

A list of surviving Italian string keyboard instruments originally provided with more than 12 notes per octave

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This checklist presents most of the known harpsichords and virginals originally made with split sharps. Although most of the virginals have survived with their original keyboards, many of the harpsichords were later altered to remove the split keys.

Harpsichords:

These lists supersede and correct ones I published earlier.¹ (Numbers prefixed with a W are drawn from my own catalogue and used primarily for unsigned instruments²).

W366 Ferrara c1559-97, Schloß Köpenick, Berlin

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#²

From an analysis of the measurements and building methods in this and Venetian instruments it is now possible to confirm this compass. The nameboard has been skillfully altered to include the initials of Alfonso II which leads to hypotheses that the instrument may have been ordered before he succeeded to the Duchy of Ferrara, or that he bought a finished instrument and had his name incorporated. This harpsichord is probably the one recorded in a Ferrara inventory for 1598 since it shows signs that there was an organ beneath it at one time.³ It is the oldest, surviving Italian string keyboard instrument which was originally provided with split sharps, and was probably made in Venice, but the maker has not been identified.

¹ Wraight and Stembridge, "Italian Split-Keyed Instruments", *Performance Practice Review* 7, no. 2 (1994), 150-181; see pp. 152-157 and Wraight, 'The cimbalo cromatico and other Italian string keyboard instruments with divided accidentals', *Schweizer Jahrbuch für Musikwissenschaft, Neue Folge* 22 (2003), pp. 105-136.

² In order to save space I have not given a W no. reference for each instrument to my thesis, Wraight, *The stringing of Italian keyboard instruments c1500 - c1650*, part 2 of which contains further details of all the instruments. An instrument signed 1670 Tollenari, in the Landesmuseum, Stuttgart, now has the following compass:

C-c³ + D^b, D#, d^b, d#

The keyboard is new and the compass implausible; it has only been included here for the sake of completeness. There is no evidence this was originally built with split sharps.

³ See Durante and Martellotti, *Cronistoria*, p. 208, document A210 where two instruments are described that fit the Schloß Köpenick harpsichord:

«Un'istromento con li semitoni tagliati tutto lavorato di groppi con il suo organo sotto, n. 1»

Un'istromento da li semitoni tagliati, tutto di groppi, con il suo organo sotto, n. 1»

On p. 207, document A209bis, the third instrument is given as «Un istromento a doi registri e l'organo sotto» which would correspond to the Schloß Köpenick instrument since it surely did not have the three registers which are mentioned for the second instrument in this inventory.

Viti de Trasuntinis 1591, Ian Pleeth, England⁴

C-c³ fully chromatic, 19 keys per octave

The string lengths are nominally 3/4 of the those of the *Clavemusicum Omnitonum* (see below) and it appears that it was intended to sound a fourth higher than the 1606 instrument.

Vito de Trasuntinis 1606, Museo Civico, Bologna

C-c³ 31 keys per octave *Clavemusicum Omnitonum*

Two reproductions of the instrument have been made: in the Germanisches Nationalmuseum, Nuremberg, and by Lewis Jones, London, UK.

Giovanni Boni 1619, Musée Instrumental, Conservatoire Royale, Brussels

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#²

Giovanni Boni 1619 [A]⁵ Vizcaya, Florida.

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#²

This instrument has an original Orazio Albana 1645 signature on the nameboard, which has been taken from another instrument.

Giovanni Boni c1619 [A], Alexander McKenzie of Ord, England

GG(AA?)-c³ + F#, G#, d#, a^b, a#, d#¹, a^{b1}, a#¹

This instrument is remarkable for the multiple division of the natural keys in the bass. The exact designation of the bass notes has not been clearly determined.

Giovanni Boni?, Collezione degli Strumenti Musicali, Rome, no. 2826

C-c³ fully chromatic 19 keys per octave, without D^b and perhaps some divided keys in the treble.

This may just be a modified keyboard, originally chromatic, which has been placed in this instrument.⁶

⁴ This information was kindly supplied by Christopher Nobbs. «Viti» is the spelling he gives for the inscription.

⁵ The [A] abbreviation indicates that I have attributed an instrument to the maker indicated. For further details see Wraight, *The stringing*, Part 2.

⁶ See John Henry van der Meer, "Partiell und vollständig", p. 16. The harpsichord was originally made with 19-notes/octave, but according to Stembridge, "The *Cimbalo cromatico*," p. 37, note 6, citing Grant O'Brien, «there are no signs that the harpsichord ever had 19 divisions to the octave; the key-frame has clearly been cut at the bass end to make it fit into the harpsichord.» Stembridge describes how the present keyboard (not the harpsichord) appears to have been made from one which was originally intended to have been fully chromatic C-c³ «but without D^b and possibly without some of the chromatic keys in the top octave.» The present order of the naturals (as altered by GBC [=Giovanni Battista Boni, Cortona?]) with three divided keys in the bass octave, according to Patrizio Barbieri "Cembalaro", p. 137, example g is thus:

BB^b
AA BB D
GG C E F (hereafter normally)

W325 c1620 Anon., Russell Collection, Edinburgh, no. 4302 ⁷

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#²

Although the maker of this harpsichord has not been identified, I suggested that a Roman or Florentine origin is possible, with Florence being more likely. Grant O'Brien has claimed that the instrument was made using Neapolitan foot measure.⁸ Darryl Martin re-examined all the arguments recently and found a Florentine origin to be more likely.⁹

Pasquino Querci c1625 [A], Musikinstrumenten-Museum, Leipzig

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}

This was previously recorded as a Zenti harpsichord dated 1653 (or 83) but a comparison of moulding profiles has clearly revealed that it was produced in Querci's workshop.

Stefanus Bolcionius 1627, Russell Collection, Edinburgh

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, and two naturals below C/E

Barnes established that there were originally 53 notes in the Bolcioni harpsichord.¹⁰ I confirmed the attribution to Bolcioni through a comparison of mouldings.¹¹ O'Brien has inferred the compass above from the marks on the registers which uniquely identify the position of the c and f notes.¹² The unusual feature of this instrument is that the compass starts with three naturals in sequence.

W139 1630 G.A., Collezione degli Strumenti Musicali, Rome, no. 1187

C/E-c³ + d#, a#, d#¹, a^{b1}, a#¹, d#²

This compass is given by Van der Meer who found the missing keys for g#/ a^b unusual.¹³

Fabrizio (Faber) 1631, Germanisches Nationalmuseum, Nuremberg, MIR 1072

C/E-c³ fully chromatic B#-f²

This harpsichord is signed Franciscus Faber. The original range of C/E-c³ was established by examination of the original balance pin holes, which show that the fully chromatic range was only from B#-f².¹⁴

⁷ W325 is a reference number in my catalogue; see Wraight *The stringing*, part 2, p. 327, where my assessment of the instrument was published.

⁸ Russell Collection website: <http://www.music.ed.ac.uk/russell/instruments/hs1a16202/datasheet.html>, accessed 23.11.2010. A more detailed analysis is to be found at his own website:

http://www.claviantica.com/Neap_sch_files/Cen_Russ.htm

⁹ Darryl Martin, 'EUCHMI (4302): A case study of harpsichord identity', *GSJ* 63 (2010), pp.17-47.

¹⁰ John Barnes, 'The specious uniformity of Italian harpsichords', *Keyboard Instruments: studies in keyboard organology 1500-1800*, ed. Ripin, E.M. (Edinburgh, 1971), pp.1-10.

¹¹ See Wraight, *The stringing*, Part 2, pp. 67-73.

¹² Grant O'Brien, "Towards establishing the original state of the three-manual harpsichord by Stefano Bolcioni, Florence, 1627, in the Russell Collection of Early Keyboard Instruments, Edinburgh", in: *Galpin Society Journal* 53 (2000), pp. 168-200. My thanks go to Darryl Martin for a correction to the compass in an earlier version of this checklist.

¹³ Van der Meer, "Partiell und vollständig", instrument no. 131.

¹⁴ Van der Meer, "Partiell und vollständig", instrument no. 21. The total number of notes is 65, and not 68 as reported

Fabrizio (Faber), Barbetta Restaurant, New York

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#², + a#?

The compass is given as C/E-c³ with eight divided keys by Libin and Shanks.¹⁵

Franciscus Marchionus 1666, Yale, New Haven

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}

According to Boalch all the sharps were divided, but Hubbard gives them thus.¹⁶ Marchioni was from Florence, but built this instrument in Rome. If this date is correct it is the last known Italian string keyboard instrument of this type.¹⁷

W730 no. 1868(?) Collezione degli Strumenti Musicali, Rome

C/E-c³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#²

The compass given by van der Meer¹⁸

Some evidence from documents:

The following two harpsichords are only known from a Florentine inventory of 1700.¹⁹

Domenico da Pesaro 1566

The entry lists a compass of C/E-a² with 50 keys and F#, G#. This would probably have been the following:

C/E-g², a² + F#, G#, d#, a^b, d#¹, a^{b1}, d#² + a#, a#¹

It was probably still an unmodified instrument in 1700. The measurements show it has a length similar to another Dominicus harpsichord but that the width is larger by the amount of the extra keys involved.²⁰ This is a rare indication of the manufacture of instruments in Venice with split sharps.

Girolamo Zenti 1653

GG-c³ + d#, a^b, d#¹, a^{b1}, d#² (probable)

It is unusual that a harpsichord whose compass extends to GG has split sharps.

by van der Meer, as corroborated by an independent, later examination; see Stenbridge, "The *Cimbalo cromatico*", p. 36.

¹⁵ Laurence Libin and Kathryn L. Shanks, "A harpsichord from Sorrento", in: *Early Music* 18 (May 1989), p. 216.

¹⁶ See Boalch, *Makers*, p. 110; Hubbard, *Three Centuries*, p. 36.

¹⁷ See also Barbieri, "The evolution" in this volume, note 87 for details of Sarti's instrument in 1779-84.

¹⁸ Van der Meer, "Partiell und vollständig", instrument no. 125.

¹⁹ See Vinicio Gai, *Gli strumenti musicali della corte medicea e il museo del conservatorio 'Luigi Cherubini' di Firenze*, Florence, 1969, p. 8. (Dominicus), p. 7 (Zenti).

²⁰ See Wraight, *The stringing*, Part 2, p. 151, the instrument numbered W437.

Two Neapolitan harpsichords with split sharps are recorded in Cardinal Aldobrando's household in 1603.²¹

Another claviorganum with split sharps is recorded in the same Ferrara inventories as W366 mentioned above.²²

A harpsichord is mentioned in a Ferrara inventory of 1598 as having split sharps.²³

A list of surviving virginals with more than 12 notes per octave:

Stefanus Bolcionius 1629 [A], Deutsches Museum, Munich, no. 9231

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b 1}

This was previously known as "Petrus Centamin 1711" but is signed on the reverse of the nameboard "Stefanus Bolcionius Pratensis 1629" and a moulding comparison confirms that Bolcioni was the maker.

Stefanus Bolcionius 1627 [A], Musée de la Musique, Paris, no. E.980.2.x

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b 1}, d#²

Formerly known as "Viti de Trasuntinis 1601" from a faked signature, but there is also a faded signature by Bolcioni. Moulding comparisons also confirm he was the maker.

Stefanus Bolcionius 1641 [A], Musikinstrumenten-Museum, Leipzig

C/E-F³ + F#, G#, a^b, a^{b 1}

Signed "Stefanus bolcionius Pratensis 1641".

Stefanus Bolcionius 16?? [A], Washington, DC, no 60.1392

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b 1}

"Ionnes Batt Boni da Cortona fecit Anno 1617" is written on the nameboard, but a moulding comparison shows that Bolcioni was probably the maker.

²¹ See Frederick Hammond, *Girolamo Frescobaldi*, Cambridge, MA. 1983, p. 364, note 28.

²² See note 80. This instrument is one of the two cited by Stembridge in Wraight and Stembridge, "Italian Split-Keyed Instruments", p. 161.

²³ Cited by Stembridge, "Italian Split-Keyed Instruments", p. 160. This is no. 2804 in Durante and Martellotti's, *Cronistoria*, document A209, dated 21 October 1598, «Un instrumento adorato con la tastadura tagliata da due registri, n.1» but this might be one of the instruments mentioned above (see note 80), without reference to the organ. Slight differences in the descriptions of each inventory make it difficult to track the instruments.

W451 Poggi [A], Musée Instrumental, Conservatoire Royale, Brussels, no. 1596

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b1}

This, and the following three instruments, I have identified as the work of Poggi through the mouldings and keycheek outlines.²⁴

W440 Poggi [A], Musikmuseet, Stockholm

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b1}

W327 Poggi [A], Russell Collection, Edinburgh, no. V2-A1620.45²⁵

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b1}, d#²

The present keyboard was made by Malcolm Rose following an older one, which contains apparently original parts.

W21 Poggi [A], Liverpool Museum

C/E-F³ + F#, G#, d#, a^b, d#¹, a^{b1}

This has a faked signature "Baffo 1581" and the keyboard with split sharps no longer survives.

Some further evidence from documents:

A Florentine inventory at the Medici Court of October 1640 records two *spinette* with five split sharps which were probably made by Bolcioni and might have had the following compass:²⁶

C/E-F³ + F#, G#, d#, a^b, d#¹

From these surviving instruments it is clear that the additional accidentals were usually d# and a^b. When a further accidental was provided it was usually a#, indicating that the circle of fifths was extended in the direction of the sharps rather than complementing all the diatonic notes with major and minor thirds, which would have required a d^b. It is usual that when additional d# and a^b notes were provided the short octave bass was complemented with F# and G#. Only

²⁴ Details are published in my thesis, part 2, under Poggi.

²⁵ In my earlier publications, and an earlier version of this checklist, the compass was incorrectly given without the d#². Malcolm Rose and Darryl Martin kindly assisted in determining the correct, original compass.

²⁶ Frederick Hammond, "Musical Instruments at the Medici Court in the Mid-Seventeenth Century", in: *Analecta Musicologica*, Studien zur italienischen-deutschen Musikgeschichte 15 (1975), p. 204, also cited by Stembridge in Wright and Stembridge, "Italian Split-Keyed Instruments", p. 161: «Stefano Strumentario Dua Spinette stauatr:e della Cassa con cinque semituoni spezzati». Riccardo Pergolis suggests reading this as "due spinette staccate della cassa, i.e. not attached, or inner-outer instruments in our modern parlance. Patrizio Barbieri, *Gli Strumenti Poliarmonici*, p. 89, note 23, has established that the terminology "attacato alla cassa" indicated in Rome an instrument which is not separable from its apparent outer case, i.e. it is a "false-inner-outer" as we now call it.

occasionally do we find Italian instruments which have F# and G# in the bass octave without additional split keys.²⁷

Conclusions

When we consult the list of virginals it is apparent that all of the instruments were built in Florence by only two makers, Bolcioni and Poggi around 1620-1641. This corrects van der Meer's earlier view of the œuvre, formed before the new attributions were available, according to which the work was also Venetian.²⁸ It can be estimated how popular such virginals with split sharps were in Florence: since these eight instruments represent a quarter of the virginals we can be sure they were made there in the same period. The four instruments which Bolcioni and Poggi provided with divided sharps represent half of Bolcioni's known virginal output and a fifth of Poggi's known production.

In a similar fashion we can see the strong representation of the eight Roman harpsichords among the 17 instruments listed here. When we compare the number Roman harpsichords having split sharps with the *total* Roman harpsichord production for the same period, then 8 of the instruments (out of a total of 14) shows an even stronger preference for divided keys. Florentine harpsichords are less well represented with only two or three instruments.

The weighting which these statistics give to the popularity of instruments with split sharps could easily be substantially altered if it were possible to assign more of the several unsigned virginals and harpsichords to Roman or Florentine production. Nevertheless, the data available suggests that the manufacture of virginals and harpsichords with split sharps formed a significant part of the instrument makers' output in the first half of the 17th century.

²⁷ One example is the oval-shaped *spinetta* recorded in an inventory (see Gai, *Gli Strumenti*, p. 10) by Bartolomeo Cristofori of 1690 with the compass C/E-c³ and F#, G#.

²⁸ See note 6 for van der Meer's study.