## PATTERNS AND DESIGNS FOR THE CONSTRUCTION OF SMALL SOPRANO VIOLAS DA BRACCIO

Similar to the preceding model but without points, with an inclined top section of the flat back or without this inclined section, and with an arched back. All the instruments in this category have subsequently suffered transformations.

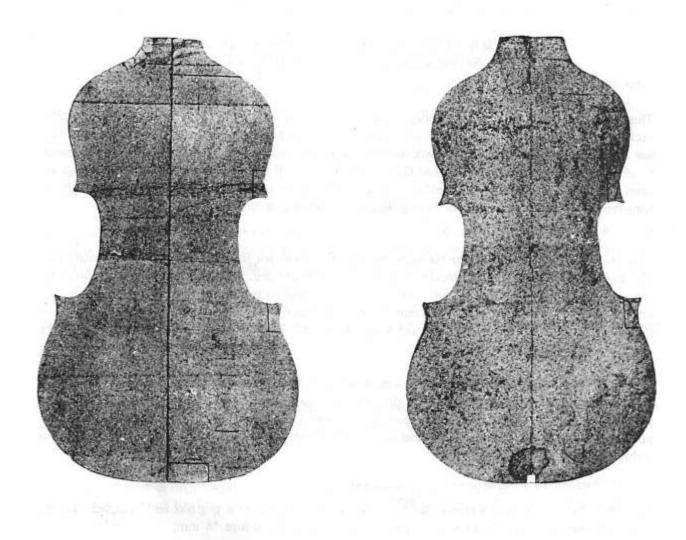
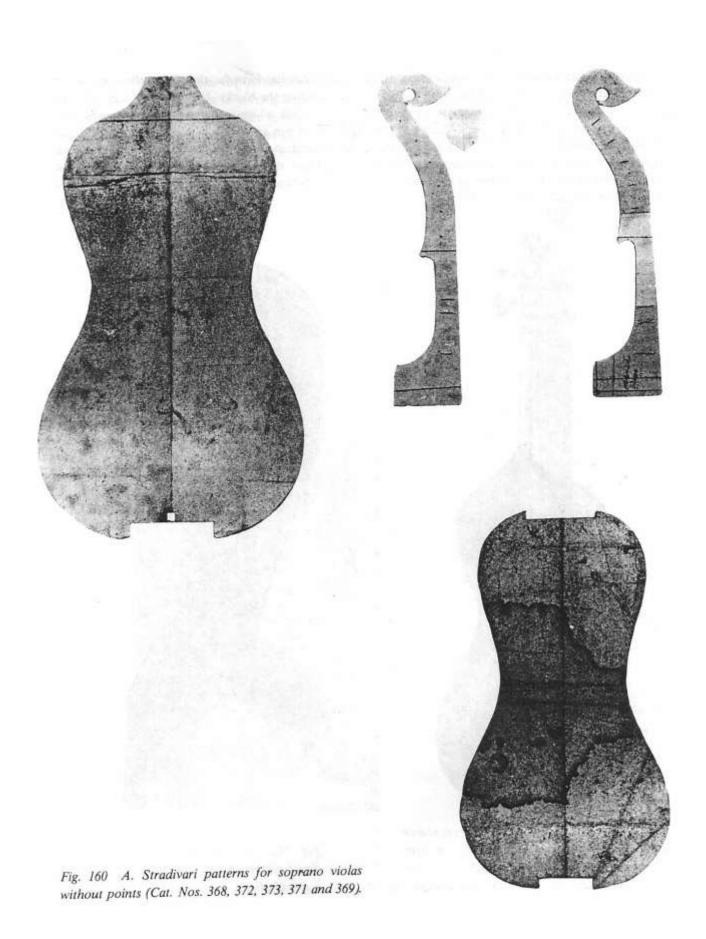


Fig. 159 A. Stradivari: patterns for soprano violas with points (Cat. Nos. 364 and 365).



NO. 368 Paper pattern for the construction of the wooden counter-form for the ribs of the viola having an inclined upper section of the flat back, 372 mm long including the blocks. U.B 166 mm, L.B 200 mm, width at the centre of the instrument 124 mm, the bottom block which in the pattern is cut away as a recessed portion would have been 17 mm×62 mm. Outlined in pen are: the neck block 36.5 mm in depth by 112 mm and 40 mm in width and the scheme for the placement of the ff holes. The measurements are: diameter of the upper eye 6 mm, diameter of the lower eye 9 mm, distance between the centres of the upper eyes 64 mm, between the centres of the lower eyes 110 mm, distance between the parallel lines of the axis of the ffs 6 mm (fig. 160).

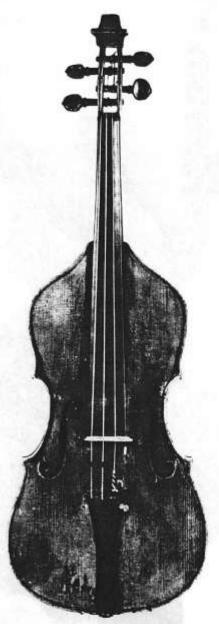


Fig. 161 A. Stradivari: a six strings soprano viola without points transformed at a later date into a violin, with the addition of the points and the elimination of two strings.

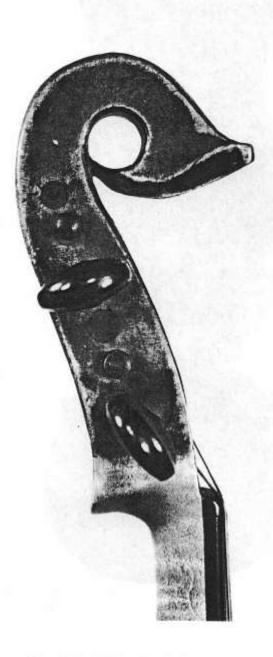


Fig. 162 A. Stradivari: the same instrument, detail of the volutoid finial terminated with a shield shape.

NO. 369 Pattern in paper for the construction of the counter-form on which the ribs were constructed for a viola, without change in inclination of the back, 303 mm in length, including the blocks. U.B 131 mm; L.B 159 mm and 98 mm at the centre of the instrument. The position in the paper pattern where the blocks would be placed has been cut out and would give for the measurement of the neck and bottom blocks 55 mm×8 mm and 40 mm×9 mm respectively (fig. 160).

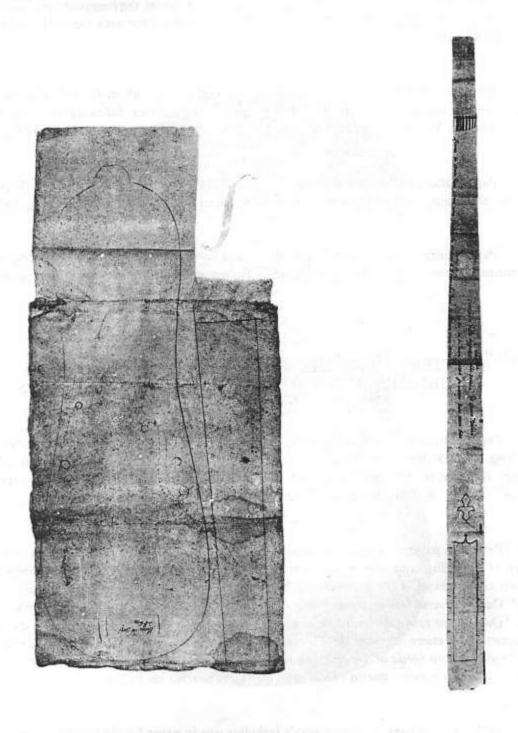


Fig. 163 A. Stradivari: patterns for a large guitar of unique form (Cat. Nos. 382, 383 and 385).

NO. 370 An unfinished sketch on a sheet of paper 470 mm×250 mm for another model, with indications for the placement of the ff holes and the height of the ribs. U.B 208 mm, measurement at the centre of the instrument 132 mm. Diameter of the upper eyes of the ffs 8.5 mm, for the lower eyes 12 mm, distance between the centres of the circles of the upper eyes 52 mm, of the lower eyes 126 mm, height of the ribs 42 mm and 47 mm with autographed indication Altes de Cor. On the reverse side of the same sheet is a handwritten sketch for a viola d'amore with details of the neck block, the height of the ribs, and purfling. Length 413 mm, U.B 190 mm, L.B 235 mm. CCs 128 mm, height of the neck block 52 mm, height of the ribs 40 mm, 47 mm and 50 mm.

NO. 371 Paper pattern 302 mm × 62 mm of the neck with volute, with marks indicating the postion of the tuning peg holes, the width of the shield shaped finial and the following in handwritten script "Manicho Giusto". Width of the shield 42 mm at its top and 28 mm at its central part (fig. 160).

NO. 372 Paper pattern of the neck with volute 31 mm × 61 mm bearing marks indicating the positions of the holes for the tuning pegs and the width of the shield shaped finial, 50 mm and 37 mm (fig. 160 - pag. 224).

NO. 373 Paper pattern of the shield shaped finial used for the termination of the volutoid peg head of the instrument 54 mm high, by 41 mm wide at its highest point, by 32 mm wide at its centre.

## PATTERNS AND DESIGNS FOR THE CONSTRUCTION OF GUITARS AND THEORBOED LUTES AND GUITARS

NO. 374 Paper pattern for a guitar including details of the fingerboard-neck and tied bridge, measuring 496 mm long. U.B 231 mm, L.B 287 mm, at the centre of the instrument 195 mm, diameter of the sound hole 85 mm, height of the ribs marked as 123 mm and 100 mm at the neck block. Length of the neck from heel to nut 363 mm. Widths 55 mm at the base and 48 mm at the nut (fig. 164).

NO. 375 Pattern in paper of a neck and fingerboard 320 mm long by 72 mm and 60 mm in width, with a description of the strings and their arrangement at the nut. Written on this item in the handwritten script of the sons of Stradivari is the following "Misura della Longezza et Largezza del manico della Chitara Tiorbata". On the reverse side in correspondence to the strings which are in pairs or mounted singly is the following "Questi deve essere compani due cantini di Chitara - queste deve essere compane due sotanelle di Chitara - questi deve essere compane doi Cantini da violino Grossi - queste altra corda deve essere un canto da violino - questa altra corda deve essere un canto da violino ma di più grossi - questa corda deve essere un cantino da violino".

NOS. 376 - 381 Five patterns in diverse woods including one in paper for the cutting of the external form of the guitar peghead of respective lengths: 178 mm, 157 mm, 161 mm, 140 mm, 150 mm, 178 mm.

NO. 382 Design on a sheet of paper measuring 747 mm×340 mm of a large guitar shaped instrument with its neck of a strange and unusual form. It has the position of the ff holes outlined and the height of the ribs marked. Lenght of the instrument 658 mm U.B 174 mm. L.B 234 mm, at the centre 156 mm. Length of button 26 mm. Height of ribs 84 mm and 73 mm with the indication "Altezza del corpo dell Bassa". Diameter of the upper eye of the ff holes 10 mm, of the lower eye 13 mm, length of the neck 465 mm, its widths 82 mm and 58 mm (fig. 163).

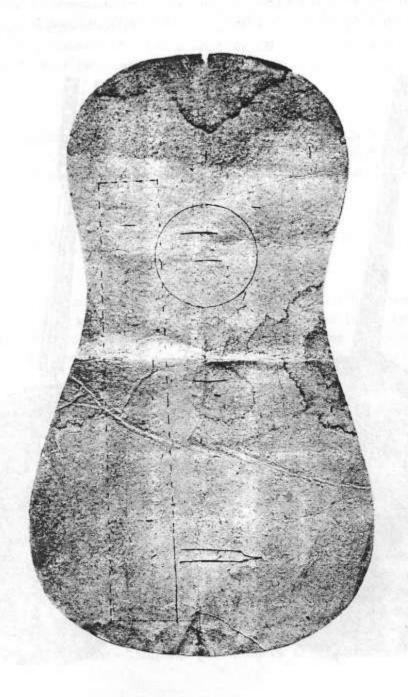


Fig. 164 A. Stradivari: a pattern for a guitar (Cat. No. 374).

NOS. 383 - 384 Two paper patterns of the axis of the ff holes 120 mm in length and 10 mm in width (fig. 163).

NO. 385 Paper pattern for the upper neck of a theorboad cittern 801 mm×53 mm with indications of the distribution of seven strings at the nut and their description, also in the handwriting of the sons of Stradivari "Misura della longezza e largezza della tratta di Citara Tiorbata (theorboad lute) et in su la detta tratta ge vanno susa sette bassi e Questa in Cima deve essere una quarta da violino e il restando deve da chitara tutte sette" (fig. 163), see also NOS. 505 - 508, NOS. 362 and 347.



Fig. 165 A. Stradivari: the guitar of 1700.

### DESIGNS FOR THE CONSTRUCTION OF A HARP

Two instruments are known which were constructed on these patterns. One is in the Conservatorio di Musica di Napoli. The other in the Museum of the Conservatory in Paris ("Musée du Conservatoire Paris").

NO. 386 Pen sketch for the construction of a table harp with 27 strings, with the position for the attachment of the strings indicated; 960 mm in height by 400 in width. Indicated on the pattern in the handwriting of Stradivari is the measure of the height in the Cremonese measure (braccio): "Brasa duo-2 lungo" (fig. 166).

NO. 387 Design on a strip of paper 700 mm×165 mm×9 mm of the belly of the harp soundbox with indications of the measurements and position of the two heart shaped sound holes, and the points of attachment of the twenty-seven strings. Height 671 mm, widths 147 mm and 57 mm.

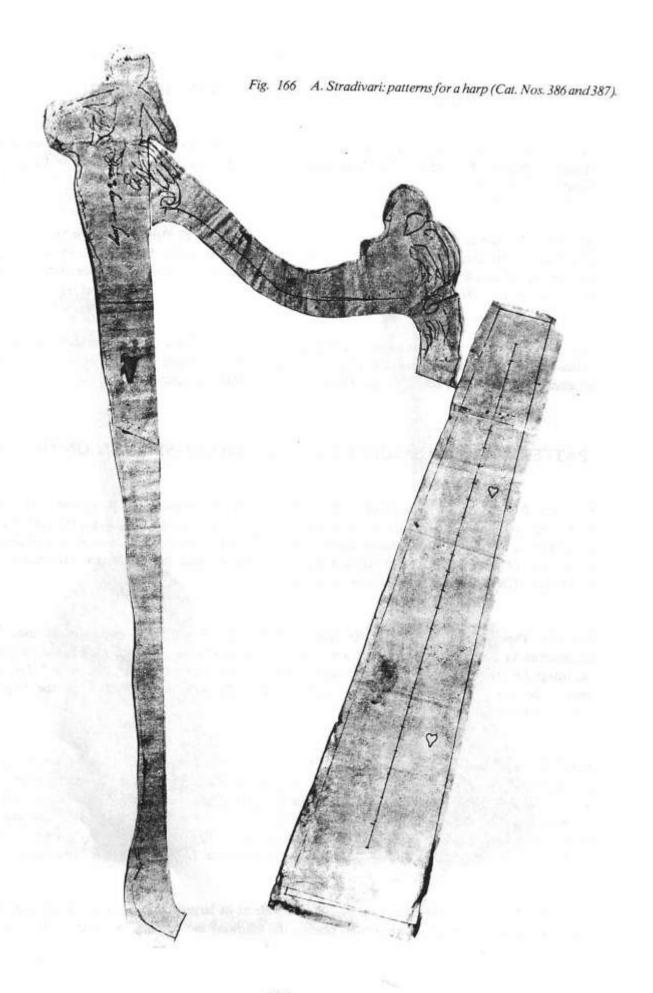
### PATTERNS AND MEASUREMENTS FOR THE CONSTRUCTION OF LUTES

NO. 388 Paper pattern 636 mm long by 367 mm wide at its largest point, by 70 mm wide at the position of the neck joint, used for an arch lute. Indicated are the positions of the tied bridge, the diameter of the sound hole at 81 mm. Marked also on this pattern is a silverpoint drawing of the scroll of a violin. On the reverse side of the sheet, traced in red is a sketch for another small lute, with its appropriate neck and fingerboard. (Design of the scroll of the violin; fig. 7).

NO. 389 Paper pattern measuring 488 mm in length by 288 mm at its widest point, used for the construction of lutes of the french pattern with twelve courses of double strings. Included in the pattern is the design for the fingerboard and in the handwriting of Stradivari the following indication "Musure per il manico del liuto al francesa vera de dudece ordine doppio". Measurements of the fingerboard 311 mm×114 mm×90 mm (fig. 168).

NO. 390 Paper pattern 487 mm long by 280 mm wide for the construction of a lute bearing the following indications. The size of the neck block 52 mm in height by 105 mm in width. The tied bridge with the divisions for the twelve courses of strings, and the diameter of the sound hole 63 mm. In handwriting on the pattern is the following: above — "Forma per far il liuto alla Francese e il corpo dai alto due onze e mezza per la fornutura delle corde dai de dudice ordine doppio e da li setti basse con li ottave e ancora se fano de dudice ordine de Corde"; below - "Scagnello quando dai de 12 ordini le corde" (fig. 169).

NO. 391 Paper pattern 494 mm long by 293 mm wide at its largest point, used for the construction of a lute with twelve courses of double strings bearing the following indications. The design of the neck block





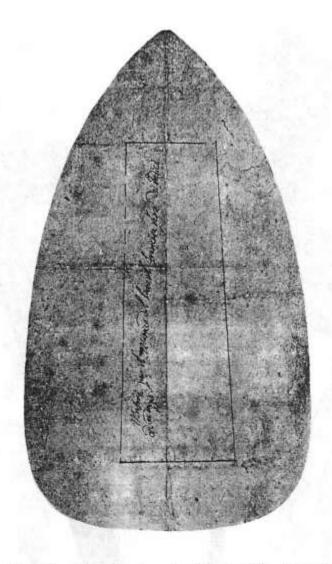


Fig. 168 A. Stradivari: a pattern for a lute (Cat. No. 389).

49 mm high by 121 mm and 49 mm wide, and the tied bridge with the divisions for the twelve pairs of strings. The diameter of the sound hole 75 mm. On the reverse side are the indications of the depth of the instrument together with the handwritten script "La forma dai alta due onze e' mezza".

NO. 392 Paper pattern 302 mm×113 mm×96 mm of a neck-fingerboard for a lute, marked at the nut are the divisions for twelve pairs of strings, bearing also in the handwriting of the sons of Stradivari the following "La longezza del manico del liutto alla francesa deve essere di questa largezza per poter far capire dentro tutte le dette corde" on the reverse side appear the words "questi è li tasti deve essere dieci".

NO. 393 Paper pattern 237 mm×86 mm×21 mm of the palette of a lute with indications of the divisions for the holes of the tuning pegs, bearing the handwritten annotation "Bisola per far la bisola de liuto alla francesa" and on the reverse "Altezza per far li busi delli Piroli".

NO. 394 Paper pattern 338 mm×81 mm×30 mm of a palette for a lute, with a handwritten annotation by the sons of Stradivari "La largezza et longezza della bissola del liutto alla francesa".

NO. 395 Paper measure 338×28×21 mm for measuring the length of a palette for a lute with marks indicating the divisions for the peg holes, bearing the annotation in the handwriting of the sons of Stradivari "La altezza della bissola delli ordini dodici Doppi del liutto alla francesa".

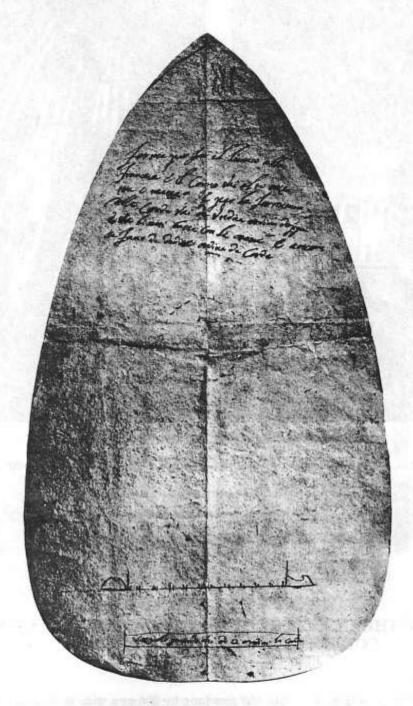


Fig. 169 A. Stradivari: a pattern for another lute (Cat. No. 390).

NO. 396 Tied bridge for a lute made in pear wood 188 mm long, bearing the following in the handwritten script of the sons of Stradivari "Scagnello del liutto alla francesa de ordini 12 e il detto scagnello deve essere fatto di Pere".

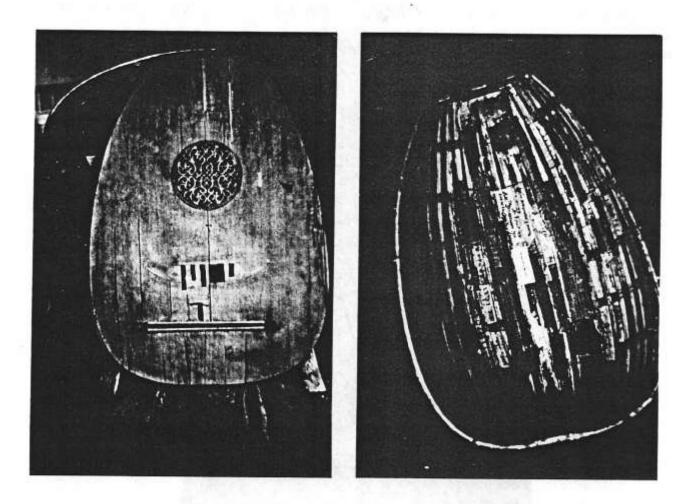


Fig. 170 The sounding body of a lute made by M. Tieffenbrunner with its table remade by A. Stradivari dated 1695.

NO. 397 Wooden fragment of a tied bridge 165 mm in length.

# PATTERNS FOR THE CONSTRUCTION OF MANDOLAS - MANDOLINS AND CORISTI OR SOPRANO MANDOLINS

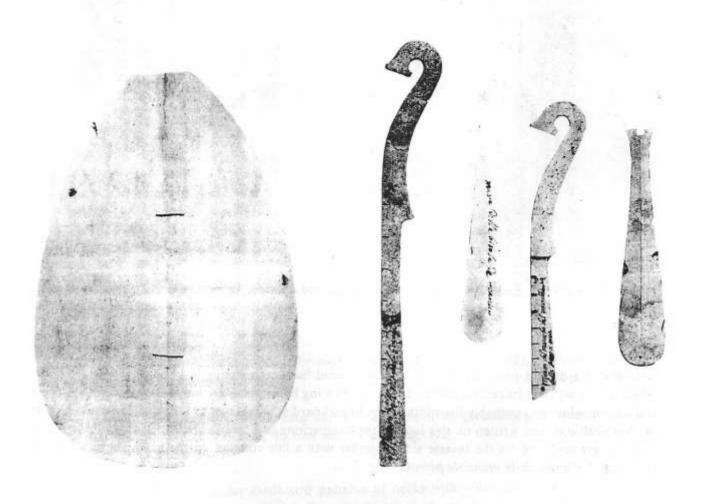
NO. 398 Paper pattern for a large mandola 460 mm long by 206 mm wide at its widest point, with neck block 41 mm high by 70 mm and 21 mm wide (fig. 171).

NO. 399 Paper pattern for a mandola 400 mm long by 204 mm wide at its widest point and 73 mm wide at the foot of the neck block, marked by the arc of a compass are various measurements, most probably for the depth of the instrument which are 179 mm, 171 mm, 49 mm and 41 mm (fig. 173).

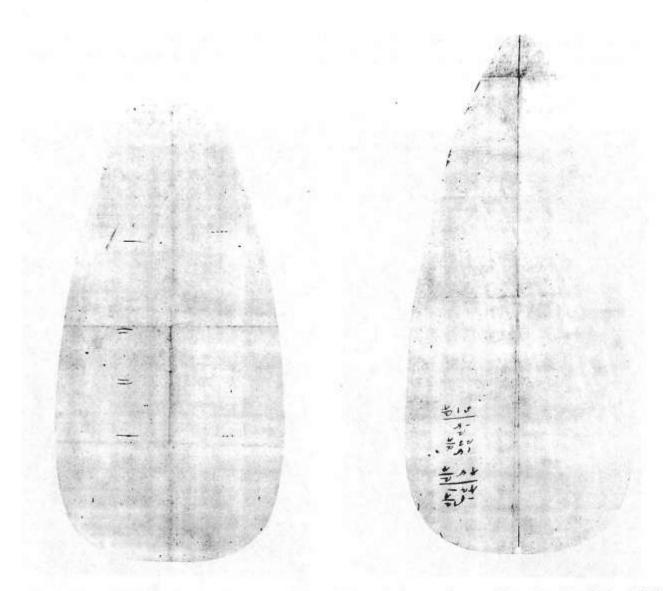
NO. 400 Paper pattern for a mandola 350 mm in length by 230 mm wide at its largest point. The foot of the neck block measures 50 mm. The depth of the instrument is indicated by a compass arc at 126 mm.

NO. 401 Paper pattern for a mandolin 317 mm long by 180 mm in width at its widest point, the neck block measuring 39 mm wide at its foot.

NO. 402 Paper pattern for a small mandolin 253 mm in length by 112 mm in width at its widest point, the neck block measuring 27 mm at its foot (fig. 174).



Figs. 171 and 172 A. Stradivari: a pattern for a mandola (Cat. No. 398) and patterns for the necks of mandolas and mandolins (Cat. Nos. 403, 404, 407 and 406).



Figs. 173 and 174 A. Stradivari: a pattern for mandolas and a pattern for mandolins (Cat. Nos. 399 and 402).

NO. 403 Cardboard pattern of a neck with a volutoid finial terminating in a flat rectangle 375 mm in length with a width at its central part of 18 mm. Indicating by compass arc are two measurements 47 mm and 41 mm which are probably the width of the fingerboard at its base and at the nut. Indicated also are the fret positions, and written on this item in the handwriting of Stradivari the following - "Musura del mandola granda" and on the reverse side, together with a line running up the neck 298 mm long the following: "Musura della mandola piccola" (fig. 172).

NO. 404 Development in paper of the volute of the preceding neck but lacking the upper part for the termination of the volute; 196 mm long, 37 mm in width at its widest point and 10 mm in width at its thinnest, bearing the following annotation in handwriting "Musura della bisola de manico" (fig. 172).

NO. 405 Pattern in cardboard of a neck with volutoid finial terminating in a flat rectangle 281 mm in length by 15 mm in width at its centre. Indicated are the positions of ten peg holes and two compass measurements 51 mm and 47 mm, probably indicative of the width of the fingerboard, bearing also the autograph annotation "Musura del Mandolino più Grando".

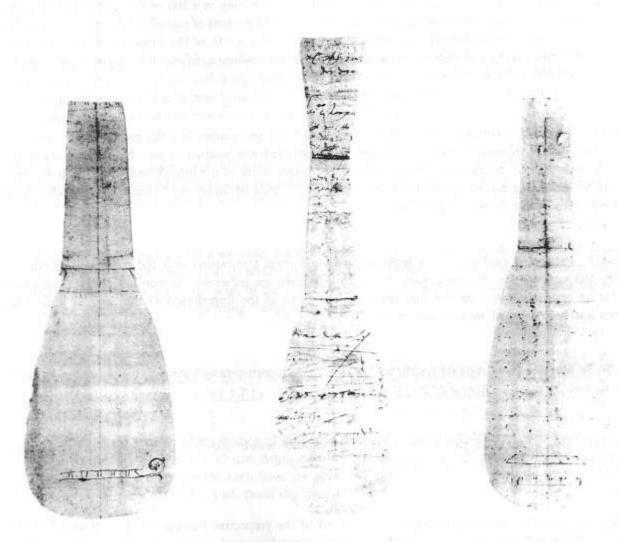


Fig. 175 A. Stradivari: patterns for soprano mandolins (Cat. Nos. 421, 419 and 420).

NO. 406 Development in paper of the back part of the volute of the preceding neck, measuring 208 mm long by the following widths: 39 mm, 16 mm and 24 mm (fig. 172).

NOS. 407 and 408 Two similar cardboard patterns of necks with volutoid finials 258 mm long by 15 mm in width at their central parts. Marked are the positions of eight holes for pegs, the fret positions, and compass arcs which probably indicate the width of the fingerboard at 46 mm and 39 mm. On this item appears the following annotation in the handwriting of the sons of Stradivari "Misura del manicho del mandolino della forma nova F.N." (fig. 172).

- NO. 409 Development in paper marked with the letters F.N. for the back of the volute of the preceding neck, 184 mm long and 35 mm, 15 mm and 27 mm in width.
- NO. 410 Pattern in card of a neck with volutoid finial terminating in a flat rectangle 321 mm long by 16 mm wide at its centre. The following items are marked: the positions of eight holes for tuning pegs, the distance between the frets and, with compass arcs, the probable width of the fingerboard at 48 mm and 41 mm, bearing also the annotation by the sons of Stradivari "Misura del manicho della mandola della seconda forma S.F." (fig. 16).
- NO. 411 Pattern in cardboard of a neck with volutoid finial termination in a flat rectangle 290 mm long by 16 mm wide at its centre with the following items indicated: the position of nine holes for tuning pegs, the fret distances and, by the arcs of a compass, the probable width of the fingerboard 47 mm and 40 mm, bearing the following annotation in the handwriting of the sons of Stradivari "Misura del manicho della mandola della Terzia forma "T.F." (fig. 16).
- NO. 412 Pattern in cardboard of a neck with volutoid finial terminating in a flat rectangle 240 mm in length, 160 mm wide at its central part. The following items are indicated: the position of eight holes for the tuning pegs, the fret distances and the probable width of the fingerboard 45 mm and 39 mm. The pattern has been marked by the sons of Stradivari: "for: S".
- NO. 413 Development in paper for the back of a volute 216 mm long by the respective widths of 41 mm, 20 mm and 31 mm.
- NO. 414 Development in paper for the back of another volute 206 mm in length by the respective widths of 37 mm, 20 mm and 32 mm.
- NOS. 415 and 416 Two tied bridges in pear wood of the respective lengths of 103 mm and 75 mm.
- NO. 417 Bridge in pine wood 99 mm in length.
- NO. 418 Facsimile of a bridge in pear wood 99 mm in length.
- NO. 419 Paper pattern for a soprano mandolin of a total length of 431 mm with a neck-fingerboard and guitar shaped palette (peg head). Measurements of the soundbox are: length 194 mm, maximum width 105 mm; of the neck-fingerboard length 127 mm, width 35 mm at the nut and 49 mm at the foot of the block. Palette: length 110 mm, width 35 mm at the nut and 59 mm at its upper termination.

- NO. 420 Paper pattern for soprano mandoline including neck-fingerboard, total length 373 mm. On this pattern have been sketched in pen the details of a tied bridge with the appropriate distribution of the strings. Measurements of the soundbox are: length 233 mm, maximum width 132 mm. Measurements of the neck-fingerboard are: length 150 mm, width 66 mm at the foot of the block and 50 mm at the nut (fig. 175).
- NO. 421 Paper pattern for a soprano mandolin including the neck-fingerboard, total length 371 mm, bearing a pen sketch of the tied bridge with the appropriate divisions for the strings. Measurement of the soundbox: length 235 mm, maximum width 112 mm. Measurements of the neck: length 136 mm, width 50 mm at the foot of the block, and 43 mm at the nut (fig. 175).
- NO. 422 Paper pattern for a soprano mandolin including the neck-fingerboard 368 mm long. Soundbox 252 mm in length by 116 mm wide at its widest point. Neck 116 mm long by 45 mm wide at the foot of the block and 41 mm wide at the nut.
- NO. 423 Paper pattern for a soprano mandolin bearing a design on the neck-fingerboard. Soundbox: 218 mm long by 114 mm wide at its widest point. Neck fingerboard: 173 mm long by 48 mm in width at its widest point. The width at the joint of the neck with the block is 48 mm and the width at the nut is 39 mm; with an annotation in handwriting "Musura dele mano".

# PATTERNS FOR THE CONSTRUCTION OF POCHETTES OF VARIOUS FORMS CALLED BY STRADIVARI "CANINI"

- NO. 424 Paper pattern of the body and neck of a pochette: total length 442 mm, with indications for the height of the ribs 20.5 mm, a 12 mm depth measurement at the nut and the line of the nut. Length of the soundbox 244 mm, length of the neck from the upper rib to the nut 120 mm, width of the neck 33 mm and 25 mm respectively (fig. 176, 3 rd. from the right).
- NO. 425 Paper pattern of the body and neck of another pochette with a total length of 490 mm. Length of the soundbox 249 mm. Length of the neck from the upper rib to the nut 135 mm. Widths of the neck 32 mm and 27 mm respectively.
- NO. 426 Pattern in paper of the form of another pochette 322 mm in length and with the largest lower width of the body at 103 mm. Largest upper width of the body 80 mm. Width at its centre 68 mm.
- NO. 427 Cardboard pattern for the soundbox of another pochette 236 mm in length.
- NO. 428 Pattern in paper of the lower part of a pochette 163 mm in length with the design for the C shaped sound holes cut out (fig. 177, top centre).

NO. 429 Paper pattern of the soundbox of a pochette 306 mm in length with the handwritten annotation by the sons of Stradivari "1733: Ultima" (fig. 177, botton centre).

NOS. 430 and 431 Cardboard patterns for a pochette inclusive of the neck. Total length 488 mm. Length of the soundbox 249 mm. Lower width of the soundbox 75 mm. Upper width 57 mm. Also indicated is the position of the nut and the following annotation in handwriting "Questa è la musura del Canino" (fig. 176, far right). Cardboard pattern of the lower part of the soundbox of the same instrument, 199 mm in length with the ff holes cut out in their correct position.

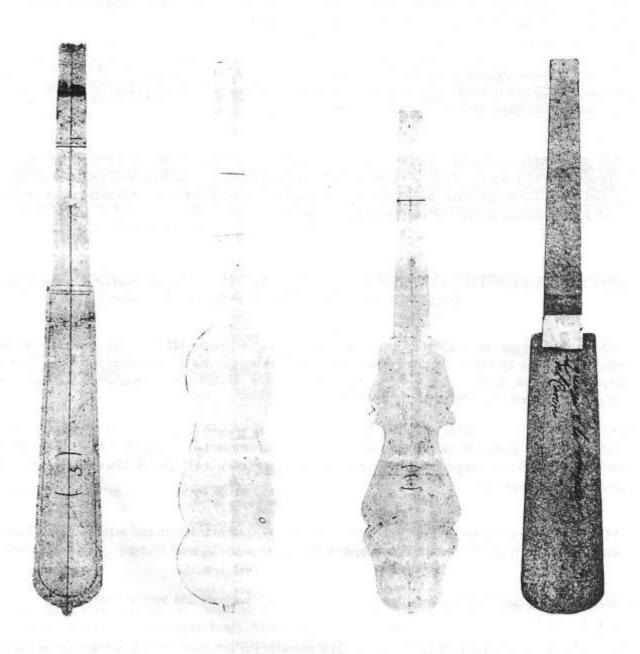


Fig. 176 A. Stradivari: patterns for pochettes (Cat. Nos. 424, 430 and 434).

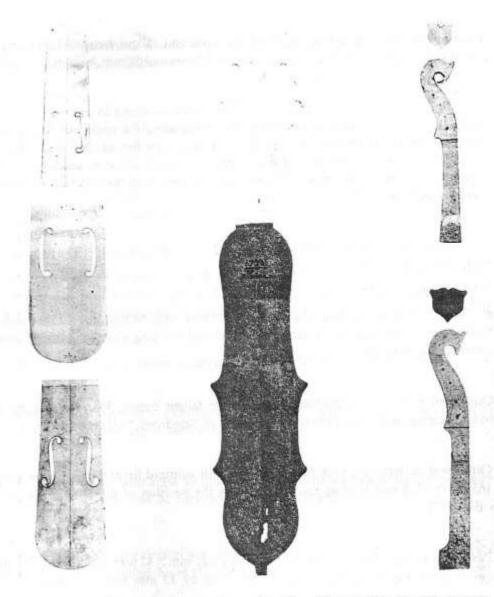


Fig. 177 A. Stradivari: other patterns for pochettes (Cat. Nos. 428, 429, 432, 443, 444, 445, 447, 448 and 456).

40S. 432 and 433 Cardboard patterns for a pochette, including the neck and button for the tailgut. Fotal length 508 mm. The following items are indicated: the line of the nut; the height of the ribs 37 mm, and the purfling. Measurements of the soundbox are: length 287 mm, width 63 mm and 43 mm (fig. 176, ar left).

Paper pattern of the lower part of the same instrument 167 mm in length with the f shaped sound soles cut out (fig. 177, bottom left).

NOS. 434 and 435 Paper pattern for a pochette including the neck and button for the tailgut. Total ength 512 mm. The following items are indicated: the line of the nut, the height of the ribs 35 mm, the measurements of the soundbox are 289 mm in length by 62 mm and 51 mm in width (fig. 176). Pattern in paper of the lower part of the same instrument 168 mm in length with the ff holes cut out in their appropriate position.

- NO. 436 Paper pattern of a pochette including the neck and tailgut button. Total length 498 mm, measurements of the soundbox are length 266 mm, width 70 mm and 58 mm, bearing also the date 1733 in the handwriting of Count Cozio di Salabue.
- NOS. 437 and 438 Pattern in cardboard of a pochette including the neck and tailgut button. Total length 435 mm. Indicated on the pattern are the following items the line of the nut and the height of the ribs at 31 mm and 21 mm. Measurements of the soundbox are length 276 mm, width 47 mm and 30 mm. Paper pattern of the lower part of the same instrument 153 in length with the C shaped sound holes cut out in the appropriate position.
- NO. 439 Paper pattern of a pochette 386 mm long by 62 mm and 51 mm wide. The f shaped sound holes on this pattern are cut out.
- NOS. 440 and 441 Cardboard pattern of a pochette 287 mm long, 54 mm and 70 mm wide. Pattern in paper of the lower part of the body of the same instrument 140 mm long with the C shaped sound holes cut out in their appropriate position.
- NO. 442 Cardboard pattern of a pochette including the tailgut button 302 mm long by 74 mm and 55 mm in width, bearing in the handwriting of the sons of Stradivari "1733 Ultima".
- NO. 443 Cardboard pattern of a neck for a pochette with volutoid finial terminated in a shield shape: measuring 163 mm×13.5 mm bearing marks indicating the position of the nut and four holes for the tuning pegs (fig. 177).
- NO. 444 Design on a fragment of cardboard measuring 222 mm × 42 mm of a neck with volutoid finial terminating in a shield, the neck measuring 191 mm long by 13 mm wide (top right, fig. 177).
- NO. 445 Pattern in paper of a shield shaped terminal for a volute 31 mm in height by 35 mm wide at its highest point (fig. 177).
- NO. 446 Paper pattern of a shield shaped terminal for a volute 31 mm high by 30 mm wide at its highest point.
- NO. 447 Paper pattern of a shield shaped terminal for a volute 26 mm in height by 24 mm wide at its highest point (fig. 177).
- NO. 448 Cardboard pattern of a neck with volutoid finial terminated with a flat head and with a slight heel at the neck joint, 211 mm in length by 160 mm in width, bearing marks indicating the position of the nut and four holes for tuning pegs (fig. 177, bottom right).

- NO. 449 Cardboard pattern of a neck with volutoid finial terminated with a flat head 198 mm long by 15 mm wide, bearing marks indicating the position of the nut and the holes for the pegs.
- NO. 450 Paper pattern of a neck with volutoid finial terminated with a flat head and with a small heel at the neck joint 187 mm long by 11 mm wide, used for smaller pochettes and bearing marks indicating the position of the nut and the holes for the tuning pegs.
- NO. 451 Pattern in maple wood of a neck with volutoid finial terminating in a flat head, and a small heel at the neck joint, 221 mm long by 13 mm wide, bearing marks indicating the position of the nut and the tuning peg holes.
- NO. 452 Pattern in maple wood of a neck with volutoid finial missing the terminal part, having also a small heel at the neck joint 217 in length by 15 mm wide, bearing marks indicating the position of the nut and tuning peg holes. The measurements marked on the neck probably refer to the widths of the head.
- NO. 453 Paper pattern of a volute terminated with a flat head 71 mm long.
- NO. 454 Design on a fragment of a cardboard 215 mm×35 mm of a neck with volutoid finial terminated with a flat head and having a heel at the neck joint.
- NO. 455 Square of paper with sides 89 mm long, perforated with patterns of three pairs of ff shaped sound holes 52 mm, 45 mm and 36 mm in height respectively.
- NO. 456 Paper pattern of the central part of the body of a pochette 140 mm×42 mm with perforated patterns for the C shaped sound holes (fig. 177, middle left).
- NO. 457 Rectangle of paper 120 mm×32 mm bearing the whole design for an f shaped sound hole, 49 mm in height.
- NO. 458 Pattern in maple wood of a fingerboard 184 mm long by 30 mm and 17 mm in width.
- NO. 459 Pattern in paper of a fingerboard 172 mm in length by 35 mm and 25 mm in width.
- NO. 460 Paper pattern of a fingerboard 182 mm in length by 35 mm and 24 mm in width.
- NO. 461 Pattern in maple wood of a tailpiece 97 mm long by 28 mm and 10 mm wide.

- NO. 462 Pattern in maple wood of a tailpiece 94 mm long by 28 mm and 10 mm wide.
- NO. 463 Pattern in maple wood of a tailpiece 56 mm long by 26 mm and 15 mm wide. The holes for the attachment of the strings and tailgut are indicated.
- NO. 464 Facsimile of a bridge made in maple wood 14 mm high by 20 mm wide at its base.

#### VARIOUS ITEMS

- NOS. 465 473 Nine tuning pegs in an unfinished state made in jujube wood (species of zizyphus, equivalent to buckthorn) five with small ivory buttons filling the center hole in the top of the peg.
- NOS. 474 and 475 Two tuning pegs in pear wood in an unfinished state one with a ferrule and button of ivory, the other tinted black.
- NO. 476 An original bow with an ivory headed tensioning screw, length 660 mm, point of balance from tip 440 mm with frog, without frog 385 mm; weight 64.4 gms. (fig. 178).
- NO. 477 An original bow stick with a repair to the point in ebony wood. Period of Nicolò Amati; the bow hair being held at both ends in the bow stick. Length 675 mm. Balance point 39 mm from tip; weight 44.6 gms.
- NO. 478 An original bow frog in ebony.



Fig. 178 A. Stradivari: patterns for the frogs and tips of bows and an original bow (Cat. Nos. 479, 501 and 476).

NOS. 479 - 498 Twenty patterns in maple wood of different bow frogs of which one has a heart-shaped perforation (comprising 5 basses, 3 bass viols, 9 violins, one 3/4 th size violin, 2 violas).

NO. 499 Pattern in maple wood used in the making of the head of a bass-bow 142 mm in length.

NOS. 500 - 501 Two samples in poplar wood of the heads of bows 127 mm and 88 mm long respectively (fig. 178).

NOS. 502 - 504 Model in wood perhaps an apparatus for an acoustical study when attached to a tailpiece, itself applied to a facsimile tailpiece 126 mm long by 48 mm and 26 mm wide. Included are patterns in maple wood for the construction of the upper part of the apparatus which bear the handwritten annotation - "Questa e quella che si tacca la Cordina".

NOS. 505 - 508 Four cardboard patterns measuring respectively 162 mm×67 mm and 38 mm; 136 mm×69 mm and 30 mm; 66 mm×48 mm; 69 mm×48 mm, two for the upper peg box of a chitarrone.

NO. 509 Original stamp made of box wood for the application of Stradivari's seal on the labels of violins. Height 38 mm, diameter of the mark 10 mm (fig. 91).

NO. 510 Copy by Carlo Mantegazza of the original stamp (NO. 509) - height 50 mm (fig. 92).

#### DESIGNS FOR ORNAMENTAL INLAY OF VIOLINS VIOLAS & CELLOS

NO. 511 Page of a book 180 mm×152 mm with reproductions of decorative motifs. It was this book perhaps to which Stradivari referred when carrying out the decoration for his violin the "Greffuhle", so called because of the Griffon which is included as part of the decoration.

NO. 512 Proof sheet in negative on a piece of paper 137 mm×64 mm, made by Stradivari in ink using a reproducing stamp; used in the inlay of the scroll of the "Greffuhle" (fig. 136).

NO. 513 Proof sheet in negative on a piece of paper 121 mm × 30 mm, made by Stradivari in ink using a reproducing stamp; used for the decoration of the ribs of the "Greffuhle" violin (fig. 136).

- NO. 514 Proof sheet in negative on a piece of paper 167 mm × 38 mm. Made by Stradivari in ink, using a stamp in order to reproduce the inlay for the ribs of another violin. (fig. 136).
- NO. 515 Proof sheet in negative on a piece of paper 118 mm × 38 mm made by Stradivari in ink using a reproducing stamp, used for the inlay of the ribs of another violin. (fig. 136).
- NO. 516 The same proof as the preceding one on a piece of paper 96 mm×40 mm.
- NO. 517 Proof made on maple wood of the inlay of a Griffon 54 mm×45 mm. (fig. 138).
- NO. 518 Free hand pen design on a piece of paper 145 mm × 115 mm for the inlayed decoration of the two side faces of a violin scroll. (fig. 134).
- NO. 519 Free hand pen design on a paper pattern 145 mm×19 mm and 88 mm of the back of a violin scroll to complete the inlayed decoration of the preceding scroll NO. 518. (fig. 134).
- NO. 520 Free hand design in pen on a piece of paper 148 mm × 54 mm for the inlayed decoration of the ribs of a violin similar to NO. 518. (fig. 134).
- NO. 521 Free hand design in pen on a piece of paper 290 mm × 200 mm for the inlayed decoration of the ribs of a viola. (fig. 134).
- NO. 522 Free hand design in pen on a piece of paper 200 mm × 148 mm for the inlayed decoration of the ribs of a viola. (fig. 134).
- NO. 523 Perforated design on a piece of paper 187 mm × 29 mm for the inlayed decoration of the ribs of a violin. This item was used to act as a stencil intermediating between the rib and a small cotton gauze sac containing lamp black. (fig. 135).
- NO. 524 Paper stencil 255 mm×118 mm for the painted decoration by brush of the ribs of a cello used in putting the design onto the rib. (fig. 140).
- NOS. 525 527 Three little stamps in poplar wood used for printing arabesques.

NO. 528 Ornament in mother of pearl 47 mm×40 mm for an heraldic crest to be inlayed into the fingerboard of a cello.

## PATTERNS FOR THE METAL FITTINGS OF MUSICAL INSTRUMENT CASES

NOS. 529 - 538 Ten paper patterns of various forms and dimensions for the iron hinges of musical instrument cases of lengths varying between 116 mm and 240 mm; in widths varying between 15 mm, 33 mm. (fig. 179).

NO. 539 Design for a hinge; cut out of cardboard 200 mm×40 mm.

NO. 540 Cardboard pattern identified as first string peg holder of a lute 65 mm in height, bearing the handwritten script "Grilletti" (tiggers).

NOS. 541 - 546 Six maple wood patterns of various forms and dimensions for metal clasps for the locks of instrument cases.

NOS. 547 - 592 Forty-six paper and cardboard patterns of various forms and dimensions for clasps of locks and other metal fittings. On some items are free hand pen sketches of the designs of the mechanism of spring-lever locks. On one Stradivari has written the surname "Ghisolfi" presumably the name of a client. (fig. 179).

NOS. 593 - 598 Six paper patterns and one in maple wood, for crests and coats of arms to be made in metal for application on musical instrument cases.

NO. 599 Paper pattern for the decorative trimming of a lock 84 mm×57 mm taken from a piece of writing by Stradivari to which his signature is affixed.

NO. 600 Paper pattern for the decoration trimming of a lock, bearing areas of varnish used as a glue to hold the pattern in position.

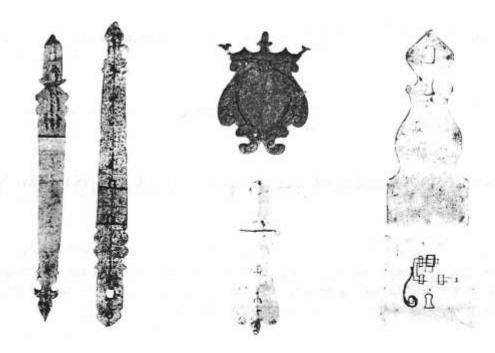


Fig. 179 A. Stradivari: patterns for the iron work of musical instrument cases (Cat. Nos. 529-600).

NO. 601 An account of costs made on the occasion of the death of Stradivari's first wife with the signature of Stradivari affixed measuring 251 mm×171 mm and dated 25th May 1698.

NOS. 602 - 631 Thirty packages used for the safe-keeping of small patterns, marked by Stradivari with the same letters as the patterns for the instruments which they contain. On some are the annotations of Stradivari's sons or of Count Cozio di Salabue.

NO. 632 An original label of Niccolò Amati measuring 78 mm × 17 mm coming from an instrument of 1681.

NO. 633 An original iron stamp of Giovanni Battista Guadagnini used for putting his makers mark on the labels of his instruments. Diameter of the imprint 15 mm.

### TOOLS USED IN MUSICAL INSTRUMENT MAKING

NOS. 634 - 638 Five large wooden screw clamps, four of 322 mm, one of 240 mm in height.

NOS. 639 - 649 Eleven clamps made of iron of which eight are 70 mm in height, two are 84 mm in height and one is 92 mm in height (donation Ceruti).

NO. 650 Fifty-two spring clips in the form of a "U", approximately 50 mm in height for holding the linings under pressure against the ribs during the glueing process.

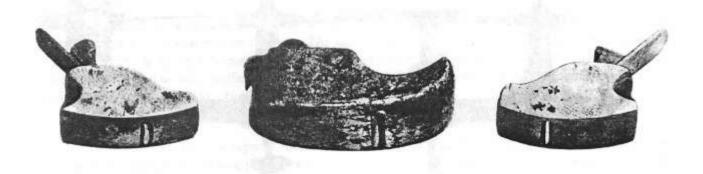


Fig. 180 Small planes in bronze and iron (Cat. Nos. 655-660).

NOS. 651 - 654 Four wooden bass bar clamps, three measuring 262 mm in length and one measuring 366 mm in length used for glueing the bass-bar against the inner face of the belly of a musical instrument.

NOS. 655 - 660 A series of six planes of different sizes with curved soles, four in iron and two in bronze for the working of the bellies and backs of the instruments (fig. 180. The two bronze planes donated by Ceruti).

NOS. 661 - 663 Three thickness gauges for inside measurements made in tempered iron, measuring 365 mm × 130 mm used for checking the thicknesses of the back and belly of the musical instruments (fig. 75).

NO. 664 Pressure point gauge in forged iron used in obtaining the final thickness of the instrument having one point acting as the anvil and the other as a point. It left puncture marks in the wood to mark the correct thickness which was previously determined by means of the adjusting screw. (fig. 75).

NO. 665 Pressure point gauge made in wood used for marking the central areas of the bellies and backs of instruments measuring 382 mm×108 mm.

NO. 666 Graduated pressure point gauge in wood, measuring 416 mm×128 mm (donation Ceruti).

NOS. 667 - 673 Five gouges and two chisels of different measures for wood.

NOS. 674 - 677 Four gimlets of various diameters.

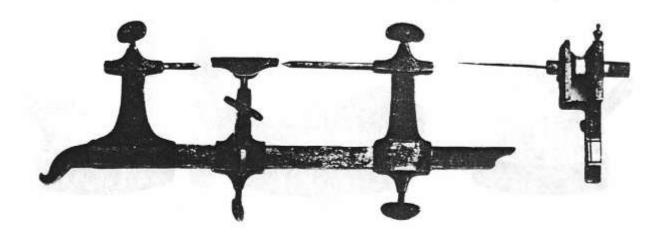


Fig. 181 Small lathe and needle drill (Cat. Nos. 706 and 707).

NO. 678 A reemer in forged steel for plotting out the positions and initial sizes of the peg holes of a cello.

NOS. 679 - 680 Two purfling cutters with adjustable blades for the cutting of the purfling channel, one used for the internal cut and one for the external one. Each one 66 mm long × 30 mm wide. (figs. 99, 100, donation Ceruti).

NOS. 681 and 682 Two purfling picks used for clearing out the purfling channel.

NOS. 683 - 690 Eight hollow ended tools made in iron for the cutting and decoration of leather used in covering musical instrument cases.

NOS. 691 - 697 Seven scrapers with bevels used in the final finishing of the instruments, made from the blades of scabers and stilettos.

NOS. 698 - 699 A curved rasp and a round file.

NOS. 700 - 701 Two set squares made in wood, one with the incised letters "C.B." probably of Carlo Bergonzi.

NOS. 702 - 704 Three adjustable mortice gauges made of wood, one being semicircular in form.

NO. 705 A small honing stone.

NO. 706 Small lathe in forged iron, measuring 180 mm in aperture between its points at the maximum setting, used for turning miniature items. The lathe may have been turned by a line wound around a pulley, this line being held in tension by a bow. This system is still used by clock makers. The lathe is furnished with eleven wooden pullies in a series varying from 32 mm diameter to 15 mm diameter and a bow for turning them (fig. 181, donation Ceruti).

NO. 707 Needle drill with a support made of forged iron used for making the holes for the attachment of the strings through the tuning pegs. The pulley of the drill was turned by the same bow as that used for the lathe (fig. 181, donation Ceruti).

NO. 708 Adjustable scribing compass measuring 83 mm in height and 31 mm in aperture (fig. 106).

NO. 709 Small chest made of willow wood 111 mm in height, 147 mm wide and 68 mm deep, with two compartments and two lids, used for the safekeeping of packages and envelopes which contained the smaller patterns. The cassette has written on it in contemporary capitals the following "I modelli per li violoncelli 1716", which has been repeated by Count Cozio di Salabue on the other lid.

Trustaine line 8 in mono della presense lina
In? Sevadinari

Fig. 182 The autograph of Antonio Stradivari.