
NEWS FOR CELLISTS JANUARY 2014

London Cello Weekend 8-9 February

London cellists are warmly invited to the Haldane Room at University College London, Gower Street, WC1E 6BT on Saturday 8 and Sunday 9 February where we will be showing a selection of the cellos and bows listed on the back page of this newsletter. Appointments are available 10am-6pm on Saturday 8 February and 10am-4pm on Sunday 9 February. If you would like to try any cellos or bows, to bring an instrument or bow for possible inclusion in the Cello Exchange or to consult us about any other cello-related matter, please contact us as soon as possible to book your appointment. For full booking and venue details, please telephone 01353 668559 or email aitchmnatz7@ntlworld.com. For further information, also see aitchisoncellos.com/antique.htm

Manchester Visit 26-28 January

Robin, Sarah and three of Robin's cellos (Stradivari, Montagnana and Guadagnini copies) will be visiting Manchester from 26 to 28 January. If you would like to try any or all of these instruments during our visit, please don't hesitate to contact us on 01353 668559 or email aitchmnatz7@ntlworld.com

String Trial Evolution

Since launching our string trial service ten years ago, Robin has helped hundreds of cellists to explore the potential of different strings on their instruments. Robin has always started each string trial by reviewing the sound adjustment of the cello in question before experimenting with strings because the tonal improvements players are seeking can often be at least partly achieved through sound adjustment, for example finding a better sound post position. So we have now decided to integrate string trials into our sound adjustment service; in future, any cellist wishing to improve their instrument's sound or response will also have the opportunity to try our full range of strings on their cello after the instrument has been assessed. Our sound adjustment service is based on the time Robin spends on each instrument (currently £55 per hour).

The Sound Post

Adjusting sound posts with professional players is one of the most stimulating and exacting challenges faced by a luthier. We write about this rewarding route to an improved sound on pages 2-3.

New Wolf Note Eliminator

An innovative wolf note eliminator has just been launched by its cellist designer, Dr Kevin Krentz. The Krentz Wolf Eliminator for Cello is a 35g cylindrical polycarbonate capsule about the size of a tube of lip salve, containing a system of highly charged neodymium and ferrous magnets which suspend a magnetic piston inside the capsule. When the cello is played, the magnetic piston oscillates and modulates the vibration of the wolf note without dampening the resonance of the cello.

This device is fitted inside the instrument via the bass sound hole and is held inside the cello front by a small but powerful circular magnet which sits on the outside of the cello below the bass sound hole. Our experiments have found that not only does the device prevent wolf notes with minimal dampening effect, but it can also improve the overall response of the cello. The external magnet slides easily over the varnish surface, making it possible to experiment freely with wolf note elimination and tonal adjustment and also to 'park' the device near the bass corner if it is not needed. The Krentz Wolf Eliminator costs £95 and can be ordered from us. aitchisoncellos.com/krentzwolfeliminator.htm

Web Site Update and Eurostar

We are currently working on an updated version of our web site. Over the years we received so much positive feedback that we are determined to keep the new site as close as possible to the old, but please don't hesitate to let us know how you think the existing site could be improved.

We are still collecting feedback about cellists' experiences on Eurostar and will report back about this issue in the spring edition of this newsletter.

THE SOUND POST

At an unrecorded moment during the fifteenth century an important innovation took place in the development of bowed stringed instruments: luthiers started fitting a small wooden strut between the previously self supporting front and back plates of their instruments. The impact on the sound of these instruments was so dramatic that Italian luthiers call this transformative but humble piece of dowel the 'anima' or 'soul'.

The sound post – to use its more prosaic English name – is certainly a crucial ingredient in the sound of an instrument. When a sound post is fitted between the front and back of the cello, the plates become stiffer in their response to vibration as the instrument is played. A skilled luthier uses the sound post to tune the response of the body of the cello in the same way that a player brings a string up to playing pitch using a peg.

Acousticians have discovered that the position of the sound post near the treble bridge foot forces the instrument into highly asymmetric modes of vibration which project sound very powerfully; if you remove the sound post, the bridge area of the instrument vibrates with a much more neutral, symmetrical 'see-saw' action and becomes very quiet because little air is being forced through the sound holes. The asymmetric position of the sound post causes the instrument to expand and contract in volume, allowing the cello to 'breathe' as air is forced in and out of the sound holes. This is what acousticians call a 'breathing mode' and a cello vibrating in this way will make a big sound. The exact position and tension of the sound post determine how effectively these breathing modes perform and therefore the position and tension of the sound post have a huge impact on the sound of a cello.

The main criteria to consider in fitting a sound post are **tension, position and fit**. The **tension** of the fitting implies how firmly the sound post is lodged between the front and back of the cello: is the post lightly held between the front and back plates (a loose post) or securely wedged in (a tight post) – or is it somewhere in between? The **position** of each end of the post on the inner surfaces of the front and back plates of the instrument is significant: on the front plate we are interested in the position of the post in relation to the treble bridge foot. On the back plate we focus on how close the bottom of the post comes to the edge of the cello (the plate is stiffer closer to the edge where the ribs are and is softer closer to the centre). Regarding the **fit** of the sound post: all luthiers like to see a well-fitted post whose circular ends appear to be in full

contact with the inside surfaces of the cello. However, whenever a post is moved, subtle changes to this fit occur and these also have tonal implications.



All in all, adjusting a sound post is like playing with a complex three-dimensional puzzle because any movement of the post simultaneously affects its tension, position and fit. The luthier must visualise these changes and be able to judge the effect of each parameter on the cello. It would be nice if there were hard and fast rules for sound post adjustment, or if computers could produce answers for us, but such scientific and technological solutions are unlikely to appear in the near future. So when a luthier adjusts a sound post, he/she must discern how the cello is responding - which rules are working and which are being broken - guided by the ears and the feel under the bow.

The symptoms of an inappropriately fitted post include: bad wolf notes, imbalance between the different registers of the cello, a slow/poor/patchy/uneven response and inadequate power and projection, so it is normal for players with very poorly fitted sound posts to arrive with a very long list of things they would like to improve on the cello, often including strings, tailpiece, endpin, bridge and improvement of projection. Fortunately, fitting a better post in an appropriate position and at a suitable tension for the cello will normally cause most of these problems to go away.

When assessing a cello's sound adjustment, the feel of a cello under the bow provides the equivalent of a

symptom picture: Can the player get into the string easily and quickly? Is it possible to produce a “*ppp*” pianissimo with a good core sound and a clean start, or is the response a bit all-or-nothing, making it difficult to play softly? Does the string feel stable under the bow or ‘fizzy’ and uncomfortable? Is engagement with the string direct and satisfying or does it feel as if the string has to catch up with the bow at the start of each bow stroke? Does it feel precarious, as though the sound will crack when you play harder, or do you feel that the cello has reserves of power and tone to draw on if you need to play harder? Feelings like these give the luthier an insight into what the adjustment-related ailment might be, like a blood-pressure read-out or a pulse-rate record.

We are both cellists and although we have never played professionally, the experience of trying out a great number of different cellos over many years and working with good players to improve instruments has given us the ability to feel the response of instruments under the bow and to understand how the instrument might feel to a good player. This is a vital ingredient in being able to understand the problems players are experiencing and the outcomes they are looking for when they come for sound adjustment. Robin has a very highly evolved system for set up and sound adjustment and he keeps meticulous records so that when a player returns for a further adjustment, the history of the previous adjustment is always to hand.

It must be emphasised that there is no ‘one size fits all’ approach or position for sound posts. The luthier’s first job is to interpret the feedback he/she is getting from the instrument to find out what the cello needs in terms of the tension and position of the post. Once this is established, a range of viable adjustments will become apparent and it is then time to find out what the musician needs from the instrument for their personal taste and the demands of the playing that they are doing. Players sometimes ask us how we think an instrument should be set up, but we believe that it is not for us to impose our taste. We would much rather understand the ideals of the cellists we are working with and then to offer some alternative solutions which, we hope, will give rise to a truly individual result for the player and their instrument.

Case Study 1 We were recently visited by an advanced conservatoire student who was trying to settle down with a family owned instrument to see if she wished to adopt it for her long term use. The cello had been restored quite extensively but the player found that she was unable to shape and colour her phrasing as she wished, particularly on the A string. As a listener, Robin sensed a lack of core sound in the upper register

and when he played the cello he found the C string response awkward. There was also a very different feel under the bow between different strings and a distinctly unstable, granular feel to the A string. The sound post was positioned very close to the bridge foot and well out from the centre of the cello towards the outer edge of the bridge foot. Robin suspected that this adjustment had arisen because the post was too short and this hypothesis was born out by initial adjustments, so Robin decided to lengthen the post by half a millimetre.

When re-fitting the post it was tricky to get the post standing vertically due to the flat arching of the cello, which could well explain why the previous luthier had fitted a short post. However, the cellist and Robin were able to find a nice position for the post which gave her the flexibility and bloom in the A string sound she was looking for without compromising the C string. The core sound was also much improved and when Robin tried the cello at the end of the adjustment he was gratified to find that it had a satisfying and predictable, coherent feel under the bow.

Case Study 2 A professional cellist brought a very fine English cello made by Fendt which had a long history of good set up and sound adjustment work but which was still very unlovely to play. When Robin tried the cello he described all the response defects that he experienced. The cellist agreed emphatically, told Robin that they were absolutely of one mind and asked Robin to do whatever he could to improve the cello.

The cello had a Belgian bridge which Robin at first imagined was causing the C string to be very stubborn, so he adapted a known French bridge from our collection to fit the cello. The cello became much darker sounding with the French bridge but the C string response did not improve, so Robin re-fitted the cello’s Belgian bridge and started experimenting with the sound post. He found that if he introduced even the slightest tension to the fit of the post, the cello shut down completely, whatever the post position. He also discovered that the only way to open up the C string was to position the post very well out from the centre. So the cello uncompromisingly dictated that the post should be loose and placed well out from the centre, but unfortunately it is very difficult to develop A string brilliance with this post arrangement. In response, Robin decided to cut a new and more brilliant sounding Belgian bridge for the cello, which had the desired tonal result. Following this work, Robin received several unexpected and congratulatory phone calls from cellists who knew the instrument and said how well it was playing since its visit to Ely.

SELECTED CELLOS AND BOWS

GAETANO GADDA CELLO 1936

L.O.B: 30" (758mm) String length: 27¼" (689mm)

Price: £78,000

A beautiful example of the work of Gaetano Gadda in very good condition. The tone is powerful, rich, clear and colourful and the fine varnish is a transparent orange-brown. Eric Blot certificate.

SIMON ANDREW FORSTER CELLO 1836

L.O.B: 29" (735mm) String length: 26¾" (682mm)

Price: £60,000

This magnificent cello was made for the Bishop of Oxford in 1836. It is in extremely good condition, with a very rich, colourful and powerful tone. Labelled: *S. A. Forster, London, No. 14.* Hill certificate

JOSEPH HILL CELLO 1770

L.O.B: 29½" (740mm) String Length 26¾" (677mm)

Price: £55,000

A particularly beautiful cello with a one-piece back in excellent condition, with a quick response and a sweet, expressive tone. Hill Certificate.

THOMAS SMITH CELLO 1762

L.O.B: 29" (740mm) String length: 26½" (674mm)

Price: £30,000

A handsome instrument in very good condition with a powerful, colourful tone and a quick, easy response. Letter of authenticity from Charles Beare.

JEAN-BAPTISTE SALOMON CELLO c.1750

L.O.B 29½" (750mm) String length: 26¾" (681mm)

Price: £25,000

An elegant cello with a deep, rich, powerful tone and transparent golden varnish, made from exceptionally fine materials.

CELLOS BY ROBIN AITCHISON

Stradivari, Montagnana and Guadagnini models by Robin are now available. **Price: £23,000**
See aitchisoncellos.com/antique.htm

PETER WAMSLEY CELLO c.1735

L.O.B: 29¾" (758mm) String length: 27¼" (690mm)

Price: £22,000

This appealing cello is an example of the later work of Peter Wamsley. It has a rich, deep tone and a beautiful dark, plummy red varnish.

LONDON SCHOOL CELLO c.1820

L.O.B: 30½" (766mm) String length: 27½" (689mm)

Price: £20,000

A handsome English cello with a deep, complex tone and excellent projection, in good condition.

MICHAEL KEARNS CELLO 1998

L.O.B: 29½" (750mm) String length: 27½" (698mm)

Price: £16,000

A responsive, lively and attractive cello by a respected maker in very good condition.

ENGLISH CELLO c.1820

L.O.B: 29" (735mm) String length: 26¾" (682mm)

Price: £11,000

HUNGARIAN CELLO c.1910

L.O.B: 29½" (751mm) String length: 27¼" (693mm)

Price: £10,000

GERMAN CELLO c.1910

L.O.B: 29½" (750mm) String length: 26¾" (680mm)

Price: £6,000

Selected Cello Bows

John Dodd	81.3	S	tbc
W E Hill & Sons	75.0	S	tbc
Sartory	82.0	S	tbc
William Salchow	81.9	S	£4,770
John Clutterbuck	81.9	G	£4,750
Jean-Pascal Nehr	82.0	G	£4,740
John Stagg	82.8	G	£4,500
Garner Wilson	81.2	G	£4,200
Steve Salchow	81.7	S	£3,820
John Dodd	tbc	S	£3,500
F N Voirin	75.4	S	£3,500
John Aniano	81.0	S	£3,020
Roger Zabinski	81.2	S	£2,980
Martin Beilke	81.9	S	£2,750
Bernd Etzler	81.4	S	£2,750
Eric Gagné	81.7	S	£2,590
Heinz Dölling	91.0	S	£2,500
Stephen Bristow	83.3	G	£2,400
Robert Pierce	81.9	S	£2,230
Howard Green	81.7	S	£2,200
Richard Wilson	82.2	S	£2,000
D S Finkel	81.2	S	£1,500
J S Rameau	76.7	S	£1,500
Herman A Hoyer	76.0	G	£1,500

Weight = in grammes; S = Silver; G = Gold
N = Nickel tbc = to be confirmed