

BARRETT DAM

Contours, Upper Dam site

West side of Cañon.

TRANSIT

398

17

W20

H. S. CROCKER COMPANY

DRAWING MATERIALS AND
SURVEYING INSTRUMENTS

SAN FRANCISCO

TABLES FOR EXCAVATIONS AND EMBANKMENTS

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING

Roadway 18 Feet Wide. Side Slopes 1 to 1.
For Single Track Excavation.

"Copyright, 1895, by Kueffel & Esser Co."

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MICROFILMED

JAN 6 1985

MICROFILMED

TAB
D

0	9
1	10
2	11
3	12
4	13
5	14
6	15
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36	45

JAN 6 1965

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Barrett Dams.
Contours. upper dam site

350' Contour West.

0+76 A	19° 12' R	12.69	1280.7
1	18° 31' R	12.50	1261.5
2	16° 56' R	12.28	1239.3
3	15° 53' R	12.45	1256.4
4	11° 56' R	12.19	1230.2
5	10° 26' R	11.94	1205.
6	9° 05' R	11.85	1195.8
7	7° R	12.13	1244.1
8	2° 50' R	11.91	1202
9	1° 35' R	11.85	1196
10	0° 13' L	12.00	1211
11	1° 12' L	12.15	1226
12	2° 42' L	12.27	1238
13	5° 16' L	12.25	1236
14	8° 33' L	12.17	1228
15	10° 34' L	11.96	1207
16	11° 52' L	11.77	1188
17	13° 58' L	11.86	1197
18	15° 17' L	12.01	1218

340' Contour

0+76 A	15° 08' L	11.95	1206
1	13° 50' L	11.75	1186
2	11° 25' L	11.63	-5.0 1169
3	9° 44' L	11.90	1201
4	8° 40' L	11.89	1200
5	7° 52' L	12.10	1221
6	5° 42' L	12.13	1224

West side of Contour Feb. 25. 1907
1.20 P. M.

F.L. 3+52.7A

Corp. }
 Will J. King
 Eng. Lockman
 Al. H. Allen
 M. S. Watson
 Zook

Trail

F.L. 3+72.5

Feb. 25, 1907

Sta.	Def.	Vert. ang.	Rod	Horizontal	Corrected Horizontal
8	3°53' L		12.14		12.25
9	1°56' L		12.07		12.18
10	0°27' R		11.82		11.93
11	2°32' R		11.85		11.94
12	3°17' R		11.62		11.73
13	4°49' R		11.94		12.05
14	5°30' R		11.80		11.91
15	6°46' R		11.99		12.10
16	7°36' R		11.75		11.86
17	10°42' R		11.79		11.90
18	11°46' R		12.00		12.11
19	12°14' R		12.14		12.25
20	15°33' R		12.26		12.37
21	16°31' R		12.10		12.21
22	18°43' R		12.08		12.19
Δ	20°05' R		12.32		12.43
23	20°36' R		12.36		12.47
24	21°21' R		12.79		12.90
330' Contour					
0+76A	23°36' R		12.53		12.65
x	22°34' R		12.39		12.50
3	20°13' R		11.99		12.10
Δ	19°57' R		12.00		12.11
4	18°46' R		11.88		11.99
5	16°28' R		11.82		11.93
6	15°25' R		12.06		12.17
7	14°09' R		11.92		12.03

Trail (Sta. L of reading)

$$\begin{array}{r} 276.7 \\ 20.05 \\ 5.25 \\ \hline 2.44209 \\ 9.535783 \\ 1.011917 \\ \hline 2.989709 = 976.6 \end{array}$$

$$\begin{array}{r} 276.7 \\ 20.05 \\ 5.25 \\ \hline 2.44209 \\ 9.535783 \\ 1.011917 \\ \hline 3.090599 \\ \hline 977.3 = 1231.8 \end{array}$$

Sta. 13+30A

$$\begin{array}{r} 152.30 \\ 20.05 \\ 5.25 \\ \hline 180.00 \\ \hline 3+52.7 \end{array}$$

$$\begin{array}{r} 1030 \\ 352.7 \\ \hline 977.3 \end{array}$$

$$\begin{array}{r} 276.7 = 2.44209 \\ 20.05 = 9.535783 \\ 5.25 = 1.011917 \\ \hline 3.089532 = \\ 1203.2 \end{array}$$

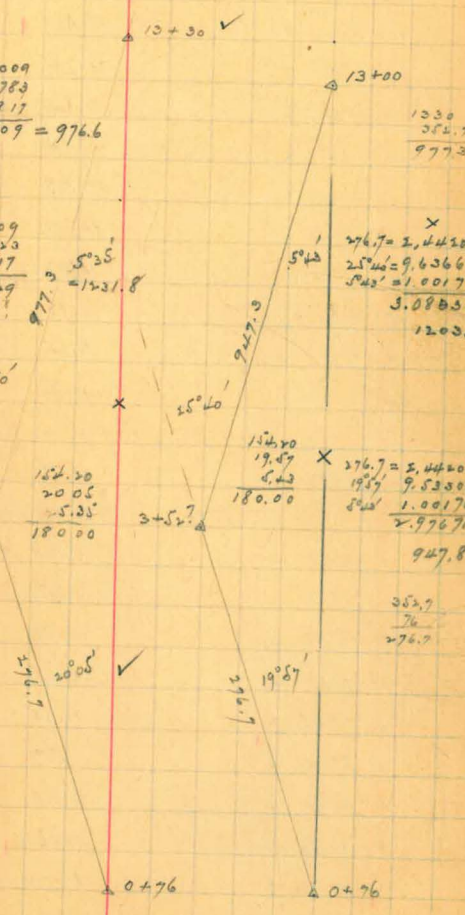
$$\begin{array}{r} 152.30 \\ 19.47 \\ 5.25 \\ \hline 180.00 \\ \hline 3+52.7 \end{array}$$

$$\begin{array}{r} 276.7 = 2.44209 \\ 19.47 = 9.535783 \\ 5.25 = 1.011917 \\ \hline 2.976719 = \\ 947.8 \end{array}$$

$$\begin{array}{r} 352.7 \\ 76 \\ \hline 276.7 \end{array}$$

F.L. 3+52?

Sta. 13+00A



Feb. 25, 1907

8	12° 35' R	11.93	- 4.0 1200
9	10° 47' R	11.54	1165
10	8° 47' R	11.62	- 2.0 1171
11	6° 52' R	11.80	1191
12	4° 56' R	11.78	1189
13	2° 28' R	11.63	1174
14	0° 8' L	11.74	1185
15	2° 47' L	11.99	1210
16	3° 07' L	12.00	1211
17	5° 55' L	11.97	1208
18	7° 20' L	11.92	1203
19	7° 57' L	11.75	1186
20	8° 45' L	11.80	1191
21			
22	14° 49' L	11.79	1190

320' Contour

0+76 a	1 12° 33' L	11.68	1179
	2 12° 08' L	11.50	+ 2.5 1165
	3 8° 28' L	11.66	+ 4.0 1181
	4 7° 51' L	11.68	1179
	5 7° 05' L	11.75	1186
	6 5° 36' L	11.72	1183
	7 2° 56' L	11.80	1191
	8 0° 50' L	11.62	1175
	9 2° 43' R	11.56	1167
	10 3° 28' R	11.64	1175
	11 12° 24' R	11.69	1180

West bank Trail

E. " "

Feb. 3+5?

12	15° 11' R	11.85	1196
13	15° 58' R	11.64	1175
14	18° 24' R	11.61	1172
15	19° 52' R	11.67	1178
15	20° 29' R	11.71	1182
16	23° 10' R	12.05	1216
17	24° 30' R	11.72	1183
370'			
0+76	A 1 25° 09' R	11.66	1177
	2 25° 16' R	11.74	1185
	3 21° 28' R	11.56	1167
	4 19° 41' R	11.39	1149.4
	4 19° 20' R	11.36	1146
	5 17° 05' R	11.41	1151
0+97A	6 15° 37' R	11.29	1139
	7 15° R	11.40	1150
	8 13° 37' R	11.25	1135
	9 5° 46' R	11.28	1138
	10 3° 04' R	11.26	1136
	11 0° 21' L	11.41	1136
	12 1° 03' L	11.34	Trail 1151
	13 2° 39' L	11.39	1144
	14 6° 05' L	11.38	1149
	15 7° 40' L	11.27	1148
	16 9° 40' L	11.39	1137
	17 12° 03' L	11.24	1149
	18 13° 06' L	11.27	1134
			1137

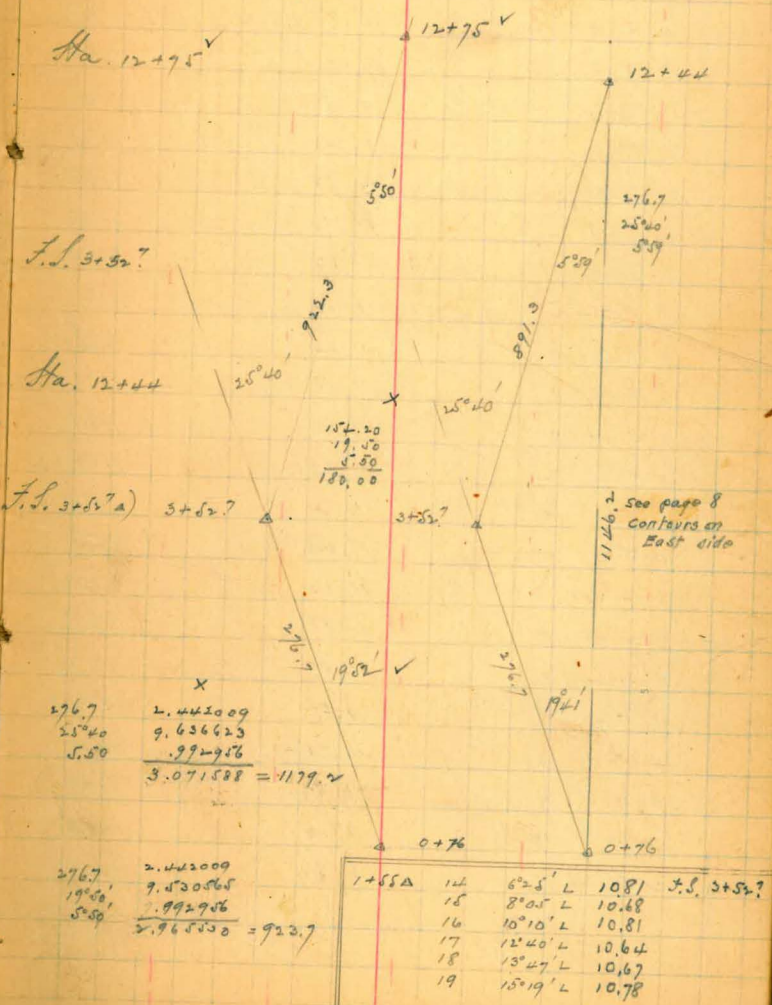
very windy

Feb. 26, 1907

Raining, Showers.

Work on line from 3 P.M. To 5.30

Very strong wind.



Feb. 26, 1907

19	14° 30' L	11.26	1146
300'			
0+97A	14° 08' L	11.15	1125
2	13° 20' L	11.13	1123
3	11° 35' L	11.15	1125
4	9° 30' L	11.20	1133
5	7° 09' L	10.98	1108
6	6° 10' L	11.16	1126
7	3° 20' L	11.17	1127
8	1° L	11.26	1136
9	1° 54' R	11.24	1134
10	3° 40' R	11.01	1111
11	5° 49' R	11.11	1121
12	9° 15' R	11.04	1131
13	12° 20' R	11.03	1113
14	13° 38' R	11.04	1114
15	14° 50' R	11.12	1122
16	16° 45' R	10.88	1098
17	17° 42' R	10.87	1097
18	19° 47' R	10.79	1088.7
A	19° 55' R	10.79	1089
9	21° 18' R	10.87	1097
20	24° R	11.19	1129
21	26° 30' R	11.12	1122

Very Windy

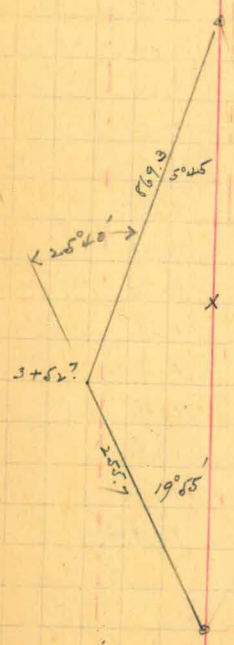
f. l. 3+52.7 A) 1+55A

1	14° 50' L	10.61
2	14° L	10.55
3	12° 13' L	10.58
4	9° 01' L	10.77
5	7° 33' L	10.46
6	6° 30' L	10.62
7	3° 54' L	10.62

Trail

Trail

+1.7



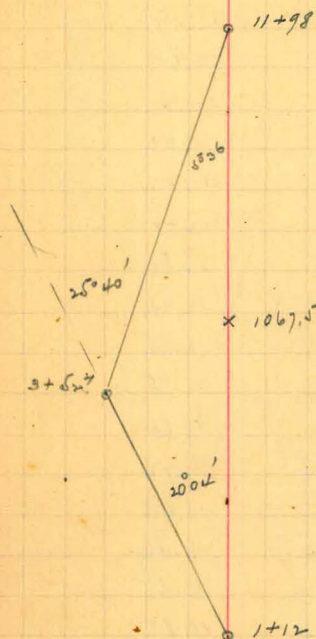
$$\begin{array}{r}
 255.7 \\
 19.55 \\
 5.45 \\
 \hline
 255.4 = 2939227
 \end{array}$$

$$\begin{array}{r}
 X \\
 2.407731 \\
 9.636623 \\
 .999184 \\
 \hline
 1105.4 = 3.0 + 3538 \\
 362 \\
 176
 \end{array}$$

290'

1+14 Δ	1 27° 04' R	10.68	1078
	2 26° R	10.62	1072
	3 32° 50' R	10.72	1082
	4 23° R	10.61	1071
	5 21° R	10.39	1048
	Δ 20° 04' R	10.40	1049.4
	6 19° 05' R	10.42	1051
	7 17° 35' R	10.55	1065
	8 16° 20' R	10.57	1067
	9 15° 18' R	10.85	1095
	10 14° 09' R	10.68	1078
	11 12° 25' R	10.74	1084
	12 10° 31' R	10.97	1107
	13 9° 46' R	10.88	1098
	14 6° 51' R	10.88	1098
	15 5° 10' R	10.73	1083
	16 2° 04' R	10.91	1101
	17 2° L	10.94	1104
	18 12° 52' L	10.95	1105
	19 6° 46' L	10.83	1093
	20 8° 52' L	11.02	1112
	21 12° 32' L	10.84	1095
22	omitted		

Very Windy



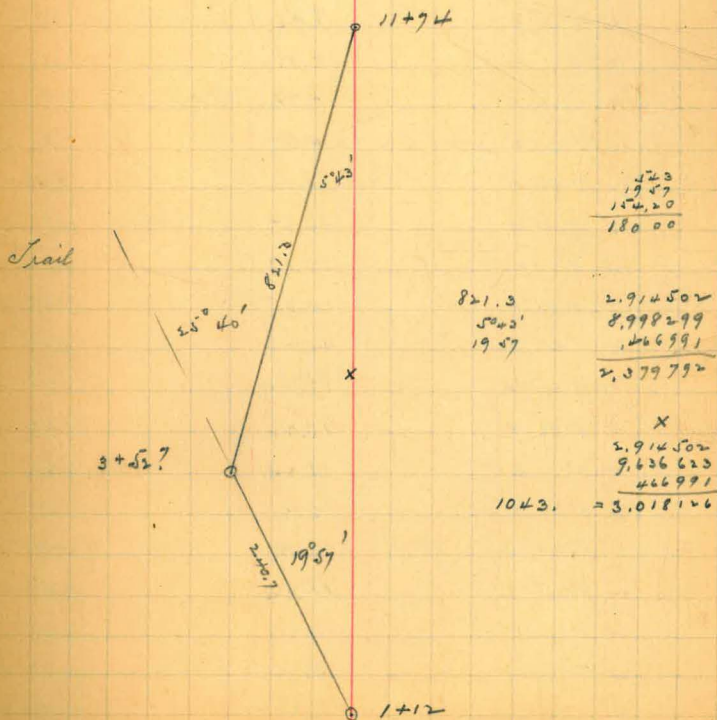
1+55 Δ	18 5° 06' L	10.51
	19 7° 04' L	10.47
	20 9° 19' L	10.62
	21 13° 04' L	10.42
	22 14° 40' L	10.41

280
280'

1+12A	16° 18' L	10.83	1093
2	14° 40' L	10.77	1090 +3.
3	11° 40' L	10.67	1077
4	9° 32' L	10.81	1091
5	8° 08' L	10.90	1100
6	6° 44' L	10.76	1086
7	3° 12' L	10.71	1084 +3.
8	1° 48' L	10.86	1096
9	1° 16' R	10.74	1084
10	3° 10' R	10.56	1066
11	7° R	10.78	1088
12	8° 12' R	10.66	1076
13	10° 14' R	10.72	1082
14	12° 45' R	10.48	1058
15	13° 45' R	10.44	1054
16	15° 22' R	10.65	1075
17	16° 20' R	10.57	1067
18	17° 16' R	10.51	1061
19	18° 43' R	10.36	1045
20	19° 57' R	10.33	1042.3
30	20° 20' R	10.31	1040
21	21° 38' R	10.37	1046
22	24° 13' R	10.69	1079
23	26° 24' R	10.61	1071
24	27° 35' R	10.65	1075

Equirectangular
↓

1+55A	16° 58' L	10.44	1053
2	18° 02' L	10.35	1047 +3.0
3	12° 12' L	10.20	1029
4	9° 52' L	10.41	1050
5	9° 19' L	10.45	1054
6	6° 59' L	10.30	1039
7	3° 51' L	10.35	1047 +3.0



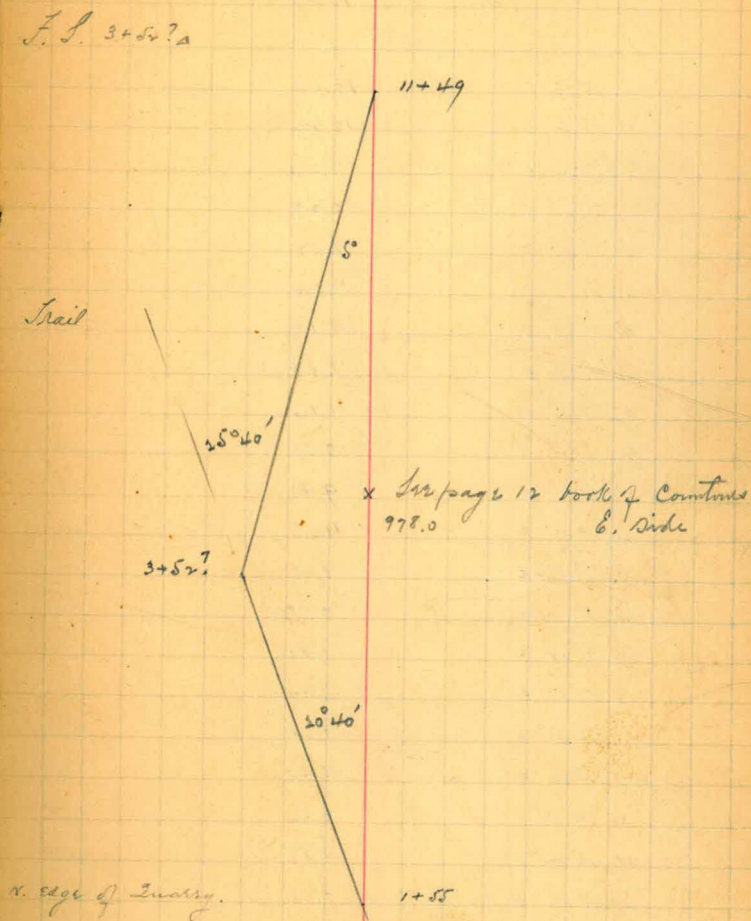
Sta.	Def.	Vert. Ang	Red	Horizontal
270' Contour				
1+55A	30° 12' R		10.18	1027
2	28° 31' R		10.15	1024
3	28° 16' R		10.26	1035
4	24° 05' R		10.01	1010
5	21° 25' R		9.77	986
Δ	20° 40' R		9.67	975.7
6	19° 35' R		9.74	983
7	17° 54' R		9.95	1004
8	17° 13' R		9.93	992
9	16° R		10.02	1011
10	14° 12' R		9.87	996
11	13° 02' R		9.87	996
12	10° 54' R		10.11	1020
13	9° 20' R		10.07	1016
14	8° R		10.17	1026
15	5° 52' R		10.05	1014
16	3° 55' R		10.20	1029
17	2° 52' R		10.20	1029
18	0° 45' R		10.21	1030
19	2° L		10.24	1033
20	3° 49' L		10.16	1025
21	6° 27' L		10.19	1028
22	8° 02' L		10.34	1043
23	9° 34' L		10.27	1036
24	11° 48' L		10.12	1021
25	12° 13' L		10.28	1037

Feb. 27 1907

9.30 a.m.

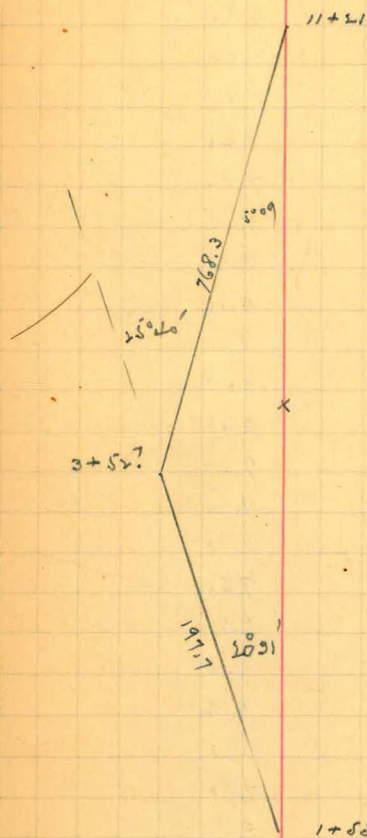
F.L. 3+52.7

Trail



	26	16°36' L	10.27	1036
		260'		
1+55Δ	1	16°02' L	10.09	1018
	2	13°19' L	10.12	1021
	3	11°58' L	10.04	1013
	4	7°22' L	10.22	1031
	5	5°20' L	10.02	1011
	6	2°35' L	10.02	1011
	7	0°59' L	10.09	1018
	8	2°28' R	10.08	1017
	9	4°08' R	10.16	1025
	10	6°32' R	10.05	1014
	11	10° R	9.91	1000
	12	13°11' R	9.65	974
	13	14°50' R	9.66	975
	14	16°22' R	9.85	994
	15	18°22' R	9.61	970
	16	19°50' R	9.45	953
	Δ	20°31' R	9.46	954.4
	17	21°13' R	9.45	953
	18	23°30' R	9.50	959
	19	24°50' R	9.58	967
	20	26°06' R	9.76	984
	21	28°04' R	9.97	1006
	22	31°09' R	9.88	997

Feb. 27, 1907.



768.3	2.885531
5.09	8.952100
20.21	4.55227
	<u>2.292968</u>
	196.7

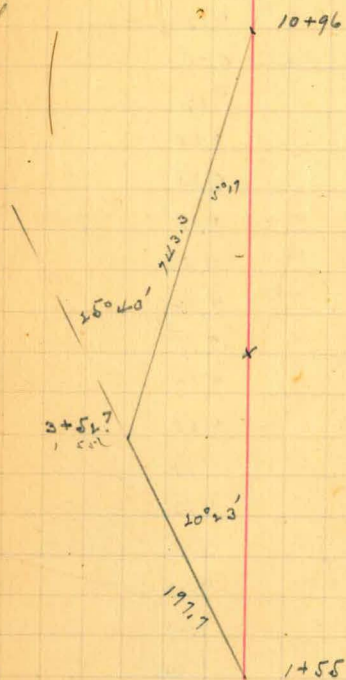
20.21	
5.09	
20.21	

x	2.885531
x	8.952100
x	4.55227
	<u>2.777221</u>
	949.5

250'

1+55A	1	31° 54' R	9.62	971
	2	29° 12' R	9.63	972
	3	27° 48' R	9.74	983
	4	26° 42' R	9.77	986
	5	25° 05' R	9.48	956
	6	22° 35' R	9.30	938
	7	20° 35' R	9.18	926
	Δ	20° 23' R	9.18	926.2
	8	19° 16' R	9.20	929
	9	16° 44' R	9.61	970
	10	14° 27' R	9.40	948
	11	13° R	9.41	949
	12	11° 28' R	9.60	969
	13	10° 26' R	9.70	979
	14	9° 32' R	9.78	987
	15	8° 13' R	9.82	991
	16	6° 16' R	9.94	1003
	17	4° 26' R	10.00	1009
	18	3° 42' R	9.94	1003
	19	0° 0' R	9.95	1004
	20	1° 52' L	9.82	991
	21	4° L	9.81	990
	22	6° 52' L	10.07	1006
	23	8° 36' L	10.02	1011
	24	11° 55' L	9.96	1005
	25	12° 44' L	10.02	1011
	26	16° 08' L	9.97	1006

Feb. 27, 1907.

F. S. 3+52?
Trail

743.3	2.871164
5.17	8.964170
20.23	.458047
	2.493381 =
	196.5

X
2.871164
9.634622
.458047
2.965833 =
924.3

N. End of survey.

240'

1+55A	1	15° 38' L	9.78	987
	2	14° 11' L	9.85	994
	3	12° 30' L	9.75	984
	4	7° 25' L	9.65	974
	5	7° 52' L	9.91	1000
	6	6° 36' L	9.98	1007
	7	3° 15' L	9.75	984
	8	1° 08' L	9.69	978
	9	0° 57' R	9.84	993
	10	2° 46' R	9.77	986
	11	5° 41' R	9.77	986
	12	6° 38' R	9.68	977
	13	7° 55' R	9.65	974
	14	9° 23' R	9.54	963
	15	11° 08' R	9.45	953
	16	12° 49' R	9.22	930
	17	14° 53' R	9.22	930
	18	16° 35' R	9.34	942
	19	17° 56' R	9.21	929
	20	19° R	8.98	906
	A	20° 15' R	8.96	904.0
	21	20° 56' R	8.97	905
	22	22° 14' R	9.05	913
	23	25° 04' R	9.26	934
	24	27° 08' R	9.50	962
	25	29° 43' R	7.41	949

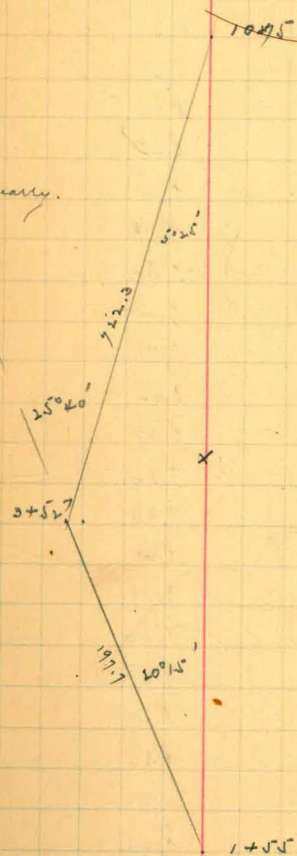
Feb. 27, 1907

F. L. 3+52.7

N. End of Quarry.

Trail.

Trail.



722.3	2.858718
5025	8.974962
20° 15'	.440777
197.0	2.294457

X
2.858718
8.974962
.440777
2.294457
X 9.866818 = 903.9

26	32° 50' R	9.48	956
27	33° 30' R	9.54	963
230'			
2+67 a	37° 42' R	8.31	838
	36° 02' R	8.28	835
	34° 15' R	8.28	835
	33° 02' R	8.37	844
	31° 32' R	8.39	846
	28° 20' R	7.98	805
	25° 10' R	7.80	787
	23° 32' R	7.67	774
	20° 21' R	7.73	780
	19° 35' R	8.04	811
	18° 10' R	8.07	814
	16° 28' R	7.92	799
	14° 09' R	7.93	800
	11° 28' R	8.28	835
	9° R	8.38	845
	5° 42' R	8.46	853
	4° R	8.53	861
	2° 46' R	8.48	855
	1° R	8.53	861
	1° L	8.44	851
	2° 54' L	8.53	861
	14° 24' L	8.59	867
	17° 20' L	8.55	863

Feb. 27, 1907.

F. of 3+57. a
Trail

Trail

N end of quarry.

220'

2+67a	1	16°48' L	8.45	852
	2	13°27' L	8.45	852
	3	11°27' L	8.38	851
	4	8°20' L	8.32	850
	5	5°10' L	8.50	859
	6	2°13' L	8.39	846
	7	0°28' L	8.32	839
	8	0°54' R	8.39	846
	9	3°31' R	8.39	846
	10	5°28' R	8.31	838
	11	7°09' R	8.31	838
	12	7°45' R	8.86	813
	13	8°24' R	8.19	826
	14	10°26' R	8.11	818
	15	13°03' R	7.74	781
	16	15°20' R	7.63	770
	17	17°26' R	7.69	776
	18	19° R	7.75	782
	19	19°57' R	7.44	761
	20	21°47' R	7.49	755
	21	22°52' R	7.55	761.5
	22	23°29' R	7.57	764
	23	26°21' R	7.63	770
	24	30° R	7.96	803
	25	31°40' R	8.25	832
	26	32°40' R	8.14	821

Feb. 27, 1907.

F.S. 3+52.7

+6.0

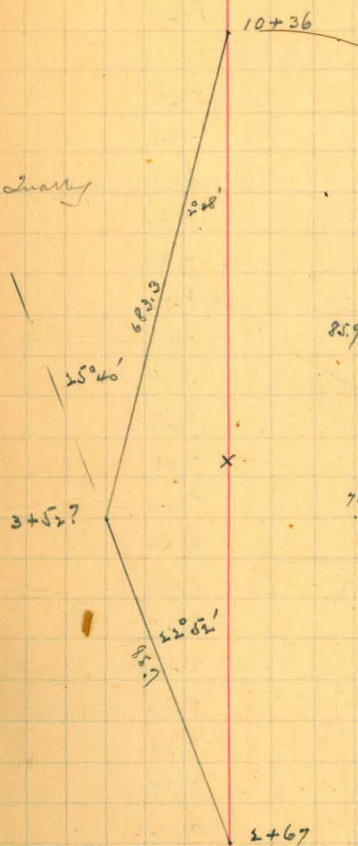
+11.7

+1.0

N. Edge of Quarry

Trail

Trail



$$\begin{array}{r}
 683.3 \\
 220' \\
 225.5 \\
 \hline
 859
 \end{array}
 \qquad
 \begin{array}{r}
 2.834611 \\
 8.688863 \\
 .410511 \\
 \hline
 1.933985
 \end{array}$$

$$\begin{array}{r}
 X \\
 2.834611 \\
 9.636623 \\
 .410511 \\
 \hline
 761.6 = 2.881745
 \end{array}$$

Feb. 27, 1907

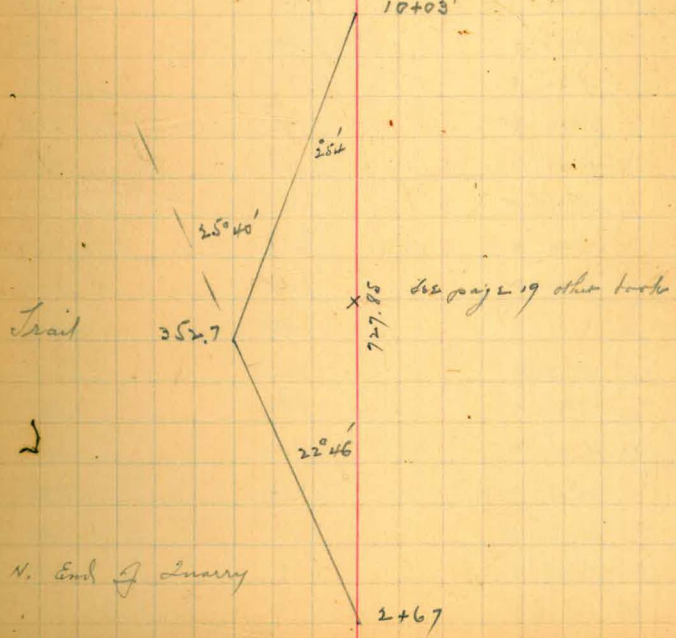
26	35°	R	8.15	822	
27	37° 27'	R	8.09	816	
28	39° 37'	R	8.20	827	
210'					
2+67Δ	1	40° 50'	R	8.10	817
	✓	39° 15'	R	9.93	800
		38° 31'	R	8.06	813
		35°	R	7.98°	805
3		34° 20'	R	-7.94	801
4		32° 22'	R	8.03	810
		30° 55'	R	7.90	797
5		30° 33'	R	7.81	788
6		26° 52'	R	7.42	748
7		23° 27'	R	7.26	732
Δ		22° 46'	R	7.22	728.2
8		20° 49'	R	7.23	729
9		18° 53'	R	7.36	742
10		18° 20'	R	7.57	763
11		18° 53'	R	7.44	750
12		13° 20'	R	7.46	752
13		11°	R	7.58	765
14		10° 17'	R	7.89	796
15		8° 30'	R	8.04	811
16		5° 17'	R	8.04	811
17		3° 41'	R	8.17	824
18		1° 08'	R	8.20	827
19		0° 20'	L	8.18	825

Trail

S. S. 3452'

N. W. Cor. of Excav. for Office
N. edge " " "

Center of E. side of Public Library



Trail

N. End of Quarry

Feb. 27, 1907.

	20	5° 22' L	8.45	852
	21	8° 40' L	8.40	847
	22	10° 50' L	8.31	838
	23	12° 05' L	8.26	833
	24	16° 46' L	8.31	838
		200'		
2+92A	1	16° 02' L	7.93	800
	2	13° 33' L	7.97	800
	3	11° 11' L	7.96	803
	4	9° 26' L	7.91	798
	5	7° 20' L	8.11	818
	6	3° 48' L	8.03	810
	7	0° 57' R	7.82	789
	8	2° 52' R	7.83	790
	9	6° 03' R ^{1/2}	7.65	772
	10	8° 36' R	7.59	766
	11	10° 11' R	7.38	744
	12	11° 48' R	7.13	719
	13	13° 22' R	7.12	718
	14	16° R	7.04	710
Feb. 28	15	17° 30' R	7.07	713
7:00 A.M.	16	19° 50' R	6.82	688
	17	26° 03' R	6.87	693
	18	28° 26' R	7.02	708
	19	31° 12' R	7.26	732
	20	33° 06' R	7.50	757
	21	36° 28' R	7.54	761

S.S. 3+827A

- 4.0

Fair

Feb, 28, 1907

	Def.	Rod	
22	36° 13' R	746	752
23	37° R	743	749
		751	758
24	40° 13' R	749	753
25	44° 22' R	771	778
26	43° 47' R	795	802
	190'		
3+18A	1 47° 10' R	761	768
	2 45° 08' R	717	723
	3 42° 44' R	696	702
	4 33° 52' R	683	689
	5 32° 22' R	673	679
	6 31° 16' R	683	689
	7 27° 48' R	671	677
	8 20° 52' R	649	652
	9 19° R	644	649
	10 17° 52' R	660	666
	11 16° 33' R	649	654
	12 12° 50' R	653	659
	13 12° 29' R	667	673
	14 10° 33' R	672	680
	15 8° 28' R	711	717
	16 5° R	722	728
	17 2° 50' R	742	748
	18 3° 20' L	761	768
	19 6° L	764	771
	20 8° 20' L	750	757

W.E. Cort. porch of Office

F.L. 3+52.7.A

Trail

N. Edge of Quarry

Feb. 28, 1907

21	12° 33' L	767	774	
22	15° 46' L	762	769	
	180'			
3+4+1A	15° 55' L	727	733	F.S. 3+4?
2	12° 48' L	737	738	-5.0
3	9° 35' L	717	723	
4	7° 17' L	727	733	
5	4° 32' L	724	730	
6	1° 29' L	722	728	
7	2° 03' R	718	724	N. Edge of Quarry
8	5° 15' R	687	693	
9	8° 06' R	678	684	
10	10° 45' R	637	652	+10.0 West side of road
11	14° 42' R	623	628	" "
12	19° 20' R	618	623	" "
13	17° 40' R	596	601	East "
14	20° R	581	586	
15	26° 20' R	578	583	
16	29° 36' R	596	601	
17	33° 57' R	639	644	
18	37° 18' R	657	663	
19	39° 20' R	653	659	
20	43° 30' R	658	667	
21	49° R	717	723	

170'

3+65A	1	25° 06' R	6.81	687
	2	23° 26' R	6.45	680
	3	20° 04' R.	6.23	628
	4	17° 55' R	6.16	621
	5	17° 25' R	5.96	601
	6	14° 23' R	6.07	-612
	7	12° 12' R	6.23	628
	8	9° 20' R	6.02	609
	9	4° 30' R	5.86	561
	A	0° 0'	5.47	551.5
	10	0° 29' L	5.40	544
	11	6° L	5.47	551
	12	8° 21' L	5.60	565
	13	10° 43' 1/2 L	5.64	569
	14	16° 04' L	5.94	599
	15	17° 14' L	6.13	618
	16	20° 30' L	6.35	640
	17	22° 50' L	6.50	656
	18	24° 30' L	6.68	674
	19	26° 45' L	6.93	699
	20	31° 54' L	6.96	702
	21	39° 06' L	6.96	702
	22	48° 15' L	7.10	716

Feb. 28, 1907.

F. J. 13+30 A

9+16⁺ A

By chain 551.4

E. edge of road
N. " "

160'

3+87A	1	42° L	6.84	690
	2	42° 20' L	6.67	673
	3	40° 12' L	6.57	663
	4	38° 26' L	6.53	659
	5	37° 12' L	6.41	646
	6	30° 55' L	6.46	651
	7	25° 40' L	6.27	632
	8	20° 42' L	6.04	609
	9	17° 15' L	5.60	565
	10	15° L	5.46	550
	11	12° 26' L	5.28	532
	12	8° 25' L	5.28	529
	12	5° 31' L	5.14	518
	14	0° 52' L	5.08	509
	15	3° R	5.10	514
	16	5° 16' R	5.20	524
	17	9° 32' R	5.65	570
	18	12° 50' R	5.89	594
	19	18° 10' R	5.64	569
	20	20° 02' R	5.83	588
	21	22° 20' R	5.91	596
	22	24° 07' R	6.12	617
	23	25° 56' R	6.38	643
	24			

West bank of road
East

F.S. 13+300

150'

4+13A	1	30°18' R	6.30	635
	2	27°02' R	5.94	599
	3	25°46' R	5.63	568
	4	23°20' R	5.47	551
	5	21°09' R	5.42	546
	6	18°46' R	5.22	526
	7	15°45' R	5.47	551
	8	10°20' R	5.16	520
	9	6°05' R	4.80	484
	10	3°24' R	4.70	474
	11	0°48' L	4.66	470
	12	3°20' L	4.71	475
	13	7°06' L	4.78	482
	14	9°28' L	4.88	492
	15	12°40' L	4.84	489
	16	15°05' L	4.90	494
	17	16°50' L	5.10	514
	18	19°09' L	5.29	533
	19	22°15' L	5.70	575
	20	24°20' L	5.71	576
	21	28°12' L	5.95	600
	22	30°53' L	0.96	604
	23	33°08' L	0.87	609
	24	38°25' L	6.10	618
	25	41°12' L	7.3	615
	26	44°30' L	8	632
				647

F. L. 13+30A

140'

1	46° 12' L	6.13	618
2	44° 30' L	6.05	610
3	41° 25' L	6.04	609
4	39° 15' L	5.81	586
5	34° 19' L	5.81	586
6	31° 40' L	5.70	575
7	29° 16' L	5.63	568
8	26° 41' L	5.47	551
9	24° 23' L	5.38	542
10	20° 52' L	4.98	502
11	18° 49' L	4.81	485
12	18° 25' L	4.44	447
13	15° 04' L	4.23	446
14	10° 27' L	4.57	461
15	8° 23' L	4.42	445
16	1° 09' L	4.37	441
17	1° 43' R	4.26	439
18	6° 46' R	4.33	436
19	9° 50' R	4.56	460
20	12° 45' R	4.87	491
21	14° 51' R	6.04	503
22	20° 22' R	4.77	481
23	21° 25' R	4.96	500
24	25° 46' R	5.16	520
25	Time in way		
26	32° 31' R	6.19	624

Feb. 28, 1907

F.S. 13+30 Δ

Feb. 28, 1907.

I. P. M.

22

130'

4+86Δ	1	35° 12' R	6.17	622
	2	33° 02' R	5.63	568
	3	32° 44' R	5.08	512
	4	26° 54' R	4.77	481
	5	23° 54' R	4.64	468
	6	22° R	4.38	441
	7	17° 30' R	4.60	464
	8	13° 53' R	4.26	429
	9	11° 20' R	4.00	403
	10	6° 34' R	3.93	396
	11	2° 16' R	3.97	400
	12	8° 03' L	4.06	409
	13	10° 55' L	4.17	420
✓	14	15° 5' L	4.10	413
	15	21° 20' L	4.22	425
	16	21° 26' L	4.50	454
	17	22° 55' L	4.63	467
	18	26° 15' L	5.05	509
	19	28° 53' L	5.14	518
	20	31° L	5.27	531
	21	34° 36' L	5.47	551
	22	39° 54' L	5.48	552
	23	42° 40' L	5.73	579
	24	44° 08' L	5.76	581
	25	46° 36' L	5.76	581
	26	49° 24' L	5.91	596

f. f. 13+30Δ

120'

4+90A	1	52°47' L	5.62	567
	2	50°26' L	5.44	548
	3	47°06' L	5.43	547
	4	46°07' L	5.35	539
	5	44°10' L	5.40	544
	6	41°17' L	5.16	520
	7	36°52' L	5.06	510
	8	33°46' L	4.93	497
	9	31°32' L	4.67	471
	10	28°32' L	4.58	462
	11	25°18' L	4.22	426
	12	23°55' L	4.07	411
	13	22°07' L	3.84	388
	14	15°24' L	3.78	382
	15	10°23' L	3.71	374
	16	7°08' L	3.55	358
	17	6° R	3.46	348
	18	9°21' R	3.23	345
	19	12°52' R	3.47	349
	20	16°32' R	3.59	362
	21	17°30' R	3.82	385
	22	20°10' R	4.07	410
	23	23°48' R	4.00	403
	24	26°49' R	4.20	423
	25	29°55' R	4.35	438
	26	32°52' R	4.62	466

February 28th. 1907.

F. S. 13+30A

11

27	35° R.	4.70	474
28	36° 50' R	5.35	539
	110'		
5+11A	1		
2	28° 50' R	4.62	465
3	36° 26' R	4.92	485
4	32° 34' R	3.96	399
5	28° 05' R	3.83	386
6	26° R	3.74	377
7	22° 35' R	3.74	377
8	20° 25' R	3.49	351
9	17° 05' R	3.21	323
10	9° R	3.08	310
11	0° 0' 0'	3.11	313
12	6° 40' L	3.22	324
13	13° L	3.33	335
14	21° 22' L	3.50	353
15	26° 20' L	3.73	376
16	29° 25' L	4.04	407
17	33° 40' L	4.34	437
18	36° 50' L	4.67	471
19	41° 40' L	4.83	487
20	45° 10' L	5.13	517
21	48° 08' L	5.05	509
22	52° 35' L	5.16	520
23	55° L	5.28	532

Feb. 28, 1907.

F. S. 13+30'A

		100'	
5+43A	1 58° 53' L	4.96	500
	2 56° 20' L	4.83	487
	3 53° 25' L	4.87	491
	4 52° 04' L	4.73	477
	5 49° 13' L	4.71	475
	6 46° 56' L	4.76	480
	7 43° 30' L	4.23	426
	8 40° 22' L	4.33	436
	9 38° 03' L	3.96	399
	10 34° 56' L	3.74	377
	11 31° L	3.39	342
	12 28° L	3.17	319
	13 21° 34' L	3.06	308
	14 8° 5' L	2.75	277
	Δ 0° 0'	2.54	255.5
	15 1° 12' R	2.67	269
	16 13° 10' R	2.58	260
	17 21° 05' R	2.69	271
	18 25° 05' R	3.10	312
	19 28° 09' R	3.24	336
	20 32° 25' R	3.33	335
	21 38° 20' R	3.62	367
	22 44° 40' R	4.00	403
	23 44° 22' R	4.53	457
	24 46° 20' R	4.96	500
	25 50° 10' R	5.20	524

2/28/07

F.S. 13+30.2

257

Sta. 8+00

by chain 257.

90'

5+65 Δ	1	55°17' R	2.84	488
	2	49°55' R	4.60	464
	3	50°15' R	4.23	426
	4	48°30' R	3.81	384
	5	44°25' R	3.49	349
	6	37°53' R	3.08	310
	7	30°35' R	2.95	297
	8	18°26' R	2.65	267
	9	23° R	2.34	235
	10	13°55' R	2.23	224
	11	11°10' R	2.12	213
	12	22°32' L	2.70	272
	13	29°50' L	2.81	283
	14	36°15' L	3.07	309
	15	38°53' L	3.42	344
	16	42°15' L	3.73	376
	17	43°30' L	4.04	407
	18	46°05' L	4.07	410
	19	50°02' L	4.37	440
	20	52°10' L	4.43	446
	21	55°35' L	4.54	458

2/28/07

F.S. 13+30a

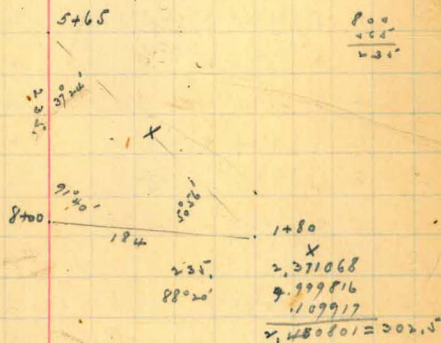
Trail

		80'		
5+65A	56°50' L	4.27	437	440
2	52°06' L	4.28	428	431
3	48°37' L	4.08	408	411
4	44°45' L	3.87	387	390
5	44°05' L	3.40	340	342
6	41°34' L	3.32	332	334
7	39°35' L 2°10'	2.98	298	300
8	37°24' L	3.00	300	302.0
8	32° L 3°	2.71	270	272
9	25°32' L 2°40'	2.47	247	249
10	22°38' L 2°40'	2.49	249	251
11	12°10' L 3°	2.31	230	231
12	21°25' R 2°50'	2.15	215	216
13	17° R 2°50'	2.21	221	222
14	31°27' R 2°40'	2.43	243	244
15	32°54' R 2°20'	2.80	280	282
16	39°10' R 2°10'	3.01	301	303
17	43°30' R 2°	3.30	330	332
18	49°50' R	3.40	340	342
19	50°43' R	3.74	374	377
20	52°50' R	4.26	426	429
21	52°50' R 248	4.52	452	456
22	57°10' R 226	4.74	474	478
23	60°06' R 100	5.02	502	508

2/28/07

F.S. 13+30A

1+84 Δ of four lines

$$\begin{array}{r} 9140 \\ 3724 \\ \hline 12904 \\ 5056 \end{array}$$


Trail

		70'				
5765A	1	60°52' R	2°40'	4.60	459	463
	2	56°10' R	2°50'	4.47	446	449
	3	54°40' R	3°	4.07	406	409
	4	53°22' R	3°20'	3.70	369	372
	5	49°10' R	3°20'	3.24	333	335 328
	6	48° R	3°50'	3.18	316	318
	7	41°10' R	4°	2.95	294	296
	8	36°05' R	4°30'	2.73	271	273
	9	33°20' R	5°	2.39	237	238
	10	27°20' R	5°10'	2.13	211	212
	11	2°24' R	6°10'	2.07	204	205
	12	7°40' L	5°	2.16	214	215
	13	14°25' L	5°	2.26	234	235
	14	30°50' L	5°	2.47	245	246
	15	42°35' L	4°20'	2.89	287	289
	16	44°40' L	4°20'	3.25	323	325
	17	47°45' L	3°40'	3.25	334	336
	18	46°20' L	3°	3.54	353	356
	19	48°40' L	3°20'	3.87	386	389
	20	52°40' L	3°20'	4.07	406	409
	21	57°20' L	3°10'	4.07	406	409
	22	62°25' L	3°	4.27	436	439

2/28/07

F. L. 13+300

-7.0

		60'			
5+65 Δ	63°38' L	4°10'	4.39	437	440
	60°38' L	4°20'	4.16	414	417
3	58°10' L	5°10'	4.00	397	400
4	54°42' L	4°40'	3.93	390	393
5	48°15' L	3°40'	3.62	361	364
6	48°05' L	6°30'	3.29	335	337
7	45°54' L	6°	3.01	298	300
8	43°56' L	6°40'	2.76	272	274
9	33°20' L	8°	2.37	232	233
10	12°42' L	9°	2.04	199	200
11	2°53' L	9°	2.06	201	202
12	8°20' R	9°	2.03	198	199
13	29°55' R	10°40'	2.09	202	203
14	35°20' R	7°40'	2.28	224	225
15	37°08' R	7°	2.26	252	254
16	42°24' R	7°	2.70	266	268
6+33 Δ	55°42' R	4°	2.58	257	259
18	60°10' R	3°40'	2.79	278	280
19	62°17' R	3°20'	3.00	299	301
20	65°40' R	8°	3.24	323	325
21	66°16' R	2°40'	3.66	366	369
22	66°20' R	2°40'	3.92	392	395
23	69°20' R	2°30'	4.10	409	412

Feb. 28, 1907
 Mod. 1, "

f.f. 13+300

+2.0

f.f. 13+300

March 1, 1907.

50'

6+33A	71°20' R		3.88	388	391
7	68°34' R		3.73	373	376
8	70°50' R		3.29	329	331
9	68°34' R		3.06	306	308
10	63°15' R		2.88	288	290
11	60°20' R		2.76	276	278
12	58° R		2.38	238	239
13	57°50' R		2.17	217	218
14	53°20' R		2.04	204	205
15	50°15' R		1.89	159	160
16	30°17' R	2°20'	1.32	132	133
17	13°17' R	2°40'	1.18	118	119
18	7°32' R	2°20'	1.23	123	124
19	2°30' R	2°40'	1.24	124	125
20	1°11' R	2°40'	1.20	120	121
21	25°40' L		1.28	128	129
22	46°40' L	2°	1.67	167	168
23	56°40' L		2.05	205	206
24	58°37' L		2.26	226	227
25	60°17' L		2.99	299	301
26	65°32' L		3.41	341	343
27	68°52' L		3.63	363	366
28	72°17' L		3.87	387	390
29	73°15' L		4.04	404	407

F.S. 13+300

+3.0

B.M. on 50' contour

40'

6+33A

Clock face in way

2	70°27' L	2.56	359
3	67°30' L	3.39	341
4	64°15' L	3.08	310
5	63°28' L	2.69	271
6	60°32' L	2.50	252
7	61°30' L	2.27	228
8	61°57' L	2.17	218
9	28°52' L	1.25	126
10	10°35' R	1.13	114
11	33°03' R	1.17	118
12	45°04' R	1.39	140
13	52°25' R	1.63	164
14	58°04' R	1.94	195
15	61°40' R	2.02	203
16	61°30' R	2.25	226
17	64°13' R	2.28	229
18	63°56' R	2.71	273
19	67°46' R	2.97	299
20	71°35' R	3.14	316
21	Face		
22	74°23' R	3.99	402

Mar. 17 1907

F. S. 13+30' A

30'

6+33 Δ	1	77°15' R		2.90	390	393
	✓	75°15' R		3.60	360	363
	3	72°40' R	2°20'	3.34	334	336
	4	73°10' R	3°30'	3.08	307	309
	5	67°49' R	2°20'	2.76	276	278
	6	66°26' R	2°40'	2.39	239	240
	7	62°25' R	3°	2.13	212	213
	8	60°25' R	4°	1.87	186	187
	9	55°40' R	4°	1.62	161	162
	10	51°05' R	4°40'	1.36	135	136
	11	45°16' R	5°20'	1.18	117	118
	12	21°50' R	5°20'	1.06	105	106
	13	4°49' L	5°20'	1.04	103	104
	14	18°54' L	6°50'	1.04	103	104
	15	28°07' L	8°	1.10	108	109
	16	35°40' L	6°	1.31	130	131
	16	65° L	2°50'	2.30	230	231
	17	62°22' L		2.58	258	260
	18	68°15' L		3.20	320	322
	19	72°26' L		3.53	353	356

F.S. 13+300

+3.0

B.M. on 30' contour

20'

6+33A	6	41°40' L	12°	1.27	127	123
	7	31°48' L	12°	1.12	107	105
	8	19°40' L	12°30'	0.90	86	87
	9	4°52' R	12°	1.00	96	97
	10	26°44' R	11°	0.96	93	92
	11	44°30' R	8°20'	1.17	115	116
	12	54°12' R	8°00'	1.35	132	133

	1	70°55' L	4°	5.23	321	323
	2	71°20' L	5°10'	2.87	285	287
	3	68°05' L	3°30'	2.60	259	261
	4	67°25' L	2°50'	2.43	241	242
	5	66°25' L	7°	2.24	221	222

F.S. 13+30'A

West end of cut off wall, (Elev. of cut off wall = 21.0)

10'

Δ 6+33	1	48° 10' R	11° 40'	1.23	118	119
	2	48° 07' R	13°	1.03	98	99
	3	5° 14' R	17° 20'	0.91	83	84
	4	21° 45' L	10° 50'	0.85	78	79
	5	42° L	9° 40'	1.27	124	125
1+8+4 A	6	85° 10' R	21°	2.10	183	184
	7	91° 20' R	15° 40'	2.84	263	265
	8	98° 52' R	13°	3.43	326	328
	9	96° 21' R	11° 40'	3.78	363	366
	10	95° 35' R	10°	4.43	430	433

2+67

21	26° 54' L	2° 40'	8.76
22	30° 06' L	2° 41'	9.06
	240'		
6	26° 03' L	2° 20'	8.64
7	23° 38' L	2° 20'	8.66

250' contour, check on previous

Reading 3
F.S. 3+52? ASta 0 - 10' on East side
56° 56' L 11° 40' 1.07

F.S. 6+330

3/18/77

	Def	Vert A	Rod	Cor Rod
1+84 A	44° 57' L	7° 20'	6.65	654
"	47° 55' L	9° 10'	5.23	510
"	43° 40' L	10° 50'	4.34	419
"	43° 5' L	13° 0'	3.64	346
"	46° 15' L	8° 0'	6.02	590
"	51° 40' L	9° 20'	5.09	496
"	55° 8' L	10° 30'	4.46	431
"	57° 28' L	21° 50'	2.31	199
"	106° 38' L	31° 50'	1.79	130
"	130° 56' L	26° 20'	1.96	157
"	130° 10' L	25° 0'	2.01	165
"	137° 57' L	20° 10'	2.36	208
"	143° 0' L	19° 40'	2.46	218
"	143° 50' L	18° 40'	2.57	231
"	146° 32' L	18° 30'	2.56	230
"	147° 12' L	15° 0'	3.05	285
"	154° 6' L	15° 0'	3.08	287
"	156° 20' L	13° 50'	3.33	314

80' Contour

1+84 A	1° 30' L	2° 20'	1.83	183
"	8° 55' L	1° 15'	2.66	266
"	14° 16' L	1° 55'	3.30	330
"	24° 24' L	0° 50'	4.34	434
"	30° 20' L	0° 40'	5.00	500
"	32° 38' L	0° 46'	5.51	551

8/29/07

Hally
Kant.

B.S. 800 Stream level at toe wall lower site

N. Bank

" "

" "

E. Bank

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

Under overhanging rock.

B.S. 8+00

=*1

Contour 110

1+84 Δ	26° 39' L	2° 40'	5.35	534	535
	20° 50' L	3° 0'	4.66	465	469
	14° 10' L	3° 40'	3.70	378	382
	8° 40' L	4° 0'	3.18	316	320
	1° 15' R	5° 15'	2.56	254	

Contour 30

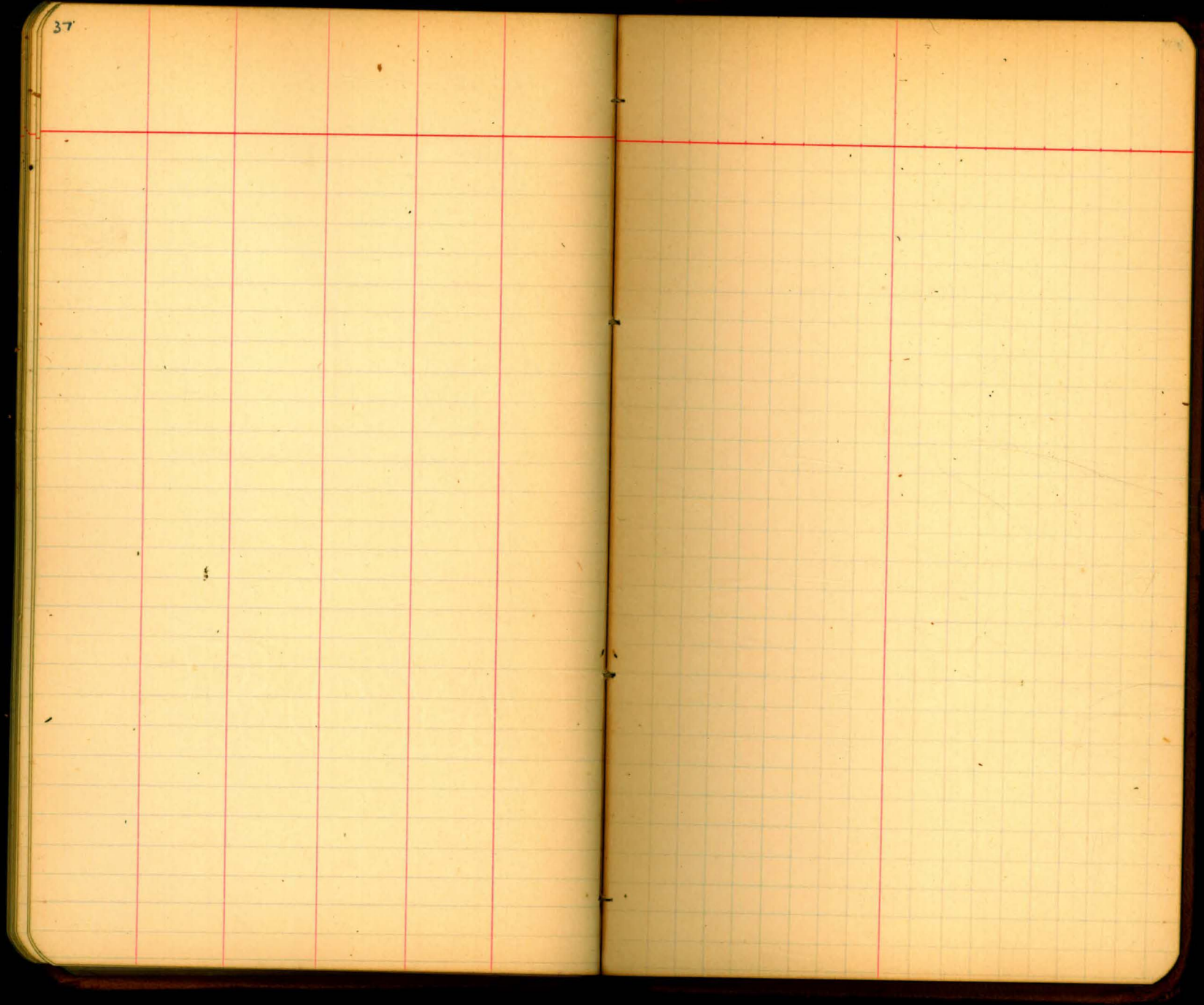
1+84 Δ	38° 35' L	6° 40'	4.70	464	
	28° 54' L	9° 35'	3.26	317	
	27° 34' L	14° 20'	2.38	223	
	52° 54' L				

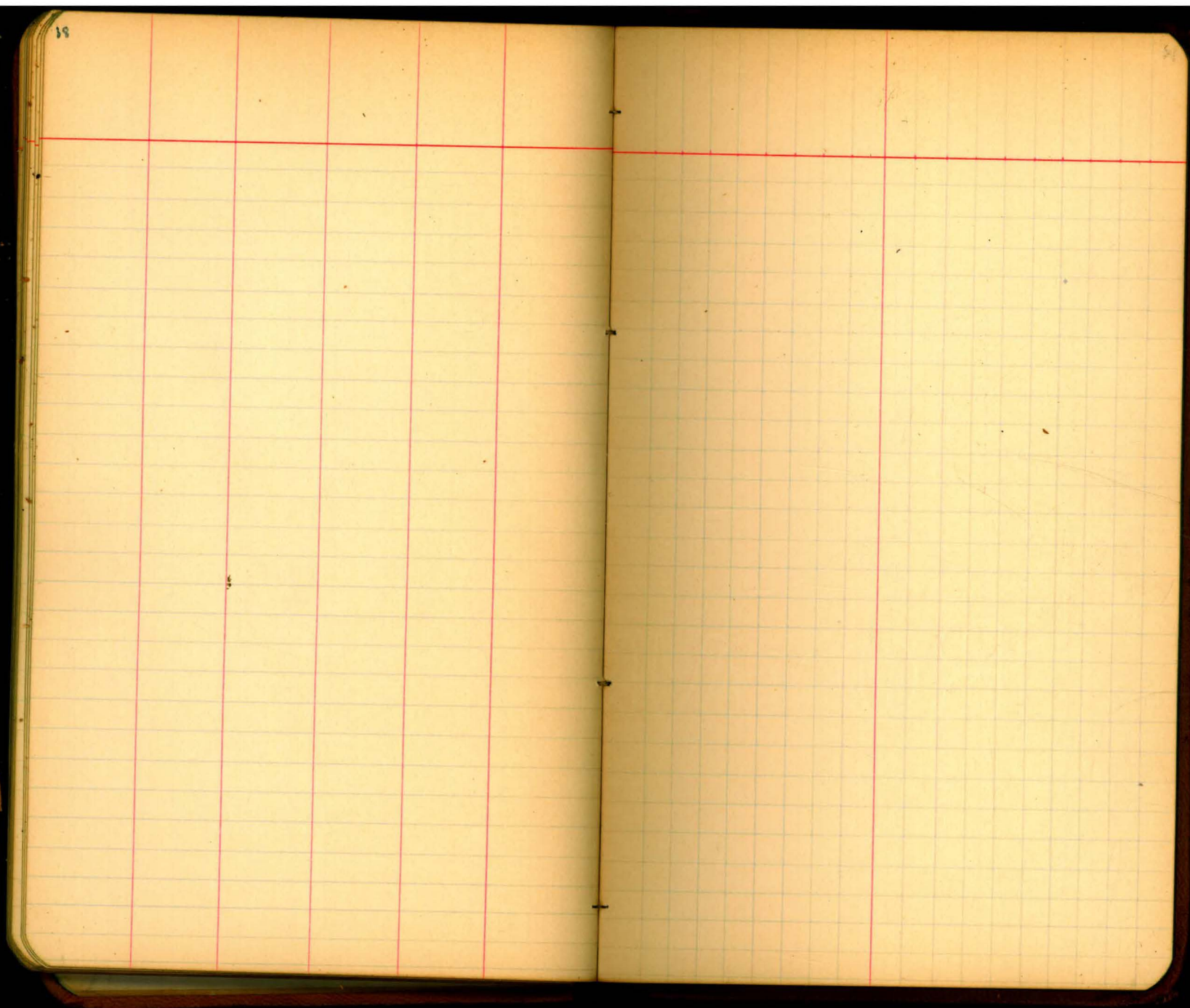
B.S. 8+00

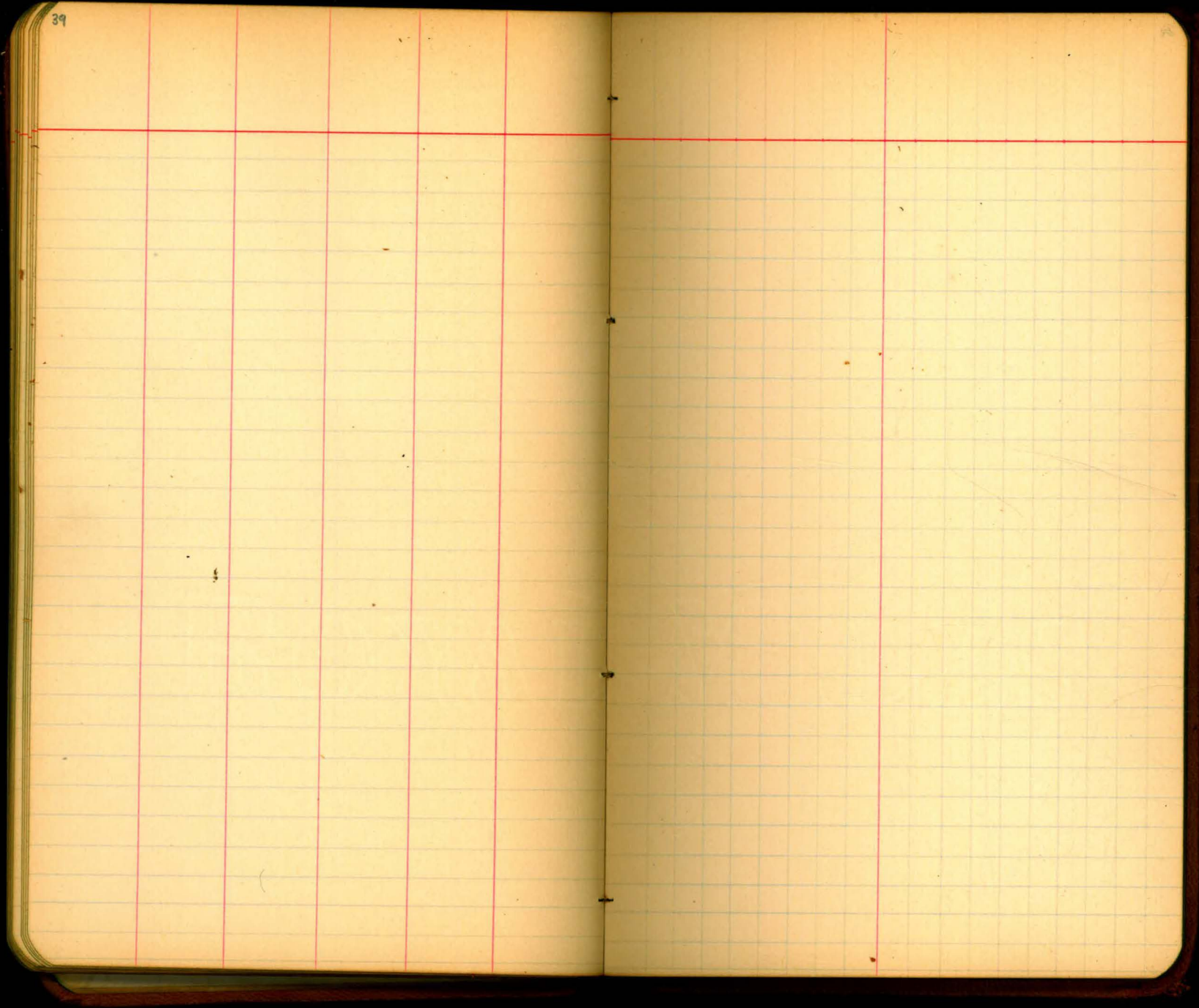
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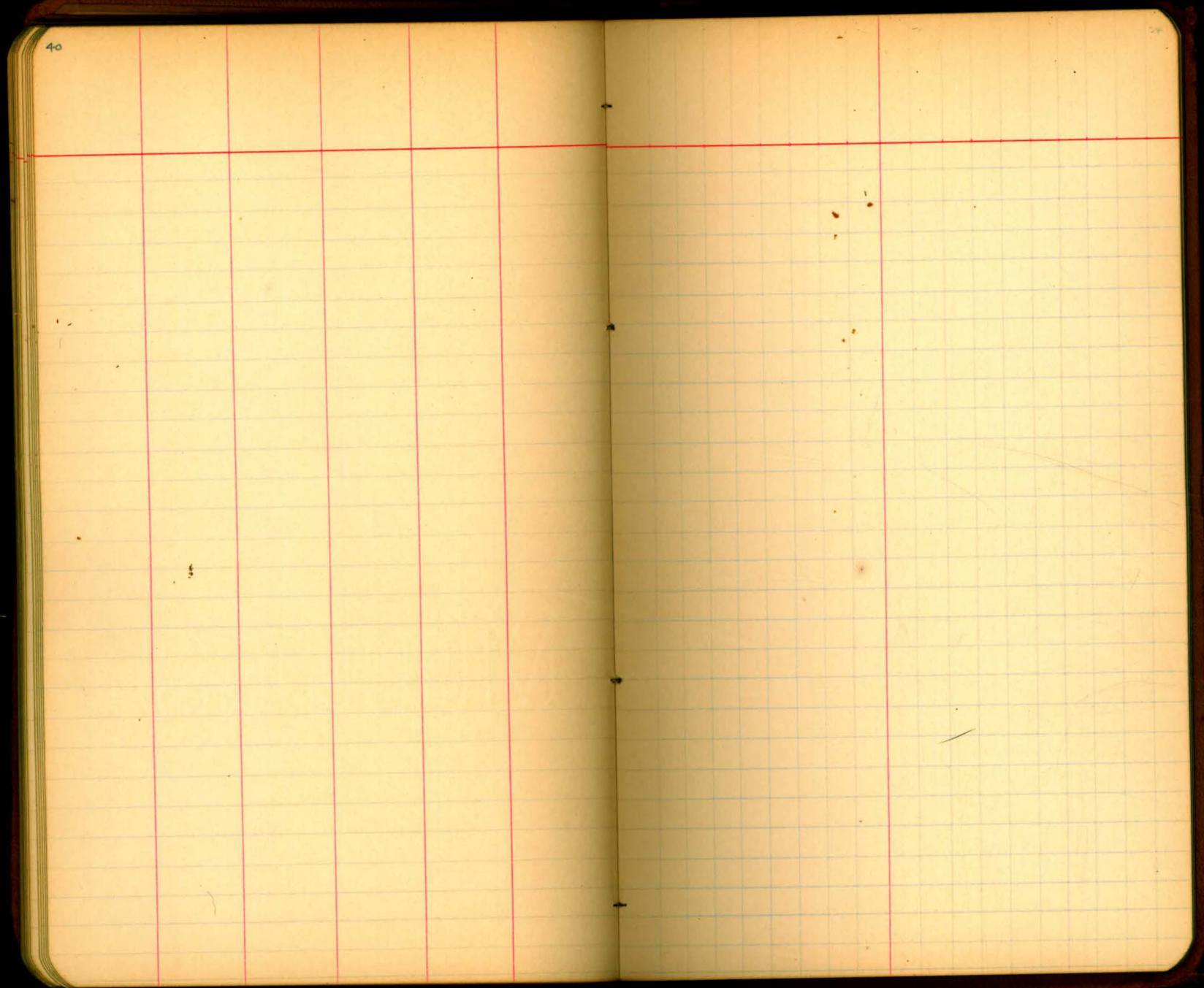
B.S. 8+00

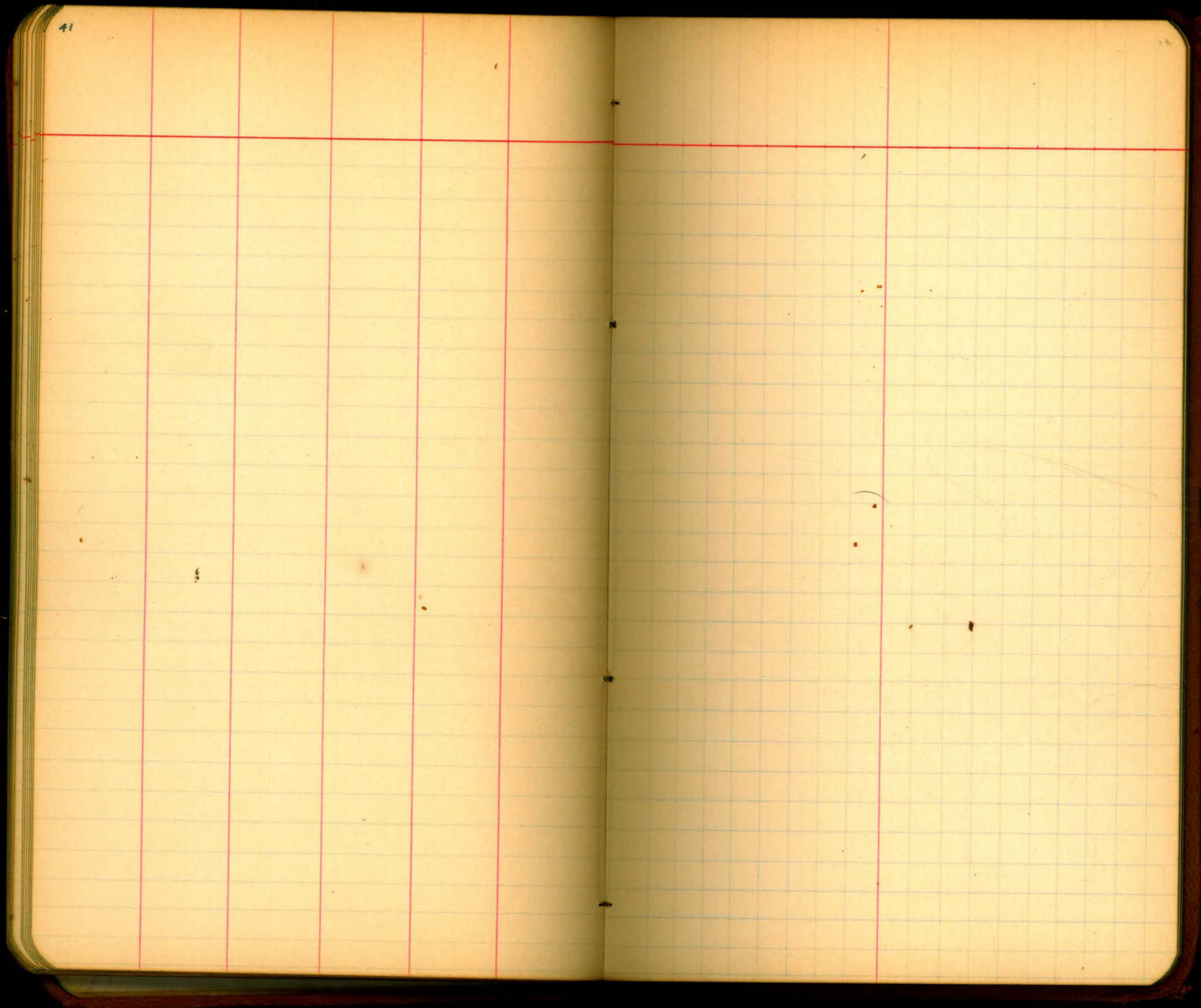
N.W. cor of engine shack lower site.

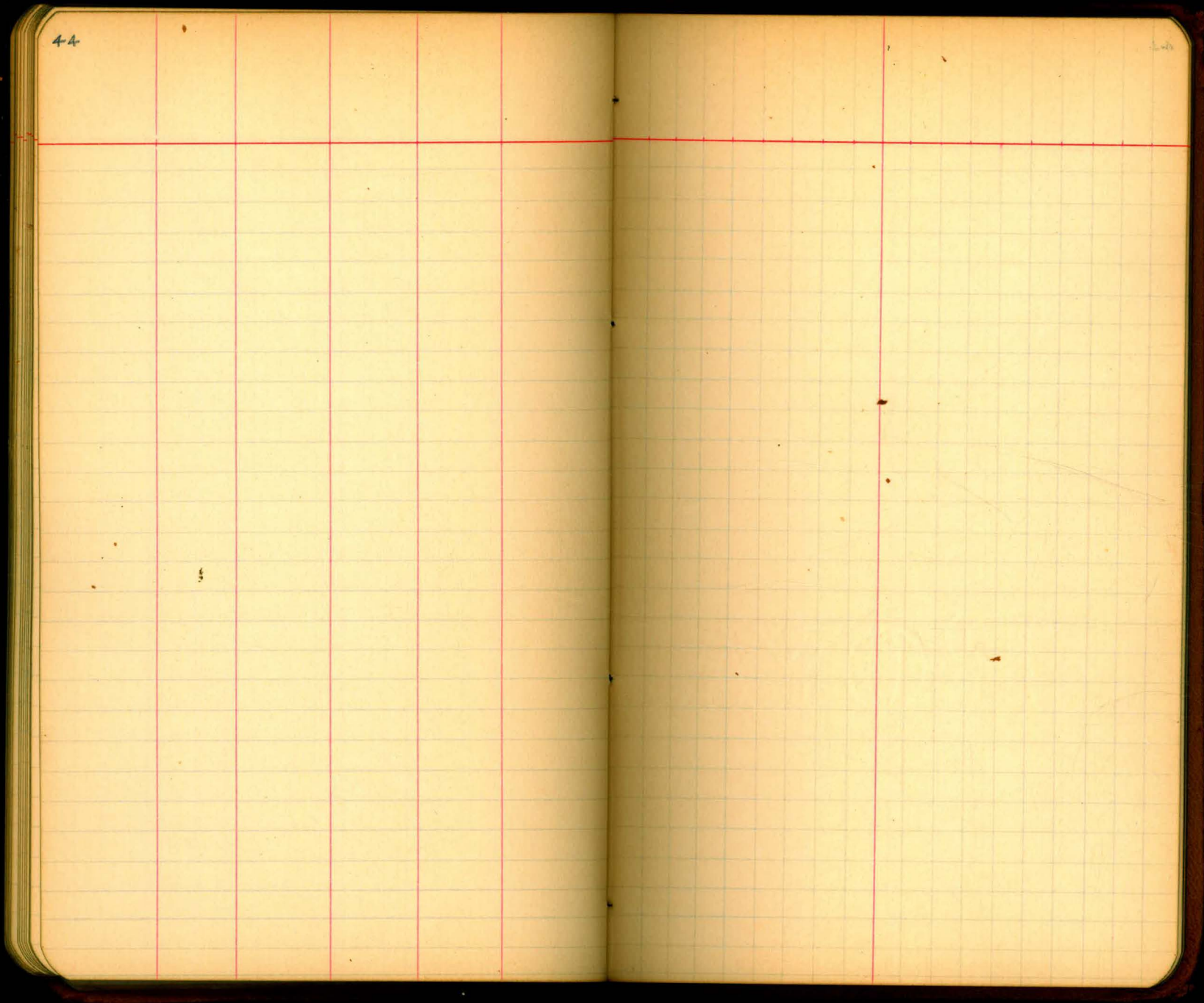


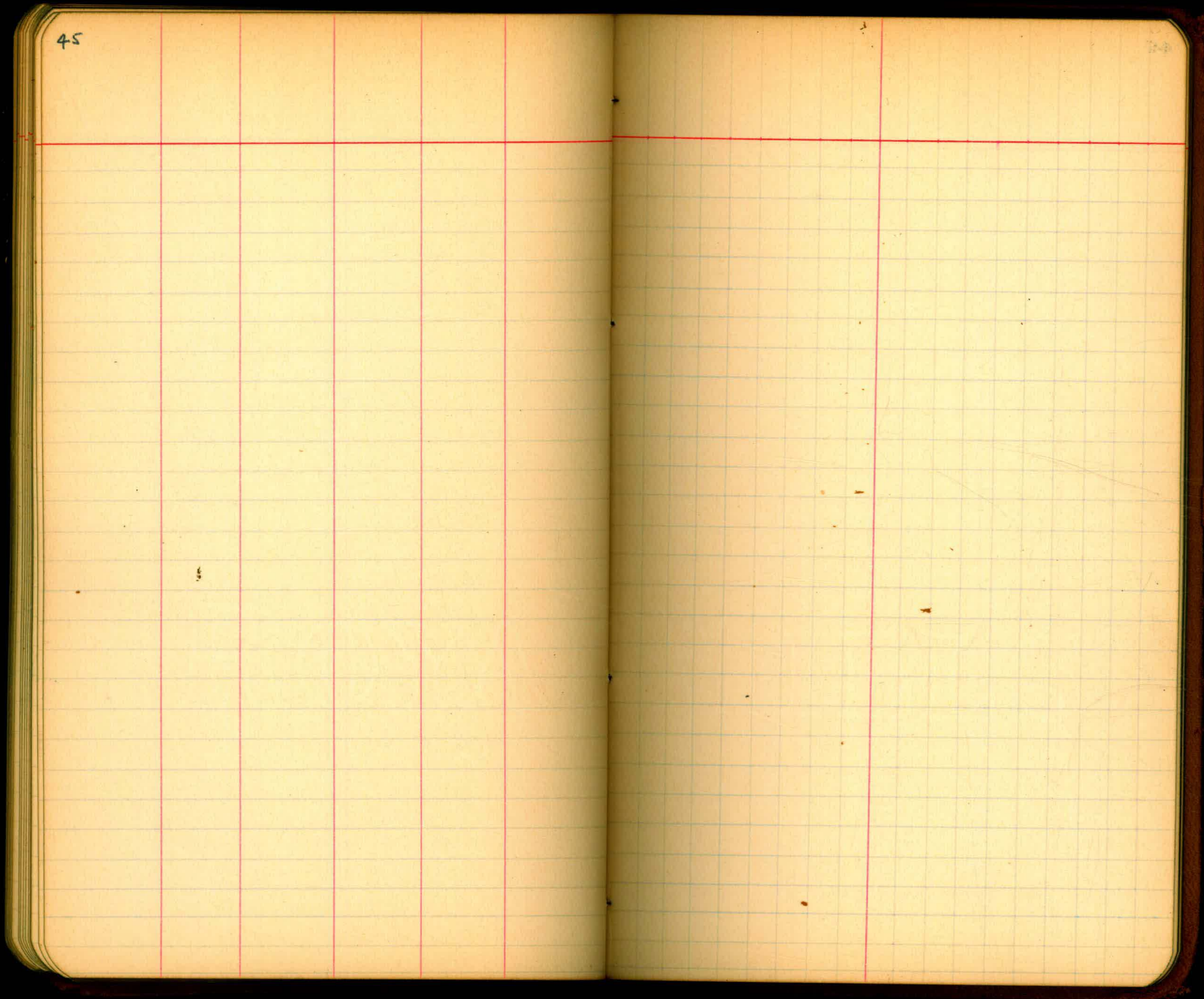


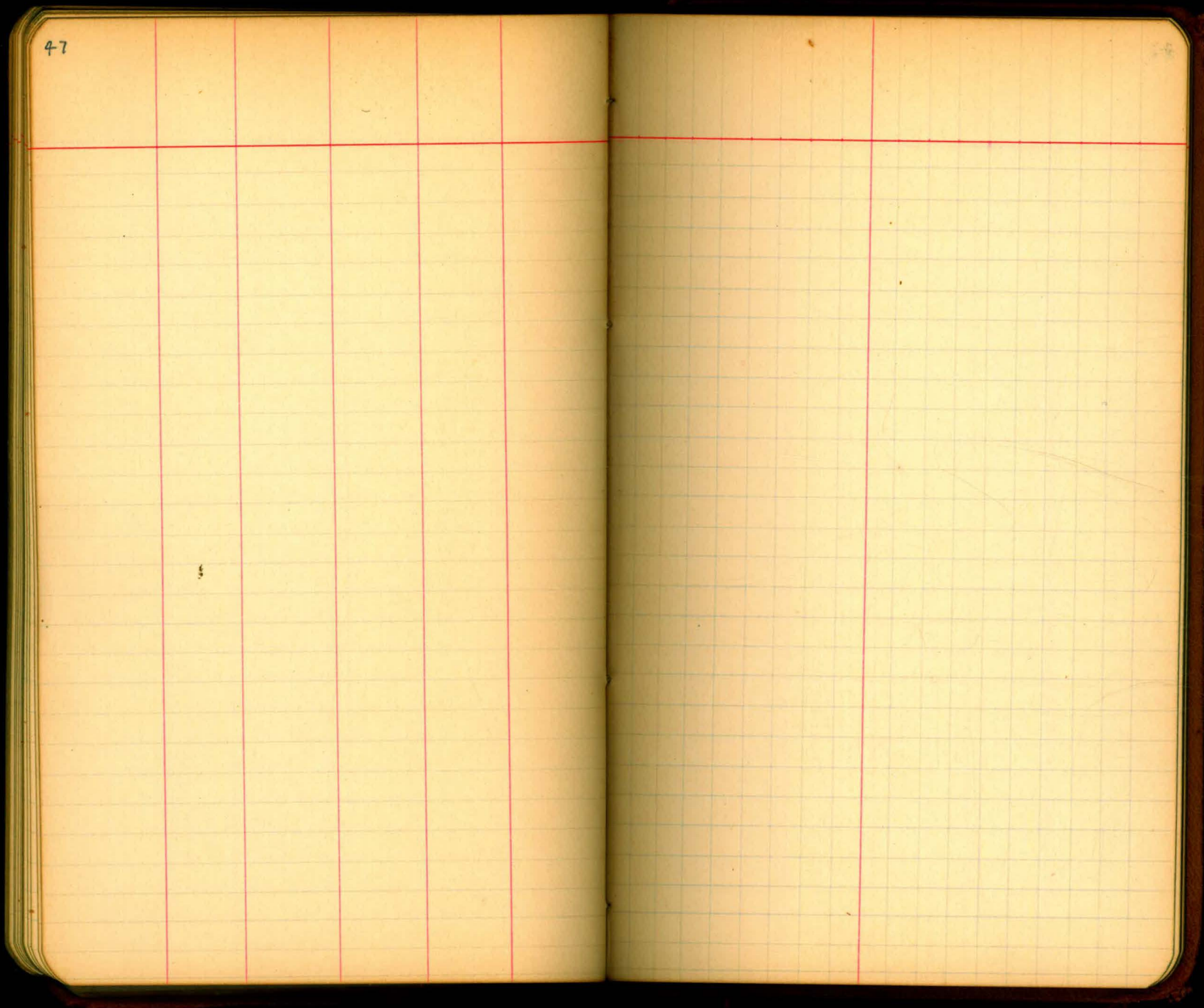


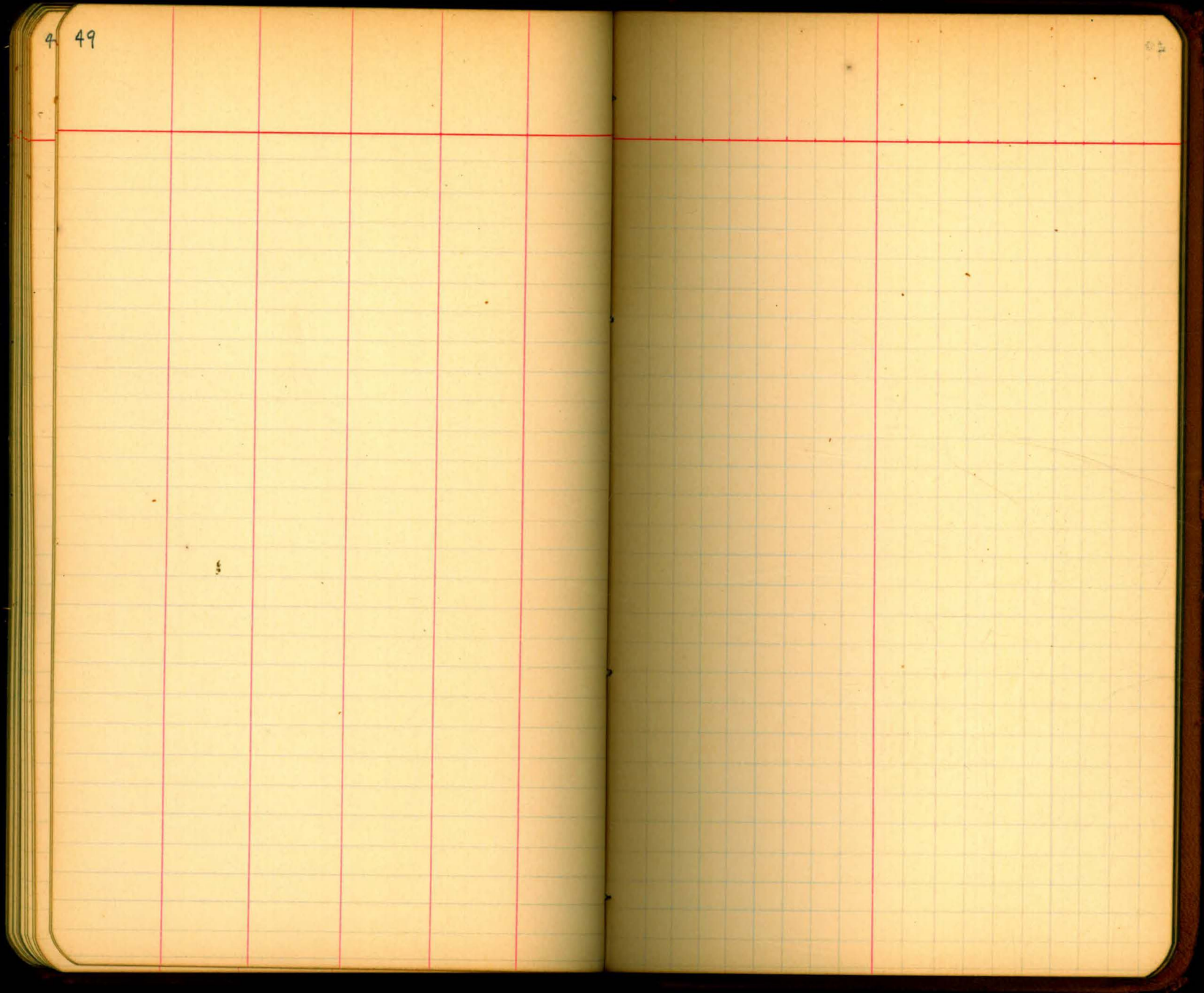






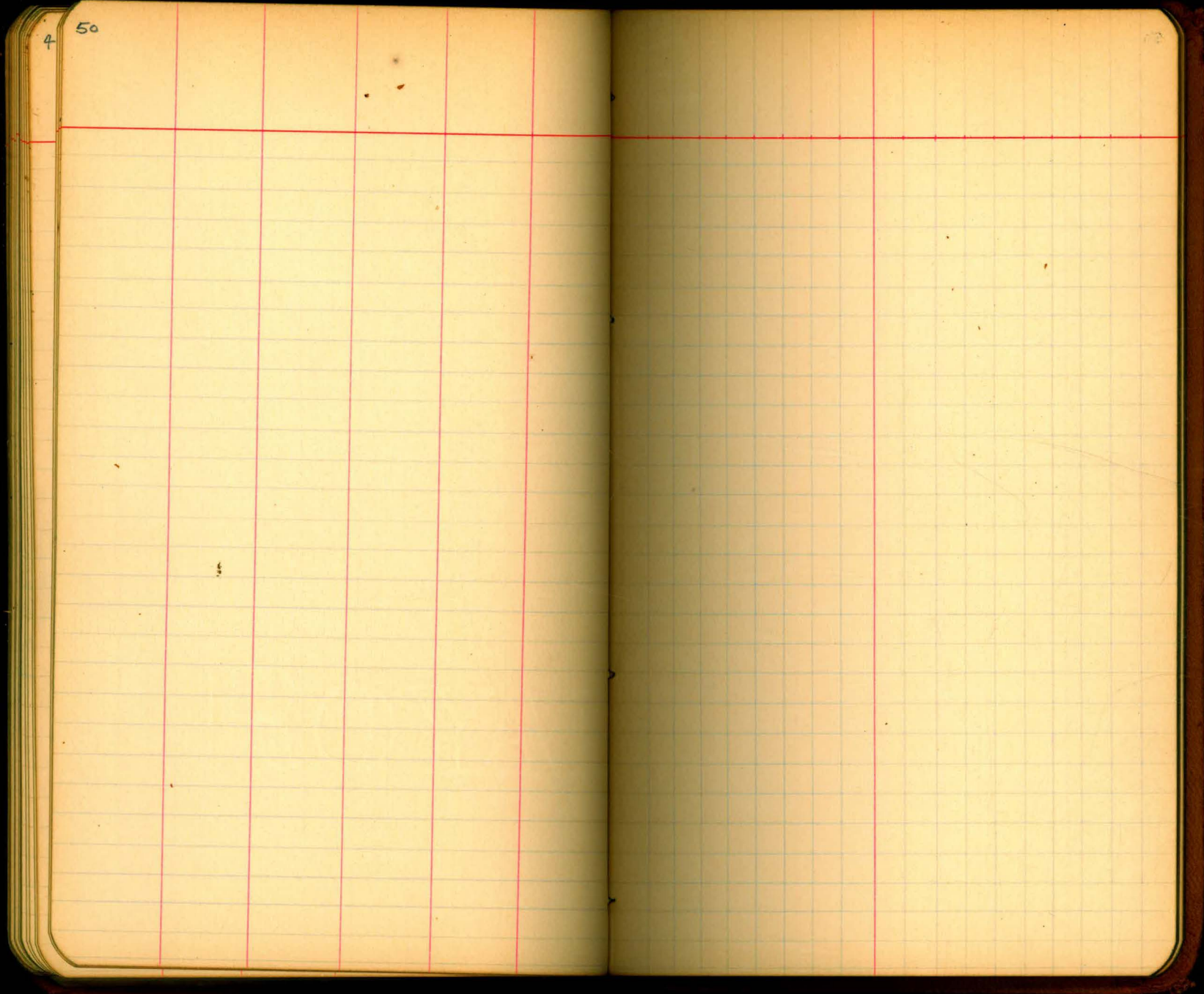


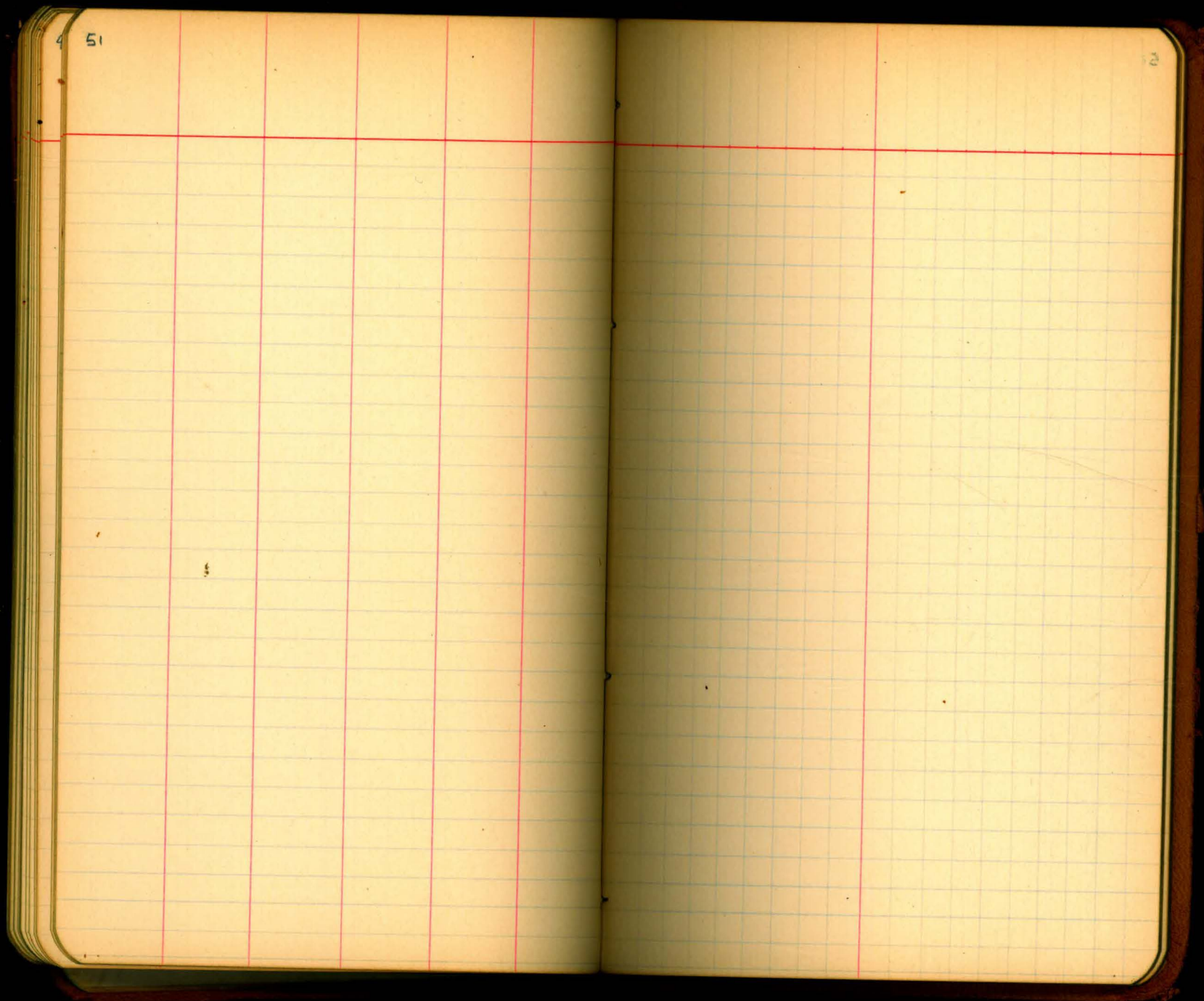


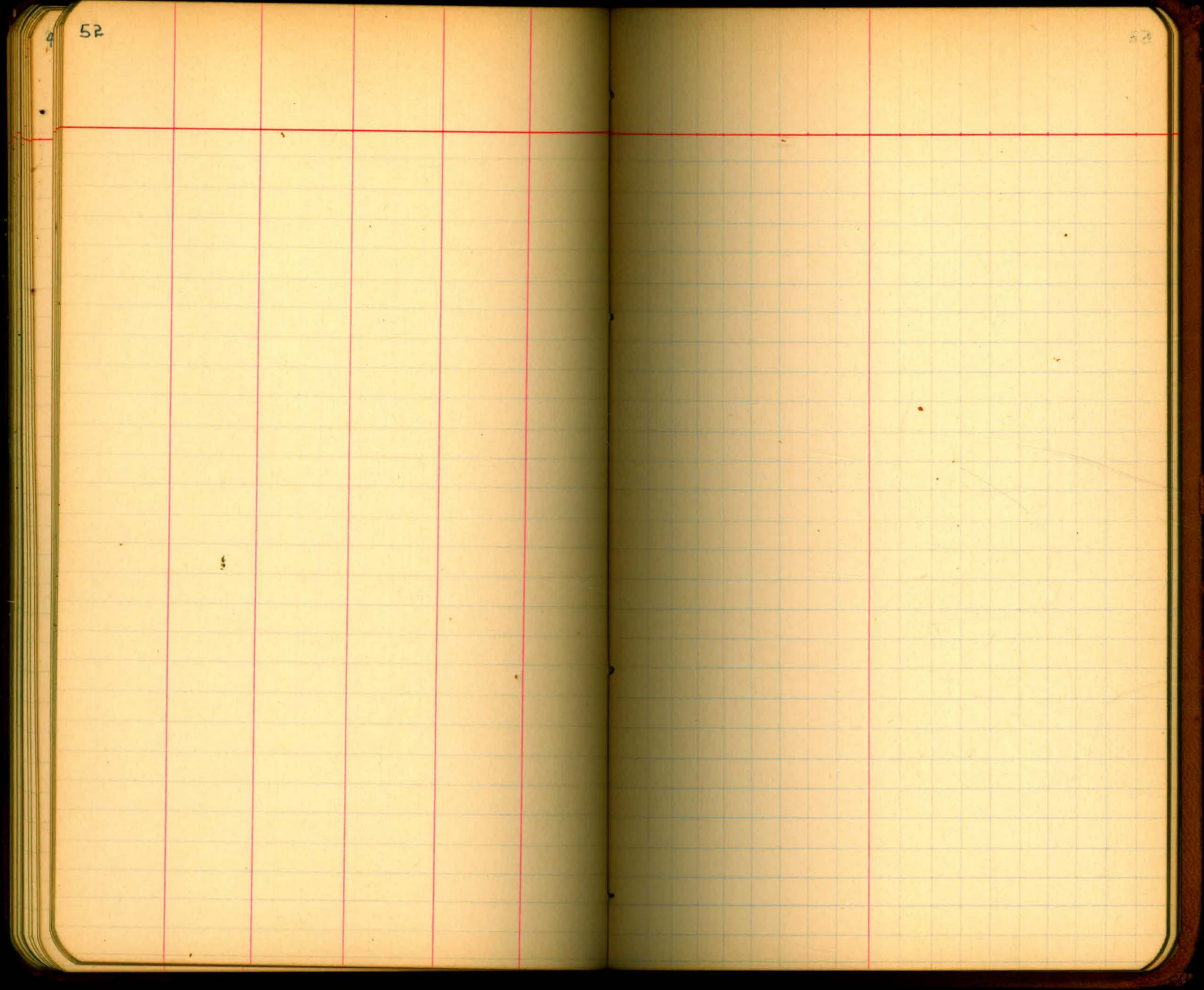


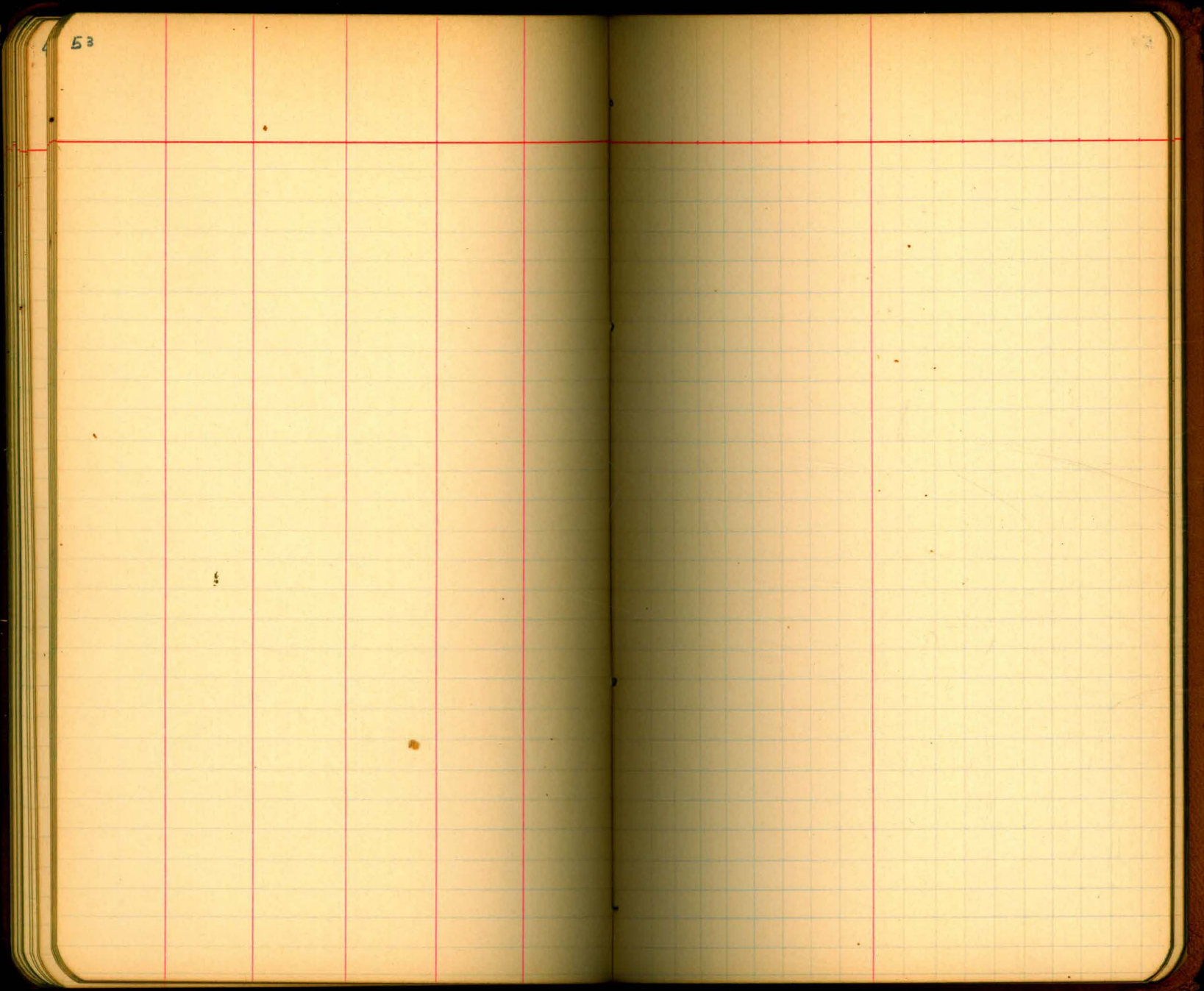
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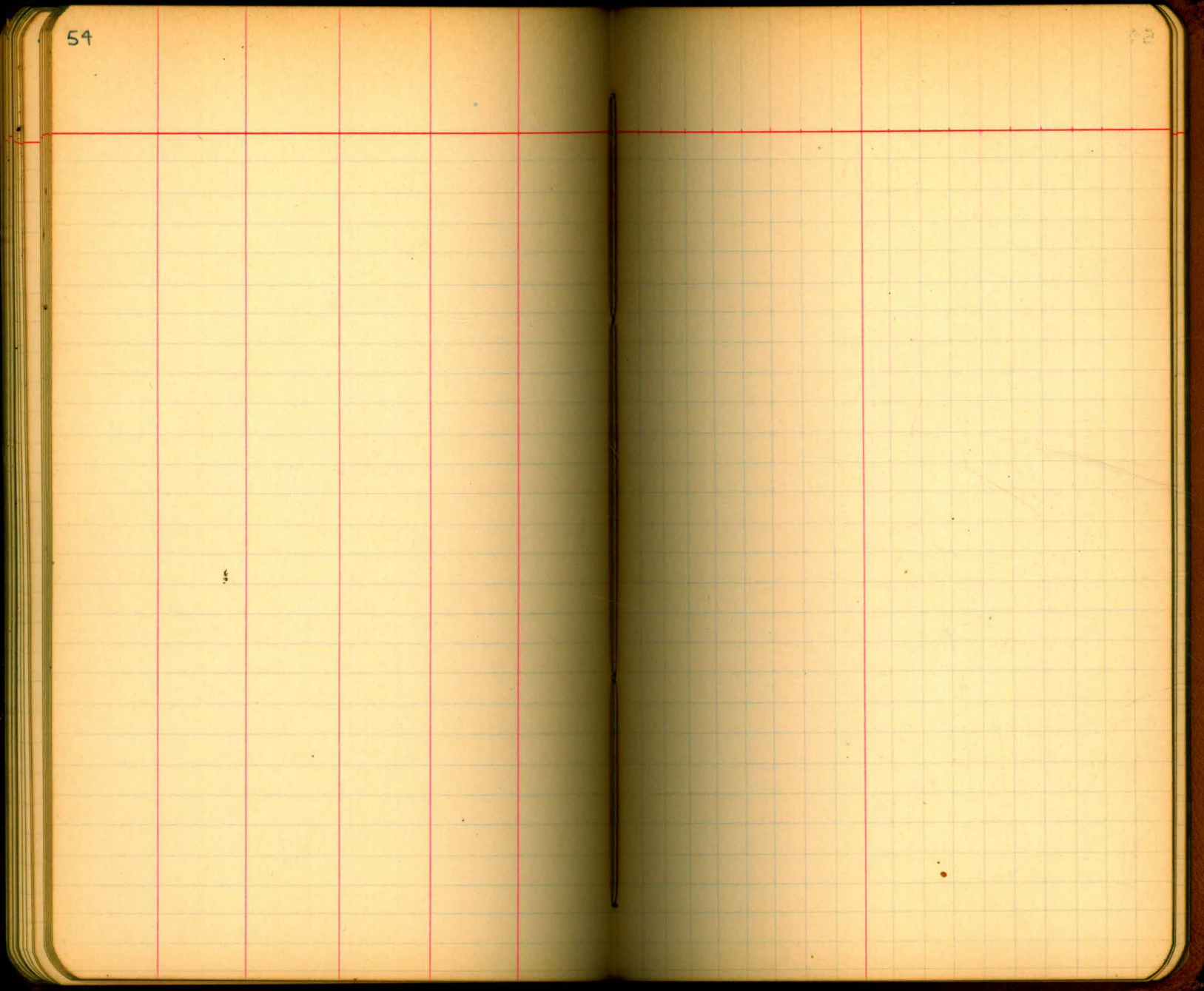
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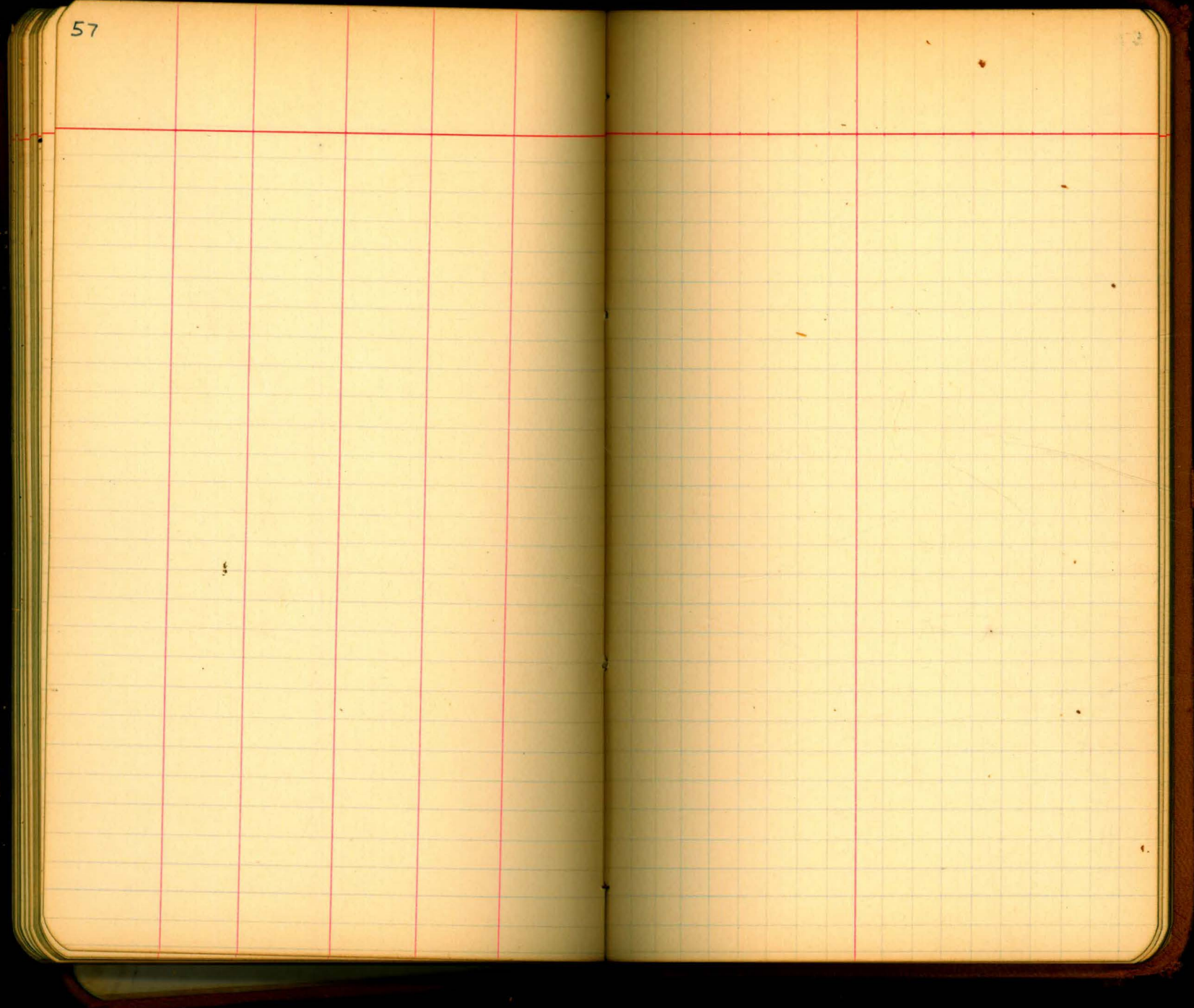


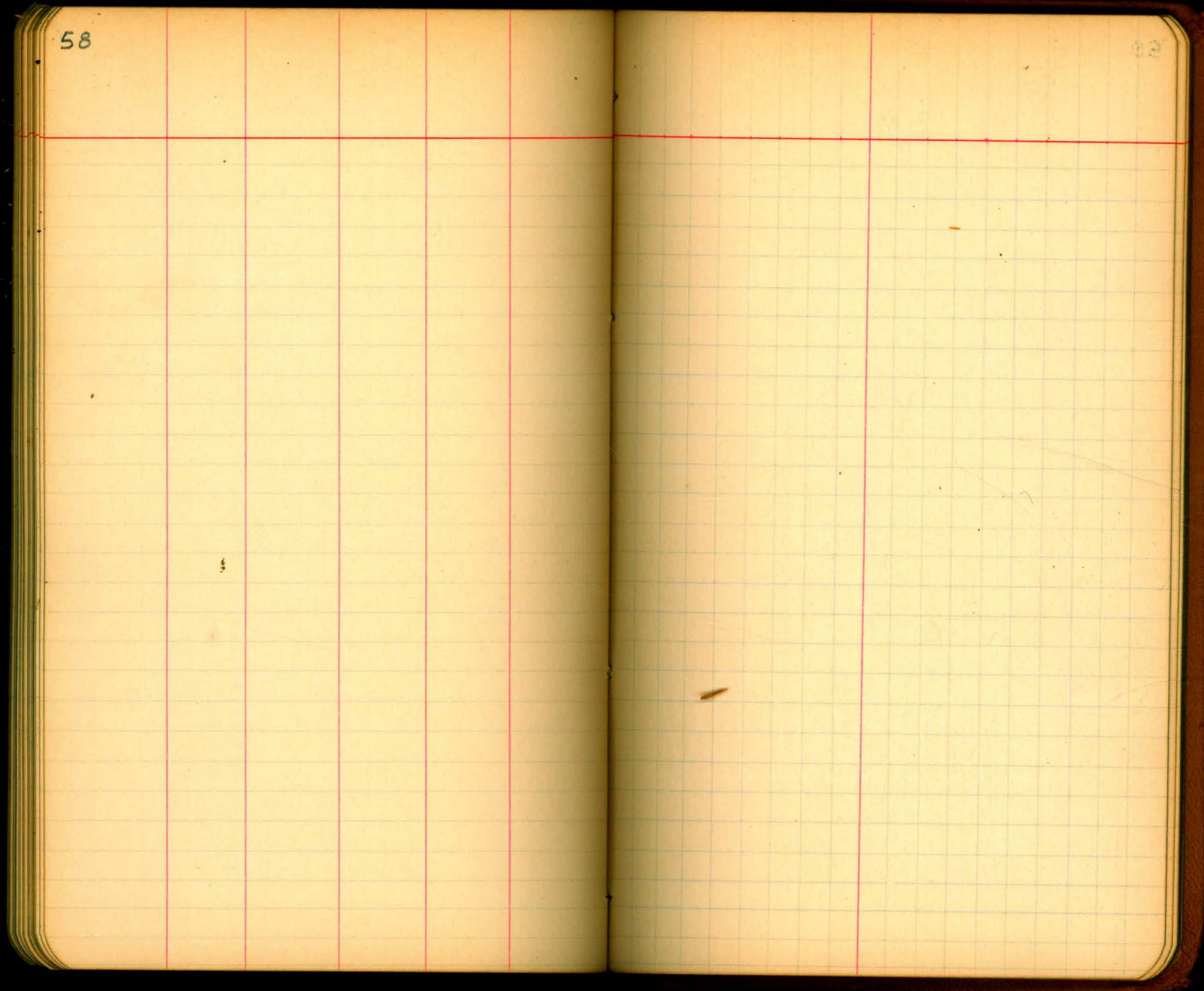






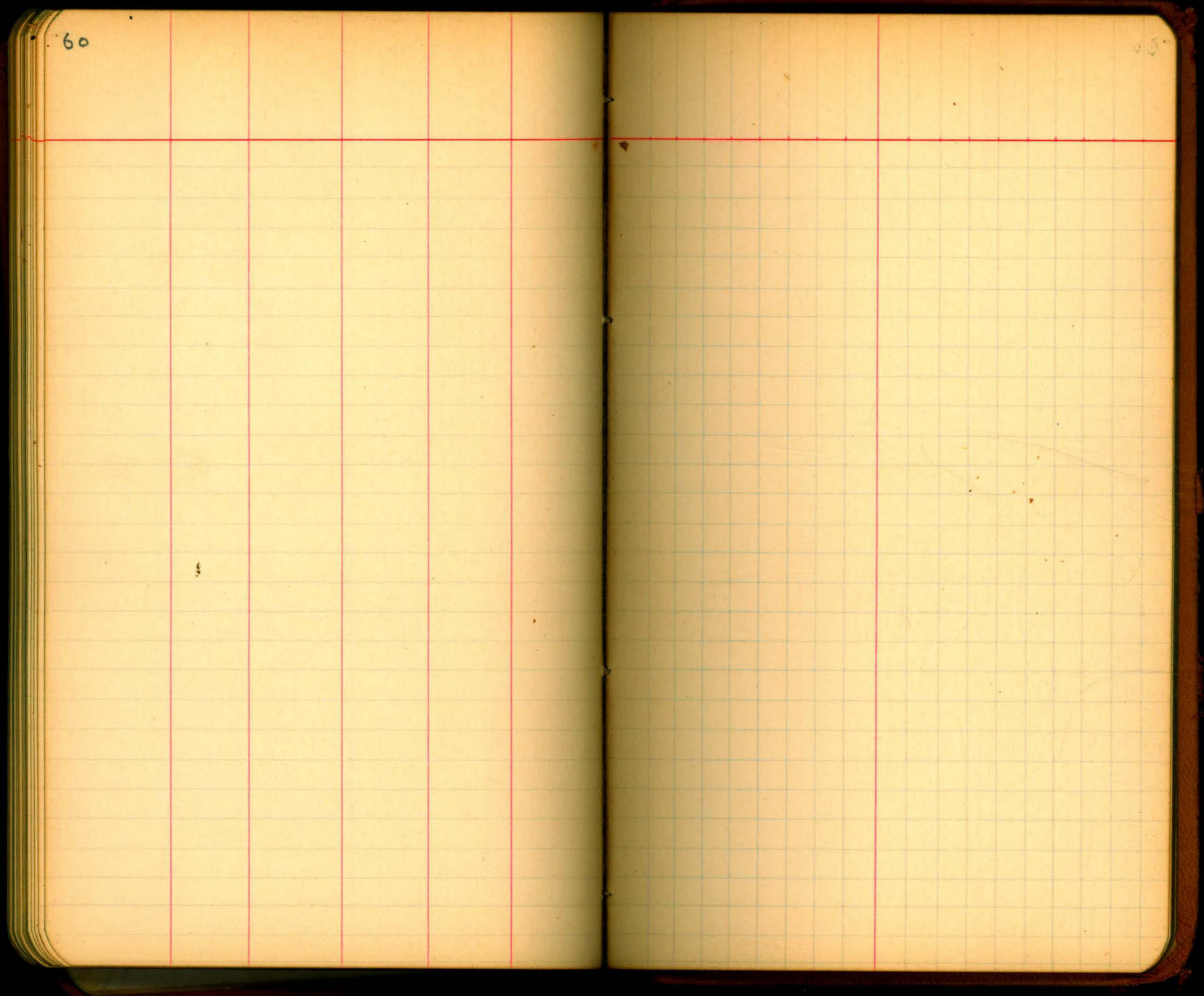


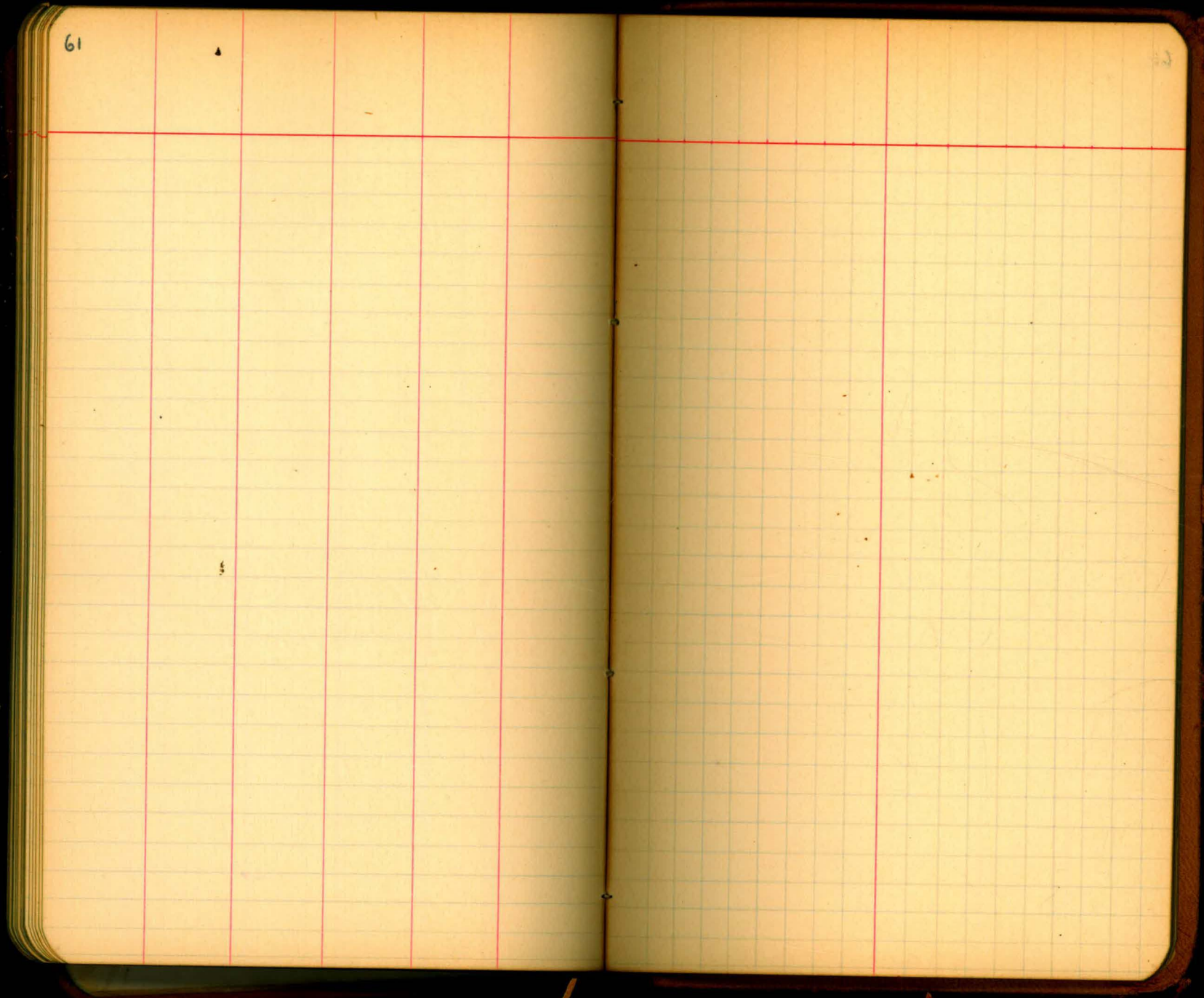




59

60

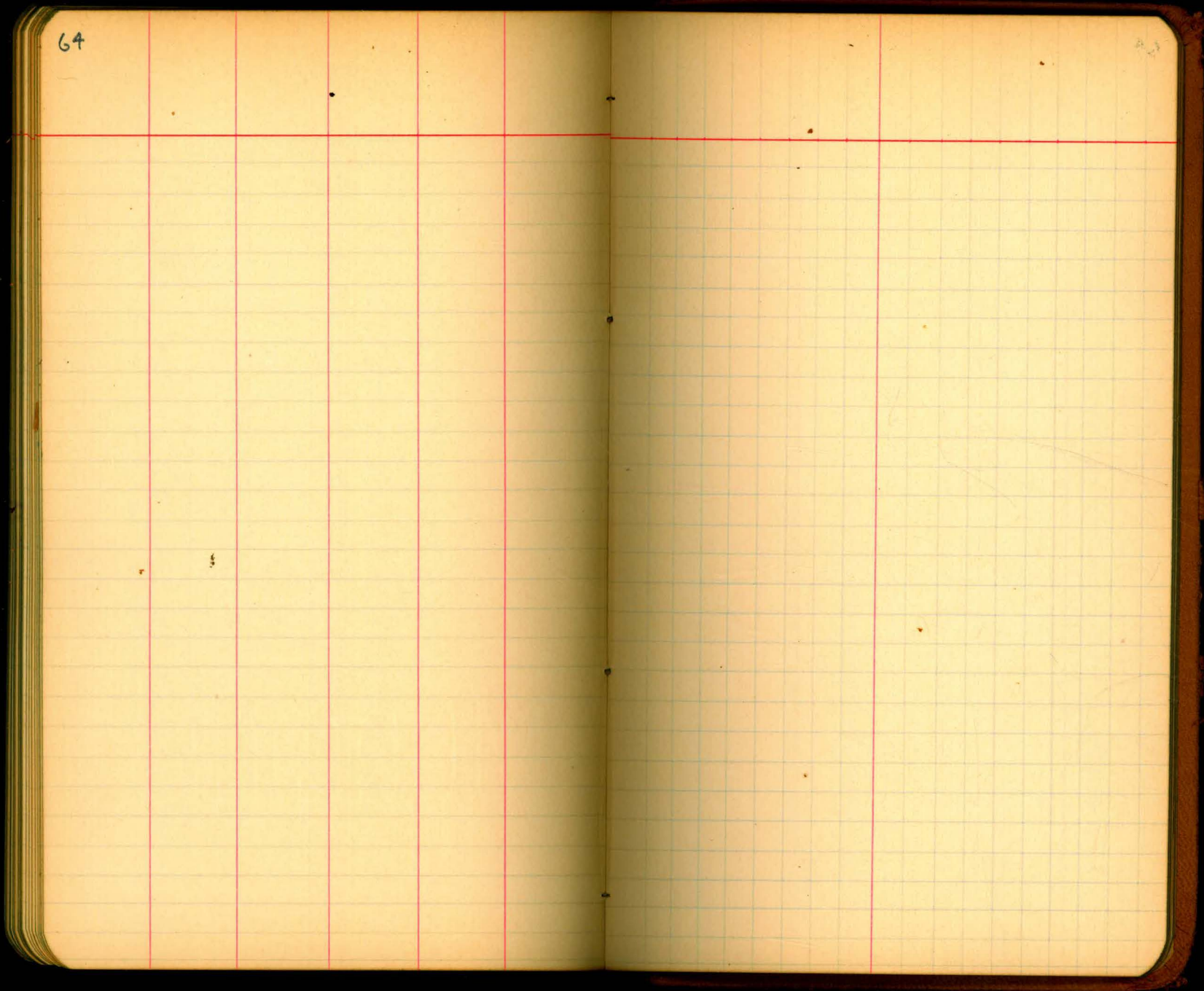


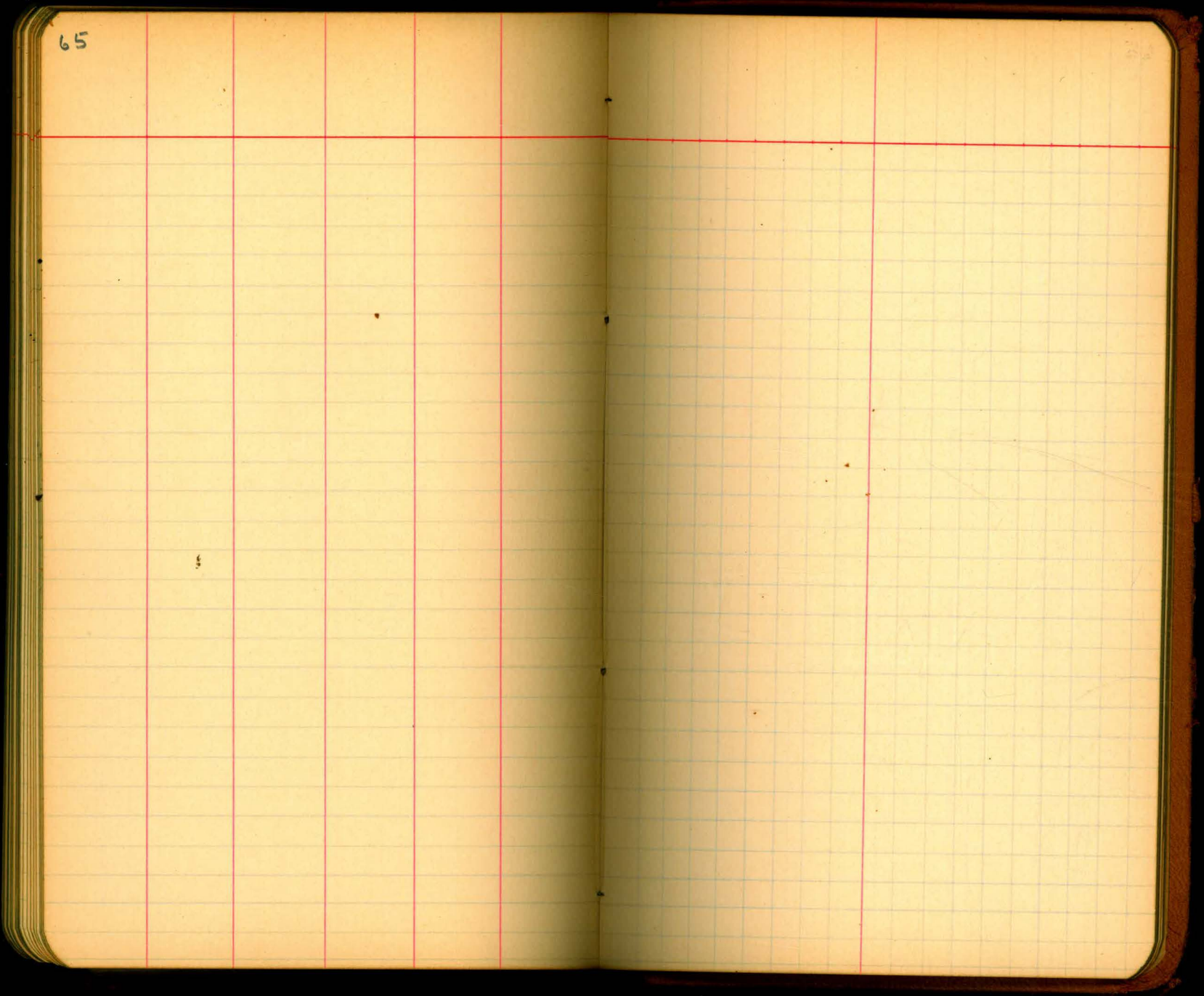


62

63

64





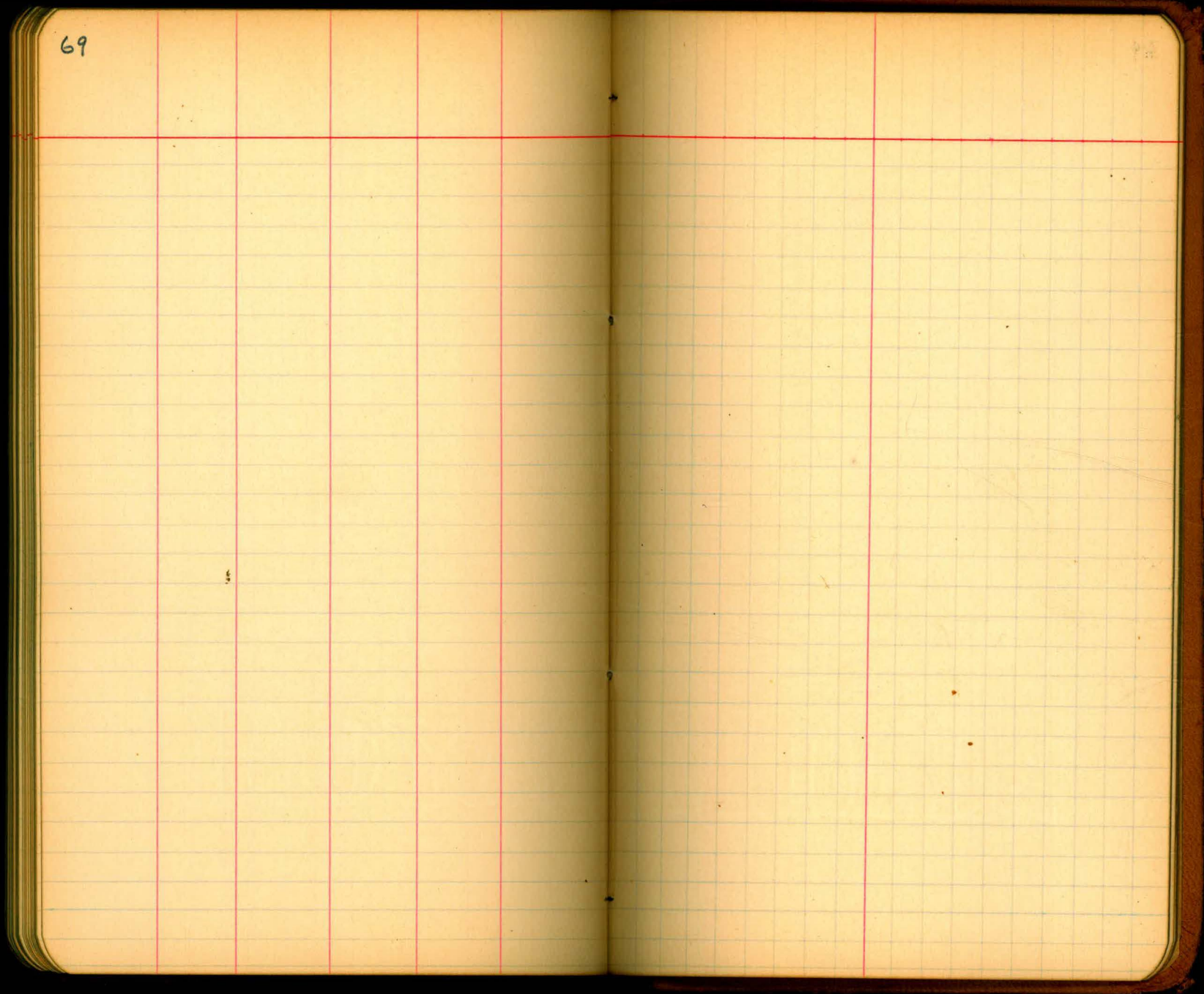
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67

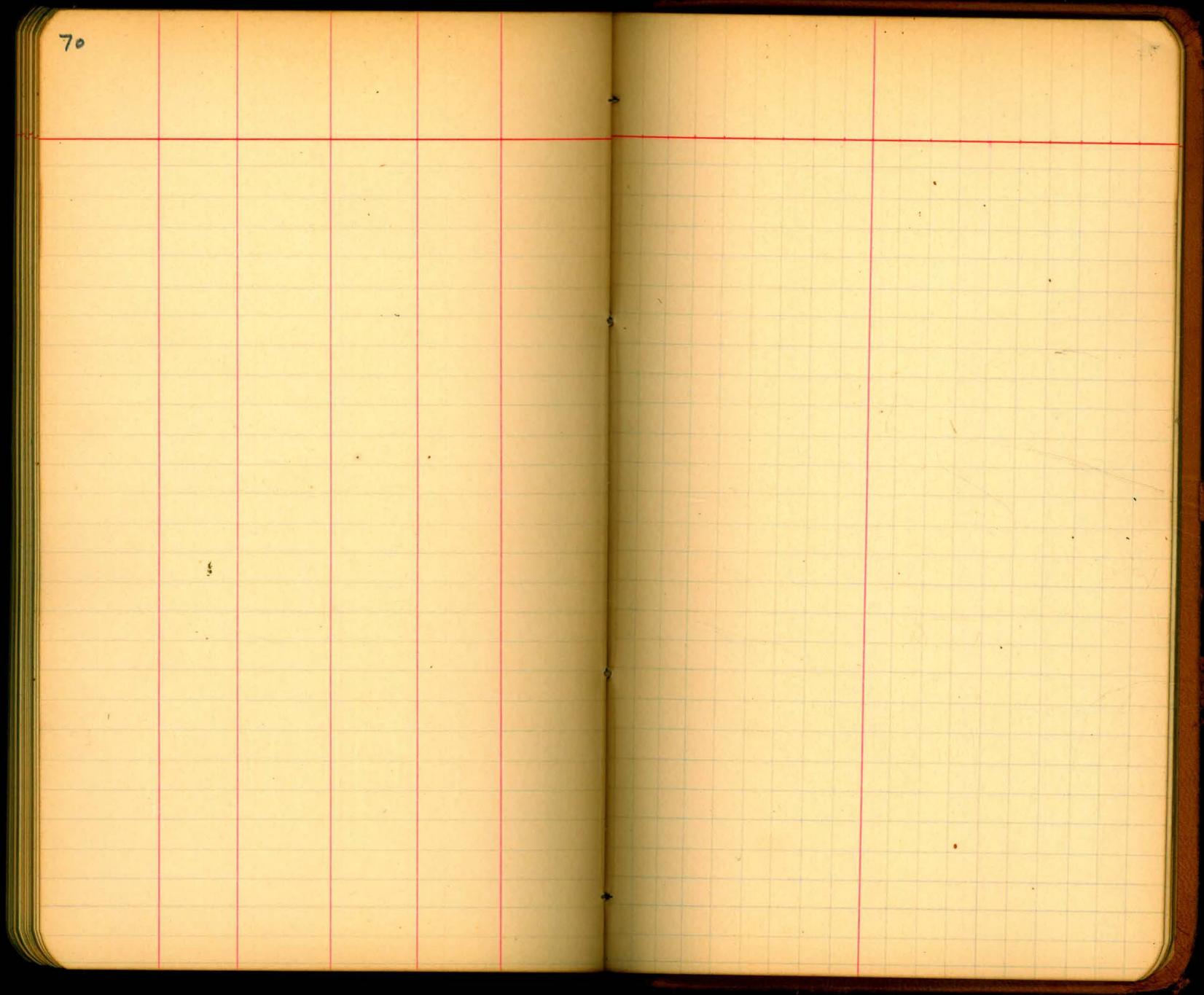
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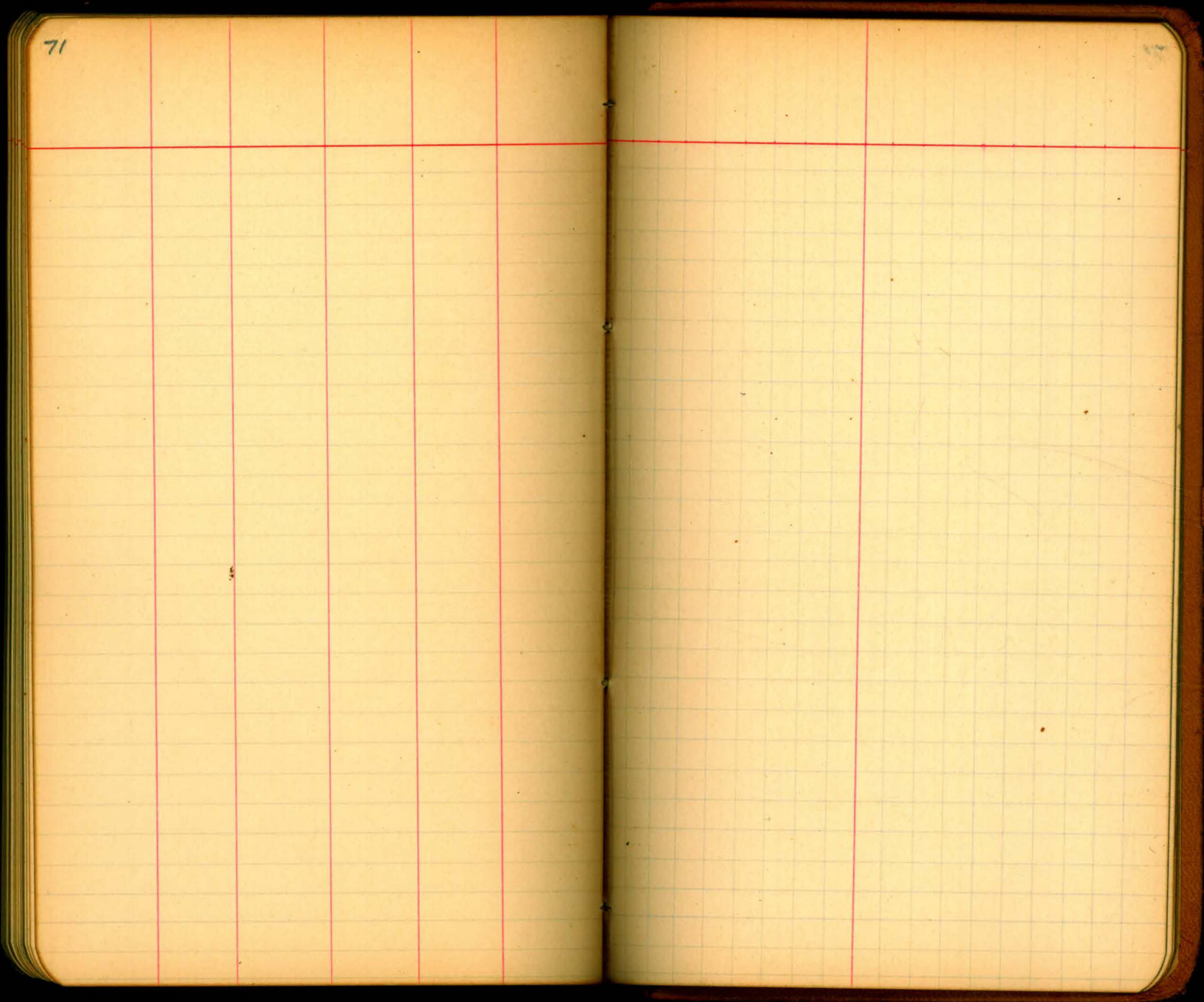
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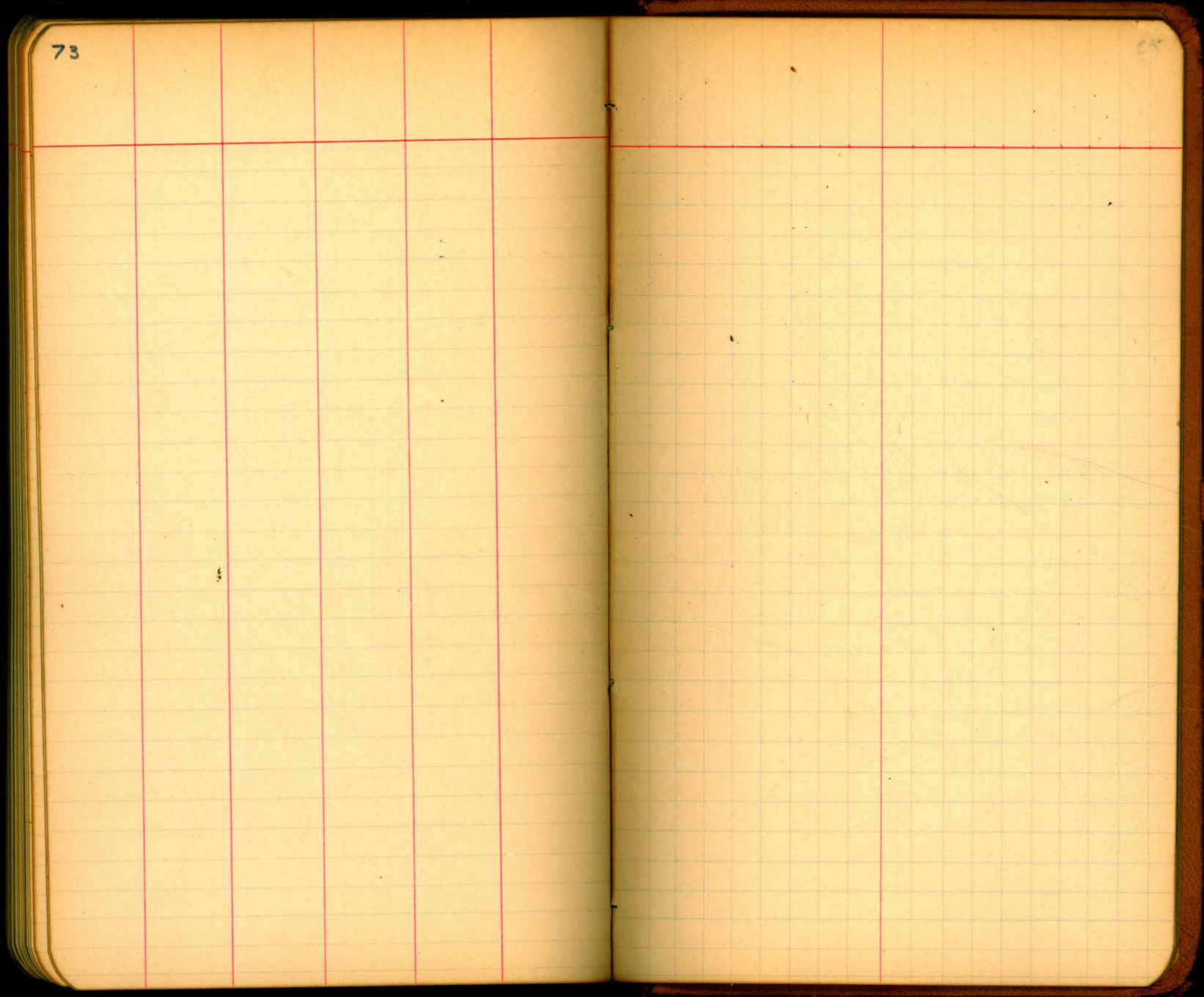
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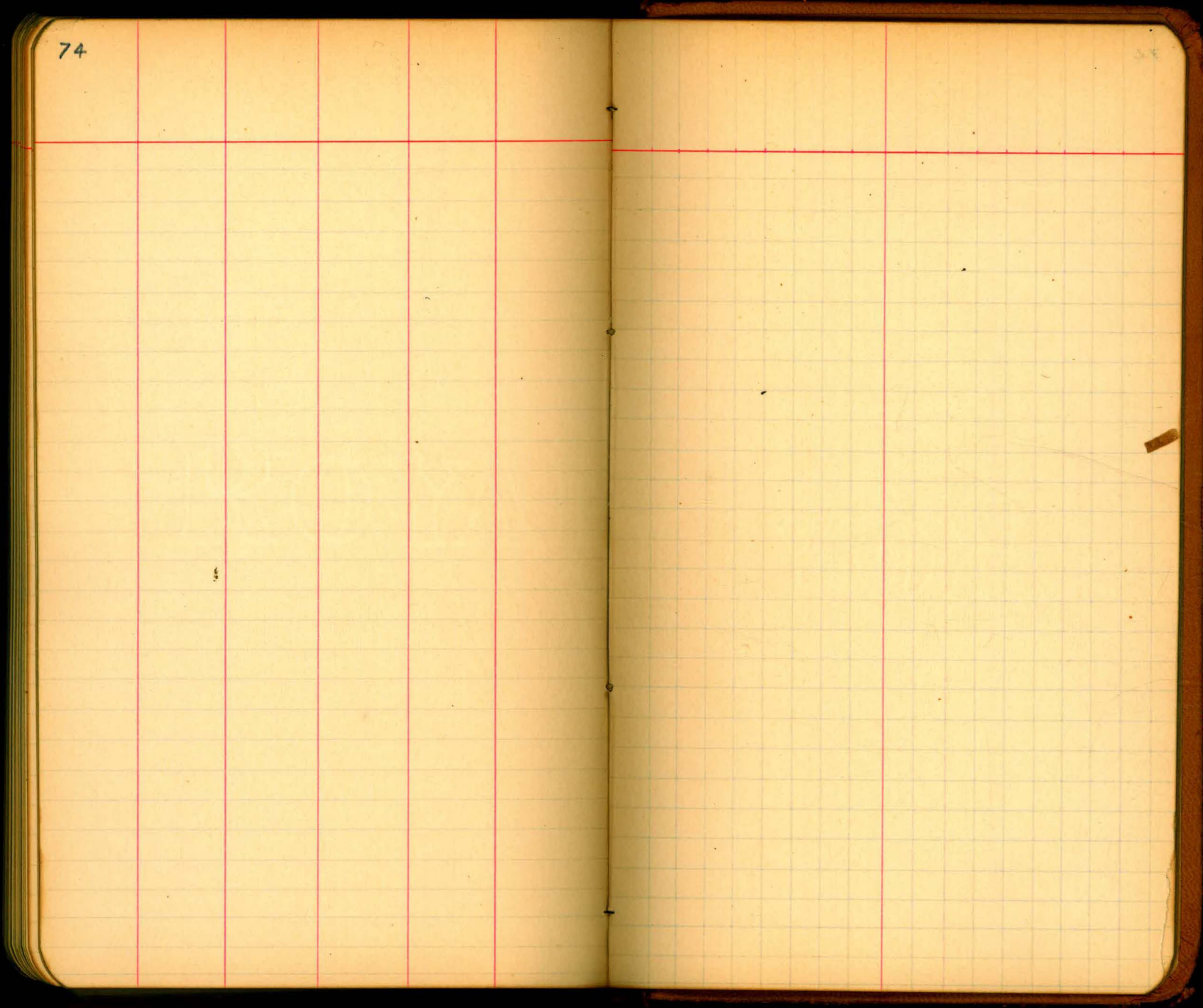


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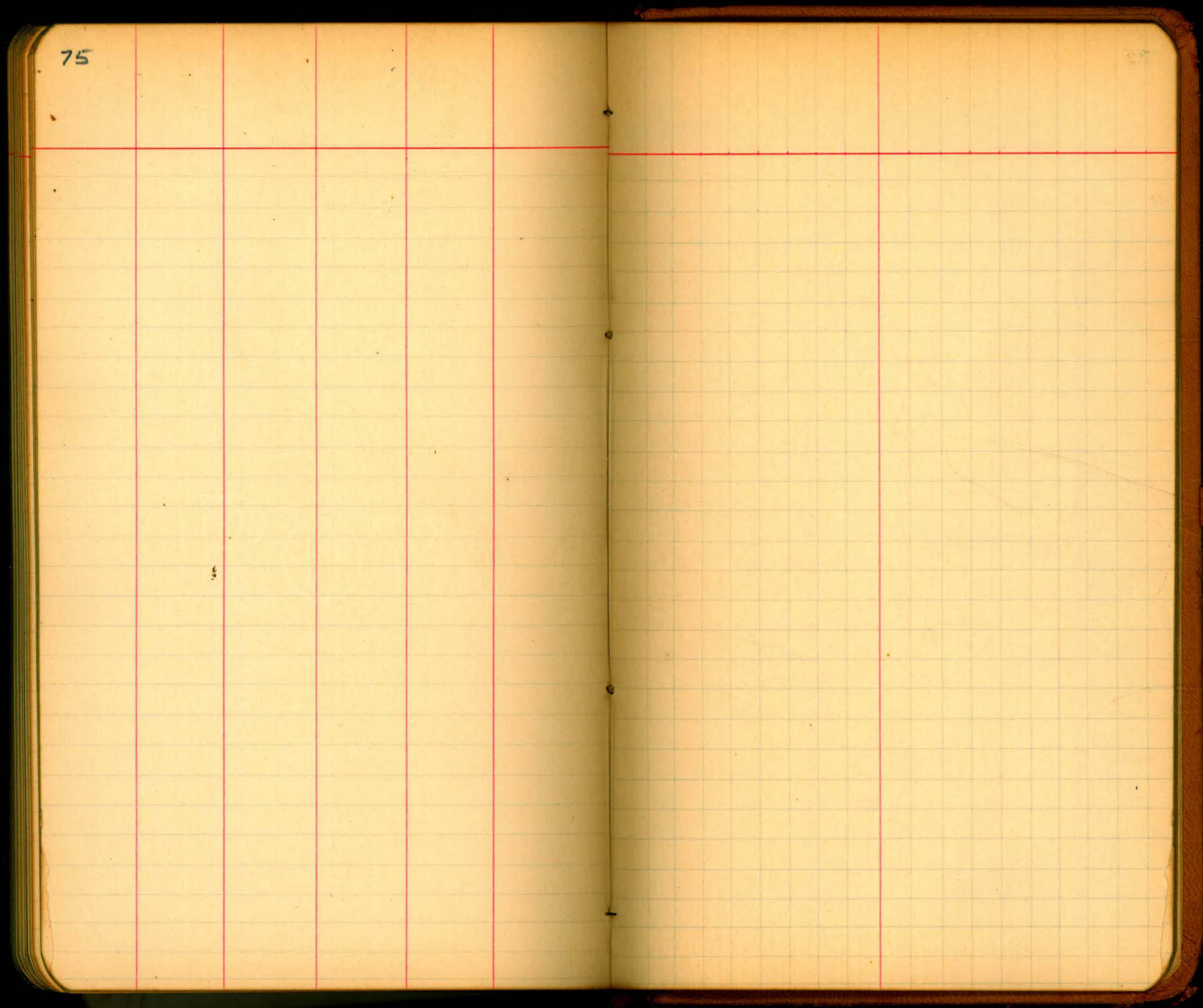








75



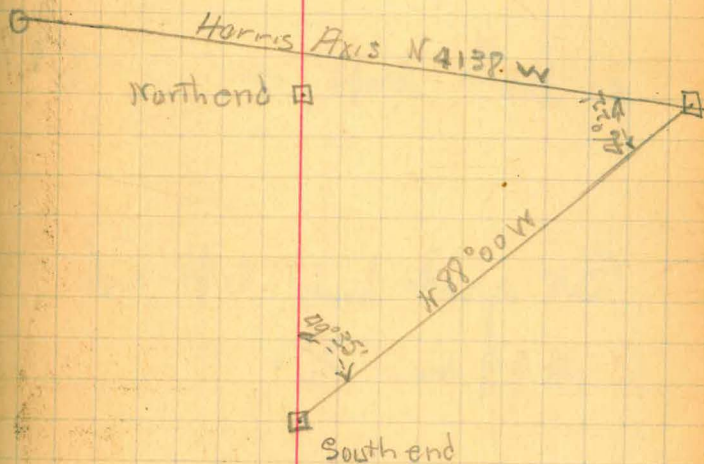
Dec 13/12 West. Mendoza

Sopuz.

Azimuth of Harris Station Base
and Taxis.

N 42° 25' E

Borrett Station
Azimuth.



Job 105 Nov 25 1942

Location of cross grade

Portal to #1 in roof

1745

#1 in roof to #2 in roof

3609

#2 in roof to breast

84

= Depth drift =

61.54

Set grade hubs left side

499 in $\frac{1}{2}$.

Connection between Job 105

Sta FS

□ 5	Rep 1 = Harris	Song	West of Stadia Base
□ 3	□ 2	68° 09'	N 55° 30' W
		64° 12'	R
□ 2	□ 1	132° 58'	R
□ 1	Trunk line	344° 09'	R
			57645 E

and Harris Stadia Base

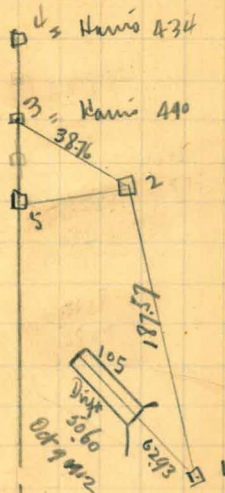
Oct 9 1962

cross = □

2988	3698
1480	2595
754	6293
697	
797	
355	1745 Harris 543
797	
950	3315
442	5060
476	Partial to 13 point.
832	
1498	
738	
816	
1332	Dist
1253	162
1081	
1481	= hub
	7.57

32.64
612 38.76
Dist 1 to 3

Mount Smiley Mendoza



□ A	
14.4	
14.7	
13.7	uphill
13.1	
□ 3	
14.15	downhill
12.7	
201	Locating □ 3
60	
□ 5	

55.9
52.95

Vert. A.

4+13 10 59 L N 40 25 W 12° 20
 R.P. #2 10° 59 L

R.P. #1 71° 9' S 40° 35' E ✓

R.P. #2 71° 9' R S 36° 30' W ✓ 174.9'

R.P. #2 10 59 S N 43 25

4+13 91 53 R S 51 30 E OK

R.P. #3 96 15 E S 47 10 E ✓
 MW

F.S. on R.P. #1

R.P. #3 F.S.

R.P. #1 to R.P. #2 = 174.9'

R.P. #1 = 13 33.73 - Base line.

F.S. #1

SOUTH

15°30' L S 15°30' E
 6°40' L S 22°10' E
 45°00' R S 22°50' W

62°32' L S 41°29' E course of Long Chord

267984

33.7

24.9

30.8

21.85

111.25

4935

29910

4622

15815
32 45 135

K 4145W

22
15230
1330

13221
4407

13
119
181
362

700
480
210

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

FOR SINGLE TRACK EMBANKMENT.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.