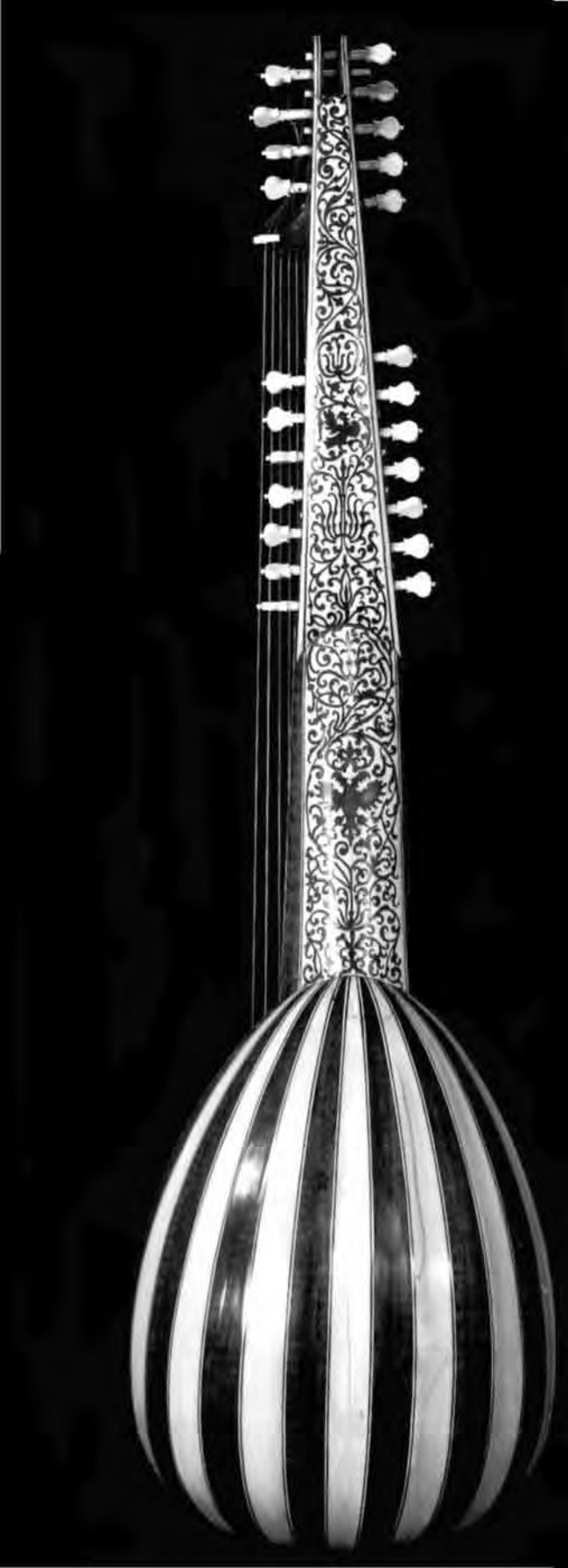

CATALOGUE OF MUSICAL INSTRUMENTS IN THE VICTORIA AND ALBERT MUSEUM

Part I:
KEYBOARD INSTRUMENTS
by Howard Schott

Part II:
NON-KEYBOARD INSTRUMENTS
by Anthony Baines

Catalogue of MUSICAL INSTRUMENTS in the VICTORIA AND ALBERT MUSEUM

Part I: Keyboard Instruments
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New catalogue entries, supplementary notes and bibliography by
James Yorke

V&A PUBLICATIONS

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Front cover: Theorbo by Cristoforo Choc, about 1620.
Ivory and ebony neck with rosewood ribbing. 7756–1862.
Back cover: Jewelled spinet by Annibale Rossi, 1577.
Covered with lapis lazuli, and other precious and semi-precious stones. 809–1869.

Publishers' Note: This new single volume edition has been compiled from two volumes previously published separately. The pagination for each volume remains unchanged. A new Foreword, plus supplementary bibliography and endnotes to both volumes, have been added.

FOREWORD TO ONE VOLUME EDITION

Howard Schott and Anthony Baines' definitive catalogues of the musical instruments in the Victoria and Albert Museum, reissued as a single volume in 1998, have proved their worth by selling out.

This 2002/3 edition is a reprint of the 1998 edition, which leaves the text and illustrations virtually unchanged. It has been made possible through generous donations from the John Radcliffe Trust and the Parnassus Foundation, courtesy of Jane and Raphael Bernstein. The V&A would like to thank Alec Cobbe, Esq., the Cobbe Collection Trust, the Marc Fitch Fund, the Leche Trust, the Harley Foundation, the John Radcliffe Trust and the Worshipful Company of Musicians for generously supplying the funding that made the 1998 edition possible.

Renewed thanks to Edward and Antony Gobel, Professor Lawther and Alastair Laurence and Peter Thornton for their various generous contributions to this project.

CHRISTOPHER WILK
JAMES YORKE

Victoria and Albert Museum, 2002

PART I: KEYBOARD INSTRUMENTS

CONTENTS

EDITOR'S FOREWORD

The collection of keyboard instruments in the Victoria and Albert Museum is famous even if it is not very large. It contains several instruments that enjoy wide renown and many that are of great musicological importance. Although a new catalogue of the collection was published in 1968, the study of ancient keyboard instruments has advanced so rapidly since that date and the collection itself has increased so notably that an entirely fresh catalogue was clearly needed. Only thus could the significance of each instrument be fully appreciated and the scope of the collection be properly understood.

The Museum has been extremely fortunate in having secured the services of that eminent authority in the field, Dr Howard Schott, to compile such a catalogue, and the results of his labours are now encompassed in this volume. It is by no means easy for anyone who is not on the staff to work within the framework of a large museum but Dr Schott managed to accomplish his task with tact and with sympathy. I would like to record our great appreciation of the manner in which he went about this very complex assignment.

It should be explained that the collection has been formed within the Victoria and Albert Museum which is a museum of the decorative arts. For this reason most of the instruments have been acquired with an eye on their ornamental qualities and as examples of elegant craftsmanship, while, until recently, it was considered largely irrelevant that musical instruments were also designed to produce sounds. In recent years there has been a change in emphasis although, at the time of writing, the Museum still has no trained musicologist on its permanent staff and the collection is therefore still not favoured with the attentions of a full-time specialist curator. Some recordings have certainly been made during the past decade or so, but the present circumstances still do not permit the Museum to bring forward the musical qualities of its instruments to any great extent. It is hoped that the increasing interest which the public is showing in musicology and therefore in musical instruments will eventually lead to the provision of adequate staff and the very special facilities that are required in order to enable these delicate objects to be more fully enjoyed without in any way putting them at risk. In the meantime it must inevitably be the decorative aspect that is foremost in the Museum's presentation of its collection. This makes of especial significance the publication of a catalogue that seeks to redress the balance by properly registering the musical capacity of each instrument and establishing its relative position in the evolution of keyboard instruments. The Museum is sincerely grateful to Dr Schott for having brought his very extensive knowledge of

these matters to bear on this task and for having so painstakingly drawn up this entirely new catalogue.

Within my Department, first Frances Palmer and then James Yorke assisted Dr. Schott and myself with the preparation of this catalogue.

PETER THORNTON

Keeper of Furniture and Woodwork and of the National Collection of Musical Instruments

Victoria and Albert Museum, October 1981

NOTE: Technical drawings have been made of some of the most important instruments in the collection. They are full-scale in most cases and are accompanied by notes and photographs. Further drawings are added to the series as opportunity allows. They can be obtained from the Museum's Publications Service who can provide an up-to-date list with current prices.

INTRODUCTION

In the comparatively short time since the publication of the previous catalogue of the Museum's keyboard instruments, a work of several co-authors, named and unnamed, in addition to Raymond Russell, listed on the title-page, there have been significant additions both to the collection and to our knowledge. It was decided, therefore, that an entirely new catalogue would have to be prepared rather than to attempt a revision of the 1968 publication. The principal purpose of the catalogue descriptions remains the one accorded priority by Russell, to give a general account of the appearance and decoration of each instrument. Such descriptions are of necessity somewhat summary and cannot be expected to provide sufficient technical information to satisfy the reasonable requirements of instrument builders and others interested in the construction of keyboard instruments.

Although by no means universally followed nowadays, Russell's measurement practice and terminology have been retained for the most part. The term 'virginals' refers to oblong instruments; 'spinet' refers to polygonal or wing-shaped ones, regardless of the angle of the strings in relation to the keyboard, or to the presence of both bridges or of only one bridge on the soundboard. Scaling and plucking points have been taken on the longer of the 8-foot choirs of strings. In the case of virginals and Italian spinets, the plucking point has been measured from the plectrum of the appropriate jack to the left-hand bridge, and not to the nut on the player's right. In English spinets the measurement is from the plectrum to the nut on the wrest-plank. The term 'standard measurement' (replacing the German *stichmass*) means the width of three octaves, that is, 21 naturals. Some of the text itself has been taken over from the Russell catalogue in suitable instances, including many of the references to cognate instruments in other collections and to the literature. But such references have, of course, been revised to bring them up to date.

Following Russell, it is appropriate to recall here that the formation of the Museum's musical instrument collection owes much to the work of a diligent and percipient nineteenth-century scholar, Carl Engel. Born in 1818 in the region of Hanover, he was trained as a musician, studying the pianoforte with Hummel and composition and theory with Lobe. In the mid 1840s he moved to Manchester and established himself as a music teacher there. In 1850 he returned to the Continent for further study with Carl Czerny in Vienna and Ignaz Moscheles in Leipzig. By 1852 he had returned to England, settling with his wife in Kensington. Here began the intensive reading that formed the basis of his later writings and other work in the field of organology. In addition to a substantial library, Engel also soon assem-

bled an important collection of musical instruments.

His connection with the South Kensington Museum, the forerunner of the Victoria and Albert Museum, as organological consultant began about the time of his first important publication in 1864. The nucleus of the Museum's collections had been purchased from the Great Exhibition of 1851 and, after a period at Marlborough House, was installed in South Kensington by 1857, the year in which the first keyboard instrument was acquired, the tiny ebony and silver German octave spinet (No. 4265–1857). Many of the most precious musical instruments in the Museum were gathered during the years from about 1860 to 1880, and these accessions reflect the wise counsel and benevolent influence of Carl Engel.

His first publication in conjunction with his work at the Museum was a folio volume published in 1869, *Musical Instruments of all Countries*, illustrated with twenty photographs. In 1870 there appeared *A Descriptive Catalogue of the Musical Instruments in the South Kensington Museum* (ENGEL 1870). Curiously, this modest booklet of 82 pages has been overlooked by most past scholarship, although it was the nucleus around which grew the much expanded version published four years later (ENGEL 1874), *'preceded by an Essay on the History of Musical Instruments'*, and followed by an appendix listing the 107 instruments from Engel's private collection then on loan to the Museum. The 1874 Engel catalogue of the Museum's musical instruments was not replaced until the publication of the Baines and Russell catalogue in 1968, almost a century later.

After the death of his wife, Engel became more and more depressed. He sold his library at auction sales in 1881. Fortunately, many of his best instruments had already passed to the Museum in 1875. After a visit to his family in Germany, Engel returned to Kensington and finished his last book, *The Violin Family*, published posthumously not long after he died by his own hand in 1882. Through his years of writing, organizing lectures and performances on early instruments, and tireless work on its behalf, Engel must be accounted not only the foremost organological authority of his time but also the one to whom the Museum's collection of musical instruments owes more than anyone else.

Since Engel's day the collection has continued to grow and has now more than doubled in size. The present catalogue includes accessions made as late as 1980. It is hoped that this expansion may continue in spite of limitations of funds and space because there are still many gaps that remain to be filled. It would, for instance, be very desirable that the British national collection of musical instruments include examples of English grand pianos of the eighteenth century, of which there are none at present in the Museum. But not even the largest and most comprehensive instrument collection could ever hope to attain completeness, even if the derisory prices at which some of the most precious keyboard instruments in the Museum were acquired in Engel's time still prevailed.

The present catalogue includes not only instruments kept within the Museum (or on loan from it to other institutions) but also those that form part of the furnishings of other buildings under its administrative control, such as Ham House and Osterley Park House. The collection of keyboard instruments includes many rare specimens, even some that can fairly be described as unique. The amount of detail in the individual descriptions reflects to some degree the assessment of the importance of the particular instrument. However, technical considerations have imposed limitations in certain instances on the scope and extent of the examination. In the case of those instruments that have been examined and measured by experts for the purpose of producing engineering drawings for sale by the Mu-

seum, it has been possible to abstract the requisite information wholly or in part from these documents.

The arrangement of the catalogue is basically chronological, although the dating of certain instruments can only be approximate at best. It will be noted that several of them have been redated in accordance with recent research. The concept of 'national schools' that formerly dominated our thinking about early keyboard instruments has shown itself to be of limited utility and, indeed, at times quite misleading. The fact is that in England, especially, different traditions of keyboard instrument making co-existed and were blended. For example, in Restoration times the Italian tradition in its best form, represented by the great Girolamo Zenti, was transplanted and vigorously practised in London at the very time that Ruckers harpsichords from Antwerp and Flemish builders themselves were also arriving on these shores. As it happened, it was the Flemish tradition of harpsichord making that eventually prevailed. Through Hermann Tabel and his Alsatian and Swiss disciples, Kirckmann and Shudi, the Flemish tradition was developed and transformed into the English eighteenth-century style. But Shudi, it is now known, also kept Italian instruments, especially for convenient use as relatively portable continuo harpsichords, in his collection of hire instruments, well into the late eighteenth century.

Finally, it is a pleasure to acknowledge with gratitude the kind assistance of the Museum's staff and of many organologists and instrument makers who have made available their respective stores of information and advice. These include Derek Adlam (Goudhurst), John Barnes (Edinburgh), Wilson Barry (Andover, Mass.), Margaret Cranmer (Cambridge), William Debenham (Lamberhurst), Andrew Douglas (Oxford), William Dowd (Boston, Mass.), Sheridan Germann (Boston, Mass.), Martin Goetze and Dominic Gwynn (Northampton), Dr Hubert Henkel (Leipzig), Helen Rice Hollis (Washington), John Koster (Belmont, Mass.), Barbara Lambert (Boston, Mass.), Laurence Libin (New York), G. Grant O'Brien (Edinburgh) and Denzil Wraight (Oxford and Marburg an der Lahn). To all of these and to any who may inadvertently have been omitted from this listing, the author offers his sincere thanks.

HOWARD SCHOTT
London, September 1981

CATALOGUE

The Museum numbers end with a date indicating the year of acquisition.

The items are arranged in the following sequence, which is approximately chronological:

1. HARPSICHORD, Jerome of Bologna, Rome, 1521 Mus. No. 226–1879 (Russell No. 1)
2. SPINET, Italian, mid-sixteenth century, Mus. No. 490–1899 (Russell No. 2)
3. SPINET by Annibale dei Rossi, Milan, 1555 Mus. No. 156–1869 (Russell No. 3)
4. SPINET by Marco Jadra, 1568, Mus. No. 155–1869 (Russell No. 4)
5. VIRGINAL, Flemish, 1568, Mus. No. 447–1896 (Russell No. 11)
6. SPINET ('Queen Elizabeth's Virginals'), Italian, *c.* 1570, Mus. No. 19–1887 (Russell No. 7)
7. HARPSICHORD by Giovanni Antonio Baffo, Venice, 1574, Mus. No. 6007–1859 (Russell No. 5)
8. SPINET by Annibale dei Rossi, Milan, 1577, Mus. No. 809–1869 (Russell No. 6)
9. CLAVIORGAN by Lodewyk Theewes, London, 1579, Mus. No. 125–1890 (Russell No. 16)
10. VIRGINAL, Northern European, *c.* 1600. Mus. No. 420–1872 (Russell No. 10)
11. OCTAVE SPINET, Italian, *c.* 1600, Mus. No. 218–1870 (Russell No. 8)
12. CABINET ORGAN, South German, early seventeenth century, Mus. No. 216–1879 (Russell No. 45)
13. POSITIVE ORGAN, German, *c.* 1627, Mus. No. 2–1867 (Russell No. 46)
14. OCTAVE SPINET, German, *c.* 1625–50, Mus. No. 4265–1857 (Russell No. 9)
15. HARPSICHORD by Andreas Ruckers the Elder, Antwerp, *c.* 1631, Mus. No. 1079–1868 (Russell No. 14)
16. HARPSICHORD by Ioannes Ruckers, Antwerp, 1639, Mus. No. 1739–1869 (Russell No. 13)
17. VIRGINAL by Thomas White, London, 1642, Mus. No. W. 11–1933 (Russell No. 17)
18. VIRGINAL by John Loosemore, Exeter, 1655, Mus. No. 813–1873 (Russell No. 18)
19. HARPSICHORD by Vaudry, Paris, 1681, Mus. No. W. 12–1974
20. SPINET by John Player, London, last quarter of seventeenth century, Mus. No. 466–1882 (Russell No. 19)
21. POSITIVE ORGAN, Portuguese (?), *c.* 1700, Mus. No. 26–1886 (Russell No. 44)
22. HARPSICHORD by Thomas Hitchcock, London, *c.* 1725, Mus. No. 126–1890 (Russell No. 20)
23. HARPSICHORD, English, *c.* 1730, (Mus. No. HH. 109 (Russell No. 12)
24. SPINET, Thomas Hitchcock, London, *c.* 1740, Mus. No. W. 43–1922 (Russell No. 21)
25. OCTAVE SPINET, Henry Hill, London, 1750, Mus. No. 145–1878
26. CLAVICHORD, Barthold Fritz, Braunschweig, 1751, Mus. No. 339–1882 (Russell No. 28)

27. SPINET, John Crang, London, 1758, Mus. No. W. 16–1947 (Russell No. 22)
28. CHAMBER ORGAN, John Crang, London, late 1760s, Mus. No. W. 13–1980
29. SQUARE PIANO, Johann Christoph Zumpe, London, 1767, Mus. No. W. 27–1928 (Russell No. 29)
30. SPINET, Baker Harris, London, 1770, Mus. No. W. 14–1943 (Russell No. 23)
31. SPINET, Joseph Mahoon, London, 1771, Mus. No. 383–1907 (Russell No. 24)
32. SQUARE PIANO, Johannes Pohlman, London, 1773, Mus. No. O.P.H. 158–1949 (Russell Addenda)
33. HARPSICHORD, Jacob & Abraham Kirckman, London, 1776, Mus. No. W. 43–1927 (Russell No. 25)
34. CLAVICHORD, 'Peter Hicks', last quarter of eighteenth century, Mus. No. W. 7–1917 (Russell No. 27)
35. SQUARE PIANO, Christopher Ganer, London, *c.* 1780 Mus. No. W. 75–1975
36. HARPSICHORD, Shudi & Broadwood, London, 1782, Mus. No. W. 13–1943 (Russell No. 26)
37. HARPSICHORD, Pascal Taskin, Paris, 1786, Mus. No. 1121–1869 (Russell No. 15)
38. CHAMBER ORGAN, Daniel Prior, London, 1786, Mus. No. 303–1900 (Russell No. 47)
39. SQUARE PIANO, Longman & Broderip, London, *c.* 1795, Mus. No. W. 33–1964 (Russell No. 31)
40. SQUARE PIANO, John Broadwood & Son, London, 1801, Mus. No. H.H. 433
41. PIANINO, Chappell & Co., London, *c.* 1815, Mus. No. W. 2–1919 (Russell No. 43)
42. SQUARE PIANO, Flórez, Madrid, *c.* 1815, Mus. No. 48–1876 (Russell No. 30)
43. GRAND PIANO, Georg Haschka, Vienna, *c.* 1815–20, Mus. No. 460–1907 (Russell No. 32)
44. GRAND PIANO, Thomas Tomkison, London, before 1820, Mus. No. W. 33–1930
45. UPRIGHT PIANO, Van der Does, Amsterdam, *c.* 1820, Mus. No. 461–1907 (Russell No. 34)
46. GRAND PIANO, William Stodart, London, *c.* 1820, Mus. No. W. 5–1952 (Russell No. 35)
47. SQUARE PIANO, Clementi & Co., London, *c.* 1820, Mus. No. W. 12–1953 (Russell No. 33)
48. UPRIGHT PIANO (*Euphonicon*), English, *c.* 1840, Mus. No. 342–1874 (Russell No. 36)
49. CABINET UPRIGHT PIANO, Collard & Collard, London, *c.* 1840, Mus. No. W. 29–1954 (Russell No. 37)
50. UPRIGHT PIANO, Collard & Collard, London, 1855–75, Mus. No. W. 20–1974
51. UPRIGHT PIANO, F. Priestley, London, *c.* 1860, Mus. No. W. 43–1926 (Russell No. 41)
52. UPRIGHT PIANO, Collard & Collard, *c.* 1865, Mus. No. W. 6–1968
53. UPRIGHT PIANO, John Broadwood & Sons, London, 1867, Mus. No. Circ. 144–1957 (Russell No. 42)
54. GRAND PIANO, Robert Wornum & Sons, London, *c.* 1870, Mus. No. W. 11–1913 (Russell No. 38)
55. GRAND PIANO, John Broadwood & Sons, London, *c.* 1882, Mus. No. W. 2–1961
56. GRAND PIANO, John Broadwood & Sons, London, 1882, Mus. No. Circ. 45–1962 (Russell No. 40)
57. GRAND PIANO, John Broadwood & Sons, London, 1883, Mus. No. W. 23–1927 (Russell No. 39)
58. UPRIGHT PIANO, John Broadwood & Sons, London, *c.* 1903, Mus. No. W. 15–1976
59. UPRIGHT PIANO, Römhildt, Weimar, 1906, Mus. No. Circ. 476–1967

60. UPRIGHT PIANO, Collard & Collard, London, 1881, Mus. No. W. 26–1983.

61. SEMI-GRAND PIANO, John Broadwood, London, 1906–07, Mus. No. W. 38–1984.

62. OCTAVE SPINET, Robert Goble, Oxford, 1950. Mus. No. W. 10–1994.

EDITOR'S NOTE

The Museum Number of each instrument is given in the first line of the entry concerned.

This number invariably includes an annual serial number and the year of the instrument's acquisition by the Museum.

1. The instrument is inscribed above the keyboard:
Hieronymus Bononiensis faciebat Romae MDXXI under the elegaic couplet:

Aspicite ut trahitur suavi modulamine vocis
Quicquid habent aer sidere terra fretum.

2. The present compass is forty-seven notes, C-d^3, with C/E short octave. (The details of the various stages through which the instrument has passed, including modifications of its compass, are discussed in section 7 below.) The standard measurement is 498mm. The key panel is of lime or poplar. The naturals, faced with boxwood, have arcades with a blue background of painted paper and ivory buttons. They measure 114mm long by 23mm wide. The sharps are of dark stained hardwood and measure 72mm long by 11mm wide.

3. At present there are two sets of strings of 8-foot pitch and two sets of jacks which are not original. The back 8-foot plucks towards the treble and the front 8-foot register plucks towards the bass. The scaling and plucking points are as follows:

	String length	*Plucking point*
C	1463mm	144mm
c	1016mm	108mm
c^1	497mm	92mm
c^2	269mm	90mm
c^3	128mm	37mm
d^3	108mm	32mm

4. The soundboard of pine or spruce varies in thickness from 1.9mm to 3.3mm. There is a rose carved of four layers of wood and parchment measuring 105mm in diameter. The soundboard and wrest-plank bridges are of cypress. The baseboard and interior parts are of pine or spruce. The case walls are of cypress and measure 5 – 5.5mm in thickness. The wrest-plank is of two parts, oak closer to the keyboard, pine at the back, but is veneered in cypress to conceal this. The instrument measures 1860mm in length, 750mm in width and 221mm in height. No stand for the harpsichord has been preserved.

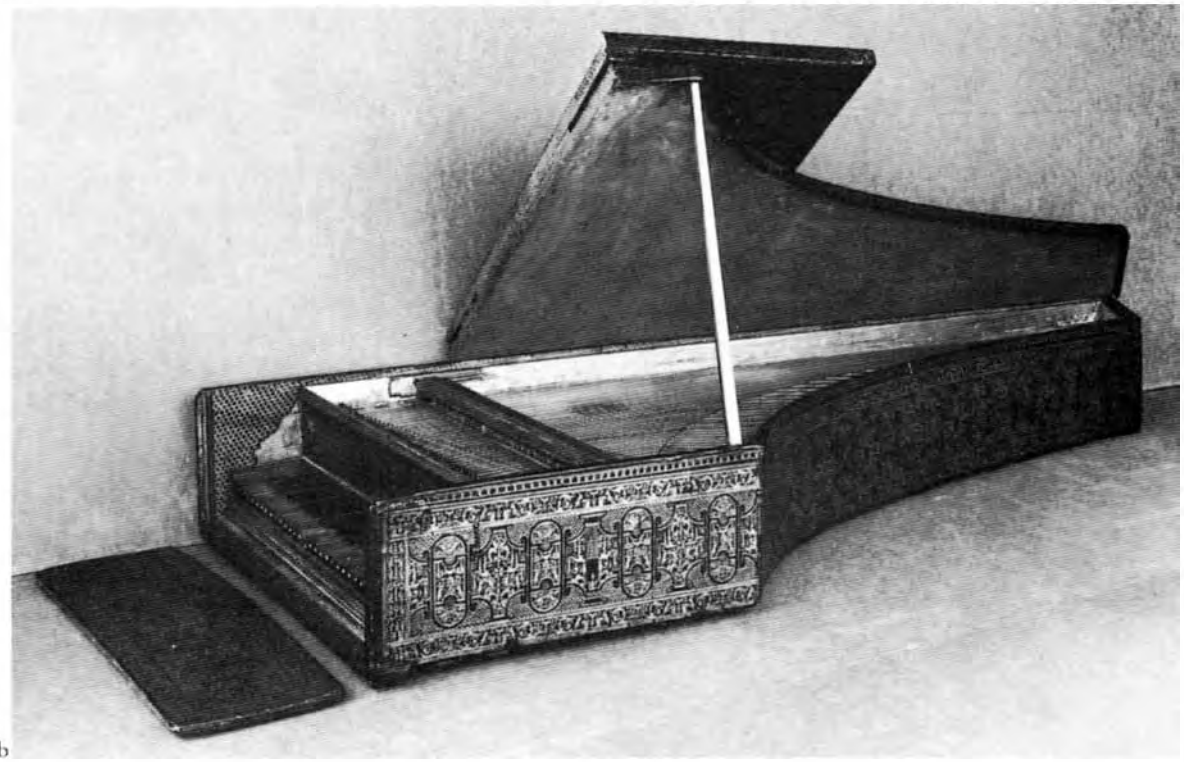
5. The outer case, from which the harpsichord can be removed, is covered outside with brown leather decorated with a pattern of tooled and gilt strapwork with grotesques in the style of the second half of the seventeenth century. An unidentified coat of arms decorates the panel that covers the keyboard. This outer case is lined with sprigged cut apple-green velvet, now partly restored. (The velvet inside the lid is modern.) The harpsichord itself bears the same coat of arms as are seen on the outer case, but painted over an earlier coat, presumably those of the original owner, at present unidentified, above the keyboard. The inside of the casing has been gilded, perhaps when the present outer case was provided. Some of this gilding has now been removed to reveal the decorative stringing inlaid along the top edge of the casing and down the centre of the jack-rail.

6. The instrument was purchased in 1879 for £120.

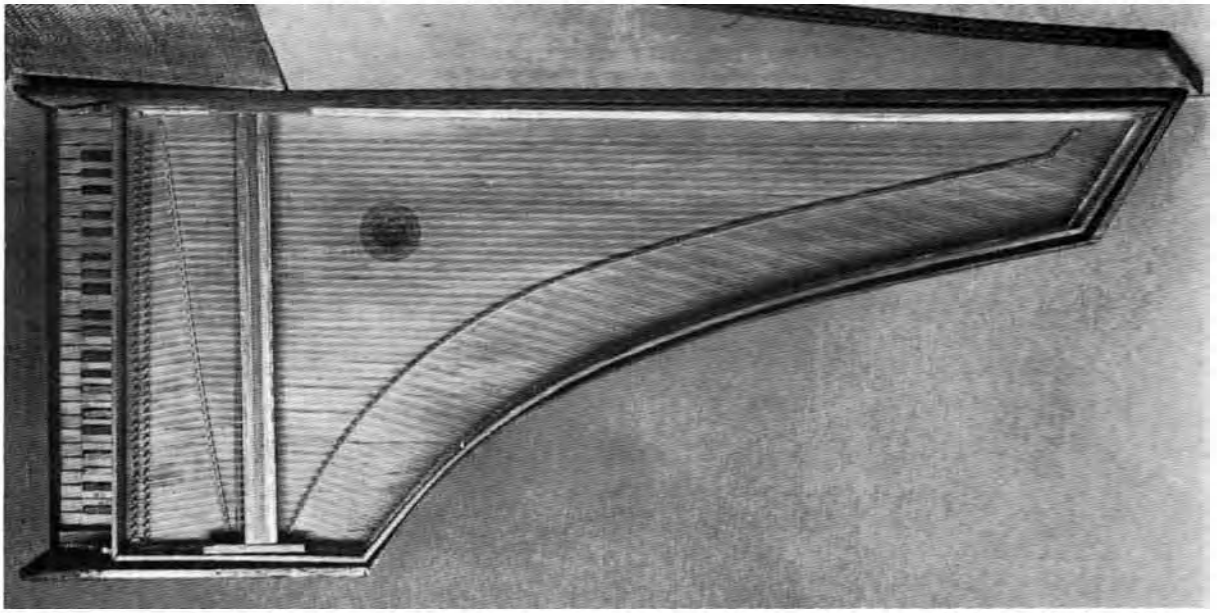
7. There is no reason to doubt the authenticity of the inscribed maker's name and date. This instrument, therefore, can be regarded as one of the earliest signed and dated harpsichords extant. It was restored to exhibition order in 1963–4 by Andrew Douglas and the Museum's Conservation Department. It was further examined in 1964 by John Barnes and again in 1975 by William Debenham, who prepared an engineering drawing of it. It was restudied in detail during 1980–1 by Denzil Wraight. The conclusions reached during these most recent examinations are summarized in the present description.

The harpsichord was originally strung with a single choir of strings and had a keyboard com-

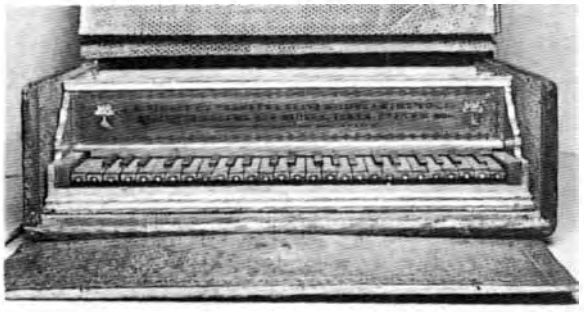
Ia



Ib



Ic



Id

Ie

pass of fifty notes, most likely C/E–f^3, with a scale of about 285–295mm for c^2 (pitch c). At one time pedal pull-downs for the lowest fourteen notes (C-f) necessitated cutting a slot in the bottom of the harpsichord under those keys. At a later stage or stages, other changes were made in order to adapt the harpsichord to the musical needs of a later period. A second unison choir of strings and an additional row of jacks were added. The pitch was raised by about two semitones and the compass reduced to forty-seven notes, the present range of C/E-d^3. The gap was widened and the wrest-plank rebuilt as described above. A new keyboard for this compass was provided, doubtless in order for the levers to extend to the additional row of jacks. Adding the second choir of strings probably also required the fitting of eight extra bars to the original soundboard and two further large bars to strengthen it in the bass area. It is impossible to reconstruct the exact sequence of these changes with certainty. Doubts have been expressed as to whether the instrument, in fact, ever functioned properly in this last, its present state.

1. The instrument at present has a nameboard behind the keyboard bearing the inscription *D.D. opus Ioannis Francisi Antegnati Brixiani MDXXXVII*. It is questionable whether the nameboard was originally intended for this instrument. The inscription is not centred, so that the date *MDXXXVII* at the right-hand end is noticeably close to the case at the treble end of the keyboard. The nameboard is also crudely cut at an angle at the right-hand side. The wood of the batten appears different from that of the rest of the instrument. The single button placed in the centre of the nameboard batten to attach it to the instrument is located about 50mm to the left of another hole, possibly the original one. A block has been added to the body of the instrument behind the nameboard to receive the pin of this button. The original nameboard seems to have been somewhat thinner and was attached to the body by two small pins.

2. The present keyboard compass is forty-nine notes, F-f^3 chromatic. According to the 1965 restoration report by Mr John Barnes, the arrangement of holes and the surviving portion of the original balance rail show that the lowest notes of the original forty-seven note compass were F, G and A, lacking the low F-sharp and G-sharp since added. Thus, the first accidental was B-flat. The treble end of the balance rail is now missing, but the available width for the keyboard with its standard measurement of 501mm shows that the original extension was to f^3. The instrument presumably sounded at a pitch about one fourth lower in terms of the modern standard, i.e. C-c^3. The lowest octave was at one time fitted with pedal pull-downs, as is evident from the slots cut both in the instrument and its outer case. The present arrangement of keys was devised as an acceptable compromise, merely adding the low F- and G-sharps to the original compass. During his restoration, Mr Barnes therefore removed the evidence of previous alterations of compass, including one to fifty notes, C/E short octave – f^3, presumably in various attempts to adapt the instrument to the requirements of changes in the prevailing pitch or in stringing material.

The keyboard projects from the instrument. The naturals are covered in boxwood with arcaded fronts. They measure 178mm in total length with keyheads of 41mm and a width of 23mm. The sharps are of ebony, with a length of 75–77mm and width varying from 9mm at the top to 12mm at the bottom. Instead of a rack, the spinet has large iron back pins that fit into unbushed slots cut in the keys at the distal end. The jacks formerly fitted were later replacements and have been removed.

3. The present scaling and plucking points are as follows:

F	1138mm (190mm)
c^2	390mm (96mm)
f^3	137mm (67mm)

However, the bridge at the bass end has obviously been shifted at least once so as to alter the original scaling, which cannot now be determined. The present strings are modern replacements.

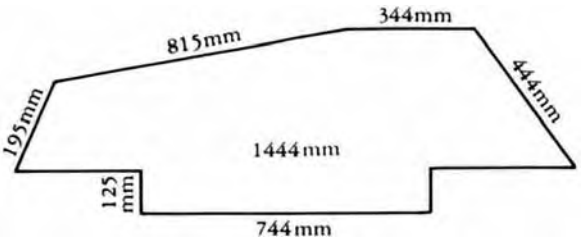
4. The soundboard would appear to be of cypress. A carved geometrical rose ornamented with seven small ivory studs is set into the soundboard. The body is of cypress wood, pentagonal in shape, and decorated on the inner face of each side with floral scrollwork and confronted birds in gilt gesso on a blue ground. There were formerly ivory studs set along the top moulding in the familiar Italian manner.

The instrument is at present housed in a wooden outer case painted a dark colour, probably originally blue, decorated with a moresque pattern in white. The inside of the lid is painted with a monogram as well as a device comprising two hands clasping a black scorpion with the motto *Amoris vulnus idem qui sanat fecit*. Its shape

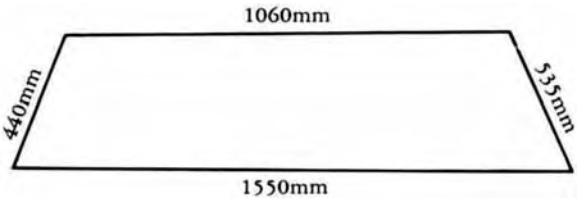
strongly suggests that this outer case was originally made for some other spinet. It has been filled out on the left-hand side to make a box (for spare strings etc.) but not on the right-hand side, which is too narrow to allow this. The former strap hinges have been replaced at some point by the present ring hinges. There is no stand.

5. The instrument was acquired in 1899 at the Bardini sale (catalogued as Lot 739, illustrated at page 12) for £190. Its previous history is not known.

6. There is nothing about the spinet inconsistent with an Italian sixteenth-century origin, although the previous ascription to Antegnato must be questioned. The problematical nameboard may well have been appropriated from some other instrument to replace a missing batten on the spinet. The F-f^3 original compass of this instrument is that required by Italian music for keyboard of the early sixteenth century, for instance the collection published by Marcantonio di Bologna in 1523.



Outline of spinet with dimensions



Outline of outer case with dimensions

2a

2b

2c

1. The instrument is inscribed above the keyboard: *Opus Anibalis Mediolanensis MDLV.*

2. The keyboard compass is fifty notes, C/E-f^3, with bass short octave. The standard measurement is 478mm. The naturals are covered in ivory with decorated and arcaded fronts. They measure 123mm of visible length with key-heads of 40.5mm. The width is c.21mm, but some naturals are slightly wider and the topmost key is only 20.5mm wide. The bevelled sharps of ebony faced with horn and inlaid with ivory and ebony stringing, measure 72–75.5mm long by 11–12.5mm wide. The key-panel is of limewood. The keys are guided by vertical iron pins fixed at the rear of the key-frame which fit in the slots cut at the distal ends of the keys.

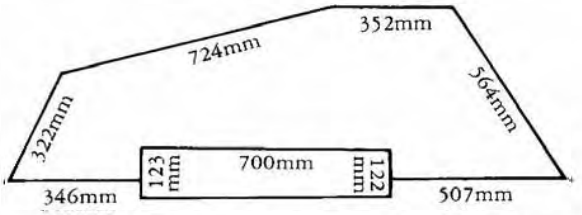
3. The jacks are original, except for three antique replacements and one modern one. The tongues of all but three jacks are relatively modern. The present scaling is as follows:

	String length	*Plucking point*
C	1092mm	130mm
c	892mm	
c^1	559mm	
c^2	310mm	84mm
c^3	149mm	
f^3	86mm	32mm

The present stringing in brass and steel is modern.

4. The spinet is of cypress wood and pentagonal in shape. The inner face of each wall and the panel above the keyboard are finely carved in relief with figures amid floral scrollwork. Trophies of musical instruments are carved in the panels at each end of the keyboard, behind the two small figures carved in the round which flank the keyboard and hold respectively a *lira da braccio* and a lute. The jack-rail is fixed at the front end in the mouth of a fantastic beast placed on its side above the soundboard. Only the front of the case is decorated with inlaid ornament in a simple lozenge pattern, confirming that the instrument was intended not to be removed from the customary outer case which is now missing. The top moulding is decorated in typical sixteenth-century Italian style with small ivory studs.

The dimensions of the spinet are as follows:



The case measures 198mm in height plus 4mm for the feet at the corners. (The feet are less refined in workmanship and appear to be later replacements, as must be the portion of the baseboard under the projecting keyboard.)

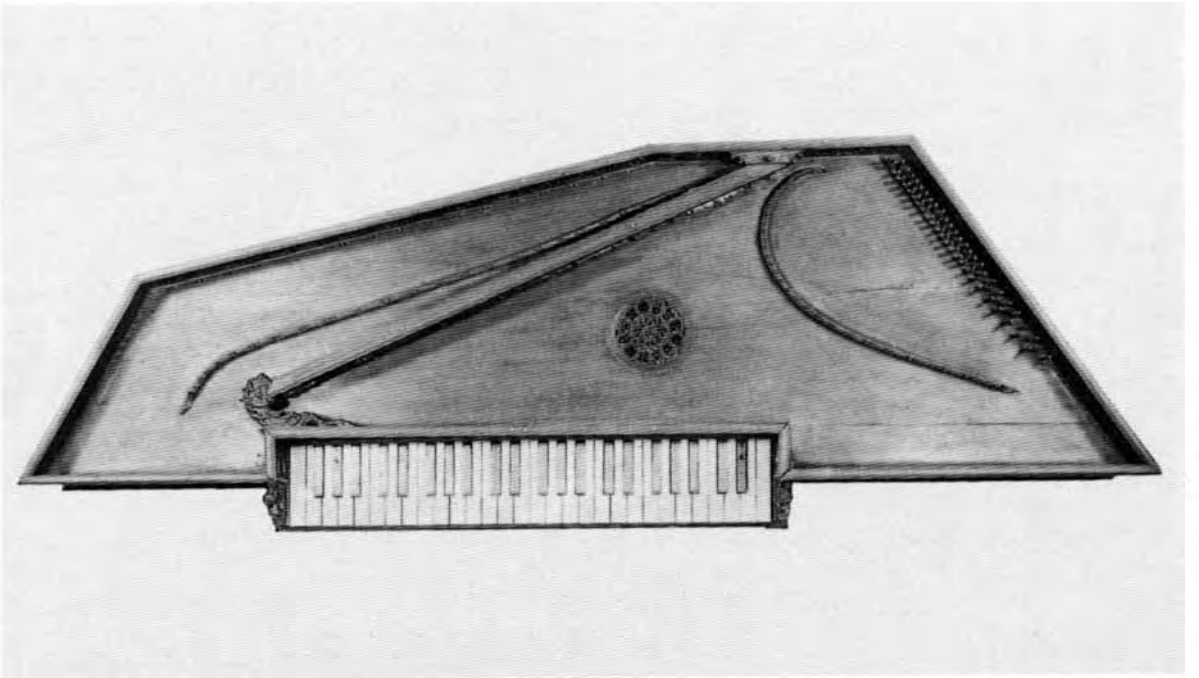
The soundboard contains a carved wooden rose of a geometric pattern 99mm in diameter, and a register providing a direct wood-to-wood bearing against the jacks.

5. In common with virtually all surviving Italian instruments of the sixteenth century, this spinet has been subjected to major alteration in the course of its active life as a playing instrument. In order to shorten the stringing so as to raise the pitch, the left-hand bridge has been repositioned. The original scaling, therefore, was approximately as follows:

C	1138mm
c	947mm
c^1	597mm
c^2	338mm
c^3	173mm
f^3	133mm

SPINET, Annibale dei Rossi, Milan, 1555

3a



3b

3C

It is estimated that the original pitch may have been as much as a fourth below the present-day norm. Alternatively, the spinet may originally have been fitted with iron strings having a higher tensile strength than brass. A change to brass for tonal reasons would necessitate shortening the scale.

The key-panel and key-frame are not original. It appears that the original key coverings and arcades have been transferred to new keys which are probably not of Italian origin, since they are made of limewood and are guided by vertical iron pins at their distal ends; these features are not characteristic of Italian harspichord-making. Beneath the keys are glued patches of leather on the faces of which are depressions suggesting that vertical rods of about 4.75mm diameter were formerly fitted under the keyboard, possibly as trackers connected to the organ portion of a claviorganum. Such a combination of a spinet and an organ (rather than a wing-shaped harpsichord, as in the Museum's Theewes claviorganum, No. 9), is depicted on the painting attributed to Friedrich von Falckenburg, dated 1619, that decorated the inner surface of the lid of an outer case for such an instrument, now in the Germanic National Museum, Nuremberg.

6. The instrument was restored to playing order in 1964 by John Barnes for recording by the British Broadcasting Corporation. The information about the earlier states of the spinet is based on Mr Barnes's restoration report. He also noted that the instrument's soundboard had been carefully repaired at some previous date, but with pieces of wood that were too thick, with the result that the soundboard was somewhat stiffened around the middle part of the left-hand bridge, the one that was repositioned in order to change the pitch. This, Mr Barnes observed, reduced the resonance in the tenor register which characterizes this type of instrument.

7. The instrument was acquired by purchase in 1869 for £150 from Rawson Brown.

1. The instrument is inscribed on the anterior surface of the jack-rail: *Marci Iadrae MDLXVIII.*

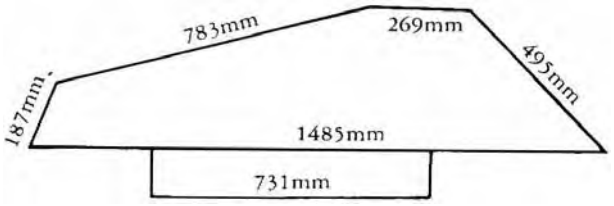
2. The projecting keyboard has a compass of fifty notes, C/E short octave to f^3. The standard measurement is 499mm. The keys of soft wood have wooden blades at the end that slide in the slots of the rack behind the keyboard. The ivory-covered naturals measure 23mm wide by 113mm long, with 37mm key-heads. The naturals have carved ivory arcades, a number of which are replacements. The ebony sharps are bevelled, measuring 71–75mm long by 11–12mm wide. The remains of painted decoration may be seen on the first 16mm of their length and on the bevel at the front. A slot, now filled in, was cut at one time in the bottom board to allow the use of a sixteen-note pull-down pedal keyboard, now missing, with a compass of C/E-g. The jacks, apparently replacements although old, slide in the slots of an unleathered register cut in the soundboard. The instrument at present is quilled in Delrin.

3. The spinet, currently strung in modern brass wire, has the following scaling and plucking points:

C	1200mm	(210mm)
c	1048mm	(267mm)
c^1	591mm	(139mm)
c^2	311mm	(76mm)
c^3	151mm	(71mm)
f^3	110mm	(72mm)

4. The case walls and soundboard are of cypress. The bottom board, painted or stained dark, is apparently of deal. The bridges appear to be of sycamore or maple. The soundboard contains a vellum rose, 102mm in diameter, of traditional design.

5. The spinet is pentagonal in shape, finely decorated on the front and those inner surfaces which are visible from the front with formal arabesque patterns with representations of animals, birds and herms, executed in shades of gold and colours on a black ground. The mouldings round the top and bottom edges of the casing are of ebony and the top moulding is inlaid with ivory stringing. The shaped brackets flanking the keyboard also have edges inlaid with ivory. In its original state the instrument undoubtedly was kept in a protective outer case. Since the decoration is confined to the surfaces visible from the front, presumably this outer case was of the type that opened along its entire front, like that of the 'Queen Elizabeth Virginal'; it did not merely open to disclose the keyboard, while concealing the front of the instrument to either side. The dimensions of the instrument are shown on the diagram below.



The spinet measures 174mm high.

6. The instrument was acquired by the Museum from Rawson Brown in 1869 for £150.

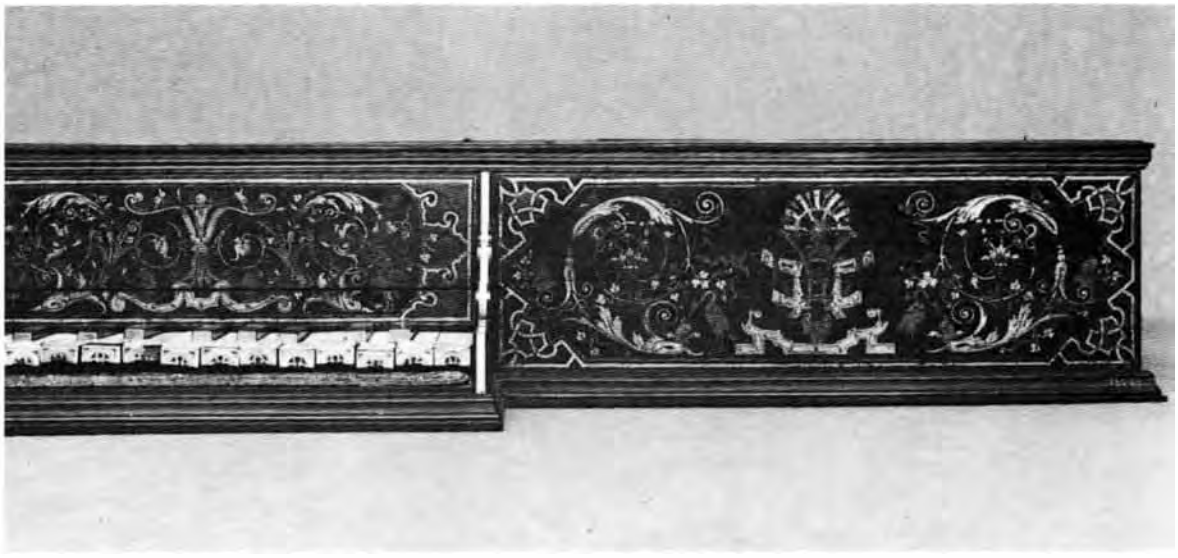
7. The spinet was restored to playing order by the Adlam Burnett workshop in 1977. It had previously been put into exhibition order in 1965 by Mr John Barnes, who found an inscription on the underside of the soundboard:

A laude é gloria sia dela santissima trinita é dela gloriosa é sempre vergine maria
francisci brixiensis fecit 1569

Who this Francesco of Brescia may have been is not clear. It has been suggested, but without

substantial evidence, that he may have been Francesco Antegnato, the maker whose name has been affixed to another Italian virginal in the Museum's collection (No. 490–1899) in a variant form, Giovanni Francesco Antegnato. The Antegnato family of Brescia were famous organ builders of the mid- and late-sixteenth centuries, and continued active there well into the following century. It is quite possible that Marco Jadra dealt in instruments made by his various suppliers; in a later age firms like Longman & Broderip (Piano W.33–1964) traded on such a basis.

4a



4b

1. The instrument is unsigned. The date 1568 appears following a motto inscribed on the back of the instrument (see below.)

2. The present keyboard is a dummy with an apparent compass of A–f^3, which bears no relationship to the original range. The replacement keyboard probably dates from the late nineteenth century. The original compass is believed to have been of forty-five notes, probably the ubiquitous C/E-c^3. This range was subsequently enlarged to forty-eight notes, probably C,D-c^3, thereby adding the low E-flat, F-sharp and G-sharp. Evidence of this enlargement is provided by the present arrangement of the register. Its forty-eight slots are made up of single slots at the bass and treble ends, with twenty-three double slots to hold the remaining forty-six jacks, rather than twenty-four double slots to hold all forty-eight jacks, which would have been normal for a virginal originally built with a forty-eight-note compass. Furthermore, the uppermost double slot shows signs of having been enlarged from a single one. There are also indications that the casework at each end of the keyboard was cut away at one time to accommodate the additional keys, but was then later reconstituted. Three tuning pins were also provided for the additional notes.

3. Although not extended, both bridges have been repinned at various times so that it is now difficult to reconstruct the scaling. There are scribed lines on the soundboard near the right-hand bridge that Russell (1968) believed would suggest that the two halves of this bridge had been moved from their original positions. However, Koster (1981) has adduced cogent reasons for considering these lines as representing the position for the bridge originally intended by the maker before he opted for a somewhat longer scale at c^2. There are no signs, such as glue stains, of the bridge actually having been relocated, and the painted soundboard decoration, undoubtedly original, is consistent with the present conformation of the bridge.

A hypothetical reconstruction of the string band would be as shown below, assuming that, while the strings above c^2 were plucked close to their mid-point, the lower strings were plucked in a decreasing proportion down to about one-quarter of their length in the bass.

	String length	*Plucking point*
C	1310mm	354mm
c	1031mm	299mm
c^1	652mm	236mm
c^2	338mm	159mm
c^3	195mm	109mm

4. The case is of walnut, in sarcophagus form resting on four small turned and carved feet, possibly replacements of later date. The top edge of the case measures 1630mm long by 563mm wide. The case height, exclusive of the feet and the coffered lid, measures 257mm. The scantlings are 21–23mm.

The case is finely carved in relief with trophies of arms and of musical instruments in a decidedly Italianate manner. In the centre above the keyboard there is a cartouche on which is carved a nude male figure holding a viola da gamba. Above the keyboard and on the sides and lid are fine strapwork compositions. The one on the lid frames the arms of William, Duke of Cleves, Berg and Jülich (1516–1592), often referred to as William the Rich.

At each end of the virginal there is carved a grotesque fish mask with a ring-handle in its mouth. Lion masks protrude from the front of the case at either side of the keyboard.

The interior of the lid is decorated on a blue ground with gold strapwork and the mottoes MVSICA DISPARIVM DVLCIS CONCORDIA VOCVM and PELLO LEVO PLACO TRISTIA CORDA DEOS. In the centre is a medallion depicting Orpheus

charming the wild beasts. The soundboard, presumably of spruce, is painted in gouache with flowers in the earliest identifiable painting style used on Flemish harpsichords, like that also found on the pre-1575 transposing harpsichord (Brussels Instrument Museum) and the Theewes claviorganum of 1579 in this museum. The rose, now unfortunately missing, measured about 70mm in diameter.

Mottoes in gold are inscribed round the base of the instrument: LAVDATE DOMINVM IN CHORDIS ET IN ORGANO in front, LAVS DEO at both ends, and at the back OMNIS SPIRITVS LAVDET DOMINVS (sic) with the date 1568. The inner edge of the case and the inner surface of the falling front to the keyboard are also painted blue. The falling flap bears the motto MVSICA · NVNC · DIGNAS · HABITET · SVA · PROIMAA [sic] · LAVRVS/NITIT · HONORE · SVAS · PRETIO · SVPERATQVE · SORORES · PRORSVS · ET · IMMENSVM · PROPELLIT · LVMINA · CORDI. The jack-rail is inscribed MVSICA TVRBATOS SENSVS ANIMOSQVE REMOVET. Remains of paper and baize or felt are found under the jack-rail, with musical notation and writing on the paper.

The walnut case has suffered some worm damage and has been repaired with patches in several places. The blue paintwork and gilding have been retouched at various times.

5. The instrument is unique among surviving northern European virginals both in form and decoration. It is quite dissimilar to Joes Karest's thin-cased virginals (1548, Brussels Instrument

5a

Museum, and c. 1550, Rome, Museum of Musical Instruments), on the one hand, and the later, heavy-cased instruments made by the Ruckers and their contemporaries in Antwerp. Nevertheless, it is most probable that this virginal was built in that city, the regional centre of harpsichord making. It is of special interest in this connection to note that the carving of the case is derived in part from prints by Jakob Floris in his *Veelderhande Cierlycke compertementen*, published in Antwerp in 1564.

The instrument was shown at the Exposition Nationale Belge of 1880, when it belonged to a collector in Liège. It was acquired by the Museum through purchase in 1896.

5b

5c

5d

1. The instrument is unsigned by its maker. The rear of the nameboard batten bears the inscription: *Restored by Andrew Douglas/Oxford 1961.*

2. The present keyboard compass is of fifty notes, GG/BB-c^3. The standard measurement is 483mm. The naturals are of ebony with embossed gilt paper fronts. The key-heads are delicately rounded while the tails are completely flat. The naturals are 115mm long with a key-head of 36mm, and are 22mm wide. The sharps are of hard-wood inlaid with certosina work in ivory, silver, boxwood and ebony. They are bevelled, measuring 8–8.5mm wide and 69–75mm long.

The key levers are made of sycamore and are faced at the sides with soft leather, an unusual feature. Wooden pins at the distal end slide in the slots cut in a rack at the rear of the key frame.

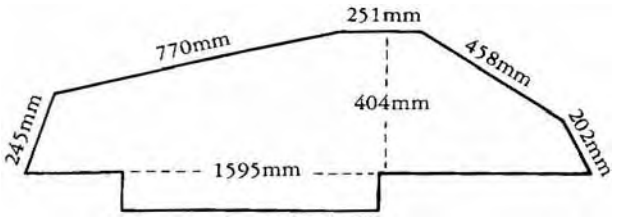
3. The cypress jacks are original. (As they are slightly too short for the present key-levers, the latter have been fitted with spacing blocks to compensate.) The jacks are provided with double sets of dampers and the tongues are fitted with brass springs. The scaling and plucking points are as follows:

GG	1281mm (150mm)
C	1240mm (177mm)
c	873mm (190mm)
c^1	497mm (90mm)
c^2	268mm (83mm)
c^3	122mm (79mm)

The instrument is strung with modern replacement material.

4. The case and mouldings, jacks, jack-rail, soundboard and the left-hand bridge are of cypress. The right-hand bridge and wrest-plank are of beech. The box register is of beech and pine. The baseboard, framing, liners, corner blocks, soundboard ribs, key-frame and outer case are of pine.

The instrument is hexagonal with projecting keyboard and has the dimensions shown on the diagram below:

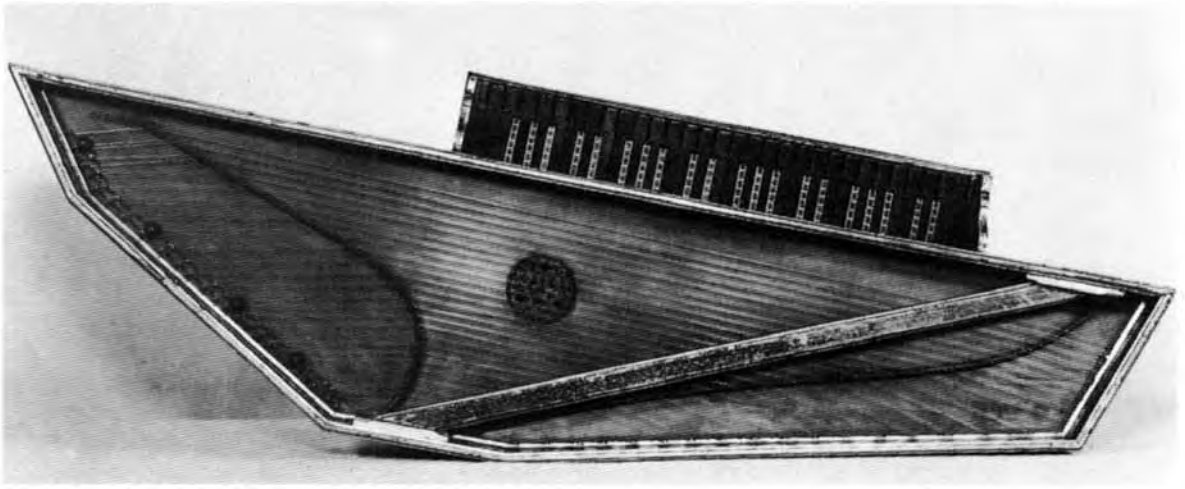


HEIGHT: 184mm; 217mm in outer case.
SCANTLINGS: sides, 3–4mm; spine, 4.0–4.4mm; bottom 12mm

The forward-facing surfaces of the instrument are richly decorated with moresques in red and blue glazes on a gilded ground. The pattern is reserved, however, so that it is rendered in the gold against a painted ground. (The blue glaze now shows as a green colour because of the yellowing of the varnish superimposed over the decoration.) To the left of the keyboard a panel bears the English royal arms as borne by the Tudor monarchs until the death of Queen Elizabeth I in 1603. On the right is a panel displaying the badge used by both Anne Boleyn and her daughter Elizabeth I – a falcon on a stump, crowned and holding a sceptre. In view of the apparent date of this spinet (*c.* 1570) the badge must in fact refer to Queen Elizabeth I, with whose name it has long been associated.

The outer case, believed to date from *c.* 1680, is lined with yellow silk except for the faces of the lid, which are japanned with stylized floral patterns executed in gold on a black ground in a close imitation of contemporary Japanese lacquer. The outside is surfaced with red velvet. The brass lock-plate is delicately engraved.

The soundboard contains a cut parchment rose. The thickness of the soundboard averages 3mm, from 2.7mm to about 4.0mm at the spine.

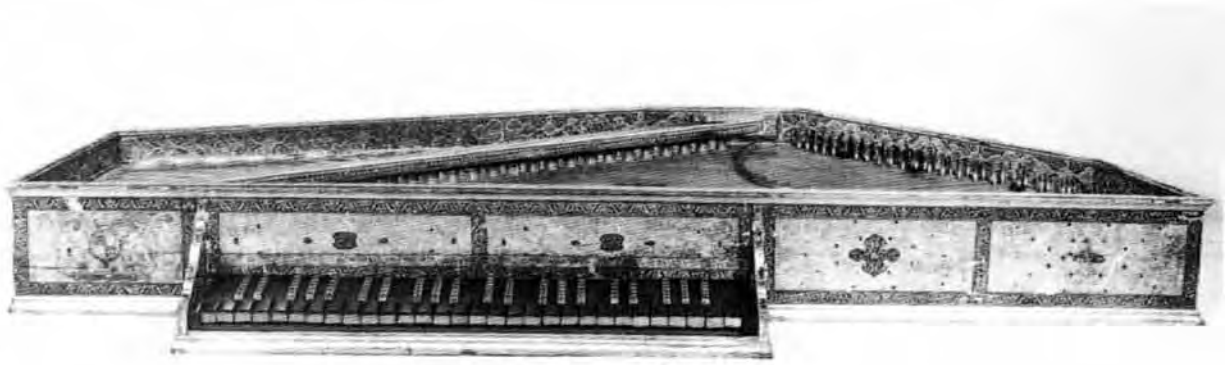


6a

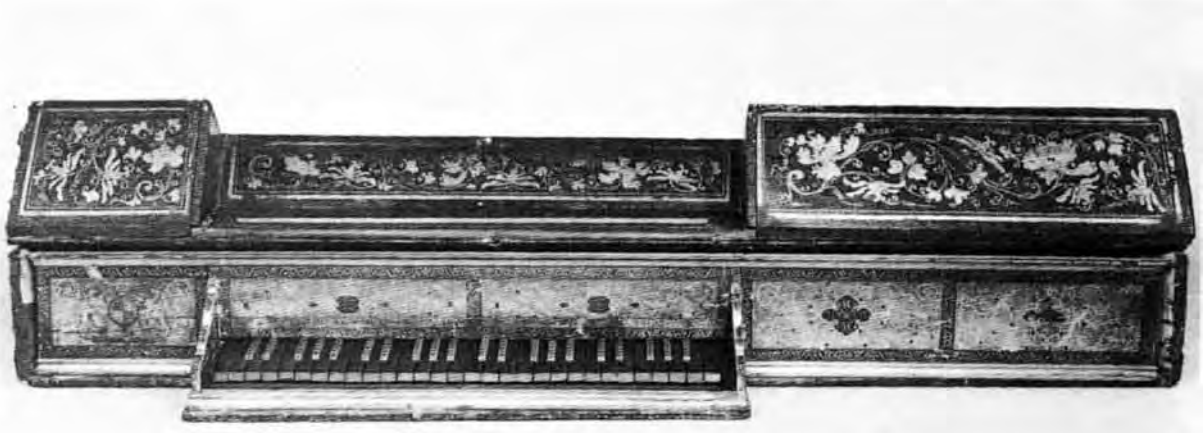
5. Nothing is known of the history of the instrument until its purchase by Lord Spencer Chichester before 1798 in London, where it had 'lain sometime in obscurity'. He kept it at his country seat, Fisherwick in Staffordshire, and it was acquired at a sale held there in 1805 by a painter, Jonah Child of Dudley. He wrote a letter to the *Gentleman's Magazine* in June 1815, describing the instrument and mentioning that he 'had no objection to transferring it to a more suitable possessor'. In about 1842 it was purchased by an anonymous 'late owner' from someone who stated that it had come from Fisherwick. It was later acquired by the Reverend Nigel Gresley, of Milbourne St Andrew, Blandford, Dorset, who finally sold it to the Museum for £125 in 1887.

6. In common with virtually all sixteenth-century Italian instruments, the spinet has undergone an alteration in its compass. The original range is uncertain. The present keyboard is unlikely to be the original one. The notches cut in the balance-rail of the key-frame point to an original compass of C-c^3, d^3 (without c sharp^3) but this would certainly be most unusual. In any event, the keyboard has been extensively modified to change it from the type with a sliding blade and a sawcut rear guide to the present form with a wooden pin moving in a slot. The top note has also been transferred to the bass end. The need to add spacing-blocks at the ends of the keys to reach the jacks, the original ones, has already been noted. Some very faded and incomplete traces of lettering near the wrest-pins show no evidence of alteration, but the lettering at the treble end is confused, probably because some of the wrest-pins had to be moved in order to avoid fouling the strings. These traces of lettering do not suffice to clarify the question of the original compass.

The extraordinarily striking resemblance of this unsigned instrument to the Benedicti Floriani spinet of 1571 in Leipzig, both as regards construction and decoration, was noted over fifty years ago by JAMES. Detailed comparative studies of both might well justify an attribution to that Venetian maker. The similarity of such features as the profiles of the end-blocks of the keyboard and the curves of the bridges must be balanced against differences of scaling and dimensions that are not easily squared with an ascription to Floriani, however. Certainly the decoration is in a style much favoured in Venice at that period.



6b



6c

6d

6e

7. HARPSICHORD, Giovanni Antonio Baffo, Venice, 1574 Mus. No. 6007–1859

1. The instrument is inscribed in two panels of the decoration above the keyboard: IOANES ANTONIVS BAFFO VENETVS MDLXXIIII.

2. The present keyboard compass is GG/BB-c^3, fifty notes with bass short octave. The ivory-covered naturals with arcaded carved wooden fronts measure 112mm long (from the rear of the sharps) by 22mm wide, with key-heads of 40mm length. The sharps of ebony are bevelled and measure 71mm long by 11–12mm wide. The standard measurement is 504mm. Two sharps bear traces of a gold line across the front.

3. The scaling and plucking points of the longer 8-foot strings are as follows:

GG	1841mm (183mm)
C	1820mm (181mm)
c	1156mm (144mm)
c^1	572mm (129mm)
c^2	286mm (93mm)
c^3	132mm (60mm)

The jacks are of pearwood with beech tongues. Almost all are original.

4. The case, baseboard and barring are of a coniferous softwood. The soundboard is of cypress. The wrest-plank and the original keys (see below) are of sycamore, as is the balance-rail. Modifications of the keyboard were made in beech. The box slide registers are of pearwood with sycamore sides. Boxwood blades at the distal end of the keys fit in a rack.

The case of the instrument itself is decorated with ivory studs along the top edge and the jack-rail. The inner face of the case and the jack-rail, nameboard and key-blocks are all veneered with rosewood, partly inlaid with boxwood and ebony, and bear delicately gilded arabesques. The cypress soundboard contains a carved wooden rose of intricate geometrical design with some details executed in cut parchment or card. The diameter of the rose is 132mm. Mouldings are solid rosewood.

Scantlings are as follows: baseboard, 12mm reducing to 10mm at the tail; cheek, spine and bentside, 3.8 to 4.2mm.

The outer case, from which the instrument can be withdrawn, is painted inside with grotesque decoration surrounding a cartouche with a scene of Apollo and the Muses, all on a white ground. (The source for the cartouche has been identified by Sheridan Germann as an engraving by Giorgio Ghisi [1520–1582] after a painting by Luca Penni of *c.* 1550, which is in turn derived from Raphael's 'Parnassus' of *c.* 1511 in the Vatican Segnatura.) The outer faces of the case were originally decorated with gilt scrollwork on a black or dark blue ground; some of this decoration has been revealed by a recent cleaning (1964) but the painted decoration which had for so long hidden the original embellishment has been allowed to remain on the lid and on the long side of the outer case. This later layer consists of garlands of flowers painted in a mid-eighteenth-century style on a sage-green ground. There is no stand. It is considered that the painted decoration of the outer case dates from *c.*1570 so that the case is contemporary with the harpsichord. Details of this painting accord with the painted ceiling of the Salotto at the Villa d'Este in Tivoli of 1568 and contemporary decoration in Venice.

The inlaid decoration of the instrument itself is quite similar to that of the Venetian chess and backgammon board of *c.* 1580 in the Museum's collection (No. W. 9–1972) and shows the influence of Near Eastern lacquer work.

The dimensions are as follows:

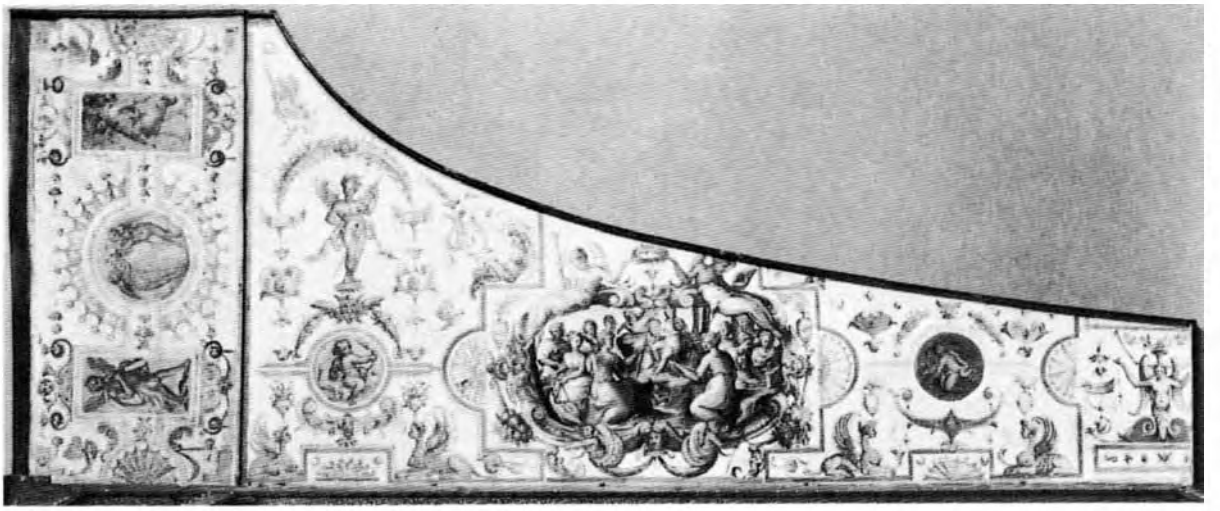
	Harpsichord	*Outer Case*
Length	2170mm	2217mm
Width	839mm	898mm
Depth	187mm	252mm

7a

5. The instrument was purchased in 1859 for the sum of £6 7*s*,0*d*.

6. In common with many Italian harpsichords of the earliest period, especially those by such eminent makers as Giovanni Antonio Baffo, the present instrument has undergone numerous alterations in the course of its active life extending well into the eighteenth century. This fact testifies to the quality of the harpsichord and the esteem in which Baffo was held, just as the products of the Ruckers workshop of Antwerp were so prized by musicians and connoisseurs that they were rebuilt, enlarged and even faked (see No. 23). The alterations to the Baffo harpsichord may also have been carried out to accommodate the change in the prevailing pitch of stringed keyboard instruments in Italy, or perhaps changes in the nature of stringing material, which it is presumed took place during that period.

An editor's note added to the text of Russell (1968) summarized the principal changes in the instrument as reported by Mr John Barnes, who had restored it in 1964 to playing order. How-



7b

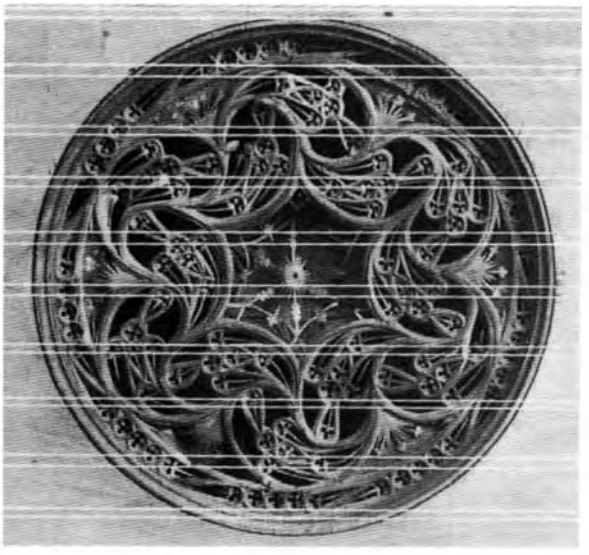
7c

ever, Mr Barnes has since refined his analysis of the rebuilding history of the instrument and the following summary of his revised conclusions is based on Barnes (1971).

The original keyboard compass of C/E-f^3 was subsequently altered, possibly some fifty to sixty years after the instrument's original construction, to a fifty-note compass of GG/BB-c^3, the present range of the harpsichord. Presumably at the same time the original disposition of the harpsichord, one 8-foot and one 4-foot register, was altered to the typical later Italian disposition of two 8-foot stops. There are marks on the soundboard where the 4-foot hitchpins and even the 4-foot bridgepins were located. The position of the 4-foot nut on the wrest-plank can also be determined. Calculations from the resulting measurements confirm that the 4-foot scaling agreed with that of the 8-foot strings. Both the 8-foot and 4-foot nuts were located close together, with both sets of tuning pins in front of the 8-foot nut. The octave strings presumably passed through holes in the 8-foot nut (the present nut is a rather crude replacement and does not follow the line of the original one). With such an arrangement of tuning pins and nuts, it is to be assumed that the shorter strings, those of the 4-foot stop, were plucked by the jacks closer to the keyboard. Indeed, one of the box slides of the harpsichord has the word *Otava* written on it, and this slide was certainly in the front position when it and the wrest-plank were bored by woodworm.

When the second 8-foot register was substituted for the 4-foot, the bridges and hitchpins of the latter were removed and its jacks lengthened so that their plectra would reach the higher level of the 8-foot strings. The pitch of the instrument after the keyboard alteration and the replacement of the 4-foot register by a second 8-foot was raised by about a fourth, assuming that the strings themselves remained tuned to the same pitches. These modernizations made the harpsichord resemble new instruments being built at about the same time.

At a later stage, probably towards the latter part of the eighteenth century, the harpsichord underwent a further and most unfortunate rebuilding. (The details, as given in the 1964 restoration report, are found in Russell 1968, 34f.) The compass was crudely enlarged from fifty notes (GG/BB-c^3) to fifty-four notes (C-f^3), and some 250mm cut from the tail end of the instrument. This truncation clearly shows in the decoration of the lid's inner surface and the rearmost panel of gilded arabesques of the bentside of the case.



7d

In spite of the vicissitudes of repeated rebuilding, the harpsichord remains an outstandingly fine example of the work of this celebrated maker. The restoration report and the further study made during the preparation of the Museum's measured drawing of the instrument both bear witness to the impeccable workmanship of the mechanical parts and the concealed structure. For instance, the original jacks still fit perfectly in their guides and are uniform in thickness to a tolerance of 0.1mm, an extraordinary degree of precision in the sixteenth century.

1. The instrument is inscribed above the keyboard: ANNIBALLIS DE ROXIS MEDIOLANENSIS MDLXXVII.

2. The keyboard compass is of fifty notes, C/E-f^3. The standard measurement is 483mm. The naturals are of ivory set with stones of various kinds and colours with elaborate arcaded fronts. They measure 115mm long by 22.5mm wide. The accidentals have lapis lazuli slips with ivory surrounds set in ebony. They measure 68–70mm in length, top and bottom, and 12mm wide. Bottom C and top f^3 are inlaid with an arabesque pattern. There is no evidence of compass alteration.

3. The jacks are probably original and certainly of great age (a number of them appear to differ from the others in a slight degree as regards the contour of the bottom end and the smoothness of the wood; these may be replacements). The jacks are provided with a double set of dampers. The tongues are fitted with brass springs secured with sealing wax to the body of the jack. The scaling and plucking points are as follows:

C	1212mm	(170mm)
c	956mm	(220mm)
c^1	603mm	(172mm)
c^2	342mm	(117mm)
c^3	170mm	(97mm)
f^3	128mm	(91mm)

The instrument is strung to exhibition order with modern replacement material.

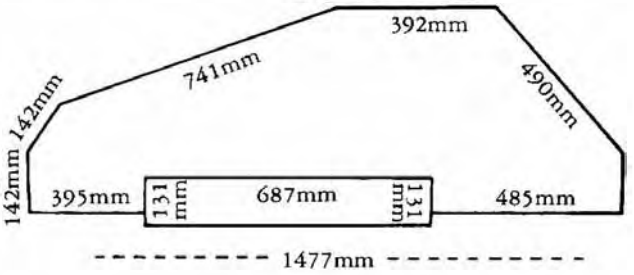
4. The spinet is heptagonal. It is surely the most sumptuously decorated instrument in the Museum's collection, indeed without parallel among surviving Renaissance keyboard instruments. The front faces and inside of the case are embellished with strapwork panels carved in ivory on an ebony ground. The centres of the panels are set with precious stones. The small wooden mouldings surrounding the strapwork are set with garnets and turquoises. There are small panels of lapis lazuli on the jack-rail and below the keyboard. The jack-rail is held, at the front of the instrument, in the mouth of a carved lion whose head is held by two small putti. On top of the jack-rail are four small ivory putti, carved in the round, playing musical instruments: lute, organistrum, viol and *lira da braccio*. Flanking the keyboard are boxwood figures, carved in the round, of a man in classical armour and a woman with a child. There is no longer a separate outer case but this extremely elaborate instrument must certainly have had one.

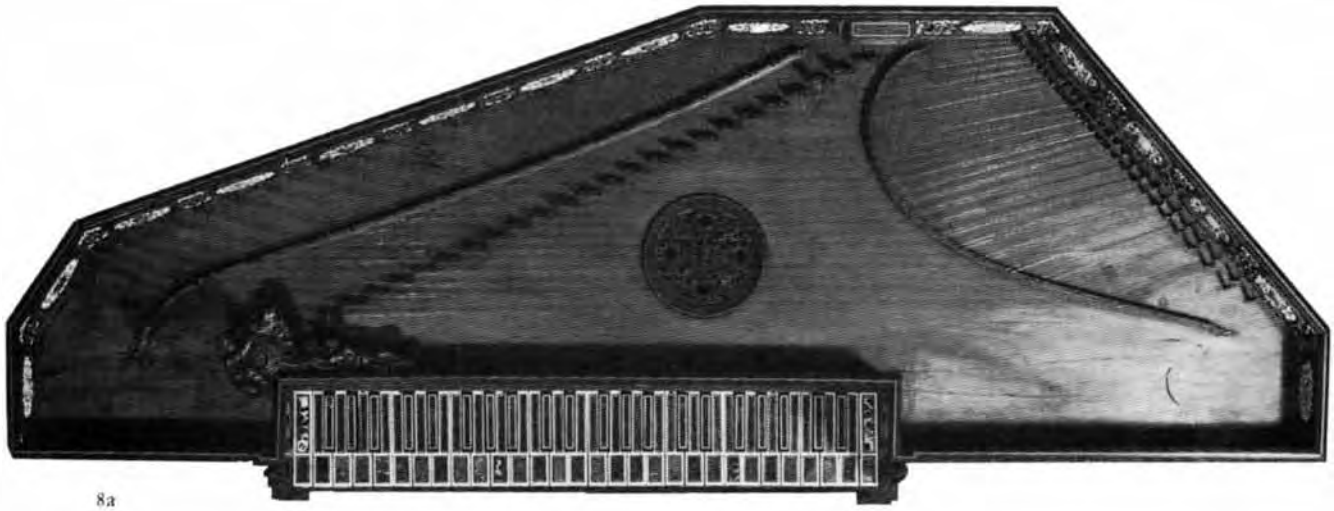
This very early example of *pietre dure* furniture decoration is adorned with a total of 1,928 stones:

857 turquoises, 361 pearls, 103 lapis lazuli, 28 amethysts, 58 topazes, 6 carnelians, 40 emeralds, 32 sapphires, 117 garnets, 242 small garnets and rubies, 4 crystals, 9 agates, 52 jaspers, and 19 small jaspers and agates.

The soundboard contains a wooden rose of exceptionally large diameter (145mm), extremely well carved in relief with strapwork medallions and grotesque female busts surrounding a boy's head.

The dimensions are as shown below. The depth of the case is 268mm.





8a

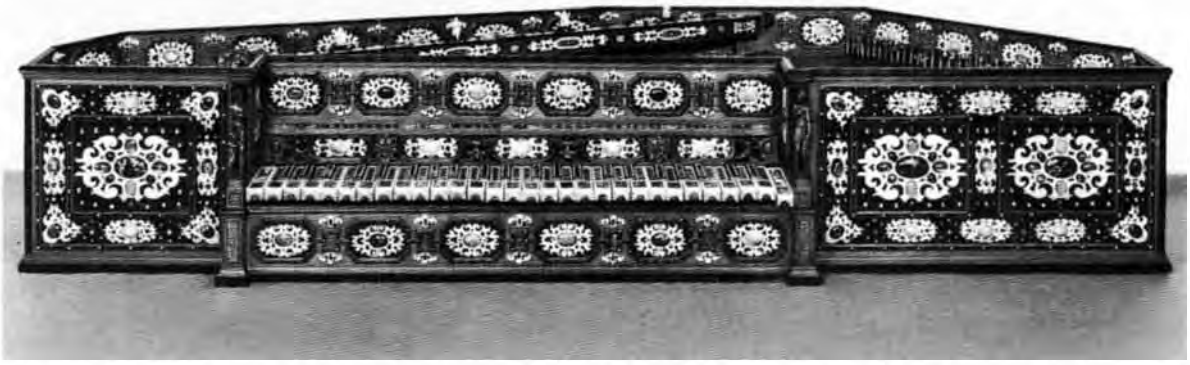
5. The provenance of this spinet is not known completely but it is almost certainly the instrument described in Morigi's *La Nobiltà di Milano*: 'Annibale Rosso was worthy of praise, as he was the first to modernize clavichords into the shape in which we now see them. This skilful maker constructed amongst other works a clavichord of uncommon beauty and excellence, with the keys all of precious stones, and with the most elegant ornaments. This instrument was sold for 500 crowns, and is now in the possession of the learned and refined nobleman Signor Carlo Trivulzio. Ferrante (Rosso), his son, is following in the footsteps of his father in all respects and continuing to make improvements in clavichords, thereby making a name for himself.' (p. 295. The original Italian text is found in ENGEL 1870, p. 53, and ENGEL 1874, p. 273.)

The word 'clavichord' was used at the time to refer to spinets and virginals rather than the instrument now denoted by this term. The word *manicordio* was the usual Italian expression for clavichord. (It was also the Spanish word, continuing in use into the eighteenth century, and Milan from 1535 to 1706 was of course under Spanish rule, a circumstance which had cultural as well as political effects.)

The instrument next comes to light as part of the large collection assembled by Antoine Louis Clapisson (1808–66), a French composer and teacher, the remainder of which he sold to the

8b

French state in 1861 as the nucleus of the musical instrument collection of the Paris Conservatoire. The Rossi spinet, however, was reserved. After being exhibited at the Paris Exposition of 1867, it was acquired by the Museum in 1869 for the then considerable sum of £1,200. (Queen Elizabeth's Virginals cost the Museum only £125 in 1887.)



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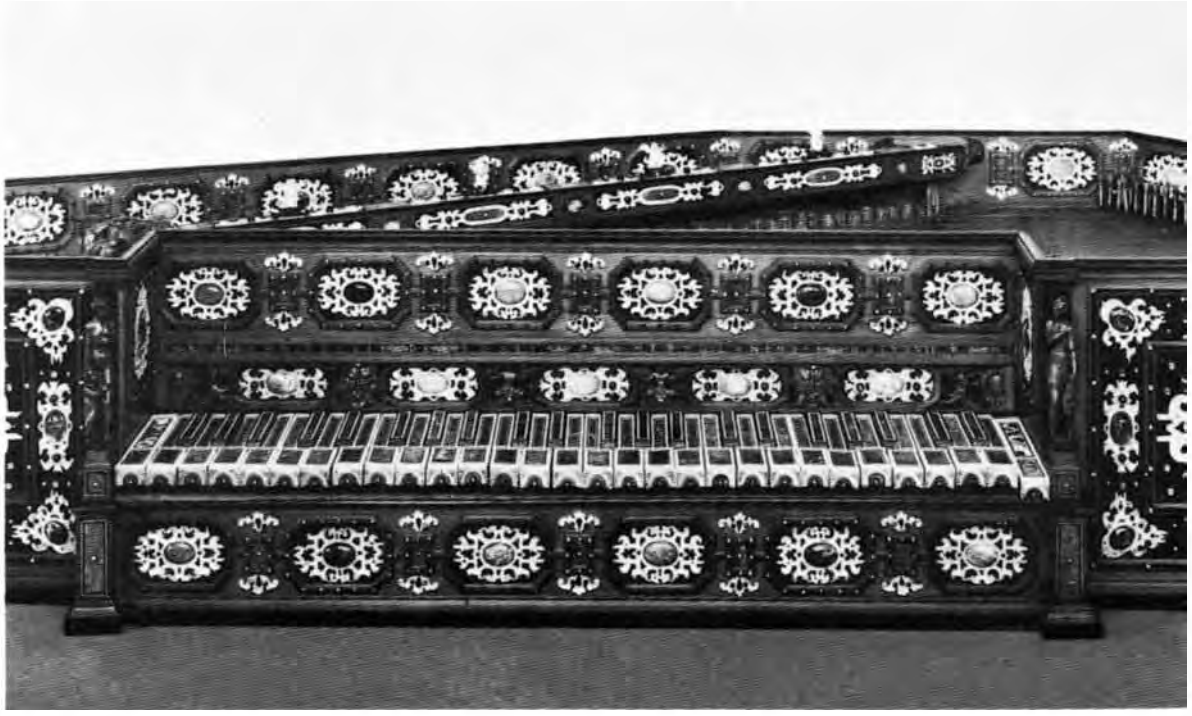

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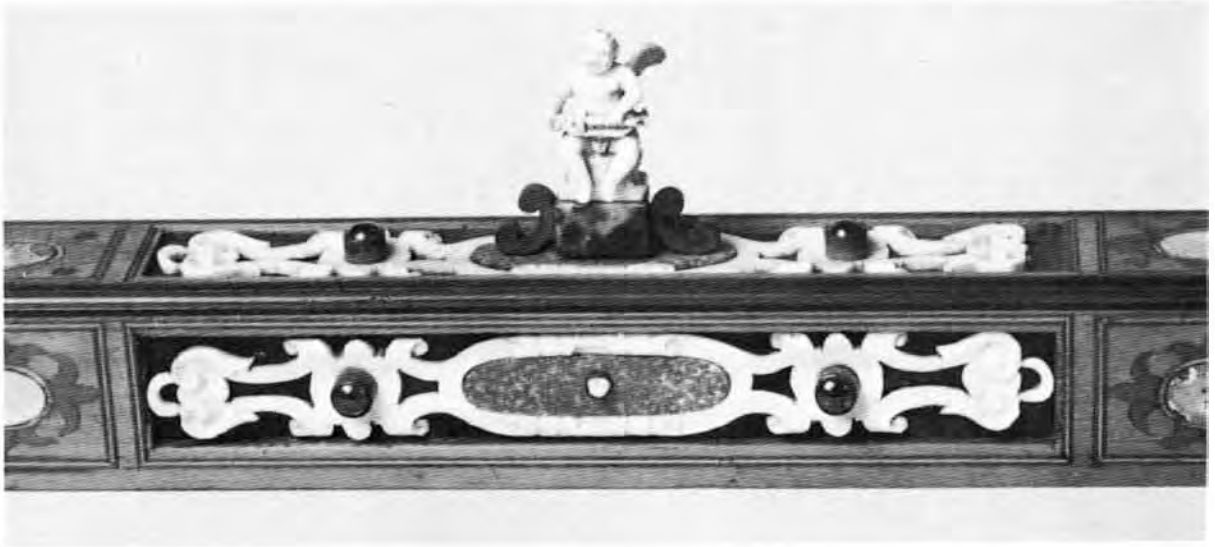
8e

8f



8g

1. The instrument is inscribed on the inner surface of the lockboard: *Ludowicus Theewes me fesit 1579.*

2. There was a single keyboard, now missing, of forty-nine notes. From other indicia, it is clear that the compass of the harpsichord portion of the instrument was indeed forty-nine notes, presumably C – c^3 chromatic, without a short octave. The compass of the organ, however, was only forty-eight notes, presumably C,D-c^3, omitting the low C sharp. The standard measurement was *c.* 482mm.

3. The harpsichord portion was disposed 2 × 8-foot, 1 × 4-foot. It is belived that the 4-foot register was the middle one. The back 8-foot plucked to the left and the front 8-foot to the right. As both the 4-foot nut and bridge are replacements, as also is the lower portion of the 8-foot bridge, it is impossible to estimate the scaling of the 4-foot. The string lengths and plucking points of the back 8-foot, according to HUBBARD and KOSTER, are as follows:

C	1530 (approx.) mm	(177mm)
c	1100 (approx.) mm	(163mm)
c^1	620mm	(152mm)
c^2	350mm	(144mm)
c^3	202mm	(134mm)

Only one 4-foot jack survives and the mortice in its tongue is so small that the fragment of metal in it may be the remains of a brass plectrum. The presence of the fixed metal hooks on the 8-foot bridge, L-shaped pins of brass unlike any to be found on other historical harpsichords, has been the subject of considerable speculation. They presumably were used to affect the sound produced by one of the sets of 8-foot strings in a manner analogous to the *arpichordum* device, found on many Flemish virginals, and the brays of certain Renaissance harps. Thus, two 8-foot timbres would have been available, a normal plucked string sound and the buzzing tone of the choir against which the hooks pressed at the bridge.

Contrary to usual practice, the position of the movable jack-slides is below that of the guides, which are fixed mortices cut through the spruce of the soundboard. The spruce soundboard extends to cover the wrest-plank, which is hollowed out beneath the 8-foot and 4-foot nuts so that they rest on freely vibrating wood. There are three stop-knobs, two to the left and one to the right, that controlled the registers of the harpsichord.

4. The organ portion was probably disposed as follows:

There were five ranks of pipes and a coupler (organ to harpsichord), drawing in bass and treble, with twelve stops, all, including the coupler, divided at *a*/*a*-sharp.

Stopped Diapason 8-foot wood
Flute 4-foot stopped wood
Principal 2-foot (Bass: stopped wood; Treble: open wood)
Cymbel I (1/4-foot repeating, metal)
Regal 8-foot wood
Coupler (organ to harpsichord)

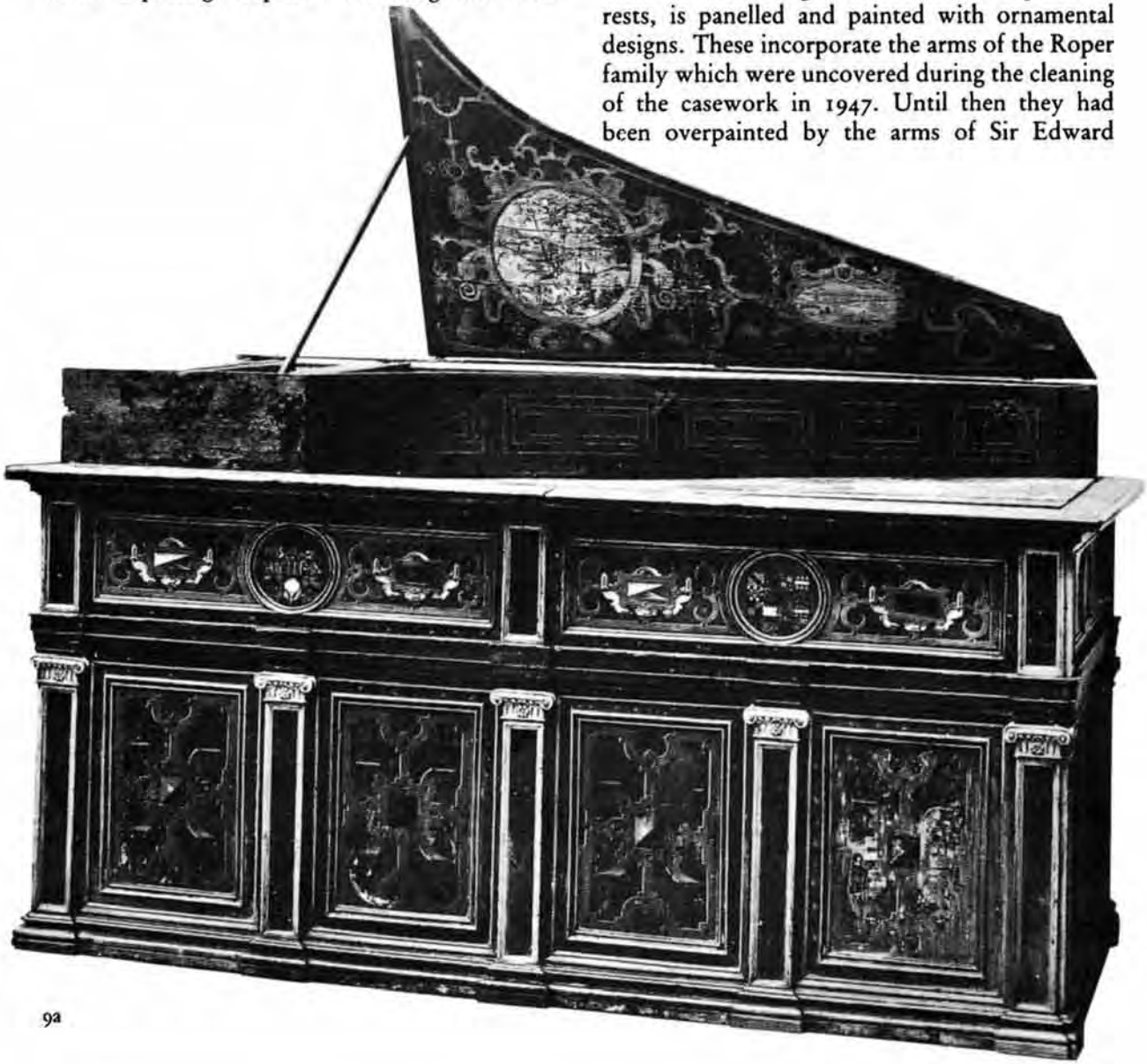
The five divided ranks of pipes were controlled by ten stop knobs, five at each side, below the keyboard. The divided coupler mechanism is believed to have been controlled by knobs, one on each side of the case, about 850mm above the floor level.

Only a single pipe survives (in damaged condition). In the course of cleaning the interior of the organ in about 1966, some additional fragments were discovered: parts of several jacks, a piece of tooled leather from the exterior case of the harpsichord, a piece of an upper guide, two small battens, two pallet springs, seventeen wooden Regal boots and one sticker. (These are on display separately.)

5. The cases of both harpsichord and organ are of oak. The exterior of the harpsichord is covered with leather, finely stamped and gilt, but now much damaged. The inside of the harpsichord is decorated with embossed paper (which was probably originally gilded) and with painting of strapwork and other designs together with a scene depicting Orpheus charming the wild beasts. The soundboard is painted in gouache with flowers, but the maker's rose is missing.

The bracing system consists of a series of flat rectangular braces set virtually on the bottom of the harpsichord, and rising to the level of the underside of the case liners, placed to run transversely from the spine to the bentside.

The case of the organ, on which the harpsichord rests, is panelled and painted with ornamental designs. These incorporate the arms of the Roper family which were uncovered during the cleaning of the casework in 1947. Until then they had been overpainted by the arms of Sir Edward



9a

Hoby, of Bisham, Berkshire, and his wife Margaret, daughter of Henry Carey, 1st Baron Hunsdon. This marriage took place in 1582, and Lady Hoby died in 1605; the overpainting must have occurred between those years. The instrument stood for many years at Ightham Mote, Kent.

6. The claviorgan, despite its gravely damaged condition, is of immense importance in the history of the making of musical instruments. It is the only surviving English keyboard instrument datable to the sixteenth century. Moreoever, it is the work of a prominent member of the Antwerp guild that embraced the makers of such musical instruments, a man who seems to have spent most of the 1570s working in the English capital and who may well, therefore, have influenced instrument making in England at this period.

A number of claviorgans of comparable age by Italian and German makers survive. It is known from inventories and iconographic material that the combined harpsichord and chamber organ was in wide use throughout the sixteenth, seventeenth and eighteenth centuries. Handel, for example, is known to have conducted oratorio performances from just such a combination instrument. Other harpsichords in the Museum's collection were at one time attached to organs that have now disappeared (e.g. the Vaudry harpsichord of 1681 [No. 19] and the Annibale dei Rossi spinet of 1555 [No. 3]. The plates illustrating the latter instrument include a lid-painting depicting a sixteenth-century scene of music-making in which a claviorgan is prominently featured.)

7. The instrument was given by Mrs Luard-Selby in 1890.

8. References:

BARRY
KOSTER

9b

10. VIRGINAL, ('The Glass Virginal'), Northern European, *c.* 1600

Mus. No. 420–1872

1. The instrument is unsigned.

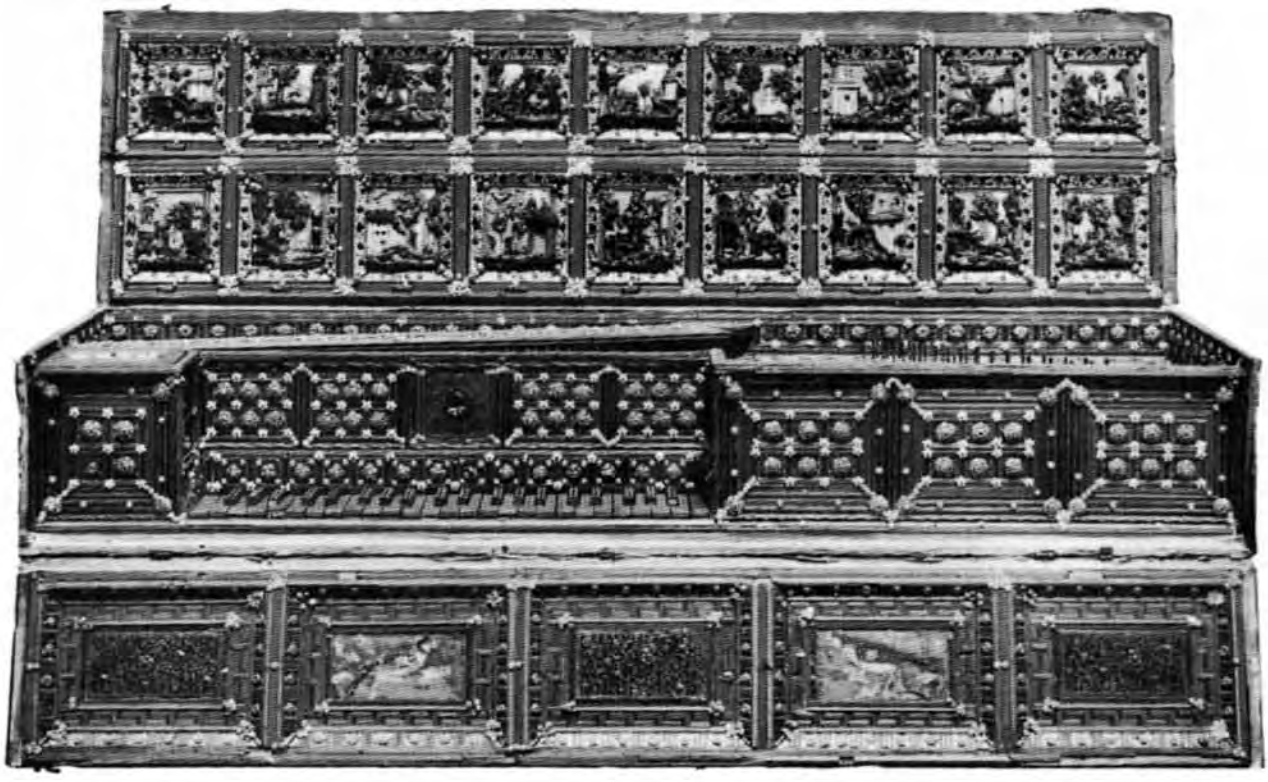
2. The keyboard compass is of forty-five notes, C/E – c^3, bass short octave. The standard measurement is 498mm. The naturals, covered with slips of enamelled copper, edged with coloured glass in a manner similar to the rest of the instrument, have fronts of blue and gold glass. They measure 103mm long, with a key-head of 29mm, by 23mm wide. The sharps are of ebony with two ivory fillets running their full length. Their fronts are of gilt moulded wood. They measure 65mm long by 12mm wide.

3. The scaling and plucking points are as follows:

C	1350mm	(149mm)
c	342mm	(82mm)
c	155mm	(67mm)

The jacks appear to be original with remains of old quilling still present.

4. The virginal is in typical Northern European rectangular form with an integral case with lid and drop-front attached. The case walls, due to the nature of the decoration, cannot be measured but are at least of 15mm thickness. The case is covered without in leather, tooled and gilt with a border of floral scrollwork and small animals. The lid contains eighteen panels, worked in high relief in coloured glass, containing scenes from Ovid's *Metamorphoses*, each identified below with a brief title. These scenes are framed with strips of white enamel bearing floral scrollwork. The inner face of the drop-front is divided into five panels, each of which was probably originally set with enamelled plates that have a blue



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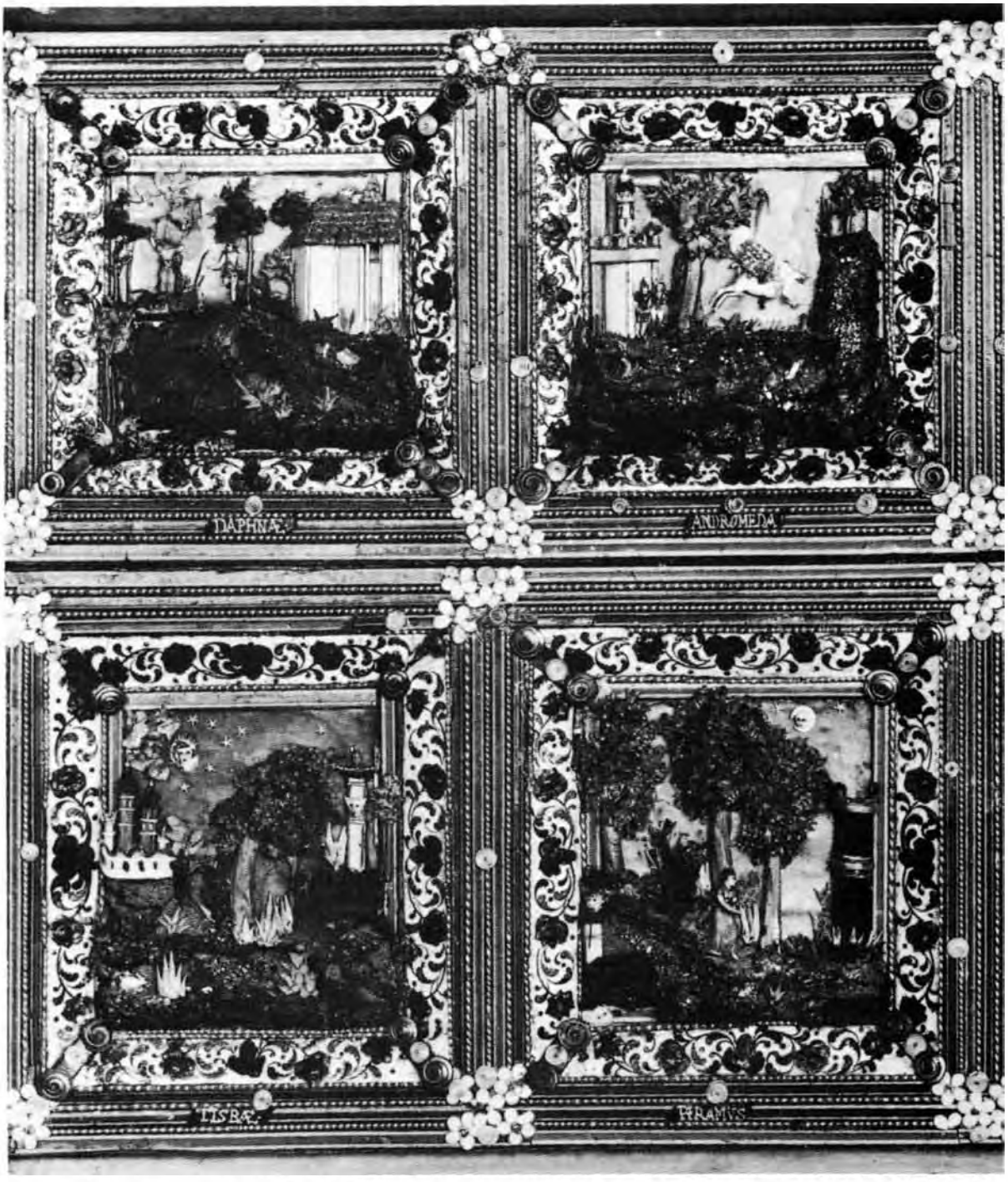


10b

ground and floral motifs (the colours of which have decomposed). Three of these enamelled plates remain; the second and fourth are missing and have been replaced by crudely cut-out engravings of birds and butterflies pasted to the red ground of the wooden backing. Another enamelled panel, similar but containing a head of a woman among the scrollwork, is set above the keyboard. Surrounding all these panels and covering the entire keyboard is a decoration consisting of coloured glass rods, rosettes and sequins, and of small spirals of brass wire. The soundboard is covered with glass rod decoration and contains a rose of *c.* 112mm diameter.

This virginal is illustrated by Astone Gasparetto in his exhaustive survey of Venetian glass-making, *Il vetro di Murano dalle origini ad oggi*, Venice, 1958, Figs. 97–9, because it is sometimes asserted that glass decoration of the kind to be seen on this instrument was executed at Murano. However, Gasparetto demonstrates that the technique spread from Venice to France and Flanders, and also to Germany. Indeed, he suggests that the decoration of this instrument may be German work, a hypothesis supported by the virginal's Northern European construction. Indeed, since this type of glass decoration was apparently also known in Flanders, the instrument may well have been built in the principal centre of Flemish harpsichord-making, Antwerp.

The instrument measures 1510mm long, 420mm wide and 255cm high. There is no stand.

5. The instrument was purchased in 1872 for £140.

6. It has been pointed out that the decoration of the instrument also bears a close relation to that of a casket in the Museum's collection, No. C. 20–1923, which is believed very probably to be German work of the mid-seventeenth century. The claim that the virginal originally belonged to Elizabeth, Queen of Bohemia, the daughter of James I of England, cannot be substantiated. However, it should be borne in mind that Bohemia was also becoming renowned for its glass in the early seventeenth century. While the Queen spent a considerable period of her life in Holland, which had close links to Antwerp, the great Northern European centre of harpsichord-making, she lived in great poverty during this exile, so that she is unlikely to have acquired so richly embellished an instrument at this stage of her life. Finally, it is possible that this instrument may be the one seen by Paul Hentzner on his travels in England during 1598 when he noted that 'A musical instrument made all of glass, except the strings' then stood in the Hall at Hampton Court (see R. Fastnedge, *English Furniture Styles*, London, 1955, 16). Possibly intended primarily for display in a *Wunderkammer* or as a property in a masque, the instrument nevertheless was designed to be played. A plucked string still produces a strong, full sound in the tradition of the Flemish virginals.

1. This small instrument is unsigned.

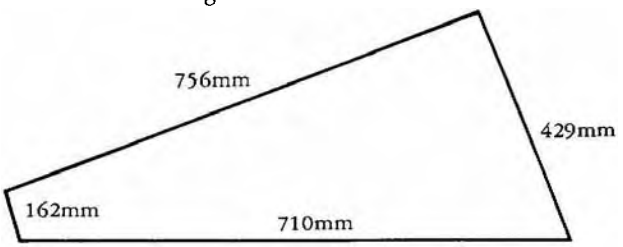
2. The projecting keyboard has a compass of forty-five notes, C/E-c^3, bass short octave, but sounding an octave, or possibly as much as a twelfth above the apparent pitch. The standard measurement is 450mm. The key panel is of beech. The ivory-covered naturals now have fronts of plain wood, but are believed originally to have had ivory or wooden arcades. Somewhat irregular in cut, the naturals measure *c.* 80mm long by *c.* 21mm wide. The bevelled ebony sharps measure 50–55mm long and 10–12mm wide. The scaling and plucking points are as follows:

Apparent C	662mm (46mm)
c	529mm (43mm)
c^1	332mm (42mm)
c^2	169mm (43mm)
c^3	76mm (47mm)

(The lowest six strings are grouped closely together at the extreme end of the V-shaped bridge, doubtless in order to maximize their length.)

3. Many jacks had to be replaced when the instrument was restored to playing order by Mr John Barnes in 1965. The jacks originally had quill springs, Mr Barnes reported, but these had subsequently been replaced by brass wire springs (the new replacement jacks have plastic springs). The instrument was originally quilled and portions of these quill plectra were still present at the time of restoration. The jacks, made of pearwood, are weighted with lead and fitted with double dampers.

4. The soundboard of cypress was found to have a thickness of 1.5–2mm. There is a multi-layered rose of parchment in the soundboard. Used parchment was also found within the spinet at two of the glued joints. The bridges are of sycamore. The corpus of the instrument is of cypress. The wrest-plank is, unusually, made of pearwood. The dimensions of the instrument are shown on the diagram below:



5. The spinet can be removed from its outer case. The cypress is painted black, on which ground gold decoration is applied. There are sparse arabesques on the inner faces and a delicate arcaded pattern of *portière* motifs with figures on the panel behind the keyboard. Gilded cherubs form the key-blocks at the ends of the keyboard. The outer case, painted plain brown without, bears two paintings within on the lid and falling front. The larger painting shows a mythological scene, including a large ship and merfolk. On the smaller hinged flap are depicted a number of dancing figures and musical trophies. (Some draperies added to the nude figures, presumably out of prudery, at some later date, were removed when the case was cleaned in 1964.) The outer case has a lining of cloth to protect the spinet as it is removed and replaced. The nameboard and mouldings are of ebony, as is the jack-rail on which traces of the former decoration can still be discerned.

6. The sound of the spinet is bright, clear and adequately loud, indeed almost pungent in quality. The tone is perhaps somewhat shallow as compared to a full-size spinet and the lowest octave lacks the tonal roundness of longer strings. The convenience and portability of such small spinets no doubt accounted for their widespread use in Italy long after octave instruments

had for the most part passed out of fashion in northern Europe. Thus, Dr Burney reported in his *The present state of music in France and Italy*, published in London in 1771, that 'throughout Italy they generally have little octave spinets to accompany singing, in private houses, sometimes in triangular form, but more frequently in the shape of our old virginals; of which the keys are so noisy, and the tone so feeble, that more wood is heard than wire'. In the case of the present instrument, Burney's strictures regarding weak tone and noisy key action certainly do not apply.

7. The instrument was acquired by purchase in 1870 for £20. At the time it was believed that the paintings were by Federigo Zucchero.

11a

12. CABINET ORGAN. South German, early seventeenth century

Mus. No. 216–1879

1. The instrument is unsigned.

2. The keyboard compass is of forty-one notes, E-g^2, a^2, without a bass short octave (that is, chromatic from E), and lacking g^2 sharp. The standard measurement is 474mm. The bone-covered naturals measure 94mm long, with key-heads of 31mm, and 22mm wide. The naturals have key-fronts decorated with interlaced arcading. The sharps, of ebonized fruitwood and strongly bevelled, measure 59–62mm long by 9.5–12.5mm wide.

3. The conjectural specification is as follows:

Stopped wood 4-foot
Stopped wood 2-foot
Open wood and metal 1-foot
Open metal 1/2-foot in bass and 1 1/3-foot in treble
Regal metal (cast from low tin alloy) 8-foot

All registers draw in halves divided at b/c' by means of sliders with small lead handles concealed behind small hinged panels on the left- and right-hand sides of the cabinet. The wind supply is provided by a single-rise reservoir and feeder operated by a foot-pedal at the right-hand side.

4. The upper part of the cabinet, dating from the late sixteenth century, is decorated in characteristic South German style with marquetry in various woods veneered on a carcase of pine. The lower part of the cabinet is cleverly painted in imitation of the marquetry work of the upper part.

The lower part of the cabinet, containing the soundboards and pipework of the organ in a very compact arrangement, was made when the organ was built some time in the seventeenth century. A grooved panel immediately below the keyboard gives access to the regal pipes, which stand at the front of the pipework to facilitate retuning which is required more frequently for these reeds than for flue pipes. A hinged panel at the rear gives access to the remainder of the pipework, all of which is placed horizontally. The cabinet measures 1295mm high, 1125mm wide and 585mm deep.

5. The cabinet organ was purchased in 1879 at an unspecified price from the Robinson Collection.

12a

13a

1. This organ has long been believed to be the work of Gottfried Fritzsche (1578–1638), organ builder to the Electoral Court of Saxony. However, his name does not appear anywhere on the instrument. Gurlitt (1938) ascribes the organ to Fritzsche basing his attribution on Fürstenau's 1861 publication of relevant archival material. During restoration of the case work in 1967, a faint pencilled inscription was found on the key-frame, reading: *Erbaut 1741 Tobias Defrain Orgelbauer a Dresden.* This doubtless refers to a renovation of the instrument rather than to its

initial construction. The organ's compass, its decoration and the portrait of Duke Johann Georg I (1585–1656), who reigned from 1611, all confirm its seventeenth century origin. The specific date 1627, traditionally associated with this organ and given in previous catalogues, is therefore not improbable. It cannot, however, be substantiated at present.

2. The keyboard compass is of forty-one notes, C/E – g^2, a^2, without top g^2-sharp. The standard measurement is 506mm. The naturals of ebonized birch measure 23mm wide by 94.5mm long, with a key-head formed by rounded edges extending from the front edge to a scribed line 30.5mm behind. The sharps of bone-topped black-stained hardwood measure 53mm long by 8mm wide and are canted towards the rear. The keys are hinged with parchment. A forty-second key at the bass end of the keyboard was formerly connected to a ventil mechanism. Blowing was effected from the rear by two bellows (now detached) identical in form, with designs painted in the centre section of the upper surface. The bellows weights are now missing.

3. There are three ranks of pipes made of layered paper: 2-foot (front) (Principal?), 1-foot (middle) (Octave?) and 4-foot stopped (rear) (Gedackt?). These ranks were controlled from the right-hand side by metal slider handles, now missing, but possibly not original, as the slider ends have had pieces of various woods spliced on to them.

4. The case is of pine, in contrast to the birch used for the keys, slides and wind-chest. Both the case and the open-work ornament above the cornice, a typical example of strapwork in northern Renaissance style, are carved, painted and gilt. The pipe-shade is of card, découpé and painted *in tempera* with designs that include angels, the coat of arms and a medallion portrait of Johann Georg I, inscribed in medallic latinity: DG. IOAN. GEOR. D. SAX. ML. CL. & MON. ELEC. On the inside surfaces of the two shutters of the case are painted *in tempera* the Dismissal of Hagar, with the inscription: *Agar ancilla ab Abraham dimittur cum puero/Genes 21*; and the Sacrifice of Abraham, with the inscription: *Abraham parentus offeret fillium suum Isaac in Sacrificium domini/Genes 22.* The maximum dimensions of the case are 1024mm high, 810mm wide and 460mm deep.

5. The organ was purchased in 1867 for £40.

6. References:

GURLITT, WILLIBALD: 'Zum Schülerkreis von G. Fritzsche'. *Musik und Kirche*, x (1938), 158.
FÜRSTENAU, MORITZ: *Zur Geschichte der Orgelbaukunst in Sachsen – Vortrag*, Dresden, 1861, at 15 (cited by Gurlitt). *Idem., Beiträge zur Geschichte der Königlich Sächsischen musikalischen Kapelle – grossentheils aus archival. Quellen*, Dresden, 1849.

1. The instrument is unsigned.

2. The keyboard compass is of thirty-eight notes, G-g^2, a^2 (lacking g^2-sharp). The standard measurement is 387mm. The bone covered naturals measure 71mm long and 18mm wide. They bear fronts of gilded embossed paper. The keys are not marked with a scored line dividing off the key-heads from the tails. The sharps are of pearwood stained black to resemble ebony, topped by a veneer of dark wood (possibly ebony) on which there are traces of gilt designs on part of the upper surface.

3. Thirteen of the jacks are modern replacements. Rather than being numbered, the originals are marked with the names of the notes they play in German letter notation. They move in a leathered register flush with, rather than on top of, the soundboard. The jack tongues are of holly.

4. The strings are modern replacements. The scaling and plucking points are as follows:

G	391mm	(24mm)
c	352mm	(43mm)
c^1	211mm	(37mm)
c^2	109mm	(40mm)
a^2	56mm	(38mm)

5. The case is veneered in ebony, decorated with applied silver ornament in the form of strap-

14a

work surrounding small circular and oval medallions variously embellished with fine etching, engraving and enamelling. The lid contains a box, of which the lid forms a sloping writing-desk. A mirror is in the underside of the lid. The spinet stands upon a sturdy plinth containing a drawer with a secret catch, fitted to hold writing materials. The instrument measures 450mm long, 240mm wide and 187.5mm high at the back. The soundboard is of spruce (or pine) and contains a delicately cut-out paper rose.

This is an example of the *cabinets d'Allemagne* produced by the silversmiths of Augsburg as expensive presents suitable for display in Cabinets of Curiosities. They came in many forms and sizes and in a wide range of qualities.

6. The instrument was purchased in 1857 for £44.

7. The miniature scaling of the spinet, suggesting a possible pitch of a twelfth above the prevailing norms, and the tiny dimensions of the keyboard, far too small for an adult hand even of small proportions, might suggest that this instrument was merely a toy or, at most, an object of purely decorative interest. However, the sound quality is remarkably fine, with a clear, bright and powerful tone. Although without any indication of its maker, the spinet is similar to a writing-case spinet by Samuel Bidermann the Younger of Augsburg (1600–after 1661) with an automatic playing mechanism that performs six stylized keyboard dances (Rück Collection, Germanic National Museum, Nuremberg, No. MIR 1223, illustrated in the exhibition catalogue *Augsburger Barock* – Augsburg, 1960], No. 696, Ill. No. 341). The tunes themselves, indicative of the type of music playable on a miniature spinet of this sort, are transcribed in Alexander Buchner's *Mechanical Musical Instruments* (Batchworth Press, n.d.).

The casework was restored in the Museum's Conservation Department in 1964. Two missing oval enamelled plaques were replaced with etched silver plaques. Shortly thereafter, Mr John Barnes restored the mechanism to playing order, replacing one jack of later date and twelve missing jacks.

14b

German stringed keyboard instruments of such early date are of the greatest rarity. The dating of the present instrument is based on both its decorative features and its keyboard compass. An upper limit a^2 without g^2 sharp is found in the keyboard instruments of the period and their repertoire. Compare, for instance, the Museum's positive organ, possibly by Fritzsche of Dresden, of about 1627, which has a similar arrangement of its top notes (see No. 13).

15. HARPSICHORD, Andreas Ruckers the Elder, Antwerp, 1631

Mus. No. 1079–1868

1. The harpsichord is inscribed above the keys: ANDREAS RUCKERS ME FECIT ANTVERPIAE 1651 (sic). The date *1651* (sic) is written in black lettering on a white scroll between the soundboard rose and the longside. There is a gilt cast-metal rose with the initials A.R.

2. There are two manuals of fifty-eight note compass, GG, AA – f^3. The standard measurement is 487mm. The ivory-covered naturals with moulded boxwood fronts measure 132mm long on the upper and 123mm long on the lower manual, both with 40mm key-heads and a width of 22mm. The bevelled ebony sharps measure 76mm long on the upper and 72mm long on the lower manual, both with a width of 8–11mm.

3. The harpsichord is disposed as follows:

LOWER MANUAL: ← 4-foot
← 8-foot
UPPER MANUAL: 8-foot (dogleg) →

There is no coupler. The registers are controlled by three brass stop-knobs, two at the bass end and one at the treble end above the upper keyboard.

4. The present stringing in brass and steel is entirely modern. The scaling and plucking points are as follows:

	8-foot (longer string)	*4-foot*
GG	1448mm (152mm)	917mm (121mm)
c^2	330mm (98mm)	235mm (81mm)
f^3	127mm (12mm)	60mm (44mm)

5. The soundboard is of spruce and contains the gilt cast-metal rose with the initials *A.R.* (diameter 65mm) of the kind used by Andreas Ruckers the Elder in his instruments of all types datable from 1608 to 1636; this differs slightly from the roses in his later instruments. The soundboard is decorated in gouache with flowers, fruits, animals, arabesque border patterns (largely obliterated), and the date *1651* is placed on a white scroll between the rose and the longside. Much of the soundboard painting dates from the eighteenth century, as is explained more fully below.

6. The case is now painted black outside, except for the longside where the original marbled painting (a red-brown background veined in white) is still visible. The lid is secured by four large brass strap-hinges, and the two front sections of the lid by eight smaller hinges. The remains of the original 'snake' hinges are still visible. There are also four brass clasps for locking the lid. (There was formerly a front lockboard with the inscription ACTA VIRUM PROBANT, but this was accidentally destroyed when the lock was under repair in about 1860, before the harpsichord was acquired by the Museum.) There is a compartment in the longside for spare strings, etc.

The inside of the lid and part of the keyboard surround are painted a brick-red with gilded decoration in a floral design, and with mottoes: SIC TRANSIT GLORIA MUNDI on the main lid; MUSICA DONUM DEI on the small front section. These mottoes were probably included in the original seventeenth-century decoration which was on block-printed paper backgrounds. Remains of these papers, typical of Antwerp harpsichords, are still to be seen within the case, but have been much painted over.

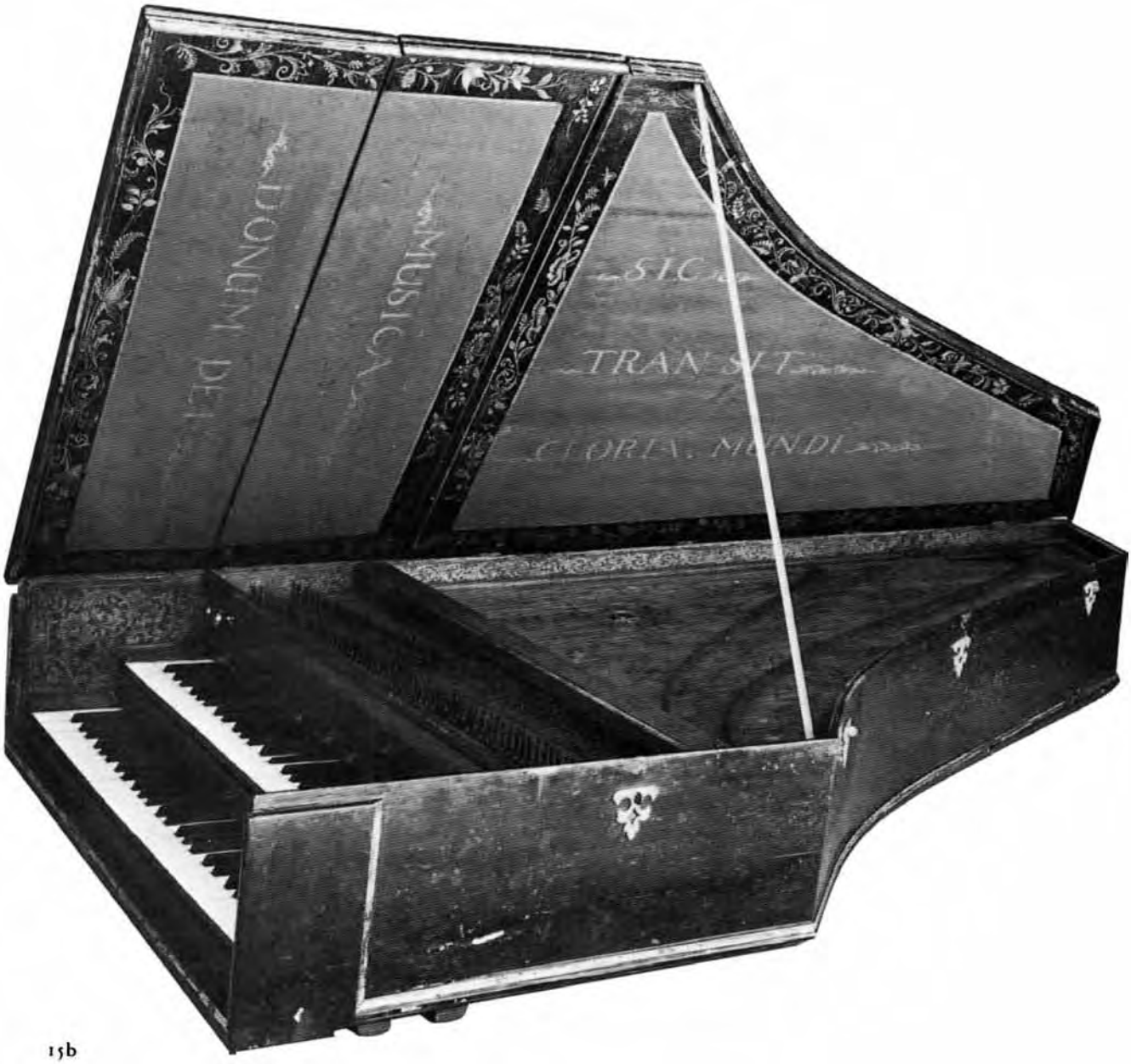
The harpsichord measures 2020mm long, 915mm wide and 262mm high. The stand, known from an old photograph and probably of eighteenth-century English origin, with four turned legs joined by stretchers, is now missing.

7. The harpsichord is a notable example of a Ruckers as rebuilt in the eighteenth century. Originally constructed as a typical 6-foot single manual instrument of forty-five note compass, C/E-c^3, it had two registers, a 4-foot and an 8-

15a

foot, possibly with a buff stop, measuring about 1820mm long (some 200mm shorter than at present) and about 711mm wide (about 204mm narrower than as enlarged). The process of extensive alteration of the case, compass and disposition of Ruckers harpsichords to meet the musical requirements of later periods was far more commonly carried out, judging from the number of survivors, in France than in England, and was referred to there as the *grand ravalement*. The enlargement of the present instrument is believed to date from the second half of the eighteenth century. A tell-tale indication is the use of so-called 'bat' pins for the front pinning of the English-style keyboard fitted to the rebuilt harpsichord, a type of pin used by the great London makers, such as Kirckman and Shudi, after the middle of the century. The registers and jacks fitted during the enlargement are also of typically late eighteenth-century English type.

Unlike the *petit ravalement* enlargement, which basically meant cramming a few more notes into an unaltered case, the *grand ravalement* was a drastic and most substantial rebuilding, affecting the inner as well as the outer structure. Thus, for instance, there is an additional bottom brace of pine of typical eighteenth-century English form located beneath the soundboard rose and visible through it. The joints on the long-side, bentside and cheekpiece are visible, as well as that above the keyboards, showing where the case has been enlarged to add notes at both the bass and treble ends of the compass, and to provide the additional length required for a second manual. The present *grand ravalement* seems to have been accomplished in one stage. A completely new wrest-plank was provided (probably of oak) and veneered with spruce. Forward of the gap new painted decoration was added and this was applied before the new nuts were fitted on the



15b

veneered surface of the wrest-plank. New 8-foot and 4-foot soundboard bridges were also fitted, both of pear or service wood. A new bottom board was applied over the worm-eaten older one.

A curious deviation from conventional English eighteenth-century construction is to be observed in the double-pinning of the 8-foot soundboard bridge. The thirty double and one single course of strings in that section are less acutely angled

than in a typical English instrument. The hitch-pins, on the other hand, are bent back slightly more than was customary.

The soundboard-painting was necessarily extended and altered in the *ravalement*. A slight amount of overpainting, possibly by way of restoration, can be observed. Arabesques that formerly defined the edges of the case and outlined the soundboard bridges had to be obliterated when these elements were relocated. New or extended sprays of leaves and flowers were used to cover them. Nevertheless, enough of the original soundboard painting survives to permit correction of the date of the original instrument, taking other factors into account as well.

The *1651* date appears to have been altered. The numerals are written in black rather than in the red colour customarily used by Ruckers when the date was placed on a white banner. Traces of red along the edges of the banner appear to indicate that the typical red-and-white colour scheme was the one originally followed. What is more, the numerals of the date *1651* are not executed with the customary neatness and precision of the Antwerp decorators. The style of the soundboard painting (discounting the later additions and alterations) has been identified as that found on four other Ruckers instruments datable to the 1630s (Boalch Nos. 97, 100 and 102a and a single-manual harpsichord in the collection of Michael Thomas, Whissonsett, Norfolk).

The soundboard rose is also of a type used by Andreas Ruckers the Elder until 1636. It is suggested that the black *1651* now on the white banner above this rose was originally *1631* in the usual red colour but, having darkened with age, soil or chemical change, was obscured at the time of the repainting. To an eighteenth-century maker of musical instruments who was rebuilding a Ruckers, this difference of twenty years in the date of the original would not have seemed significant. (For a detailed analysis of the soundboard painting, see Sheridan Germann in SCHOTT.) Taking all these factors into account, the instrument has been redated *c.* 1631.

8. The harpsichord was presented by John Broadwood & Sons in 1868. It is one of several claimants to the title of 'Handel's harpsichord'. The inconclusive documentation is reprinted in RUSSELL 1968.

1. The soundboard contains an *IR* rose. The date 1639 is painted on the soundboard at the base of the 4-foot bridge.

2. There is no keyboard. The present compass is of fifty-five notes, GG, AA – d^3. No wrestpins remain, but the harpsichord in its final state had three choirs of strings: back 8-foot and 4-foot (in median position), both plucking towards the bass, and front 8-foot, plucking towards the treble.

3. The instrument is not at present strung. Its present scaling, based on the replacement nuts and repinned 4-foot hitchpin rail and soundboard bridges, is approximately as follows:

	Longer eight foot strings	*Four foot strings*
GG	1332mm (170mm plucking point)	690mm (75mm)
c^2	325mm (88mm)	162mm (53mm)
d^3	153mm (67mm)	116mm (47mm)

Some of the jacks and the registers, both of English eighteenth-century type, are preserved.

4. The outside of the case, presumably of poplar, is painted black with rather stiff garlands of

16a

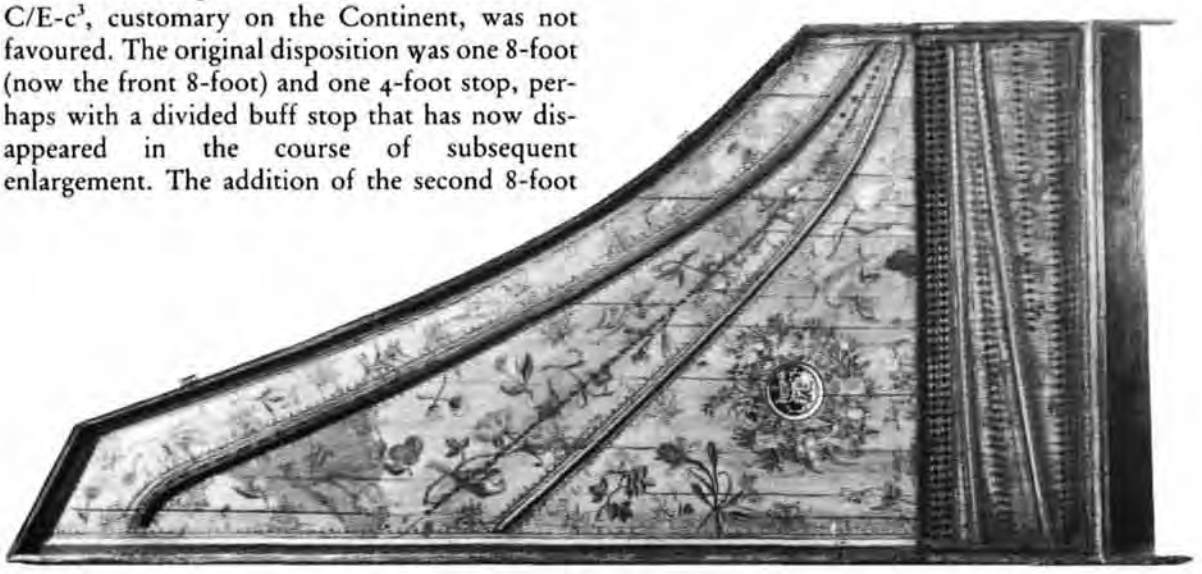
flowers and leaves in two sorts of gilding. The interior of the lid is painted green and decorated with rococo scrollwork and putti, all in a greenish-yellow monochrome, apparently executed during the third quarter of the eighteenth century. The interior of the harpsichord and the keyboard surround are crudely painted with black and white arabesques to resemble vaguely the Antwerp block-printed papers commonly used to decorate seventeenth-century Flemish harpsichords and virginals. The soundboard of spruce is decorated in gouache with flowers, fruit, birds and arabesques, and contains the maker's rose as a trade mark: a winged figure holding a harp and supporting the initials I.R. The diameter is 73mm.

The harpsichord measures 1731mm long, 785mm wide and 212mm high. There is no stand.

5. Like many harpsichords from the Ruckers workshop, this instrument has undergone various transformations during its working lifetime. It began life as a 6-*voet* single harpsichord with an exceptional original compass of fifty-one notes, C-d^3 chromatic, seemingly especially made for the English market, where short octave C/E-c^3, customary on the Continent, was not favoured. The original disposition was one 8-foot (now the front 8-foot) and one 4-foot stop, perhaps with a divided buff stop that has now disappeared in the course of subsequent enlargement. The addition of the second 8-foot stop required the enlargement of the gap by moving the header or belly-rail further away from the player to accommodate the third register. The enlargement of the instrument affected its compass and disposition but the fifty-five notes and three registers were fitted into the original case which has not been extended. Two longitudinal braces of the sort commonly used in the English eighteenth-century manner of construction were also added behind the belly-rail when the gap was widened. The enlargement of the keyboard was accomplished in part by reducing the size of the end-blocks. Unfortunately, although the original baseboard is still in place, and despite the insertion of the two longitudinal braces, no trace of the series number so typical of the Ruckers workshop can now be made out.

This harpsichord is known to have been the property of King George III, but it was disposed of when Queen Charlotte received a new harpsichord by Jacob Kirckmann in 1766. The keyboards and stand were destroyed in a fire at Kirckmann's piano manufactury in 1853.

The instrument was given to the museum in 1869 by Messrs Kirckman & Sons.



16b

1. The instrument is inscribed on the front of the jack-rail: *Thomas White Fecit 1642*. Most of the major case components bear the maker's initials scratched on them. In addition, there are some marks, possibly a kind of joiner's 'chop', on the rear surface of the nameboard. Jack No. 9 bears the mark *CL* and Jack No. 45 the mark *AB*.

2. The apparent keyboard compass is forty-nine notes, C-c^3 chromatic. However, the lowest key can be used to play either of two notes, depending on which of the two lowest mortices holds a jack (an extra jack for the purpose is kept in the small tool compartment to the left of the key-well). The standard measurement is 484mm. The boxwood-covered naturals measure 105mm long by 22mm wide. The sharps of stained hardwood, possibly walnut, are bevelled and measure 64–65mm long by 10–12mm wide. The key-panel is of poplar. The naturals have fronts of gilded and embossed paper and are further decorated with stamped ornamentation on their key-heads, which measure 32mm long.

3. The jacks, largely original, seem to have been made unusually short, so that the distal ends of the keys have had to be built up with layers of cloth in order to bring the quills to a correct position beneath the strings. The jack-tongues are later replacements.

4. The strings are modern replacements of brass and steel. The scaling and plucking points are as follows:

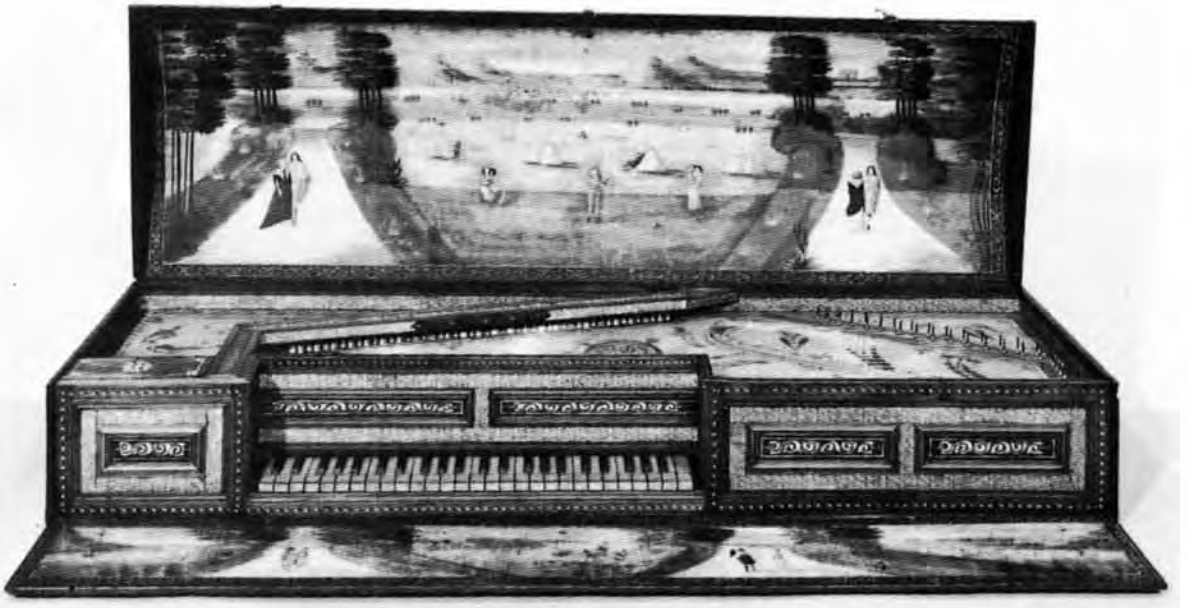
AA (?)	(bottom string)	1457mm (157mm)
C	(second string)	1438mm (150mm)
c		986mm (126mm)
c^1		576mm (90mm)
c^2		297mm (58mm)
c^3		151mm (43mm)

5. The drop front, coffered lid and part of the case (front, sides, hitchpin rail and wrest-plank) are of oak. The bottom board, which is somewhat eroded by worm, and the back are of pine. The soundboard is of spruce (possibly pine) with a cedarwood moulding. The thickness of the soundboard ranges from 3.1 to 4.3mm, with considerable variation. There is a soundboard rose of gilded wood and parchment measuring 95mm in diameter. The scantlings are: sides 8.5mm, back 12mm and bottom board 9–11mm. The instrument measures 1654mm long by 523mm wide by 290mm high. There is no stand.

6. The case is undecorated on the outside. The hinges and hasps are of iron, apparently of a common pattern, as they are identical to those on a similar virginal by John Loosemore of Exeter, dated 1655, also in the Museum's collection. The decoration within is typical of seventeenth-century English virginals. The coffered lid and drop front bear naïve paintings of gentry promenading and peasants haymaking. The soundboard is decorated in gouache with flowers, fruits and birds. The interior of the virginal and the front are decorated with gilded embossed *papier mâché* in the Flemish style. The painted ornamentation on the lid of the small tool-compartment to the left of the key-well seems also to be derived from Flemish models. The front of the instrument contains six panels and borders of naïvely painted scrollwork.

7. The instrument is the gift of Mrs Ada Deacon. It was restored in 1977 by the Adlam Burnett workshop, when it was noted that this, the second-oldest surviving English virginal, had undergone no major modification or restoration since its construction in 1642. Nevertheless, an extraordinary disparity in the quality of workmanship is apparent. On the one hand there are many finely wrought details, such as the mouldings which are meant to be seen. These contrast

sharply with the work in the concealed interior parts which are crudely fashioned. The soundboard wood is also unusual in that, whilst the portion closer to the player is approximately sawn on the quarter (with three to ten grain lines to the centimetre), the wood further to the rear of the instrument is slab sawn. The jacks do not run quite vertically because the lower guide slots are slightly displaced, doubtless unintentionally. The guide-pegs at the distal end of the keys are not angled consistently. The naïve quality of the painting and scrollwork have already been noted.



17a

17b

1. The instrument is inscribed on the front of the jack-rail: *John Loosemore Fecit 1655*.

2. The apparent keyboard compass is fifty-one notes, C-d^3 chromatic. However, the lowest key can be used to play either of two notes, depending on which of the two bottom mortices holds a jack. The standard measurement is 473mm. The naturals, covered in boxwood, measure 107mm long, with key-heads of 32mm length, by 21mm wide. The natural fronts are covered with arcades of embossed paper. However, the designs of the

18a

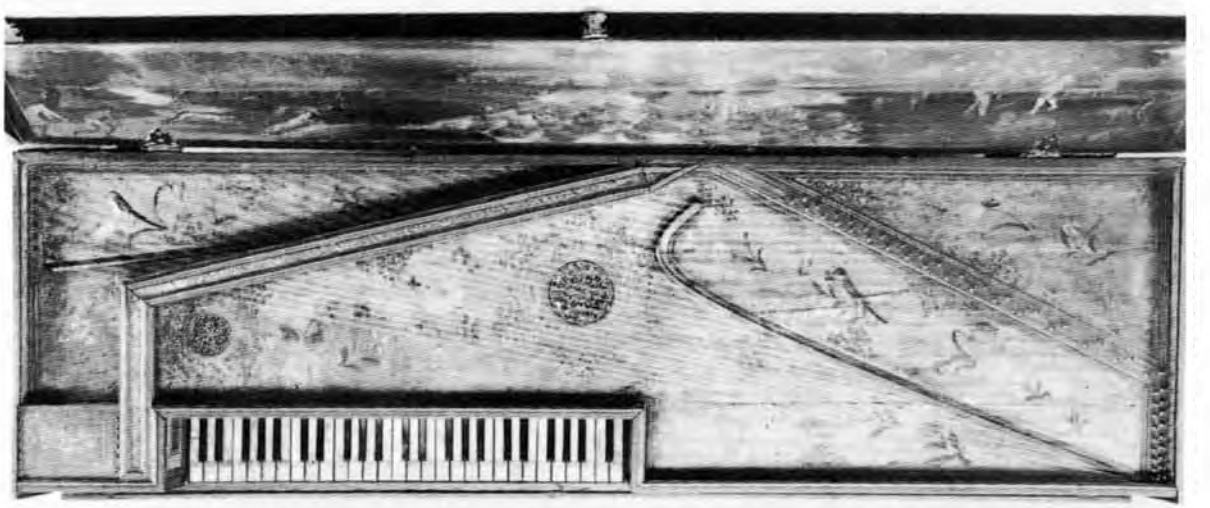
arcades vary considerably and are not arranged in any discernible sequence. The sharps of stained hardwood, 65–66mm long by 9mm wide, are canted towards the rear, perhaps reflecting current organ-building practice. The keys are guided by wooden slips sliding in a rack. The jacks are old and may in part be original.

3. The scaling and plucking points are as follows:

(AA?)	1637mm	(174mm)
C	1630mm	(165mm)
c	1146mm	(100mm)
c^1	645mm	(70mm)
c^2	311mm	(64mm)
c^3	175mm	(51mm)
d^3	152mm	(47mm)

4. The drop-front, coffered lid and parts of the case (front, sides, wrest-plank and hitch-pin rail) are of oak. The spine and bottom board are of a soft wood. The outside of the case is undecorated, adorned only by fancy hinges and hasps of iron. The inner surfaces of the coffered lid and drop-front contain naïve decorative paintings, with scenes of a stag-hunt, shipping, Adam and Eve, and various birds (probably identifiable as peacock, turkey, pheasant and cockerel), in a rural setting. The front of the instrument and the soundboard surround are covered with embossed and gilded *papier mâché* in the Flemish manner. A small panel of looking-glass is set centrally above the keyboard. The soundboard is decorated in gouache and contains two ornamental roses of gilded carved wood of 95mm and 65mm diameter, respectively. The lid of the small tool compartment to the left of the key-well is decorated with a painted design in the Flemish style. The virginal measures 1740mm long by 521mm wide by 282mm high. There is no stand.

5. The virginal was acquired by purchase in 1873 for £52 10*s*.0*d*.



18b

1. The harpsichord is signed underneath the soundboard in red wax: *Vaudry a Paris 1681.* The jack-rail bears the inscription on its proximal face: *Vaudry-Paris-1681.* The maker's mark, the letter 'V' in red crayon, appears on many concealed parts of the instrument.

2. The keyboard compass is fifty notes, GG/BB (short octave) - c^3. The key levers are of soft wood, poplar or lime. The naturals, ebony covered with gilded trefoil arcades carved directly on the ends of the key levers, measure 108mm, lower manual, and 107mm, upper manual, in visible length, and 22mm wide. The key-heads on both manuals are 31mm long with two scored lines. The bevelled sharps of solid bone measure 7–12mm wide by 77mm, lower manual, and 76mm, upper manual in length.

3. There are three sets of strings, disposed as follows:

Lower manual: 8-foot ←
4-foot ←
(Coupler)
Upper manual: 8-foot →

The registers are controlled by iron stop-levers, one at the left for the lower manual 8-foot, one at the right for the 4-foot. The jacks, nearly all original, are of pearwood and are now fitted with condor quill plectra. The coupler is engaged by pushing in the lower manual. The present brass and iron strings are modern (remains of older stringing material removed during the restoration have been preserved).

String lengths (approximate plucking points)
Lower 8-foot:
GG 1612mm (181mm)
C 1590mm
c 1195mm
c^1 708mm
c^2 352mm (112mm)
c^3 182mm (100mm)

4. The soundboard is of spruce, measuring from 2.4 to 3.2mm in thickness. The soundboard and wrest-plank bridges are of walnut. Three bars extend across the 4-foot bridge and six bars across the 8-foot bridge. Two fins run from the 4-foot bridge to the 4-foot hitch-pin rail. There is a gilded three-dimensional cut parchment rose. The soundboard is painted in gouache with roses, anemones and tulips in purple, red, white and green, and is bordered with a running scroll (*rinceau*) pattern in blue. The oak wrest-plank is veneered in spruce to match the soundboard.

5. The cheek, bentside and tail are of walnut, while the bracing system, spine and baseboard are of soft wood, probably cedar of Lebanon but possibly pine. The inner surface of the spine, where visible, is veneered in walnut and a walnut moulding is glued along the upper inner edge of the case. Scantlings are as follows:

spine	11.4 mm
cheek	9.8 mm
bentside	4.5 mm
tail	10.0 mm
baseboard	12.8 mm

The harpsichord measures 2176mm long, 768mm wide and 242mm high, with a total height of 900mm from the floor. The finely japanned case and framed stand of seven spiral-turned legs are decorated with vaguely chinoiserie scenes and figures in gold, silver and bronze tones on a black ground based on engravings by Jacques Stella. The crudely executed red and gold ornamentation inside the instrument is said to have been added to match the decorative colour scheme of the room in the Château de Savigny-les-Beaune, where the harpsichord was housed until shortly before it was acquired by the Museum.

6. The harpsichord was purchased in London for £18,500 in 1974 with a contribution from Mr Ronald Lee. It is the only extant instrument to have been built by a member of the Vaudry fam-

ily, who apparently had a Parisian workshop that carried on business for several generations. One Vaudry, presumably Jean-Antoine (*c.* 1680–1750), is referred to in a legal document of 1718 as '*maître seul faiseur d'instruments de musique du Roi . . .*'. The tradition that this harpsichord once belonged to the Duchesse du Maine, daughter-in-law of Louis XIV, is strengthened by the fact of Vaudry's royal patent. The Duchesse was renowned as a patron of music because of the concerts that she sponsored at the Château de Sceaux outside Paris. After the failure of the Cellamare conspiracy against the Régence in 1718, the Duchesse was banished from the court to the Château de Savigny-les-Beaune in Burgundy. According to tradition she brought this harpsichord with her at the time and placed it in a room that was then decorated in red and gold, the inside of the lid being painted to match – rather badly. It apparently remained at Savigny until the early 1970s.

7. After its original construction, the instrument's compass was enlarged to meet the requirements of eighteenth-century music. First the range was extended to fifty-three notes, GG, AA, BB-flat, BB, C-c^3, and then again to fifty-six notes, GG-d^3 chromatic. At some earlier stage in its life, the instrument was fitted with an organ so as to make it a claviorgan. The pipe-work rested in the front section of the stand below the keyboards of the harpsichord. For this reason the two front legs of the stand and the front rail and stretcher were squared off in part to accommodate the organ case. The bottom board beneath the lower keyboard was pierced to permit 19b

the stickers of the organ to reach the keys of the manual, from which the organ was played. During the restoration of the harpsichord in the Adlam Burnett workshop in 1974–5, the original compass was restored and a 10cm section of the bottom board (the portion of the very front of the instrument which had been crudely pierced as noted) was replaced with new wood along with the front rail and stretcher of the stand.

8. Reference:
ADLAM 1976.

19c

20. SPINET. John Player. London. last quarter of seventeenth century

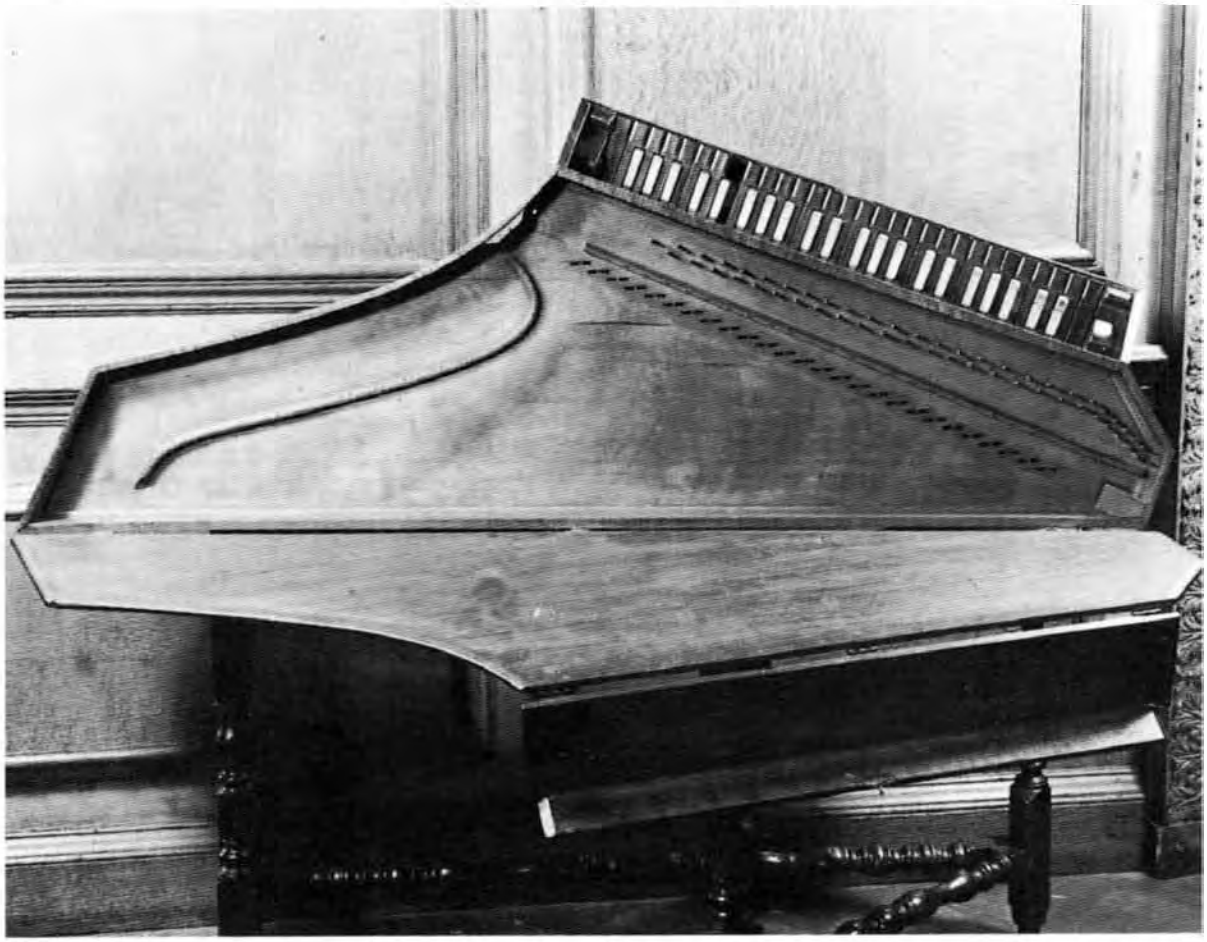
Mus. No. 466–1882

1. The instrument is inscribed on the name-board: *Johannes Player Fecit.*

2. The keyboard compass is of fifty-one notes, GG-c^3, broken octave, with split C-sharp and D-sharp keys. The standard measurement is 474mm. The naturals are ebony-covered and an old photograph shows they formerly bore fronts that were made of some composition (perhaps gesso) decorated with a relief pattern and gilded. The naturals measure 87mm in visible length, with key-heads of 32mm, and 21mm in width. The sharps are of wood topped with ivory and are tapered from front to rear. They measure 52–53mm in length and 11.5mm in width. The keys are guided by wooden slips at their distal end that slide in a rack. Both the jacks and the jack-rail are missing. The box slide is joined to the oak wrest-plank. The key for c^2, formerly missing, has been restored.

3. The scaling and plucking points are as follows:

GG	1297mm (102mm)
C	1267mm (97mm)
c	909mm (65mm)
c^1	477mm (38mm)
c^2	249mm (50mm)
c^3	121mm (41mm)

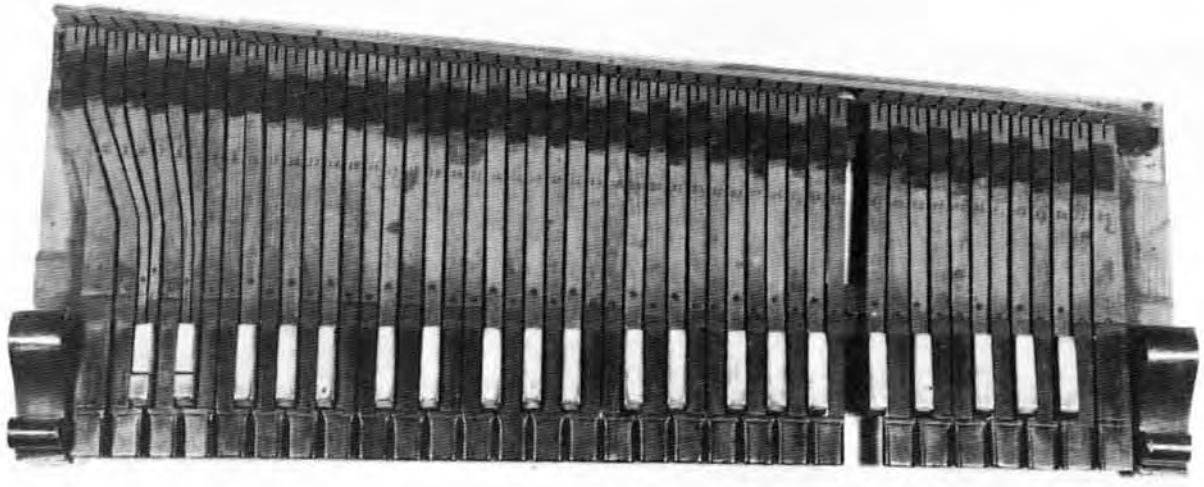


20a

The instrument has no strings at present.

4. The case is of oak and undecorated. The wood of the soundboard, bridges and hitchpin rail is obscured by a dark brown stain that is probably not original. The three lid-hinges are of iron and the three hinges of the keyboard-cover are of brass. The stand, with four turned legs and four turned stretchers, is also of oak and appears to be original to the instrument, although certain parts which seem of slightly different pattern and colour are probably later restorations. The instrument measures 1302mm in maximum length, 577mm in maximum width and 162mm high, with a total height above the floor of 838mm.

5. The instrument was purchased for £20 in 1882. (The stand has the Museum No. 466A-1882.)



20C

1. The organ is unsigned.

2. The keyboard compass is forty-five notes, C/E-c^3, with bass short octave. The keys are of stained fruitwood. There are no arcades. The standard measurement is 450mm.

3. The conjectural specification is:

Gedact	4-foot	stopped metal
Principal	2-foot	stopped metal
Mixture II		open metal

There are three stop-knobs at either end of the keyboard. Those at the left-hand side are now dummies. It is not unlikely that registers originally divided were later modified so as to be controlled by a single knob each rather than by two separate ones. The wind pressure presumably was low, probably 30–40mm. The reservoir and feeders are now missing, as is the base in which they would have been contained. Sixty of the two hundred and sixty pipes have been preserved.

21a

4. The organ measures 1295mm long, 1220mm wide and 610mm high. In its present condition it appears to have been subjected to considerable rebuilding or perhaps to have been assembled from a number of elements from different sources. The fine gothic carving on the front, possibly of sixteenth-century origin, has been pieced out at the top by crudely executed fretwork. The top-moulding is machine-made and, thus, of very recent origin. The mechanical construction and the roughly made pipe-work (which have a high tin content) suggest a relatively early origin, even before 1600. However, the compass extension to c^3 effectively excludes such an early date. Keyboard instruments with base short octaves continued to be made well into the eighteenth century. The lack of refinement in the construction is more likely to reflect a provincial origin, a place of manufacture far from one of the centres of organ building. According to the information furnished by the donor, a resident of Madeira, the organ was formerly located in the church of São Salvador in Santa Cruz, Madeira and, thus, it may be the work of a Portuguese maker. The present paintwork was applied in the 1960s.

Newspaper of the 1880s has been used to make repairs to some pipes, but this fact has no bearing on the dating of the instrument.

5. The organ was presented to the Museum in 1886 by Dr Grantham of Madeira.

1. The instrument is inscribed above the keyboards: *Thomas Hitchcock, Londini, Fecit.* The lowest key of the lower manual is inscribed: *James D. Harpsichord.*

2. The keyboard compass is of sixty-one notes, GG – g^3, chromatic. The standard measurement is 486mm. The naturals are covered with ivory plaques and have carved ivory fronts. They measure 129mm long on the lower manual and 122mm long on the upper, with key-heads of 41mm (lower) and 36mm (upper), respectively. The width of the naturals is uniformly 22mm. The sharps are of ebony with a central ivory slip, so-called 'skunk-tail sharps'. They are canted towards the rear. They measure 86–94mm in length on the lower manual and 80–88mm on the upper. They are 10–13mm in width on both manuals.

3. The present disposition is that of later English eighteenth-century harpsichords:

Lower manual: ← 4-foot
→ 8-foot
Upper manual: ← 8-foot (dogleg)
← 8-foot (lute)

There is no manual coupler at present. It is believed that in its original state the instrument had a coupler actuated by moving the upper manual towards the rear of the instrument. When the coupler was eliminated and, presumably, the present disposition introduced, the lute stop may have been added. At this time the present jacks and registers were fitted, both being of characteristic English eighteenth-century type. The jacks are of service wood with holly tongues. They have hog-bristle springs and retaining staples. The lute-stop jacks have lead weights to ensure their prompt return.

4. The scaling and plucking points in millimetres are as follows:

22a

	8-foot longer string	*Back 8-foot*	*Lute*	*Dogleg*
GG	1731	238	77	225
C	1604	217	73	205
c	1119	185	56	167
c^1	656	157	46	138
c^2	330	137	33	122
c^3	165	92	18	72
g^3	118	33	12	26

5. The soundboard is of spruce and is set with its grain at about a 45-degree angle to a straight line drawn from the keyboard to the point of the tail. Its thickness varies from 0.9mm to 4.0mm. The 8-foot and 4-foot bridges both appear to be of pearwood. The former is sawn but the latter is bent into shape. The 4-foot hitchpin rail is in part above the soundboard rather than entirely below it, as was the almost universal practice. The wrest-plank is of oak with a front piece of beech added, all faced with a veneer of walnut. The scantlings are: spine (pine) 12.8–13.2mm; bentside (walnut) 7.5mm; and cheek (pine) 13mm plus 1.4mm (walnut veneer).

6. The case is of walnut with a double curve to the bentside. This is an unusual feature in an English harpsichord but is found in the Charles Haward instrument of 1683 (collection of Sir William Worsley, Hovingham Hall, Yorkshire). The lid is secured by four graduated brass strap-hinges of a fancy shape and engraved with floral scrolls, except on the spine side. Four butterfly hinges of less elaborate workmanship secure the front portion of the lid to the main section. The key-well surround is veneered in walnut with stringing in pale walnut in a chevron pattern. There are Italianate carved scrolls on the key-blocks. Four S-hooks secure the lid to the case. There are sockets for candlesticks at each end of the keyboards. The stop-knobs are missing.

The stand is of beech, stained to match the walnut case, but the lower stretcher is a replacement of pine similarly stained. It is now much distorted.

The harpsichord measures 2317mm long, 938mm wide and 267mm high.

7. The instrument stood for many years at Ightham Mote, Kent (see also No. 9). It is not known when the major rebuilding referred to above was undertaken. In addition to replacement of jacks and registers, it included modifications to the upper-manual keys and elimination of the former shove-coupler. The lower jack-guide of the main-gap jacks was also replaced. The wrest-plank counter veneer was removed where it bridged the main-gap and possibly the lute-gap as well, if the lute stop, in fact, was not added at the time of the rebuilding. The tuning-pins were also rearranged and various other structural details changed.

A possible original disposition of the harpsichord would have been:

Lower manual: ← 4-foot
→ 8-foot
Upper manual: ← 8-foot (permanently engaged) shove coupler

As this is the only known harpsichord by this maker, a prolific builder of spinets, it is not possible to make any direct comparison. The present disposition of the type characteristic of later eighteenth-century English harpsichords is already found in the 1721 harpsichord by Hermann Tabel, master of both Jacob Kirckman and Burkat Shudi, now in the County Museum, Warwick.

8. The harpsichord was presented to the Museum in 1890 by Mrs Luard-Selby.

References

JAMES
HIRT
RUSSELL 1973 (Plate 62 shows a Thornhill design for a painted lid for what may have been a harpsichord very like this.)

1. The instrument is inscribed over the keys: IOANNES · RVCKERS · ME · FECIT · ANTVERPIAE. The date 1634 is painted in red on the soundboard between the bass ends of the two bridges, and also appears on the main lid. A gilt cast-metal rose with the initials *I.R.* is in the soundboard.

2. There are two manuals of fifty-seven-note compass, GG – e^3. The standard measurement is 495mm. The ivory-covered naturals with carved ebony fronts measure 129mm long, with a key-head of 39mm, and 23mm wide. The sharps of hardwood stained to resemble ebony are bevelled, measuring 82–88mm long by 10mm wide.

3. There are three sets of strings, disposed as follows:

Upper manual: 1 × 8-foot (dogleg)
Lower manual: 1 × 8-foot, 1 × 4-foot

The registers are now arranged with the 4-foot placed between the two 8-foot registers (see below). There are three brass knobs controlling the registers. The knob at the left-hand side and above the upper manual controls the rearmost register, the lower 8-foot. The two knobs for the other two registers, 4-foot and upper 8-foot, are located at the right-hand side.

4. The strings are modern brass and steel replacements. The scaling of the longer 8-foot and

23a

the 4-foot strings and plucking points are as follows:

	Longer 8-foot	*4-foot*
GG	1497mm (232mm)	1016mm (135mm)
C	1041mm (216mm)	892mm (125mm)
c	997mm (179mm)	579mm (110mm)
c^1	638mm (153mm)	330mm (66mm)
c^2	334mm (108mm)	167mm (43mm)
c^3	167mm (102mm)	79mm (36mm)
e^3	123mm (93mm)	88mm (35mm)

5. The soundboard is of spruce. It contains a rose in the style of Joannes Ruckers the Younger with a winged figure holding a harp, and incorporating the initials *I.R.* The rose, however, measures 61mm in diameter, a size used by Ruckers for virginals rather than harpsichords. The wrest-plank is covered with veneer and bears an ink inscription: *Restored by Arnold Dolmetsch 1894* (see below), but the painted decoration of

23b

23c

the soundboard does not extend behind the gap. Fruit, leaves and flowers are painted in gouache from in front of the gap to the tail. Arabesque borders surround the bridges and the edges of the soundboard.

6. The case is painted in panels in imitation of marble, the panels being red with yellow veining, surrounded by narrow black and yellow lines, and enclosed by broad bands of dark green with blue veins. The long side of the instrument is not decorated. The inner surfaces of both harpsichord and lid are lined with printed paper bearing designs in a Renaissance style. Arabesques drawn free-hand appear along the inner edges of the panels outlined by borders of block-printed paper. The sea-horse design of the block-printed paper above the keys is the reverse of the more common Ruckers type (it has white sea-horses and arabesques on a black ground). The front lid bears the motto *Soli Deo Gloria* and the main lid the motto *Acta Virum Probant* with the date *1634*.

The instrument measures 2185mm long, 949mm wide and 265mm deep (906mm height above the floor). There is a trestle-stand with turned upper supports and cabriole legs below the single stretcher.

7. The harpsichord was restored by Arnold Dolmetsch in 1894 as noted above. At this time he added two pedals (see Russell 1968, Plate 12A) for changing stops, removed the dogleg extension of the upper 8-foot jacks, added a buff stop and manual coupler, placed the 4-foot jacks at the rear behind the two 8-foot registers. When the instrument was again restored by John Barnes in 1969 he removed these accretions. The harpsichord is now substantially in its original state.

8. Until comparatively recently this harpsichord was accepted at face-value, and was commonly referred to as 'the Ham House Ruckers'. Evidence has continued to accumulate, however, indicating that the instrument is an early eighteenth-century harpsichord of English make. The outline of the instrument is completely consistent with an English design of the eighteenth century. The curve of the bentside is concentrated in the treble end of the instrument and there is a long straight section. The 8-foot bridge follows a similar basic curve. Instruments from the Ruckers workshop, on the other hand, show a shallow curve in the case of both bentside and bridge that extends for almost the entire length

23d

of the former. The tail angle is also less acute than in English harpsichords.

The case of the present instrument is substantially wider (by some 162mm) than the largest Ruckers model, the transposing double, but there is no sign of enlargment to be found anywhere in this instrument. The decoration, while aspiring to imitate Antwerp harpsichord casework and soundboard painting, does not pass muster. The soundboard decoration is not related closely to the style of any Ruckers instrument of unquestioned authenticity. (The leaves arranged in star-shaped patterns and radiating from a central point low on the stem recall the palmate patterns of long radiating leaves used by perhaps the same painter to replace arabesques removed during the enlargement in eighteenth-century England of the Museum's Andreas Ruckers II harpsichord, Museum No. 1079–1868, here dated 1631). The marbling of the case is quite unlike that of genuine Ruckers instruments and leaves the long side of the instrument undecorated, contrary to Flemish practice but a common feature of English harpsichord making. (In the enlargement of the Museum's Andreas II Ruckers harpsichord the original marbling was left on the long side, while the rest of the case was redecorated.) The block-printed papers might just possibly be accepted as genuine Antwerp type, since they existed in so many forms, but the pen-and-ink arabesques on the lid panels are entirely dissimilar to authentic specimens. The soundboard rose with the initials *I.R.* measures 61mm in diameter, a size used only for virginals.

9. The harpsichord is part of the furniture of Ham House, Petersham, near Richmond. The contents of this house come under the care of the Museum. While the exact date of its installation at Ham House is uncertain, it was probably amongst the many items of furnishing acquired during the decades following the fourth Earl of Dysart's succession to the title in 1728.

10. Arnold Dolmetsch wrote to Herbert Horne on 4th March 1894, 'Did I tell you that I have got Lord Dysart's Ruckers?' This suggests that Dolmetsch believed he was restoring a seventeenth century instrument. On 3 July he wrote that 'Lord Dysart wants his Harpsichord on Saturday, and *me* on Sunday . . .'. On 26 July he told Horne that his lordship would be 'very pleased to see you on Sunday' but that 'we shall not be able to go together, however, as I want to go in the morning, to have a thorough tuning of the harpsichord which will want it.'

1. The instrument is inscribed on a panel above the keys inlaid in the nameboard: *Thomas Hitchcock Londini Fecit No. 1484*. Behind the nameboard is written: *1484 James No. 4*, and similar inscriptions are found on the highest and lowest keys, possibly reading *jeans N°4* on the topmost key. The anterior face of the wrest-plank is inscribed: *James is No 4*. According to Russell, the last dated spinet by Thomas Hitchcock is No. 1425 of 1733. Therefore, it is assumed that the present instrument is datable about 1740.

2. The keyboard projects and has a compass of sixty-one notes, GG-g^3, chromatic. The standard measurement is 480mm. The naturals are ivory covered and fronted by ivory arcades. They measure 127mm long with key-heads 37mm long, and 22mm wide. The sharps are of ebony with a fillet of ivory inlaid in their upper surface to form the characteristic 'skunk-tail' pattern also found on the Thomas Hitchcock harpsichord in the Museum's collection. They are bevelled and measure 80–88mm long by 10–12mm wide. The scaling and plucking points are as follows:

GG	1547mm (208mm)
c^2	314mm (135mm)
g^3	94mm (47mm)

The instrument is at present strung in modern steel but is not under tension.

3. The case is of walnut with a double curve bentside, markedly different from the bentsides of the three later English eighteenth-century spinets in the Museum's collection. The jack-rail, nameboard and inner faces of the spinet are inlaid with harewood stringing. The wrest-plank is veneered with walnut rather than in the spruce of the soundboard, as is more common. There are three engraved strap-hinges. The stand is modern. The scantlings average 10.5mm. The spine is considerably heavier, measuring about 17.5mm. The bottom board is remarkable in that it is exceptionally full of knots; the builder evidently felt this would not adversely affect the instrument's stability. The extreme length of the spinet is 1810mm and its extreme width 710mm. The depth of the instrument is 185mm.

4. The spinet was originally purchased in 1866 for the Educational Division of the South Kensington Museum for £10. It was subsequently transferred from the Science Museum.

24a

1. The instrument is signed on the lowest key: *H Hill 1750 Fricker 27*. The highest key is signed: *B(y) H Hill 1750*.

2. The projecting keyboard has a compass of fifty-two notes, apparent GG/BB-d^3, with bass short octave. The standard measurement is 478mm. The naturals, covered with ivory of a marked grain, have arcaded ivory fronts. They measure 92mm long by 22mm wide, with key-heads of 32mm length. The sharps of ebony have sharply canted fronts and measure 10mm wide by 55–61mm long. The scaling and plucking points are as follows:

Apparent GG	835mm	(109mm)
c^2	166mm	(69mm)
d^3	72mm	(25mm)

The spinet is scaled to sound one octave above normal pitch.

3. The case is veneered in mahogany. The keyboard surround is veneered in walnut with sycamore stringing. The wrest-plank is veneered with mahogany. There are three strap-hinges of cut brass attaching the main lid to the spine of the instrument, and three butterfly hinges of similar design attaching the front flap to the main lid. The original lock is present but the hook, formerly at the treble end of the case to fasten down the lid, is now missing. The extreme length is 981mm, the extreme width 598mm and the depth 166mm. The instrument rests on a trestle stand and the total height above the floor level is 809mm.

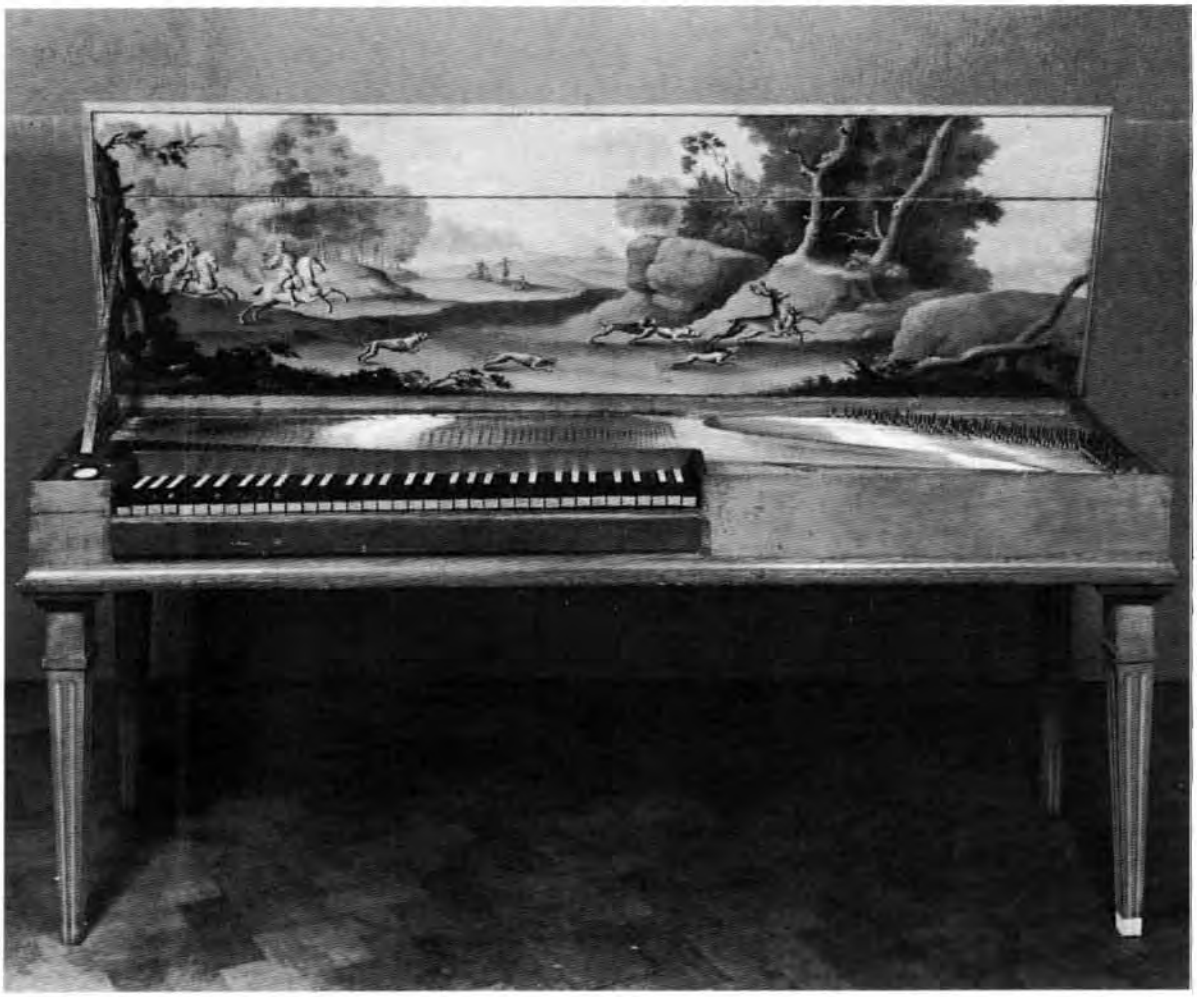
4. The spinet was presented to the Museum by H. Sandham, Esq.

25a

25b

1. The instrument is signed in ink on the treble (8-foot) wrest-plank: *Barthold Fritz fecit Braunschweig aô. 1751 Mens. febr.*

2. The keyboard compass is sixty-five notes, FF-a^3 chromatic. In addition to the normal pair of strings for each note, the lowest twenty keys have an additional octave string (that is, one of 4-foot pitch). The key panel is of limewood. The standard measurement is 489mm. The naturals are of a brown-stained hardwood, possibly rosewood, with embossed and gilded paper fronts. They measure 141mm in length (to the rear of the sharps at the distal end) with key-heads 48mm long and 22mm wide. The sharps are of black-stained pearwood topped by ivory plaques with black incised decoration. The sharps are canted towards the rear, and measure 93mm in length and 11mm in width at the top, and 91mm and 9mm at the bottom, respectively. At the distal end of the keys horn blades are fitted which slide in the slots of the rack.



26a

3. The tangents are of brass and are graduated from bass to treble. The strings are of brass, except for the lowest eight notes of the 8-foot pitch strings which are open-wound with copper on a brass core. The scaling (bridge to tangent) is as follows:

	8-foot strings	*4-foot strings*
FF	1495mm	1106mm
C	1337mm	924mm
F	1215mm	806mm
c	1017mm	652mm
f	834mm	
c^1	567mm	
f^1	426mm	
c^2	294mm	
f^2	220mm	
c^3	147mm	
f^3	109mm	
a^3	86mm	

String gauges are marked in ink on the keys.

From the ninth string of the 8-foot strings onward, gauges are marked:

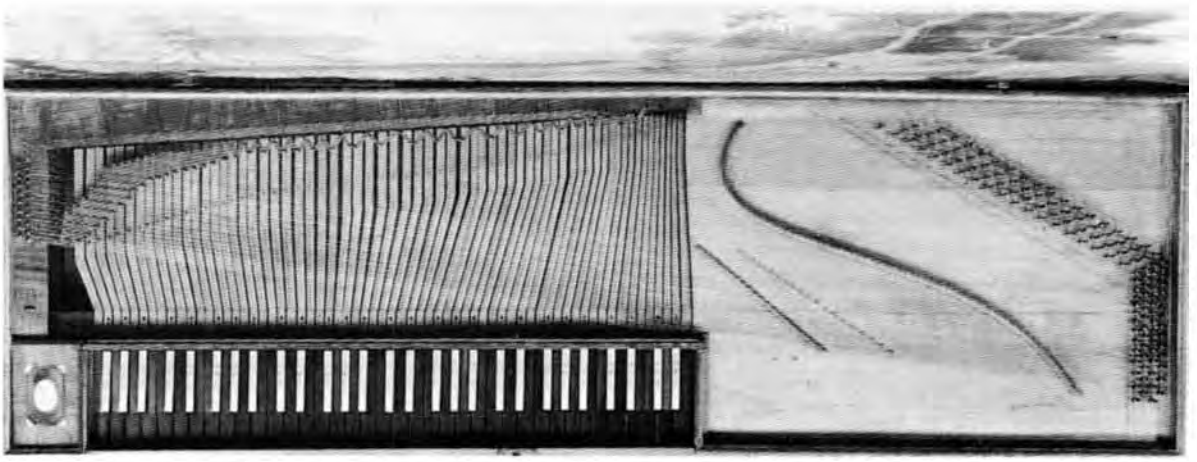
9–10	0 (0.46mm)
11–13	1 (0.41mm)
14–17	2 (0.38mm)
18–24	3 (0.35mm)
25–31	4 (0.30mm)
32–43	5 (0.28mm)
44–56	6 (0.27mm)
57–65	7 (0.25mm)

4-foot gauges for the first twenty notes are as follows:

1–2	2 (0.38mm)
3–7	3 (0.35mm)
8–12	4 (0.30mm)
13–17	5 (0.28mm)
18–19	6 (0.27mm)
20	7 (0.25mm)

The covered strings of the lowest eight notes, as fitted by Mr John Barnes when he restored the instrument in 1963, are as follows:

	Core	*Cover*	*Spacing*
1	.51mm	.35mm	.51mm
2	.51mm	.35mm	.71mm
3	.46mm	.35mm	.71mm
4	.46mm	.31mm	.71mm
5	.46mm	.30mm	.71mm
6	.46mm	.27mm	.71mm
7	.46mm	.26mm	.71mm
8	.46mm	.26mm	.91mm



26b

4. The soundboard is of spruce. Its thickness varies between 2.1 and 2.3mm. The 4-foot and 8-foot bridges are of beech, the former of a modified S-curve shape, the latter straight. The wrest-plank, hitchpin rail and balance-rails are of oak. The case of the instrument is pine. It measures 1790mm long, 581mm wide and 774mm from floor-level to the top surface of the lid. The instrument without its stand measures 172mm high plus 14mm for the lid. Scantlings range from 13mm at the front to 30mm baseboard thickness.

5. The clavichord was acquired from the estate of Carl Engel in 1881 for £15. Nothing is known of its history prior to its acquisition by Engel.

6. The outer surfaces of the case are painted a pale green. The key surround, soundboard surround and inner surface of the front flap are painted a red-brown. There are fluted and tapering legs of square section, also painted pale green. The interior surface of the lid contains a blue monochrome painting of a stag hunt.

7. By virtue of its size and exceptionally wide compass, this clavichord is considerably in advance of its time. The repertoire most closely associated with the large German clavichord of the mid- to late-eighteenth century, the music of C. P. E. Bach and the other composers of the *Empfindsamkeit* school, keeps within a five-octave compass, FF-f3 with rare exceptions. After about 1780 large unfretted instruments descending to FF began to expand towards the treble end to g^3, a^3, even c^4 and, incredible to relate, f^4. The instrument is also notable for its decoration since lid paintings were relatively uncommon in German instruments of the eighteenth century. It is probable that the colours of the outer case and lid painting harmonized rather better when the instrument was originally decorated than at present.

1. The instrument is inscribed above the keyboard: *Crang Londini Fecit*. Above this is the motto *Musica Laborum Dulce Levamen* and the date 1758 placed below a centrally placed trophy of musical instruments executed in marquetry.

2. The keyboard projects and has a compass of sixty-one notes, GG-g^3, chromatic. The keys are guided by front pins and balance pins. The key panel is of oak. Lead weights help balance the keys. The naturals are covered with thick ivory plaques and are fronted by ivory arcades. They measure 134mm in total and 128mm in visible length, with keyheads of 40.5mm, and 22mm in width. The ebony sharps are bevelled at the front, but not at the sides, and measure 96–99mm in length and 10mm in width. About 84mm of the length of the sharps is visible. The standard measurement is 486mm. There are slots in the nameboard to permit the sharps to pass through it rather than being so cut as to terminate in front of the board. Six naturals and two sharps are complete replacements of about 1800, and are very well made. All felt and leather in the spinet is of early date, and are very likely to be original material.

3. All but one of the jacks are original. The jacks are leaded, with those from GG-g sharp bearing three weights and the remainder a single weight. A substantial number of quills are old and, presumably, of eighteenth-century origin. The scaling and selected plucking points are as follows:

GG	1650mm (182mm)
C	1523mm
c	1143mm
c^1	698mm
c^2	317mm (120mm)
c^3	156mm
g^3	105mm (47mm)

When restored to exhibition order in 1963 by Mr John Barnes, the spinet was found to have strings which, if not the original ones, were nevertheless early and of the appropriate iron wire in the ferrous portion of the stringing. The gauges were noted by Mr Barnes, using the Imperial inch measurement, as shown below. Metric equivalents are given in brackets. Question marks are used to show conjectural diameters.

1.	Brass	.025 in ? (.635mm)
2–3.	Brass	0235 in (.597mm)
4–6.	Brass	.022 in (.559mm)
7–12.	Brass	.018 in (.457mm)
13–15.	Brass	.018 in ? (.457mm)
16–17.	Iron	.017 in ? (.432mm)
18.	Iron	.014 in ? (.356mm)
19.	Iron	.014 in (.356mm)
20–28.	Iron	.012 in (.305mm)
29–34.	Iron	.012 in ? (.305mm)
35–37.	Iron	.010 in ? (.254mm)
38–47.	Iron	.010 in (.254mm)
48–61.	Iron	.0085 in (.215mm)

4. The soundboard, set with its grain parallel to the long side of the instrument, is of spruce. The bridge is apparently of beech.

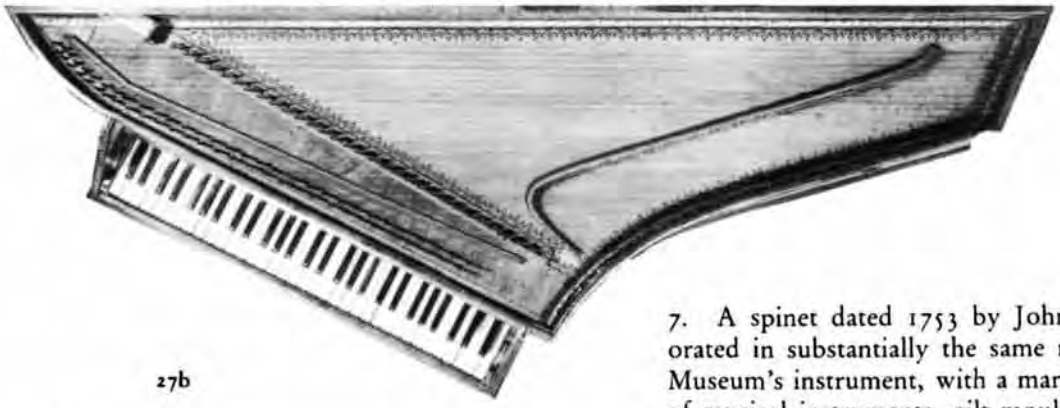
5. The case is handsomely veneered with panels of burr walnut, cross-banded with unfigured walnut, and is decorated with boxwood and ebony stringing. The Italianate carved key-blocks at both ends of the keyboard also carry this stringing. The marquetry work above the nameboard is unusually elaborate. The fancy hinges and locking plates of the lid are of brass and richly engraved. The soundboard is surrounded by gilt mouldings and is decorated, somewhat in the Flemish tradition, with painted arabesques, an exceptionally rare feature on English eighteenth-century instruments. The extreme length of the instrument is 2018mm and its extreme width 765mm. It measures 247mm deep. Scantlings average *c.*15mm. There is no stand at present. Every feature of this spinet's construction and decoration indicates that it was built as an especially luxurious instrument.

6. The instrument was bequeathed by Miss C. A. R. Adams. Its earlier provenance is not known. However, an old playing card, folded and glued in as packing to the balance-rail, bears the following text:

Mrs Weston desires [Mr]
Crang will call to[morrow]
by Eleven o clock[without]
fail the spinnet[is]
so bad she cant[play]
upon it

Tuesd[ay]

27a



27b

Whether Mrs Weston was the original owner of the present instrument, it is impossible to say. It seems more likely that this card referred to some other instrument. It was presumably lying about in Crang's workshop and was cut up by one of the workmen as a packing-piece for this spinet. (The bracketed portions of the text are conjectural as part of the card has been trimmed away.)

7. A spinet dated 1753 by John Crang, decorated in substantially the same manner as the Museum's instrument, with a marquetry trophy of musical instruments, gilt mouldings, painted arabesques and elaborate cross-banded veneers, is in the collection of the Metropolitan Museum of Art in New York City.

28. CHAMBER ORGAN, (The Beckford Organ), John Crang, London, late 1760s

Mus. No. W. 13–1980

1. The organ has survived only in part. The upper case, lower case and sides of the case are preserved, but the ceiling and back of the case are now missing. There are no remains of the console except for its base and ceiling, forming part of the front of the case, or of the key-action, stop-action or the mechanism for the shifting movement or wind-supply. The wind-chest, made in two sections with a double slider between, has survived largely in its original form. Remains of a number of ranks of pipework survive.

2. The instrument's original compass and stop-list are believed to have been fifty-seven notes, GG, AA-e^3, ten ranks of pipes (listed according to the order on the wind-chest):

Open Diapason 8-foot (GG-G probably stopped)
Principal 4-foot
Stopped Diapason 8-foot
Flute 4-foot
Twelfth 2 2/3-foot
Fifteenth 2-foot
Vox Humana 8-foot (from c upwards)
Sesquialtera III
Trumpet 8-foot
Dulciana 8-foot (from c upwards)

There are fifty-seven channels in the wind-chest, corresponding to the fifty-seven note compass, with no divided ranks but with two short ranks, as shown above.

3. The organ, built by John Crang for the elder William Beckford, was placed in the music-room (or 'Organ Hall'), a richly decorated cube of thirty-six feet, in his newly completed Palladian mansion, Fonthill Splendens. It was acquired to further the development of the musical talents of his son, his more famous namesake. It is thought that the latter may have had lessons from Mozart during the composer's only visit to England. The organ case may have been designed by William Chambers, very possibly influenced by the French organ-case design of the period. The style of the superbly carved ornaments is closely similar to that favoured by the firm of Vile & Cobb

28a

who were cabinet makers to the King and carried out many of the principal exercises in their field in the 1760s.

In 1801 the younger William sold the organ, which did not fit the decorative scheme of his new Gothick mansion, Fonthill Abbey. In the sale catalogue it was described thus:

> *46 A most* CAPITAL ORGAN, built by CRANG, in *high preservation* with *diapasons, principal sesqui altra trumpet*, &c with a *pedal* to take off the full organ, 1 row of keys, the compass from lower G to E in alt, 3 pair of bellows with *mahogany front, the pipes richly gilt, the outside elaborately carved with trophies of music, and surmounted by a figure of* FAME, painted dead white, about 26 feet high and 15 wide.

In 1817 Lord Pomfret presented it to the parish church of Towcester, Northants, where it remained, undergoing various renovations and other vicissitudes, until it was given to the Museum by the Towcester Parochial Church Council in 1980.

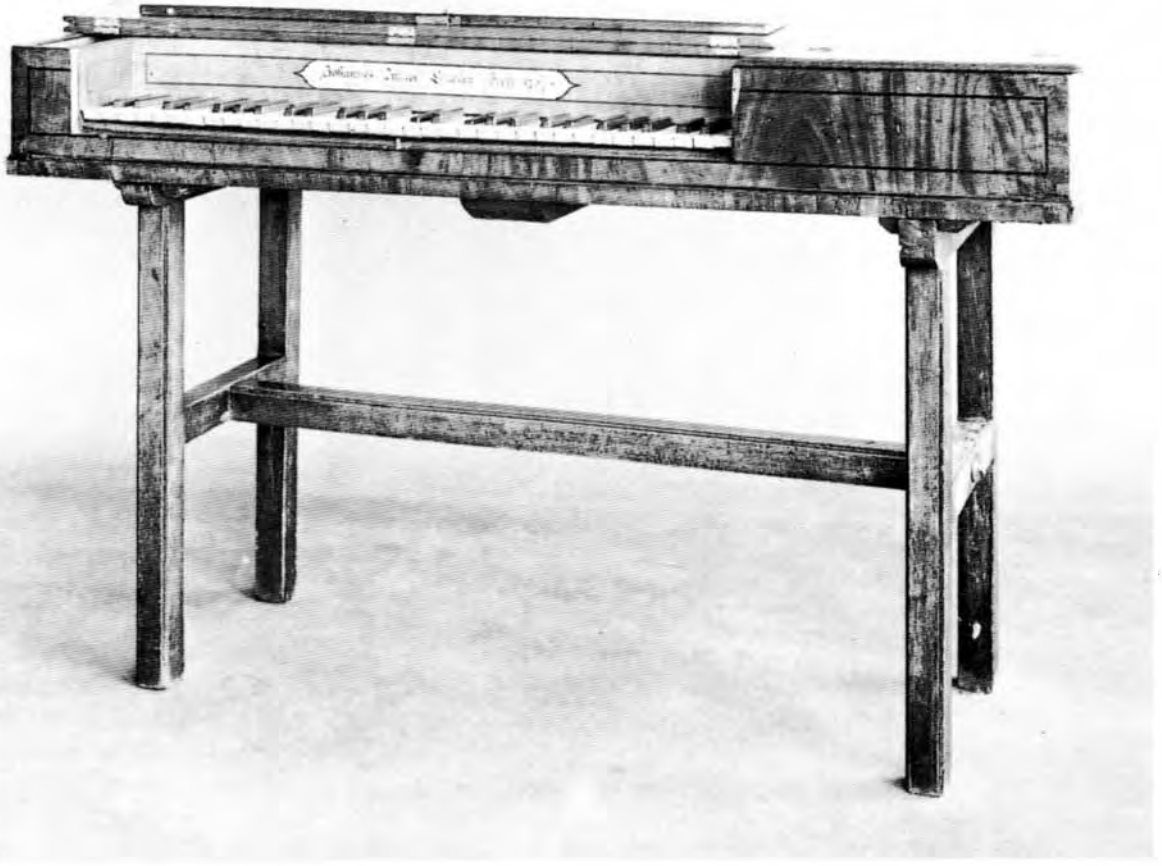
29. SQUARE PIANO, Johann Christopher Zumpe, London, 1767

Mus. No. W. 27–1928

1. The nameboard is inscribed in pen and ink: *Johannes Zumpe Londini Fecit 1767/Princess Street Hanover Square.*

2. The keyboard compass is apparently of fifty-nine notes, GG to f^3. However, the lowest chromatic note, GG-sharp, is a dummy key attached to the same action as GG, so that the sounding compass is GG, AA – f^3, fifty-eight notes. The naturals are ivory-covered, with a visible length of 127mm (key-heads of 41.5mm) and a width of 21mm. The fronts of the naturals are of wood moulding. The bevelled sharps of ebony measure 72–75mm long by 9–11.5mm wide. The standard measurement is 484mm.

3. The instrument is fitted with the English single action (the first type of action adopted by Zumpe). The hammers are leather-covered. The present dampers are of a soft cashmere cloth,



29a

dyed red. (As originally built, the instrument probably had dampers of soft deer leather. This material unfortunately hardens and becomes inefficient as a damper. The replacement with cloth dampers probably must have occurred at an early date.)

Two levers located at the left-hand side of the instrument raise the bass and treble dampers, respectively, dividing at c^1 which, curiously, is raised by both levers. The damper rail is missing.

4. This stringing is bichord throughout. The present stringing comprises twelve open-wound overspun brass courses, twelve simple brass courses and thirty-four steel courses. The scaling and strike-line are as follows:

GG	1604mm (50mm)
C	978mm (52mm)
c	745mm (45mm)
c^1	505mm (35mm)
c^2	295mm (27mm)
c^3	145mm (22mm)
f^3	110mm (20mm)

5. The case is made of mahogany with stringing of boxwood or holly. The trestle-stand is also of mahogany. The piano measures 1278mm long, 466mm wide and 172mm high (747mm total height from the floor). The number XVIIII (!) is incised on the back of the nameboard, and pencilled or scratched on various parts of the casing. These marks are thought to be indications for the assemblage of parts in the workshop and are probably without chronological significance.

6. An inscription in ink on the back of the nameboard reads: *Restored to Playing/Order AD 1928/ by John Sebastian/Morley.* A further restoration was undertaken in 1966 by John Barnes, who filed a complete report on the instrument and the work carried out. The instrument is of particular importance. While two Zumpe square pianos of 1766 survive, one is the experimental instrument with divided sharps made for Dr Crotch (formerly in the Broadwood Collection, now in the Württemberg State Museum, Stuttgart), while the other is a somewhat smaller instrument of AA-f^3 compass and with a black keyboard (Garlick Collection, Boston, Massachusetts). The Museum's instrument is apparently the earliest surviving in the typical form that Zumpe's pianos assumed and retained until his retirement from business in 1784.

1. The instrument is inscribed on a panel above the keys: *Baker Harris Londini Fecit 1770.*

2. The keyboard compass is sixty notes, FF, GG-f^3, chromatic. The standard measurement is 483.5mm. The naturals are ivory covered with boxwood moulded fronts. They measure 125mm long, with 40mm key-heads, and 22mm wide. The sharps are of ebony and bevelled, measuring 78–80mm in length and 10–11mm in width. The keys are guided at the rear by metal pins sliding in a rack.

3. The jacks are all modern replacements. The scaling and plucking points are as follows:

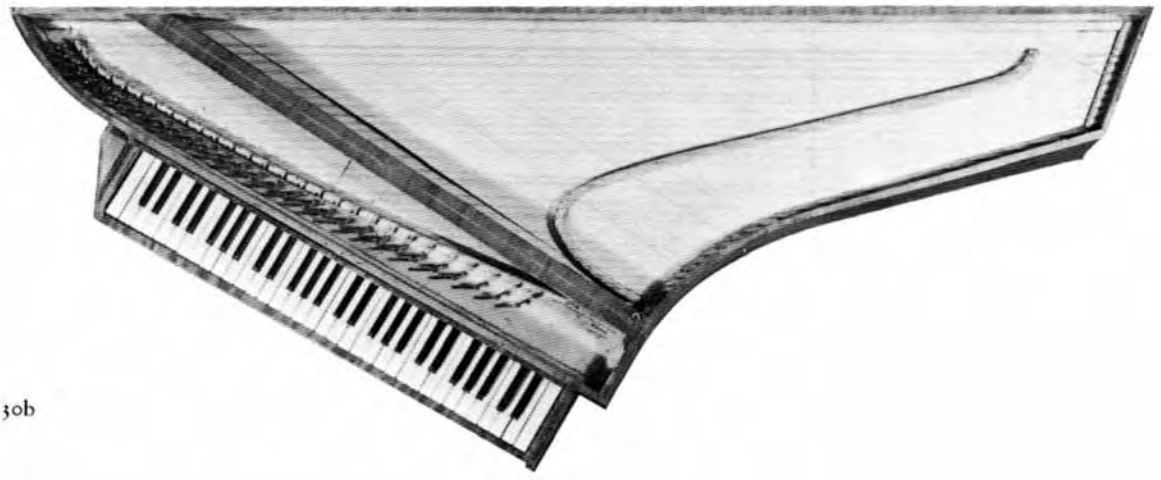
FF	1570mm	(186mm)
c^2	261mm	(160mm)
f^1	97mm	(42mm)

4. The soundboard and bridge are modern replacements.

5. The case and lid are of mahogany. The case is decorated with cross-banding and stringing of sycamore and ebony. Above the keys the case is veneered in walnut, with cross-banding of tulipwood and stringing of sycamore and ebony. The centre panel, with the inscription, is of sycamore. The scantlings average 11–11.5mm. The extreme length of the spinet is 1884mm and its extreme width 780mm. It measures 20.5mm in depth. There is no longer a stand.

6. The instrument has been extensively restored. The wrest-plank bears an inscription in ink: *Restored by Charles Hersant, 49 Lennox Road, Stroud Green Road, N. London, April 1914.* The spinet was given to the Museum by Mr Charles Hey Laycock.

30a



30b

1. The instrument is inscribed on the name-board above and behind the keys: *Joseph Mahoon, London*. The bottom key bears an inscription: *1771 No. 45*, together with what appear to be initials. The top is inscribed with the same date and what look like the same initials.

2. The keyboard compass is sixty-one notes, GG-g^3, chromatic. The standard measurement is 486mm. The naturals have ivory coverings and arcaded fronts. They measure 127mm long, with key-heads of 37mm, and 22mm in width. The bevelled sharps are of ebony with an ivory fillet in the characteristic 'skunk-tail' pattern. They measure 10–11mm in width. Their total length is *c.* 87mm, but the ebony and ivory pieces are cut to varying lengths; thus, about 10mm free space level with the naturals is left at the back of each key.

3. The jacks are of varying dates and origins. Some may be original.

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The scaling and plucking points are as follows:

GG	1525mm (195mm)
C	1437mm (200mm)
c	1069mm (175mm)
c^1	596mm (162mm)
c^2	282mm (125mm)
c^3	142mm (83mm)
g^3	87mm (44mm)

4. The boards composing the soundboard run parallel to the keyboard, a most unusual feature. The soundboard is stained a dark brown, as is the bridge, probably due to some restoration efforts at a later date.

5. The somewhat plain case is of mahogany, cross-banded with sycamore stringing. Above the keys are panels of walnut with more sycamore stringing, and similar stringing decorates the soundboard surround as well. The three plain pierced strap- and three butterfly-hinges, and the two locking-hooks on the bentside are of brass. The instrument measures 1525mm in extreme length, 780mm in extreme width and 214mm high (standing 879mm above floor level). There is a turned trestle-stand.

31b

32. SQUARE PIANO, Johannes Pohlman, London, 1773

Mus. No. O.P.H. 158–1949

1. The instrument is signed on a panel of sycamore or boxwood inlaid in the nameboard: *Johannes Pohlman Londini Fecit 1773*.

2. The compass is of sixty-one notes, FF-f^3. The standard measurement is 485mm. The naturals with ebony coverings and holly key fronts measure 118mm long by 22mm wide, except for GG 20mm and FF 18mm, respectively. The bevelled sharps of stained pearwood topped with ivory slips measure 74–77mm long by 9–11mm wide.

3. The instrument is fitted with the English single action (Zumpe's first action; see No. 29). The hammers are leather-covered (the coverings have been renewed). Three levers in a string-box at the left-hand side of the instrument control respectively the raising of the treble dampers (c^1–f^3), the bass dampers (FF-b) and a buff stop (the

32a

latter pushes a leather-covered batten up against the strings).

4. The stringing is bichord throughout, open-wound brass on brass overspun strings (FF-BB), plain brass strings (C-g) and plain iron strings (g-sharp-f^3). The scaling and strike line are as follows:

FF	1304mm	(75mm)
C	1220mm	(61mm)
c	840mm	(55mm)
c^1	555mm	(45mm)
c^2	305mm	(35mm)
c^3	152mm	(27mm)
f^3	110mm	(22mm)

5. The case is veneered in mahogany on a mahogany carcase with fiddle-maple stringing; it rests on a mahogany trestle-stand with brass casters. The soundboard of spruce is original although it has since been delicately rebarred, presumably by Arnold Dolmetsch. The scantlings measure 16.5mm except for the spine, which is 20.5mm thick. The bridge is of sawn beech. The wrest-plank is of pine capped with beech.

The instrument measures 1498mm long, 495mm deep and 187mm high (797mm above the floor).

6. The instrument was restored by Arnold Dolmetsch who used a number of his invitation cards in the work, referring to 'Mr. Arnold Dolmetsch's Series of Three Concerts at 7, Bagley Street, Bedford Square, on Wednesday evening, July 12th, 19th, and 26th, 1899, at 8.30 o'clock'. His restoration must date from shortly afterward.

The piano was restored in the Adlam Burnett workshop in 1979, but required no major repairs. *Indeed, Mr Adlam's description of the instrument* in 1969 as 'a good example of the earliest phase of piano building in England, in a fine state of preservation', happily still applies.

7. The instrument forms part of the furnishings of Osterley Park House. It was acquired at a time when the total redecoration of the house was being brought to conclusion under the guidance of Robert Adam. Its acquisition reflects the rather advanced tastes of Robert Child, the owner of Osterley who was a prominent banker, and of his family.

33. HARPSICHORD, Jacob and Abraham Kirckman, London, 1776

Mus. No. W. 43–1927

1. The instrument is inscribed above the upper manual: *Jacobus et Abraham Kirckman Londini fecerunt 1776.*

2. The keyboard compass is sixty notes, five octaves from FF-f^3, chromatic, lacking FF sharp. The standard measurement is 485mm. The key-panel appears to be of limewood. The ivory-covered naturals with boxwood moulded fronts measure 21.5mm with a 41mm key-head, and a length of 127mm on the upper manual and 129mm on the lower. The bevelled ebony sharps are 10–11mm wide, and 75–79mm in length on the upper manual, 82–85mm on the lower.

3. There are three sets of strings, disposed as follows:

Upper manual: 1 x 8-foot (dogleg), lute, harp of buff leather to 8-foot;
Lower manual: 1 × 8-foot, 1 × 4-foot.

33a

The presence of the harp stop on the upper manual is exceptional, as it is normally found in Kirckman harpsichords on the lower. The registers are arranged in the normal English fashion:

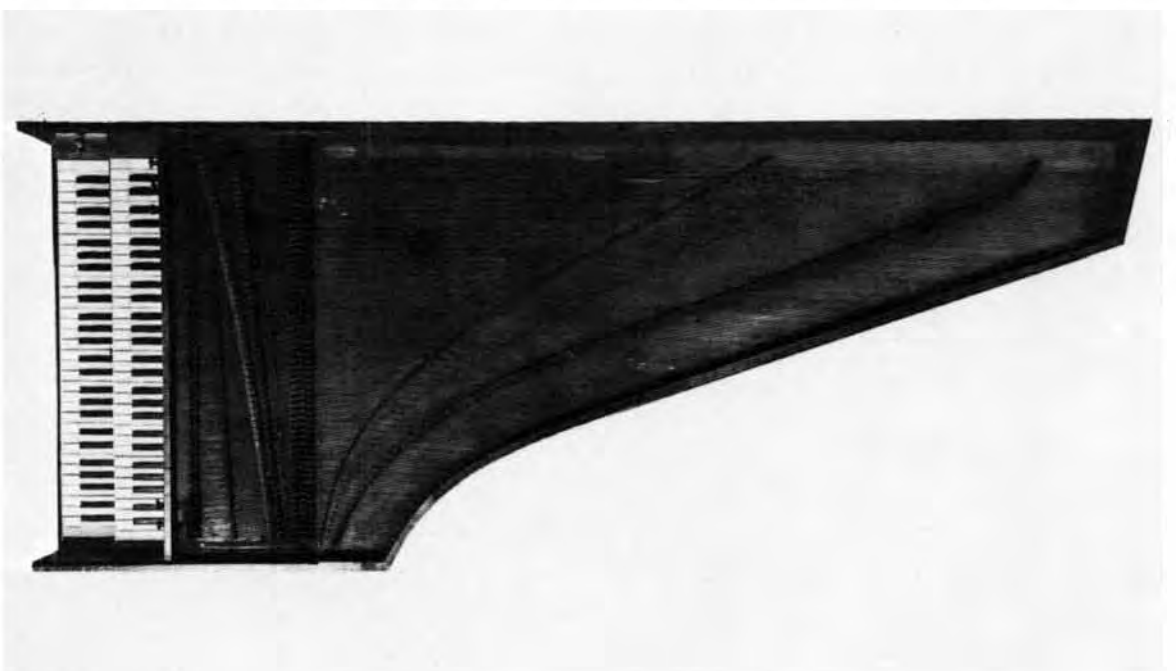
4-foot ← (quill plectra)
Lower 8-foot → (quill plectra)
Upper 8-foot ← (quill plectra)
Lute ← (quill plectra)

The registers are controlled by a set of brass knob hand-stops and, alternatively, by a machine-stop and pedal. The hand-stops are arranged as follows:

Above the upper manual at the left-hand side: harp – lute – 4-foot
Above the upper manual at the right-hand side: 8-foot (dogleg) – 8-foot.

Instead of operating the hand-stops, the player can engage the machine-stop controlled by the left pedal. This pedal works in conjunction with a stop-lever knob located to the left of the keyboards. When this knob is drawn back towards the player, the pedal is disconnected so that the hand-stops alone control the registers. When, however, the knob is pushed away from the player, the lower manual offers the sound of the full harpsichord (both 8-foot stops and the 4-foot) with only the dogleg 8-foot sounding on the upper manual. Upon depressing the left pedal, the player changes this registration to a single 8-foot on the lower manual and the lute stop on the upper manual; that is, the 4-foot stop has been withdrawn and the lute substituted for the dogleg 8-foot. Thus, the player has four registrations instantly available by depressing the left pedal or allowing it to rise.

The right-hand pedal controls a flap in the lid of the instrument, a device often referred to as a 'nag's-head swell', which permits a limited degree of dynamic control. This swell device, however, is only available when the lid is closed



33b

(except for that front portion of the lid which has to be opened to allow the music-desk to be used).

4. The strings are modern brass and steel replacements. String gauge numbers are stamped on the 8-foot nut as shown below. Conjectural diameters in millimetres are indicated in brackets.

1 – 2	13 (0.69mm)
3	12 (0.62mm)
4 – 5	11 (0.56mm)
6 – 8	10 (0.51mm)
9 – 12	9 (0.46mm)
13 – 19	8 (0.41mm)
20 – 24	7 (0.37mm)
25 – 30	6 (0.34mm)
31 – 42	5 (0.29mm)
43 – 60	4 (0.25mm)

The scaling and plucking points are as follows:

	Longer 8-foot	*(dogleg)*	*(lute)*	*4-foot*	
FF	1757	(185)	(68) mm	1038	(105) mm
C	1648	(165)	(60) mm	1126	(102) mm
c	1195	(130)	(43) mm	822	(165) mm
c^1	698	(104)	(33) mm	465	(79) mm
c^2	355	(78)	(24) mm	177	(64) mm
c^3	175	(60)	(19) mm	89	(54) mm
f^3	136	(69)	(18) mm	66	(50) mm

As is normal in Kirckman instruments, the 4-foot nut is divided, and the 8-foot nut is pierced to allow the 4-foot strings (from c on) to pass through it.

5. The soundboard is of spruce. The wrestplank is of oak veneered with spruce. The case is veneered with cross-banded mahogany inlaid with sycamore stringing. The lid is mahogany. The keyboard surround is veneered with panels of burr walnut, cross-banded with tulipwood, and inlaid with sycamore stringing. The soundboard contains the Kirckman rose, a trophy of musical instruments incorporating the initials I.K. There is an adjustable mahogany music-desk, a feature not commonly found on eighteenth-century London harpsichords. The trestle-stand, with its two pedals, is original.

The scantlings vary from 14mm on the left cheek and 16mm on the right to 19mm on the bentside and spine. The harpsichord measures 2360mm long, 940mm wide and 317mm in depth. Its total height above the floor is 930mm.

6. The harpsichord was given to the Museum by Mr F. S. Dayman in 1927. Its previous history is not known.

7. The harpsichord is a fine example of the late eighteenth-century English type of instrument, fitted with the expressive devices of nag's-head swell and machine-stop in an effort to endow the dynamically rigid plucked string sound with some of the flexibility of the fortepiano. The sheer grandeur of sound produced by such large harpsichords kept them in use as orchestral continuo instruments up to the turn of the nineteenth century and even beyond. It is recorded that Kirckman's workshop, which had long since entered the piano trade, made its last harpsichord in 1809.

The Museum's instrument was restored in the Adlam Burnett workshop in 1974.

34. CLAVICHORD, signed 'PETER HICKS' last quarter of the eighteenth century

Mus. No. W. 7–1917

1. The instrument is signed *Peter Hicks fecit* in a somewhat clumsily painted inscription on an inlaid panel of satinwood in the mahogany name-board behind the keyboard. There is no record of any maker by this name.

2. The keyboard compass is C – d^3. The standard measurement is 481mm. The key-panel appears to be of lime or similar wood. The naturals are covered with ebony and the arcaded fronts are of boxwood. They measure 95mm in length by 21mm wide. The sharps are of ebony topped with ivory slips. They measure 53mm long by 9mm wide. Metal blades at the distal end of the keys slide in a rack.

3. The clavichord is fretted with twenty-five pairs of strings serving for fifty-one notes. The fretting scheme is as follows:

Pairs 1–10: C – A, unfretted.
Pair 11: A sharp, B.
Pair 12: c, c sharp.
Pair 13: d, d sharp, e.
Pair 14: f, f sharp, g.
Pair 15: g sharp, a, a sharp.
Pair 16: b, c^1, c^1 sharp.
Pair 17: d^1, d^1 sharp, e^1.
Pair 18: f^1, f^1 sharp, g^1.
Pair 19: g^1 sharp, a^1, a^1 sharp.
Pair 20: b^1, c^2, c^2 sharp.
Pair 21: d^2, d^2 sharp, e^2.
Pair 22: f^2, f^2 sharp, g^2.
Pair 23: g^2 sharp, a^2, a^2 sharp.
Pair 24: b^2, c^3.
Pair 25: c^3 sharp, d^3.

The tangents are of brass. Those of the lowest nine notes (C – G sharp) are leather-covered, an unusual but not unique feature. The leather shows the imprint of plain, not overspun strings.

4. The present strings are modern. The brass strings are arranged in pairs according to the fretting scheme given above. The scaling is as follows:

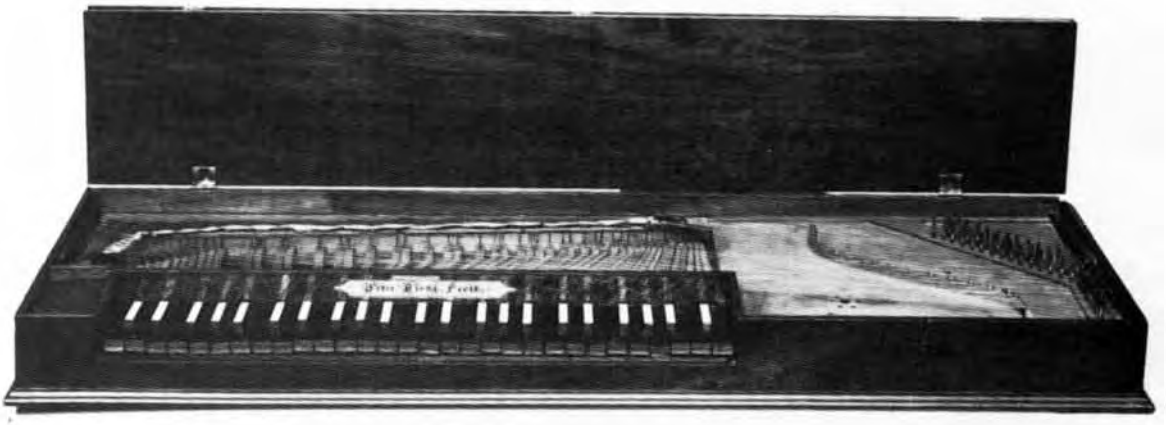
C:	1050 mm
c^2:	245mm
d^3:	129 mm

5. The soundboard is crudely made of soft wood, probably spruce. The thickness varies between 3–4mm. The curve of the S-shaped bridge is wide at the treble end and shallow at the bass end, the reverse of the customary configuration. In the opinion of Mr John Barnes, who restored the instrument in 1965, the string-lengths above c^1 would have been much closer to their theoretical values if the form of the bridge had been the reverse.

About 80mm from the treble end of the keyboard and the same distance from the front of the case, to the right of the keyboard, the soundboard has been pierced with a pattern of six small holes (*c.* 4mm in diameter) arranged in a circle round a central larger hole (*c.* 8mm in diameter). This unusual and crudely executed feature would seem to have been intended as a kind of rose. Both the hitch-pin rail and the moulding at the front of the soundboard are held in place by screws, a practice not customarily followed by clavichord makers.

6. The case is of mahogany. The moulding round the base of the case and the lid appear to be of later date. The long sides of the case measure *c.* 8mm and the short sides *c.* 7mm in thickness. The case is 1235mm long by 354mm wide by 100mm high (including the skirt and lid mouldings). There is no stand.

7. The provenance prior to 1881 is unknown. (A programme of a Military Ball held in 1880 was found inside the instrument, however.) In that year it was owned by John Gillis of Cardiff. In 1892 he sold it to Dr Thomas Lea Southgate



34a

of Upper Northwood, Surrey, then editor of *The Musical News* and formerly editor of *The Musical Standard*. Dr Southgate bequeathed it to the Museum.

8. The instrument poses a number of questions that can be answered only partially and hypothetically. The elusive nature of the English clavichord, an instrument to which literary references exist from the time of Caxton, has often been the subject of comment. Mattheson remarked on the singular fact that, while many clavichords were exported from Hamburg to England in the early eighteenth century, there is no record of anyone having seen or heard such instruments. What, he asked, became of them? Broadwood's surviving records show that the firm stocked small gauges of wire for clavichords in the latter part of the century. Thomas Jefferson is known to have ordered a clavichord sent to him in Virginia, but then asked instead for a square piano. If the present instrument is, in fact, of English make, it is of the greatest rarity by that fact alone.

The marked disparity of quality of craftsmanship between the well-constructed case and keyboard, on the one hand, and the crudely executed soundboard and bridge on the other, is not easily explained. The depth of the case is greater than usually found in fretted clavichords of four-octave compass, but is not altogether without precedent. Mr Barnes, in his restoration report of 1965, states that 'there is nothing in its construction or decoration . . . inconsistent with an eighteenth-century English origin'. While this is certainly supported by the general appearance of the simple mahogany case, keyboards with ebony-covered naturals are not generally found on English instruments (the Museum's Pohlman square piano, Osterley Park House, No. 32 is one of the rare exceptions). The restorer's statement that there was nothing 'amateurish or experimental' in the construction of the clavichord seems excessively charitable. The crudely-made soundboard and acoustically improbable bridge (possibly glued on in reverse, as suggested by the restorer) may well represent a non-professional's attempt at rebuilding a ruined clavichord with only its case and keyboard intact.

1. The instrument is inscribed on the nameboard: *Christopher Ganer Musical Instrument Maker/Broad Street Golden Square London.*

2. The keyboard has a compass of sixty-one notes, FF-f^3, chromatic. The standard measurement is 482mm. The naturals, ivory-covered with stained wood moulded fronts, measure 127mm long, with key-heads 44mm in length, and 22mm wide. The ebony sharps are bevelled. They measure 9–11mm in width and 78–81mm in length.

3. Because of the condition of the instrument at the time of examination, the scaling and strike-line could not be measured. The instrument is bichord strung throughout. The lowest twelve notes have open-wound overspun strings. After eleven courses of brass, the remaining thirty-eight courses are strung in iron wire. The wrest-pins are located at the right hand. To the left there are two levers, one of which raises the dampers. The function of the second lever could not be ascertained. The instrument is fitted with a typical English single-action with overhead dampers on wooden levers that are hinged at the back.

4. The case is veneered in mahogany with satinwood and marquetry decoration. There are six gilt medallions at the head of the legs of the instrument, two visible from the front and two at each side. The nameboard is decorated with neo-classical swag-and-ribbon motifs. The instrument measures 1568mm long, 536mm wide and 266mm deep, and has a total height above the floor of 822mm.

5. The piano was given by Miss F. M. Harris.

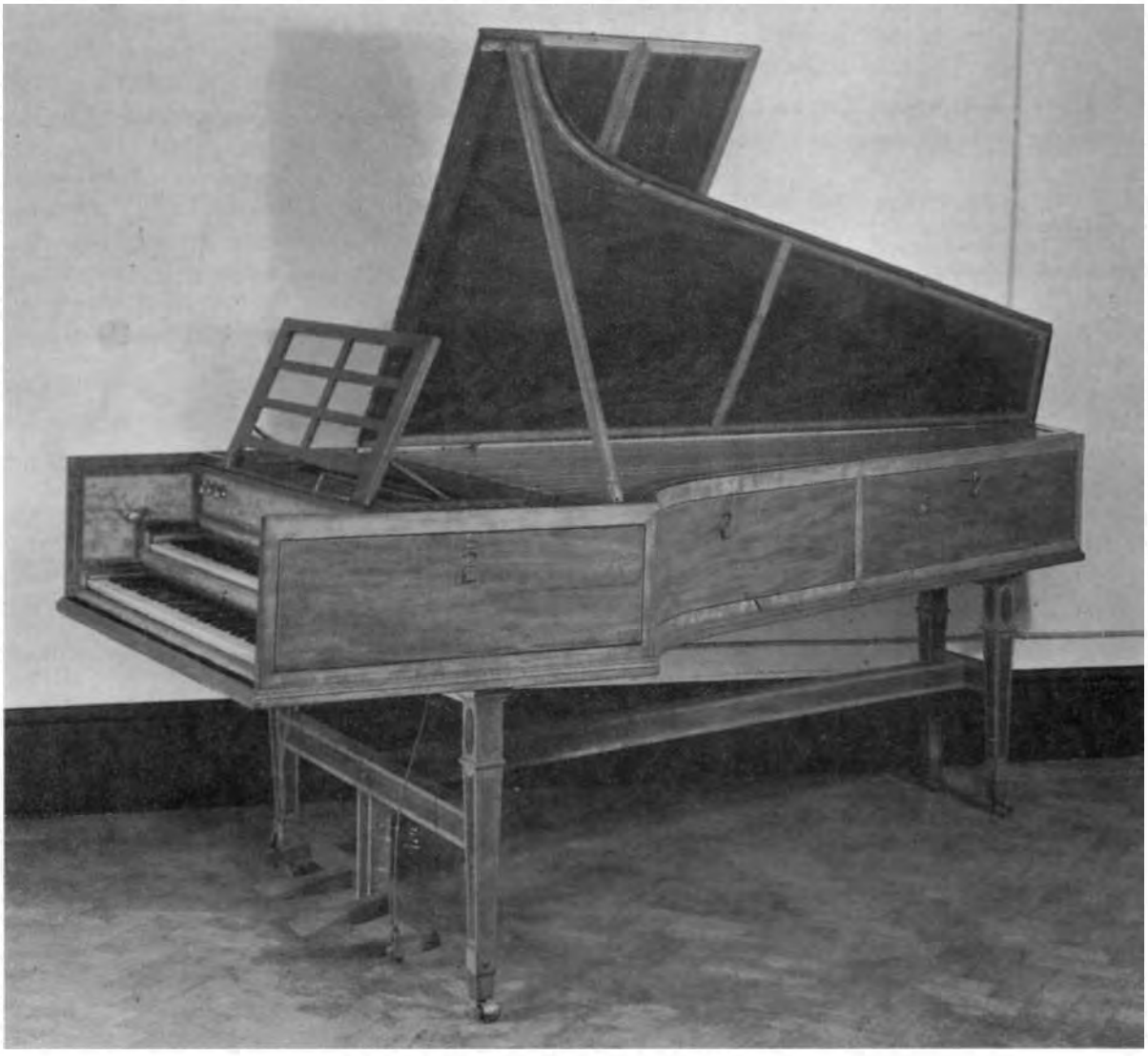
35a

35b

1. The instrument bears a nameboard above the upper manual inscribed *Burkat Shudi et Johannes Broadwood No. 919 Londini Fecerunt 1782. Great Pulteney Street. Golden Square.*

2. The keyboard compass is sixty-six notes, five and one-half octaves from CC-f^3 chromatic. The standard measurement is 488mm. The key-panel appears to be of limewood. The ivory-covered naturals with boxwood moulded fronts measure 22mm wide with a 41mm key-head, and a length of 129mm on the upper and 135mm on the lower manual. The bevelled ebony sharps are 10–11mm wide, and 73–75mm in length on the upper manual, 82–85mm on the lower.

3. There are three sets of strings, disposed as follows:



36a

Upper manual: 1 × 8-foot (dogleg), Lute;
Lower manual: 1 × 8-foot, 1 × 4-foot, Harp of buff leather to 8-foot.

The registers are arranged in the normal English manner:

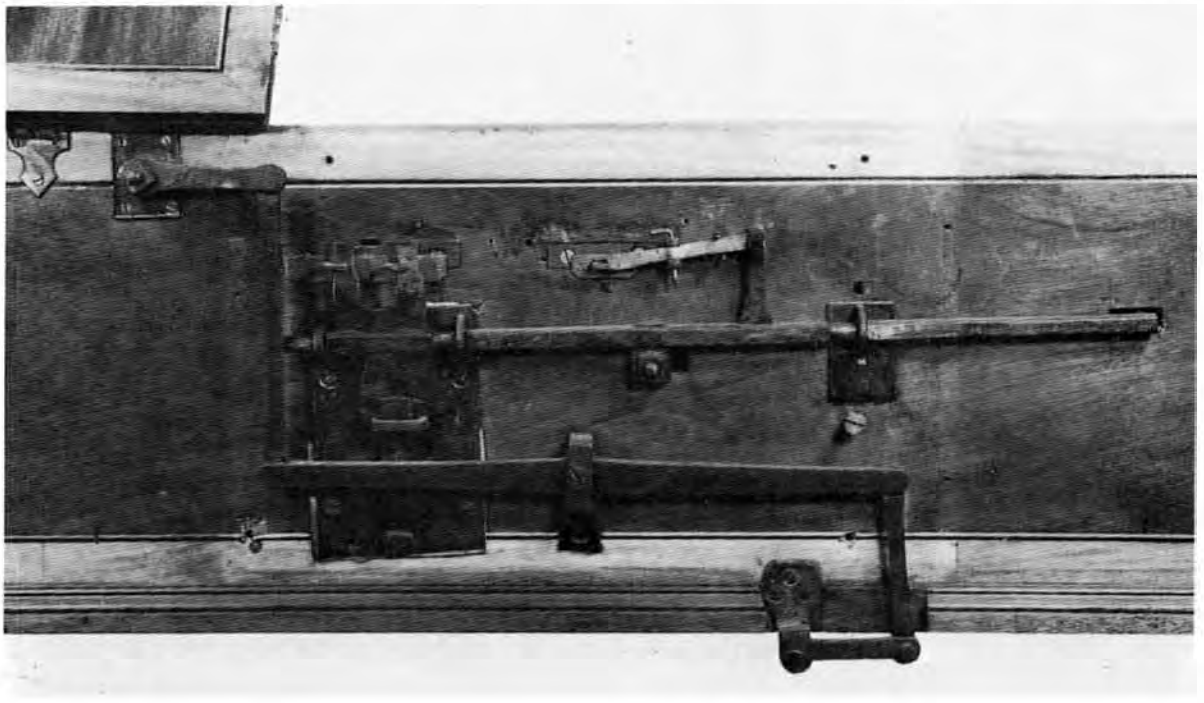
4-foot ←	(quill plectra)
Lower 8-foot →	(leather plectra)
Upper 8-foot ←	(quill plectra)
Lute ←	(quill plectra)

The registers may be controlled by a set of brass knob hand-stops, or alternatively by a machine-stop and pedal. The hand-stops are arranged as follows:

Above the upper manual at the left-hand side: lute – 4-foot – harp.
Above the upper manual at the right-hand side: 8-foot (dogleg) – 8-foot

Instead of operating the hand-stops, the player can engage the machine-stop controlled by the left pedal. To do this, the player pushes forward a knob located on the side of the instrument at the bass end of the keyboards. This action immediately brings on the dogleg 8-foot and 4-foot registers. The player then adds the lower 8-foot to give the full harpsichord registration on the lower manual (2 × 8-foot, 1 × 4-foot) and the single dogleg 8-foot on the upper. Upon depressing the pedal, the registration immediately changes to the lute on the upper manual and a single 8-foot on the lower. That is, the lute is exchanged for the dogleg 8-foot stop and the 4-foot is withdrawn. Thus, the player has available at a touch of the pedal four different registrations. The harp stop must be operated by hand, however.

The right-hand pedal operates a set of twelve louvres, known as a 'Venetian swell', arranged in an inner lid or framework that normally rests above the strings even when the outer lid is raised. The louvres can be opened or closed by the pedal similarly to the swell-box of a pipe



36b

organ, thus simulating effects of *crescendo, diminuendo, sforzando* and *subito piano*. If desired, the inner lid can be raised and attached to the outer lid by small hooks on the latter.

4. The strings are modern brass and steel replacements. String gauge numbers are stamped on the nuts as shown below. Conjectural diameters in millimetres are indicated in brackets.

8-foot strings		*4-foot strings*	
1–3	15 (0.90mm)	1–6	12 (0.62mm)
4–6	14 (0.80mm)	7–9	11 (0.56mm)
7–8	13 (0.69mm)	10–13	10 (0.51mm)
9–10	12 (0.62mm)	14–17	9 (0.46mm)
11–12	11 (0.56mm)	18–22	8 (0.41mm)
13–15	10 (0.51mm)	23–25	7 (0.37mm)
16–18	9 (0.46mm)	26–30	6 (0.34mm)
19–24	8 (0.41mm)	30–36	5 (0.29mm)
25–29	7 (0.37mm)	37–66	4 (0.25mm)
30–35	6 (0.34mm)		
36–48	5 (0.29mm)		
49–66	4 (0.25mm)		

The scaling and plucking points are as follows:

Longer 8-foot		*(dogleg)*	*(lute)*
CC	2057	(244)	(119) mm
C	1666	(203)	(95) mm
c	1182	(167)	(75) mm
c^1	694	(130)	(52) mm
c^2	347	(98)	(34) mm
c^3	173	(62)	(17) mm
f^3	131	(55)	(14) mm

Shorter 8-foot			*4-foot*	
CC	2044	(258) mm	1165	(150) mm
C	1626	(219) mm	877	(122) mm
c	1150	(178) mm	592	(108) mm
c^1	665	(145) mm	330	(93) mm
c^2	332	(112) mm	156	(75) mm
c^3	167	(80) mm	82	(60) mm
f^3	125	(70) mm	64	(18) mm

5. The soundboard is of spruce. The wrestplank is presumably of oak with spruce veneer. The case and lid are veneered with panels of mahogany cross-banded with satinwood, presumably on oak, and the trestle-stand of mahogany is similarly decorated with satinwood. The music-desk of mahogany is adjustable to various angles. The keyboard surround is veneered with panels of sycamore. The scantlings vary from 14.5–15mm for the bass and treble cheeks to 20–22mm for the bentside and spine. The harpsichord measures 2678mm long, 1450mm wide and 332mm deep. It stands 935mm above floor level.

6. The harpsichord was presented to the Museum by Mr Charles Hey Laycock in 1943. Its previous history is unknown.

7. The five-and-one-half octave compass with the extension down to 16-foot CC was a speciality of Shudi's. He certainly had introduced it by 1765, when it is believed that the young Mozart played upon such an instrument during his stay in London. In that year Shudi made the first of three such instruments sold to Frederick the Great of Prussia, substantially similar to the Museum's instrument but lacking the Venetian swell. Haydn ordered a harpsichord of this large type complete with Venetian swell and it is now in the Kunsthistorisches Museum in Vienna. This was the largest type of eighteenth-century English harpsichord; about a dozen specimens survive. The musical uses to which the additional low notes were put can only be a matter of conjecture. No music of the period expressly requires them, so they must merely have served to double the written bass notes in the lower octave from time to time, more likely in keyboard accompaniments in orchestral works than in solo or chamber music.

1. The harpsichord is inscribed on the nameboard above the keys: FAIT PAR PASCAL TASKIN A PARIS 1786; around the soundboard-rose: PASCAL TASKIN 1786; and on the lowest key in branded lettering PASCAL TASKIN with the date $\frac{1786}{1}$ in ink at the distal end. John Barnes disclosed Taskin's trade card glued to the inner surface of the bentside when restoring the instrument in 1971.

Behind the nameboard is written in ink *Refait par Charles Fleury facteur de pianos à Paris an 1856 fleury*, recording a renovation by a specialist of that date in the repair of early keyboard instruments. Also behind the nameboard is written a cabinet maker's note in red pencil: *Tringue a Couteaux du petit clavecine* (sic). A similar hand in the same red pencil, which appears behind the nameboard of Pascal Taskin's own harpsichord, built in 1769 and now in the Russell Collection, Edinburgh, bluntly wrote the name *Pascal*. It seems reasonable to suppose that Taskin himself wrote both these notes.

2. The keyboard compass is of sixty-two notes, EE-f^3. The standard measurement is 359mm, as compared with Taskin's normal standard measurement of 475mm. The ebony-covered naturals measure only 11mm wide by 107mm long, with key-heads of 28mm. The naturals have arcaded boxwood fronts. The bevelled sharps measure 73–75mm long by 8–9mm wide, and are topped with ivory, believed to be original, rather than bone, customarily used by Taskin and his French contemporaries. Not only are the keys themselves considerably smaller than normal, but the separation between adjacent sharps is so slight, a mere 9–10mm, that only a child's hand can play upon this keyboard.

3. There are two sets of strings, both at 8-foot pitch. There is a harp stop of buff leather to the shorter set of strings, the front 8-foot. The registers are controlled by three metal stop-levers located above the keyboard: the back 8-foot at the left, the harp stop in the centre and the front 8-foot at the right. The back 8-foot plucks towards the bass and the front 8-foot towards the treble.

Seven jacks are replacements, six of them presumably dating from the Fleury restoration, while the seventh was provided by Mr Barnes in place of a damaged original jack. The back 8-foot jacks are numbered with *Fleury*? marked on the first one. The front 8-foot jacks are numbered consecutively from *P1*, and the first also has the date *1786*.

4. The strings are modern brass and iron. French wire gauge numbers of the period are marked on the wrest-plank bridge:

Notes	*Gauges*
1–3 EE–FF sharp	0 (0.56mm) copper
4–6 GG–AA	1 (0.53mm) copper
7–8 AA sharp –B	2 (0.47mm) copper
9–10 C–C sharp	2 (0.47mm) brass
11–12 D–D sharp	3 (0.42mm) brass
13–15 E–F sharp	4 (0.37mm) brass
16–21 G–c	5 (0.33mm) brass
22–27 c sharp – f sharp	6 (0.29mm) brass
28–33 g–c^1	6 (0.29mm) iron
34–42 c sharp^1 –a^1	7 (0.26mm) iron
43–51 a sharp^1 – f sharp^2	8 (0.23mm) iron
52–62 g^2–f^3	9 (0.20mm) iron

The scaling and plucking points of the longer 8-foot strings are:

EE	1460mm (139mm)
C	1390mm (122mm)
c	1044mm (102mm)
c^1	653mm (81mm)
c^2	345mm (61mm)
c^3	172mm (41mm)
f^3	125mm (35mm)

The registers are slightly canted towards the bass, being 160mm from the front wall at the bass end but only 145mm at the treble. The double-pin-

37a

ning of the bridge is exceptional, taking in a full three octaves from the lowest note. The bridge of service or pearwood, is not hollowed in the manner of certain Taskin 8-foot soundboard bridges. The spruce soundboard contains a rose in the form of a Maltese cross of gilt metal. The present rose may be a later replacement as it is markedly dissimilar to those found in other Taskin instruments.

5. The instrument measures 1815mm long by 735mm wide. Its height above the stand is 200mm and the total height from the floor is 735mm. The case is japanned, the outside being black, while the inner surface of the lid, the inner faces of the case and the keyboard surround are of a coral-pink colour. (It is believed that this interior colour was originally a clear pink and that the present shade is the result of overpainting, presumably during early restorations, and of the yellowing of the layer of varnish over the paint.) Both the inside and outside of the case are decorated with gilt chinoiseries consisting of small figures in fantastic landscapes. The stand has five fluted legs and is carved and gilt. Three chased brass hinges attach the lid to the spine and two slightly narrower ones of the same type join the two parts of the lid.

The soundboard is painted with flowers in gouache with the characteristic floral decoration and small blue ring round the rose and the symbolic branch of a tree with a small bird. GERMANN 1980 attributes the floral decoration of the key-well, jack-rail and inner case to 'the first Taskin painter', possibly M. Doublet the elder, whose work can be traced from *c.* 1760 to 1786. The soundboard decoration and chinoiseries are ascribed to the 'second Taskin painter', possibly M. Doublet the younger, who was active in Taskin's service from 1778 to 1790.

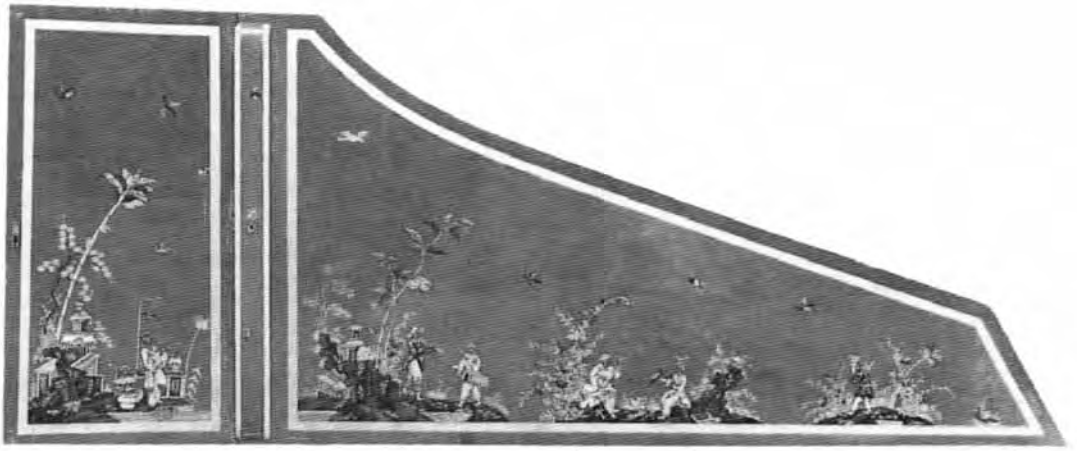
6. The harpsichord was purchased for £80 in 1869.

7. This harpsichord is unique in that it is the only known example of a truly miniature instrument by a harpsichord-maker of the first rank. Although the Ruckers workshop in Antwerp in the late sixteenth and seventeenth centuries produced a number of different models of harpsichords and virginals of various sizes that sounded at an entire range of pitches, covering at least a ninth (see O'BRIEN 1979), and even though octave spinets persisted well into the eighteenth century, none of these instruments can be described as miniature, that is, one of standard type played at a normal 8-foot pitch but constructed on a small scale, even with reduced dimensions of its keyboard.

In view of the miniature form of the instrument, it is worthy of note that Taskin included the additional low note EE found on his instruments datable after 1780 and on those of a number of other French and German harpsichord-makers, such as Collesse of Lyons and the Gräbner workshop in Dresden. The reason for this additional note is unclear as none below FF occurs in any harpsichord music of the period or even in the repertoire of the pianoforte until the second decade of the following century.

It is also of interest that this harpsichord, although luxuriously decorated, so that one assumes that it must have been commissioned for the child of a royal, noble or very rich bourgeois family, was nevertheless made with but one manual. French eighteenth-century harpsichords, so far as is known from surviving instruments and documents, were mainly of two-manual type. Until very recently, in fact, the present instrument was the only single-manual French eighteenth-century harpsichord known.

Two major restorations of the instrument are recorded, as previously noted. The first, undertaken by Charles Fleury of Paris in 1856, in addition to the details mentioned above, involved the addition of a further sixty-third course of strings at the treble end and a corresponding shift



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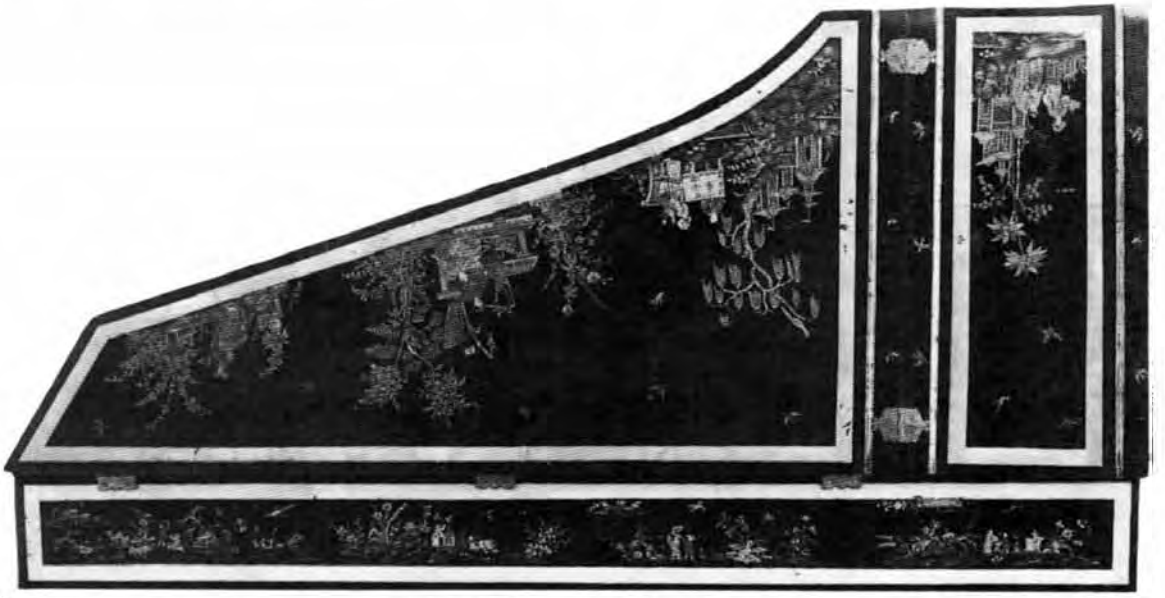


37c

37d

of the keyboard to right by one semitone. Equivalent alterations were also made to the registers. This shift was for the purpose of shortening the scale slightly, presumably to permit tuning to a pitch somewhat higher than had prevailed in Taskin's time, raising it from A-409–415 to A-435–439.

These alterations were reversed during the restoration of the instrument to as near original condition as possible, carried out by John Barnes in 1971.

1. The instrument is inscribed above the keyboard: *Daniel Prior Londini Fecit 1786.*

2. The keyboard compass is of fifty-four notes, C – f^3. The keyboard is drawn towards the player when the instrument is opened for playing. It is pushed in like a drawer before closing the front of the instrument. During the early nineteenth century, a small pedal board of thirteen notes, CC – C, was added with stopped pedal pipes of 16-foot tone. The original disposition, four ranks controlled by the manual keyboard, remains:

Open diapason	8-foot
Stopped diapason	8-foot
Principal	4-foot
Fifteenth	2-foot

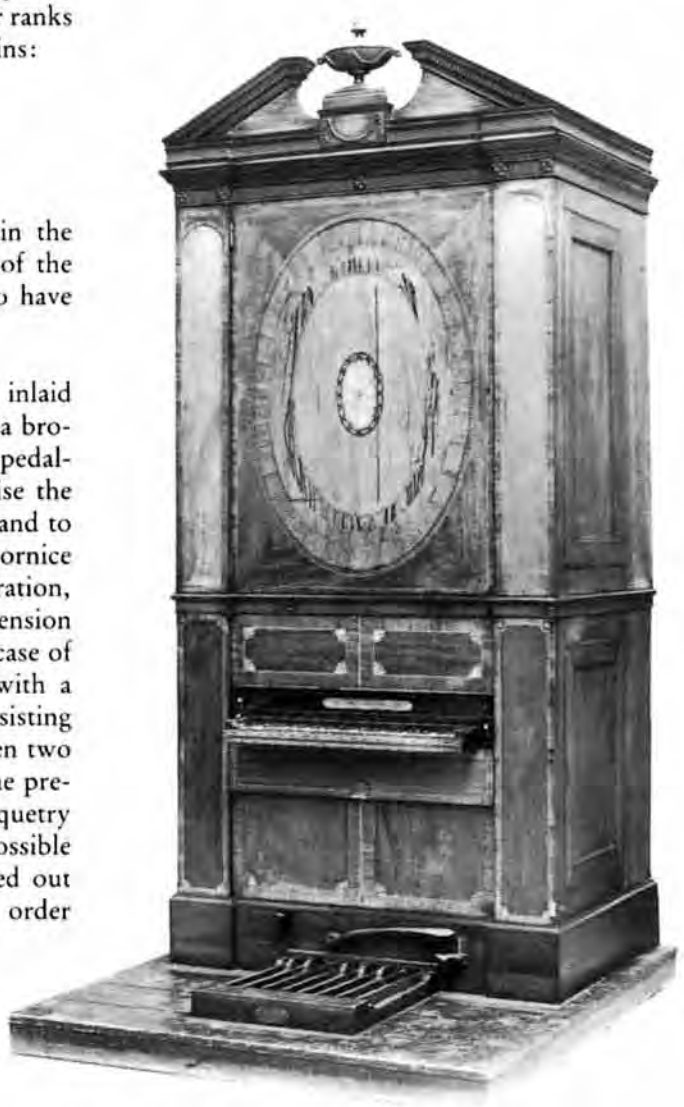
A 'nag's-head' swell device is provided in the form of a pedal-operated lid on the top of the case. Most of the pipework is believed to have been destroyed during World War II.

3. The neo-classical case is of mahogany inlaid with various woods. It is surmounted by a broken pediment and urn. At the time the pedal-pipes were added, it was necessary to raise the case on a plinth of about 75mm in height and to extend it at the rear by 200mm. The cornice seems to date from the time of this alteration, since there is no join in it above the rear extension of the case. There are indications that the case of the instrument was originally provided with a conventional front of gilt show pipes consisting of an elliptical centre compartment between two side compartments of three pipes each. The present front, with its large oval inlaid marquetry decoration, is a later replacement. It is possible that the alteration to the front was carried out when the 'nag's-head' swell was fitted, in order to prevent the egress of sound from the front.

The style of the inlay on the nameboard and keyboard surround is noticeably different from that of the case in general.

The organ measures 5258mm high, 1321mm wide and 889mm deep.

4. The instrument was acquired in 1900 by gift of Mr F. Barrett Lennard.



38a

598

1. The instrument is inscribed on the nameboard: *New Patent Longman & Broderip/ London*. The number *606* is die-stamped on the frame on the left-hand side. The low F-sharp key is signed *Winger No. 60*. (The name may possibly be *Winget*.)

2. The keyboard compass is sixty-eight notes, FF-c^4, chromatic. The standard measurement is 487mm. The key-panel is of lime. The naturals are ivory-covered and measure 128mm in visible length, with 45mm key-heads, and 22mm wide. The bevelled ebony sharps measure 80–82mm long by 9–11mm wide.

3. The piano is bichord strung throughout. Courses 1–11 are of open-wound tinned copper on a brass core. Courses 12–22 are of plain brass and the remaining strings are steel. The scaling is the following:

	String length	*Strike line*
FF	1424mm	129mm
C	1230mm	70mm
c	944mm	50mm
c^1	540mm	35mm
c^2	298mm	29mm
c^3	143mm	24mm
c^4	75mm	10mm

4. The instrument has an English single-action with crank dampers (to d^3 that is, excluding the 'additional notes'). There is no damper-raising or other device operated by pedal or lever. The hammer-coverings are of leather.

5. The case is of mahogany with stringing of various woods. The nameboard, veneered in satinwood, is pierced and decorated with painted designs. There is a removable dust cover (a wooden frame covered with green silk) that is dropped over the string band. The stand is of the French-tray type with square tapered legs. The shelf of the stand, on which music could be placed, is a restoration made in the Museum. A collapsible music-desk is behind the nameboard. The instrument measures 1656mm long, 594mm wide and 226mm high (855mm total height above the floor). The case walls measure *c.* 18mm in thickness, except the back, which is *c.* 27mm thick.

6. The instrument was presented by Mr Guy Jonson.

40. SQUARE PIANO, John Broadwood & Son, London, 1801 Mus. No. H.H. 433

1. The instrument, encased in a sofa-table, is inscribed on the nameboard: *John Broadwood and Son/Makers to* HIS MAJESTY AND THE PRINCESSES/GREAT PULTENEY STREET . . . GOLDEN SQUARE/LONDON 1801. The lock is signed: DOWNER.

2. The keyboard compass is of sixty-one notes, FF–f^3. The standard measurement is 490mm. The ivory-covered naturals with moulded wooden fronts measure 122mm long by 22mm wide. The bevelled ebony sharps measure 67–22mm long by 9–13mm wide.

3. The instrument is bichord strung throughout. (For technical reasons, the scaling, strike-line and details of the stringing could not be determined.) The entire layout of the instrument is somewhat compressed, being slightly shorter and shallower than a typical Broadwood five-octave square piano. The length of the longest string, FF, is 1216mm. The piano is fitted with the typical English single action normally found in Broadwood squares of the period. The strings are damped by brass under-dampers of the so-called 'peacock' type. There is no pedal or other device for raising the dampers as a group.

4. The piano proper is contained in a drawer 130mm high which can be withdrawn partially, to allow the instrument to be played, or entirely for purposes of tuning and repair. The front flap of the piano simulates the front of a drawer, such as would be found on a conventional sofa-table with typical brass knobs. This front flap is hinged at the bottom so that it can be opened to expose the keyboard. When open, the flap projects towards the player rather than dropping down flush against the case.

5. The table measures 1477mm in length, but has a falling leaf at each end together measuring an additional 292mm. The width is 565mm at the top and 675mm at the bottom of the richly ornamented pedestal-stand. The depth of the table is 164mm and it stands a total of 755mm above floor level. The table is veneered in mahogany with stringing of ebony and boxwood. The inscription on the mahogany nameboard is written

40a

on an inlaid plaque of boxwood. There are pierced mahogany panels to the left and right of the plaque, backed with silk. The stand is of a modified trestle design with outswept reeded legs joined by a turned pole stretcher.

6. The piano forms part of the furnishings of Ham House, which were acquired by the Museum in 1948 by bequest of the 9th Earl of Dysart. A similar piano dated 1803 was on the London market in 1980.

1. The nameboard, veneered in satinwood, bears the inscription: *Patent/CHAPPELL & CO/ 124 New Bond Street/London*, on its central portion, located between decorative pierced work at each end.

2. The compass is of thirty-seven notes, c – c^3. The sound is produced by the action of a down-striking simple hammer mechanism on glass rods of graduated size, arranged in two rows in order to save space. There is no damping mechanism. The keyboard is of contemporary pianoforte dimensions.

3. The case of simple design is veneered in mahogany with cross-banding of a dark-stained wood. The key-well is veneered with satinwood matching the nameboard described above. The instrument measures 181mm in height by 565mm in width by 575mm in depth.

4. The instrument was given to the Museum by Mr Edmund Davis.

5. The musical use for which the pianino was intended is not clear. The three-octave compass would seem insufficient for the performance of any contemporaneous keyboard music. Possibly the instrument was intended as a substitute device for piano practice or for giving the pitch to unaccompanied choral groups. As the glass rods contrive to make the instrument permanently tuned, as it were, it may also have been conceived as an aid to the tuning of pianos.

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41b

1. The instrument is inscribed on the lowest key: *Florez* on the side and *Madrid* on the bottom. The top key is signed *Florez*.

2. The keyboard has a compass of sixty-eight notes, FF-c^4. The key-panel is of pine with beech inserts for the mortises 48mm from the front. The standard measurement is 487mm. The ivory-covered naturals measure 22.5mm wide by 130mm long, with key-heads of 43mm. The ebony sharps are bevelled, measuring 80–84mm long by 9–13mm wide. The action is the form of a single mechanism without a spring hopper known as 'Zumpe's second action'. The dampers are in fact hooked rather than, as might first appear, of the 'Irish' or cranked form, and extend to c^3 (the topmost four dampers are missing at present). The hammers are leathered. The pedal that raised the dampers is now missing. The remains of a divided buff stop are visible on the action. The highest twelve notes are 'additional keys', that is, the extension of compass by an additional seven notes beyond the previous norm of five octaves, is achieved by mounting the added treble notes on a subsidiary frame under the soundboard, their hammers emerging through a slot at the edge of the sound board to strike the string. This enabled the compass to be extended without limitation of the soundboard's effective area or any material increase in overall length.

3. The instrument is bichord strung throughout. The lowest ten courses are of open-wound overspun brass, the next ten courses are of plain brass, and the remaining forty-six courses are of iron. The scaling and striking points are as follows:

FF	1485mm (115mm)
C	1245mm (86mm)
c	882mm (52mm)
c^1	512mm (33mm)
c^2	275mm (20mm)
c^3	136mm (15mm)
c^4	75mm (10mm)

The first twenty-one courses are on the bass bridge and the remaining forty-five courses on the treble bridge. (The use of the divided bridge is one of the reasons for assigning a date of *c.* 1815 rather than the earlier date of *c.* 1800 given in the previous catalogue.)

4. The casework is of mahogany and rosewood decorated with brass banding, carved and gilt foliage, and plaques of cut horn and paper set on a blue ground to resemble Wedgwood jasperware medallions. The French-style frame has square tapered legs with gilt brass mounts. (The music stand is missing.) The wrest-plank is of massive construction with a 50mm layer of beech laid on the same depth of pine. The bottom board is of oak rather than the lime or pine usually found on instruments in the English style of construction. The soundboard of spruce measures 3–4mm in diameter and a triangular piece has been inlaid at the right-hand rear corner. The scantlings are *c.* 18mm. The piano measure 714mm long, 595mm wide and 291mm high (909mm above the floor).

5. English-type square pianos were apparently made in Spain in the last quarter of the eighteenth century. An instrument of this type dated 1788 (Koster Collection, New Bedford, Massachusetts), inscribed *Del Marmol/en Sevilla*, for example, is remarkably similar to English squares of a few years earlier as regards form, construction, type of action and even the casework, albeit of lesser refinement. The English influence to be seen in the pianos made by Flórez for the Royal Palace in Madrid has been noted (Juan Jose Junquera, *La decoración y el mobilario de los palacios de Carlos IV*, Madrid, 1979, 32. A cabinet upright by Flórez in the Palacio Real is illustrated there, Plate 6). The present piano by Flórez, decorated with gilt ornaments and

42a

42b

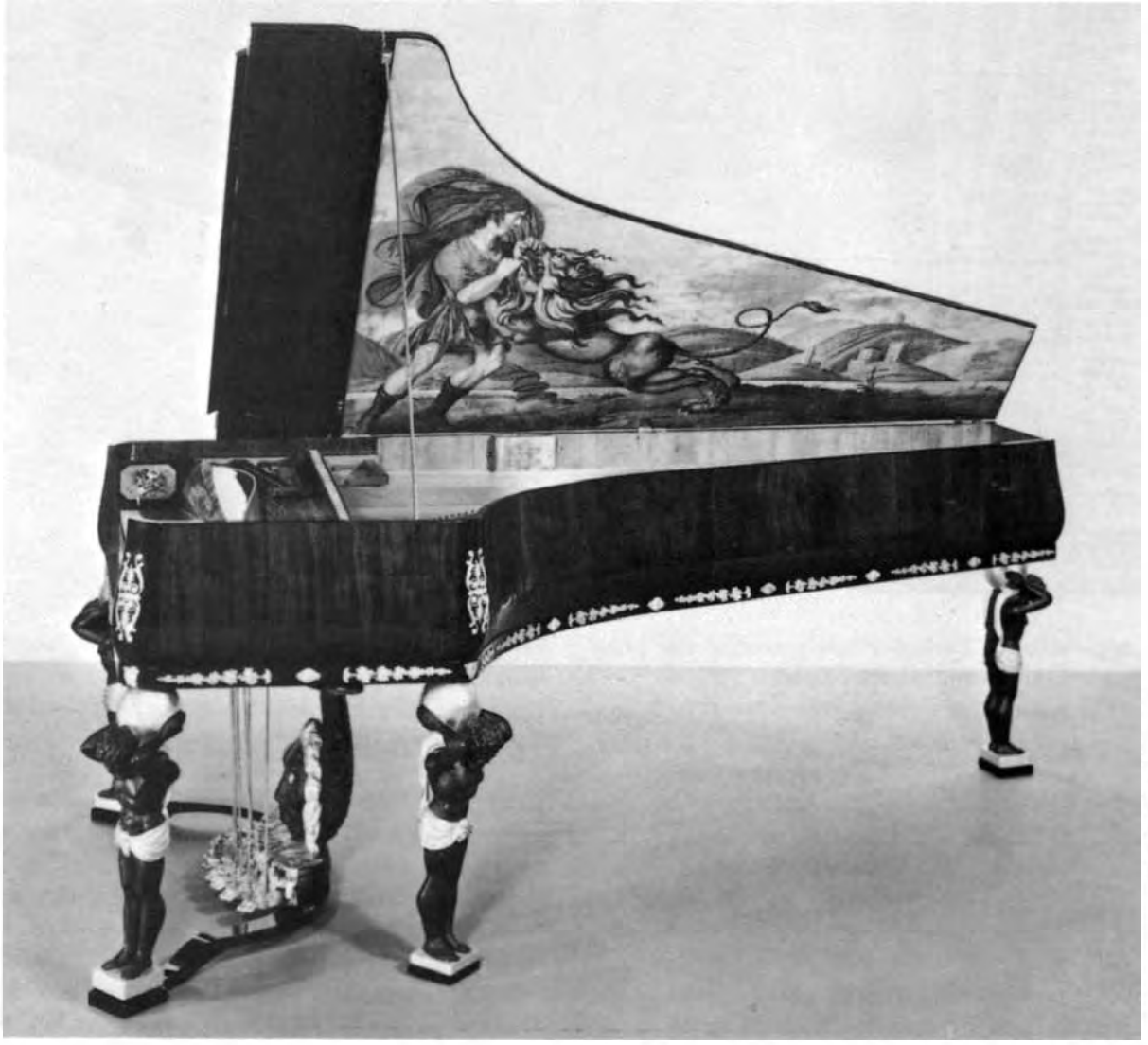
medallions inspired by Wedgwood originals, recalls the remarkable Broadwood piano of 1796 with a case said to have been designed by Thomas Sheraton. The Broadwood is a grand piano (formerly in the Deerfield Museum, now in the Boston Museum of Fine Arts) with a satinwood case set with 'Wedgwood's and Tassie's medallions' as the original bill states, and is richly decorated with gilt ornament. It bears the Spanish royal arms because it was presented to the Queen of Spain, Maria Luisa de Parma, by Don Manuel de Godoy, Prime Minister of Spain, who had commissioned it in London. (See James 1930, Plate LXII and William Dale, *Tschudi, The Harpsichord Maker*, London, 1913.)

6. The instrument was acquired by purchase in 1876 for £21.

1. The instrument is inscribed on the damper rail: *Georg Haschka in Wien.*

2. The piano has a compass of seventy-three notes, FF-f^4. The standard measurement is 479mm. The ivory-covered naturals with bone fronts measure 138mm in visible length by 21mm in width. The bevelled ebony sharps measure 95–98mm long by 9.5–11mm wide.

3. The instrument is fitted with the typical Viennese or South German action (*'Wiener Mechanik'*) and is damped throughout its entire compass. There is one continuous bridge and stringing is trichord throughout, without overspun strings. After ten courses strung in brass, the remainder of the compass is strung in iron. There are eight pedals controlling a bassoon effect (*'Fagottzug'*), una corda shift, drum and tri-



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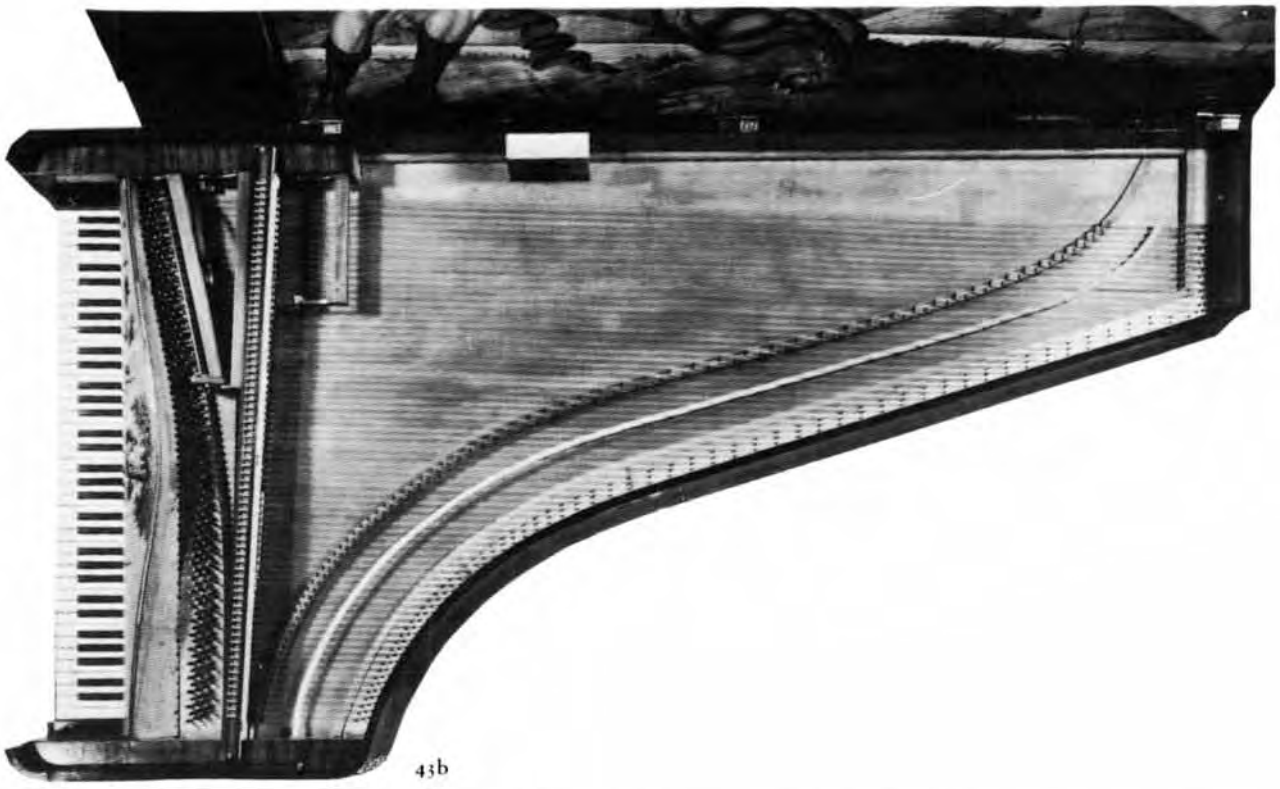


43b

angle effects ('Turkish music'), muting soft pedal ('*Moderator*') and damper pedal.

The scaling and striking points are as follows:

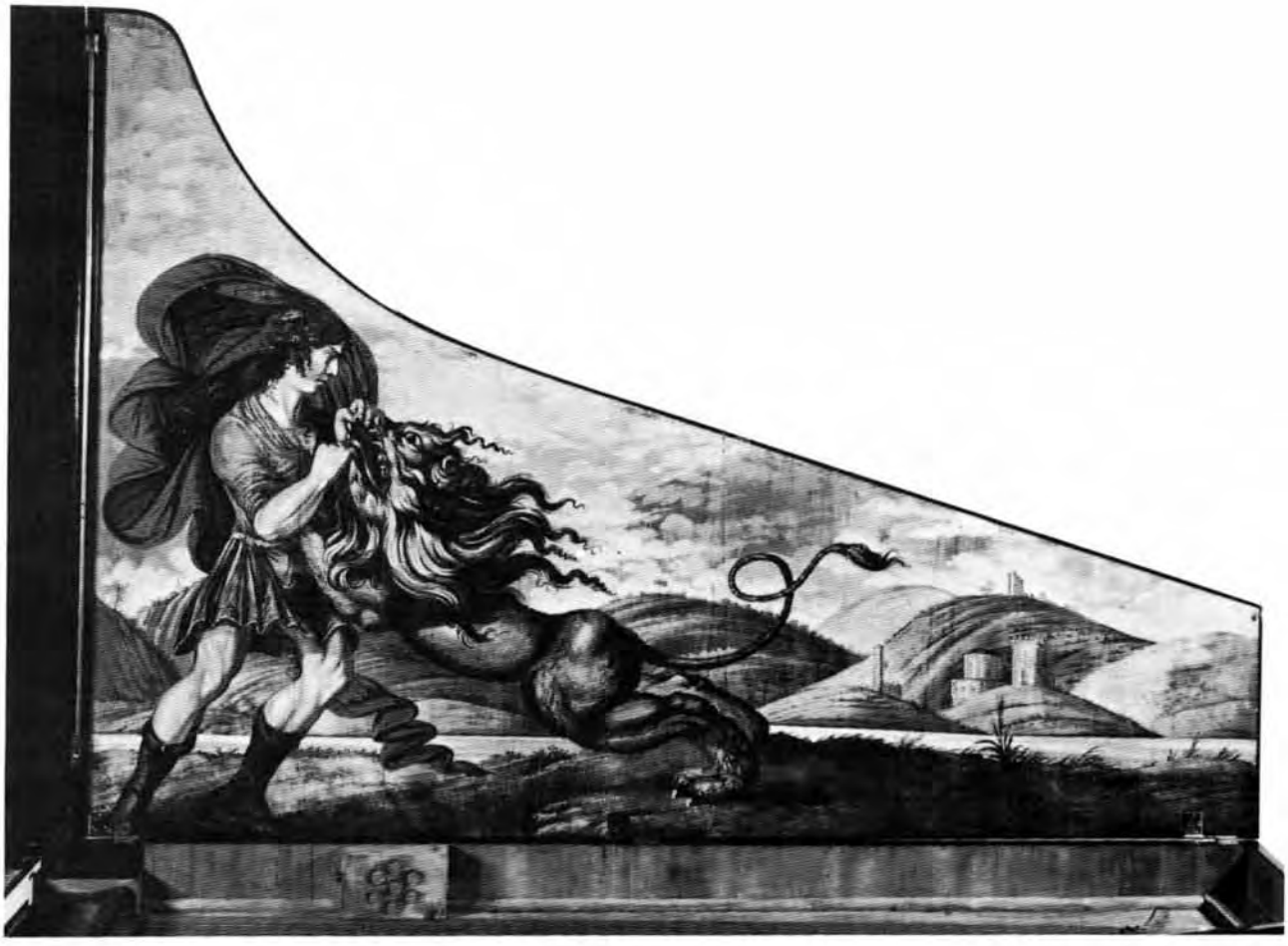
FF	1727mm	(157mm)
C	1567mm	(135mm)
c	1072mm	(95mm)
c^1	564mm	(58mm)
c^2	284mm	(27mm)
c^3	141mm	(13.5mm)
c^4	70.5mm	(7mm)
f^4	53.5mm	(4mm)

As is common in Viennese grand pianos of the period, there is a non-functional choir of strings between e^1 and f^1 to fill a gap in the string band where an iron brace is set between the wrest-plank and belly-rail, with a corresponding gap in the action.

4. This instrument has a somewhat flamboyant case in a debased version of the Empire Style with pretty embellishment in a romantic vein.

The pinewood case is veneered on the outside with mahogany and inside with satinwood. The lid of mahogany is painted inside with a scene of Samson rending the lion (Judges 14:6), surrounded by a band of ebony. Round the lower

GRAND PIANO, Georg Haschka, Vienna, *c.* 1815–20



43c

edge of the case runs an ebony band enriched with gilt metal mounts representing foliage, grotesques, masks and palmettes. The key-plate is a lyre supported by two winged female demi-figures terminating in floral scrollwork. The three front corners have ormolu mounts of eagles standing on floral ornament; at the further end is a similar mount with conventional leaves, flowers and volutes.

The shaped panel behind the keyboard is veneered with satinwood and painted with a depiction of Apollo playing the lyre seated beneath a tree in a wide landscape. At each side of the keyboard is a satinwood panel painted with flowers, musical instruments and a music book. The damper rail is ebonized and painted with festoons of convolvulus and leaves, as well as with the inscription.

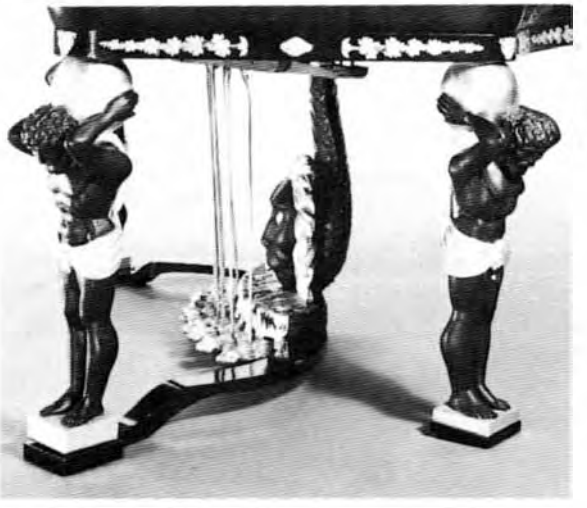
The instrument is supported on four legs of atlantes, nearly nude male figures, each carrying a globe. The figures are painted black while their loin cloths, the globes and plinths are gilt. A crescent-shaped stretcher connects the plinths of the two front legs and, above the centre of this, which is carved to represent waves, rises a black monster with a lion's head and dolphin's body

43d

with gilt tail and mane. Two small frogs also emerging from the waves form a base from which project eight pedals shaped like lions' paws and actuating brass rods.

The piano measures 2305mm long, 1194mm wide and 864mm high.

5. The piano was presented to the Museum in 1907 by Sir William Q. Orchardson, R.A., who had featured it in his painting entitled 'A Tender Chord'. It was restored to playing condition in the workshop of Derek Adlam in 1981.



43e

44. GRAND PIANO, Thomas Tomkison, London, before 1820

Mus. No. W. 33–1930

1. The instrument is inscribed on an oval panel inlaid in the nameboard: *Thomas Tomkison/ Dean Street Soho/Maker/To His Royal Highness the/Prince Regent*. The inscription is surmounted by the arms of the Prince of Wales, including the motto *Ich dien*.

2. The keyboard compass is seventy-three notes, CC-c^4. The standard measurement is 490mm. The ivory-covered naturals measure 134mm long by 22mm wide, with key-heads of 44mm length. The bevelled ebony sharps measure 84–88mm in length by 10mm wide.

3. The piano is trichord strung throughout with no overspun strings. From CC to B-flat the material is brass, and from B to c^4 iron. The scaling is as follows:

	String length	*Strike line*
CC	1808mm	187mm
c^2	267mm	33mm
c^4	70mm	10mm

44a

4. The piano is fitted with a typical English grand action with flag-dampers throughout the compass. The leather outer covering of the hammers surrounds a core of folded leather. The left-hand pedal controls a shifting action for *due corde* and *una corda*. The right-hand pedal is divided, the left section raising the dampers in the bass (CC-c^1) and the right those in the treble (c^1-sharp-c^4).

5. The case is veneered in rosewood. The top surface of the lid and the long side of the case are inlaid with brass in a typical Regency manner. The decoration on the side consists of panels, framed by brass stringing, containing a pattern of stars on a dark ground with trefoil brass ornaments in the corners. Below there is a moulding of metal and three brass handles, controlling hooks within the case to secure the lid, each of which is decorated with a female and a satyr mask. The wooden pedals are held in a carved lyre and the instrument is supported on four tapered and reeded legs. The key-well is veneered in satinwood with tulipwood borders and the nameboard is inlaid with an oval of lighter satinwood inscribed as noted above. The piano measures 2368mm long by 1146mm wide, and is 320mm deep, standing a total of 544mm above the floor.

6. The piano is a superb example of a highly decorated and well-made English instrument of the Regency period. It is still entirely of wooden construction without any metal bracing, and with the bottom of its case closed rather than open with exposed inner framing. The divided bridge construction is noteworthy only in that the long bridge carries the string courses down to A, that is, two notes below the changeover from iron to brass stringing. This is probably the result of an empirical stringing by ear so that there has been no dogmatic insistence that stringing material and the bridge should divide at precisely the same point in the scale.

7. The piano was given to the Museum in 1930 by Sir Clive Coates.

45. UPRIGHT PIANO, Van der Does, Amsterdam, *c.* 1820 Mus. No. 461–1907

45a

1. The nameboard is inscribed *Van der Does/ Amsterdam*.

2. The keyboard compass is seventy-three notes, FF-f^4. The standard measurement is 492mm. The naturals, covered in ivory with satinwood fronts, measure 147mm long by 23mm wide. The key-heads are 46mm long. The ebony sharps measure 99mm at the bottom and 95mm at the top in length, and are 8mm wide.

3. The stringing is entirely of plain wire with twelve bichord and sixty-one trichord notes. The keys are connected to the action (which could not be examined) by long stickers. The hammers are covered with leather. The six pedals operate as follows, from left to right:

1. Bassoon (a parchment strip is brought against the strings in the lower register);
2. Drum (a drumstick beats upon the soundboard);
3. Damper (like the modern sustaining pedal, removing the dampers from the strings);
4. Bells (operates a small set of bells inside the case);
5. *due corde* (shifts the action so that the hammers strike only two of the three strings); and
6. *una corda* (shifts the action still further so that only a single string is struck).

4. The case is of mahogany (partly solid, partly veneered), oak, pine and satinwood. The instrument measures 2145mm in height, 1161mm in width (the column and its base take up an additional 301mm), and 664mm in depth (plus a further 30mm projection to the snouts of the lions' heads). Round the upper edge of the front, which is shaped like a harp, runs a detachable pine moulding carved with leafwork, partly stained black and partly gilt. This leads to a volute resting on a large mahogany pillar of composite type with a stepped base in three stages. The capital and base of the pillar are gilt, and on the front of the plinth is a gilt lyre in carved wood. The keyboard rests on two monopodia supports each carved as a lion's head on a lion's leg, the mane, face and paws being gilt. Each lion stands on a rail connected with the body of the instrument. The lower portion of the instrument is enclosed by two doors veneered in mahogany, each ornamented with ormolu moulding and an escutcheon. The upper portion of the front is covered by a mahogany frame with a green woollen material with a self-coloured pattern. The nameboard is veneered in satinwood and painted with swags of leaves and flowers, surrounding a black oval panel with the name and location of the maker.

5. The instrument was acquired by gift of Sir William Q. Orchardson, R.A. in 1907. Its early provenance is unknown.

6. The correct name and biographical information about the maker were kindly furnished by Dr Clemens von Gleich of the Municipal Museum, The Hague, and Austin Niland, Esq. Corneille Charles Emanuel van der Does, born in 1769 in Voorburg near The Hague, settled in Amsterdam by 1819 when he married, and died there in 1827. His son, Cornelis Ferdinant van der Does (1820–1892), later continued the nrm and moved to The Hague in 1840. The Museum's instrument would appear to date from 1820 at the earliest, which accords with its compass and disposition. The multiplicity of pedals for special tonal effects was especially characteristic of Viennese pianos of the first quarter of the nineteenth century, as, for instance, the Museum's pianoforte by Georg Haschka (No. 43), which was presented by the same donor simultaneously with the Van der Does instrument. The shape of the instrument, known on the Continent as a *Giraffenflügel* (literally 'giraffe piano'), also suggests that the maker must have modelled his instruments on Viennese prototypes. The unusually elaborate casework would indicate that the instrument was bespoken by a wealthy client and was not produced in the ordinary course of business. The piano is depicted in two paintings by the donor: 'Music when soft voices die' (1893) and 'The Lyric' (1904).

1. The piano is inscribed on the nameboard: *William Stodart/Maker to their Majesties and Royal Family/Golden Square, London*. There is no serial number.

2. The keyboard compass is of seventy-three notes, CC-c^4. The standard measurement is 487mm. The ivory-covered naturals with moulded wooden fronts measure 135mm long, with 45mm key-heads, and 22mm wide. The bevelled ebony sharps are 82–85mm long by 9–11mm wide.

3. The instrument is fitted with the English grand-piano action. The entire compass is damped. The present hammer-coverings are of felt and are undoubtedly replacements of the original leather coverings. Damper and *una corda* pedals were fitted but are now missing. There is a slip of wood at the treble end of the keys that

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can be removed to permit shifting the action beyond the *due corde* position to obtain a true *una corda* sound. The damper rail is of the type derived from the harpsichord jack-rail and is lined with baize to reduce the noise of the damper action.

4. The present stringing is not original. The bridge pins, nut and hitchpin rail, and a vacant set of wrest-pin holes indicated that the original stringing was trichord, save for bichord on the first three notes only. The instrument was later restrung with heavier wire in bichord stringing. Overspun strings were used in the bottom octave, which increased the tension, causing the hitch-pin rail to be torn away.

The approximate scaling and strike-line are as follows:

CC	1707mm (200mm)
c^2	280mm (20mm)
c^4	70mm (15mm)

5. The outside of the case, including the lid, is veneered with mahogany panels, cross-banded with rosewood and decorated with brass stringing. The inside of the instrument is veneered in satinwood with ebony stringing. The key surround is veneered in the same way as the outside of the case but is more elaborately decorated with brass stringing. There are three brass rings, one on the cheek and two on the bentside, that control hooks on the inner surfaces which secure the lid. Two pairs of turned and fluted legs surmounted by milled brass collars support the instrument. Each pair of legs screws into a veneered batten attached to the underside of the instrument, which is decorated with a leaf pattern carved at each end.

The framing of the instrument is of wood. The only metal elements are the arched spacers of iron that strengthen the gap between wrest-plank and soundboard. This is a feature of the earliest English grand pianos, as, for instance, the Americus Backers instrument of 1772 in the collection of the Duke of Wellington.

The piano measures 2275mm long, 1145mm wide and 298mm high. It stands a total of 904mm above the floor.

6. The instrument can be dated about 1820 for the following reasons. It lacks any tubular metal bracing of the compensating type patented in 1820 by Allen and Thoms. This patent was quickly bought up by their employer, William Stodart, the maker of this instrument. While he may have continued making six-octave grands, it is known that Stodart made instruments of larger compass before 1820, as for instance, the six-and-one-half octave grand piano in the collection of the late Edward Croft-Murray, dated 1818, which has an inscription similar to that on the present instrument. In Stodart's later pianos, such as that datable about 1830, and now in the Kunsthistorisches Museum in Vienna, a serial number was inscribed at the treble end of the wrest-plank.

Inlaid brass decoration of the type seen here only came into fashion in England towards the end of the second decade of the century. A Mott pedestal piano of 1817 in the collection of H.M. the Queen is similarly inlaid with brass.

7. The piano was given to the Museum in 1952 by Miss R. M. Scott.

47. SQUARE PIANO, Clementi & Co., London, *c.* 1820 Mus. No. W. 12–1953

1. The instrument is inscribed on the nameboard: *New Patent/Clementi & Company/26 Cheapside/London*. The name *J. E. Moon* is die-stamped on the wrest-plank along with the stencilled name of *Gliddon (York)*, possibly the dealer who sold the instrument. The serial number 14739 is stamped inside the case.

2. The keyboard compass is seventy-three notes, FF-f^4, chromatic. The standard measurement is 484mm. The ivory-covered naturals have boxwood fronts and measure 22mm wide by 130mm long. The bevelled sharps are of ebonized fruitwood covered by slips of ebony. They measure 82–85mm long by 10–13mm wide.

3. The piano is bichord strung throughout. The lowest ten courses are strung with open-wound overspun strings. The scaling is as follows:

FF	1480mm
c^2	260mm
f^4	51mm

The wrest-pins are on the left-hand side of the back of the frame, rather than at the right of the soundboard.

4. The instrument is fitted with the English single action with crank dampers. The hammers are covered with red cloth over leather. The highest fifteen notes are treated as 'additional keys', the hammers coming up through a slot at the edge of the soundboard to strike the strings. There is a single pedal, suspended from a pillar set off-centre beneath the case that raises all the dampers.

5. The mahogany case is cross-banded with rosewood and has mounts of chased and lacquered brass. It stands upon a French type tray-stand supported by six fluted turned legs mounted with gilt brass. The instrument measures 1658mm long, 630mm deep and 257mm high (860mm total height above the floor).

6. The piano was given by Mr T. A. Jackson.

47a

1. The instrument bears a label inlaid on the nameboard: *Abel & Sons – Musical Repository – Parade, Northampton.* It is signed inside the arms of the case on each side: *101-W.H.N.* (No maker's name appears, but see 5 below.)

2. The keyboard compass is of eighty notes, CC-g^4. The standard measurement is 493mm. The ivory-covered naturals, with enamelled key fronts, measure 134mm long, with key-heads of 44mm, by 22mm wide. The bevelled ebony sharps measure 85–89mm long by 11–12mm wide. The piano is fitted with an adaptation of the sticker-type upright piano action located below the keyboard, a so-called drop action. The overdampers extend to g^2-sharp. There are two pedals for raising the dampers and shifting the action for *una corda.*

3. The piano is bichord strung throughout. The first eighteen courses (CC-f) are overspun and carried on the short bridge with single hitchpin loops. The remaining courses on the long bridge are of plain wire of relatively heavy gauge for the period. They are paired around the hitchpins, which are actually studs in the iron frame. The strings are tuned by mechanical wrest-pins at the bottom of the instrument, and consist of threaded pins with hexagonal nuts that are turned with a tuning hammer of special design which has not been preserved.

4. The instrument measures 1967mm high, 1362mm wide and a total of 796mm deep, inclusive of a scroll 125mm deep at the back which was apparently designed to ensure that the instrument was kept well away from the wall.

The instrument is built against a harp-shaped metal frame (presumably of cast iron) and strung vertically. The upper portion of the metal frame is exposed to view. In lieu of the conventional soundboard there are three sound-boxes of graduated sizes: a large one to amplify the vibrations of the bass strings, a smaller one for the tenor register, and a still smaller one for the treble. These sound-boxes are pierced with f-holes like instruments of the violin family and, indeed, resemble respectively a 'cello, a viola and a violin without necks, fingerboards or scrolls.

The wooden casework of the lower portion of the instrument is of rosewood. The iron frame is partly painted in imitation of rosewood. The sound-boxes are built in violin fashion with sycamore backs and sides, and spruce tops.

5. The *Euphonicon* was invented about 1840 by Dr John Steward of Wolverhampton, Staffs. Patents in his name were issued on the instrument in England (1841), Ireland (1841) and Scotland (1842) but the name *Euphonicon* appears only in the latter two. An instrument in a private collection in Paris bears the inscription:

EUPHONICON

STEWARD'S PATENT

MANUFACTURED
BY
BEALE & CO.
201, REGENT STREET
LONDON
ANNO 1842

The patents speak in terms of a seven-octave (eighty-five note) compass. The Museum's instrument is possibly datable a year or two earlier by reason of its slighter lesser range. While many early upright pianofortes are of a design modelled on the traditional harp shape (e.g. the Museum's 'Giraffe piano' by Van der Does of Amsterdam, No. 45), the *Euphonicon* is very late for an instrument of this general form and is also apparently unique in its use of violin-type sound-boxes as tonal amplifiers.

6. The instrument was acquired by purchase in 1874 for £20.

7. Reference: HARDING, pp. 244–5 and pp. 257–9.

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49. CABINET UPRIGHT PIANO, Collard & Collard, London, *c.* 1840

Mus. No. W. 29–1954

1. The piano is inscribed on the nameboard as follows: *Patent/Collard & Collard/Late/Clementi, Collard & Collard/London.* The serial number 1413 and the name *J. LAMBERT*, presumably the craftsman who built the piano, are branded on the back.

2. The keyboard compass is seventy-eight notes, CC – f^4. The ivory-covered naturals measure 140mm long by 21mm wide. The bevelled sharps of ebony are in the characteristic rounded form favoured by this maker. They measure 87–90mm long by 9–10mm wide. The standard measurement is 489mm.

3. The instrument is fitted with a simple check-action without tapes but with extremely long stickers, as is required in this cabinet type of upright piano. There is a printed label under the lid, giving instructions for its maintenance:

DIRECTIONS

1. The action is taken out in the usual manner, after first removing the dampers; but *care must be taken* to lay the action-frame down on its side, to prevent any injury to the damper-stickers.

2. Three screws will be observed in each upright rail of the action-frame: by removing these, the check-rail and damper-stickers may at one be taken away, and any hammer set to the strings with the greatest ease.

3. To regulate the jacks, take a piece of strong wire bent to a right angle at one end, and pass it between the damper-stickers into the eye of the jack-screw.

Under the printed text the following is written in an italic hand in ink: 'The excellence of this invention will be readily discovered by the eye of an intelligent mechanic, as by the finger of an accomplished performer.'

The hammer coverings are of felt. The two pedals control the raising of the dampers (which extend to c^3) and the *una corda* shifting of the action.

4. The stringing is bichord throughout. The lowest nineteen courses are overspun and pass over the short bridge. The instrument is straight strung.

5. The case is of rosewood veneer on rosewood. It is surmounted by a pediment carved with an egg-and-dart frieze, supported on two colonettes with Corinthian capitals, which enclose a panel of floral embroidery in wools and silks on canvas applied to flannel. The keyboard lid is curved and has carved handles. The keyboard is supported on two hexagonal pillars turned at top and bottom.

The instrument measures 1880mm high, 1320mm wide and 635mm deep.

6. A similar cloth-fronted cabinet upright piano is seen in a painting in the Museum's collection, *The Governess* by Richard Redgrave, R.A., Museum No. F.A. 168.

7. The piano was presented to the Museum in 1954 by Dr P. Dingle.

49a

50. UPRIGHT PIANO, Collard & Collard, London, *c.* 1855–1875

Mus. No. W. 20–1974

508

1. The instrument is inscribed *Collard & Collard* on a brass plate set into the nameboard.

2. The compass is eighty-five notes, AAA – a^4. The standard measurement is 490mm. The ivory-covered naturals measure 140mm long by 21mm wide. The ebony sharps are in the characteristic form with rounded fronts favoured by this maker. They are bevelled and measure 87–90mm long by 9–10mm wide.

3. The action is of a simple sticker type without tapes. The overdampers extend to f^2. The instrument is straight-strung with eight unichord overspun courses, twenty bichord overspun courses and the remaining fifty-seven courses of bichord plain wire. In addition to a damper-pedal, there is a shifting soft pedal.

4. The case is of softwood carved with elaborate Neo-gothic ornament in a style reflecting contemporary German influence. The case is dressed with a yellow varnish. There is a folding music-desk. The instrument is 1224mm high, 1380mm wide and 697mm deep. (It was previously reported that a number, 5618, suggesting a date of manufacture of 1831, had been found in the piano, along with other pencilled dates around 1900. Both from the type of construction and the distinctive decoration, a date between 1855 and 1875 would seem more probable, a period when many such cottage pianos were produced.)

51. UPRIGHT PIANO, F. Priestley, London, *c.* 1860

Mus. No. W. 43–1926

1. The instrument is inscribed on the nameboard: *F. Priestley, 15, Berners Street, Oxford Street*; and on the soundboard: PRIESTLEY'S/PATENT/LONDON/1468 (the lettering stamped, the serial number written in ink).

2. The keyboard compass is of eighty-two notes, CC-a^4. The standard measurement is 492mm. The ivory-covered naturals, with key fronts of painted wood, measure 151mm long by 23mm wide. The ebony sharps are bevelled, measuring 91–95mm long by 10–13mm wide. The action is a simple check-mechanism without tapes and is fitted with underdampers. The right-hand pedal lifts the dampers and the left-hand pedal shifts the action to *una corda*.

51a

3. The instrument is straight-strung and bichord throughout, after the initial overspun unichord section, CC-AA. There follow three bichord sections: AA-sharp-A, copper overspun on steel; A-sharp-g, steel overspun on steel; and g-sharp-a^4 of simple steel.

4. The case is of unpolished American walnut, with a simple, collapsible music desk, and two candleholders of copper at either end of the keyboard. The framing is entirely of wood. The two pedals are also of wood. The piano case was painted by Edward Burne-Jones with scenes from the 'Chant d'Amour', and of Death and maidens playing musical instruments. The instrument measures 1270mm long, 935mm high and 469mm deep.

While it is true to say that the piano is of decorative interest only, since it is a relatively old-fashioned and simple instrument for its period, it has nonetheless great documentary value. The painter's widow described how the piano was acquired in 1860 and then worked on by her husband:

> '. . . Mrs Catherwood [Burne-Jones' aunt] gave us a piano, made by Priestley of Berners Street, who had patented a small one of inoffensive shape that we had seen and admired at Madox Brown's house; we had ours made of unpolished American walnut, a perfectly plain wood of pleasing colour, so that Edward could paint upon it. The little instrument when open shows inside the lid a very early design for the "Chant d'Amour" and on the panel beneath the keyboard there is a gilded and lacquered picture of Death, veiled and crowned, standing outside the gate of a garden where a number of girls, unconscious of his approach are resting and listening to music. The lacquering of this panel was an exciting process, for its colour had to be deepened with heat while still liquid, and Edward used a red-hot poker for the work . . .' (Georgina Burne-Jones, *The Memorials of Edward Burne-Jones*, London, 1904, Vol. I, p. 207).

5. The instrument entered the Museum's collection as the gift of Mrs J. W. Mackail in 1926.

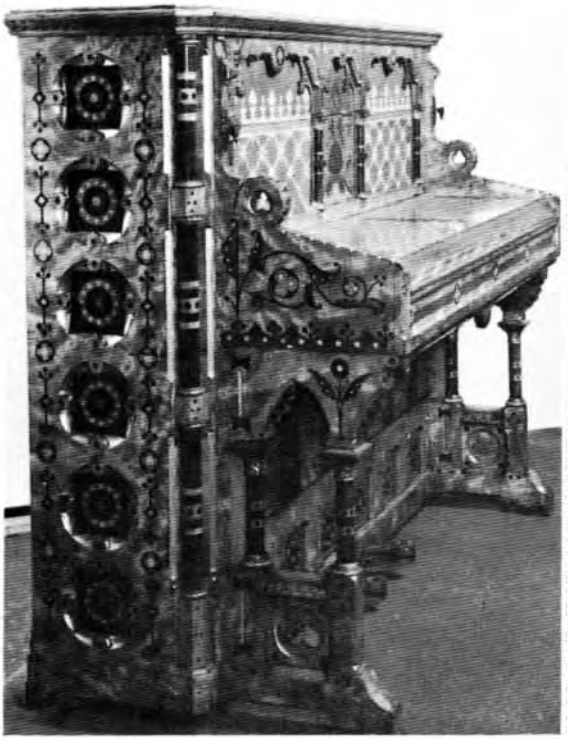
52. UPRIGHT PIANO, Collard & Collard, probably designed by Charles Bevan,

c. 1865 Mus. No. W. 6–1968

1. The instrument is signed on the nameboard behind the keys in polychrome transfer: *Collard & Collard*. At the treble end of the wrest-plank there is a die-stamped legend: *480 Collard & Collard*. Four names, presumably of workmen who made the case, are die-stamped in the wood: *Wm Dockett, J. O'Neill, H. Richmond* and *W. Meadley*. The top key is die-stamped, presumably with the name of the keyboard maker: *W. Hutchinson*.

2. The compass is eighty-five notes, AAA – a^4. The standard measurement is 493mm. The naturals are covered with ivory and, exceptionally, fronted by ivory rather than bone or celluloid, and measure 22mm wide by 151mm long. The

52a



52b

sharps, with the rounded front long characteristic of the keyboards of this firm, are not of ebony but of a synthetic plastic material that is coloured black and is glued on wooden cores: they measure 100mm in total length and 10.5mm in width.

3. The piano is fitted with a tape-check sticker upright action with overdampers. The hammers are felt-covered in the modern manner. There are two brass-faced pedals, a damper pedal to raise all the dampers, and a soft pedal that shortens the hammer stroke.

4. The piano is straight-strung on a wooden frame with an iron hitchpin rail. The first eight courses are overspun unichord. The next nineteen courses are bichord overspun, while the plain wire courses to the top of the compass comprise thirty-six bichord courses and twenty-two trichord courses. The overdampers extend to b^2.

5. The soundboard is of spruce. The barring appears to be of conventional type.

6. The instrument measures 1526mm wide by 1208mm high by 670mm deep. The case, veneered in satinwood and richly inlaid, was probably designed by Charles Bevan, who was responsible for the appearance of a certain amount of furniture in the reformed Gothic style in a closely similar facetted taste. He was active from 1865 to 1871. Apart from the purely decorative elements, the case is of conventional form. There is a folding music-rack that disappears under the instrument's lid. The candlesticks, formerly held in the brackets of the front panel at either side of the music-rack when in use, have been lost.

7. The instrument was acquired by purchase for £100 in 1968 from Major Rudolph Mayer of London.

53. UPRIGHT PIANO, John Broadwood & Sons, London, 1867

Mus. No. Circ. 144–1957

1. The instrument is inscribed on the name-board: *John Broadwood & Sons, London*. The wrest-plank bears the serial number 30818 B. The right-hand case wall is numbered 269 and the lower front panel 818.

2. The keyboard compass is of eighty-two notes, CC-a^4. The keyboard has ivory-covered naturals and ebony sharps. The check action is fitted with overdampers which extend to b^2.

3. The piano is straight-strung on a wooden frame with an iron hitch-rail for the lower portion of the compass only. The stringing is uni-

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chord CC-E, bichord F-b^1, trichord c^2–a^4. There is an iron reinforcing bar along the outer edge of the top of the rear panel.

4. The case is of mahogany with a fretwork front panel and turned front legs in a twisted pattern. There are brass candlestick holders but the candlesticks are missing. The instrument measures 1263mm wide, 1028mm high and 505mm deep.

5. The piano was formerly on the Royal Yacht *Victoria and Albert*, the second one so named, which was launched in 1855. It was acquired by gift from Mrs Edmundson of Gidea Park, Essex.

53b

54. GRAND PIANO, Robert Wornum & Sons, London, *c.* 1870

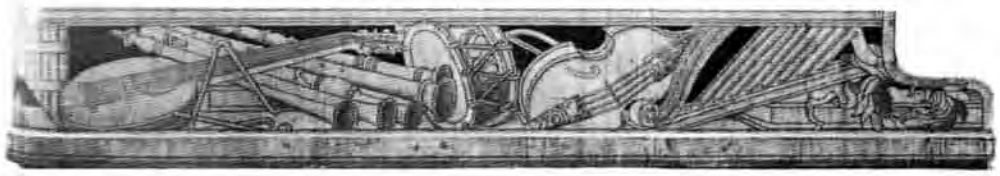
Mus. No. W. 11–1913

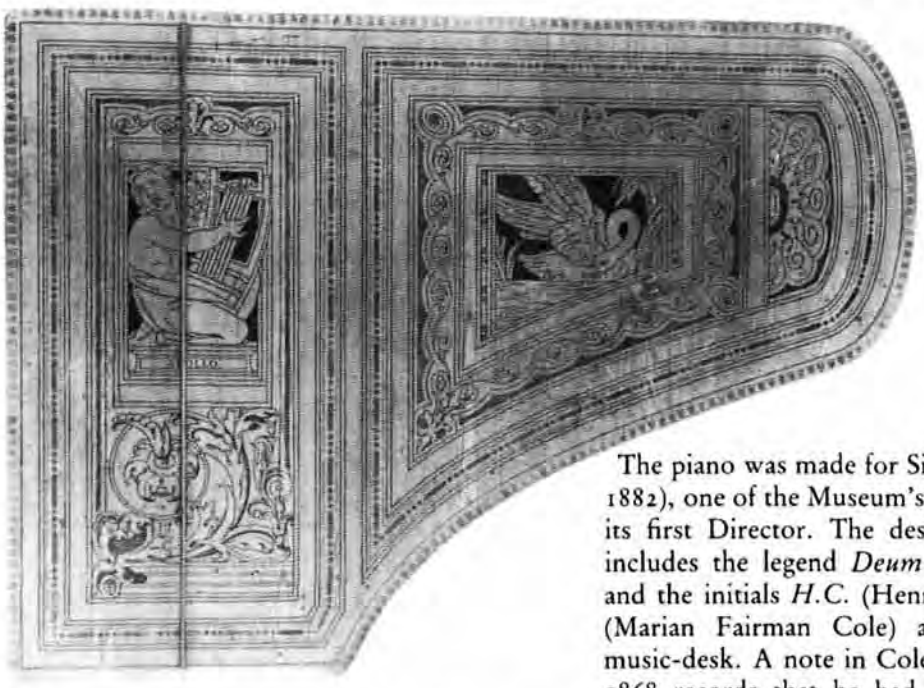
54a

1. The instrument is inscribed on the nameboard: *Robert Wornum & Sons, London*, and with the serial number 12556 within.

2. The keyboard compass is eighty-five notes, AAA-a^4. The standard measurement if 490mm. The ivory-covered naturals measure 137mm in visible length and 22mm wide. The bevelled ebony sharps measure 93–98mm long by 10–12mm wide. The piano is fitted with Robert Wornum's tape-check down-striking action, derived from the tape-check actions he had previously used in his upright and conventional grand pianos. Many nineteenth-century piano builders throughout Europe experimented with down-striking grand actions designed to overcome two disadvantages of the common type of mechanism—the tendency to unseat the strings from the bridges with a consequent adverse effect on the tone, and the weakening of the structure by the gap that permitted the hammers of a conventional grand action to strike upwards. While strictly speaking not the inventor of the tape-check action, which was anticipated by Lichtenthal of Brussels, Wornum is credited with perfecting it substantially in the form in which it is still used in upright pianos today.

The overdampers extend to a^2. There are two pedals for raising the dampers and shifting the action for *una corda*.





54c

3. The piano is strung with three overspun unichord, sixteen overspun bichord and nine overspun trichord courses, with the remaining fifty-seven trichord courses of plain wire. The strings are individually looped to the hitch-pins throughout the compass.

4. The case is of pine and measures 2060mm long, 1355mm wide and 351mm high, with a total height of 962mm from the floor. It is decorated with painted designs by John Gamble (1837–1911), consisting of a panel depicting Apollo with his lyre, another panel with a swan, and various musical instruments of older type along the sides, including some instruments drawn from the Museum's own collection.

The piano was made for Sir Henry Cole (1808–1882), one of the Museum's founding fathers and its first Director. The design of the inner lid includes the legend *Deum Cole Regem Serva*, and the initials *H.C.* (Henry Cole) and *M.F.C.* (Marian Fairman Cole) are carved into the music-desk. A note in Cole's diary for 21 April 1868 records that he had been in touch with Gamble about the 'INTARSTATURA', clearly a play on the Italian words *intarsia* (inlay or veneering, especially the elaborate type of inlaid design that Gamble's painted decoration resembles) and *tastatura* (keyboard). It is assumed that the completed instrument was delivered around 1870. It was exhibited at the International Exhibition held in London in 1871. Gamble carried out a considerable amount of decoration on the actual building of the Museum during Cole's time as Director. Lady Cole was an accomplished pianist.

5. The instrument was given to the Museum by one of Sir Henry Cole's sons, Mr Alan S. Cole.

6. Reference: HARDING, 163–169, 245–247.

55. GRAND PIANO, John Broadwood & Sons, London, *c.* 1882

Mus. No. W. 2–1961

1. The instrument is inscribed in inlaid lettering on an oval panel in the nameboard: *Broadwood & Sons/case by/Wright & Mansfield*. The serial number 21357 is stamped on the wrest-plank.

2. The keyboard compass is eighty-five notes, AAA – a^4. The standard measurement is 494mm. The ivory-covered naturals measure 146mm long by 22mm wide. The bevelled ebony sharps measure 92–98mm long by 10mm wide.

3. The instrument has an English check grand action with underdampers to b^2. The two wooden pedals control the dampers and the *una corda* shifting of the action.

4. The instrument is straight-strung with individual hitch-pin loops on a full iron frame composed of separate elements bolted together. The stringing comprises eight overspun unichord, three overspun bichord, eight overspun trichord and sixty-six simple trichord courses. The overspun courses are carried on the short bridge.

5. The case is veneered in mahogany, feather-banded around the edges, with stringing courses of satinwood and ebony forming panels on the sides of the case and on the front of the lid. At the corners of each panel there is a shell-shaped quadrant.

There are six tapered legs of square section, with collars top and bottom, fitted with casters. The four legs at the broad end are linked by a curved X-shaped set of stretchers, surmounted at their crossing point by a large urn. All this is veneered with marquetry work similarly to the case. The pedals are attached at the front of the forward stretcher.

The cabinet-making firm of Wright & Mansfield made high-quality furniture during the 1870s and 1880s and played an important role in the development of the neo-Georgian style. The Museum's collection includes a notable example of their work in the large cabinet made for the Paris Exhibition of 1867 (Museum No. 548–1868).

6. The piano was given to the Museum by Mr Victor Rossini.

56. GRAND PIANO, John Broadwood & Sons, London, 1882

Mus. No. Circ. 45–1962

1. The instrument is inscribed on the name-board: *John Broadwood & Sons/London*. It is signed by the case-designer on the wrest-plank: *Alfred Waterhouse*. The inner surface of the spine is signed; *Parkinson 21657*. The action is die-stamped: *Baker 21657*.

2. The keyboard compass is eighty-five notes, AAA – a^4. The standard measurement is 493mm. The ivory-covered naturals measure 152mm long by 22mm wide. The bevelled ebony sharps measure 92–98mm long by 9.5mm wide.

3. The piano has an English check grand action. The overdampers extend to b^2, but are set back behind the hammer strike-line as if for under-dampers. The two pedals control the raising of the dampers and the action shift for *una corda*.

4. The instrument is straight-strung with individual hitch-pin loops. There is a full iron frame composed of separate elements bolted together. The stringing comprises eight overspun unichord, three bichord overspun, and seventy-four simple trichord courses. The strings are tuned by a special patent wrest-pin device. The following appears on the soundboard:

John Broadwood patent pin-piece screw pin – Notice to Tuners:

The pins, being screwed into the metal and wood must not be struck with the hammer. SHOULD A STRING BREAK, take the coil off without drawing the Pin, then turn the pin up 1/8 & 1/16, cut the length of new wire off three inches behind the Pin, and insert the end in the Drilled Hole.

The scaling and strike-line are as follows:

AAA	1865mm (220mm)
c^2	304mm (41mm)
a^4	46mm (7mm)

56a

5. The case was decorated to the design of Alfred Waterhouse, the renowned architect of the Natural History Museum in South Kensington, A.R.A. (1830–1905). It is constructed of basswood with mahogany legs, and is inlaid with boxwood and mother-of-pearl. The case is of especially heavy construction, with cheek and spine scantlings of 37mm, 28mm at the tail and 29mm along the bentside. The music-desk is unusual in that the horizontal panel at the right-hand side can be raised so as to serve as a second music-desk for a musician facing the cheek of the instrument. There are two metal candle-holders.

The piano measures 2540mm long, 1354mm wide and 342mm high. The total height above the floor is 942mm.

6. The piano was given to the Museum in 1962 by Michael Waterhouse, PRIBA, a grandson of the designer, and his wife.

57. GRAND PIANO, John Broadwood & Sons, London, 1883

Mus. No. W. 23–1927

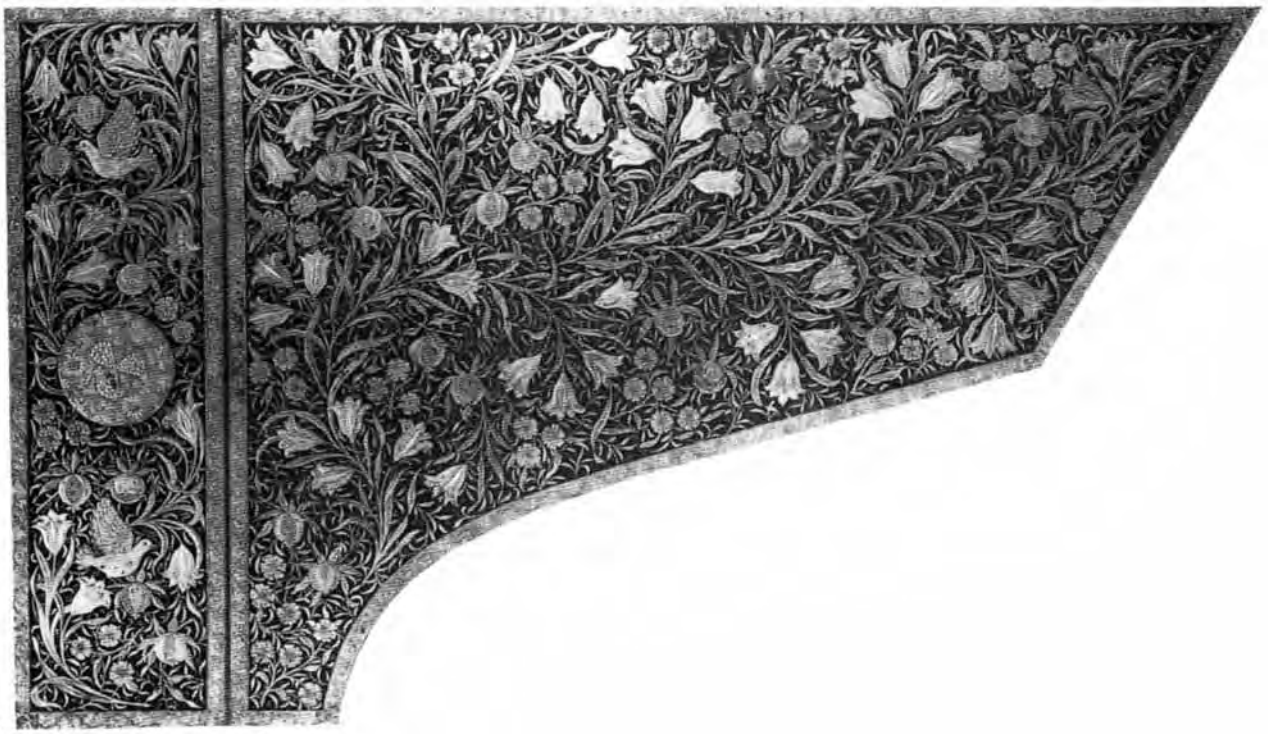
1. The instrument is inscribed on the nameboard, in inlaid lettering: *John Broadwood & Sons/London*.

2. The keyboard compass is eighty-five notes, AAA-a^4. The standard measurement is 492mm. The ivory-covered naturals measure 22mm wide by 147mm in visible length, with 48mm keyheads. The bevelled ebony sharps measure 89–97mm long by 10–11mm wide.

3. The instrument is straight-strung with individual hitchpin loops on an iron frame composed of separate elements bolted together. The stringing comprises eight overspun unichord courses, three overspun bichord courses, six overspun trichord courses and sixty-eight simple trichord courses. The scaling and strike line are as follows:

AAA	1840mm (230mm)
c^2	305mm (35mm)
a^4	45mm (13mm)

57a



57b

4. The instrument has an English check action with underdampers to b^2. The dampers are strongly graduated in size from bass to treble, from *c.* 90mm to *c.* 45mm. The two wooden pedals operate the *una corda* (left) and sustaining (right) devices.

5. The oak case is stained green (now faded) and decorated with birds, fruit and flowers executed in relief in silvered and gilt gesso. The decorative scheme was sketched by Sir Edward Burne-Jones and designed in detail by Kate Faulkner of William Morris's firm, Morris & Company; she also executed the work on the case. There is a simple oak music-stand of lattice design. The instrument was made for Mr Alexander Ionides of No. 1 Holland Park, London, and was displayed, both at the 1888 Arts and Crafts Exhibition and at the Exhibition of Decorative Arts of Great Britain and Ireland, Paris, 1914. The piano measures 2658mm in length, 1405mm in width and 457mm in height (965mm from the floor).

6. References: The piano is illustrated *in situ* in Lewis F. Day, 'A Kensington interior', *The British Architect*, 23 November 1888, 139, at 141. See also John Broadwood and Sons, *Album of Artistic Pianofortes*, London 1895; *The Art Journal*, 1893, 141; Gleeson White, 'An Epoch-making House', *The Studio*, xii (1898), 102; Catalogue of Messrs. Morris and Company, 1909, 72; W. R. Lethaby, 'Phillip Webb and his Work', *The Builder*, 6 November 1925; WILSON, 1972; WAINWRIGHT, 209.

7. The instrument was given by Mrs A. C. Ionides.

58. UPRIGHT PIANO. John Broadwood & Sons, London, *c.* 1903

Mus. No. W. 15–1976

1. The piano is inscribed on the nameboard behind the keys: *John Broadwood & Sons, London*. It bears the serial number 95399. The legend *John Broadwood & Sons, London. Est. 1732. Special Appointment to H.M. The Queen. The Prince and Princess of Wales. Gold Medals London & Paris.* is moulded in the cast-iron plate. A dealer's label is attached at the right-hand of the nameboard: *J.C. Sherwin & Sons. Established 1855. Hanley.*

2. The compass is of eighty-five notes, AAA-a^4. The standard measurement is 499mm. The ivory-covered naturals measure 22mm wide and 149mm long. The bevelled ebony sharps measure 9–10mm wide and 93–95mm long.

58a

3. The piano is fitted with a standard tape-check upright action. The hammers are felt-covered in the modern manner. There are two brass pedals, a damper pedal and a soft pedal that operates by shortening the hammer stroke.

4. The piano is straight-strung with a full iron plate with agraffes. The first twenty strings are unichord overspun, the next thirteen notes bichord overspun and the remaining notes trichord plain wire. Underdampers are fitted extending to c-sharp^3.

5. The soundboard is of spruce. The barring appears to be of conventional type.

6. The piano measures 1168mm high, 1372mm wide and 622mm deep. The case is of ebonized mahogany. The back is filled by a frame covered in dark brown cotton twill. The case is decorated by elaborate roundels of pewter and carved wooden flowers on its exterior surfaces. The inner surfaces of the key surround are ornamented with marquetry patterns with embellishments in tinted ivory. The handles and hinges are silver-plated. The 'Manxman' model was designed by M. H. Baillie Scott (1865–1945) in 1896 and is unique in that the keyboard, as well as a music-shelf that extends for its entire length, is entirely enclosed by the projecting sides, the two doors and the lid of the instrument, as with a cupboard and in contrast to the usual form of upright piano with a projecting keyboard. This piano was constructed to the highest standards of craftsmanship.

8. References: Michael Wilson, 'Updating the Ivories: the piano designs of Baillie-Scott (1865–1945)', *Country Life*, January 22, 1976; WAINWRIGHT, 235.

1. The instrument is inscribed *Römhildt/Weimar* in brass inlaid letters surrounded by a decorative motif in characteristic *Jugendstil* form, on the fallboard. In addition, the cast-iron gilded plate includes moulded lettering of the name *Römhildt* and a transfer on the soundboard identifies the instrument as from the *Römhildt Pianoforte-fabrik AG*. The instrument bears the serial number 9234 and is thus datable to 1906.

2. The keyboard compass is of eighty-five notes, AAA-a^4. The piano is of modern construction with a full iron plate and overstrung. The tape-check action is fitted with underdampers (to d-sharp^3). There are two pedals, a soft pedal on the left that shortens the hammer stroke, and a sustaining pedal on the right that raises the dampers. The standard measurement is 497mm. The ivory-covered naturals are of 147mm overall length, with 50mm key-heads, and 22mm wide. The bevelled ebony sharps measure 90–95mm long by 9–12mm wide. The stringing includes thirteen unichord overspun choirs, fourteen bichord overspun choirs and the remaining twenty-seven choirs of simple trichord stringing.

3. The case is of oak and was designed by Henry van de Velde (1863–1957), a prominent figure in the turn-of-the-century *Art Nouveau* (or *Jugendstil*) movement. The piano, thus, is primarily of decorative rather than musical importance. It measures 1582mm wide by 1295mm high by 661mm deep. There is a simple matching piano bench of oak with its seat upholstered in brown cloth. The piano case is decorated with simple relief ornamentation.

4. The piano was acquired, with other furniture *en suite*, by purchase from Admiral Gerhard Wagner, retired, of Hamburg.

59a

60. UPRIGHT PIANO. Collard & Collard. London. case by Messrs Shoolbred

Design attributed to H.W. Batley (fl. *c.* 1870-1910), 1881. Mus. No. W. 26–1983.

1. The instrument is stamped on the soundboard, immediately below the upper lid: *155/Collard & Collard.* Below the inscription is written the serial number: 115313. To the right of it is a printed label, which reads *Directions for regulating/To adjust the sticker to the hammer butt/To adjust the set-off of the hammer/To take out the action.* The following inscription is found on the front in the central panel above the keyboards: *With. Voice. Of. Angels/In. Hir. Armonie.*

2. The compass is eighty-five notes, AAA–a^4. The standard measurement is 495mm. The ivory-fronted and covered naturals are 152mm long and 23mm wide. The rounded ebony sharps are 104mm long and 12mm wide.

3. The piano is fitted with the Collard & Collard spring-and-loop action. The hammers are felt-covered and the dampers placed in front of the stringing. The wooden pedals are tipped with brass discs. The right pedal lifts the dampers from the strings and the left pedal lowers the célèste, a felt strip, to within the range of the hammers in order to produce a soft, velvety sound.[i]

4. The piano is overstrung and fitted with eight overspun monocords, AAA–EE, fourteen overspun bicords, FF–F#, and sixty-three simple tricords, G–a^4.

5. The piano has a wooden frame, fitted with a spruce soundboard and a cast iron hitch plate.

6. The piano measures 1238mm high, 1410mm wide, 762mm deep. It is fitted with a folding music stand, concealed inside the upper case when not in use. The case is of carved boxwood. The workings of the piano were made by Collard & Collard and sent for completion to Messrs Shoolbred of Tottenham Court Road on 4 March 1881.[ii] The design of the case has been attributed to H.W. Batley, a former pupil of Bruce Talbert and employee of the firm.[iii] The piano is similar to a cabinet made to his designs by Shoolbred & Co. for the Paris Exhibition of 1878. It also resembles pieces of furniture included in Batley's *Series of Studies for Domestic Furniture Decoration* (London, Sampson Law, 1883). The decoration is influenced by Japanese art, which became increasingly popular in England during the 1860s and was enthusiastically adopted by the Aesthetic Movement from about 1870.

7. The instrument was bequeathed by Donald Arthur in 1983.

61. SEMI-GRAND PIANO, John Broadwood & Sons, London, 1906-07

Mus. No. W. 38-1984

1. The piano is inscribed on the nameboard behind the keys: *John Broadwood & Sons/ London*. It bears the serial number 49330 painted on the iron frame, nearest to the two lowest notes, and the Royal Coat of Arms stamped on the bentside of the frame.

2. The compass is eighty-eight notes, AAA–c^5, and the standard measurement 495mm. The ivory-covered naturals are 23mm wide and 153mm long. The bevelled ebony sharps measure 12mm wide and 98mm long.

3. The piano is fitted with a Roller-Knotch action, supplied by Schwander of Paris. The hammers are covered with felt. There are two oak pedals: the right one raises the dampers and a left one shifts the hammers to strike *una corda*. They are connected to the main body of the piano with decorative wrought iron rods.

4. The piano is overstrung with eight overspun unicords, 15 overspun bicords, and 65 simple tricords. The strings are fitted from AAA to e^2 with overdampers, the lengths of which are gradated from 71cm at AAA to 38cm at e^2. The scaling line and strike line are as follows:

AAA–1427mm (185mm)
c^2–325mm (35mm)
c^5–48mm (6m)

5. The soundboard is of spruce, the grain of which runs across (as opposed to the length of) the piano – a rare feature amongst Broadwoods. The strings are hitched to a curved frame of malleable iron, a strengthened form of cast iron.

6. The piano measures 997mm high, 1492mm wide and 2133mm long. The oak case was originally designed by Sir Edwyn Lutyens (1869–1944) for his 'oak drawing room in the Jacobean Style', furnished by Waring & Gillow for the English Pavilion, also designed by Lutyens, for the Paris Exhibition of 1900. He may well have been inspired by the Knole harpsichord, made by John Haward of London, in 1622. Lutyens's piano rests on thirteen slender balustraded legs, linked by curved stretchers, as opposed to the conventional three bulbous legs of Victorian design. Lutyens was praised for dispensing with the standard 'lyre-shaped' pedal frame 'which had no functional purpose to fulfil' and replacing it with 'two upright steel rods' which 'are frankly exposed to view'. John Broadwood & Son are recorded as having produced ten pianos of the Paris Exhibition design, priced at 350 guineas, between September 1903 and July 1907. The malleable wrought iron frame was designed by George Daniel Rose, an employee of John Broadwood & Co. This enabled the grand piano to withstand a tension of 16 tons by means of a single curvaceous frame, and dispense with a series of iron girders that had hitherto provided Broadwood grands with the necessary strength. This invention greatly improved the resonance of the instrument.

This piano was completed on 16 February 1907 and despatched to W.F. Cole & Sons, Sheffield, whence it was delivered to C.D. Leng (1861–1921), the editor of the Weekly Telegraph and son of Sir William Leng (1825–1902) a campaigning journalist and owner of the Sheffield Telegraph. Neither father nor son are known to have been amongst Lutyens's major clients.

7. This piano was purchased for £9,000 in 1984.

62. OCTAVE SPINET, Robert Goble (1903-1991), Oxford, 1950

Mus. No. W. 10-1994

1. The instrument is inscribed ROBERT· GOBLE·ANNO·MCML on the nameboard, and signed *Robert Goble. Oxford 1950* at the right end and stamped *ROBERT GOBLE 41* at the left end of the soundboard, both in front of the wrest pins.

2. The compass is forty notes, c–c^4. The standard measurement is 465mm. The ebony covered naturals are 93mm long and 22mm wide. The edges are painted gold and carved with gothic arcading. The boxwood sharps are 49mm long and 10mm wide. The scaling and plucking points are as follows:

c 721mm (31mm)
c^1 612mm (119mm)
c^2 389mm (124mm)
c^3 213mm (97mm)
c^4 106mm (68mm)

3. The jacks, made of pearwood, were requilled by Robert Goble & Sons in November 1969. The body of the instrument is yew and the soundboard of sprucewood. The soundboard is 3mm thick and decorated with gothic arcading along the outer edges. The wrest plank is yew. The bridge nearest the hitchpins is of oak and that nearest the wrestpins beech.

4. The instrument is 150mm high, 76mm long and 500mm deep. Robert Goble studied instrument making under Arnold Dolmetsch (1858–1940), and established his own workshop at Hazlemere, Surrey. In 1947 he moved his business to Headington, Oxford. From 1950 he concentrated on keyboard instruments, including octave spinets, which he called *octavinas*. The instruments, including this one, were inscribed by his wife, Elizabeth, a pioneer in the performing of early music, and a descendant of John Charles Robinson (1824–1913), first Superindendent of Art at the South Kensington (now Victoria and Albert) Museum. The serial number of the instrument is 41. Goble's numbering started at 30. The instrument was originally made in 1950 at a cost of £58 for Bruno Turner, a Spanish Renaissance music specialist, and acquired by the donor in 1954.

5. The instrument was given to the V&A by Prof. P.J. Lawther, CBE, MB. DSc, FRCP.


ROBERT ✣ GOBLE ✣ ANNO ✣ MCML

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BIOGRAPHICAL NOTES ON THE INSTRUMENT-MAKERS REPRESENTED IN THE MUSEUM COLLECTION

NOTE: Further information about these and other makers of keyboard instruments may be found in BOALCH, COLT-MIALL, GROVE, HARDING and HIRT.

ANTEGNATO, Francesco
A spinet-maker working in Brescia in the second quarter of the sixteenth century. The inscribed nameboard, dated 1537, of the Museum's spinet (No. 490–1899) is all that can with certainty be associated with this maker. It is not impossible that spinets and harpsichords generally supposed to be the work of others are really products of this workshop that later passed through other hands in the course of restoration or trade. See, for example, the spinet inscribed *Johannis Francisi Brisciani 1544* (Milan, Museo Teatrale alla Scala) and the harpsichord bearing two inscriptions, *Francesco de Brescia 1564* and *Domenico da Pesaro 1590* (Dublin, National Musuem of Ireland). See further the Museum's spinet (No. 155–1869), inscribed with both the names of Marco Jadra (*Marci Iadrae MDLXVIII*) and Francis of Brescia (*Francisci Brixiensis fecit 1569*).

BAFFO, Giovanni Antonio
A Venetian harpsichord-maker of great skill and reputation, from whose workshop there survive half a dozen harpsichords and spinets dated from 1570 to 1581. Three of these are of outstanding quality: the Museum's harpsichord of 1574, a similar instrument of 1579 (Paris, Musée du Conservatoire) and a spinet of 1570 (Paris, Musée de Cluny).

BROADWOOD, John, *see* SHUDI

CLEMENTI & COMPANY
The firm of musical-instrument-makers, music-sellers and publishers was founded by Muzio Clementi, the eminent composer and virtuoso pianist, and various partners, including John Longman, formerly of Longman & Broderip (see below), and Frederick Augustus Hyde, Frederick William Collard, Josiah Banger and David Davis, under the style of Longman, Clementi & Co. This firm traded at Longman & Broderip's former premises from October 1798 until February 1800 when Longman retired. The firm then became known as Clementi, Banger, Hyde, Collard & Davis or, often, simply Clementi & Co. From August 1810 the firm was known as Clementi, Banger, Collard, Davis & Collard, becoming Clementi, Collard, Davis & Collard in 1819, and Clementi, Collard and Collard in 1822. After Clementi's death in 1832, the firm continued to manufacture pianos under the name Collard & Collard. It was absorbed by the Chappell Piano Company in 1929, and production came to an end in 1971.

COLLARD & COLLARD, *see* CLEMENTI & COMPANY

CRANG, John
A native of Bishop's Nympton, North Devon, Crang was apprenticed to the Loosemore organ-building workshop in Exeter. After moving to London in the early 1740s, he set up his workshop in Wych Street 'backside St. Clement Dane's, Strand'. He benefited from the patronage of Sir George Amyard, M.P. for

Barnstable, and also of Handel's executors. He was entrusted with the care of Handel's organ in Great Coram Street and in time developed a flourishing business as an organ-builder and harpsichord-maker. There survive a spinet of 1753 (New York, Metropolitan Museum of Art), the harpsichord portion of a claviorgan of 1745 (private collection, Redhill, Surrey) and the Museum's two instruments, the 1758 spinet (No. W. 16–1947), very similar to the New York instrument, and the organ of the late 1760s made for Fonthill Splendens (No. W. 13–1980). In 1771 he formed a partnership with his brother-in-law, James Hancock, and in the 1780s, having amassed considerable property in the West Country, he retired to his birthplace, leaving Hancock in charge of a successful firm, which carried on as Crang & Hancock, eventually becoming Hancock & Hancock.

FLÓREZ, (Given names unknown)
Spanish piano-maker active in Madrid during and probably after the reign of Charles IV (1788–1808).

FRITZ, Barthold
Born in Holle in 1697, Fritz spent his working life as an organ- and clavichord-maker in nearby Brunswick where he settled in 1720. Although reported to have made more than five hundred clavichords, only four survive today. His treatise on tuning, published in 1756, claiming to teach the art of equal temperament, went through five German editions and one Dutch.

GANER, Christopher
A native of Leipzig, he probably learnt the craft of instrument-making in Saxony before emigrating to London *c.* 1760 as one of the 'Twelve Apostles', the dozen pioneering builders of square pianos, including Zumpe and Pohlman. Surviving instruments and documentary evidence indicate that he was active in London as a harpsichord-, spinet- and piano-maker between 1774 and 1811.

HARRIS, Baker
A spinet- and harpsichord-maker working in Denmark Street, London, between 1740 and 1780. Over a dozen spinets survive as well as one, or possibly two, harpsichords. It is not known whether he was related to other spinet-makers of the same surname in London during the eighteenth century.

HASCHKA, Georg
A Viennese piano-maker, born in Moravia *c.* 1772, active until his death in 1828.

HICKS, Peter
Unknown apart from the inscription, early nineteenth century in character, which appears on the clavichord in the Museum. The doubts concerning the inscription and the instrument are set out in the relevant entry.

HILL, Henry
A London spinet-maker, born there in 1715, apprenticed in 1731 to John Ladyman, and admitted to the freedom of the Joiners' Company in 1745. The Museum's octave spinet of 1750 is apparently his only surviving instrument.

HITCHCOCK, Thomas
A member of a well-known family of London spinet- and harpsichord-makers, Thomas the younger (*c.* 1685 – after 1733), the builder of the Museum's harpsichord, was the son of Thomas the elder (*fl.* 1660–1700) and, it is believed, the father of John Hitchcock (? – 1774). Many more spinets by this workshop have survived than harpsichords, of which there remains only the Museum's by Thomas the younger. (The John Hitchcock harpsichord formerly in the Henry Ford Museum, Dearborn, Michigan, was destroyed by fire in 1972).

JADRA, Marco
An Italian virginals-maker to whom three instruments are attributed, dated between 1552 and 1568.

JEROME (Hieronymus Bononiensis)
Jerome of Bologna was active in Rome. He was the maker of the Museum's harpsichord dated 1521, the earliest signed and dated harpsichord known to have survived. He is otherwise unknown, save for a passing reference to the short treble scale of his harpsichords in Michel Corette's *Le Maître de Clavecin*, Paris, 1753, p. 84.

KIRCKMAN
The largest firm of harpsichord-makers in eighteenth-century London. The firm was started by Jacob Kirckman, (1710–1792), a native of Bischwiller, Alsace. He married the widow of the master to whom

he became apprenticed in London, Hermann Tabel, in 1738. His nephew, Abraham, (1737–1794) became his partner in 1772. The business was then carried on by the latter's son, Joseph, who had signed harpsichords with his father from 1789. The firm continued as piano-makers until absorbed by Collard & Collard in 1896.

LONGMAN & BRODERIP
Musical instrument dealers, music-publishers and music-sellers founded in 1767 as John Longman & Co., becoming Longman, Lukey & Co. in 1769, Longman, Lukey & Broderip in 1775. From 1776 the firm was known as Longman & Broderip until it was wound up in bankruptcy in 1798. Broderip went into business with C. Wilkinson and Longman entered into a partnership with Muzio Clementi (see CLEMENTI & COMPANY).

LOOSEMORE, John
An organ- and virginals-maker of Exeter (1613–1681). In addition to the virginals in the Museum, part of the pipe-work and case of the organ he built for Exeter Cathedral survive as do a regal and a chamber organ.

MAHOON, Joseph
A London spinet- and harpsichord-maker known to have been active between 1729, when he received a royal warrant as harpsichord-maker, and his death in 1773. Two harpsichords and a small number of spinets from his workshop survive.

PLAYER, John
A spinet-, virginals- and harpsichord-maker of London (*c.* 1634–*c.* 1705) from whose establishment eight instruments survive, the earliest of which is a virginal of 1664.

POHLMAN, Johann
A harpsichord- and pianoforte-maker, Pohlman was probably one of the emigrant instrument-builders who left Saxony during the Seven Years War (1756–1763). His earliest and latest ascertained dates are 1767 and 1793. Although references to his harpsichords have come down to us, his only surviving instruments are square pianos like that to be seen at Osterley Park House, which forms part of the Museum's collection.

RÖMHILDT PIANOFORTE-FABRIK AG.
This Weimar firm was active during the last quarter of the nineteenth century and the first quarter of the present one, building instruments of modest pretensions for domestic use.

ROSSI, Annibale dei
This Milanese virginals-maker is known to have been active from 1542 until 1577. He was succeeded by his son, Ferrante, who worked until at least 1595.

RUCKERS
A family of harpsichord- and virginals-makers who acquired a higher reputation than any other maker in the period before the introduction of the pianoforte, and whose influence affected harpsichord-building throughout transalpine Europe. The Museum's two Ruckers harpsichords are by Joannes (1578–1643) and Andreas the elder (1579–after 1644), the two sons of the founder, Hans Ruckers the elder (*c.* 1550–*c.* 1598). Genuine Ruckers instruments continued in great demand throughout the eighteenth century and, consequently, underwent enlargement and rebuilding to meet the musical requirements of a later age. Imitations of Ruckers harpsichords were also frequently created to meet a demand greater than the supply of genuine instruments could satisfy. An example of the latter is the harpsichord at Ham House, now considered to be an English imitation of a Ruckers harpsichord, as subsequently enlarged, but made entirely in about 1730.

SHUDI, Burkat
Originally named Burckhardt Tschudi, he was born at Schwanden, Switzerland in 1702 and emigrated to London in 1718. There he was apprenticed to Hermann Tabel, to whom Kirckman was also indebted for his craft instruction. Shudi's earliest known instrument is dated 1729. In 1769 his son-in-law and apprentice, John Broadwood, was taken into partnership and from that time instruments were signed by both. Shudi retired in 1772 and died the next year. Broadwood carried on, becoming the leading English piano-maker of his time; the firm is still active today as John Broadwood & Son, Ltd.

STODART, William
He succeeded his father, Robert Stodart, who had founded a firm of piano-makers in 1775, after working

at Broadwood's where he, together with Americus Backers, developed the English grand piano action in the early 1770s. William became a partner in the 1790s. The firm became William Stodart & Son *c.* 1825 and continued until the death of Malcolm Stodart, William's son, in 1861.

TASKIN, Pascal
A Belgian, born near Verviers in 1723, he migrated to Paris in early manhood and worked in the Blanchet workshop, the most celebrated harpsichord-manufactory of the time. In 1766, having recently become a member of the Parisian instrument-makers' guild, he married his master's widow of a few months but until at least 1770 always signed himself *Pascal Taskin, élève de Blanchet*. He was famous not only for his fine harpsichords but also for his enlargement and rebuilding (*ravalement*) of Flemish instruments of the seventeenth century, in many of which he incorporated his invention, the *peau de buffle* register, a soft leather stop, said to date from 1768. He became the royal instrument-maker in 1774 but was able to adapt quickly to the revolutionary régime after 1789. A number of his pianos as well as harpsichords and spinets survive, along with *ravalements* of Flemish and earlier French instruments. Taskin died in 1793.

THEEWES, Lodewyk
A native of Antwerp, Theewes was a member of a family of harpsichord and lute makers, becoming a member of the makers' guild in 1561. In 1571 he is recorded as living in London (Southwark) as a virginals-maker. The name is spelt as above on the Museum's claviorgan, his only surviving instrument, but documentary sources record such variants as Tyves, Teeus and Theeuwes.

TOMKISON, Thomas
An English piano-maker, active in Dean Street, Soho between 1798 and 1851. The workmanship of his surviving grand pianos is extremely fine. He produced over nine thousand pianos during his working life.

VAN DER DOES, Corneille Charles Emanuel
A Dutch piano-maker, born at Voorburg near The Hague in 1769. He had settled in Amsterdam by 1819 and died there in 1827. The firm was continued by his son, Cornelis Ferdinant (1820–92) who removed to The Hague in 1840.

VAUDRY, (Jean-Antoine?)
Jean-Antoine Vaudry, whose dates according to SAMOYAULT-VERLET were *c.* 1680–1750, could hardly have made the Museum's instrument, dated 1681. Possibly he was older than previously believed or the maker of the Museum's fine instrument was an ancestor of the later Jean-Antoine Vaudry.

WHITE, Thomas
A London virginals-maker. It is not known when he was born but he died in 1660. His father and his two sons were also engaged in the same profession. Five of his virginals survive.

WORNUM, Robert Jr.
English piano-maker (1780–1852). While working in his father's firm, Wilkinson and Wornum, he developed two very successful small upright piano models. After his father's death in 1815, he formed his own firm, mainly concerned with building simple and inexpensive pianos. In 1828 he introduced a very dependable cottage-piano action, soon copied by two leading French piano-makers, and by 1837 was building the tape-check upright piano action which is the prototype of modern upright actions. He was one of several piano-makers who experimented with downstriking grand piano actions, as in the Museum's instrument. The firm was continued by his son but was wound up in 1900.

ZUMPE, Johann Christoph
A German harpsichord-maker, first employed in the Silbermann workshop, he migrated to London in the 1750s and worked briefly for Shudi before setting up in about 1760. He soon became famous for his square pianos for which the demand was so great that he passed orders on to Johann Pohlman. Between 1769 and 1784 he was in partnerships with Gabriel Buntebart and one Meyer. In 1784 he retired with an ample fortune to Germany.