

Index

- Ab: 11-12, 18, 37, 43, 58, 61; Ab major: 39
 A \sharp : 99-102
 A tuning (nomenclature): 17, 51, 73, 96-97
 Abbott, Djilda: 114
 Agricola, Martin: 22, 93
 Alberti, Leon Battista: 111-12, 116
 Al-Kindi: 9, 11
 Anderson, Warren: 30
 Anselmi, Giorgio: 20
 Apel, Willi: 98
 apotome: 9, 15
 Arabic lute: 9
 architects, architecture: 109, 111-12, 116, 119-20
 archlute (*arciliuto*): 77, 80
 Aristotle: 30
 Aristoxenus: 2, 23, 30-31, 68, 80, 86, 88, 92
 arithmetic: 23
 Arnaut, Henri: 3, 11, 109-12, 116
 Aron, Pietro: 5, 11, 93
 'artificial' instruments: 89-91
 Artusi, Giovanni Maria: 3, 19, 30, 84-91, 94, 99-100
 astronomy: 11, 23, 70, 89, 118
 Attaignant, Pierre: 2-4, 9-15, 94

 B \sharp : 101-02
 B minor: 38-39
 Ballet, William: 85
 Ban, Joan Albert: 71-72
 bandurria: 18
 Barbieri, Patrizio: 43
 Barbour, James Murray: 3, 24, 29, 43, 75, 84-86
 Bardi, Giovanni de: 44
 Baron, Ernst Gottlieb: 112

 Bartolus, Abraham: 68-70, 93
basse de viole: 4-6, 38-42, 79-80, 93-94, 97; *see also* viol music
 basso continuo: 38-40, 93
 beats, beating: 12-13, 52-54, 65, 67, 101-03
 Beethoven, Ludwig van: 39
 Bendeler, Johann Philipp: 37
 Berchinslaw, John: 45
 Bermudo, Juan: 2, 6, 13-18, 23, 27-30, 58, 94
 Bernini, Gian Lorenzo: 48
 Birch Collection: 45
 Biscargui, Gonçalo Martinez de: 16
 Boethius: 20, 23, 30, 87
 Bol, Hans: 39
 Bottrigari, Ercole: 44, 47
 bow, bowing: 5, 7, 67, 79
 Boyvin, Jacques: 38
 Briggs, Henry: 32
 Brouncker, William: 33-36
 Bull, John: 93
 Burkholtzer, Hanns: 118
 Burwell Lute Tutor (anon.): 6
 Burzio, Nicola: 11

 C \flat : 99-100
 C \sharp : 13, 37, 43, 56, 63, 68, 88-89, 99-102
 Caccini, Giulio: 44
 cadences: 67
 Caffagni, Mirko: 63
Calleno custure me (anon.): 85
 Camerata: 44
 Campanus, Johannes: 23
 Cardano, Girolamo: 20-22, 93
 catapults: 26
 Cavazzoni, Marc Antonio: 22
 cents: 36
 Charles II: 33

- chitarrone: 88, 91-92
 'chromatic' frets: *see under* frets
 Ciconia, Johannes: 20
 circle of 5ths: 22
 circles: *see* curves, circular
 cittern: 75
clavijas: 53-54
 Clercx, Suzanne: 20
 comma: 1, 5, 7, 9, 18, 23, 27, 42, 51, 61, 67-68, 73, 78, 80, 84-85, 91, 121
 common time: 95
 compass: 15, 59, 67, 106-08
 composers (in general): 2-4, 19, 50-51, 86-87, 94
 consort: *see* ensemble music
 Costa, Lorenzo: 19-20
 Couperin, Louis: 4, 37, 99-103
 curves: circular, 24-27, 109-20; elliptical, 118-20
- D#: 11, 43, 51, 55, 61, 82, 99-103
 D tuning (nomenclature): 17, 96-97
 Damann, Rolf: 70
 Danoville, 'Le Sieur': 6-7, 94
 Dart, Thurston: 6
 Denis, Jean: 46-47
 Dequai, M.: 42
 Descartes, René: 33, 35
 diagonals: 104-05, 116
 diesis: *see* lesser diesis
 Dietterlin, Wendel: 116, 119-20
 diminutions: 63
Discours non plus melancoliques que diverses (anon.): 11
 Dombois, Eugen: 52, 59, 66
 Doni, Giovanni Battista: 2, 30, 44, 47-50, 68-69, 71, 93
 double frets: *see under* frets
 Doursther, Horace: 115
 Dowland, John: 3, 81-83, 89, 93-94
 Dowland, Robert: 81
- Ebb: 22
 Eb: 11, 18, 37, 43, 45, 55-56, 61
 E#: 40, 42, 73, 101-02
 ear: 3-4, 6, 15, 30-31, 38, 42, 45, 49, 60-65, 75, 83, 89-90, 94, 111
 Eitner, Robert: 58
 Ellis, Albert: 36
 ensemble music: 43-46, 65, 67, 93
 entasis: 119-20
- equal semitones: 1-2, 8, 15, 19-36, 48, 79, 84-85, 92-93; *see also under* intervals
 equal temperament: 1-8, 18-41, 44-45, 47, 52-54, 56-57, 80, 88, 93-94
 Estève, M.: 43
 Euclid: 23-27, 33
 extra frets: *see under* frets
- Fx: 52, 73
 F minor: 39
 F# minor: 37-41, 99-103
fa: *see mi* and *fa* frets
 Faber Stapulensis: *see* Lefèvre
 fantasias: 52-56
 Faulhaber, Johannes: 32
 fermatas: 95
 Fine, Oronce: 2, 10-12, 58, 94
finitio: 111-12
 Fitzwilliam Virginal Book: 93
 Fogliani, Ludovico: 22, 27, 61, 85
 flexibility of intonation: 5, 7, 19, 22, 36, 39-41, 49, 56, 67, 93-94
- Frei, Hans: 3, 121
 Frescobaldi, Girolamo: 48
 frets: chromatic, 9-10, 78; double or extra, 2, 18, 46-47; slanted, 8, 17-18; special, 18, 46-47, 68-69, 75-76; *see also mi* and *fa* frets
 fret 1: 9, 16-18, 28-29, 50-53, 56-60, 62-64, 66, 82-84
 fret 2: 9, 28, 50, 60-62, 66
 fret 3: 9, 16-18, 28-29, 59, 60, 62-63, 66, 81-82, 84
 fret 4: 2, 8-9, 17-18, 28, 50, 52-57, 59-60, 62-63, 66, 82, 94
 fret 5: 9, 28, 58, 60, 66, 81
 fret 6: 9, 11, 16-17, 28-29, 56, 60, 64, 66, 84
 fret 7: 9, 28, 58, 60, 64, 66, 81-82
 fret 8: 16-17, 28-29, 59, 64, 66, 73, 84, 114
 fret 9: 28, 66, 81
 fret 10: 28, 73, 84
 fret 12: 21, 34, 75
- Fritz, Barthold: 6
 fudging: *see* flexibility of intonation
 Fuller, David: 103
- Gb: 37, 99-100
 G#: 11-13, 18, 37, 43, 45, 51-53, 55-56, 58, 61, 73, 82, 102-03

- G tuning (nomenclature): 17-18, 54, 85, 96-97
 Gafurio, Franchino: 11, 27, 58
 Galilei, Vincenzo: 21, 30, 46
 Gallicus, Johannes: *see* Legrenze
 Ganassi, Silvestro: 3, 6-7, 58, 60-65, 94-97
 genera (diatonic, chromatic, enharmonic): 31, 77
 Geoffroy, Jean-Nicolas: 39
 geometry, geometrical constructions: 23-28, 33, 48, 89, 104-21
 Gerle, Hans: 3, 52, 58-60, 81
 'give and take': 5, 36
 golden section (golden mean): 2, 33
 Grammateus, Henricus: *see* Schreiber
 Grayson, Cecil: 111
 Greek music (theory): 30-31, 68-69, 77
 guitar: 18, 45, 47-48, 68-69
 gut strings: 5
- half-comma: 27, 36, 44, 59, 61, 78, 82, 85-86, 88, 91-92
 Hamm, P.: 11
 harp: 47
 harpsichord: 4, 7, 17, 36-40, 45, 47, 49, 61, 93-94, 99
 Harton, Michielle: 3, 121
 Harwood, Ian: 11, 50, 55, 85, 109
 Heartz, Daniel: 11-12
 Heinze, Johann Jakob: 39
 hexachord: 9, 93
 Hirsch Collection: 11
 Horace: 99
 Hsu, John: 4
 Hummel, Johann Nepomuk: 5-6
 Husmann, Heinrich: 58
- intarsia: 112
 integers: *see under* numbers
 intellect: 30
intensione: 5
 intervals: chromatic, 87-91; 'natural', 89-91; ungraceful, 87; unnatural, 89, 91-92
 unison: 6-8, 41, 50, 66, 73, 75, 94
 semitone: chromatic, 1-2, 4, 9, 56;
 diatonic, 1-2, 4, 9, 15, 43, 56, 58-59;
 major, 10-11, 21, 46; minor, 10-11, 20-22, 25, 36, 46-47, 61, 63-64; *see also* equal semitones; unequal semitones
 whole-tone: major, 78 (*see also* ratios, 9:8); minor, 78, 84 (*see also* ratios, 10:9); pythagorean, 24 (*see also* ratios, 9:8)
 3rd, major: 1-2, 7-8, 12, 17, 19, 31, 43-44, 46, 50-51, 54, 58-59, 65-68, 82, 84, 90, 96-97
 4th, diminished: 12, 51, 84, 88-91
 5th, wolf: 43, 61, 70-71
 6th, major: 54, 65-66, 84
 7th, diminished: 88-91
 octave: 6-8, 19, 24, 31-32, 43, 50, 54, 66, 73, 77, 84, 94, 96-97
 fifteenth (double octave): 2, 7, 68, 79
- Jahnal, Franz: 21
 Juschkevitsch, A. P.: 32
 just intonation: 2, 34, 67-80, 94
- Kepler, Johannes: 118
 keyboard instruments: 2, 4-7, 11, 16-19, 27-28, 36-41, 43-50, 58, 61, 67-68, 70-72, 78, 93-94, 99-103
 keys and modes: 18, 37-41, 51, 57, 68, 87, 97, 99; first or dorian mode, 18; *tons transposez*, 37-39; *troisième ton*, 38
 Kircher, Athanasius: 105
- Lanfranco, Giovanni Maria: 11
 leading-note (leading-tone): 39-40, 43, 52, 58, 101
 Le Blanc, Hubert: 5
 Lefèvre, Jacques: 23-24, 26, 29
 Le Gallois, Jean: 103
 Legrenze, Johannes: 11, 20
 lesser diesis: 19, 67, 84
 Levitan, Joseph S.: 99
 limma: 9, 15, 20
 Lindley, Mark: 11, 27, 36-37, 41, 43, 58, 61, 67, 71, 75, 109
 lira (da braccio): 47
liuto attiorbato: 115
 logarithms: 32-33
 London: British Library, 11, 45; National Gallery, 19-20
 low action: 66-67
 Lowinsky, Edward E.: 22, 99-101
 lute designs: 3, 109-21
 lute music: 2-4, 12-15, 56-59, 82-85, 93, 97, 109; *see also* vihuela music

luth à double manche: 77

Macran, Henry S.: 30-31
 Macrobius: 2, 30, 68
 madrigals: 87-91
 magnitudes: 23, 30-31, 89
 mandora: 118
 Marais, Marin: 2, 4, 36-41, 94
 Marchetto of Padua: 20
 Marenzio, Luca: 89-91
 Marpurg, Friedrich Wilhelm: 6
 Marsden, Eric William: 26
 Martinez de Biscargui, Gonçalo: 16
 mean proportional(s): 23-27, 33, 104-06
 meantone temperament (in general): 1-4,
 7-8, 11, 18, 22, 43-67, 93-94
 1/4-comma: 7, 27, 43-44, 54, 61,
 65-66, 78
 2/9-comma: 44, 66
 1/5-comma: 7, 37, 54, 66
 1/6-comma: 44, 50, 54, 58-59, 66
 measurement, units of: 114-15
 Mersenne, Marin: 3, 19, 21, 43, 45, 49-
 50, 70-79, 112
 mesolabe: 24, 104-05
 metaphysical thinking: 31-33, 69-70, 93,
 111-12
mi and *fa* frets: 15-18, 55-57, 63, 66,
 82-83
 Milán, Luis: 3-4, 51-57, 59, 94, 97
 Miller, Clement A.: 21
 Minnaert, M. G. J.: 32
 Mitchell, David: 81
 modes (tones): *see* keys and modes
 'modified meantone': 3, 84-85
 module: 111-19
 monochord: 10-11, 24, 27, 37, 72, 80,
 104-06
 Monteverdi, Claudio: 3, 84-90
 Morley, Thomas: 11
 multitudes: 23, 89
 Münxelhaus, Barbara: 109
 'musical science': 23, 87
musicus: 30, 58
 Nassarre, Pablo: 28
 Newton, Isaac: 36
 Nicomedes: 106
 Nierop, Dyrck Rembrantz van: 73-76
 Nivers, Guillaume-Gabriel: 38
 notation: *see* tablature notation

numbers: 23, 31-32, 111-12; decimal, 32;
 integers, 31; irrational, 31, 89-92,
 110; prime, 9, 121; whole, 31

octave: *see under* intervals

open strings: *see under* strings

organ: 7, 18, 27-28, 37, 45, 58, 61, 71,
 93

overtone: 31

Ozanam, Jacques: 37-38

Palisca, Claude: 23, 30, 86

Panofsky, Erwin: 119

pavanes: 37, 51, 99-103

Perkins, Leeman: 4

perpendiculars: 24, 106

Philo of Byzantium: 26

pictorial evidence: 19

Pierce, Jane Illingworth: 11, 60

pitch classes: 72-73, 78

pitch frequencies: 1, 31, 65, 80

plagiarism: 81, 93

plectrum: 50, 109

Podio, Guillermo de: 20, 23

Poulle, Emmanuel: 11

Poulton, Diana: vi, 50, 60, 81

Praetorius, Michael: 2, 5, 19, 36-37, 93

preludes: 12-15, 94

prime numbers: *see under* numbers

proofs: 20, 24, 33, 105

proportional mean(s): 23-27, 33, 104-06

proportions: *see* ratios

Prosdócimo de' Beldemandi: 20

Ptolemy: 20, 78

Pujol, Emilio: 22

Pythagoras: 9, 83, 112-13

pythagorean comma: 5

pythagorean intonation: 1-2, 4, 7-17, 22,
 44-45, 67, 94

pythagorean mentality: 109, 121

pythagorean theorem: 114, 116

pythagorean whole-tone: *see under* intervals

quadrivium: 23

quantities, continuous or discrete: 23, 68

Rameau, Jean-Philippe: 6, 41-42

Ramis de Pareja, Bartolomeo: 16, 58

ratios: 23, 30-31, 67, 79, 88-89, 105,

111-12, 114, 121

2:1: 9, 30

- 2: $\sqrt{5} - 1$: 33
 3:2: 9, 30, 63
 4:3: 9, 11, 30, 63
 5:4: 63
 6:5: 63
 9:8: 2, 9, 11, 20, 78, 84-85, 90-92
 10:9: 2, 78, 84-85, 90-91
 11:7: 121
 16:15: 22, 84, 90
 17:16: 20-21, 23, 68-69
 18:17: 2-3, 20-21, 23, 64, 68-69,
 75-77, 106
 19:18: 68-69
 20:19: 68-69
 27:25: 22
 81:64: 9
 81:80: 1, 7, 27, 85, 90-91
 256:241: 9, 20
 2187: 2048: 9
 Razzi, Fausto: 87
 rectangles: 26, 104-05
 regular tunings or temperaments: 8, 43-44,
 65
 Reinhard, Andreas: 68, 70
remissione: 5
 Rivius: *see* Ryff
 Roberti, Ercole de': 20
 Roche, Martine: 39
 Rome: 50
 rose: 110-15, 118
 Rossi, Lemme: 106
 Rousseau, Jean: 6-7, 94
 Rousseau, Jean-Jacques: 38
 Royal Society: 2, 68
 rubato: 52
 Ryff, Walter Hermann: 116

 Salinas, Francesco: 16, 19, 49
 Salmon, Thomas: 68-69, 93
 Samson, W.: 114
 Sancta Maria, Tomas de: 16
 S. Lorenzo in Damaso: 48
 Sauveur, Joseph: 43
 science: 6, 11, 31, 36-37, 87
 Schlick, Arnolt: 3, 56-58, 94, 97-98
 scholars and scholarship, mistaken: 3, 11,
 13-15, 22, 84-86, 94
 Schrade, Leo: 51
 Schreiber, Heinrich: 11, 23-25, 29
 Schubart, C. F. D.: 39
 Segerman, Ephraim: 14

 Sellas, Matteo: 3, 114-15, 121
 semicircle: 24-27
 semitones: *see* equal semitones; unequal
 semitones; *and see under* intervals
 sequences: 40
 Serlio, Sebastiano: 116
 singing: 84-91, 94
sistema partecipato: 43
 slanted frets: *see under* frets
 Söhne, Gerhard: 3, 109
 Sommer, Hermann: 114
 Spataro, Giovanni: 11, 22, 58, 93
 special frets: *see under* frets
 Spencer, Robert: 77
 Steblin, Rita: 39
 stencils: 114
 Stevin, Simon: 32
 strings: false, 5; irregular, 5-7, 18; open,
 1-2, 6-8, 42, 65-66, 74-75, 77, 79,
 96-97
 string tension: 5, 7, 59, 61, 66
 Strunk, Oliver: 44
 superparticular proportions: 92
 symmetry of the universe (putative): 68-70
 syntonic comma: 1, 7, 9, 27, 61; *see also*
 comma

 tablature notation: 3-4, 70-71, 95-98
tempérament ordinaire: 37, 93
 theorbo: 38, 47, 49; *tuorbe*, 77
 Thompson, Thomas Perronet: 68-69
 Tilmouth, Michael: 68
 timbre, inharmonic: 32
 tones (modes): *see* keys and modes
 transposition: 18, 38-41
 triangles: 24, 105, 112-14
 tuning checks: 6-8, 21, 60, 65-66, 83

 'ud: 9
 Ulm Cathedral: 112-13
 unequal semitones: 8, 23, 36-38, 45, 48,
 84, 88, 93-94; *see also under* intervals
 unisons: *see under* intervals

 Valderrabano, Enriquez de: 4, 22, 54-55
 Vatican City: Biblioteca Vaticana, 22
 Venere, Vvendelio: 3, 116-19, 121
 Vicentino, Nicola: 19, 22, 44, 46, 93
 Vienna: Österreichische Nationalbibliothek,
 10; Sammlung alter Musikinstru-
 mente, 116

- vihuela: 6, 13-18, 28-30, 50, 52; seven-
 course vihuela, 15-17, 28
 vihuela music: 3, 22, 51-56
 viol consorts: 67, 93; *see also* ensemble
 music
violetta diabarmonica: 68-69
 viol music: 4, 38-41, 51, 57, 68, 87, 97,
 99; *see also basse de viole*
 Virgil: 86
 Vitruvius: 68, 111
 voice, vocal music: 3, 53, 55, 57, 84-91,
 94
vox humana: 52
 Ward, John: 15
 weight, number, measure: 83
 Werckmeister, Andrea: 37
 Willaert, Adrian: 22, 99-101
 wolf 5th: *see under* intervals
 wood: 112
 Wright, Owen: 9
 Zarlino, Gioseffo: 19-21, 24-26, 30, 89,
 104-07