

Whence the *Muntz*?

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Introduction

1. Within Antonio Stradivari's prodigious output of violins there exists one which, as a result of its ownership during the nineteenth century by George Henri M Muntz, is known today by that industrialist's family name. The violin – with a two-piece back plate – is today owned by the Nippon Music Foundation of Tokyo, Japan, and contains a label which is dated I736; the I is printed, the 736 numerals hand-drawn.

2. It is claimed by commentators that this violin was one of the instruments owned by Il Conte Ignazio Alessandro Cozio di Salabue (1755-1840) and that Count Cozio describes the violin in his documents.¹

3. The *Muntz* violin's principal body measurements (extremity to extremity, and taken with callipers) were published in 1993 as:

	Upper Bout max. width	Centre Bout min. width	Lower Bout max. width	Body Length
Front plate	161.8mm	107.2mm	200.5mm	351.5mm
Back plate	160mm	109.1mm	201mm	353.2mm ²

4. The principal dimensions of the Stradivari violin mould which is marked with the letter *B* and the date 6th December 1692 have been defined as: UB 154mm, CB 102mm, LB 195mm, Length 347mm.³

5. The 1993 body-measurements of the *Muntz* (see 3.) do not specify the thickness of the ribs; a thickness of 1.15mm is here advanced. In addition, the measurements do not include a specification for the width of the plate overhang, i.e. the distance by which the front or back plate projects beyond the vertical outside face of the rib; a nominal width of 2.5mm is here advanced. Adding 7.3mm (2 × rib thickness and 2 × plate overhang) to the principal dimensions of the *B* 6.12.92 mould (see 4.) produces extremity-to-extremity measurements for a resultant violin of:

UB 161.3mm CB 109.3mm LB 202.3mm Length 354.3mm

The comparative dimensional evidence, particularly the evidence from the *Muntz* maple-wood back plate which, even after many decades, will exhibit barely any transverse shrinkage, suggests that the violin was made around the *B* 6.12.92 mould (as is currently exhibited at the Museo del Violino in Cremona, Italy).

The questions to be addressed in the following pages are (1) whether any of the descriptive texts written by Count Cozio can be shown to correlate robustly with the physicality of the present-day *Muntz* violin, and (2) whether the Count's measurements of the dated-1736 Stradivari violins which he owned can be securely matched to measurements of the *Muntz*.

¹ The extant Cozio manuscripts are archived at the Biblioteca Statale di Cremona, Libreria Civica (BSCr, LC, ms. Cozio xx).

² Beare, C., *Antonio Stradivari, The Cremona Exhibition of 1987*, London (1993), p. 321.

³ Measurements from *Antonio Stradivari, disegni, modelli, forme*, Museo del Violino, Cremona, p. 112.

The most informative colour photographs of the present-day *Muntz* violin can be found on the Tarisio.com website (Cozio archive, ID 40062). The photo of the front plate shows clearly the considerable imbalance in the positioning of the *f*-holes, with the treble *f*-hole being set some three millimetres higher up the plate than its partner (this imbalance is frequently found in Stradivari's late-period violins). Also revealed is the condition of the front-plate spruce wood: at the mid-point of each half-width the golden colour of the wood changes from light to dark. It is as if the front plate has been made from four pieces of wood – the two lighter-coloured segments being glued together at the centre-joint, the two darker segments being glued to the outer edge of the lighter. This 'line of separation' between light and dark is clearly seen in the violin's upper bout, slightly less so in the lower. This two-colour feature is never mentioned by Count Cozio in his various descriptive commentaries (see later).

As is usual, the front-plate growth rings (the 'grain') are narrow and tightly packed together in the centre of the plate, gradually expanding towards the edges but never becoming particularly wide; the rings expand in width slightly more on the bass side than on the treble.

The back plate, in two pieces, shows moderately-distinctive flames of variable size. The flames are almost exactly horizontal.

Judged by his own immaculate standards, Stradivari's purfling on the present-day *Muntz* violin is untidy and imprecise in places, but whether it justifies the Hills' scorn is debatable:

The irregular purfling we meet with tells the same tale: the grand old man's hand trembled so much in cutting the grooves for its insertion that his knife played sad havoc in all directions – so much so that to have filled up the trenches it would, in places, have been necessary to use purfling of violoncello thickness.⁴

The Hills continue with their criticisms of the violin's physicality:

The formation of the corners and edges is ponderous, blunt, irregular, and of square appearance. [...] The modelling is heavy, full, and abrupt. [...] The varnish generally shows, though not without exception, considerable deterioration. More often it is heavily laid on, wanting in softness of texture, and in perfect transparency and richness of colour. At times it is even of a muddy and streaky appearance [...].⁵

The Hills, in their *Antonio Stradivari* monograph of 1902, provide reproductions of a selection of Stradivari labels;⁶ the reproductions are identified as 'Facsimile labels' which suggests they are not photographic. Whether or not any textual uncertainties seen on the glued-in labels were 'erased' during the making of the facsimiles is unknown. Two of the labels are dated 1736 and both have *D'ANNI 92* annotations (Figs. 1 and 2). On the first such label the numerals 92 are repeated on an additional small piece of paper glued along the bottom edge of the main label:

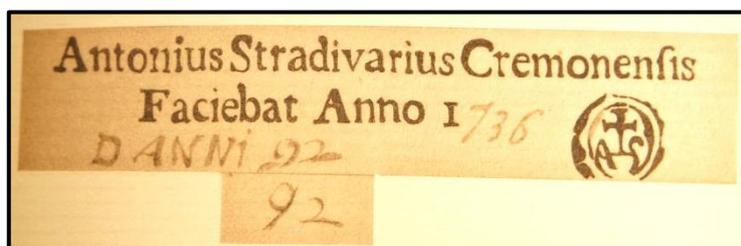


Fig. 1

⁴ Hill, *Antonio Stradivari* (1902), p. 87.

⁵ *Ibid.*

⁶ *Ibid.*, between pp. 216 and 217.

On the second the lettering for *D'ANNI 92* has 'fallen off' the bottom edge of the main label and therefore an additional oblong piece of paper has been glued below with the annotation written thereon:

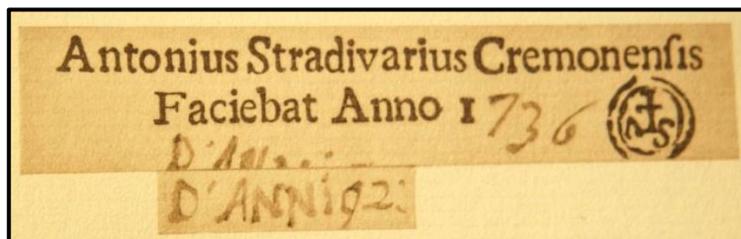


Fig. 2

In their 1902 monograph the Hills do not indicate the identity of the two violins whose internal labels were copied to create the two 'facsimiles' (Figs. 1 and 2) but since the Hills –

1. comment on the *Muntz* violin over the course of four pages (pp. 87-90)
2. provide an image of the violin's 'edge, purfling and sound-hole' (p. 88)
3. state that 'Count Cozio makes mention in the notes left by him of the purchase of this violin, with others, in 1775 from Paolo Stradivari'⁷
4. state that the Count 'sold this instrument to [Luigi] Tarisio, who took it to Paris, and disposed of it to the elder Gand in 1831'⁸
5. state that the violin 'came into our hands, and subsequently [in 1902] became the property of Mr. Higgins'

– it is reasonable to assume that one of the two illustrations above (the only two within the Hills' monograph which show labels dated *I736*) is of the *Muntz* label. A photograph of the *Muntz* label⁹ unambiguously shows a printed Roman numeral – *I* – followed by three handwritten Arabic numerals: *736*; the calligraphic character of the *736* numerals demonstrates that it is the image in Fig. 2 (above) which is the Hills' facsimile of the *Muntz* label.

Documents written by Antonio Stradivari show that his method of drawing an upper-case letter *D* is quite unlike the 'modern' *D* which is seen on the two label annotations, likewise Stradivari's upper-case letter *A* (Figs. 3 and 4).¹⁰ The Hills' four label illustrations which show the number *9* as entirely hand-drawn (rather than it having been a printed *6* with the upper curving tail then erased and a lower curving tail added beneath) – i.e. labels of *I698*, *I699*, *I709*, and *I719* – all show the *9* to have a tail which, at the bottom, curls, distinctively, to the left and then rises (see Fig. 5, overleaf). This shape does not correspond, in any way, with the appearance of the number *9* as found on the two annotated labels (Figs. 1 and 2).



Fig. 3

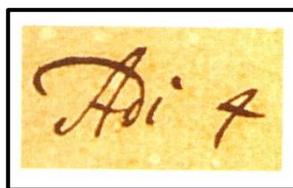


Fig. 4

⁷ Reference to the details of label-dates within the instruments bought by Count Cozio from Paolo Stradivari (see pp.5-6 of this account) will demonstrate the falsity of the Hills' commentary.

⁸ Count Cozio did not sell the future-*Muntz* violin to Luigi Tarisio since the Count never owned the violin (as the present research will make clear). The name of Luigi Tarisio does not appear in Charles-François Gand's business ledger which covers the period 1816-1831; see p.21 of this account.

⁹ The photograph was supplied to the present author by the Nippon Music Foundation.

¹⁰ Figs. 3 and 4 are sourced from *Antonio Stradivari: disegni, modelli, forme*, p. 67.

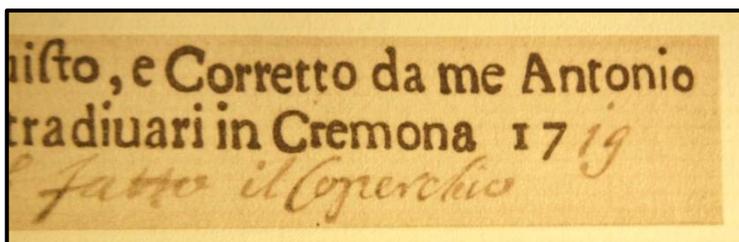


Fig. 5

Within his manuscripts Count Cozio acknowledges the falsification of labels effected by members of the Mantegazza family in Milan:

The violin belonging to the Canzi heirs, judged by Mantegazza to be by Andrea Guarneri [...] with counterfeit printed label: *Nicolaus Amati cremonensis faciebat anno 1642*.¹¹

[this viola] has a counterfeit printed label inserted by Mantegazza the father.¹²

Description and measurements of the Andrea Amati viola belonging to the Canzi heirs, with a counterfeit label put in by Mantegazza the father; the lettering, although beautiful and large, somewhat faded.¹³

The Count also acknowledges his own identical behaviour:

[...] label with seal, as with the others, except that it was cancelled by me (*fu cancellate da me*).¹⁴

[a violin label-dated 1730]: changed label (*cambiato biglietto*).¹⁵

Medium sized [violin], front plate by the Amatis, 1717, label changed (*biglietto cambiato*).¹⁶

[I] changed the label. (*Violino di Ant^o Stradivari del 1710, cangiato il Biglietto*)¹⁷

Antonius Stradivarius Cremonensis faciebat Anno 1731 and handwritten underneath this label in my lettering (as is the 31) [of '1731']: *D'anni 93*; this label also new.¹⁸

[...] and [I] inserted the label of Antonio Stradivari of the year 1730 and underneath [the label] there is written, in my hand, *d'ANNI 96 92*. (*e fraposto il biglietto d'Ant^o Stradivari dell anno 1730 e sotto vi è manuscritto (di mio carateri), d'ANNI 96 92*).¹⁹

Label with stamp [monogram]: *Antonius Stradivarius Cremonen. Faciebat anno 1731 d'anni 92*: the '31' and '92' are in my handwriting.²⁰

¹¹ Translated from BSCr, LC, ms. Cozio 47, folio 125v.

¹² Translated *ibid.*, folio 111r.

¹³ Translated *ibid.*, folio 117r.

¹⁴ Francesco Stradivari violin of 1717; translated from BSCr, LC, ms. Cozio 41.

¹⁵ Cozio/Bacchetta *Carteggio*, p. 197 (pub. Antonio Cordani, Milano, 1950)

¹⁶ *Ibid.*

¹⁷ BSCr, LC, ms. Cozio 45/2.

¹⁸ Translated from BSCr, LC, ms. Cozio 41.

¹⁹ BSCr, LC, ms. Cozio 47, folio 136v.

²⁰ Translated from BSCr, LC, ms. Cozio 42, p. 4. Count Cozio's information suggests that the label is counterfeit since, according to the Hills (Hill (1902) p. 218), Stradivari's labels from 1700 onwards had only the first (Roman) numeral – 'I' – printed whereas the following three (Arabic) numerals were handwritten. The Count's comment implies that the first two numerals – '17' – were printed.

In 1816 Count Cozio wrote a lengthy account of the history of *lutherie* in northern Italy.²¹ In the section of this *Memorie* which focuses on the *Scuola Cremonese* and the *Autori di prima classe* the Count writes (in translation) that Antonio Stradivari ‘died in 1737, of years 93’. In a subsequent section the Count writes:

... this tireless author [i.e. Antonio] worked until he was aged 93 [*d’anni novanta tre*], as is annotated in his own handwriting on the label within a violin of the year 1737, this violin held today by Professor Bertuzzi of Milan, [the violin] originating from this nobleman [i.e. Count Cozio] who acquired it, together with another twelve [violins] in 1773 and 1774 from the late Signor Paolo Stradivari, a cloth merchant, son of this Antonio and brother of Francesco.

A Stradivari violin label-dated 1737 is not included in Count Cozio’s *c.1775* inventory of the instruments which he purchased from Paolo Stradivari (see below). The *d’anni 93* violin which the Count sold to Pietro Bertuzzi ([A] below) was dated 1731 and had a one-piece back plate; from the *Memorie* text (above) it is clear that Count Cozio subsequently changed the label’s fourth date-numeral from 1 to 7.²²

The history

Between 1773 and 1775 Count Cozio purchased at least twelve violins from Paolo Stradivari in Cremona. The Count wrote brief descriptions of six of these instruments:²³

- [A]²⁴ 1731 Count Cozio states that the label inside this *forma grande* violin has the annotation *d’anni 93*. The violin was sold through Cesare Rovida and passed to Pietro Bertuzzi. It has a one-piece back plate²⁵ and therefore has no connection with the *Muntz*.
- [B] 1716 this violin is defined by Count Cozio as ‘number 1, the best for equality [of voice] and beauty’ (*il primo d’uguaglianza e bellezza*). This violin was not sold.
- [C] 1724 this violin (which would be sold to Paganini in 1817) is defined as ‘number 2; the most sonorous’ (*il piu forte*).
- [D] 1730 the label inside this *forma grande* violin has the annotation *d’anni 92*. This violin was sold to Francesco Molere[go] on 24 May 1801. The violin has a one-piece back plate (*fondo intiero*).
- [E] 1717 this violin is identified as having been made by Francesco Stradivari (*è del figlio*). Sold to Monsieur Durand, of Paris, in 1805.
- [F] 1720 with a one-piece back plate; sold to Pasquale Edoardo Folli on 4 July 1801.

²¹ BSCr, LC, ms. Cozio 1.

²² This ‘1737’ violin, with a one-piece back plate, is not the *Chant du Cygne* violin; see the present author’s article, *The Stradivari ‘Chant du Cygne’ violin: a question of labelling*, in *The Galpin Society Journal*, March 2017, pp.81-96.

²³ BSCr, LC, ms. Cozio 41. The manuscript is undated but was probably written in the early months of 1775; see N. Sackman, *The ‘Messiah’ violin: a reliable history?*, chapter 3 (www.themessiahviolin.uk).

²⁴ These editorially-inserted letters are simply to aid matching with the violins subsequently listed and described.

²⁵ All the underscoring of ‘a one-piece back plate’ is by the present author, and simply for the sake of clarity. To repeat: the present-day *Muntz* violin has a two-piece backplate.

On a subsequent page of the same manuscript Count Cozio describes a very small Stradivari violin, a violin which he would still own in 1823:

[G] *forma piccola assai, fondo intiero, bosco vena larga ma poco brillante, covino piu del rotondo, manico buono, rizzo contornato, coperchio ben travagliato e belle ff, ancora intatte e mai stato sonato, male profilato, catena nuova, fasse intiere, vernice carica e spessa, arrangiate da guadagnini, vero del biliete, biglietto come gli altri, d'anno 1730, ma credi 1736, manuscritto d'anni 92.*

[written in the margin] *era del Signor Boroni
si ha nel 1823 posto in nota della Collezione Principale.*

Very small model, one-piece back plate, the wood has flames which are wide but of little brilliance. The neck-button is more than round [more than a semicircle?]; the neck is good; the scroll is outlined [in black]. The front plate is well made with beautiful *f*-holes. [The violin] is still undamaged, and never played. Poor purfling; a new bass-bar; one-piece ribs; thick varnish, heavily applied. [The violin has been] set up by Guadagnini. Genuine label; the label like the others, of the year 1730, but I believe [the violin dates from] 1736, handwritten 'of years 92'.

The violin belonged to Signor Boroni.

I have it; in 1823 placed, as noted, in the Principal Collection.

Count Cozio's margin annotation (which could not have been written before 1823) makes clear that he retained this violin for almost 50 years.

This section of the Cozio 41 manuscript continues with a description of a violin label-dated 1717 and then concludes with a 'not by Stradivari' violin. It is likely that these two instruments were acquired from a source other than Paolo Stradivari.

Count Cozio then provides (still in ms. 41) descriptions and label-dates for six further violins – *Segue Stradivari forme grande novi* ('... large models; new'). These six violins complete the group of instruments purchased in Cremona:

[H] 1730 *forma grande* and with a one-piece back plate. Count Cozio makes no mention of a *d'anni 92* annotation. Sold to Mantegazza.

[I] 1730 *è del Francesco figlio*. In 1823 this Francesco Stradivari violin was still with Count Cozio.

[J] 1715 sold to Giuseppe Molere[go].

[K] 1730(4) the Count overwrites the 0 with a 4; the violin is defined as *forma grande* and with a one-piece back plate; there is no mention of a *d'anni 92* annotation. This violin was sent to the Count's sister, Irene, who lived in the town of Valenza.

[L] 1730 *d'anni 92*; with a one-piece back plate; sold to Pasquale Folli.

[M] 1730 *Fondo gionto vena larga ed il secondo per bellezza, covino più del semicerchio manico uguale di bosco, fascie belle, rizzo contornate, le effe belle, fassa agiunta al poretto, d'anno 1730 D'anni 92, il mio favorito che io suonava, vernice puitosto gialla.
3º 4 di forza²⁶*

[written in the margin] *si ha e nel 1823 lasciato in nota a vendere separato*

Jointed back plate; the flames are wide and the second best for beauty. The neck-button is more than a semicircle; the neck is made from the same wood [as used for the back

²⁶ A 3 was initially written by Count Cozio but then overwritten with a 4.

plate]. Beautiful ribs; the scroll is outlined [in black]; the *f*-holes are beautiful; the [lower] rib is jointed at the tailpiece button. Of the year 1730, of years 92. My favourite violin that I played. The varnish is rather yellow. The ~~third~~ fourth best for [tonal] strength.

I have it, and in 1823 I noted to sell it separately.

As with the ‘very small’ 1730 violin which belonged to Signor Boroni (p.6, [G]) Count Cozio’s margin annotation makes clear that in 1823 he still possessed this ‘favourite’ violin of 1730, and therefore both violins (which are the only 1730 Antonio Stradivari violins listed in ms. Cozio 41 that were not sold) are likely to reappear in descriptive documents written between 1775 and 1823 (but the violins might not be exhibiting their original 1730 label-dates).

There are no known documents which identify Count Cozio’s acquisition of Antonio Stradivari violins containing original labels dated ‘1736’. Documentary evidence (see later) suggests that Count Cozio altered Stradivari’s hand-drawn ‘nought’ numeral (in ‘1730’ labels) to show as ‘six’ (‘1736’); such an alteration would be the simplest course of action following a realisation that ‘1730’ and ‘of years 92’ was an impossible combination.

In April 1801 Count Cozio compiled a new, more detailed inventory of his Stradivari instruments: *Inventario de Violini, Viole, e Violoncelli*.²⁷ One section of this inventory is titled:

Violini di Stradivario Antonio da molti anni accomperati dal suo nipote a Cremona

Violins of Antonio Stradivari, of various years, obtained from his grandson [Antonio II] in Cremona.

The violins already described in ms. Cozio 41 (pp.5-6 of this account) reappear in this new inventory:

- [A] 1731 one-piece back plate; sold to Bertuzzi
- [H] 1730 one-piece back plate; sold to Mantegazza
- [J] 1715 sold to Giuseppe Molerego
- [D] 1730 one-piece back plate; sold to Molerego.
- [F] 1720 one-piece back plate; sold to Folli, 4 July 1801.
- [M] 1730; as already indicated, this violin was not sold prior to 1823:

Segue detto Antonio Stradivario viglietto stampato col bollo come li retro: come retro anno 1730 (ma pare che dicesse 38) con agionta sotto manuscritta dicente D’ANNI 92. Voce tonda e pastosa, e forte ma pure ancora interna, ma risponde eguale ed assai su tutte le corde. Conotati: le profila non è così esatta: vernice rossa chiara liquida che tende un poco al gialliccio: siccome ha molta panza longa nel fondo e coperchio che va quasi ai bordi non pare di forma tanto grande: fondo in due pezzi vena larga non seguente ma bella: covino ai due terzi di circolo: fascie e manico d’eggual [sic] bel legno: col nero al contorno del riccio coperchio bella vena unita: belle ff, grandi e ben scavate: intatto: per la sua bellezza, e forza, e qualità di voce vale zecchini novanta: con manico dato indietro dal Guadagnini.

Antonio Stradivari, the label stamped with the seal like the previous [violins]: *anno 1730* but [the date] looks like 38. With, added underneath, handwriting which states: *d’anni 92*. The voice is rounded and mellow; sonorous, but still internalised; but [the violin] responds evenly and strongly on all the strings. Description: the purfling is not absolutely precise; the varnish is light red, liquid, slightly yellow-ish (*un poco al gialliccio*). Because [the violin] has very noticeable longitudinal arching on both the back and the front [plates], and because this

²⁷ BSCr, LC, ms. Cozio 42.

arching extends almost to the edges the violin does not seem to be that large. The back plate is in two pieces; the flames are wide, uneven, but beautiful; the button is two-thirds of a circle;

([M] 1730 contd.) the ribs and the neck are made of equally beautiful wood, with black outlining of the scroll. The front plate has beautiful veins [i.e. growth rings] of uniform [width]; beautiful *f*-holes, large, and [the wings] nicely hollowed; undamaged; for its beauty, power, and quality of voice, it is worth 90 *zecchini*; with a tilted-backwards neck by Guadagnini.

Note the repetition (from [M] on pp.6-7) of the text regarding the beauty of the back-plate flames, the ribs, and the *f*-holes. Note the Count's new comments about the arching (see also p.11 and p.14 of this account).

[C] 1724 Paganini's violin.

[L] 1730 One-piece back plate; sold to Folli.

[G] 1730; as indicated earlier (on p.6 of this account), this violin was not sold prior to 1823:

voce buona chiara, e più forte in proporzione di sua forma. Conotati: forma piccola, vernice rosso scura densa da pastello con macchie rossiccie, con pancia ma ben distesa, lavoro comune, le ff però belle e proporzionate – forma assai piccola,²⁸ fondo intiero, vena larga diseguale, covino due terzi del circolo; fascie e manico di egual legno, riccio ben fatto e profilato di nero. Intatto. Con manico dato indietro dal Guadagni [sic] come tutti li altri del Stradivari. [...] poco più piccolo in mezzo alla larghezza alla forma mezzana delli Amatis, ma molto più corte sotto e sopra e così più proporzionati. Vale per la sua rarità almeno Giliati cinquanta.

The voice is clear and good, and stronger [than one might expect] from the violin's size. Description: small form; dark-red varnish – thick, like paste; with reddish spots. With a [noticeable?] belly but it is smoothly extended [to the edges?]. Ordinary workmanship; however, the *f*-holes are beautiful and in proportion – the model is very small. One-piece back plate with wide, unequal, flames; the neck-button is two-thirds of a circle. The ribs and neck are made from the same wood; the scroll is well made and outlined with black. Undamaged. With a tilted-backwards neck by Guadagnini as with all the other violins by Stradivari [which I own]. [...] a little smaller in the central width [when compared to] the small-size Amati violins but very much shorter below and above [i.e. longitudinally shorter in the lower and upper bouts] and thus more in proportion. For its [dimensional?] rarity it is worth at least 50 *gigliati*.²⁹

From the Count's text it is clear that this is Signor Boroni's 'very small' violin ([G] on p.6).

[B] 1716 the 'number 1' violin.

Summary

The only 1730 Antonio Stradivari violins owned by Count Cozio in April 1801 were:

1. [G] Signor Boroni's rare, small/very small violin, dated 1730, with a one-piece back plate and thick, dark-red varnish, which, in 1823, was to be placed in Count Cozio's *Collezione Principale*.
2. [M] The Count's 'favourite' 1730 violin with a jointed back plate, beautiful ribs and *f*-holes, a jointed bottom rib, and rather yellow varnish, which, in 1823, was 'to be sold separately'.

²⁸ Count Cozio's underscore.

²⁹ The *gigliato* coin was equivalent to the *zecchino*.

Count Cozio's two Stradivari violins which were label-dated 1730 and displayed the handwritten annotation *d'anni 92* reappear in a subsequent manuscript of 1808, but are now dated '1736':

1808, 16 gennaio, Milano: Inventaro delli instrumeti nella guardarobba alta di noce nel gabinetto.
1808, 16th January, Milan: Inventory of the instruments in the tall walnut cupboard in the closet.³⁰

- a Stradivari violin of 1736 ([G] on p.6); see Fig. 6, below.
- a Stradivari violin of 1736 ([M] on p.6); see Figs. 7a and 7b, overleaf

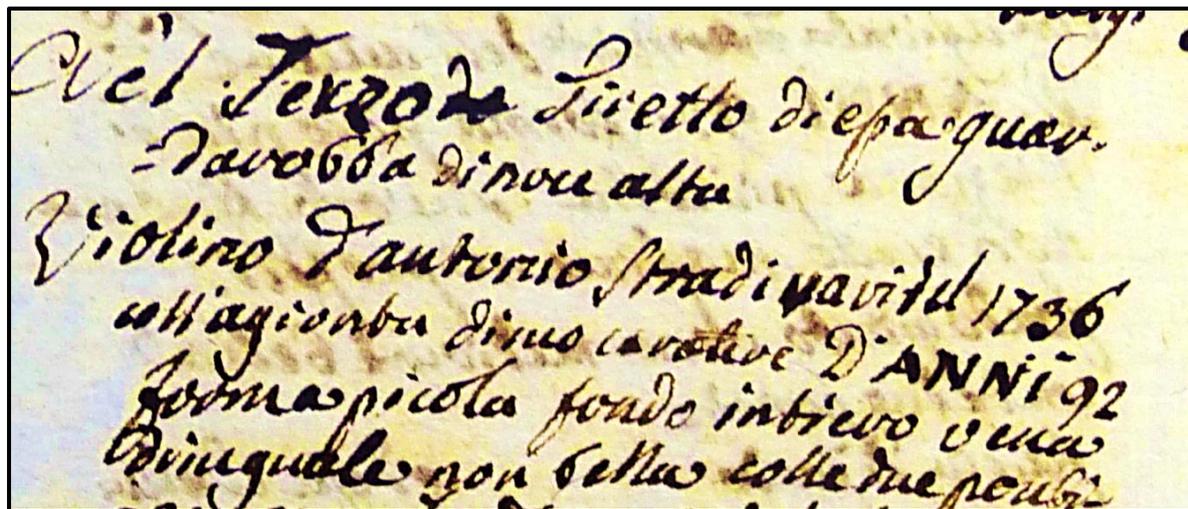


Fig. 6: BSCr, LC, ms, Cozio 46 (detail). Close examination of the fourth date-numeral suggests that it was initially a nought, to which an upper tail was subsequently added by Count Cozio to create a six. In his manuscripts Count Cozio always used inked dots to show which label-numerals were hand-drawn; in Fig. 6 the Count has placed an ink dot under the numeral 3 and another under the numeral 6; thus this [G] violin's label-date comprised printed numerals **17** and hand-drawn numerals 36.

Nel Terzo Tiretto di essa guardarobba di noce alta
Violino d'Antonio Stradivari del 1736 coll'agionta di suo carattere D'ANNI 92
forma piccola fondo intiero vena disuguale non bella colle due pontine come il sudetto Amati del 1668, covino $\frac{2}{3}$ circolo, profilato non bene, fascia di fondo gionta di legno d'esse come il manico. Coperchio vena buona lavoro passabile e così delle ff scanellate un poco, manico bello. Vernice rossa oscura mal data però assai forte, e buono di voce ed intatto, e può valere Luigi 40.

In the third drawer of this tall walnut wardrobe
Antonio Stradivari violin of **1736**, with, added in his handwriting, *D'ANNI 92*
Small form, one-piece back plate, the flames are uneven [in width?] and unattractive; with two [locating] pins like the aforementioned Amati violin of 1668.³¹ The neck-button is two-thirds of a circle. The purfling is not good. The rib around the bottom of the violin is jointed; the wood used [for the rib] is the same as that used for the neck. The front plate is nicely grained; the workmanship is satisfactory likewise that of the *f*-holes which have been slightly hollowed [i.e. the wings have been hollowed]; the neck is good. The varnish is dark red; badly applied. Nonetheless, [the violin is] very sonorous – it has a good tone and is undamaged, and can be priced at 40 *Luigi*.³²

³⁰ BSCr, LC, ms, Cozio 46.

³¹ (an Amati violin which had belonged to Count Cozio's father)

³² 1 *Luigi* = 20 *French francs*.

The ‘small form’, the ‘one-piece back plate’, the ‘nonetheless ... very sonorous’ evaluation, as well as the description of the varnish (‘dark red; badly applied’) and the ‘uneven’ back-plate flames – all these features identify this violin as that which had belonged to Signor Boroni (see [G] on p.6 and p.8) notwithstanding the fact that the violin’s rib is described in 1775 as ‘one piece’ (p.6) but in 1808 as ‘jointed’ (p.9). This discrepancy is likely nothing more than a momentary lapse in concentration (and in any case it is an error which is irrelevant to the provenance of the *Muntz*).

This description is followed by Count Cozio’s description of his second 1736 violin; this violin has a two-piece back plate (Fig. 7a):

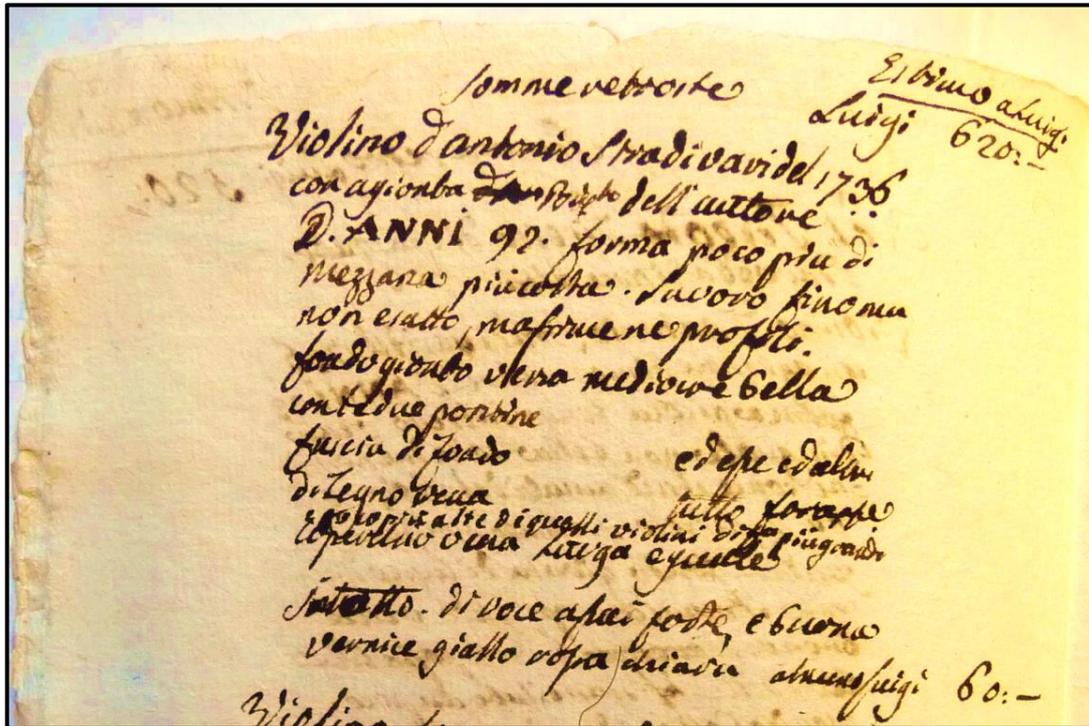


Fig. 7a: BSCr, LC, ms. Cozio 46, folio 2v. Note that this violin’s label-date, like the previous, has printed numerals **17** and hand-drawn numerals 36.

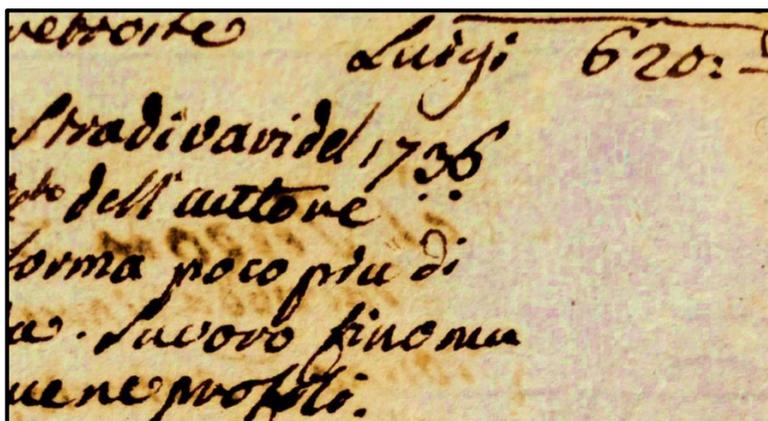


Fig. 7b: BSCr, LC, ms. Cozio 46, folio 2v (detail). Close examination of the fourth date-numeral suggests that it was initially a nought, to which an upper tail was subsequently added by Count Cozio to create a six.

Violino d'Antonio Stradivari del 1736 con agionta biglietto dell'autore D. ANNI 92 forma poco piu di mezzana più corta. Lavoro fino ma non esatto, massime ne profili. fondo giunto vena mediocre bella con le due pontine [here Count Cozio leaves an unused space] fascia di fondo

[unused space] *ed esse ed altre di legno vena* [unused space] *tutto forastiero e poco più alte di quelli violini di forma più grande. Coperchio vena larga eguale intatto, di voce assai forte e buona vernice giallo rossa chiara almeno Luigi 60.*

Antonio Stradivari violin of **I736** with added label of the maker: *D.ANNI 92*

The model is a little more than half size, shorter [?shorter than full size]. The workmanship is good but not precise, especially in the purfling. The back plate is jointed; medium-width flames, beautiful, with the two locating pins [unused space] the rib around the bottom of the violin [unused space] and they and others of flamed wood [unused space] all is foreign wood and [the arching is] a little more elevated than on those violins of larger form. The front plate has wide veins [i.e. growth-rings] which are equal [i.e. of consistent width]; undamaged. The violin's voice is very sonorous and good. The varnish is yellow/light-red. At least 60 *Luigi*.

The 'yellow/light-red varnish' connects this violin with the **[M]** violin described at the bottom of p.7 of this account where the varnish is described as 'light red, liquid, slightly yellow-ish', and also connects with the violin described in 1775 – 'the varnish is rather yellow' (**[M]** top of p.7). Note the above comment that the violin's arching 'is slightly more elevated than on those violins of larger form' and compare with the text on p.7 (bottom) of this account. The consistent-width rings were previously identified in 1801 (see top of p.8).

The specific condition of the **I736** label-date numerals means that the above violin cannot be today's *Muntz*; an official photograph of the *Muntz* label clearly shows that only the 'I' was printed, i.e. **I736**. Since a hand-drawn numeral 7 cannot be amended, with pen and ink, to appear as a printed 7, it must be the case that the entire label inside this **[M]** violin (and inside the **[G]** violin, see Fig. 6) is a fraudulent replacement of Stradivari's original.

The unused spaces in Count Cozio's manuscript are puzzling; perhaps other matters interrupted his work and he forgot to fill-in the 'answers' to his 'subject-headings' (these being the positioning of the locating pins, the one- or two-piece condition of the bottom rib, and an unknown aspect of the 'flamed wood') but how could the Count have forgotten his unfinished description when he continued writing on the same page with a lengthy description of a *Giuseppe Guarneri filio d'Andrea* violin of 1707? The unused spaces suggest that Count Cozio wrote the Fig.7a descriptive text from memory; certainly he was in Milan but perhaps the **I736** violin was temporarily out of his hands (left behind at the Castello di Salabue?) and the Count's only 'crib' was his manuscript of the April 1801 inventory (see p.7); it is noticeable, for example, that in 1801 the Count writes *coperchio bella vena unita* ('the front plate has beautiful veins [i.e. growth rings] of uniform [width]'), an evaluation which, in January 1808, is repeated with *coperchio vena larga eguale* ('the front plate has wide veins [i.e. growth rings] which are equal [i.e. of consistent width]'). Might the Count's puzzling comment – *forma poco piu di mezzana più corta* ('the model is a little more than half size, shorter') – flow from him not having the violin in his hands and being unable to remember the instrument's overall dimensions?

Summary In January 1808 Count Cozio's two **I736** violins were those which he had previously described in 1775 and in April 1801 when they were label-dated 1730:

1. the rare, small/very small Boroni violin (**[G]** on p.6 and p.8) with a one-piece back plate and thick, dark-red varnish, which was destined for the *Collezione Principale*
2. the violin (**[M]** on pp.6-7 and pp.7-8) which had a two-piece back plate, arching which was slightly more elevated than normal, had 'yellow/light-red' or 'light red ... slightly yellow-ish' varnish, and a jointed bottom rib; it was the Count's 'favourite' violin, which, in 1823, he decided to sell 'separately'.

Eight years after the 1808 inventory, in the aforementioned *Memorie* document of 1816 (see p.5 of this account), Count Cozio writes the following commentary:

I still own two [Stradivari] violins of the year 1736, with the annotation, in Stradivari's handwriting, included on the label, 'of years 92' [*di anni novanta due*]; they are undamaged and of an astonishing force and quality of voice, barely any less than his undamaged masterpiece, of even greater force and beauty, dated 1716, which stands out with the Amatis in my collection.³³

Also in 1816 Count Cozio began work on his 300-page (150 folios) book of instrument measurements;³⁴ the dozens of texts are dated from 1st April 1816 onwards. On 29th May 1816 Count Cozio compiled comprehensive measurements for seven violins (ms. Cozio 47, folios 12r – 21r):

- a 1668 Nicola Amati violin
- a 1716 Antonio Stradivari violin
- a 1724 Stradivari violin
- a 1612 Antonio and Gerolamo Amati violin
- a 1658 Andrea Guarneri violin
- a 1736 Stradivari violin; *grande*
- a 1736 Stradivari violin; *forma piu piccola*

Given that all these sets of measurements were compiled on 29th May 1816, and it was in 1816 when Count Cozio wrote his 'I still own two violins of the year 1736 ...' comment (quoted above), it is reasonable to assume that the first of the two 1736 violins – *grande* – is the aforementioned [M] violin, while the *forma piu piccola* violin is the [G] violin which belonged to Signor Boroni:

ms. Cozio 47, folios 19r, 19v, and 20r

1816. Milano li 29. Maggio. Segue ad misure come sopra coi profili del mio Stradivario forma ~~mezzana~~ [one struck-through unreadable word] *grande*, col gialliccio delli ultimi cioè del 1736. con suo Bigliettino d'anni 92. il più forte dopo li primi sudetti di forma P.G. questo dovrebbe essere di forma B delli 6. xbre 1692, più corta di circa tre ponti di quella B. 3. giugno d'anno 1692.³⁵

Milan, 29th May 1816. Continuing to the measurements, as with the previous instruments,³⁶ including the purflings, of my Stradivari [violin], ~~half-size~~ [?] large form, with yellow-ish [varnish]; one of the last, namely of 1736, with his small label 'of years 92'. The most sonorous after the above-mentioned [violins] of the P.G. mould.³⁷ This [violin] must be of the mould B of 6th December 1692, shorter by about three *ponti* than the mould marked B 3rd June 1692.³⁸

³³ Translated from BSCr, LC, ms. Cozio 2.

³⁴ BSCr, LC, ms. Cozio 47.

³⁵ A side-margin annotation in Count Cozio's handwriting – attention being drawn to this annotation by the Count drawing a hand with a pointing finger! – refers to a related set of measurements which begins on folio 28v of his manuscript (see p.15 of this account).

³⁶ When measuring his violins Count Cozio always used the French government's authorised system known as the *Pied du Roi*. In this system, one *pouce* (*polici* to the Count) is equivalent to 27.07mm; one *ligne* (*ponti*) is equivalent to 2.26mm. For a detailed examination and explanation of the Count's measuring procedure (using dividers and a *Pied du Roi* ruler) see N. Sackman *The 'Messiah' violin: a reliable history?*, Chapter 5 (www.themessiahviolin.uk).

³⁷ The 'above-mentioned' P.G. violins are the 1716 and the 1724 instruments.

³⁸ Why didn't Count Cozio write, unambiguously, *questo è di forma B* ('this violin is of the mould B ...')? For a consideration of the issues surrounding the source mould see p.20 and pp.24-25 of this account. Three *ponti* is equivalent to 6.8mm.

Front plate measurements achieved with dividers, ‘including the purflings’	<i>polici ponti</i>
[1] <i>Maggior larghezza nella parte superiore polici cinque ponti nove, e mezzo</i>	<i>pol. 5. 9³/₆</i>
[2] <i>Minor larghezza di mezzo al petto polici tre, ponti otto, e due terzi</i>	<i>pol. 3. 8⁴/₆</i>
[3] <i>Magior larghezza inferiore polici sette ponti tre, ed un terzo</i>	<i>pol. 7. 3²/₆</i>
[4] <i>Longhezza superiore dal ponticello al bordo polici sette, e mezzo ponte</i>	<i>pol. 7. 0³/₆</i>
[5] <i>Longhezza inferiore dal ponticello polici</i> [the numerals are not written in words]	<i>pol. 5. 8³/₆</i>
[6] <i>Spessore del ponticello ponti due</i>	<i>pol. – 2</i>
[7] <i>Grorezza de bordi elevati caduno ponti due, e così</i> [Thickness/width of the raised borders; each is 2 <i>ponti</i> and thus]	<i>pol. – 4</i>
[8] <i>Totale polici tredici ponti tre</i>	<i>pol. 13. 3</i>

Using the French government’s *Pied du Roi* system the Count’s *polici/ponti* measurements of width can be converted to millimetres (see footnote 36):

- [1] Maximum width across the upper bout
[between the outer line of the purfling on each side of the plate; *coi profili*] = 156.82mm
- [2] Minimum width across the middle of the [C-bout] chest [ditto] = 100.80mm
- [3] Maximum width across the lower bout [ditto] = 197.01mm.
- [7] The width of the wood lying to the outside of the purfling on each side (treble and bass), i.e. a total of 4 *ponti* = 9.04mm, must be added to the three width results given above. Therefore the front-plate extremity-to-extremity dimensions of width for this violin were:

Upper Bout	156.82mm + 9.04mm = 165.86mm
Centre Bout	100.80mm + 9.04mm = 109.84mm
Lower Bout	197.01mm + 9.04mm = 206.05mm.

The body length of this ‘yellow-ish’ violin was established by Count Cozio in stages:

- [4] Length from the bridge upwards to the outer line of the purfling = 190.62mm
- [5] Length from the bridge downwards to the outer line of the purfling = 154.56mm
- [6] Thickness of the bridge [measured at the foot] = 4.52mm
(The resultant overall length between the outer line of the purflings = 349.7mm)
- [7] Add the width of the border, twice, to the length: 349.7mm + 9.04mm = 358.74mm
- [8] Total length 13 *polici*, 3 *ponti*: 351.91mm + 6.78mm = 358.69mm.

Thus the four principal front-plate measurements (rounded) of this *grande* violin ([M]) were:

UB 165.9mm CB 109.8mm LB 206.1mm Body Length 358.7mm.

These measurements deny any possibility that this violin is the present-day *Muntz*:

Front plate: 161.8mm	107.2mm	200.5mm	351.5mm
Back plate: 160.0mm	109.1mm	201.0mm	353.2mm (see p.1 of this account)

Count Cozio then measures	<i>policci ponti</i>
the distance between the <i>f</i> -holes in the middle of the chest	2. $8\frac{1}{2}$ = 73.35mm
the distance between the upper eyes of the <i>f</i> -holes	1. 6 = 40.63mm
the distance between the lower eyes of the <i>f</i> -holes	3. $10\frac{1}{4}$ = 104.37mm
the length of the <i>f</i> -holes ‘in the longer part’	2. 7 = 69.96mm
the length of the <i>f</i> -holes ‘in the shorter part’	2. $6\frac{1}{3}$ = 68.44mm.

The Count then provides yet more measurements – for the ribs, neck, fingerboard, bridge, etc.

At the very end of his set of measurements – at the bottom of folio 20r of ms. 47 – Count Cozio writes:

Alto e largo di curve più del solito e questo è di voce assai forte e buona e di bel legno e fondo in due pezzi

The height and breadth of the arching is more than usual, and this [violin] has a very sonorous and good voice, and is made with beautiful wood and the back plate is in two pieces.

cf. the 1808 description presented on p.11 of this account:

... and [the arching is] a little more elevated than on those violins of larger form.

Squeezed onto the very edge of the paper, at the bottom of folio 20r, the Count adds:

vedi il resto a foglio 29.

See the rest at folio 29. [actually at folios 28v and 29r; see below and p.15 of this account]

The above set of measurements is immediately followed by measurements for another 1736 Stradivari violin (i.e. the second of Count Cozio’s two 1736 ‘still owned’ violins):³⁹

1816, 29 Maggio. Altro mio violino Strad Ant^o del 1736. d’anni 92. forma più piccola, fondo intiero, e forte come un grande si crede della forma [unused space] prese col compasso coi profili.

29th May 1816. Another, my Antonio Stradivari violin of 1736, ‘of years 92’, smaller type, one-piece back plate, and sonorous, like a big [violin]; believed to be built around the ... mould; [the measurements] taken with dividers including the purflings.

The Count’s enthusiastic comment – that this smaller violin was ‘sonorous, like a big [violin]’ – clearly points to Signor Boroni’s small/very small violin (**[G]**) with dark-red varnish and a one-piece back plate. The Count’s principal measurements of this violin are: UB 155.7mm, CB 102.7mm, LB 195.2mm, and Length 343.7mm.⁴⁰ The Count seemingly did not own the source-mould since he is unable to complete his comment *si crede della forma ...* .

Three days later, on 1st June 1816, Count Cozio wrote out a set of measurements for a 1736 Stradivari violin *coll indicazione d’anni 92* (ms. Cozio 47, folios 28v and 29r). As quoted earlier – *vedi il resto a foglio 29* – this new set is directly related to the set written on folios 19r, 19v, and 20r.

A substantial area in the centre of Count Cozio’s sheet of paper has disintegrated; officials at the Biblioteca Statale di Cremona have attached an opaque sheet of paper to the original in order to hold it in one piece. The text presented below is transcribed from what can still be read on the original document, supplemented by Renzo Bacchetta’s transcription (*Carteggio*; see fn.15) which dates from the late 1940s (at which date the disintegration of the paper was seemingly not as severe as currently):

³⁹ BSCr, LC, ms. Cozio 47, folios 20v and 21r.

⁴⁰ cf. Stradivari’s small, decorated, *Cipriani Potter* violin of 1683 which has measurements of 153, 103, 192, and 339mm.

ms. Cozio 47, folios 28v and 29r

1816 1^o Giugno Milano Misure del mio Violino dell Antonio Stradivario forma non così grande, vernice gialliccia, fondo gionto, vena bellissima, intatto con biglietto del 1736. Coll indicazione d'anni 92, il più forte de dieci altri di [one unreadable word] esse presi io a Cremona dal nipote dell autore nel 1775: prese col compasso compresi li profili, coperchio.

1816, 1st June, Milan; measurements of my Antonio Stradivari violin, the model not so large.⁴¹ Yellow-ish varnish, jointed back plate [with] the most beautiful flames. Undamaged, with label of the year 1736, with the annotation 'of years 92'. The most sonorous of the ten others⁴² of [?], these I obtained in Cremona from the author's grandson in 1775. [Measurements] taken with dividers including the purflings on the front plate:

Front plate measurements:	<i>policì ponti</i>	(see [7] below)
[1] UB maximum width between the outer line of the purflings	5. $9\frac{1}{4}$	= 156.25mm (+ 9.04mm)
[2] CB minimum width (ditto)	3. $8\frac{2}{3}$	= 100.80mm (+ 9.04mm)
[3] LB maximum width (ditto)	7. $3\frac{1}{3}$	= 197.01mm (+ 9.04mm)

Extremity-to-extremity widths are therefore: UB 165.29mm, rounded to **165.3mm**
 CB 109.84mm, rounded to **109.8mm**
 LB 206.05mm, rounded to **206.1mm**

The rounded widths presented on p.13 of this account for the [M] violin were: 165.9mm
 109.8mm
 206.1mm.

[4] Length from bridge upwards to the outer line of the purfling	7. $0\frac{3}{6}$	= 190.62mm
[5] Length from bridge downwards (ditto)	5. $8\frac{3}{6}$	= 154.56mm
[6] Bridge thickness	0. 2	= 4.52mm
[7] Combined width of two borders	4	= <u>9.04mm</u> 358.74mm

[8] Total length of 13 *policì* and 3 *ponti* = 358.69mm

Rounded measurement of length is **358.7mm**; this dimension is identical to that of the [M] violin (folios 19r, 19v, and 20r; see p.13).

At this point Count Cozio supplies further measurements but these are less numerous than before; nonetheless, they include:

the distance across the chest (between the <i>f</i> -holes)	2. $8\frac{1}{2}$	= 73.35mm (same as the 19r-20r violin)
the distance between the upper eyes of the <i>f</i> -holes	1. $5\frac{1}{2}$	= 39.50mm (cf. 40.63mm)
the distance between the lower eyes	3. $10\frac{1}{2}$	= 104.94mm (cf. 104.37mm)
the maximum length of the <i>f</i> -holes	2. 7	= 69.96mm (same as the 19r-20r violin)
the minimum length of the <i>f</i> -holes	2. $6\frac{1}{4}$	= 68.26mm (cf. 68.44mm)

Clearly, Count Cozio was not simply copying his earlier measurements text (19r-20r); if he had, every measurement across the two sets would have been identical. The very few measurements which are not identical – just four – differ by such minute amounts that the conclusion can only be that Count Cozio inadvertently measured the same violin twice.⁴³ The much shorter second set of measurements suggests that the Count, realising his mistake, stopped measuring and writing, added annotations to

⁴¹ 'Not so large' as the *P.G.*-mould 1716 and 1724 violins?

⁴² The 'ten others' therefore excluding the *P.G.* 1716 and 1724 violins.

⁴³ The fact that the discrepancies between the two sets of measurements are so small demonstrates the precision of the Count's measuring procedure as carried out on different days on the same violin.

folios 28v and 29r referring back to folios 19 and 20 and added annotations to folios 19r and 20r referring forwards to folios 28 and 29.

With the two sets of measurements being of the same ‘yellow-ish’ violin it follows that the two introductory descriptions can be combined:

Milan, 29th May 1816 ... my Stradivari [violin] of ~~middle~~ [?] large form, with yellow-ish [varnish]; one of the last, namely of 1736, with his small label ‘of years 92’. The most sonorous after the aforementioned [violins] of the P.G. mould. This violin must be of the mould B of 6th December 1692

1816, 1st June, Milan; ... my Antonio Stradivari violin, not as large as the *P.G.* violins. Yellow-ish varnish, jointed back plate [with] the most beautiful flames. Undamaged, with label of the year 1736, with the annotation ‘of years 92’. The most sonorous of the ten others, these I obtained in Cremona from the author’s grandson in 1775.⁴⁴

Combined description: The violin is not the largest yet it is the strongest (tonally) of the ten violins which are other than those of 1716 and 1724; it has a two-piece back plate with the most beautiful flames; it has yellow-ish varnish; it is undamaged; the label is dated 1736 and annotated *d’anni 92*; the violin ‘must be’ derived from the *B* mould dated 6.12.92.

This is the violin which was described in 1775 as the Count’s ‘favourite’, which had ‘rather yellow’ varnish’, and which, at least initially, was evaluated as the ‘~~third~~ fourth best for [tonal] strength’ ([**M**] on p.6); it is also the violin described in April 1801 ([**M**] on p.7) and in January 1808 (pp.10-11); it was ‘still owned’ in 1816 (p.12) and measured twice in May 1816 (above); in 1823 Count Cozio determined to sell the violin ‘separately’ (p.7, top).

The [**M**] violin’s principal measurements, rounded, are: **165.6mm**⁴⁵
109.8mm
206.1mm
and **358.7mm**.

Seven years later, on 15th January 1823, Count Cozio compiled his *Inventario de stromenti cremonesi*.⁴⁶ This document was a draft listing of instruments which the Count intended to sell. There are no Stradivari violins dated 1730 included in this inventory but two violins of 1736 are listed contiguously (see Fig. 8, overleaf):

Fig. 8, upper part: *Stradivario Ant^o f^a G.^d [forma grande] d’anni 92, fondo in due, intatto, 1736*

Fig. 8, lower part: *Stradivario Ant^o f. M.^a [forma mezzana] d’anni 92, fondo intatto⁴⁷
capo d’opera di tal g^e [genere], intatto, 1736*

For the lower instrument note the Count’s comment: ‘masterpiece of this type’ [of violin].

⁴⁴ The evidence from ms. 41 (see pp.5-7 of this account) is that no violins with original 1736 labels were sold to Count Cozio.

⁴⁵ Measurement averaged from 165.9mm and 165.3mm.

⁴⁶ BSCr, LC, ms. Cozio 68.

⁴⁷ Here the word *intatto* is being used to indicate ‘one-piece’ back plate; the second-line *intatto* indicates ‘undamaged’.

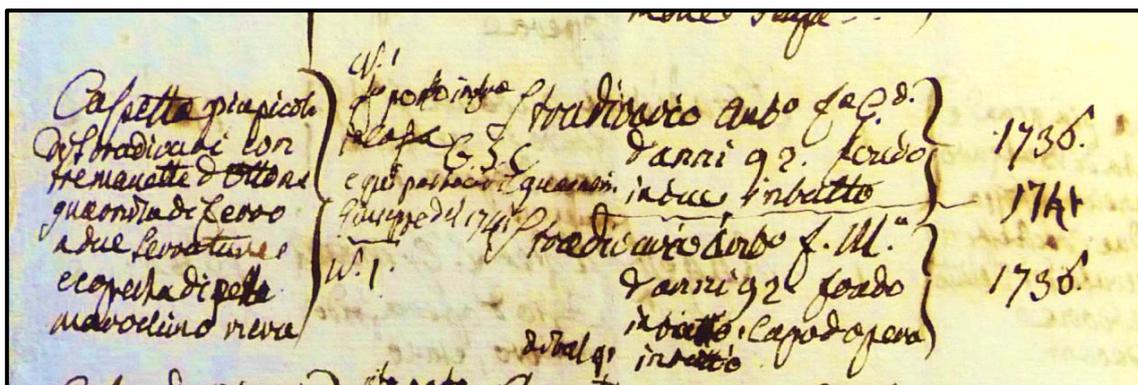


Fig. 8. BScR, LC, ms. Cozio 68.

Count Cozio's finalised inventory (dated 27th February 1823) – *La Collezione, Primo Inventaro*⁴⁸ – lists 34 instruments (28 violins, 3 violas, and 3 cellos) which he was sending to his Milanese banker, Carlo Carli, for sale. The Count's intention was that all the instruments should be sold in one transaction: *vendersi tutti unitamente*. There are no Stradivari violins label-dated 1730 included in this finalised inventory. The fifth instrument is described thus (Fig. 9):

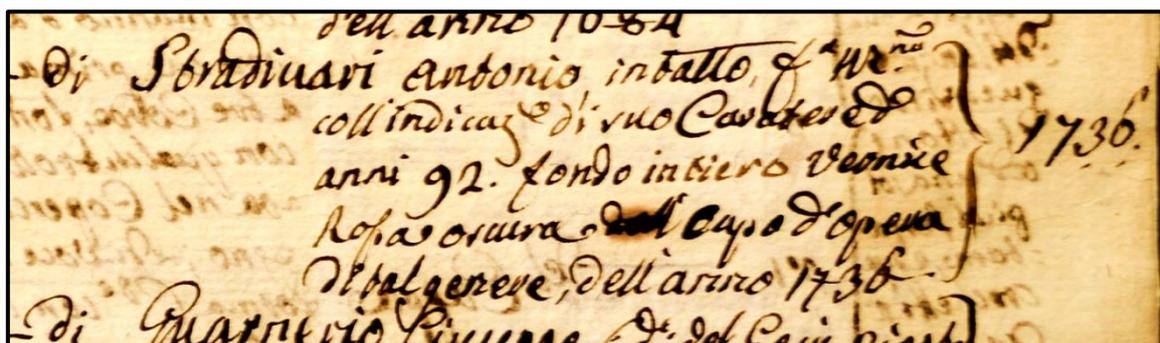


Fig. 9. BScR, LC, ms. Cozio 73. Note that the final '0' has been modified to show as '6'; see [G] on p.6 for the Count's comment: 'the label [...] of the year 1730, but I believe [the violin dates from] 1736.' Note also the dots underneath the 36 numerals = 'handwritten'.

*Stradiuari Antonio, intatto, f^a M^{na} 49 coll'indicaz[ion]e di suo Carattere d'anni 92.
Fondo intiero, vernice rossa oscura, capo d'opera di tal genere, dell'anno 1730/6.*

Antonio Stradivari, undamaged, half size, with annotation in his handwriting 'of years 92', one-piece back plate, the varnish is dark red, masterpiece of this type [of violin], of the year 1730/36.

Note the repetition of 'masterpiece of this type'.

With the *Primo Inventaro* being written just five weeks after the draft *Inventaro de stromenti cremonesi* it is surely the case that the 1736 violin in Fig. 9 is the second of the two which were placed contiguously in the earlier manuscript (Fig. 8, lower part); the exact repetition of *capo d'opera di tal genere* is notable (if this was an entirely normal-sized violin there would be no reason to draw attention to its 'type'). Clearly, this is Signor Boroni's small violin, the violin with a one-piece back plate and dark-red varnish which is initially presented in this account as [G] on p.6.

⁴⁸ BScR, LC, ms. Cozio 73.

⁴⁹ This cannot be other than an abbreviation for *forma mezzana* (half size).

- Cf. the varnish: p. 6 'thick varnish, heavily applied'
 p. 8 'dark-red varnish – thick, like paste'
 p.10 'the varnish is dark red; badly applied'
 p.18 'the varnish is dark red'.

Thus the margin annotation (p.6) made by Count Cozio – 'I have it; in 1823 placed, as noted, in the Principal Collection' – is entirely correct.

The large, twice-measured, 'yellow-ish', 'favourite' violin, with a two-piece back plate, is not listed in Count Cozio's *Primo Inventaro* of 34 instruments, all of which were to be sold in one transaction. Being the subject of the Count's margin annotation – *si ha e nel 1823 lasciato in nota a vendere separato* ('I have it, and in 1823 I noted to sell it separately') (see [M] on p.7) – the violin was therefore included in the Count's *Secondo Inventaro* (also dated 27th February 1823) which lists, with prices, instruments which were to be sold individually: *per vendersi in dettaglio* (see Fig.10).⁵⁰ The violin which is placed first in this *Secondo* inventory – the only Stradivari violin which is listed therein – is described thus:

1 di Stradivari Antonio f^a G.^[d] intatto, fondo in due pezzi, vernice rosso chiara con Biglietto dell anno 1736, ed aggiunta di sua mano d'anni 92. Luigi ottanta 80

One of Antonio Stradivari, large type, undamaged, two-piece back plate, light-red varnish, with label of the year 1736, and added in his hand, 'of years 92'. 80 Luigi.⁵¹

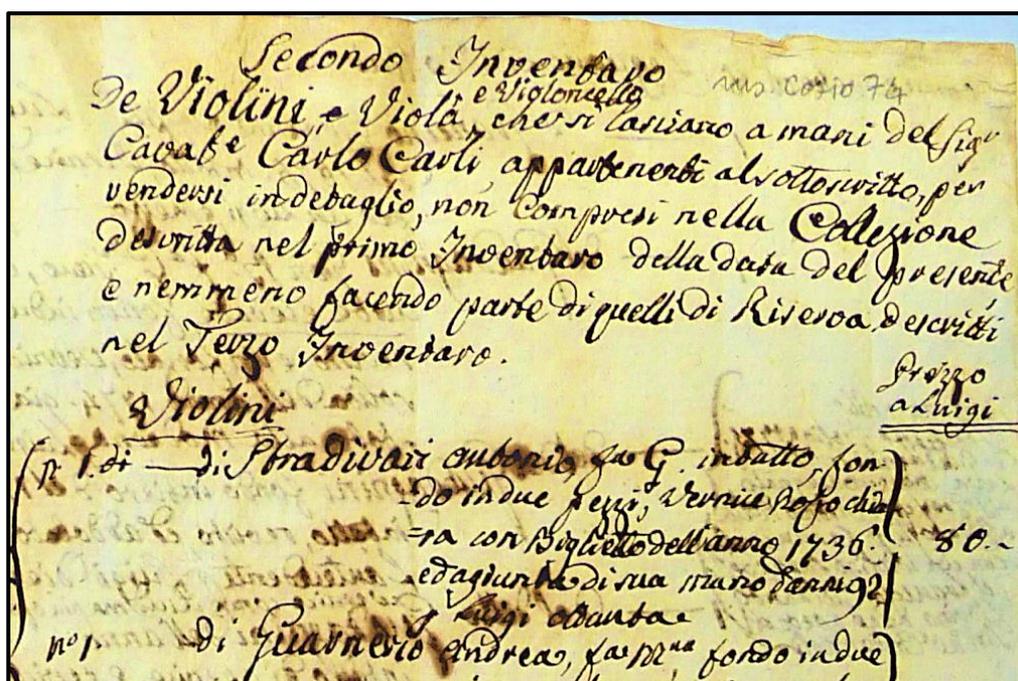


Fig. 10: ms. Cozio 74.

With Signor Boroni's violin having appeared in the *Primo Inventaro* it must be the case that this 'large type' violin is Count Cozio's 'favourite', [M], violin.

⁵⁰ BSCr, LC, ms. Cozio 74. Count Cozio also compiled a *Terzo Inventaro*.

⁵¹ This violin is the only 1736 instrument listed in the *Secondo Inventaro*.

If, having been deposited with Carlo Carli in 1823, both of these **I736** violins were subsequently sold, then the identity of the purchaser(s) is unknown, likewise the date(s) on which the sales took place. As far as is known, no relevant transaction documents – memoranda, bills of sale, receipts etc. – survived the subsequent financial collapse of the Carli banking house. Within the Cozio archive at the Biblioteca di Cremona there is just one letter, dated 3rd December 1839 and addressed to Count Cozio, in which Giuseppe Carli (Carlo's son) informs the Count that Luigi Tarisio had visited Milan, had inspected the Count's collection of instruments, and had chosen fourteen which he wished to buy. Count Cozio died in December 1840, still refusing to sell those fourteen instruments to Tarisio for the small sum of money the latter was offering.⁵² In May 1841 Giuseppe Carli wrote to the Count's daughter, Matilde, including with his letter an inventory of all the instruments which were still being held in Milan.⁵³ The inventory lists 74 instruments, including 48 violins by Guadagnini, but none by Antonio Stradivari; it must be assumed, therefore, that Signor Boroni's small **I736 [G]** violin as well as the large **I736 [M]** violin had already been sold. The present-day identities and whereabouts of these two violins are unknown.⁵⁴

The source mould

On 27th February 1823 – the same day on which he wrote out his *Primo* and *Secondo* inventories – Count Cozio wrote a descriptive inventory of the Stradivari violin moulds which he owned.⁵⁵ His full description of the mould which is marked *A.6 DCBE 1692 B* is:

N° 4 forma di cui se ne vede fatto poco uso, però (su di essa vi fece al mio violino assai forte vernice gialliccia con l'agionta di carattere d'autore nel biglietto 1736 – danni 92) più corta di circa tre ponti della sudetta B e di un sol ponto della PG ma da questa anche più ristretta [one unreadable word] nella parte superiore di due punti segnata scolpita dicente A.6.DCBE 1692 B.

No. 4: mould which, clearly, has been little used; however (it was used to make my very sonorous violin [with] yellow-ish varnish, with the addition, in the maker's handwriting, on the label, 1736 – aged 92). [This mould is] shorter by about three *ponti* than the above-mentioned B [mould of 3rd June 1692⁵⁶] and by a single *ponto* than the PG [mould of 4th June 1689] but this ['this' being the 6.12.1692 mould?] is also narrower [?] in the upper part [narrower than the 4.6.1689 mould?] by two *ponti*. Carved mark stating 'On the day of 6th December 1692 B'.

Thus Count Cozio's *B* mould of 6th December 1692 mould was approximately 3 *ponti* (c. 6.78mm) shorter in length than the *B* mould of 3rd June 1692 which has a length of 352mm.⁵⁷ Therefore the Count's mould was **345.22mm in length**.

⁵² The 14 instruments were eventually sold to Tarisio on 14th August 1841 at the prices which he had originally offered; no Stradivari instruments were included.

⁵³ BScR, LC, ms. Cozio 84.

⁵⁴ It might be suggested that Signor Boroni's violin is today's *Belle Skinner* violin (Yale University) but measurements of the *Belle Skinner*, as published by Yale – 152/102/191/338mm – do not match Count Cozio's measurements of the Boroni violin – 155.7/102.7/195.2/343.7mm; in addition it is stated within the Cozio Archive of the Tarisio.com website (ID 40113) that on the *Belle Skinner* violin's label 'the last three digits of the date are handwritten.'

⁵⁵ BScR, LC, ms. Cozio 72. The seven violin moulds which Count Cozio identifies in his inventory are: *G*, *PG*, *B* (3.6.1692), *B* (6.12.1692), *SL* (9.11.1691), *S* (20.9.1703), and *P*. The Count also knew of the extra-large *P.G.* mould but this is not listed in his extant inventory; either a page from the inventory has been lost or the Count sold the *P.G.* mould at an earlier unknown date to an unknown person.

⁵⁶ The 3.6.92 mould is described in the immediately preceding entry of the Count's inventory.

⁵⁷ *Antonio Stradivari: disegni, modelli, forme*, p. 111.

The Count's 6.12.1692 *B* mould was also 1 *ponto* (2.26mm) shorter in length than the *PG* mould of 4th June 1689 which has a length of 348mm.⁵⁸ Therefore the Count's mould was **345.74mm in length**. This measurement robustly supports the previous: 345.22mm. Averaging these two results provides the certainty that the Count's 6.12.1692 mould was 345.48mm in length (**345.5mm rounded**).

The Count's 6.12.1692 *B* mould, when compared with the 4.6.1689 *PG* mould, was narrower across the Upper Bout, by two *ponti* (4.52mm). The Upper Bout of the 4.6.1689 mould has been specified as 161mm;⁵⁹ therefore the Count's mould was 156.48mm (**156.5mm rounded**).

The present-day 6.12.1692 mould is defined⁶⁰ as having a Length of 347mm and an Upper Bout width of 154mm. The dimensional similarities provide some assurance that the Count's 6.12.1692 mould is the same mould as is displayed today at the Museo del Violino in Cremona, Italy.

The *Muntz* appears in Paris

The Musée de la Musique, in Paris, has placed online more than 40 free-to-access digital files, the files containing an image of each and every page from the business ledgers which were used by the personnel at the Gand/Bernardel/Caressa & Français violin dealership in Paris during the nineteenth and early-twentieth centuries: <http://archivesmusee.citedelamusique.fr/en/gand/archives.html>. The ledgers are paired together: 1) a Directory (*Répertoire*) showing customers' names in alphabetical order, each name usually being followed by an address; adjacent to the address are numbers which refer to pages in 2) the parallel General Ledger (*Grand Livre*) which usually covers the same chronological period as the Directory. Code numbers for all these digitised files follow a consistent format: E.981.8.xx.

From 1870 onwards, until one year before he died (in 1892), Charles-Nicolas-Eugène Gand compiled his *Catalogue descriptif des instruments de Stradivarius et J Guarnerius*. Gand's descriptions of instruments are written in black ink, followed by details, in red ink, of previous owners and, in some cases, subsequent owners, together with dates when the instruments were sold and the prices paid; each description also identifies the name of the owner of the instrument on the date when Gand noted down his observations. The descriptions are assumed to be either of instruments which Gand bought or sold, or instruments which were repaired and maintained by his workshop personnel. Some of the descriptions may be of instruments which Gand saw in the possession of Parisian colleagues.

The measurements supplied by C N E Gand – usually only for the body length of the instrument – use the French *Pied du Roi* system, as had been used sixty years earlier by Count Cozio di Salabue. Dimensional evidence indicates that Gand, when measuring violins, used callipers rather than a flexible tape.

On p. 64 of his *Catalogue* Gand entered the details of a 1736 Stradivari violin:

(année 1874) Violon Stradivarius, 13 pouces, année 1736, portant au bas de l'étiquette une petite annotation de la main de Stradivarius: d'Anni 92.

Fond de deux pièces beau bois, veines presque droites, belles éclisses, Table de deux pièces, beau sapin. Belle tête. Vernis rouge jaune doré.

(Ce violon est complètement intact).

⁵⁸ *Ibid.* p. 108.

⁵⁹ *Ibid.*

⁶⁰ *Ibid.* p. 112.

[in red ink] *Ex Cornet d'Amiens, 1832, 2,500 francs*
 Ex Wilmotte d'Anvers, 1862, 5,000 francs
 Ex Ménard de Marsainvilliers, 1867, 6,000 francs
 M^r Muntz, Birmingham, 1874, 10,000 francs

(1874) Stradivari violin, 351.9mm length,⁶¹ dated 1736, displaying below the [internal] label a small annotation [written] in the hand of Stradivari: 'of years 92'.

The back plate is in two pieces, beautiful wood, the flames almost straight [horizontal]. Beautiful ribs. The front plate is in two pieces, beautiful spruce. The varnish is golden red-yellow.

The violin is completely intact.

Ex Cornet, of Amiens, 1832, 2,500 francs
Ex Wilmotte, of Antwerp, 1862, 5,000 francs
Ex Ménard de Marsainvilliers, 1867, 6,000 francs
Mr Muntz, Birmingham, 1874, 10,000 francs

Unfortunately, the Gand/Bernardel/Caressa & Français archive at the Musée de la Musique does not include the General Ledger which covers the year 1832, nor the parallel Directory (both are assumed to be lost), so the information regarding M. Cornet, from Amiens, is recorded only within Gand's *Catalogue descriptif* entry of 1874.

There is one ledger within the G/B/C&F archive which pre-dates 1832 – a *Grand Livre*⁶² compiled by Charles-François Gand which covers the period 1816-1831. Searching through the entirety of this ledger – 150 folios – reveals a page with details of sales to *M^r Cornet*. On 27th October 1828, C-F Gand repaired M. Cornet's Stradivari violin:

fait un chevalet au Stradivarius et changé deux cordes, 4 francs.

On 3rd September 1831 C-F Gand carried out further repairs to this Stradivari violin:

redressé la touche, remit une queue [tail-piece] et 2 cordes au Stradivarius, 4 francs.

If M. Cornet, in 1832, spent 2,500 francs in buying the Stradivari violin which would later be known as the *Muntz* then the Stradivari violin identified by C-F Gand on 27th October 1828 and on 3rd September 1831 must be a different instrument. Alternatively, perhaps the 1832 transaction actually indicated M. Cornet's *sale* of his Stradivari violin to C-F Gand (the violin being re-sold 30 years later, in 1862, to M. Wilmotte – see below). The name 'Cornet' appears just twice in the subsequent G/B/C&F ledgers; on 26th February 1850 he bought a few violin and cello strings; on 2nd March 1859 he bought a Stainer violin, for 200 francs. There is no mention of a Stradivari violin.

According to the General Ledger for 1861-1878,⁶³ on 20th August 1862 Charles Wilmotte bought from Gand frères *Un violon Stradivarius, N^o 910, avec un étui d'acajou*, for 5,000 francs; this information confirms C-N-E Gand's red-ink sequence of ownership (see above).

The name *Ménard de Marsainvilliers* (Baron Auguste Ménard de Marsainvilliers?) appears in the Directory for 1866-1875⁶⁴ with the page reference 840. Page 840 of the parallel General Ledger⁶⁵ lists transactions during 1867 and 1868. On 30th July 1867 *M^r Ménard de Marsainvilliers* purchased *Un violon Stradivarius* for 6,000 francs; no further details given in the ledger, not even the stock number. On 4th November 1868 a 10-franc repair was made to the violin.

⁶¹ cf. the 1993 calliper-derived body-length measurements presented on p.1 of this account: 351.5mm and 353.2mm.

⁶² E.981.8.9.

⁶³ E.981.8.35

⁶⁴ E.981.8.19

⁶⁵ E.981.8.14

The name *Muntz à Birmingham* appears in the Directory which covers the period 1866-1875;⁶⁶ the reference to page 126 links to the General Ledger for the period 1866-1876.⁶⁷ Two transactions are entered into the ledger: the first is dated 16th July 1873, the second 10th March 1874. On the latter date *M^r G H M Muntz* purchased *Un Violon Stradivarius N^o 910 avec un étui d'acajou, 10,000 francs*. A further 150 *francs* was charged to cover the cost of a employee from Gand & Bernardel frères personally taking the violin to London. Mr Muntz settled the bill, very promptly, on 14th March 1874. It was surely during March 1874 than C-N-E Gand entered the details of the violin, and its history of ownership, into his *Catalogue descriptif*.

George Henri M Muntz died in March 1887. According to the Cozio Archive of the Tarisio.com website the *Muntz* violin passed to the Hills of London in 1886. The Hills sold the violin to 'Lord Wilton' in 1888 but re-acquired the violin one year later, selling it in 1892 to Alfred Sassoon (d. 1895). In 1902 the violin passed to 'Mr Higgins'; see overleaf for details of some subsequent owners.

Charles Gand's *Catalogue* was subsequently copied and extended by Albert Caressa and Henri Français; Henri retired in 1920 and the firm was then administered by Albert, and then, after 1938, by Henri's son, Emile Français (1894-1984). This greatly-extended ledger is archived as part of the Jacques Francais Rare Violins, Inc. Photographic Archive and Business Records, held at the Archives Center, National Museum of American History, Smithsonian Institution, Washington DC, USA; the ledger is within Box 55, Folder 2 ['JF55.2']. It is possible that when Jacques Francais (1924-2004) – the son of Emile and the grandson of Henri – emigrated to the USA in 1948 in order to establish his own violin dealership he took the ledger with him, for reference purposes.

Also contained within the same Smithsonian Institution archive is a second handwritten ledger (Jacques Francais Rare Violins, Inc. Photographic Archive and Business Records, Box 55, Folder 4), which replicates the entirety of the JF55.2 ledger. This second ledger has the following inscription on the first page: *Emile Français, 5 Rue de Copenhague, Paris 8^{ème}* (hereafter cited as EF/JF55.4).

Within JF55.2 and EF/JF55.4⁶⁸ the historical information provided by C-N-E Gand in 1874 is extended:

(année 1874) Violon Stradivarius, 13 pouces, année 1736, portant au bas de l'étiquette une petite annotation de la main de Stradivarius: d'anni 92.

Fond de 2 pièces, beau bois veines presque droites, belles éclisses, table de deux pièces, beau sapin, belle tête. Vernis ~~rouge-jaune~~ orange clair doré.

Taille 0,355

(Ce violon est complètement intact)

Ex Cornet, d'Amiens, 1832, 2,500^f

Ex Wilmotte, d'Anvers, 1862, 5,000^f

Ex Ménard de Marsinvilliers, 1867, 6,000^f

M^r Muntz, Birmingham, 1874, 10,000^f

M^r Talbot, à Aix la Chapelle, 1913, par Bauer, noxx [these five letters are a price-code]

1937 figure à l'Exposition du bicentaire comme le Muntz, no. 81 du catalogue⁶⁹

M^r Richard Klein, New York, 1950, par Jacques, \$25,000

Docteur E P Engelman, San Mateo, Californie, 1961, \$39,000.

(1874) Antonio Stradivari violin, 13 pouces [351.9mm], year 1736, showing at the bottom of the label a small annotation in Stradivari's handwriting: 'of years 92'.

⁶⁶ E.981.8.19

⁶⁷ E.981.8.14

⁶⁸ Page 64 in both ledgers.

⁶⁹ This line of information appears in EF/JF55.4 only.

The back plate is made from two pieces; beautiful wood, the flames almost straight. Beautiful ribs. The front plate is made from two pieces; beautiful spruce. Beautiful head. The varnish is ~~red-yellow~~, golden light-orange.

Length 355mm⁷⁰

(The violin is completely intact)

ex Cornet, of Amiens, 1832, 2,500 francs

ex Wilmotte, of Antwerp, 1862, 5,000 francs

ex Ménard de Marsainvilliers, 1867, 6,000 francs

Mr Muntz, Birmingham, 1874, 10,000 francs

M. Talbot [Dr Georg Talbot] from Aix la Chapelle,⁷¹ 1913, through Bauer, 65,000 [francs]⁷²

1937: shown at the Stradivari Bicentennial Exhibition in Cremona as ‘The Muntz’; number 81 in the catalogue⁷³

[Sold to] M. Richard Klein, New York, 1950, by Jacques [Français], 25,000 dollars

[Sold to] Doctor E P Engleman, San Mateo, California, 1961, 39,000 dollars.

Conclusion

(None of the following considerations apply to Signor Boroni’s small dark-red violin with a one-piece back plate.)

The research presented in this account has had two points of focus:

1. Do the descriptive texts written by Count Cozio for his [M] violin clearly correlate with the physicality of the *Muntz* violin?
2. Do the Count’s measurements of his [M] violin clearly correlate with those of the *Muntz*?

1. Features of the Count’s [M] violin, extracted from his texts as presented on pp. 6, 7, and 11, are:

- a) jointed back plate
- b) jointed bottom rib
- c) imprecise purfling (twice mentioned)
- d) elevated arching on both plates (twice mentioned)
- e) beautiful front-plate grain of uniform width (twice mentioned)
- f) beautiful *f*-holes (twice mentioned)
- g) beautiful back-plate flames of uneven width (twice mentioned)
- h) varnish which is ‘rather yellow’, ‘light red/slightly yellow-ish’, ‘yellow/light-red’
- i) the overall model is a little more than middle size

With respect to a), b), and c) there are far too many Stradivari violins to which all three characteristics can be applied for a specific one-violin-only connection to be claimed. With respect to d) photographic evidence in the Cozio Archive of the Tarisio.com website (ID 40062) shows the side-view profile of the *Muntz* to be not at all elevated; comparison with side views of 1730-period violins

⁷⁰ This measurement was almost certainly achieved with a flexible tape.

⁷¹ a.k.a. Aachen, or Bad Aachen, in North Rhine-Westphalia, Germany.

⁷² The name ‘Talbot’ does not appear in the G/B/C&F Directory which covers the period 1912-1920 (E.981.8.48) – nor does the name ‘Bauer’ (which is clearly a misunderstanding of the name of Robert A Bower, a ‘gentleman dealer’ of violins). However, ‘Bauer’ does appear in the previous Directory, for 1905-1912 (E.981.8.46), with his address given as ‘Minerva Seymour Villas, Anerley’ (in the Bromley area of south-east London) and a page reference of ‘718’. Page 718 of the parallel 1905-1912 General Ledger (E.981.8.45) shows a single entry for ‘R. Bauer’, dated 17th August 1905, when he bought an Amati violin for 6,250 francs (and paid by cheque).

⁷³ In the Editrice Turrus edition of the catalogue – *L’esposizione di Liuteria Antica a Cremona nel 1737* (introduction by Gianpaolo Gregori) – the *Muntz* violin appears as item 85. The black-and-white photograph of the violin’s front plate clearly shows the two-tone contrast in the wood; the associated text describes the violin as *piuttosto piccolo* (‘rather small’).

in Vol. IV and Vol. VIII of Jost Thöne's *Antonius Stradiuarius* publication shows that there are many contemporaneous violins exhibiting archings which are much more pronounced. Careful study of the Tarisio.com photograph of the *Muntz* front plate demonstrates that the growth rings are not of uniform width. The *Muntz* *f*-holes are noticeably asymmetrical and the upper wings are cut well short of the *f*-hole edge; the *f*-holes are cut quite differently from each other; they do not look like a complementary pair – 'beautiful'? The back-plate flames are certainly attractive but are not distinctive enough to warrant the term 'beautiful' (and the flames are not particularly wide).

In his *Muntz* certificate of 1969 Rembert Wurlitzer writes: 'The top is cut from two pieces of spruce of medium to medium-broad grain, marked by a darker sap mark along each flank.' In his descriptions Count Cozio never makes any reference to a 'two-tone' colouration in the front plate of his [M] violin.

2. The various texts provided by Count Cozio leave the present-day investigator with a dilemma: on the one hand there are the repeated statements that the [M] violin 'must be derived from the 6.12.92 mould', and since the *Muntz* violin was almost certainly built around the 6.12.92 mould (see p.1 of this account) it is tempting to believe that the Count's violin was the future *Muntz*. On the other hand there are the Count's two complementary sets of measurements of his [M] violin – measurements which were made three days apart – which reveal the violin to have principal dimensions that cannot be associated in any way with the *Muntz* violin. If there was only one set of measurements it might be possible to argue that for some inexplicable reason the Count failed to follow the careful measuring procedure which he uses with all his other violins; having two matching sets of measurements negates utterly any such proposition.

In light of the evidence (see Fig. 7b) that Count Cozio changed the label inside his [M] violin, and since to do so requires the violin's front (or back) plate to be removed, such a removal would have provided a perfect opportunity for the Count to test-fit each of his Stradivari moulds against the violin's internal space as defined by the inside face of the rib garland.⁷⁴ The four principal measurements of that space would be the result of subtracting 7.3mm (see p.1) from the plate-extremity measurements of the [M] violin. Thus, subtracting 7.3mm from each of 165.6mm, 109.8mm, 206.1mm, and 358.7mm (see p.16) would leave rib internal-face bout widths of **158.3**, **102.2**, and **198.5mm**, with length **351.1mm**. The four principal dimensions of Stradivari's 6th December 1692 mould – **154**, **102**, and **195**, with length **347mm** – would have allowed it to fit inside the garland with 2.15mm to spare on each side of the upper bout and 1.75mm to spare on each side of the lower bout; there would be just over 2mm spare at each end of the mould's length. The centre bout, however, would have been a very snug fit – only 0.1mm of space on either side.

Of the other moulds which are identified by Count Cozio in his inventory (see p.20 and footnote 55)

the G mould, with measurements of 161, 103, 201, and 350mm⁷⁵ would not have fitted inside the garland; the mould's upper bout is 2.7mm too wide, the centre bout is 0.8mm too wide, and the lower bout is 2.5mm too wide

the PG mould (4th June 1689) – 161, 103, 200, and 348mm – would have been too wide across all three bouts

⁷⁴ Count Cozio states (see p.8 of this account) that Guadagnini modified the neck on his [M] violin as well as on all the other Stradivari violins that he owned; this modification would have required, firstly, the violin's front plate to be removed. If the Count was uncertain of his own ability to safely detach the [M] front plate he could have carried out his test-fit of the moulds while Guadagnini was working on the neck of the violin. With Guadagnini dying in 1786 it is chronologically consistent for Count Cozio to identify the 6.12.92 mould as the source of his [M] violin in his measurements document of 1816 (see p.12).

⁷⁵ All measurements are from *Antonio Stradivari: disegni, modelli, forme*.

the B mould (3rd June 1692) – 153, 102, 194, and 352mm – would have been too long in the length; the upper and lower bouts would have been short of the rib garland by 5.3 and 4.5mm respectively

the SL mould (9.11.1691) – 153, 100, 194, 350mm – would produce the same result as the *B* mould (above) for the upper and lower bouts

the S mould (20.9.1703) – 157, 102, 196, 345mm – would have fitted across all three bouts but it would have left an enormous 6.1mm of unused space in the length

the P mould (25.2.1705) – 161, 102, 200, 348mm – would have been too wide to fit across the upper and lower bouts.

Knowing, as he surely did, that the correct source-mould should fit closely to the inside face of the rib garland around its full circumference, Count Cozio may have decided that the loose fit of the 6.12.92 mould was the least worst result from the seven moulds which he owned; perhaps this is why the Count does not write *questo è di forma B* (see footnote 39).

With respect to label-dates, the evidence from ms. Cozio 46 (see pp.10-11 and Figs. 7a and 7b) is unambiguous: the Count's large [M] violin had a **I736** label; the present-day *Muntz* violin has a **I736** label. It is not plausible that the entire label of the [M] violin has been changed for a second time.

As demonstrated in this account, the present-day **I736 Muntz** violin was never in Paolo Stradivari's hands nor was it ever part of the instrument collection formed by Il Conte Ignazio Alessandro Cozio di Salabue. The history of the **I736 Muntz** violin, prior to its appearance in Paris in 1832, is unknown.

Certificated measurements

Copies of three certificates for the present-day **I736 Muntz** violin were supplied to the present author by the Nippon Music Foundation: the certificates were from Hamma & Co. of Stuttgart (1950), Rembert Wurlitzer (1969), and Jacques Francais (1972); note the acute arching of the C-bout-width and the body length – the result of measuring with a tape.

	UB max. width	CB min. width	LB max. width	Body Length
Hamma	161mm	115	203	355
Wurlitzer	161.9	112.7	203.2	355.6
Francais	161	115	203	355 (copying Hamma?)

The Nippon Music Foundation also supplied a sheet of their own measurements for the violin; clearly, these are calliper measurements:

Front plate	162	107.6	201	352
Back plate	160.5	109.4	201.5	354

cf. the 1993 calliper measurements (see p.1):

Front plate	161.8	107.2	200.5	351.5	cf. p.20: Gand, writing in 1874 - 351.9mm.
Back plate	160	109.1	201	353.2	

As shown on p.13 and pp.15-16 the principal calliper-defined measurements of Count Cozio's **I736 grande** violin ([M]) – twice measured – are:

165.6 109.8 206.1 358.7mm.

Nicholas Sackman: Associate Professor, Department of Music, University of Nottingham (retired). Author of ***The Messiah violin: a reliable history?*** (2015); see www.themessiahviolin.uk for details. Author of an historical study of the Stradivari *Habeneck* violin, published in the Journal of the American Musical Instrument Society, 2016, and re-published on the aforementioned website. Author of an historical study of the ‘original’ neck of the Stradivari *Soil* violin (website). Author of a detailed historical study of the two Guarneri *del Gesù* violins which belonged to John Tiplady Carrodus (website). Author of an extensive and detailed investigation into the reality of the 1724 Stradivari violin which Count Cozio di Salabue sold in 1817 to Niccolò Paganini (website). Author of an historical study of the Stradivari *Chant du Cygne* violin (Journal of the Galpin Society, March 2017). Author of a transcription and translation of the complete sales-ledger archive of Jacques Francais (Smithsonian Institution, Washington DC); see website. Author of a detailed historical examination of the Stradivari quartet of decorated instruments exhibited at the Palacio Real in Madrid, Spain; see website. Author of *The case of the missing mould* (‘The Strad’, June 2018). Author of a detailed examination of issues which surround both the *Cannone* violin in Genoa and the *Canon* violin sold by David Laurie (website).

Further investigative articles can be found at the author’s website (www.themessiahviolin.uk); all are free-to-read.