

GRADES ON UPPER Otay to
LOWER Otay Pipe line.

W 994

FIELD BOOK

360

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

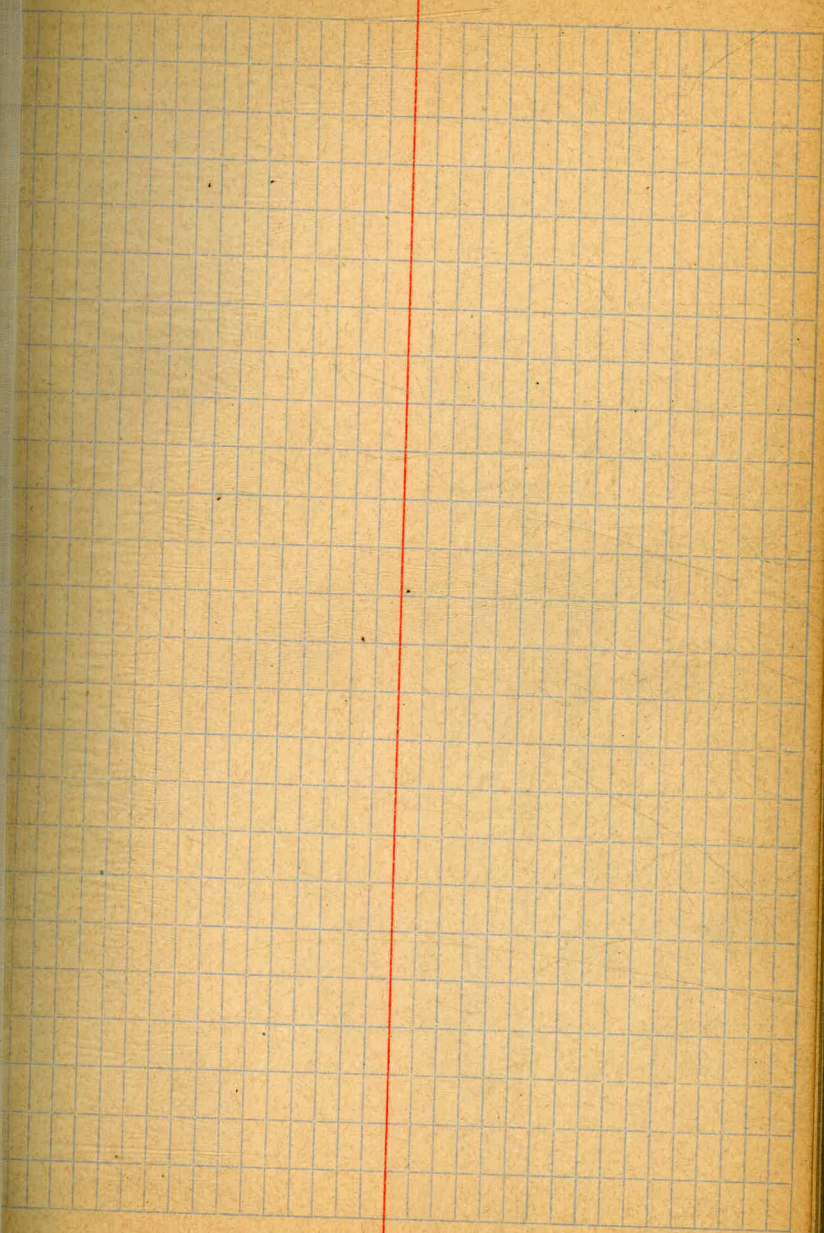
DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

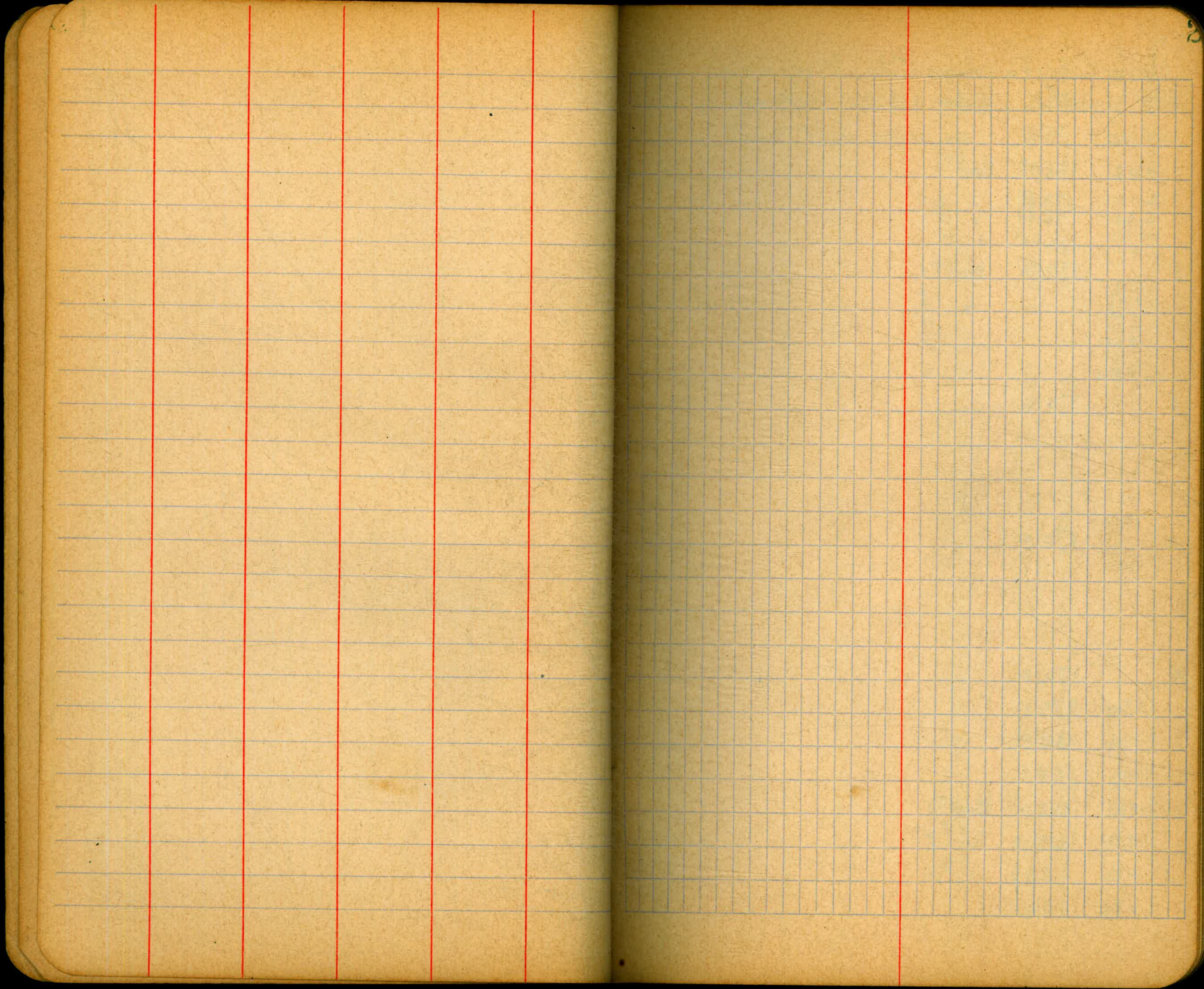
"Copyright, 1895, by Keuffel & Esser Co."

| | 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.

RETURN TO CIVIL ENGINEER'S OFFICE
CITY HALL, SAN DIEGO, CAL.





| Upper Sta | Lower Sta | Grade | Cut | Fill | Pipe Line Head |
|-----------|-----------|--------|---------|---------|----------------|
| 0+00 | | 174.5 | | | |
| +02 | | 174.49 | Bent #1 | | |
| +18 | | 173.69 | " 2 | | |
| +34 | | 172.99 | " 3 | | |
| +50 | | 172.25 | " 4 | | |
| 1 | | 170.0 | Bent #1 | | |
| +16 | | | " 2 | | |
| +32 | | | " 3 | | |
| +48 | | | " 4 | | |
| +64 | | | " 5 | | |
| +80 | | | " 6 | | |
| 2 | | 170.0 | | | |
| 3 | | 170.0 | | | |
| 4 | | 170.0 | | | |
| +30 | | 170.0 | | | |
| +50 | | 168.8 | | | |
| +70 | | 164.5 | | | |
| Bent #1 | | +81 | 162.0 | Bent #1 | |
| | | +97 | 159.8 | " #2 | |
| 5 | | +13 | 159.2 | " #3 | |
| | | +25 | 160.0 | | |

— Note grades are for bottom of 36" Wood Stave pipe. —

#1

#2

#3

5+50 162.5

6+00 167.7

+50 171.0

7+00 172.0

+50 172.0

8+00 171.0

9+00 168.0

10+00 165.0

11+00 155.4

+40 152.0

+60 148.8

| | | |
|---------|-------|---------|
| 11 + 80 | 143.0 | |
| 12 + 00 | 137.0 | |
| + 20 | 134.0 | |
| + 30 | 133.5 | |
| + 60 | 134.0 | |
| + 80 | 133.2 | |
| 13 + 00 | 129.8 | |
| + 20 | 124.5 | |
| + 30 | 122.7 | Bent #1 |
| + 46 | 121.2 | " #2 |
| + 62 | 121.4 | " #3 |
| + 80 | 123.7 | |
| 14 + 00 | 128.2 | |
| + 25 | 131.0 | |
| + 50 | 131.0 | |
| <hr/> | | |
| 15 + 00 | 130.5 | |
| + 50 | 130.0 | |
| <hr/> | | |
| 16 + 00 | 129.3 | |
| + 50 | 128.7 | |
| <hr/> | | |
| 17 + 00 | 128.0 | |

± Road.

#4

17+50 127.8

18+00 127.5

+50 127.8

19+00 128.0

+50 129.0

20+00 130.0

+50 131.0

+75 131.5

21+00 134.6

+50 140.8

22+00 147.0

+50 150.0

23+00 151.0

+50 151.0

24+00 149.7

+50 148.5

25+00 147.3

+50 146.0 ✓

26+00 142.5

+50 138.5

27+00 134.5

+50 131.0

+67 131.0 Bent #1

+83 131.0 " #2

28+00 131.0

+15 131.0

+50 135.0

29+00 138.0

+50 139.5

30+00 141.0

5

30 + 50 140.0

31 + 00 137.5

+ 50 135.0

31 + 06 135.0 Bent #1

32 + 00 135.0

+ 12 135.0 Bent #2

+ 50 135.0

33 + 00 135.0

+ 50 136.0

34 + 00 137.5

+ 50 140.0

35 + 00 141.0

+ 50 137.5

36 + 00 132.0

+ 50 128.5

6

37+00 125.5

+50 124.0

+92 124.0 Bent #1

38+00 124.0

+08 124.0 Bent #2

+50 124.0

39 126.0

40 131.6

41 137.2

+50 140.0

42 142.3

43 147.0

44+00 147.0

45 146.0

46 143.0

47 140.0

48 138.0

49 136.5

50 136.5

51 137.75

52 139.0

53 138.25

54 137.5

55 136.75

56 136.0

57 131.0

57 + 50 126.25

58 121.5

+ 50 116.75

59 112.0

+ 22 108.3 BENT #1

+ 38 107.0 " # 2

+ 50 107.0

60 110.5

+ 50 114.5

61 118.5

+ 50 122.9

62 127.3

+ 50 131.7

63 136.1

+ 50 140.5

64 144.5

+50 146.5

65 147.5

+50 146.5

66 145.0

+50 142.0

67 139.0

+42 138.5

+58 138.5

BENT #1

" #2

68 139.0

+25 139.5

+50 141.0

69 145.0

+50 147.5

70 150.0

+50 150.0

9

71 147.5

+50 143.0

72 138.5

+50 137.0

73 135.5

+50 136.0 ✓

74 136.5

+50 135.0

75 133.5

+50 128.5

76 123.5

+50 118.5

+80 116.0

77 115.5

+16 115.5

+30 115.8

BENT #1
" #2

10

77+50 118.0

78 123.0

+50 130.0

79 137.0

+50 142.0

80 146.5

+50 148.5

81 150.5

+50 151.0

82 151.5

+50 151.25'

83 151.0

+50 150.0

84

84 149.0

+50 149.0

85 149.5

+50 150.5

86 151.0

+50 151.0

87 151.0

+50 151.0

88 151.0

+50 150.0

89 148.5

+50 148.5

90 144.0

+50 141.0

+75 141.0

91 142.0

+50 144.5

92 145.0

+50 143.5

93 141.25

+50 139.0

94 136.5

+50 126.5

95 117.0

+50 108.5

+75 104.5

+92 103.0 BENT*

| | | |
|-----------------------|-------|-----------------|
| 96 | 103.0 | |
| +08 | 103.3 | BENT #2 |
| +25 | 105.5 | |
| +50 | 110.5 | |
| 97 | 120.5 | |
| +50 | 129.0 | |
| 98 | 136.5 | |
| +50 | 139.5 | |
| 99 | 142.0 | |
| +50 | 141.5 | |
| 100 | 134.5 | END of 36" PIPE |
| +50 | 125.0 | |
| +74 | 120.5 | Bent #1 |
| +90 | 120.0 | " #2 |
| 101 +08 | 120.6 | " #3 |
| 10 | | |
| +25 | 124.0 | |
| +50 | 130.0 | |

Start here with 24" Pipe.

12

102 146.0

+27 149.0

+50 149.8

103 149.3

104 148.0

+50 147.0

105 146.0

106 146.0

107 146.0

108 146.0

+50 146.0

109 145.0

+50 144.0

110 142.5

111 130.8

+50 125.0

+55 123.0

+71 123.0

Bent #1

" #2

112 125.8

+50 132.5

113 140.0

13

113 + 50 143.0

114 144.0

115 147.3

116 150.0

117 150.5

118 150.8

119 151.0

| | |
|-----|-------|
| 120 | 151.0 |
|-----|-------|

| | |
|-----|-------|
| 121 | 150.0 |
|-----|-------|

| | |
|-----|-------|
| 122 | 148.0 |
|-----|-------|

| | |
|-----|-------|
| 123 | 146.5 |
|-----|-------|

| | |
|-----|-------|
| 124 | 148.0 |
|-----|-------|

| | |
|-----|-------|
| 125 | 148.0 |
|-----|-------|

| | |
|-----|-------|
| +50 | 145.0 |
|-----|-------|

132+90 140.0

133+25 135.0

+50 129.0 Bent#1

#66 129.0 " 2

82 129.0 " 3

98 129.0 " 4

134 14 129.0 " 5

30 129.0 " 6

+50 130.0 4

135 130.0

+25 130.0 Bent#1

41 130.0 " #2

+57 130.0 " #3

483 130.0 " #4

+99 130.0 " #5

136 130.0

+15 130.0 #6

+50 130.0

15-

16

| | | | |
|-----|-----|-------|---------|
| 136 | +74 | 127.6 | Bent #1 |
| | +90 | 126.0 | Bent #2 |
| 137 | | 125.0 | |
| | +06 | 125.0 | " #3 |
| | +22 | 125.0 | " #4 |
| | 38 | 125.0 | 5 |
| | 54 | 125.4 | #6 |
| | +70 | 127.0 | #7 |
| 138 | | 130.0 | |
| | +50 | 135.0 | |
| 139 | | 135.0 | |
| | +20 | 127.2 | Bent #1 |
| | +42 | 122.4 | " #2 |
| | +50 | 122.8 | |
| | +58 | 120.0 | " #2 |
| | +74 | 120.0 | " #3 |
| 140 | | 125.0 | |
| | +10 | 125.5 | Bent #1 |
| | +26 | 126.3 | " #2 |
| | +42 | 127.1 | " #3 |
| | +58 | 127.9 | " #4 |
| | 141 | 130.0 | |
| 142 | | 130 | |

17

18

19

143 124.0

144 116.0

145 108.0

146 93.0

147 73.5

450

+62 66.0 Bent #1

+78 66.0 Ben #2

148 66.0

450 69.0

20

149 72.0

+50 72.0

150 71.5

+50 71.0

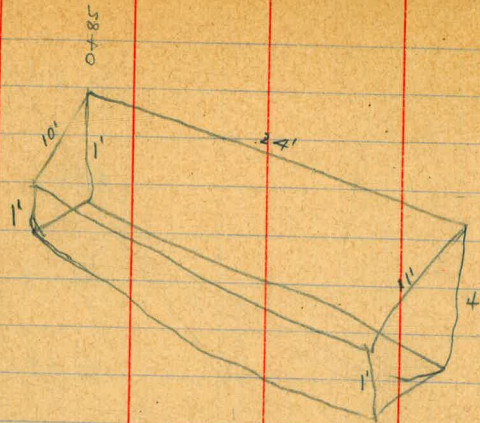
151 69.5

+50 68.0

1

27

Alignment and Profile - Upper Otay Dam



+68.8 B.S. on 1+83 14° 54' R.

+46

3+00

⊙ +83 Instrument at 2+83 F.S. on 1+83

+50

+30

+05

2+00

+85

+83

0° 00'

+50

+38

+27

+12

1+00

+83

8° 01' 30"

+40

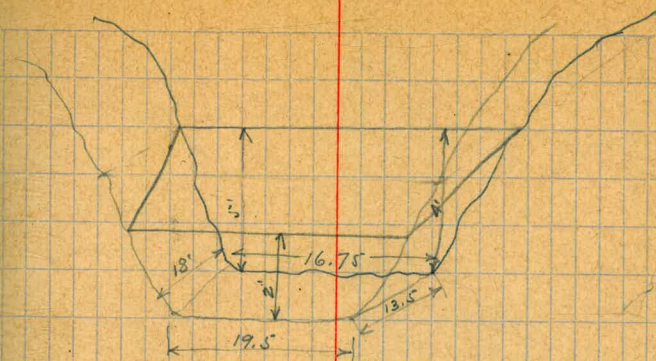
0+00

14° 42' 30"

Gromwell
Hayler
West

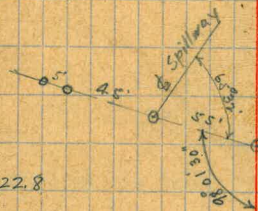
4-13-17

28



Inside Face of W. Wall of Spillway

East End of Dam



B.R. 22.8

B.R. 28.2

Bed Rock 31.5'

Bed Rock 40.2'

Bed Rock 43.9'

Bed Rock 54.0'

Bed Rock 74.5'

Bed Rock 75'

Bed Rock 47.2' down

Bed Rock 47' down

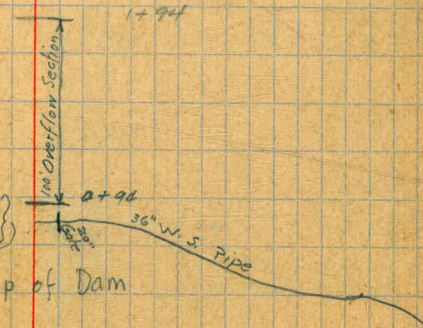
Outlet Pipe - Top of Pipe 32.2'

(Bed Rock 36.8')

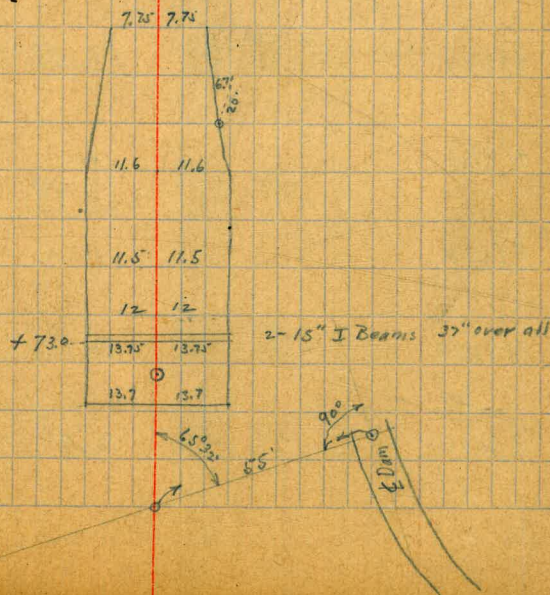
16' Down to Bed Rock from Top of Dam

West End of Dam

Dam is 4' wide on top



| | | | |
|---------|----------|---------------------------|--|
| 2+67.0 | Δ | $30^{\circ} 28'$ | End of Spillway |
| 2+04 | | | |
| 1+31.23 | Δ | $24^{\circ} 34'$ | End of Curve |
| 1+06.23 | | $12^{\circ} 59'R$ | |
| +81.23 | | $3^{\circ} 47'R$ | |
| +61.45 | Δ | | |
| +53 | | | Beginning of old Spillway 27' wide (on center) |
| 0+00 | Δ | $\Delta 65^{\circ} 32' L$ | F.S. on 2+83 of Dam |



Levels on Spillway - Upper Otay Dam

Spillway Crest

| | | | |
|------|------|--------|-------------|
| | 5.29 | 560.04 | 554.75 |
| 0+00 | | | 5.29 554.75 |
| +10 | | | 7.5 552.5 |
| +15 | | | 9.5 550.5 |
| +25 | | | 9.2 550.8 |
| +30 | | | 10.3 549.7 |
| +40 | | | 11.0 549.0 |
| +55 | | | 9.9 550.1 |
| +75 | | | 9.0 551.0 |
| +90 | | | 8.8 551.2 |
| +100 | | | 554.6 |

| | | | |
|---------|------|--------|-----------|
| 0+30 | 9.9 | 550.1 | |
| +53 | 10.7 | 549.3 | |
| +61.45 | 10.6 | 549.4 | |
| +73.0 | 10.4 | 549.6 | |
| | 6.25 | 553.79 | Bottom of |
| +81.23 | 10.5 | 549.5 | |
| +106.23 | 10.7 | 549.3 | |
| +131.23 | 10.8 | 549.2 | |

4-13-17

30

Top of Dam at East End

Sta 2+83 Dam

Note - Side Readings are above Bottom of Spillway

| | | | | | |
|--------------------|-------------------|------------------|-------------------|-------------------|-------------------|
| L | | R | | | |
| $\frac{+12.0}{30}$ | $\frac{+0.3}{10}$ | $\frac{0.0}{20}$ | $\frac{+1.5}{23}$ | $\frac{+2.0}{30}$ | $\frac{+4.7}{50}$ |

| | | | | |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| $\frac{+1.7}{25}$ | $\frac{+1.0}{12}$ | $\frac{+1.0}{12}$ | $\frac{+2.7}{15}$ | $\frac{+5.0}{40}$ |
|-------------------|-------------------|-------------------|-------------------|-------------------|

| | | | | | |
|-------------|---------------------|--------------------|--------------------|---------------------|-------------|
| Top of Wall | $\frac{+3.6}{13.7}$ | $\frac{0.0}{13.7}$ | $\frac{0.0}{13.7}$ | $\frac{+2.4}{13.7}$ | Top of Wall |
|-------------|---------------------|--------------------|--------------------|---------------------|-------------|

| | | | | |
|------------|----------------------|---------------------|---------------------|----------------------|
| 15" I Beam | $\frac{+4.0}{13.75}$ | $\frac{0.0}{13.75}$ | $\frac{0.0}{13.75}$ | $\frac{+4.0}{13.75}$ |
|------------|----------------------|---------------------|---------------------|----------------------|

| | | | |
|--------------------|--------------------|--------------------|---------------------|
| $\frac{4.0}{11.5}$ | $\frac{0.0}{11.5}$ | $\frac{0.0}{11.5}$ | $\frac{+4.4}{11.5}$ |
|--------------------|--------------------|--------------------|---------------------|

| | | | |
|---------------------|--------------------|--------------------|---------------------|
| $\frac{+4.0}{11.6}$ | $\frac{0.0}{11.6}$ | $\frac{0.0}{11.6}$ | $\frac{+4.0}{11.6}$ |
|---------------------|--------------------|--------------------|---------------------|

Levels on Spillway Upper Otay Dam (Continued)

4-13-17

31

560.04

1+50

11.3

548.7

2+00

12.7

547.3

2+67

14.6

545.4

L

R

$\frac{+4.0}{11.5}$

$\frac{0.0}{11.5}$

$\frac{0.0}{11.5}$

$\frac{+4.0}{11.5}$

$\frac{+3.8}{9.6}$

$\frac{0.0}{9.6}$

$\frac{0.0}{9.6}$

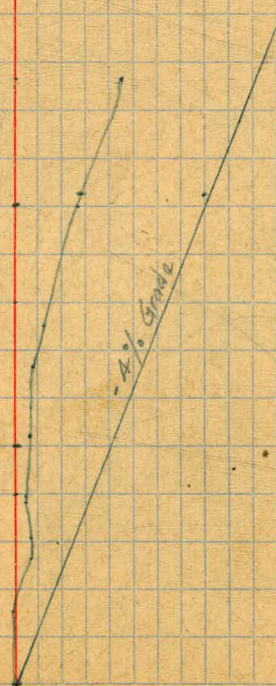
$\frac{+3.6}{9.6}$

$\frac{+3.0}{7.75}$

$\frac{0.0}{7.75}$

$\frac{0.0}{7.75}$

$\frac{+2.0}{7.75}$



4.27 559.02 554.75

0.23 554.98 554.75

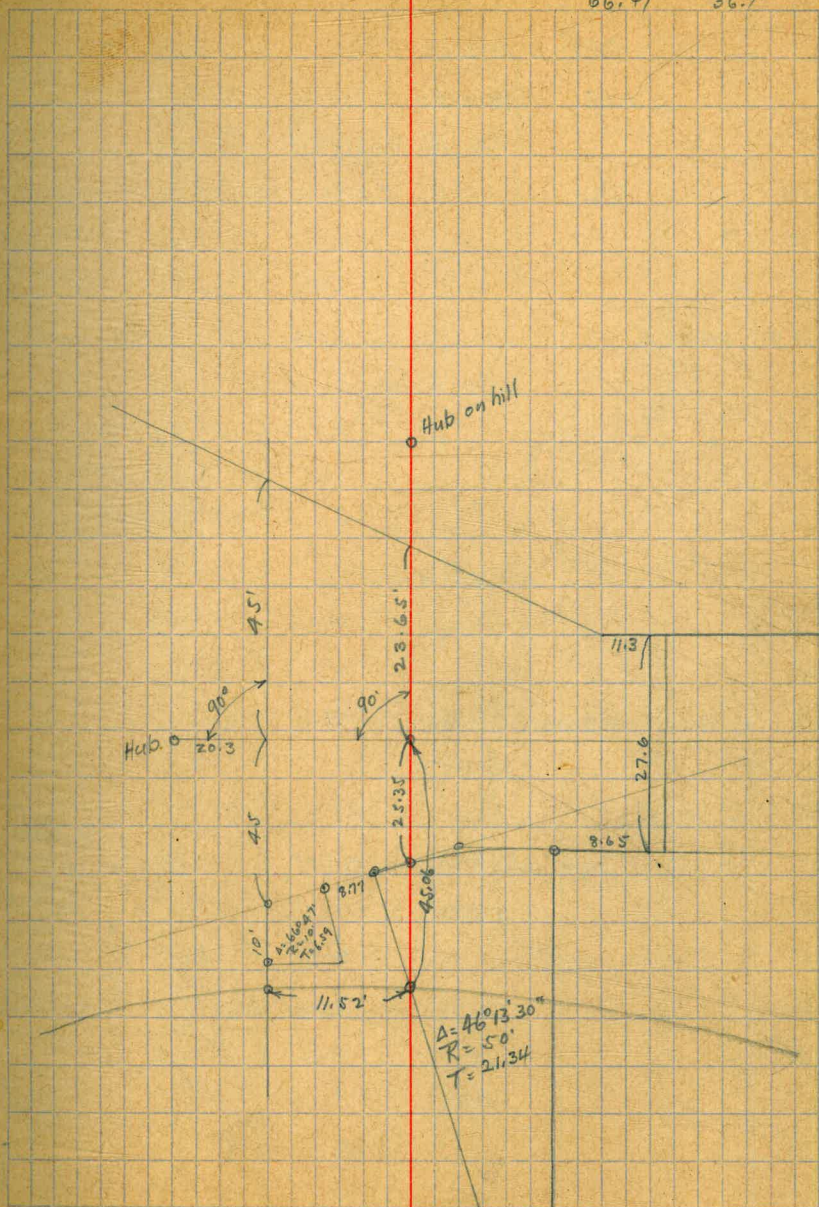
5.23 549.75

11.17 565.92 # 554.75

16.17 549.75

32

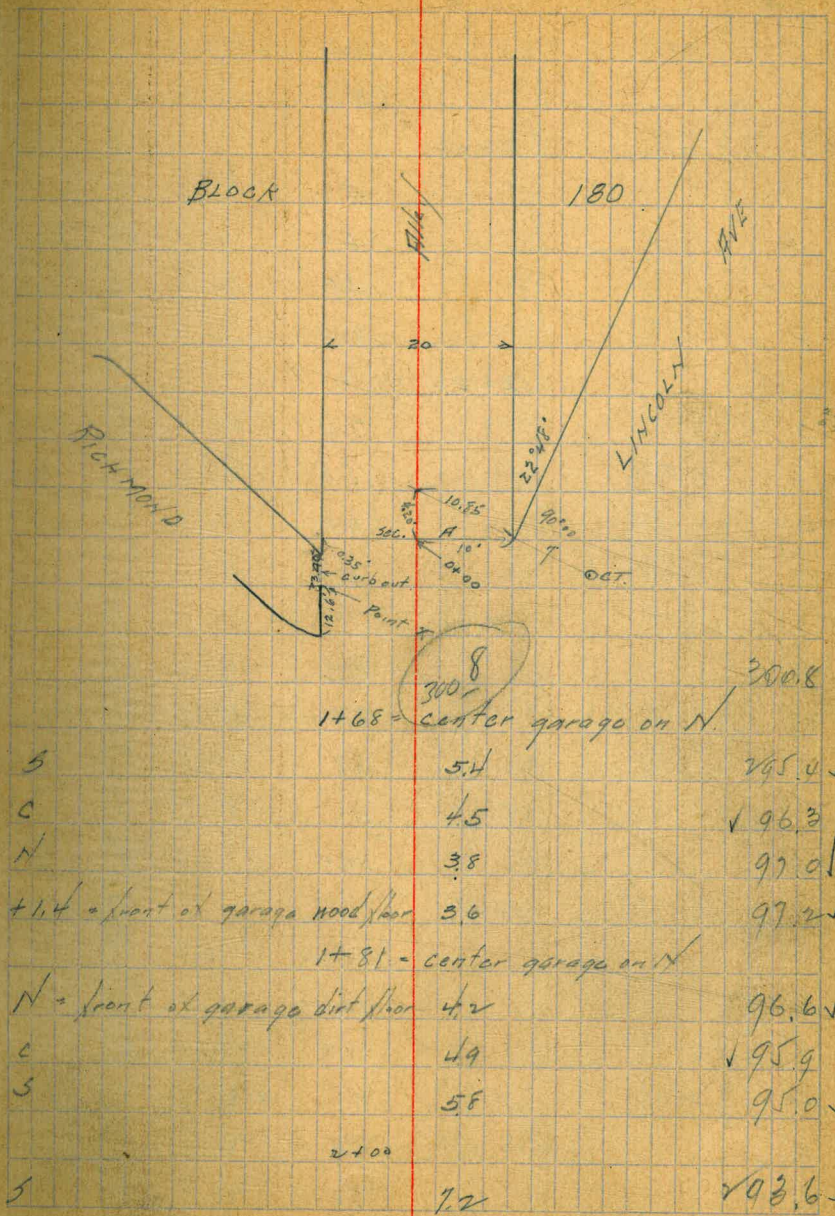
66° 47' 36.7'



2/4/20
Ground
170 ft
50 ft

Cross Section of
ALLEY BLOCK 180 20' wide
University Heights

| | | | | |
|-----------------------------------|------|---------------|------|-----------------------|
| | 9.55 | 301.61 | | 292.06 |
| | 1.07 | 300.82 | 1.86 | 299.75 |
| | | Sec A: 0+00.8 | | 300.8 |
| N | | | 1.07 | ✓ 299.75 on cement ab |
| C | | | 1.1 | ✓ 299.4 |
| S | | | 1.5 | ✓ 299.3 |
| S at point X | | | 1.77 | ✓ 299.05 on cement ab |
| | | 0+04.0 | | |
| S | | | 1.6 | ✓ 299.2 |
| C | | | 1.3 | ✓ 299.5 |
| N | | | 0.7 | ✓ 300.1 |
| | | 0+50 | | |
| N | | | 2.0 | ✓ 298.8 |
| C | | | 2.3 | ✓ 298.5 |
| S = cement walk parallel to house | | | 2.61 | ✓ 298.21 |
| | | 0+87.8 | | |
| C = M.H. | | | 3.05 | ✓ 297.77 |
| S = cement walk parallel to house | | | 3.35 | ✓ 297.47 |
| | | 1+00 | | |
| S | | | 3.9 | ✓ 296.9 |
| C | | | 3.2 | ✓ 297.6 |
| N | | | 2.6 | ✓ 298.2 |
| | | 1+50 | | |
| N | | | 3.2 | ✓ 297.6 |
| C | | | 4.0 | ✓ 296.8 |
| S | | | 4.9 | ✓ 295.9 |



300.82

300.8

| | | | | |
|-----|--|------|-------|---|
| +5 | | 5.7 | 295.1 | ✓ |
| C | | 5.3 | 95.5 | ✓ |
| N | | 4.5 | 96.3 | ✓ |
| | 2+40 | | | |
| N | | 5.3 | 95.5 | ✓ |
| C | | 6.2 | 94.6 | ✓ |
| +2 | | 6.3 | 94.5 | ✓ |
| S | | 8.2 | 92.6 | ✓ |
| | 2+55 | | | |
| S | | 7.9 | 92.9 | ✓ |
| +8 | | 6.6 | 94.2 | ✓ |
| C | | 6.6 | 94.2 | ✓ |
| N | | 5.7 | 95.1 | ✓ |
| | 3+00 | | | |
| N | | 7.6 | 93.2 | ✓ |
| +7 | | 8.0 | 92.8 | ✓ |
| C | | 8.7 | 92.1 | ✓ |
| S | | 11.1 | 289.7 | ✓ |
| +5 | | 12.4 | 288.4 | ✓ |
| | 3+41 | | | |
| -10 | | 14.3 | 286.5 | ✓ |
| -5 | | 13.6 | 287.2 | ✓ |
| S | | 11.8 | 289.0 | ✓ |
| +9 | | 7.8 | 293.0 | ✓ |
| C | | 7.8 | 293.0 | ✓ |
| N | | 7.0 | 293.8 | ✓ |
| +1 | = edge of concrete apron Entrance from East | 7.00 | 293.8 | ✓ |

300.8

34

| | | | | |
|----------------------------|-------------------------------|------|--|---|
| | | | 3+54.5 = End of garage on N. side from E | |
| N | -7.2 = edge of concrete apron | 6.23 | 294.6 | ✓ |
| | 3+75 | | | |
| N | | 6.2 | 94.6 | ✓ |
| C | | 7.0 | 93.8 | ✓ |
| +7 | | 7.5 | 93.3 | ✓ |
| S | | 9.6 | 91.2 | ✓ |
| +10 | | 13.3 | 287.5 | ✓ |
| | 4+00 | | | |
| -5 | | 10.8 | 290.0 | ✓ |
| S | | 8.3 | 292.5 | ✓ |
| +2 | | 7.4 | 293.4 | ✓ |
| C | | 6.6 | 294.2 | ✓ |
| N | | 6.1 | 94.7 | ✓ |
| | 4+20 | | | |
| -5.2 = cement floor garage | | 6.32 | 94.5 | ✓ |
| N | | 6.3 | 94.5 | ✓ |
| C | | 7.1 | 93.7 | ✓ |
| S | | 8.3 | 92.5 | ✓ |
| +5 | | 10.2 | 290.6 | ✓ |
| | 4+50 | | | |
| S | | 7.7 | 93.1 | ✓ |
| C | | 7.4 | 93.4 | ✓ |
| N | | 6.6 | 94.2 | ✓ |
| | 4+67 = Manhole | | | |
| C = Top of M.H. also T.P. | | 7.44 | 293.38 | ✓ |

| | | | |
|--|------|--------|--------|
| T.P. Top of H | 4.30 | 297.68 | 293.58 |
| | 4+70 | 297.7 | 297.7 |
| -5.7 = front of garage cement | | 3.00 | 294.7 |
| N | | 3.7 | 94.0 |
| C | | 4.3 | 93.0 |
| S | | 4.8 | 92.9 |
| | 4+87 | | |
| 5.5 N of N.H. = front of garage cement | | 3.01 | 94.7 |
| | 5+00 | | |
| S | | 5.0 | 92.7 |
| C | | 4.1 | 93.6 |
| N | | 3.5 | 94.2 |
| | 5+45 | | |
| N | | 3.1 | 94.6 |
| C | | 3.2 | 94.5 |
| S | | 3.8 | 93.9 |
| | 5+70 | | |
| S | | 4.0 | 93.7 |
| C | | 3.6 | 94.1 |
| N | | 3.3 | 94.4 |
| +0.2 = cement floor garage | | 2.25 | 294.83 |
| | 6+00 | | |
| N | | 3.5 | 94.2 |
| C | | 4.0 | 93.7 |
| S | | 4.4 | 93.3 |

35

| | | | |
|---------------------------------|------|--------|-------|
| | 6+30 | 7 | 297.7 |
| S | | 5.8 | 291.9 |
| C | | 5.2 | 292.5 |
| N | | 5.0 | 92.7 |
| | 6+60 | | |
| N | | 7.6 | 401 |
| T.P. | 3.41 | 294.82 | 6.27 |
| C = Top of 8" Kalamazoo sewer | | 4.73 | 290.1 |
| S | | 6.1 | 291.6 |
| | 6+75 | | |
| C (Top of pipe 5' above ground) | | 4.80 | 47.9 |

In fact too far
Pipe across ground here

3/24/42
Moore

Cross Section of Alley
BIK 1 Loma Grande 15' wide

| | | | |
|------------------------------------|--------|--------|------------|
| 1.55 | 284.42 | 282.87 | 3rd Walnut |
| N.E. Walnut = 0100 | | | |
| E Alley Return | 4.60 | 279.82 | |
| E.L. paving | 5.00 | 279.42 | |
| C | 5.60 | 278.79 | |
| W.L. Paving + Alley Return | 5.59 | 278.83 | |
| 10' N | | | |
| W | 4.8 | 279.62 | |
| C | 5.1 | 279.32 | |
| E foot of Conc. Wall | 4.8 | 279.62 | |
| 50' N | | | |
| E | 4.5 | 279.92 | |
| C | 4.6 | 279.82 | |
| W | 4.5 | 279.92 | |
| 100' N | | | |
| W | 3.9 | 280.52 | |
| C | 3.9 | 280.52 | |
| E foot of Conc. Wall | 3.9 | 280.52 | |
| 150' N | | | |
| E | 3.3 | 281.12 | |
| C | 3.2 | 281.22 | |
| W | 3.20 | 281.22 | |
| Garage Wood Floor 3.5' w. l. w. h. | 3.05 | 281.37 | |
| 200' N | | | |
| W | 2.3 | 282.12 | |

| | | | |
|--------------------------|--------|--------|--------|
| C | 2.5 | 281.92 | |
| E | 2.9 | 281.52 | |
| TP 6.26 | 287.95 | 2.73 | 281.89 |
| 230' N | | | |
| -0.5 Garage Conc Floor | 5.83 | 282.12 | |
| E.L. + 1.0 edge of Apron | 6.24 | 281.71 | |
| 250' N | | | |
| E | 5.7 | 282.25 | |
| C | 5.7 | 282.25 | |
| W | 5.8 | 282.15 | |
| 300' N | | | |
| W | 5.5 | 282.45 | |
| C | 5.4 | 282.55 | |
| E | 5.4 | 282.55 | |
| 344' N | | | |
| E | 4.9 | 283.05 | |
| C | 5.0 | 282.95 | |
| W | 5.1 | 282.85 | |
| +1.3 edge of Conc. Apron | 5.20 | 282.75 | |
| +2.3 Garage Conc Floor | 5.20 | 282.75 | |
| 395' N | | | |
| -0.6 edge Conc. Apron | 4.88 | 283.07 | |
| 6.0 Garage Conc Floor | 4.78 | 283.17 | |
| W | 4.9 | 283.05 | |
| C | 4.7 | 283.25 | |
| E fence 2.3' in Alley | 4.6 | 283.35 | |

287.95

406' N

-3.7 Garage Conc. floor 3.90 284.05 EL H/W

425' N

E 4.4 283.55

C 4.3 283.65

W 4.7 283.25

442' N

W - 3.0 Garage Conc. floor 4.83 283.12

W 4.8 283.15

C 4.5 283.45

E 4.4 283.55

470' N

E 4.4 283.55

C 4.9 283.05

W 4.6 283.35

491' N

W 5.2 282.75

C 5.4 282.55

E 5.4 282.55

+ 2.5 Garage (forms set for Conc. floor) 5.45 282.50

500' N

E 5.2 282.75

+3 6.2 281.75

C 6.0 281.95

W 5.7 282.25

287.95

542' N

W 10.2 277.75

C 10.1 277.85

+5 10.1 277.85

E 8.4 279.55

TD 1.25 279.41 9.79 278.16 ✓

562' N

E & Conc. walk 4.00 275.41

C 3.9 275.51

W 3.5 275.91

595' N

W 5.9 273.51

+3 6.7 272.71

C 6.8 272.61

+6 6.8 272.61

E 5.8 273.61

600' N = SL Brooks

E 7.2 272.21

C 7.4 272.01

W 7.5 271.91

612.5' N = S curb Line Brooks

W on Conc. Curb 8.22 271.19

E - - - 7.42 271.99

No Alley returns in on either side

37

3/11/54
no. 000

Cross Section of Alley 20' wide
Blk 204 University Hqts

| | 7.86 | 353.91 | 346.05 | NUM BP 20th + Univ |
|-----------------------------------|--------|-------------------|--------|-----------------------|
| | | N.L. Univ. = 0+00 | | |
| W Alley Returns bearing same elev | 5.39 | 348.55 | | |
| C | 5.60 | 348.31 | | |
| E ✓ ✓ ✓ ✓ ✓ | 5.16 | 348.75 | | |
| | 15' N | | | |
| E | 4.6 | 349.31 | | |
| C | 4.7 | 349.21 | | |
| W | 5.1 | 348.81 | | |
| | 45' N | | | |
| W | 4.5 | 349.41 | | |
| C | 4.4 | 349.51 | | |
| E | 4.4 | 349.51 | | |
| | 92' N | | | |
| E-1.7 Garage Conc floor | 3.30 | 350.61 | ✓ | |
| E | 3.6 | 350.31 | | |
| C | 4.0 | 349.91 | | |
| W | 4.0 | 349.91 | | |
| +6 ✓ dirt floor | 4.0 | 349.91 | ✓ | |
| | 106' N | | | |
| W-6 Garage Conc floor | 3.50 | 350.41 | ✓ | |
| | 150' N | | | |
| W | 3.2 | 350.71 | | |
| C | 3.3 | 350.61 | | |
| E | 3.0 | 350.91 | | |

| | 190' N | | |
|-------------------------|----------|--------|--------|
| E-1.7 Garage dirt floor | 1.5 | 352.41 | ✓ |
| E | 1.8 | 352.11 | |
| C | 2.2 | 351.71 | |
| W | 2.2 | 351.71 | |
| +3 ✓ ✓ ✓ | 2.0 | 351.71 | |
| | 240' N | | |
| W | 1.3 | 352.61 | |
| C | 1.3 | 352.61 | |
| E | 1.0 | 352.91 | |
| TP 10.03 | 363.59 ✓ | 0.35 | 353.56 |
| | 287' N | | |
| E | 9.2 | 354.39 | |
| C | 9.5 | 354.09 | |
| W | 9.8 | 353.79 | |
| +2.2 Garage dirt floor | 9.8 | 353.79 | |
| | 305' N | | |
| W-5 ✓ Conc ✓ | 9.33 | 354.26 | ✓ |
| | 315' N | | |
| E-3 ✓ dirt ✓ | 8.9 | 354.69 | ✓ |
| | 355' N | | |
| W-5 ✓ Conc ✓ | 8.45 | 355.14 | ✓ |
| W | 8.7 | 354.89 | |
| C | 8.9 | 354.69 | |
| E | 8.7 | 354.89 | |

363.59

406' N

E fence + small Bldg. in Alley 8.0 355.59 ✓

C 8.4 355.19

W 8.4 355.19

+ 5 Garage Conc Floor 8.45 355.14 ✓

445' N

W 8.0 355.59

C 8.0 355.59

E 8.0 355.59

456' N

W - 4.5 Garage Conc floor 7.52 356.07 ✓

468'

W - 4.5 ✓ dirt ✓ 7.10 356.49 ✓

500' N

E 5.8 357.79

C 6.0 357.59

W 5.8 357.79

505' N

E - 4.0 Garage Conc floor 5.08 358.51 ✓

E ✓ ✓ Apron 5.40 358.19 ✓

537' N

W - 2' ✓ ✓ floor 4.02 359.57 ✓

W 4.3 359.29

C 4.4 359.19

E 4.2 359.39

39

555' N

E - 2.5 Garage dirt floor 3.15 360.44 ✓

580' N

E 2.8 360.79

C 3.0 360.59

W 2.8 360.79

599' N = sk Lincoln Ave

W Alley Return 1.42 362.17

W to yardage 1.9 361.69

C ✓ ✓ 2.2 361.39

E ✓ ✓ 2.1 361.49

E Alley Return 1.34 362.25

TP 4.70 363.97 4.22 359.27

TP sk BM 3.18 360.79

1 dets
Lined (N)
360.85

3/20/24 Gray

CROSS SECTION OF
ALLEY BLK 65 PERRYVILLE
28th Oregon bet Dwight & Myrtle

15' wide

40

| | 1917 | 33418 | 32401 | B.P. SE Oregon-Dwight |
|-----------------|------|-------------|--------|--------------------------|
| | | 5 L Dwight. | | |
| W on curb | | 4.78 | 329.40 | |
| W ground | | 4.6 | 329.58 | |
| C | | 4.6 | 329.58 | |
| E No Curb built | | 4.1 | 330.08 | |
| | | 50' S | | |
| E | | 4.4 | 329.74 | |
| C | | 4.8 | 329.38 | |
| W | | 5.1 | 329.08 | |
| | | 52' S | | |
| W | | 5.0 | 329.18 | |
| C | | 4.9 | 329.28 | |
| ± 5.5 | | 4.7 | 329.48 | |
| E | | 3.4 | 330.78 | |
| | | 100' S | | |
| E | | 4.7 | 329.48 | |
| C | | 5.1 | 329.08 | |
| W | | 5.2 | 328.98 | |
| | | 150' S | | |
| W | | 4.7 | 329.48 | |
| C | | 4.5 | 329.68 | |
| E | | 4.4 | 329.78 | |
| | | 180' S | | |
| E | | 4.6 | 329.58 | |

| | | | |
|-------------------------|----------|--------|----------|
| C | 4.4 | 329.78 | |
| W fence out in alley. | 4.5 | 329.68 | |
| | 200' S | | |
| W | 4.4 | 329.78 | |
| C | 4.1 | 330.08 | |
| E | 4.1 | 330.08 | |
| | 250' S | | |
| E | 3.8 | 330.38 | |
| C | 3.8 | 330.38 | |
| W | 3.8 | 330.38 | |
| T.P. 4.84 | 335.75 ✓ | 329 | 330.91 ✓ |
| | 291' S | | |
| -5 - cement floor | 5.27 | 330.48 | |
| W | 5.0 | 330.75 | |
| C | 4.8 | 330.95 | |
| E | 4.8 | 330.95 | |
| | 350' S | | |
| E | 4.9 | 330.85 | |
| C | 4.8 | 330.95 | |
| W | 5.0 | 330.75 | |
| | 400' S | | |
| W fence is 0.8 in alley | 5.4 | 330.35 | |
| +3.5 | 4.9 | 330.85 | |
| C | 5.2 | 330.55 | |
| E | 5.1 | 330.65 | |

This amount
is not used
from flow.

443' S

| | | |
|-------------------------|------|--------|
| - 3.8 = front of garage | 4.35 | 331.40 |
| E = edge cement apron | 4.60 | 331.15 |
| + 3 | 5.1 | 330.65 |
| C | 5.1 | 330.65 |
| + 5 | 5.0 | 330.75 |
| W | 5.5 | 330.25 |

485' S

| | | |
|-------|-----|--------|
| W | 5.5 | 330.75 |
| + 3.5 | 4.9 | 330.85 |
| C | 5.1 | 330.65 |
| E | 5.1 | 330.65 |

493' S

| | | |
|-------------------------------|------|--------|
| E - 4 = front of cement floor | 4.63 | 331.12 |
|-------------------------------|------|--------|

500' S

| | | |
|-----|------|--------|
| E | 4.9 | 330.85 |
| C | 5.2 | 330.55 |
| W | 5.2 | 330.55 |
| T.P | 4.57 | 335.22 |
| | 5.10 | 330.65 |

550' S

| | | |
|---|-----|--------|
| W | 4.8 | 330.42 |
| C | 4.7 | 330.52 |
| E | 4.2 | 331.02 |

560' S

| | | |
|----------------------------------|------|--------|
| 3' W of W.L. = garage cement fl. | 4.97 | 330.25 |
|----------------------------------|------|--------|

587' S

| | | |
|---|-----|--------|
| E | 4.2 | 331.02 |
| C | 4.8 | 330.42 |
| W | 4.9 | 330.32 |

598.5' S

| | | |
|----------------|------|--------|
| W on cement ab | 5.30 | 329.92 |
| C | 5.3 | 329.92 |
| E on cement ab | 4.91 | 330.31 |

7 Theobald Moore
Earle Univ. to El Capon
Cross Section of Hamilton
Contd from B 1110 (Last page)

373.52

HAMILTON

42

| | | | | |
|-----|------|--------|--------|---|
| | 5.7 | 373.52 | 368.35 | 80' N of "20' S of El Capon + Ham |
| | | | | 25' N of N of Howard |
| E | 5.8 | | 367.7 | |
| cb | 7.0 | | 366.5 | |
| 1/4 | 7.3 | | 366.2 | |
| c | 7.6 | | 365.9 | |
| 1/4 | 7.0 | | 366.5 | |
| cb | 7.7 | | 365.8 | |
| w | 10.5 | | 363.0 | |
| +5 | 11.1 | | 362.4 | |
| | | | | 35' N |
| -5 | 10.3 | | 363.2 | |
| w | 9.4 | | 364.1 | |
| cb | 7.7 | | 365.8 | |
| 1/4 | 7.3 | | 366.2 | |
| c | 7.2 | | 366.3 | |
| 1/4 | 6.8 | | 366.7 | |
| cb | 6.7 | | 366.8 | |
| E | 5.6 | | 367.9 | |
| | | | | 50' N |
| E | 6.2 | | 367.3 | |
| cb | 6.5 | | 367.0 | |
| 1/4 | 6.9 | | 366.6 | |
| c | 7.2 | | 366.3 | |
| 1/4 | 7.6 | | 365.9 | |

| | | |
|-----|-----|--------|
| cb | 8.3 | 365.2 |
| +15 | 8.4 | 365.1 |
| w | 9.3 | 364.2 |
| +5 | 9.9 | 363.6 |
| | | 75' N |
| -5 | 9.5 | 364.0 |
| w | 9.3 | 364.2 |
| cb | 7.8 | 365.7 |
| 1/4 | 7.2 | 366.3 |
| c | 6.6 | 366.9 |
| 1/4 | 6.2 | 367.3 |
| cb | 5.8 | 367.7 |
| E | 5.1 | 368.4 |
| | | 100' N |
| E | 5.2 | 368.3 |
| cb | 5.3 | 368.2 |
| 1/4 | 5.9 | 367.6 |
| c | 6.5 | 367.0 |
| 1/4 | 6.9 | 366.6 |
| cb | 7.4 | 366.1 |
| +10 | 8.1 | 365.4 |
| w | 8.2 | 365.3 |
| +5 | 8.4 | 365.1 |
| | | 125' N |
| -5 | 9.0 | 364.5 |
| w | 8.8 | 364.7 |

373.52

| | | |
|--------|-----|-------|
| cb | 7.3 | 366.2 |
| 1/4 | 6.4 | 367.1 |
| c | 4.9 | 368.6 |
| 1/4 | 4.5 | 369.0 |
| cb | 4.9 | 368.6 |
| E | 5.1 | 368.4 |
| 150' N | | |
| E | 4.5 | 369.0 |
| cb | 5.7 | 367.8 |
| 1/4 | 5.8 | 367.7 |
| c | 5.8 | 367.7 |
| 1/4 | 6.1 | 367.4 |
| cb | 6.0 | 367.5 |
| W | 8.3 | 365.2 |
| +5 | 8.5 | 365.0 |
| 164' N | | |
| -5 | 7.8 | 365.7 |
| W | 7.4 | 366.1 |
| cb | 5.9 | 367.6 |
| 1/4 | 6.0 | 367.5 |
| c | 6.2 | 367.3 |
| 1/4 | 5.6 | 367.9 |
| cb | 5.0 | 368.5 |
| E | 3.9 | 369.6 |
| 188' N | | |
| E | 2.9 | 370.6 |

373.52

Hamilton 43

| | | |
|--------|-----|-------|
| +12 | 2.6 | 370.9 |
| cb | 3.3 | 370.2 |
| 1/4 | 3.8 | 369.7 |
| c | 4.3 | 369.2 |
| 1/4 | 4.6 | 368.9 |
| cb | 5.1 | 368.4 |
| W | 6.8 | 366.7 |
| 200' N | | |
| W | 6.0 | 367.5 |
| cb | 5.1 | 368.4 |
| 1/4 | 4.6 | 368.9 |
| c | 4.2 | 369.3 |
| 1/4 | 3.8 | 370.7 |
| cb | 3.3 | 371.2 |
| E | 2.6 | 371.9 |
| 225' N | | |
| E | 2.9 | 371.6 |
| cb | 3.3 | 371.2 |
| 1/4 | 3.5 | 370.0 |
| c | 3.8 | 369.7 |
| 1/4 | 4.3 | 369.2 |
| cb | 4.7 | 368.8 |
| W | 5.2 | 368.3 |
| 250' N | | |
| W | 5.5 | 368.0 |
| cb | 4.3 | 369.2 |

| | | |
|-----|-----|-------|
| 1/4 | 3.9 | 369.6 |
| C | 3.6 | 369.9 |
| 1/4 | 3.1 | 370.4 |
| cb | 3.1 | 370.4 |
| E | 3.0 | 370.5 |

275' N

| | | |
|-----|-----|-------|
| E | 2.4 | 371.1 |
| cb | 3.1 | 370.4 |
| 1/4 | 3.1 | 370.4 |
| C | 3.8 | 369.7 |
| 1/4 | 3.9 | 369.6 |
| cb | 4.6 | 368.9 |
| W | 5.3 | 368.2 |

300' N

| | | |
|-----|-----|-------|
| W | 5.1 | 368.4 |
| cb | 4.3 | 369.2 |
| 1/4 | 4.4 | 369.1 |
| C | 4.1 | 369.4 |
| 1/4 | 3.8 | 369.7 |
| cb | 3.5 | 370.0 |
| +10 | 2.3 | 371.2 |
| E | 2.2 | 371.3 |

325' N

| | | |
|----|-----|-------|
| E | 2.6 | 370.9 |
| +7 | 3.5 | 370.0 |
| cb | 4.1 | 369.4 |

| | | |
|-----|-----|-------|
| 1/4 | 4.6 | 368.9 |
| C | 5.1 | 368.4 |
| 1/4 | 4.9 | 368.6 |
| cb | 4.8 | 368.7 |
| W | 6.2 | 367.3 |

334' N

| | | |
|-----|-----|-------|
| W | 6.2 | 367.3 |
| cb | 6.3 | 367.2 |
| 1/4 | 6.3 | 367.2 |
| C | 6.6 | 366.9 |
| 1/4 | 5.8 | 367.7 |
| cb | 4.5 | 369.0 |
| E | 3.0 | 370.5 |

337' N = S.L. El Capon

| | | |
|---------------------------|------|--------|
| C | 5.6 | 367.9 |
| +14 on Cement Curb Return | 6.13 | 367.39 |
| cb | 6.7 | 366.8 |
| 1/4 | 6.8 | 366.7 |
| C | 7.1 | 366.4 |
| 1/4 | 7.3 | 366.2 |
| cb | 7.8 | 365.7 |
| +6 | 7.73 | 365.79 |
| W | 7.6 | 365.9 |

Cement curb Returns 14' x 20' 20' on El Capon side
sidewalk not filled in

Walker
3-27

X. Section Filbert st. 80' wide
From Vesta to Woden

14' cb's
13' 7/8

17.79
17.8

| | | | |
|----------------------------|------------|-------|-------|
| 5 ft. Spt. Main + Vesta | 1.12 | 17.79 | 16.67 |
| | | 19.8 | |
| | N.L. Vesta | | |
| 5 | 6.6 | 11.2 | |
| cb | 6.7 | 11.1 | |
| 1/4 | 6.7 | 11.1 | |
| 2 | 6.5 | 11.3 | |
| +4 | 7.1 | 10.7 | |
| +8 | 7.1 | 10.7 | |
| 1/2 | 6.0 | 11.8 | |
| cb | 5.9 | 11.9 | |
| N | 6.2 | 11.8 | |
| | N cb. | | |
| N | 5.9 | 11.9 | |
| cb. | 5.5 | 12.3 | |
| 1/4 | 5.7 | 12.1 | |
| +5 | 6.9 | 10.9 | |
| 2 | 6.6 | 11.2 | |
| 1/4 | 6.7 | 11.1 | |
| cb | 6.5 | 11.3 | |
| 5 | 6.5 | 11.3 | |
| | N cb + 5' | | |
| 5 | 7.3 | 10.5 | |
| cb | 7.2 | 10.6 | |
| 1/4 | 7.0 | 10.8 | |
| 2 | 6.9 | 10.9 | |
| 1/4 | 6.7 | 11.1 | |

| | | |
|-----|-------|------|
| cb | 6.5 | 11.3 |
| N | 6.3 | 11.5 |
| | N 1/4 | |
| N | 5.8 | 12.0 |
| cb. | 6.0 | 11.8 |
| 1/4 | 6.4 | 11.4 |
| 2 | 6.5 | 11.3 |
| 1/4 | 6.6 | 11.2 |
| cb | 6.9 | 10.9 |
| 5 | 7.3 | 10.5 |
| | 2 | |
| 5 | 7.1 | 10.7 |
| cb. | 6.7 | 11.1 |
| 1/4 | 6.4 | 11.4 |
| 2 | 6.3 | 11.5 |
| 1/4 | 6.1 | 11.7 |
| cb | 5.7 | 12.1 |
| N | 5.5 | 12.3 |
| | 5 1/4 | |
| N | 5.4 | 12.2 |
| cb | 5.9 | 11.9 |
| 1/4 | 6.0 | 11.8 |
| 2 | 6.3 | 11.5 |
| 1/4 | 6.3 | 11.5 |
| cb | 7.0 | 10.8 |
| 5 | 7.8 | 10.0 |

1779
17.8
 5' + 5'

| | | |
|---------------|-------|------|
| S | 7.6 | 10.2 |
| cb. | 6.9 | 10.9 |
| $\frac{1}{4}$ | 6.3 | 11.5 |
| $\frac{1}{2}$ | 6.5 | 11.3 |
| $\frac{3}{4}$ | 6.0 | 11.8 |
| cb. | 5.8 | 12.0 |
| N | 6.0 | 11.8 |
| | +7 | |
| N | 5.0 | 12.8 |
| +8 | 2.8 | 13.0 |
| +9 | 5.9 | 11.9 |
| cb. | 5.8 | 12.0 |
| $\frac{1}{4}$ | 5.8 | 12.0 |
| +3 | 5.9 | 11.9 |
| +4 | 6.7 | 11.1 |
| $\frac{1}{2}$ | 6.6 | 11.2 |
| $\frac{3}{4}$ | 6.2 | 11.6 |
| cb. | 6.9 | 10.9 |
| +4 | 7.1 | 10.7 |
| +6 | 6.4 | 13.4 |
| S | 6.7 | 11.1 |
| | E cb. | |
| S | 6.7 | 11.1 |
| +7 | 6.4 | 11.4 |
| +9 | 7.1 | 10.7 |
| cb. | 6.8 | 11.0 |

1779 17.8

46

| | | |
|---------------|--------------------|------|
| $\frac{1}{2}$ | 6.3 | 11.5 |
| +6 | 5.9 | 11.9 |
| +7 | 6.6 | 11.2 |
| $\frac{1}{4}$ | 6.4 | 11.4 |
| +8 | 7.0 | 10.8 |
| +12 | 5.8 | 12.0 |
| $\frac{1}{2}$ | 5.8 | 12.0 |
| cb. | 6.0 | 11.8 |
| +3 | 5.9 | 11.9 |
| +5 | 5.0 | 12.8 |
| N | 4.9 | 12.9 |
| | E. h. Vesta = 0+00 | |
| N | 5.0 | 12.0 |
| +8 | 4.9 | 12.9 |
| +10 | 6.0 | 11.8 |
| cb. | 6.3 | 11.5 |
| $\frac{1}{4}$ | 5.4 | 12.4 |
| +6 | 7.0 | 10.8 |
| $\frac{1}{2}$ | 6.4 | 11.4 |
| +7 | 6.6 | 11.2 |
| +9 | 5.8 | 12.0 |
| $\frac{3}{4}$ | 5.9 | 11.9 |
| cb. | 6.6 | 11.2 |
| +6 | 7.1 | 10.7 |
| +8 | 6.5 | 11.3 |
| S | 6.8 | 11.0 |

17.79

17.8

50 E

| | | |
|---------------|-----|------|
| S | 6.8 | 11.0 |
| +7 | 6.0 | 11.4 |
| +9 | 7.0 | 10.8 |
| cb. | 6.8 | 11.0 |
| $\frac{1}{4}$ | 6.2 | 11.6 |
| +5 | 6.0 | 11.8 |
| +6 | 6.7 | 11.1 |
| 2 | 6.7 | 11.1 |
| +7 | 7.2 | 10.6 |
| +9 | 5.7 | 12.1 |
| $\frac{1}{4}$ | 5.1 | 12.7 |
| cb. | 5.5 | 12.3 |
| +5 | 5.6 | 12.2 |
| +6 | 4.6 | 13.2 |
| N | 4.8 | 13.0 |
| 77 E | | |
| N | 1.8 | 13.0 |
| cb. | 3.5 | 12.3 |
| $\frac{1}{4}$ | 5.3 | 12.5 |
| +5 | 6.0 | 11.8 |
| +8 | 7.0 | 10.8 |
| 2 | 6.5 | 11.3 |
| +7 | 6.7 | 11.1 |
| +9 | 6.2 | 11.6 |
| $\frac{1}{4}$ | 5.8 | 12.0 |
| cb. | 6.5 | 11.3 |

17.79

17.8

47

| | | |
|---------------|-----|------|
| +6 | 6.9 | 10.9 |
| +7 | 6.7 | 11.1 |
| S | 7.0 | 10.8 |
| 100' E | | |
| S | 6.9 | 10.9 |
| cb. | 6.6 | 11.2 |
| $\frac{1}{4}$ | 5.9 | 11.9 |
| 2 | 5.9 | 11.9 |
| 2 | 5.4 | 12.4 |
| cb. | 5.5 | 12.3 |
| N | 4.9 | 12.9 |
| 148' E | | |
| N | 5.4 | 12.4 |
| cb. | 5.4 | 12.4 |
| +10 | 6.0 | 11.8 |
| cb. | 5.9 | 12.1 |
| $\frac{1}{4}$ | 5.3 | 12.5 |
| $\frac{1}{4}$ | 6.4 | 11.6 |
| $\frac{1}{4}$ | 6.0 | 11.8 |
| cb. | 6.6 | 11.2 |
| S | 7.0 | 10.8 |
| 151' E | | |
| S | 6.9 | 10.9 |
| cb. | 6.6 | 11.2 |
| $\frac{1}{4}$ | 6.0 | 11.8 |
| +4 | 6.2 | 11.6 |

1779

17.8

| | | |
|---------------|----|------|
| +6 | 72 | 10.6 |
| 2 | 68 | 11.0 |
| +7 | 71 | 10.7 |
| +9 | 57 | 12.1 |
| $\frac{1}{2}$ | 54 | 12.4 |
| cb | 56 | 12.2 |
| +4 | 59 | 11.9 |
| +6 | 54 | 12.4 |
| N | 55 | 12.3 |
| 200'E | | |
| N | 53 | 12.5 |
| +8 | 56 | 12.2 |
| +10 | 62 | 11.6 |
| cb | 60 | 11.8 |
| $\frac{1}{4}$ | 57 | 12.1 |
| +3 | 58 | 12.0 |
| +6 | 69 | 10.9 |
| 2 | 69 | 10.9 |
| +8 | 74 | 10.4 |
| +10 | 61 | 11.7 |
| $\frac{1}{4}$ | 61 | 11.7 |
| cb | 64 | 11.2 |
| +6 | 68 | 11.0 |
| +7 | 62 | 11.6 |
| S | 64 | 11.4 |
| S | 64 | 11.4 |
| +7 | 60 | 11.8 |

250'E

1779

17.8

48

| | | |
|---------------|----|------|
| -8 | 65 | 11.3 |
| cb | 65 | 11.3 |
| $\frac{1}{2}$ | 58 | 12.3 |
| +5 | 60 | 11.8 |
| +7 | 78 | 10.0 |
| 2 | 72 | 10.6 |
| -6 | 76 | 10.2 |
| +9 | 58 | 12.0 |
| $\frac{1}{2}$ | 53 | 12.5 |
| cb | 59 | 11.9 |
| +5 | 61 | 11.7 |
| +6 | 51 | 12.7 |
| N | 52 | 12.6 |
| 300'E | | |
| N | 48 | 13.0 |
| cb | 55 | 12.3 |
| $\frac{1}{2}$ | 52 | 12.6 |
| +3 | 56 | 12.2 |
| +5 | 74 | 10.4 |
| 2 | 74 | 10.4 |
| -7 | 74 | 10.4 |
| +9 | 57 | 12.1 |
| 2 | 57 | 12.1 |
| cb | 61 | 11.7 |
| +6 | 61 | 11.7 |
| +8 | 56 | 12.2 |

17.79 17.8

| | | | |
|--------------------|--------------------------|------|------|
| 5 | | 5.7 | 12.1 |
| | 320'E | | |
| 5 | | 5.8 | 12.0 |
| +5 | | 5.8 | 12.0 |
| +9 | | 6.2 | 11.6 |
| cb | | 6.1 | 11.7 |
| $\frac{1}{2}$ | | 5.3 | 12.5 |
| +6 | | 5.8 | 12.0 |
| $\frac{1}{4}$ | | 7.3 | 10.5 |
| $\frac{1}{4}$ | | 5.6 | 12.2 |
| cb | | 5.5 | 12.3 |
| N | | 5.0 | 12.8 |
| | 327'E | | |
| N | | 5.1 | 12.7 |
| cb | | 5.4 | 12.4 |
| $\frac{1}{4}$ | | 5.4 | 12.4 |
| $\frac{1}{2}$ | | 5.9 | 11.9 |
| $\frac{1}{2}$ | | 5.1 | 12.4 |
| cb | | 6.1 | 11.7 |
| +6 | | 6.1 | 11.7 |
| +9 | | 5.6 | 12.2 |
| 5 | | 5.8 | 12.0 |
| | 346'E = 2 Cor. Walk on S | | |
| -15' = top of Walk | | 5.52 | 12.3 |
| 5 | | 5.5 | 12.3 |
| +8 | | 5.7 | 12.1 |
| +10 | | 6.4 | 11.4 |

17.79 17.8

69

| | | | |
|---------------|--------------------------|-----|------|
| cb | | 6.3 | 11.5 |
| $\frac{1}{4}$ | | 5.6 | 12.2 |
| +8 | | 5.8 | 12.0 |
| +9 | | 7.1 | 10.4 |
| $\frac{1}{2}$ | | 7.5 | 10.3 |
| +7 | | 7.5 | 10.3 |
| +9 | | 5.6 | 12.2 |
| $\frac{1}{2}$ | | 5.3 | 12.5 |
| cb | | 5.5 | 12.3 |
| N | | 4.9 | 12.9 |
| | 385'E = 2 Cor. Walk on S | | |
| N | | 4.4 | 13.4 |
| +1 | | 4.8 | 13.0 |
| +10 | | 5.5 | 12.3 |
| cb | | 5.4 | 12.4 |
| $\frac{1}{2}$ | | 5.3 | 12.5 |
| +3 | | 5.2 | 12.6 |
| +6 | | 8.1 | 9.7 |
| cb | | 7.9 | 9.9 |
| +7 | | 8.3 | 9.5 |
| +10 | | 5.4 | 12.4 |
| $\frac{1}{2}$ | | 5.4 | 12.4 |
| cb | | 6.3 | 11.5 |
| +6 | | 6.3 | 11.5 |
| +7 | | 5.6 | 12.2 |
| 5 | | 5.5 | 12.3 |

| | 17.79 | 18.1 |
|--------------------|------------|------------|
| +1.5 = top of walk | | 5.37 12.5 |
| T.P. | 5.71 18.13 | 5.37 12.42 |
| | 250' E | |
| U | | 5.3 12.8 |
| +7 | | 5.4 12.7 |
| +8 | | 6.1 12.0 |
| cb | | 6.1 12.0 |
| $\frac{1}{4}$ | | 5.5 12.6 |
| +5 | | 9.5 8.6 |
| $\frac{1}{2}$ | | 9.0 9.1 |
| +10 | | 5.4 12.7 |
| $\frac{3}{4}$ | | 5.1 13.0 |
| cb | | 5.4 12.7 |
| +6 | | 5.4 12.7 |
| +8 | | 4.6 13.5 |
| N | | 4.4 13.7 |
| | 500' E | |
| N | | 3.4 14.7 |
| +8 | | 4.1 14.0 |
| +10 | | 4.7 13.4 |
| cb | | 4.8 13.3 |
| $\frac{1}{2}$ | | 4.9 13.2 |
| +7 | | 9.1 9.0 |
| $\frac{1}{4}$ | | 9.3 8.8 |
| +7 | | 9.3 8.8 |
| $\frac{1}{4}$ | | 5.4 12.7 |
| cb | | 5.7 12.4 |

| | 18.13 | 18.1 |
|---------------|---------------------|----------|
| +6 | | 5.7 12.7 |
| +7 | | 4.6 13.5 |
| U | | 4.4 13.7 |
| | 550' E | |
| U | | 3.9 14.2 |
| +7 | | 4.0 14.1 |
| +8 | | 3.1 13.0 |
| cb | | 5.2 12.9 |
| $\frac{1}{2}$ | | 5.2 12.9 |
| +6 | | 9.6 8.5 |
| $\frac{1}{4}$ | | 9.6 8.5 |
| +9 | | 9.6 8.5 |
| +11 | | 4.1 14.0 |
| $\frac{1}{2}$ | | 4.1 14.0 |
| cb | | 4.4 13.7 |
| +5 | | 4.1 14.0 |
| +7 | | 3.5 14.6 |
| N | | 2.8 15.3 |
| | 600' E = N.L. Waden | |
| N | | 3.3 14.8 |
| +8 | | 4.0 14.1 |
| +10 | | 5.2 12.9 |
| +11 | | 4.5 13.6 |
| $\frac{1}{2}$ | | 6.0 12.1 |
| +6 | | 9.8 8.3 |
| $\frac{1}{4}$ | | 9.8 8.3 |

18.13

18.1

+8

9.8

8.3

 $\frac{1}{4}$

5.0

13.1

cb

5.3

12.8

+6

5.0

13.1

+9

3.8

14.3

5

3.5

14.6

Walker
10-2-27

X. Section Maden St. 60' wide

10' cb
10' 7'

From S.W. Filbert to S.W. Main St.

S.W. Filbert

18.1

W

18.13

3.5

14.6

+6

3.7

14.4

cb

4.8

13.3

 $\frac{1}{4}$

5.3

12.8

8

5.0

13.1

 $\frac{1}{4}$

5.5

12.6

cb

4.8

13.3

E

3.4

14.7

S.W. +6'

E

5.3

12.8

cb

5.5

12.6

 $\frac{1}{4}$

5.9

12.2

8

5.5

12.6

 $\frac{1}{4}$

5.7

12.4

cb

5.7

12.4

W

4.7

13.4

S cb.

18.13

18.1

51

W

52

12.9

cb

57

12.4

 $\frac{1}{2}$

68

11.3

8

66

11.5

 $\frac{1}{4}$

67

11.4

cb

60

12.1

E

54

12.7

S $\frac{1}{2}$

E

53

12.8

cb

61

12.0

+3

83

9.8

 $\frac{1}{4}$

65

9.6

8

76

10.5

 $\frac{1}{4}$

72

10.9

cb

53

12.8

W

49

13.2

+7

W

100

8.1

+8

100

8.1

cb

65

9.6

 $\frac{1}{4}$

87

9.4

8

83

9.8

 $\frac{1}{2}$

93

8.8

cb

102

7.9

E

104

7.7

+10

107

7.7

+10

107

7.4

18.13 18.1

~~2~~

| | | | |
|---------------|-----------------|------|------|
| -10 | | 10.7 | 7.4 |
| E | | 10.5 | 7.6 |
| cb | | 10.2 | 7.9 |
| $\frac{1}{4}$ | | 9.7 | 8.4 |
| 2 | | 8.9 | 9.2 |
| $\frac{1}{4}$ | | 9.2 | 8.9 |
| +7 | | 9.1 | 9.0 |
| cb | | 9.9 | 8.2 |
| N | | 9.9 | 8.2 |
| | + 8 | | |
| N | | 10.0 | 8.1 |
| cb | | 10.0 | 8.1 |
| +4 | | 8.8 | 9.3 |
| $\frac{1}{4}$ | | 8.8 | 9.3 |
| 2 | | 8.1 | 10.0 |
| $\frac{1}{4}$ | | 9.1 | 9.0 |
| cb | | 9.9 | 8.2 |
| E | | 10.4 | 7.7 |
| +10 | | 10.8 | 7.3 |
| | N $\frac{1}{4}$ | | |
| E | | 7.4 | 10.7 |
| cb | | 8.0 | 10.1 |
| $\frac{1}{4}$ | | 8.2 | 9.9 |
| 2 | | 7.7 | 10.4 |
| +7 | | 7.9 | 10.2 |
| $\frac{1}{4}$ | | 6.8 | 11.3 |

18.13 18.1

52

| | | | |
|---------------|------|-----|------|
| cb | | 5.4 | 12.7 |
| N | | 6.0 | 12.1 |
| | + 4 | | |
| N | | 4.2 | 13.9 |
| cb | | 4.9 | 13.2 |
| $\frac{1}{4}$ | | 6.5 | 11.6 |
| 2 | | 7.3 | 10.8 |
| $\frac{1}{4}$ | | 7.5 | 10.6 |
| cb | | 7.4 | 10.5 |
| E | | 7.3 | 10.8 |
| | N cb | | |
| E | | 7.3 | 10.8 |
| cb | | 7.1 | 11.0 |
| $\frac{1}{4}$ | | 6.5 | 11.6 |
| 2 | | 6.2 | 11.9 |
| $\frac{1}{4}$ | | 5.9 | 12.2 |
| cb | | 5.3 | 12.8 |
| N | | 5.1 | 13.0 |
| | + 4 | | |
| N | | 5.1 | 13.0 |
| cb | | 5.3 | 12.8 |
| $\frac{1}{4}$ | | 5.4 | 12.5 |
| 2 | | 5.9 | 12.2 |
| $\frac{1}{4}$ | | 6.2 | 11.9 |
| cb | | 6.9 | 11.2 |
| E | | 7.1 | 11.0 |

18.13

18.1

+6

| | | |
|---------------|-----|------|
| E | 7.3 | 10.8 |
| cb | 6.9 | 11.2 |
| $\frac{1}{4}$ | 6.1 | 12.0 |
| $\frac{2}{4}$ | 5.8 | 12.3 |
| $\frac{3}{4}$ | 5.5 | 12.6 |
| cb | 5.0 | 13.1 |
| +5 | 4.8 | 13.3 |
| N | 3.9 | 14.2 |

N.L. Filbert = 0-00

| | | |
|---------------|-----|------|
| N | 3.3 | 14.8 |
| cb | 3.3 | 14.8 |
| +3 | 3.6 | 14.5 |
| +5 | 5.0 | 13.1 |
| $\frac{1}{4}$ | 5.3 | 12.8 |
| $\frac{2}{4}$ | 5.2 | 12.9 |
| $\frac{3}{4}$ | 5.9 | 12.2 |
| cb | 6.7 | 11.4 |
| E | 7.1 | 11.0 |

50' N

| | | |
|---------------|-----|------|
| E | 8.4 | 9.7 |
| cb | 8.1 | 10.0 |
| $\frac{1}{4}$ | 7.4 | 10.7 |
| $\frac{2}{4}$ | 6.5 | 11.6 |
| $\frac{3}{4}$ | 6.8 | 11.3 |
| +4 | 6.7 | 11.4 |
| +6 | 5.5 | 12.6 |

18.13

18.1

53

| | | |
|----|-----|------|
| cb | 5.1 | 13.0 |
| N | 4.9 | 13.2 |

100' N

| | | |
|---------------|-------|------|
| N | 7.5 | 10.6 |
| cb | 7.9 | 10.2 |
| +3 | 9.0 | 9.1 |
| $\frac{1}{4}$ | 9.1 | 9.0 |
| $\frac{2}{4}$ | 9.1 | 9.0 |
| $\frac{3}{4}$ | 9.7 | 8.4 |
| cb | 9.8 | 8.3 |
| E | 9.6 | 8.5 |
| T.P. 7.19 | 16.42 | 9.50 |

16' N

150' N

| | | |
|---------------|-----|-----|
| E | 8.2 | 8.2 |
| cb | 8.7 | 7.7 |
| $\frac{1}{4}$ | 8.8 | 7.6 |
| $\frac{2}{4}$ | 8.6 | 7.8 |
| $\frac{3}{4}$ | 8.3 | 8.1 |
| cb | 7.8 | 8.6 |
| N | 7.1 | 9.3 |

200' N

| | | |
|---------------|-----|-----|
| N | 7.7 | 8.7 |
| cb | 8.0 | 8.4 |
| +3 | 8.1 | 8.3 |
| $\frac{1}{4}$ | 8.3 | 8.1 |
| $\frac{2}{4}$ | 8.1 | 8.3 |

16.22

16.4

| | | |
|-----|-----|-----|
| 1/2 | 8.4 | 8.0 |
| +7 | 8.6 | 7.8 |
| cb | 7.9 | 8.5 |
| E | 7.5 | 8.9 |

250' N

| | | |
|-----|-----|------|
| E | 6.4 | 10.0 |
| cb | 6.6 | 9.8 |
| +5 | 7.6 | 8.8 |
| 1/2 | 7.5 | 8.9 |
| 4 | 7.1 | 9.3 |
| 1/2 | 7.4 | 9.0 |
| +6 | 7.5 | 8.9 |
| +7 | 6.4 | 10.0 |
| cb | 6.5 | 9.9 |
| N | 6.7 | 9.7 |

300' N = S.W. Main St.

14' obs
13' obs

| | | |
|-----|-----|------|
| N | 5.3 | 11.1 |
| cb | 5.3 | 11.1 |
| +3 | 6.7 | 10.2 |
| 1/2 | 6.2 | 10.2 |
| 1 | 6.5 | 9.9 |
| 1/2 | 6.5 | 9.9 |
| +5 | 6.5 | 9.9 |
| cb | 5.7 | 10.7 |
| E | 5.8 | 10.6 |

5 cb

16.22

16.4

54

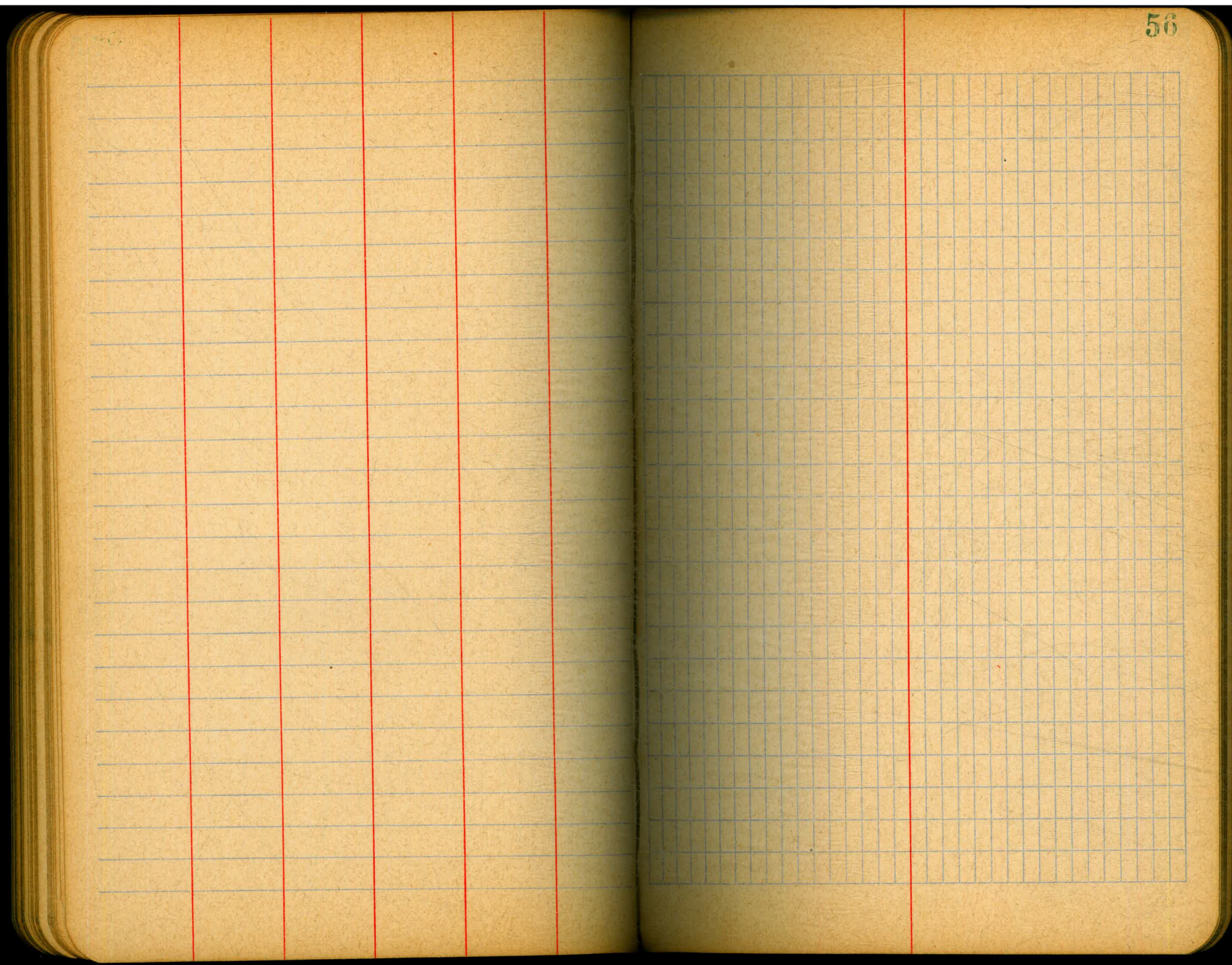
| | | |
|-----------|-----|------|
| E | 6.0 | 10.4 |
| cb | 6.1 | 10.3 |
| 1/2 | 6.4 | 10.0 |
| 1 | 6.5 | 9.9 |
| 1/2 | 6.3 | 10.1 |
| +5 | 6.1 | 10.3 |
| cb | 5.1 | 11.3 |
| N | 5.0 | 11.4 |
| 5 cb + 6' | | |
| N | 5.1 | 11.3 |
| cb | 5.4 | 11.0 |
| +5 | 6.5 | 9.9 |
| 1/2 | 6.6 | 9.8 |
| 1 | 6.4 | 10.0 |
| 1/2 | 6.8 | 9.6 |
| cb | 6.7 | 9.7 |
| E | 6.7 | 9.7 |

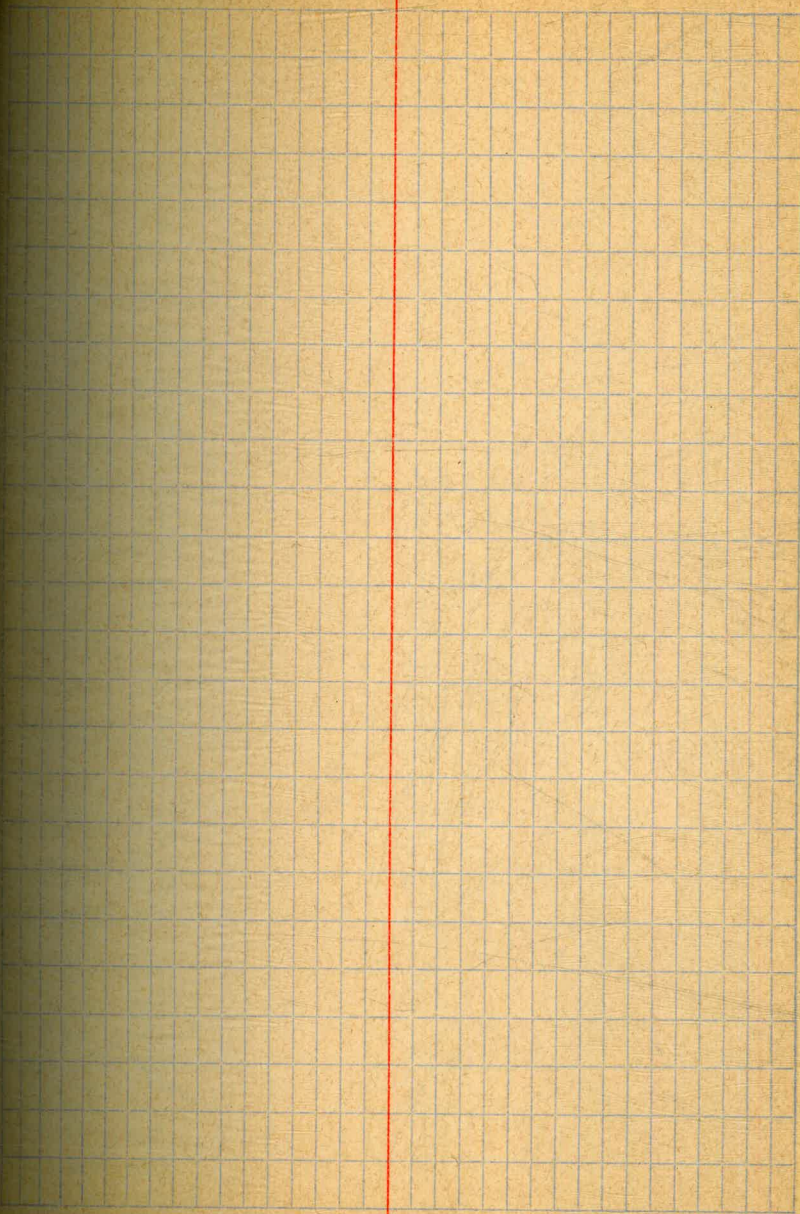
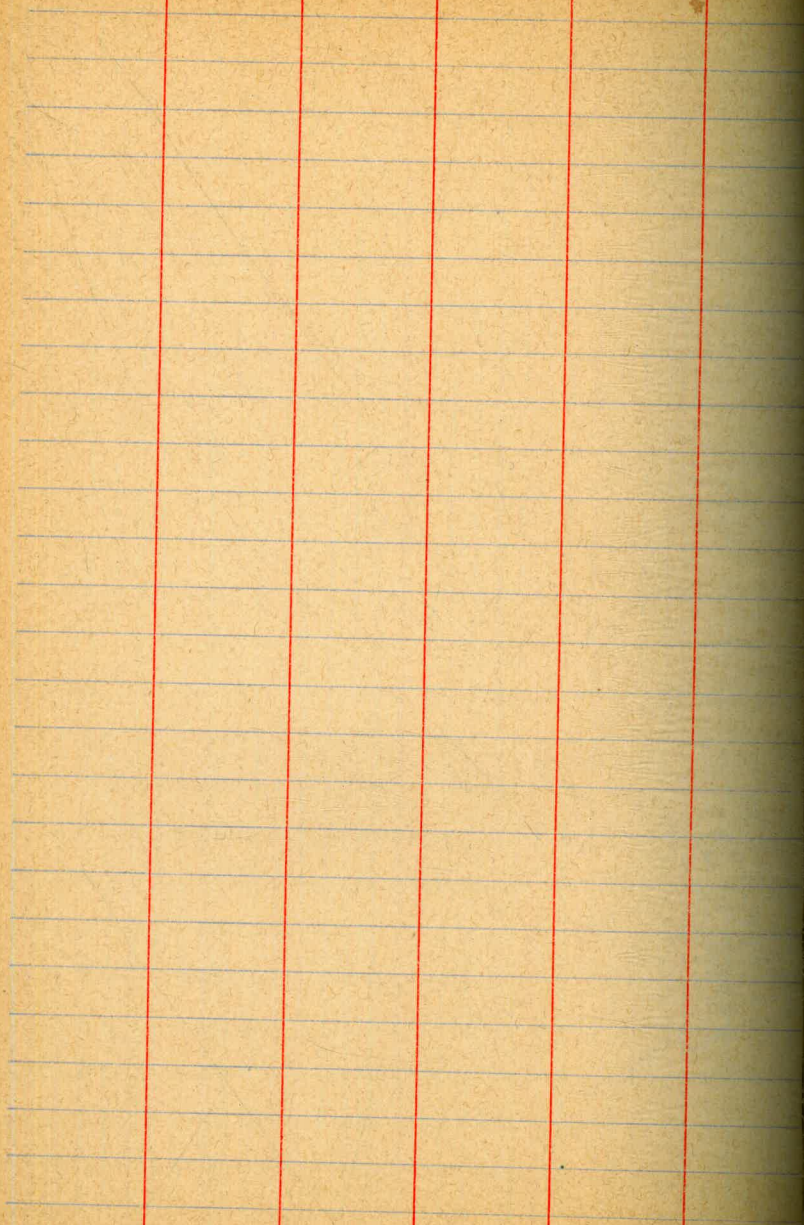
5 cb + 8' = 50' N. S.W. Main = 5 edge Pavement

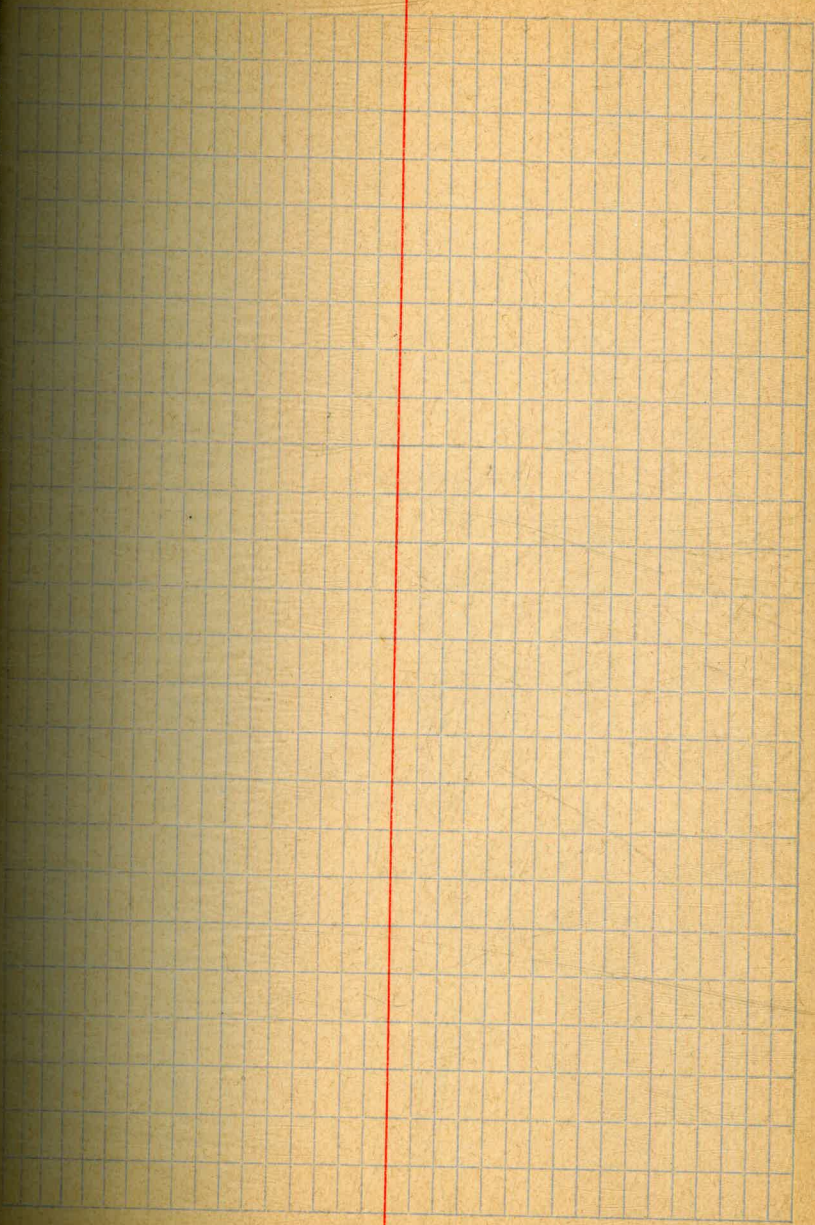
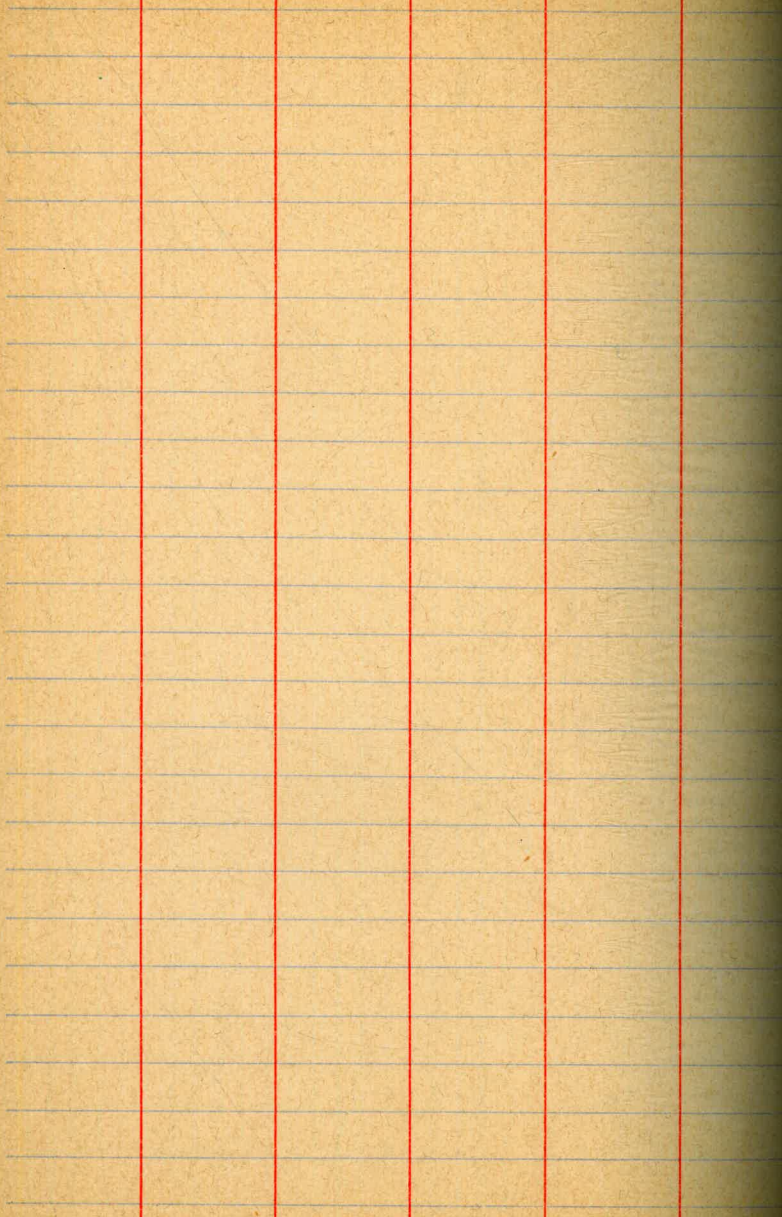
| | | |
|-------------------|------|----------------|
| E = top of Paving | 6.96 | 9.46 |
| cb = " " " | 6.89 | 9.53 |
| 1/2 = " " " | 6.83 | 9.59 |
| 1 = " " " | 6.71 | 9.71 |
| 1/2 = " " " | 6.65 | 9.77 |
| cb = " " " | 6.55 | 9.87 |
| N = " " " | 6.50 | 9.92 |
| T.P. 6.81 | 2.16 | 2.07 |
| T.P. 6.81 | 2.07 | 1.35 |
| T.P. 6.81 | 2.07 | 1.670 |
| T.P. 6.81 | 2.07 | 1.667 = B.M. |
| T.P. 6.81 | 2.07 | 0.03' in Error |

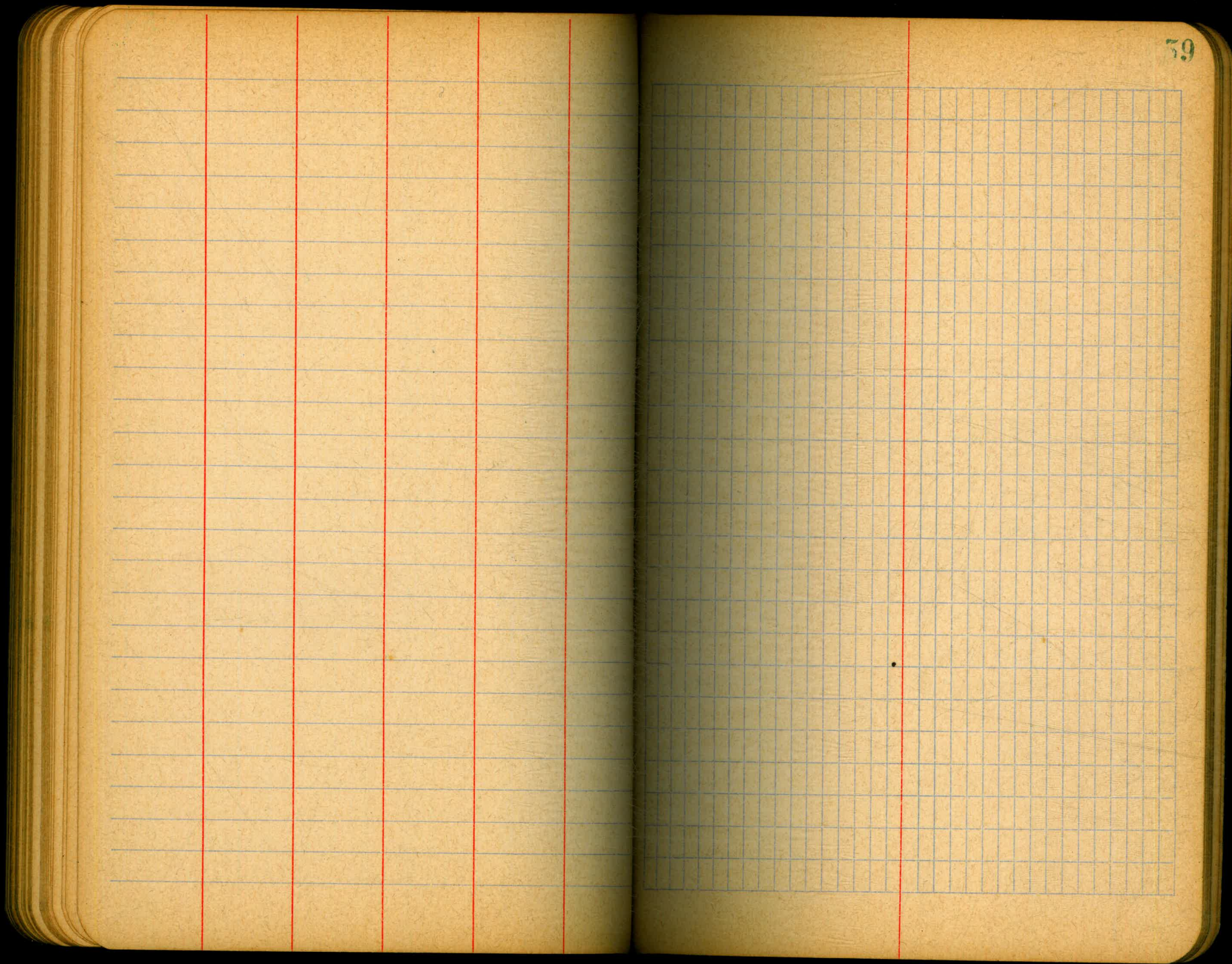
This page features a grid of blue horizontal lines spaced evenly down the page. Three vertical red lines are drawn across the page, creating four columns of varying widths. The leftmost column is the widest, followed by a narrower column, a very narrow column, and a final narrow column on the right. The paper is aged and yellowed.

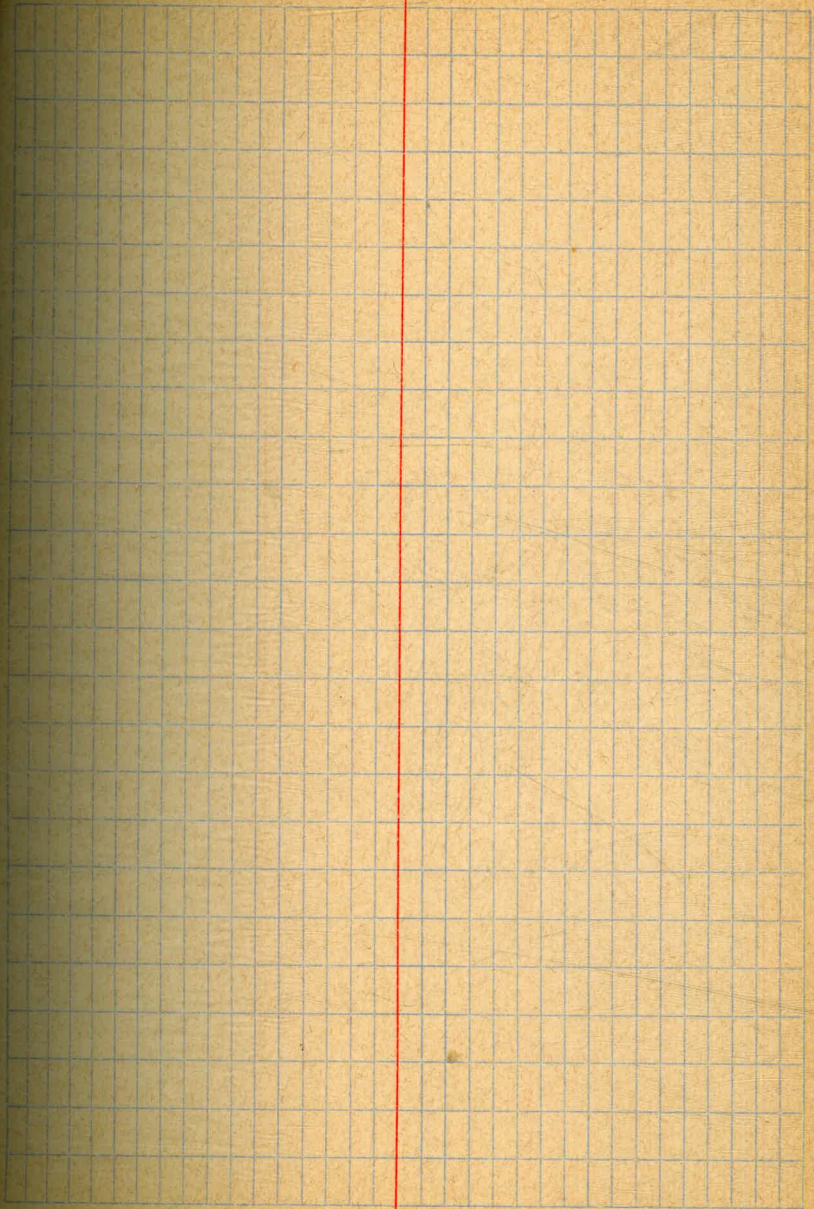
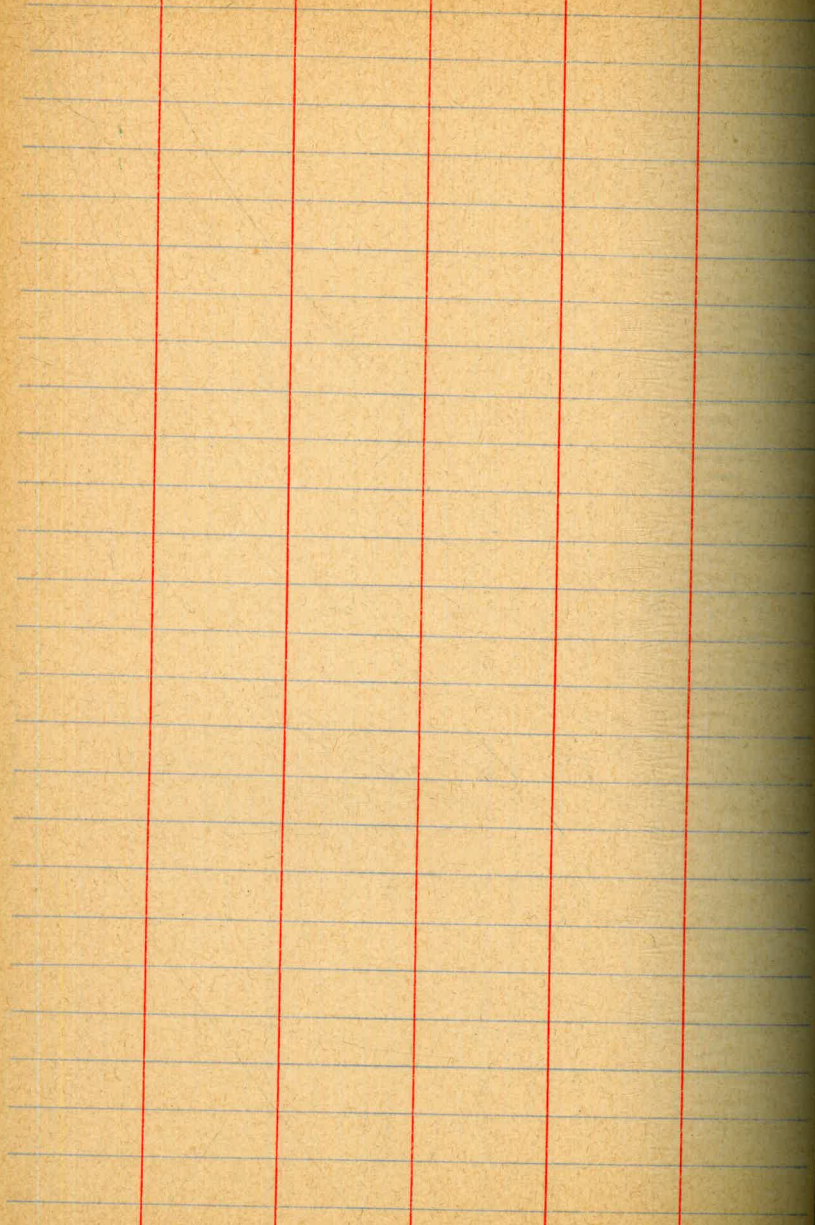
This page features a grid of blue horizontal lines spaced evenly down the page. A single vertical red line is drawn across the page, creating two columns of equal width. The paper is aged and yellowed.

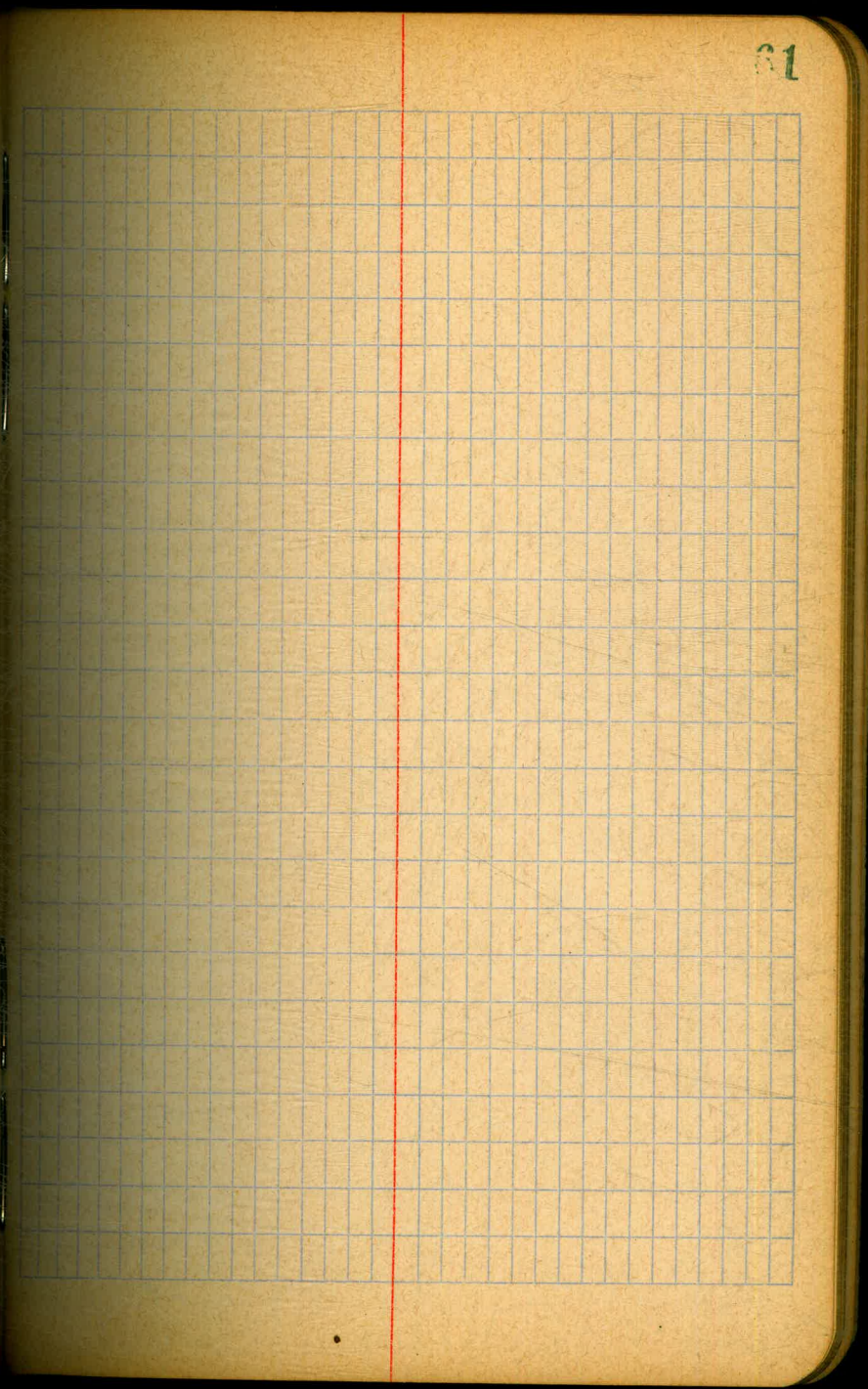
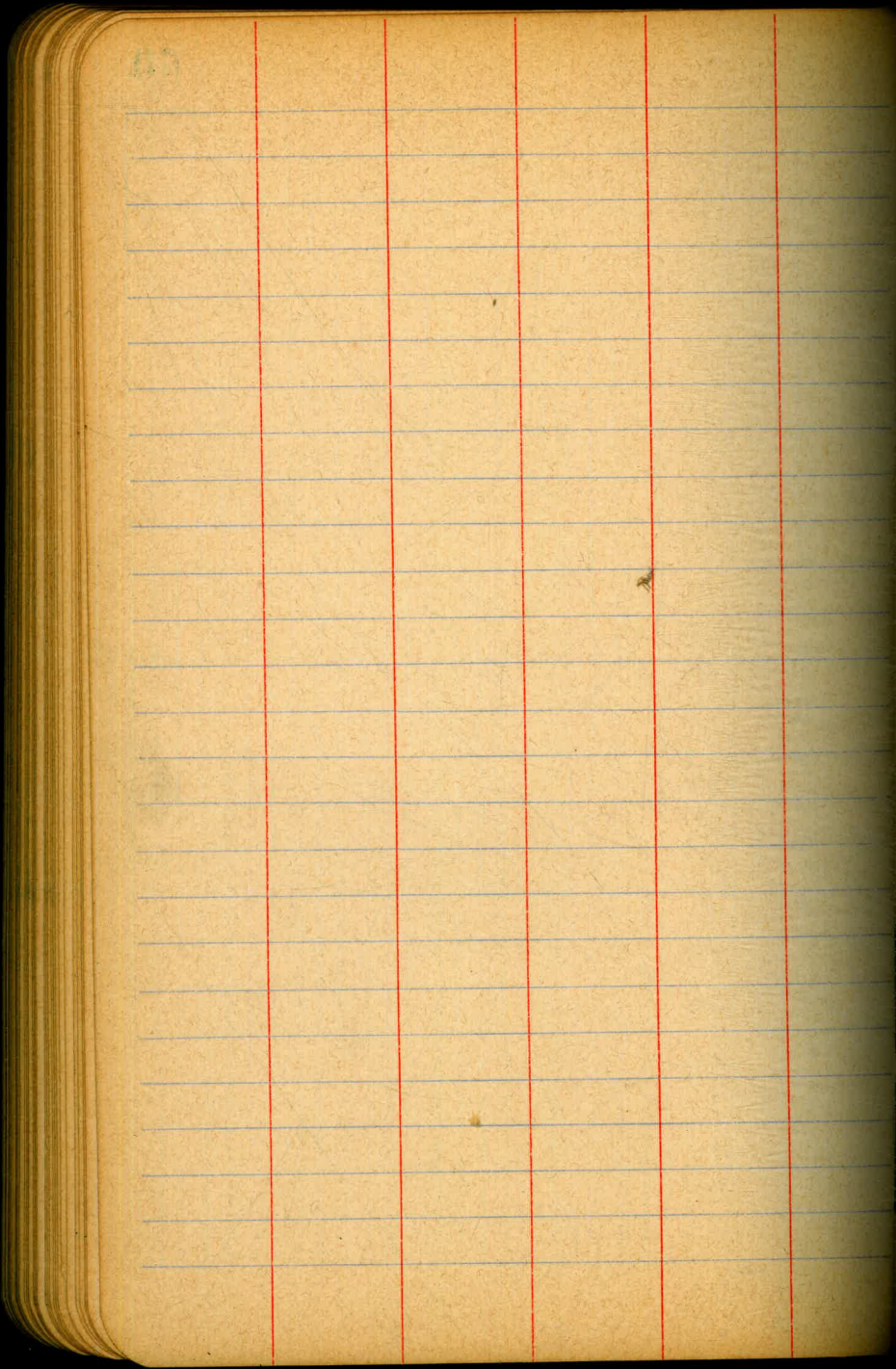


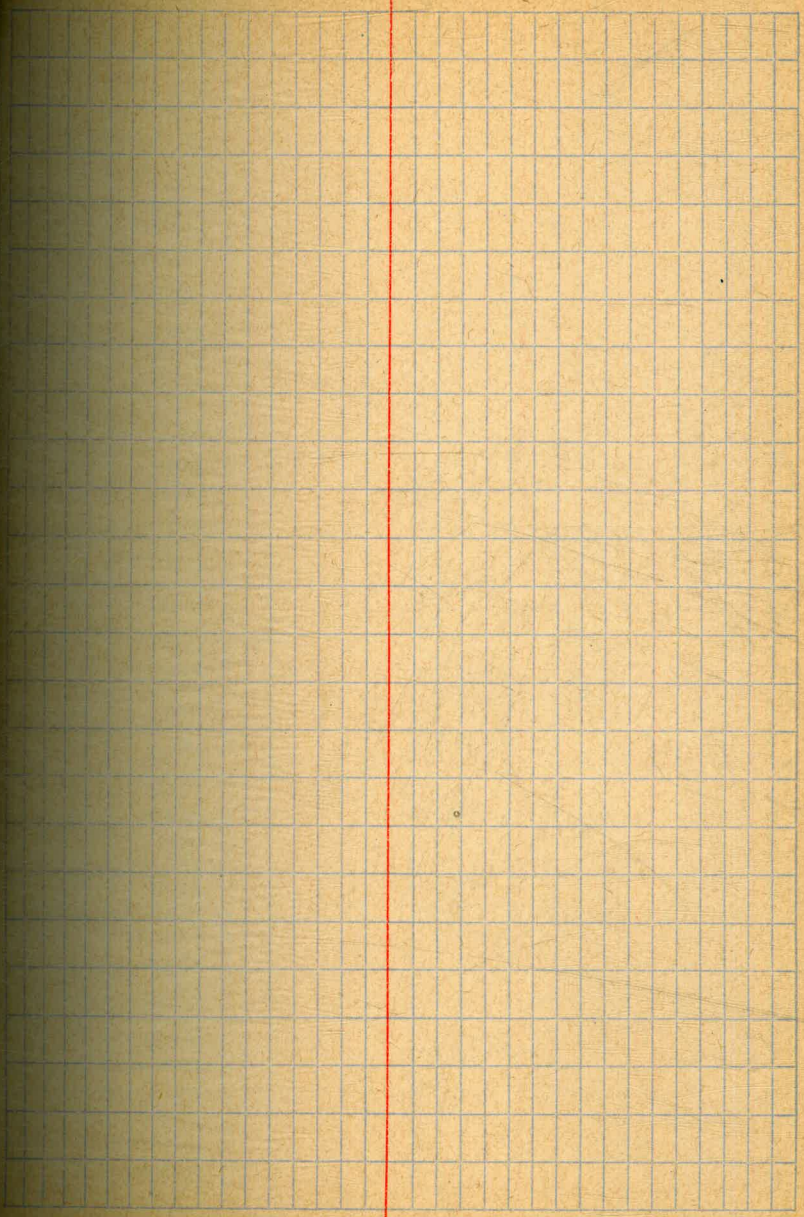
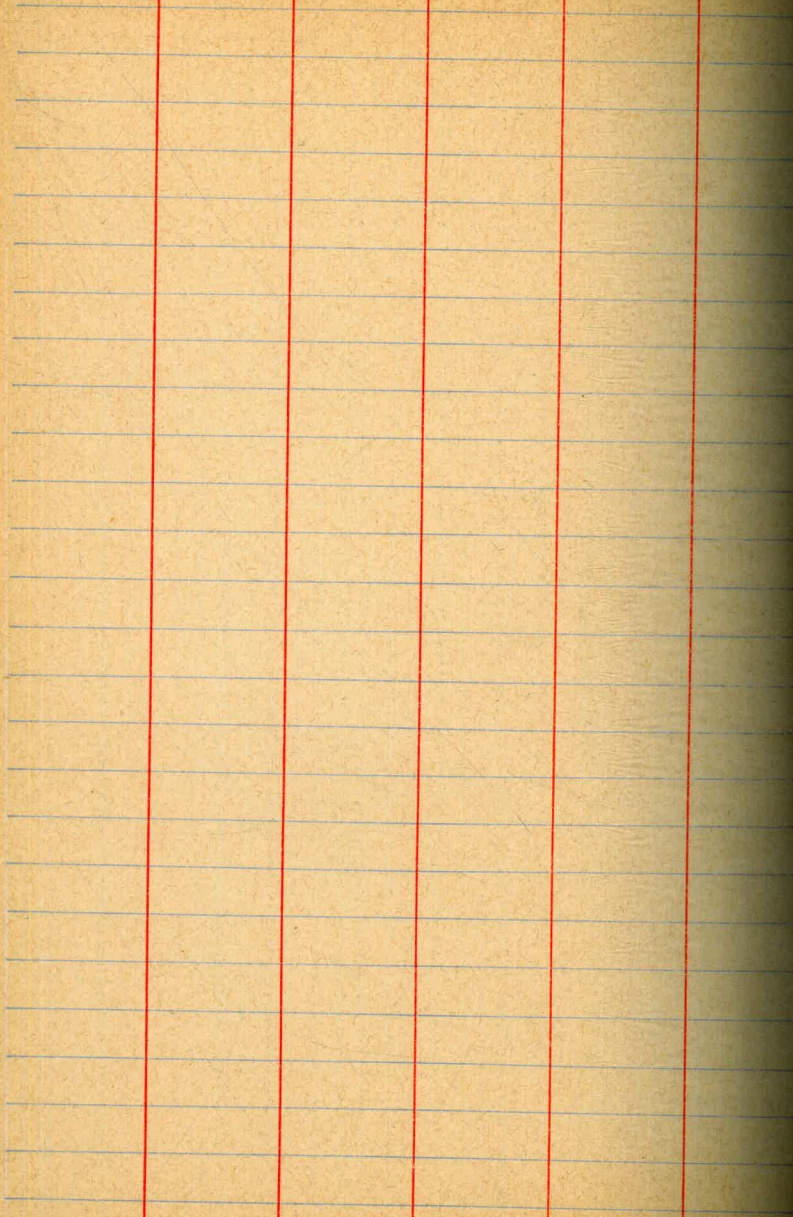


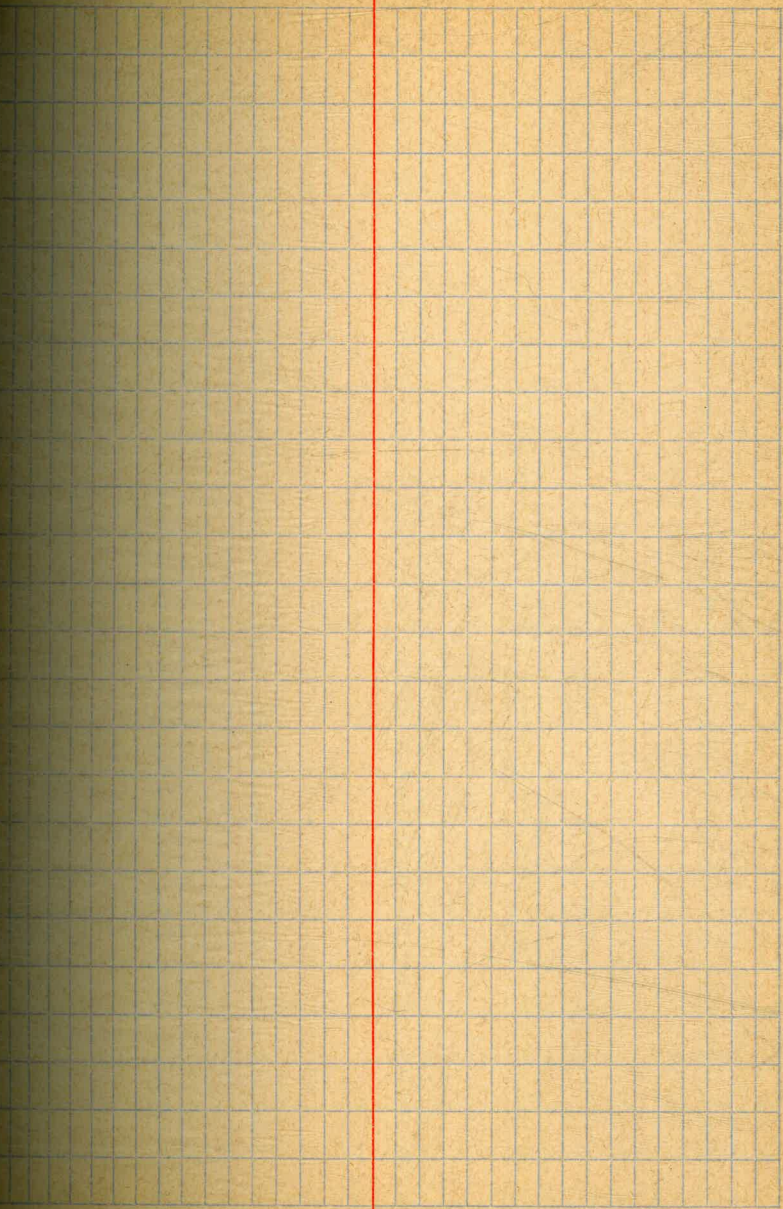
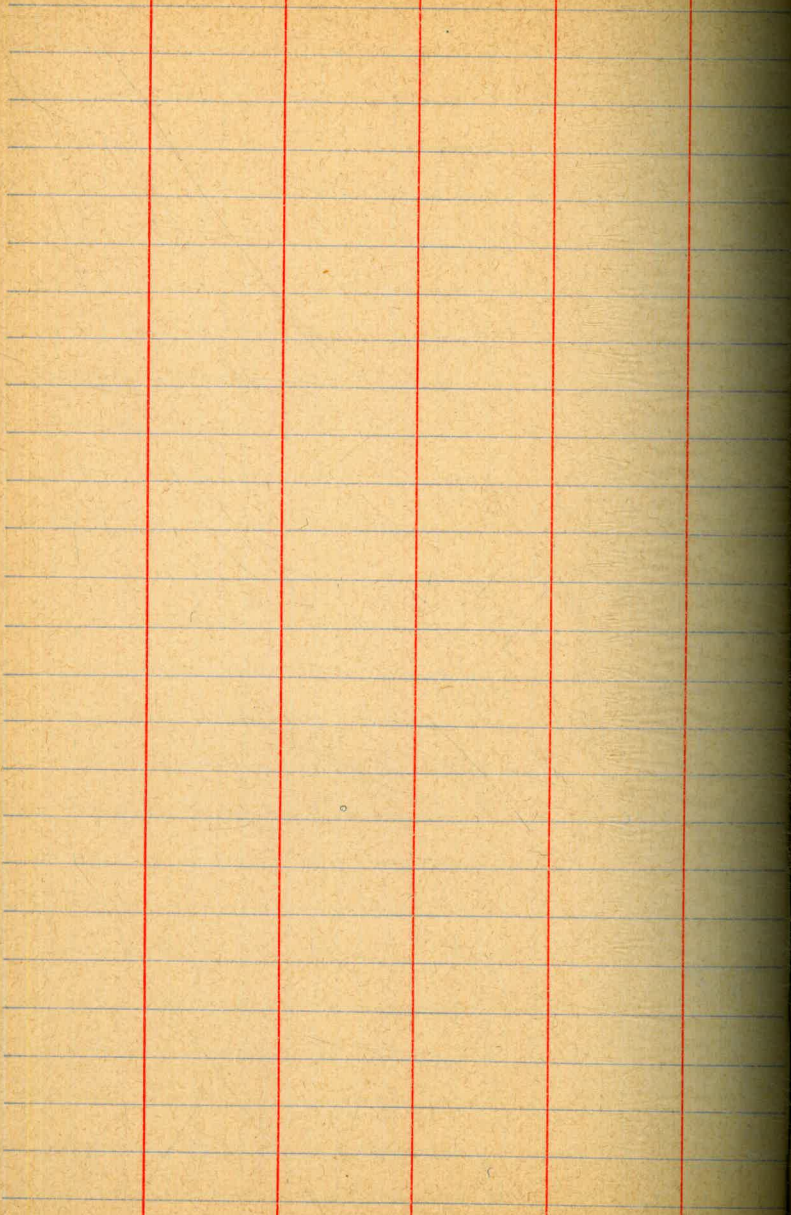


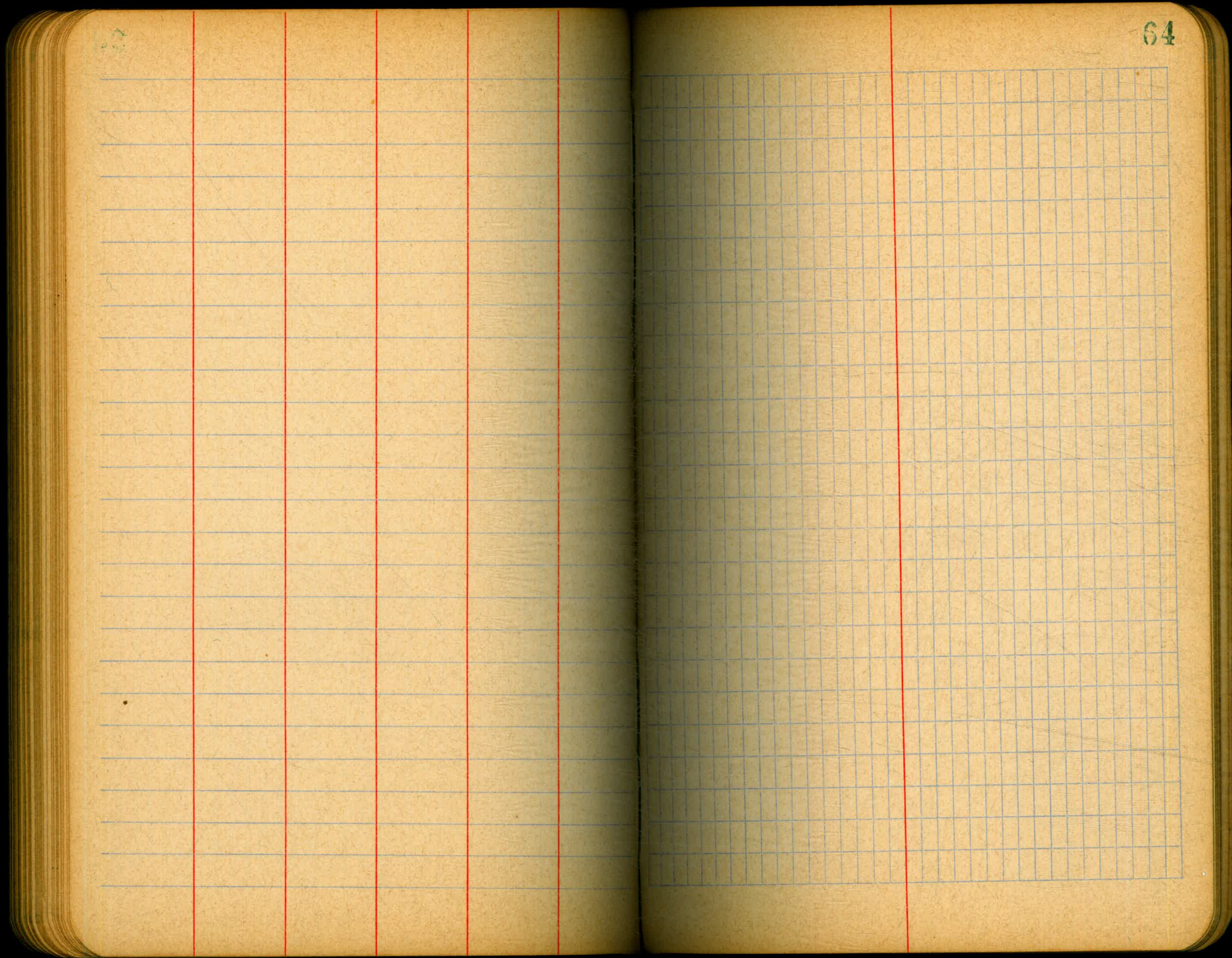


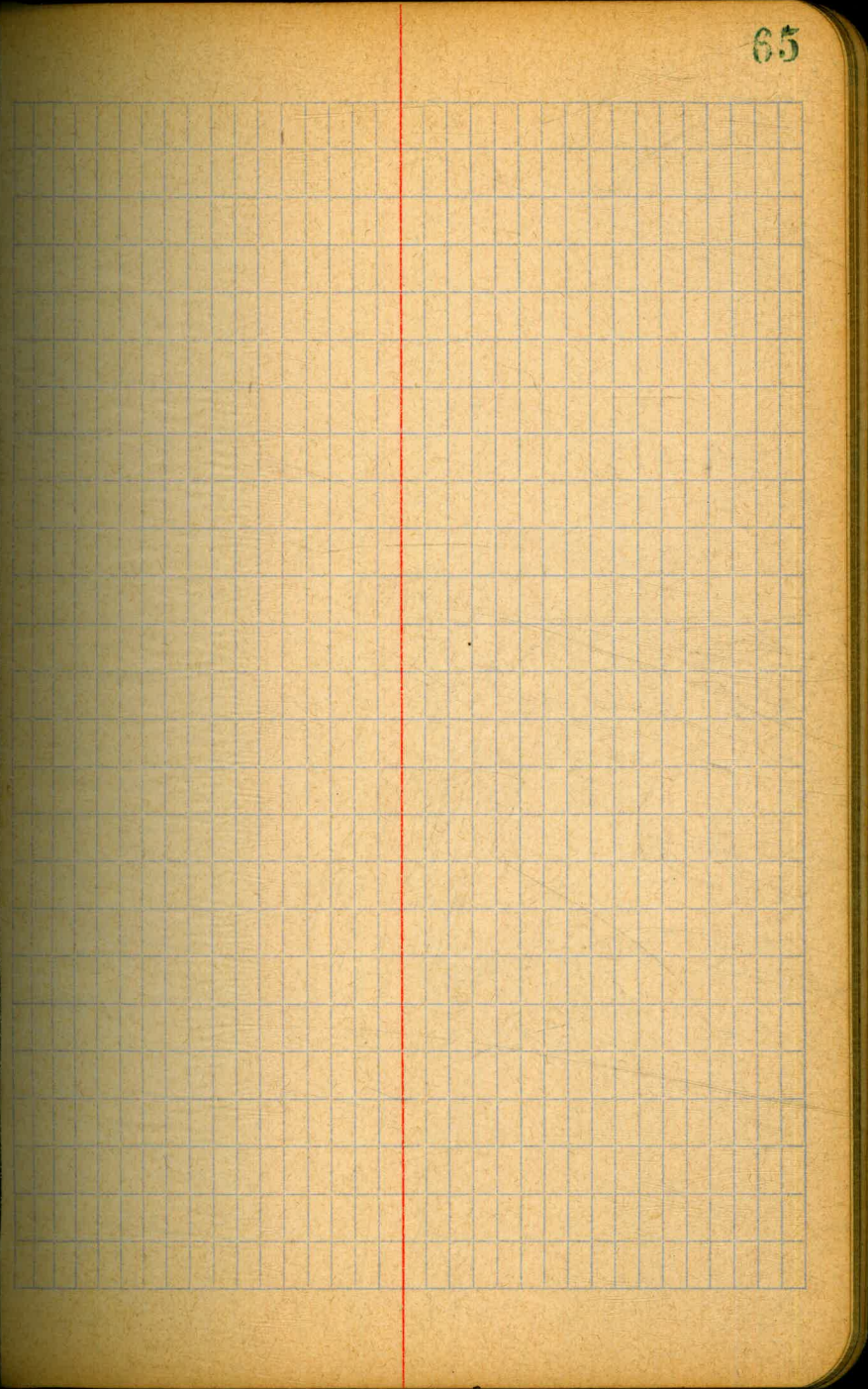
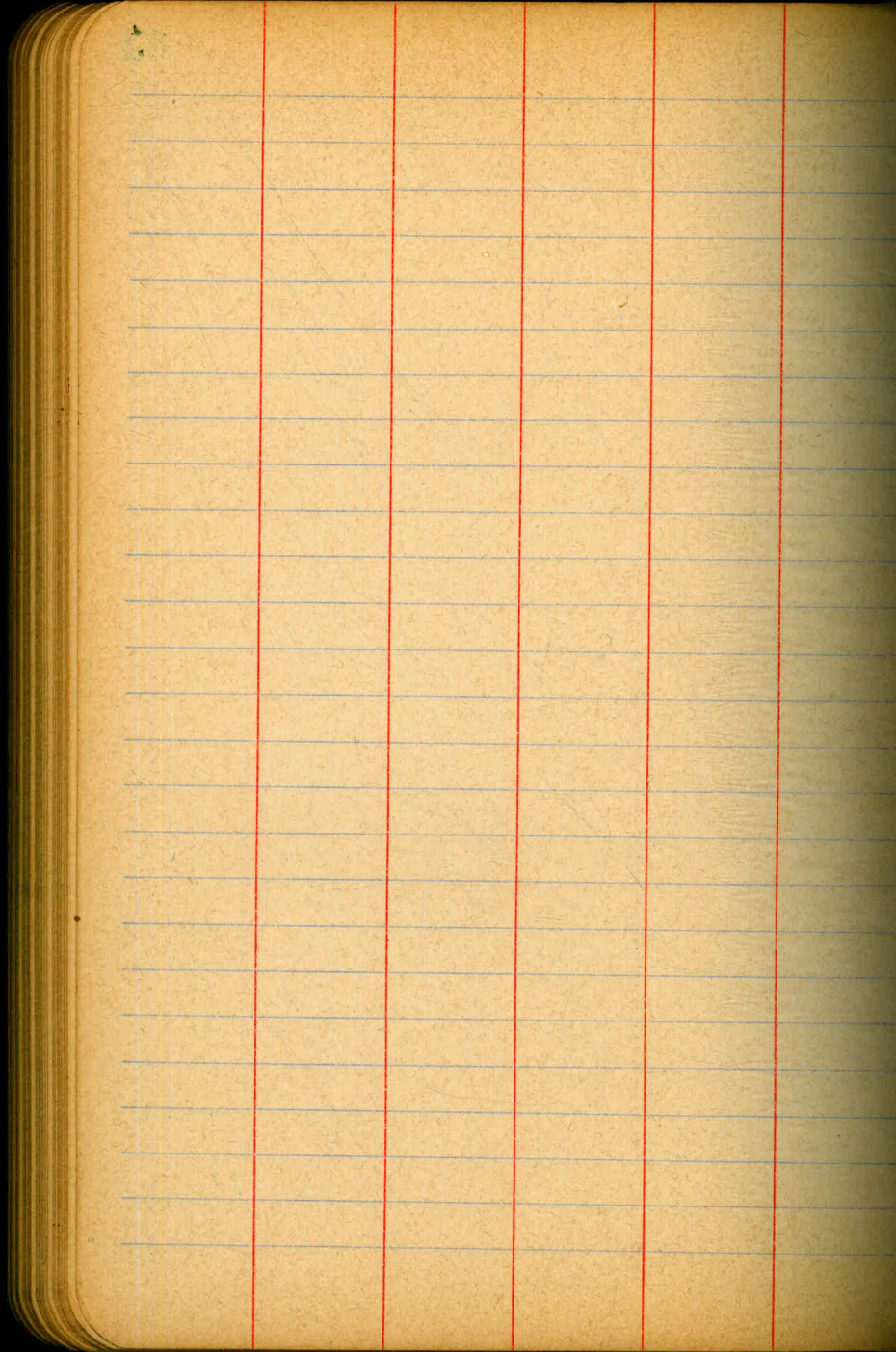






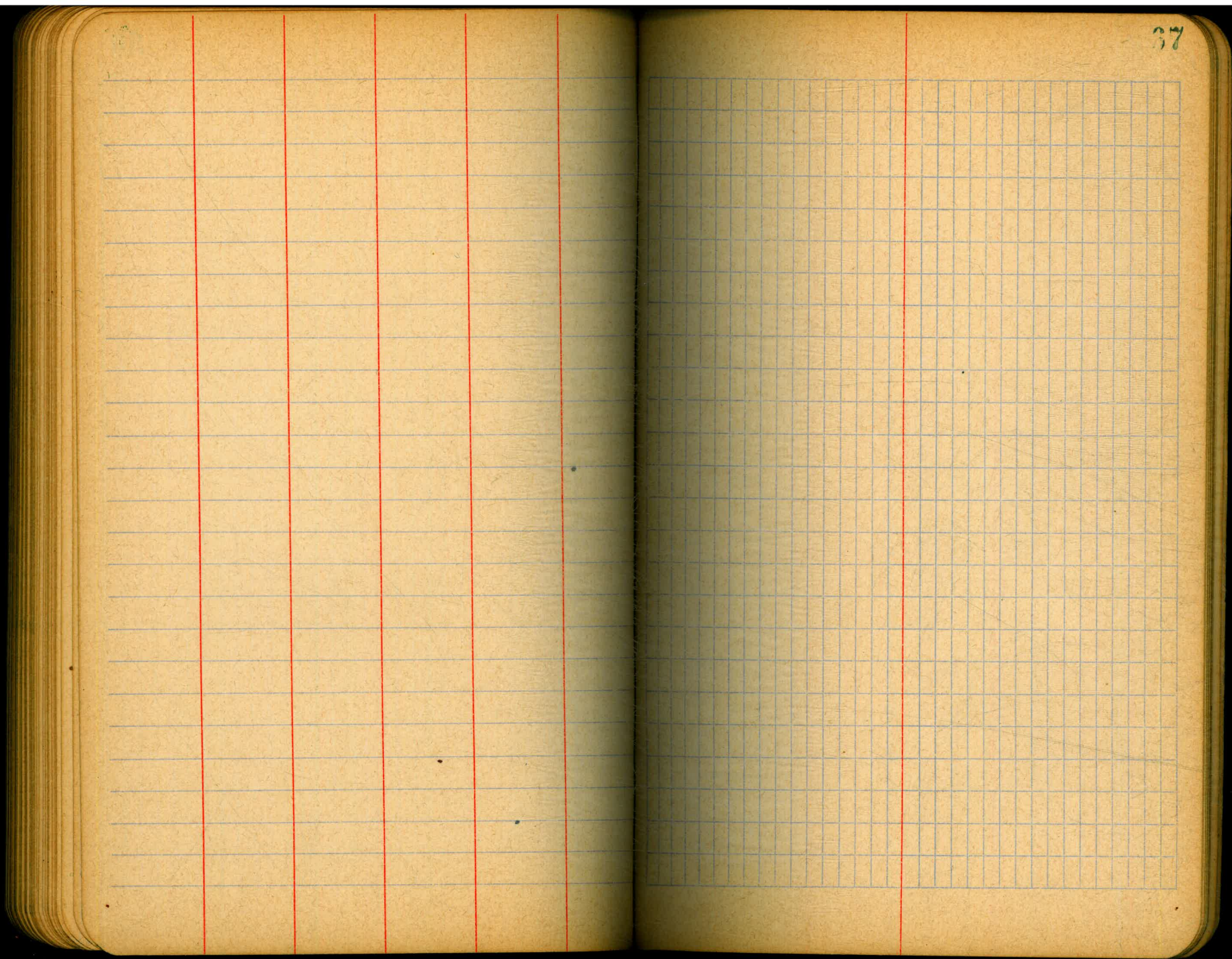


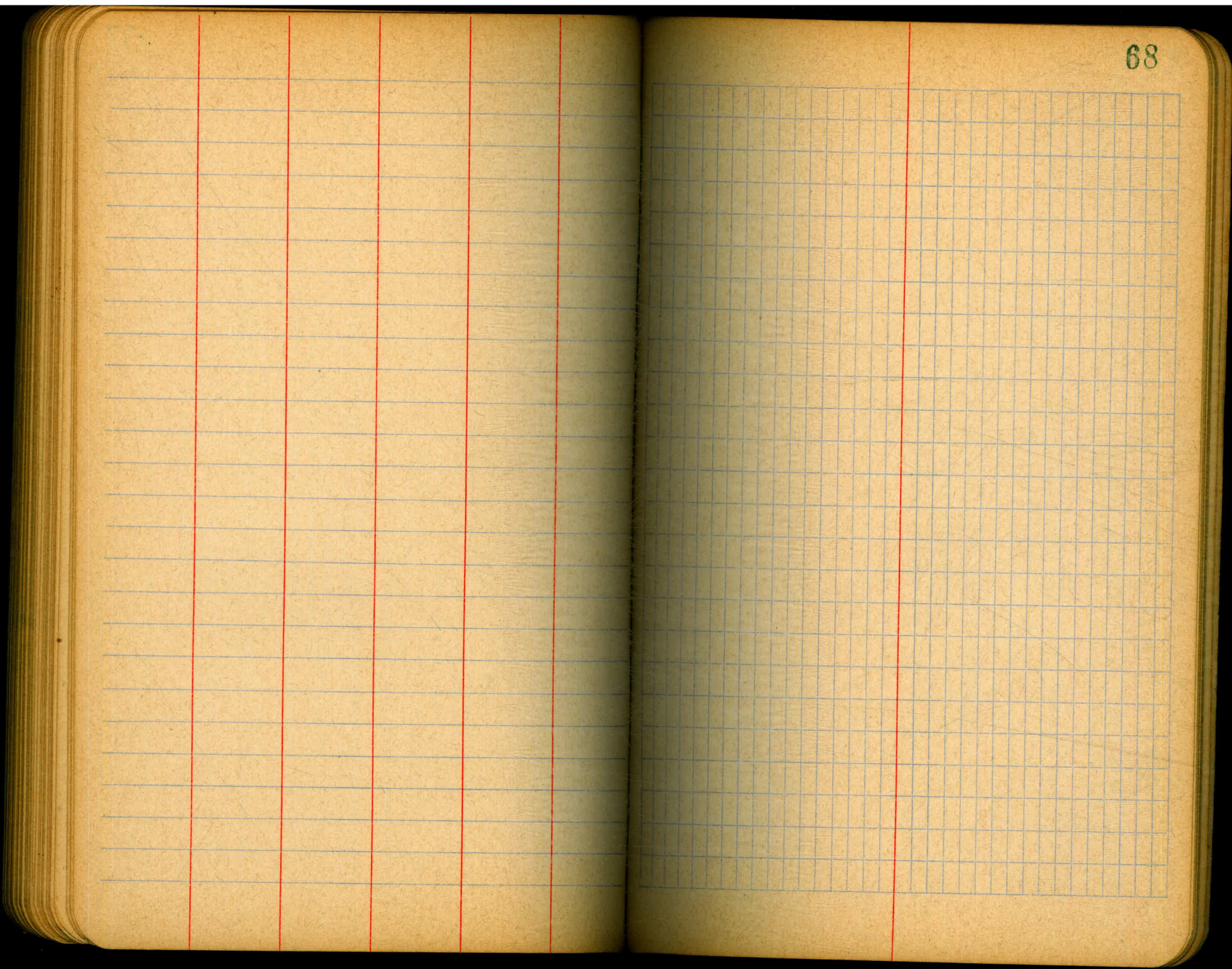


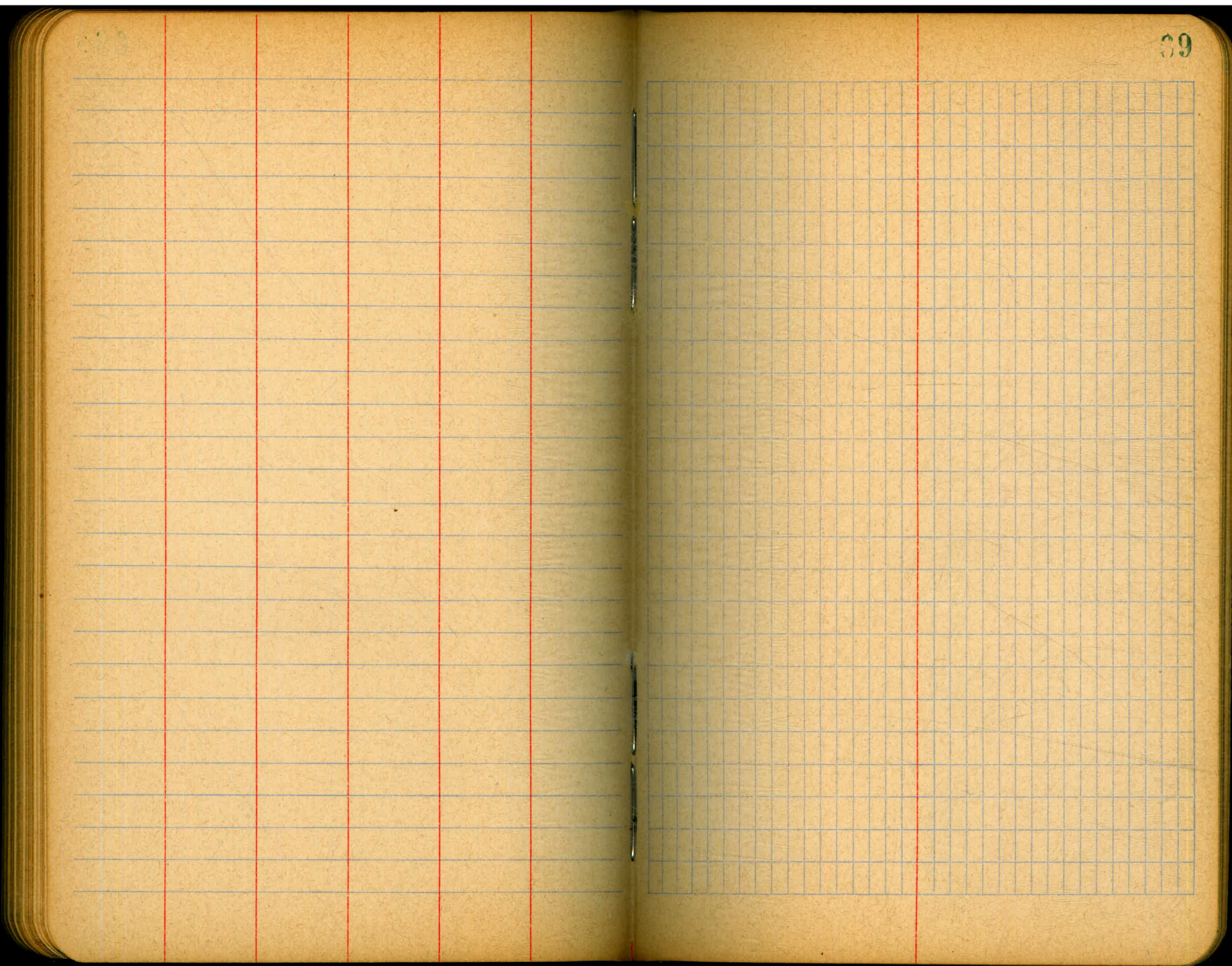


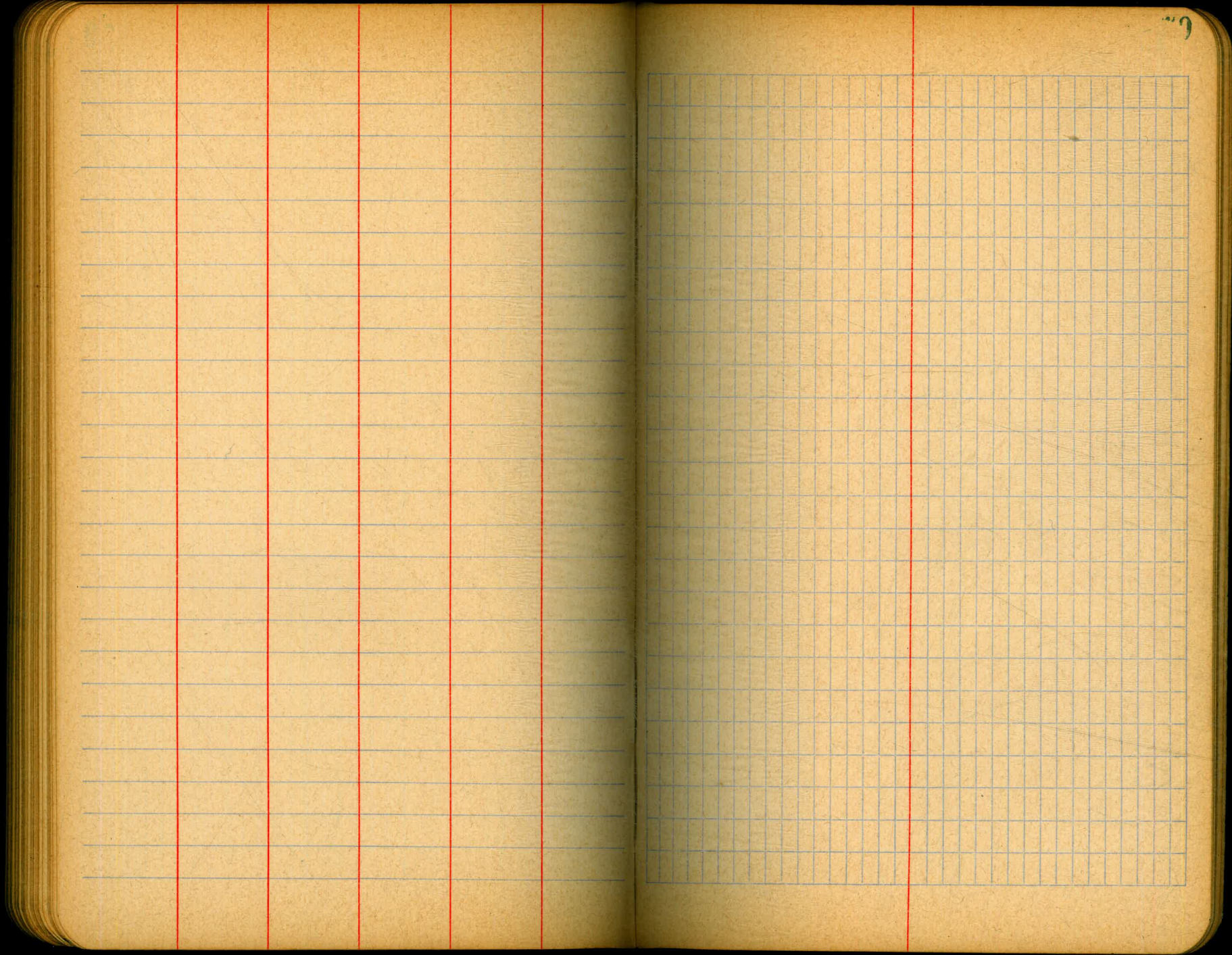
Handwritten notes on page 65, consisting of approximately 20 lines of text. The text is mostly illegible due to fading and the texture of the paper.

Handwritten notes on page 66, consisting of approximately 20 lines of text. The text is mostly illegible due to fading and the texture of the paper.





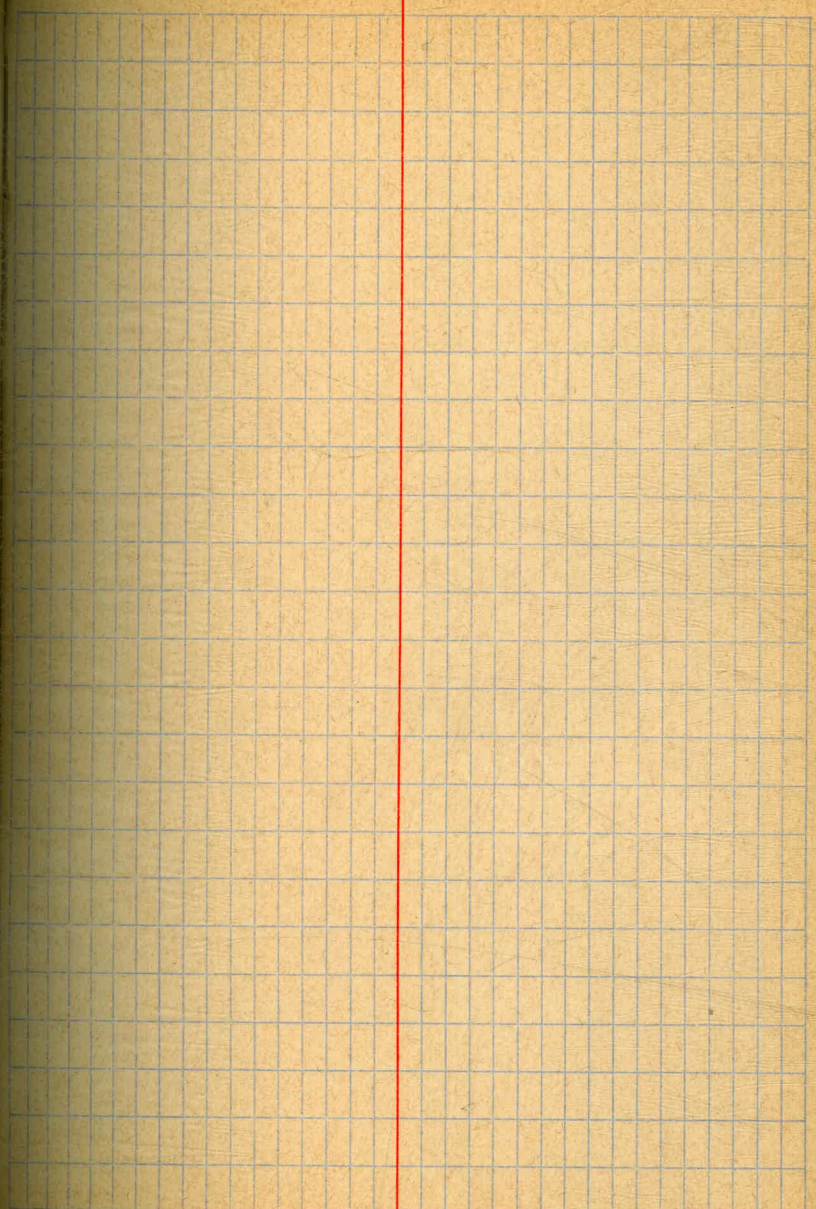
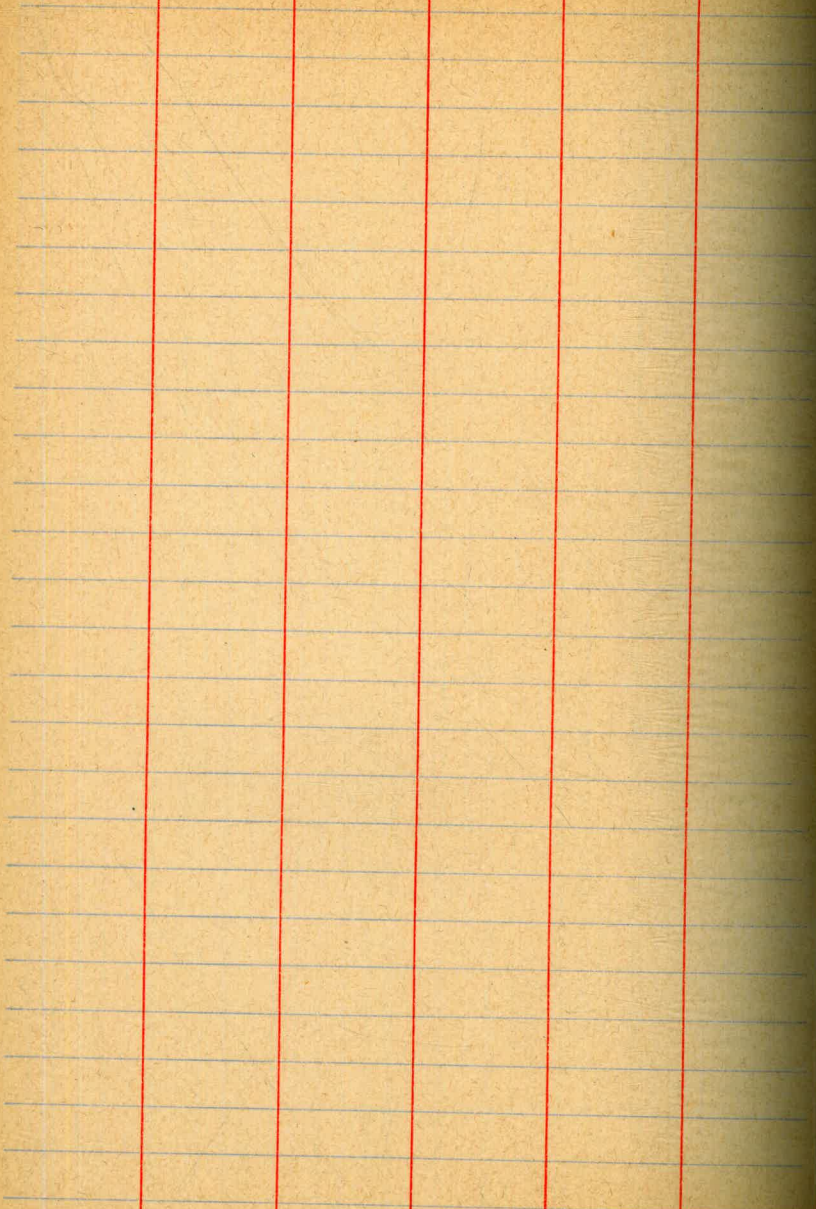


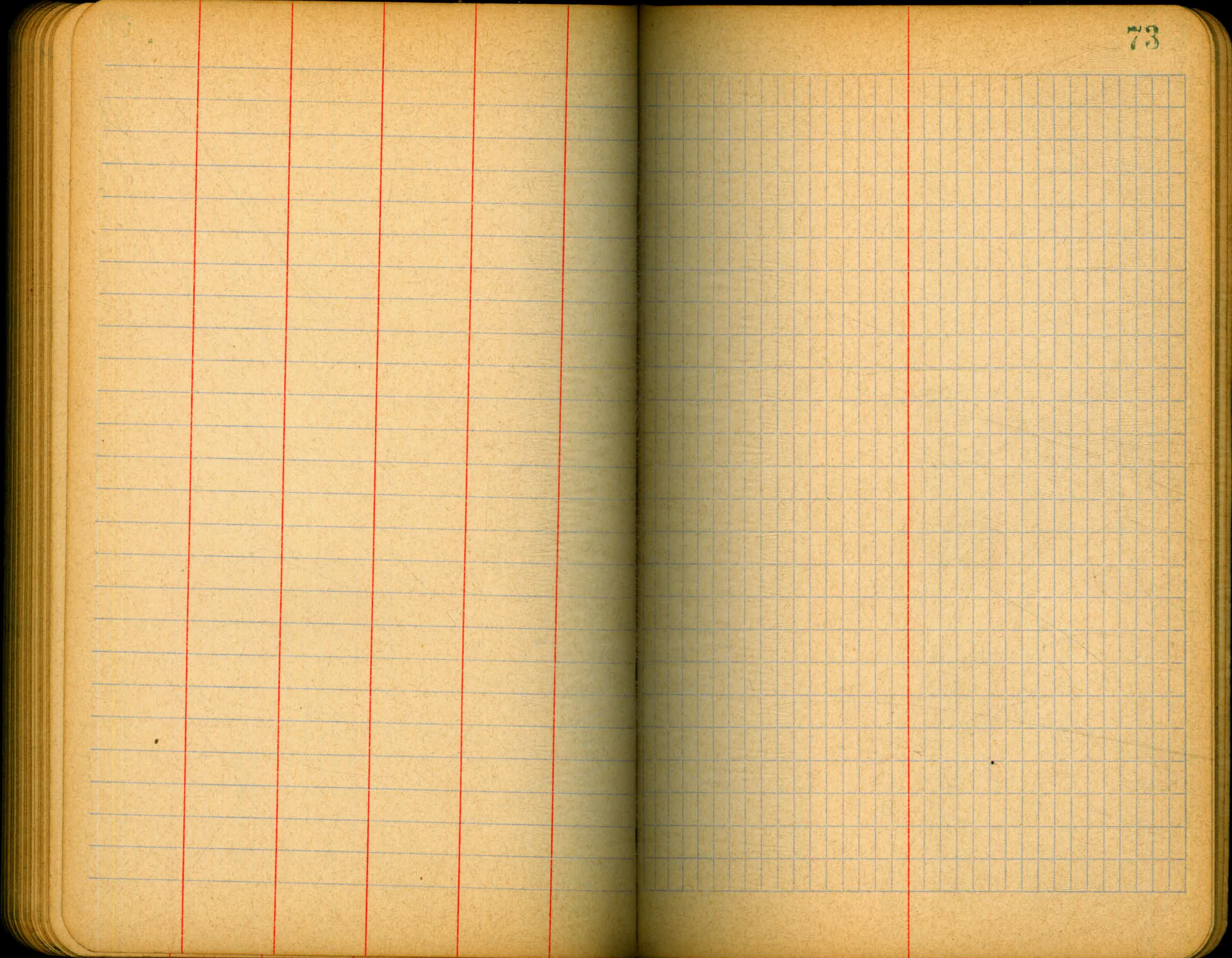


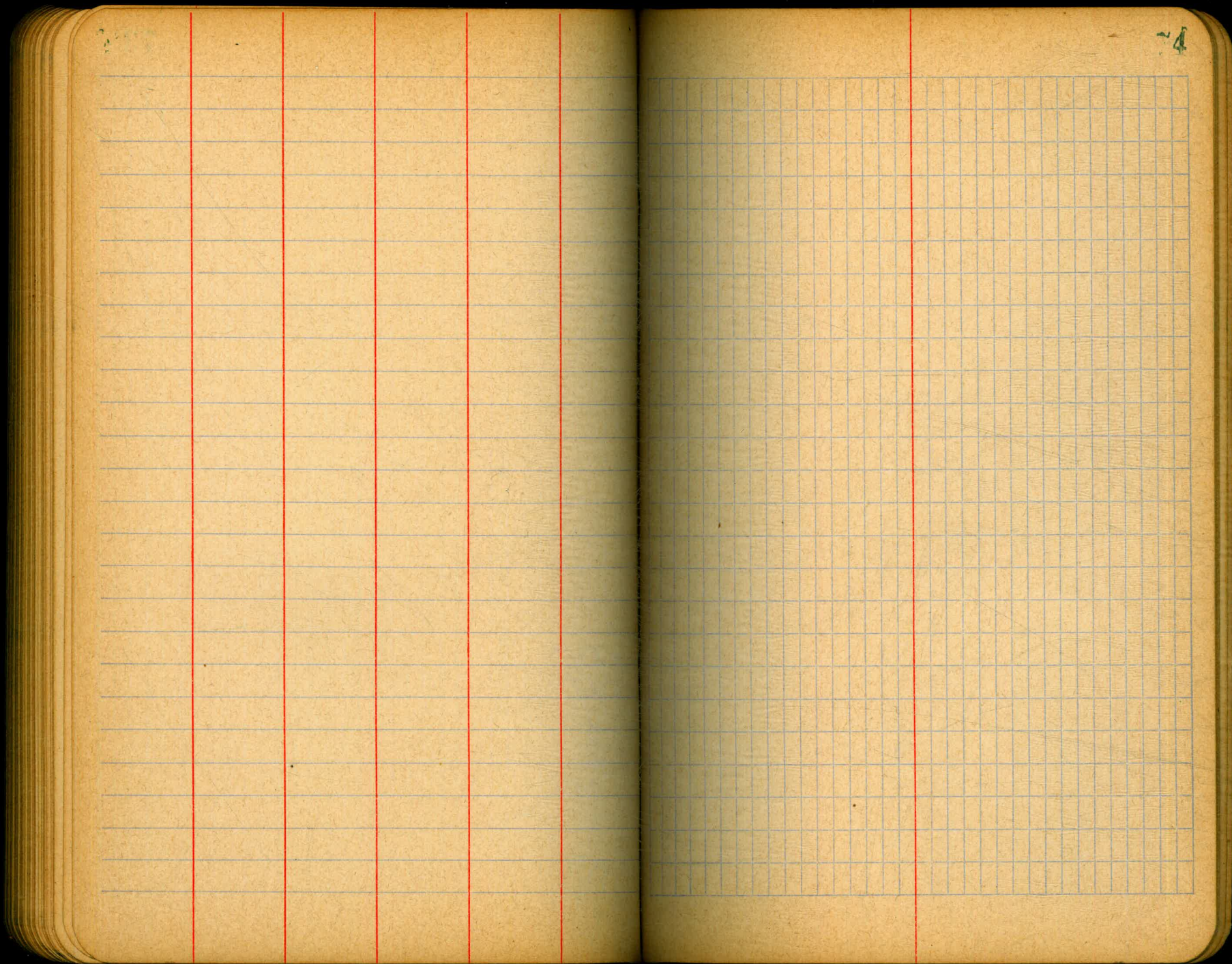
29

A ledger page with horizontal blue lines and four vertical red lines creating five columns. The columns are of varying widths, with the two inner columns being the narrowest. The page is otherwise blank.

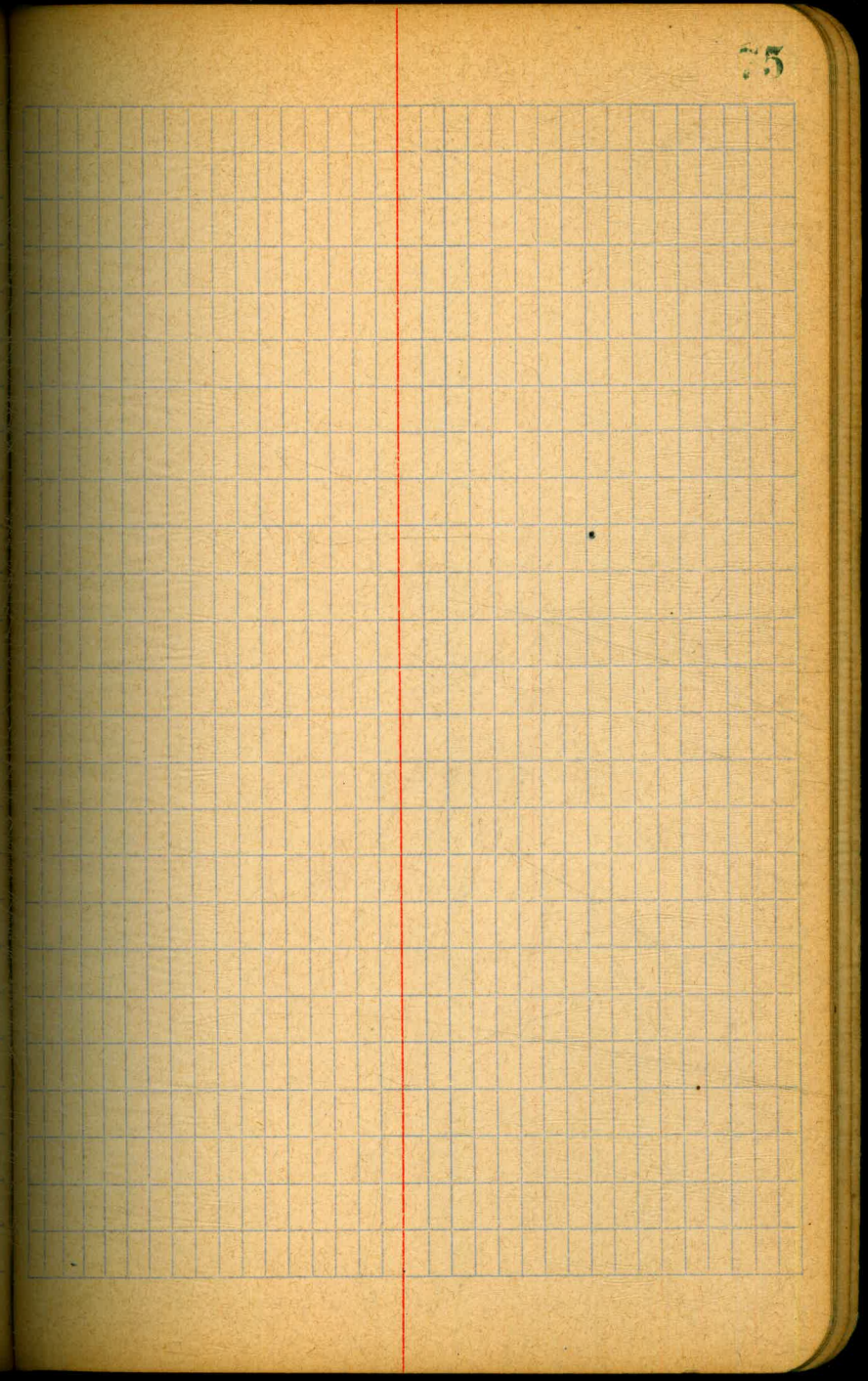
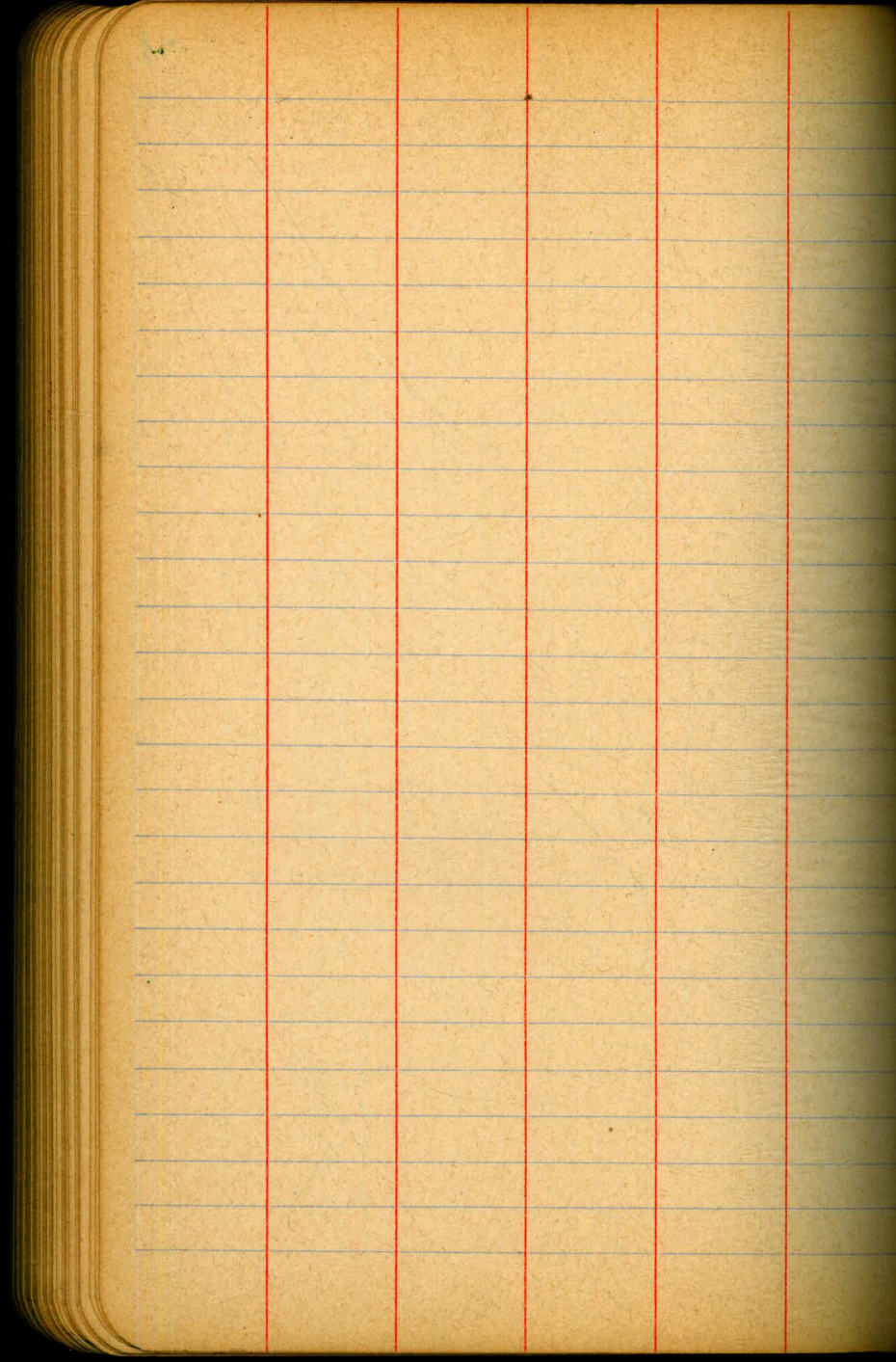
A ledger page with a grid of blue lines and one vertical red line on the left side. The grid consists of 20 columns and 25 rows. The red line is positioned approximately one-fifth of the way from the left edge. The page is otherwise blank.

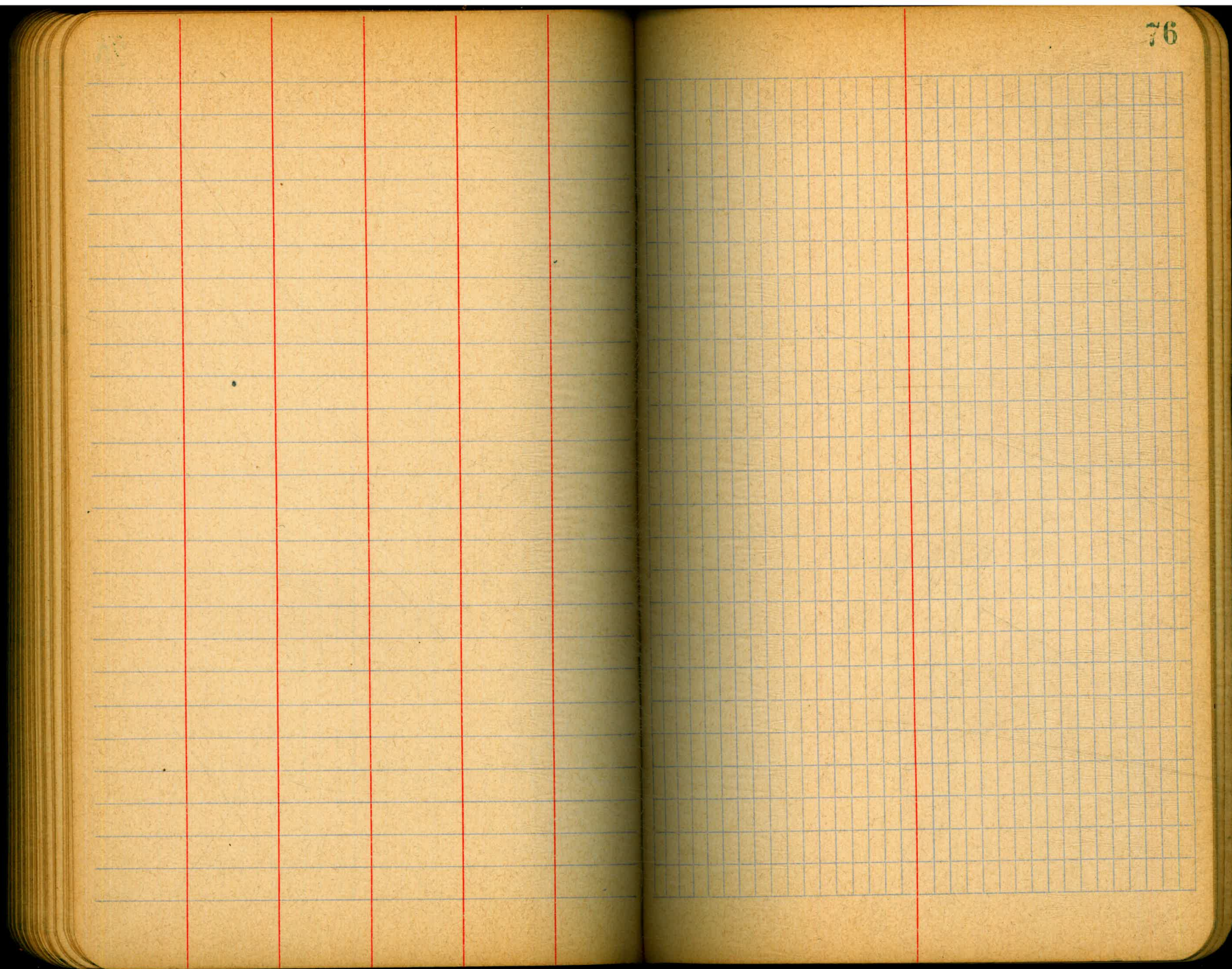


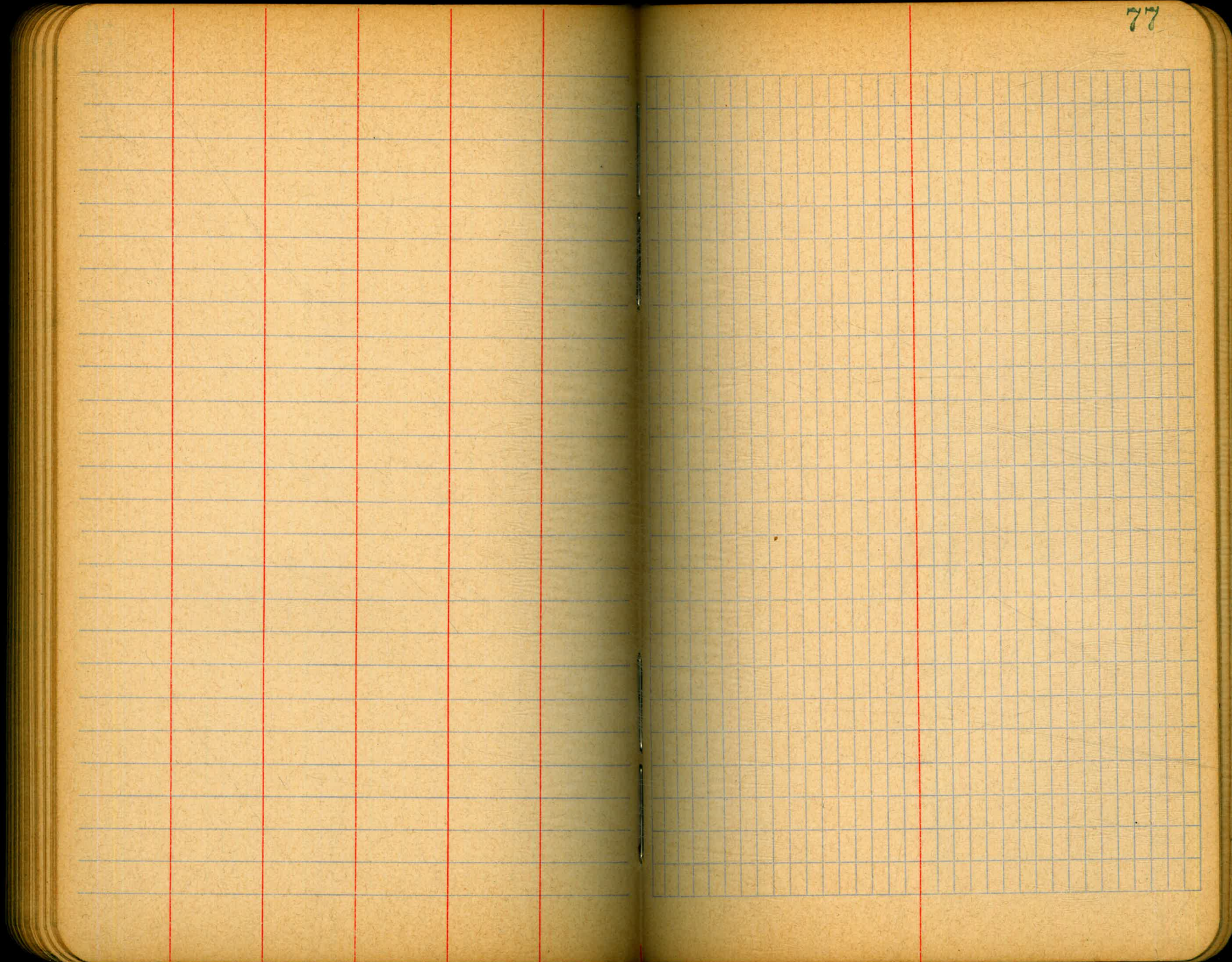


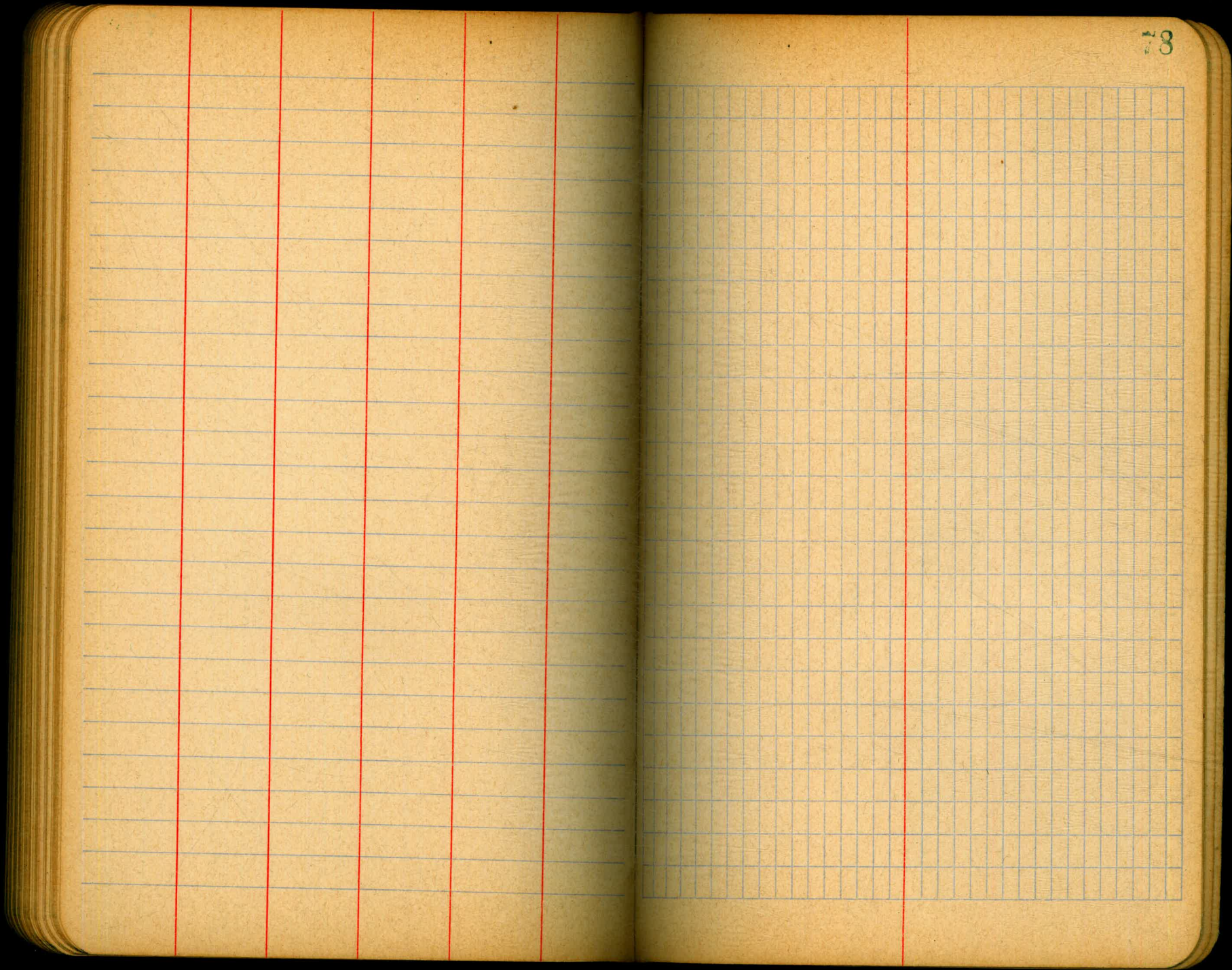


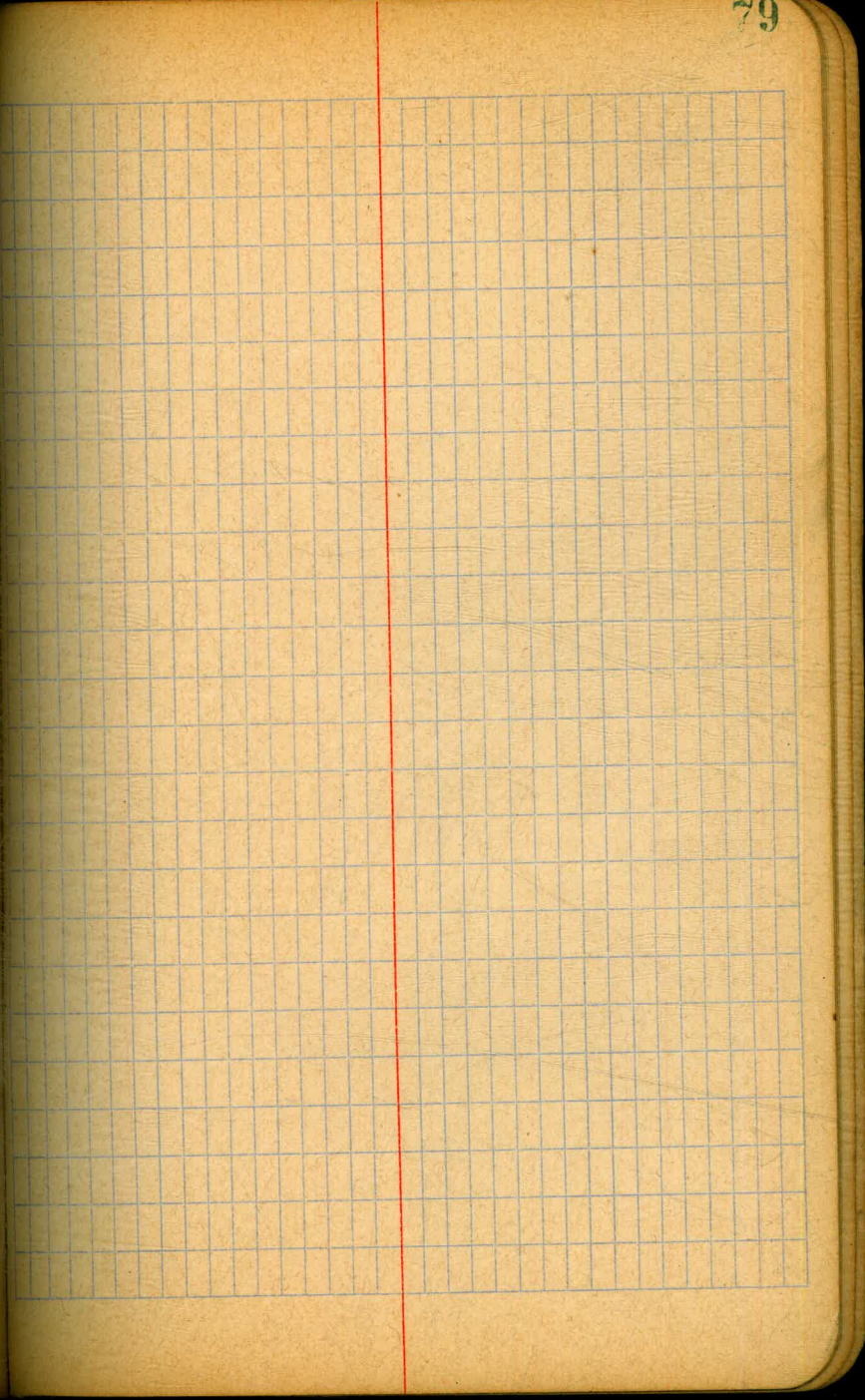
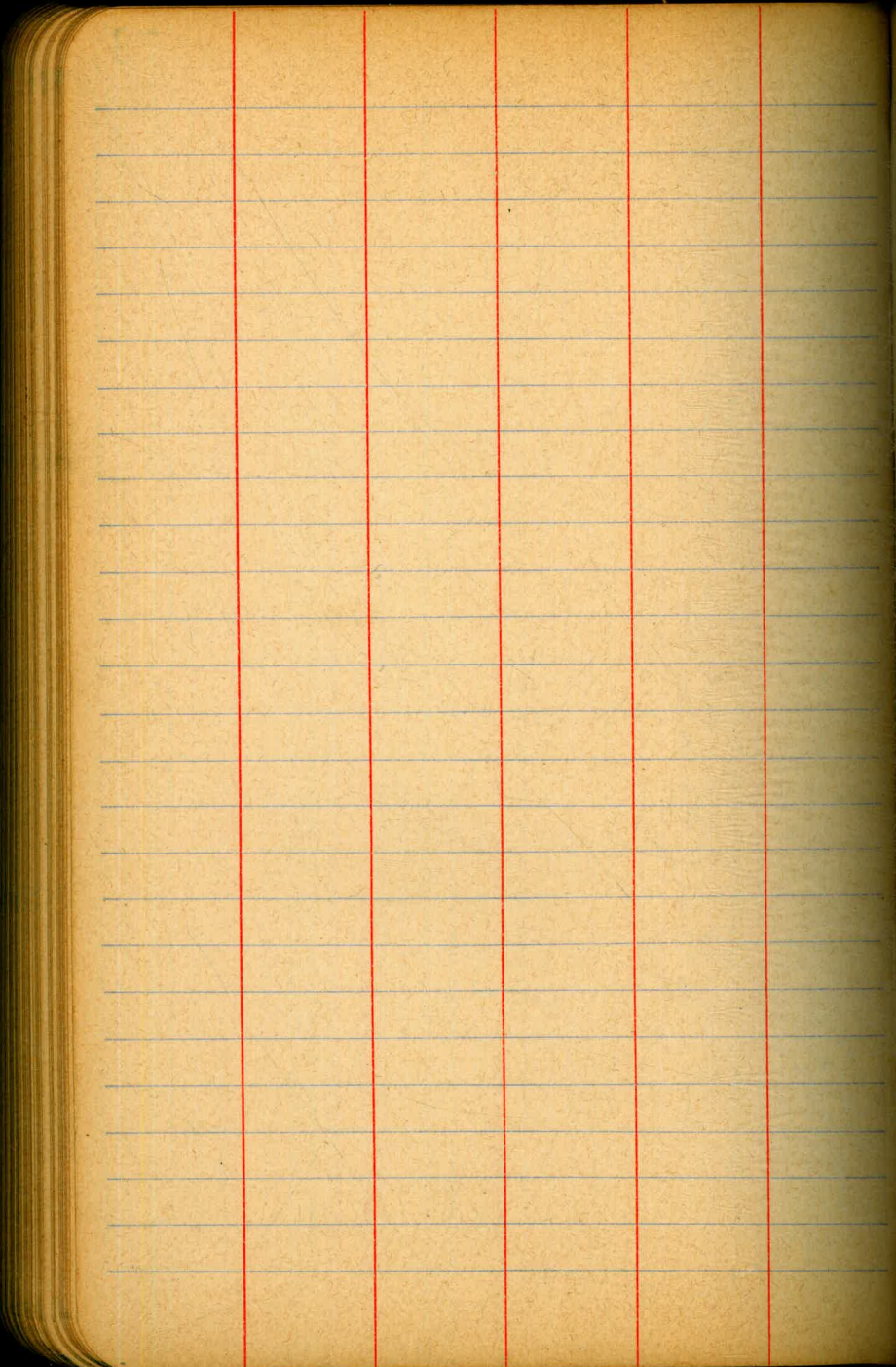
4

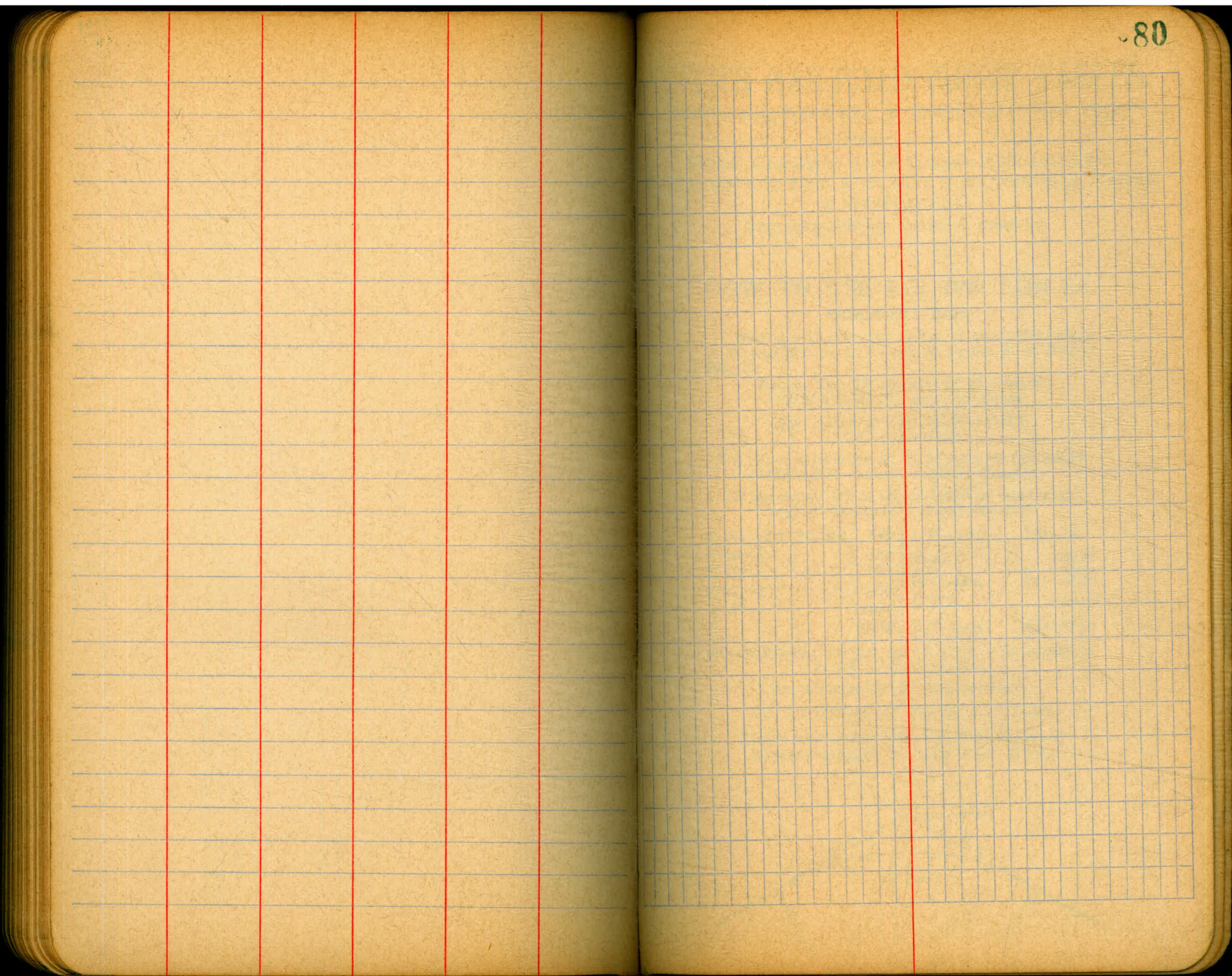












0+80
 0+97.8 MN. + N.O.L. 6 ft
 1 +00
 +68 cts garage on N. road
 +81 " " " " " " dirt
 2 +00
 +40
 +55
 3
 +41 wedge of case East End
 +54.5
 +75
 4 +00 cts garage
 +50
 +70 MN.
 +70 cts garage
 5
 +45
 +70
 6
 +30
 +60

RETURN TO CITY ENGINEER'S OFFICE
 CITY HALL, SAN DIEGO, CAL.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES $1\frac{1}{2}$ TO 1.

FOR SINGLE TRACK EMBANKMENT.

| | 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.

MADE IN GERMANY.