

SOUNDING BOARD

Issue No. 2. Published by The British Harpsichord Society JUNE 2010

Guest Editor - WILLIAM MITCHELL, former maker of Franco-Flemish & Italian harpsichords, English virginals and the Claviorganum which was recently illustrated on our Home page. For further details see <http://www.harpsichords.co.uk/>

CONTENTS

Editorial and Introductions to the individual articles [William Mitchell](#)

Historical Damping

[Paul Y. Irvin](#) explains how to convert a harpsichord damped in the modern way to obtain the sounds heard over two centuries ago.

French Harpsichord maker Vincent Tiabut

[Stefan Claessens](#) was awestruck when he first encountered the work of this 17th century master and simply had to know much more.

Woodcuts and Paintings

[Arnold den Teuling](#) has discovered two items of Renaissance art that are the earliest examples of visual reference to the harpsichord and clavicitherium. Intriguingly, he explains why they are often depicted back-to-front !

The Harpsichord in Brazil

[Oliver Seeger](#) enlightens us as to how the harpsichord originally arrived in Brazil, how it declined and then successfully rose up again.

Kirkman Harpsichord attack

[Peter Mole](#) explains what happened when HRH The Prince of Wales came across an antique harpsichord.

And finally...

Birthday Cake

[Catherine Attwood](#) from Nottingham University has a very special birthday – and a very special cake !

'The Harpsichord Gift' article promised for this Issue, will now be included in the next one, together with an account of the BHS and BCS joint visit to Christopher Hogwood's collection of historic instruments. Please keep sending your contributions to editor@harpsichord.org.uk .

Please note that opinions voiced here are those of the individual authors and not necessarily those of the BHS. All material remains the copyright of the individual authors and may not be reproduced without their express permission.

EDITORIAL

I am grateful for the opportunity to edit this magazine, although keenly aware that anything I write will be held electronically for, well, perhaps eternity and so it is with a slight degree of trepidation that I do so.

Pamela Nash started our first issue with a very thought-provoking take on contemporary harpsichord music and associated ideas. She has stirred peoples' imaginations, even when the status quo predominates. I have the feeling that, although many of us find it difficult to appreciate modern works at first, we should be well served by using them as a chance to explore and return to as a way of expanding our personal repertoire. The impact is far greater when attending live performances and I can testify to this after having been to one of Pamela's 'Harpsichordfests' in Manchester.

I began my harpsichord-building career in the early 1970s. Everything was buzzing and there was an air of excitement about the revival of early music and the chance for makers of all instruments to provide the players of the day with what they wanted. It was an opportunity to be creative; to afford pleasure; to be of service; to bring joy and delight and the means by which to entertain. The hours were long and patience was required in abundance, but it was worth the effort and profoundly satisfying when hearing the harpsichords played.

My customers were people who had a common denominator: cultured; erudite and musical. I had the gleeful pleasure of staying with many of them. There were books everywhere; CDs galore and the opportunity to discuss all things musical and life in general. From Berlin to San Antonio; from Gothenburg to Tel-Aviv; from Vienna to Washington and many more, these experiences allowed me to discover how a passion for music and harpsichords truly transcends politics and ancient squabbles and provide the chance for everyone to have a great time.

I love the harpsichord. It embraces so many fascinating concepts: the beautiful and exotic materials that go into making it; the physics of sound and frequencies; tuning and the reason why harpsichords are better tuned in unequal temperament; decoration and how the ideas of 'classical', 'restrained', 'elegant' and 'first class' suit the instrument so well and, finally, the chance to play and obtain music from it – and the vast repertoire that it includes. The harpsichord is the bridge between visual art and musical expression; very few instruments have that magical combination in quite the same way.

They are certainly delicate creatures and the action tolerances can be very fine indeed: just a few thousandths of an inch in some parts. I ride a Norton 850 Mk III Commando motorcycle and the reason I mention this is that I always use the analogy that pianos are like cars and will survive several thousands of miles (i.e. playing) without too much consideration, whereas harpsichords are similar to motorbikes and require gentle attention by way of tuning, adjustment and general tender loving care in order for them to perform to maximum capacity.

I'm going to begin this edition of Sounding Board by being somewhat contentious and say that most, if not all those instruments that are 'authentically-based' and 'historical copies' are not being accurately described as such unless the damping of the strings is in accordance with original principles. In reality, we builders tend to provide the type of tonal character that we are led to believe that performers and, indeed, audiences want to hear. The fact is that the quality of sound a harpsichord can produce is much richer and abundant when the strings are dampened from the side instead of on top. Although the initial instruments I made in the early 70s were so damped, I went on to use modern, overhead flag-damping in a significant majority of harpsichords in order to comply with the expectations of most musicians. However, I am increasingly convinced that the concept needs to be more seriously considered since the tonal and maintenance benefits can be substantial.

*When I delivered a harpsichord to my customer in Glencoe, Chicago in the late 1980s, I had the pleasure of meeting the maker **Paul Y. Irvin** from nearby Northfield. I very much respect his ideas on this subject of historical damping and he has written an informative treatise in the Spring 2010 edition of the 'Harpsichord and Fortepiano' Magazine that provides clear evidence from early instruments of how and why such damping is so important and I should urge you to obtain a copy of it. For Sounding Board, however, he has kindly contributed an article he wrote originally for the newsletter of the Western Early Keyboard Association in Washington State in the autumn of 2009 that explains how it is possible for harpsichords with the modern damping arrangement to be converted to provide the more interesting sounds obtained when damped from the side. I am grateful to WEKA for their kind permission to reproduce it here. W.M.*

MODIFYING MODERN DAMPERS FOR HISTORICAL BENEFITS

INTRODUCTION

The historical harpsichord builders evolved an integrated system of features and materials that efficiently achieved their intentions of how a harpsichord should sound and work. The understanding of some of these interrelationships was lost during the break in harpsichord manufacture in the nineteenth century. Modern sound and performance assumptions were applied during the 20th century rediscovery of harpsichords and restorations of the antiques that resulted in changing their sonic and performance characteristics. Careful consideration of the consequences of various historically-chosen interrelated features can reveal the likely original performance intentions, while judicious modifications to current practices can bring us closer to realizing those historical sound and performance qualities. Modifying modern harpsichord dampers with an understanding of historical expectations can provide our harpsichords with a more resonant sound, expanded possibilities of timbre, and reduced maintenance, getting us closer to the musical and playing qualities enjoyed historically.

HISTORICAL VIEW

Historical harpsichord builders developed and used a system of damper features (shapes, type of cloth, number, attachment, etc.), quite different from what we became used to seeing in dampers of the 20th century revival of the harpsichord. These modern dampers are usually rectangular, of a fairly stiff cloth, and rather tightly attached to the jack, either in a tight slot, or even screwed or glued to an attached bracket on the damper.

Inspection of the historical (both single and doubled) mouse-ear, round, or slant-cut-above-and-below dampers that have survived, along with examination of the consequences of various other historical evidence, such as historical string spacing, plectra lengths, damper slot depths, grip qualities, etc., show clearly that the historical builders' intentions of what the dampers should do were quite different from the 20th century expectations. Even though over the last twenty years an increasing number of researchers have become aware that the intentions and musical consequences of these dampers are very different than modern ones, the actual use of the historical approach to dampers in both antique restorations and new historical copies lags far behind the copying of other historical features, despite the considerable benefits provided by using them. In fact in the two keyboard instrument museums I have visited in the U.S. and four in the U.K. in the last few years, I did not notice any replacement harpsichord dampers with an historical damper shape and material.

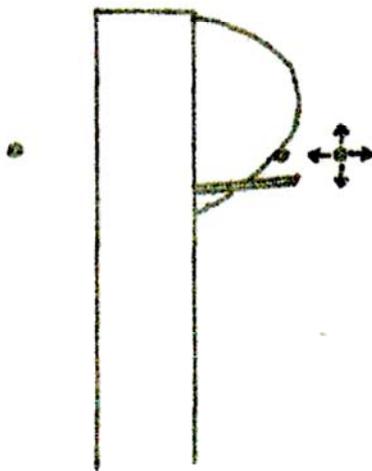
The consequences of using historical dampers rather than modern firm and/or rectangular ones are: quicker and more complete damping, much decreased

maintenance, and, on multi-register harpsichords: increased resonance from sympathetic vibrations (the “cathedral effect”), and additional tonal colors.

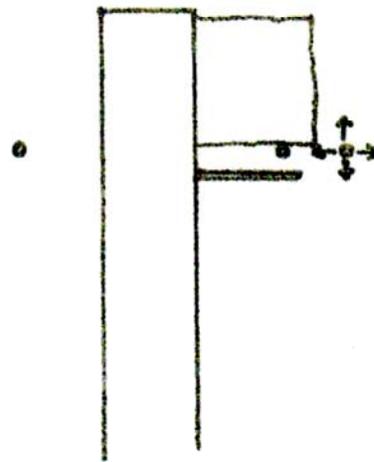
After a brief description of historical damper features, this article will describe a simple approach that harpsichord owners can perform to gain these historical damper benefits in a harpsichord already built with modern-style dampers.

HISTORICAL FEATURES

The historical sloped or rounded shape has several benefits. It simultaneously damps the horizontal and vertical vibrations of the string for more complete and quicker damping, it greatly reduces the possibility of the damper being in the way of nearby vibrating strings, and it leaves the string free to vibrate sympathetically when a register is turned off.



Historical, side damping



Modern, 'flag' damping

[Notice how close the vibrating adjacent string is to the damper.]

All drawings are to scale, with typical historical string spacing.

The **resilience** of the softer, historical damper cloth also has multiple beneficial consequences. This property smothers the string vibrations without rebounding or resisting the encounter with the string. When a register is turned on, dampers with this more yielding quality are far less likely to push individual strings slightly away from their plectra when they descend, and subsequently cause unreliable plucking. Such dampers are also less likely to cause the register itself to be pushed back away from the strings by the collective resistance of the dampers when the register is slid on (springback) thereby ensuring more consistent plucking performance when changing registers. Resilient dampers are far less likely than stiff dampers to permanently distort their shape when misadjusted or to have notches worn in them from vibrating strings and therefore provide a significantly larger range of efficient performance without need for adjustment, whether due to less than perfect damper positioning or from case and soundboard movement caused by humidity changes.

Historical damper **grip** seems to be one of “not too much, not too little”. This feature, like the more resilient damper cloth, expands the range of conditions in which the dampers will work well without need for adjustment.

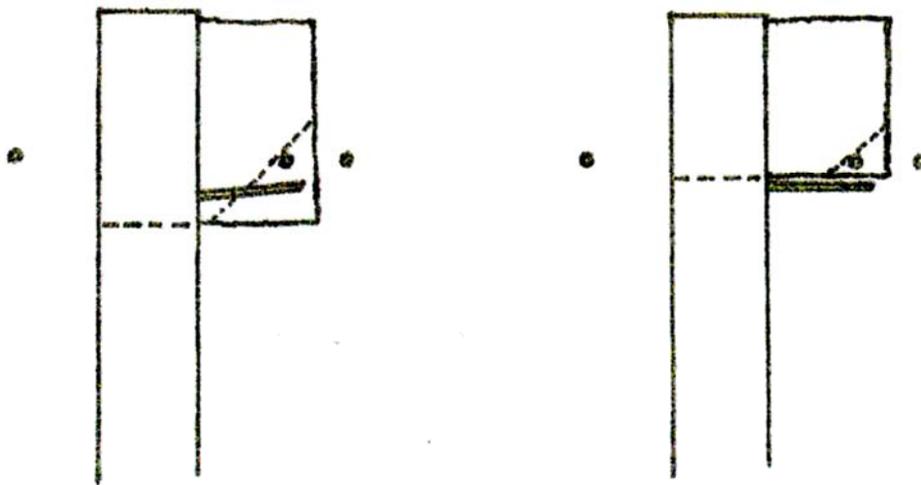
MODIFYING PROCEDURE

Naturally, building a harpsichord with appropriate damper cloth cut to efficient shapes fit into properly sized damper slots is the ideal, whether to recreate historical practice or to create an instrument with more musical possibilities and less maintenance. But rather than having to replace all the dampers or all the jacks in an instrument lacking these features, the historical benefits can usually be largely realized by simple modifications to the present dampers. A minimalist approach, addressing the flag type of damper in a damper slot, will be described here.

The main points to keep in mind as we retrofit for the historical damper benefits are the sloped or rounded shape, an increase in the resilience and give to the damper's engagement with the string, and a proper amount of grip of cloth in the damper slot. (Please do not start performing any of these modifications until you have read this entire section through at least once in order to understand the various relationships involved.) *see End Notes*

Shape: I find a pair of cuticle scissors works well for this operation. (If the cloth used in your dampers is stiff or thick, you may need to use a stronger scissors.) Cut a slanted or curved lower edge on your present damper so that when the register is in the on position it meets the string at approximately a 45 degree angle. This angle of encounter both damps the horizontal and vertical vibrations of the strings simultaneously and equally which gives a quicker and quieter silence, keeps the damper further away from any neighbouring strings it faces, and, when properly positioned, leaves the strings undamped when that register is turned off. (If, when a properly damping jack has its register turned off and the jack drops a little bit, then the damper is set too low in its slot and needs to be raised.)

If your jacks have angled plectra you should be able to shape the lower edge all the way back to the damper slot as in historical practice. If the damper slots of your jacks do not go below the level of the plectra and if your jacks have horizontal plectra (rarely found on historical harpsichords), you may need to keep the curve just at the end of the damper on the back 8' and the 4' jacks.

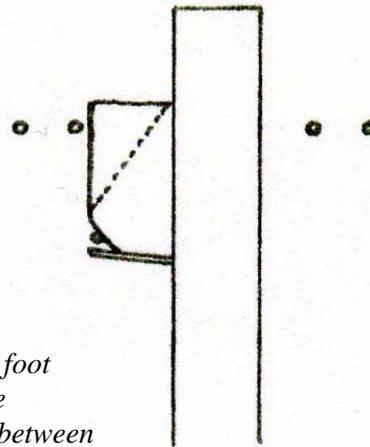


Cut along the line on the damper for jacks with angled plectra and deep damper slots.

*Cut along **this** line for horizontal plectra & slots that are cut in line with the plectra*

The other dotted lines refer to the level of the damper and its slot in the jack.

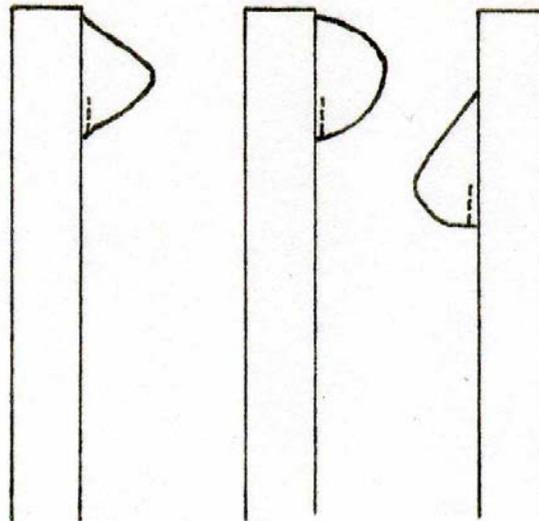
Especially with 4' dampers it is good to also either slant or curve away the upper corner of the damper to ensure clearance with the 8' string above particularly if the tighter historical string spacing is used. Since this cut also makes the end of the damper more giving and less stiff in its engagement with the string, you may want to do this to the 8' dampers as well.



4 foot damper is cut along this line to allow 8 foot string clearance and increased resilience. The historical string spacings are typically: 1mm between the 4 foot and 8 foot and 2.5mm between the 8s

Resilience (i.e flexibility): The purpose here is to create a damper that does not hit the string but only smothers its vibrations. Probably the quickest way to significantly increase the resilience of a somewhat stiff damper is to make a short upcut (with the cuticle scissors or the knife used for voicing) on the lower edge of the damper close to the jack (but not right against the jack since you may want to adjust the damper deeper into the slot, sometime). This cut might be 1/4 to 1/2 way up the damper depending on the size and stiffness of the damper, and on the strength of the string vibrations it has to subdue. Start the cut small and increase it until you get the desired effect of smothering the vibrations with virtually no impact against the string.

Reducing the strength of the connection of the damper to the jack with this upcut will result in the far edge of the damper being more independent and flexing a bit this way or that depending on its height and distance adjustment. As long as this bending is not excessive enough to result in permanent distortion, or interference with other strings, it will just increase the range over which the damper will work effectively without needing adjustment for case and soundboard swelling or shrinking due to humidity changes.

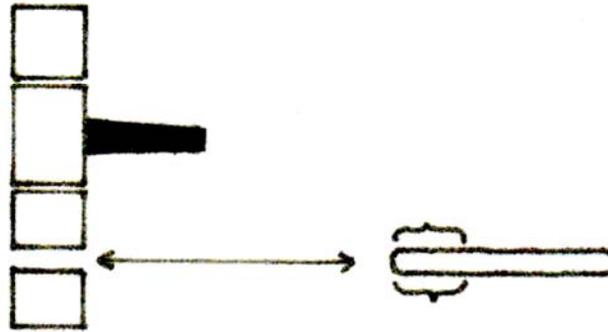


Different damper shapes with upcuts to increase resilience

Grip: The objective here, ideally, is to hold the damper reliably in position without either a death grip that crushes the cloth and makes it unnecessarily difficult to adjust, or with too loose of a fit that allows the damper to be pushed out of position while playing, especially in the bass. (If you have lived with your dampers satisfactorily in this regard for a while and the first two changes above are working well enough, you can skip this step.)

An overly tight grip can often be found with plastic jacks since their smooth surface (even when teeth or ridges are present) does not provide much surface friction

to grip the cloth. Frequently when owners find their dampers moving around in smooth slots they fit thicker damper material. This response often just flexes the top of the damper arm or slot outward and gives a tight fit on the bottom of the damper and a loose fit at the top, so the damper pivots away from the string on repeated contacts. If your jacks' damper slots are sized to grip the cloth very tightly you may be able to fit thinner, softer cloth to start with and then shape and ease as necessary, as described above. If the slot is too smooth or just a little too loose to hold the cloth well, the friction can be increased by applying a thin coating of rubber cement onto both sides of the edge of the damper that inserts into the slot, and allowing it to dry before the damper is reinserted. In most cases a thick coat of cement is not needed, just the introduction of the rubber's greater friction for gripping, so do not try to put on too much. [If this step is needed, it is best done before the shaping and snipping steps described above so that there is more damper to hold onto, and so that the damper positions do not have to be adjusted a second time.]



This drawing shows where the damper's rubber cement should be applied and then allowed to dry before re-inserting into the damper slot, in order to improve

NOTES

¹There are three items to consider before modifying your flag dampers: a) the disposition of the instrument; b) tongue performance; and c) transposing.

a) If you have a spinet, a virginal, a double-manual, or a 1 x 8', 1 x 4' single-manual, modifying your dampers will be entirely a plus for added musical and reduced maintenance purposes (assuming b and c below are also agreeable). If you have a single with two 8' registers which you play solo at times then this might give modern ears more sympathetic resonance than they are comfortable with. If you are considering modifying the dampers in a 2 x 8' single-manual, please see the article "Harpichord Dampers – Historic vs. Modern" on my website (pyirvin.com) for several approaches for this type of harpsichord.

b) Some modern designs of the harpsichord jack can allow excessive flyback movement of the tongue, which permits the tongue to hit against the string behind it as the jack drops. With dampers that are always in contact with the strings the faint click that this causes is often not noticed. Historical jacks, however, had various means (register slot shape, jack design balanced with spring tension, or tongue checks) to restrict the backward motion of the tongue so that this did not occur, since with the historical damper shapes the strings behind would be sounded by the flying tongues if that register were turned off (not a problem for virginals and spinets). Before modifying the dampers in your grand harpsichord you might want to check some notes in the tenor and bass to see if excessive tongue motion happens in your instrument during rapid repetition. If it does, you can then decide if it might be worth modifying your jacks to restrict this motion so that you can take advantage of historical dampers, and also have quicker repetition. The design of your particular jack will determine the options available to achieve this change; contact the maker of your instrument, or any experienced builder.

c) Many current copies of historical harpsichords are made to have their keyboards shifted to make available different pitches and often have instructions to turn all registers on so that the jacks can hang suspended by their dampers when the keyboard shift occurs, in order to prevent the jacks from possibly jamming in between keys when the keyboard is slid to the side. This approach can work quite well when using stiff dampers. Not surprisingly, this trick does not work as well with the more resilient historical damper since this transposing feature was not something taken into consideration by historical makers as they evolved their damper shapes. And if it had been, it is doubtful that they would have been willing to give up all the musical and maintenance benefits in favor of occasional transposing ease.

Stefan Claessens from Belgium visited one of Brussels' most outstanding museums and made a chance discovery of a seventeenth century harpsichord by Vincent Tibaut. Its appearance immediately overwhelmed him and he felt compelled to find out much more about this intriguing maker who worked in Toulouse, capital of the former province of Languedoc...

MYSTERY, BEAUTY AND SPLENDOUR, THE HARPSICHORDS OF VINCENT TIABUT

When I went on one day to the Musical Instruments Museum (MIM) in Brussels, I was fascinated by the many beautiful instruments. But one instrument took my attention completely. It was an exceptional instrument which was streamlined like an Italian, unbelievably decorated like a French from the court of Louis XIV and proud and impressive like a German. It was an international instrument and you could feel it. There was an atmosphere of mystery around the instrument, everyone who passed couldn't just walk around it, they HAD to look at it. It was beautiful. Such beauty caught in one instrument, I hadn't seen it anywhere else in my young career. It was the harpsichord of Vincent Tibaut, dated 1679.

When I started my fourth year at the royal conservatory Gent (Belgium) studying Historical Keyboard Building, I had to choose a theme for my investigation for my final exam. It was an obvious choice of course: Vincent Tibaut! With this opportunity it was an ideal situation for me to examine all the instruments of this builder. A great experience!

Who was Vincent Tibaut?

This is a short summary of who Vincent Tibaut actually was.

Tibaut was born in Coyron in Bretagne (natif de Coyron en Brethanie). I have filtered some of the most important descriptions in the archives of Toulouse, where he eventually lived and built harpsichords.. Here I found that:

“Vincent Tibaut, compagnon Menuisier” had an audition for the craft by Lafolie, the syndicate of the city and through Poitevin, attorney of the King. In this statement he had to ‘payer les droits de la ville, hospital et confrairie auxquelles fins ledit Thibaut a presté le sermant en tel cas requis et acostumé.’

Here we can see that it was not so simple for someone to become an independent builder/joiner (and that's also the fact for other businesses). You had to be accepted by the city and pay several taxes for the city, hospital, etc., before you could join the Guild.

Then the most interesting feature comes, Vincent Tibaut was a member of the Guild of Toulouse and he also paid taxes for this. He had to swear an oath and had to make sure he would assist the Guild with meetings, etc. The Guild was of the same caliber as that of Antwerp's Guild of St-Luke (where the Ruckers family were members).

In the wedding vow papers of Tibaut, we can see that he was staying in Saint-Carbes, in a small parish named Saint-Etienne. We can also deduce that he was a master joiner. His parents are also named: his father was a master carpenter of Nantes, named Jean Tibaut and his mother was Jacquotte Aspot.

What is most interesting is that Vincent didn't have to make a masterpiece before entering the Guild. This is due to the fact that his father was a master carpenter and Vincent was his apprentice. This was clearly a common way in the Ancien Regime. He and his wife had five children, but none of them survived.

Research and comparison

The investigation started with the harpsichord of the Musée de la Musique Paris. Here there was one of the remaining instruments by Tibaut, dated 1691. The second instrument which I have examined, was in a private collection in Bretagne, dated 1681 and this is the only playable instrument of the three. The third instrument is located in Brussels, in the MIM, and is dated 1679.

From these three instruments, which I have thoroughly examined, I have made a study of comparison and collected all the information, but which wasn't much. I studied the information and came to the conclusion that many crucial parts of information were missing, and the information that did exist, was sometimes wrong. Here is an example: pear wood that was tangled with elder wood. Also faults in technical drafts are always the fact.

My idea is that you use a draft as a guide, but never as a single source of information. Also, one has to remember the fact that they used to work completely differently in ancient times (15-16-17-18th centuries). They worked proportionally, this means that they worked with proportions like circulars etc, where they took multiples of. But this fact would lead too far away from the point of discussion.

With these facts in mind, I began my investigation and tried to make a "complete as possible work" of Vincent Tibaut. I also note that this is just a small part of what I have written. When the research ends, my complete work will be available with lots of photographs of the instruments.

Comparison of the instruments

Paris

This instrument is in its original state, as far as we can see, of course. The instrument is heavily damaged which makes it very interesting because I could look in places where it would be otherwise impossible. There are many Italian influences visible on the instrument. This was not such a big surprise because the 17th century keyboard instruments were almost all under the influence of Italy. A few of the Italian characteristics are:

- The body is globally 7-9mm thick
- The inner construction exists of knees and a lot of nails
- The soundboard bridges are lightly profiled



On the photographs of the inside of the instrument, you can see one of the ribs. The most interesting feature of this is that the 4-foot hitch pin rail is glued to this rib. Pay attention to the measurements of the 4-foot hitch pin rail: it's 10-12 mm caré.

The keyboard has two blocks with a scroll, but originally there was one on each end of the keyboards (four on total thus). This is a German characteristic.



Brussels

This instrument was heavily restored in the 60's. This is not a good sign. The first point is that the painting on the soundboard is not original. It is from a later date than the instrument. Also I have many suspicions that the marquetry of the lid is also not part of the original instrument. Most probably it was added when the buyer had the instrument and wanted to add his escutcheon on the instrument.



The construction doesn't differ very much from the instrument of Paris, the only point of difference is that this instrument is more decorated.

The front of the keys are cut in the same way and the keyboard blocks have the shape of lions. The legs are all made in the same way, four are left-

turning, the other four are right-turning. Probably the only real original marquetry is the small band with palm motives on the edges of the sides and lid. This type of decoration for furniture, was typical for the region of Toulouse in the 17th century. I think in this way that someone else did the decoration, someone who was specialised in wood inlaying of Toulouse.



The sharps are made of solid bone, sometimes I've found that the sharps are made of two pieces which are glued together. The height of the sharps is: 10mm to 8mm. I have also found leather plectra in the instrument that is not 100% original.



French private collection

This is most interesting because it's still playable, and there are several recordings of it



(for example, Jacques Champion de Chambonnières, 'Pièces de Clavecin', by Françoise Lengellé. Produced by Pan Classics). This instrument goes further in the line of the other instruments, with the same decoration (except the marquetry from that of Brussels). The paintings on the soundboard may look

original, but I am quite sure that they are not because they are too romantic. The material of which the rosette is made, is difficult to analyse. For the moment I suspect that it is made of lead, but wood is also possible. I am still searching for this.



Replica

I've made a copy as close as possible. The sides of the instrument are mitered together without dove tails or similar connections. I used sometimes little plugs to connect them (which I've also found in the originals). The keyboard has a compass of GG-c3 (with short octave) and is made of poplar. I've found different types of material for the jacks. But with a more detailed observation, the material that is probably original, would be Sorbus domestica. I've made the rosette of lead and added gold leaf on it.

Comparative dimensions of the three instruments

The overall lengths of the instruments are 2070mm to 2100mm. The widths are 760mm to 761mm. the height is 226mm to 232mm. the distances of the snares is given in this table.

	1679 (Brussel)	1681 (Guillou)	1691 (Parijs)
GG	1552/1546/948	1539/1528/960	1609/1587/958
C	1543/1534/923	1524/1518/935	1581/1560/936
F	1275/1237/744	1282/1244/757	1370/1344/757
c	967/936/567	976/944/577	1104/1071/586
f	787/762/450	795/767/454	897/862/460
c1	582/562/310	584/564/307	635/612/314
f1	464/444/233	466/447/233	498/476/236
c2	327/314/154	327/313/155	347/331/155
f2	255/243/116	252/242/114	265/253/118
c3	168/159/77	165/157/71	174/162/77

Stefan Claessens

Arnold den Teuling from Assen in The Netherlands makes an informed commentary on what is thought to be the earliest extant representation of a harpsichord along with some helpful links...

THE HARPSICHORD ON THE MINDEN ALTAR PIECE (1425)



One of the highlights in the collection of the Berlin Bodemuseum is the altar piece, originating from Minden Cathedral (Lower Saxony). The central image represents the glorification of the Virgin Mary, there are Apostles and other Saints in a large circle around it and a smaller circle with musical angels, divided into coffers, between St. Mary and the other Saints. One of these coffers contains four angels above each other, the bottom angel playing a psaltery of the pig head type, a harpsichord, a clavichord and the top angel an earthenware rumbling pot in the form of a three-legged cooking pot. There are spectacular and extensive remnants of blue paint and gold foil on the wood. The coffer is about 40 cm high.

The Altar Piece has been carved from lime wood in an unknown workshop by an unknown artist, about 1420-1425, and so it predates the famous description of the

harpsichord and other instruments by Henricus Arnault de Zwolle from ca. 1440. (By the way: in literature he is often wrongly called Arnault de Zwolle; Arnault is presumably his father's name and not a family name. In Middle Dutch his name was most likely Henrick Arnoldssoen van Swolle or something like that).

The harpsichord has been represented in reverse, presumably for artistic reasons. There is another interesting feature. Henricus's description mentions three plucking actions and one hammer action. Two of the three work from the upper side downward, the plectra being pulled upward by levers or little chains. Several attempts to reconstruct these actions have been made, for instance by John Lester <http://www.harpsichord.org.uk/EH/Vol3/No3/zwolle.pdf>, Chris Barlow <http://www.barlowharps.demon.co.uk/arnautWeb/arnaud.html> and by J.C. Monzani <http://www.jcmonzani.com/arnaut.php>. Lester gives a translation in English from the Latin treatise by Henricus, admitting his limited knowledge of Latin. Indeed there are some errors in it, but generally speaking the translation is correct and even clever, for I was not capable myself to understand everything of the text, though I have a more than average knowledge of medieval Latin.

As far as is possible to judge from the statues the plank covering the action is too close to the sound board to contain a downward action. The position of the sound holes agrees with the drawing by Henricus de Zwolle and also with the instruments in painted vaults in Uppland (Sweden) from about 1480, for instance in Häverö church (image at <http://home.planet.nl/~teuli049/petrinroduction.html>, with links to some other images). The keys have not been integrated into the case of the instruments, but protrude from the case. The angels keep their hands on both keyboard instruments in

a low position, as is usual with angel musicians on later paintings by Rogier van der Weijden and the Van Eyck brothers. None of the angels in the altar piece is playing a recorder or traverse flute, though their invention dates from the same period as the harpsichord, some years before 1400.

The photograph has been made by me in October 2007. The Bodemuseum is a state museum and the altar piece belongs to the state. Photographing was permitted and there is no objection to publication.

Arnold den Teuling has also discovered a pictorial reference to a 15th century clavicytherium. It may be tricky to discern here, but the information would be of help to anyone contemplating a visit to Holland and this Museum. The idea that these and many other harpsichords were carved or painted 'mirrorwise' – or 'in reverse' on many occasions is particularly interesting.

CLAVICYTHERIUM BY GEERTGEN TOT SINT JANS

The Museum Boijmans Van Beuningen in Rotterdam has at its disposal a painting on wood by Geertgen tot Sint Jans, one of the most important early painters in the northern Netherlands. He was born ca. 1460/1465 in Leiden and he lived in Haarlem in St. John's Monastery (now the archives of the city and the province of North Holland) where he died about 1490. The painting represents St. Mary with child, trampling a dragon under a crescent like the woman in the Apocalypse. The painting is mostly, however wrongly, described as a Glorification of St. Mary. The whole painting is about 24.5 x 18.1 cm. It was probably painted between 1480 and 1485.



Around the central image there are three circles of angels, the outer of which consists of angel musicians. In three corners there are keyboard instruments: top left a portative organ, with one angel playing it and another handling a bellow, bottom right a clavichord of a wellknown type and top right a clavicytherium, surrounded by angels playing a dulcian blown with a bag, a kind of bow with six little bells on it and a very tall harp. The playing position of the angel at the keyboard instrument is very low as is usual on paintings of that period. The angel holds the instrument with his left hand. The keys and the tuning pins have been indicated schematically.

At first sight the clavicytherium of Geertgen has been represented mirrorwise. That would not be unique. There is also a clavicytherium in mirror on an Altar Piece from Kefermarkt (Austria),

dating from the same period. The wood-carved, actual instrument was however heavily restored during the 19th century and is therefore unreliable for further reference. Sebastian Virdung calls the instrument "recently invented" in 1511, and his

woodcut is also mirrorwise. But woodcuts are notorious for this defect and it does not mean that any real instrument had its bass strings to the right side.

There are three surviving instruments from before 1700, and all the three have the bass strings normally put at the left side: the instrument from southern Germany (Ulm) from 1480 in the Royal College of Music at London, an instrument in the Folkemuseum at Oslo, possibly 16th century, and an instrument made by Henning Hake at Riga in 1657, the latter both described by J.H. van der Meer, A contribution to the history of the clavictherium, in: *Early Music* 6 (1978) 247-259.

The construction of the soundbox is similar in all three: it is placed sloping from the bottom right to the top left. At the left side there is a vertical plank sustaining the soundbox and leaving a triangular open space between the keyboard and the wrest plank, the soundbox and itself. The strings have been placed vertically. In the London clavictherium there is a woodcarving in the open space, heavily infested by woodworm. Van der Meer concluded from the length of the surviving tuning pins that both instruments described by him have probably been wire strung. *Virdungs* image does not represent the open space and he describes, in not a very clear way, that at least a part of the strings were made from sheep gut.

No instrument has its bass strings to the right side. Neither has the clavictherium by Geertgen tot Sint Jans has, as will be evident after close inspection. The soundbox is vertically positioned at the right side, and there is a curved bar or plank from the bottom left to the top of the sound box, to resist the tension of the strings. A wooden carved grid has been painted in the open space between the bar and the soundbox looking like a climbing rose. The conclusion that the bass strings run diagonally from the bottom left up to the right and the rest of the strings parallel to the right of them is inevitable. I do not know any other image of an instrument like this. No other similar surviving instruments are known.



I must apologise for the quality of my photograph, made in June 2008. In the first place it is enlarged compared to the original painting. Photographing in the museum, a public (municipal) institution with a city-owned collection, was permitted, but without flash or tripod. The plexiglass both disturbed the range finder of my camera and caused blue stains by reflexion of the room lighting. Maybe a part of the image has been

hidden by the frame. Perhaps a more authoritative person could persuade the museum authorities to temporarily relieve the painting from its glass and frame for a more accurate photograph.

Arnold den Teuling

Mention the word Brazil and most people immediately associate it with the Amazon, football and the Copacabana Beach of Rio (which also happens to be

where my customer out there used to live). **Oliver Seeger** tells us how the harpsichord arrived and the importance of its place in Brazilian culture.

THE HARPSICHORD:

AN IMPORTANT PART OF THE MUSICAL HISTORY OF BRAZIL

Brazilian people have always been musical ! It is possible to clearly observe how much music has always done, does and will continue doing as part of the Brazilian society, as well as of the Brazilian people. The colors, the rhythms, the harmonies and the several ethnic roots make the Brazilian music extremely rich and worthy of a lot of study.

The beginning of this rich musical culture took place in the period of Brazil before the arrival of the Portuguese court. At this time music started being totally executed and played in the Brazilian churches, specially in the south-eastern state of Minas Gerais, where these performance opportunities did, for a short period of time, develop a cultural revolution which was essential for the formation of the country.

In the XVI century the writing, as well as the musical instruments were imported from Europe by priests as well as by rich people. Such orders took up to one year and a half to arrive at their destiny. There is evidence – even if somewhat obfuscated – that the first harpsichord came to Brazil at this time, reaching an import peak in the XVII and XVIII centuries. They were then brought in from Portugal as well as from other countries in Europe.

The Brazilian musical scenery was then strictly restricted to churches, but later spread however, to small schools where singing, organ playing and also the harpsichord were taught. The harpsichord, on its initial exposure in the Brazilian region was a great success, due to its glowing and passionate sound.

With the arrival of the Portuguese court in Brazil, the harpsichord acquired a greater importance in the year 1808. The Portuguese King Dom João VI brought with him the passion for music, and with that the Brazilian cultural society acquired a great impulse; several harpsichords were then brought from Portugal and widely studied and taught to several persons of that group.



They were widely used in the performances at the court as well as in musical schools, which were then starting in Brazil. Just like the access that there is to the piano these days, so was the harpsichord at that time, being part of the society and representing a very important musical instrument. It was used by the first great Brazilian composer, Father José Maurício Nunes Garcia

D. João VI listening to Father José Maurício playing harpsichord

Oil on wood of Henrique Bernardelli (2nd half of the XIX century) 41x51cm

Unfortunately, however, the return of the King Don João VI to Portugal was a real disaster to the Brazilian music, for the amount of money reserved for music was

scarce and his son, the monarch Dom Pedro¹ was not able to maintain the musical houses, which his father had supported. The harpsichord lost its value and fell into a vague forgetfulness, especially with the advent of the piano, which brought the harpsichord down in a rude manner.

Since that time the harpsichord was scarcely heard of, but thanks to the important figure of Polish origin, Wanda Landowska, many people displayed a sudden interest in an instrument which, up to then laid in the darkness of partial forgetfulness.

Wanda Landowska did, with her Pleyel harpsichord, cause this instrument to be resurrected in the XX century and with that, therefore, it started being admired again. Unfortunately this admiration was not enough to give this instrument the real shine that it deserves. However the interest for its learning has now been increased.

In the seventies, in the city of São Paulo, a great harpsichord festival was founded by the Secretary of Culture, José Mindim. This festival aroused public attention to the instrument, allowing an important Brazilian generation to have access to it, such as the case of Bruno Martins, an important Brazilian harpsichordist.

Like Bruno Martins we also find Roberto de Regina, who made hundreds of harpsichords in Brazil, which was of utmost importance for the history of this instrument in the country. We also find Ilton Wjuniski from Paris who was the premier harpsichord player of Brazil and who won three international prizes. Among other important players, the well known Rosana Lanzelotte also played an important role in the propagation of the harpsichord in Brazil.

Due to its historical context, interest in the music of the harpsichord is much larger in Europe, but even so there should be still a very special effort from Brazilian amateurs in order to make this instrument more diffused in the Brazilian society in our time, as it had been previously done, taking into consideration its beautiful and enchanting sound.

One cannot leave in the shadow of forgetfulness such a grand instrument as the harpsichord and doubtlessly it should be taken into consideration, thus arising in Brazilians a passion for its sound, for its esthetics as well for its study, sharing so with other European countries the role which should be given to it in the Olympus of the musical instruments: **t h e t o p !**

Oliver Seeger

***Peter Mole** takes a light-hearted, yet informative look at a visit by the Prince of Wales to Dumfries House and his encounter with one Jacob Kirkman...*

HRH STABS KIRKMAN

It would be nicer, but less accurate, to be able to write 'HRH *plays* Kirkman', but nevertheless those who are ardent television viewers (aren't we all?) will have seen the programme honouring the 60th birthday of His Royal Highness The Prince of Wales (and if not, you can see it on the BBC iPlayer if you are quick). In the footage are some scenes shot in Dumfries House, the Palladian mansion near Ayr which was recently acquired by a Trust largely funded by Prince Charles. The Tapestry Room of this house contains what I take to be the 1772 Jacob Kirkman harpsichord, formerly the property of the Marquess of Bute. Boalch lists it as a double with 2 x 8, 1 x 4 and a lute.

'Do you think this still works? I'm glad he left that behind,' says the Prince, and lifting up the flap he stabs a key or two. Plink Plonk 'It needs a lot of tuning' .

No surprise there then!

If you look at the website of the house, <http://www.dumfries-house.org.uk/gallery.asp> there are two shots which include the Kirkman and also what I think is the Keene & Blunt spinet of *circa* 1702 (GG-d3 with split sharps).

This newly opened house could be worth a visit, and for those who live in the Bad-Lands south of Watford and who would have to make a weekend of it, there are two very interesting old instruments at Sizergh Castle near Kendal, a very early Player spinet and an English virginal.

Peter Mole

***Dr Catherine Attwood** is an expert in medieval French literature, in particular 14th and 15th century lyric poetry at Nottingham University. She has a passion for the harpsichord and a cake was made specially to reflect this on her birthday...*



Many happy harpsichord returns !
