

Appendix Q

Glossary

Action

In pianos, 'the system of levers, comprising ... the hammers, keys, and any additional levers or moving parts, by which the' energy of the downward 'movement of the finger on the key is transmitted to the hammer which sounds the string'.¹ 'The function of the action is to transform a lower velocity of the key into a higher one for the hammer.'²

Argand Lamp

A domestic oil lamp with a gravity-fed oil reservoir mounted above a cylindrical wick, devised 'so that air can pass both through the centre of the wick and also around the outside of the wick before being drawn into a cylindrical'³ 'glass chimney above'.⁴ The Argand lamp was invented and patented about 1782, in Geneva, by Aimé Argand (1750–1803).⁵ An Argand lamp produces 'a light output of 6 to 10 candlepower'.⁶

Arris

In furniture, the sharp edge or ridge formed by the intersection of two surfaces meeting at an angle.

Balance Rail

In stringed keyboard instruments, the lateral member of the wooden 'key frame that holds the balance' rail pins 'and serves as a fulcrum for the key levers'.⁷

1 Cole, *The Pianoforte in the Classical Era*, p. 377.

2 W. Pfeiffer, *The Piano Hammer*, p. 98.

3 'Argand Lamp', in *Wikipedia: The Free Encyclopedia* (Last modified 17 April 2012).

4 'Argand Lamp or Quinquet' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 29.

5 'Argand Lamp', in *Wikipedia*.

6 *Ibid.*

7 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 333.

Balance Rail Pin

In stringed keyboard instruments, a vertical metal pin fixed into and 'protruding from the balance rail, which' passes through a mortice 'near the middle of a key lever', thus defining its pivot point 'to hold and guide the lever'.⁸ Commonly, balance rail pins are made of plated brass wire.

Baluster Leg

'In furniture, a leg in the form of a column with [an] elliptical or pear-shaped bulge' either towards the base or towards the top.⁹

Basso Continuo

See 'Thoroughbass', below.

Bassoon Stop

In pianos, 'a mutation ... in which a semi-cylindrical roll of parchment' or silk-covered paper—'fixed to the underside of a wooden bar'¹⁰ near the bass and tenor strings—is engaged 'by means of a knee lever ... pedal' or hand-stop,¹¹ to lightly 'touch the strings, producing a buzzing sound'.¹²

Belly Rail

In harpsichords and grand pianos, a heavy wooden transverse bar, 'which acts as a support for the [keyboard-end] ... edge of the soundboard',¹³ whose ends are 'attached to the spine and cheekpiece, under and parallel to the front edge of the soundboard. In most instruments there is both an upper belly rail, to which the edge of the soundboard is glued, and a lower belly rail, which is attached to the bottom' boards of the instrument.¹⁴ In square pianos, a heavy wooden bar supports and is located under 'the left-hand edge of the soundboard'.¹⁵ 'In some square pianos, as in most Viennese ... grands, the treble part of the soundboard may project beyond the belly rail.'¹⁶

8 Ibid., p. 333.

9 'Baluster' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 38.

10 Cole, *The Pianoforte in the Classical Era*, p. 377.

11 Burnett, *Company of Pianos*, p. 200.

12 Cole, *The Pianoforte in the Classical Era*, p. 377.

13 Ibid., p. 377.

14 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 333.

15 Burnett, *Company of Pianos*, p. 201.

16 Cole, *The Pianoforte in the Classical Era*, p. 377.

Bentside

‘The curved case wall of a harpsichord, spinet, or grand piano.’¹⁷

Bentside Spinet

A stringed keyboard instrument ‘with [a] harpsichord ... action, almost always with a single keyboard’—projecting from the case front, with slanted cheeks—and one set of strings (one string per note), ‘the shape and internal arrangement of which are similar to that of the harpsichord’,¹⁸ but where ‘the spine, instead of being at a right angle to the [nameboard] ... is at an angle of approximately twenty-five degrees. There is usually a bentside.’¹⁹ The bentside was ‘usually, but not necessarily, curved at the tail, and the left hand side of the case often curved to the spine as well’.²⁰ Bentside spinets were especially popular in England during the second half of the seventeenth century. In England during the eighteenth century, the bentside spinet ‘was the middle-class harpsichord of both choice and necessity. Not nearly as expensive as a grand, but still an attractive instrument with a five-octave compass, it could play almost anything that could be done on a large double’ manual harpsichord.²¹ ‘It’s tempting to assume that spinets were a kind of “poor man’s harpsichord”, but their prevalence among the British gentry and musical elite ... proves otherwise ... They stayed fairly well in tune; were stylish, affordable, and compact; and possessed a sweet tone suitable for domestic music making.’²²

Bi-Chord (Double-Strung)

In stringed keyboard instruments, having two adjacent unison strings—that is, two adjacent strings tuned to the same pitch—per note.

Biedermeier Style

In furniture and the decorative arts, an aesthetic that flourished between 1815 and about the 1850s. It originated in Germany, and was characterised by restraint, functionality, rigorous simplicity and uncomplicated elegance. The Biedermeier style had more to do with ‘comfort rather than ostentation, and was popular with the prosperous bourgeoisie’.²³

17 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 333.

18 *Ibid.*, p. 340.

19 Burnett, *Company of Pianos*, p. 210.

20 Kottick, *A History of the Harpsichord*, p. 377.

21 *Ibid.*, p. 377.

22 Watson, *Changing Keys*, p. 16.

23 ‘Biedermeier Style’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 49.

Bottom Boards

In stringed keyboard instruments, adjoining wooden planks comprising the bottom of the instrument 'to which the case sides and other members are attached and which forms an important part of the structure'.²⁴

Bridge

In stringed keyboard instruments, a long, narrow 'wooden structure',²⁵ 'commonly of serpentine design',²⁶ 'usually made from a deciduous hardwood such as beech, maple, walnut, or fruitwood',²⁷ and 'fastened to the soundboard, on which the strings'²⁸—which are kept in their 'correct lateral position'²⁹ by bridge pins—bear. The bridge 'serves both to define one end of the speaking length of each string and to transmit its vibration to the soundboard'.³⁰ 'There is some evidence that the bridge also acts as a filter, dampening certain vibrations while allowing others to pass through' to the soundboard. Another 'function of the bridge is to act as a brace for the soundboard, strengthening the soundboard around and under it against the downward pressure exerted by the strings'.³¹ In English square pianos, the bridge is typically J-form, with the curve at the treble end.

Bridge Pin

In stringed keyboard instruments, a 'small piece of brass or other metal wire (effectively a headless nail) driven [part-way] into the bridge so as to determine the ['correct lateral position']³² ... of the string bearing on the bridge'.³³ 'The bridge pin ... serves to delimit one end of that string's speaking length'.³⁴

24 Burnett, *Company of Pianos*, p. 200.

25 *Ibid.*, p. 201.

26 Cole, *The Pianoforte in the Classical Era*, p. 377.

27 Burnett, *Company of Pianos*, p. 201.

28 Cole, *The Pianoforte in the Classical Era*, p. 377.

29 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 334.

30 *Ibid.*, p. 333.

31 E. J. Kern, *Harpichord Design and Construction* (New York: van Nostrand Reinhold Company, 1980), p. 33.

32 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 334.

33 Cole, *The Pianoforte in the Classical Era*, p. 377.

34 Clinkscale, *Makers of the Piano 1700–1820*, p. 395.

Buhl (*Bouille*)

In furniture, 'marquetry of tortoise-shell' in combination with brass and or other metals such as pewter.³⁵ Named 'after the eighteenth-century French cabinet maker who was its most celebrated exponent'.³⁶ In early nineteenth-century English piano case decoration, elaborate '*bouille* work' commonly comprises 'intricate scrolling shapes cut from sheet brass inlaid into rosewood veneer'.³⁷

Cabinet Piano

A piano in upright form, whose grand piano length strings extend from the floor. The action is located in front of the string plane. The instrument is effectively 'a grand piano ... turned vertically so that the wrest[-plank] ... is at the top and the tail rests on the base, which sits directly on the floor'.³⁸ The instrument's external form is 'a symmetrical, rectangular cabinet starting at floor level. The front usually has silk-covered doors concealing the soundboard and strings'.³⁹ 'Two legs serve to support the [protruding] keyboard and offer stabilization to the instrument itself.'⁴⁰

Cabriole Leg

In furniture, a tapered 'leg of double-curved form, convex at the top and concave below, which came into use towards the end of the 17th century and generally disappeared with the advent of Neo-classicism towards the end of the 18th' century.⁴¹ Its shape is 'based on the stylized hind leg of [an] animal'.⁴²

Cartouche

In furniture, an 'ornamental device ... suggesting [a] partly opened scroll or [the] volute of [an] Ionic capital', sometimes 'oval, rectangular or square in shape, used as [a] surround [and] ... space ... for [an] inscription'.⁴³

35 'Bouille or Buhl Work' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, pp. 58–9.

36 Cole, *Broadwood Square Pianos*, p. 86.

37 *Ibid.*, p. 86.

38 Clinkscale, *Makers of the Piano 1700–1820*, p. 395.

39 Kottick and Lucktenberg, *Early Keyboard Instruments in European Museums*, p. 259.

40 Clinkscale, *Makers of the Piano 1700–1820*, p. 395.

41 Richard Burnett, *Company of Pianos*, p. 202.

42 'Cabriole or Bandy Leg' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 69.

43 'Cartouche' in *ibid.*, p. 78.

Check (Back Check)

In pianos, the 'action element (not always present) usually consisting of a leather pad', commonly 'supported by' a standing, sloping wire, which 'catches the returning hammer head to prevent its rebounding to strike the string an unwanted second time'.⁴⁴

Cheek (Cheekpiece)

In English harpsichords and grand pianos, the short, rectangular-shaped 'case wall at the ... treble' and bass end 'of the keyboard, wrest plank, and soundboard', running parallel to the spine.⁴⁵ In a square piano, the 'side part of the casework' at the treble end of the instrument.⁴⁶

Classic Era

In a widely accepted and commonly encountered periodisation schema of Western civilisation's music history, the period between ca 1750 and ca 1830. The term 'Classical' is broader in its meaning, and is often used colloquially when referring to a particular tradition of Western music.

Clavichord

A horizontal 'stringed keyboard instrument, sounded by means of upright', up-striking brass 'blades [tangents] fixed at the distal part of the key lever',⁴⁷ comprising a fairly shallow rectangular box, open at the top (closed by a lid), with an inset keyboard at the front long-side of the instrument, a soundboard at the treble end, and horizontal strings running obliquely from the back of the instrument at the bass end to the front at the treble end (the bass strings being nearest to the player), the strings passing over the tangents and the soundboard.⁴⁸ Clavichords are usually double-strung. Commonly, 'until circa 1700, clavichords were "fretted"—that is, 'more than one note'⁴⁹ can be obtained from a string course (two or more adjacent strings tuned to the same pitch) by having the possibility for each of several adjacent key levers to strike a string course at different places (each adjacent key lever produces a different note from its neighbour). Clavichords in which each string course is only ever struck by a single key lever are designated as 'unfretted'.⁵⁰ Unfretted clavichords were the norm after ca 1700.

44 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 334.

45 *Ibid.*, p. 334.

46 Cole, *The Pianoforte in the Classical Era*, p. 378.

47 *Ibid.*, p. 378.

48 This definition is based on one given in Clarke, 'The English Piano', pp. 254–5.

49 Burnett, *Company of Pianos*, p. 202.

50 See Brauchli, *The Clavichord*, p. 4.

Clavicytherium

'A harpsichord designed to stand up vertically. The resulting instrument features an upright soundboard', strings oriented vertically above the keys (key levers, as in harpsichords, are horizontally oriented), thereby taking 'up less space than [a] conventional' harpsichord.⁵¹

Claviorganum

A harpsichord or piano integrated with an organ (combined in the same case). Accordingly, a claviorganum may sound as a harpsichord, piano or organ, or as a simultaneous combination of both, and may have either a single keyboard or two keyboards (one for the harpsichord or piano, the other for the organ).

Combination Piano

A piano integrated with another keyboard instrument (combined in the same case), such as: a piano-harpsichord (a design patented by Robert Stodart in 1777); a clavichord-piano (an instrument made by John Geib in 1792); two (upright) pianos (an instrument made by Matthias Müller in 1801).⁵²

Commode

A 'low cabinet or chest of drawers, often with elaborate decoration and usually standing on cabriole legs or short feet ... Commodes were meant to stand against the wall and had greater width than height.'⁵³ Commodes were introduced in France 'toward the end of the seventeenth century'.⁵⁴

Compass (Keyboard Compass)

The gamut of a keyboard.

51 C. Benson, 'Clavicytherium', in I. Kipnis (ed.), *The Harpsichord and Clavichord: An Encyclopedia* (New York: Routledge, 2007), p. 81.

52 See A. W. J. G. Ord-Hume and F. J. de Hen, 'Combination Pianos', in R. Palmieri (ed.), *Piano: An Encyclopedia* (New York: Routledge, 2003), p. 91.

53 A. Abbas, 'What is a Commode? Is it a Chest of Drawers or a Toilet?', in *About.com Furniture* (New York: The New York Times Company, 2012).

54 'Commode' in S. Chadenet (ed.), *French Furniture from Louis XIII to Art Deco* (Boston: Bulfinch Press, Little Brown & Company, 2001), p. 9.

Consecutive Fifths

In musical composition, the 'simultaneous duplication of the melodic line ... by another at the interval of a perfect 5th', the resultant interval (comprising two musical parts) being immediately followed, within the same two musical parts, by another simultaneous duplication of the melodic line at the interval of a perfect fifth. During the eighteenth century, the rules of harmony, counterpoint and musical grammar dictated that consecutive fifths were strictly forbidden.⁵⁵

Continuo

See 'Thoroughbass', below.

Cottage Piano

A piano in upright form, whose height is about 1.5 metres, 'with vertical strings extended to the floor; invented by Robert Wornum' in 1811.⁵⁶ The action is located in front of the string plane.

Counterpoint

In musical composition, 'the technique of combining two or more' simultaneously sounding 'melodic lines in such a way that they establish' an interdependent 'relationship while retaining their ... individuality' in relation to rhythm and contour.⁵⁷

Cranked Key Lever

In square pianos, because the curved treble part of the J-form bridge is placed near the belly rail edge of the soundboard, the soundboard edge is not a straight line. As a result, some treble key levers are not straight, but deviated ('cranked').

Crescendo

In music, the Italian term '*crescendo*' is a performance instruction denoting 'becoming louder'.⁵⁸

55 Drabkin, 'Consecutive Fifths, Consecutive Octaves', p. 666.

56 Clinkscale, *Makers of the Piano*, Vol. 2, p. 470.

57 'Coun-ter-point', in *TheFreeDictionary* (Huntingdon Valley, Pa: Farlex Inc., 2012).

58 See R. Donington, 'Crescendo', in S. Sadie (ed.), *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980), Vol. 5, p. 32.

Cross-Banding

In furniture, the ‘decorative use of thin cross-grained strips of veneer’.⁵⁹ The ‘grain of the veneer is perpendicular to the length of the strip’.⁶⁰

Cut-Off Bar

In stringed keyboard instruments, a ‘long straight piece of wood glued to the underside of the soundboard, usually in a diagonal direction from about the centre of the soundboard front edge to about the centre of the soundboard edge along the spine. It supposedly cuts off or delimits the active area of the soundboard.’⁶¹

Cyma

In architecture, a profile comprising ‘one continuous double curve’ composed of two quarter-circles.⁶²

Damper

In stringed keyboard instruments, a ‘discrete mechanical part in the action whose function is to quell the vibration of the strings when the finger releases the key ... The agent used to quell the vibrations is generally [woven cloth,] a soft pad of cloth or [soft] leather. Felt dampers as seen on modern pianos are a 19th century invention.’⁶³

Damper Compartment

In pianos, the portion of the damper that contains the damping agent.

Diminuendo

In music, the Italian term ‘*diminuendo*’ is a performance instruction denoting ‘becoming softer’.⁶⁴

⁵⁹ ‘Cross-Banding’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 109.

⁶⁰ Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 334.

⁶¹ M. Latcham, ‘Cut-Off Bar’, in I. Kipnis (ed.), *The Harpsichord and Clavichord: An Encyclopedia* (New York: Routledge, 2007), p. 112.

⁶² ‘Cyma’, in *Encyclopædia Britannica Online* (Encyclopædia Britannica Inc., 2012).

⁶³ Cole, *The Pianoforte in the Classical Era*, pp. 378–9.

⁶⁴ See D. Fallows, ‘Diminuendo’, in S. Sadie (ed.), *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980), Vol. 5, p. 480.

Double-Manual

See 'Manual', below.

Double-Pinned

The bridge of a stringed keyboard instrument is 'double-pinned' when there is a 'small piece of brass or other metal wire (effectively a headless nail) ... driven part way into the rear of the bridge whose purpose is to divert or deflect the string from its natural path between the bridge pin and the hitch-pin, so as to increase the side bearing or to firmly seat the string on the bridge without increasing the down bearing'.⁶⁵

Double-Strung (Bi-Chord)

In stringed keyboard instruments, having two adjacent unison strings—that is, two adjacent strings tuned to the same pitch—per note.

Dovetail Joint

In woodworking joinery, a joint comprising interlocking wedge-shaped elements. A dovetail joint is 'used to attach two pieces of wood so that they form a corner, without using nails ... Glue is used between the' interlocking wedge-shaped elements 'to ensure that the two pieces of wood stay together'.⁶⁶

Down-Striking Hammers

In a piano, hammers that strike the strings from above. The majority of grand and square 'pianos have their actions below the strings, so that the hammers strike upwards against the strings, which tend to move the string away from the bridge. This has certain disadvantages, and several makers decided to overcome these by designing pianos with the action *above* the strings so that the hammers struck downward onto the strings.'⁶⁷

8' (8-foot)

In stringed keyboard instruments, the term '8" (8-foot) is used to describe a set of strings, each of which sounds at a normal point of pitch reference. For

65 Cole, *The Pianoforte in the Classical Era*, p. 377.

66 K. Swan, 'What are Dovetails?', in N. Foster (ed.), *WiseGeek: Clear Answers for Common Questions* (Sparks, Nev.: Conjecture Corporation, 2003–12).

67 C. F. Colt and A. Miall, *The Early Piano* (London: Stainer & Bell, 1981), p. 155.

example, at a pitch standard of $a^1 = 430$ Hz, the string for the note a^1 (the note nine semitones above middle-C) sounds at 430 Hz. An 8' set of strings sounds an octave lower than a 4' (4-foot) set of strings.

Empire Style

In furniture, a 'style popular in France' from ca 1804 to 1830.⁶⁸ Traditional classical 'forms and ornament, already seen in the Louis XVI style, blended with' imperial Napoleonic symbols of fame and victory, 'which included the bee ... laurel wreath, stars, the eagle, and exotic ... motifs culled from' Egypt (such as palm leaves, mummies and caryatids).⁶⁹ 'Furniture was characterized by clear-cut silhouettes and symmetry in decoration ... The staple wood was mahogany, solid or veneer; brass and ormolu mounts were the chief embellishments.'⁷⁰

Endblocks

In stringed keyboard instruments, the wooden 'blocks found between the cheeks and the first and last keys'.⁷¹

Engine-Turning

In furniture and decorative arts, 'the tracing of an ornamental pattern using a machine or lathe attachment',⁷² 'applied to a wide variety of materials, developed in [the] 1760s. Used initially in France to decorate gold work.'⁷³ Ornamental patterns are created by removing fine threads of whatever material is being decorated.

English Square Piano

A stringed keyboard instrument whose design, touch and sound are consistent with square pianos made at any time between the mid-1760s and the 1860s by London-based piano makers—beginning with the pianos of Johann Christophe Zumpe.

68 'Empire Style' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 132.

69 C. Gontar, 'Empire Style, 1800–1815', in *Heilbrunn Timeline of Art History* (New York: Metropolitan Museum of Art, 2000–04).

70 'Empire Style', in *Infoplease* (London: Pearson Education, 2000–12), definition taken from *The Columbia Electronic Encyclopedia*, 6th edn (New York: Columbia University Press, 2007).

71 Kottick, *A History of the Harpsichord*, p. 471.

72 'Engraving' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 136.

73 *Ibid.*, p. 133.

Entablature

'In architecture, [an] assemblage of horizontal mouldings and bands' comprising, from lowest to highest: architrave, frieze and cornice, 'supported by and located immediately above' a column.⁷⁴

Equal Temperament

'Any system of temperament that divides the octave into ... [intervals] which are all equal in size.' In Western music, the commonly encountered 'equal temperament divides the octave into 12' intervals of equal size, each of which is called a semitone.⁷⁵

Escapement

'A contrivance in many piano actions by which the element that impels the hammer toward the string ceases to do so by pivoting away from the hammer shortly before the hammer head reaches the string.'⁷⁶ This allows for a 'disengagement of the hammer from the impelling force provided by the finger on the key'.⁷⁷ An escapement provides the player with comfortable, reliable and subtle control over dynamics.

Escutcheon

A protective material—such as metal or ivory—fixed around a keyhole as an ornament to protect it or the surrounding surface.

Fallboard

In stringed keyboard instruments, a hinged segment of the instrument's lid designed to protect the keywell and the exposed portion of the key levers (keyboard). When the fallboard is 'closed', so too is the instrument's case, and access to the keywell and the keyboard is prevented.

Fermata (Pause Sign)

In Western music notation, a symbol comprising a dot with an arch-like semicircle around it. The fermata symbol is commonly placed above a note, a

⁷⁴ 'Entablature', in *Encyclopædia Britannica Online* (Encyclopædia Britannica Inc., 2012).

⁷⁵ Jorgensen, *Tuning*, p. 771.

⁷⁶ Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 336.

⁷⁷ Cole, *The Pianoforte in the Classical Era*, p. 379.

chord, a rest or a bar line. During the eighteenth and early nineteenth centuries, the performative meaning of a fermata was determined by its musical context, ranging from the elongation or reduction of the rhythmic value of a note, chord or rest, and the negation of a related pulse between two consecutive movements of a musical work, to an indicator of improvised ornamentation.

Forte

In music, the Italian term '*forte*' is a performance instruction denoting 'loud', 'strong'.

Fortepiano

A widely used term⁷⁸ denoting the eighteenth to mid-nineteenth-century wooden-framed touch-sensitive stringed keyboard instrument whose strings are sounded by pivoted hammers.⁷⁹ The frame may include iron gap spacers and/or tension bars.

Fortissimo

In music, the Italian term '*fortissimo*' is a performance instruction denoting 'very loud'.

Fretted Clavichord

A clavichord built with the possibility for each of several adjacent key levers to strike a string course (two or more adjacent strings tuned to the same pitch) at different places, each adjacent key lever producing a different pitch from its neighbour.⁸⁰

Front Guide-Pin

In stringed keyboard instruments, a vertical metal pin 'protruding from the front [touch] rail of a key frame', which guides the lateral alignment of a key by fitting into a mortice 'cut into the underside' near the front of the key lever.⁸¹

78 Clinkscale, *Makers of the Piano 1700–1820*, p. 397.

79 See 'The Term "Piano"', in the 'Descriptive Conventions' at the beginning of Volume 1 of this publication.

80 See Brauchli, *The Clavichord*, p. 4.

81 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 336.

Key levers with a front guide-pin are commonly called 'front-guided' keys. This type of key lever was the most common 'arrangement after 1790 for all kinds of pianos'.⁸²

Fruitwood

'The wood of any of several fruit-bearing trees, such as the apple, cherry or pear.'⁸³

Galant Style

In music, an eighteenth-century European aesthetic evidenced by easily accessible, agreeable, flowing music, in which the melody predominates—commonly comprising predictable, symmetrically balanced phrase lengths—and accompaniment plays a subordinate role. Galant-style music avoids contrapuntal textures and compositional complexity, and makes no stringent demands on the intellect or emotions of the listener.⁸⁴

Gap

'In harpsichords and grand pianos, the space between the wrest plank and the soundboard.'⁸⁵ In conventional grand pianos, the gap is the space through which up-striking 'hammers rise to strike the strings'.⁸⁶

Gap Spacer

'In ... grand pianos, an iron [bracket] reinforcement, shaped like an inverted U', incorporated between the edge of the 'wrest plank and the upper belly rail', which rises up and over between the strings.⁸⁷

Gilding (Gilt)

In furniture and decorative arts, an 'ornamental gold coating on glass, ceramics, metals, furniture, etc., used ... to cover whole articles, or in conjunction with other forms of decoration'.⁸⁸

82 Cole, *The Pianoforte in the Classical Era*, pp. 379–80.

83 'Fruit-Wood', in *The Free Dictionary*.

84 See Berg, *The Correspondence of Christian Gottfried Krause*, pp. xvii–xviii.

85 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 336.

86 Cole, *The Pianoforte in the Classical Era*, p. 380.

87 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

88 'Gilding' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 160.

Grand Piano

'A large horizontal wing-shaped' stringed keyboard instrument, 'the form of which is directly derived from that of the harpsichord',⁸⁹ comprising a fairly deep case, open at the top (closed by a lid), with a protruding horizontal keyboard (whose bass end meets the left-hand edge of the instrument's spine at a right angle) and 'a bentside following the line of the bridge'.⁹⁰ Horizontal strings run parallel with each other and the spine, and pass over up-striking hammers (rare exceptions have down-striking hammers) and the soundboard.⁹¹

Hammer

In pianos, the part of the action that comprises the hammerhead and hammer shank. 'The hammer is the primary part that distinguishes the piano from all other stringed keyboard instruments.'⁹²

Hammer Butt

In pianos, the 'part of the ... hammer furthest from the' hammerhead,⁹³ which 'is hinged to the hammer rail and touched by the jack'.⁹⁴

Hammerhead

In pianos, the wooden structure at one end of a hammer shank, 'usually covered with leather', which 'strikes the string'.⁹⁵

Hammer Rail

In pianos, the 'lateral wooden bar to which the hammers are [hinged]. In square pianos ... the hammer rail may be quite thin, the hammers articulated from it on leather hinges.' Generally, in grand pianos, 'the hammers are pivoted on axles which are fastened to a more substantial hammer rail'.⁹⁶

89 Ripin, 'Grand Pianoforte', p. 635.

90 Cole, *The Pianoforte in the Classical Era*, p. 379.

91 See Clarke, 'The English Piano', pp. 254–5.

92 K. Kean, 'Hammer', in R. Palmieri (ed.), *Piano: An Encyclopedia* (New York: Routledge, 2003), p. 161.

93 Cole, *The Pianoforte in the Classical Era*, p. 380.

94 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 334.

95 *Ibid.*, p. 337.

96 Cole, *The Pianoforte in the Classical Era*, p. 380.

Hammer Rest Rail

In pianos, the 'rail upon which the hammer heads (or part of the [hammer] shanks near the hammer heads) rest'.⁹⁷

Hammer Shank

In pianos, the 'long and thin' portion of a hammer between the hammer butt or hammer pivot axle and the hammerhead.⁹⁸

Hand-Lever (Hand-Stop; Stop)

In pianos, a pivoted 'lever, often terminating in a decorative knob',⁹⁹ 'moved by the player's hand',¹⁰⁰ used to engage or disengage a mutation.

Harp Stop (Buff Stop)

In square pianos, a hand-stop or pedal-operated mutation, comprising a leather-covered wooden batten, which, when engaged, presses against the underside of the strings 'near to the extremity of their sounding lengths' (that is, near to the nut-pins).¹⁰¹ This causes 'the upper partials' of the sound 'to be restricted'.¹⁰² Simultaneously, the lingering attenuation of the sound is cut short. To late eighteenth-century listeners, the resultant sound would most probably have resembled a gut-strung harp or a lute.

Head

In keyboard instruments, the short, wide portion of the playing surface 'of a natural key' situated forward 'of the sharps'.¹⁰³ The playing surface is often made of a precious material, such as ebony or ivory.

97 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

98 *Ibid.*, p. 340.

99 Cole, *The Pianoforte in the Classical Era*, p. 380.

100 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

101 Cole, *The Pianoforte in the Classical Era*, pp. 377–8.

102 *Ibid.*, p. 378.

103 *Ibid.*, p. 337.

Historically Inspired Performance Practice

The conventions of performance that appear to have been prevalent among knowledgeable performers before our time, including those customs that were so commonly understood that they were not notated, as well as aspects of performance that were too subtle to notate.¹⁰⁴

Hitch-Pin

In stringed keyboard instruments, the metal pin ('effectively a headless nail, usually brass) over which the eye'¹⁰⁵ 'at the end of a string opposite the end held by the wrest pin'¹⁰⁶ 'is hitched; therefore the anchor point'.¹⁰⁷

Hitch-Pin Block

In square pianos, the 'heavy wooden block that holds the hitch pins', usually situated 'behind the keyboard and attached to the left and back case walls'.¹⁰⁸

Hitch-Pin Rail

'In harpsichords, spinets, and grand pianos, the [wooden] rail that holds the hitch-pins (at the edge of the soundboard along the bent side and tail, often with a moulding cut into its front edge).'¹⁰⁹

Hitch Plate

In pianos, 'an iron plate ... into which the hitch-pins are inserted'.¹¹⁰

Hertz (Hz)

'Hz is the International Standard symbol for Hertz, the unit of frequency, defined as the number of cycles per second of a periodic phenomenon ... Sound is a travelling wave which is an oscillation of pressure. Humans perceive frequency of sound waves as pitch. Each ... note [sounding pitch in music] corresponds to

104 See Rosenblum, *Performance Practices in Classic Piano Music*, p. xvii.

105 Cole, *The Pianoforte in the Classical Era*, p. 380.

106 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

107 Cole, *The Pianoforte in the Classical Era*, p. 380.

108 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

109 *Ibid.*, p. 337.

110 Burnett, *Company of Pianos*, p. 207.

a particular frequency which can be measured in Hertz.¹¹¹ The term was named in honour of the German physicist Heinrich Rudolf Hertz (1857–94), who was ‘the first to conclusively prove the existence of electromagnetic waves’.¹¹²

Inlay

In furniture and decorative arts, a ‘decorative technique in which pieces of wood, ivory, metals, mother-of-pearl, etc., contrasting in colour with the background material, are fitted into chiselled-out areas ... forming patterns or pictures’.¹¹³

Interval

The sounding distance between two pitches as it is perceived by the mind.

Jack

1) In pianos, ‘the ... lever articulating from, or attached’ directly to the ‘key lever, which transmits the motion of the key lever to the hammer’ butt¹¹⁴ (‘or sometimes to intermediate elements acting on the hammer butt’).¹¹⁵ ‘Also called the “hopper” in escapement actions of the English type.’¹¹⁶ 2) In pianos, the upright rectangular hardwood slip from which protrudes—at the upper end of one of its two wide faces—the damper compartment.

Key

In keyboard instruments, the section of a key lever delineated by the area of the playing surface.

Keyboard Compass (Compass)

See ‘Compass (Keyboard Compass)’, above.

111 ‘Hertz’, in *Wikipedia*.

112 ‘Heinrich Hertz’, in *Wikipedia: The Free Encyclopedia* (n.d.).

113 ‘Inlaying’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 187.

114 Cole, *The Pianoforte in the Classical Era*, p. 381.

115 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

116 Cole, *The Pianoforte in the Classical Era*, p. 381.

Keyboard Pantalon

'A stringed keyboard instrument with hammer action invented in north Germany in the early 18th century, probably before any knowledge of the invention of the piano ... in Italy had been disseminated there. Typically provided with bare wooden hammers, [no dampers, and] with the alternative of a softer tone produced either by a moderator¹¹⁷ ... or an additional set of softly voiced leathered hammers.'¹¹⁸

Key Character

'Temperament as practiced on keyboard instruments during the 19th century and before was unequal temperament; that is, the [interval between] various semitones differed in' size or ratio, 'and each of the 24 major and minor scales contained its own unique interval relationships. This in turn caused each tonality ... to have special' emotional and aesthetic qualities known as key character.'¹¹⁹

Key Dip

In keyboard instruments, a measurement of the vertical displacement of 'the front end of a key' lever¹²⁰ 'when it reaches the limit of its [downward] movement'.¹²¹

Keyframe

In stringed keyboard instruments, the wooden framework 'upon which the key levers rest'.¹²² In late eighteenth-century pianos, the keyframe commonly comprises transverse members of identical length (running parallel both with each other and with the keyboard): a 'back [touch] rail, a balance rail and [a] front [touch] rail', joined at each end (and sometimes in the centre) with a single shorter bar running from the front to the back.¹²³

117 See 'Moderator', below.

118 Cole, *The Pianoforte in the Classical Era*, p. 382.

119 Jorgensen, *Tuning*, p. 769.

120 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

121 Cole, *The Pianoforte in the Classical Era*, p. 381.

122 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

123 Burnett, *Company of Pianos*, p. 208.

Key Lever

In keyboard instruments, a pivoted wooden lever, on the top of the exposed portion of which is the playing surface.

Key Plate

In keyboard instruments, a thin covering glued to the top of a key lever that comprises the playing surface as well as the exposed portion of the key lever. A key plate is often made of a precious material, such as ebony or ivory.

Keywell

In stringed keyboard instruments, the 'vertical surroundings of' a recessed keyboard,¹²⁴ 'bounded by the interior portions of the spine and cheek piece and the nameboard'.¹²⁵

Keywell Cheek

In stringed keyboard instruments, the 'short wall ... or the front part of the spine or cheek' near 'the end of the keyboard'.¹²⁶

Knee-Lever

In pianos, a vertically acting 'lever, mounted beneath the keyboard area of the piano, operated by raising the player's knee',¹²⁷ which controls a mutation.¹²⁸

Lap Joint (Lapping)

In joinery, a technique for joining two pieces of wood by partially overlapping the pieces and fastening them together.¹²⁹

Lapped Dovetail Joint

In joinery, a dovetail joint that is concealed from the front view.

124 Ibid., p. 208.

125 Kottick, *A History of the Harpsichord*, p. 472.

126 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

127 Cole, *The Pianoforte in the Classical Era*, p. 381.

128 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 337.

129 See M. R. Anglin, 'What is a Lap Joint', in B. Harris (ed.), *WiseGeek: Clear Answers for Common Questions* (Sparks, Nev.: Conjecture Corporation, 2003–12; Last modified 17 June 2012).

Listing Cloth

In stringed keyboard instruments, a strip of cloth located near the hitch-pin rail, whose function is to dampen the sympathetic vibrations of the non-sounding portion (between the bridge pin and the hitch-pin) of each string.

Lockboard

In stringed keyboard instruments, the ‘board that closes the case ... in front of the keyboard’.¹³⁰

Machine Engraving

In furniture and decorative arts, ‘the tracing of an ornamental pattern’,¹³¹ ‘applied to a wide variety of materials’,¹³² using a machine or lathe attachment.¹³³ Ornamental patterns are created by removing fine threads of whatever material is being decorated.

Manual

Another word for keyboard. ‘Single-manual instruments have one keyboard; double-manual ... two.’¹³⁴

Marquetry

In furniture and decorative arts, a ‘decorative technique’ applied to flat surfaces, ‘by which various woods or other materials (ivory, bone, metals, tortoise-shell) are inlaid in [a] sheet of veneer’.¹³⁵

Medallion

‘In ceramics, [a] small round or elliptical tablet with [a] decorative motif [or scene] painted or in relief.’¹³⁶

130 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 338.

131 ‘Engine-Turning’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 136.

132 *Ibid.*, p. 133.

133 See *ibid.*, p. 136.

134 M. S. Waitzman, *Early Keyboard Instruments: The Benton Fletcher Collection at Fenton House* (London: The National Trust, 2003), p. 97.

135 ‘Marquetry’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, pp. 225–6.

136 ‘Medallion’ in *ibid.*, p. 229.

Mode

In music, a scale comprising a set of consecutive pitches arranged in a specific sequence of tones and semitones. In Western music, between the ninth and mid-sixteenth centuries, eight modes were commonly used.

Moderator

In pianos, a mutation comprising a batten¹³⁷ 'situated closely below the strings',¹³⁸ 'with projecting pieces of [woven] cloth or [soft] leather that can be interposed—by means of a hand stop, knee-lever, or pedal—between the hammer[heads] and strings'.¹³⁹

Moulding

In furniture, 'a long ornamental element, either projecting or recessed, of continuous profile (flat, round, concave, convex, etc.)',¹⁴⁰ 'used to cover transition between surfaces or for decoration'.¹⁴¹

Mutation

In stringed keyboard instruments, a mechanical device incorporated into the instrument that, when engaged, alters or modifies the timbre of the sound.

Nag's Head Swell

In pianos, a mutation operated by a pedal—or sometimes by a knee-lever—which modifies the piano's volume by lifting either a hinged segment of or the entire lid.

Nameboard

In stringed keyboard instruments, the removable rectangular wooden 'board, often resembling a case wall', fitted 'immediately behind the playing surfaces of the keys'.¹⁴²

137 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 338.

138 Burnett, *Company of Pianos*, p. 208.

139 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 338.

140 'Molding' in Chadenet, *French Furniture from Louis XIII to Art Deco*, p. 11.

141 'Molding (Decorative)', in *Wikipedia: The Free Encyclopedia* (Last modified 17 September 2012).

142 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 338.

Natural

In keyboard instruments, the playing surface of a key lever, at the front of, between and lower than the playing surface of a sharp ('accidental') key.

Neo-Classical

In furniture and decorative arts, an anti-Rococo style 'derived from forms and decorative motifs of ... [ancient] Greece and Rome ... straight lines replaced rococo curves, and classical motifs were used, e.g. draperies and swags ... fluting ... medallions'.¹⁴³ The style is characterised by symmetry, simplicity, delicacy and restraint.

Newel Post

The larger upright post at the bottom of a flight of stairs, which supports the handrail of a stair banister.

Nut

In harpsichords, spinets and grand pianos, the 'long, narrow, and sometimes curved' strip or bar 'of hardwood attached to the wrestplank, that supports the strings at the end opposite to the soundboard bridge'.¹⁴⁴ In square pianos, the nut is 'of one piece with the hitch-pin' block.¹⁴⁵

Nut-Pins

In stringed keyboard instruments, small metal pins 'driven part way into the nut'.¹⁴⁶ 'Nut pins keep an individual string in its correct lateral position [and] ... define ... precisely one end of its speaking length.'¹⁴⁷

143 'Neo-Classical Style or Classical Revival' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 244.

144 Cole, *The Pianoforte in the Classical Era*, p. 382.

145 Clinkscale, *Makers of the Piano 1700–1820*, p. 400.

146 *Ibid.*, p. 400.

147 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 338.

Octave

The sounding distance ('interval') between two pitches, where the sound of the higher pitch is produced by vibrations that are double the frequency of the lower pitch; the sound of the lower pitch is produced by vibrations that are half the frequency of the higher pitch.

Ogee

A moulding profile (shaped somewhat like an 'S') comprising a concave arc flowing into a convex arc—that is, two arcs that curve in opposite senses, so that the ends are parallel.¹⁴⁸

Open-Covered String

In late eighteenth and early nineteenth-century square pianos, an overspun 'string in which the adjacent loops of the' thin wire helical covering (commonly brass or copper) wound around the straight core (usually brass or iron) 'do not touch each other'.¹⁴⁹

Organized Piano (Claviorganum; Piano Organisé)

A piano integrated with an organ—combined in the same case. An organized piano may sound as a piano, an organ or as a simultaneous combination of both, and may have either a single keyboard or two keyboards (one for the piano, the other for the organ). The organ's pipework is usually 'contained in a cabinet underneath'¹⁵⁰ the piano.

Ormolu

In furniture and decorative arts, 'brass or bronze objects or mounts' that are 'gilded or covered with gold-coloured lacquer'.¹⁵¹

Overspun String (Covered String)

In late eighteenth and early nineteenth-century square pianos, a bass string 'consisting of a straight core around which a [thin wire] helical covering'¹⁵²

148 See 'Ogee', in *Wikipedia: The Free Encyclopedia* (n.d.).

149 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 338.

150 Cole, *The Pianoforte in the Classical Era*, p. 378.

151 'Ormolu' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 253.

152 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 334.

‘of soft metal, such as copper’¹⁵³ is ‘wound ... to add weight and mass’.¹⁵⁴ The adjacent loops of the thin wire helical covering touch each other. If plain brass wire is used for the strings of approximately the two bottom octaves in late eighteenth and early nineteenth-century square pianos, the tone produced is hollow and musically unsatisfactory. Overspinning produces a heavier and yet supple string (the string is not stiffened by an increase in mass) that produces a richer tone.

Pantalon

See ‘Keyboard Pantalon’ above.

Parianware

‘Fine-grained hard-paste porcelain, usually unglazed ... resembling marble in appearance.’¹⁵⁵

Patera

In furniture and decorative arts, a small flat, circular or oval cast applied ornament.

Peau de buffle

In harpsichords, soft quills of buffalo leather.

Piano

1) See ‘Cottage Piano’; ‘Fortepiano’; ‘Grand Piano’; and ‘Organized Piano’ above. See also ‘Square Piano’ and ‘Upright Piano’ below. 2) In music, the Italian term ‘*piano*’ is a performance instruction denoting ‘soft’.

Pianissimo

In music, the Italian term ‘*pianissimo*’ is a performance instruction denoting ‘very soft’.

153 Burnett, *Company of Pianos*, p. 209.

154 Clinkscale, *Makers of the Piano 1700–1820*, p. 400.

155 ‘Parian Ware’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 257.

Pilaster

The vertical structural part of a building that takes the form of a decorative shallow rectangular column (with a base, shaft and capital) projecting slightly from a wall.

Pitch

'The particular quality of ... an individual musical' note's sound, which 'fixes its position in the' gamut, 'determined by what the ear judges as being the most fundamental wave-frequency' of that sound.¹⁵⁶

Pitchpipe

A small, usually wooden, end-blown square-bodied wind instrument without finger holes, 'fitted with a moveable', graduated 'wooden plunger or piston, on which a scale of notes with a range of about an octave [is] ... marked'.¹⁵⁷ When blown, a pitchpipe sounds the note of the scale as marked on the plunger. During the eighteenth and early nineteenth centuries, pitchpipes were often used to fix the basic pitch of stringed keyboard instruments.

Pizzicato

'A playing technique that involves plucking the string(s) of a' generally bowed string instrument with the fingers.¹⁵⁸

Rear Rack-Guide

In clavichords, keyboard pantalons, square pianos by Johann Christoph Zumpe and in English square pianos whose action design is modelled on that of Zumpe, a wooden rack located at the interior rear of the case under the hitch-pin block and immediately behind the distal end of the key levers, whose function is to prevent any lateral deviation of the rear of each key lever.

156 M. Lindley, 'Pitch', in S. Sadie (ed.), *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980), Vol. 14, p. 779.

157 Haynes, *A History of Performing Pitch*, p. 19.

158 'Pizzicato', in *Wikipedia: The Free Encyclopedia* (Last modified 28 July 2013). See also S. Monosoff, 'Pizzicato', in S. Sadie (ed.), *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980), Vol. 14, p. 799.

Reeding

In furniture, a decorative ornament comprising a ‘series of thin, parallel convex ribs’.¹⁵⁹

Regency Style

In furniture, a ‘general term for several ... styles found in Britain c1795–1820’.¹⁶⁰ The term ‘is derived from the regency (1811–20) of George Augustus, prince of Wales (later George IV)’. The style ‘encompasses a number of differing influences—including Greek, Roman, Chinese and rococo ... ornament on the flat surfaces of Regency furniture derived from the rich contrast of exotic wood veneers and application of metals or painting rather than extensive carving or complicated contours’.¹⁶¹

Rib

In stringed keyboard instruments, a relatively small ‘wooden reinforcing bar’, commonly with tapered ends, and made of spruce or other light wood ‘glued to the underside of the soundboard’.¹⁶² Soundboard ribs: 1) support the soundboard against downward pressure exerted by the bridge; 2) encourage sections of the soundboard to expand upwards in response to increases in humidity; and 3) assist in the transmission of vibration.¹⁶³

Rococo

1) In furniture, a ‘decorative, curvilinear style characterized by light, delicate, asymmetrical motifs based mainly on rock, shell, floral, and leaf shapes’.¹⁶⁴ The style, ‘which was both a continuation of and a reaction against that of the ... baroque era which preceded it’,¹⁶⁵ evolved in early eighteenth-century ‘France ... and rapidly spread throughout Europe, then to England where it reached its peak c1750–70’.¹⁶⁶ 2) In a widely accepted and commonly encountered periodisation schema of Western music history, the ‘Rococo’ era is defined as the period between ca 1725 and ca 1775. Rococo music is usually light and

159 ‘Reeding’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 284.

160 ‘Regency style’ in *ibid.*, p. 284.

161 ‘The Regency Style’, in *Restorations Network* (The Restorations Network, 1997–2008).

162 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 339.

163 See R. Russell, *The Harpsichord and Clavichord*, 2nd edn (New York: W. W. Norton & Company, 1973), p. 20.

164 ‘Rococo Style’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, pp. 289–90.

165 Burnett, *Company of Pianos*, p. 209.

166 ‘Rococo Style’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, pp. 289–90.

graceful rather than grand and/or profound, and commonly contains a melodic line that is excessively overlaid with 'little note' ornaments—appoggiaturas, lower mordents, slides, trills, turns, and so on.

Romantic Era

In a widely accepted and commonly encountered periodisation schema of Western music history, the period between ca 1830 and ca 1880.

Sash Window

'A window that slides vertically.'¹⁶⁷

Scale

In music, a set of consecutive pitches.

Scaling

In a stringed keyboard instrument, 'the system or systems of string lengths used in its design'.¹⁶⁸ Scaling 'is determined by the desired pitch' range of the instrument 'and string material, whether iron, steel, or copper alloy'.¹⁶⁹

Semitone

In keyboard instruments, the octave is commonly divided into 12 notes. The distance ('interval') between each adjacent note is called a semitone.

Sforzando

In Western music, for most nineteenth-century composers the Italian term '*sforzando*' denotes a dynamic accent within the prevailing dynamic. For many twentieth and twenty-first-century composers, the term denotes a sudden, strong dynamic emphasis, irrespective of dynamic context.¹⁷⁰

167 Yorke, *Georgian & Regency Houses Explained*, p. 126.

168 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 340.

169 Burnett, *Company of Pianos*, p. 209.

170 See 'Sforzando', in S. Sadie (ed.), *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980), Vol. 17, pp. 210–11.

Sharp

In keyboard instruments, the playing surface of a key lever at ‘the rear of, and higher than’ the playing surface of a natural key.¹⁷¹ Sometimes referred to as an ‘accidental’ key.

Shellac

A resinous substance secreted by the female lac bug (*Kerria lacca*). The resin is processed and sold as dry flakes, which are dissolved in methyl alcohol to make liquid shellac, which is used in the process of French polishing.¹⁷²

Short Octave

In keyboard instruments, an ‘arrangement of the lowest octave of keyboards in which certain accidental [sharp] notes are missing and several keys sound notes other than their appearance would suggest’.¹⁷³

Single-Manual

See ‘Manual’, above.

Soffit

The underside of a structural component of a building, such as an arch, beam, cornice, overhang, staircase or vault.

Soundboard

In stringed keyboard instruments, ‘the thin wooden plate that transmits the vibration of the strings to the air’.¹⁷⁴ The thickness of the soundboard varies—‘according to the type and date of the instrument, from approximately two to [approximately] seven millimetres. In almost all surviving’ eighteenth and early nineteenth-century examples, ‘the wood used is spruce, fir, pine or

171 Burnett, *Company of Pianos*, p. 214.

172 See ‘Shellac’, in *Wikipedia: The Free Encyclopedia* (n.d.).

173 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 340.

174 *Ibid.*, p. 340.

cypress. It is usually quartersawn (growth-rings approximately at right angles to the surface)';¹⁷⁵ this maximises 'the acoustic properties and minimize[s] any shrinkage that might cause the board to crack'.¹⁷⁶

Speaking Length (Sounding Length)

In stringed keyboard instruments, the portion of a string between the bridge and nut-pins—or between the pins on the two bridges of a virginal, or between the tangent and bridge of a clavichord—which vibrates to produce a sounding note.¹⁷⁷

Spigot

A 'peg or pin turning through a right angle controlling [the] flow of liquid through [a] tap'.¹⁷⁸

Spine

The rear case wall of a square piano or the long straight 'case wall of a harpsichord', bentside spinet or grand piano.¹⁷⁹

Spinet

'A diminutive [single-strung] harpsichord which can be triangular or pentagonal in shape', and which has a single keyboard. 'The strings are usually at an angle to the keyboard.'¹⁸⁰

Square Piano

A horizontal stringed keyboard instrument, superficially similar to a clavichord, comprising a fairly shallow rectangular box, open at the top (closed by a lid), with an inset keyboard towards the left at the front long-side of the instrument, a soundboard at the treble end, and horizontal strings running obliquely from the back of the instrument at the bass end to the front at the treble end (the

175 Burnett, *Company of Pianos*, p. 210.

176 Cole, *Broadwood Square Pianos*, p. 82.

177 See Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 340.

178 'Spigot' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 320.

179 See Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 340.

180 Cobbe, *Composer Instruments*, p. xv.

bass strings being nearest to the player), the strings passing over up-striking hammers and the soundboard.¹⁸¹ Square pianos usually have dampers (unlike keyboard pantalons).

Stichmaß (Three-Octave Span)

In keyboard instruments, the distance from the left-hand side of the F key to the left-hand side of the f² key—that is, the width of the three octaves in the centre of the keyboard. The three-octave span measure is taken as the standard reference when comparing various keyboards, rather than a single-octave span, since old keyboards can be slightly variable, owing either to the maker's lack of precision or to subsequent distortion of the wooden keys in varying conditions of humidity. 'The 3-octave span is a fairly reliable parameter, and will usually remain constant for any given maker over a period of many years. It can be used to distinguish between the work of different makers when the instruments are either unsigned or possibly fraudulently inscribed. An accurate single-octave span is obtained by dividing the 3-octave span by three.'¹⁸²

Stretcher

A 'strengthening and stabilizing rail, running horizontally between the legs of [a] piece ... of furniture'.¹⁸³

String Course

In stringed keyboard instruments, two or more adjacent strings tuned to the same pitch.

Stringing

1) In furniture and decorative arts, a 'long narrow strip of decorative' inlaid wood or metal.¹⁸⁴ 2) In stringed keyboard instruments, the 'system of ... strings, including their number', dimensions and metal type.¹⁸⁵

181 This definition is based on one given in Clarke, 'The English Piano', pp. 254–5.

182 Cole, *The Pianoforte in the Classical Era*, p. 384.

183 'Stretchers' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 329.

184 Clinkscales, *Makers of the Piano 1700–1820*, p. 402.

185 *Ibid.*, p. 402.

Stucco

'A plaster used to render, imitate stonework', or to 'form decorative features'.¹⁸⁶

Swag

In furniture and decorative arts, a painted, moulded or embossed 'ornamental' garland 'of fruit, flowers, [or] drapery'.¹⁸⁷

Tail

1) 'In harpsichords ... and grand pianos, the short case wall between the bent side and the spine.' 2) The narrow 'portion of the playing surface of a natural key behind the head and between the sharps'.¹⁸⁸ The playing surface is often made of a precious material, such as ivory.

Tangent

'The upright [up-striking] brass blade, near the distal end of a clavichord key lever, that strikes the string and not only causes the string to sound but also determines one end of its speaking length'.¹⁸⁹

Tangent Action

In pianos, a tangent action has non-pivoting vertical rebounding hammers, rather than pivoted rebounding hammers. 'The distinguishing feature of the so-called tangent action is that the vertical hammers are not attached to any other part of the action but move up and down in a guide similar to the jack guide of the harpsichord ... The non-pivoting vertical hammers are propelled towards the strings from below, either by the keys on which they rest or by intermediate levers interposed between the keys and the hammers.'¹⁹⁰ 'The intermediate levers can be mounted on the key lever or hinged above the keys. Both these types of intermediate levers can face towards the player or away from the player.'¹⁹¹

186 Yorke, *Georgian & Regency Houses Explained*, p. 126.

187 'Swag' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 332.

188 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 341.

189 *Ibid.*, p. 341.

190 di Stefano, 'The *Tangentenflügel* and Other Pianos with Non-Pivoting Hammers', p. 80.

191 *Ibid.*, p. 80, fn. 4.

Tangentenflügel

A tangent action keyboard instrument. The term '*Tangentenflügel*' 'came into use about 1791 when an instrument made by Franz Jacob Spath and Christoph Friederich Schmahl of Regensburg, was described using this name in the *Musikalischer Korrespondenz der deutschen Filarmonischen Gesellschaft* [*Musical Correspondence of the German Philharmonic Society*].¹⁹² All the *Tangentenflügel* made by Spath, Schmahl and those other builders who were clearly their followers include the following features: 1) a wing-shaped ('grand') form; 2) a tangent action with bare wooden hammers (without any top covering) and intermediate levers; 3) a damper-raising mechanism activated by a knee-lever; 4) an *una corda* mechanism usually activated by a knee-lever; 5) a mutation mechanism that inserts cloth or leather between the strings and the hammers; and 6) a mutation whereby a fringe of tasselled cloth presses against the strings from below, close to the nut.¹⁹³

Tanning

'The treatment of skin with tanning agents to render it durable, resilient, hard-wearing, and soft. There are two main types of tanning. 1. Vegetable tanning, in which skins are tanned in pits with plant extracts such as spruce, oak, or alder wood; oak galls, pomegranates, or acorn seed husks. 2. Mineral tanning [adopted in the early twentieth century], in which skins are tanned in drums with alum or chromium salts, the latter shortening the otherwise protracted tanning period to six or seven weeks.'¹⁹⁴ 'Lanolin oil and brains are used to make softer leathers, while vegetable tanning produces a firm leather.'¹⁹⁵

Teapoy

A 'small pedestal or three-legged table'.¹⁹⁶

Temperament

'A ... scale in which the sizes of one or more of its ... intervals has been altered ... so that all or at least a large portion of its intervals can be made to fit within ... [a] man-made pattern.'¹⁹⁷

192 Ibid., p. 80.

193 See *ibid.*, p. 82.

194 Vass and Molnár, *Handmade Shoes for Men*, p. 210.

195 'Materials' in Strange, 'Restoration of a Longman & Broderip Square Piano'.

196 'Teapoy' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, pp. 338–9.

197 Jorgensen, *Tuning*, p. 777.

Tension Bar

In grand pianos, a long metal bar, commonly positioned in the direction of the strings, which augments the strength of the case. In square pianos, a metal bar passing over the strings that augments the strength of the case.

Thoroughbass (Basso Continuo; Continuo)

In music, 'a largely practical discipline ... in which ... [a] keyboardist' or, within some contexts, a player of a strummed instrument such as a guitar or theorbo, or a bowed string instrument such as a viola da gamba or violoncello, plays or 'realises' 'chords ... encoded in figured-bass notation ... One of the most salient features of thoroughbass is that it asks us to think of music in terms of a series of successive chords. These chords are encoded in a notation of Arabic numerals ... that indicate their interval structure above a ... continuo bass line.'¹⁹⁸

Three-Octave Span (*Stichmaß*)

See '*Stichmaß* (Three-Octave Span)', above.

Tonality

In music, a system 'in which specific hierarchical pitch relationships are based on' a specific note or 'tonic'.¹⁹⁹ Commonly (within a performative context), tonality preserves 'the psychological feeling of rest ... when the tonic ... is reached'.²⁰⁰

Tone

In keyboard instruments, the octave is commonly divided into 12 notes. The distance ('interval') between each adjacent note is called a semitone. A tone is the interval comprising two adjacent semitones.

Triple-Strung (Tri-Chord)

In stringed keyboard instruments, having three adjacent unison strings—that is, three adjacent strings tuned to the same pitch—per note.

198 Christensen, 'Thoroughbass as Music Theory', pp. 9–10.

199 See 'Tonality', in *Wikipedia: The Free Encyclopedia* (n.d.).

200 Jorgensen, *Tuning*, p. 778.

Tunbridgeware

In furniture and decorative arts, an inlay design comprising a ‘diamond, star, or square mosaic pattern’. It is ‘made by gluing together slim shafts of wood, in various colours, so that the required ... pattern appears at [the] end of [the] cluster of sticks. [The] cluster is then sliced thinly, across [the] design, to form [a] veneer.’²⁰¹

Tuning

‘The skill of adjusting ... pitches so that they produce the ... [required] frequencies.’²⁰²

Tuning Fork

An small ‘acoustic resonator in the form of a two-pronged fork with the prongs formed from a U-shaped bar of elastic metal’,²⁰³ ‘which when struck will always resonate’ at the same specific and constant pitch.²⁰⁴

Tuning Hammer (Tuning Key)

‘The T-shaped metal tool applied, like a clock key, to turn the wrestpins’ of a stringed keyboard instrument, thereby altering the tension of the strings, ‘and so tune the instrument. So called because the cross-piece or handle [is] ... shaped like a hammer and [can] ... be used as such to knock the wrest pins firmly into the’ wrest-plank.’²⁰⁵

Una Corda

In pianos, a device that enables the keyboard (and therefore the action) to be laterally realigned, causing the hammers to strike only one string of double or triple-strung notes.

201 ‘Tunbridge Ware’ in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, pp. 353–4.

202 Jorgensen, *Tuning*, p. 778.

203 ‘Tuning Fork’, in *Wikipedia: The Free Encyclopedia* (n.d.).

204 Colt and Miall, *The Early Piano*, p. 158.

205 Cole, *The Pianoforte in the Classical Era*, p. 384.

Unfretted (Fret-Free) Clavichord

A clavichord in which each string course—two or more adjacent strings tuned to the same pitch—is only ever struck by a single designated key lever.²⁰⁶

Upright Grand

A piano in upright form, usually standing 2.1 metres high. The instrument is arranged like a grand piano set on end, the soundboard and strings oriented vertically above the keys; key levers (as in grand pianos) are horizontally oriented. The hammers are located behind the string plane.

Up-Striking Hammers

In typical grand and square pianos, hammers located below the strings, which 'strike upwards against the strings'.²⁰⁷

Veneer

In furniture and decorative arts, a 'thinly-sliced sheet ... of wood, notable for [its] colour and grain, glued to the surface' of a 'less fine wood'.²⁰⁸

Venetian Swell

A wooden frame holding tightly fitting horizontal wooden louvres '(resembling those of Venetian blinds) that can be opened and closed by a pedal to control the volume of sound. It covers the soundboard [and strings] of many late eighteenth century English harpsichords.'²⁰⁹ A Venetian swell 'is rarely found on early pianos'.²¹⁰

Volute

The ornamental 'spiral scroll on [the] capital of [an] Ionic column'.²¹¹

206 See Brauchli, *The Clavichord*, p. 4.

207 Colt and Miall, *The Early Piano*, p. 155.

208 'Veneering' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 360.

209 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 342.

210 Clinkscale, *Makers of the Piano 1700–1820*, p. 403.

211 'Volute' in Cameron and Kingsley-Rowe, *Collins Encyclopedia of Antiques*, p. 364.

Well Temperament

In keyboard instruments, the 'leading ... temperament of the 18th and 19th centuries ... a temperament in which one can modulate freely through all the ... [tonalities] without encountering ... an interval that is considered far too out of tune ... [for] use'.²¹²

Wrest-Pin

In stringed keyboard instruments, the upright 'iron pin (about 4 mm to 6 mm. in diameter; sometimes called "tuning pin") held by the wrest plank around which a string is wound. The head of the pin is shaped so that it can be gripped by a special wrench, the tuning hammer ["tuning key"], by which the pin can be rotated to change the tension and therefore the sounding pitch of the string.'²¹³

Wrest-Plank

In stringed keyboard instruments, the heavy hardwood 'block that holds the wrest pins' (tuning pins).²¹⁴ In harpsichords, spinets and grand pianos, the wrest-plank also provides the surface to which the nut is attached.

212 Jorgensen, *Tuning*, p. 779.

213 Koster, *Keyboard Musical Instruments in the Museum of Fine Arts, Boston*, p. 343.

214 *Ibid.*, p. 343.

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