

LIST OF SURVIVING TRIPLE-FRETTED CLAVICHORDS

Definition

For the purpose of this list, a *triple-fretted* clavichord is one in which, for part of the compass, groups of three adjacent notes (but no more) are obtained from the same course of strings. Some surviving clavichords of early date have groups of three, four, and even five notes obtained from a single course: these are *multiple-fretted* clavichords, and are not included in this list (see the separate document www.peter-bavington.co.uk/multiple-fretted.htm).

Nearly 50 triple-fretted clavichords are known to have survived. Most were probably made in the second half of the seventeenth century; by 1700, the type was probably obsolete, though a few examples survive from as late as the 1750s. Maria Boxall has argued¹ that the triple-fretted type seems to have been a speciality of the South-German region, and it is true that a large proportion of the surviving examples seem to come from this area (roughly speaking South Bavaria, South Austria, and the German-speaking regions of Switzerland).

The standard Pattern

Working upwards from the bass, the usual pattern is to begin with a number of fret-free notes, then a few courses with two notes per course, and then triple-fretting to the top of the compass. In the great majority of cases (well over 80% the surviving examples) the pattern in the triple-fretted section is as follows in each octave:

B–C–C# | D–E_b–E | F–F#–G | G#–A–B_b

I shall refer to this as the standard pattern. Standard-pattern triple-fretting may start at *d*, *b* or *d*¹. A significant group of about fifteen instruments, however, varies this by beginning the triple fretting with a group of three starting at note *a*, followed by a two-note fretted course, then continuing in the standard pattern, thus:

a–b_b–b | c¹–c#¹ | d¹–e_b¹–e¹ | f¹–f#¹–g¹ | g#¹–a¹–b_b¹ | b¹–c²–c#² (etc.).

It may be significant that many clavichords in this group seem to come from the German-speaking cantons of Switzerland.

Only a handful of clavichords have survived with triple-fretting that lies quite outside the standard pattern: in these cases, the complete fretting (where known) is given in the list that follows.

For the sake of completeness, a small number of clavichords that have triple-fretting in the top octave only have been included in the table (Group V).

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¹ Maria Boxall, 'The Origins and Evolution of Diatonic Fretting in Clavichords', *Galpin Society Journal* LIV (2001), pp. 143–99, especially pp. 174–8.

List of triple fretted clavichords

The clavichords are listed here in groups according to the lowest triple-fretted course; any pairwise-fretted courses below this are ignored. 'BMO' refers to the identifying number of the record in the internet resource Boalch-Mould Online (www.boalch.org). The names of owners and sources of information are given in abbreviated form; full details are given in the notes below the table.

No.	Maker	Date	Place made	Compass	BMO	Standard pattern?	Owner and Inv. No. if any	Source of information
Group I: triple-fretting starts <i>d-e^b-e</i>								
1	D.O.M	1652	Germany	<i>C/E-c³</i>	2461	yes	Yale University ¹ 4944.1960	Museum notes ²
2	Hoffmann	?1663	?Schwarzburg	<i>C.D-c³</i>	808	yes	Leipzig ³ 18 (lost in WW2)	Henkel Leipzig ⁴
3	Johann Weiss	1702	Stuttgart	<i>C.D-c³</i>	2039	yes	Munich DM ⁵ 1909-5392	Henkel DM ⁶
4		17C	Germany	<i>C/E-c³</i>	2464	yes	Nuremberg GNM ⁷ MINE 58	Kares ⁸
5		17C	?Germany	<i>C/E-c³</i>	2465	yes	Nuremberg GNM ⁷ MINE 55	Kares ⁸
6		17C	Germany	<i>C/E-c³</i>		yes	Leipzig ³ 4 (lost in WW2)	Henkel Leipzig ⁴
7		?1700	Germany	<i>C/E-c³</i>	2334	yes	Benton Fletcher ⁹ No. 19	PAB & BCSN 17 ¹⁰
8		?1700	?Germany	<i>C.D-c³</i>	2474	yes	Brussels MIM ¹¹ 1621	Mahillon, vol. 3 ¹²
9		before1724	Germany/S. Ger.	<i>C/E-c^{3*}</i>	2466	yes	Nuremberg GNM ⁷ MI 442	Kares ⁸
10		?1730	South Germany	<i>C/E-c³</i>	2469	yes	Smithsonian ¹³ 65.590	EKJ 10 ¹⁴
11	Peter Hicks	?	?Bristol	<i>C-d³</i>	758	yes	V&A ¹⁵ W.7-1917	Schott & PAB ¹⁶
Group Ia: triple-fretting starts <i>d-e^b-e f-f# g-g# a-b^b b-c¹-c#¹</i>								
12		?1740	South Germany	<i>C-c³</i>	2470	yes	Nuremberg GNM ⁷ MIR 1047	Kares ⁸

Group II: Triple-fretting starts $a-bb-b$ $c^1-c\#^1$ $d^1-eb^1-e^1$								
13		?1715	?Germany	$C/E-c^3$	2475	yes	Nuremberg GNM ⁷ MINE 56	Kares ⁸
14		?17C	?Germany	$C/E-c^3$	789	yes	Edinburgh MIMEd ¹⁷ 4321	Martin/BCSN ⁹ ¹⁸
15		?1709	Switzerland	$C/E-c^3$	2506	yes	Zurich Design Museum ¹⁹ KGS-1963-0060-201	Boxall ²⁰
16		17C	Germany	$C/E-c^3$	2476	yes	Leipzig ³ 6	Henkel Leipzig ⁴
17	Johann Adam Türig	1680	Switzerland	$C/E-c^3$	1988	yes	Paul Simmonds	Simmonds CI ²¹
18	J. A. Türig	1680–90	Switzerland	$C/E-c^3$	2243	yes	Geneva ²² IM 177	Simmonds CI ²¹ ; Museum fact-sheet ²²
19	J. A. Türig (attr.)	17C	Switzerland	$C/E-c^3$	2135	yes	Met. Mus. ²³ 89.4.1215	Museum website ²³
20		17C	?Switzerland	$C.D-c^3$		yes	Lucerne ²⁴ 51	Joelson CI ²⁵ No. 5
21		17C	?Switzerland	$C/E-c^3$		yes	Private owner	Joelson CI ²⁵ No. 6
22		17C	?Switzerland	$C/E-c^3$		yes	Lucerne ²⁴ 50	Joelson CI ²⁵ No. 7
23		17C	?Switzerland	$C/E-c^3$		yes	Whereabouts unknown	Joelson CI ²⁵ No. 9
24		17C	?Switzerland	$C/E-c^3$		yes	Harry Joelson	Joelson CI ²⁵ No. 11
25		before 1723	?Switzerland	$C/E-c^3$		yes	Basel HM ²⁶ 1879.103	T. Steiner ²⁷
26		1700–25	?Switzerland	$C-d^3$		yes	Pianofort'ino, Basle ²⁸	Website ²⁹
27	J. J. Amman	1742	Rankweil, Austria	$C/E-c^3$	2244	yes	Zug ³⁰ 3369	Museum factsheet and website ³¹
28		1700–50	?Germany	$C-c^3$		yes	Berlin ³² 2157	Restle-list ³³
29		?17C	?South Germany	$C/E-c^3$	2449	yes	Gian Luca Illario, Italy	Bavington ³⁴

Group III: Triple-fretting starts $b-c^1-c\#^1$								
30	Weidner	1697	Augsburg	$C/E-c^3$	2037	yes	Zurich LM ³⁵ 17.498	Joelson CI ²⁵ No. 1
31		17C	?Flanders	$C/E-c^3$	2497	yes	Edinburgh MIMEd ¹⁷ 4486	Barnes drawing ³⁶
32		?1730	South Germany	$C.D-c^3$		yes	<i>Collectors Guide</i> Oct 1962	BCSN72 ³⁷
[No. 33 has been moved to Group VI as the fretting was incorrectly reported: see No. 44A]								

Group IV: Triple-fretting starts at $d^1-e^1-b^1-e^1$								
34		1650-90	Switzerland	$C/E-c^3$		yes	Chur ³⁸ XI 113	SCS7(Neunhoeffer) ³⁹
35		1700	Switzerland	$C/E-c^3$		yes	Berne MH ⁴⁰ 5896	SCS7 (Brauchli) ⁴¹

Group V: Triple fretting starts above d^1								
36		?18C	?St Gall	$C/E-c^3$		yes	Basel HM ²⁶ 1976.9	Gutmann ⁴⁹
37	Franz König	1739	Ingolstadt	$C/E-c^3$	1113	yes	Munich DM ⁵ 1908-16816	Henkel DM ⁶
38	Franz König?	1759	Ingolstadt	$C/E-c^3$	1114	yes	Brussels MIM 1618 ¹¹	Mahillon, vol. 3 ¹²
39		17C	Germany	$C/E-c^3$	2472	no	Leipzig ³ 8	Henkel Leipzig ⁴
No. 39: This instrument has a short and broken octave, with split keys for $D/F\#$ and $E/G\#$. Fretting is as follows: $C/E F-F\# D G-G\# A Bb-B c-c\# d eb-e f-f\# g-g\# a bb-b c^1-c\#^1 d^1-e^1 e^1-f^1-f\#^1 g^1-g\#^1-a^1 bb^1-b^1-c^2 c\#^2-d^2-eb^2 e^2-f^2-f\#^2 g^2-g\#^2-a^2 bb^2-b^2-c^3$.								
40	F. Kiedolps	??1751	Schweinfurth	$C.D-e^3$	913	yes	Smithsonian ¹³ 303.540	EKJ10 ⁴²
41		1776	Portugal	$C-d^3$		no	Lisbon ⁴³ MM 410	Doderer/VDM ⁴⁴
No. 41: This instrument is diatonically fretted except for the top two courses. $C-B$ fret-free; thence as follows: $c-c\# d eb-e f-f\# g-g\# a bb-b c^1-c\#^1 d^1 eb^1-e^1 f^1-f\#^1 g^1-g\#^1 a^1 bb^1-b^1 c^2-c\#^2 d^2 eb^2-e^2 f^2-f\#^2 g^2-g\#^2 a^2-bb-b^2 c^3-c\#^3-d^3$								

Group VI: Exceptional frettings								
Triple-fretting begins at $e-f-f\sharp$								
42	George Woytzig	1688	?Stockholm	$C/E-c^3$	2062	no	Scenkonstmuseet ⁴⁵ M 3146	Brauchli ⁴⁶
No. 42: C/E to e_b fret-free; thence as follows: $e-f-f\sharp$ $g-g\sharp-a$ b_b-b-c^1 $c\sharp^1-d^1-e_b^1$ $e^1-f^1-f\sharp^1$ $g^1-g\sharp^1-a^1$ $b_b^1-b^1-c^2$ $c\sharp^2-d^2-e_b^2$ $e^2-f^2-f\sharp^2$ $g^2-g\sharp^2-a^2$ $b_b^2-b^2-c^3$								
Triple-fretting begins at e_b-e-f								
43		?18C	?Germany	$C-f^3$	2462	no	Yale University ¹ 4940.1900	Museum notes ⁴⁷
No.43: $C-d$ fret-free; thence as follows: e_b-e-f $f\sharp-g-g\sharp$ $a-b_b-b$ $c^1-c\sharp^1-d^1$ $e_b^1-e^1-f^1$ $f\sharp^1-g^1-g\sharp^1$ $a^1-b_b^1-b^1$ $c^2-c\sharp^2-d^2$ $e_b^2-e^2-f^2$ $f\sharp^2-g^2-g\sharp^2$ $a^2-b_b^2-b^2$ $c^3-c\sharp^3-d^3$ $e_b^3-e^3-f^3$								
Triple-fretting begins at $f-f\sharp-g$								
44		1720	?Germany	$C/E-c^3$		yes	Basel HM ²⁶ 1956.553	Gutmann ⁴⁸
Triple-fretting starts $f-f\sharp-g$ $g\sharp-a$ b_b-b $c^1-c\sharp^1$ $d^1-e_b^1-e^1$ (etc.)								
44A	(was No. 33)	1700	?Portugal	$C/E-c^3$		yes	Bernard Brauchli	Doderer/VDM ⁴⁹
45		17C	?Italy	$C/E-c^3$		yes	Paris ⁵⁰ E.2111	Museum website ⁵¹
Two triple-fretted courses, otherwise diatonically fretted								
45A		c. 1700	?Nuremberg	$C.D-c^3$		no	Berlin ³² 2160	Hermert ⁵²
No. 45A: According to Andreas Heermert, the fretting on this instrument has been altered; the original fretting was as follows: Fret-free $C-A$; thence B_b-B $c-c\sharp$ d e_b-e $f-f\sharp$ $g-g\sharp$ $a-b_b-b$ $c^1-c\sharp^1$ d^1 $e_b^1-e^1$ $f^1-f\sharp^1$ $g-g\sharp$ $a^1-b_b^1$ $b^1-c^2-c\sharp^2$ d^2 $e_b^2-e^2$ $f^2-f\sharp^2$ $g^2-g\sharp^2$ $a^2-b_b^2$ b^2-c^3 .								
Triple-fretting provides for divided $D\#/E_b$ keys								
46		?	?	$C/E-c^3$	2471	no	Munich DM ⁵ 1909-18165	Henkel DM ⁶
No. 46: This instrument has three split keys for $D\#$ and E_b . The fretting has been altered, but the original system can be deduced, as follows. Fret-free $C/E-B$; thence $c-c\sharp$ d $d\sharp-e_b-e$ $f-f\sharp$ $g-g\sharp$ a b_b-b $c^1-c\sharp^1$ d^1 $d\sharp^1-e_b^1-e^1$ $f^1-f\sharp^1-g^1$ $g\sharp^1-a^1-b_b^1$ $b^1-c^2-c\sharp^2$ d^2 $d\sharp^2-e_b^2-e^2$ $f^2-f\sharp^2-g^2$ $g\sharp^2-a^2-b_b^2$ b^2-c^3 .								

Group VII: Triple-fretted, details unknown								
47		c.1700	?Germany	<i>C/E-c³</i>		?	Basel, private collection	Brauchli's SCS list ⁵³
48		1700-50	?	<i>C/E-c³</i>		?	Zurich LM ³⁵ 996: but Museum deny it is there	Brauchli's SCS list ⁵³
49		1700-50	Switzerland	<i>C-d³</i>		?	St Gall HVM ⁵⁴ 8392	Brauchli's SCS list ⁵³

List of owners and sources

- ¹ Morris Steinert Collection of Musical Instruments, Yale University, School of Music, New Haven CT USA.
- ² Unpublished data sheet supplied by Yale University; also the collection website (<https://music.yale.edu/browse-collection/clavichord-49441960>; accessed March 2023).
- ³ Grassi Musikinstrumentenmuseum der Universität Leipzig, Germany.
- ⁴ Hubert Henkel, *Clavichorde, Musikinstrumentenmuseum der Karl-Marx-Universität Leipzig, Katalog* Vol. 4, Leipzig, VEB Deutscher Verlag für Musik, 1981.
- ⁵ Deutsches Museum, Munich, Germany.
- ⁶ Hubert Henkel, *Besaitete Tasteninstrumente* (Catalogue of stringed keyboard instruments in the Deutsches Museum, Munich), Frankfurt/Main, Verlag Erwin Bochinsky, 1994.
- ⁷ Germanisches Museum, Nuremberg, Germany.
- ⁸ Martin Kares, *Verzeichnis der Europäischen Musikinstrumente im Germanischen Nationalmuseum Nürnberg, Band 3, Klavichorde*, Wilhelmshaven, Florian Noetzel Verlag, 1999.
- ⁹ The Benton Fletcher Collection of Musical Instruments, Fenton House (National Trust), Hampstead, London, UK.
- ¹⁰ Peter Bavington, 'The Triple-Fretted Clavichord in the Benton Fletcher Collection: Observations and Recommendations', unpublished report addressed to the National Trust, 2015; also Peter Bavington, 'Clavichords in Britain No. 8: The Anonymous Triple-fretted Clavichord at Fenton House, London' in *British Clavichord Society Newsletter* No. 17 (June 2000).
- ¹¹ Musée des Instruments de Musique/Muziek Instrumentenmuseum, Brussels, Belgium.
- ¹² Victor-Charles Mahillon, *Catalogue Descriptif et Analytique du Musée Instrumentale (Historique et Technique) du Conservatoire Royal de Musique de Bruxelles*, Vol. 3, Ghent, 1900.
- ¹³ Smithsonian Institution, National Museum of American History, 1300 Constitution Avenue NW, Washington DC, USA.
- ¹⁴ Michael O'Brien, 'The Smithsonian Clavichords' in *Early Keyboard Journal*, Vol. 10 (1992).
- ¹⁵ Victoria & Albert Museum, Cromwell Road, London, SW7 2RL.
- ¹⁶ Howard Schott, *Victoria and Albert Museum, Catalogue of Musical Instruments: Vol. 1, Keyboard Instruments*, London, HMSO, 1985; also Peter Bavington, unpublished notes following an examination of the Peter Hicks clavichord on 14 September 2016.
- ¹⁷ St Cecilia's Hall Museum of Instruments, 50 Niddry Street, Edinburgh, EH1 1LG.
- ¹⁸ Darryl Martin, 'Clavichords in Britain No. 6: Anonymous Triple-fretted Clavichord in the Russell Collection, University of Edinburgh' in *British Clavichord Society Newsletter* No. 9 (October 1997).
- ¹⁹ Museum für Gestaltung (Design Museum), Zurich, Switzerland; formerly at the Museum Bellerive (now closed) in the same city.
- ²⁰ Maria Boxall, private communication to Peter Bavington, 2010.
- ²¹ Paul Simmonds, 'Three Clavichords from the Workshop of Johann Adam Türig', *Clavichord International*, Vol. 23 No. 1 (May 2018).
- ²² Musée d'Art et d'Histoire, Geneva (fact-sheet supplied by Laurie Bischoff of the museum).
- ²³ Metropolitan Museum of Art, New York NY, website (<https://www.metmuseum.org/art/collection/search/501784>; accessed March 2023).
- ²⁴ House of Instruments, Lucerne-Kriens, Switzerland.
- ²⁵ Harry Joelson, 'The Thirteen Clavichords of Henry Schumacher' in *Clavichord International*, Vol. 7 No. 1 (May 2003).
- ²⁶ Historisches Museum, Basel, Switzerland
- ²⁷ Thomas Steiner, private communication, based on examination of the instrument in the museum accompanied by Isabel Münzner. The fretting given in the following work is incorrect: Veronika Gutmann, 'Die Bestände der Musikinstrumenten-Sammlung des Historischen Museum Basel: Die besaiteten Tasteninstrumente. II. Tangentenklaviere und Kielklaviere', *Historisches Museum Basel: Jahresbericht 1996*, Basel, 1997.
- ²⁸ Pianofortino Konzert-Galerie, Basel, Switzerland

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- ²⁹ <http://www.pianofortino.net/instruments> (accessed March 2023)
- ³⁰ Museum Burg Zug, Kirchenstrasse 11, CH-6300, Zug, Switzerland
- ³¹ <https://www.burgzug.ch/page/de/sammlung/sammlung-online/details?said=1026>.
- ³² Musikinstrumentenmuseum, Staatliches Institut für Musikforschung Preussischer Kulturbesitz, Ben-Gurion-Strasse 10785 Berlin.
- ³³ Konstantin Restle, unpublished checklist of the clavichords in the Musikinstrumentenmuseum, Staatliches Institut für Musikforschung PK, Berlin, prepared April 1997 for members of the German Clavichord Society.
- ³⁴ Peter Bavington, notes made on examining the instrument, May 2024
- ³⁵ Landesmuseum, Zurich, Switzerland
- ³⁶ John Barnes, technical drawing of the instrument, 1988; also museum website (<https://collections.ed.ac.uk/mimed/record/17226?highlight=clavichord>; accessed March 2023).
- ³⁷ Peter Bavington, 'A Mystery Clavichord' in *British Clavichord Society Newsletter* No. 72 (October 2018).
- ³⁸ Rätisches Museum, Hofstrasse 1, CH-7000 Chur, Switzerland.
- ³⁹ Frieder Neunhoffer, 'Das Clavichord im Rätischen Museum, Chur' in *Bulletin de la Société Suisse du Clavicorde*, No. 7.
- ⁴⁰ Musée d'Histoire de Berne, Helvetiapl. 5, CH-3005 Berne, Switzerland
- ⁴¹ Bernard Brauchli, 'Musique Historique de Berne: Un Clavicorde Anonyme de la Fin du 17eme ou Debut du 18eme Sciecle' in *Bulletin de la Société Suisse du Clavicorde* No. 7.
- ⁴² Michael O'Brien, 'The Smithsonian Clavichords', *Early Keyboard Journal*, Vol. 10 (1992), pp. 128–34.
- ⁴³ Museu da Música, Lisbon, Portugal
- ⁴⁴ Gerhard Doderer and John Henry Van Der Meer, *Cordofones de Tecla Portugueses di Século XVIII: Clavicórdios, Cravos, Pianofortes e Espinetas/Portuguese String Keyboard Instruments of the 18th Century: Clavichords, Harpsichords, Fortepianos and Spinets*, Lisbon Fundação Calouste Gulbenkian, 2005, pp. 248, 349–51.
- ⁴⁵ Swedish Museum of Performing Arts (Scenkonstmuseet), Sibyllegatan 2, 103 26 Stockholm, Sweden.
- ⁴⁶ Bernard Brauchli, *The Clavichord*, Cambridge University Press, 1998, p. 99.
- ⁴⁷ Unpublished data sheet supplied by Yale University; also the collection website (<https://music.yale.edu/browse-collection/clavichord-49401900>; accessed March 2023).
- ⁴⁸ Veronika Gutmann, 'Die Bestände der Musikinstrumenten-Sammlung des Historisches Museums Basel: Die besaiteten Tasteninstrumente. II. Tangentenklaviere und Kielklaviere', *Historisches Museum Basel: Jahresbericht 1996*, pp. 9, 12, 13.
- ⁴⁹ Gerhard Doderer and John Henry Van Der Meer, *Cordofones de Tecla Portugueses di Século XVIII: Clavicórdios, Cravos, Pianofortes e Espinetas/Portuguese String Keyboard Instruments of the 18th Century: Clavichords, Harpsichords, Fortepianos and Spinets*, Lisbon Fundação Calouste Gulbenkian, 2005, pp. 245, 341–2.
- ⁵⁰ Musée de la Musique, 221 avenue Jean-Jaurès, 75019 Paris.
- ⁵¹ <https://collectionsdumusee.philharmoniedeparis.fr/doc/MUSEE/0161358>; accessed March 2023.
- ⁵² Andreas Hermert, Note to a CD recording by Terence Charlston (Divine Art dda 25204, 2020); see also note 33.
- ⁵³ Bernard Brauchli, 'Clavicordes Historiques en Suisse—Essai d'Inventaire' in *Bulletin de la Société Suisse du Clavicorde* No. 4 (May 1997), with addenda and corrigenda in No. 5 (October 1997) and additions in No. 7 (October 1998).
- ⁵⁴ Historical and Folklore Museum, Museumstrasse 50, CH-9000 Sankt Gallen, Switzerland.