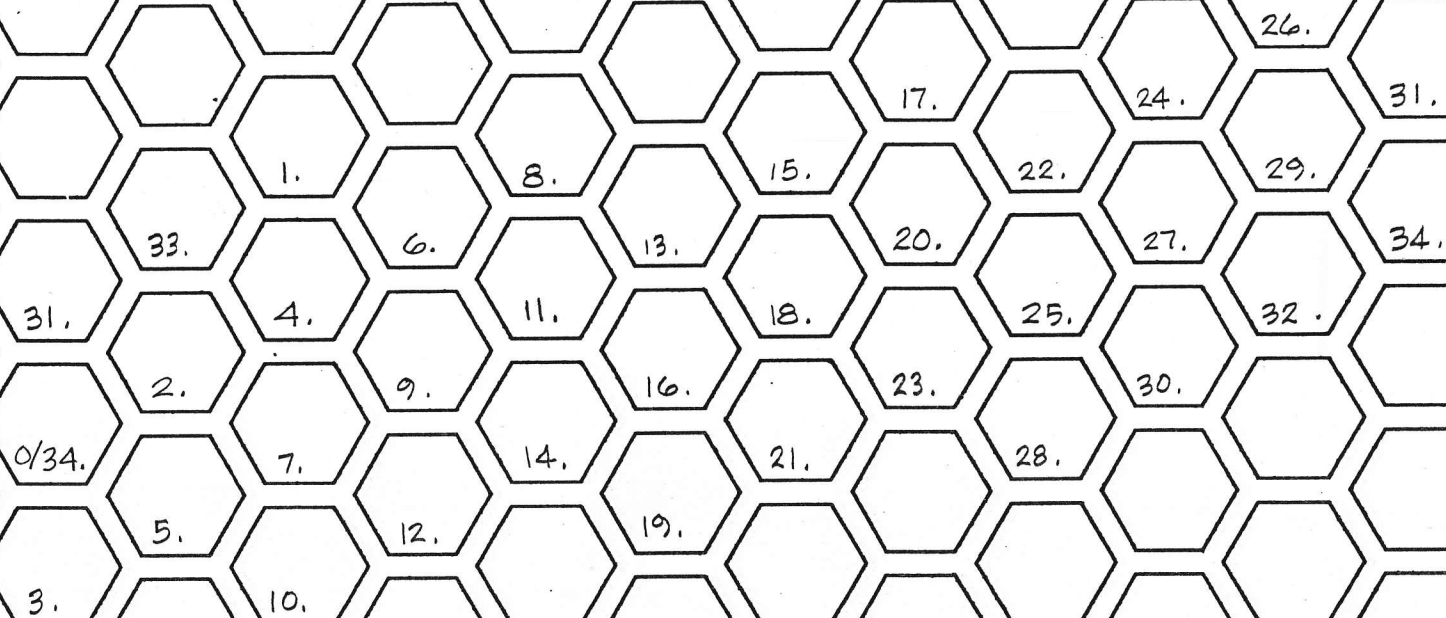


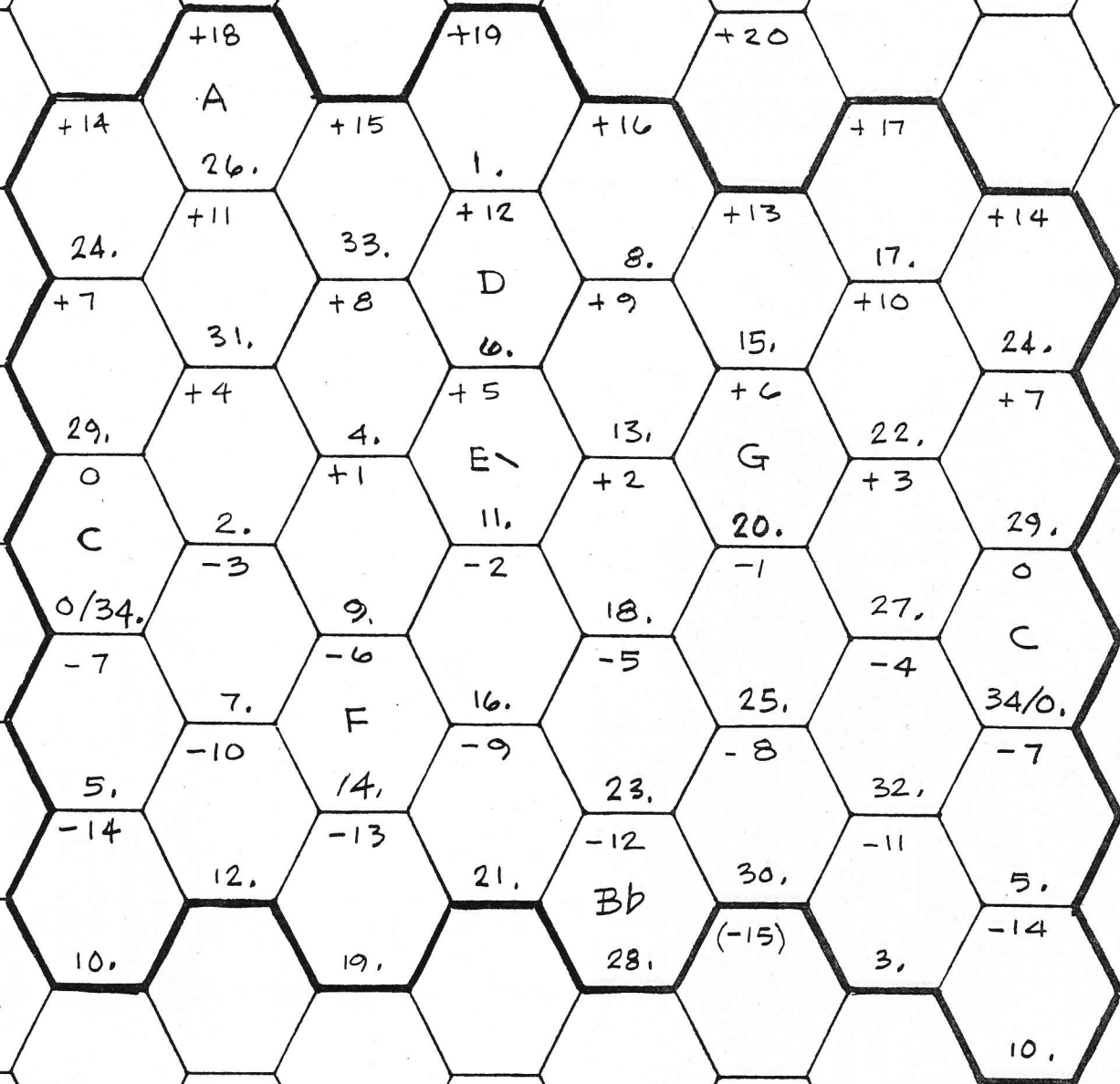
34-Tone Percussion Instrument

11-rank Hanson Keyboard Geometry
used by permission
by Erv Wilson 1993



2/7 KBD, 9/34 Scale

©1988 by Eric Wilson



7-rank variation of Hanson Keyboard Geometry
used by permission

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
C	D $\flat$	C $\sharp$	D	E $\flat$	D $\sharp$	E	F	G $\flat$	F $\sharp$	G	A $\flat$	G $\sharp$	A	B $\flat$	A $\sharp$	B	C																	
C	C $\sharp$	C $\sharp$	D	D $\sharp$	C $\sharp$	E	F	F $\sharp$	F $\sharp$	G	G $\sharp$	G $\sharp$	A	A $\sharp$	A $\sharp$	B	C																	
C	D $\flat$	C	D	E $\flat$	E $\sharp$	E	F	G $\flat$	G $\sharp$	G	A $\flat$	A $\sharp$	A	B $\flat$	B $\sharp$	B	C																	

Unison	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{5}{6}$	Whole Tone
C		C $\sharp$		C $\sharp$		D
C		D $\flat$		D $\sharp$		D
C	C $\uparrow$	C $\sharp$	C $\sharp\uparrow$	C $\sharp$	C $\sharp\uparrow$	D
C	D $\flat\downarrow$	D $\flat$	D $\sharp\downarrow$	D $\sharp$	$\downarrow$	D

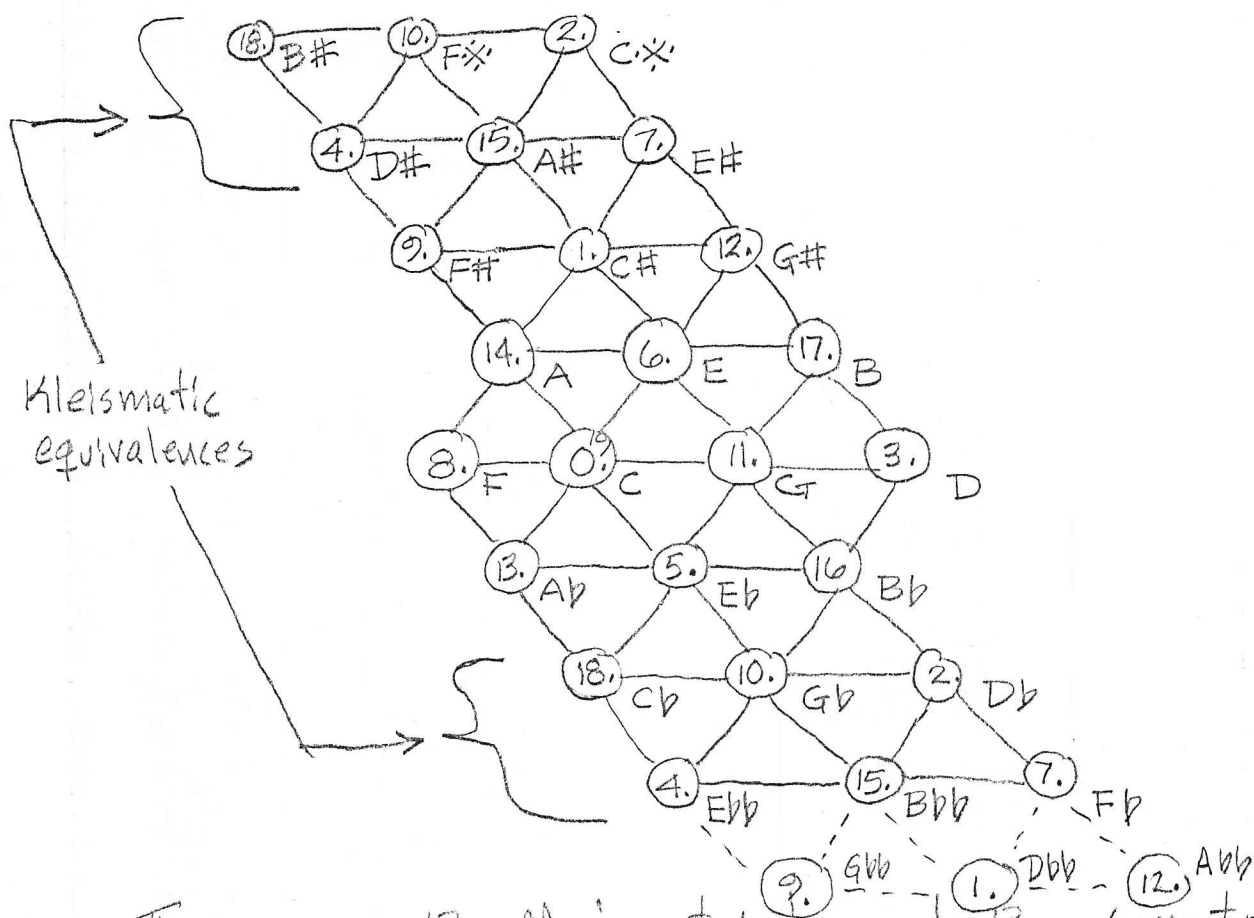
Whole Tone					
Third tone	Third Tone	Third Tone	Third Tone	Third Tone	Third Tone
$\frac{1}{6}T$	$\frac{1}{6}T$	$\frac{1}{6}T$	$\frac{1}{6}T$	$\frac{1}{6}T$	$\frac{1}{6}T$

$\sharp$	Third high	$\sharp$	$\frac{2}{3}$ high (sharp)
$\flat$	Third low	$\flat$	$\frac{2}{3}$ low (flat)
$\uparrow$	Sixth high		
$\downarrow$	Sixth low		

34-notation
© 1993 Eric Wilson

Normal Notation of All Triads in 19-Tone (MOS), with 5-step Generator

by Eric Wilson



There are 13 Major triads and 13 minor triads in the 19-tone scale (MOS) with a 5-step generator. These can be spelled in normal notation as shown.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	3				
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34/6
$\frac{1}{1}$		$\frac{25}{24}$	$\frac{16}{15}$		$\frac{10}{9}$	$\frac{9}{8}$		$\frac{6}{5}$	$\frac{16}{13}$	$\frac{5}{4}$		$\frac{4}{3}$	$\frac{27}{20}$	$\frac{18}{13}$	$\frac{45}{32}$		$\frac{40}{27}$	$\frac{3}{2}$		$\frac{25}{16}$	$\frac{8}{5}$		$\frac{5}{3}$	$\frac{27}{16}$		$\frac{16}{9}$	$\frac{9}{5}$	$\frac{24}{13}$	$\frac{15}{8}$			$\frac{1}{1}$		
								$\frac{40}{39}$	$\frac{65}{64}$			$\frac{40}{39}$	$\frac{65}{64}$																					



Study for 34-Tone Keyboard
using the Hanson generalized schema
by Erv Wilson 1995 (Dec 14, 95)

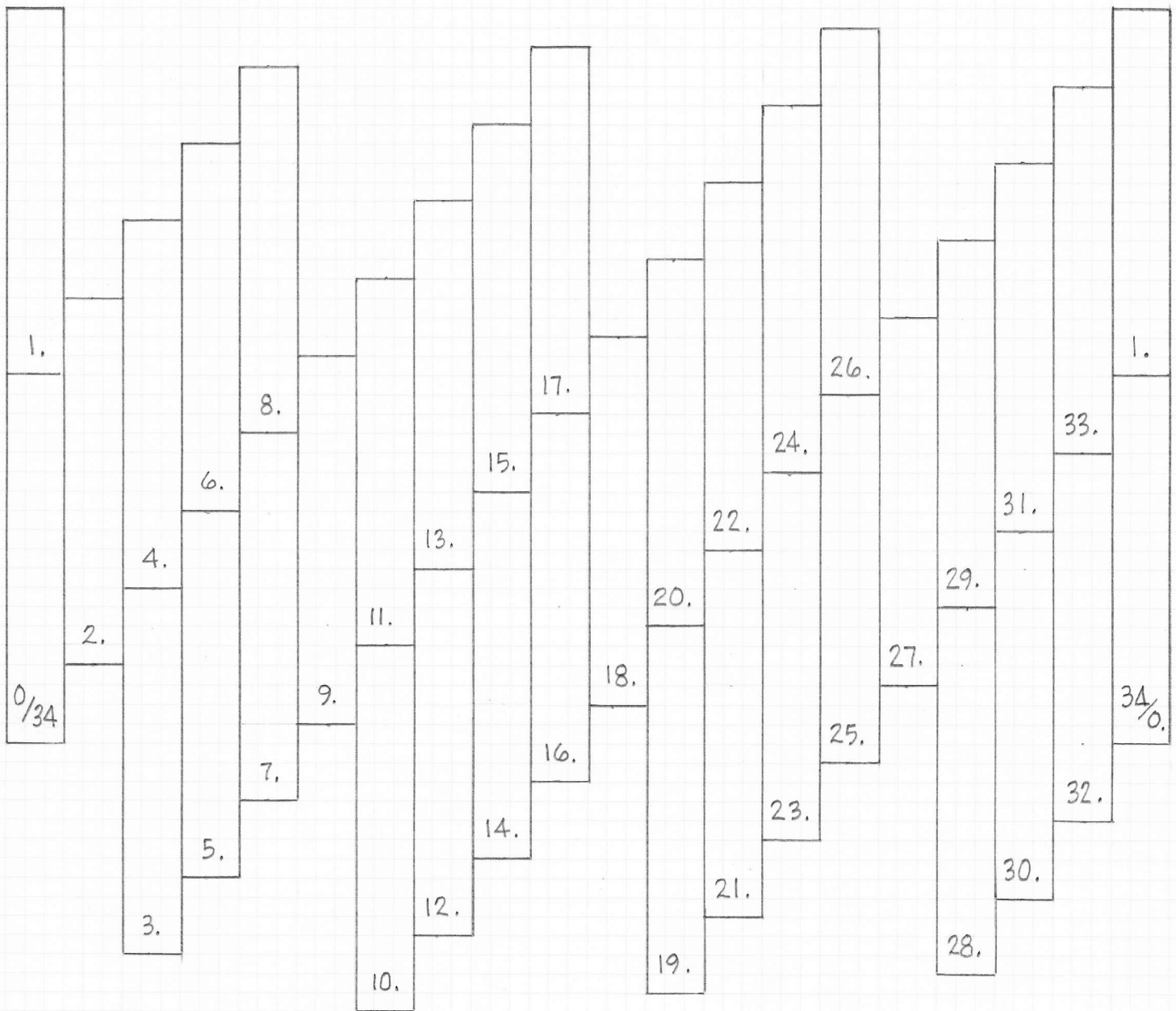
[illegible]

34-Tone Tubulong Design

19-rank variation of Hanson Keyboard Geometry

by Erv Wilson 1993

© 2003 Erv Wilson

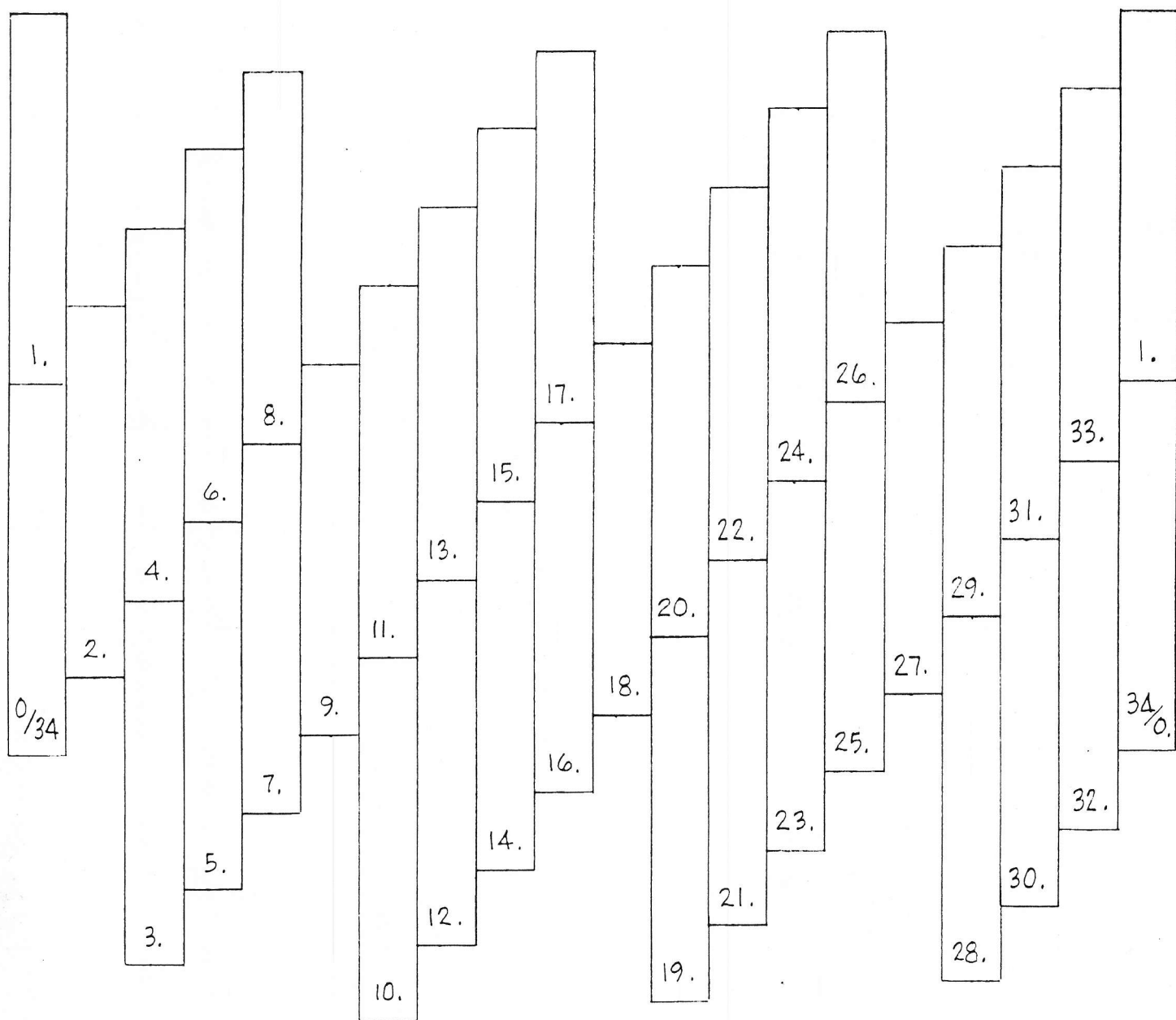


Hanson Generalized Keyboard Geometry used by permission

34-Tone Tubulong Design

19-rank variation of Hanson Keyboard Geometry

by Erv Wilson 1993

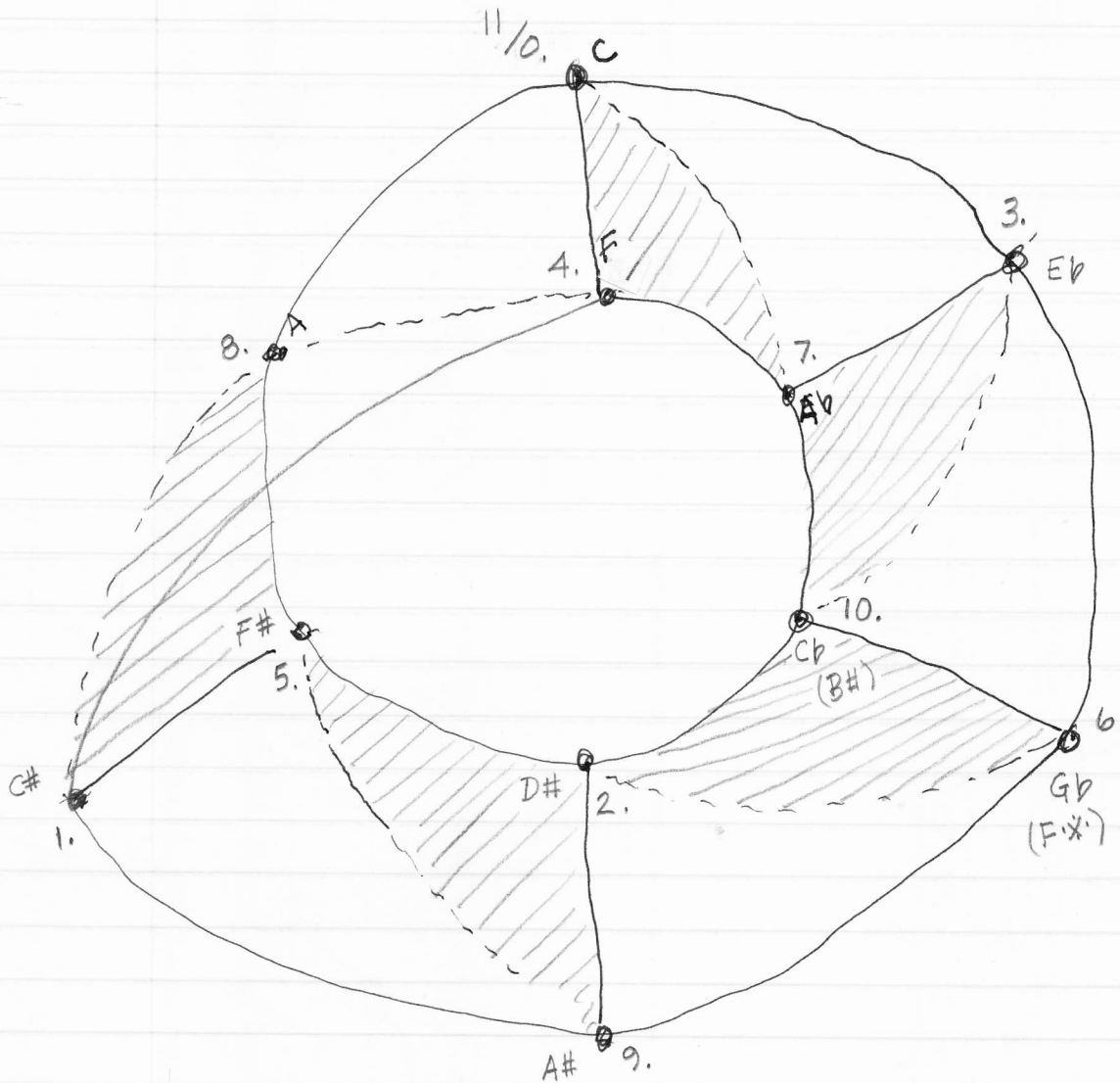


Hanson Generalized Keyboard Geometry used by permission

Eleven-tone Loop

©1997, ©1994 by Eru Wilson

(Inferred from the Hanson sequence)



Shaded areas are minor triads.
unShaded areas are Major triads.
(except the triad F, A, C# is augmented)

This is like a moebius loop,

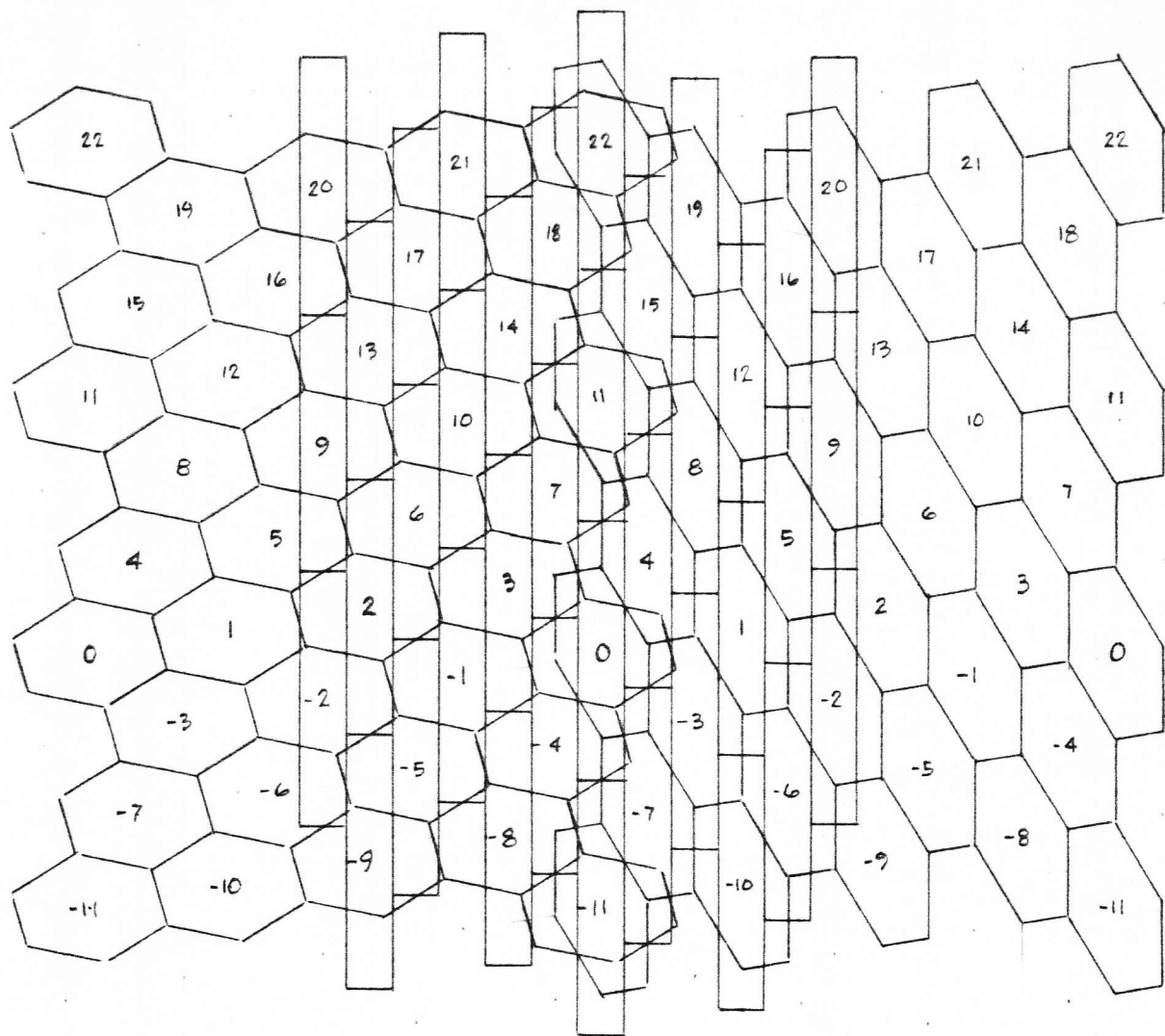
0	C	0/11.
-4	B#	10.
	Cb	18.
		32.
		34/0.

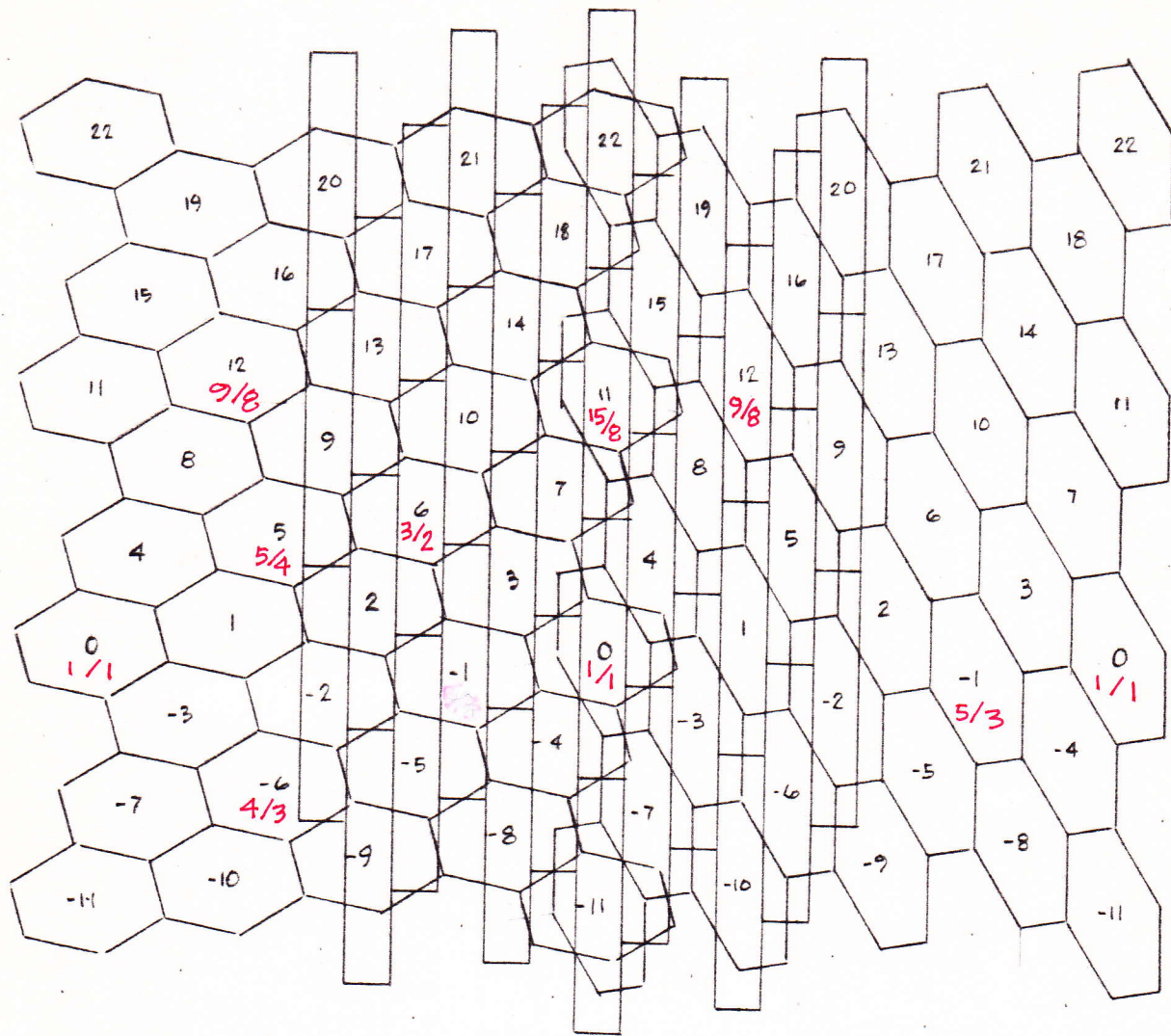
+3	A#	9.
-1	A	8.
		14.
		25.
-5	Ab	7.
		13.
		23.

+2	F#	6.
	Gb	10.
		18.
-2	F#	5.
		9.
		16.
-6	F	4.
		8.
		14.

+1	Eb	3.
		5.
		9.
-3	D#	2.
		4.
		7.

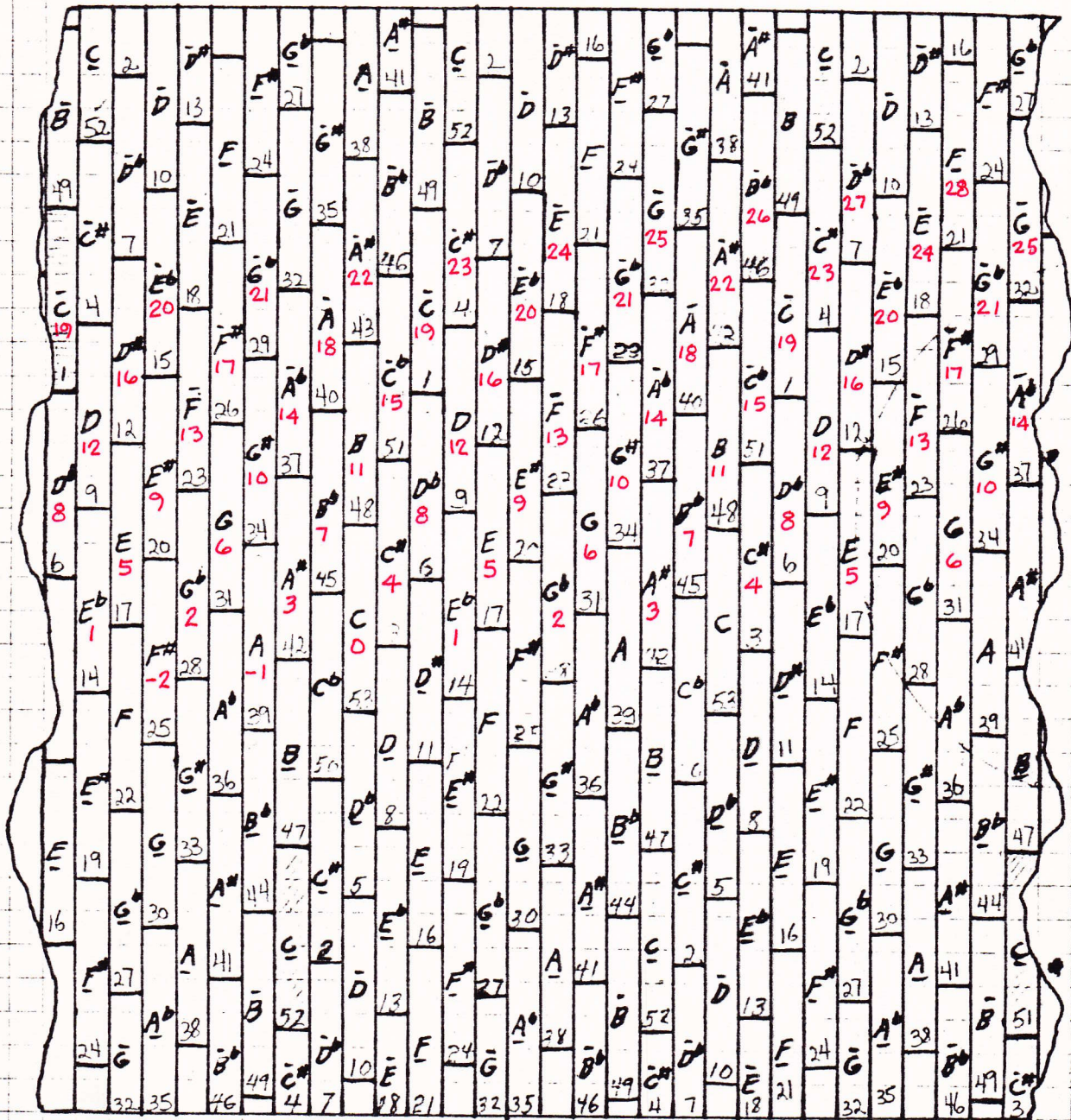
chain of -3ds		
+4	C#	1.
0	C	0/11.
		0/19.
		0/34.
		2.





HANSON KEY LAYOUT FOR 53 TONE CYCLE

DESIGN A



INVENTED BY:

L. A. Hanson Jr.

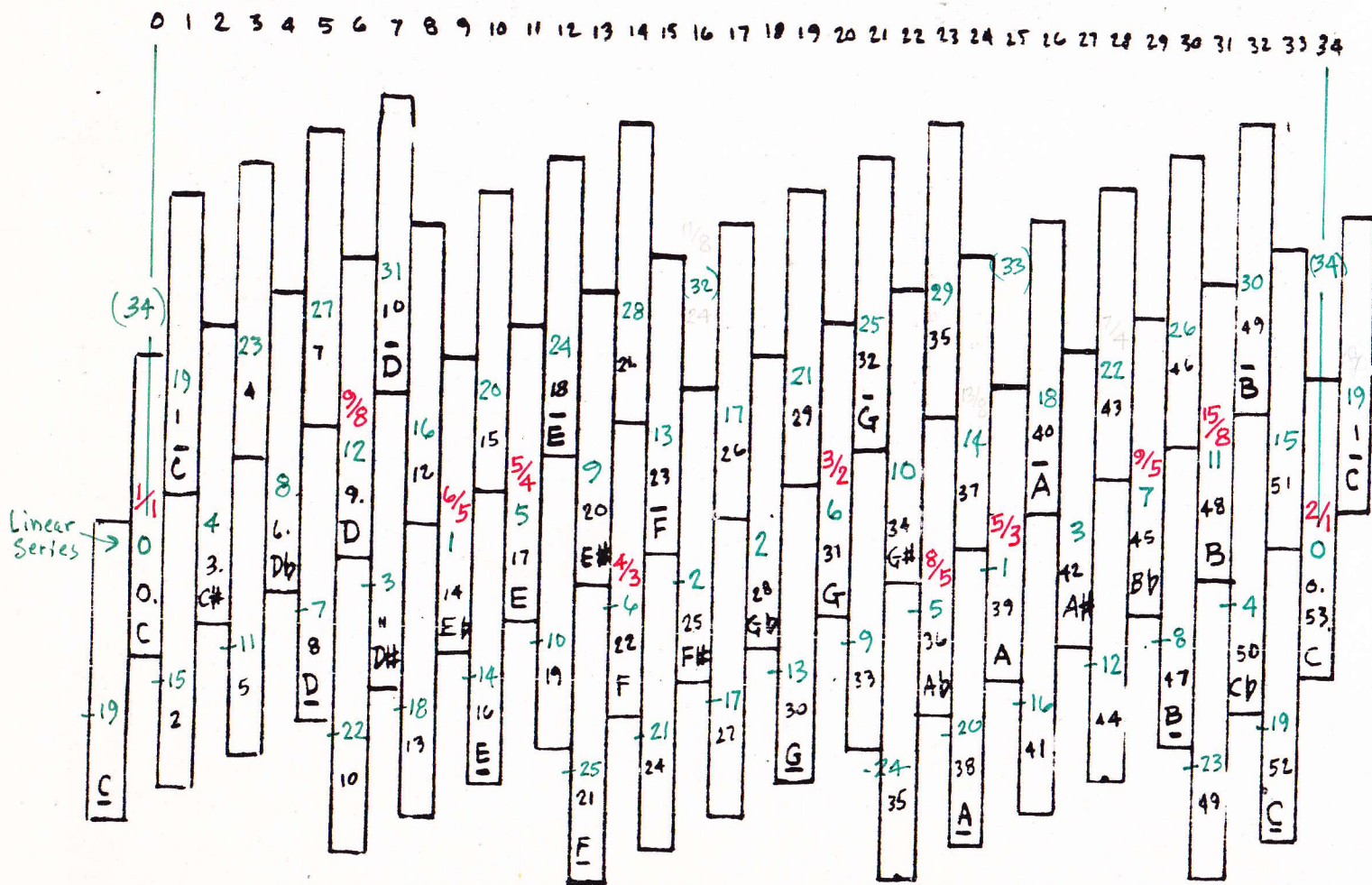
WITNESSED BY: DATE: 16 JAN 1978

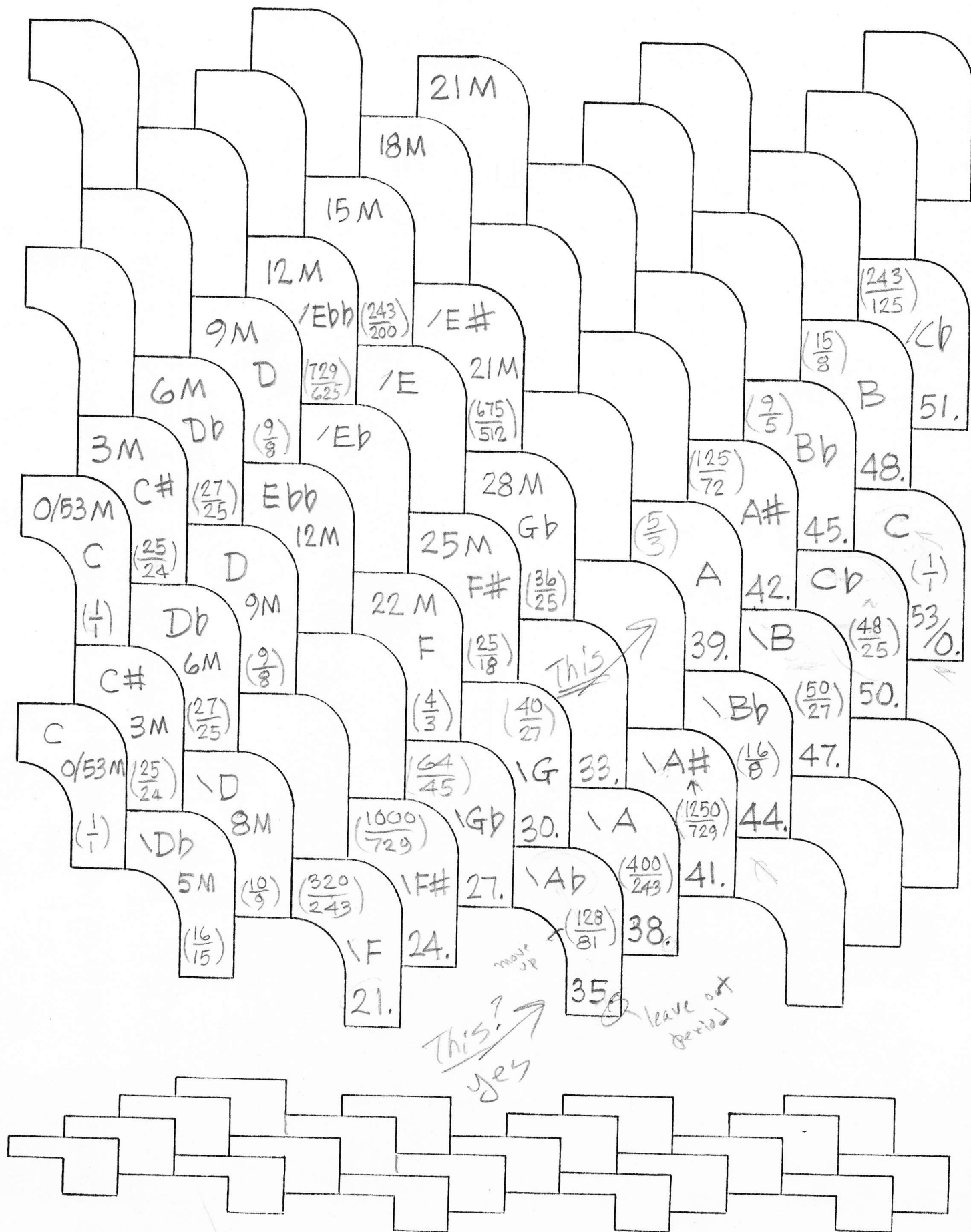
Christine A. Hanson

Variation on Hanson's Generalized Kbd Geometry
for mounting 53 tuned tubes (or more)
Design © 1978 by Eric Wilson, all rights reserved

($\frac{9}{34}$) Tubulong Keyboard

constructed of round, 2024-T3, Aluminum alloy, tubing
by Glen Prior for Larry Hanson.

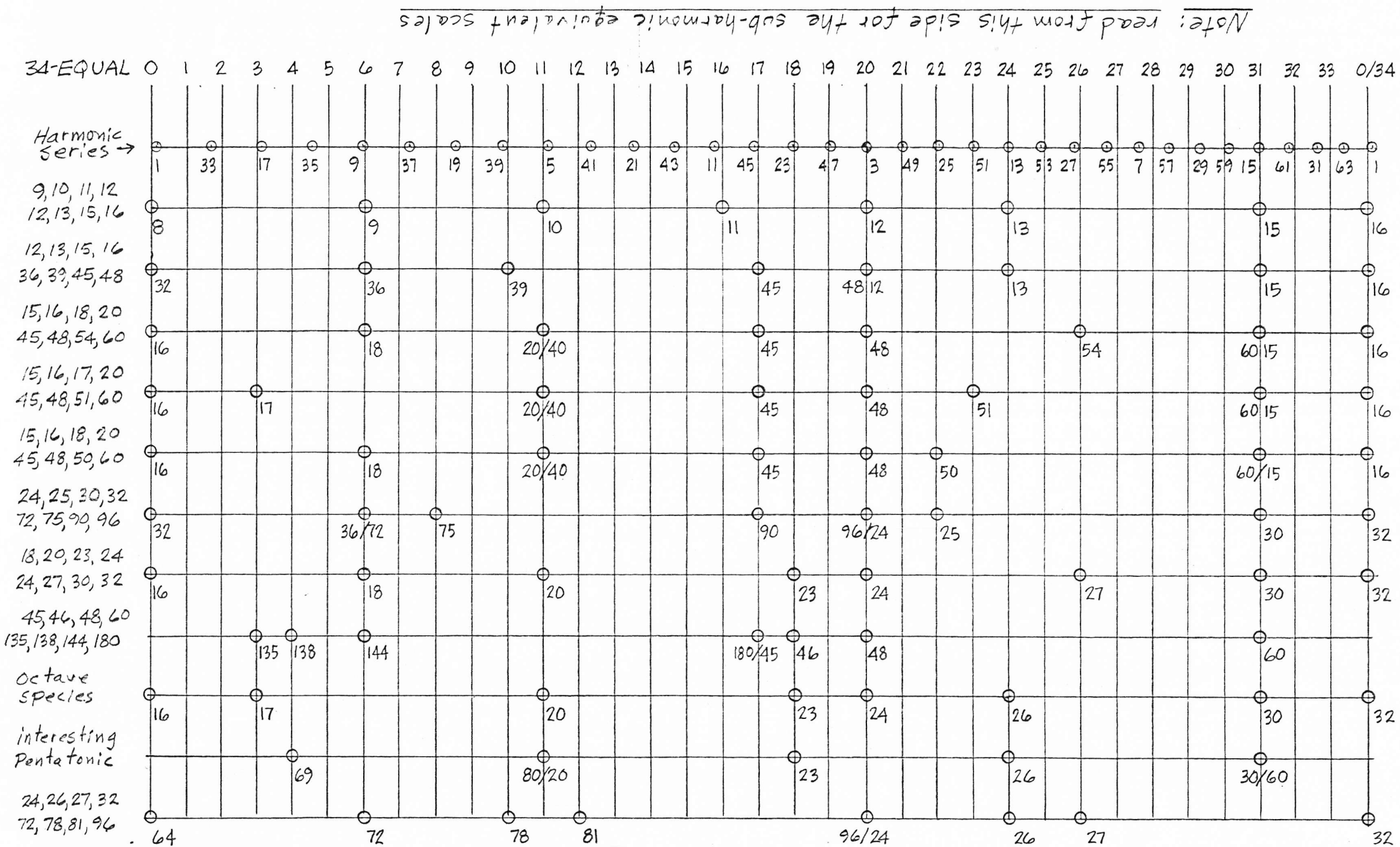




Resources of the 34-Tone Scale

work in progress, all rights reserved
by Erv Wilson 1994

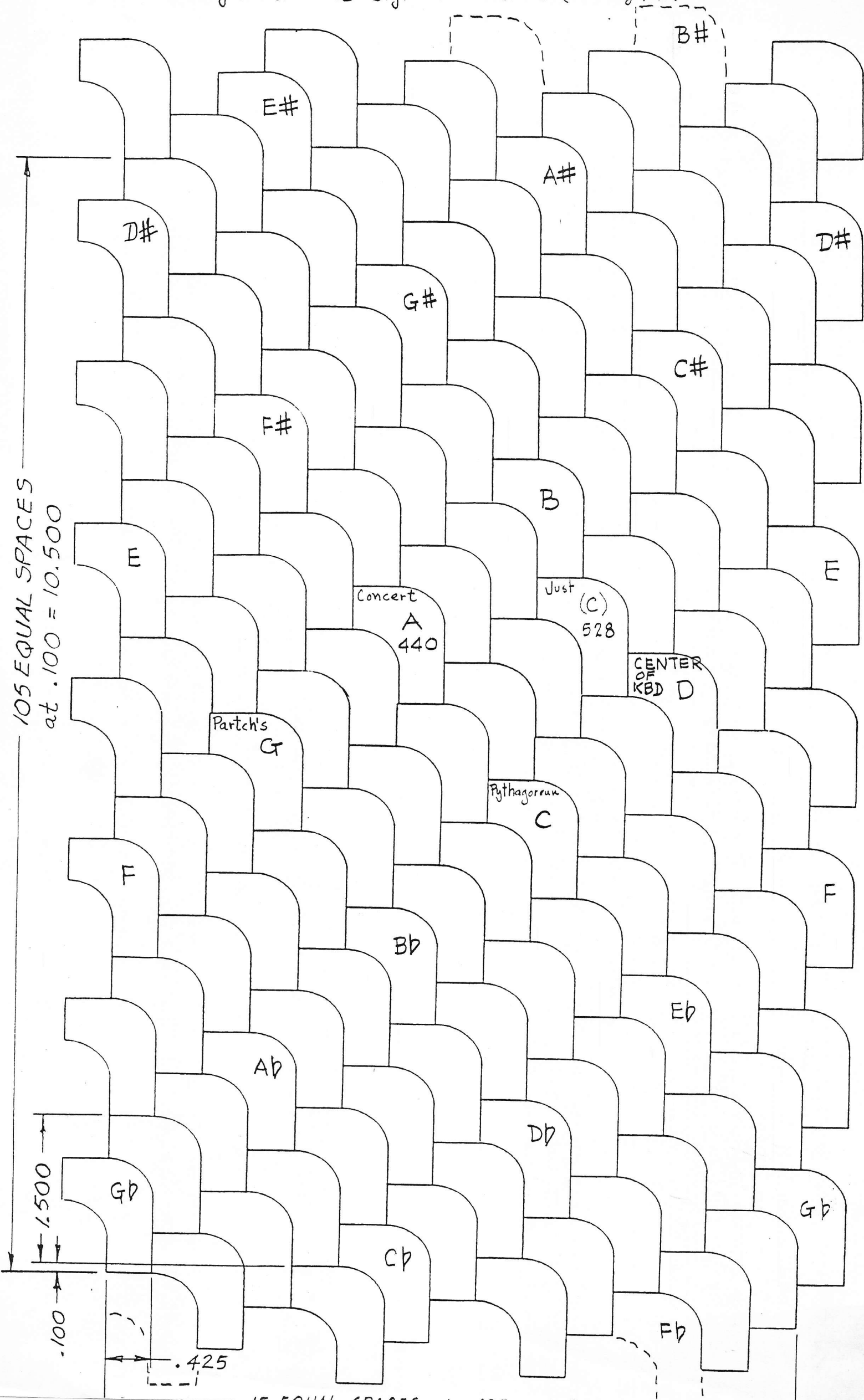
Notes on Harmonics and Tetrachords

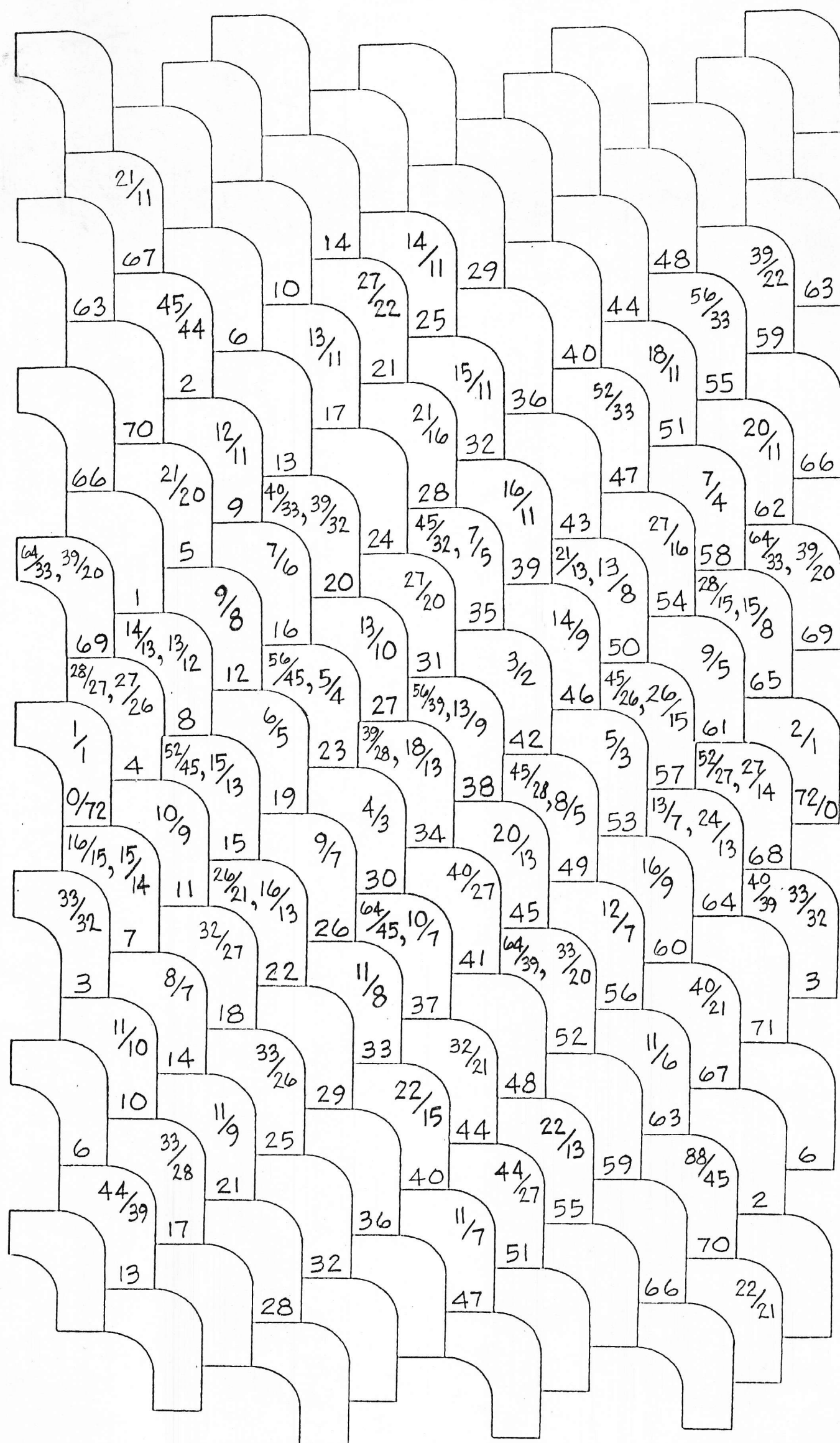


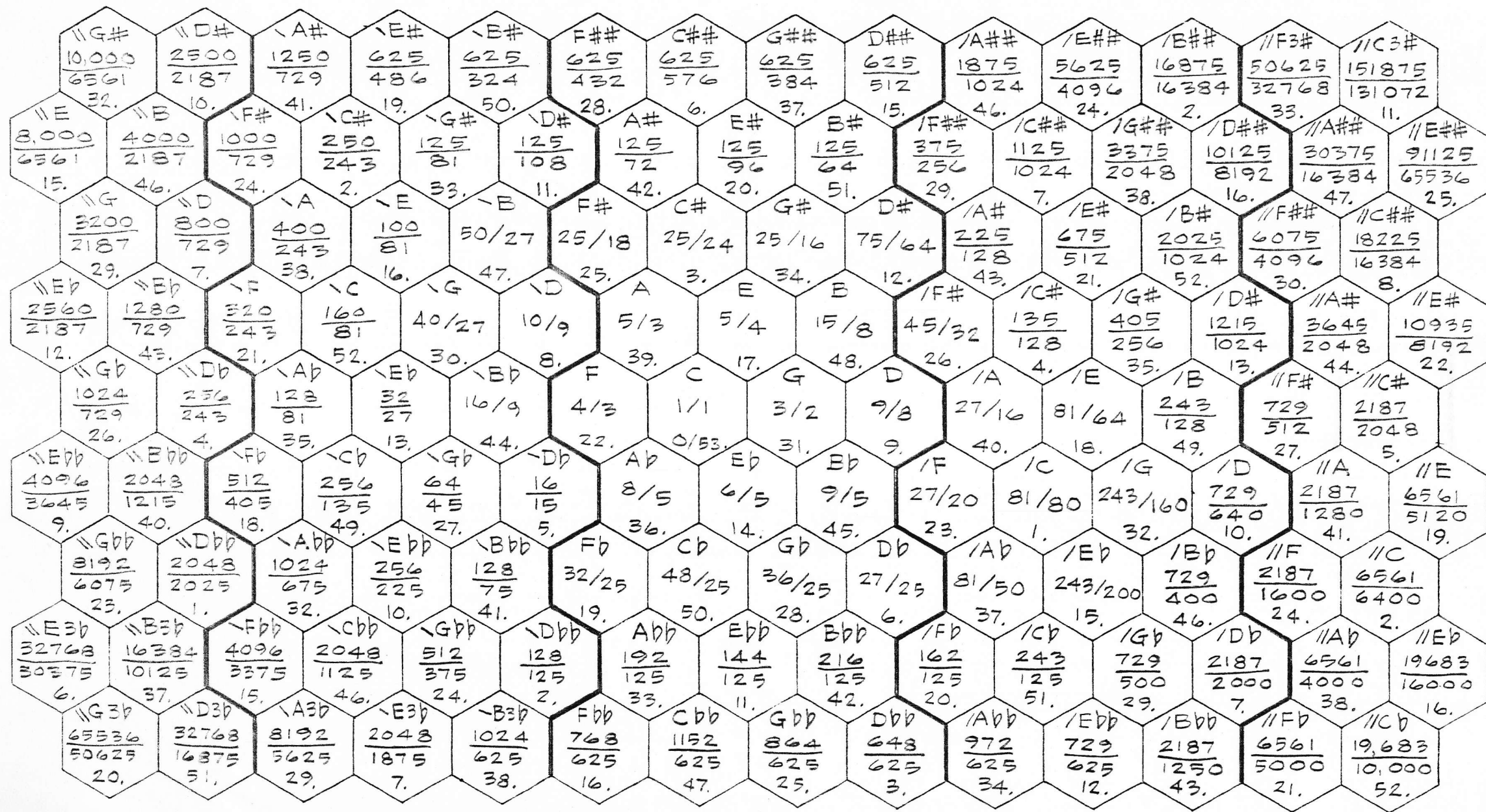
Hanson's Design "B"

design data and digital location (121 digits)

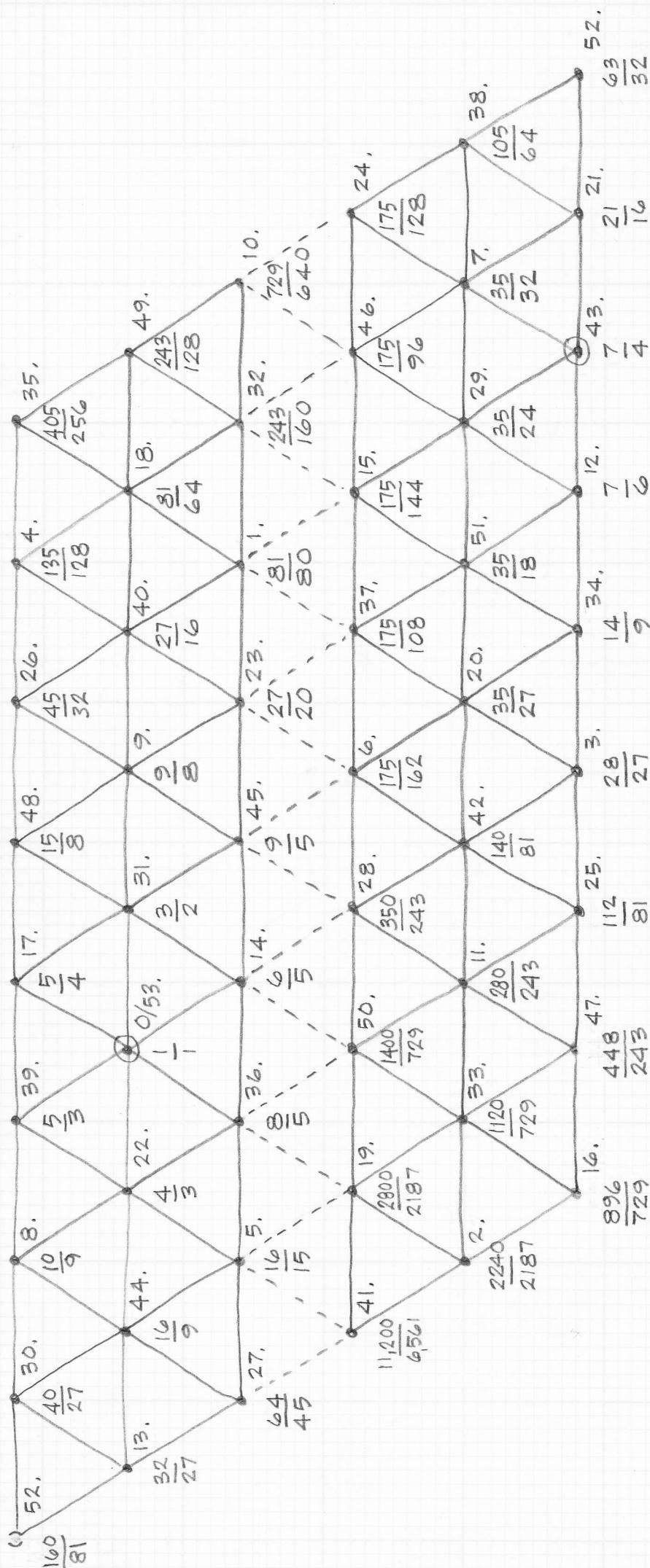
Issued Mar 18, 89 E.W.







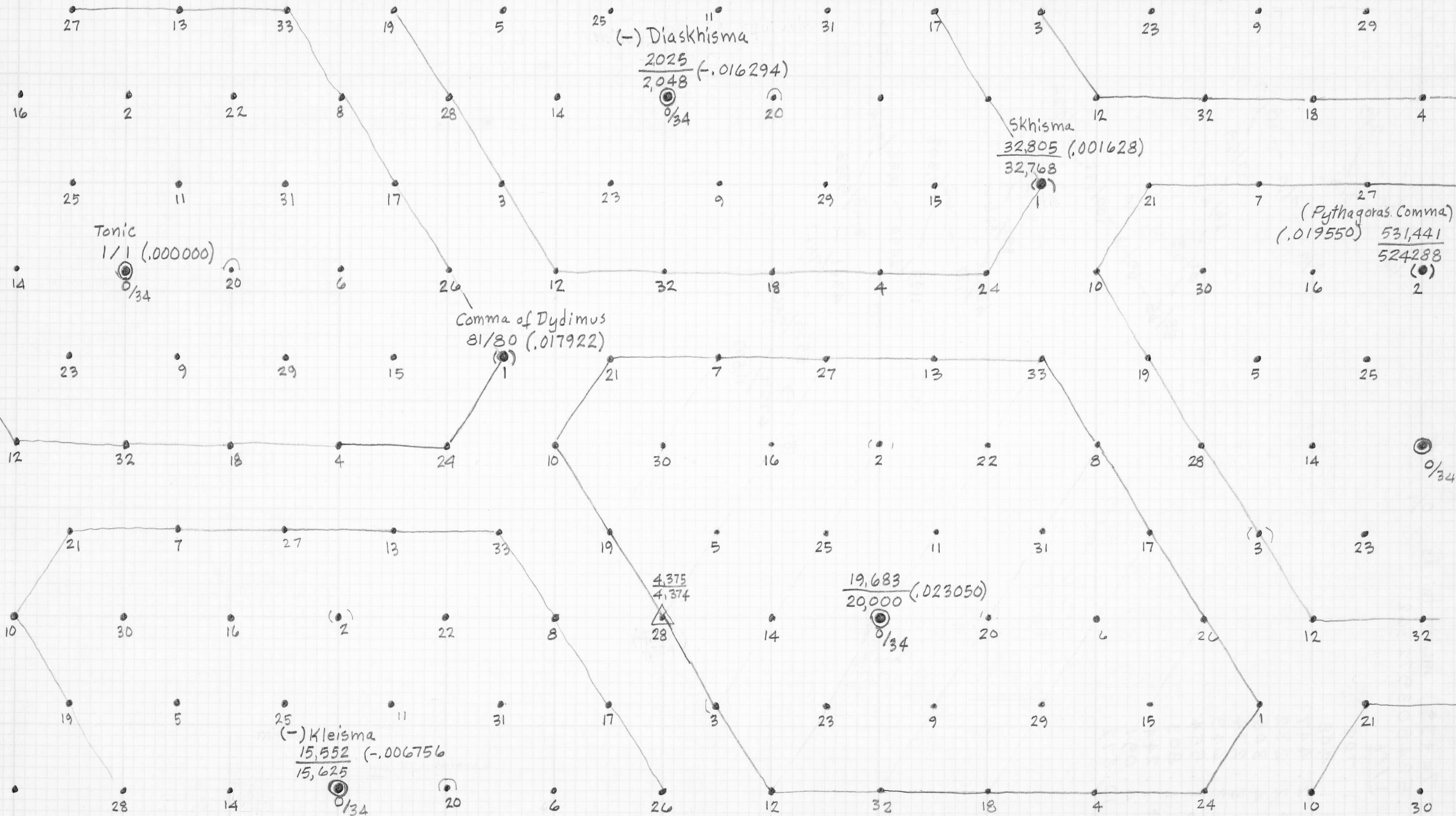
- 53/0. 2/1
52. 160/81 or 63/32
51. 35/18
50. 1,400/729
49. 243/128
48. 15/8
47. 448/243
46. 175/96
45. 9/5
44. 16/9
43. 7/4
42. 140/81
41. 11,200/6,561
40. 27/16
39. 5/3
38. 105/64
37. 175/108
36. 8/5
35. 406/256
34. 14/9
33. 1120/729
32. 243/160
31. 3/2
30. 40/27
29. 35/24
28. 350/243
27. 64/45
26. 45/32
25. 112/81
24. 175/128
23. 27/20
22. 4/3
21. 21/16
20. 35/27
19. 2800/2187
18. 81/64
17. 5/4
16. 896/729
15. 175/144
14. 6/5
13. 32/27
12. 7/6
11. 280/243
10. 729/640
9. 9/8
8. 10/9
7. 35/32
6. 175/162
5. 16/15
4. 135/128
3. 28/27
2. 2240/2187
1. 81/80
- 53/0. 1/1

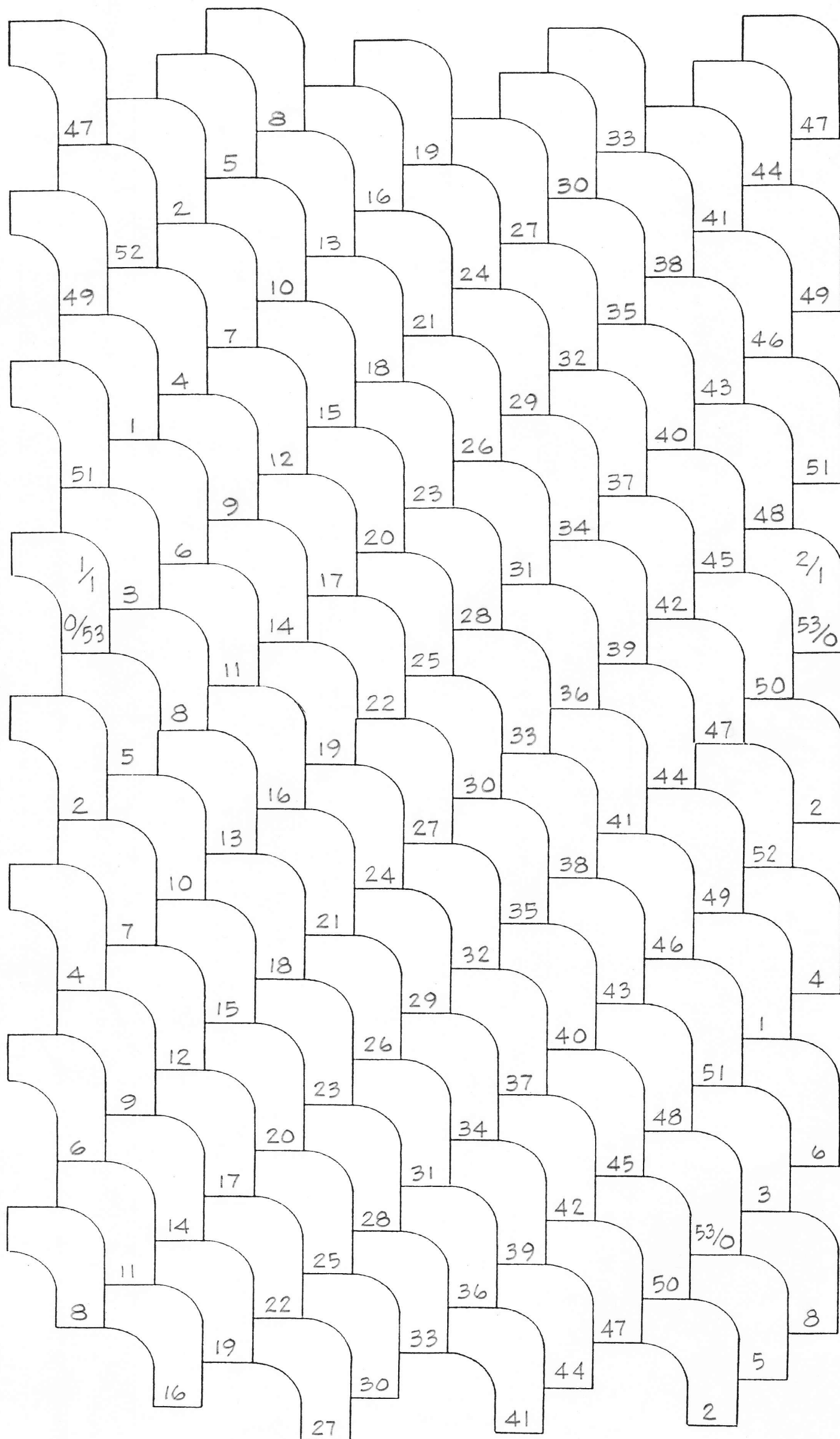


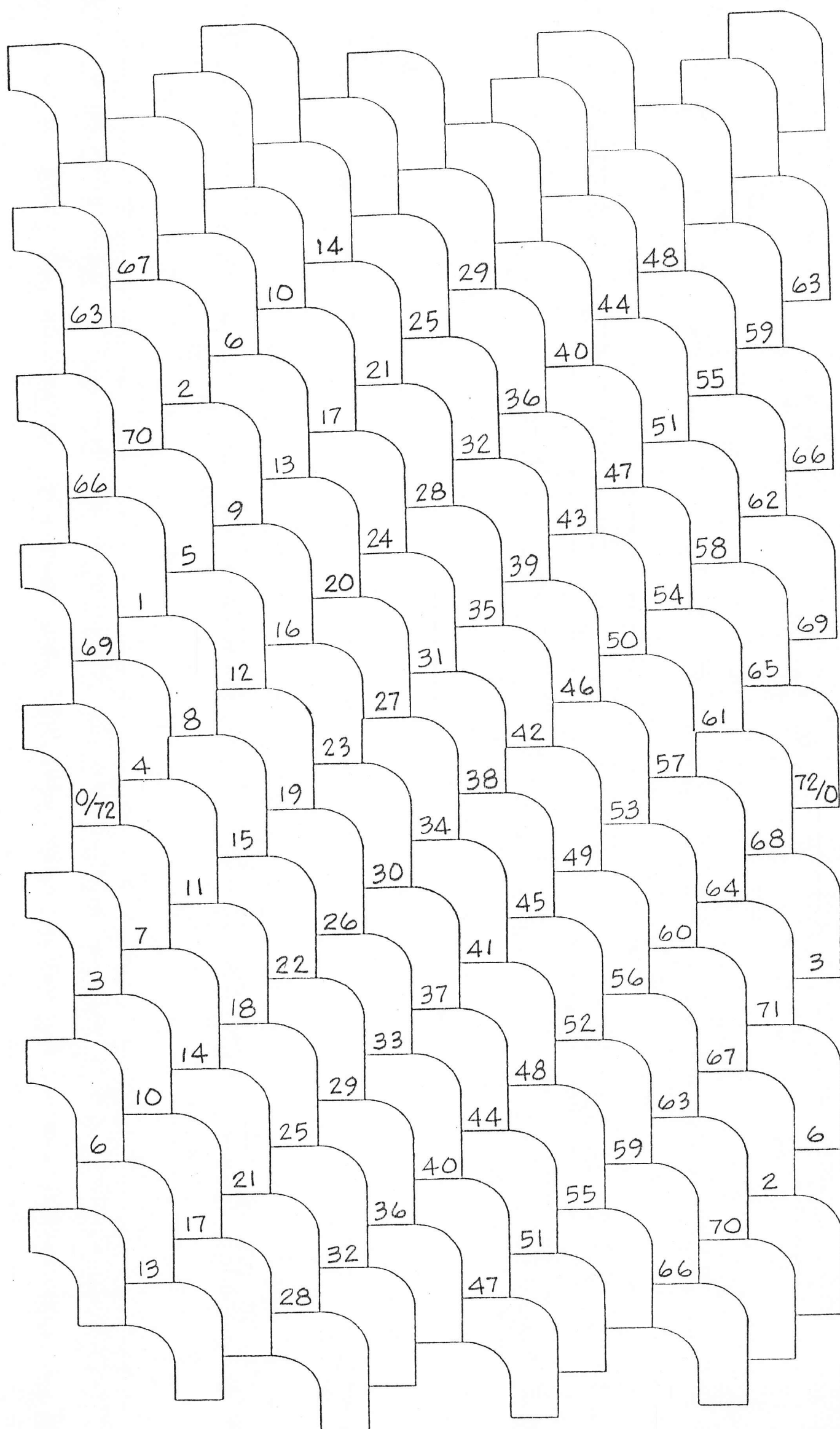
$+22 = 7$, 263970678275
 $-21 = 11$, 263836589590
 $7 = +39$, 584803972362

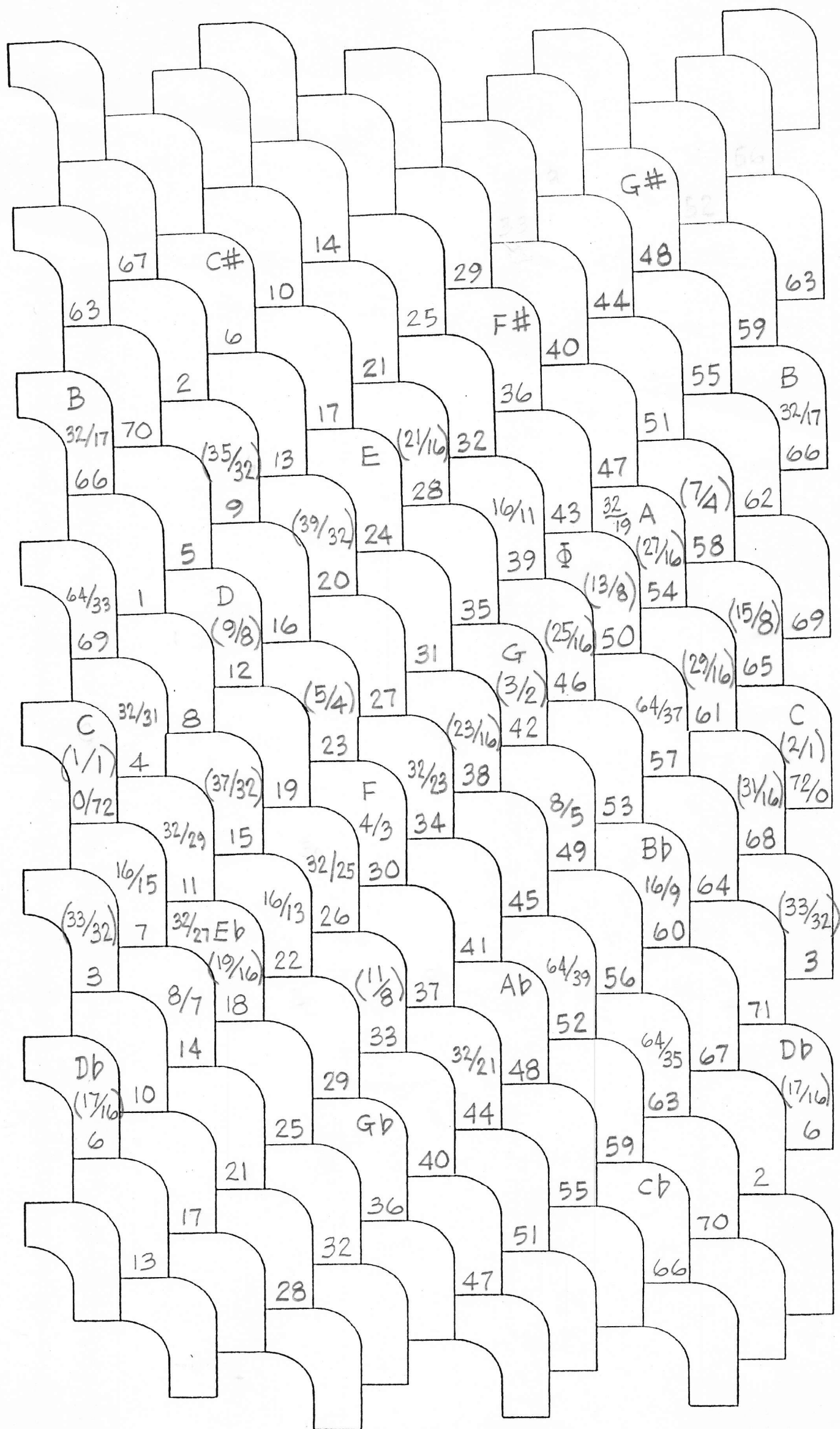
4,375
 4,374

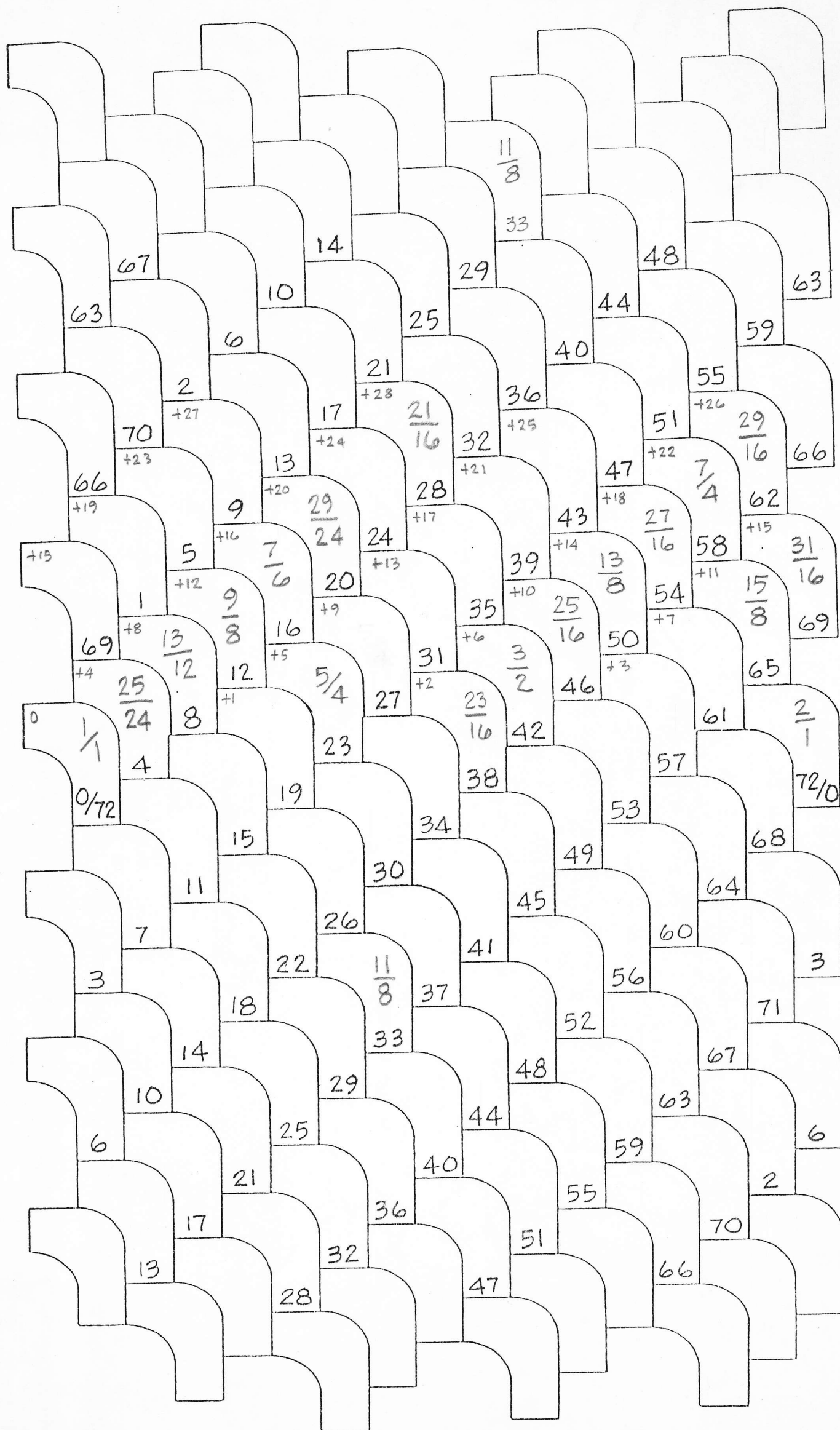
Some Notes on L.A. Hanson's 34-Grid by E. Wilson 02-22-96

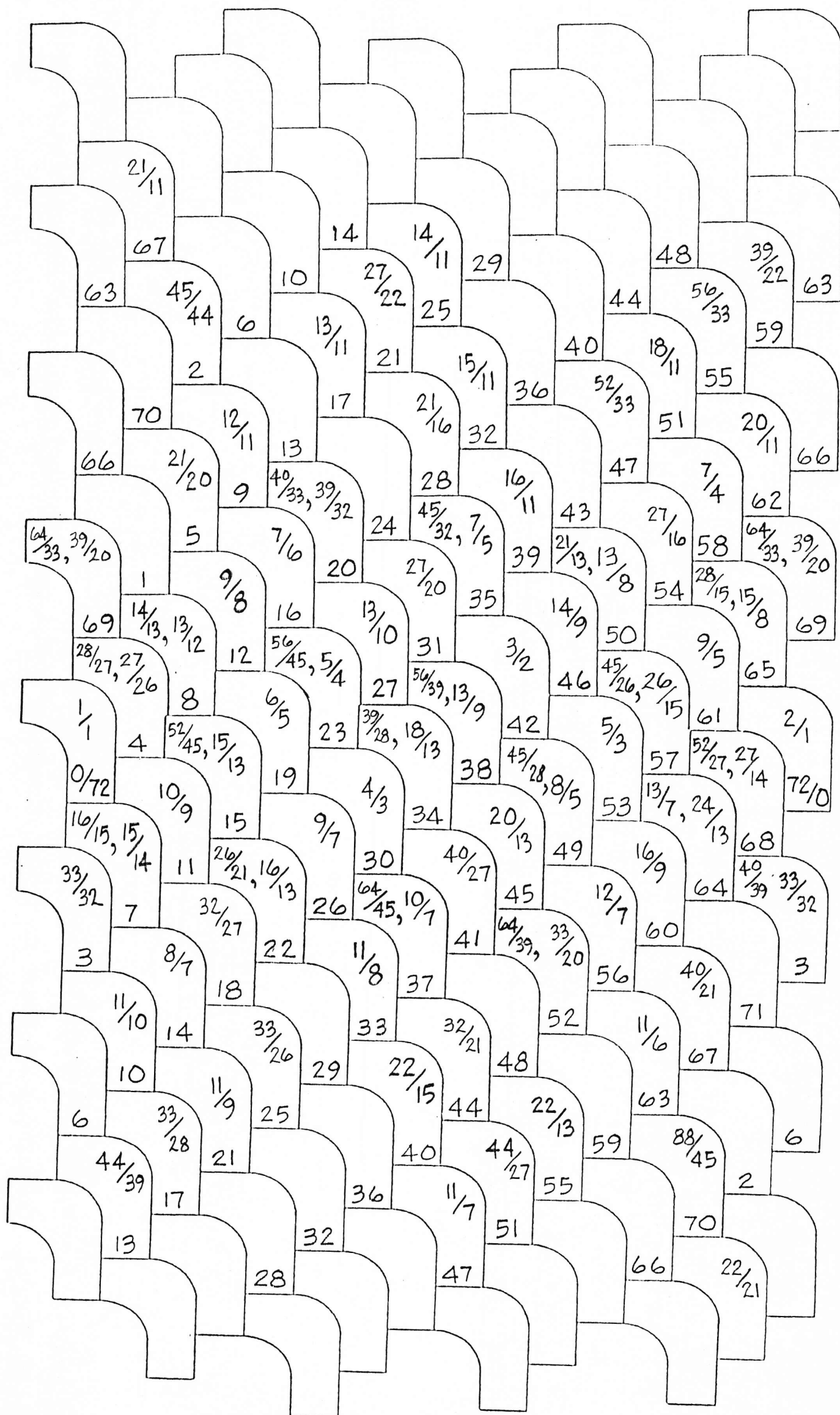












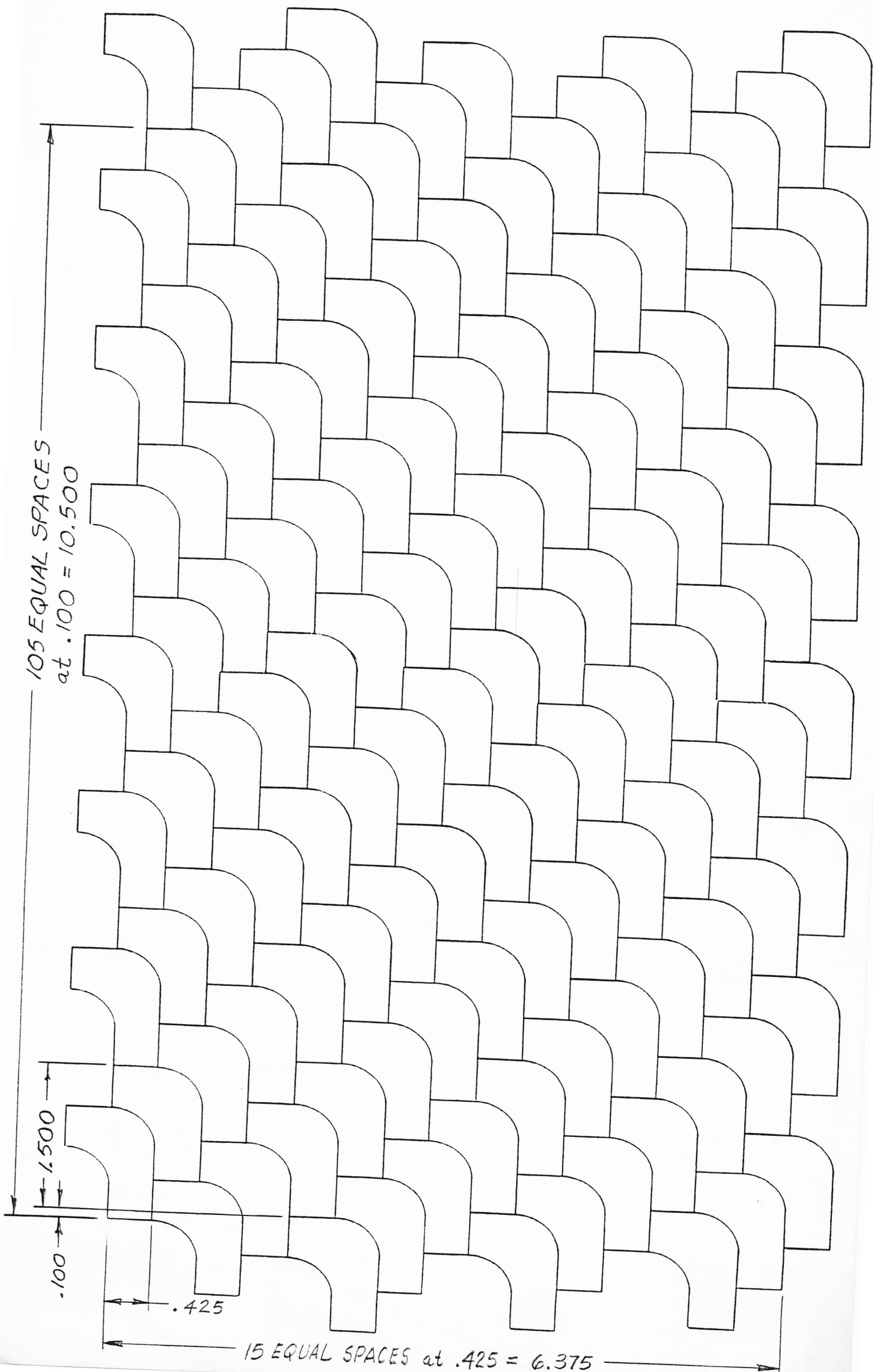
105 EQUAL SPACES
at .100 = 10.500

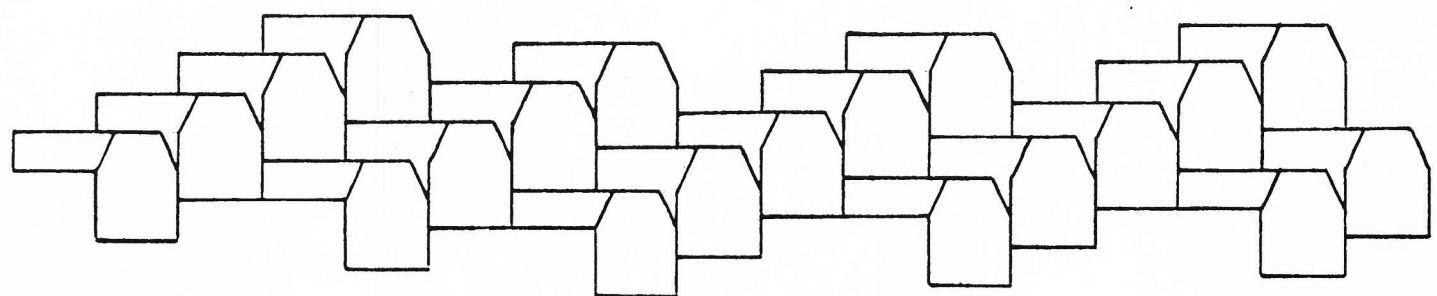
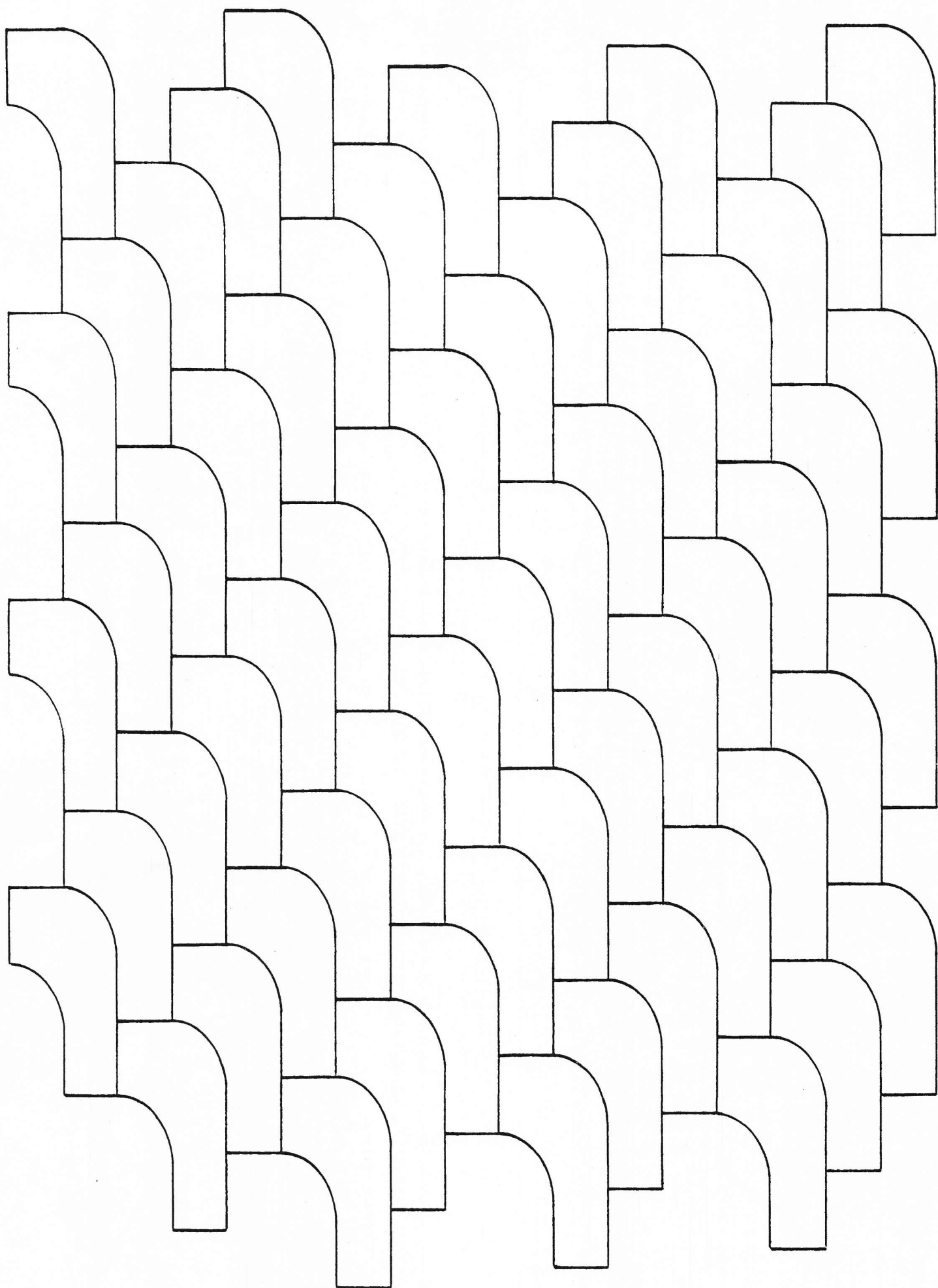
1.500

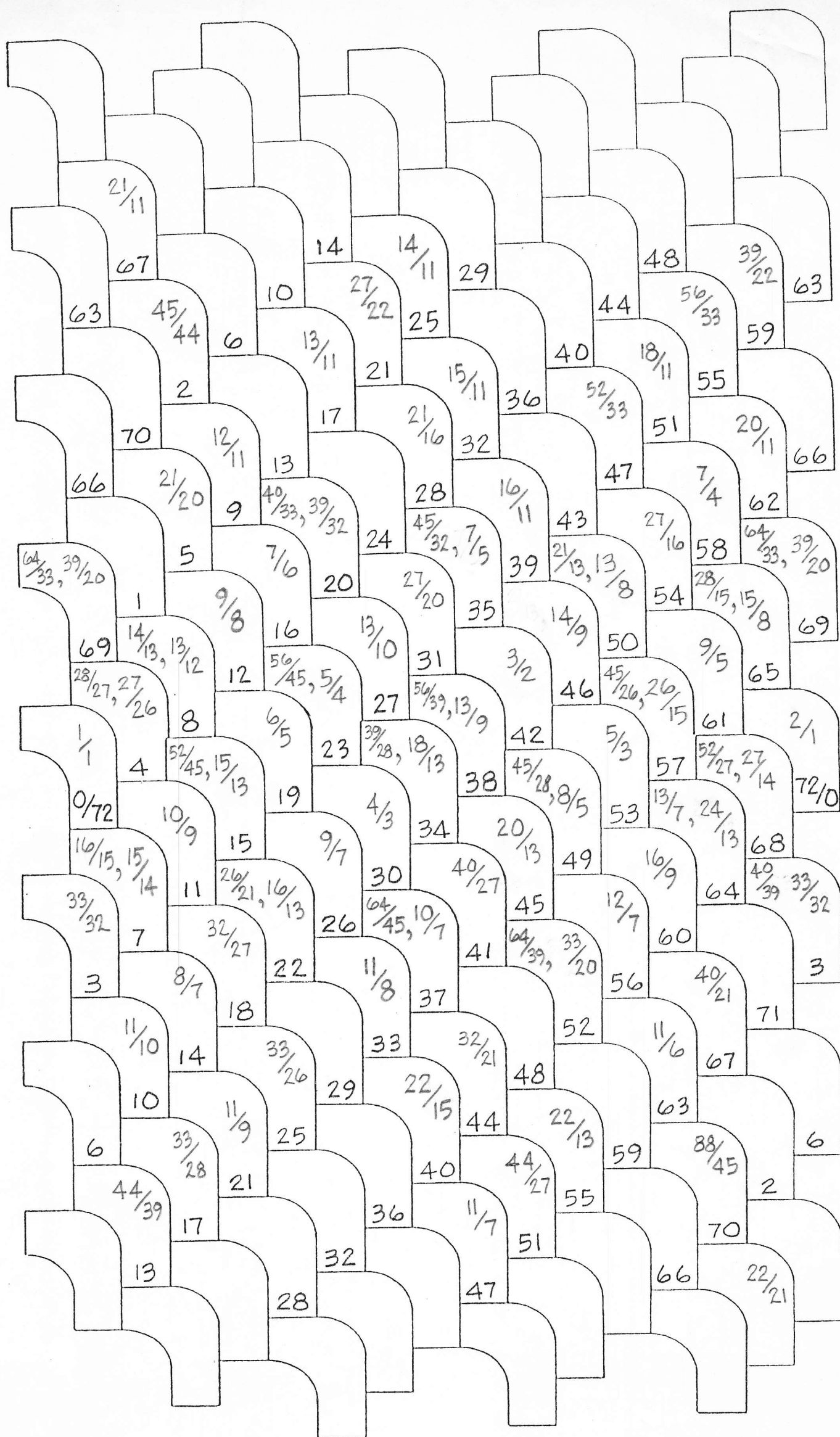
.100

.425

15 EQUAL SPACES at .425 = 6.375

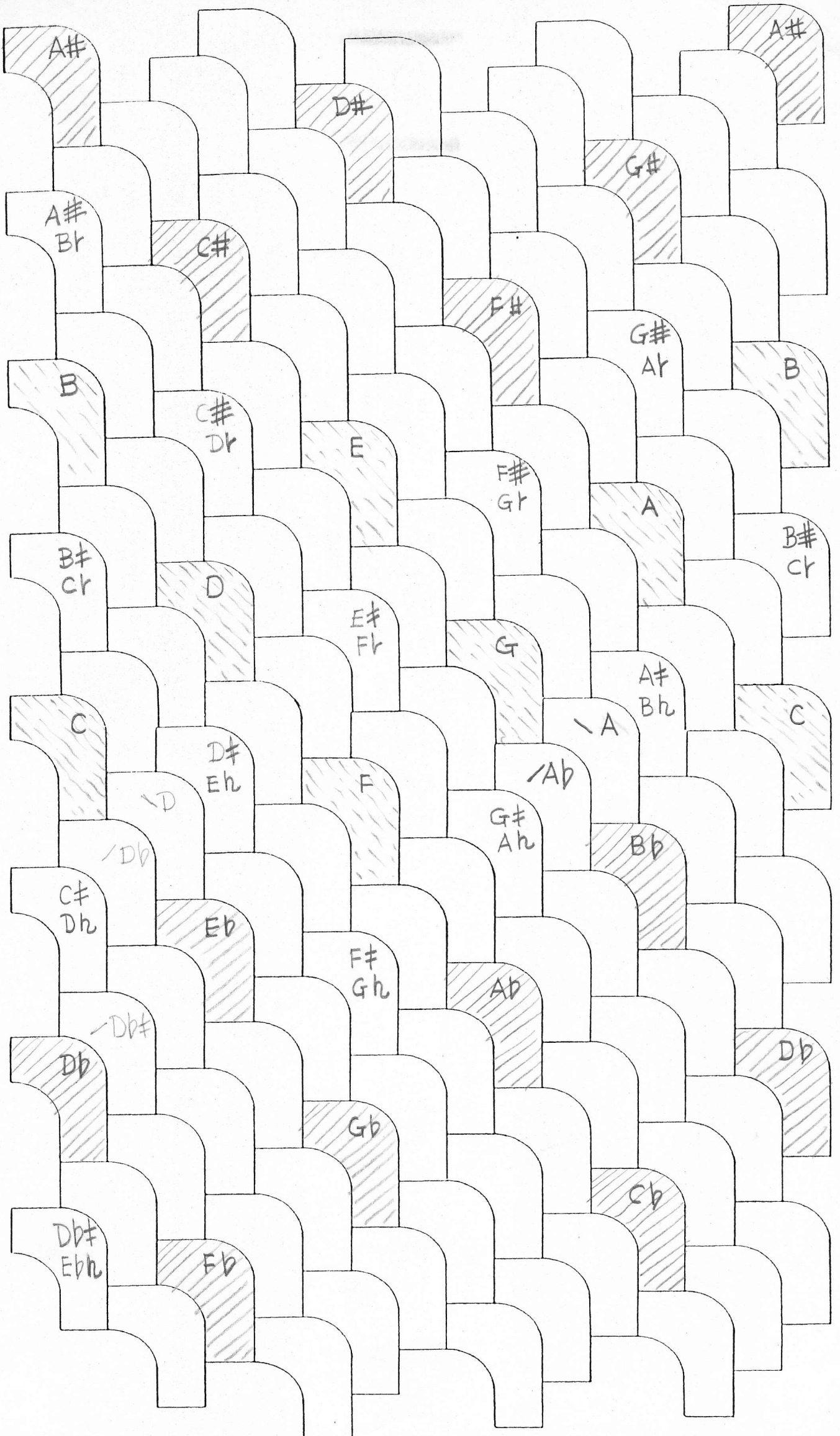






8 7 6 6 6 6 6 6 7 6 6 6 7 6 6

#



Ebb

C D E F G A B C
δ ε γ α β

