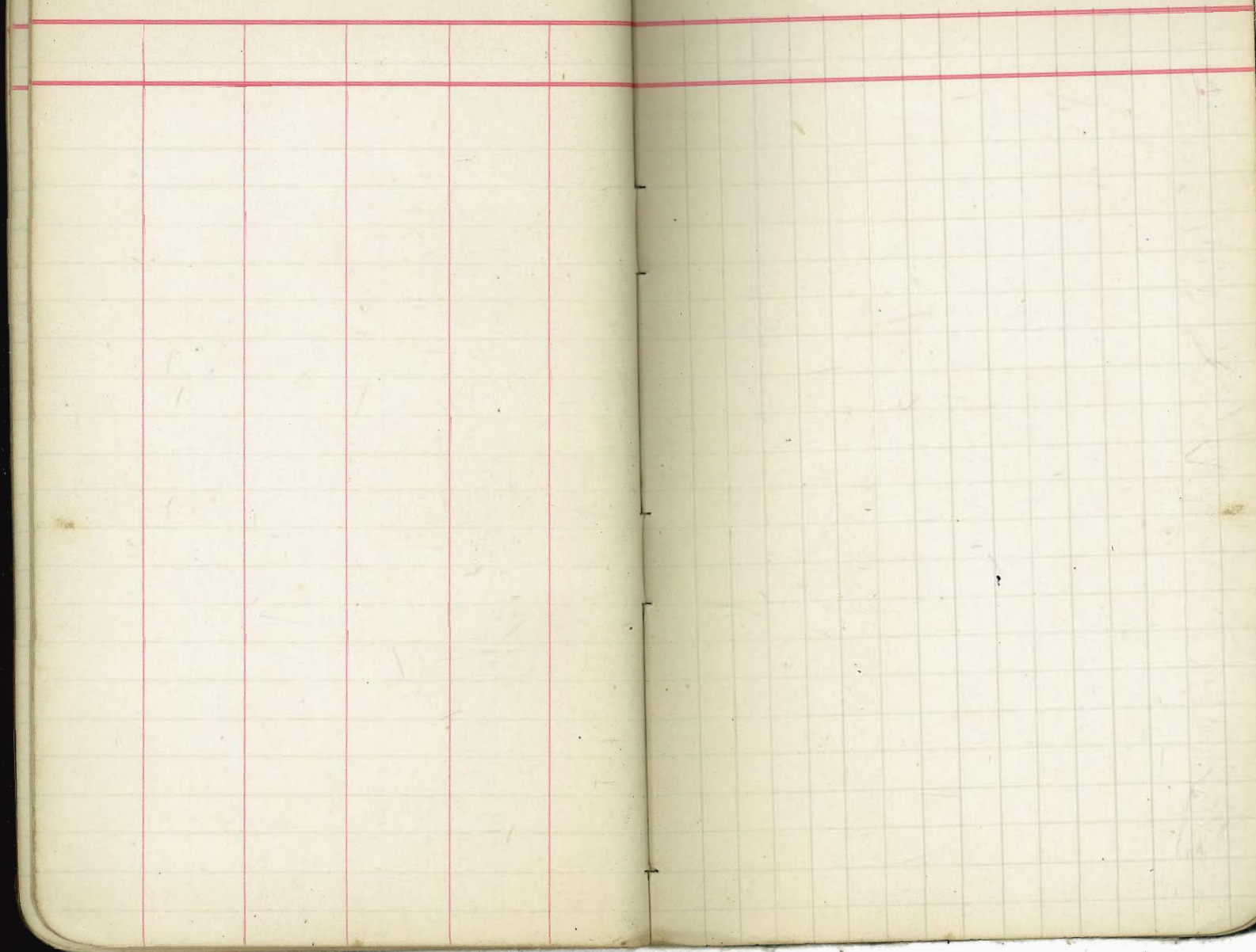
*From A*

11













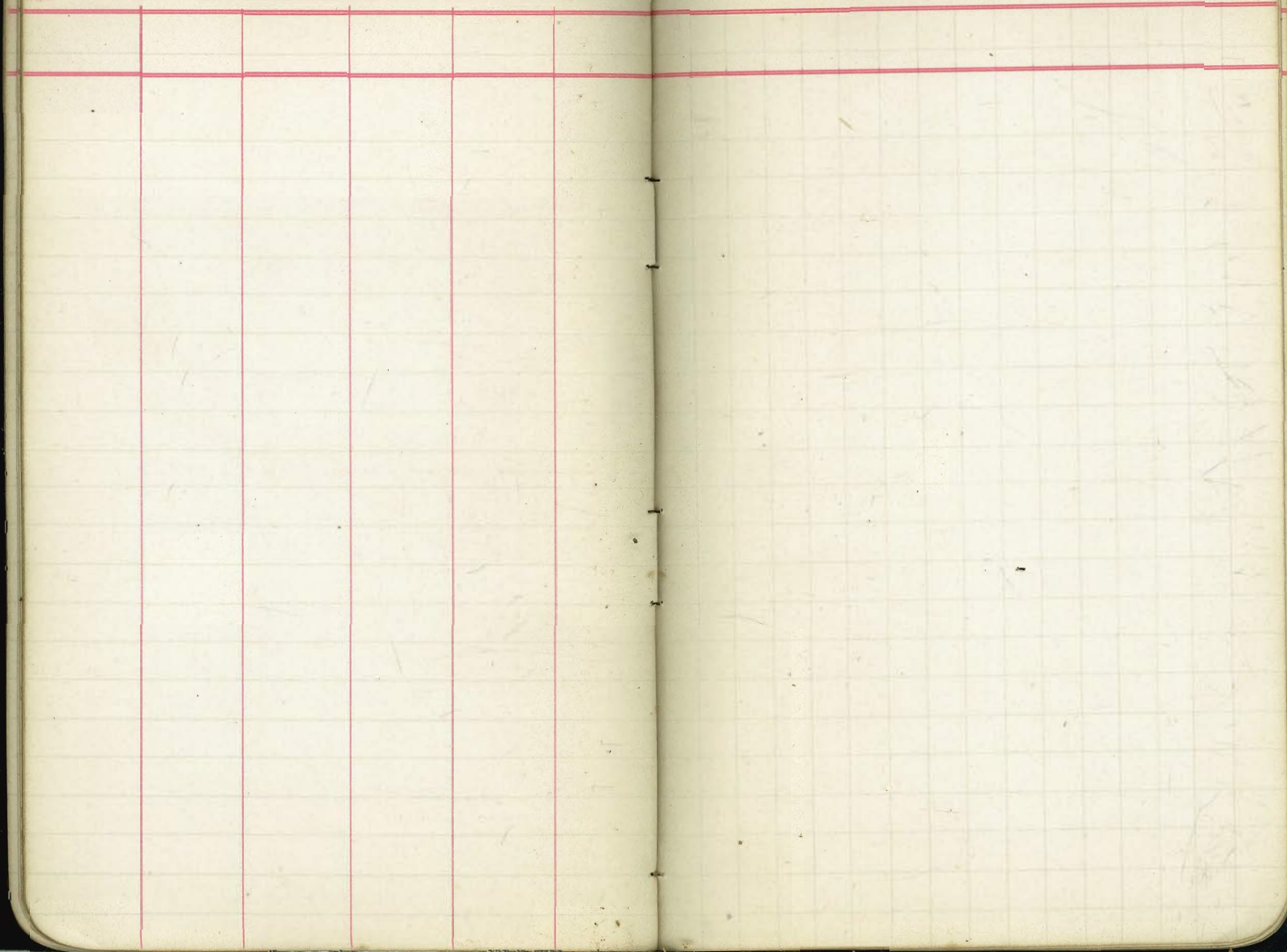
The image shows an open notebook with two pages. The left page is ruled with horizontal lines and features a grid of vertical lines, with two vertical lines highlighted in red. The right page is ruled with horizontal lines and has a grid pattern. The number '15' is printed in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.



The image shows an open notebook with two pages. The left page is ruled with a grid of 10 columns and 20 rows. The right page is ruled with a grid of 10 columns and 20 rows. The number '16' is printed in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.



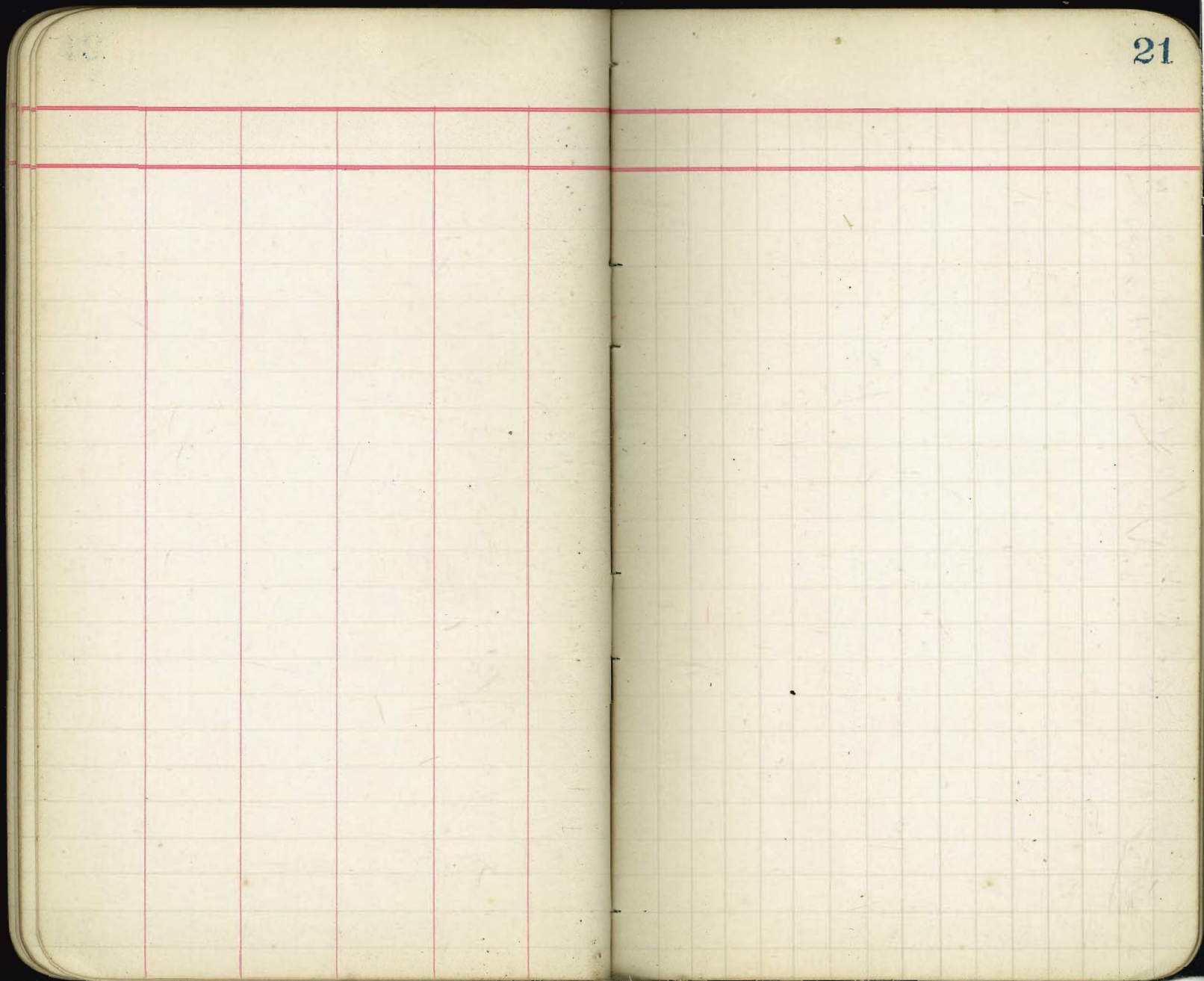








The image shows an open notebook with two pages. The left page is ruled with a table structure consisting of 6 columns and 15 rows, defined by red vertical lines and blue horizontal lines. The right page is ruled with a grid structure consisting of 15 columns and 15 rows, defined by red vertical lines and blue horizontal lines. The pages are cream-colored and show signs of wear, including small stains and a small red mark at the bottom center. The notebook is placed on a white surface, and the background is dark.

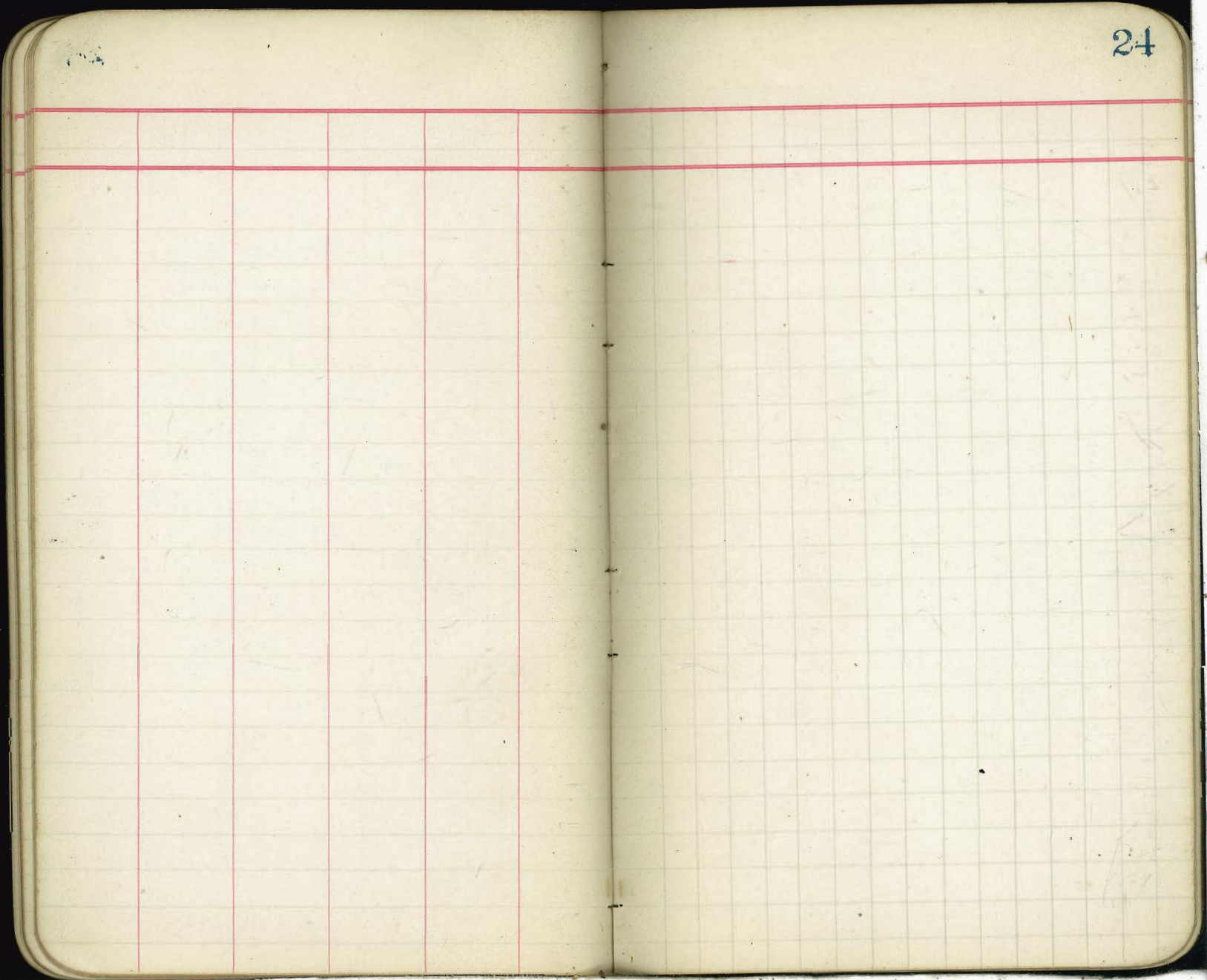






The image shows an open notebook with two pages. The left page is ruled with a table structure. It has a top horizontal red line, a second horizontal red line below it, and six vertical red lines that divide the page into seven columns. The right page is ruled with a grid. It has a top horizontal red line and a second horizontal red line below it, with 18 vertical blue lines creating 18 columns. The pages are cream-colored and show signs of use, including some smudges and a small red mark at the bottom center of the notebook.

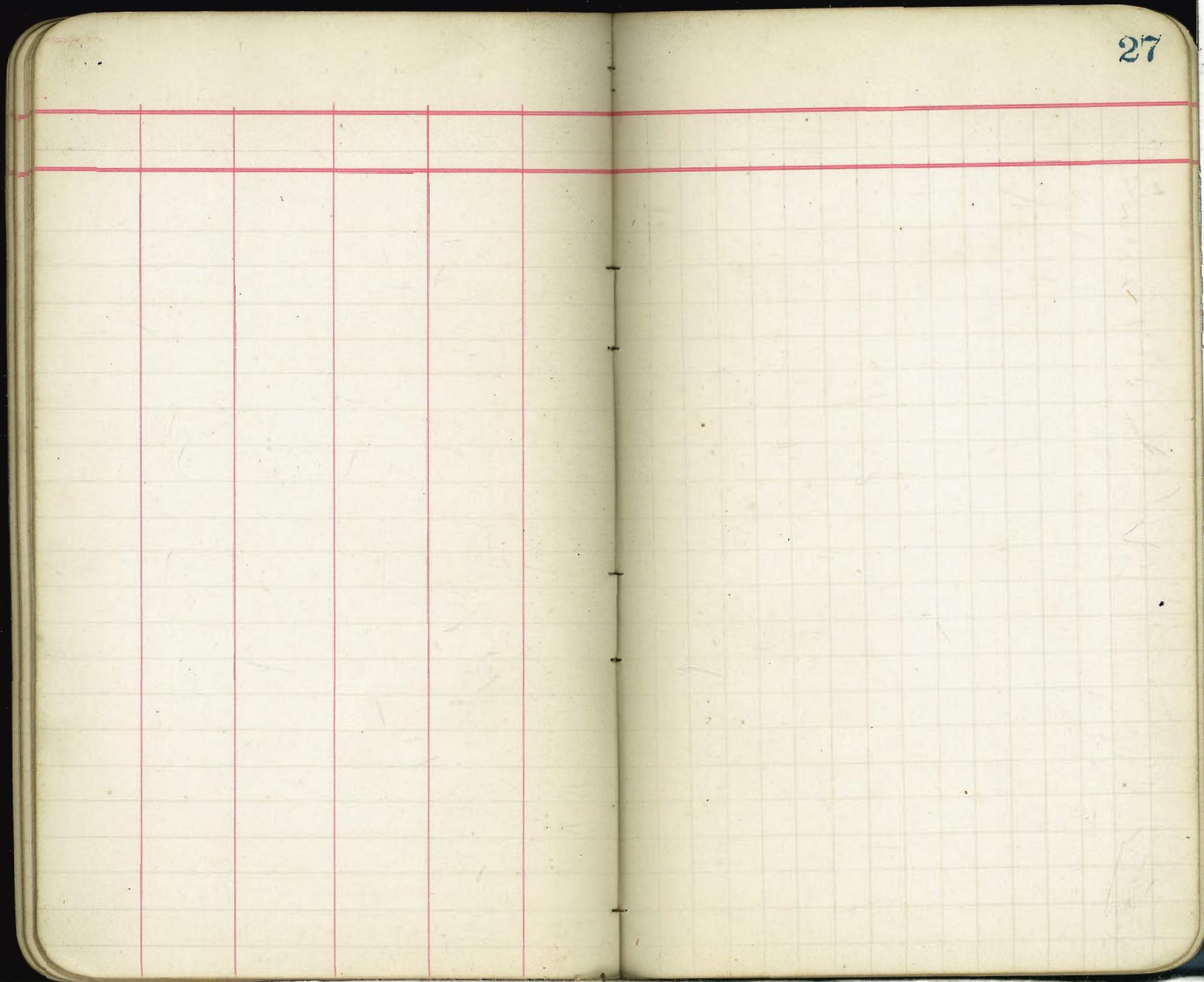








The image shows an open notebook with two pages. The left page is a ledger page with a grid of red lines. It has two horizontal lines near the top, creating a header section. Below these, there are six vertical red lines that divide the page into seven columns of varying widths. The right page is a standard grid page with a uniform grid of red lines. The pages are cream-colored and show signs of use, including some faint smudges and a small red mark at the bottom center of the notebook's binding area.



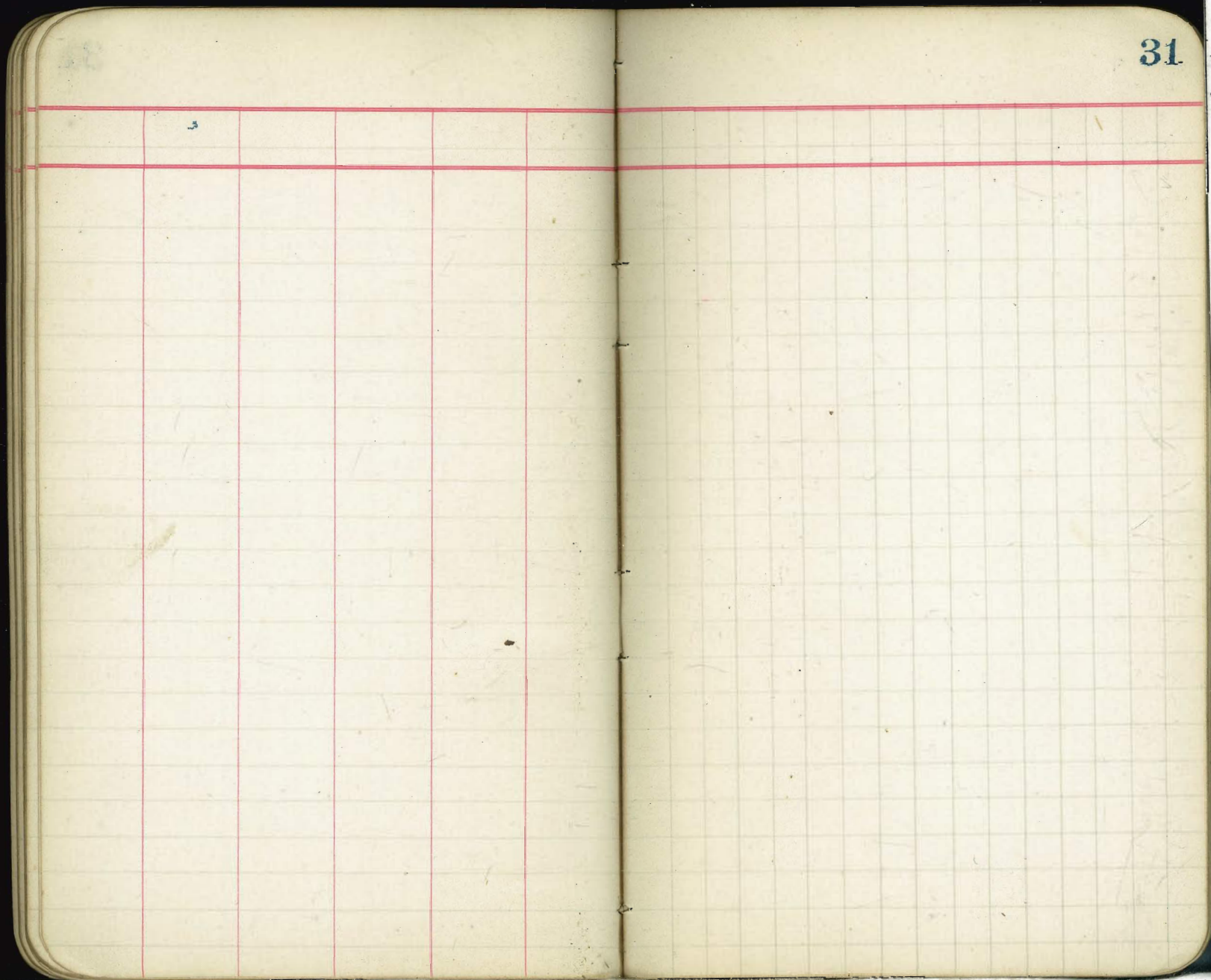




The image shows an open notebook with two pages. The left page is a ledger page with a grid of 10 columns and 20 rows. The first two columns are wider than the others. The right page is a standard grid page with 20 columns and 20 rows. The pages are cream-colored and show signs of use, including some faint smudges and a small red mark at the bottom center of the notebook.

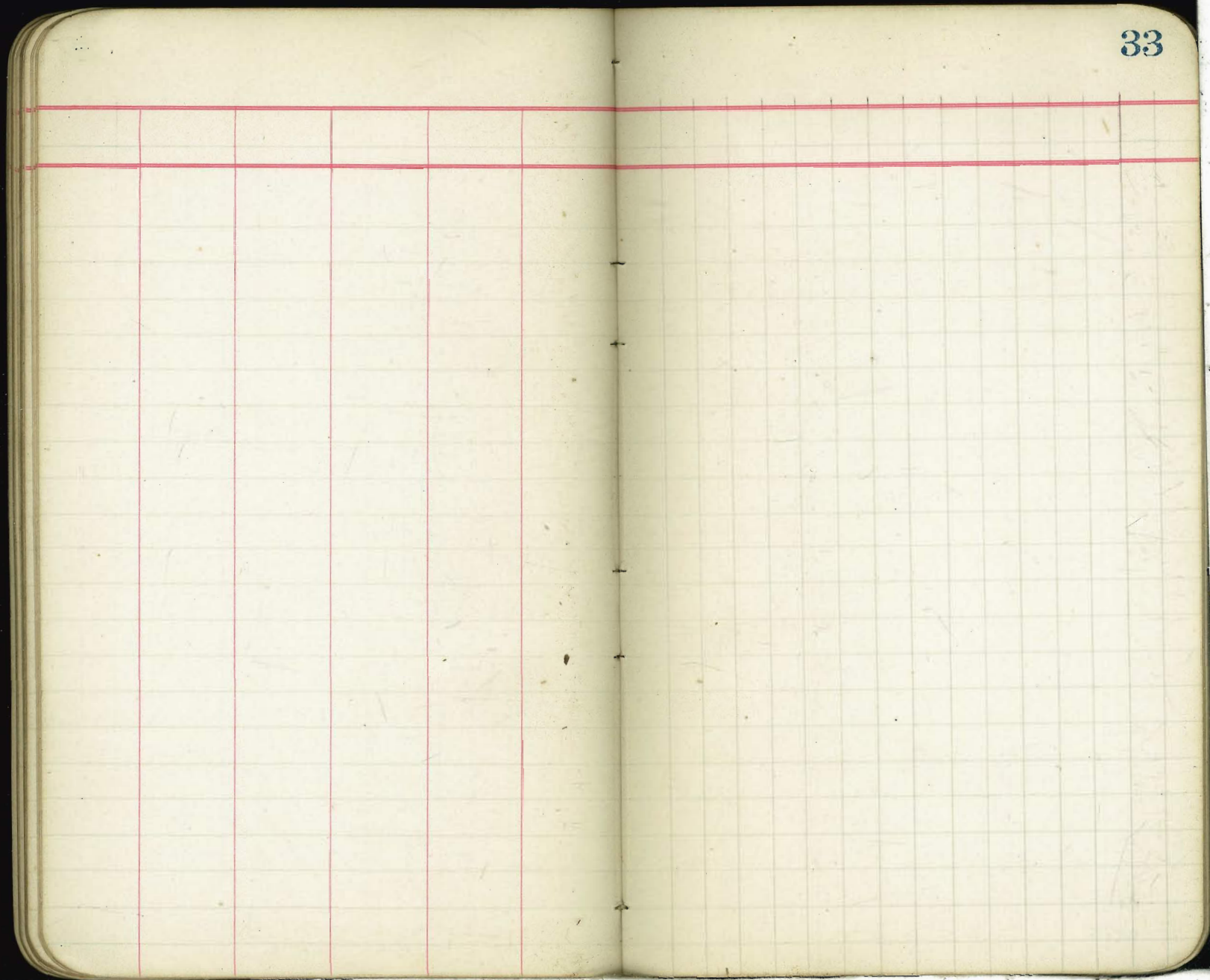


The image shows an open notebook with two pages. The left page is a ledger page with a grid of red lines. It features a header row at the top, followed by two rows of columns. The first column is the widest, followed by four narrower columns of equal width. Below these are several rows of horizontal lines. The right page is a grid page with a uniform grid of light blue lines. The number '30' is printed in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.

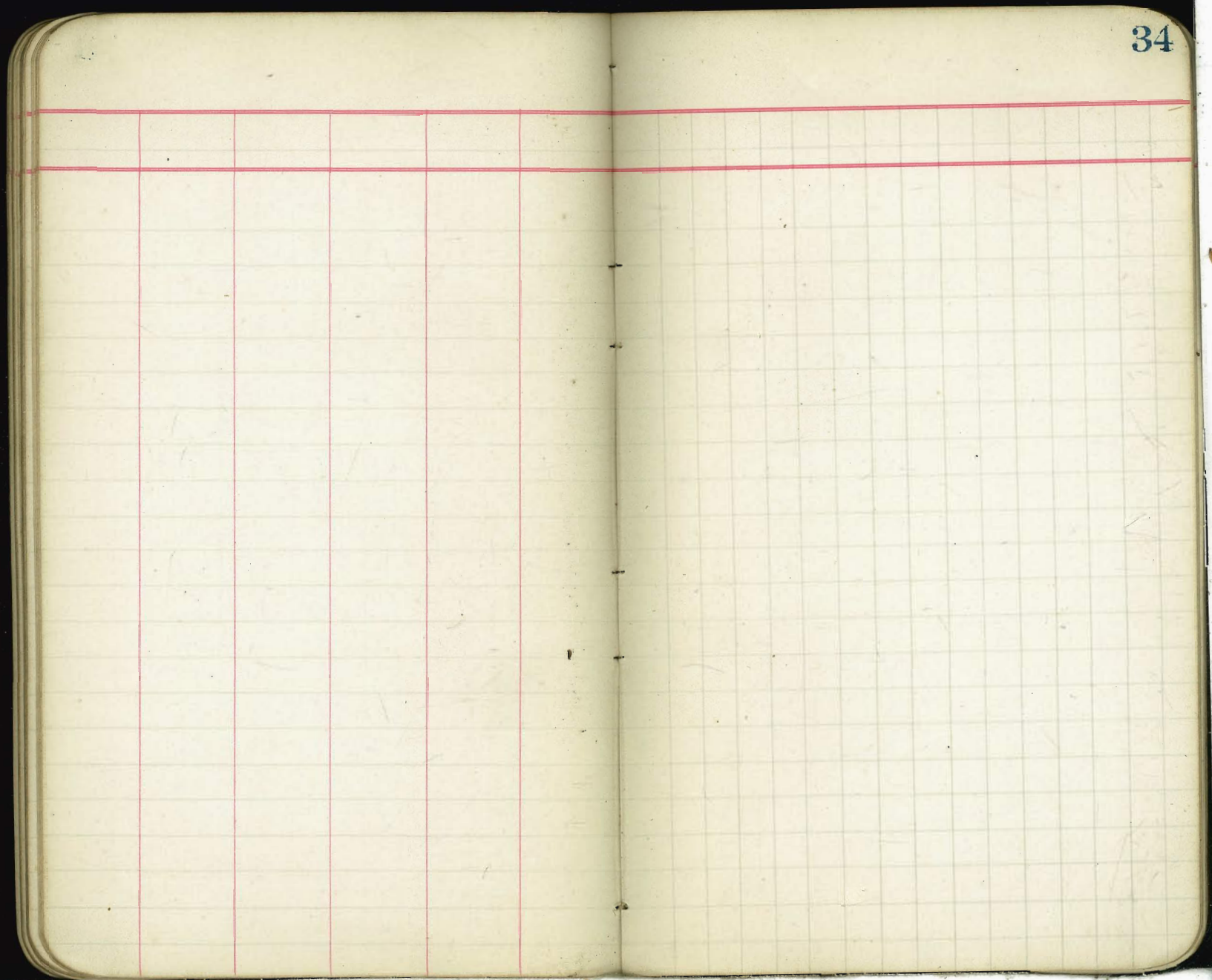


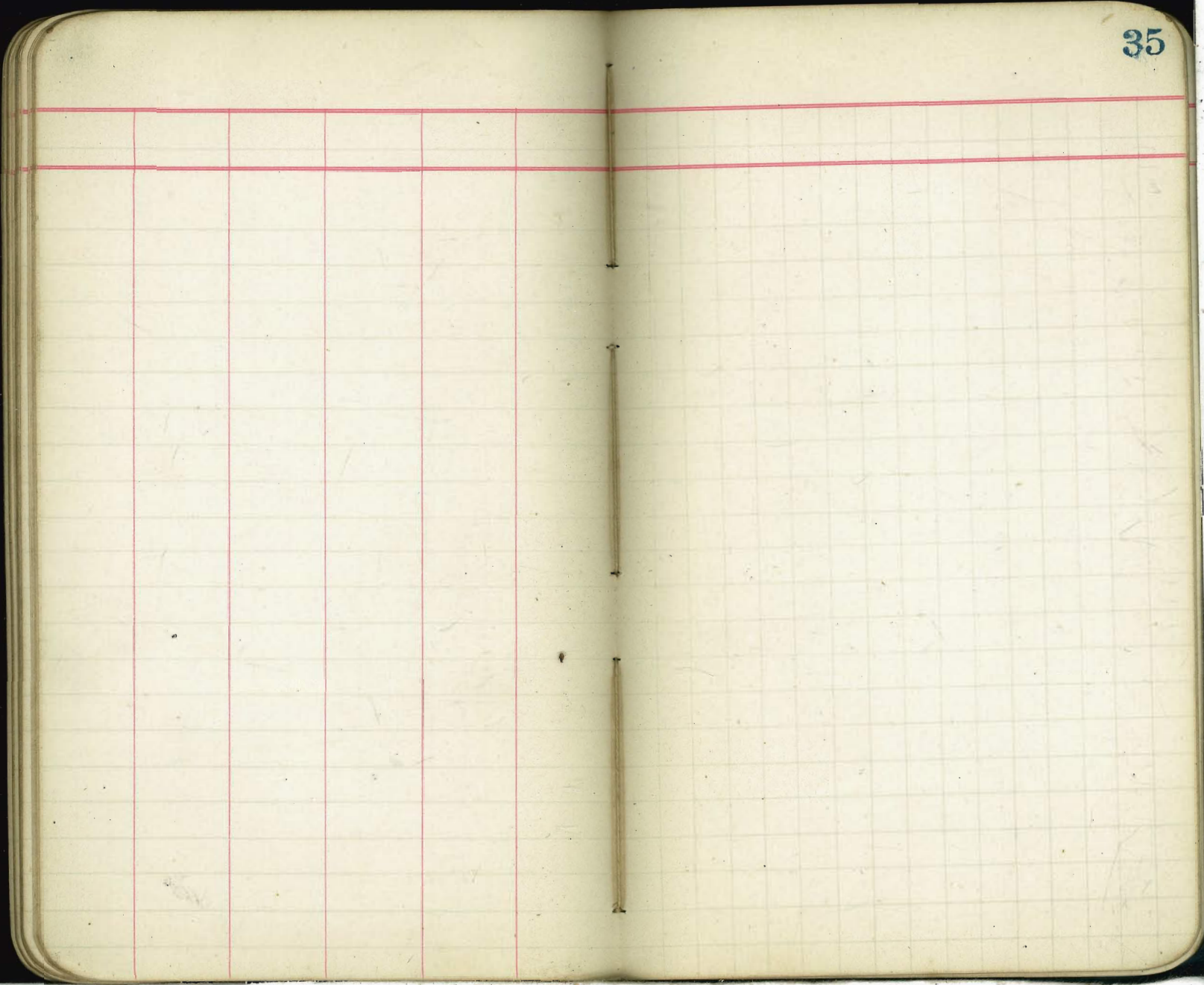


The image shows an open notebook with two pages. The left page is ruled with a grid of 6 columns and 18 rows. The right page is ruled with a grid of 18 columns and 18 rows. The number 32 is printed in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.







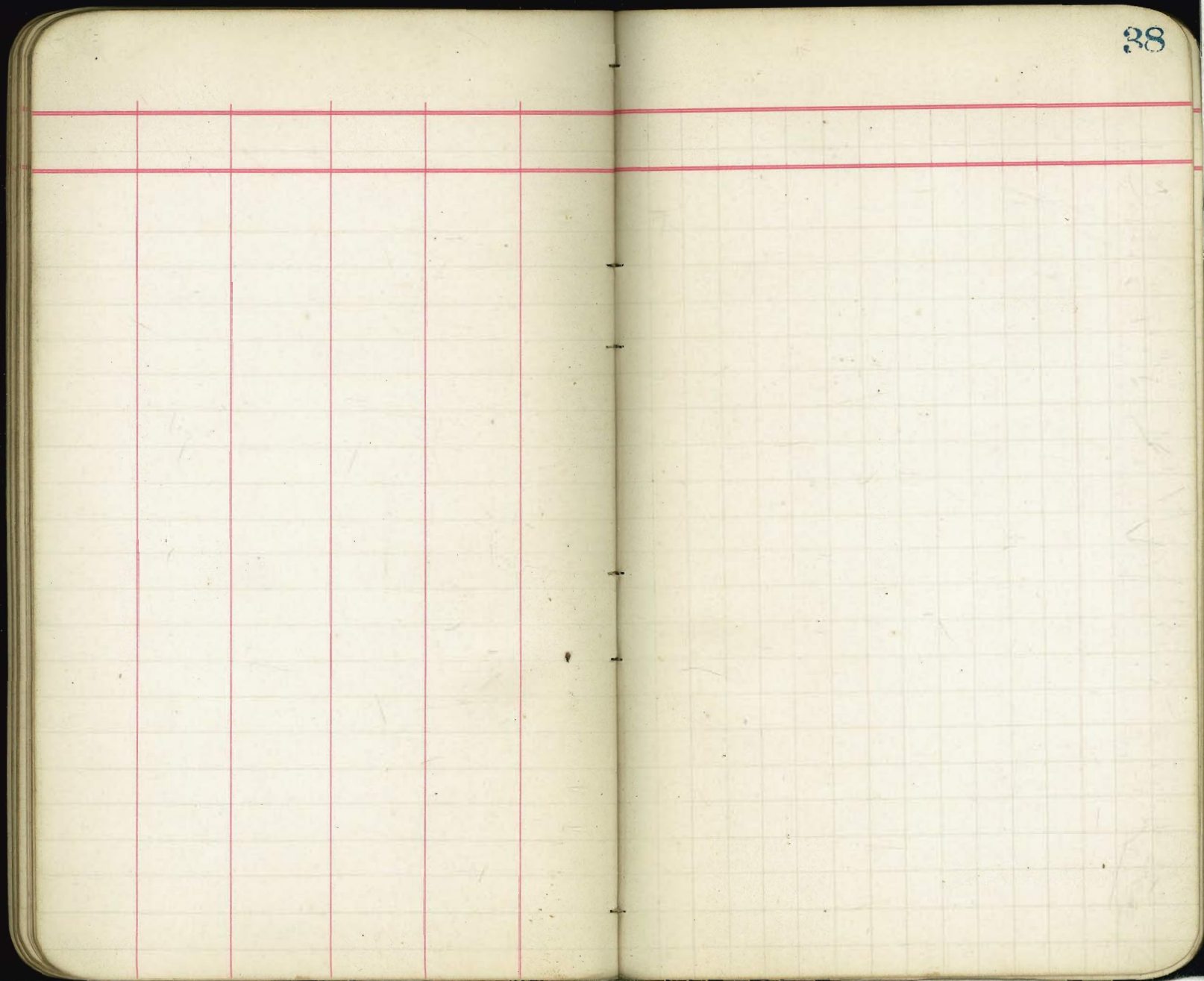




The image shows an open notebook with two pages. The left page is ruled with a grid of 5 columns and 15 rows. The right page is ruled with a grid of 15 columns and 15 rows. The number 36 is printed in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.

The image shows an open notebook with two pages. The left page is ruled with a grid of 5 columns and 15 rows. The right page is ruled with a grid of 15 columns and 15 rows. The number 37 is written in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.

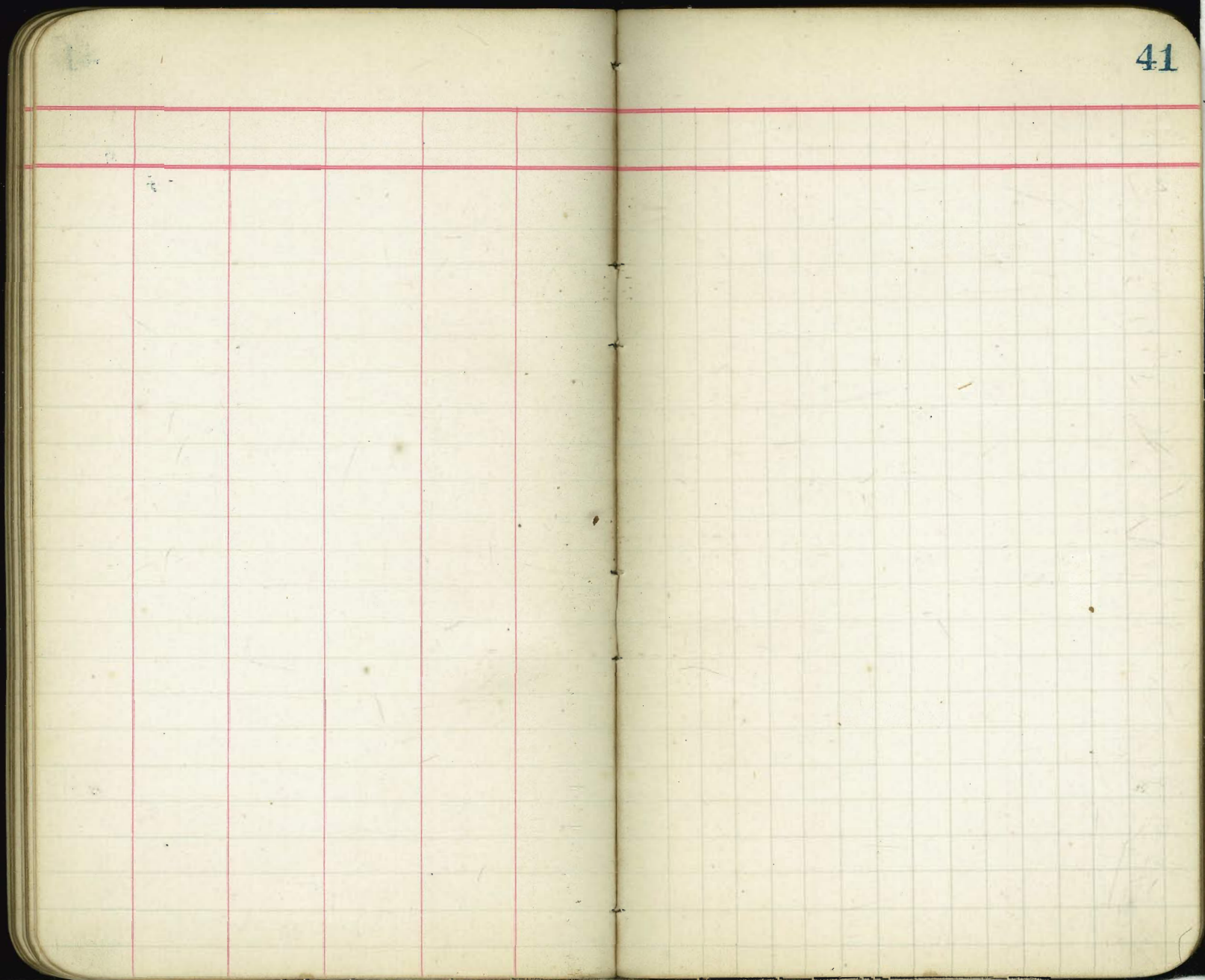








The image shows an open notebook with two pages. The left page is ruled with a table structure consisting of 6 vertical columns and 18 horizontal rows. The right page is ruled with a grid of 18 vertical columns and 18 horizontal rows. The number '40' is printed in the top right corner of the right page. The notebook is placed on a white surface, and the background is dark.







Ammon  $\frac{M}{11}$

43



Union  $\frac{8A}{1}$

44

Union  $\frac{81}{11}$

			32+85	
	30x05	32+88		
30+08			32+90	
	29+79	32+58		
29+77			32+35	
	29+55	32+99		
29+59			32+10	
	29+29	32+08		
29+27			31+85	
	29+05	31+83		
29+09			31+81	North line of A meet
	28+80	31+59		
28+78				
	28+55			
28+53				
	28+30			
28+28				
	28+05			
28+03				
	27+79			
27+77				
	30x28			
			33+02	

2 ft. back of  
30+78  
Inspector

flue tank  
33+10  
outer line

by taken down  
end of pipe on Union  
no more pipe to be laid



Winnipeg

	24+94 $\frac{1}{2}$	
24+92 $\frac{1}{2}$	24+50 $\frac{1}{2}$	<del>fish</del>
24+48 $\frac{1}{2}$	27+00	B N
24+ <del>94</del>	28+94	28+94
24+24	24+02	26+94
24+00	26+46	26+24
	26+22	26+00
	25+98	25+95
22+98	25+98	25+98
22+95	25+98	25+50 $\frac{1}{2}$
22+90	25+49 $\frac{1}{2}$	25+25
22+49	25+23	25+23
22+25 $\frac{1}{2}$	25+23	25+23
22+20 $\frac{1}{2}$	25+23	25+23
22+01	25+23	25+23
21+99	24+98	25+0 $\frac{1}{2}$



Union  $\frac{M}{11}$  -

47

		21+75	
	18+00	21+99	
17+98		21+51	
	17+99	21+49	
17+94		21+25	
	17+51	21+29	
17+49		21+01	
	17+25	20+99	
17+28		20+95	
	17+00 $\frac{1}{2}$	20+94	
15+98 $\frac{1}{2}$		20+50	North line of D street
	16+75	20+48	
16+93			
	16+50 $\frac{1}{2}$	$\frac{e}{19+25}$	
16+48 $\frac{1}{2}$		19+00	
	16+25	18+98	
16+24		18+95	
	15+93		
	$\frac{e}{15+50}$	18+50	
	18+48		
	15+25	18+25 $\frac{1}{2}$	
15+29		18+28 $\frac{1}{2}$	

Along ...  
Reach ...  
near ...



Union  $\frac{21}{11}$

9+50		12+50 $\frac{1}{2}$	
9+48		12+48 $\frac{1}{2}$	15+00
9+22 $\frac{1}{2}$	9+24		14+98
		$\frac{21}{11}$ $11+95$ <small>Boil</small>	14+95
8+98	9+00		14+73
		11+51	14+50
8+74 $\frac{1}{2}$	11+49		14+48
8+72 $\frac{1}{2}$		11+25	14+25 $\frac{1}{2}$
		11+23	14+23 $\frac{1}{2}$
$8 \times 00$ <small>9 me</small>		11+00 $\frac{1}{2}$	14+00
		10+98 $\frac{1}{2}$	13+98
		10+75	13+75
	9+75	10+73	13+73
7+78		10+49	13+50 $\frac{1}{2}$
	9+49	10+47	13+48 $\frac{1}{2}$
7+47		10+24 $\frac{1}{2}$	13+25
	9+25	10+22 $\frac{1}{2}$	13+24
7+23		9+98 $\frac{1}{2}$	13+01
	9+00	9+96 $\frac{1}{2}$	12+99
6+98		9+94	12+95 $\frac{1}{2}$
	6+75	9+92	12+93 $\frac{1}{2}$
6+73			




## Mission

W	E	W	E
			6+50
	8+25	6+48	
3+23			6+25
	2+99	6+23	
2+97			6+00
	2+95	5+98	
2+93			5+95
	2+50	5+93	
2+48			5+49
	2+24	5+47	
2+22			5+25
	1+99	5+23	
1+97½			4+99 North line H street
	1+73½	4+97	
1+71½			
	1+50		
1+48			South line of H street
	1+25		
1+23			3+75
	1+04	3+73	
1+02			3+50
		3+48	



In radius from the  
 top south of B to an  
 5" Siphon Hole at  
 B to be 6 in Pipe



3 feet from plug  
 to center of Pipe

0 0 8 21  
 1 0 7

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	84
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	81
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	81
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	84
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	81
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	81
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	81
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	84
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	74
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	74
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	74
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	74
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	74
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	74
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	74
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	74
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	66
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	66
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.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		