Matrix; with Pingalas Meru Prastāra, and Uath Gral. Keyboard

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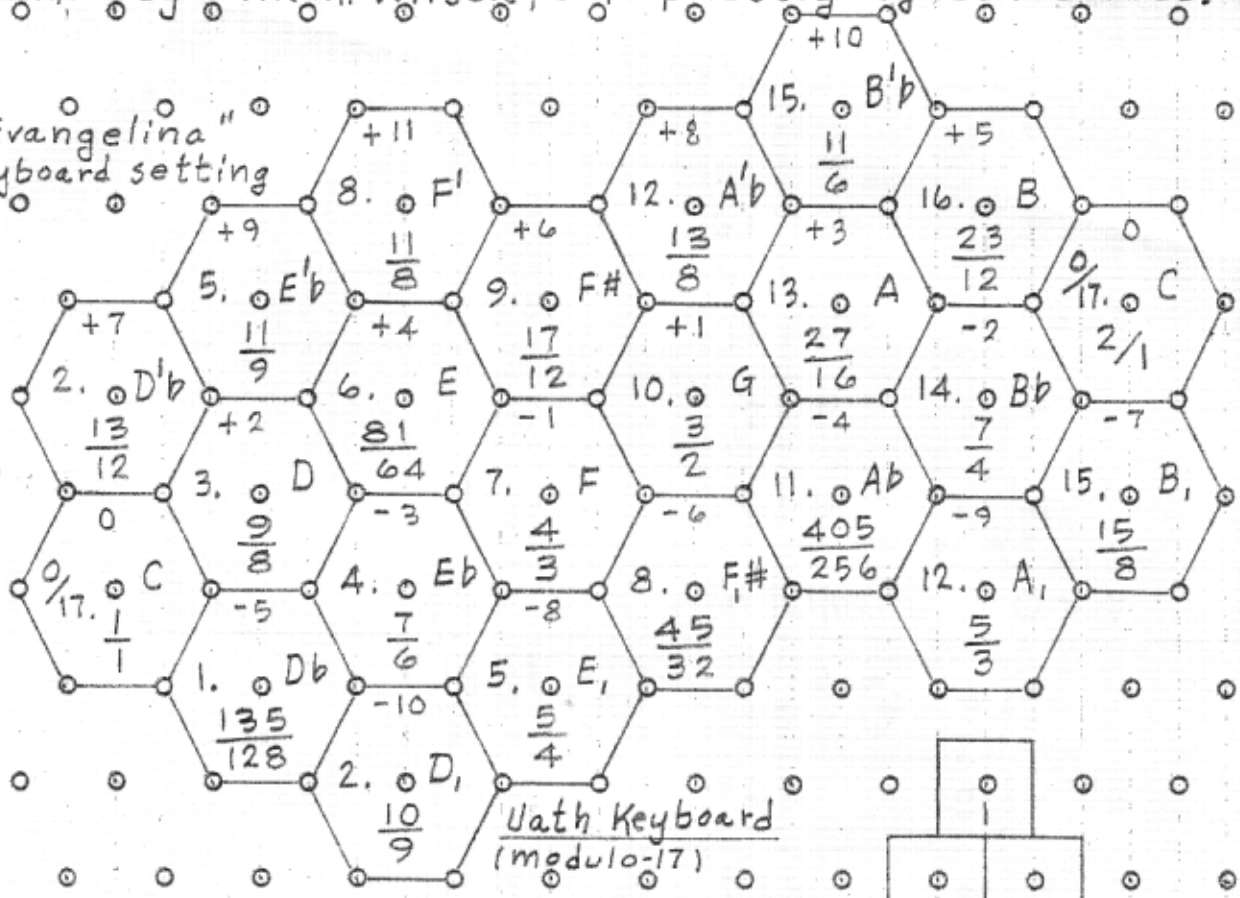
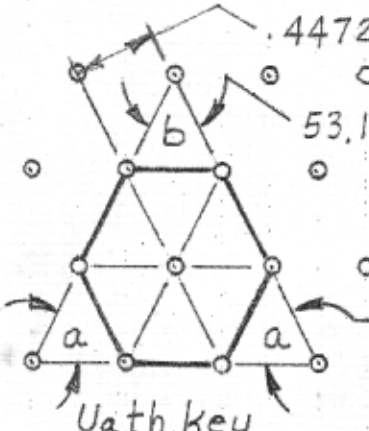
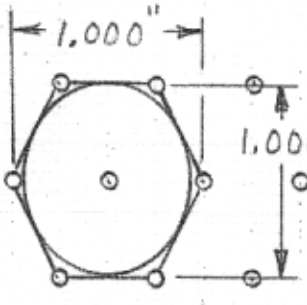
"Evangelina" Keyboard setting



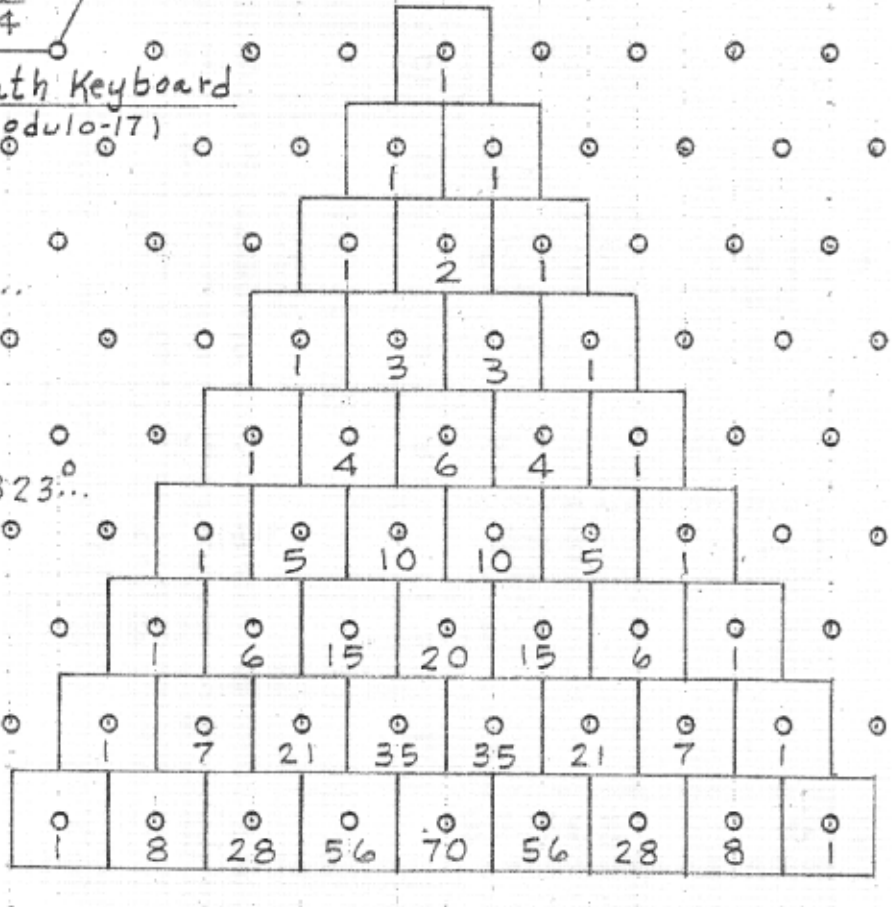
Uath Keyboard (modulo-17)



Uath key



Inscribed 60° Ellipse

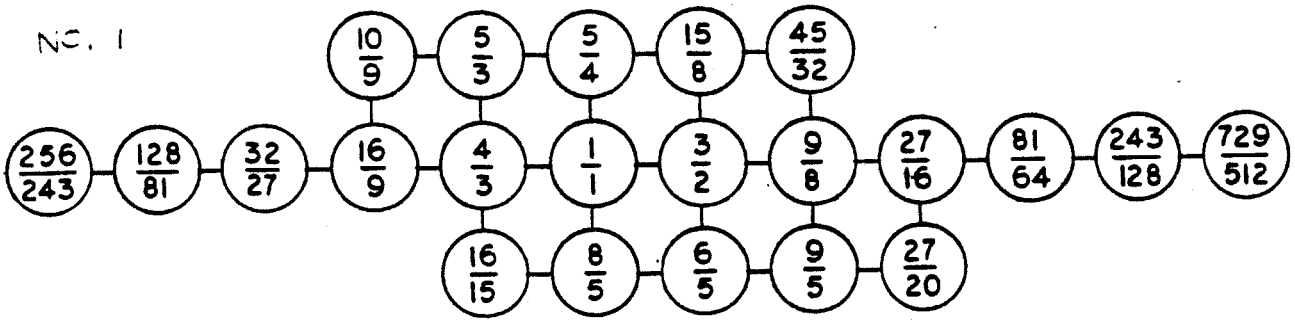


(Meru prastāra)

So-called Pascal's Triangle

Ref; "On the use of Series in Hindu mathematics" by A.N. Singh, OSIRIS, Vol 1 (January 1936) pp. 623-624.

NO. 1



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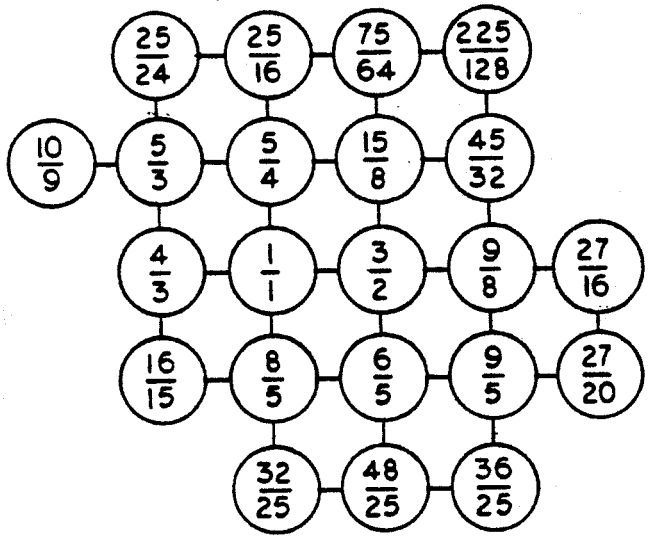

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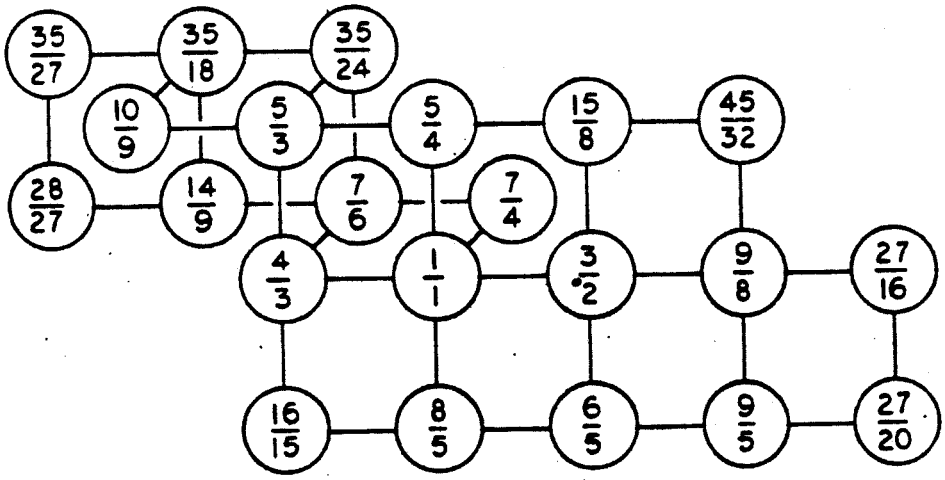

22-TONE CONSTANT SCALE STRUCTURE

PRE-ISSUE BY ERV WILSON 20 SEP 1967
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5-limit 22-Tone System of Srutis

(Indian Style)

Hindo inflections must occur simultaneously

				(40/27)	10/9	5/3	5/4	15/8	45/32		
256/243	128/81	32/27	16/9	4/3	1/1	3/2	9/8	27/16	81/64	243/128	729/512
				(64/45)	16/5	8/5	6/5	9/5	27/20		

5-limit 22-Tone System, Wilson

(European Style)

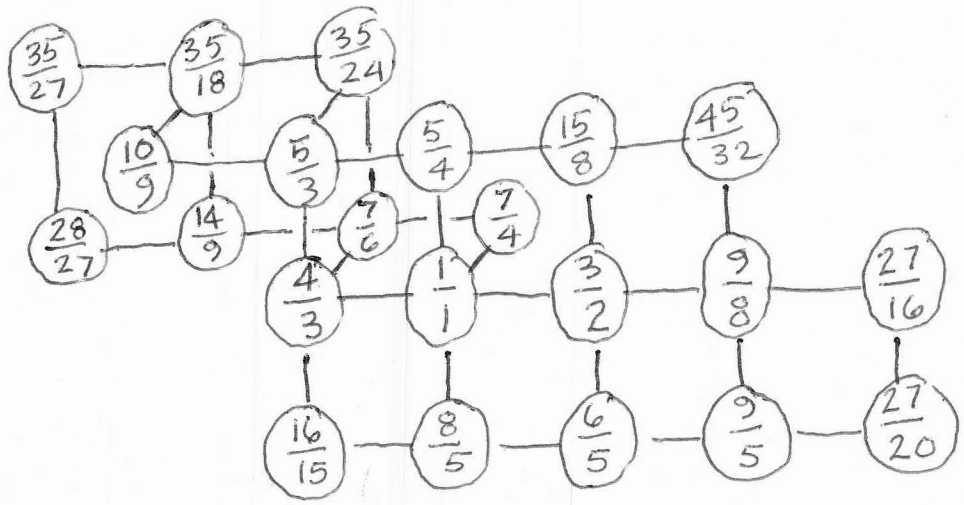
	25/24	25/16	75/64	225/128
10/9	5/3	5/4	15/8	45/32
4/3	1/1	3/2	9/8	27/16
16/15	8/5	6/5	9/5	27/20
32/25	48/25	36/25	(54/50)	

Tho this inflection looks neat on paper, creating 3 Interlocked duodenes, is for Practical, and Aesthetic reasons of a melodic nature not as desireable as the 10/9.

Letter to John Chalmers from E. Wilson
Aug 3, 1965

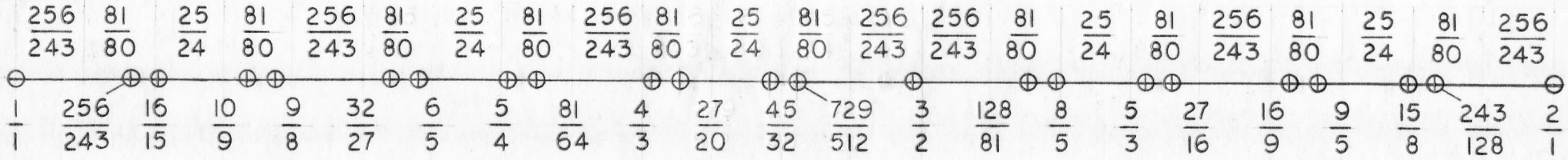
7-limit 22-Tone System, Wilson

(Greek Style)

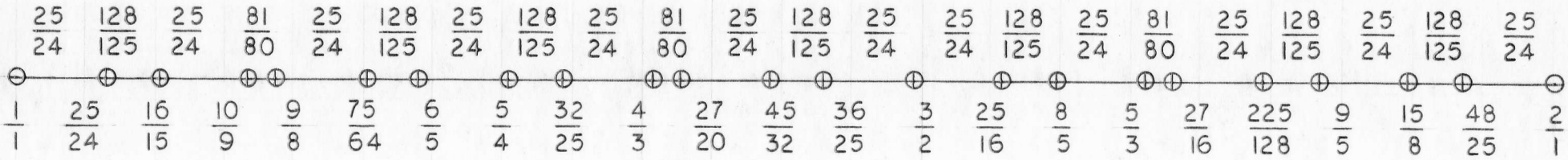


These 3 systems have 15 tones in common and 7 variable tones. The 7 variables of the 7-limit system are in diatonic relation to the 14/9, and give rise to a series of enharmonic permutations.

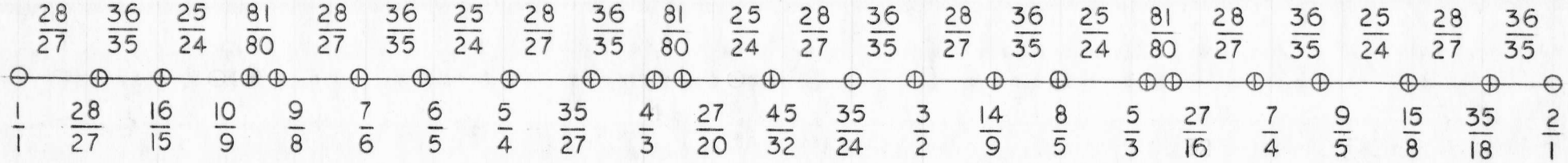
NO. 1


256/243 81/80 25/24 81/80 256/243 81/80 25/24 81/80 256/243 81/80 25/24 81/80 256/243 256/243 81/80 25/24 81/80 256/243 81/80 25/24 81/80 256/243
1/1 256/243 16/15 10/9 9/8 32/27 6/5 5/4 81/64 4/3 27/20 45/32 729/512 3/2 128/81 8/5 5/3 27/16 16/9 9/5 15/8 243/128 2/1

NO. 2.


25/24 128/125 25/24 81/80 25/24 128/125 25/24 128/125 25/24 81/80 25/24 128/125 25/24 25/24 128/125 25/24 81/80 25/24 128/125 25/24 128/125 25/24
1/1 25/24 16/15 10/9 9/8 75/64 6/5 5/4 32/25 4/3 27/20 45/32 36/25 3/2 25/16 8/5 5/3 27/16 225/128 9/5 15/8 48/25 2/1

NO. 3.


28/27 36/35 25/24 81/80 28/27 36/35 25/24 28/27 36/35 81/80 25/24 28/27 36/35 28/27 36/35 25/24 81/80 28/27 36/35 25/24 28/27 36/35
1/1 28/27 16/15 10/9 9/8 7/6 6/5 5/4 35/27 4/3 27/20 45/32 35/24 3/2 14/9 8/5 5/3 27/16 7/4 9/5 15/8 35/18 2/1

Letter to John Chalmers from Erv Wilson Aug 3, 65

5-limit 22-tone System of Srutis

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	256/243	81/80	25/24	81/80	256/243	81/80	25/24	81/80	256/243	81/80	25/24	81/80	256/243	256/243	81/80	25/24	81/80	256/243	81/80	25/24	81/80	256/243	
1/1	256/243	16/15	10/9	9/8	32/27	6/5	5/4	81/64	4/3	27/20	45/32	729/512	3/2	128/81	8/5	5/3	27/16	16/9	9/5	15/8	243/128	2/1

5-limit 22-tone System, Wilson

	25/24	128/125	25/24	81/80	25/24	128/125	25/24	128/125	25/24	81/80	25/24	128/125	25/24	25/24	128/125	25/24	81/80	25/24	128/125	25/24	128/125	25/24	
1/1	25/24	16/15	10/9	9/8	75/64	6/5	5/4	32/25	4/3	27/20	45/32	36/25	3/2	25/16	8/5	5/3	27/16	225/128	9/5	15/8	48/25	2/1	

7-limiT 22-tone System, Wilson

	28/27	36/35	25/24	81/80	28/27	36/35	25/24	28/27	36/35	81/80	25/24	28/27	36/35	28/27	36/35	25/24	81/80	28/27	36/35	25/24	28/27	36/35	
1/1	28/27	16/15	10/9	9/8	7/6	6/5	5/4	35/27	4/3	27/20	45/32	35/24	3/2	14/9	8/5	5/3	27/16	7/4	9/5	15/8	35/18	2/1	

The above systems are completely constant; each given interval is invariably composed of a constant number of degrees. Reversely, there is a high degree of stability; each given number of degrees produces a relatively high proportion of identical intervals. (total stability is possible only in equal temperament of the scale.)

From the above species one might postulate a series of 9/8 Pentachords and their permutations.

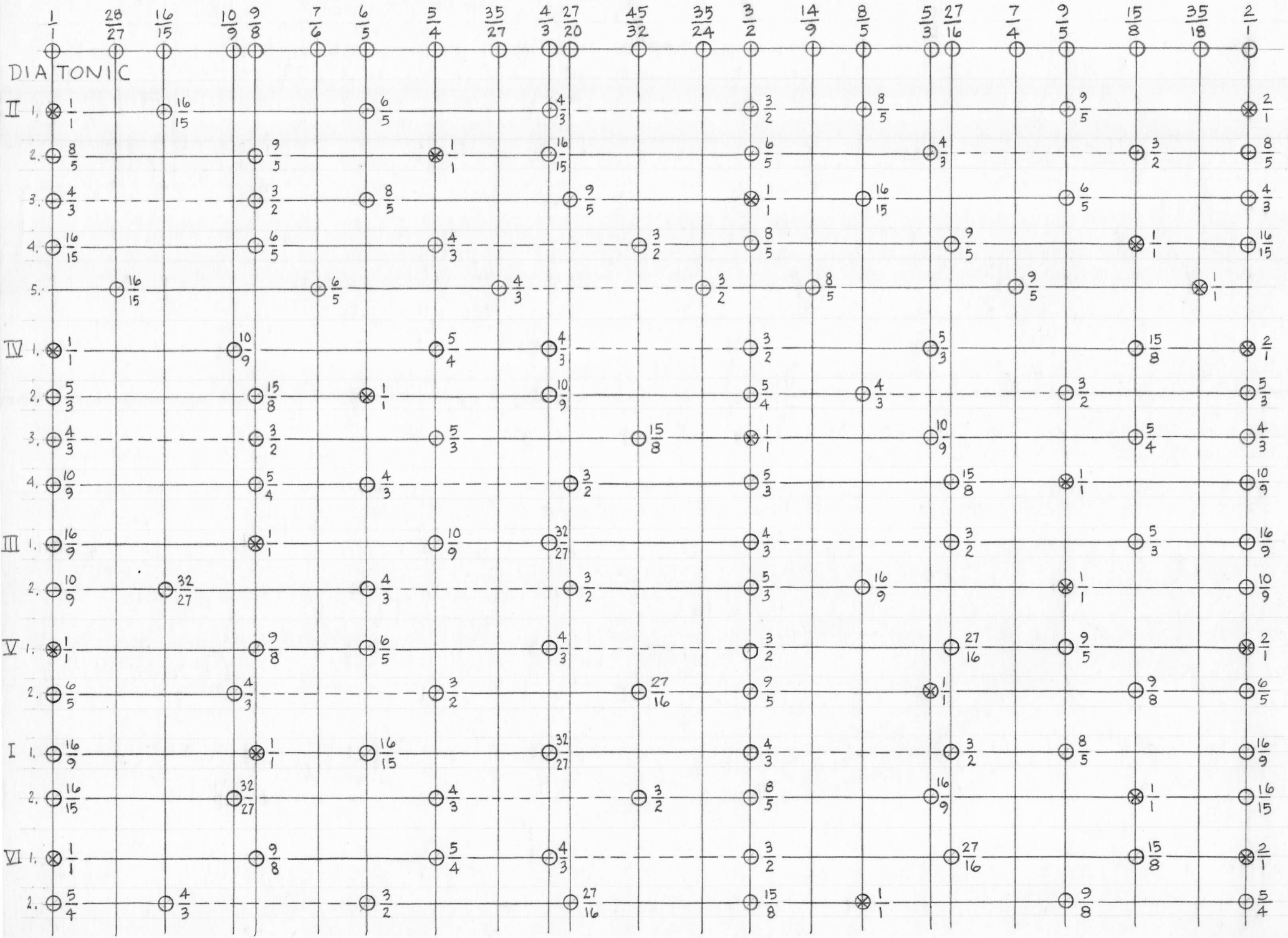
I.E. 1/1 256/243 16/15 10/9 9/8 and permutation

1/1 25/24 16/15 10/9 9/8 "

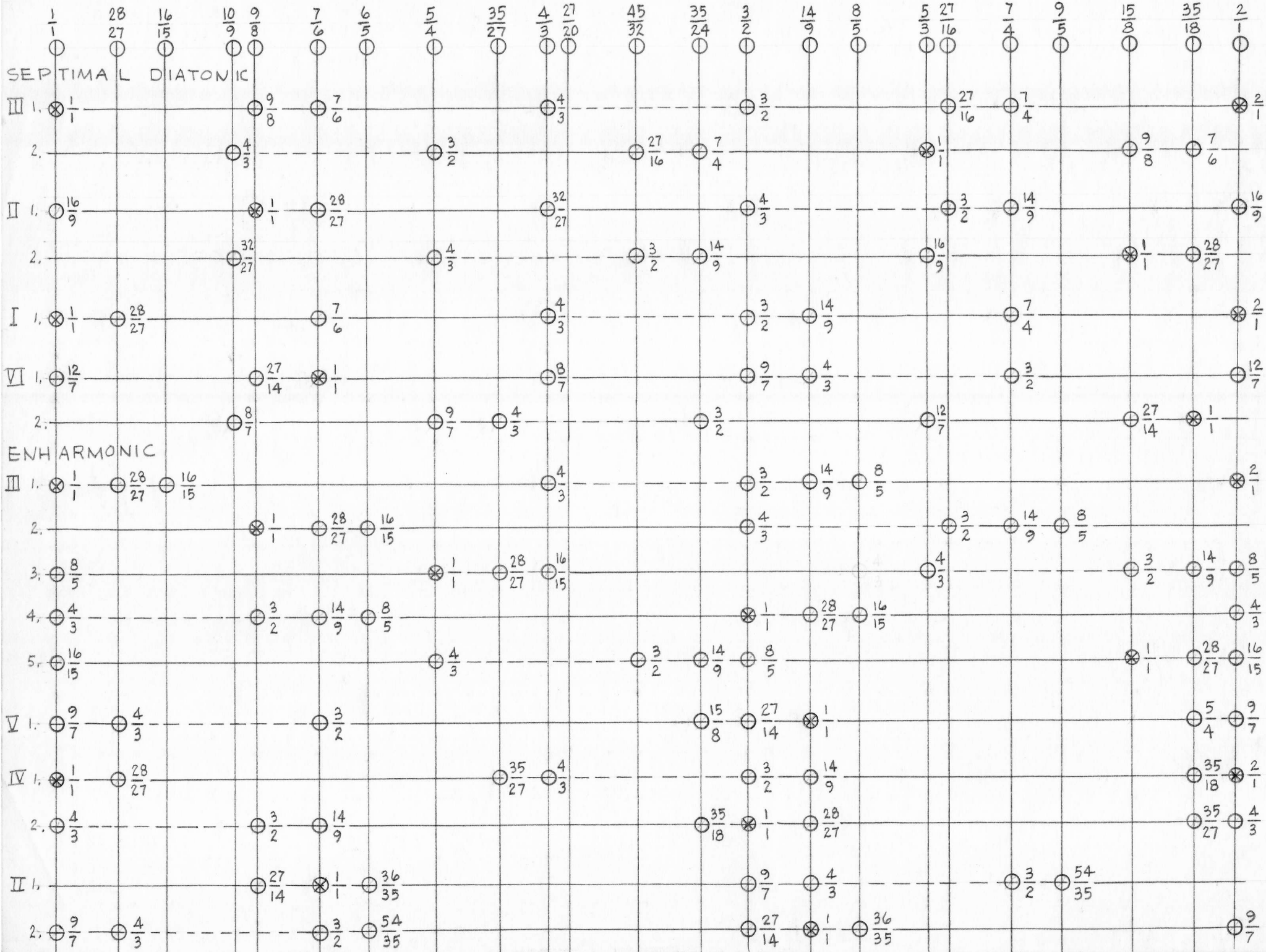
1/1 28/27 16/15 10/9 9/8 "

as the 9/8 is invariably constructed of one or another of the permutation of the respective base Pentachord.

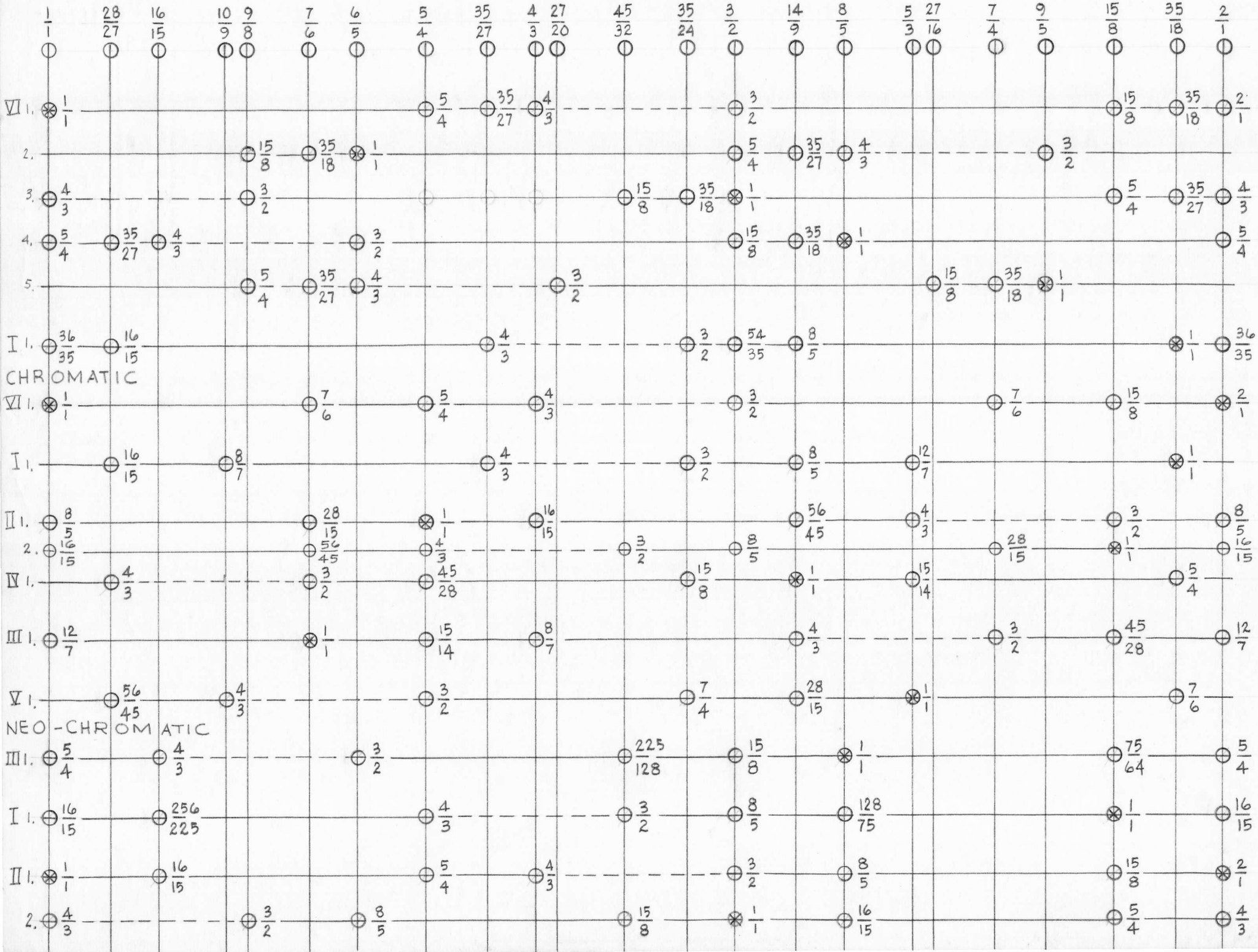
NO. 3


1/1 28/27 16/15 10/9 9/8 7/6 6/5 5/4 35/27 4/3 27/20 45/32 35/24 3/2 14/9 8/5 5/3 27/16 7/4 9/5 15/8 35/18 2/1
DIATONIC
II 1. 1/1 16/15 6/5 4/3 3/2 8/5 9/5 2/1
2. 8/5 9/5 1/1 16/15 6/5 4/3 3/2 8/5
3. 4/3 3/2 8/5 9/5 1/1 16/15 6/5 4/3
4. 16/15 6/5 4/3 3/2 8/5 9/5 1/1 16/15
5. 16/15 6/5 4/3 3/2 8/5 9/5 1/1
IV 1. 1/1 10/9 5/4 4/3 3/2 5/3 15/8 2/1
2. 5/3 15/8 1/1 10/9 5/4 4/3 3/2 5/3
3. 4/3 3/2 5/3 15/8 1/1 10/9 5/4 4/3
4. 10/9 5/4 4/3 3/2 5/3 15/8 1/1 10/9
III 1. 16/9 1/1 10/9 32/27 4/3 3/2 5/3 16/9
2. 10/9 32/27 4/3 3/2 5/3 16/9 1/1 10/9
V 1. 1/1 9/8 6/5 4/3 3/2 27/16 9/5 2/1
2. 6/5 4/3 3/2 27/16 9/5 1/1 9/8 6/5
I 1. 16/9 1/1 16/15 32/27 4/3 3/2 8/5 16/9
2. 16/15 32/27 4/3 3/2 8/5 16/9 1/1 16/15
VI 1. 1/1 9/8 5/4 4/3 3/2 27/16 15/8 2/1
2. 5/4 4/3 3/2 27/16 15/8 1/1 9/8 5/4

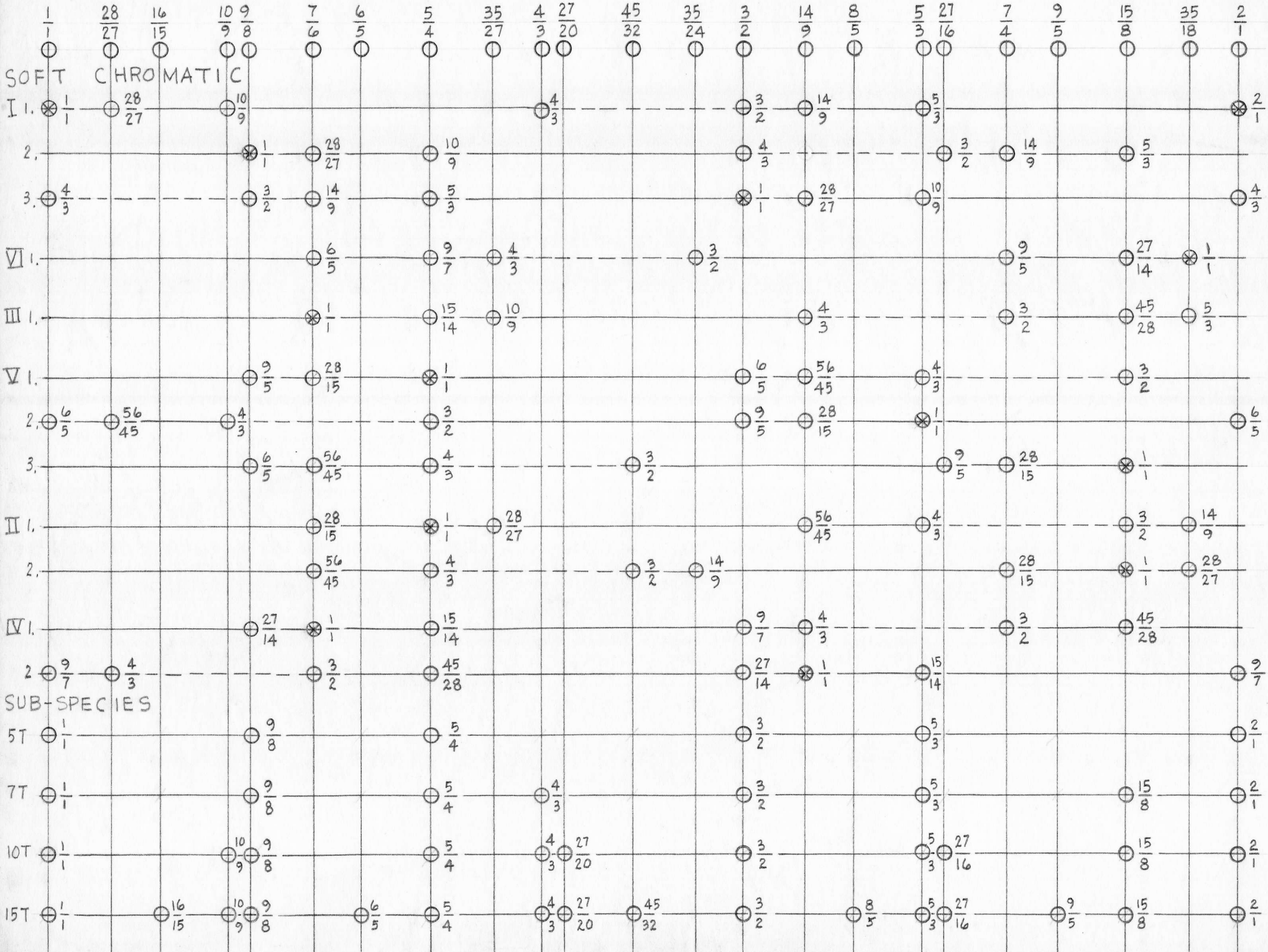
SHEET 3


1/1 28/27 16/15 10/9 9/8 7/6 6/5 5/4 35/27 4/3 27/20 45/32 35/24 3/2 14/9 8/5 5/3 27/16 7/4 9/5 15/8 35/18 2/1
SEPTIMAL DIATONIC
III 1. 1/1 9/8 7/6 4/3 3/2 27/16 7/4 2/1
2. 4/3 3/2 27/16 7/4 1/1 9/8 7/6
II 1. 16/9 1/1 28/27 32/27 4/3 3/2 14/9 16/9
2. 32/27 4/3 3/2 14/9 16/9 1/1 28/27
I 1. 1/1 28/27 7/6 4/3 3/2 14/9 7/4 2/1
VI 1. 12/7 27/14 1/1 8/7 9/7 4/3 3/2 12/7
2. 8/7 9/7 4/3 3/2 12/7 27/14 1/1
ENHARMONIC
III 1. 1/1 28/27 16/15 4/3 3/2 14/9 8/5 2/1
2. 1/1 28/27 16/15 4/3 3/2 14/9 8/5
3. 8/5 1/1 28/27 16/15 4/3 3/2 14/9 8/5
4. 4/3 3/2 14/9 8/5 1/1 28/27 16/15 4/3
5. 16/15 4/3 3/2 14/9 8/5 1/1 28/27 16/15
V 1. 9/7 4/3 3/2 15/8 27/14 1/1 5/4 9/7
IV 1. 1/1 28/27 35/27 4/3 3/2 14/9 35/18 2/1
2. 4/3 3/2 14/9 35/18 1/1 28/27 35/27 4/3
II 1. 27/14 1/1 36/35 9/7 4/3 3/2 54/35
2. 9/7 4/3 3/2 54/35 27/14 1/1 36/35 9/7

SHEET 4

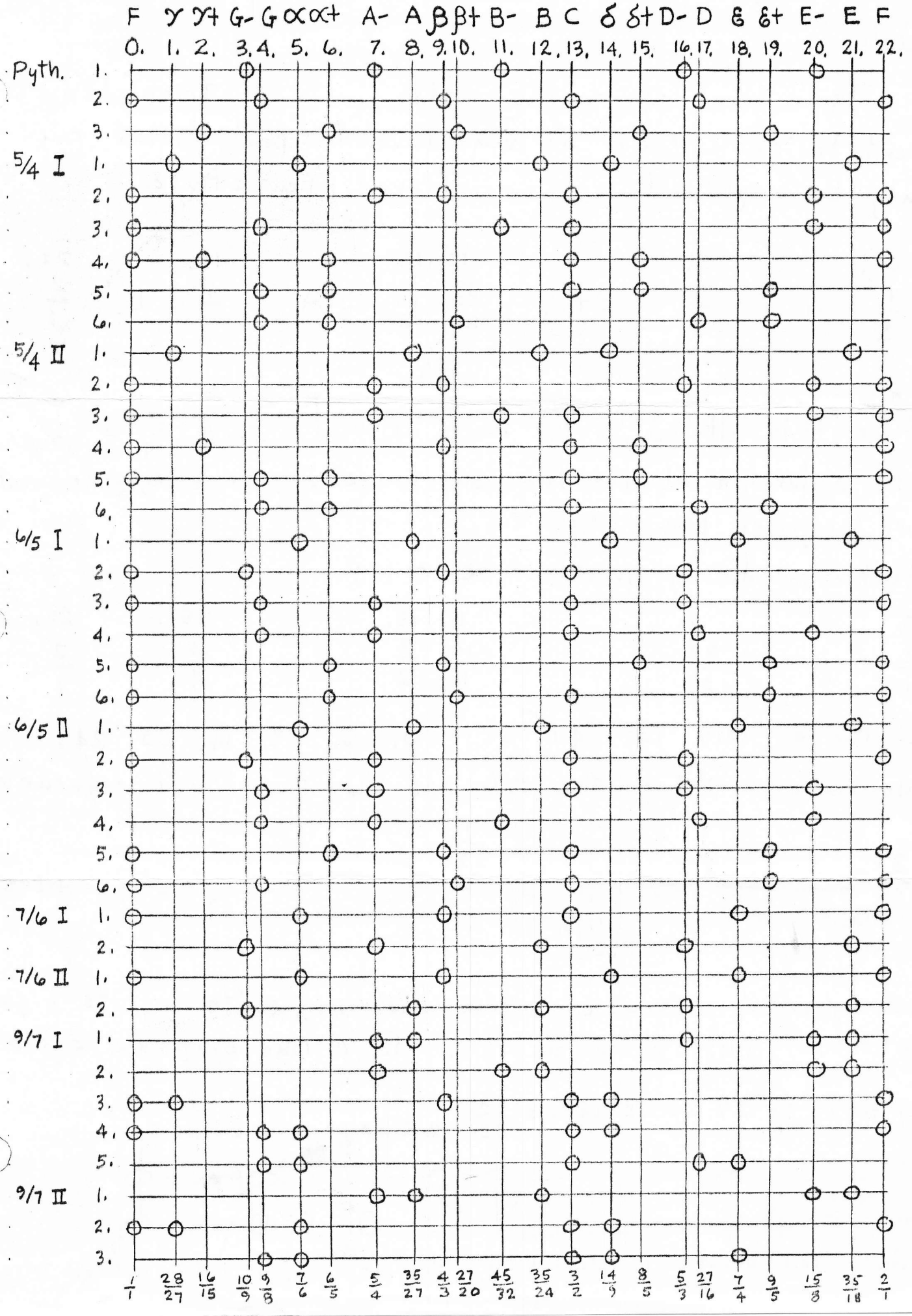

1/1 28/27 16/15 10/9 9/8 7/6 6/5 5/4 35/27 4/3 27/20 45/32 35/24 3/2 14/9 8/5 5/3 27/16 7/4 9/5 15/8 35/18 2/1
VI 1.
2.
3.
4.
5.
I 1.
CHROMATIC
VI 1.
I 1.
II 1.
2.
IV 1.
III 1.
V 1.
NEO-CHROMATIC
III 1.
I 1.
II 1.
2.

SHEET 5

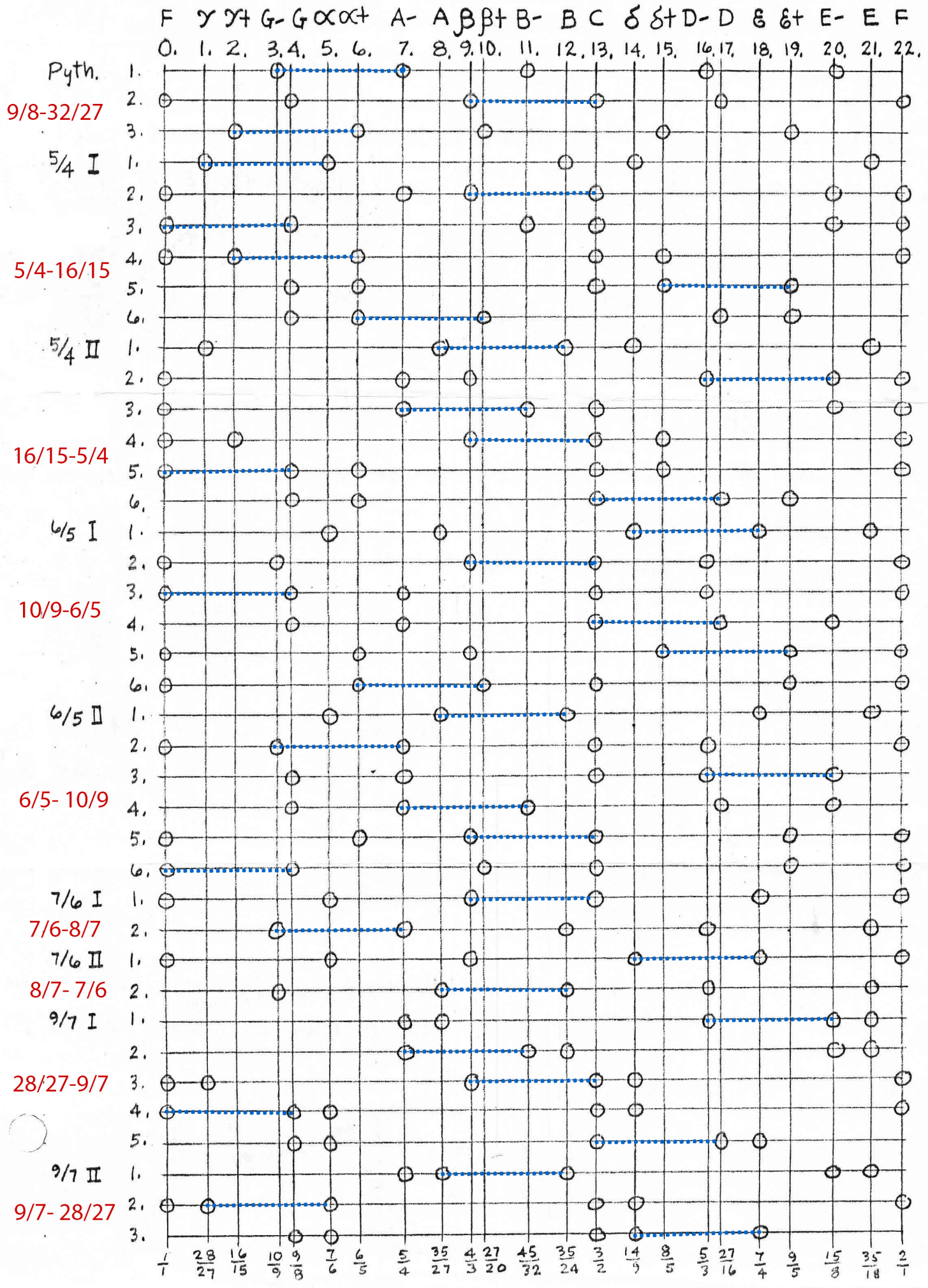

1/1 28/27 16/15 10/9 9/8 7/6 6/5 5/4 35/27 4/3 27/20 45/32 35/24 3/2 14/9 8/5 5/3 27/16 7/4 9/5 15/8 35/18 2/1
SOFT CHROMATIC
I 1. 1/1 28/27 10/9 4/3 3/2 14/9 5/3 2/1
2. 1/1 28/27 10/9 4/3 3/2 14/9 5/3
3. 4/3 3/2 14/9 5/3 1/1 28/27 10/9 4/3
VI 1. 6/5 9/7 4/3 3/2 9/5 27/14 1/1
III 1. 1/1 15/14 10/9 4/3 3/2 45/28 5/3
V 1. 9/5 28/15 1/1 6/5 56/45 4/3 3/2
2. 6/5 56/45 4/3 3/2 9/5 28/15 1/1 6/5
3. 6/5 56/45 4/3 3/2 9/5 28/15 1/1
II 1. 28/15 1/1 28/27 56/45 4/3 3/2 14/9
2. 56/45 4/3 3/2 14/9 28/15 1/1 28/27
IV 1. 27/14 1/1 15/14 9/7 4/3 3/2 45/28
2 9/7 4/3 3/2 45/28 27/14 1/1 15/14 9/7
SUB-SPECIES
5T 1/1 9/8 5/4 3/2 5/3 2/1
7T 1/1 9/8 5/4 4/3 3/2 5/3 15/8 2/1
10T 1/1 10/9 9/8 5/4 4/3 27/20 3/2 5/3 27/16 15/8 2/1
15T 1/1 16/15 10/9 9/8 6/5 5/4 4/3 27/20 45/32 3/2 8/5 5/3 27/16 9/5 15/8 2/1

SHEET 6

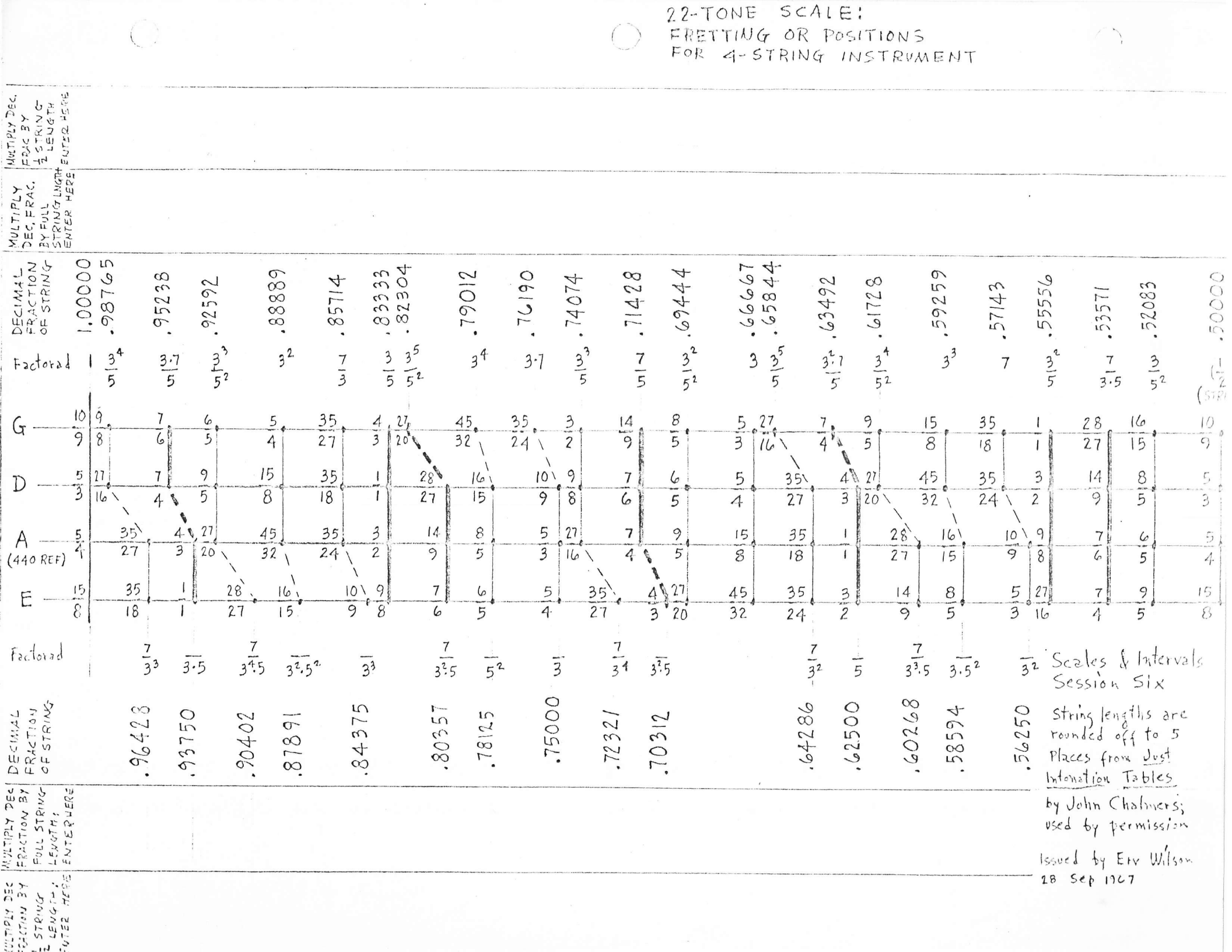
Tri-chordal, Pentatonic scales on the Trausceleste & Marimba. Issued Erv Wilson 1973



Tri-chordal, Pentatonic scales on the Trausceleste & Marimba. Issued Erv Wilson 1973



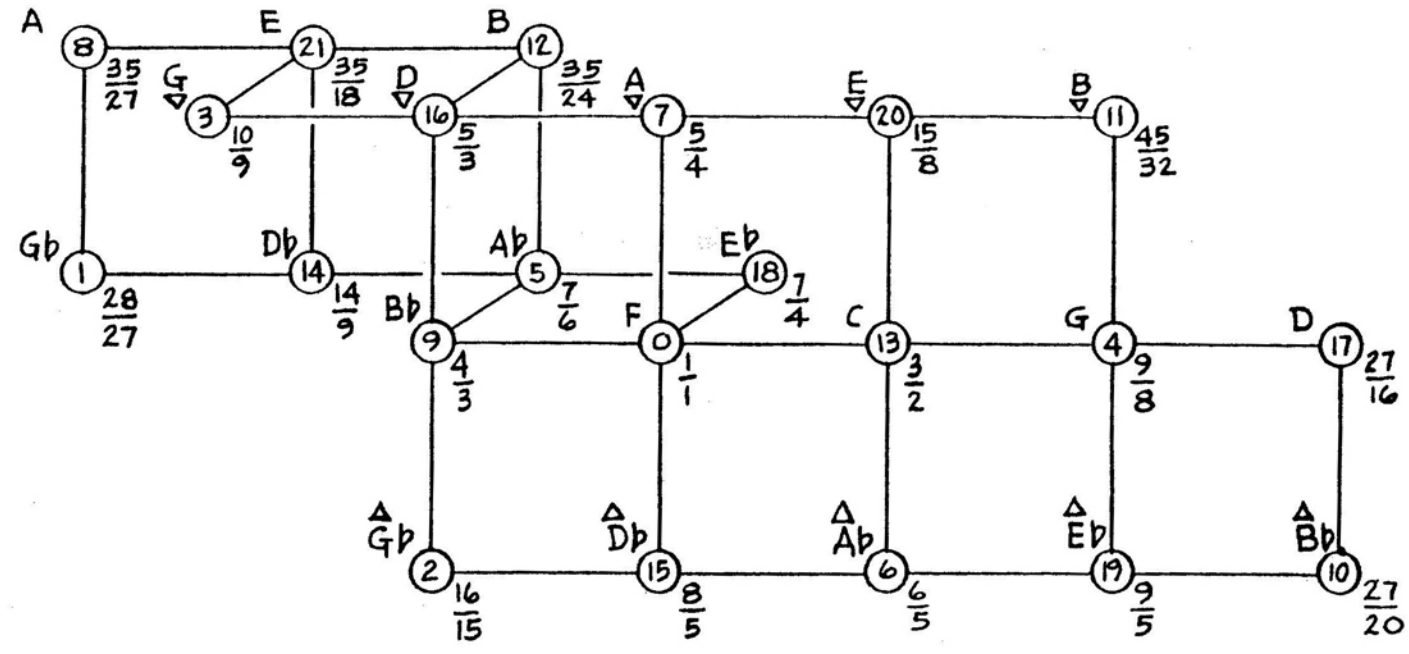
22-TONE SCALE:
FRETTING OR POSITIONS
FOR 4-STRING INSTRUMENT

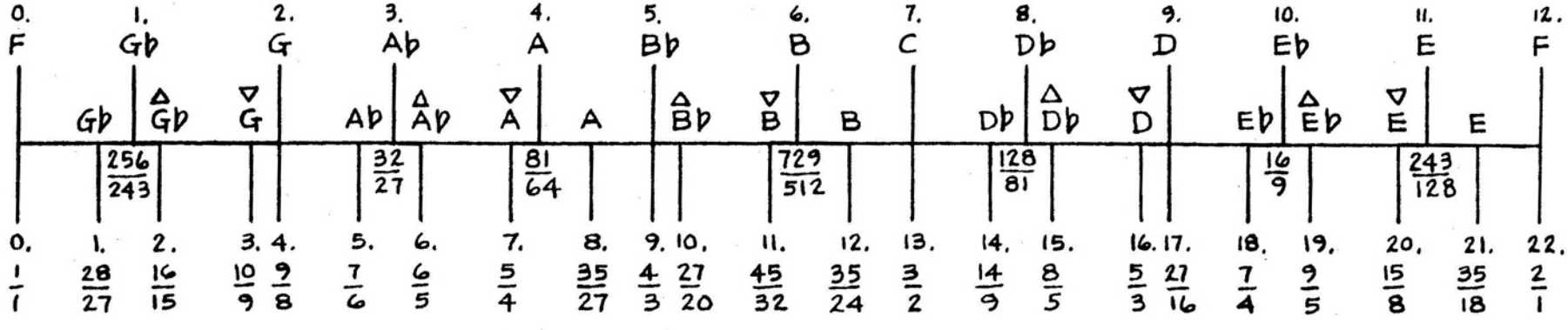


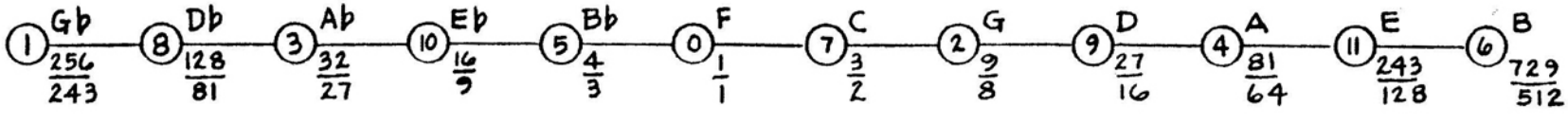
Scales & Intervals
Session Six

String lengths are rounded off to 5 places from Just Intonation Tables by John Chalmers; used by permission

Issued by Erv Wilson
28 Sep 1967







12-Tone PyThagorean & 22-Tone Scale Comparison
Issued by Erv Wilson 1 Nov 67

22-TONE MUSICAL INSTRUMENT

INVENTOR: ERV WILSON
ISSUED NOV. 4, 1965
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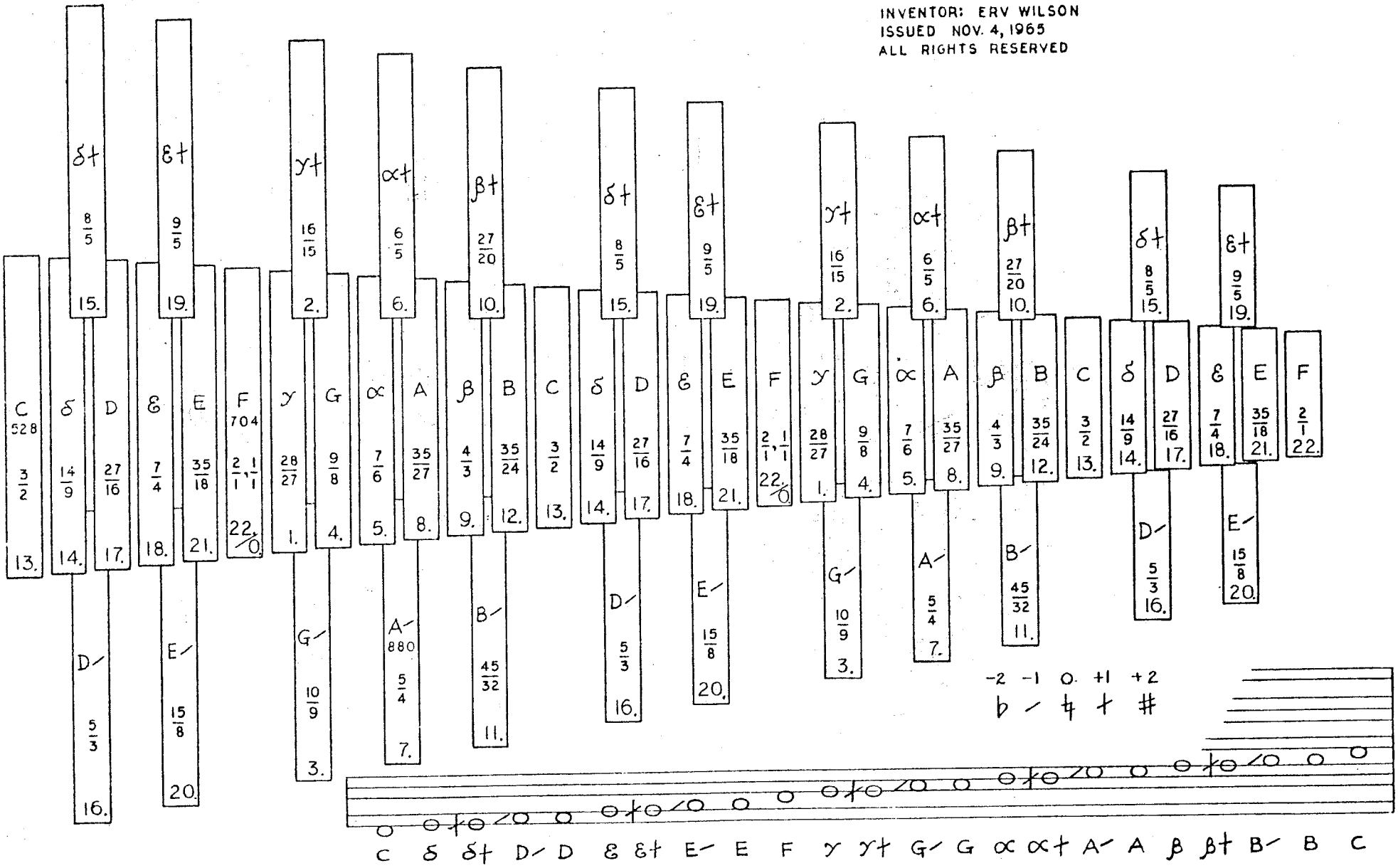
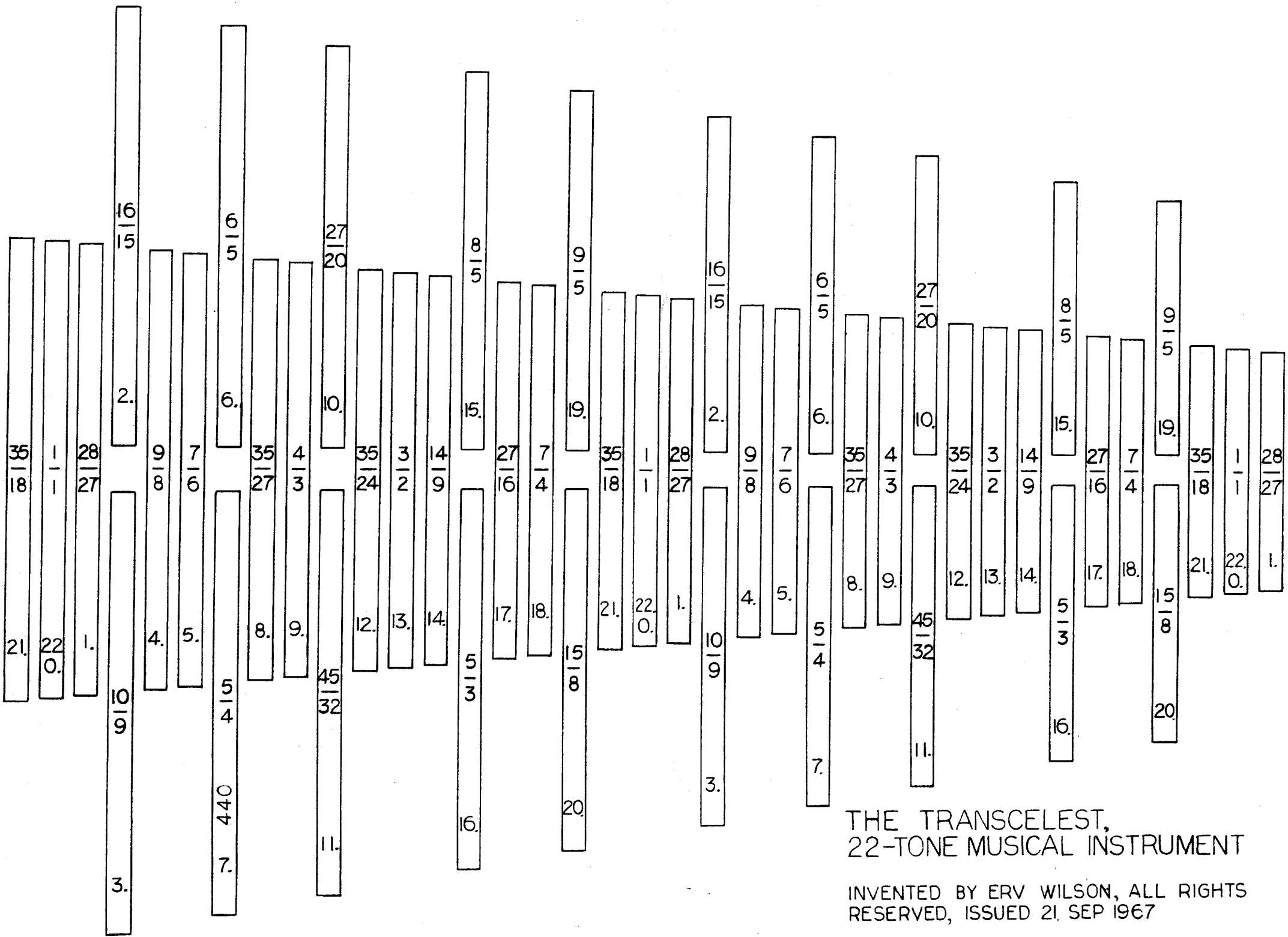


WILSON'S GENERALIZED KEYBOARD
(IN APPLICATION TO A 22-TONE SCALE)
PAT. PNDG., ALL RIGHTS RESERVED
ISSUED BY ERV WILSON, JULY 1966

15.	2.	6.	10.	15.	19.	2.	6.	10.	15.	19.	2.	6.	10.
8/5	16/15	6/5	27/20	8/5	9/5	16/15	6/5	27/20	8/5	9/5	16/15	6/5	27/20
14.	1.	5.	9.	14.	18.	1.	5.	9.	14.	18.	1.	5.	9.
14/9	28/27	7/6	4/3	14/9	7/4	28/27	7/6	4/3	14/9	7/4	28/27	7/6	4/3
13.	0.	4.	8.	13.	17.	0.	4.	8.	13.	17.	0.	4.	8.
3/2	22.	9/8	35/27	3/2	27/16	22.	9/8	35/27	3/2	27/16	22.	9/8	35/27
12.	2/1 1/1	3.	7.	12.	16.	2/1 1/1	3.	7.	12.	16.	2/1 1/1	3.	7.
35/24	21.	10/9	5/4	35/24	5/3	21.	10/9	5/4	35/24	5/3	21.	10/9	5/4
11.	35/18	20.	11.	45/32	20.	35/18	20.	11.	45/32	20.	35/18	20.	11.
45/32	20.	15/8	45/32	15/8	15/8	45/32	15/8



THE TRANSCELEST, 22-TONE MUSICAL INSTRUMENT

INVENTED BY ERV WILSON, ALL RIGHTS RESERVED, ISSUED 21 SEP 1967

SRUTI SONG

with classic tuning design © 1978 by EN Wilson

Sa	Ri	Ga	Ma	Pa	Dha	Ni
1/1	256/243	32/27	4/3	3/2	128/81	16/9
264	278.12	312.89	352	396	417.18	469.33
C	Db	Eb	F	G	Ab	Bb
22½	1.	5.	9.	13.	14.	18.

Sa	Ri	Ni	Dha	Pa	Ma	Ga	Re	Ri	Ga	Ma	Ni
1/1	243/128	9/5	27/16	3/2	729/512	81/64	9/8	10/9	5/4	45/32	15/8
528	501.19	475.20	445.50	396	375.89	334.12	297	293.33	330	371.25	495
C	B	Bb+	A	G	F#	E	D	D-	E-	F#-	B-
22½	21.	19.	17.	13.	12.	8.	4.	3.	7.	11.	20.

Re+	Ga+	Ma+	Dha+	Dhā	Gā	Mā	Ga	Re	Ga	Re
16/15	6/5	27/20	8/5	5/3	5/4	45/32	32/27	9/8	81/64	256/243
281.60	316.80	356.40	422.40	440	330	371.25	312.89	297	334.12	278.12
Db+	Eb+	F+	Ab+	A-	E-	F#-	Eb	D	E	Db
2.	6.	10.	15.	16.	7.	11.	5.	4.	8.	1.

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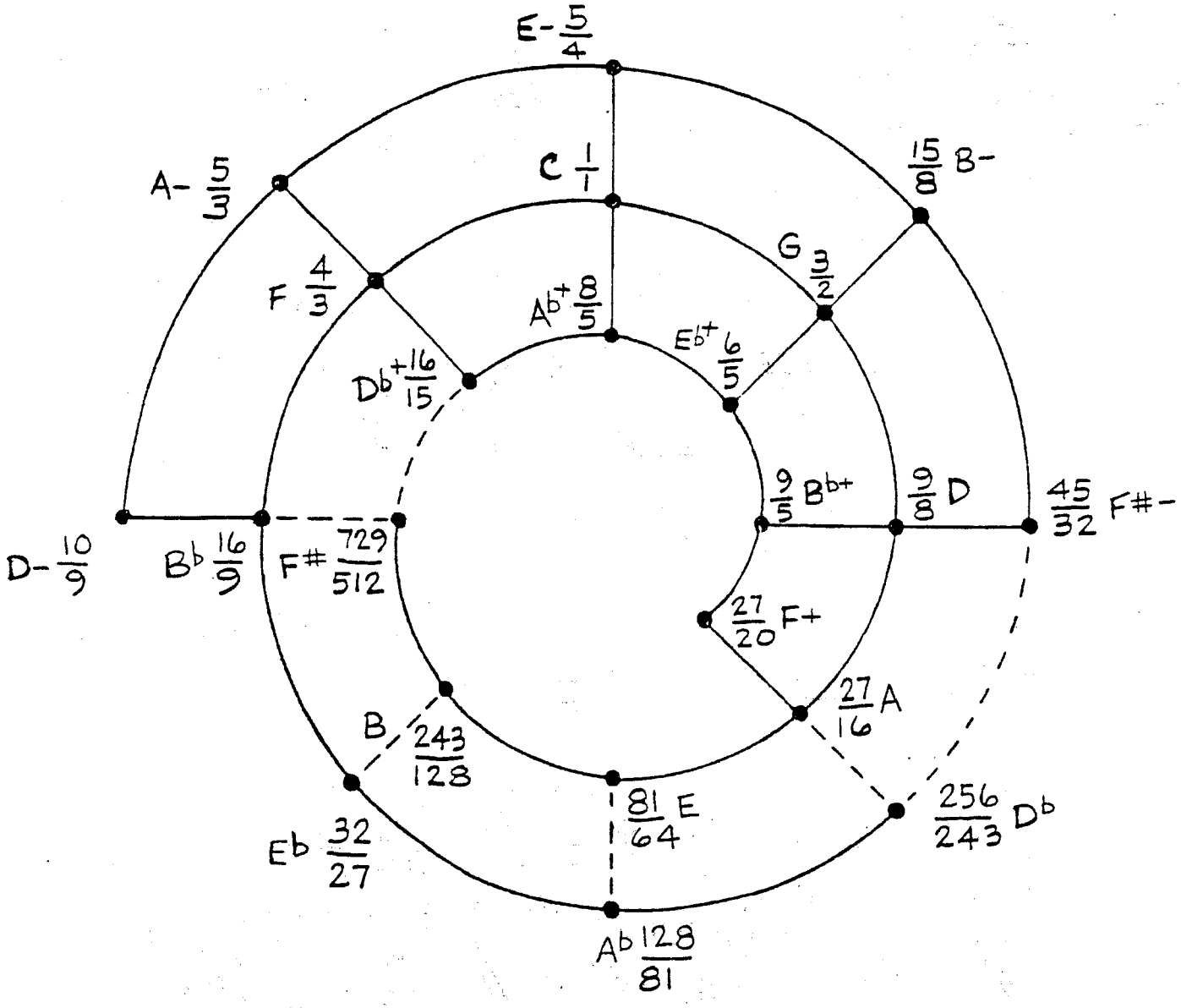
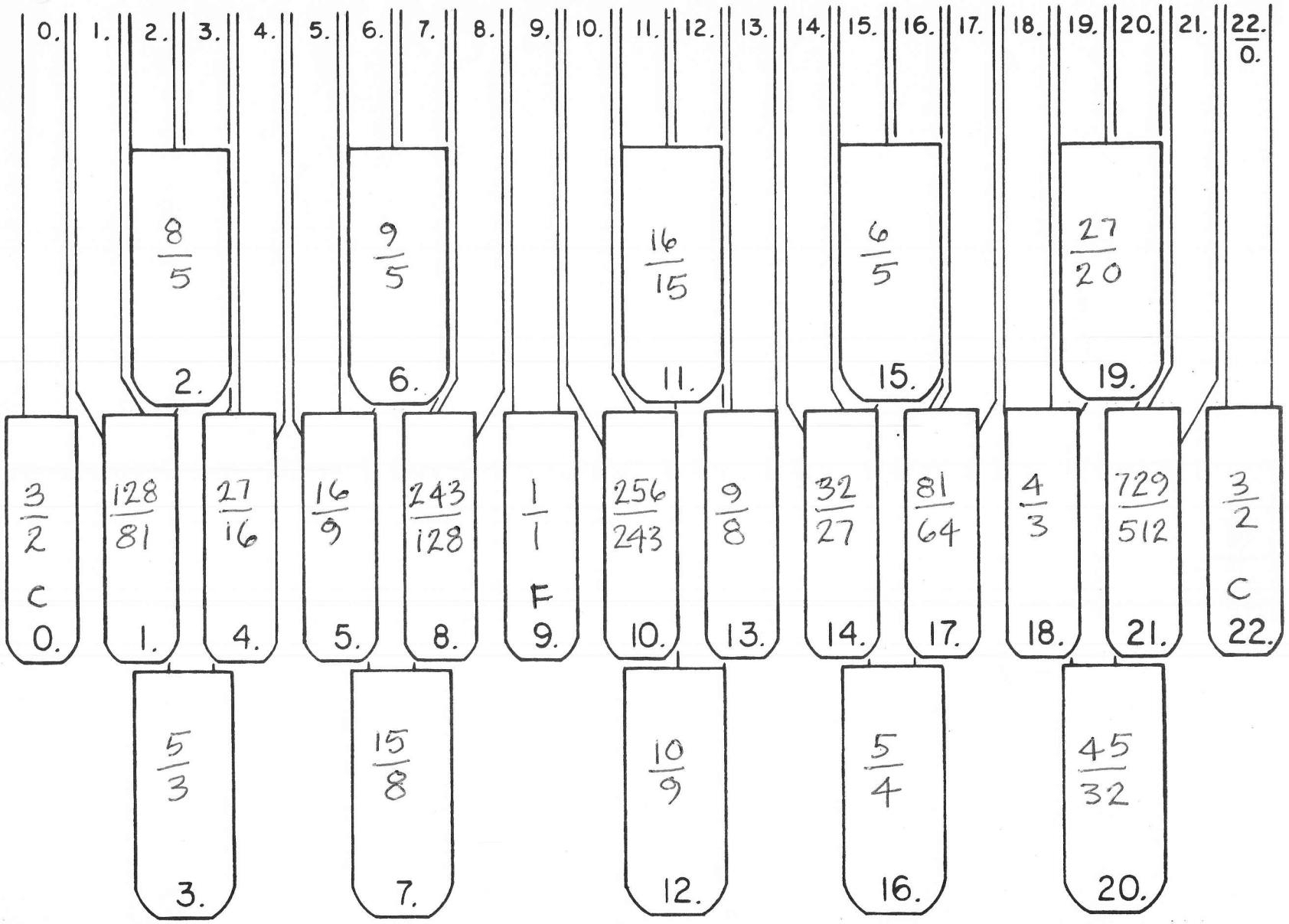
22-Tone Spiral Lattice

© Erv Wilson 1985



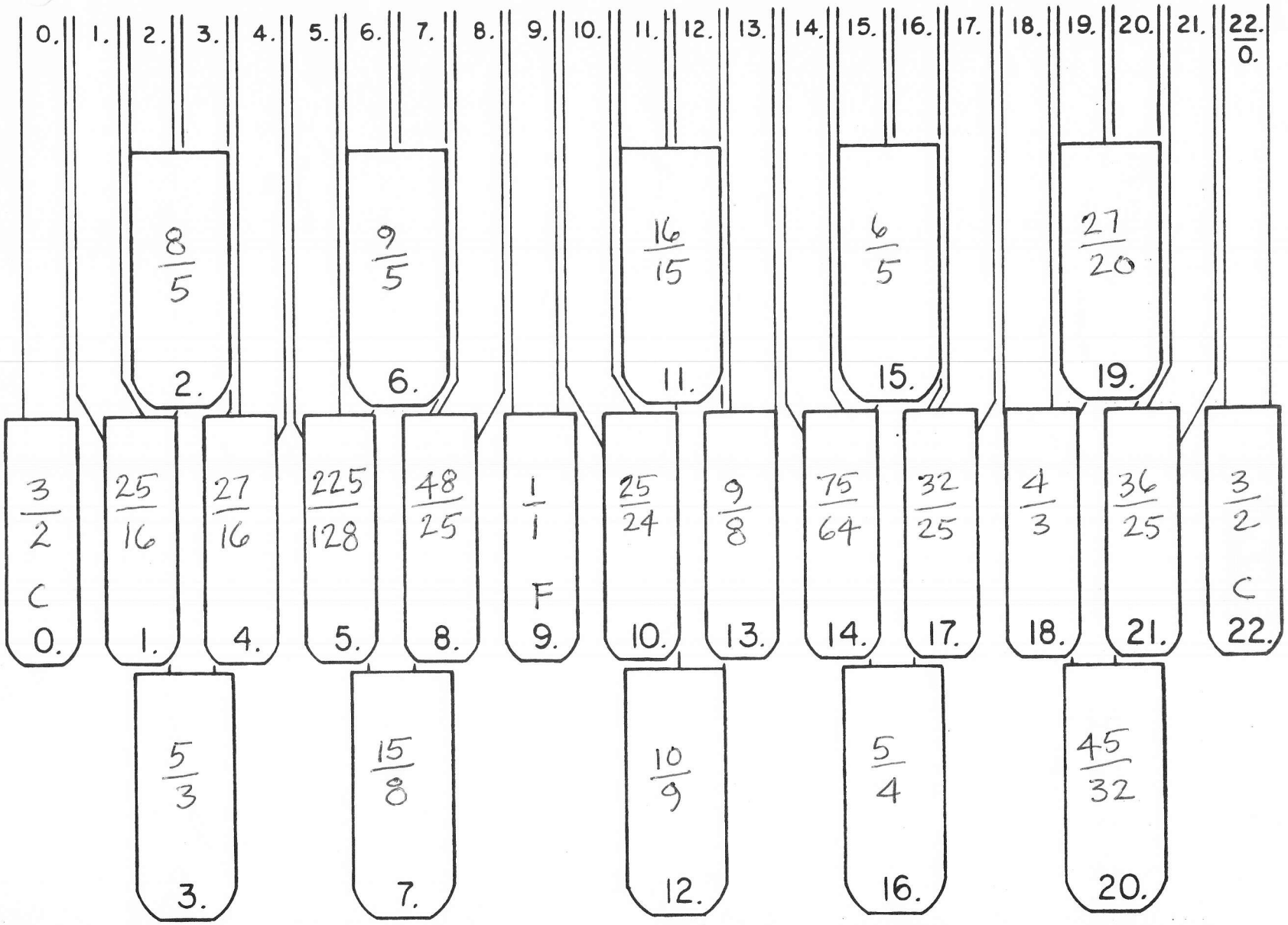


5-limit 22-tone System of Srutis

Letter to John Chalmers from Erv Wilson Aug 3, 65

THE 5-12-5, 22-TONE KEYBOARD

INVENTOR: ERVIN M. WILSON
ISSUED JULY 28, 1965

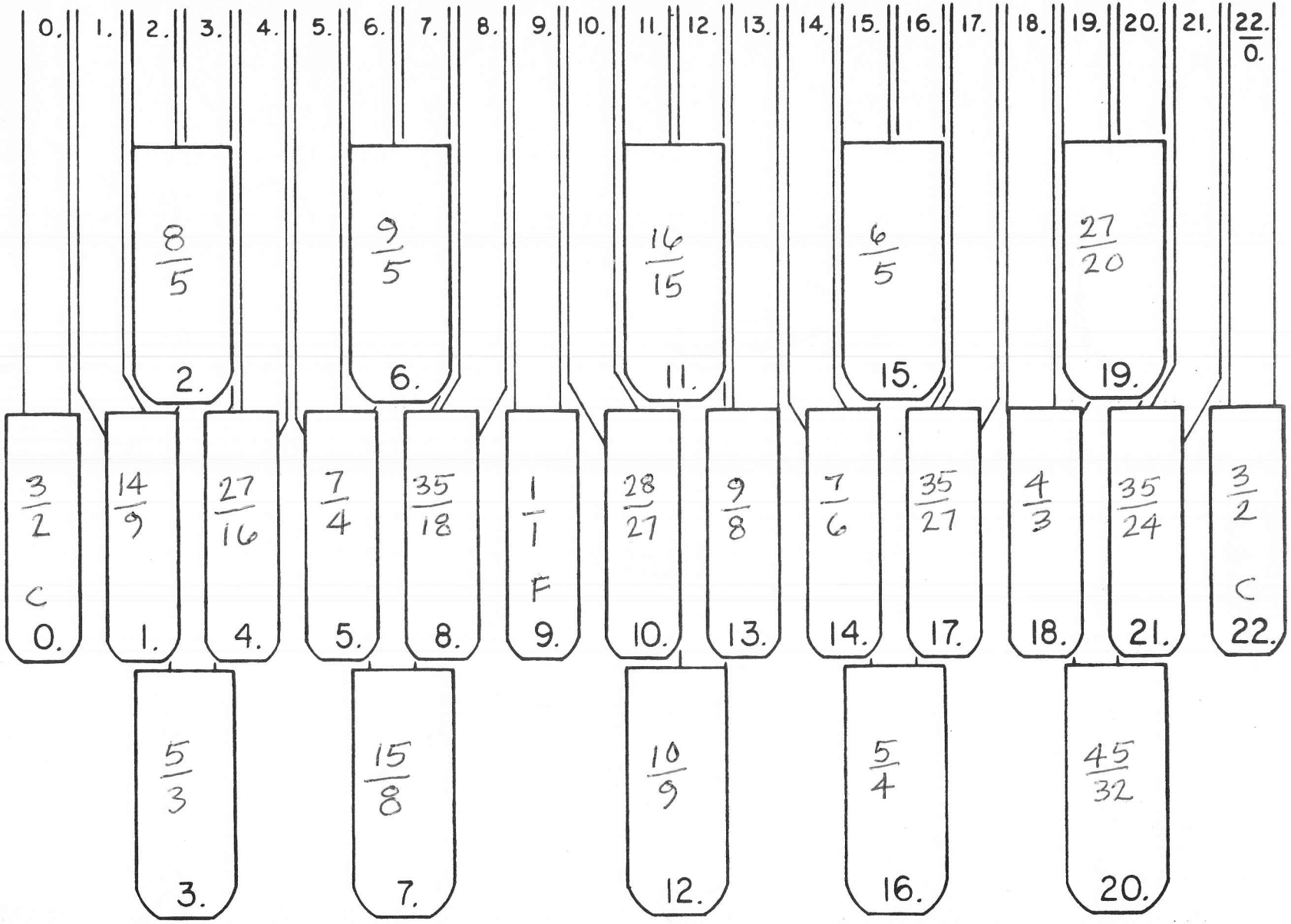


5-limit 22-tone System, Wilson

Letter to John Chalmers from Erv Wilson Aug 3, 65

THE 5-12-5, 22-TONE KEYBOARD

INVENTOR: ERVIN M. WILSON
ISSUED JULY 28, 1965

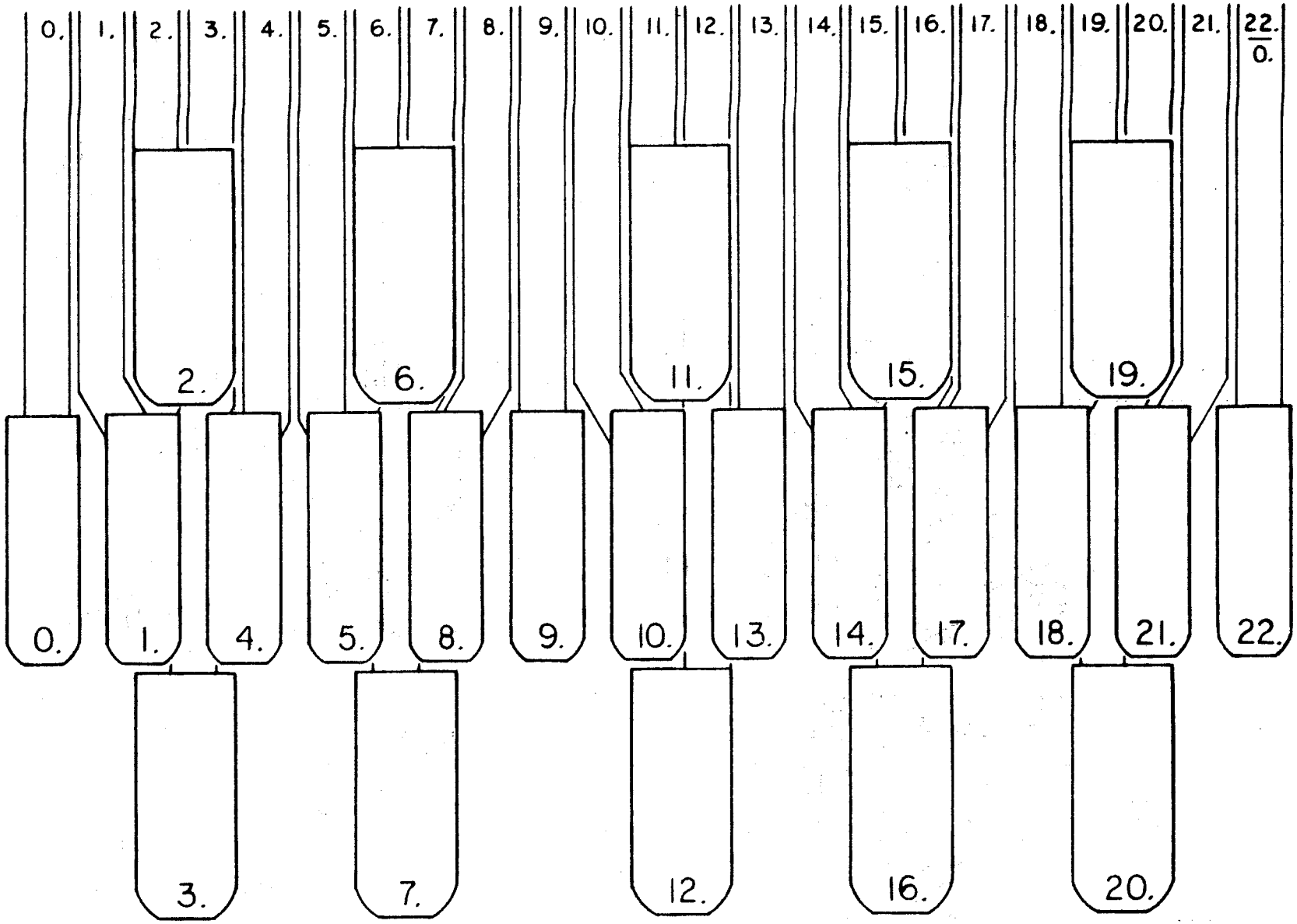


7-limit 22-tone Just System, Wilson

Letter to John Chalmers from Erv Wilson Aug 3, 65

THE 5-12-5, 22-TONE KEYBOARD

INVENTOR: ERVIN M. WILSON
ISSUED JULY 28, 1965



THE 5-12-5, 22-TONE KEYBOARD

INVENTOR: ERVIN M. WILSON
ISSUED JULY 28, 1965

4 Scales

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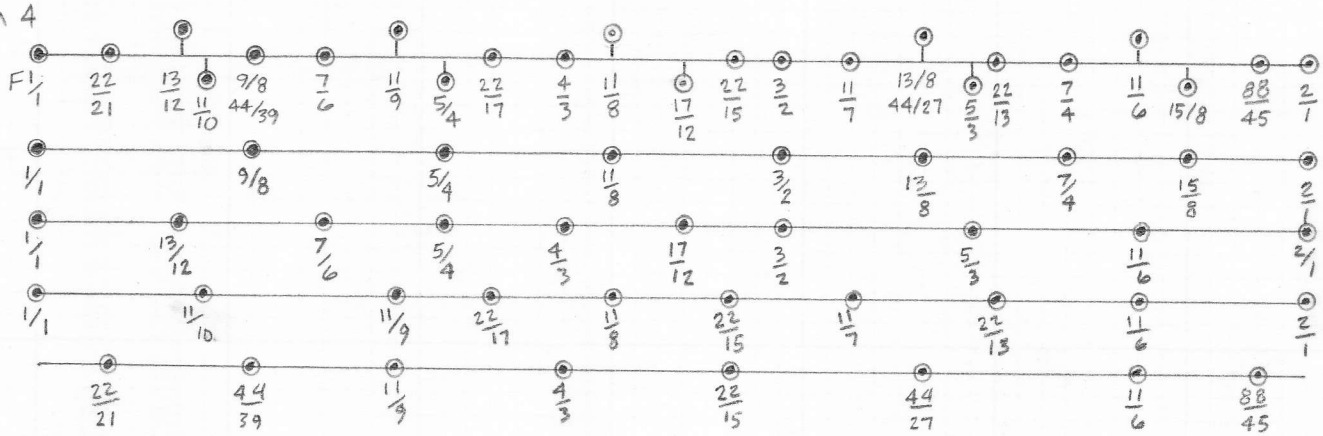
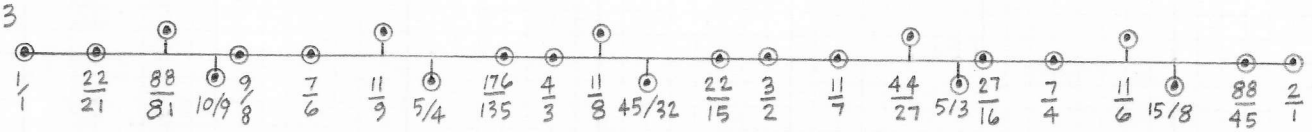
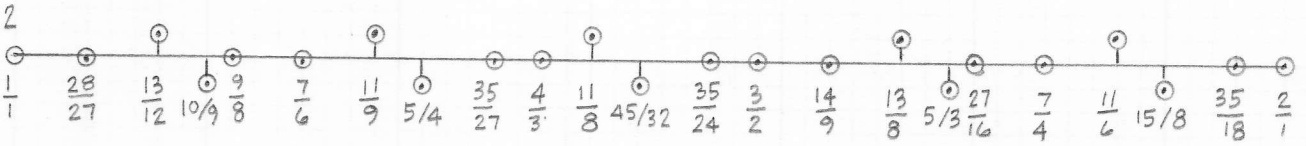
Wilson 4



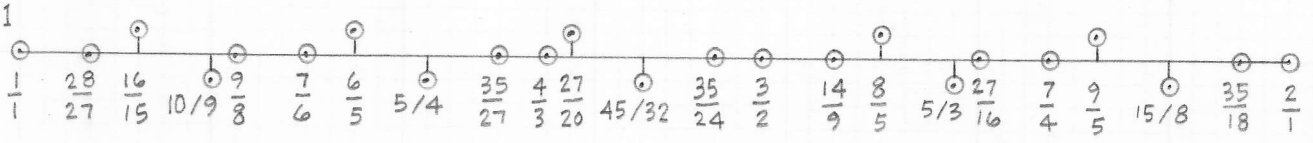
Wilson 3



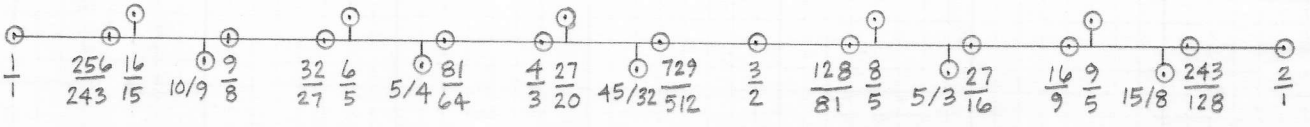
Wilson 2

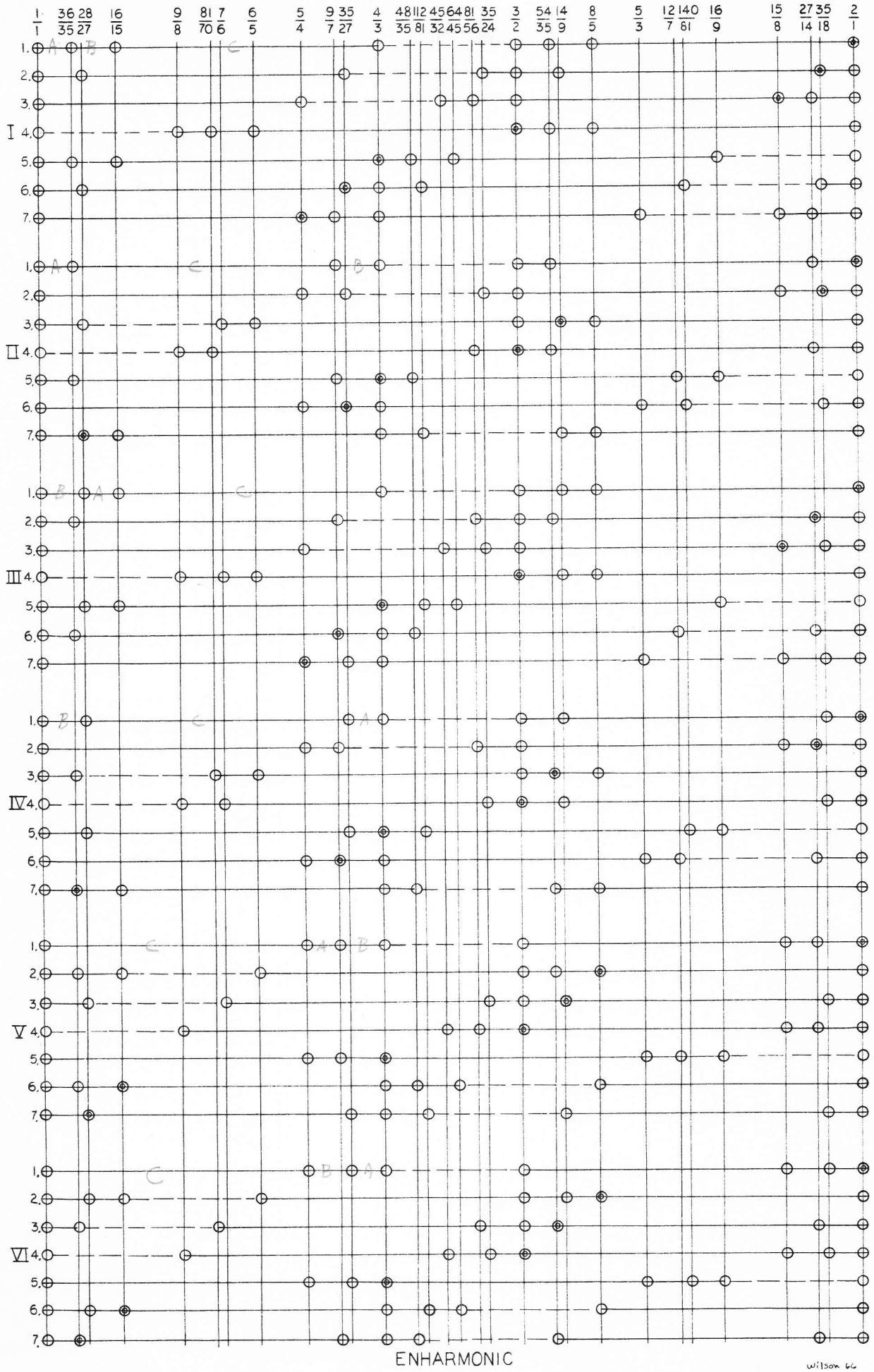


Wilson 1



India

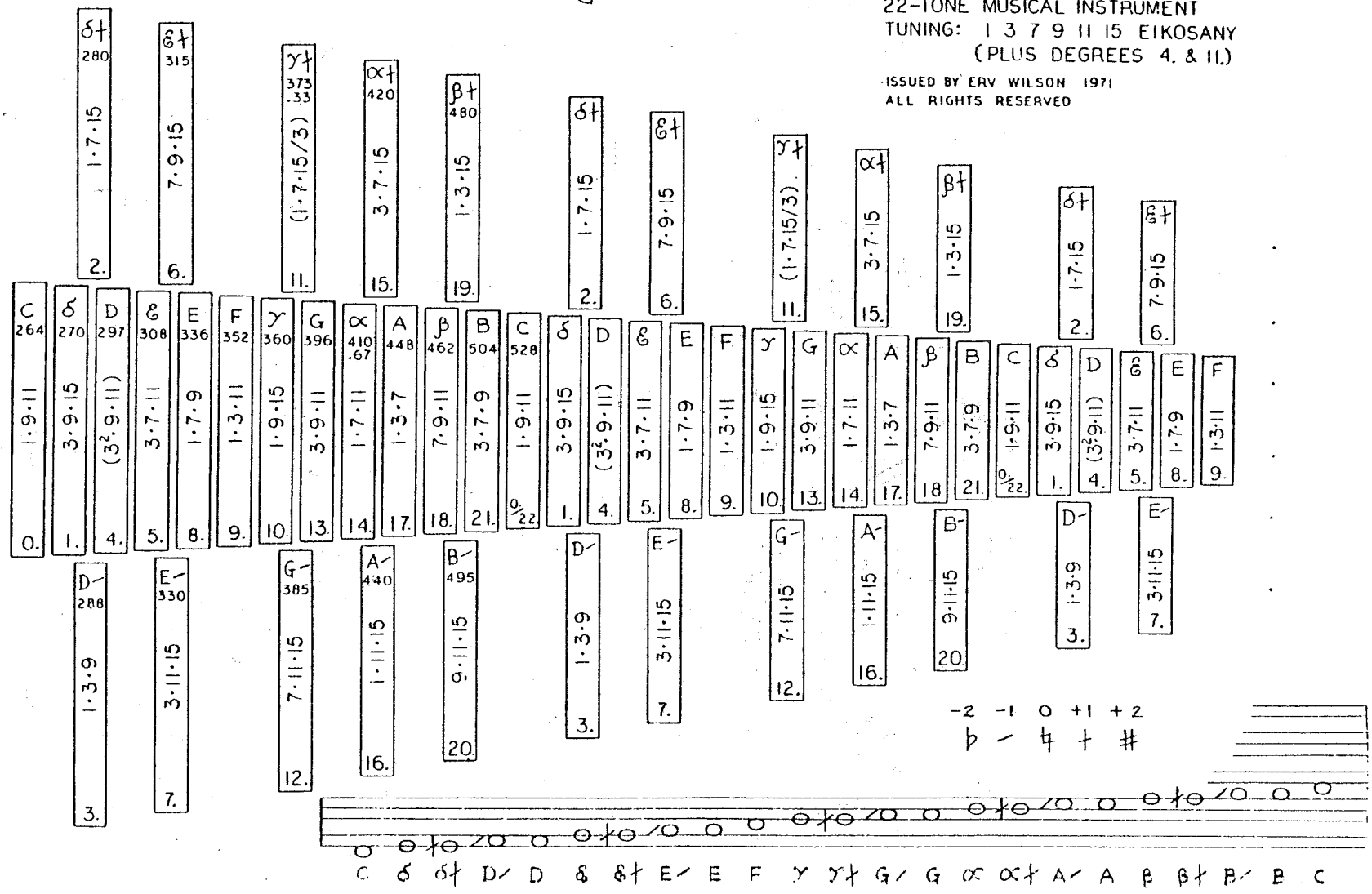


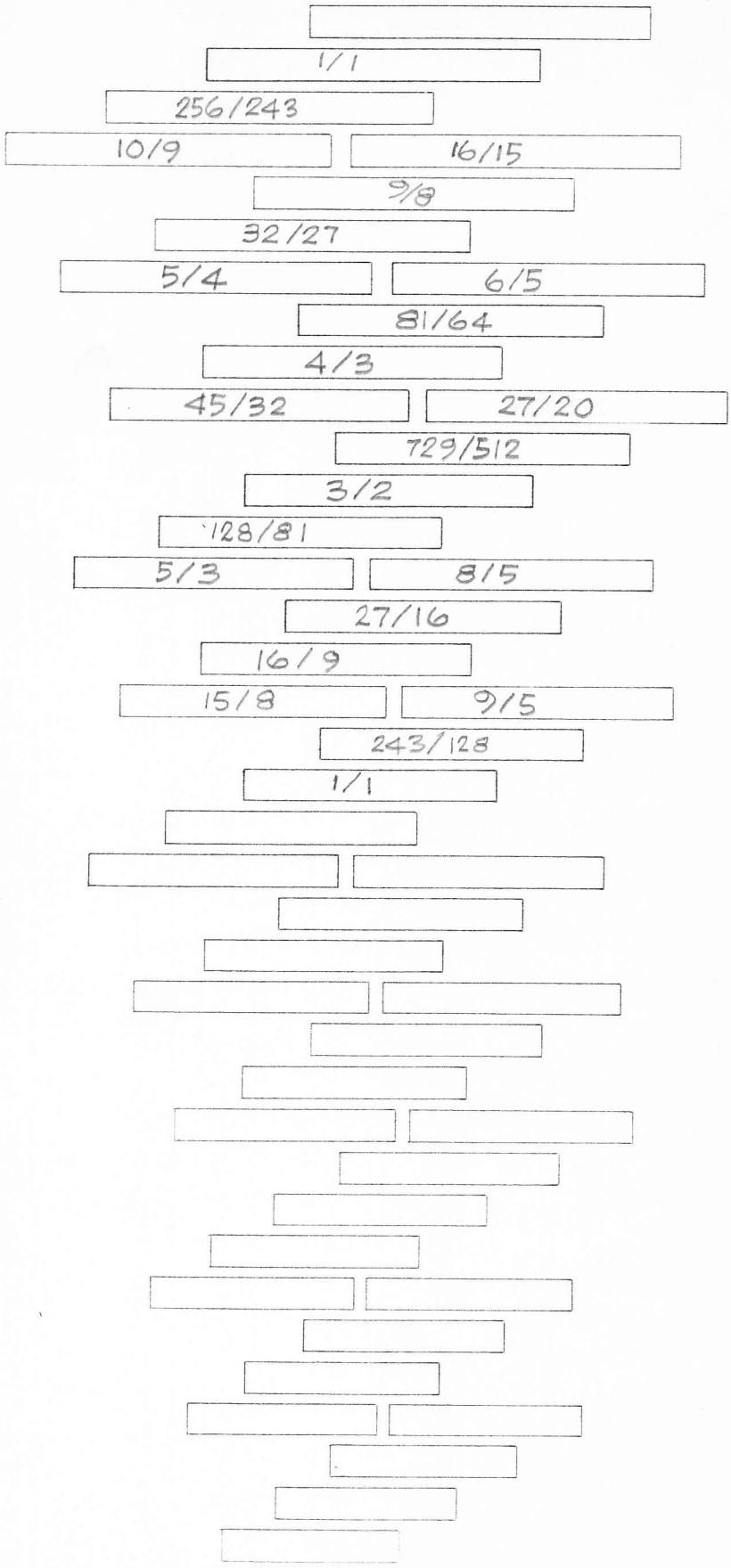

1/1 36/35 28/27 16/15 9/8 81/70 7/6 6/5 5/4 9/7 35/27 4/3 48/35 112/81 45/32 64/45 81/56 35/24 3/2 54/35 14/9 8/5 5/3 12/7 140/81 16/9 15/8 27/14 35/18 2/1
I
II
III
IV
V
VI
1. 2. 3. 4. 5. 6. 7.
A B C
ENHARMONIC
wilson 66

also see D'alessandro Like a Hurricane
by Erv Wilson in XENHARMONIKON XII
1989

Please refer to fig. 11
for a better mounting

Figure 10




1/1
256/243
10/9
16/15
9/8
32/27
5/4
6/5
81/64
4/3
45/32
27/20
729/512
3/2
128/81
5/3
8/5
27/16
16/9
15/8
9/5
243/128
1/1

* Evangelina Notes

* The Evangelina Tuning commemorates the work done by Evangelina Villegas and Surinder K. Vasal with quality Protein Maize in Mexico Africa, India, Japan & China

1. Japanese melody "Sakura"

(5-12-5) 22-Tone Tubulong, "Evangelina" Tuning

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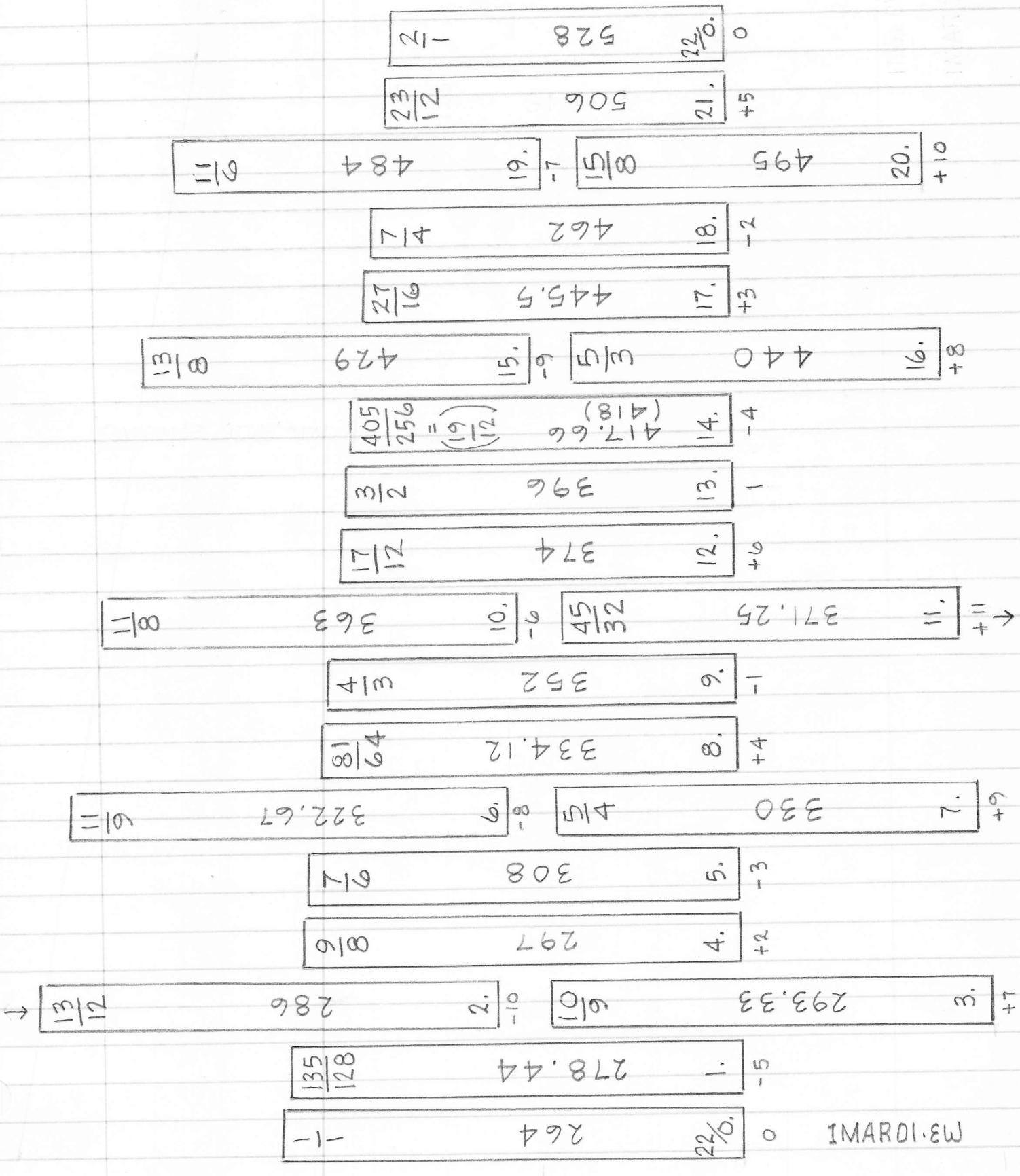

Ref; Some Basic Patterns Underlying Genus 12 & 17, E. Wilson 1980

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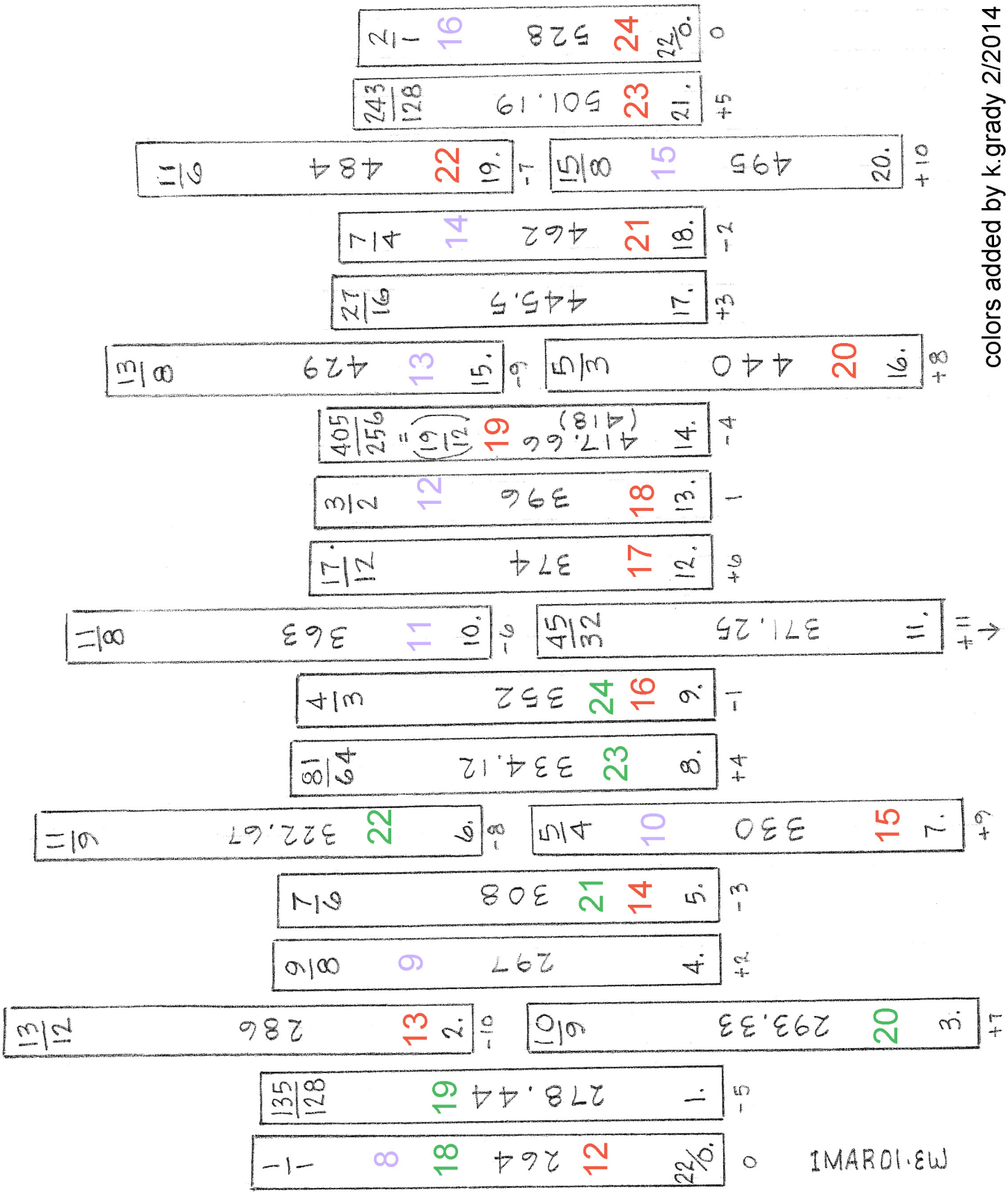

Ref; Some Basic Patterns Underlying Genus 12 & 17, E. Wilson 1980

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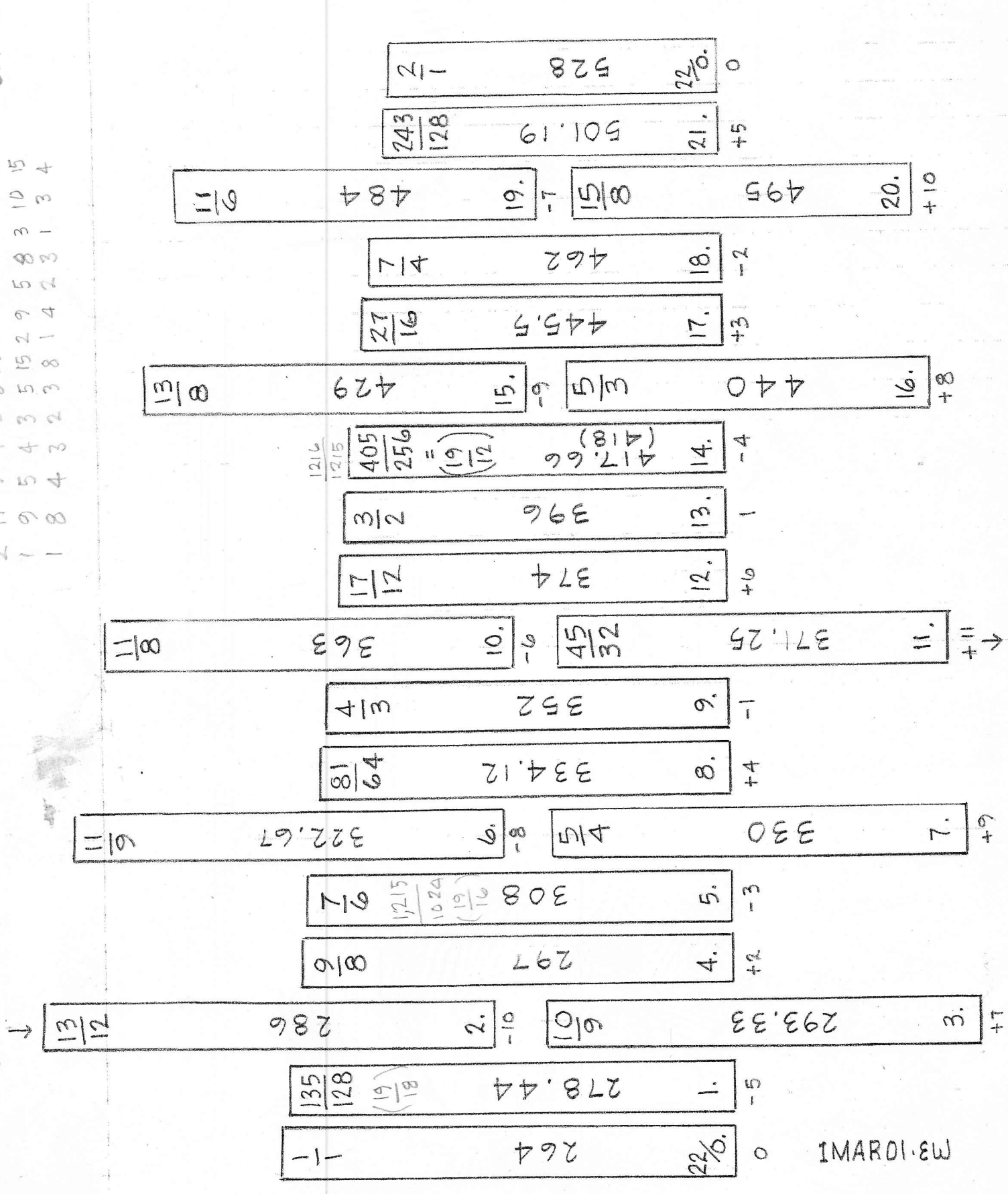
SAVE



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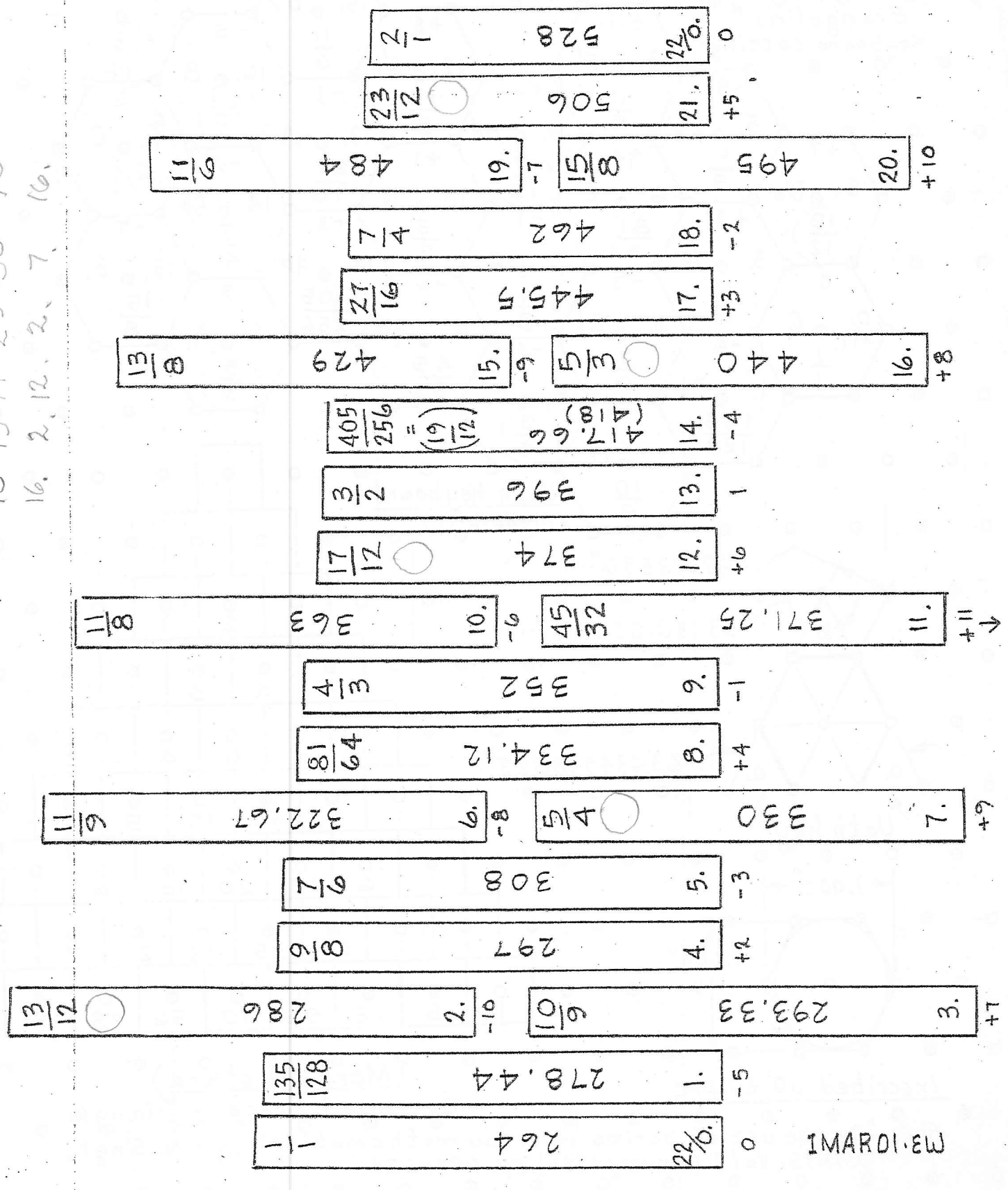

(From F 352)

10 13 17 23 30 40
16. 2. 12. 2. 7. 16.

Splendro on "Lucas" Triangle

NLIS

IMARDI.EW

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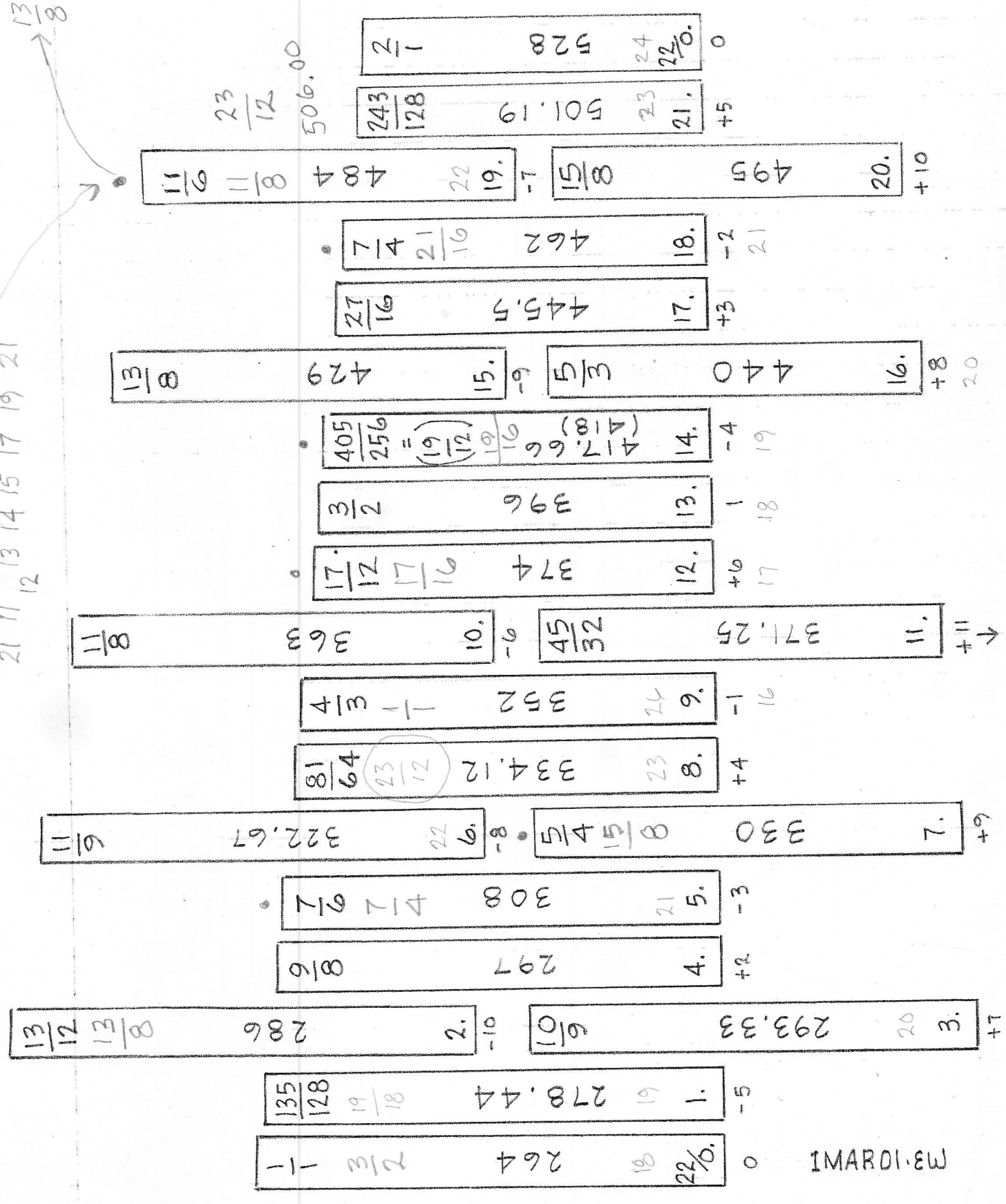

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