

WATER

*Return to City Engineers Office
City Hall, San Diego, Cal.*

TRANSIT

398

F.B. 339

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of **339**

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	28.52	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	92.38	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.		

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City Hall, San Diego, Cal.

Crocker Quality

TRANSIT BOOK



No. _____

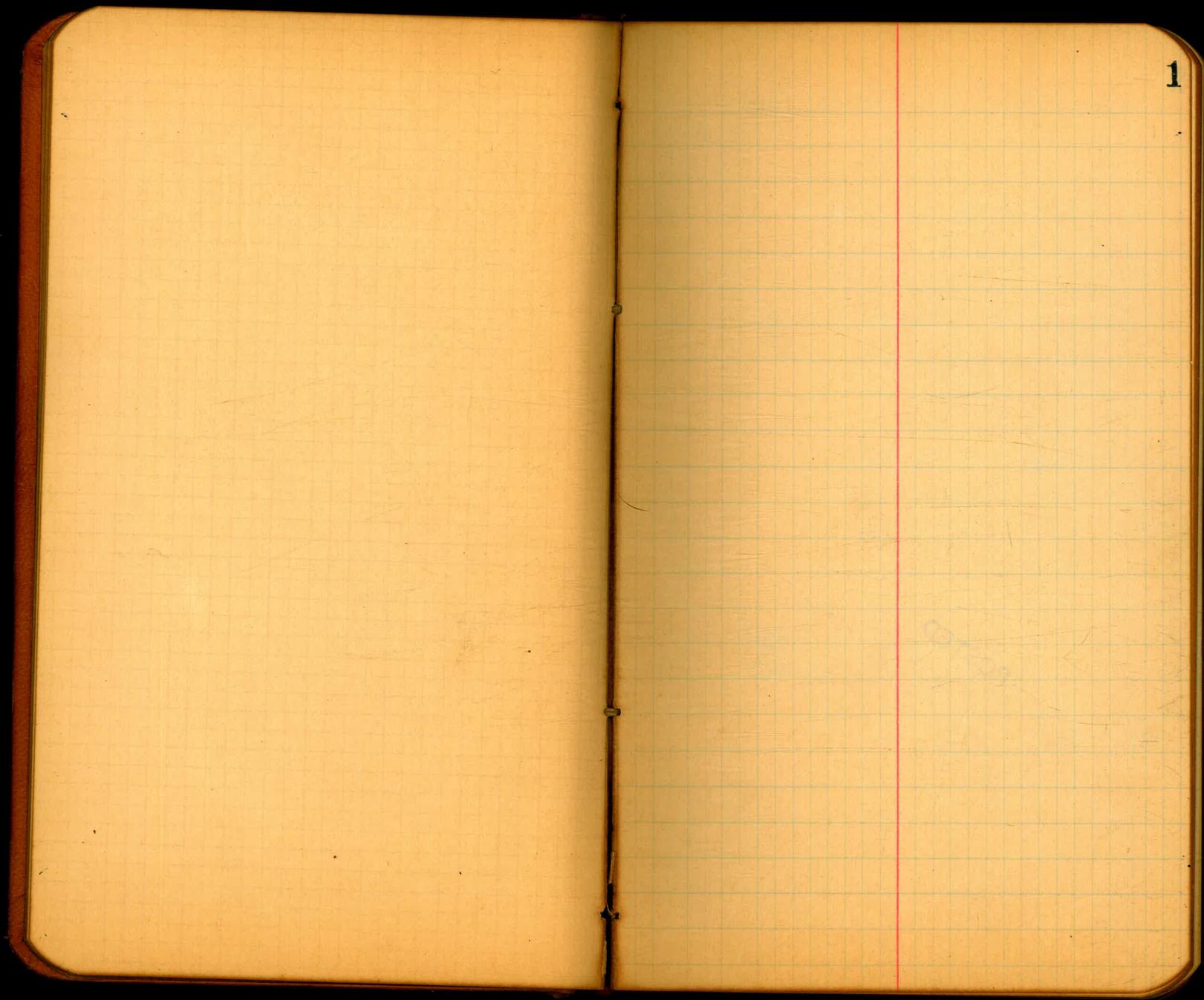
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SAN FRANCISCO AND SACRAMENTO
CALIFORNIA

FROM
LORING'S BOOK STORE
SAN DIEGO, CAL.

7433 1871 38th National 25's-SW cor.
7242 " 39th " 25's-SW cor.
1229 1871 Cap tack on "Lilin Gate"



1

Survey of Water pipe line from area
 east of bridge at + Silver Lake at + Catalina at
 to at Reservoir
 80 = bearing Reservoir line 25° 27' 30"

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

+ 734 = W of barter st 7° 26' L
 + 734 = E of " " "

738
 222
 516

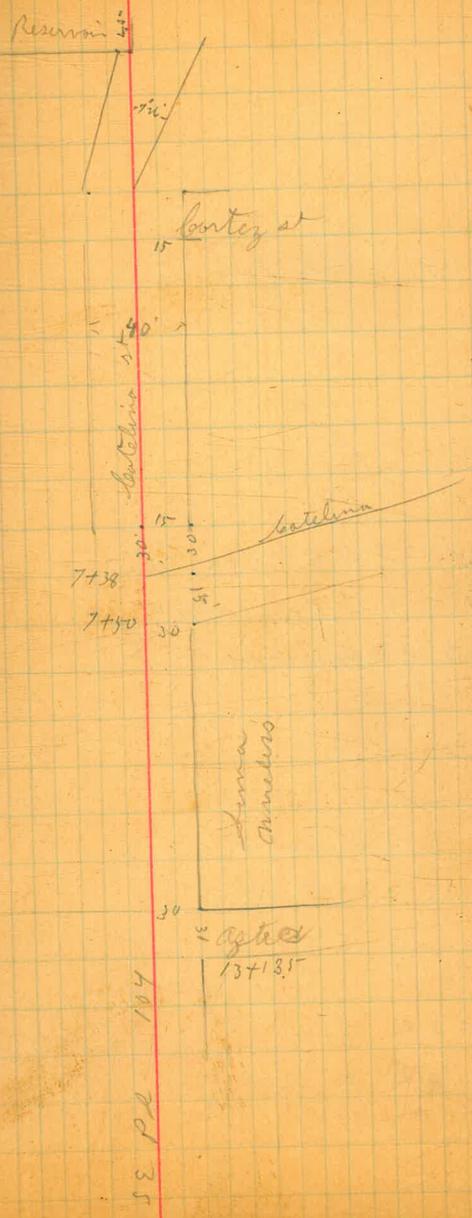
+ 75 = W of Silver Lake st
 + 38 = center of Silver Lake st
 + 50 = 2 line Catalina st

POSTED

1283.5
 738.
 545.5

+ 835 = S of Afton st

1840 = A Prop line



19

20

21

22

23

+11.5 = Peak Lin

24

25

26

27

28

+7.5 = S L of Wame Hill 2nd

29 = S L Rollways st

+50 = 2 L Rollways

30

31

32

+40 = S L Fort st

33 = 2 L " "

34

35

36 = S L Wame

37 2 L "

37

38

40

41

42

43

44

45

46

47

48

Road
23+11.5

Rollways st

Fort st

Wame st

39

750 = 22 Dudley

40 = 82

41

42

43 = S.L. Charles at

726 = Public line NE 147 90° L

756 = 2nd Silver Gate at

44

45

46

47

48

49

50

51

52

733 = 02 Pt Loma

766 = Water main on Loma Ave

SE of Pt 147

45+22

Public line NE Ed Pt 147

877

Dudley

300
30
45
30
26
26

Public line on Loma Ave

Levels for Water Pipe
 on batulmu, Selva Gate + Charlotte
 Benches on Selva Gate

	6.48	276.88		270.40	
TP	11.58	287.93	0.53	276.35	
TP	11.49	298.97	0.95	287.98	
Bm			5.30	293.27	near Charlotte Selva Gate
TP	2.10	299.83	1.24	297.73	near Shady SW corner
Bm	5.18	296.97	8.14	291.69	
TP	14.71	308.83	0.74	296.13	near SW corner
Bm	11.27	319.61	0.49	308.24	
TP	12.40	321.82	0.19	319.42	
TP	10.14	341.39	0.61	331.21	near gate
TP	8.60	347.56	2.43	338.96	near PB
Bm	3.14	346.28	4.45	340.11	SW A after
TP	12.17	357.67	6.75	345.30	
TP	11.31	368.64	0.34	357.32	
TP	7.77	376.95	0.36	368.28	
Bm			20.2	374.03	70m of gate from at Pagan

POSTED

Leads for Note Pit on bedelium
Silver Gate & Charles st

	20~	37605		37403	137m
at Gate 23' west of 00			3.0		373.1
00			0.2		372.9
1			4.3		371.6
2			6.7		369.4
4 22			7.6		368.5
+ 734			10.7		365.4
3			12.3		363.8
TP	160	365.69	11.96	364.09	
4			8.2		357.5
5			12.3		353.4
TP	316	356.79	12.06	353.63	
6			5.4		351.4
7			4.2		352.6
+ 75			4.1		352.7
+ 38			2.0		353.7
+ 50			2.3		353.5
8			4.5		352.3
9			6.8		350.0
10			9.0		347.8
11			11.2		345.6
TP	286	350.15	10.50	344.29	
12			3.2		345.0
+ 835			8.7		344.5

6

Gate 23' W of 24' 00 Fence line
Fence line Reservoir

W line of Cartey Angle 70' 00" L
E line " " "

on bedelium

W line of Silver Gate st
Peebles line E line of Donna Wireless 200
W line of bedelium

on silver bedelium

13			5.8	344.4
TP	60	<u>349.11</u>	7.04	343.11
14			4.8	344.3
15			5.3	343.8
16			7.0	342.1
17			8.4	340.7
18			9.6	339.5
TP	2.65	<u>341.61</u>	10.18	338.96
19			3.1	338.5
20			4.2	337.4
21			6.2	335.4
22			8.6	333.0
23			10.6	331.0
24			12.2	329.4
TP	0.0	<u>329.86</u>	11.75	329.86
25			3.0	326.8
26			6.9	323.0
27			12.0	317.9
TP	1.15	<u>318.41</u>	12.60	317.26
28			6.7	312.0
29			6.8	311.6
29			17.8	306.6
TP	0.37	<u>308.21</u>	10.07	308.24
30			5.0	303.7

S. L. Parker

S. L. Parker et

n. l.

30			72		301.5
31			115		297.2
TP	062	<u>29859</u>	1074	297.97	
32			48		293.8
+30			63		292.3
33			81		290.5
34			86		290.0
35			90		289.6
36			83		290.3
TP	727	<u>299.01</u>	685	291.64	
+30			86		290.4
37			78		291.2
38			58		293.2
39			37		295.3
+30			47		296.3
40			18		297.2
TP	464	<u>302.11</u>	154	297.97	
41			72		297.5
42			59		296.2
43			90		293.1
+26			95		292.6
+52			74		294.7
TP	1082	<u>304.45</u>	848	293.63	

S.E. of Fort St

n.d.

S.E. of same st

n.d. of same st

S.E. Dudley

n.d.

S.E. of Charleston

30445

44			7.5		296.0
45			3.2		301.3
450			2.5		302.0
46			3.4		301.1
47			6.9		297.6
7P	143	29743	8.5	286.0	
48			5.0		292.4
49			11.3		286.1
7P	098	28741	11.4	286.03	
50			7.2		279.9
7P	103	27537	12.47	274.4	
51			2.8		272.8
52			8.8		266.8
733			10.2		265.4
766			11.8		263.8

Adams

Edwin Somers
 Pitt River & River

POSTED

7/24 Hatch Moore Churchman
 7/19 Churchman
 Levels for main on 38" Sl. from National

	705	81.38	74.33
0 + 00 = 10' E 1/3 of Cr. of 38" National		5.6	77.8
0 + 30 - 51 National		4.5	76.9
+ 50		5.0	76.4
1		6.1	75.3
+ 50		7.2	74.2
+ 80		7.2	74.2
2		6.7	74.7
+ 50		7.1	74.3
3		6.6	74.8
+ 20		4.4	77.0
+ 80 = Nk		4.9	76.5
+ 30		5.0	76.4
4	W	4.9	76.5
+ 10 = 51		4.4	77.0
+ 50		5.1	76.3
5		5.8	75.6
+ 50		5.7	75.7
+ 75		6.3	75.1
6		7.4	74.0
+ 50		7.3	74.1
7		8.3	73.1
+ 10 = Nk		8.1	73.3
+ 50	Y	7.6	73.8
T.P.	144	76.08	6.74

to E Ave and on E Ave from Gamma to Gamma.
 BM 25' S of SW Cor. 38" National (Hub).

	76.08		
+ 90 = 51		5.3	73.8
8		2.4	73.7
+ 50		3.3	72.8
9		6.7	69.4
+ 20		8.7	67.4
T.P. 043	63.67	12.84	63.24
+ 50		1.6	62.1
+ 75		5.1	58.6
10		9.2	54.5
T.P. 045	51.43	12.52	51.15
+ 50		4.2	47.2
11		11.0	40.4
T.P. 074	39.26	12.97	38.46
BM Top 3x3 gas intake		2.13	37.07
+ 50		4.70	34.5
12		12.1	27.1
T.P. 073	26.91	13.02	26.18
+ 50		6.2	20.7
13		11.4	15.5
T.P. 167	16.31	12.27	14.54
+ 50		4.2	12.1
+ 90		4.7	11.6

POSTED

POSTED

		1601		
14			6.5	9.8
+18			12.2	4.1
+30			11.7	4.6
+31			9.7	6.6
+50			5.3	11.0
15			4.2	12.1
+50			5.4	10.9
T.P.	287	14.62	4.56	11.75
16			3.5	11.1
+50			3.9	10.8
17			4.7	9.9
+50			4.8	9.8
18			4.9	9.7
+50			5.0	9.6
	3m 18+17		4.40	10.22
	BM Spkin Elevator			
19			5.0	9.6
+50			4.4	10.2
20			4.2	10.4
+50			4.3	10.3
21			4.7	9.9
+50			5.1	9.5
22			5.1	9.5
T.P.	1219	21.62	5.10	9.52

POSTED

		2162		
+50			12.2	9.4
+88.5	L 39'50" R		9.1	Gamma St. 12.5
23			5.0	13.6
+50			3.5	18.1
T.P.	1194	33.51	2.05	21.57
24			10.7	22.8
+50			11.1	22.4
25			9.4	24.1
+30.5	L 90" L		9.0	24.5
+50			7.6	25.9
26			6.0	27.5
+50			5.3	28.2
27			5.7	27.8
+50			5.2	28.3
28			3.7	19.8
+50			2.3	31.2
T.P.	Top of shaft 28+00	4.075	12.8	
29			8.95	32.2
+50			7.6	33.1
30			5.3	35.4
+50			5.4	35.3
31			5.0	35.7
+50			4.8	35.9
32			4.6	36.1
+50			3.8	36.9

POSTED

		4073		
33			2.7	38.0
+50			2.4	38.3
34			2.3	38.4
+50			1.1	39.6
TP	6.80	47.28	0.25	40.48
35			6.0	41.3
+25			4.4	42.9
+50			4.2	43.1
36			3.9	43.4
+50			4.4	42.9
37			4.8	42.5
+50			4.7	42.6
38			5.7	41.6
+50			5.1	42.2
39			5.2	42.1
+50			4.4	42.9
40			5.4	41.9
+476 Fence			3.5	43.8
Bm N. in Gr			1.83	44.45

POSTED

0.87	3310		32.23
2.12	22.52	12.70	20.40
1.43	22.27	1.68	20.54
Bm CT on Elm Gate.	8.45	13.79	13.89

POSTED

Hatch
 26 Moore
 08 Churchman.

Levels on Sutter (10.5. of Cr.) from
 Goldfinch to Kite for water main

Spk in pole	Grati - Goldfinch			
1371	3.04	272.58		269.54
	0.70	267.69	5.68	266.90
Hub NE	1.57	261.72	7.39	260.21
0+00 = WL				
			4.1	257.6
+50			6.0	255.7
1			8.0	253.7
+13			9.1	252.6
+25			13.0	248.7
+45			7.5	254.2
+50			6.9	254.8
+75			6.6	255.1
2			5.9	255.8
+50			6.8	255.9
3			4	260.9
+50			3.6	258.6
4			2.6	259.1
T.P.	0.55	259.33	2.94	256.78
+50			1.8	257.5
5			6.0	253.3
7P	0.66	247.02	12.97	246.36
+25			6.0	241.0
T.P.	2.11	236.68	12.45	234.57
+50			10.0	226.7
+60			14.8	221.9

{ 2+93.5 Fence }
 { 9+44.2 }

236.68

+75			9.2	227.5
6			0.2	236.5
T.P.	13.00	248.91	0.77	235.91
+25			0.9	248.5
T.P.	12.55	261.38	0.08	248.83
+45			4.6	256.8
+50			3.7	257.7
+75			0.9	260.5
T.P.	12.74	273.53	0.59	260.79
7			11.2	262.3
+25			9.8	263.7
+50			8.9	264.6
+75			7.4	265.6
8			7.8	265.7
+25			8.2	265.3
+50			9.4	264.1
+75			9.6	263.9
9			10.9	262.6
+40			11.3	262.2
+50			10.4	263.1
+75			9.3	264.2
10			7.0	266.5
+40			4.2	269.3
10+77.6 =			1.8	271.7

1.53, 272.00 1371 Top of 4" x 4" Post at SW Cor. Rice's Fence.

10+77.6 = }
 18+93.5 } old Line -

15

16

81

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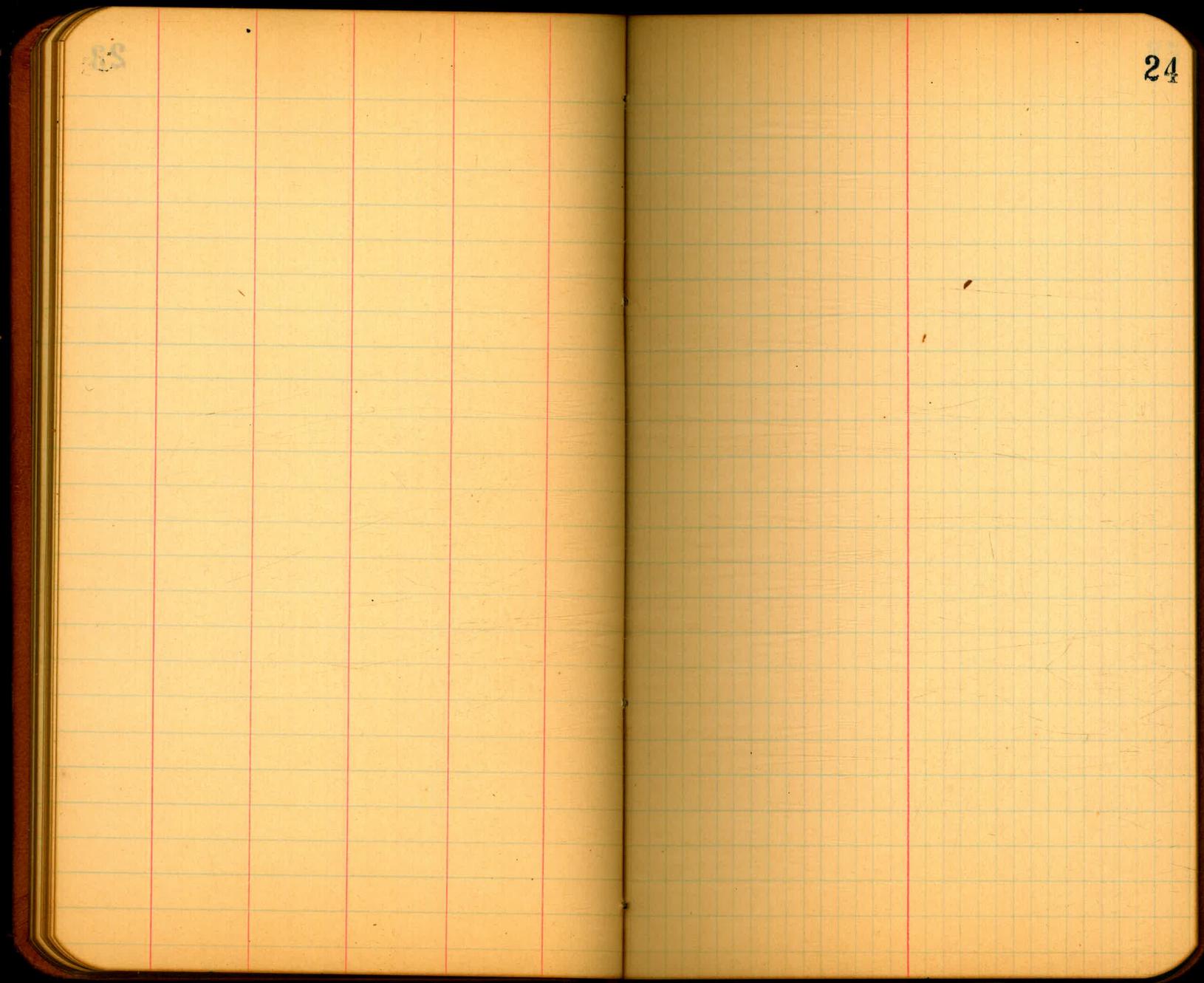
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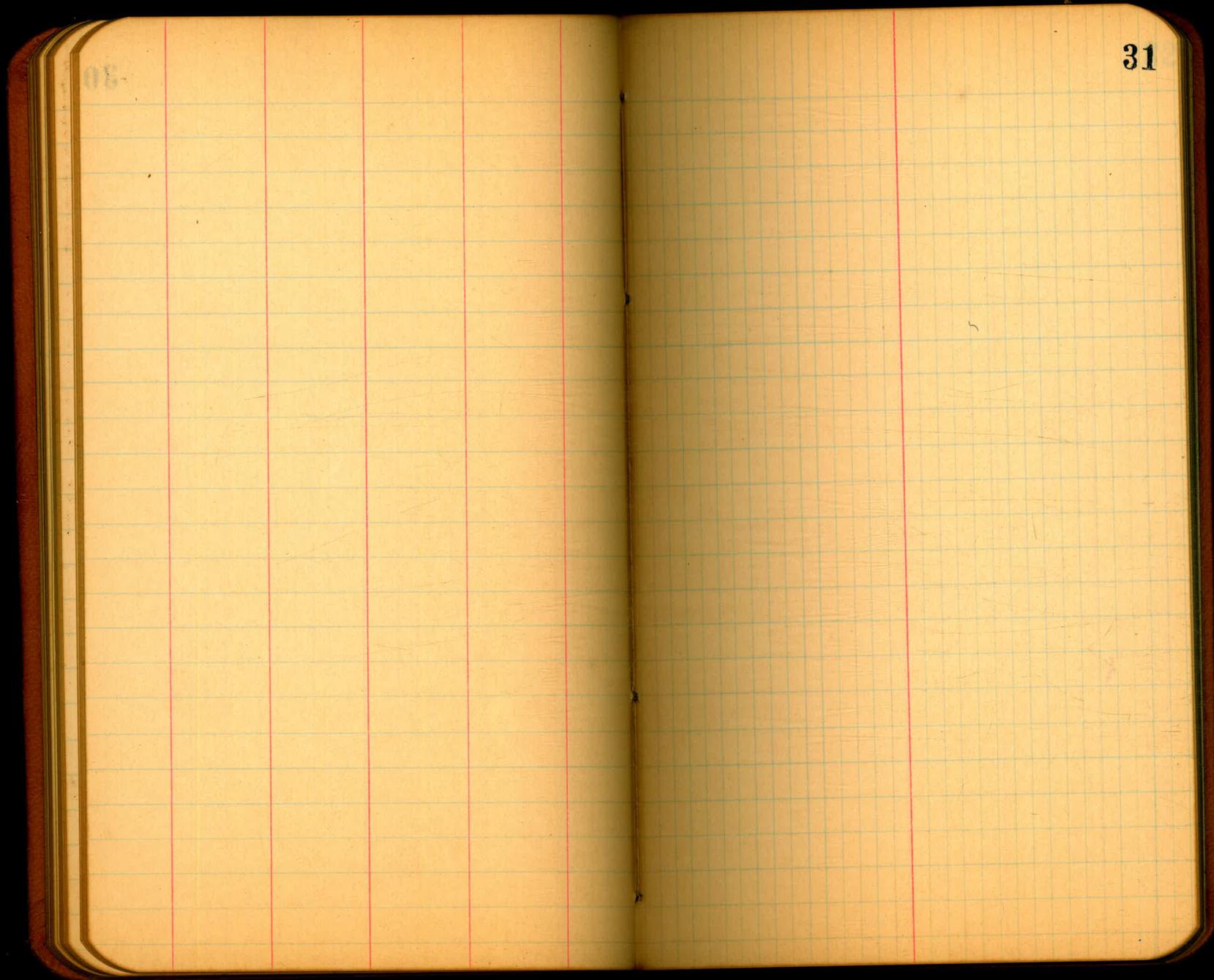
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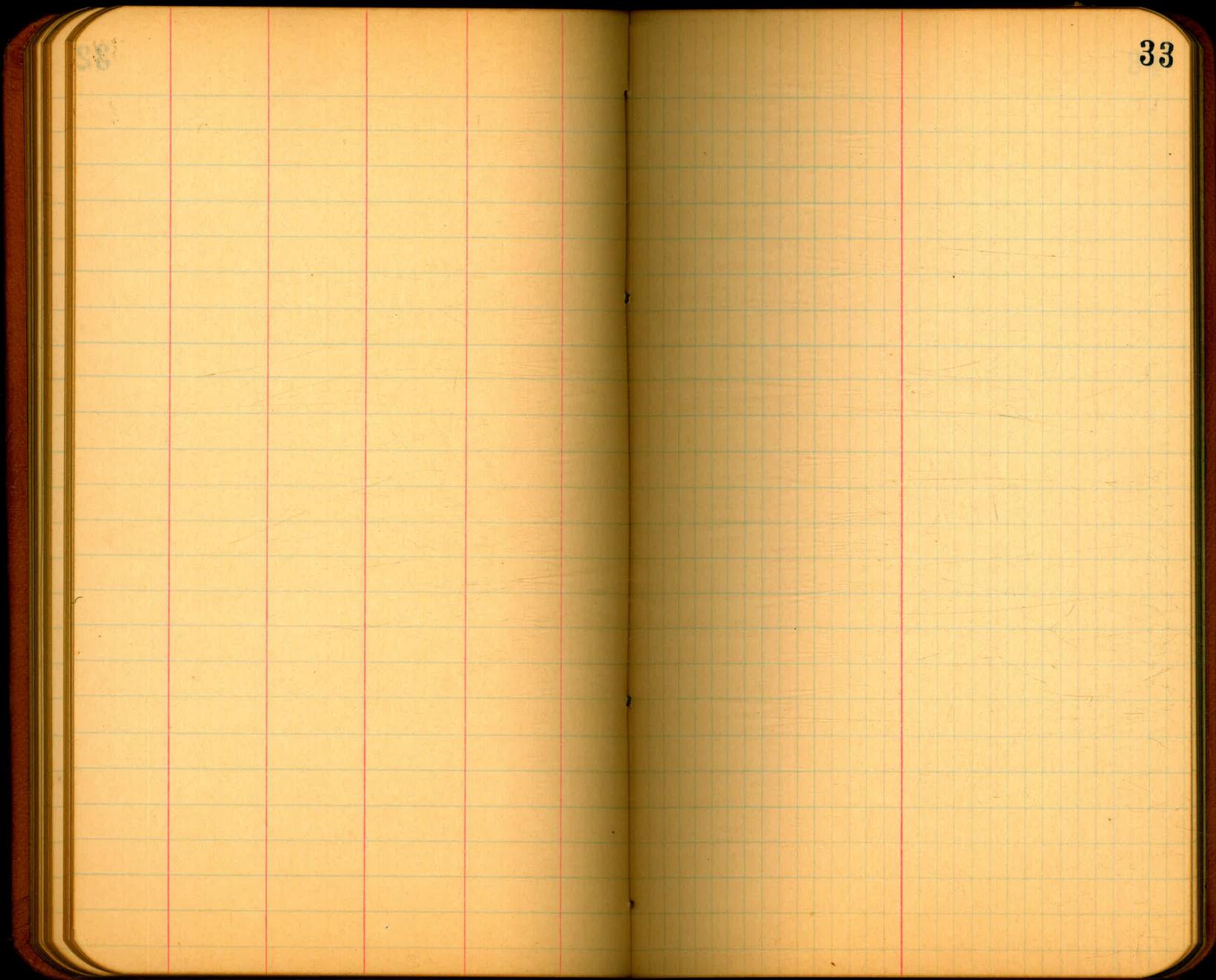
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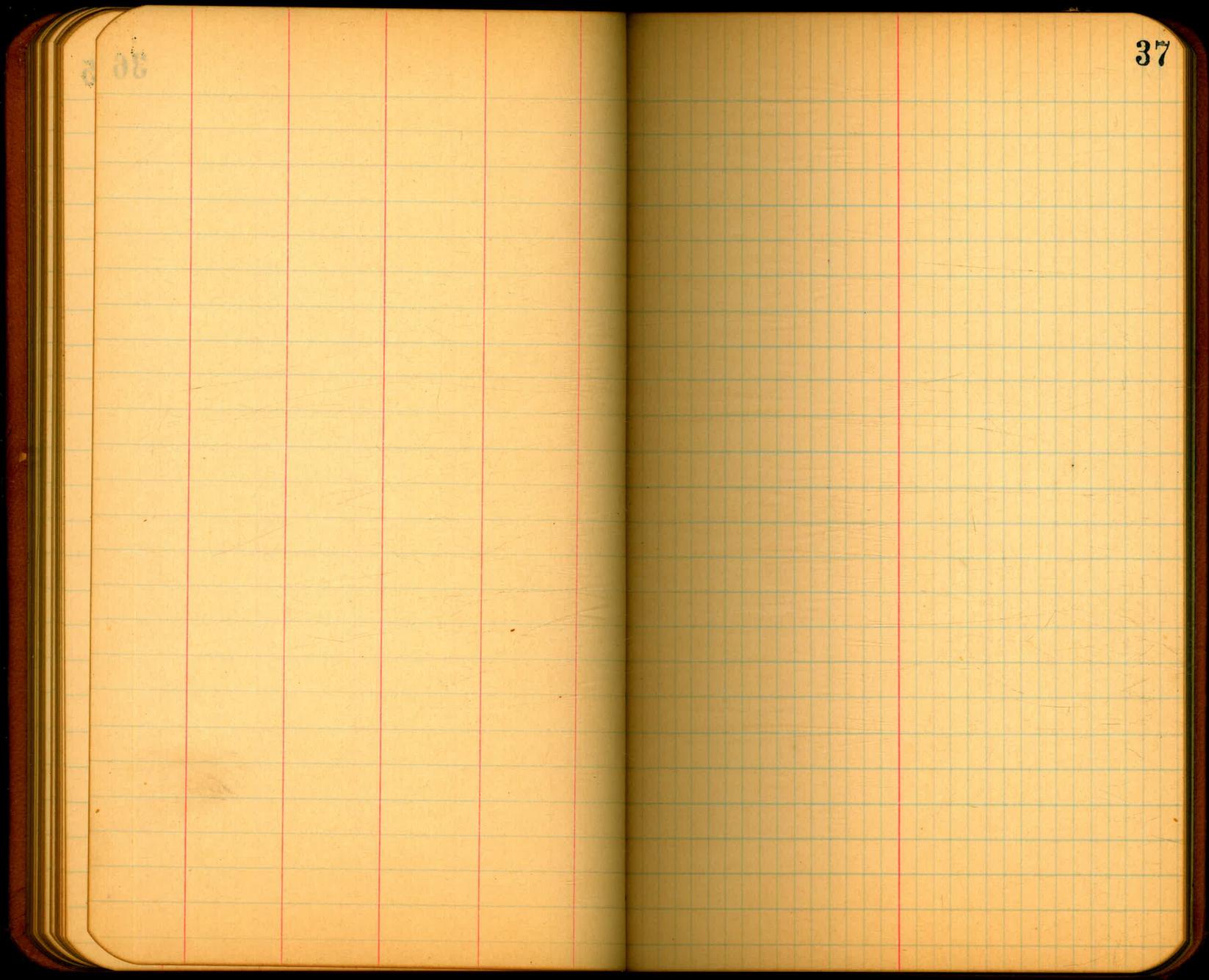
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7933
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37.07

674
1284
1232
1287
213

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14
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27.30

3920
73
167
287

17
53
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2985

1462

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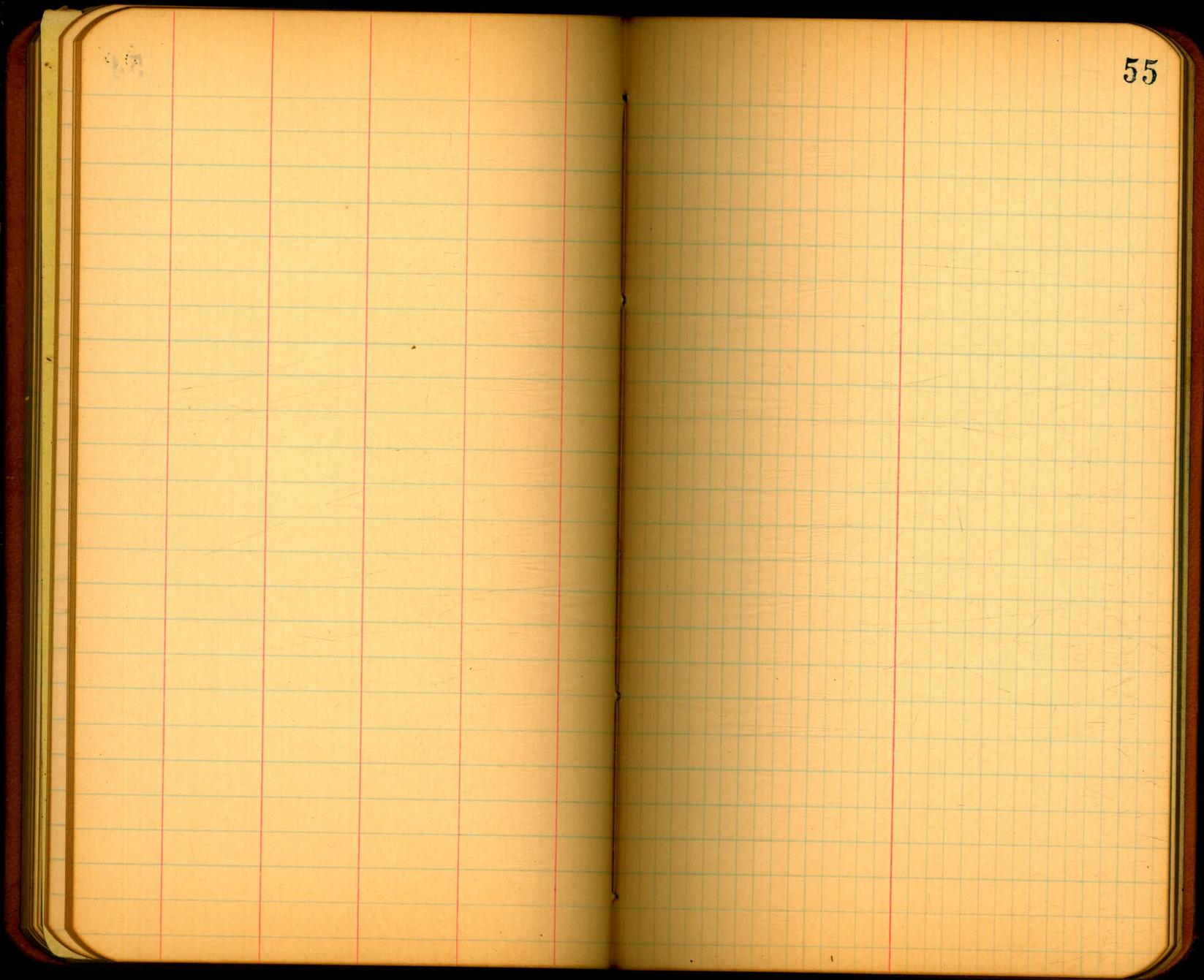
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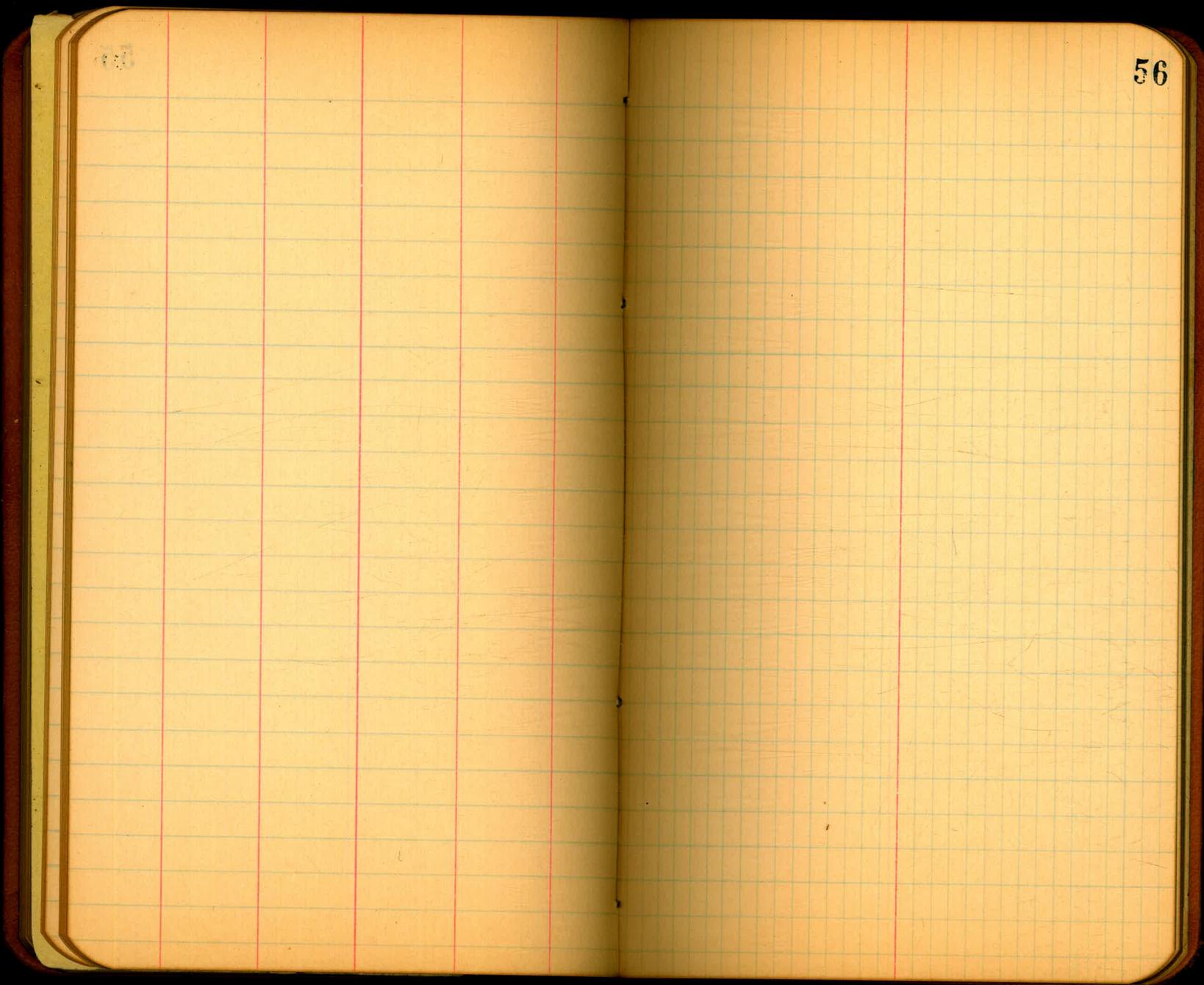
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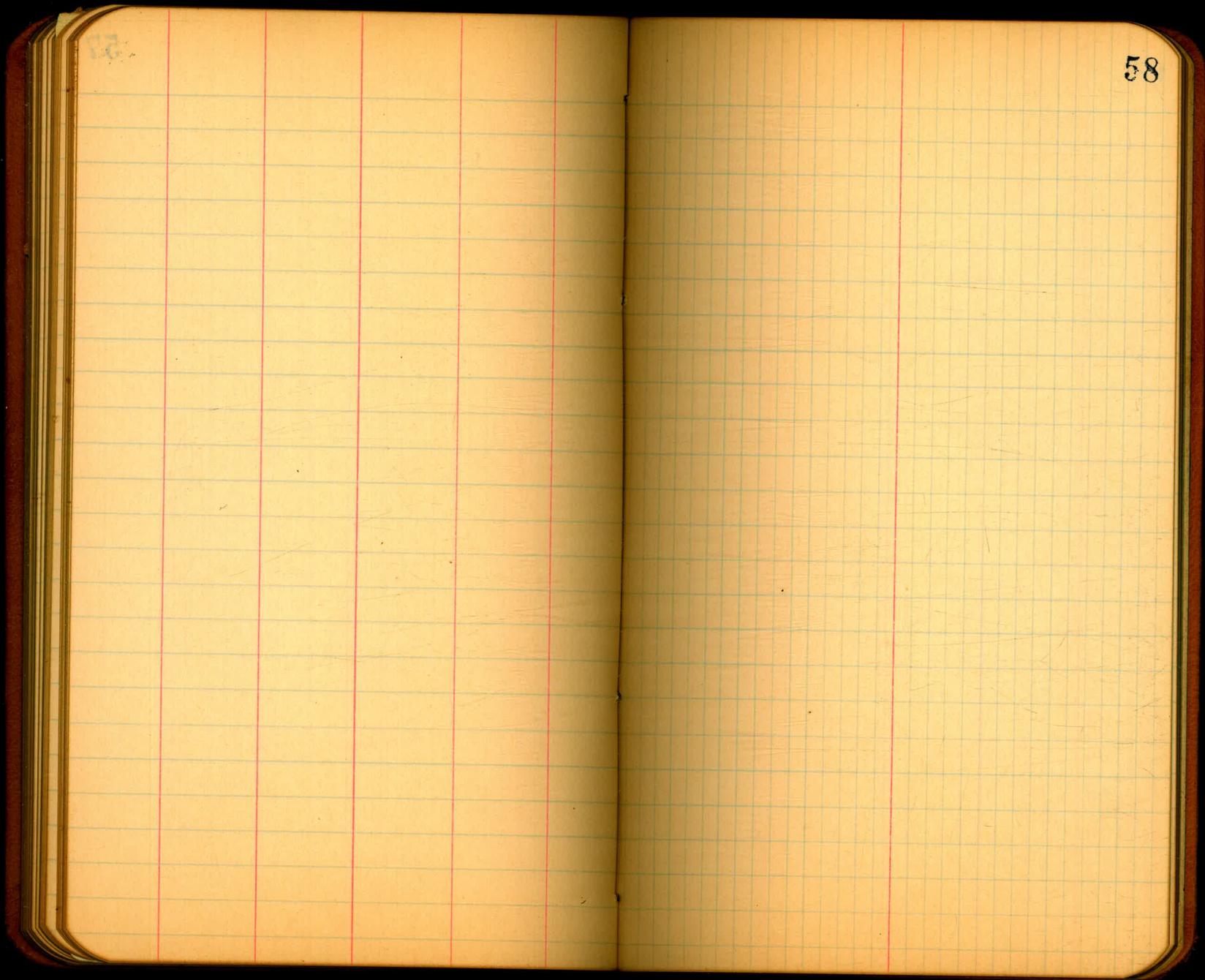


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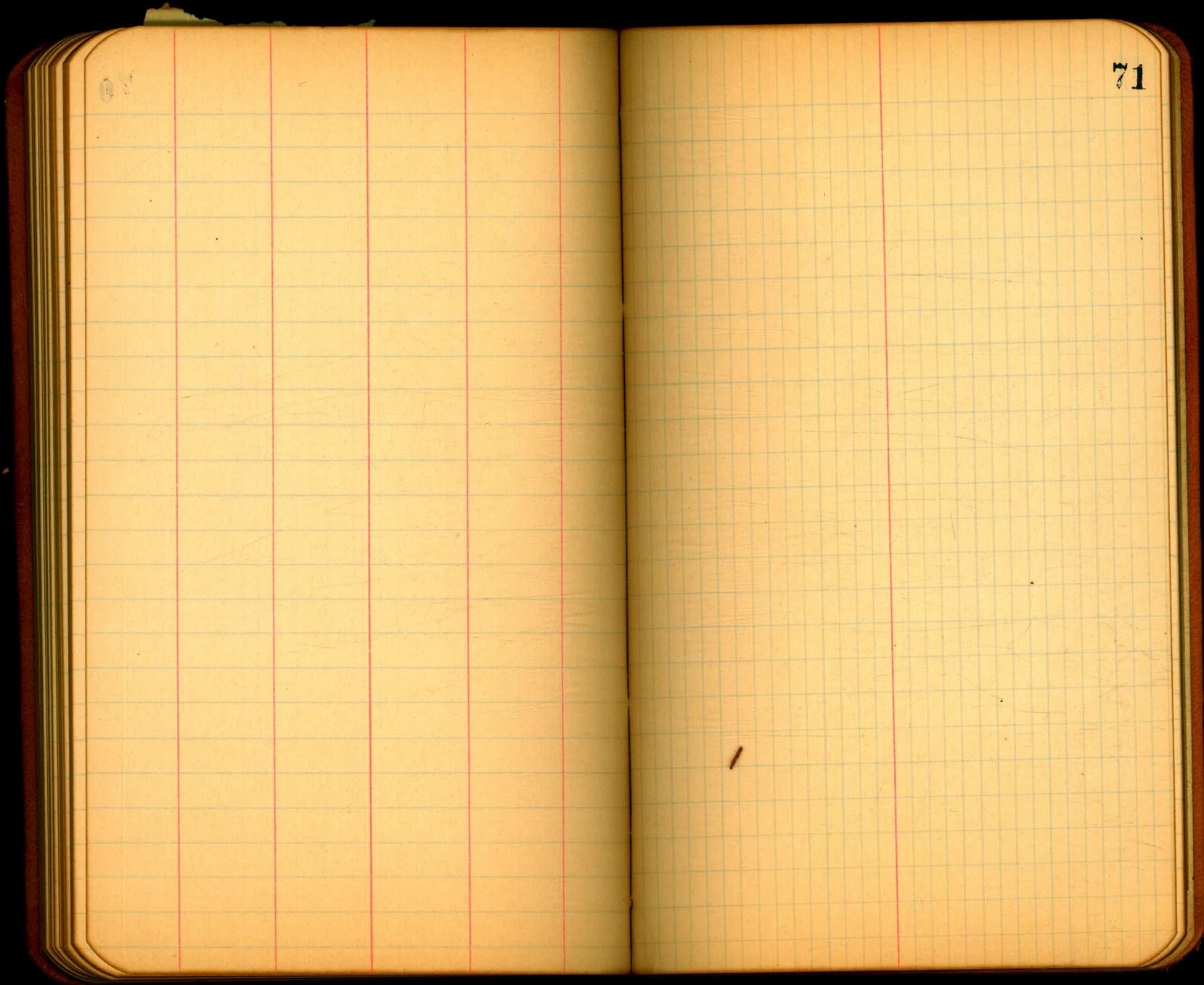
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77

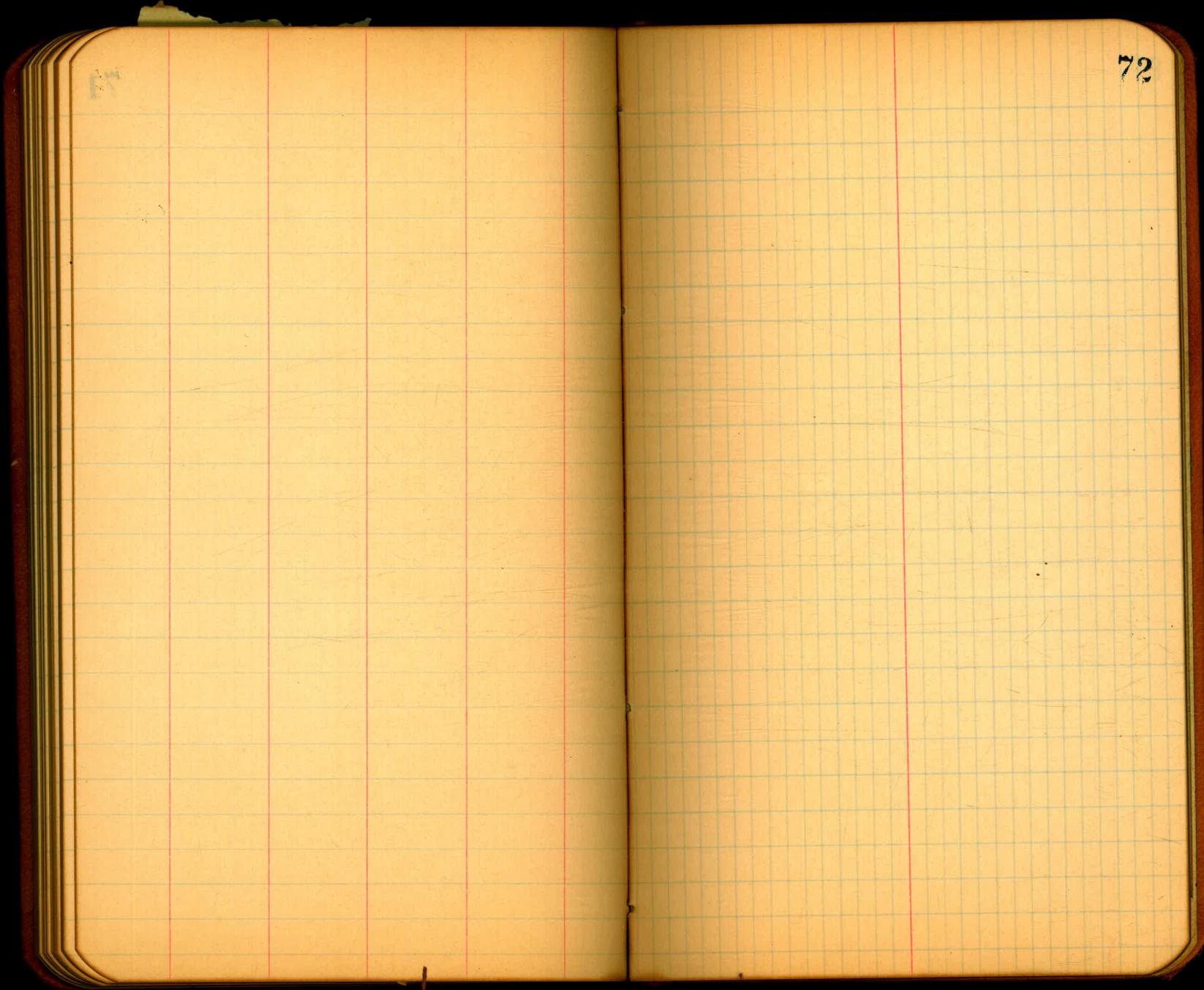
78

69

70



71



72

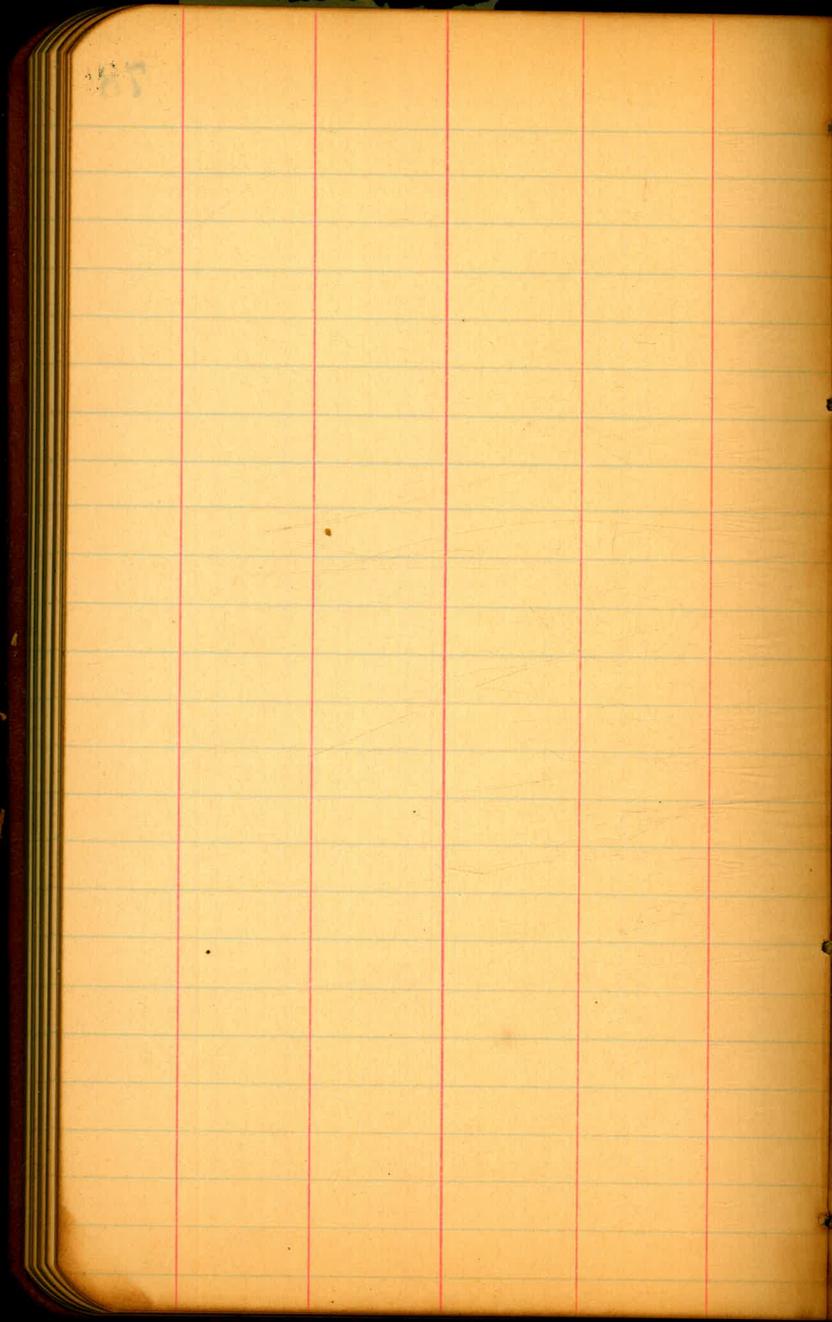
4

76

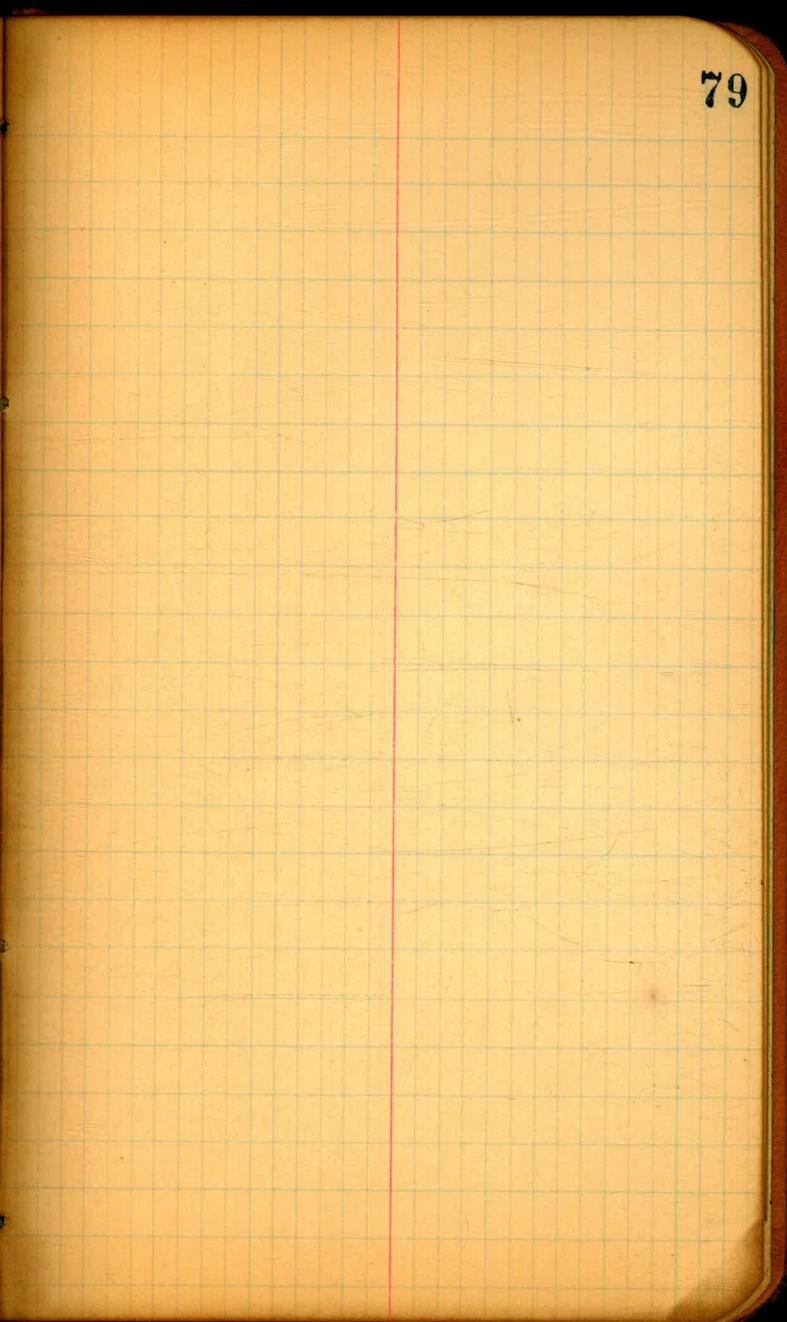
76

77

78



87



79

87

80

80

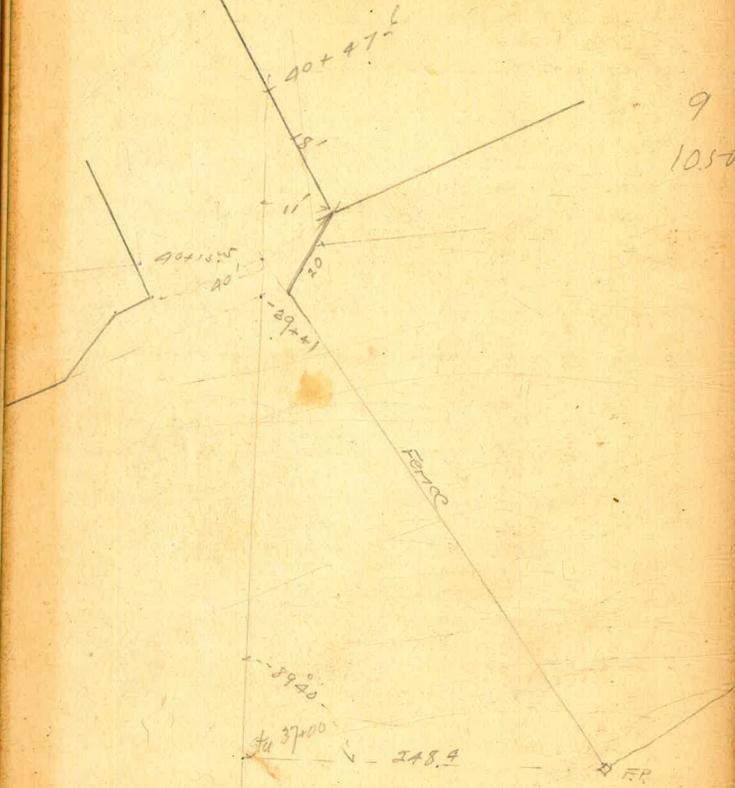
80

838

81

22+89.5 < 39.51
 40+75 approx

25+80.5 < 90° L



675- to PL

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.

MINUTES.	LKS.	MINUTES.	LKS.	MINUTES.	LKS.
1	2 1/2	21	49	41	95 3/4
2	4 3/4	22	51 1/2	42	98
3	7	23	53 3/4	43	100 1/4
4	9 1/2	24	56	44	102 1/2
5	11 3/4	25	58 1/2	45	105
6	14	26	60 3/4	46	107 1/2
7	16 1/2	27	63	47	109 3/4
8	18 3/4	28	65 1/2	48	112
9	21	29	67 3/4	49	114 1/2
10	23 1/2	30	70	50	116 3/4
11	25 3/4	31	72 1/2	51	119
12	28	32	74 3/4	52	121 1/2
13	30 1/2	33	77	53	123 3/4
14	32 3/4	34	79 1/2	54	126
15	35	35	81 3/4	55	128 1/2
16	37 1/2	36	84	56	130 3/4
17	39 3/4	37	86 1/2	57	133
18	42	38	88 3/4	58	135 1/2
19	44 1/2	39	91	59	137 3/4
20	46 3/4	40	93 1/2	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						
0		0		0		0	
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