

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

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New catalogue entries, supplementary notes and bibliography by James Yorke

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Howard Schott and Anthony Baines assert their moral right to be identified as authors of this book

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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.

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CHRISTOPHER WILK JAMES YORKE

Victoria and Albert Museum, 2002

STRINGED INSTRUMENTS

GROUP I. THE VIOLS

If we may recognize among musical instruments a hierarchy of those for which great music has been specifically composed, then the viol or viola da gamba must take its place alongside such important instruments as the violin, the lute, and the pianoforte. Viols first came into use at the end of the fifteenth century. A viol is always, whether small or large, played in a downwards position, resting on the knee or between the knees according to its size, and at first sight it may appear to be merely a kind of smallish 'cello with sloping shoulders and six strings. An essential point, however, is that these strings are tuned in the manner of the Renaissance lute (that is, much as a guitar is still tuned today); also, the violist ties the fingerboard with gut frets, as on a lute. Moreover, the strings are of relatively thin gut and the body of the viol is lightly built; the belly, though arduously carved into an arched shape from joined pieces of wood, as in violinmaking, lacks the overhanging edges and bold corners which contribute much to the sturdy appearance of violins and 'cellos. The viol is, in fact, intended for music in a gentle vein, depending not upon wide dynamic range and strong pressures of the bow, but upon a quick, clear speech, unforced in quality and suited to the intimately conversational polyphony of the repertory of the consort of viols—the ensemble of viols of different sizes, treble, tenor and bass. The fashion for playing viols in consort grew up during the sixteenth century, and this remained one of the principal delights of cultivated musicians until almost the end of the seventeenth century. Its finest music is that of such English composers as Byrd, Orlando Gibbons, William Lawes, during whose times professional English violists were as famed abroad as at home, while in France and Germany English viols were reckoned the best that could be obtained, especially for consort playing.

Among the earliest English makers known by surviving instruments is John Rose of London. His bass viol (1/1: Fig. 2) already shows the essentials of the classic form of the viol, which followed the very variable designs produced by earlier Italian makers. Characteristic features include the soundholes in the form of two C's back to back; the inwards slope of the upper part of the back, which adds to the player's comfort; the square 'hook-bar' on to which the tailpiece is hooked at the bottom

of the instrument; and the open scroll (a scroll pierced right through) which many viol-makers favoured as an alternative to a finial carved in the form of a human head or of an animal. In overall proportions it will be noticed that the body length is no greater than the string length (which is the playing length of the strings down to the bridge), whereas by comparison the violin group of instruments have larger bodies (and shorter necks) suited to their more powerful musical nature. The next great maker represented in this Collection is Henry Jaye of Southwark, most of whose viols date from the first third of the seventeenth century. The example shown (1/2: Fig. 1) has a later date and is a tenor viol of small dimensions: the viol-makers allowed some choice in the dimensions of viols for a consort. Later seventeenth-century makers include Richard Meares and John Baker, each represented here by a bass viol (1/3, 1/4: Fig. 3) with purfled ornament on the belly of a kind that goes back to mid-sixteenth century Italy. The Baker viol, like many other old viols, has later been converted for use as a 'cello, no doubt at some time in the eighteenth century, during which viol-playing declined. The art has, however, been revived in the present century, and many viols by the old makers are now in professional use again, supplemented by modern instruments based on the old models.

On the Continent, Busch and Hiltz, both of Nuremberg, made many instruments in the mid-seventeenth century with a lobed or festooned outline (1/8: Fig. 4), previously also used by Rose in some of his instruments. The classic model was executed by many fine makers in France and the Netherlands, and in Germany from the end of the century, especially by the Hamburg school led by Joachim Tielke, whose work is characterized by elaborate decoration (1/10: Fig. 7). At most periods viols were sometimes made with one string more or less than the traditional number of six, e.g. bass viols with an extra string in the bass (1/6: Fig. 5) and small treble viols with a string removed from the bass like the pardessus de viole ('super-treble') made in France in the first half of the eighteenth century for playing in consort with harpsichord and bass viol (1/13). It might be asked why so many of the viols in this Collection, as in others, are bass viols. The explanation is twofold: at every period of viol history the bass viol was played not only in the consort but also as a solo instrument (although it was then preferred in a slightly smaller model known as a division viol); and secondly it became an important continuo instrument, assisting with the bass part in music of many kinds.

Spurious labels, bearing the names of famous makers '(Gasparo da Salo', 'Nicolaus Amati', etc.) are found as much in viols as in violins, lutes, etc. Such labels, where they occur, are nevertheless included in the individual descriptions that follow, for the sake of completeness of documentation.

THE VIOLS

I/I BASS VIOL by John Rose. London; about 1600. Fig. 2.

Label, in ink: John Rose.

Belly of five pieces of pine, double purfled. Back of two pieces of maple. The body is built without any side linings. The neck, with a shaped root, has been narrowed to 5 cm wide at the root, but the fingerboard is 2 cm wider, with an ebony nut 6 cm wide. Open scroll. Tailpiece and fingerboard of ebony with ivory stringing, the tailpiece being attached to a hook-bar. Six oak pegs, probably modern.

Dimensions: Length total 127; belly 70.5. Depth 13. Width of bouts 33.5, 24, 39. String length about 73.

Museum No.: 803-1877.

John Rose worked in London through the second half of the sixteenth century and is believed to have died just after 1600. Contemporary sources also refer to him as John Ross, while on the label of the orpharion dated 1580, in the possession of Lord Tollemache, the name reads Johannes Rosa.

1/2 TENOR VIOL by Henry Jaye. London: 1667. Fig. 1.

Label, in ink: Henry Jaye in | Southwark | 1667.

A tenor viol of the smaller size. Pine belly, double purfled and purfled round the soundholes. A carved oval rose is inset into the upper part of the belly. Back of sycamore with the grain running lengthways and decorated with inlaid stringing with a v-shaped ornament. The sides have been cut down in their lower parts and the corresponding part of the back is formed of a bent mahogany panel as if a later hand had altered the instrument for playing on the shoulder. Sycamore neck, slightly carved at the root, and with a well-carved pegbox with an open scroll. Tailpiece attached to hook-bar. Six pegs.

Dimensions: Length total 78; belly 44. Depth 10. Width of bouts 21, 15, 26. String length about 42.

Museum No.: 173-1882.

Jaye and Rose are numbered by Thomas Mace among the five best viol-makers 'in the World' (the other three names being Aldred, Smith and Bolles). Many magnificent Jaye viols exist, both in collections and in active use. The date marks the present instrument as a late example, most having dates lying between 1610 and 1630. Another Henry Jaye made violins and kits in the middle of the eighteenth century.

1/3 BASS VIOL by Richard Meares. London; 1677. Fig. 3.

Label, printed: Richard Meares, without | Bishopsgate, near Sir | Paul Pinders. London | Fecit 1677 (the last two figures in ink).

Belly of four pieces of pine, double purfled. A formal floral device is inlaid and engraved in the centre. The back is a later replacement, made of two pieces of

sycamore decorated with double lines of purfling with a fancy knot-pattern in the centre. The sides appear to be contemporary with the back. Thin wooden sidelinings to the back, none to the belly. Neck with a spliced repair. Pegbox with a carved woman's head with her hair tied back with a bow, and with scrollwork carved in relief on the back. Tailpiece, attached to hook-bar, and fingerboard are of ebony with ivory stringing. Six boxwood pegs. The neck is still partly fretted with gut.

Dimensions: Length total 121; belly 67. Depth 11.6. Width of bouts 30.5, 22.5, 36.5. String length about 67.5.

Museum No.: 170-1882.

An early though similar viol by Meares, now with a violoncello neck and head, is in the Conservatorio Naçional, Lisbon, dated 1637.

1/4 BASS VIOL by John Baker. Oxford; 1688. Fig. 3.

Label, in ink: Ino. Baker / Oxon 1688.

Belly of five pieces of pine, with double purfling and a central device similar to those on the Meares viol (1/3). Back of three pieces of sycamore, double purfled with decorative loops. The body linings are of canvas. A later neck (secured from inside the body by a large wood screw) and scroll head in crude violoncello style. Plain modern ebony tailpiece attached to hook-bar, and ebony fingerboard inlaid with light-coloured wood. Ivory nut (width 4 cm). Four ebony pegs.

Dimensions: Length total 108; belly 68.5. Depth 12.2. Width of bouts 32, 23, 39. String length about 61.

Museum No.: 171-1882.

The body retains a somewhat antique shape with pronounced slope to the shoulders, and the lower bouts are unusually wide compared with the rest. There was also a William Baker making viols in Oxford at the end of the seventeenth century, as well as a Francis Baker similarly occupied in London. John Baker of Oxford seems, however, to have been the most highly esteemed of these makers.

1/5 TENOR VIOL. English; second half of the seventeenth century. Fig. 2. No label visible.

Belly of five pieces of pine, single-purfled. Back of two pieces of sycamore, slightly bent inwards near the top instead of being normally half-cut. An open scroll. Plain ebony tailpiece, attached to hook-bar, and ebony fingerboard with diagonal cross-banded edges in two shades of brown wood. Nut width 3.5 cm. Six ebony pegs with ivory buttons.

Dimensions: Length total 90; belly 48. Depth 6.7. Width of bouts 23, 16, 26. String length about 52.

Museum No.: 153-1882.

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1/6 BASS VIOL by Frederick Hintz. London; 1760. Fig. 5.

Two labels, one printed: Gasparo da Salo in Brescia. The other in ink: Fred. Hintz / fecit / London 1760.

A seven-stringed viol. Belly of pine in one piece (or two pieces with an invisible join) and with painted lines of simulated purfling. Back made of two pieces of sycamore with painted purfling. Thin wooden side-linings to the body, of which the lower two corners are slightly pointed. An open scroll. Tailpiece, probably later, with crudely scored lines and attached to an end pin. Fingerboard of a wood like pear, with painted lines. Ivory nut (width 4.8 cm). Seven boxwood pegs.

Dimensions: Length total 122; belly 67. Depth 13.3. Width of bouts 30.5, 21.5, 34. String length about 68.5.

Museum No.: 169–1882.

Hintz is listed in Mortimer's Directory of 1763 as 'Guitar-maker to her Majesty and the Royal Family; makes Guittars, Mandolins, Viols de l'Amour, Viols de Gamba, Dulcimers, Solitaires, Lutes, Harps, Cymbals, the Trumpet marine, and the Aeolian Harp' (cf. English Guitar 11/5). No other viol by Hintz appears to be known. He also sold furniture.

1/7 ALTO VIOL. English; late seventeenth century. Fig. 9.

Label, in ink: Andreas Amati Cremonensis Anno 1637.

Belly of three pieces of pine with simulated purfling in black paint. Back of two pieces of sycamore. Wooden side-linings. Probably built as a small tenor viol, the body has been cut down at the shoulders to a large treble, or 'alto', size. Pegbox with a poorly carved head with long hair, and with black inlaid flash and stringing. Modern tailpiece and fingerboard. Ivory nut (width 4.5 cm). Six ebony pegs.

Dimensions: Length total 74; belly 40.6. Depth 5.3. Width of bouts 21, 15.5, 26 (cf. the Jaye viol, 1/2). String length about 39.

Museum No.: 152-1882.

Engel, p. 339.

1/8 BASS VIOL by Paul Hiltz. Nuremberg; 1639. Fig. 4.

Label, partly legible, in ink: Paolo Hi ... / ... fecit / ... anno 1639.

Festooned body. Back of two pieces of sycamore. Belly of two pieces of pine, with purfled ornament and soundholes of a serpentine shape (once wavy altered to f form); also a rose with an eagle, finely carved, partly gilt. Tailpiece and fingerboard decorated with a marquetry pattern in ebony and ivory. The instrument has been renecked at some date with a neck of violoncello type. The pegbox, with a carved head of a woman with the hair tied in a bow in eighteenth-century manner, was originally a viol pegbox for six pegs, the holes for two of them now being plugged.

Dimensions: Length total 121; belly 70. Depth 13. Width of body at widest upper part 34.5, at widest lower part 39.5.

Museum No .: 398-1871.

The instrument is accompanied by a bow with out-curved stick shaped octagonally; total length 70.

A very similar viol by Paul Hiltz, dated 1656, is in the Claudius Collection, Copenhagen.

1/9 BASS VIOL. German; early eighteenth century. Fig. 6. No label visible.

Belly of two pieces of pine, with ivory edges and four lines of simulated purfling in black paint. Back of two pieces of sycamore, bent inwards in the upper part (with an interior strengthening bar at this point) and without a sharp angle. Wooden side linings. The root of the neck and the pegbox are carved in relief with scrollwork. The carved head is of a woman. Tailpiece, attached to a hook-bar, with marquetry of ebony and boxwood with a bird and a butterfly amid scrolls. Fingerboard with fine marquetry floral scrollwork in ivory and tortoiseshell, engraved and blackened. Six dark-stained pegs.

Dimensions: Length total 120.5, belly 68. Depth 13.5. Width of bouts 30, 22.5, 35. String length about 67.5.

Museum No .: 7360-1861.

In the opinion of Günther Hellwig of Lübeck this instrument is by Joachim Tielke, including the fingerboard, but the tailpiece is by Barak Norman.

1/10 BASS VIOL. Possibly by Joachim Tielke. Hamburg; about 1700. Fig. 7. No label visible. Written in ink under the tailpiece, John Cause, 1835.

Belly of two pieces of pine, with an oval rose of ivory pierced and carved with a figure playing the harp. Back of rosewood, slightly arched, with ivory lines and ornamental motifs in the Tielke manner, as also the sides. Wooden side linings. Tailpiece, attached to an ivory and ebony hook-bar, and fingerboard both with marquetry of ivory and tortoiseshell with grotesques; small sections of mother-of-pearl may replace pieces of semi-precious stones. The pegbox, with marquetry similar to the fingerboard, is surmounted by an unusual scroll. The six original pegs are replaced by brass whole-plate machines by Baker, London (early nineteenth century), with ivory pins and buttons. The neck is tied with thirteen gut frets—nearly twice the usual number of a viol.

Dimensions: Length total 117.5; belly 67.5. Depth 13. Width of bouts 30, 22.5, 35.5. String length about 67.5.

Museum No .: 168-1882.

Joachim Tielke (1641-1719) is celebrated for the fine craftsmanship and exuberant

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ornamentation exhibited in his stringed instruments of many kinds (cf. cittern 10/3 and guitar 12/1). Some forty-seven of his bass viols survive. John Cawse, a former owner of the present viol, was, according to Engel, an artist. He may have been responsible for the alteration to the instrument, which was later, in 1845, played in a special concert of early music ordered by the Prince Consort. John Cawse (1779–1862) was a painter.

A list of surviving instruments by Tielke is included in an article on the maker by Günter Hellwig, in *Galpin Society Journal*, XVII, 1964. In his opinion, the scroll is of nineteenth century date, while the fingerboard and tailpiece may be eighteenth century work.

t/II BASS VIOL by Martin Voigt. Hamburg; 1726. Fig. 8.

Label, in ink: Martin Voigt in Hamburg me fecit. 1726. \$4.

Belly of two pieces of pine, double purfled in ebony. Back of twenty-five strips of ebony with ivory stringing, and the sides similar of nine strips. Wooden side linings. Neck root and open scroll of ebony inlaid with mother-of-pearl engraved, as are also the ebony tailpiece, hook-bar and fingerboard. The back of the neck is veneered alternately with ivory and ebony strips. Ivory nut (width 6 cm). Six pegs.

Dimensions: Length total 121; belly 67. Depth 14. Width of bouts 30-5, 23, 36. String length about 66-5.

Museum No.: 1298-1871.

With this viol is a bow (1298A-1871) of ebony with ivory stringing matching the instrument.

Martin Voigt, of whom little is recorded, may have been a pupil of Joachim Tielke, whose style is recalled in this sumptuous instrument.

1/12 BASS VIOL. English. Fig. 5.

Label, printed: Gasparo da Salo in Brescia.

Belly of two pieces of pine, single purfled and with the soundholes placed rather high. Back of two pieces of sycamore. The body is simply lined with kerfing and with thin corner blocks. The neck, rounded at the root, has been lengthened by packing piece. The pegbox is grafted to the neck and has a finely carved head of a grotesque old woman. Modern tailpiece with a carved ivoy plaque (possibly part of a tobacco rasp) attached to an end pin. Fingerboard with tortoiseshell and ivory marquetry and floral scrolls of the Tielke type. Six pegs.

Dimensions: Length total 113; belly 66. Depth 13.5. Width of bouts 31, 23.5, 35.5. String length about 63.5.

Museum No.: 167-1882.

This viol is a composite piece, with the fingerboard possibly by Tielke.

1/13 PARDESSUS DE VIOLE. French; eighteenth century. Not illustrated. No label visible.

Belly of a single piece of pine, and back of a single piece of sycamore, both with simulated purfling in black paint. The neck is probably a replacement, with crude pegbox and scroll both stippled and gouged in simple decoration. Modern tortoise-shell tailpiece attached to a hook-bar. Tortoiseshell fingerboard with ebony edges. Six ebony pegs and six strings. The bridge is stamped *PANPI*.

Dimensions: Length 61; belly 33.5. Depth 7.5. Width of bouts 16, 11.8, 20. String length about 32.

Museum No.: 164-1882.

With a bow (164A-1882), 78 cm long.

I/14 BASS VIOL. Probably English; eighteenth century. Fig. 9. No label.

Of approximately violin shape, with belly, back and sides of mahogany. The belly, of a single piece, has un-nicked f-holes of crude form. The back, also of a single piece, is arched. Thick neck with short (40 cm) fingerboard and very crude scroll. The tailpiece is attached to a brass end pin. Six pegs.

Dimensions: Length total 113.5; belly 62. Depth 6. String length 64.

Museum No.: 172-1882.

This crude instrument is presumably amateur work, possibly made for a church band. The unusual mahogany body is not very resonant.

1/15 PARDESSUS DE VIOLE. French or Italian; mid-eighteenth century. Not illustrated. Label, printed: A... nius Gragnani fecit / Luberti anno 174(?)1. (The last two digits are in ink and not distinct.)

Belly of two pieces of pine, arched and pierced by two sound-holes in the usual C-shape. Back and sides are of alternating strips of sycamore and yew, the back is flat and slopes in toward the shoulders. The belly and back are both double-purfled in a light wood. The peg-box is drilled for five pegs, and is carved on the back with a scroll of foliage. The finial is carved in the form of a woman's head, garlanded with flowers.

Dimensions: Length 62; belly 32.5. Depth 5.3. Width of bouts 16, 11, 18.5. String length about 31.

Museum No.: 163-1882.

Similar to the work of Guersan, this may be a French pardessus with an Italian label or an Italian instrument intended for the French market.

GROUP 2. THE VIOLA D'AMORE, BARYTON AND CITHER VIOL

The first two of these are modified viols provided with sympathetic strings of wire. These run underneath the playing strings of gut and are not touched by the bow, but impart a distinctive colour to the effect of the instrument through their soft though clear sympathetic resonance. The viola d'amore belongs mainly to the first half of the eighteenth century, when it was built in most countries, especially Italy, Germany and France. The most typical body form has viol-like sloping shoulders and flat back, but soundholes of a flame-like shape (2/4: Fig. 12), though many instruments have an arched back (2/2: Fig. 11) or a festooned body outline (2/1: Fig. 10). The viola d'amore is played overarm like the ordinary viola, and without frets. The six gut strings are tuned to a simple chord, and the wires similarly, or else as one pleased. The long and graceful pegbox has from twelve to fourteen pegs, the higher ones being for the wires, which are led thence along the back of the pegbox and down a channel hollowed in the neck underneath the fingerboard. In rarer cases, however, the wires are tuned at the bottom of the body by steel wrest pins concealed in traps in the sides and turned by a separate key (2/1: Fig. 10). Vivaldi and Bach are two of the better-known composers who occasionally wrote for the viola d'amore.

The baryton is a larger instrument, about equal to a bass viol in size. It appeared a little earlier than the viola d'amore—not long after the middle of the seventeenth century. It has six playing strings and a very variable number of wire sympathetic strings which in some cases were tuned to a chromatic scale. The instrument is constructed with an open neck comprising two parallel arms with a broad space between them which is covered by a decorated plate with the fingerboard running to one side. Behind this plate the wires are exposed and can therefore be struck with the left thumb from behind to produce touches of accompaniment and 'lute' effects, in addition to discharging their sympathetic function. Most barytons have a festooned outline of some kind, and soundholes of paired 'commas' are characteristic (2/7: Fig. 15). The only composer of note for the baryton is Haydn, his patron, the Duke of Esterhazy, having been for a time a lover of the instrument.

The cither viol has wire-playing strings (and no sympathetics). It was brought out in the latter part of the eighteenth century by the highly reputed Dublin violin-maker Thomas Perry. He also called his invention a 'sultana' (2/8: Fig. 16). It amounts to a bowed version of the popular English guitar of the day (see Section 11), some examples even including the paired strings (double courses) of the latter instrument.

2/1 VIOLA D'AMORE. South German or Austrian; 1719. Fig. 10. No label.

Festooned model. Belly of two pieces of pine, with 'flame' soundholes and a small carved and gilt rose showing the arms of Franz Anton Graf von Harrach, Prince-Bishop of Salzburg from 1709 to 1727. Two-piece back with applied decoration. Pegbox with a winged cupid's head, gilt. The ebony tailpiece is shaped obliquely and attached to an ivory hook-bar. Ebony fingerboard with shaped end. Seven stained pegs for the gut playing strings. The eight wire sympathetic strings are attached to hitch pins above the nut and are tuned by wrest pins in the bottom block of the body, accessible through sliding traps, one on each side of the hook-bar.

Dimensions: Length total 78.5; belly 42.6. Depth 5.2. Width of bouts 21, 13.5, 26. String length about 39.5.

Museum No.: 722-1878.

The body outline resembles a pattern used by Ulrich Eberle of Prague during the same period and matched in an 'English Violett' (a viola d'amore with increased number of sympathetic strings) attributed to Eberle, in the Collection of Leipzig University (no. 851). The date is nowhere visible, but is given by Engel (p. 360), who adds that the instrument was given by the Prince-Bishop of Salzburg in 1776 to F. X. Lidel. Herr Günther Hellwig has suggested that the maker may have been Andreas Ferdinand Mayer, who is recorded as being the court lute and violin maker at Salzburg in 1721 and who continued working until about 1750. He used a reddish-brown varnish, and, although several German makers favoured such a dark-tinted varnish, it is noteworthy that this instrument has an opaque dark red coating.

2/2 VIOLA D'AMORE by Jean Nicolas Lambert. Paris; 1772. Fig. 11.

Label, printed: J. N. Lambert | Rue Michel le Comte | 1772.

Belly of two pieces of pine, with flame holes and single purfling. Arched back with purfling including an asymmetrical tongue near the neck. Fillets of black-stained wood are inserted between the plates and the sides. The pegbox is decorated with stars stamped along the sides and has a carved head with conical cap, askew. Three brass position marks are located along the bass edge of the fingerboard. Seven gut strings and seven wire sympathetic strings, the latter tuned by pegs placed in the upper part of the pegbox, whence they run down the back of the pegbox bearing upon three nuts, two of ivory and an intermediate one of steel. The wires are attached to steel pins at the base of the instrument.

Dimensions: Length total 76; belly 36.5. Depth 4.5. Width of bouts 18, 12, 23.5. String length about 33.

With the instrument is a bow similar to a modern violin bow, length 74.

Museum No.: W.344-1921.

Jean-Nicolas Lambert was a general *luthier*, working from about 1743 to his death, which is said to have been before 1761 after which the business was continued by his widow up to about 1785. There also exist violins, citterns, guitars, and hurdy-gurdies which bear his label. Cf. Mandore 8/4.

Given by Mrs. Press.

2/3 VIOLA D'AMORE. Probably French; mid-eighteenth century. Fig. 12.

of the pegbox over two nuts and thence into the hollowed neck.

Label, printed: Nicolaus Amati Cremonen Hieronymus Antonius Nepot. Fecit, 1679.

Belly of a single piece of pine, with dark edges and light-coloured purfling, and 'flame' holes. Arched back of two pieces of sycamore with a seal-impression of a bearded classical head in red wax at the bottom end. The sides have been deepened by thickening strips above and below, contributing about 2.5 mm to the present depth. Pegbox with open back and with stamped decoration in the French manner, which includes a fleur-de-lis. A well-carved blindfolded female head. The ebony tailpiece, probably modern, is attached to an end pin with ivory backing plate. The ebony fingerboard is raised on a long packing wedge. Seven gut strings and seven wire sympathetic strings, the latter running from the higher pegs outside the back

Dimensions: Length total 74; belly 37. Depth 5. Width of bouts 18, 12, 22. String length about 34.

Museum No.: 157-1882.

2/4 VIOLA D'AMORE. German; eighteenth century. Fig. 12.

No label visible.

Belly of three pieces of pine, with poorly cut 'flame' holes and raised ebony purfling. Flat back of two pieces of sycamore. The neck has been re-set with a packing wedge at the root. The pegbox has a closed back and a carved blindfolded boy. Thirteen crude pegs of black-stained wood, for seven gut strings and six wire sympathetics, the latter passing outside the back of the pegbox into the hollowed neck.

Dimensions: Length 74; belly 38.5. Depth 5.7. Width of bouts 19.8, 12.5, 23. Museum No.: 161-1882.

2/5 VIOLA D'AMORE. German or Italian; first half of eighteenth century. Fig. 13.

Printed label: Antonius Stradivarius Cremona 1702 (the last two figures in ink).

Festooned body of large dimensions. Flat back of sycamore. Belly with double purfling, 'flame' holes, and a parchment rose under the end of the fingerboard. Belly and back overlap the sides. The tailpiece is shaped obliquely and the fingerboard is new. The pegbox, partly open at the back, has a plain scroll. The bridge is by Chanot, Paris (nineteenth century). There are seven gut strings and seven

sympathetic, the latter attached at the foot of the belly, though there are five holes, now plugged, for hitch pins at the base of the instrument.

Dimensions: Length total 86; belly 44.5. Depth 6.5.

Museum No.: 158-1882.

The outline very closely resembles that of large, festooned viole d'amore by Jais, Alletsee and other German makers of around the 1720's. An Italian example by Grancino, Milan, 1696 (Boston, Museum of Fine Arts), is also similar, however.

2/6 BARYTON by Joachim Tielke. Hamburg; 1686. Fig. 14.

Inscription painted alongside the fingerboard: Joachim Tielke / in Hamburg fecit / Anno. 1686. Also a printed label inside which reads the same.

Belly of pine, with 'flame' holes and with double purfling forming small decorative knots at the indentations between the bottom lobes of the festooned body. Two-piece back with signs of a wax seal. At the base, a ferrule for resting the instrument on the floor, and a hook-bar. The pegbox is carved on the back with figures in relief (Venus in her chariot?) similar to those in ivory marquetry found on bass viol 1/10. A splendid carved triple lion's head forms the finial. On the treble side of the pegbox is a narrow cavity accommodating the boxwood pegs of the six playing strings, which run to a tailpiece in the shape of two savages, carved in wood stained black and partly gilt. The twenty-five wire sympathetic strings run from wrest pins in the main width of the pegbox, thence behind a pierced and carved neck and under a frame, across which is stretched some silk material, to their attachment on a fixed bridge glued obliquely to the belly. Some old holes in the pegbox show that this arrangement has been altered at some time.

Dimensions: Length total 135; belly 69. Depth 13. Width of bouts 36, 28.5, 42. String length about 67.

Museum No.: 115-1865.

The instrument is furnished with two bows and also a shaped cardboard box which can be fitted exactly into the hollow behind the neck; this box contains eight spools of brass wire of various gauges, and manuscript sheets and cards giving the gauges and tunings of the sympathetic strings. The corresponding gauges are marked in ink alongside the appropriate wrest pins on the instrument itself.

Hellwig's list of surviving instruments by Tielke, mentioned in the notes to bass viol 1/10, gives no other baryton by this famous maker.

2/7 BARYTON by Jacques Sainprae. Berlin: about 1720. Fig. 15.

Inscribed on a brass plate which forms a nut for the sympathetic strings: Jacques Sainprae a Berlin.

Pine belly with 'comma' soundholes and double purfling. Back of sycamore. The body shape is without lower corners at the waist and with a two-lobed bottom. The

finely carved neck, with masks on either side at the root, has a top face veneered with engraved ivory, the whole pierced to form a wavy floral scroll pattern. The partitioned pegbox has the sides carved in relief with acanthus bordering, and the back pierced and carved with fine floral scrolls and strapwork. The finial is a carved figure of Orpheus playing a lyre, with putti below. Of six original pegs for the playing strings, two have been removed and their holes filled. Wrest pins for twenty-five wire sympathetic strings are distributed across both halves of the pegbox. The wires run to an oblique fixed bridge with hitch-rail immediately below. Tailpiece, attached to an asymmetrically placed hook-bar, and fingerboard are decorated with marquetry of engraved ivory on tortoiseshell with figures in classical dress, and with strapwork.

Dimensions: Length total 133; belly 70. Depth 14. Width of bouts 35, 27 (waist), 41. Museum No.: 1444–1870.

There is no other record of this maker (or player?), and nor does there appear to be any existing confirmation of an earlier statement that this baryton belonged to J. J. Quantz (1697–1773), the celebrated flute-master to Frederick the Great.

2/8 CITHER VIOL by Thomas Perry. Dublin; 1767. Fig. 16.

Label, in ink: Made by Thos. Perry | in Christ Church | Yard Dublin 1767. Stamped on the button: Perry Dublin.

High-arched belly of a single piece of pine, with 'flame' holes and mother-of-pearl inlay round the edges. Arched back of one piece of sycamore, with two painted black lines. Back and belly edges are flush with the sides. The neck is set a little backwards and without frets. The head, with a square finial similar to that of English guitars (see section 11), has six enclosed brass machines tuned by ring-shaped fingerpieces along the sides, as is also found on some English guitars, e.g. 11/3. There are indications that this machine-head, though of an eighteenth century pattern, replaces original pegs. The tailpiece has an ivory slip over ebony and the fingerboard is ivory with ebony edging. Six wire strings, three steel, one brass, and two overspun.

Dimensions: Length total 76; belly 36. Depth 4·3. Width of bouts 19, 12·5, 23·5. String length about 34. Fingerboard 24. Nut width 3·5.

Museum No.: 156-1882.

A brief note on Thomas Perry is given later, with English guitar 11/4.

2/9 CITHER VIOL. Possibly French; early nineteenth century (?). Fig. 16. No label visible.

A heavy construction with figure-of-eight outline with a curved point at each shoulder. Low-arched pine belly with gilt borders and no purflings, two small soundholes painted like lyres and crossed by gilt wires imitating lyre strings. Flat back of

bird's-eye maple. Belly and back overhang the sides. Wooden side linings. The thick neck has a thick, flat head with a carved female figure with high-piled hair and deep decolletage. Eleven vertical steel wrest pins in the head for the same number of wire playing strings, nine of which are steel, two brass. The ivory nut (width 5·2) reaches over the bass side of the neck to lead two or three of the strings clear of the fingerboard. Above the nut, located in shallow grooves in the face of the head, are three hitchpins for the attachment of wire sympathetic strings, which number seven. These pass under the fingerboard and through holes in the bridge to an attachment on the underside of the tailpiece, where they are tuned by threaded hooks and milled wheels. On the face of the tailpiece are three star-shaped studs of mother-of-pearl. Dimensions: Length total 69; belly 39·5. Depth 6 to 6·4. Width of bouts 19, 23·5. String length about 31·5.

Museum No.: 154-1882.

The body dimensions correspond with those of a viola d'amore, an instrument in which a shadow of interest persisted in France through the first part of the nineteenth century. The grooves in the nut and bridge, though some have been relocated, point to a stringing in the manner of the late eighteenth-century French citterns, with four double courses of wire and three single, though the string length is considerably less. This curious instrument has also been ascribed to an earlier period, e.g. by G. Kinsky (History of Music in Pictures, 1929, p. 242) as being of the seventeenth century, possibly in view of the references during that time to a viola d'amore with wire playing strings, though also possibly on account of the flat head and the forward-leaning female figure which suggests a travesty of the exquisite head of a sixteenth-century Brescian cittern by Girolamo Virchi in the Kunsthistorisches Museum, Vienna.

GROUP 3. VIOLINS AND REGIONAL FIDDLES

Unlike the viols, which stem from the musical achievement of a specific era, namely the organization of part-music in the second half of the fifteenth century, the violin marks the culmination of an old European tradition of professional fiddle-playing that goes back to the troubadours and even beyond. Nevertheless, all too little is known about the earlier fiddles and of the immediate background of the violin itself, which, in the earliest known work of Andrea Amati and Gasparo da Salò in the 1560's, is already brought to the threshold of the perfection reached by the Amati grandson Nicolò and his followers of the next generation including the peerless Antonio Stradivari (1644–1737). Stradivari, whose crowning achievements in violin-making coincide historically with the great florescence of the Italian

school of virtuoso violin-playing led by Corelli, is today known by six hundred or more violins, one of which is the middle-period example shown here (3/1: Fig. 17).

The majority of violin-makers back to Gasparo have of course also made those larger instruments which supply a tenor voice (viola) and a bass (violoncello) to the group in which violins are the trebles. Together they were at first used mainly in the music of court spectacles and to provide dance music, which no doubt accounts for their construction, which is heavier than that of the viols. Nevertheless, by the end of the eighteenth century they required further internal strengthening, thanks mainly to a rise in playing pitch and to demands for a more powerful sound, while external modifications became necessary as the result of advances in technique. Thus the neck of the 'cello (3/9: Fig. 24) may not look totally convincing to the eye. It is a later neck of the kind fitted to practically every fine old violin, viola or 'cello from about 1800 onwards—different in shape and set from the original neck though with the old pegbox and scroll expertly grafted on to it. The Stradivari violin has likewise been given a modern neck, but the carved English violin (3/2: Fig. 18) retains a neck of the old form.

The design of a double bass normally follows that of the other members of the group, though with a few modifications on account of its size: thus players on the whole prefer basses with sloped shoulders and a flat back; moreover, an arched back like that of a 'cello would be grossly extravagant in wood, though it is sometimes found in basses. The giant bass (3/10: Fig. 25), standing thirty inches taller than a normal double bass, is a unique instrument, and there seems to be no record of its effect in performance; it has been fitted for three strings in accordance with the prevailing practice for the bass in nineteenth-century England.

At most periods makers have now and then built violins of odd shapes, whether as fantasies (as 3/4 may be: Fig. 22) or as attempted improvements (3/5: Fig. 20). An original kind of violin which is traditional in western Norway is the Hardanger fiddle (3/8: Fig. 21), with four wire sympathetic strings in addition to the four gut playing-strings: it also has a flattish fingerboard and bridge which favour a style of playing largely in chords. Its cheerful decoration in Norse folk style is also characteristic. This type is first recorded in the latter part of the seventeenth century. An even more distinctive type of regional fiddle is the Welsh crwth (3/11: Fig. 22). By origin this is a lyre of the same family as the Greco-Roman lyres, with an upper cross-bar supported by two arms alone. It is first observed as a kind of fiddle about 1300, fitted with a neck (yet retaining the two arms) and sounded with a bow. The crwth (in Middle English, 'crowd') was still occasionally heard in Wales at the end of the eighteenth century. The present example is a copy of one of three or four genuine

specimens remaining. The pair of 'drone' strings which run clear of the fingerboard constitute a feature shared by certain types of Medieval and Renaissance fiddles.

3/1 VIOLIN by A. Stradivari. Cremona 1699. Fig. 17.

Label, printed: Antonius Stradiuarius Cremonensis | Faciebat Anno 1699 (the last three figures in ink), followed by a circle containing a cross and the initial AS.

Belly of two pieces of pine, with purfling of two lines black and one light; the varnish is not original. Back of two pieces of sycamore. The neck is later, following modern practice. The head is by Stradivari, though (according to W. Henley, *Antonio Stradivari*) from another violin.

Dimensions: Length total 59; belly 34.5. Depth 3.8. Width of bouts 16.7, 11, 20.5. String length 32.8.

Museum No.: W.104-1937.

Stradivari, once thought to have been a pupil of Nicolò Amati, is now believed to have been apprenticed as a wood-carver in Cremona and to have turned to violin-making as a result of acquaintance with the Amati household. His early violins, from 1660 to 1684, follow Amati models. Thereafter his originality began strongly to assert itself, leading to the celebrated models with lower arching of the belly, and bolder, slightly enlarged upper and lower bouts, through which, combined with workmanship of unequalled order, he is considered to have brought the violin to its highest perfection.

Bequeathed by Mrs. B. Mulgan.

3/2 VIOLIN. English; last third of the seventeenth century. Fig. 18. No label visible.

Belly, later than the rest, of two pieces of pine, with un-nicked f-holes and simulated purfling in black paint. Back of one piece of sycamore carved with spiralling scrollwork in relief and a figure playing a lute near the lower end and the arms of England as borne by the Stuart monarchs from 1603 until 1707. The neck, attached from inside the body by an iron nail, is set almost in line with the edges of the belly and has been slightly lengthened by a packing piece at the root. The pegbox has slightly carved sides and a cherub below, carved in high relief. The finial is in the form of a woman's head with laurel crown. Ebony tailpiece with scrolls carved in relief, and ebony fingerboard of less than modern length laid directly upon the neck without packing wedge.

Dimensions: Length 58.5; belly 34. Depth 3.5. Width of bouts 16, 10.5, 20. String length about 32.7. Fingerboard 24.7.

Museum No.: 34–1869.

It has been stated that this instrument belonged to King Charles II (1660-1685) or

to James II (1685–1688). The royal arms do not indicate which, but the style of the carved scrollwork is of the type in favour at that period, while the general quality of the instrument is also sufficiently high to allow the belief that it can once have belonged to the King of England.

3/3 VIOLIN. French or English; nineteenth century. Fig. 19.

No label visible.

Oblong shape, with arched belly and back, and sides of constant depth throughout. The soundholes are of a simplified f-shape. The bridge is stamped Aubert/à Mirecourt/France.

Dimensions: Length 60.5; Depth 4. Width 11.5.

Museum No.: 176-1882.

The old museum register describes this specimen as English. Engel's remark on it is pertinent: 'A curiosity in its way, and worthy of examination, if only as an evidence that the usual form of the violin is the best hitherto discovered for the acoustic perfection of the instrument.'

3/4 VIOLIN. Possibly German; seventeenth-eighteenth century. Fig. 22.

Label, printed: Gasparo da Salo. In Brescia, and in ink: Da mi restaurato.

Body in figure-of-eight shape. High-arched belly in one piece of pine, rising immediately from the edges; triple purfling and f-holes with very small top circles. Back of one piece of sycamore or maple, triple purfled, with a repair at the left shoulder. Inside body, thin side linings, canvas strips at the two indentations, and a shallow bass bar. The neck, attached by a nail, is set in line with the belly edges and upon it is a packing wedge which has been reduced in thickness to take the modern finger-board. The scroll, quite well carved, has wide corkscrew spirals projecting each side. Ebony tailpiece and fingerboard.

Dimensions: Length total 57; belly 33.5. Depth 3.3. Width of bouts 17.5, 12.5 (waist), 21. String length about 31.

Museum No.: 159-1882.

This violin, of approximately three-quarter size, is a crudely made instrument. The wood is coarse-grained, the purfling irregular, and the plates rise straight from the edges in an elementary manner.

3/5 VIOLIN (Howell's patent). English; after 1835. Fig. 20.

Label, printed: Gasparo da Salo.

Model without corners and with two-lobed bottom. Back of one piece of sycamore. Pine belly with C holes back to back. A flat tailpiece of ebony inlaid with an arrow pattern, and a nearly flat, plain ebony fingerboard.

Dimensions: Length total 60; belly 30.5. Depth 3.

Museum No.: 160-1882.

T. Howell of Bristol brought out several versions of his design which he patented in 1835. It combines early Renaissance features seen in Italian paintings, with esoteric ideas on improving the violin, e.g. through a shortened body intended to facilitate playing in high positions of the hand. Another model of Howell's violin is described and illustrated by Heron Allen (see bibliography), p. 110.

3/6 VIOLETTA PICCOLA. Eighteenth century. Fig. 21.
No label.

A small body with steeply sloped shoulders. The belly and the back overlap the sides as on a violin. Belly, with f-holes, has simulated purfling in black paint and bas been rather coarsely treated at some time so that the grain of the pine shows up markedly. The high-arched back of one piece of sycamore, with an old repair. The neck is set in line with the belly and the rising ebony fingerboard is laid upon it. A small pegbox with a simple scroll and four boxwood pegs.

Dimensions: Length total 52.7; belly 30.2. Depth 3.75. Width of bouts 12, 7.5, 15. String length 31.5. Fingerboard 25. Nut width 2.

Museum No.: 165-1882.

This rather coarsely made instrument, to which the name violetta piccola, a term for a small viol mentioned in Praetorius, was given by Engel, is a kind of narrow-bodied three-quarter-size violin rather than a kit.

3/7 MINIATURE VIOLIN. German; probably nineteenth century. Fig. 21.
No label.

Pine belly and sycamore back, with black inlaid purfling. The back is inlaid with a lobed panel containing a townscape in marquetry of coloured woods. Pegbox with finial in the form of an old bald-headed man. Sycamore fingerboard with inlaid stringing following the outline.

Dimensions: Length total 31; belly 15.5. Depth 2.5. Width of bouts 7.5, 5, 8.8. String length 15.3.

Museum No.: 10-1871.

Probably made in Mittenwald as a tourist souvenir.

3/8 HARDANGER FIDDLE by K. E. Helland. Norway (Hardanger area); 1872. Fig. 21. Label, in ink: Fabrikirt af Knudt Eriksen Helland 1872. The date is also painted on the finial.

Pine belly and maple back with painted floral scrolls in black and edges set with mother-of-pearl alternating with black triangles. Neck set in line with belly. Pegbox with eight pegs, four of which are for wire sympathetic strings. The finial is in the form of a heraldic lion with gilt crown, the carving of the head executed in Norwegian peasant tradition originating in the Viking period. Fingerboard and tailpiece veneered with ebony inlaid with ivory and mother-of-pearl.

Dimensions: Length total 64; belly 35. Depth 4.2. Width of bouts 16, 17, 20. With a bow.

Museum No.: 155-1882.

Several members of the Helland family were making violins of this kind in the Telemark province during the nineteenth century.

3/9 VIOLONCELLO. Venetian; eighteenth century. Fig. 24.

Label, printed: Antonius Stradiuarius Cremoneniis [sic] Faciebat Anno 1[7]11 (the last two figures in ink).

Belly of two pieces of pine, back of two pieces of sycamore. Inlaid purfling of two black lines and one light. The body has been altered from its original shape. The later neck shows much use, and the pegholes have twice been plugged and redrilled. Dimensions: Length total 122; belly 75. Depth 12. Width of bouts 34.5, 23, 44.5. String length about 67.

Museum No.: W.4-1950.

Given by Miss Josephine McQuare.

3/10 DOUBLE BASS. Italian; seventeenth century. Fig. 25.

No label.

The belly of this giant bass is of five pieces of pine, with purfling (two black strips, one white) 1 cm wide. The f-holes, un-nicked, are 34 cm long and the bass bar is some 3 cm deep. The back is of three pieces of sycamore, with two internal cross boards, and is half-cut and has double purfling in black, unlike the belly. The neck, replacing an earlier neck which was about 4 cm wider at the root, carries a scroll head with machines for three strings. The brass plates of the machines are engraved Duke of Leinster on one side and D. Dragonetti on the other. The tailpiece was originally drilled for four strings and later adapted for three.

Dimensions: Length total 288; belly 200.5. Depth 30.5. Width of bouts 84, 56, 105. String length about 143. Nut width 5.

Museum No.: 487-1872.

This instrument, unique among old basses on account of its size, formed part of the collection of the celebrated double bass soloist Domenico Dragonetti (1763–1846), who presented it to the Duke of Leinster who in turn presented it to the Museum. Its one-time ascription to the hand of Gasparo da Salò is now considered erroneous.

3/11 CRWTH. English; nineteenth century. Copy of an eighteenth century Welsh original. Figs. 22 and 23.

No label visible.

Back, sides, arms, neck and crosspiece carved from a single piece of sycamore. The sides increase in depth towards the base, and the arms are carved hollow at the rear. Flat belly of pine, 5 mm thick, with grooves along the edges and two circular soundholes. There is no bass-bar. The neck carries a thick and flat, rising fingerboard which extends a little way over the belly. The tailpiece is flat and shaped obliquely. The obliquely placed bridge has a short leg resting on the belly and a long leg which passes through the right-hand (bass side) soundhole to rest against the back; there is also a short central projection which does not reach the belly. The strings pass through holes above the nut to the rear of the crosspiece where they are tuned by six iron wrest pins turned from the front by a separate key. Of the six strings, two run clear of the neck on the bass side.

Dimensions: Length total 56; belly 32. Mean depth 4.5. Mean width 24. String length about 32. Fingerboard 26.

Museum No.: 175-1882.

Engel (p. 294) lists a crwth which was obtained in the Isle of Angelsey and loaned to the Museum by Colonel Wynne-Finch. It had a label inside which read: *Maid in the paris of | anirhengel by Richard | Evans Instruments maker | In the year 1742.* A repair was dated 1871 and the instrument was restored in the following year, exactly to its original condition by George Chanot, the violin-maker in Bond Street. The crwth here referred to by Engel is illustrated in *Musical Instruments, Historic, Rare and Unique* by A. J. Hipkins and W. Gibb (1888, Plate xxiv). According to the late Canon F. W. Galpin, the present instrument is a copy by George Chanot of the Evans crwth, which is itself now in the Welsh Folk Museum at St. Fagan's Castle. Two further authentic crwths are at Aberystwyth Library, and the Warrington Museum.

GROUP 4. KITS

The kit or pocket violin (French poche or pochette) is the dancing master's violin, made from the sixteenth century to the eighteenth in shapes suitable for carrying about in the coat pocket. The commonest form is narrow, truncheon-like, fitting into a tubular case (4/1: Fig. 26), though many other shapes are met (4/7: Fig. 29).

4/1 KIT by Dimanche Drouyn. Paris; third quarter of the seventeenth century. Fig. 26 and frontispiece.

Label, in ink: Dimanche Drouyn / A Paris.

Narrow model, with five-faced ivory body. Belly with purfling simulated with inlaid silver twisted wire, and with a heart-shaped soundhole and two inwards-

KITS 21

facing C-holes with central points. Ivory fingerboard and pegbox, with the finial in the form of a woman's head with plait at back. On the back of the body is written in Indian ink: 370 P.R.

Dimensions: Length total 37; belly 23. Width 3.8. Fingerboard 11.2.

Museum No.: 519-1872.

With the instrument is an ivory bow, length 38, of hair 28.

The tubular, tooled and gilt red leather case is decorated in a manner practised in France during the second half of the seventeenth century. The fleur-de-lis gives no indication of date. The crowned L's are associated with Louis XIII and XIV in the seventeenth century, as well as with earlier and later kings of that name. The crowned dolphin which also appears on it, however, was borne only by the Dauphin; and the only Dauphin of the second half of the century was Louis, le Grand Dauphin (1661–1711), the eldest son of Louis XIV. He is more likely to have had use for a pochette during the earlier part of his life, during the third quarter of the century. The hair-style of the lady on the finial also suggests this date. Thus this kit must presumably be a French royal piece. It is also interesting to note that the inlaid stringing of spiral silver wire, seen on the belly of the instrument itself, occurs on some French gun-stocks. The wire for this purpose was normally straight before and after this period but, during the third quarter of the seventeenth century, it was often spiralled.

The maker, Drouyn, seems to be otherwise unrecorded.

4/2 KIT by Jacques Du Mesnil. Paris; 1647. Fig. 27.

Label: Du Mesnil | a Paris 1647.

Narrow model. Ebony body shaped to five faces. Belly similar to that of the preceding instrument. Ebony fingerboard and pegbox with a carved head of a woman.

Dimensions: Length total 41.5; belly 26.5. Width 4. String length 24.6. Finger-board 13.

Museum No.: W.2-1937.

Jacques Du Mesnil or Dumesnil is known by several instruments, including a curious violin dated 1655 (Paris Conservatoire) and a carved flat-backed mandore without date (Lisbon Conservatorio Naçional).

4/3 KIT. French; late eighteenth century or later. Fig. 28.

No label visible.

Narrow model, with body of perhaps pearwood, shaped to five faces and carved with floral patterns in low relief. Belly of pine with f-holes with added tails. The neck is inlaid with two flashes of darkened wood and the pegbox has a crudely carved head of an old woman wearing a cap. Tailpiece veneered with mother-of-pearl inlaid

with a bearded mask carved in ivory. A fleur-de-lis is engraved on a light-coloured wooden panel set in the dark fingerboard.

Dimensions: Length 43.5; belly 25. Width 5. String length 23.5. Fingerboard 18.5. Museum No.: 647-1890.

A crudely made and very worn instrument formed in the traditional manner, but with carving so debased that it gives no clue to the date, which might even be early nineteenth century.

4/4 KIT. French; probably eighteenth century. Fig. 27.

No label.

Narrow model, with the body of tortoiseshell bent round and shaped to five faces, and a silver cap at the end riveted in place. Belly with heart-shaped soundhole and two inwards-facing C-holes. The pegbox has a finial, now partly missing, in the form of a man with a moustache and inlaid mother-of-pearl eyes. Four ivory pegs.

Dimensions: Length total 34.5; belly 21.5. Width 3.3. String length 22. Finger-board 11.

Museum No .: 166-1882.

4/5 KIT. German; seventeenth century. Fig. 27.

No label visible.

Narrow model, with body of a fruitwood coupled with ivory in fancy alternation, shaped to five faces. Belly with nearly straight outwards-facing C-holes and a small heart-shaped hole near the fingerboard. Tailpiece and fingerboard of the same wood as the body, with feather banding in ivory which is in fact stag's horn. The finial is in the form of a sheep's head. Four small boxwood pegs.

Dimension: Length total 47.

Museum No.: 498-1905.

4/6 KIT. German or Swiss; first half of the eighteenth century. Fig. 28.

No label visible.

Narrow shape with out-swelling lower part. Body of boxwood, crudely carved in relief with small figures, musical instruments and animals. The f-holes recall those of a violin. The stained oak fingerboard is inlaid with a simple pattern in light wood. The finial is shaped like a fish's head.

Dimensions: Length 44.5. Width 6. Depth 5.

Museum No.: 457-1882.

4/7 KIT. English; eighteenth century. Fig. 29.

No label visible.

Viol-shaped body with arched back, of sycamore. Pine belly with a single line of

purfling. A well-carved scroll with wide spirals, and boxwood pegs. Ebony tailpiece and fingerboard.

Dimensions: Length total 46; belly 18. Depth 2.8. Width of bouts 9, 6, 10.3. String length 30. With a bow, length 60.5.

Museum No.: W.6-1931.

Bequeathed by F. L. Lucas, Esq.

GROUP 5. THE TRUMPET MARINE

The trumpet marine or tromba marina (5/1: Fig. 30) has one long gut string which is sounded with a bow. It is not, as it might at first glance appear, a kind of one-stringed double bass, but an ingenious instrument for playing simple melodies in the treble voice register. The string is touched at points along the upper part of its length where it will sound harmonics. This is done with the left hand, while the right hand strokes the string with the bow at a point higher up the string towards the head of the instrument. Successive harmonics will provide the best part of a major scale, exactly as they do when playing the old natural trumpet (whence the first part of the name, though 'marine' has never been convincingly explained). Near the lower end of the soundbox the string passes over a bridge with a projecting leg which trembles and jars against the belly and acts as a primitive amplifier.

The trumpet marine dates from about the fifteenth century. Most examples are from the seventeenth and eighteenth centuries, during which time the instrument was much used in religious houses for accompanying plainsong; some, indeed, were still in use in monasteries in Germany and Switzerland late in the nineteenth century before being procured for museums.

5/I TRUMPET MARINE. Probably French; eighteenth century. Fig. 30. No label visible.

Body of five staves of pine, open at the bottom. Pine belly with black-painted edge and an oval soundhole with an ebony moulding surround. The head has a crude scroll and a ratchet tuning by separate key for the single string. Wooden bridge of the normal asymmetric shape. Inside the body, immediately behind the belly, are forty-one wire sympathetic strings running upwards from hitch-pins close to the bottom, over a wire bridge, to wrest pins accessible for tuning through a pierced and carved sliding trap above the upper end of the belly.

Dimensions: Length total 191. Greatest width 37. String length about 144. Museum No.: 174-1882.

A few other surviving trumpets marine also possess sympathetic strings, which are

referred to in some seventeenth-century sources (including Samuel Pepys's Diary, in 1667) and have been ascribed to Jean-Baptiste Prin. An example which the late Canon F. W. Galpin obtained from a house in Cheshire, and is now in the Museum of Fine Arts, Boston, is said to be Italian and of seventeenth-century date.

GROUP 6. HURDY-GURDIES

On the hurdy-gurdy, gut strings are sounded by the resined rim of a boxwood wheel mounted on an iron axle turned by a handle at one end of the instrument. The strings on which the tunes are played, usually two in number, are stopped by wooden blades mounted on transverse wooden keys manipulated by the player's left hand, these blades being concealed inside a long keybox with a hinged lid. Any other strings that the instrument may have are drones, each sounding one note continuously and imparting to the music of the hurdy-gurdy something of the character of bagpiping. The French hurdy-gurdy (vielle à roue) normally has four of these drones, though only three are used at a time, the remaining one being disengaged from the wheel by turning a small ivory stop mounted on the belly. The wheel is protected by a curved wooden guard plate gripped between two mouldings fixed to the belly. The soundholes, of which there is sometimes only one, commonly preserve an antique form of a C with a midway nick; similar soundholes are sometimes found in sixteenth-century viols.

The hurdy-gurdy originated in ecclesiastical circles, probably during the twelfth century, as an instrument for training choirs. After the Middle Ages, during which phase it was favoured with a period of courtly use, it survived as a folk and beggar's instrument, and so it remains today, with a wide but sparse distribution extending from Spain to Russia. Street musicians played it in London until late in the last century. In France, however, it returned to courtly fashion in the seventeenth century (6/1: Fig. 31) and was extensively made in the eighteenth, with either a waisted (guitar-shaped) body or one of approximately lute shape. In the latter form it remained a popular folk instrument in Berry and neighbouring provinces of France through the nineteenth century (6/6: Fig. 37) and up to today.

The organ hurdy-gurdy is a late eighteenth-century French variant (vielle organisée, 6/4: Fig. 34) which combines a hurdy-gurdy with a pipe-organ in a single instrument. The handle both turns the wheel which sounds the strings and actuates a bellows which sounds the pipes. The keys simultaneously stop the strings and open valves which admit air to the pipes.

The monocorde à clavier (6/7) is a nineteenth-century invention for domestic use, with a single string which is stopped by a pianoforte-like keyboard and sounded by a separate bow.

6/1 HURDY-GURDY. French; seventeenth century. Fig. 31.

Mark, stamped on the keybox: I. (or P.?) Louvet [repairer].

Straight-sided body with bow-shaped wide end, and with sloping shoulders formed by flange-like involutions of the belly running up to the pegbox. The belly has two roses produced by drilling a series of concentric holes, joined into a single motif by painted details and surrounded by a painted wreath of laurels in the Renaissance tradition. The edges of belly and back are bordered by Renaissance arabesque scrollwork painted in black. Also painted in black on the belly are two scenes of hunting which include a man dressed in jerkin, hose and wide-brimmed hat that appear to be of seventeenth-century date. On the back and on the wheel-guard is a shield with the royal arms of France flanked by the crowned monogram of Henri II, 1547–1559. (not, as has been claimed, of Henri II and his queen, Catherine de' Medici).

The heart-shaped pegbox, with six vertical pegs, continues the line of the keybox, but is joined to the body and is also braced to this by a turned baluster-shaped strut on each side. The keybox has a hinged lid veneered outside with ebony and ivory bands, the keys being of the same two materials. The side of the keybox is stamped in the French manner with a bell-like motif and the name of Louvet. The tailpiece is likewise banded black and white.

Dimensions: Length including handle 56; body 31. Depth of body 7. Width 21. String length 28.

Museum No.: 220-1866.

The form of this instrument suggests a seventeenth-century date for it, and so does the costume of the figure painted on it. It is unlikely that it dates from the period of Henri II. Possibly the arms were added in the eighteenth century during the fashionable period of the hurdy-gurdy. Clearly the instrument was repaired in Paris during the eighteenth century, by a member of the Louvet family, either Pierre (see 6/3) or his brother Jean, who had a shop at the sign of 'La Vielle royale' in the Rue de la Croix des Petits Champs.

6/2 HURDY-GURDY by Varquain. Paris; 1742. Fig. 32.

Inscribed in ink on inside of keybox lid: Varquain. ruë & carre-four de Bussi F. S. Germain. à Paris 1742.

Guitar-shaped body with mahogany belly edged with a barber's-pole inlay of ebony and ivory, as is the lid of the keybox, the wheel-guard and the tailpiece. The last two of these also have small formal patterns inlaid with mother-of-pearl. Two

C-holes in the belly. The sides and top of the pegbox, which continues on the line of the keybox, are stamped with stars and have carved scallop ornaments as well. The finial is in the form of a woman's head wearing a cap (the crescent over the forehead, a fashionable feature of such caps at the time, has been broken off). Vertical pegs for six strings.

Dimensions: Length total 66; body 45. Depth of body 19.5. Width 26. String length 31.

Museum No .: 577-1872.

Varquain was a maître luthier and the maker of a number of surviving hurdy-gurdies of this vielle en guitare model.

6/3 HURDY-GURDY by Pierre Louvet. Paris; mid-eighteenth century. Figs. 32 and 33. Stamped: P. Louvet.

A small-sized instrument of the guitar-shaped model. Belly and back of mahogany, the former with a barber's-pole edging of ebony and ivory. Sides of rosewood. The keybox is stamped with the same bell-shaped motif as 6/1 and twice with the maker's name. The name is also stamped under the body, inside the lid (twice in each case), and is engraved on an ivory panel inlaid at the wide end. The pegbox, continuing the keybox, is richly carved with interlacing stems and scallop-shells, and the finial has the form of a woman's head wearing a fancy Turkish head-dress. The tailpiece, wheel-guard and keybox lid are of ebony with ivory stringing; the first and last of these also have small inlaid mother-of-pearl panels. Six pegs.

Dimensions: Length total 45; body 33.5. Depth of body 7.5. Width 16.5. String length 22.5.

Museum No.: 364-1864.

6/4 ORGAN HURDY-GURDY (vielle organisée). French; eighteenth century. Figs. 34 & 35. No maker's name visible.

The hurdy-gurdy has a large guitar-shaped body of sycamore. On the belly, the soundholes, and the barber's-pole edging of ebony and mother-of-pearl are similar to 6/2 and 6/3. The tailpiece and keybox lid are of rosewood with mother-of-pearl stringing. The pegbox is crudely carved with a finial in the form of a woman's head and is stamped with stars. There are four pegs, and also, on the keyboard side of the pegbox, four wrest pins for drone strings, apparently added to the instrument at a later date.

The mahogany box for the organ, on the top of which the hurdy-gurdy rests, contains twenty-eight wooden stopped pipes on the far side, and thirty-four pipes placed horizontally beneath the box. There are two slider stops at the left-hand end of the box, for controlling these two registers of pipes. The stand is of pine painted to look like mahogany: it may be of later date than the rest.

Dimensions: Length of hurdy-gurdy, total 75; body 57. Width 28. Length of organ box 71.5. Width 30.

Museum No .: 338 & A-1882.

According to Engel (p. 345) this instrument was made by a Frenchman living in London.

6/5 HURDY-GURDY. French; second half of the eighteenth century. Fig. 36.
No name visible.

A small-sized, highly ornamented instrument, made no doubt as a drawing-room toy. Guitar-shaped body of sycamore. The belly is edged with a band of tortoise-shell with silver and brass piqué work, and has two roses of pierced and stamped silver with sun motifs. The tailpiece, wheel-guard and keybox lid are likewise decorated, the last having a central panel of reddish-brown lacquer also inlaid with a floral design. On the wheel-guard, a garland within which is a trophy of musical instruments. The main keys are similarly decorated. The short keys are set with paste imitation stones, as are the six ivory pegs. The finial of the pegbox is finely-carved in wood with the figure of a woman, her neck and head being of ivory. Her open gown is pulled back to form the sides of the pegbox, while her petticoat forms the top which holds the pegs.

Dimensions: Length total 55, body 26.5. Depth 6. Width 14.5. String length 24. Museum No.: 95-1870.

6/6 HURDY-GURDY by Pajot. France (Auvergne); 1835. Fig. 37.

Label, printed: Mention Honorable | Pajot Père et Fils ['Père et' is crossed out] | Facteur d'instruments | A Jenzat par Gannat | -1835-[or 1855?] No. 65.

Lute-shaped body of nine ribs of sycamore alternately stained. The pegbox, an extension of the keybox, has six pegs and a crudely carved head. The instrument is crudely decorated with floral inlay and painted design. Normal French provincial instrument, of rather large dimensions.

Dimensions: Length total 74. Width 34. String length 30.

Museum No.: 267-1882.

6/7 KEYED MONOCHORD (monocorde à clavier). French; late nineteenth century. Not illustrated.

No label visible.

Underneath the central member is an inscription in pencil, partly illegible and ending 'No. 2'. The instrument, which is mounted on a simple stand, consists of a narrow box of pine containing the key action, fixed by iron brackets to a longitudinal central member. On the right is an oval soundbox of pine, with two C-shaped soundholes with central nicks, placed back to back, and with a knob-like

peg for tuning the single string, which passes over a bridge and runs through the keybox. The string is sounded with a separate bow. On the front of the keybox is a three-octave keyboard with twenty-two ivory natural keys and fifteen sharps. The keys actuate brass levers which strike and stop the string in the manner of the keys of a clavichord.

Dimension: Length overall 140.

Museum No.: W.38-1917.

This instrument was invented by J. Pousset, of Pierre, in 1883, and was made in several varieties, intended for use in churches.

Bequeathed by Henry Saint-George, Esq.

GROUP 7. LUTES

Of the musical instruments which were adopted by Europe from Arab culture in the thirteenth century, the lute ranks among the first in importance as a result of the devotion bestowed upon it over two centuries and more—from the sixteenth to the earlier part of the eighteenth—not only by lovers of music and song but also by all who treasured a household possession of rare beauty to the eye. Unfortunately very few of the numerous lutes that have come down to us are now able fully to reveal this beauty, such have been the ravages occasioned by extensive rebuilding with different numbers of strings, different lengths of neck, and so on, in order to meet changes in playing requirements. Moreover, following the obsolescence of the lute in the eighteenth century, valuable old lute bodies were used for the fabrication of collectors' pieces, with ad hoc replacements of other parts, these last often being so crude and ugly, as well as unpractical, that the best course today may be to remove them, as has recently been done in two instances among the lutes in this Collection. One of these possesses a lute body (7/2: Fig. 39) built by the most renowned of the early makers, Laux (Luke) Maler, a German by birth who worked in Bologna in the first half of the sixteenth century and whose instruments were prized as long as the playing of lutes remained a fashionable pursuit. Many of the most celebrated lute-makers up to the early seventeenth century were likewise Germans domiciled in Italy; of these, Marx Unverdorben of Venice, Wendelin Tieffenbrucker of Padua, and Matteo Buechenberg of Rome are represented in the Collection.

The rounded form of the lute is obtained by bending and joining the numerous ribs over a domed wooden mould. The body is fixed to a wide and shallow neck

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faced with a fingerboard, and is covered with a pine belly in which is a soundhole with a carved 'rose' (or often with large lutes a triple rose, as shown 7/11). Round the lower edge of the belly is fixed a protecting strip known as the 'lace'. An unsigned ivory lute (7/1: Fig. 38) shows the complete form of the classic lute, with its sharply angled pegbox. As with many other kinds of stringed instrument which are struck with the fingers (or, in some cases, a plectrum), most of the strings of a lute are paired in unison, so that the player speaks not of the total number of actual strings, but of the number of 'courses', each course consisting of a pair of strings or a single string as the case may be. This ivory lute has eleven courses, of which the treble course is single and the rest are double. Of all these, the first six courses embrace the basic tuning pattern of the instrument, while the others are 'basses', tuned diatonically like harp strings. The peg for the single treble course is often, as here, raised above the others with the idea of reducing the chance of breakage of its very fine gut when under tension. The neck of a lute was tied with gut frets like those of a viol; fixed frets of ivory or metal are inauthentic substitutions, though original practice often admits a few fixed frets inset into the belly, where a gut fret could of course not be fitted.

The Theorbo, a two-headed lute, first appeared about the middle of the sixteenth century. The pegbox is brought upright and a second pegbox is placed at some distance above it in order to allow the basses a greater string-length; this is advantageous for their sound, particularly when the instrument is to be used in the accompaniment of groups of instruments or voices, for which the theorbo was primarily intended. The upper pegbox is often offset by being brought over to the bass side of the instrument on a curved bracket (7/5: Fig. 42). In the chitarrone or archlute the extension is straight and very much longer (7/11: Fig. 46) and the instrument was sometimes strung with wire instead of gut. Theorbo and chitarrone were much used up to the middle of the eighteenth century for basso continuo accompaniment, and many were then made from old lute bodies (7/15: Fig. 49). During the seventeenth century the lute itself was often built with an upright head for bass strings, while small-sized theorbos were also made, presumably for small hands, just as small-sized guitars can be purchased today.

From the end of the eighteenth century the shape of the lute body has never entirely lost its attraction in the eyes of makers and their amateur patrons; evidence of this is the 'modern' or 'German' lute of about 1770 onwards with six strings; this is really a form of guitar. An original form is the 'Swedish theorbo' introduced by M. P. Kraft of Stockholm about 1790 (7/16: Fig. 53). The brass thumb lever is for altering the pitch of the bass strings while playing, to follow modulations in

the music; similar devices were now and then fitted to old theorboes to keep them in use with the new styles of song accompaniment (7/8).

Note. The author and the Museum authorities would like to record their indebtedness to Major-General Michael W. Prynne, the well-known specialist on lutes, for his advice and opinion on matters connected with the instruments in this group.

7/1 LUTE. Probably Italian; first half of the seventeenth century. Figs. 38 and 40. No label visible.

The body is of nine ivory ribs with ebony stringing intervening. Pine belly with carved rose. Ivory lace. The neck and the back of the head are decorated with floral scrollwork in marquetry of ebony and ivory. Plain ebony fingerboard. The reflexed head holds twenty-one ivory pegs, one of which is a raised peg for the treble string. Eleven courses of strings, the first being single, the rest double.

Dimensions: Length total from nut to base 76; belly 46. Width 30. String length 69. Length of neck from the nut, inclusive, to the angle with the belly 28.

Museum No.: 1125-1869.

A simple, elegant instrument. (Engel, p. 241.)

7/2 BODY OF A LUTE by Laux Maler. Bologna; early sixteenth century. Fig. 39. Label, in ink on a strip of paper: Laux Maler.

This instrument, like 7/3, had been much altered, especially in the last century. Only the body was original. Some later very crude additions were removed in the Conservation Department of the Museum in 1964 and a new belly and neck were provided to a specification kindly suggested by Major-General M. W. Prynne, these new parts being added solely to give an idea of the original appearance of the instrument. The body is of eleven sycamore ribs.

Dimensions: Length 56. Width 33.

Museum No.: 194-1882.

Thomas Mace, in 1676, records that lutes by Maler were the most highly esteemed of any and, even though 'old, battered, cracked things', were worth up to £100 apiece. One of the finest surviving Maler lutes is in the Kunsthistorisches Museum, Vienna, but even in this case there is doubt whether the neck and fittings can be original, though if replacements they are of an early period.

7/3 BODY OF A LUTE by Marx Unverdorben. Venice; mid-sixteenth century. Fig. 39.

Label, printed on a slip in Gothic lettering: Marx Unverd...in...netia.

As with 7/2 only the body is original (see above). This is constructed of a mosaic of

As with 7/2 only the body is original (see above). This is constructed of a mosaic of ivory and two sorts of wood in an overall star pattern, glued to strips of parchment. There is no other supporting material, but the body is surprisingly rigid, though it has become distorted in places.

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Dimensions: Length about 50. Width 33.

Museum No .: 193-1882.

Unverdorben is thought to have been a pupil of Maler. Examples of his work are exceedingly rare, and none remains in its original condition.

7/4 THEORBO by Matteo Sellas. Venice; 1637. Figs. 40 and 41.

Inscribed on the fingerboard: Matteo Sellas alla Corona | in Venetia. A printed label inside also gives the date 1637.

Back of fifteen ivory ribs with double ebony stringing between. The belly is finely carved with a rose and has ivory heart-shaped inlaid ornaments at each end. The back of the neck has marquetry scrollwork decoration of ivory and ebony. The front is veneered with ebony surrounding ivory bands engraved with scrollwork and landscapes. Eleven thin brass frets have been added at a later period.

The main pegbox has fourteen pegs for seven double courses, and the upper has the same, though the upper nut is grooved for five double courses.

Dimensions: Length total 116; belly 42.5. Width 32.5. String lengths 64, 93. Length of neck 30.

Museum No .: 1126-1869.

Matteo Sellas was the most prolific and highly esteemed Venetian lute and guitar maker of the second quarter of the seventeenth century. Many of his instruments are most beautifully decorated, and many of his lutes and theorboes have body outlines of marked originality. The shape of the present instrument is closely matched by other Sellas theorboes at Brussels and elsewhere.

7/5 THEORBO by Cristopher Choco. Venice; seventeenth century. Fig. 42.

Inscription, engraved on the neck: Christofolo Choc | Al Aquila Doro | in Venetia.

A small theorbo, with back of fifteen ribs, alternately rosewood and ivory. Pine belly with carved rose and ivory purfling, also an ivory heart-shaped ornament at the lower end. The bridge is probably not original. The back of the neck has marquetry decoration in snake wood and ivory consisting of floral scrolls, a bird and a double-headed eagle. The fingerboard has ivory panels engraved with figures and a landscape, framed with ebony and ivory strips. The main pegbox has fourteen pegholes but a nut with eleven grooves. The upper pegbox has fourteen pegholes of which two are plugged, and an offset nut which appears to be of later date.

Dimensions: Length total 106; belly 39.5; neck 27. Width 31. String lengths 57, 85. Museum No.: 7756-1862.

Some mystery surrounds the name and nationality of the maker of this very pretty instrument. A lute in the Germanisches Nationalmuseum, Nuremberg, is inscribed Cristoffolo Hoch, again at the 'aquila d'oro in Venetia'. Another, at the Paris Conservatoire, has both Christofer Cocks... 1654 and Cristoforo Cocko. Others have Cocho.

7/6 THEORBO. Italian: seventeenth century. Fig. 46.

No label visible.

The back is of twenty-three shaded ribs of pine. The pine belly has an inset carved wooden rose and a crude later bridge. The sycamore neck, of later date than the body, is thinned on the rear along the bass side and has six ivory frets. There are also five frets glued to the belly, and the instrument has been much used since these were fitted. The upper head is set well askew to the centre line of the neck. There are eight rosewood pegs in the main pegbox and nine in the upper, for single stringing throughout.

Dimensions: Length total 120; belly 59; neck 45. Width 39.5. String lengths 67, 88.5. Museum No.: 196-1882.

7/7 THEORBO by Michael Rauche. London; 1762. Figs. 43 and 44.

Inscription, in a Rococo cartouche on the back of the neck, in marquetry: Rauche in Chandos Street London 1762.

Body of twenty-three ivory ribs with ebony stringing between. Belly of pine with inset triple rose carved in wood. The neck is veneered with ebony, the lower section bearing the maker's name, the upper two sections having panels containing musical trophies and flowers, all executed in ivory applied in relief. Fingerboard veneered with ebony, with nine ivory frets. Also three frets set in the belly. The pegboxes are of ebony trimmed with ivory, the main with fourteen pegs, the upper with ten for five double courses.

Dimensions: Length total 127; body 63.5. Width 37. String lengths 71.5, 99.5. Neck 31.

Museum No.: 9-1871.

7/8 THEORBO by J. H. Goldt. Hamburg; 1734. Figs. 43 and 45.

Label, printed: Jacobus Henricus Goldt fecit Hamburg 1734 (the last figure in ink). Engraved on the back of the neck: Jacobus Heinrich Goldt fecit Hamb. On the fingerboard is inlaid an oval mother-of-pearl medallion engraved with a sun above two shields, one showing a whale blowing, the other containing the initials of the maker, all surrounded by the words Sconne und Shild. Gott der Heer ist (no doubt Goldt's trademark, presumably with reference to a shop at the sign of the Sun and Shield).

Body of eleven rosewood ribs with ivory stringing between. Belly of pine carved with a rose. Fingerboard and back of neck have fine tortoiseshell and ivory marquetry patterns of grotesques amid strapwork (*Laub und Bandelwerk*) and a small medallion of mother-of-pearl. The pegboxes are painted red inside, otherwise black. The main has fourteen pegs, for two single courses, six double. The upper pegbox is for five double courses and has a semitone device, added later and now broken,

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with three ivory nuts which can be raised in slots against iron springs, for the first, third and fourth courses.

Dimensions: Length total 133; belly 54. Width 35. String lengths 76, 105. Neck 35.5. Museum No.: 4274–1856.

7/9 THEORBO. Provenance and date uncertain. Fig. 53.

A small instrument with slightly asymmetric body and belly outline. The body, very shallow (7 cm maximum depth), is of nine ribs of sycamore, and carries a fancy 'lace' with inlaid feathered strings of ivory and ebony. Pine belly with an open soundhole, placed high, close to the neck block. The thick bridge is placed well to the bass side of the belly. The neck has a raised fingerboard of black-stained wood, perhaps oak, with ivory strips. It is 6.7 cm wide at the edge of the body and it extends on to the belly, where it is surrounded by a fruitwood fillet. Plain heads of complex form, with a square finial decorated with ivory, mother-of-pearl and black-stained wood in a formal design. The main pegbox has ten pegs, for two single courses, four double. The upper pegbox is for six single strings.

Dimensions: Length total 86.5; belly 33. Width 23. String lengths 45.5, 64. Neck 21. Nut 5.2.

Museum No.: 231-1882.

7/10 THEORBO. Provenance and date uncertain. Fig. 53.

No label visible.

Body of thirty-three shaded ribs. The belly is later; it is surrounded with a thick black moulding and has a small fretted and gilt rose somewhat similar in pattern to the roses of English guitars. The bridge is centred far over to the bass side and 16 cm from the base of the body. There are no 'beards' at the end of the fingerboard. The neck appears to be older than the two pegboxes. The fingerboard has nine ivory frets. The lower pegbox is for one single course and six double. The upper is for five double courses, and has a square finial like that of an English guitar, with a tortoiseshell slip.

Dimensions: Length total 115; belly 48. Maximum width 33. String lengths 53, 79. Length of neck 20.5.

Museum No.: Circ. 324-1935.

The instrument is probably a post-1750 conversion of quite a good seventeenth-century lute, perhaps Italian.

7/II CHITARRONE by Matteo Buechenberg. Rome; 1614. Figs. 46 and 48.

Label, in ink: Matheus Buechenberg / Roma 1614. An engraved ivory panel, with the Medici arms supported by two angels, is set at the base of the fingerboard.

Body of forty-one shaded ribs of yew. Pine belly carved with a triple rose. The neck

is of ebony, with ivory stringing forming angular panels on the fingerboard; the ebony and an unidentified dark brown wood form a diagonal chequerboard pattern. The main pegbox is for six double courses. The upper pegbox, for eight single strings, has clearly been sawn off and replaced on the front face of the head. There are also signs of splicing and repairs at the lower end of the head below the main pegbox.

Dimensions: Length total 190; belly 65. Width 39. String lengths 89, 159. Museum No.: 190-1882.

Probably this instrument was genuinely built as a chitarrone, but the neck later chopped down and spliced. The Grand-Ducal crown, on an engraved ivory panel at base of fingerboard, would, if authentic, indicate Cosimo II de' Medici, though the top ball lacks the small fleur-de-lis with which it should be furnished. Buechenberg is perhaps the most famous of the early makers of the chitarrone, which was also described in his day as the 'Roman theorbo'.

7/12 THEORBO by Matteo Buechenberg. Rome; 1619. Figs. 46 and 47.

Label, in the same cursive hand as 7/11: Matheus Buechenberg | Roma 1619.

Back of fifty-one shaded ribs. Pine belly carved with a triple rose, one section possibly a replacement. The neck is later, with a short plain fingerboard (16.5 cm) and main pegbox with twelve pegs, evidently, by the nut grooves, for twelve single strings. The head has been crudely chopped down from an earlier longer head and is now set over to the bass side; the back is of ebony with inlaid ivory strings. The upper pegbox has twelve pegs for six double courses, and five iron semitone levers actuated by ivory thumb buttons.

Dimensions: Length total 125.5; belly 65. Width 39. String lengths 65, 84.5.

Museum No.: 218-1882.

This instrument was no doubt originally a chitarrone similar to 7/11, but has been much cut down. The semitone mechanism is probably late eighteenth century or early nineteenth.

7/13 CHITARRONE. Italian; seventeenth century. Figs. 49 and 51.

Label, printed: Andrea Taus in Siena 1621.

Body of thirty-nine ribs of yew with a lighter wood stringing between. It is strengthened inside with strips of paper bearing manuscript inscriptions in Italian, apparently in an eighteenth- or nineteenth-century hand. Pine belly, carved with a rose. The neck has a rosewood fingerboard, but the instrument has never been played with this. A remaining ebony 'beard' shows that the original fingerboard was of ebony. The back of the neck has a lower section, probably original, with a kidney pattern inlaid in dark wood. The back of the long head has a crude imitation of this pattern, which also occurs on the front. This long head, which contains both

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pegboxes, is not original. The pegs are modern, the main pegbox being for six double courses and the upper for six single strings.

Dimensions: Length total 161; belly 48. Width 34. String lengths 67, 143.

Museum No.: 5989-1859.

According to Engel (p. 244), the instrument was originally a lute, and the present fingerboard is probably a fake. The maker Taus is otherwise unrecorded.

7/14 CHITARRONE. Italian; 1626 (?). Figs. 49 and 52.

A label is not visible but is possibly present and now obscured by paper lining strips. The date is engraved on a mother-of-pearl heart inset in the belly.

Small body of forty-four ribs of yew with ivory stringing between and with a finely string-decorated lace. The pine belly, carved with a rose, has a heart-shaped mother-of-pearl inset and ivory purfling. The fingerboard has panels of engraved mother-of-pearl surrounded by strips of ebony and ivory. The back of the neck has narrow longitudinal bands of ivory and ebony. The head has similar decoration but slightly coarser, and a section of the neck has been used for facing the upper pegbox. The main pegbox has twelve pegs and the upper eight, the pegs being modern, of rosewood set with mother-of-pearl shirt buttons.

Dimensions: Length total 170; body 55. Width 34. String lengths 70, 148.

Museum No.: 7755-1862.

This is probably an eighteenth-century conversion from a lute. Much of the decoration suggests a mid-seventeenth-century date for the original instrument if the authenticity of the engraved date is in doubt.

7/15 CHITARRONE by Wendelin Tieffenbrucker. Padua; 1592. Figs. 49 and 50.

Label, printed: In Padoua Vvendelio Venere and above, in ink, 1.5.9.2.

Body of nineteen shaded ribs. Belly of two pieces of pine, carved with a fine rose with an arabesque interlace pattern. The bridge appears to have been moved about 2·5 cm upwards, revealing a patch of criss-cross hatching on the belly where the bridge was previously placed. The neck has been broken and is probably not wholly the original neck. It is veneered with ebony and has stringing lines of ivory and marquetry panels with grotesque patterns apparently of mid-seventeenth-century date or slightly later. The panels on the back of the neck and on the long head are the contre-parties of those on the front in each case. The main pegbox has eleven pegs, for single treble course, the rest double. The upper pegbox is for eight single strings.

Dimensions: Length total 165; belly 50. Width 34.8. String lengths 67, 146. Museum No.: W.6-1940.

This is a good lute which was converted to a chitarrone in the eighteenth century or later. The marquetry on the fingerboard appears to be identical to that on a lute

by Hans Frei in the County Museum, Warwick. Both instruments have presumably been re-necked. The name on the label is the customary mark of the Paduan Tieffenbrucker, whose extant dated lutes lie between 1551 and 1611.

Given by Mrs. Constance Goetze.

7/16 SWEDISH THEORBO. About 1800. Fig. 53.

No label visible.

Asymmetrical body with straight sides and an arched back consisting of seven ribs of birchwood. The pine belly has an inserted rose carved in boxwood. The bridge is glued well to the bass side of the belly and has fifteen holes for strings, equally spaced. The neck, rising from towards the treble side of the body, has an ebony fingerboard with nine brass frets and there are seven ebony frets glued to the belly. There are three holes in the neck for attaching a capotasto.

The main head carries eight single strings. The upper head carries seven, and is provided with a semitone mechanism actuated by a brass thumb lever long enough to be used in most positions of the left hand. A wooden plate supported above the bass strings forms a nut for this mechanism and also allows the attachment of a capotasto for the basses in two positions.

Dimensions: Length total 100; belly 50. Width 36. String lengths 58, 76.

Museum No.: 212–1882.

GROUP 8. MANDORES AND MANDOLINS

From the later Middle Ages up to today instrument-makers have provided small instruments superficially resembling miniature lutes, intended to be played with comparative ease. They have generally been known in England by the French names mandore, and, from the eighteenth century, mandoline (now often anglicized 'mandolin'). The Renaissance mandore, which was especially popular in France in the second half of the sixteenth century and remained so into the next century, has a narrow and shallow body, either formed on a mould with ribs like the body of a lute, or carved from one piece of wood (which may form the neck as well). This second construction is illustrated in a French instrument in which the back is ornamented with carving of rare quality (8/1: Fig. 54). The belly is flat and is carved with a rose. The small number of strings is typical of the early mandore; they are of gut, and run from a slightly reclining pegbox to the attachment on the bridge. A later example from Italy (8/2: Fig. 55) is still strung with only four courses, but the tendency throughout the seventeenth century was to increase the number of strings until finally the eighteenth-century mandore with six double

courses was developed. This is usually described as a 'Milanese mandolin'. The body is now deeper and wider, though in most other respects the form is still that of the Renaissance version. Despite the name, this was made in most north Italian cities (8/3: Fig. 56) and in France as well (8/4: Fig. 56), varying in small details from place to place.

The Neapolitan mandolin, which is still played today, is considerably different (8/5: Fig. 58). The strings are of wire, in four double courses tuned like a violin, and are always struck with a plectrum, whereas on the previous forms either fingers or plectrum might be used. The body is deepened towards the lower end by incorporation of an upper rib of exaggerated depth, and the belly is bent inwards at bridge level to help bear the strain of the tightly tuned wires. The soundhole is open (at first circular, later oval) and a tortoiseshell plate protects the belly from being scratched by the plectrum. The strings run from a flat guitar-like head to attachment at the base of the body. Such was the mandolin envisaged by Mozart for the Serenade of Don Giovanni (1787). Its origin is not entirely clear, but by 1750 it was already becoming well known, its most celebrated makers of the time being the Vinaccia family of Naples (8/5, 8/6: Fig. 58). Early in the nineteenth century the old fingerboard flush with the belly was replaced (as it was also in the guitar during the same period) by a raised fingerboard which is extended on to the belly, thus doing away with the need for the extra frets previously set into the wood of the belly itself. This modern fingerboard is seen on a Roman mandolin (8/9: Fig. 61), a late example of one of several sub-species which appeared during the diffusion of the Neapolitan form up and down the country, along with ephemeral hybrids with the older 'Milanese' model which at the same time became supplanted by the later types.

The Bandurria

This is musically a Spanish equivalent to the Italian mandolin, employed in small orchestras for sounding the melody over an accompaniment of guitars. It is referred to in the sixteenth century, but not then fully described. The modern bandurria (8/11: Fig. 62) was well known in the eighteenth century. It is flat-backed, very small, with something of the pear shape of a cittern and often, though not invariably, has the squared shoulders seen here. It has six double courses of strings, usually gut but sometimes wire, running from a flat guitar-like head. Throughout the nineteenth century the bandurria was also built in variant forms (8/12), either to appeal to some ornamental fashion or with the idea of giving greater volume, but the standard instrument today remains true to the old model.

8/r MANDORE. French; 1640. Fig. 54.

Inscribed on edge of body, in ink, Boissart 1640.

Body, neck and pegbox carved in one piece of pearwood. The shallow, rounded back is beautifully carved with a scene of the Judgement of Paris, amid strapwork and floral scrolls. The neck is almost plain, but the back of the pegbox is carved with a vigorous representation of Medusa's head. The belly is carved with a rose and has a black border. The neck is veneered with ebony, flush with the belly, and two slender ebony beards are set into the belly continuing the line of the neck. There are five very small pegs, an ivory nut, and no frets.

Dimensions: Length total 42; belly 21. Maximum depth 3.5. Width 12. String length 28.3. Length of neck 11.

Museum No.: 219-1866.

8/2 MANDORE by P. A. Gavelli. Perugia; 1690. Fig. 55.

Label, in ink: Pietro Ant: Gavelli in Perugia 1690.

Body of nine fluted ribs alternately of ivory with engraved scrollwork, and tortoise-shell on metal foil with intervening stringing of ebony. Pine belly with a sunk triple rose of carved wood. The neck, fingerboard, stringing between the ribs, and decoration of the belly, have bands of small triangles of mother-of-pearl and ebony in marquetry. There are no frets. The pegbox has seven pegs, for four courses, the treble single, the rest double. The square finial is decorated with mother-of-pearl and tortoiseshell marquetry.

Dimensions: Length total 50; belly 24. Width 12.5. String length 33.5. Length of neck 14.

Museum No.: 504-1868.

8/3 MANDORE (Milanese mandolin) by Molinari. Venice; 1757. Fig. 56.

Label, printed: Joseph Molinari fecit | Venetiis Anno 1757. Also, stamped on belly, Ioseph Molinari.

Body of eleven ribs alternately of ebony and ivory. The belly is of a single piece of pine, carved with a rose in an interlacing design. The neck, and the ribs of the back, are decorated with a feather design in ebony and ivory. The ebony fingerboard has eight ivory frets and the nut is of ivory. The open-backed pegbox has a square finial and has twelve ebony pegs, for six double courses. The strings are tied to the bridge.

Dimensions: Length total 51; belly 25.5. Width 13.5. String length 30. Length of neck 10.

Museum No.: 191-1882.

8/4 MANDORE by Jean Nicolas Lambert. Paris; 1752 (?). Figs. 56 and 57.

Label, printed: J. N. Lambert | Rue Michel le Comte, Paris | 1752 (the last two figures in ink but unclear).

Body of thirteen ivory ribs with thin ebony stringing between, the lines carrying on up the neck. The lace is of ebony. The belly has a parchment rose surrounded by a ring of mother-of-pearl and ebony chequers which echo the purfling. The bridge terminates in applied fretted ebony scrolls. The ebony fingerboard has ten silver frets. The pegbox has a finial in the form of a Moor's head, of ebony with an ivory turban. There are eleven pegs, for six courses of strings, the first single, the rest double.

Dimensions: Length total 56; belly 22.5. Width 14.5. String length 31. Neck length 14.3. Museum No.: 503-1868.

For this maker, cf. 2/2.

8/5 MANDOLIN by Antonio Vinaccia. Naples; 1772. Fig. 58.

Label in ink: Antonius Vinaccia Fecit | Neapoli in via Constantini | Ao 1772.

Body of twenty-one fluted ribs of maple with ivory intervening stringing and a fancy fretted lace. The belly is bent inwards at bridge-level and has a circular sound-hole surrounded with a band of tortoiseshell and mother-of-pearl marquetry with figures. There is similar marquetry, but of a formal nature, on the fingerboard and the lower end of the belly. On the latter also a tortoiseshell protector plate between soundhole and bridge. The neck is banded with mother-of-pearl and tortoiseshell backed with metal foil. There are ten silver frets. The shaped flat head has eight rear pegs, for four double courses of wire strings (two steel, one brass, one overspun). Dimensions: Length total 57; belly 28. Width 17.8. String length 32.5. Length of neck 14.

Museum No.: 10–1894.

8/6 MANDOLIN by Vincenzo Vinaccia. Naples; 1785. Fig. 58.

Label, printed: Vincentius Vinaccio Fecit Neapolita | I Sito Nella Calata dello Spitaletto A.D. 1785 (the last two figures in ink).

Body of sycamore with intervening stringing simulated with black paint. Pine belly, bent at bridge-level and with tortoiseshell protector plate. The circular soundhole is surrounded with crude marquetry in mother-of-pearl and tortoiseshell, and the same crude decoration appears on the fingerboard and the edging of the belly. The neck is decorated with bands of tortoiseshell on metal foil, and of ivory and ebony. There are ten ivory frets on the fingerboard and four of ebony on the belly. The flat figure-of-eight head has eight rear pegs of boxwood, for four double courses. Dimensions: Length 50; belly 30. Width 18. String length 33.5.

Museum No.: 199-1882.

The difference in quality between the decoration of this and of 8/5 is very marked,

possibly pointing to the construction of instruments of two different qualities by V. Vinaccia, if not to a deterioration of standards in the workshop.

8/7 NEAPOLITAN MANDOLIN by Vincenzo Vinaccia. Naples; 1761 (?). Fig. 58.

A very dark label inside reads: ... n.ius Vinaccio Filius | ... Januarii fecit Neapoli | alla strada della Rua Catalana | 176 (1?).

Body of twenty-three ribs of sycamore with intervening stringing of darker wood. Pine belly with ivory purfling and tortoiseshell protector plate. The round sound-hole has crude marquetry surround of mother-of-pearl and tortoiseshell. The neck and fingerboard are banded with ebony, ivory and tortoiseshell on metal foil. There are ten frets on the fingerboard and four ebony frets on the belly. Eight pegs for four double courses.

Dimensions: Length total 55; belly 28. Width 17. String length 33.

Museum No.: 198-1882.

A simple version of 8/5. The date 1761 would seem a little early for Vincenzo Vinaccia; possibly it should be read 1766 or 1767.

8/8 MANDOLIN. Possibly Genoese; late eighteenth century. Figs. 59 and 60. No label visible.

Body of seventeen ribs of rosewood with intervening ivory stringing. Belly of two pieces of pine, bent inwards at bridge-level and decorated at the lower end with an inlaid figure of a woman in engraved mother-of-pearl, bearing a coat of arms and the initials A.G. A two-tier rose of leather, and the tortoiseshell protector plate, are both surrounded by border patterns of engraved mother-of-pearl set in composition. There are seven brass frets on the fingerboard and five on the belly. The head has twelve rear pegs of rosewood with ivory studs, for six double courses of metal strings attached to base of body (or bridge?).

Dimensions: Length total 59; belly 26.5. Width 17.5. String length 29. Nut 5. Length of neck 12.7.

Museum No.: 200-1882.

8/9 MANDOLIN by Antonio Petroni. Rome; 1865. Fig. 61.

Label, printed: Fabbrica d'istrumenti | di Antonio Petroni | Premiato all'Esposiizione Universale di Parigi del 1867. Roma. Via Lodevini. (Some figures follow.) On the belly is a small mother-of-pearl oval engraved A. Petroni | No. 50 Via Carrozza | in | Roma 1865.

Body of six wide, not fluted, ribs of ebony with formal decoration of mother-ofpearl and ivory all over. The belly, bent inwards at bridge-level, has a round soundhole and an ebony protector plate which, like the borders, the back of the neck and the fingerboard, is decorated in the same manner. The fingerboard extends on to the belly and has seventeen brass frets (of flat strip). The flat head, with curved upper edge, is mounted with an engraved silver plate covering a radially arranged screw tuning for the four double courses of wire.

Dimensions: Length total 51; belly 28. Width 18.5. String length 33.2. In a fitted mahogany case with the coat of arms of the House of Savoy in marquetry on the lid. Museum No.: 924-1902.

The instrument is said to have been made for Queen Margherita of Italy, who was married in 1868.

Given by Robert Storks, Esq.

8/10 MANDOLIN. French; nineteenth century. Fig. 60.

Label, printed: Eulry-Clèment | A Mirecourt | (Vosges).

Body of sixteen ribs of sycamore, rosewood and mahogany, forming a striking banded appearance. A fancy lace is carried round to the neck. Pine belly, slightly bent inwards at bridge-level, with an open soundhole with stringing surrounds and a protector plate of rosewood, inlaid. Bridge missing. Ebony neck with fingerboard. extending on to belly and eighteen frets of silver T-section wire. The flat head has decorative ivory studs along the sides, and eight rear pegs for four double courses of metal strings, running to four ivory hitch studs at the base of the body.

Dimensions: Length total 62; body 28.5. Width 17. String length 39. With the instrument, a quill plectrum bound with silk, length 10 cm.

Museum No.: 216-1882.

8/II BANDURRIA. Spanish; nineteenth century. Fig. 62.

No label visible.

Back and sides of walnut. Pine belly with simple purfling, open soundhole, and a fixed bridge to which the strings are tied. The body has squared shoulders, and is lined with triangular wooden blocks. The neck block has a slipper-shaped extension down the back of the body. The neck is of pine, likewise the wedge-shaped flat head with twelve pegs inserted from the rear, for six double courses of gut strings. The raised fingerboard has thirteen brass frets.

Dimensions: Length total 56; belly 23.5. Width 22. Depth 8.5. String length 25.5. Museum No.: 206-1882.

8/12 BANDURRIA. Spanish or Portuguese; nineteenth century. Fig. 62. No label visible.

Heavily constructed body with back and sides of rosewood, with the shoulders carried upwards in two hollow, squared-off horns. The back is bent sharply backwards at the horns and at the lower end of the body, which is flat and provided with two ivory feet so that the instrument can stand unsupported. The thick bottom

block is cut away centrally to allow for an inwardly sloped section of the lower part of the belly with twelve hitch-pins for the strings. The belly has three small open soundholes, a thuya wood protector plate and a loose bridge. It has simple fanbarring on the underside.

The neck has a raised fingerboard with fourteen steel frets. The wide fan-shaped head accommodates screw tuning actuated by twelve brass wheels, four along each side and four along the top. Six double courses, four of gut and the last two of overspun wire.

Dimensions: Length total 55; belly, excluding the horns, 24.5. Width 22. Depth at middle of sides 7.3. String length 28.

Museum No .: 227-1882.

An example of the elaborate bandurria models made during much of the nineteenth century, chiefly in Spain, though the type is not unknown in Portugal.

GROUP 9. THE BANJO

The inhabitants over wide tracts of West Africa and the Sudan have been observed in modern times to play simple stringed instruments with a skin belly attached to a bowl-like receptacle or else to an open frame. It may be presumed that the knowledge of such instruments was taken to the New World by African slaves, who were reported as making something of the kind in Jamaica in the late seventeenth century and in America, under the name 'banja', in the eighteenth. By the midnineteenth century the instrument had also entered into use among sections of the European population in America and had been introduced to England by the Christy Minstrels.

The banjo exhibited (9/1) shows the early method of securing the skin or 'vellum' by means of tacks. Usually the back of a banjo is open, so that the prolongation of the neck which transfixes the frame from end to end is visible. A closed back, as in the present example, is not, however, exceptional in early banjos, although the frame is more usually circular, as it always became when the tacked vellum was replaced by one which is tensioned by screws—an improvement which appears to date from around 1850. The neck of the banjo is traditionally without frets. At first there were four strings only, but most extant early specimens already include a fifth string, which is a short 'thumb string' pegged midway along the neck and used for sounding a high G only. Modern features of the banjo, including wire strings, metal frets, use of a plectrum, and resonating devices added to the body, date from late in the last century.

9/x BANJO. American or English, about 1830–1840. Fig. 63. No label visible.

Pear-shaped body, with a flat back of pine in which there is a small soundhole bushed with bone. The sides, of maple (?), nailed to the sides of the mahogany neck. The latter continues as a pole across the body under the vellum. The vellum is stretched over on to the sides and held by brass tacks; it appears to have been once fitted to an instrument of smaller, blunter shape. The bridge is of wood topped with bone. The neck is unfretted and has a bone nut, and a lug half-way along on the bass side to hold the peg of the short thumb string. The flat, figure-of-eight head is of rosewood, with four ebony pegs inserted from the rear. The five gut strings are led to a short wooden tailpiece strung to an ivory end-pin driven into the end of the neck-pole.

Dimensions: Length total 99, body 34. Width 32. Depth 8. String length to centre of vellum 74. Length of neck 23.

Museum No .: 226-1882.

GROUP IO. THE CITTERNS

Citterns are wire-strung instruments, usually with a rounded body-outline (pear-shaped) and a flat or nearly flat back. The thirteenth century appears to have known something of the kind, but the substantial history of the cittern begins with the Renaissance, when the instrument was associated particularly with Italy, where the hot sun brings conditions on the whole more favourable to metal strings than to gut. During the sixteenth century the cittern spread from Italy to other countries, to find a small place in professional music and a larger one in recreational and casual music-making of all kinds, wherein the 'spritely' sound of its strumming was much enjoyed.

A number of sixteenth-century Italian citterns survive, the elegant example shown (10/1: Fig. 64) being a comparatively large one, though fully characteristic in most details. The sides of the body taper towards the lower end. The fingerboard anticipates that of the modern guitar, being raised and extended over the belly and is provided with brass frets (some of which are absent or of incomplete width owing to certain problems in the intonation of chords which arose from a favourite manner of tuning the strings). The neck runs up behind the treble side of the fingerboard only, evidently with the idea of giving rigidity without adding to the weight which would have upset the balance of the instrument. The pegs are inserted from the front into holes in the flat head, the back of which is carved in

the form of a hook for hanging the cittern up. The strings pass over the bridge to the base of the body. They run in double courses, sometimes combined with triple, and were tuned in ways that closely anticipate that of the ukulele—with the same purpose of making simple chords easily playable, the fingers or a plectrum being used according to choice.

During the second half of the seventeenth century the cittern lost its popularity in most countries, though not in Germany (10/2: Fig. 66), where it also took on some fresh shapes. One of these is the 'bell' cittern (10/3: Fig. 65), so called from the form of its body. It was apparently introduced by the famous Hamburg maker Tielke, in the latter part of the century, whence its other name *Hamburger cithrinchen* ('little cittern'). Elsewhere in Germany, forms closer to the old Italian cittern survived, like the eighteenth-century models of Kram, Nuremberg, many of whose instruments are 'arch-citterns' with extra bass strings running from a theorbo-like upper pegbox (10/5: Fig. 69). In the near-by mountainous forest area of Thuringia, the simple cittern has been preserved as a folk instrument up to modern times, described as a Wald-zither ('forest' or 'mountain cittern', 10/7: Fig. 69), and played with a quill plectrum.

10/1 CITTERN. Italian (Urbino); 1582. Fig. 64.

Painted on back of neck: Augustinus Citaradus Urbinas MDLXXXII.

Back and sides are carved from a single piece of sycamore. The back is very slightly arched. The pine belly, also slightly arched, is a little wider than the back. It is purfled and decorated with a squared knot-pattern at the lower end, where there is a scrolled wooden projection (the 'comb'), slotted to hold the strings. The underside of the belly has four strengthening bars arranged in an open square. The bridge and the rose are simple modern replacements. The sides, which taper from neck to base, are carved with overlapping rosettes within roundels. At the neck the sides end in carved outward-turned scrolls.

The neck, which is offset to the treble side of the instrument, carries a sycamore fingerboard with eighteen brass frets. The fingerboard extends on to the belly, with a cartouche at its end which does not appear to have been decorated with any armorial charges, though another cartouche, on the back next to the neck, has a cittern carved on the shield in relief and the initials A.C. painted on it. The head has a slightly domed surface into which the pegs are inserted from the front. The finial is a small open bifurcated scroll, and a suspending hook is carved in the back of the head. The instrument appears to have been originally four-course (the top course double, the rest triple with the middle string tuned to the lower octave), but has been altered rather crudely to six-course. Two early pegs remain.

Some of the brass frets are of fractional width: nos. 4 and 11 serve only the third course (of an original four courses); nos. 6, 8, 13 and 15 serve the first and third courses only.

Dimensions: Length total 95; belly 45. Width 30. Depth at neck 6.4, at base 2.4. String length 62. Nut 4.3.

Museum No .: 392-1871.

This is a large and very elegant example of the classic Italian cittern, of which four-course examples are very few, most being six-course. Citaradus appears to denote either a cittern player or a cittern maker in sixteenth-century Italian documents, but of the Augustinus nothing further is recorded.

10/2 CITTERN. Italian or German; late seventeenth or early eighteenth century. Figs. 66 and 67.

Stamped on the back, next to the neck, with three Moors' (or kings') head crowned and the name *Nicolas* (the N back to front) on a shield surrounded by a double-headed eagle. The same stamp also appears below the head.

Striped back of sycamore and ebony in eleven strips slightly radiating. Pine belly, double purfled, with a finely carved rose and with varnish applied with a blade. The sides taper towards the base, and a halved turned baluster is applied on each side by the neck. Five brass hitch-pins at the base of the body receive the strings. Offset neck as in 10/1, surmounted by a rosewood fingerboard with shaped end on which is painted a grotesque beast with an ape's face. The head is a pegbox with ten shaped pegs of ivory, pierced and serrated, and with a rosette-shaped finial. Wire strings in five double courses of steel and overspun brass. Of the eighteen brass frets, nos. 11, 13 and 15 serve the first two courses only.

Dimensions: Length total 64; belly 30. Width 22.5. Depth at neck 4.5, at base 2.3. String length 38. Nut 4.

Museum No .: 35-1867.

An example of the traditional Italianate cittern which many German makers continued to build up to the middle of the eighteenth century.

10/3 CITTERN. Probably by Tielke. Hamburg; about 1700. Fig. 65.

No label visible, but inscribed on the side of the neck Joachim Tielke in Ham. 1539. The date is in a different hand.

A bell cittern or Hamburg Cithrinchen. Bell-shaped outline. Slightly arched back. This, like the sides, surrounds to the roses in the belly, and the pegbox is decorated with complex floral patterns and mythological figures, executed in marquetry of ivory and tortoiseshell, set in places with gems of coloured glass or paste. Belly of pearwood, with three sunk roses constructed with intricately cut vellum. The sides taper towards the base. The bridge is modern.

The offset neck is surmounted by a tortoiseshell and ivory marquetry fingerboard with silver frets. The pegbox has a wooden finial in the form of a woman's head studded with ivory to simulate strings of pearls. Five double courses, though of the original ten pegs only three remain, the rest being modern. The frets run up to no. 19, nos. 16 and 17 being fractional and 18 omitted. An inscription roughly scratched on the neck reads: c'est trop tard 1539.

Dimensions: Length total 64; belly 28. Width, maximum, 24. Depth at neck 4.7, at base 3.2. String length 36.

Museum No.: 1122-1869.

Engel, p. 247. Though of inferior quality to other Tielke bell citterns, with the shapes poorly drawn and the engraving wretched, the example is, in the opinion of Herr Hellwig, nevertheless by Joachim Tielke.

10/4 CITTERN by Anton Bachmann. Berlin; 1769. Fig. 68.

Label, printed: Antonius Bachmann | Königl. Preus. Hofinstrumentenmacher | in Berlin 1769.

Bell cittern. Slightly arched back of a single piece of sycamore. Sides, narrowing towards the base of the body, of the same wood. Belly of two pieces of pine, slightly arched. The rose is modern. The shallow neck is of full width and carries an ebony-finger board tied with five gut frets, probably a replacement of an earlier fingerboard with fixed frets. The pegbox is for eight pegs and has a square finial faced with tortoiseshell. There are eight wire strings, running to eight ivory hitch studs on the base of the body, the bridge being grooved for two single courses and three double; but the nut has fourteen evenly spaced grooves.

Dimensions: Length total 73; belly 35. Depth at neck 5; at bottom 2.8. Maximum width 26. String length, mean value 37.

Museum No.: 201-1882.

Bachmann had a good reputation as a maker, though this instrument has considerably deteriorated in condition and has been altered. Engel (p. 326) was of the opinion that Bachmann was the repairer, not the maker, of this cittern: the date 1769, would be a late one for the building of a bell cittern.

10/5 ARCH CITTERN by Andreas Kram. Nuremberg; 1766. Fig. 69.

Label, printed: Andreas Ernst Kram | in Nürnberg | anno 1766.

Flat back of a single piece of sycamore, and sides, narrowing towards the base, of the same. Belly of two pieces of pine, with an intricate sunk rose of carved wood and parchment. The thick neck is of full width and carries a scalloped fingerboard with eighteen brass frets. The theorbo-like upper pegbox is surmounted with a carved lion's head with red-painted tongue, probably taken from another instrument. The main pegbox is for four double courses of wire, and the upper for nine

single basses. these last running down to long brass hooks attached to the base of the body.

Dimensions: Length total 78; body 42. Depth at neck 7.5; at base 4.4. Width 28. String lengths 43, 25.

Museum No.: 215-1882.

10/6 ARCH CITTERN. German; late eighteenth or early nineteenth century. Fig. 69. No label visible.

Maple back and pine belly, both flat and both overhanging the sides. The latter taper slightly towards the base of the instrument. The original inserted rose is missing. Iron hooks fastened to the base of the body receive the strings. The offset neck carries a thick, dark-stained wooden fingerboard which flies a short distance over the belly and has twelve brass frets (nos. 10, 11 and 12 fractional). The theorbostyle upper pegbox has a simple rounded finial. The main pegbox is for four double courses of wire, the fourth course being overspun. The upper head has ten pegs, for ten basses.

Dimensions: Length total 107; belly 47. Width 37. Depth, mean 6.5. String lengths 56,75.

Museum No.: W.160–1921.

This crudely built instrument is no doubt the work of a local craftsman in Bavaria or Thuringia, roughly following the models of Kram and other Nuremberg citternmakers of the second half of the eighteenth century.

Given by F. Garratt, Esq.

10/7 CITTERN. German; nineteenth century. Fig. 69.

No label.

Belly, back and sides of pine, the plates overhanging the sides. A crudely carved rose. The sides are of even depth and at each side by the neck is applied a halved turned wooden rod, distantly recalling the halved balusters of earlier citterns. Offset neck surmounted by a fingerboard with twelve brass frets not all equally spaced. Pegbox with eight pegs for four double courses of wire, the first three steel, the fourth brass; the numbers of the strings are inscribed inside the pegbox, which ends in a lobed, shield-shaped finial.

Dimensions: Length total 66; belly 29.5. Width 21.5. Depth 4. String length 35.8.

With it, a quill plectrum, length 9 cm, wound with coloured silks.

Museum No.: 217-1882.

A crudely built Thuringian or Harz cittern, also known as a Waldzither.

10/8 CITTERN. Probably German; early eighteenth century. Fig. 66. No label visible. The back, sides and neck are entirely decorated with floral scrolls and feathered bands executed in marquetry of ebony and ivory. The sides are of nearly even depth. The pine belly has an ivory rose surrounded, as is the edge of the belly, with a band of ivory and ebony barber's-pole decoration. There are ten ivory hitch studs at the base of the body. The ivory loose bridge is of a fancy shape. The neck is shallow, of full width, with a wide fingerboard of which the end is shaped in a symmetrical pattern as on English guitars. There are ten ivory frets and two shorter ones. The head has a flat face for ten pegs inserted from the front. These are ivory, of bud-like shape. The finial is in the form of a putto's head. The instrument is strung with six courses, namely four double of steel and two single of brass, as on an English guitar. Dimensions: Length total 64; belly 30. Width 26.8. Depth 5.7. String length 40.

Museum No .: 204-1882.

But for the form of the head (which is possibly a replacement) and for the absence of capotasto holes in the neck, this interesting instrument resembles the 'English guitars' of the second half of the eighteenth century, though probably it anticipates these, for the decoration recalls German instruments of the second half of the seventeenth century.

GROUP II. ENGLISH GUITARS AND OTHER LATE CITTERNS

Shortly before 1750 a completely new kind of cittern appeared in England, with a proportionately large body, and with deep sides which lack the taper towards the bottom of the older form (11/1: Fig. 71). Similar instruments were built in France, Portugal and Germany during the second half of the eighteenth century, but in which country the new design first appeared is a question which still awaits a positive answer. For some forty years after 1750 or so, this instrument was very popular in England and sold under the name 'English guitar' to lady amateurs, the best examples being handsomely made to go well with the indoor furnishings of the period. Its six courses of metal strings (four double and two single) were tuned to a common chord, suiting the arpeggio-like accompaniments of the day and easily transposable into other keys by attaching a capotasto. This last is a brass or ivory bar which may be fixed to the fingerboard above the appropriate fret; the neck of these citterns is drilled with holes in which the capotasto can be bolted (11/3, 11/8: Figs. 70 and 74). Some instruments are tuned by pegs, but more by a screw-tuning with threaded rods turned by an independent watch-key (11/1: Fig. 71), or by worm gears anticipating the 'machines' of modern guitars and double basses (11/3: Fig. 70). In 1787 a Londoner named Claus invented a striking

mechanism of small hammers actuated by six small piano-like keys and operated by the right hand, to obviate the risk of damage to the player's fingernails. This mechanism was at first contained inside the body of the instrument, the hammers coming up through the soundhole (11/8: Fig. 74). The later and simpler mechanism is external and easily detachable at will ('Smith's Patent Box', 11/5: Fig. 72).

The Portuguese guitar (11/10: Fig. 77) is closely related to the English and may be directly derived from it. It has never died out (as visitors to the *fado* restaurants in Lisbon will remember) and has retained the screw tuning, though arranged radially (as on mandoline, 8/9: Fig. 61) to give room for attached tuning buttons instead of relying upon a separate watch-key. The French instruments contemporary with the English guitar are also much like it, though the Parisian makers specialized in arch-citterns (*arci-cistre*, 11/12: Fig. 78) with five or so basses. They also made citterns with a round back like that of a lute though in other respects similar to the ordinary flat-backed models. Round-backed models were also made in England but less frequently (11/16: Fig. 75).

11/1 ENGLISH GUITAR by R. Liessem. London; 1756. Fig. 71.

Label, in ink: Remerius Liessem | f.Londini 1756. Also, stamped on the back: R.Liessem.

Festooned model. Two-piece back of sycamore. The belly has purfling lines simulated in ink, and an inset rose inlaid with a star of ivory and ebony surrounded by penwork scrolls. Normal loose bridge. The ebony fingerboard, very slightly curved, has sixteen full brass frets and three short, also five holes for attachment of a capotasto. The head has a square finial with star pattern inlay as on the rose, and brass screw-tuning (by separate watch-key, now missing). Four double courses of steel and brass, two single of overspun brass.

Dimensions: Length total 70; belly 32. Width 29. Depth 6. String length 44.5. Museum No.: 230–1882.

Other instruments by this maker exist, including a 'cello. If, as it appears, the screw-tuning is here an original part of the construction, it is an early example of this device which became so widely used a little later.

11/2 ENGLISH GUITAR by Edward Dickinson. London; 1759. Fig. 71.

Label, printed: Edward Dickinson | Maker | 1759, with a crowned harp.

A small-sized instrument of the usual pear-shaped model. One-piece back of sycamore. Belly with inked purfling lines and a rather simple carved rose. The curved ebony fingerboard has twelve brass frets and three capotasto holes. The pegbox is for the normal six courses (as 11/1) and has a square finial with a star pattern of ebony, ivory and a dark brown wood.

Dimensions: Length total 67; belly 29. Width 27. Depth 6.7. String length 40. Museum No.: 222-1882.

A very simple instrument by a minor luthier of the period.

11/3 ENGLISH GUITAR by William Gibson. Dublin; 1765. Fig. 70.

Signed on the back in ink: W. Gibson, 1765.

A large-sized instrument with pointed shoulders. Back of two pieces of sycamore. Belly of pine, the rose missing. The neck is slightly hollowed on the bass side and carries a nearly flat ivory fingerboard with shaped end, fourteen full frets of brass and two short frets, and five capotasto holes. An ebony capotasto is attached by a brass bolt. The head has an original enclosed worm-gear machine tuning, with brass ring-shaped fingerpieces. The square finial is faced with tortoiseshell in which is set a small silver shield with the initials J.G.D.

Dimensions: Length total 90; belly 40.5. Width 35.6. Depth 7.2. String length 53. Museum No.: W.7-1919.

Given by Miss N. Drummond.

11/4 ENGLISH GUITAR by Thomas Perry. Dublin; second half of eighteenth century. Fig. 70.

Stamped on the back: Perry / Dublin.

Fairly large-sized in the ordinary pear-shaped model. Back of one piece of sycamore. Belly with purfling simulated in ink, and a gilt rose of stamped copper in a pattern of musical instruments with a putto in the centre. The loose bridge is of wood in a curious shape with two spatulate feet. Seven ivory hitch studs at the base of the body.

The ivory fingerboard has fifteen brass frets and six capotasto holes. The head has worm machine tuning with ring-shaped fingerpieces, similar to 11/3. The finial in the form of a Negro head is of inferior carving and possibly a later addition.

Dimensions: Length total 85; belly 37. Width 31. Depth 5.4. String length 46. Museum No.: 223-1882.

Thomas Perry is described in Dublin directories from 1787 as 'Maker of Violins, Guitars, Tenors, Salters, Violoncellos'. He was apprenticed to Richard Duke, the well-known violin-maker of London, and Perry's violins have a fine reputation. Cf. cither viol by Perry, 1767 (2/8).

II/5 ENGLISH GUITAR by Frederick Hintz. London; about 1760. Fig. 72. Stamped on back: F. Hintz.

Model with pointed shoulders. Back of two pieces of sycamore. Pine belly, with inked purfling lines and with a rose of stamped copper gilt with musical instruments and a diaper pattern in the centre.

The ebony fingerboard has fifteen full brass frets and two short and five capotasto holes. The instrument may originally have had a pegbox head, for the present head is spliced on to the neck. It has brass screw-tuning stamped *Preston Inventor*, and behind, on the wood of the head, *Preston, maker*, *London*. and *PR* crowned. Square finial with tortoiseshell and ivory decoration.

Affixed to the lower part of the body by screw grips is a detachable mechanism for striking the strings with felted hammers, printed with the words *Smiths Patent Box* over the Royal Arms of England and the word *London*.

Dimensions: Length total 69; belly 34. Width 31.5. Depth 7.5. String length 40.5. Museum No.: 37-1870.

For Hintz, see note to 1/6. He was also compiler of 'A Choice Collection of Psalm and Hymn Tunes set for the Cetra or Guittar' (i.e. English guitar), about 1760. John Preston later won fame as a music publisher. Of Smith, nothing appears to be known.

11/6 ENGLISH GUITAR. English; about 1770. Fig. 72.

No label visible.

Model with pointed shoulders. Purfled back of two pieces of sycamore. Pine belly edged with a dark wood studded with mother-of-pearl roundels. The stamped copper gilt rose is similar to that of 11/5, though from a different die. The neck is hollowed along the bass side. The ivory fingerboard, with shaped end, has thirteen full frets and two short, of brass. The head contains original brass machines with ivory axles and ivory ring-shaped fingerpieces. A square finial with mother-of-pearl and tortoiseshell decoration.

Dimensions: Length total 79; belly 35.5. Width 31.5. Depth 7.5. String length 46. Museum No.: 219–1882.

The same machines are found on an English guitar by Michael Rauche, London, dated 1770 (Ashmolean Museum), though the present body-outline and the rose point to Hintz about the same date. Certainly in later times machines were obtained by luthiers from special makers, e.g. Baker (1/10), and so they may have been in the eighteenth century as well.

II/7 ENGLISH GUITAR by Joseph Rudiman. Aberdeen; late eighteenth century. Fig. 73. Inscribed on mother-of-pearl set in the back: Rudiman $|ABD_X^N|DG$.

Pear-shaped model, with back and sides of a handsome choice of wood, nicely decorated on the sides with feather banding. Belly with a gilt stamped metal rose. Red tortoiseshell fingerboard with silver frets and four capotasto holes. The pegbox has a tortoiseshell-faced square finial.

Dimensions: Length total 73; belly 34. Depth at neck 6.5; at base 7.5. Width 30. String length 42.5.

Museum No.: 375-1882.

Joseph Rudiman, 1733–1810, is listed by Lütgendorff (as Ruddiman) as one of the best Scottish luthiers.

11/8 ENGLISH GUITAR by Christian Claus. London; after 1783. Fig. 74.

Stamped on belly: Claus & Co. Inventor London. Patent-Instrument, surrounding the Royal Arms. Also stamped, at base of belly, No. 7 Garrard Street.

Body and belly all of pine, with feather banding painted in red. Similarly painted simulated rose containing six diagonally placed holes through which small felted hammers spring out to strike the strings from below. Six small wooden keys on the lower left side of the belly actuate the hammers. Bridge missing. Ebony finger-board with shaped end and twelve brass frets and three capotasto holes. Watch-key tuning. Finial broken.

Dimensions: Length about 70. Mean depth 8.2.

Museum No.: 240-1881.

A patent taken out in 1783 (no. 1394) in the name of Christian Claus is the earliest documentary evidence for a key-action for the English guitar mounted internally.

11/9 ENGLISH GUITAR. Possibly the work of Johannes Cuypers, The Hague; late eighteenth century. Fig. 75.

No label visible.

Very unusual waisted model in a vaguely Spanish guitar format. Arched back of sycamore. Slightly arched belly of pine with simulated purfling in black ink and an open soundhole. Ivory hitch studs at base of body. Ebony fingerboard with twelve brass frets and four capotasto holes. Pegbox with a pyramid-shaped rectangular finial. Normal English guitar stringing, the last two courses overspun.

Dimensions: Length total 69; belly 30. Width of bouts 20, 18, 22. Depth of sides 5.8. String length 32.5 (very short for an English guitar, though of the same order as that of Perry's cither viol, 2/8).

Museum No.: 224-1882.

11/10 PORTUGUESE GUITAR by J. V. da Silva. Lisbon; late eighteenth century or early nineteenth. Fig. 77.

Label, printed: Jaco Vieira da Silva a fez em Lisboa no Prata da Alegria anno de 17 (no manuscript figures inserted).

Model with blunt shoulder points. Back of pine. Pine belly with ivory and wood mosaic purfling. Two small f-holes and a brass openwork rose framed with mother-of-pearl. A tortoiseshell cartouche on the belly is embellished with mother-of-pearl.

Fingerboard with twelve brass frets and four capotasto holes, and, over the belly, a tortoiseshell cartouche embellished with mother-of-pearl. An ivory capotasto is in position. Watch-key brass tuning, for six double courses of strings. The finial is oval, with painted imitation cameo, *engrisaille* on a blue ground.

Dimensions: Length total 72; belly 34. Width 30. Depth 7.5. String length 43.2. Museum No.: 208-1882.

II/II PORTUGUESE GUITAR by H. R. Ferro. Lisbon; nineteenth century. Fig. 77.

Label: Henrique Rofino Ferro. A fez em Lisboa / Ao Poco do Berratem No. 73a.

Pear-shaped, with back and belly both of pine, the belly with an inlaid purfling and open soundhole. Slightly rounded rosewood fingerboard projecting over the belly, with fourteen brass frets. Shaped flat head in guitar style, with twelve rear pegs for six double courses of wire.

Dimensions: Length total 78. Depth 8. Width 30.

Museum No.: 222-1890.

11/12 ARCH CITTERN by Sébastien Renault. Paris; late eighteenth century. Fig. 78.

Stamped on back: SB Renault à Paris.

Back and sides of sycamore, decorated with ebony stringing lines. Belly, painted a cream colour, with barber's-pole purfling of ebony and mother-of-pearl. The same border surrounds the soundhole, which is filled with a rough rose, perhaps not original. Concave sides, narrowing towards the neck. The black-painted neck has two star-shaped mother-of-pearl position marks inlaid along the bass edge. The ebony fingerboard has seventeen brass frets and three small ivory position dots. Ebony pegs with ivory studs. The main pegbox has eleven, for four double courses and three single. The upper pegbox has five, for five single basses, and has an oblique nut. Dimensions: Length total 110.5; belly 40. Width 31.5. Depth, mean 11.5. String lengths 49, 81.

Museum No.: 207-1882.

Renault made violins, harps, citterns, trumpets marine and other instruments from about 1765 onwards. From about 1781 to 1797 he was in partnership with Chatelain (harp 16/9).

11/13 ARCH CITTERN. French; about 1780. Fig. 78.

No label visible.

Back of two pieces of sycamore. Belly with a paper rose. The purfling resembles that on 11/12 and the sides of the body are similarly concave. Ebony fingerboard with seventeen brass frets. Pegboxes, number of strings, and oblique upper nut similar to 11/12.

Dimensions: Length total 115; belly 43. Width 33. Depth 11. String lengths 49, 88.

Museum No.: 211-1882.

Clearly the work of one of the Parisian luthiers of the period, possibly Renault.

11/14 ARCH CITTERN. French; late eighteenth century. Fig. 76.

No label visible.

A cruder version of the two preceding instruments, with simulated purfling painted on the pine belly. The neck and pegboxes are painted black. The fingerboard (length 33 cm) at one time had seventeen frets, but has been refitted with fourteen brass frets. The main pegbox is for seven strings and the upper for five. The upper pegbox has a straight nut and a square finial.

Dimensions: Length total 107; body 44. Width 33. Depth 9. String lengths 58, 85. Museum No.: 221-1882.

11/15 ARCH CITTERN by Harley. London; early nineteenth century. Fig. 76.

On the gilt scroll painted round the soundhole, the words: Harley. London. Back and sides of sycamore. The belly is bordered by a Greek fret band in gold. The soundhole is open, and appears to have been enlarged, since the surrounding gilt scroll has been cut into. The neck and pegboxes are painted black. The ebony fingerboard (length 25 cm) has twelve ivory frets, and the nuts are of ivory, the upper nut being slightly slanted. The main pegbox carries six overspun metal strings in single courses, and the upper carries four. The strings are attached to a crude, massive bridge pierced with ten equidistant holes.

Dimensions: Length total 97; body 47.5. Width 35. Depth 9. String length 48 and (maximum bass) 66.5.

Museum No.: W.36-1917.

The instrument appears to be a kind of hybrid between the French arch cittern and the English harp-lute-guitar (13/7).

Bequeathed by Henry Saint-George, Esq.

11/16 ROUND-BACKED CITTERN. English; 1762. Fig. 75.

Inscribed on the body: ... London 1762.

Body of nineteen ribs of sycamore with intervening stringing and six ivory hitch studs at the base; the interior is lined with English printed paper, chiefly in repairs, using the *London Chronicle*, March 1820. The belly has an open soundhole. Shallow neck with ebony fingerboard of English guitar pattern, with shaped end and with twelve steel frets and four capotasto holes. The pegbox has ten pegs, some being replacements. Five double courses of strings, four of steel, one of overspun brass. The finial is small, nearly square, and ebony faced.

Dimensions: Length total 75; belly 35. Width 27. String length 46.

Museum No.: 202-1882.

This well-used instrument is of a model which contemporary French makers appear to describe as *pandore*. The body size is smaller than a lute's and larger than a mandore's. A signed English example by Johannes Zumpe, London (Frankfurt, Historisches Museum), is dated 1762 and is also five-course.

11/17 ROUND-BACKED CITTERN. French or English; 1757. Fig. 75.

On the back, in ink, the date 1757.

Body of twenty-one ribs of sycamore with black (ebony?) intervening stringing. Six ebony hitch studs at the base. Belly with open soundhole. The neck resembles that of 11/16 but the fingerboard has seventeen frets and four capotasto holes. The pegbox has ten pegs for five double courses, and a square finial faced with a marquetry star-pattern in ebony, ivory, mother-of-pearl, and a brown wood.

Dimensions: Length total 76; belly 38. Width 26. String length 45.5.

Museum No.: 197-1882.

The instrument is inferior in quality to 11/16, but has also been much used. The contour of the body suggests a copy of the similar, though superior, round-backed citterns by Deleplanque of Lille, dated 1766, etc., while the presence of seventeen frets also suggests French work.

GROUP 12. THE GUITARS

Medieval Europe also knew guitar-like instruments. The famous Warwick Castle 'gittern', partially converted into a fiddle and now in the British Museum, has been cited as an example (though not perhaps with sufficient justification). But the true guitar, which was diffused across Europe early in the sixteenth century, seems quite certainly to have been evolved in Spain, ultimately from some medieval prototype, perhaps with some element of protest against Moorish musical culture as symbolized by the Arab lute.

A few Spanish and Italian sixteenth-century guitars survive. They are scarcely different from the instrument as it was built in most countries on the Continent, especially in Italy and France, up to the end of the eighteenth century. Compared with modern guitars, the body is proportionately narrow and the waist therefore less decisive. The soundhole is occupied by a rose, often a complex sunk structure in ivory or vellum (Fig. 79). The wood of the belly runs a short way up the neck to abut against a flush fingerboard. There are five double courses of strings (occasionally six) and gut frets, sometimes continued by fixed frets inset in the belly. The back of the body may be flat, or arched and moulded with ribs; in the

latter form the sides are often similarly constructed (12/1: Fig. 79). This strong construction was also used in Italy in the seventeenth and eighteenth centuries for a popular species of wire-strung plectrum guitar now known to historians by the Florentine name *chitarra battente*. In this the wires, often in triple courses, pass over fixed frets and over the bridge to attachment at the base of the body (12/6: Fig. 82) as on the citterns and the Neapolitan mandolin.

Towards the end of the eighteenth century the metamorphosis of the guitar into its modern form commenced, impelled by a rapidly increasing vogue for the instrument as well as by a rising professional interest in what had previously been mainly an amateur instrument. By the late 1820's Schubert, Paganini and Berlioz can be cited among guitarists and guitar composers. The five double courses gave place to six single strings. The upper and lower bouts of the body were enlarged by degrees, and the soundhole was left vacant. The internal construction was strengthened in various ways, e.g. by side-linings of wooden blocks and a neck block elongated in 'slipper' form for extra support of the joint with the body. The early example of the work of Pagés (12/7: Fig. 83), a leading Spanish maker of the time, has several of these new features, and also shows the beginnings of the so-called 'fan barring' of the lower part of the belly introduced in order to improve the acoustics. Further modifications, of the first third of the nineteenth century, include the addition of an extended fingerboard with eighteen or more brass frets; a 'pin bridge', in which the strings are attached by ebony pins penetrating both the bridge and the belly; and the 'machine' head with its brass worm-gear for tuning. These items can be seen on the guitar attributed to the celebrated London maker Louis Panormo (12/8). Such developments bring the guitar to the eve of the appearance of the wide Forres model of the mid-century, the prototype of the modern Spanish guitar, though narrow models, with much fancy decoration in mother-of-pearl and other materials continued to be made late in the century for the feminine amateur (12/9: Fig. 84). Meanwhile numerous variant models of guitar had appeared, preceded by the lyre-guitars mentioned in the next section and including some designs intended to confer acoustical advantages over the normal forms (12/14: Fig. 87). Also, there are guitars of small size. These have existed since the earliest period of the guitar, and are well known in modern times by Spanish and Portuguese forms, including the machete ('hatchet') of Madeira (12/13: Fig. 62) and the ukulele established by Portuguese seafarers in Hawaii.

12/1 GUITAR by Joachim Tielke. Hamburg; 1693. Fig. 79. Label, printed: *Ioachim Tielke in Hamburg*, An. 1693.

Vaulted back of five broad ribs of engraved marquetry of tortoiseshell, ivory and pewter in floral designs, cupids and classical scenes identified by short inscriptions; also with putti running through foliage in chase scenes. The sides are of marquetry, similarly decorated. The pine belly, with ladder-pattern purfling in ebony, ivory and pewter, is inlaid with floral marquetry in tortoiseshell, ivory and ebony in the starshaped surround to the rose. The sunk rose is of vellum, of extreme complexity, partly gilded. The bridge is decorated with engraved mother-of-pearl and flanked by floral scrolls in tortoiseshell marquetry applied to the belly.

The neck is decorated on the back with tortoiseshell and ivory marquetry, and the extension of the belly wood is inlaid with leaves in engraved mother-of-pearl. The flush ebony fingerboard is bordered by ivory fillets, and is without frets. The head has openwork of carved ivory in a floral design with putto. There are eleven pegs of carved and turned ivory, for six courses of strings, the first single, the rest double.

Dimensions: Length total 102; body 50. Width of bouts 25, 21, 30. Maximum depth of sides 13. String length 72. Nut 5.

Museum No.: 676-1872.

This large and handsome instrument is one of fifteen Tielke guitars listed by Hellwig (Galpin Society Journal, Vol. XVII).

12/2 GUITAR by Matteo Sellas, Venice; 1623. Fig. 80.

The label on the underside of the belly seems to read:

In Mateo Selas | in anno 1623 | per sua altezza Fifté [Firenze?] a 100 D...ni which would seem to imply that this fine guitar was made for 'His Highness at Florence' who, in 1623, would have been the Grand-Duke Ferdinand of Tuscany (see also the chitarrone, 7/11).

Body with deeply vaulted back and flat sides, all covered with veneered parallel zigzag bands of ebony and ivory. The pine belly is elaborately decorated with delicate arabesque scrolls of ebony, framed with bands of a dog's-tooth pattern in ebony and mother-of-pearl. The bridge is missing. At a later date the lower parts of the sides have been cut in order to allow the belly to be bent inwards at the level of the bridge. There are five ivory hitch studs at the base of the body.

The neck is veneered with marquetry panels of scrollwork in the same materials as the decoration of the belly. The fingerboard has a formal pattern of mother-of-pearl and ebony triangles. Nine brass frets have been added and there are six well-worn frets set into the belly, five of them of short width. The head originally had ten pegs, but four extra pegholes have been bored along the centre line to be used, with the original hanging hole, in the conversion to a *chitarra battente* with five triple courses of strings. The pegs are now missing.

Dimensions: Length total 86.5; body 46.5. Depth 14. Width of bouts 21.5, 19, 27.

Museum No.: 7356-1861.

A fine guitar which has at some time undergone crude alteration for use as a chitarra battente.

12/3 GUITAR. Italian; mid-seventeenth century. Fig. 81.

No label visible.

Vaulted back of twenty-five ribs of snakewood (?) with intervening ivory stringing. The sides are constructed to match the back. The pine belly, with a double string of ivory purfling, is decorated with gouged-out floral scrollwork filled with some dark composition. The soundhole is surrounded with a chequered pattern of ivory and ebony inlay. Inside the body is much paper lining, which obscures a label. The slipper neck block is connected to the arched back by a packing piece. The bridge is missing. The back of the neck is inlaid with floral marquetry in ebony and ivory. Metal frets have been added at a later date. The head is for five double courses of strings. The marquetry on the neck of this guitar is so similar to that on 12/2 that both must at least have come from the same centre.

Dimensions: Length total 90; body 45. Width of bouts 19.5, 17.5, 24. Maximum depth of sides 9.

Museum No.: 390-1871.

12/4 GUITAR. French; early eighteenth century. Fig. 82.

No label visible.

Body with vaulted back of fluted rosewood ribs with intervening ivory stringing. The flat sides have similar ribs and stringing. The pine belly has triple purfling of ebony and the soundhole, from which the rose is missing, is encircled by two rings of triple purfling. Two scrolls of tortoiseshell flank the bridge, which is a pin bridge for six strings. The body is internally strengthened by parchment with French inscriptions. The neck has rosewood and ivory stringing. The ebony fingerboard has eight ivory frets, and there are seven ebony frets (the highest three of short width) in the belly. The oblong, shaped head is originally for ten pegs, but the instrument has been converted to nineteenth-century practice with six single strings. Dimensions: Length total 90; body 43. Depth 9. Width of bouts 19.5, 18, 24.5. String length about 64.

Museum No.: 214-1882.

When this guitar was received by the Museum, it was ascribed to Voboam, the famous Parisian maker of the Louis XIV period.

12/5 GUITAR. Italian; eighteenth century. Fig. 83.

No label visible.

Flat back of pine stained to resemble rosewood. Belly of two pieces of pine with

double purfling in ivory and rosewood, and decorated relatively crudely with floral marquetry of mother-of-pearl and tortoiseshell. The bridge is plain and the neck block has no slipper. The back of the neck is decorated with alternate strings of ivory and ebony. There are ten ivory frets, also five on the belly. The figure-of-eight head for five single strings is a nineteenth-century replacement, and the neck, only 3.5 cm wide at the nut, may also not be original.

Dimensions: Length total 90; body 44. Width of bouts 20.5, 16.5, 28. Depth 7. String length 63.

Museum No.: 205-1882.

12/6 GUITAR. Italian; eighteenth century. Fig. 82.

No label, but traces of ink lettering inside body.

Vaulted back of eighteen ribs with intervening ivory stringing. The sides are similarly built but the stringing of sides and back does not meet correctly. Belly of two pieces of pine with a slight bend inwards in the lower part, rather roughly executed. A complex wood and paper rose surrounded by chequered decoration of ivory and ebony inlay. The fixed bridge, with grooves for the strings which pass over it, replaces an earlier bridge. There are five hitch nails at the base of the body for attachment of the strings. The neck has eleven ivory frets topped with brass, and an extra fret has been added on the belly. The head, later than the body, has fourteen small pegs, for five courses of wire strings, the first double, the rest triple. Dimensions: Length total 89; body 44. Width of bouts 19.5, 17.5, 24.5. Maximum depth of sides 10. String length 56.5.

Museum No.: W.7-1940.

As with 12/2, this guitar has been crudely converted for use as a chitarra battente. Given by Mrs. Constance Goetze.

12/7 GUITAR by José Pagés. Cadiz; 1798. Fig. 83.

Label, in manuscript within printed frame: José Pagés me hizo en Cadiz Año De 1798. Back in two pieces of Spanish cypress separated by a thin strip of darker wood. The sides are also of cypress. Belly of a single piece of spruce, double purfled with a darker wood. The soundhole is surrounded with a chequer pattern of inlaid mother-of-pearl and dark woods. The bridge is of the Spanish type and has holes for six double courses of strings. Under the lower part of the belly is a simple fan-barring of three radiating bars. There is light bracing in a star-formation under the upper bout. The side linings are of individual blocks and the neck block is of a slipper pattern.

A thin raised fingerboard of rosewood, with eighteen brass frets, is a later addition. The wide wedge-shaped head is drilled with twelve pegholes and a suspending hole.

Dimensions: Length total 98; body 45. Width of bouts 21.5, 18.5, 27. Depth 9.4. String length 64.5.

Museum No.: 415-1905.

Given by Mrs. W. A. Cockerell.

12/8 GUITAR attributed to Louis Panormo. London; after 1837. Not illustrated. Label obscured by repairs.

Back of four pieces of rosewood with intervening stringing in two woods. The sides similarly constructed. The belly is of two pieces of spruce, with geometrical decoration round the soundhole in mother-of-pearl and various woods. Spanish bridge for six single strings. Slipper neck block. Plain neck with rosewood finger-board, seventeen nickel-silver frets, and wedge-shaped head with machine tuning stamped with a design and VR surmounted by a crown.

Dimensions: Length total 93.5; belly 45.5. Width of bouts 23, 18.5, 29.5. Depth 10. String length 64.

Museum No.: Circ. 290-1929.

12/9 GUITAR. Barcelona; mid-nineteenth century. Figs. 84 and 85.

Label, printed: No. 385 Fabca de Altimira. Calle Escudellers No. 61. Barcelona. año 184. Back of a single piece of amboyna wood veneered on to two pieces of pine. Sides of amboyna without pinewood base. Belly of a single piece of pine, purfled with mother-of-pearl painted with floral designs. Surrounding the soundhole, hunting scenes painted on wood with figures of painted and inlaid mother-of-pearl. An oval medallion with a love scene is painted on the back with figures similarly executed. Pin bridge faced with mother-of-pearl and surrounded with mother-of-pearl marquetry carved and applied to the belly. Plain neck block. The raised fingerboard has seventeen metal frets, between them panels of engraved and painted mother-of-pearl representing rural scenes and floral designs. Machine head for six strings.

Dimensions: Length total 95; belly 45. Width of bouts 23.5, 18, 30.5. Depth 9.5. String length 62.5.

Museum No.: W.15-1915.

This heavy and florid instrument is said to have been played by the daughter of General Don Manuel de Rosas, ex-Dictator of the Argentine Republic, who fled to England in 1852.

Given by Manuel Terrero, Esq.

12/10 GUITAR by Nicolas Morlot. Mirecourt (Vosges); first third of the nineteenth century. Fig. 83.

Stamped inside back: A la ville de CremonnE / NicolaS MorlOt and the initials N.M. in a triangle.

Back of a single piece of sycamore. Belly of two pieces of spruce, inlaid with motherof-pearl and ebony feather decoration, both as purfling and surrounding soundhole. Spanish bridge for six strings. Plain neck block. Ebony fingerboard with seventeen metal frets, and figure-of-eight head with six pegs inserted from the rear.

Dimensions: Length total 94; belly 45. Width of bouts 22, 16, 28.5. Depth 8. String length 63.5.

Museum No .: W.25-1916.

'A la Ville de Cremonne' is the sign of the Nicolas premises at Mirecourt. The father, Didier (1757–1833), surnamed 'the deaf', was a well-known violin-maker, as was also his son Joseph. After the death of the latter in 1864, the stamps of Didier (ainé) and of Joseph (fils) continued to be used by the successor, Deracey, of Mirecourt.

Given by Miss G. E. Johnston.

12/11 GUITAR. Probably Italian; mid-nineteenth century. Fig. 84.

Repairer's label, printed: Repaired by J. G. Winder, Kentish Town Rd., London 1900: Body with undulating outline. Arched back of dark-stained sycamore (?) painted over black. Similar sides. Belly of two pieces of pine, bordered with pearwood inlaid with floral designs in engraved mother-of-pearl and metal, and with a rose of mother-of-pearl floral fretwork. Plain neck, with ebony fingerboard inlaid at the end with a floral design in mother-of-pearl. Twenty brass frets of flat strip, and machine head for six strings.

Dimensions: Length total 88; belly 43.5. Width of bouts 24, 17, 29.5. Depth 7.5. String length 61.

Museum No .: 916-1902.

12/12 GUITAR by Rafael Vallejo. Baza (Granada); 1789-1792. Fig. 85.

Label in ink: Dn Rafael Vallejo | me hizo | en Baza on two labels followed in one case by me en | pezo ano de 1789 and in the other by ano de 1792 with, below, a printed figure of the Virgin glued to the lining papers. Inlaid in the belly the inscription Soy del rey Doncarlos IIII Qe.Ds.Ge.Ms.As., i.e. 'I belong to King Charles IV [1788-1808] whom God preserve for many years.'

A large instrument with extra treble strings of wire. Back of rosewood decorated with a stylistic sun in various woods. Deep sides of walnut, decorated with inlaid fillets of light wood in wispy floral scrolls. Belly of a single piece of pine, inlaid with rosewood in geometrical, heraldic floral motifs and the inscription given above. Rose missing. The back of the short neck is decorated with a chequer pattern in various woods. The front of the neck is decorated to match the belly and has five brass frets. The wedge-shaped head has twelve rear pegs for six double courses running to a Spanish bridge on the belly.

In addition, ten double courses of wire strings run across the treble side of the belly, to attachment at an oblique extension of the bridge. They are tuned by twenty rear pegs held in a flat and curved extension board fixed to the shoulder of the belly. The wires pass from these pegs under an iron wire bridge and over a curved wooden nut which follows the contour of the side. These wire strings are evidently intended to be tuned diatonically and struck with the fingers of the right hand in melodies accompanied by simple chords fingered on the gut strings and struck with the thumb.

Dimensions: Length total 102; body 50. Width (lower bout) 29. Depth at neck 10.5; at base 12. String length 67; of the wire courses from 38 to 21.5.

Museum No.: 389-1871.

Engel, p. 254. Other kinds of instrument with diatonic strings mounted across the treble side of the belly include the seventeenth-century polyphant and the late eighteenth-century 'Russian theorbo'. They have been recorded on the guitar in Italy, in an eighteenth-century *chitarra-salterio* ('psaltery-guitar'); also in a Parisian guitare-multicorde of about 1830, here with the expressed object of circumventing the comparative difficulty of playing on the higher frets.

12/13 SMALL GUITAR or machete. Madeira; nineteenth century. Fig. 62.

No label visible.

Back of a single piece of olivewood and sides of the same. Belly of two pieces of pine inlaid round edges and round the soundhole with various woods, including a type of rosewood. Neck of pine, stained black, with a rosewood fingerboard inlaid with various woods in a feather design, and with seventeen brass frets and a wooden nut. The figure-of-eight shaped head has four pegs for four single strings.

Dimensions: Length total 50.5; belly 22.5. Width of bouts 10.5, 8, 13. Depth 5. String length 33.5.

Museum No.: 203-1882.

12/14 GUITAR. Provenance unknown; mid-nineteenth century. Fig. 87.

Variant form with scalloped outline. Back of two pieces of rosewood. Belly of two pieces of pine, with three small soundholes arranged in a triangle, each surrounded by inlaid decoration. The strings pass over a loose bridge to attachment at a fixed pin bridge placed immediately below. Neck block with slipper. The raised rosewood fingerboard has eighteen frets of flat brass and nine position dots. The broad wedge-shaped head has machines for six strings.

Dimensions: Length total 95; belly 43. Width 34. Depth 9. String length 64.

Museum No.: 373-1882.

Whoever designed this instrument was clearly striving after acoustic improvement of some kind. A scalloped outline had been suggested for the English 'keyed guitar'

by one William Jackson in 1784, and is also met among nineteenth-century Russian models of guitar.

12/15 NECK OF A GUITAR by Giorgio Sellas. Venice; 1627. Fig. 88.

Inscription on engraved panel on the head: Giorgio Sellas | Alla Stella | in Venetia 1627 | Fe.

A finely decorated piece, with panels of mother-of-pearl on the fingerboard, engraved with figures of the Elements, and marquetry decoration in ivory on an ebony ground on the back of the neck, consisting of grotesque figures. The flat, shaped head has holes for ten pegs. Boxwood frets have later been added to the fingerboard. A complete guitar with a similar neck and dated 1630, is illustrated by J. Jalovec, *Italian Violin-makers*, Prague, 1952.

Museum No.: 358-1896.

GROUP 13. LYRE-GUITARS, HARP-LUTES, ETC.

Neo-classicism in late eighteenth-century fashions directed the thoughts of instrument makers, particularly in France, to the ancient lyre. A very few makers ventured to offer a true lyre, with two arms rising from the body to support a cross-bar from which open strings would run downwards to the belly, with no fingerboard. Otherwise such lyre-derivatives were always given a fingerboard, and were either played in the same way as the Spanish guitar or else as the equally familiar 'English guitar'. In either case their general appearance more or less recalls a generalized classical lyre. The commonest type, the lyre-guitar, built between about 1780 and 1840, is in fact simply a guitar (13/1: Fig. 90), and the hollow arms are purely ornamental (though they rather get in the way of the player's left hand and also, according to one contemporary source, detract from the tonal resonance). The 'Apollo lyre' by Wornum, better known for his work on the upright pianoforte, is much the same kind of instrument (13/3: Fig. 90), though technically a gutstrung successor to the 'English guitar', having a shorter string length than the lyre-guitar. Closer to a lyre in structure is another type which may actually have been the earliest of these designs. This is the 'French lyre' (13/2: Fig. 89) which has arms that are structurally functional, being the sole support for the head and fingerboard, the latter having the curved shape and the approximate proportions of the larger sizes of French cittern. The earliest dated example of this type is one made by Charles of Marseilles in 1785 (Yale University Collection).

Somewhat different are the creations of the London organist Edward Light, a

man of relentless energy and originality who brought out his series of inventions from 1798 to 1819 to meet a fair success at the time among musical amateurs. A witness to this is the quantity of instruments displayed in collections today. His starting-point, the harp-guitar (13/5: Fig. 92), is a kind of gut-strung 'English guitar' with the body constructed more or less after the manner of contemporary harps. This was claimed to improve tonal results. In the harp-lute-guitar (13/7: Fig. 92) he added some longer strings in theorbo fashion and recommended a tuning of the whole instrument that provided a diatonic series of open strings almost throughout. For stronger support of the extra strings he then introduced a harp-like pillar, mounted on the bass-side shoulder of the body and joined to the head of the neck (now displaced to the treble side of the body) by a curved or swan-necked member which approximately followed the 'harmonic curve', as it is termed, of a harp neck. The new model was named the 'Harp-lute' (13/8: Fig. 93). Then, in successive models, Light by degrees relegated the fingerboard to serve a minimal function (for a few extra notes on the highest strings) and increased the number of the open strings, at the same time providing these, or some of them, with devices for raising their pitch by a semitone, in mid-performance if necessary. Of these devices, the 'ring-stop' appeared on the harp-lute. More elaborate devices, actuated from the far side of the harmonic curve by the left hand, include 'ditals' (so called on the analogy of harp 'pedals'), which, through a system of levers and springs concealed inside the curve, can hold their grip on the string, if desired, after release of a button by the thumb. Ditals were introduced in the 'British harplute' (13/10: Fig. 94), which in its final form became known as the 'Dital harp' (13/11: Fig. 94). The instrument was still held much as a guitar, though it had become to all intents and purposes a kind of portable harp or, indeed, lyre. A further-advanced model by Ventura, an ex-associate of Light, was claimed to have 'all the properties of the grand pedal harp, as well as of the harp-lute and Spanish guitar' (13/12: Fig. 94). But the full application of the resources offered by these instruments must have required more study than the average enthusiast was likely to find time for, and one can appreciate that the needs of simple song accompaniment proved to be met well enough by either guitar or harp rather than by such complicated hybrids of the two.

13/1 LYRE GUITAR. Probably French; early nineteenth century. Fig. 90.
No label visible.

Lyre-shaped with hollow curving arms and an attached neck between. The back, slightly arched, is of two pieces of mahogany, each of which is continued to form

the back of one of the arms. Belly of two pieces of pine, similarly extending up the arms. Two open soundholes with mother-of-pearl and tortoiseshell mosaic edging, as also the edge of the belly. Pin bridge. The base of the body is flat, enabling the instrument to stand upright. The neck is joined to the body as on an ordinary guitar and is faced with a flat ebony fingerboard flush with the belly and with seventeen ivory frets. The flat head is joined to the points of the arms by two ornamental gilt wooden rods. There are six rear pegs, for six gut strings.

Dimensions: Length total 87; belly excluding arms 33.5; arms 51. Width of belly 36. Depth at neck 8; below 10.5. String length 67.5.

Museum No.: 249-1882.

13/2 FRENCH LYRE. French; late eighteenth century. Fig. 89. No label visible.

Lyre-shaped with no central neck. Back of five pieces of sycamore. Sides of two pieces joined edge to edge and lined with canvas. Belly of pine, with two open soundholes, loose bridge, eight ivory hitch-pins at the rounded base and also an ivory slinging button. The shoulders of the body are raised in the form of two horns, to each of which a curved and gilt solid wooden arm is attached in the manner of a guitar neck. These arms support a flat head with carved and gilt scrollwork and eight pegs inserted from the rear. From the head, a slightly curved fingerboard with fifteen ivory frets and shaped end projects downwards towards the body, ending short of it. Eight strings, five of gut, three of overspun silk. Ten capotasto holes.

Dimensions: Length total 85; belly 26; fingerboard 31. Width 48. Depth 14. String length 51.2.

Museum No.: 253–1882.

This instrument was brought from France by a Captain Westwood with accompanying documents, now missing, alleging that it once belonged to Marie Antoinette (Engel, p. 326). The number of surviving musical instruments which have been claimed as the erstwhile property of Marie Antoinette is, however, very considerable (cf. harp 16/7).

13/3 APOLLO LYRE by Robert Wornum. London; about 1813. Fig. 90.

Label, in ink: R. Wornum | Inventor & maker | No. 42 Wigmore Street | London. No. 63. Painted on scroll round soundhole: R. Wornum Maker 42 Wigmore St. Cavendish Sq. Lyre-shaped with central neck. Back of sycamore. Belly with open soundhole containing a gilt crescent supported by an interior bracket. The body is painted a dull green with border patterns of gilt scrollwork with griffins and lyres. The fixed bridge is of an L section with ivory-bushed holes, penetrating the belly, for the strings. At the base of the body is attached a gilt base with gilt balls all round, en-

abling the instrument to be stood on a table. The shoulders of the body are carried up in two hollow arms, 18 cm long, each being surmounted by an ornamental gilt wooden rod which curves upwards and inwards to join the head. The neck is black-stained and faced with a flat ebony fingerboard flush with the belly, with twenty silver frets and four very small ivory position dots. The head has six wrest pins for tuning six gut strings, and a Mercury or Apollo head of carved and gilt gesso. This head is carried on a hinge so that it may be tilted upwards to give access to the tuning pins.

Dimensions: Length total 85; belly excluding arms 31. Width 40. Depth at neck 7. String length 54.

Museum No .: 891-1875.

Edward Light has also been claimed as the inventor of the Apollo lyre, which was meant to be tuned in the same way as the English guitar.

13/4 DOUBLE HARP-GUITAR by John Frederick Grosjean. London; about 1840. Fig. 91.
No label visible.

Long, tapered body of rosewood, straight-sided with rounded ends, placed obliquely to the line of the strings. Flat back, and pine belly purfled with black and white stringing. The inside of the belly is covered with a layer of sand. The sides narrow towards the upper end of the body. In the side farthest from the strings are two slot-shaped soundholes. Low down on the other side a neck of guitar type is attached at an acute angle. The head of this neck, with a flat-topped fluted capital of vaguely Egyptian form, is connected to the upper end of the body by a wooden arm curved in something like the shape of the neck of a harp. The neck is provided with a rosewood fingerboard flush with the belly, with seventeen nickel-silver frets and with position dots of the same metal inserted in the centres of frets 7 and 12. From an intermediate point along the curved arm a second fingerboard, half the length of the first and with twelve frets, runs down to the body. To each fingerboard there are six strings of gut and overspun silk, running to two pin bridges on the belly. The instrument was slung on a ribbon for holding in normal guitar fashion. Dimensions: Length total 96; body 79. Maximum width 32. Depth, at top 4; at bottom 10. String lengths 63, 31.5.

Museum No .: 201-1872.

Grosjean, principally a harp-maker, announced in 1837 his idea of increasing the resonance of soundboxes by coating the belly with powdered glass, or sand (Engel, p. 251). The smaller fingerboard of the double harp-guitar is presumably intended for playing music in the high octave with comparative ease.

13/5 HARP-GUITAR by Clementi. London; early nineteenth century. Fig. 92. Painted on the fingerboard: Clementi & Co. London.

Rounded body of three pieces, with an open slot in the centre piece, and closed at the bottom by a deep curved plate, the whole stained brown and bordered with rows of simulated pearl ornament. Belly painted cream-colour bordered with flowers, with a fretted rose and a fixed bridge. The neck is thinned at the back down the bass side. The slightly curved black-painted fingerboard has twelve ivory frets and a shaped flat head with ten rear pegs. The instrument is, however, strung with eight single strings of gut, the two centre pegs being functionless.

Dimensions: Length total 80; belly 44. Width 30. String length 47.3. Nut 7. Museum No.: 243-1882.

13/6 HARP-GUITAR. English; early nineteenth century. Fig. 92.

No name visible (it was probably once painted on the now blank scroll over the soundhole).

Rounded body of three pieces with a curved piece closing the bottom, all stained as 13/5. Belly with simple painted borders of black and gold, and with a fretted rose identical with 13/5 and a pin bridge topped by an ivory bar which slants up to the treble side. The neck is thinned down the bass side, and the seventeen frets on the flat fingerboard are of brass T-section fret wire. The wide Spanish-guitar type of head has eight machines. Of the eight gut strings, the two on the bass side are separated by a small extra distance from the others.

Dimensions: Length total 92; belly 44. Width 31.5. String length 63. Nut 6.8. Museum No.: 242-1882.

Though with the normal body of Light's harp-guitar, and in several respects identical with the previous example (13/5), this instrument, as it stands, is clearly meant to be played as a Spanish guitar (string length, etc.) with two additional basses. The neck appears to be original.

13/7 HARP-LUTE-GUITAR by Harley. London; early nineteenth century. Fig. 92. Inscribed on the painted scroll over the soundhole: Harley. Maker.

Body of three ribs, the centre rib having an open slot-shaped soundhole, all stained dark brown, with gilt lines forming borders. Belly with crudely painted gilt scrollwork borders, and with an inset rose fretted to form a Prince of Wales's feather-pattern flanked with trumpets. Fixed bridge. The neck is affixed to the body a little over to the treble side and has twelve ivory frets. The main pegbox is for seven gut strings, and the upper, which has a square finial and a slightly oblique nut, is for four strings.

Dimensions: Length total 91; belly 43. String lengths 44, 62. Nut 6.

Museum No.: 250–1882.

This is another of Light's designs and was also made by Barry. Harp strings were

recommended for it, and all except the first two and the last one were tuned in a diatonic sequence.

13/8 HARP-LUTE by Edward Light. London; about 1810. Fig. 93. Inscribed above the fingerboard: 675. Light. Foley Place. London.

An early pattern. Body of seven ribs, with two sound slots in the centre rib. Belly painted black and decorated with gilt scrollwork. An inserted carved rose of starshape, and a tied bridge. The neck, rising from the treble side of the body, has a wide fingerboard with eight ivory frets and three nuts. The lowest nut is for the treble string only, the next is for four strings, and the highest is for two, there being seven fingerboard strings in all. Five longer strings run from a swan-necked bar or 'harmonic curve' supported at one end by the neck and at the other by the pillar which rises from the opposite side of the body. Each but the longest of these five strings can be raised a semitone by turning a brass blade or 'ring stop' having a hole in it through which the string normally passes clear. The blades are turned by the player's right hand save for that for the shortest of these strings, which is turned by the left thumb through a linkage of rods and cranks. The twelve strings are of gut and overspun silk, and all are tuned by wrest pins.

Dimensions: Length total 82; belly 41. String lengths: fingerboard strings 35, 37, 39.5; longer strings, from 56 to 63.

Museum No.: 37-1873.

13/9 HARP-LUTE. English; about 1815. Fig. 93.

No label visible.

Body construction similar to 13/8, painted green, trimmed with gold. The belly has a star-shaped rose and a pin bridge. A small fingerboard on the belly is for three strings, with seven frets. The main fingerboard is for three strings, with nine frets. The harmonic curve carries eight strings of which nos. 5, 6 and 7 can be raised a semitone by brass ring-stops as in 13/8, while nos. 1 and 4 are raised by movable nuts actuated by sprung levers. The total number of strings is fourteen.

Dimensions: Length total 83. String lengths: small fingerboard strings 26.5; large 44; long strings from 55 to 66.

Museum No.: 252-1882.

13/10 BRITISH HARP-LUTE by E. Light. London; about 1816. Fig. 94.

Inscription in gold on the flat top of the body: Light. Foley Place | London. Patent, No. 58.

Similar body to the preceding, but with a base allowing the instrument to stand. The belly is varnished and decorated with a dark border painted with flowers. Pin

bridge and open soundhole. On the capital of the pillar is an angel painted in gold. The harmonic curve is pierced with a kidney-shaped hole, as in the preceding example, and forms with the neck one continuous curved member. The small fingerboard on the body, with nine ivory frets, is for the shortest two strings only. There are two ring-stops and ten ditals.

Dimensions: Length 83. Width 35.5.

Museum No.: W.33-1925.

Given by Miss Edith H. Pecklington.

13/11 DITAL HARP by E. Light. London; about 1819. Fig. 94.

Inscription painted in gold on flat top of body: E. Light's Patent | Dital Harp | 43 Gt. Marylebone Street | London. No. 294.

Body, similar to the preceding, painted dark blue, edged with gold decoration. The scrollwork on the belly is rather well painted compared with that on many other harps, etc., of this period. A base with moulded composition embellishment allows the instrument to stand up. The pin bridge is placed aslant the belly. The curved member (neck plus harmonic curve) is without a hole. Of the nineteen strings, six are without mechanism and thirteen are provided with ditals. The small fingerboard is for the highest string only.

Dimensions: Length 88. Width 33. String lengths 20 to 70.

Museum No.: 99-1899.

13/12 HARP VENTURA by A. B. Ventura. London; patented in 1828. Fig. 94.

Inscribed: Gt Marylebone Street No. 43. Portland Place. | By the King's Royal Letters Patent. | Harp Ventura. Invented by A. B. Ventura | Teacher to her late Royal Highness the Princess Charlotte of Wales and Saxe-Cobourg.

Flat-based body with separate back and sides. Back of sycamore with a raised central panel. Sides of blond tortoiseshell. Belly painted cream-coloured, with wide border of painted leaves in black and gold. Supported in the open soundhole by an internal bracket is a wedgwood blue and white jasperware cameo centrepiece showing a cherub playing a lyre. There are two small fingerboards on the belly for one and three strings respectively, also a fingerboard on the neck for three strings. The harmonic curve carries ten strings provided with *fourchette* semitone mechanism taken from the Érard harp and actuated by seven brass thumb levers, each with a sprung locking device. (Only seven levers are required since three of them each control a pair of octave strings.) The mechanism is encased between brass plates. The tuning key is kept in a trap with a lid, in the flat top of the body.

Dimensions: Length 62. Width 33.

Museum No.: 248-1882.

GROUP 14. THE ZITHERS

There are two principal kinds of Western instrument which consist of a flat sound-box that is placed flat on a table for playing—zithers and dulcimers. Zithers are distinguished from dulcimers by their having a fretted fingerboard over which some—in certain cases all—of the strings run. On the ordinary zither this fingerboard is located along the longest side of the soundbox, which is the side nearest the player. The melody is played on the fingerboard strings, which are stopped with the left hand and struck with the thumb and forefinger of the right. Beyond these strings are a number of free strings on which the remaining fingers of the right hand make an accompaniment. All the strings are normally of metal, and the thumb and finger which strike the melody strings are usually armed with small plectra worn like thimbles.

Various forms of zither have existed as folk instruments over the wide tracts of Europe, from Scandinavia to the Danube, since the sixteenth century at least, and from later times in the United States (the 'Apallachian dulcimer' being one). They may be ultimately derived from the medieval monochords. Development of the South German and Tyrolean forms into concert instruments began in the latter part of the eighteenth century. The soundbox, originally a long rectangle in shape, was enlarged by a bulge on the far side ('Salzburg form') or a bulge on both sides ('Mittenwald form'), both apparently inspired initially by the body-shape of the cittern (whence the name zither, a German form of 'cittern'). The example shown (14/1: Fig. 95) is a fully developed instrument of Salzburg form, the type which won the greatest popularity as the nineteenth century progressed.

There are also bowed zithers. On these, the use of a bow to sound the strings (usually a bow somewhat shorter than that of the violin) places a limit on the number of strings that can be mounted on the instrument, which is still played flat on a table. Here too there are many folk varieties. The first of the concert varieties is due to Petzmayer, a Bavarian zither soloist, in Munich, 1823. This has a heart-shaped body (14/2: Fig. 95). Others followed, leading eventually to models which are no longer played on a table but against the shoulder like a violin (the 'philomele').

14/1 ZITHER, with its case, by Franz Lehner. Munich; 1867. Fig. 95.
 Label, printed: Franz Lehner | Saiten-Instrumentenmacher | München.
 A normal 'Salzburg-form' zither of its period. Body veneered with rosewood on pine, the edges trimmed with light-coloured stringing. The belly is decorated with

marquetry in painted and engraved brass and mother-of-pearl depicting a peasant girl and a boy playing an instrument like this, amid floral scrolls. There are three ball feet on the underside of the body. The fingerboard has twenty-nine frets and is traversed by five strings (two steel, one brass, two overspun) tuned by four machines and one wrest pin. Twenty-seven overspun accompanying strings are tuned by wrest pins.

Dimensions: Length 50.5. Width 32.5.

Museum No.: 642-1869.

The fitted case contains pitch-pipe, tuning key, cleaners and tools for maintaining the instrument, and brass containers for spare strings.

The instrument was shown at the Paris Exhibition, 1867, where it was bought for the Museum.

14/2 BOWED ZITHER by Max Amberger, Munich; 1867. Fig. 95.

Label, printed: Max Amberger | Saiteninstrumentenmacher | München | Reichenbachstrasse No 39 nahe | d'Actien Volkstheater. Also stamped on fingerboard: M. Amberger | Munchen.

Heart-shaped Petzmayer model. Asymmetrical heart-shaped body of rosewood, with two tear-drop shaped soundholes. Central fingerboard with twenty-nine frets and five position dots. The three wire strings are tuned at a projecting head at the wide end of the body, by enclosed worm-gear machines and ivory tuning pegs. The strings are sounded at the narrow end, with a bow which is now missing.

Dimension: Length 46.

Museum No.: 641-1869.

Shown at the Paris Exhibition, 1867, where it was bought for the Museum.

GROUP IS. THE DULCIMERS, ARPANETTAS AND BELL HARPS

The flat, trapeze-shaped soundbox of a dulcimer is normally placed on a table, though sometimes it is played upon the knees or slung by a cord round the player's neck. The longest side is nearest the player, and since there is no fingerboard, both hands are available for striking the strings. Striking may be with a pair of plectra or with a pair of light hammer-like beaters, with sticks, often made of cane. English historians have generally retained the ancient name 'psaltery' for the instrument when plectra are used, in distinction from 'dulcimer' when the player uses beaters; but since, at any rate from the sixteenth century, the method of striking has been a matter of individual choice (or, at most, of local custom),

although the instrument itself remains the same, the distinction is hardly necessary. Beaters have, however, been used far more regularly than plectra, both in the folk dulcimers of Central and Eastern Europe (which gave rise, late in the nineteenth century, to the large Hungarian concert *cimbalom* of the gipsy orchestras), and also in the pretty dulcimers made for domestic recreation in the seventeenth and eighteenth centuries, particularly by makers in northern Italy; that made by Berti of Florence is a fine example of this type (15/1). The wire strings run in multiple courses, tuned on the right. There are two bridges, but most of the courses bear upon only one bridge, passing through the interstices of the other. The right-hand bridge is placed fairly close to the tuning pins, but the other bridge is placed where it will divide the strings which bear upon it into two sections in the length ratio 2:3, which provides two notes that are musically a fifth apart. Hence twenty-four strings, a typical number, give a compass of thirty-six notes or more.

The Arpanetta is another domestic instrument of the seventeenth and eighteenth centuries, though little made after 1750 (15/5). It was built chiefly in Germany and the Netherlands, its German name Spitzharfe referring to the pointed shape of the soundbox, which has a belly and metal strings on each side. The player stood the instrument upright on a table with the shorter side nearest him, and played the melody on the right-hand strings and the accompaniment on the left.

The Bell harp, invented by a soldier, John Simcock of Bath, early in the eighteenth century, has a set of wire strings arranged inside a vertically held soundbox, but exposed at their upper ends where they are struck with the fingers or thumbs (15/7: Fig. 100). The instrument is suspended between the two hands and swung to and fro whilst playing to obtain a pulsating sound reminiscent of a bell. Bell harps were made until well past the middle of the nineteenth century, in France as well as in England, and at one time were a favourite among street musicians.

15/1 DULCIMER by Antonio Berti. Florence; 1745. Not illustrated.

Label on the base, in ink: In Firenze / Antonio Berti / l'anno 1745.

Trapeze-shaped soundbox, with gilt moulding round the edges. Pine belly with two gilt paper roses. A dark-stained wooden wrest plank on the right and block for hitch pins on the left.

Twenty-four courses of wire strings, alternately quadruple and triple. The two bridges are composed of individual wooden posts over which run flexible brass wire bearers.

Dimensions: Length, front 75; back 39. Depth 7. String lengths 30 to 61.

Museum No.: 273-1882.

15/2 DULCIMER. Possibly Italian; first half of eighteenth century. Fig. 96.

No label visible.

Trapeze-shaped, with mirror-glass panels in the sides. Two sunk roses of complex structure. An unidentified crest or coat of arms (a lion rampant, azure) on a shield below a coronet, is on the front, carved and gilt. Twenty-six quadruple courses of wire strings.

Dimension: Length 80. Museum No.: 264-1866.

15/3 DULCIMER. Provenance and date unknown; probably mid-eighteenth century. Fig. 97.

No label visible.

Trapeze-shaped body, heavily built, with the back of a wood possibly cypress. The soundhole is in the back, and the body has scrolled feet. The hitch-rail, on the left side, is carved with a deep channel, the inner edge of which forms a rail for eleven courses of strings attached to hitch pins immediately below the edge. The other fourteen courses are hitched to the outer edge of the channel. Since the photograph was taken the strings and bridges have been replaced.

Dimensions: Width 83. String lengths 21 to 69.

Museum No.: 4-1869.

The wooden case, not originally for this dulcimer, is decorated with a scene of Orpheus and the Muses surrounded by Baroque scrollwork of late seventeenth-century character. On the outside is a painted diaper pattern with sprigs, in blue and white. The case is probably Italian.

15/4 ARPANETTA. German; dated 1713. Fig. 98.

An indecipherable manuscript label on the bottom, in a German hand, ends anno 1713.

Soundbox of pine painted green with painted floral decoration. On each side, a complex paper rose. The soundbox has an internal partition and is surmounted by a carved and painted lion's head. At the base, painted paw feet. The strings on the right side comprise twenty-six double courses, and fifteen single courses for semitones, these last set closer to the soundboard. On the left side are twenty-one single and double courses.

Dimensions: Height 108. Depth of soundbox 5.8.

Museum No.: 911-1875.

15/5 ARPANETTA. Flemish, mid-seventeenth century (?). Not illustrated.

No label visible.

A large, rather solid instrument, standing on small cross-bar feet. The body has an

internal partition and two pine bellies. The right-hand belly has two inset roses and is decorated with a scene of Orpheus and the beasts. The other has one rose and is decorated with strewn flowers reminiscent of the soundboard decoration of Flemish keyboard instruments of the seventeenth century.

The right-hand belly is traversed by thirty-seven double and triple courses of wire strings running up to three hitch-rails, one located towards the shorter side of the body, the next beyond, and the third below the second and with its surface closer to the belly. On the other side are twenty-three single and double courses, hitched to a single rail.

Dimensions: Height 122. Depth 8.

Museum No.: 251-1882.

15/6 ARPANETTA. German; first half of eighteenth century. Fig. 99.

No label visible. Inscribed in gold on left side: Errette mich o Gott, von meiner Feindes Hand | dass mich mein Feind verfolgt, ist gnügsahm dir bekand; on the right side: Vor meinen Feinden lass mich nimmer Schamroht | Leben Viel lieber lass mein Feind mit Schanden untergeben.

Soundbox painted red and decorated with chinoiseries, and on one side only with the figure of King David playing the harp, all executed in gold with black details. The carved cross-bar feet are in the shape of lion's paws, gilt. A complicated rose of cut paper, laminated and gilt.

The wire strings number, on the right-hand side, twenty-two triple and double courses running up to two hitch-rails placed at different heights on the belly; and, on the left side, twenty-two courses, running up to a main hitch-rail and a shorter rail below with its surface closer to the belly.

Dimensions: 114. Depth 5. Museum No.: 910-1875.

15/7 BELL HARP by John Simcock. Bath; mid-eighteenth century. Fig. 100.

Label, printed: Bath. John Simcock. Inventor & Maker.

A stout board of pine, narrowing a little towards one end and left rough on the outside, is mounted with two shallow sides and a central partition plank, and also with two straight hitch-rails which are placed obliquely, rising from the wider end towards the partition. At the narrow end is a wide wrest plank with pins for the wire strings, which run down to hitch pins in the bridges. There are also small individual hitch blocks for certain strings. The strings run in triple and quadruple courses. The strings and hitch-rails are concealed by two pine cover-plates which slide in grooves in the sides and the partition, to be removable from the wide end of the instrument. These cover-plates leave the upper ends of the strings exposed. The wide end (which is the bottom of the instrument as it is played) is left open.

Dimensions: Length 49; of cover-plates 30; of strings 12 to 33. Museum No.: 240-1882.

The Rococo cartouche of the label precludes a date earlier than about 1740 for this example. It is said that the bell harp was held by the fingers and struck by the thumbs; but in the present instance this would mean exposing the rough back and its unconcealed wood screws to the spectators, which can scarcely have been intended. This instrument, unless the back is a replacement, most have been swung between the thumbs and struck with the fingers.

GROUP 16. THE HARPS

Though harps of a kind were known to the early dynasties of Ancient Egypt, the true harp formed of a three-sided frame comprising soundbox, neck (where the strings are tuned), and post (also termed, if straight, the 'pillar') is a creation of medieval Europe, about the eleventh century. A fair number of examples of the traditional European harp, common up to the end of the eighteenth century, survive in collections—both of the massively built Irish kind (of which 16/3 shows the general shape though not an ancient instrument: Fig. 102) and of the graceful Continental kind from which the more advanced harps have been developed. Both of these traditional kinds of harp carried a single row of strings tuned to a diatonic scale, making an excellent musical instrument so long as the music kept to one key, as it may do to a great extent in folk and popular music. But towards the end of the sixteenth century, first in Italy and Spain, the harp became required for more sophisticated kinds of music in which all semitones were necessary, for instance in basso continuo accompaniments. To provide the extra notes simply by adding extra strings to the original row would only have made things almost impossible for the player, so the extra notes were provided by adding a second row of strings to the harp, side by side with the first row. This expedient was tried during the seventeenth and eighteenth centuries. But a better solution was found in the 'triple harp'. On this, a row of strings is sandwiched between two outer rows which provide the normal scale in duplicate (16/1: Fig. 101). It first appeared on the Continent at the end of the sixteenth century, meeting with considerable success and soon reaching the British Isles, where the harpers of Wales adopted it and a few players kept it in use up to the end of the nineteenth century. To strike a note on the middle row, a finger of either hand must reach through an outer row, which could be managed satisfactorily if such notes were not too constantly required by the music.

Meanwhile, in the second half of the seventeenth century, the germ of the modern solution to the harp's problem had been hit upon in South Germany. The original single row was retained, but the harp was now provided with metal 'hooks' set in the neck a short distance below the tuning pins. Turned by hand, each hook nips its string at the correct place to raise its pitch by a semitone, by shortening the effective length. Since this necessitated movements of one hand away from the strings, which hampered the technique, mechanisms to actuate the hooks by pedals and link-rods placed inside the post and neck (Fig. 106c) followed, devised first, it is said, in Bavaria early in the eighteenth century. From about the mid-century, Parisian makers proceeded to develop the pedal action; Cousineau and Nadermann being among the first to do so. Each pedal actuates the mechanism for a particular note, say C, in every octave throughout the compass. They first used hooks which move horizontally, in and out of the neck, termed by them crochettes (Fig. 106A); these hooks pulled the string against a fixed stop but, in doing so, drew it out of its vertical alignment. An improvement was Cousineau's 'crutch' mechanism (béquilles, 16/7: Fig. 103). Even more effective was the mechanism consisting of pairs of pins, each carried by a brass disc which the pedal turns through a quarter-circle: the pins gripped the string when the disc rotated. This system of fourchettes was introduced by Sébastien Erard, who was till then principally a harpsichord-maker, at some time during the 1780's. In 1810 Erard, now working in London, patented his 'double action', by which a string can be raised either by a semitone or by a whole tone, needing for this a second row of fourchettes and a second notch for each pedal (16/14: Fig. 114A). This is the principle of the harp today. The Erard mechanism was also employed, in single action form, by Egan of Dublin (1819) in his little portable harp for amateurs (16/14), the ancient line of professional harpers, using the true Irish harp, having by then virtually come to an end.

Another solution reverts to the use of two rows of strings, but arranges their planes to cross, so that each string is available to either hand, either above or below the point where the planes cross. This cross-strung harp was experimented with during the eighteenth and nineteenth centuries (16/4: Fig. 104), to end with Pleyel's harpe chromatique of the 1890's, the last of these unsuccessful challengers of the well-established double-action pedal harp.

16/1 TRIPLE HARP by David Evans. London; 1736. Fig. 101.
Inscription inside, in ink: David Evans Instrument Maker | In Rose Court Near Rose
Street | Covent Garden London 1736.

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A high-headed harp with back of nine ribs of sycamore. Rising belly of pine, framed with scallop-shell and floral scroll painted decoration in gold with black detail. The six small soundholes in the belly are each surrounded with painted wreaths in gold, picked out in black. The string holes are shod with metal. The post is japanned black with gilt chinoiseries. Its finial is missing. The neck is richly carved with a mask and floral ornament and with a human head close to the sound-box, and partly gilt.

The strings, tuned on the left side of the neck, include: right-hand row, thirty-four strings; middle row twenty-nine, the shortest being located just below the sixth of the first row; left-hand row twenty-five, the shortest opposite the eleventh of the first row.

Dimensions: Length of pillar 190. Greatest width of belly 51; depth 65. String lengths from 21.5 to 179.

Museum No.: 1740-1869.

This harp, which was presented to the Museum by Messrs. Kirckman & Sons (see vol. 1), was previously claimed to be associated with Charles II, but probably George II is meant. A David Evans, possibly identical with the maker of this harp, was harpist to George III (who succeeded to the throne in 1760) and teacher of John Richards of Llanrwst, a famous maker of the triple harp. This harp is discussed in detail by Miss Joan Rimmer in an article on the Morphology of the Triple Harp (Galpin Society Journal, Vol. XVIII).

16/2 TRIPLE HARP. Welsh; eighteenth century. Not illustrated.

No label visible.

A high-headed harp with back of nine ribs of sycamore, similar to 16/1, though much less elaborate. Slightly rising belly of two pieces of pine, undecorated, with six small soundholes and the string holes shod with iron staples. The post is undecorated. The neck terminates in a rudimentary scroll.

Dimensions: Height of post 194. Greatest width of belly 51; depth 71.

Museum No.: W.24-1918.

On the back of the neck are painted the initials 'J.R.' (three times). According to the donor, this stands for John Richards of Llanrwst, the celebrated Welsh harpist, who is believed to have made this harp (see also 16/1).

Given by the late Lady Llanover.

16/3 IRISH HARP. Fig. 102.

No label visible.

Back and sides separately constructed of an unidentified wood and now much worm-eaten. There are three soundholes in the back. The belly, of six pieces of pine, appears to be more recent. The post is curved in something of the old Irish manner. The neck is offset over to the right-hand side, and the strings are tuned on the right side of the neck by brass tuning pins. There are forty-one strings (the present strings of wire being modern replacements) held in the holes in the belly by small iron nails or toggles.

Dimensions: Height of post 136. Greatest width of belly 30; depth 77. String lengths 7 to 110.

Museum No.: 616-1872.

This harp is said by Engel (p. 240) to have formerly belonged to a celebrated Irish harper. It shows some influence of the non-Irish harps, e.g. the body construction and the right-hand tuning, though in general appearance the style is Irish.

16/4 CROSS-STRUNG HARP. English or French; late eighteenth century or early nine-teenth. Fig. 104.

No label visible.

The very broad soundbox is composed of a wide panel at the back flanked by four ribs on each side. The wide panel has a broad black band in which there are several holes for studs, the purpose of which is not clear. The ribs are alternately left natural and painted black, but have a middle band with grotesque decoration well painted in colours. Across the whole back inside is an inner skin of wood or cardboard covered with sand. The front of the soundbox is in three parts: a sunken central panel with painted grotesque ornaments, and two bellies with holes to receive the four sets of strings.

There are two posts, of roughly rectangular section, fixed to the body at their lower ends (74 cm apart) with large carriage bolts. The posts are inclined, to cross one another at about 30 cm from their top ends. The two necks, painted a dull red, also cross, and each ends with a crude painted scroll. The strings number forty to each neck, running in double courses (except the longest) and fixed in the belly by wooden pins, many now missing.

Dimensions: Greatest length of soundbox 152.5. Length of posts 168. Standing height 174. Greatest width across soundboxes 111. String lengths 11.5 to 152.

Museum No.: 830-1884.

This instrument has previously been described as Italian, sixteenth century, chiefly on account of the style of the painting, which, however, is in a style originating in Classical Rome, taken up by Raphael, used throughout the sixteenth and seventeenth centuries, revived in the Louis XVI period, and retained in the Empire and Regency phases. It could thus equally well be late sixteenth to mid-seventeenth century, or late eighteenth to early nineteenth. The nature of the construction of the instruments points strongly to the latter of these alternatives. Curt Sachs, in his Real-Lexikon, 1913, lists a Uranicon invented in 1805 by F. von Holbein and consisting of two harps connected together. The way the strings are made to pass

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from the tuning-pegs over a row of fixed pins suggests that the maker of the harp (or, at least, of the twin necks) was conversant with the typical late eighteenth-century pedal-harp. Here the pins seem to serve no particular purpose.

Close inspection suggests that the narrow rib on the right of the wide back-rib (see Fig. 104A) is different from the other ribs. It is possible that this harp was constructed from ribs of an old pedal-harp to which were added the wide back-rib and this single extra rib, which was needed to make the number of ribs equal on either side of the back-rib. Fig 104B reproduces a reconstructed photograph of the harp with these additions removed. It will be seen that the painted decoration seems to join up quite smoothly in this assembly. The dimensions, moreover, then seem typical of late eighteenth-century pedal-harps.

16/5 PEDAL-HARP by H. Nadermann. Paris; after 1785. Fig. 105.

Inscribed on the neck: Harpe Renforcement à sons prolongez à sons ondez ou echo réitérez et à sourdinne l'invention | de Mr Krumpholtz executée par H. Nadermann depuis l'année 1785 Paris.

Back of seven undecorated ribs, five of oak, two sycamore. The five soundholes in the back can each be closed by a shutter, the five shutters opened and closed together by a link, now missing, which was connected to one of the eight pedals. Pine belly, painted with doves, vases of flowers and tripod perfume-bearers amid musical instruments (trophies taken from Delafosse's Sixth Livre de Trophies d'Amour et de Musique, p. 3). The handsomely carved pillar and neck are in plain birchwood, and at their junction is a scroll carved with leaves and a female head in Egyptian head-dress.

Single action by *crochettes*. There is also an iron lever for the left foot, situated across the base of the belly, with a hook at its mid-point; it appears to have no connection with the shutters in the back of the body.

Dimension: Height 168.

Museum No.: 425-1884.

A similar harp, in the Museum für Angewandte Kunst, Vienna, is inscribed Inventée et faite sous les yeux de M. Krumpholtz et la première qui existe dans ce genre. Executée par H. Nadermann à Paris. 1785. In the present example, the use of an Egyptian motif in the decoration of a piece of fashionable Parisian furniture at this comparatively early date is noteworthy.

16/6 PEDAL-HARP by H. Nadermann. Paris; about 1785. Fig. 106.

Painted under neck at top of belly: H. Nadermann | à Paris. A monogram (D.J.), apparently of stamped foil, is applied above this inscription.

Back of seven ribs painted black, with a border of simulated gold beads. Pine belly

painted with swags of flowers, musical trophies and a shepherdess in a landscape in the Boucher style. Garlanded pillar richly carved and gilt, with a winged mermaid at the top, whose forked tail is plaited down the front of the pillar. At the base, two triton-babies blowing horns: they have gilt tails, but their bodies and faces are a natural skin colour. The neck is also richly carved with floral scrolls and gilt. The plate covering the link rods of the mechanism is missing. Single action by *crochettes*. *Dimension:* Height 160.

Museum No.: 4449-1858.

A particularly finely decorated harp. The painting is apparently by the same hand as that of 16/5, which is also from the Nadermann workshops; the harp must be of about the same date, or a year or two earlier at the most.

16/7 PEDAL-HARP by Georges Cousineau. Paris; late eighteenth century. Fig. 105. Inscribed on a painted ribbon: Cousineau Luthier de la Reine.

Back of seven ribs. The belly is painted with six figures playing musical instruments, all in the style of Boucher. At the base was a cock and hen (the latter now missing) carved in the round. The pillar is of an unusual section, roughly D-shaped, with corded mouldings in front and also at the back corners. Around it is entwined a garland of carved flowers, interspersed with musical instruments, rising to a satyr's mask. The scroll is surmounted by a scrolling terminal figure with a putto's body. The carving is exceptionally rich, but has suffered much detail damage and has been substantially regilt. Single action by 'crutch' (béquille) mechanism.

Dimension: Height 168.

Museum No.: 8531-1863.

Said to have belonged to Marie Antoinette, but without any evidence now known.

16/8 SMALL PEDAL-HARP by Cousineau. Paris; early nineteenth century. Fig. 107.

Stamped at base of neck: Cousineau Pere et Fils . . . A Paris (the rest illegible).

Back of seven ribs of sycamore, varnished brown. Pine belly painted with simple floral compositions. Fluted pillar with lengths of husk-garlands in the fluting. Sycamore neck with glass plate on one side, permitting one to see the steel link mechanism. Single action by *crochettes*. Thirty-four strings.

Dimension: Height 132.

Museum No.: 969-1883.

This small-sized harp, with relatively simple decoration and indifferent painting, may have been made for a young performer. Georges Cousineau's son, Jacques-Georges, became associated with the firm in 1775, at the age of fifteen, though until 1811 his main occupation was that of harpist at the Opéra. Georges père died in 1824. This harp may date from between 1811 and 1824.

16/9 PEDAL-HARP by Renault & Chatelain. Paris; about 1781-1797. Fig. 108.

Stamped on neck: S. B. Renault | & | Chatelain | A Paris. Also an inscription painted at the top of the belly: Renault & Chatelain | [Rue] de Braque a paris.

Back of seven ribs, plain varnished. Pine belly painted with garlands, musical trophies and a landscape. Pillar of oval section with mouldings, terminating in a garlanded bracket beneath the scroll. Sycamore neck with a carved ungilt scroll very like that of 16/5, and with a detachable plate on the right side. Single action by crochettes.

Dimension: Height 157.5.

Museum No.: 469-1897.

For Renault & Chatelain, see note to arch cittern, 11/12.

16/10 PEDAL-HARP by Wolter. Paris; late eighteenth century. Fig. 109.

Inscription painted in black at top of belly: Wolter Porte St Denis à Paris.

Back of seven ribs japanned black. Pine belly decorated with chinoiserie figures (of the late eighteenth-century variant with naturalistic faces of the kind also to be seen at the Royal Pavilion, Brighton, and elsewhere) and garlands. Pillar of oval section with mouldings and termination in a carved bracket, somewhat as 16/9. The neck and scroll are apparently carved by the same hand as those of the Nadermann and Renault & Chatelain harps (16/5, 16/6, 16/9); the scroll gilt, the rest japanned black and decorated with small-scale chinoiserie subjects in the common fantastic seventeenth-eighteenth-century tradition. Single action by *crochettes*.

Dimension: Height 168.5.

Museum No.: W.46-1911.

A Jean-Mathias Wolters is mentioned by Coustant-Pierre as working in Paris, leaving harps dated 1749, 1759.

Bequeathed by Captain H. B. Murray.

16/11 PEDAL-HARP. French; late eighteenth century. Fig. 110.

No inscription visible. Possibly by Nadermann (cf. 6/5).

Back of seven ribs. Fluted pillar with a florid Corinthian column surmounted by a cherub that now lacks an arm and its bow. The shape of the neck, with a small hump midway along, and the painting on the belly resemble the Nadermann harp 16/5, but the carving of the scroll and base is different from that of the other harps. The removable plate covering the mechanism in the neck is plain for most of its length. Single action by *crochettes*.

Dimensions: Height 162.

Museum No.: 4087–1857.

16/12 PEDAL-HARP. French; late eighteenth century. Fig. 111.

The maker's name is indecipherable; the inscription ends à Paris. This is a relatively simple version of the characteristic Parisian pedal-harp of the period: it has features relating it to several of the other examples in this collection.

Dimension: Height 160. Museum No.: 16-1871.

16/13 PEDAL-HARP by François Joseph Dizi. London; 1813-1831. Fig. 112.

Inscription, engraved on mother-of-pearl: F. Dizi's Perpendicular Harp. London.

Round back of birchwood, painted, and with five slot-shaped soundholes. Pine belly painted with a recurrent scroll-pattern in gold on Prussian blue; this design is painted all over the instrument. Fluted pillar with Corinthian capital and large Grecian scroll. The front of the base is supported by a pair of claw feet. The heavy neck is of four parallel steel plates housing a double-action mechanism with fourchettes. There are eight pedals and forty-three strings.

Dimensions: Height 168. Greatest width 45; depth 89. String lengths 7 to 133. Museum No.: 382-1907.

Dizi, once-celebrated Belgian harpist and composer (1780-about 1840), worked in London from 1796 to 1831, patenting certain improvements to the harp in 1813 and 1817, including the 'perpendicular' arrangement by which the vertical plane of the strings follows the centre line of the belly.

16/14 PEDAL-HARP by S. & P. Erard. London; 1858. Fig. 114.

Inscribed: Sebastian and Pierre Erard's Patent No. 6223 | 18 Great Marlborough Street, London. The patent number is also written in pencil underneath the base, and there is a stamped number 6212 P.A. in the same place.

The date of the instrument is established by the records of Erards in the possession of the firm's successors, Messrs. J. G. Morley. Back with five hinged traps actuated by an eighth pedal.

The pillar has Gothic decoration at its base and top, the latter having six facets from one of which springs the neck. The others bear applied moulded reliefs of medieval figures surmounted by arcading. Below two angels are scrolls inscribed *Pierre Erard. Published Dec 19 1833*. The neck is decorated with gilt lines, like the soundbox. Double action mechanism. Eight pedals.

Dimensions: Height 170. Depth 86.

Museum No.: W.48-1931.

The soft leather case survives.

Given by Miss E. M. Daniell.

16/15 PORTABLE HARP by John Egan. Dublin; about 1819–1831. Fig. 113.

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Engraved upon the brass strip on the neck bearing the mechanism: Manufactured by J. Egan Inventor | 31 Dawson St | Dublin.

Round back with six slot-shaped soundholes. This and the belly japanned black and trimmed with floral decoration painted in gold. The curved post is fixed to a square base for standing, which is not original. The neck is offset to the right and tuned on the right. Single action mechanism by *fourchettes* actuated by seven hand levers (their buttons now missing) located along the inner side of the post. Thirty-four gut strings.

Dimension: Height without base 90.

Museum No.: 332-1882.

An early example of Egan's Portable Irish Harp, on which, the inventor claimed, all pedal-harp music could be played.