

India Street

No 4

9

TRANSIT

Arctic Street

F.B. 731

Columbia

731

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

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

MICROFILM D.

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Table for Running on Slopes.

In the following table the first column shows the angle, the second, the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle.	Cor. in links	Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links.
°		°		°		°	
4	0-24	11	1-88	18	5-14	25	10-54
5	0-38	12	2-24	19	5-76	26	11-26
6	0-55	13	2-63	20	6-42	27	12-24
7	0-76	14	3-06	21	7-11	28	13-37
8	0-98	15	3-53	22	7-85	29	14-3
9	1-24	16	4-02	23	8-64	30	15-4
10	1-55	17	4-56	24	9-47	35	22-0

depos

rim

India street

90	3+73½	6+75½
	3+73½	6+78½
	9+50	6+51
	9+48	6+49
	9+25½	6+26
	9+29½	6+24
	9+00½	6+00
	2+98½	5+98
	2+95½	5+95
	2+93½	5+92
	2+50½	5+51
	2+48½	5+49
	2+24	5+25
	2+22	5+23
	1+99	5+00
	1+97	4+98
	1+96	4+75½
	1+94	4+93½
	1+51	
	1+49	
	1+25	

4+00
S
India street

South

North line of I. street

South line of I. street

India Street

	10x00	12x74
9x98	12x72	
9x95	12x50	
9x93	12x48	
9x50 $\frac{1}{2}$	12x28	
9x48 $\frac{1}{2}$	12x24	
9x26		
9x24		
8x98	11x50	
8x95	11x28	
8x93	11x24	
8x48	8x50	11x01 $\frac{1}{2}$
8x	10x98 $\frac{1}{2}$	
7x95	10x75	
7x51	10x73	
7x49	10x58	
7x25 $\frac{1}{2}$	10x49	
7x23 $\frac{1}{2}$	10x25	
7x00 $\frac{1}{2}$	10x23	
6x98 $\frac{1}{2}$		

India Street
11x50

North side & street

South side & st.

India Meet

3

14+98		18+48
14+98	15+00	18+48
14+98	14+95	18+24
14+98	17+98	18+00
14+49	19+72	19+74
14+49	14+24	19+50
14+22	19+48	19+25 $\frac{1}{2}$
13+98	14+00	19+23 $\frac{1}{2}$
13+98	13+75	17+00
13+98	16+98	15+75
13+49	15+79	15+51
13+29	13+25	16+49
12+98	13+00	15+25

15+25
5 gms

South's near D street

India St

4

21+25	24+29	
21+23	24+27	
21+00	24+05	
20+98	24+03	
20+94	28+80	North line of B street
20+92	23+78	
20+50		
20+48	29+00	B street
20+25		
20+23	22+75	
20+01	22+74	
19+99	22+50	
	22+48	
	22+25	
India 19+20 E street	22+23	
	22+00	
	21+98	
18+99	21+74	
18+97	21+92	
18+95	21+50	
18+93	21+48	

India street

29+60 N side A street

29x58	Estimate	30+25
	30x23	
		30+10
	30+08	
		29+85
	25+54½	29+83
25+52½		29+60
	25+30	29+58
25+28		29+35
	25+05	29+33
25+00		29+10
	25+79½	29+08
25+77½		28+85½
	25+73½	28+83½
25+50		28+60
	25+29½	28+58
25+27½		28+35
	25+05	28+08
25+03		28+10
	24+79	28+08
24+77		27+85
	24+55	27+83
24+53		

Imp
25x80
35x21

5

mp to Ash

30+35 end of India street

India North of Ash street

West	East	West	E	W	E
	2+82½		5+62		
2+80½		5+60			8+16½
	2+59		5+37	8+14½	
2+54		5+35		7+55	Go by running East for Cedar
	2+32		5+11½		South line of Cedar
2+30		5+09½		7+37	South line
	2+07		4+87		7+12½
2+05		4+85		7+10½	
	1+81½		4+61½		6+86½
1+79½		4+59½		6+84½	
	1+57		4+37		6+62
1+55		4+35		6+60	
	1+31½	3+75			Go by running East for Beach
1+29½					
	1+09½	South line Beach			6+87½
1+04½		3+57	South line	6+35½	
	0+82		3+31		6+11½
0+80		3+29		6+09½	
	0+58½		3+06½		5+86½
0+56½		3+04½		5+84½	

man Hole on Ash start with emou

Jonelia North of Ash street

W	E	W	E	W	E
	10+66		13+21 1/2	15+69 1/2	15+71 1/2
10+64		13+19 1/2			15+47 1/2
	10+42 1/2		12+9 1/2	15+45 1/2	
10+40 1/2		12+9 1/2			15+22
	10+16 1/2		12+7 1/2	15+20	
10+14 1/2		12+6 1/2			14+97 1/2
	9+9 1/2		12+47	14+85 1/2	
9+9 0		12+45			14+71 1/2
	9+6 1/2		12+21 1/2	14+69 1/2	
9+6 4		12+19 1/2			14+47
	9+4 1/2		11+97	14+45	
9+3 9 1/2		11+95			14+21 1/2
	9+17			14+19 1/2	
9+15		11+35	6 in by East for	Date	
	8+9 1/2				
8+8 9 1/2					13+97 1/2
	8+6 7	Don't line Date	13+95 1/2		
8+6 5		11+17	Don't		13+71 1/2
	8+4 1		10+92	13+69 1/2	
8+3 9		10+90			13+47
					13+45

14+22 End of pipe flush Tank
 14+20 6 in by for fire insurance East
 15+9 1/2
 15+94

India North of Ash

W

E

W

E

Atlantic Street

1+0 commenced to lay pipe

1+49

1+217

2+17

2+15

2+50

2+68

16 feet

15 mi

oil ...

Iron made on ...

Atlantic

West East
9 West 5+24

5+22

5+95

5+70

5+22

5+22

4+99

4+97

Sheet D 4+62 manhole

P. line 4+00 corner of Speichels Str

3+98

3+50

3+48

3+00

2+98

2+50

2+48

2+17

2+18

1+49

1+49

1+00 commenced to lay pipe

South-side

Atlantic street

9W	9W	Sheet 1178720 manfred	
8+		11750	
		11748	
5+		11700	
		10798	
5-		10750	
		10748	
4+		10700	
80		9798	
9		9750	
3-		9748	
		9700	
3+		8798	
		8748 1/2 North side of F Street	
2-		8745 1/2	
		7795 South side of F Street	
2		7790	
		7725	
2		7720	
		6795	
1-		6773	

Atlantic St

12

9	90	E			
4					
5			16+50	North side D street	
			16+48		
5					
				<u>15+87 1/2 man hole</u>	D street center
4			15+00		
8			14+98		
2			14+95-		
3			14+73		
			14+25-		
3			14+23		
			13+95-		
2			13+93		
			13+25		
2			13+20		
			12+74		
2			12+72		
			12+25	North side of E street	
1			12+23		

9W

4+

5+

5+

4+

5W

9

3+

3+

2+

2+

2

1+

West

4+2

5+7

5+2

4+9

Blue

P.

3+9

3+4

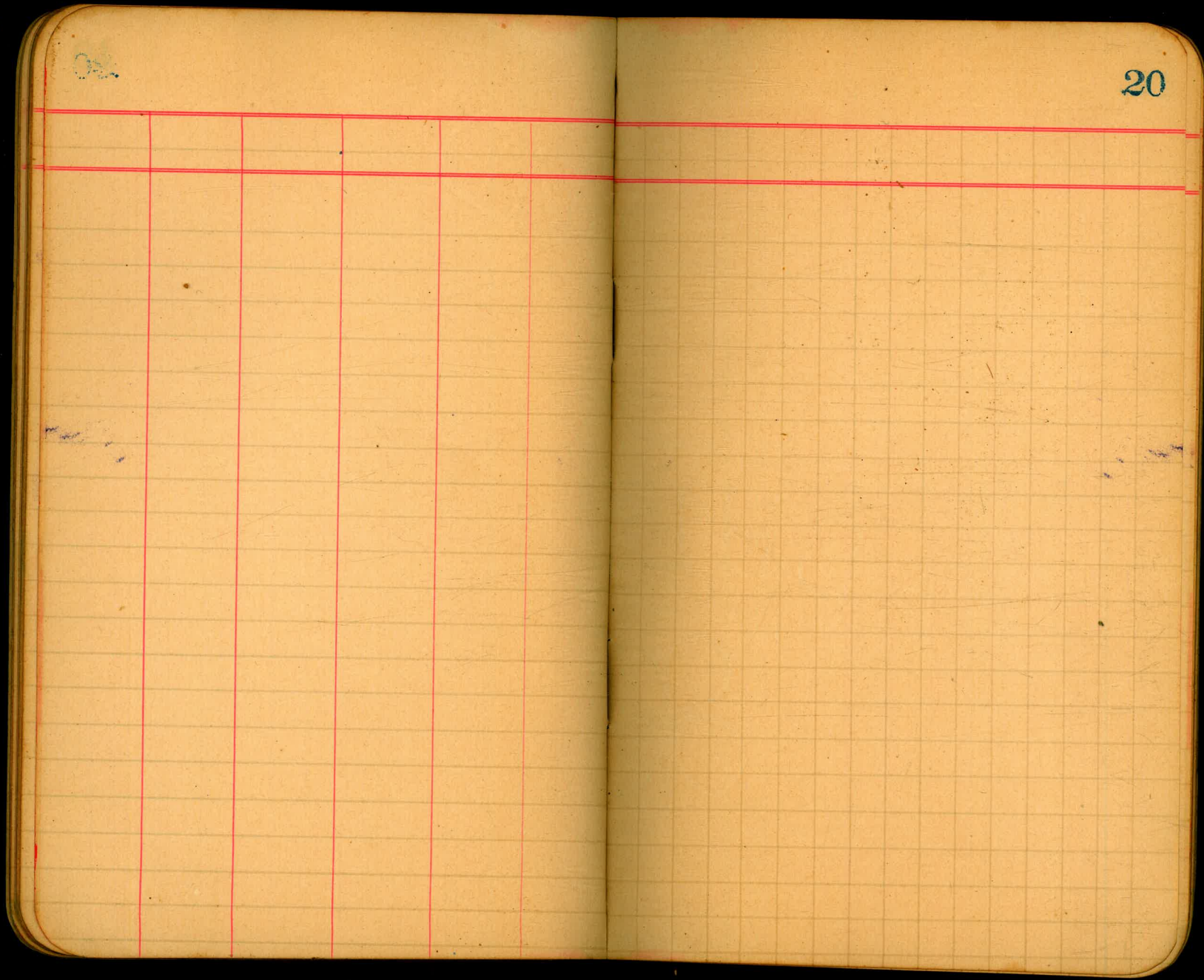
2+9

2+4

2+

1+

The image shows an open notebook with two pages. The pages are a light tan or yellowish color. The left page is ruled with a grid of light blue lines. There are five vertical red lines drawn across the page, creating six columns of varying widths. The right page is also ruled with a grid of light blue lines. In the top right corner of the right page, the number '15' is printed in a dark blue or black font. The notebook is bound in the center, and the pages are slightly aged.



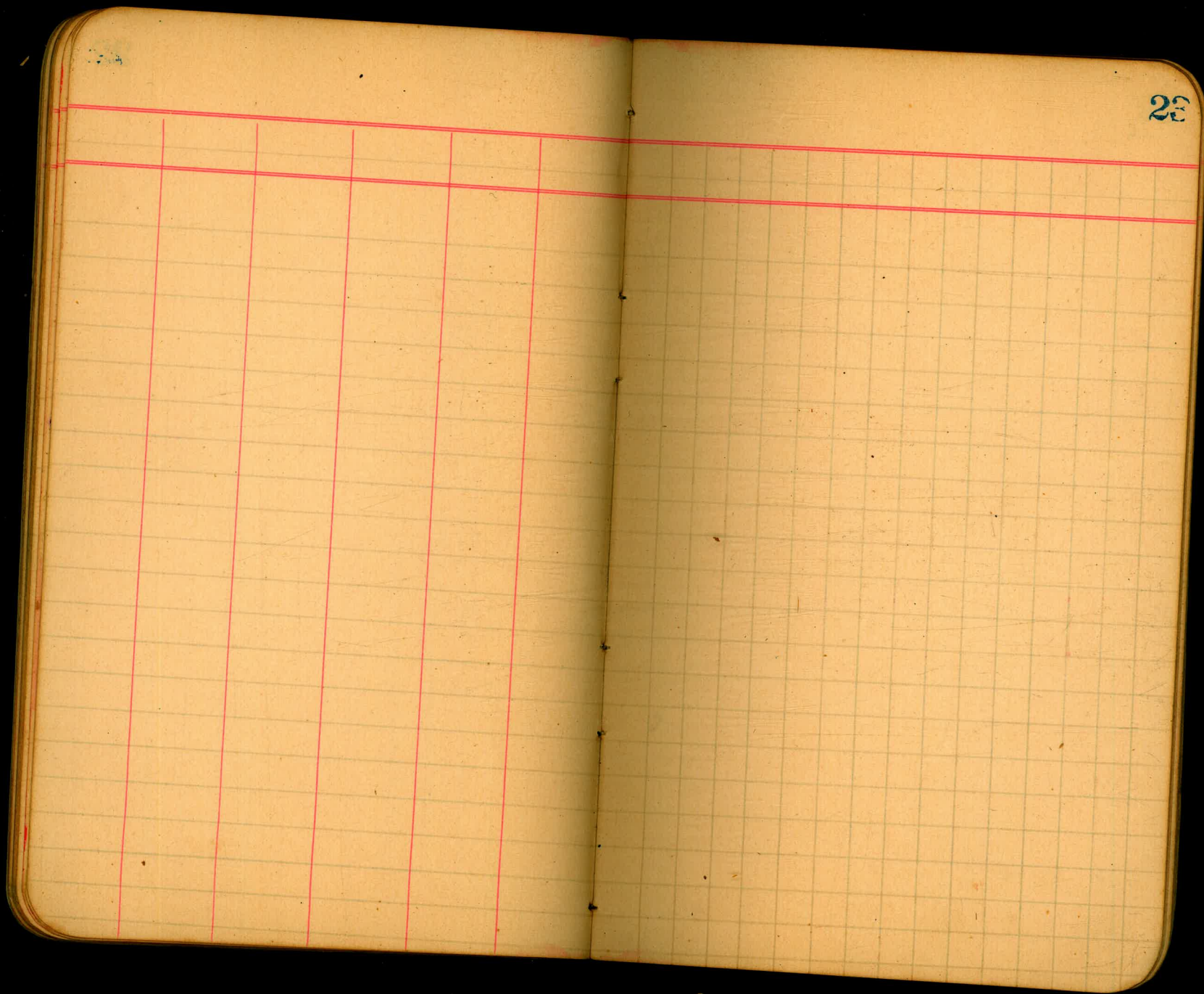
20

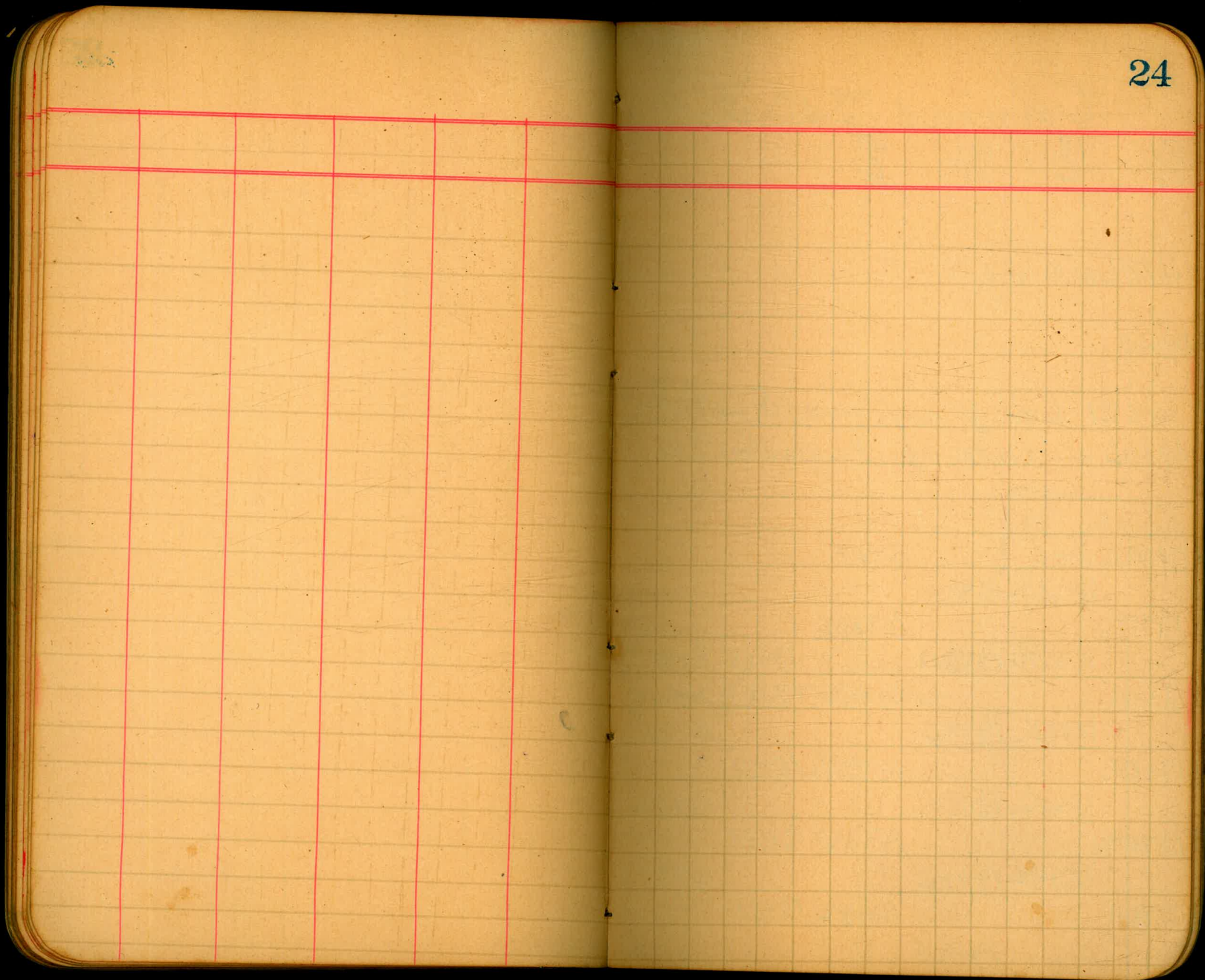
20

18

21

The image shows an open notebook with two pages. The left page is numbered 18 and features a grid of red lines. The right page is numbered 21 and also features a grid of red lines. The pages are yellowed and show signs of wear. The notebook is placed on a dark surface, and the right edge of the image shows a white border.





Columbia St North of Ash St

W E W E

14471 ball right

14449

14421 6 mi by running East to Elm Street
 14402 in center of Inspection

South by Elm

14403

16407

13481 16405

13498

16482

13457 15480

17408

13455

15458 17406

13431 15456

End of pipe for flush tank
 6 mi by running East for Fair

13429

15482 16481

13406 15490

16457

13404

15408 16455

12482 15406

16488

12480

14482 16491

14480

Page No 2 Columbia North of Ash street

W	E	W	E
	10401		92756 over
9499		12764	
	9494		127316
9494		127296	
	9452		12707
9450		12705	
	9429		11482
9425		11480	
	9401	11419	6m y running east for Date
8499			
	84766	Southern Date.	
84746		11402	6m
	8452		104766
8450		104746	
	8424		104576
8424		104496	
	8401		104266
7499		104246	
7440	6m	y running east for Cedar st	

W	E	W	E
	2x42		
2x40		4x97	
	2x17	4x95	
2x15		4x72 1/2	6x95
	1x9 1/2	4x70 1/2	
1x89 1/2		4x46 1/2	6x69 1/2
	1x67	4x44 1/2	
1x65		4x21 1/2	6x44 1/2
	1x41 1/2	4x29 1/2	
1x39 1/2			6x22 1/2
	1x17	8x60 1/2	6 ^{mi} of mining
1x15			
East 0x98	East	South line Beach at 3x42	5x94 1/2
	0x91		3x16 1/2
0x89		3x14 1/2	5x70
	0x67		2x92
0x65		2x90	5x44
	0x44		2x66
0x42		2x64	5x19 1/2

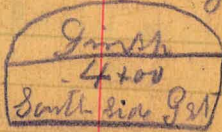
Bedrock
South line of
7x22 1/2

over to Page No 2

East for Beach 11

No 1
 Arctic Street

West	East	
	3+25-	5+00
3+23	5+98	
	3+00	5+75-
2+98	5+98	
	2+75-	5+50 1/2
2+73	5+48 1/2	
	2+50 1/2	5+25-
2+48 1/2	5+28	
	2+25-	5+00
2+23	4+98	
	1+99 1/2	4+75-
1+99 1/2	4+73	
	1+95-	4+20
1+93		
	1+50	
1+48		
	1+25 1/2	3+75 1/2
1+24 1/2	3+78 1/2	
	1+2	3+50
1+0	3+48	



Eriny Bearing East 20 ft from property line

Arctic Street

West East

8+50

8+48

7+94 1/2 in running East up F. side

South side F. side
7+75

10+25 over

10+23

7+50

10+00

7+48

9+98

7+24 1/2

9+95 1/2

7+22 1/2

9+93 1/2

7+00

9+50

6+98

9+48

6+95

9+25

6+78

9+23

6+50

9+00

6+48

8+98

6+25

8+74 1/2

6+23

8+72 1/2

Arctic street

30

West East W E

12x96

18+00

South side of D street
Jans 13x25

12x75½

12x73½

16+00

12x50

14x98

12x48

14x94½

12x25

14x72½

12x20

11x59 6" of running up E street East

South side E street

14x50

11x50 Jans

14x48

14x25

11x25

14x20

11x20

14+00

11x00

13x98

10x98

13x75-

10x75-

13x73

10x73

13x49½

10x50

13x47½

10x48

13x25

13x20

Arctic

West East

18+72 $\frac{1}{2}$	18+74 $\frac{1}{2}$	21+23 $\frac{1}{2}$
18+48 $\frac{1}{2}$	18+50 $\frac{1}{2}$	20+99 $\frac{1}{2}$
18+22 $\frac{1}{2}$	18+24 $\frac{1}{2}$	20+74
17+98	18+00	20+49 $\frac{1}{2}$
17+73	17+75	20+25
17+47	17+49	19+99
17+22 $\frac{1}{2}$	17+24 $\frac{1}{2}$	19+98 $\frac{1}{2}$
16+98	17+00	
16+92	16+94	19+00
16+50	18+98	
15+48	N.Y.D	
15+44 $\frac{1}{2}$		

South side East
19+20 9m

5 m y for E. running East

6 m y for Desert East

Arctic Street

West East West East

23x78 $\frac{1}{2}$

23x76 $\frac{1}{2}$

23x18 6+6 3 for Brimming East-

South side Br
23x00 Jan

24x02

25x04

over

25x80

22x75 $\frac{1}{2}$ 25x78

22x78 $\frac{1}{2}$

25x56

22x49 25x54

22x47

25x30

22x23 25x28

22x23

25x05

21x99 25x63

21x97

24x79

21x95 24x97

21x78

24x55

21x51 24x53

21x49

24x29

24x27

21x40

24x05

24x03

Arctic Street

33

West East

28x58 28x60 over

28x33

28x10

28x08

29x852

27x60 1/2

27x58 29x60 N Side A street

26x98 Cor of Running w/ A St East

South side of A St

25x80 Jan

25x55

25x58

26x91

25x29

Arctic Street

34

W E W E

(Rank)

30x50 end of pipe south of Ash street

30x35

30x33

over

30x102

30x82

29x84

29x82

29x592

29x572

29x36

29x33

29x10

29x08

28x85

28x80

Arctic Street North of Ash Street

W	E	W	E
	2+67		
2+65			5+22½
	2+41	5+20½	over
2+39			4+85½
	2+16	4+94½	
2+14			4+72
	1+91½	4+70	
1+89½			4+47½
	1+56½	4+45½	
1+44½			4+22
	1+42	4+20	
1+40			
	1+17		3+60 6" $\frac{1}{2}$ East
1+15			for Beach Street
	0+92½	North of Beach 3+42	
0+90½			
	0+69		3+17
0+64		3+15	
	0+43		2+91½
0+41		2+89½	

Arctic Street

W E

8+02 1/2

8+00 1/2

7+39 1/2 by East for Cedar

Southern Cedar W

7+22 1/2

10x02 over

6+96 1/2 10+60

6+94 1/2

9+96

6+90 1/2 9+94

6+88 1/2

9+52

6+47 9+50

6+45

9+25

6+22 1/2 9+24

6+20 1/2

9+02

5+99 9+00

5+95

8+95 1/2

5+92 1/2 8+74 1/2

5+70 1/2

8+52

5+44 1/2 8+50

5+44 1/2

8+26 1/2

8+24 1/2

Arctic Sheet North

W	E	W	E
12+79	12+81		
12+64	12+56	15+04	15+06
12+00	12+32	14+99 $\frac{1}{2}$	14+81 $\frac{1}{2}$
12+04	12+06	14+55	14+57
11+79 $\frac{1}{2}$	11+81 $\frac{1}{2}$	14+29	14+31
11+20	4 in by running East for Date		
South side Date	14+05	14+07	
11+02 In		13+81	
10+74	16+75	13+99	13+57
10+50	10+52	13+55	13+31
10+24	10+26	13+29	13+06 $\frac{1}{2}$
	13+04 $\frac{1}{2}$	15+31	Band of Pipe for Bush tank up to

South line East Sheet

Arctic to South of Grabeth

90	8		
East	West	East	West
	2x17		
2x15			
	1x91		
1x89			
	1x67		
1x65		North side Six ft Flint Tanks	
	1x41	3x41 end of pipe	
1x39			
	1x17		3x17
1x15		3x15	
	0x92		2x9 1/2
0x80		2x89 1/2	
	0x67		2x67
0x55		2x55	
	0x44		
0x42	south line of Grabe street		
42			2x42 1/2
		2x40 1/2	

Arctic North of Cape

39

W E

2+562

2+542

2+422

2+402

2+162

2+142

1+92

1+90

1+66

1+64

1+42

1+40

1+16

1+14

0+92

0+90

0+662

0+542

0+42

0+40

Hawl Home
South side
3+4 End of hike

3+16

3+14

2+91

2+89

Juniper street running up East

North South East West

2 South side Juniper on Arctic
32x75 - Jan

1 32x59 in running up Juniper East
32x05

1 32x03

31x81

1 31x99

31x55

1 31x58

31x91

1 31x29

31x04

1 31x04

30x80

1 30x78

33x51

33x53

33x26

33x28 1/2

33x03

33x05

32x80

32x82

East

West

Arctic street running south

South side of Juniper
we make a curve

100 South line

Archie running Gaults

East West

41

North side of street 38x33 over
 35x79 38x31

35x54 38x09

35x52 38x07

35x286 37x73

35x256 37x71

35x04 37x59

35x02 37x57

34x79 37x83½

34x77 37x81½

34x58 37x09

34x51 37x07

34x26 36x83½

34x24 36x81½

34x09 36x59

34x07 36x57

33x78

33x76

35x97

4^m running

East for Jerry

Arctic Survey
East West

South

42

side
Flush Tank North Harbour 11 on Arctic
 $39 + 34 = 2511$ back of property line

39x29

39x31

39x09½

39x09½

38x75

38x77

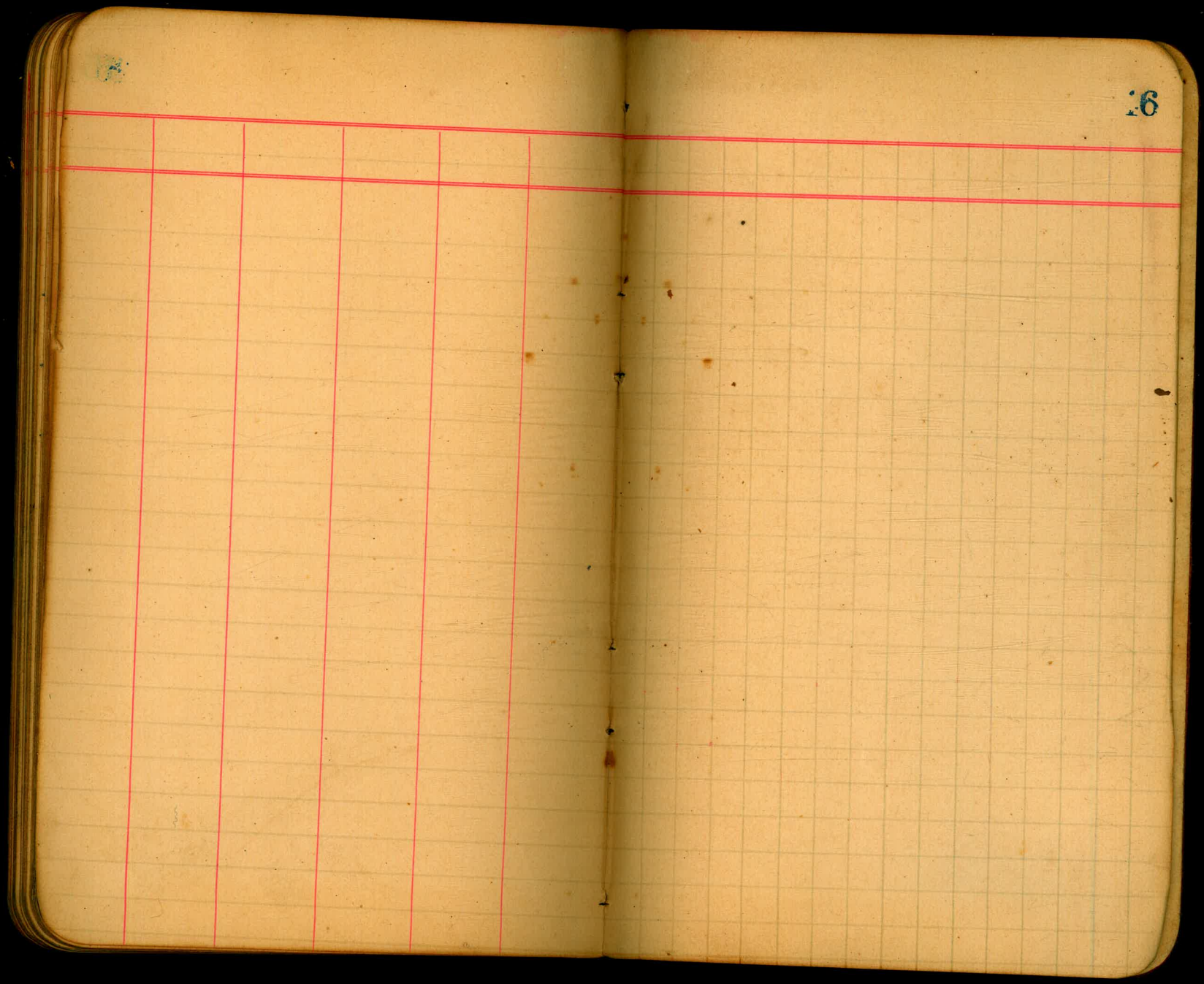
38x54

38x58

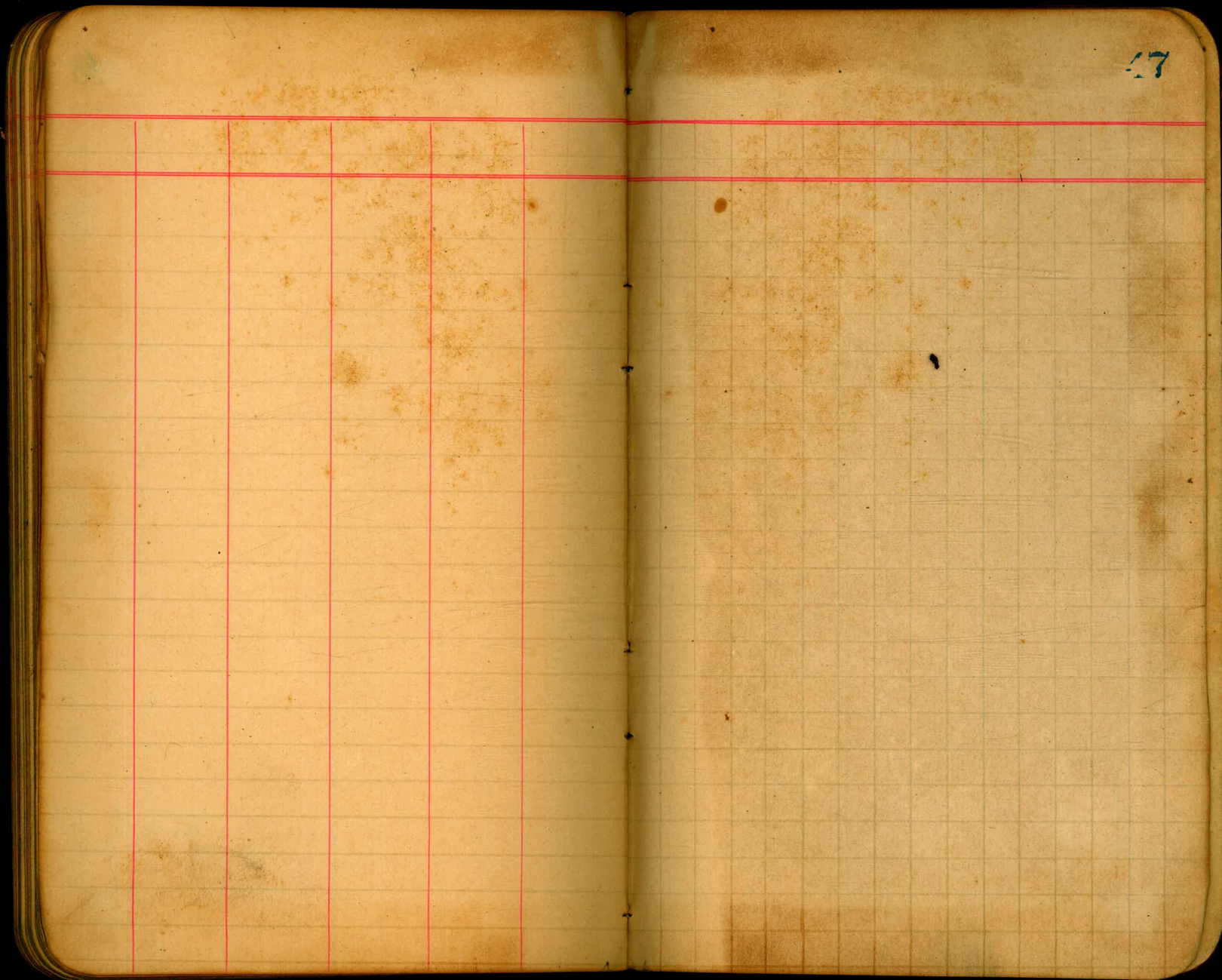
31

43

The image shows an open notebook with two pages. The left page is ruled with a grid and has five vertical red lines. The right page is ruled with a grid and has two horizontal red lines. The pages are aged and yellowed. The number '31' is written in the top left corner of the left page, and the number '43' is written in the top right corner of the right page. The notebook is placed on a dark surface, and a white strip is visible on the right edge.



16



17

TRAVERSE TABLE FOR TRANSIT BOOK,
From 1° to 90° for a distance of 100.

DEGREES.	¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.		
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.			
99.98	1.75	100.00	0.44	100.00	0.87	99.99	1.31	85	
99.94	3.49	99.98	2.18	99.97	2.62	99.95	3.05	84	
99.86	5.23	99.92	3.93	99.91	4.36	99.88	4.80	83	
99.76	6.98	99.84	5.67	99.81	6.10	99.79	6.54	82	
99.62	8.72	99.73	7.41	99.69	7.85	99.66	8.28	81	
99.45	10.45	99.58	9.15	99.54	9.58	99.50	10.02	80	
99.25	12.19	99.41	10.89	99.36	11.32	99.31	11.75	79	
99.03	13.92	99.20	12.62	99.14	13.05	99.09	13.49	78	
98.77	15.64	98.97	14.35	98.90	14.78	98.84	15.21	77	
98.48	17.36	98.70	16.07	98.63	16.50	98.56	16.93	76	
		98.40	17.79	98.33	18.22	98.25	18.65	75	
98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	74	
97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	73	
97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	72	
97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	71	
96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	70	
96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	69	
95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	68	
95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	67	
94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	66	
93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	65	
93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	64	
92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	63	
92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	62	
91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	61	
90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	60	
89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	59	
89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	58	
88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	57	
87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	56	
86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	55	
85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	54	
84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	53	
83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	52	
82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	51	
81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	50	
80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	49	
79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	48	
78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	47	
77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	46	
76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	45	
75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	44	
74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	43	
73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	42	
71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	41	
70.71	70.71							40	
DEGREES.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Degrees.
DEGREES.	¼ DEGREE.		½ DEGREE.		¾ DEGREE.		DEGREES.		

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