

The Music Box

Volume 20 Number 6 Summer 2002
Edited by Alan Pratt

An International Journal of Mechanical Music



In this issue:

- More Musical Mugs
- Hicks Barrel Organ
- Orphenion Musical Box
- Case Restoration
- Hydraulis - Greek Organ
- Plus our regular features

The Journal of the Musical Box Society of Great Britain

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Commencing at 11.00am. Viewing on the 22nd and on the morning of the sale.

* This sale includes the collection of the late David Snelling.

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The need to record...



Alan Pratt

The publication in this issue of an article on case restoration raises a subject which is dear to my heart - the need to record as much as possible of the accumulated knowledge of our members.

Come along to any Society meeting and you can guarantee that sooner or later two or three members will be found in a huddle in some corner swapping information of some aspect of mechanical music restoration. How this or that was brought back to life; how a new part was made; how a problem was overcome.

Now some of the subjects may be so unusual that they would be of limited interest - but there again, you never know! But among our members there are, I am sure, those who would appreciate guidance on some aspect of restoration. To those who have "done it all before" some of the information sought may be quite basic. However, to new members and those who have yet to venture into any kind of restoration, even basic information is useful.

The purists may say that musical boxes should only be worked upon by specialists. In the case of quality boxes this is certainly the case, but there are many boxes whose value is more sentimental than monetary which

would benefit from a little TLC but whose value would not justify a professional restoration.

Replacing lost or damaged veneer, cleaning movements, repairing organette rolls - the list of things which can be tackled with a little help is almost endless.

I have already reprinted articles from earlier Music Box magazines and will continue to do this from time to time, but this could (and should) be augmented by new articles. Long contributions are not necessarily required - although they are welcome. Just as welcome is the short submission on something specific. One particular operation which you happen to be doing in your workshop. Take a couple of pictures and explain it just as if you had a visitor in your workshop.

To allow all our collective knowledge to go unrecorded would be to deny future generations of collectors and enthusiasts the joys which we get from our instruments. Some of this sharing of information goes on at Chanctonbury Ring meetings. Why not share these with the full membership?

Next time you are carrying out some specific restoration, think about putting pen to paper and share your knowledge with others - and don't forget the pictures! ■

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The Editor welcomes articles, letters and other contributions for publication in the Journal. The Editor expressly reserves the right to amend or refuse any of the foregoing.

Any contribution is accepted on the understanding that its author is solely responsible for the opinions expressed in it and the publication of such contributions does not necessarily imply that any such opinions therein are those of the Society or its Editor.

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Front Cover picture

Our cover picture shows a Wintle 55 note street piano playing 10 tunes. The cart is original but clearly the paintwork and the gilt on the ebonised case are more recent.

*Photo courtesy of
Bonhams*

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Annual General Meeting

Our AGM this year is on Saturday, 1st June, at the St. Albans Organ Museum, 326 Camp Road, St. Albans, Herts.

To assist you to find your way to the Museum, Bob Ducat-Brown has prepared the following route guides:

From the A1M

Turn off the A1M at junction 3 (if travelling south this is at the far end of the Hatfield tunnel). Take the A414 towards St. Albans. After about 2.5 miles you come to a roundabout. Turn right onto the A1081, after about 1.25 miles you will come to traffic lights. Turn right into Drakes Drive, continue for about 0.6 of a mile. Turn left into Camp Road, the Museum is about 0.3 of a mile on your left - it is just before a school.

From the M25

Turn off the M25 at junction 22. Follow the signs to St. Albans onto the A1081, after about 1.5 miles you will come to a roundabout. Go straight over and continue on the A1081, after about 1.25 miles you will come to traffic lights. Turn right into Drakes Drive, continue for about 0.6 of a mile. Turn left into Camp Road, the museum is about 0.3 of a mile on the left - it is just before a school.

Take care to use the junction numbers and roads indicated above. Other roads may be signed to St Albans, but the ones indicated are the easiest route.

There is some parking at the Museum and we are hoping to get the use of the school car park next door. If this is not possible there is plenty of parking in the road outside.

If you think you may have a problem you can telephone Bob on 01438 712585.

The programme follows the usual pattern:-

9.30 am (onwards) Registration

- £10 for the whole day - no charge for AGM only. Delivery of items for the Auction from 9.00 am until 10.30 am. No items can be accepted after the AGM has started.

New Members

We are pleased to welcome the following new members to the Society:-

2802 Mr.C.E.Marchant,.Wilts
2803 Dr Colin Feyerabend, Kent
2804 Panos Ioannidis, Greece

**10.30 am Annual General Meeting
12.00 noon (approx) Lunch**

- buffet included in the Registration fee. Please note the Museum is not licensed, but soft drinks will be available. Auction viewing during the lunch period until 1.15 pm.

1.45 pm Society Auction with Christopher Proudfoot as our auctioneer.

3.30/4.00 pm End of Auction - tea will then be served. Conducted tours of the Museum will take place during and after tea.

Should you need to contact the Museum on the day, the telephone number is 01727 869693.

Phase 1 - Completed

Dean Organ Builders have announced the completion of phase 1 of their modernisation of perforated cardboard music production.

The first Automatic Punching Machine is now complete and working at their shops in Bristol, England. This first machine cuts standard keyless cardboard book music up to 112 keyless, and this new machine will enable owners of standard keyless organs to benefit from not only quicker delivery, but huge savings on labour charges. In most cases the new price is well under half the original price for manually punched card.

The second phase of the modernisation, to come later, aims to offer the same quality and value for money service to owners of "keyed" organs.

To receive the free music price lists, please send SAE with your organ scale to Dean Organ Builders, "The Music Box", 40 Bristol Road, Whitchurch, Bristol BS14 0PT.

The End of an Era

The Musical Museum at Brantford closes on October 27th

The Musical Museum, home of one of the world's most important collections of automated musical instruments, was based in the old St. George's Church in Brentford High Street, as a temporary measure in 1963. Almost forty years later, it is finally in sight of permanent, purpose built premises being constructed not far from its existing location as part of a major

redevelopment of the area. "We will have our final season in St. George's Church from 6th April to 27th October 2002. This will be your last chance to see, and hear, some of our musical instruments in the old church. The Museum will re-open in its new premises in 2004, although the exact date has yet to be decided" says the Museum's Chairman, Michael Ryder. "We need this time not only to dismantle and carefully pack the larger instruments, such as the Wurlitzer, which alone boasts thousands of soldered contacts and weighs several tons, ready for re-assembly in the new building, but to complete the building's interior ready for the installation of the 200 plus instruments."

The new premises will contain substantially more exhibition space allowing hidden treasures to go on show in improved period settings, and will also have a café, an auditorium seating over 200 providing the Wurlitzer with a 'cinema setting', improved storage, proper conservation workshops and archive facilities. The result of all the huge effort of moving this large collection will allow greater public access and an increased educational role.

Among the fascinating instruments currently on show is the Steinway Duo-Art grand piano, the Clarabella which contains all the instruments of a small band, the fascinating Mills Violano-Virtuoso which plays a violin and a piano; and the Fotoplayer, one of only three known to exist. The largest exhibit is the mighty Wurlitzer organ which thrilled millions of cinema and theatre audiences in years gone by and became a household name thanks to Wurlitzer broadcasts by the BBC. Housed at the Musical Museum since 1972, it can be demonstrated without an organist at the console with the help of the Wurlitzer Automatic Reproducing Roll Player, the only one ever to have been installed in Europe, and also plays coupled to a grand piano.

The Musical Museum will be open every Saturday and Sunday from 6th April to 27th October inclusive, from 2.00 to 5.00 p.m. and 2.00 to 4.00 p.m. on

Wednesday afternoons during July and August. A series of evening concerts (see list below) will lead up to the final Open Day on the 27th October.

More details can be obtained from the Musical Museum, 368 High Street, Brentford, Middlesex TW8 0BD. Tel. 0181 560 8108 or website: www.musicalmuseum.co.uk ■

**Events List -
The Musical
Museum 2002**

April 27

- Special fund raising day. Bric a brac sale etc. (The Friends of the Musical Museum promotion).

May 11

- Musical evening presented by Richard Cole. Theme to be announced.

May 25

- Musical evening presented by Richard Cole. Theme to be announced.

June 1

- Carol Williams at the Wurlitzer. A stop on her UK tour. Resident USA organist.

June 8

- John Atwell from Australia at the Wurlitzer. A stop on his UK tour.

June 29

- Paul Roberts at the Wurlitzer.

July 13

- Janet Dowset at the Wurlitzer.

July 27

- David Lobban at the Wurlitzer straight from Blackpool Tower.

August 24

- Len Rawle at the Wurlitzer.

September 27

- Richard Cole at the Wurlitzer. The last Wurlitzer concert in St. George's Church.

September 28

- Musical evening presented by Richard Cole. Theme to be announced.

October 12

- Musical evening presented by Richard Cole. Theme to be announced.

October 26

- Grand Finale concert by Richard Cole. The final concert in the old church.

Sunday 27th October

- Final Open Day at the old church!

Autumn Meeting

Lincoln – October 4th-6th 2002

Friday Evening

Tabletop sale and members' boxes to show and demonstration of boxes from local collectors.

Saturday Morning

Organ grind for Guide Dogs for the Blind in the city centre. The charity will present a prize to the best-dressed operator. Every participant will be given a special inscribed brass plaque.

Saturday afternoon – visits to the famous Usher Watch Collection in the Usher Art Gallery and a guided tour of the Cathedral; hopefully this will include a visit to the organ loft to view the Willis organ.

Saturday evening – Society dinner and entertainment.

Sunday morning – Visit to Toy Museum.

This is the itinerary to date – other items may be added later.

A Booking Form for this meeting is enclosed with this issue. ■

In the beginning...

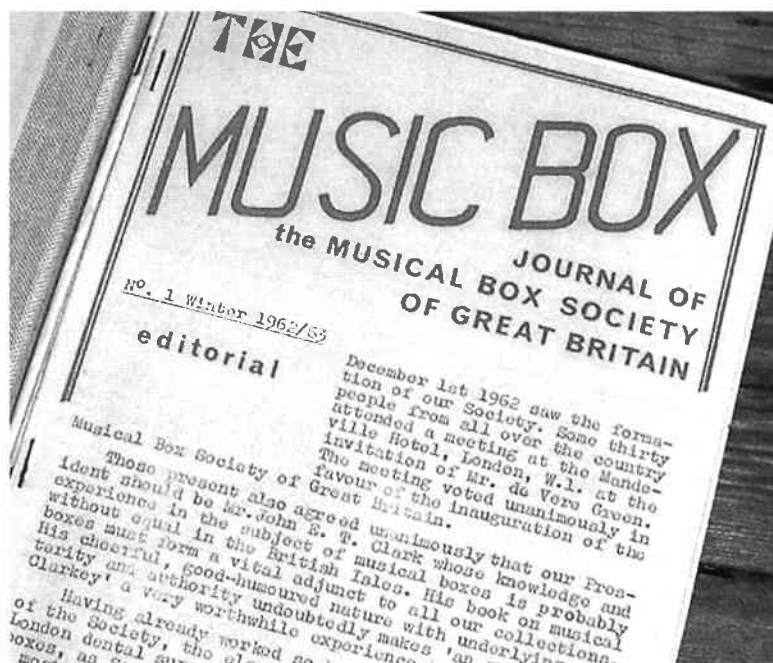
...there was Issue No.1

Back in 1962 the Music Box was a very different publication from the ones we enjoy today. Typewritten sheets, a smaller format, and no colour. But despite its modest style, these early issues contain a wealth of knowledge, and were prepared with just as much care and effort as those

of today. Just a reminder, here's the cover of the very first issue.

It is interesting to read elsewhere in this issue of The Music Box about how these early issues were produced. Duplicated pages collated by Committee members and stapled by hand!

Without those efforts our Society would not exist today. ■



Chanctonbury Ring

One of the many attractions of a local area meeting is the opportunity to hear other people's musical boxes. Our March gathering was a typical example, this time with the chance to compare and contrast four Britannia boxes, one in a smoker's cabinet and three in table-top format. Each has its own character - not better or worse - simply different. Selection of one rather than another would clearly be a matter of personal choice. This makes us question the wisdom of a telephone bidder, who purchases at auction, guided only by written description and in the absence of a listening test. Add the inability to conduct a careful examination for distress of the casework and mechanism and you don't get what would be called a precision method for selection and purchase. How many of these buyers are disappointed when they actually receive the goods? We enjoyed this event and benefited from what it taught us. Even the fact the winding handle is not standardised! Our thanks

go to the members who made their efforts to bring these instruments.

'Four reasons not to want an overture box' was the amusing and contentious introduction to Anthony Bulleid's short talk. Despite this apparent 'turn off', he managed to hold our interest as he took us through the 1820 to 1875 era, during which these instruments were manufactured. With an increased cylinder diameter (to three and one eighth inches) and a slightly reduced surface speed (0.08 inches per second), it was possible to coax two minutes per revolution and thereby achieve a less abridged, and consequently more acceptable version of an overture. At two minutes and five seconds playing time, the box used for demonstration was considered the equivalent of a present-day supermarket version - 'Buy one and get five seconds free'.

The difference between a Tabatiere box with spring arbor perpendicular to the bedplate and a Cartel box with spring arbor parallel to the bedplate was an educational

starting point to the third section of our meeting. We learned of the changes in spring barrel shape as the product developed over the years. Although generally quieter than cartel boxes, Ted Brown's old up-side-down pine drawer came to the rescue, acting as a good sounding-board for amplification of the audio output.

The next Chanctonbury Ring meeting is scheduled for 18th August when visitors are reminded to provide their own packed lunch, although puddings will be provided - yet more thanks to the canteen staff! The two inspirational subjects identified to date are 'Your favourite tune' and 'J. M. Draper and his Organettes'.

Those who attend the Old School Workshop sessions are advised the next one, on the subject of Case Restoration, takes place on 12th May. Prospective attendees are asked to let Ted Brown know in advance and to bring their own mid-day sustenance, because the local pub will be shut for re-decoration at that time. ■

THE MUSICAL BOX SOCIETY FORTY YEARS ON

**A Journey Back by
Arthur W. J. G. Ord-Hume**

Having an interest in a subject that is unusual often means that you are out on your own. My interest in musical boxes left me in just that position because I knew of no other person who shared my growing appreciation of these curious antiques.

And then, one day, somebody told me about a magical sewing-machine shop in East London's Old Kent Road adding, darkly and in tones of confidence that, on Saturday mornings, other things happened besides sewing-machines. He tapped the side of his nose...

Curious to further my obsession, for such had it become, on the next available Saturday morning I headed for that distant and then very unfamiliar quarter of London where lurked this mysterious sewing-machine emporium. Eventually, having discovered just how long the Old Kent Road is (I had no car in those far-off days), I found this small rather ordinary looking shop.

A tall fellow with a welcoming smile appeared from between the folds of the faded taffeta and to my delight extended a big hand, squeezed mine into welcome submission, introduced himself as Gerry Planus - and bid me through the curtains and to the back of the shop.

Those drapes concealed another world. Standing tall and majestic was an amazing Regina 27-inch disc musical box and on various rough tables in the tiny back parlour stood half a dozen or more cylinder musical boxes of various styles and sizes.

But there was something else that made me really feel at home. This little room was also full of people! It quickly materialised that I was by far the youngest person there but they all made me feel at home and quickly a cane-back was found for me and a mug of hot tea thrust into my hands. In a flash I knew that I was among friends and that my lone love of mechanical music was at an end. There were others out there!

Clearly the sewing-machine business was a cover-up! Over the next hour or two we all became firm

friends and Gerry Planus in particular struck me as delightful fellow who had all the right ideas in the right places. There was Ron Bayford, the Polyphon man, Arthur Coombs the Orchestrelle man - and so it went on.

It was through Gerry that I met John E T Clark whose book on musical boxes had been my Bible for many years. Clarkey, as he was known to his friends, lived in a small first-floor bed-sit in a dismal East London street and was gradually becoming infirm. In particular, his sight was deteriorating. But he was still restoring musical boxes at a small window-side bench.

One Saturday at Gerry's shop, I met Cyril de Vere Green. He was a leading dental surgeon and Dean of University College Hospital dental college. Cyril and I hit it off pretty quickly and, finding that we were near neighbours, I was invited to dinner at 11 Devonshire Place. Here I was introduced to his wife Bertha (who collected fans) and saw his collection of musical boxes.

It was around this time that Cyril became aware of the Musical Box Society International in the United States and he had attended one of their meetings.

A suggestion was quickly made that he should form a British 'chapter' or arm of the American society.

Cyril knew several other collectors not just in London but also in the rest of the country. Among these were Frank Greenacre of Gorleston-on-Sea, Robert Burnett, Don Lubbock and John Levy. There was, all told, the possibility that we now knew between us almost two dozen people infected with musical-boxitis...

Cyril attended a number of meetings in America of the MBSI and gradually key figures of the American society paid visits to Cyril's home at 11 Devonshire Place. Among these was, of course, Murtoth Guinness who was a key player. He still had his London home and was still busy buying with the help of his great friend Stanley Farmiloe.

Then there was Frances and Hughes Ryder and Howard and Helen Fitch from New Jersey, and Ralph Heintz from California. Our circle of musical-box enthusiasts was becoming wider and truly international.

After several exploratory meetings, one hosted by Murtoth and the rest by Cyril, we came out in favour of forming our own individual British society rather than merely becoming a 'chapter' of the MBSI.

On December 1st 1968 a meeting was convened at the Mandeville Hotel in London to agree to a formal proposal that a society for musical-box collectors should be formed and also that the name of the society be 'The Musical Box Society of Great Britain'.

Around thirty people turned up, some having travelled considerable distances across the country to be there. The proposal was accepted, the society was formed and then we had to elect officers. For President, John Clark was the obvious choice although his failing health would prevent his attending any meetings. Vice-President was Gerry Planus, and Secretary Cyril de Vere Green.

In charge of finance would be Treasurer Frank Greenacre. When it came to proposing an Editor, knowledge that I owned a pencil (a stub of an HB), an eraser and a portable typewriter, left me, in the eyes of the meeting, as the only candidate.

Our first Committee members were elected as schoolteacher and church-organist Arthur Coombs and Bruce Angrave, the famed cartoonist and radio broadcaster.

The aims and objects of the Society were expressed very simply: to try to bring together all those who collect mechanical musical instruments, or have a sincere appreciation for them, and wish to preserve them wherever and whenever possible.

My job as Editor was to create a magazine from the very beginning. A number of suggested titles were thrown into the hat. One, you will never believe, was 'The Polyphon'. Another was 'Key-Wound Music' and another - even more zippy - was 'The Clockwork Music Collector'. Fortunately, common sense prevailed and all these were discarded. Aware that the magazine was a receptacle for material as distinct from an instrument in its own way, the title *The Music Box* was put forward and unanimously accepted. The first editor was seen to breathe a sigh of relief!

The first copy of The Music Box was dated Winter 1962/63 and was actually mailed at the end of January 1963. It had 20 pages and the size was foolscap folded in half - a curious size that would remain with us until I decided to increase the journal to A4 size for the Spring 1975 issue.

And so the fledgling society began to blossom and by Easter-time 1963 we had 51 members.

Those first magazine were produced entirely by myself using an office typewriter to cut duplicator stencils, and then hand-printed on an Ellams flat-bed duplicator that my Father had used in his office in 1920. The printed sheets were then gathered from stacks placed around a table: you walked round and round the table taking one sheet from each pile until the last when you stapled the sheets together and formed a complete magazine.

For most of the first two decades of its operation, the Society was heavily underpinned by the generosity of Dr Cyril de Vere Green who subsidized meeting-rooms, provided refreshments at Committee meetings and so on. As the magazine expanded, it was Cyril who injected capital into its expansion. We bought a bigger, electrically powered duplicator and a magazine-stitching machine and so on.

Inevitably, the 'old-timers' got into their own huddles at meetings, and the expanding membership resulted in problems of isolation for new members. We all made a conscious effort to try to avoid this but not only was it unavoidable, it was a consequence of expansion from just a few friends into what was now an international body.

The forty years that have sped past since those tentative first meetings have, if nothing else, consolidated the position of The Musical Box Society of Great Britain. The founders always wanted it to be a responsible (and certainly a respectable) body to represent the interests of Members in matters of interest to them.

Bruce Angrave was the first person to play a Polyphon on the radio and I used to give talks on what was then known as The BBC Third Programme on mechanical music. Our subject gained credibility. In fact before we started musical boxes were considered by many to be toys, trifles

of the nursery even. We managed to get beyond that and, thanks to many articles, talks and broadcasts across the years succeeded in demonstrating that mechanical music plays an important part in the history of music.

The first two University Degrees in mechanical music subjects have come about through the work that began with the MBSGB. I am proud that, in my professional capacity, I have been associated with both these awards while I have also been involved in setting up study packages with other universities.

The big auction houses in London and New York have also benefited from our expertise, both financially (for members have been encouraged to acquire!) and as regards the research that has been carried out by our various members and published in the form of reference books.

From Gerry Planus's extraordinary shop in the Old Kent Road to Graham Webb's Portobello Road musical box emporium, Stanley Sunley's musical-box shop off Baker Street and Keith Harding's shop in the

Hornsey Road, many musical boxes were acquired by our members.

Repair techniques were often primitive. One one-time 'restorer' (not a member) made a habit of breaking teeth off combs and soldering them into others. Nobody bothered about tuning or tonality so long as the comb had no gaps!

But repair and restoration gradually developed as a process of trial and error.

And when David Tallis (our second Treasurer) revealed that he had successfully repinned a musical-box cylinder, we felt that restoration could attain no higher peak!

The years have not been kind to the Founder Members! Of those that met all those years ago at a London hotel with Murtogh Guinness, almost all have departed for better places. Of the Founder Members, with Membership Number 4, I am on my own in the single-digit brigade. As for the first couple of dozen, well, we now can be counted on the fingers of one hand, thumb excluded!

It all began with a few of us who were interested in musical boxes... ■



Fig. 1. Pictured just before his death at his bungalow at Bidford-on-Avon, John E. T. Clark, first President of the MBSGB.

Practical Tuning

A Different Approach

by John M. Powell

I read Arthur Ord-Hume's article on Practical Tuning in the Spring 2002 issue of the journal with interest having gone down that road several years ago. I found it a little confusing to start with but it did become somewhat clearer on the second time round. I felt that it left the reader a little in the air as to what to do next and missed out some of the practical aspects of the procedure. I thought that the following account may be of interest, being a slightly different approach to the same problem.

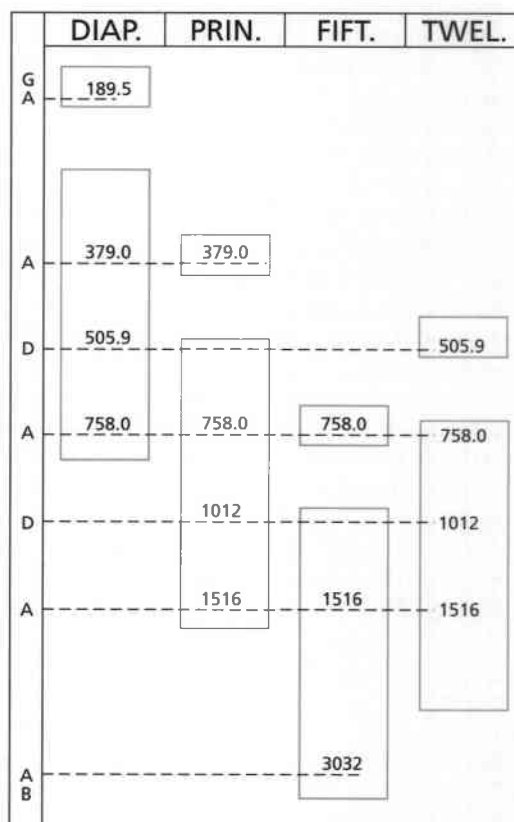
When I acquired our Flight and Robson chamber organ it was in fair condition with only 5/6 mangled metal pipes. The first operation was to measure the frequencies of all pipes that were recordable. At that time I did not understand the significance of the stop names but it did not appear significant and were just names on an ivory knob. Having dismantled the instrument and rectified mechanical faults, it was time to check the tuning, repair damaged pipes and adjust those that needed it.

The first activity was to draw up a chart as shown in the accompanying sketch listing all pipe frequencies against the full compass of the organ which, in this case, is a little over four octaves from G lowest to B highest. It is a similar scale to that which Arthur has used in his example but without his G sharp. The purpose of this was to compare easily the frequencies of all pipes that played the same note. In this example, there are nine notes which have three pipes and one with

four pipes all tuned to the same frequency. Having filled in the chart, a few discrepancies were noted. The next step was to decide what the datum frequency should be keeping the octaves pure. This was done by trial and error to get the best mean figure that would closely match both ends of the organ compass. A was fixed at 379Hz and as the intervals appeared very close to equal temperament decided, for want of anything better at that time, to proceed with this. Whereas the frequencies of the octave separated ranks fitted in without any doubt, the twelfth's location could have been one of two positions. Further juggling with figures indicated that the displacement could be the next and most significant interval to the octave, this being the perfect fifth. By picking two adjacent Ds from the already established ranks, going up from 505.9 in the ratio 3:2 and down from 1012 in the ratio 3:4, both set A of the twelfth at 758Hz and the majority of the pipes in the twelfth rank fitted in with this. Possibly some earlier tuner had not fully understood the setting of this stop.

It will be observed from the

organ construction that key A is connected to three A notes, one each from the Diapason Principal and Fifteenth ranks and the D note of the Twelfth. It is therefore the organ builder who has determined this combination and all that the amateur tuner has to do is to ensure that the twelfth displacement on the chart is a perfect fifth and all pipe frequencies required for the twelfth rank can be read directly from the chart. In the summary then, I think we both achieve a correct result but by slightly different methods. ■



Comparison between pipe frequency and stop location

Apology

There were errors in one of the charts accompanying the Practical Tuning feature in our last issue. A couple of sharps went 'walkabout' - I'd like to blame the computer but I fear the fault is all mine.

Reproduced below is the correct chart. Apologies to Arthur Ord-

Hume and to any readers who were confused by the omissions. **Editor**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|----|---|---|----|---|----|---|----|---|----|---|---|----|---|
| G | A | B | C | C# | D | E | F# | G | G# | A | B | C | C# | D | E | F# | G |
| | | | G | G# | A | B | C# | D | D# | E | F# | G | G# | A | B | C# | D |



The Orphenion Disc Musical Box

A Dinosaur that became extinct because it was too good!

by John Ward

Whilst I was watching our BBC regional news program, Midlands Today, I saw an item about the forthcoming sale of a local hoarder's collection who had recently passed away. An eccentric gentleman named Tommy Tranter had managed to amass and store over a thousand antiques in his two bedroom terrace house in Handsworth, Birmingham. This was an astounding feat, as the floor to ceiling contents of the building filled multiple articulated lorries when the removal company emptied the building. In the news story was included a video clip taken inside the house before anything was removed, and I noticed in one corner of the room a pile of about eight or nine very large ornately veneered wooden cases, the sort that usually contain cylinder movements. In volume one of the catalogue (as the collection was so huge that it filled two volumes!) was Tranters collection of mechanical music. It included forty three lots of cylinder and disc musical boxes which he had procured during his life.

Included in the sale were the following lots: a Nicole Freres box No. 33009; a nine bells in sight box; a Nicole ten air box No. 47213; a Nicole Freres twelve air box No. 45416 (Gamme No. 1956); a twelve air drum, five bells and castanet in sight box; a Nicole Freres key wind eight air box No. 36036 (Gamme No. 1413); a Nicole Freres key wind box No. 3866; a Mermod Freres eight air box No. 73108; a twelve air drum and five bells in sight box; four Polyphon disc table boxes; a 13 inch Kalliope (described in the catalogue as a Kanolope instrument) with 10 bells;

and an Orphenion disc table box.

In the sale I was lucky enough to purchase this final instrument, being in fairly good condition and with seven discs (four of which are playable). It is the 10 inch table instrument, model number 71, and I found its musical tone delightful compared to the other disc machines that I have heard. What intrigued me about the Orphenion was that I knew nothing about it, and I had never seen one before. On bringing it home I began a search to see if I could find out a little about its maker. I was sorely disappointed. Orphenion boxes are always described in the standard reference works as being rare, and as such the amount of information available is slight. However nearly everything that I have read about this instrument is nothing but high praise, yet why were so few produced? It was this question which led me to look at the Orphenion, and the work of its creator Bruno Rückert.

Here are just a few the outstanding testimonies that have been made about the Orphenion by some of our field's leading experts: 'The musical quality of Orphenion music boxes is very high.'

Siegfried Wendel

'The several Orphenion boxes examined by the author were well made and were of exceptionally fine tonal quality.'

Q. David Bowers

'Orphenion, a very sweet-toned disc instrument.'

'The Orphenion... is today recognised as a supremely musical interpreter.'

'The Orphenion was described in contemporary reports as being of high tonal quality. The test of time leaves this assertion unaltered.'

Arthur W. J. G. Ord-Hume

Compared to other disc instruments, Orphenion is really the most charmingly expressive. The comb is of the standard one would find in a fairly high quality cylinder musical box, in fact the whole movement is reminiscent of the disc's forefather. For the drive the table model uses a gear on the outer edge of the disc, and as with all boxes of this type it causes incredible wear to the zinc disc (this is the affliction that makes three of my discs unplayable). What is an unusual feature about this box is that the spring is on view on the bed plate, and its beefy size does give you sturdy reassurance when you wind the handle clockwise on the right hand side of the box. (See figure.1. for detail.)

This format of having an exposed motor, with visible governor which has spring loaded round air brake wings is somewhat dangerous. As one can easily imagine the damage caused to anyone who tries to stop the governor with physical force. Even the stopping of the movement seems a bit drastic, as it is a piece of metal violently rammed into the governor. However the exposed motor is a very good idea, allowing a large cavity to be exposed between the case work and the bed plate. By doing this the acoustics are greatly improved, and it does help to give this box a delicate mellow tone.

The table model is operated by a switch on the front right hand side, to play it the knob is slid to the left. There is a lever on this box for changing the speed of rotation, which by pulling it up makes the disc turn faster and lowered it slows it down. In the lid of the instrument is a gold transfer of the word Orphenion which can be seen in figure one. Orphenion discs are distinctive with their unusual scoop shaped projections, blue colour,



Fig. 1. The Model 71 Orphenion.

and the company's logo: a lyre. (No it is the truth, honestly) One thing that I have noticed about the discs is their restrained simple arrangements, which are lacking in the usual obligatory trills. The case is made of walnut and veneered in such a way as the grain makes a chevron pattern on the outside of the box. On the inside there are decorative squares formed with golden lines. Inside my instrument is a dealers plaque of William Spinks Riley, which says: Sole Agents - W. S. Riley & Son, Show Rooms: 100 & 102, Corporation St., Birmingham. At the moment I am embarking upon research about the Riley family and hopefully I will write an article on this at a later date. However now that I have told you about my instrument, which incidentally is the most common model, let us look at the company.

On the 9th June 1841 Bruno Rückert was born in the Kingdom of Saxony at a small town called Aue. During his youth he went to the United States of America, and

he became a fur trapper. Whilst working in the forest, Rückert began to take an interest in his surroundings and he became involved in the very active lumber industry. After his return to Germany, he founded a small timber yard in Leipzig in 1874. Apart from selling and cutting timber, Rückert found he had more than a little competence for cabinet making. It was through this aspect of his business that he came into contact with mechanical music. Soon many of the leading Leipzig makers, Symphonion and Polyphon for example used him to build cases for their instruments, as his productivity was unmatched due to his use of a production line format. The more he became involved in musical boxes, the more he became intrigued in their workings. So he began to experiment with Louis Baucer and Carl Röder in designing a new type of disc machine. After successful prototypes, Rückert imported the latest mechanisation devices from America to make his workshops

the most technically advanced in Leipzig. In 1888 they were issued with a patent for their new type of disc movement, and it went into production in 1891.

To start with Rückert cut his teeth, so to speak, on a small hand cranked disc manivell which he began to produce from 1891, called the Lyraphon after he bought the exclusive rights for it from Baucer and Röder. The handle to crank the disc was on the front of the box, and unusually the comb was inserted vertically beneath the star wheels. Like the Orphenion it too had the scoop-like projections on the discs, which Rückert spent so long devising. Its tone and range was surprising for such a basic machine. The Lyraphon was a modest instrument in all respects, and especially in its manufacturing run. Very few were made, and even less are known to survive. In 1980 Ord-Hume knew that there were only two instruments in existence, playing 6½ inch discs on 33 teeth and 41 teeth respectively. Twenty years later, in the fabulous interactive CD-ROM 'Lexikon Muisautomaten', we now know that another two 6½ inch, 41 teeth machines survive. Even so four instruments are not many, and the Lyraphon remains one of those items which is incredibly rare.

At the same time that the Lyraphon was being produced, Rückert was working on another machine called the Ariophon. This was produced by the Plagwitzer Musikwerke Ariophon Company, by R. M. Porter in Leipzig's Plagwitz district from 1891. The Ariophon, sometimes known as the Hymnophon, was an unusual disc instrument which used bands to turn star wheels. It was developed by W. A. Siefert and Rückert using the previous research of J. L. Muller, Pollnitz and Baucer. It was not a production item, rather just an assembly of parts bought from other makers which they assembled, the combs being produced by Mermod Freres. The operation of the star wheels, was through their engagement with cardboard rolls, and after 1895 with zinc bands. Projections used on the steel bands are similar to those used

Its tone and range was surprising for such a basic machine.



Fig. 2. An 8 1/4" Orphenion disc musical box with single comb movement in a walnut case.

on Orphenion discs, which makes me suspect that this is what Rückert was referring to in his British patent of 1893. At the moment only four sizes are known to have been made, and these are those with 42, 56, 72 and 104 teeth, yet no examples survive. The Ariophon was last advertised in 1897, allowing it approximately six years of production. Perhaps it is this machine that was the longest manufactured of any of Bruno Rückert's inventions.

After the Lyraphon, Rückert decided to move onto a bigger and more ambitious machine: the Orphenion. On the 6th May 1893 Rückert was granted a patent for 'Improvements relating to Note Plates or Music Sheets for Mechanical Musical Instruments' by the British Patent Office. In the same year the machine went into production. To cover this venture Rückert founded a new company the *Fabrik Mechanische Musikwerke Orphenion* in his old lumber yard at 5/7 Sedanstrasse, Leipzig. The patent included within it the scoop like projection. However it is plain enough for me to say here that Rückert did not intend his instruments just to have combs, there is even a reference to a reed instrument.

There was a range of models in different sizes and formats produced by the Orphenion company. These included table and upright versions, and there was

even a musical long case clock produced. There is one example of this at Utrecht, which uses 16 3/4 inch discs and is coin-operated. The sale of all instruments were handled through Rückert himself in Leipzig and also Katzenstein & Chun in Berlin. Such was the unusually high quality of the box, that there was a rush to purchase the instruments. Yet this stampede lasted a short time, as they soon reached their market saturation. Only discerning buyers, who had musical taste and a lot of money would buy the Orphenion. Unfortunately there were very few people who fitted the bill, and the business soon became unviable.

Throughout this period Rückert continued to make cabinets for the major producers, and this became the major aspect of his business once again. The production of Orphenion boxes only continued because it was heavily subsidised by Rückert's cabinet making. However Polyphon and Symphonion began to add a cabinet making aspect to their businesses to increase their independence. With this central source of income cut off, Rückert and the Orphenion company teetered on the edge of financial crisis.

There are many similarities between the Orphenion and the Alder machines, both being high quality instruments, and late arrivers on the musical box scene (the Adler went into production only in 1896). The Adler Company was begun by Ernst Malke and F. H. Oberlander, and it was soon acquired when it went bust by the mechanical music entrepreneur Jukes Heminem Zimmerman. Under his guidance, the Alder was slowly replaced by its cousin the Fortuna box. These instruments were high in musical quality, and suffered like Orphenion because of this. So even though they were brilliant machines, very few were bought and as such they are extremely rare. Yet fate struck again when in 1900 Fortuna too went into receivership, but Zimmerman's parent company survived. The exclusive sale of all stock, which consisted of a

large number of Orphenion boxes went to the Association of German Wholesalers of Musical Products for disposal.

This extravaganza sale was contracted to Ludwig Hupfield, who widely advertised the bankrupt stock at heavily discounted prices. However Zimmerman survived the end of the Fortuna, and his piano business bought up that of Hupfield. To this day Zimmerman pianos are still manufactured and have enjoyed many years of production. Not so for the Orphenion disc instruments. By 1900 Orphenion boxes had ceased to be produced, and all had to be sold. For only four years the Orphenion was made, and in that time it became one of the best constructed machines. So why did it not survive?

The reasons for this were actually in the instrument's design. In a time of rousing music in boudoirs and the like, the Orphenion was just too musical. There are contemporary reports of it being 'too soft' and when compared to the giants in the disc musical box industry, Symphonion and Polyphon, this does seem to be the case. Even the Orphenion discs are not without fault, as the dimple projections are a downside. In storage it is easy for them to be flattened, and once done either the note does not play or the cup is wrenched off by the star wheel. Finally the whole superiority of the instrument was its biggest problem. It was just too well made, too musically advanced, too expensive. It was just too good. When a man can buy another instrument cheaper, then he will. So Orphenion lost out to the mass producing makers, and was one of the first to be hit by the advances made in sound reproduction. The Orphenion was the David taking on not one Goliath, but three: Polyphon, Symphonion and Regina, and although it had panache, in the corporate world it was crushed to death. The Orphenion became prematurely extinct because it was too good. ■

Case Restoration

by Anthony Bulleid

This feature on case restoration is the first in what we hope will be a regular part of future issues of The Music Box. In the early days of our magazine there were frequent articles on many aspects of restoration of mechanical music. We intend to repeat some of these plus new material from our present membership. If you feel that you could pass on something which would be helpful to other members why not consider writing about it? It could be some simple hint or tip about how to tackle a single problem, something that you have discovered to help in restoration, or a more detailed explanation of a special task. All contributions will be welcomed - preferably with a picture or two. Alternatively, if you have a problem seeking an answer, tell us about it - we may be able to help. In this first article Anthony Bulleid deals with a subject that is sometimes neglected. **Editor**

Ideally, antique woodwork should look as if it had been properly cared for since new. It should have suffered neither undue neglect nor any latter-day restoration treatments. But it can of course enjoy any appropriate running repairs.

All this is encouraging for amateur work on musical box cases when done by a caring owner. It usually looks more appropriate than the show-room finish from a complete professional restoration, which is only necessary when the case is almost beyond redemption.

I think the successful outcome of a typical amateur restoration is well illustrated by the case shown in Fig. 1. The objectives are cleaning, minor repairs, and re-polishing. The essential steps are...

(1) Remove lid hinges and fix the screws in a piece of card marked with their positions - because over the years some may have been

replaced with different sizes. But first check whether the peg on the striker plate enters the hole in the lock. Probably it needs moving about 2mm outwards because the lid has shrunk. If so, take off the striker plate and place it with peg in lock hole and a drawing pin in each outer screw hole. Shut the lid so it picks up the striker plate, and then mark its correct position on the lid. Then very carefully cut out the marked area as deep as the thickness of the striker plate, which is usually about the thickness of the veneer. Block the old screw holes and mark the new screw positions. Finally make a new strip to fill the gap now exposed below the striker plate. *

(2) Remove the glass lid and take off the hinges, marking hinge positions and all screws. This can be an exasperating job, and it is worth improving the saw slots in the screws to help re-fitting. This is best done with a fine-toothed 6-inch hacksaw blade whose teeth have been ground each side to reduce the splay, until their cutting width is reduced to about 0.16".* To avoid damaging the slots in screw heads, the screwdriver blade must be a close fit and of equal length. So several screwdrivers are needed, including some with thin blades because the old smaller screws often have very narrow slots, - down to about 0.16" on some 3/8" hinge screws.

All this dismantling involves removing at least 20 wood screws. Many have suffered damp for years and one or two may break during unscrewing, leaving a buried fragment. This has to be extracted because it is directly in the way of its replacement. So, drill a close ring of 1mm holes around it, as deep as the screw length. Lever out the remnants of screw and wood. Drill new hole large enough to clear the cavity, about 1/4" or 6mm. diameter. Plug

with dowel wood coated with wood adhesive. Clean up level and mark and drill pilot hole for new screw.*

(3) Remove the case partitions. If they are not a snug sliding fit in their slots, this is the time to correct them.

(4) Detach the podium from the case body. It is usually fixed by four large countersunk screws - worth a drop of penetrating oil or white spirit around their heads to assist what is probably their first move for a century. Their feet need not be detached unless loose or badly damaged.

Then all need cleaning. External surfaces have probably been waxed and therefore need a good rub from a cloth dampened with white spirit and used until no more dirt shows up. Internal surfaces probably still have their original french polish finish. They are best cleaned with a cloth dampened with a 50/50 mixture of water and methylated spirit. That will remove dirt and traces of the original black french polish, and it will make the surfaces ready to be re-coated.

Black french polish comes in 250ml bottles from Mylands, of 80 High Street, Norwood, tel. 080 8670 9161. It cannot be sent through the post, but a local Builders Merchant who has an account with Mylands will deliver it free while on his rounds. It has a long shelf life if kept sealed; so shake well and decant some into a small, sealable bottle or jar for day-to-day use. It is very quick drying and should not be used when the room temperature is below 60° F or, for that matter, 16° C.

The polish can be applied by brush, which is ideal for touching-up and for inside corners but is not good for surfaces where it results in too

thick a coat. It must be applied by a "rubber," which simply consists of a plum-sized piece of cotton wool held in the centre of a fine cotton cloth about 5" (12cm) square. Pour just enough polish on the cotton wool to dampen it then gather the corners of the cloth together and squeeze gently till the polish exudes. Practise on clean wood or card till you can confidently apply a neat line of thin polish, without dripping over at the ends. It takes less polish on the cotton wool than at first seems necessary. A coat of polish so applied dries within an hour, but it is safer to wait till the next day before applying a second coat.*

Start work on the podium. Fill any worm holes or deep cuts and when set, level with 150 or 200 grit glass paper. Apply the polish by brush as sparingly as possible to all repairs and any bare patches. When dry remove any irregularities with 200 grit paper,

Then charge the "rubber" and apply steadily along the top, then the concave section, then the lower part and feet. I find it easiest to

start just beyond the ends for the front and back, and do the two ends separately. Immediately after use place the rubber in a jam jar which has an airtight lid. It can then be used again any time simply by adding more polish to the cotton wool. The podium should look OK after two coats. In case of any accident, level off with 200 grit paper and apply another coat.

The same procedure applies to all the black surfaces. If the control levers have escutcheons they must be removed and cleaned. Touching up of minor blemishes will include a brushed line along the joint of the control platform and its partition and all along the internal corners of the case including the front and back spacers. An extra final coat along these spacers and the tops of the partitions is worthwhile.

The last jobs are the lid top and case sides. These are veneered in burr walnut, including the four chamfered corners, each with a piece 5½" long by ¾" wide (14 by 2cm). Two of these and the panel between were badly faded (presumably from years in a sunny bay window) so restoring them

involved removing the wax coat then the old french polish, and then about 2 thous (0.05mm) of faded veneer. This is done with a mix of scraping and 100 grit paper, finishing with 200 grit or flour paper.

The 100 grit paper must always be wrapped tightly around a flat-faced block. That ensures equal removal from the whole surface, and prevents thinning at the edges. When scraping it is necessary to use a flat sheet steel scraper or the larger blade of a penknife.

Both need continual sharpening, and this is best learned from an expert.*

Boxes like that in Fig. 1 present the added difficulty of black ebonized surrounds to the panels of burr walnut. In other words, cheap black inlay surrounding expensive panels. Strictly, the whole surface should be cleaned off if faded or badly scratched, but it may be adequate to follow what a previous restorer had done... simply improve the burr walnut panels and apply black french polish to the surrounds. This needs care and patience in stripping up to the panel edge, but applying the black polish along an accurate line is easy, with practice.

Finally, finish off the burr walnut panels with three coats of clear french polish and add a coat of black to any deprived black surfaces. If you have cared for the screws, the entire reassembly is straightforward and very satisfying.

Items marked with an asterisk () become far easier after a bit of guidance from someone who has already successfully done the same work. Several members offer this sort of help and contact can be arranged by Ted Brown. So, write to him or ring him if you could do with some help. Sometimes he runs "Workshops" at the Bucks Green Museum where such jobs are demonstrated - and questions answered. Also, the Editor would welcome notes, however brief, from members who can offer practical advice and tips giving more detail about these tricky jobs. ■*

Practise on clean wood or card till you can confidently apply a neat line of thin polish, without dripping over at the ends.



The 27½ by 12½ inch (70 by 32cm) case of Rivenc serial 24859, with domed lid, podium, large feet and veneered all round including the chamfered corners. Photo thanks to Sotheby's.

Restoring a Hicks Barrel Piano

by Robert Ducat-Brown

During the lunch break at the last MBSGB Annual General Meeting there was a chance to view the lots for the afternoon's Society auction. One item stood somewhat taller than the others, and although I did not know what it was at the time I was soon to learn that it was a Hicks barrel piano. Whilst I was walking over to have a look at it I heard someone say "that will go for a high price and the other one will go quite cheaply". I turned round and saw another one a few yards away which although the same basic shape, it was somewhat dilapidated and had very little resemblance to the first one.

I went and studied the smarter of the two examples. Yes I could see it would make a good price, it had been immaculately restored, sounded very nice and would look wonderful in any collection of mechanical music. However if it was going to fetch a high price it was not for me.

I worked my way round to the second example. Oh dear! It did look in a sorry state there were bits broken and parts falling off all over the place. Inside were a few rusty strings. Although I like a challenge it did not look like one that I could undertake.

During the next hour I was drawn back to Hicks number two several times. It certainly looked interesting, but it was not an instrument that I knew anything about, so I would not know where to start on a restoration job. On one of my visits to look at it I spoke to a gentleman who turned out to be the vendor. He assured me that all the working parts were there, even more importantly the scale was marked on the frame, this was very important as it has a non chromatic scale. This I found very encouraging because it's very difficult to replace a part when you have no idea what it looks like and possibly what it's meant to do.

Another encouraging thing was that Hicks number one showed me what one should look like, and what I might be able to achieve if I was to buy Hicks number two.

Needless to say that as we drove home along the A14 and A1 we had our new friend Hicks number two in the boot.

A day or two later I had time to really study my purchase. The instrument stands 38 inches high, 16

inches wide and 14 inches deep. Once on the bench I started to remove any parts that looked as if they should come off. I also took a few photographs so that I would know where they came from and the general layout of it. There are 22 notes and two bells. The case was rosewood veneer with many pieces broken out. The veneer on the back was about one third missing and the rest peeling off. The top lid, the front



Fig. 1. Before restoration.

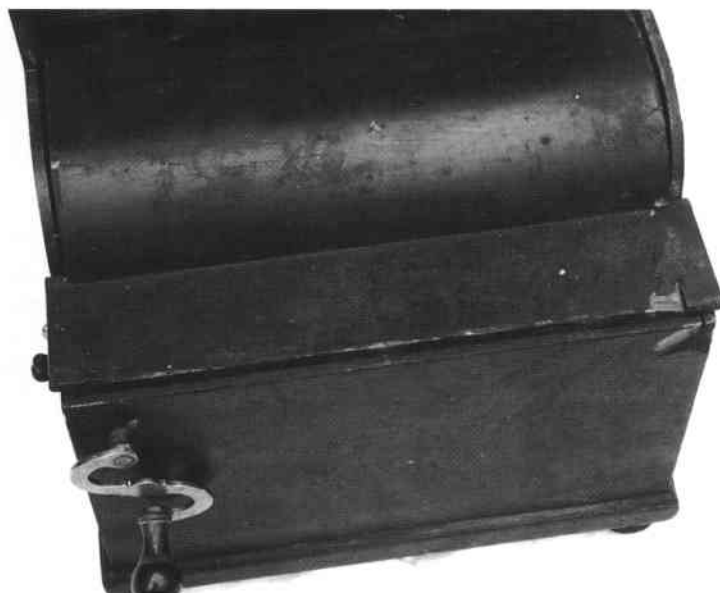


Fig. 2. Close up of the extent of the damage.

door and the curved lid over the barrel were badly broken and would require major restoration work.

I decided to remove all the veneer from the back and replace it, this would give me a good supply of matching veneer to replace all the missing bits on the front and sides. Before starting on any work I removed all the old polish with "Nitromores" and gave the whole thing a coat of woodworm treatment as there were quite a few flight holes left by past inhabitants, some of whom might still be resident.

I spent many days cutting out small pieces of veneer, placing them over the damaged areas and then cutting through both layers, removing the odd bits from the hole and gluing the new piece in the gap using hot animal glue. The holes which I needed to fill varied from small splinters to areas of about 2x2 inches.

The top lid required a new front moulding. To produce this I decided to use an old-fashioned scratch block, this is a piece of hard wood about 9 inches long which holds a shaped metal cutter in a slot, and a wooden guide to keep it going straight. The edge of the cutter is scraped along the wood transferring it's shape to the wood, it is quite a slow process but in the end will faithfully reproduce the shape of any moulding. I make my metal cutters from thin steel which is hard enough to cut into the wood, but soft enough to file to shape using the any remaining moulding as a pattern.

This is how things were done before the days of the electric router!

The front door which holds the silk facade was badly damaged, the lip which stops the silk panel falling out had broken away so I decided to cut a rebate into the front of the door and make a new lip. This part is not veneered, but by using mahogany and various stains it matched very well.

The two columns required new bases and capitals which were easy to make as they were just wooden rectangles, however there were broken mouldings on the half round parts of the columns which presented more of a problem. I took drastic action and cut right through the column removing the old mouldings, I then turned new ones on the lathe cut them in half and glued them into place. Fortunately the half round columns were screwed on from the back of the door which made the job relatively easy to carry out.

A job which had been on my mind as to how it should be dealt with was the lid above the barrel. As can be seen in the photograph this has a convex surface at the top levelling to a flat at the bottom. Both curved sides and front had gone, just a small part of one of the flat sides remained. The whole top of this lid was covered with very nice figured rosewood veneer, but all the edges were now broken away. Whatever I did would have to change to plain veneer at the edges, although not perfect, I thought it would look acceptable to all but the most exacting purists.

I decided to cut out two solid shaped pieces of wood for the curved sides, I had to offer them up to the lid many times removing a little wood each time until they were a perfect fit allowing just sufficient depth for the replacement veneer. The veneer which I had saved from the back of the piano was quite thick and would not hold in place while the glue set. All veneering so far had been done by hammer veneering. This is done by using hot animal glue, placing the veneer in position and squeezing out the excess glue with a special hammer, (this does not look like a hammer at all, but more like a scraper).

What I needed to do was use another method called caul veneering. This requires a perfectly shaped former which is warmed and clamped into position, holding the veneer in place until the glue has set. Without a great deal of work I could not see how I could get this perfectly shaped piece of wood (or caul). I then remembered the offcuts from cutting out my lid ends, with just a little extra shaping and a few clamps they worked very well.

Before french polishing there was quite a lot of small hole and crack filling to be done. I found the best answer for this to be 'Liberon' shellac filler sticks. As shellac is the main base for French polish, there is no problem at all in polishing over it. It is supplied in a tin of ten different coloured sticks which can be mixed when melted to give any required colour I found the best way to use it was as described by the manufacturer "Heat the Shellac Filler stick over the damaged area using either a hot putty knife or a low wattage soldering iron.

Drip in the shellac until the damaged area has been filled completely and the shellac is standing proud of the surface. Allow to harden thoroughly before removing excess shellac with a Liberon scraper or fine abrasive paper". I used a very small flat carving chisel to pare it down to the required level.

French polishing went very well and by the time I had finished it was hard to find most of the repairs to the veneer. I used mahogany veneer for the back, but with the help of rosewood stain it's hard to notice that it's not the real thing.

Before french polishing there was quite a lot of small hole and crack filling to be done.

It was now time to start on the works. There were small pieces of string wire on most tuning pins, so I was able to measure all the required sizes and purchase them from a piano supplies company without any problem. I removed the rust from the tuning pins and fitted the new strings quite easily. I made a little tool which is described in 'Piano Servicing Tuning & Rebuilding' by Arthur Reblitz. This makes putting the first few turns of wire round the tuning pins extremely easy, even with the thickest gauge wire.

There was not much other work to be done internally, just a good clean up removing rust and dust. Two hammer springs needed repairing, which was fairly simple as they had broken near to one end, so I was able to bend them into new little loops, and hook them back to where they came from. I replaced the leather on the hammers and just bent the wire shanks a little until they all hit the strings evenly.

One thing had been worrying me since I first looked at the Hicks, that was that the barrel was no longer round. It was in fact oval by almost an eighth of an inch. I tried to see if I could pull it into the ends which were still round, but although I used quite a lot of tension on a tourniquet, it would not come in as the wood had expanded, and there were no gaps to actually close up. I decided that I would have to stabilise the barrel before it got any worse. To do this I strapped it up as much as possible with my tourniquet and filled in the gaps with several layers of veneer off cuts and hot glue which made quite a solid job of it.

The problem now was that my oval barrel played one half of the tunes loudly and the other half as it should be. The only answer was to knock the pins in on the fat side to match the other. Some pins would need to be knocked in more than others as you went round the barrel, so I came up with the following system. The barrel was set up by its spindle in the lathe. A flat piece of steel about 1" long was put in the tool rest and set at the correct depth of the pins i.e. those on the flat side which did not need knocking in. I wrapped a piece of thin wire round the barrel with a weight hanging down the front of the barrel, this made the barrel

want to turn round towards me. As the barrel turned I tapped in the pins With a special flat punch which had a safety stop, so as not to push the pins in too far. This rested against my piece of steel. Once those pins were in to the right depth the barrel turned a little on it's own presenting the next few pins to be tapped in. At the end of the exercise all the pins were the same distance from the centre of the barrel. This job was done very quickly, in fact it took me far longer to set the whole thing up.

Well now my Hicks played its eight tunes very nicely although my tuning left quite a lot to be desired. I was later helped with this by a well

known member who's very good at such tasks. I was able to study Hicks number one at the kind invitation of its new owner. This was a great help especially with the stringing and how the restorer of his Hicks had done the silk facade. My grateful thanks to these two members. ■

Perhaps Bob's efforts will encourage others to tackle those items which at first sight seem a lost cause. Even the most unhappy-looking instrument can often be brought back to life with the application of time and loving care.

Editor



Fig. 3. The restored instrument.

The problem now was that my oval barrel played one half of the tunes loudly and the other half as it should be.

More Musings about Musical Mugs

Part 3 - by Paul Bellamy

This third article on mechanical musical novelties of the mid-1900's covers some of the less well-known makers and some unknown ones. It starts with a brief resume of the pit-falls of ceramic restoration and finishes with a summary of repair techniques. The next article will deal with the different types and makes of movements fitted to the previously mentioned novelty pots. A final article, to complete the series, will deal with repair, restoration and reconstruction of the small movements.

Restoration:

Most repairs can be detected by the difference in temperature between the colder pottery and the warmer resin coating of the repaired area. One's tongue or lips are good sensors, but do let the vendor know that you are not about to eat his pot! At this point, I shall distance myself entirely from the consequences of any altercation between you, as the prospective purchaser and the irate vendor. A scratch test is another way, i.e. it is not easy to scratch the original glaze, the repair having a much softer surface. Two further points to note are that UV light will show up repairs and the glaze may show signs of fine abrasion, spray marks, tiny particles (fibres) trapped in the glaze, or slightly 'orange peel' effect. Small hand held UV lights can be bought very cheaply. They are also very useful to view your magic marker with which, of course, you mark the insides and outsides of all your valuable pots. (Just the same as you mark all the music boxes that you have registered with the Music Box Register!). Repairs to a crazed pot are easy to detect, as the repair will be uncrazed. Broken handles and missing bits to moulded handles are less easy to detect. A magnifying glass is useful. Whether on the body or handle, look for differences in



Fig. 23. A Waltzing Matilda jug of uncertain make.

the colour of paint, poor quality touch up (particularly to printed words), cracks in the foot rim (particularly around the lugholes), fine hairline cracks which can spread from severe crazing into the body and base, discolouration to the body where water may have seeped through the glaze (particularly inside pots and under the lip of jugs).

Other makes of Musical Ceramic Novelties:

There is, at the moment, little to say about the makers of other pottery musical novelties. There are always surprises such as the rather garish pot shown in Fig. 23. It represents Waltzing Matilda and has this tune fitted with a 22-note Reuge movement with cast iron base. This puts it in the 1940's to 1950's. It has no markings except L853 painted on the underside of the base. It is said to be made in Australia by a firm called Diana which existed, apparently and not surprisingly, only for a short term.

Another rather crude Waltzing Matilda mug by an unknown maker is shown on the right of fig. 24. The only identification is an impressed

mark S21 on the underside of its base. It seems to be of the same vintage but with a Thorens 22-note movement with cast alloy base and spring case.

J. Shaw and Sons Ltd, England, was another minor maker. They produced Burlington Ware. Fig. 25 shows the back stamp. The range of Burlington musical products is not known. Fig. 26 shows a Long John Silver 'Toby' jug. This one was produced in several colours but the one with the green coat is, I think, particularly attractive. Like most of these later models, probably 1950's to early 1960's, the movements are poor. This one was fitted with an 18-note Thorens movement and small diameter cylinder playing another drinking song. I had no hesitation in removing it. He now plays The Sailors Hornpipe on a scratch-built 30-note movement in the pattern of the earlier cast iron based Thorens and Reuge models. The figure shows him alongside a Crown Devon 'Toby' jug. Together they make a fine pair.

Lancaster Sandland Ware produced at least one musical novelty shown on the left of Fig. 24 of a cream jug depicting 'Old Uncle



Fig. 24. Another Waltzing Matilda mug of unknown make, (right). A Widdecombe Fair jug by Lancaster pottery.

Tom Cobleigh'. Fig. 27 shows the back stamp on the inside base of the pot. The movement is again late, being a small diameter cylinder 18 note Thorens movement.

And finally, there is Wade Heath (Fig 28). They made a few models. This one is on the Disney theme of the Sleeping Princess. The tune is a late 18-note Thorens 'Invicta' movement with a cylinder playing 'Someday My Prince Will Come.'

Sadly, all those early makers with the exception of Reuge, never survived. The movements became smaller and smaller, ranging from the fat $\frac{7}{8}$ " diameter 30 note variety and ending up with 18 note ones. The pots lasted from the beginning of the 1930's until about 1965. Little attention has been paid to them with the exception of the reference works on Fieldings. Little or nothing has been recorded, to the best of my knowledge, on the movements used in the pots and their makers.

Today's trinkets become tomorrows treasures, as has been proven with the Fielding's musical novelties. I have attempted to fill in some of the gaps and hope others will continue to record as much as possible for posterity. The cheaper items of these delightful little objects are an ideal start for a collection. The rare ones will enhance anyone's collection. Part 3 will attempt to collate information on the movements used by the various musical pot makers throughout the mid 1900's.

Repairs:

A movement may be missing altogether from a pot for one of three reasons:

1. Loss
2. Never fitted in the first place
3. Robbed from a less valuable pot and fitted to enhance the value of another.

I have fitted out several pots with missing movements. I see no harm in making a non-musical pot into a musical one, provided it is done as sensitively and authentically as possible and is not intended to defraud. A good restoration should be virtually, undetectable from a pot with an original movement. That is why I



Fig. 25. Burlington Ware stamp, which reads: Burlington Ware, J. Shaw and Sons LTD, England.

make a record of movements that are almost certainly original to their pots.

Parts are getting difficult to find. The best way is to find the right vintage movement from another novelty such as a wooden cigarette box. In this way, I was able to restore a Daisy Bell Crown Devon cigarette box (called candy boxes by some of our transatlantic friends - a much better name) by fitting an extended drive shaft to the movement. The extension carries a crank that, as the shaft rotates, moves a lever to open and close the drawer of the box. On two occasions I have been lucky enough to get the right type of movement and with a comb having the right number of teeth but the wrong tune i.e. not even related to the tunes found in the pots. There is a way to copy the pin pattern of the correct tune from an existing pot. Using this template, a dimensionally

Today's trinkets
become
tomorrow's
treasures,...



Fig. 26 A Burlington Ware Long John Silver (right) compared with earlier Fielding's Toby, (left).

correct new cylinder can be made, drilled and pinned from brass shim stock. The cylinder of the replacement movement is then removed from its shaft and the new cylinder fitted. Finally, the comb has to be re-tuned to the scale of the original. As you can imagine, this is more of a labour of love as the process is time consuming, let alone having the luck to find parts.

In this way, after some trial and error, I was able to refit two empty Carlton Ware and one empty Winton pot in a similar manner. On one occasion I did not have access to the tune of an original movement and so wrote my own arrangement. This is a bit cheeky but the results were passable. Since then, at least three pots have come to life and are quite unique since they do what they did not do before - they play! This is what makes a hobby so satisfying. But more of this in a separate article.

The main method to restore and repair movements is to 'hybridise' bits from Reuge, Thorens and other movements. I think this is legitimate restoration provided it is not done to defraud. The main point is that screw holes and key wind holes of the spring housings may have to be adjusted to make one fit the other.

Similarly with the governors. A governor can easily be made to fit by adjusting the holes that fasten it to the base plate. However, the governors come in two basic sizes dependent on the diameter of the Great Wheel and they are not readily interchangeable. Combs of different makers with similar numbers of teeth have similar dimensions but with holes in different places. Some older combs have a separate base plate soldered to it. Later combs do not require this plate because the base of the movement has an integral raised comb platform. Comb holes can be enlarged with a good file but then sometimes need a washer under the head of the fixing screw. An alternative is to blank the original base plate holes and fit the replacement comb with new bolts. Each comb for a particular melody is uniquely tuned to its cylinder so there will be obvious signs of re-tuning. The different makers had

Despite all these anomalies, most of the parts can be adapted in some way from one type and make to another.



Fig. 27. Lancaster Sandland Ware back stamp.



Fig. 28. A Wade Heath Snow White jug with late 18-note Lador movement.

different arrangements for the same tune. Even for the same maker, cylinders may vary in diameter for the same melody and might not suit the comb even if both have the same number of teeth. Despite all these anomalies, most of the parts can be adapted in some way from one type and make to another.

The earlier cast iron type base plates used for both Thorens and Reuge pre-WWII movements look similar but are in fact different in shape. The principal dimensions will

be the same. Thus holes can be blanked and new ones drilled and tapped to fit a replacement spring housing, governor or comb. Most other makers also adopted similar prime dimensions and the parts may be substituted with minor modifications. Once one has become acquainted with these differences (and always look at the movement before buying), you won't be disappointed after purchase or with your restoration. The above details will be covered in much more detail in Part 4. ■

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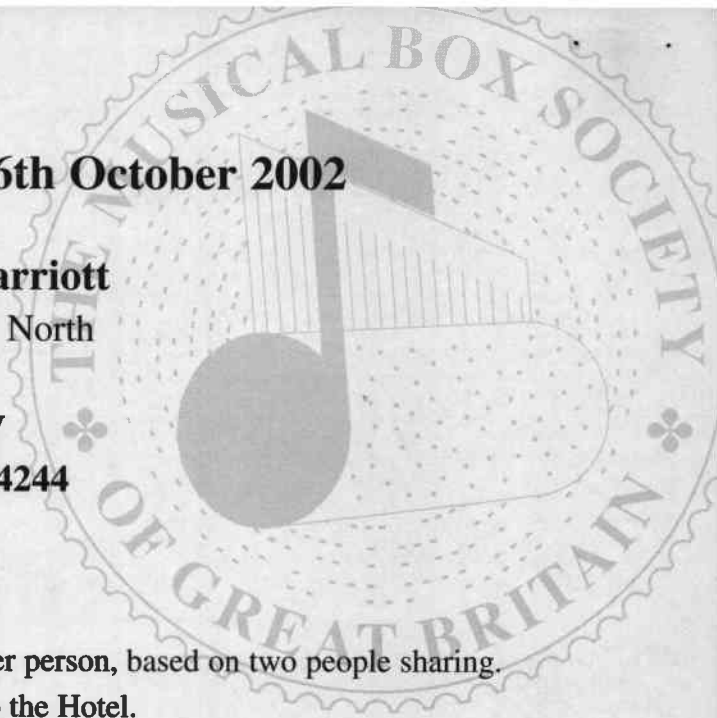
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Hydraulis

- An Ancient Greek Organ for the New Millennium

by Paul Bellamy



Fig. 1. The hydraulis of Dion placed on a modern base.

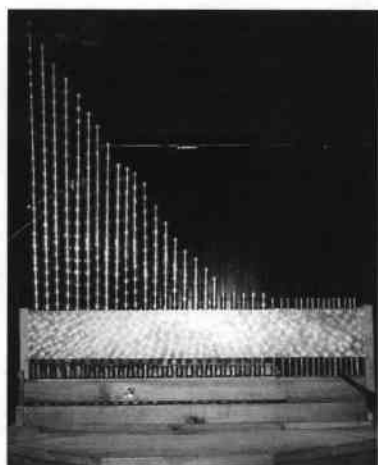


Fig. 2. The reconstructed hydraulis. (Front view).

A call from editor Alan Pratt: "Did you see the article in the Times about the Hydraulis?" "Well, no! What is it?" And so he explained how, through Talya Dalberg of the Times, he had made contact with Dr. Victoria Solomonidis, the cultural Counsellor and UK representative of the Hellenic Foundation for Culture, at the Greek Embassy. "Will you go and find out more about it?" Thus it was that, on the hottest day of the year, the delegated volunteer found himself at that architectural monstrosity of a concrete car park called the Queen Elizabeth Hall on the south bank of the Thames, adjacent to Waterloo Bridge. But within its portals was a replica of the oldest known keyed organ, the forerunner of all those that followed, including our own beloved mechanical ones, (Fig. 1).

Professor Demetrios Pandermalis, Director of archaeological excavations for the Aristotle University at Dion, in Pereria, Macedonia, was responsible for the Dion excavations in which he unearthed the remnants of an ancient organ. The city of Dion was named after Dios, the genitive name for Zeus, the most important god worshipped in that city. Dr. Vassilis Karasmanis, an engineer and philosopher, specialising in the philosophy of technology, was responsible for its re-construction, (Fig. 2). Panos Vlagopoulos, another member of the Hydraulis team, is a musicologist and researched the way in which the instrument may have been tuned and played. Finally and not least, George Parashos, a musician and

expert in the manufacture of wind instruments, was responsible for the mechanical aspect of the instrument, which was constructed, entirely in his workshop. Fig. 3 shows the keyboard.

The hydraulis was discovered in 1992. Dion is an ancient site in Pereria, Macedonia. The organ probably dates from the 1st. century B.C. and is the oldest surviving instrument of its kind. It took five years before this unique find could be translated into a working replica. The instrument consists of one rank of 24 organ pipes, the smallest of which are all the same length. Another 15 pipes may have been involved in a manner not yet determined, (Fig. 2). The extraordinary thing about this instrument is that the pipes are recognisable as direct forebears of the modern metal organ pipes, (Fig. 4). Each comprises a thin sectioned, narrow bore, open flute-type pipe practically identical with a modern metal pipe, complete with tuning ears on either side of the cut-up, (Fig. 5).

The rank is ranged with bass at the right hand side of a keyboard and treble at the left, the obverse of modern practice. The first 19 pipes, as scaled from right to left, are known, from the archaeological evidence, to be chromatic. It would appear that they equated very closely to our modern Tonic Sol-fa chromatic scale with octave intervals, probably close to equal temperament.

The remaining 5-keyed pipes are diatonic and appear to be at intervals of fifths.

Both professors were reluctant to speculate about the way in which the instrument may have

The organ probably dates from the 1st. century B.C. and is the oldest surviving instrument of its kind.

Hydraulis – An Ancient Greek Organ for the New Millennium

been played. For example, were chords used? What about modulation from one key to another? Could it have been used to produce a drone effect similar to the bagpipes? And why were the diatonic pipes tuned to fifth intervals? Also, there were some seventeen further pipes seemingly unconnected with the keyboard. One thought was that they produced a polyphonic effect. Were they open or closed and could they have been cross-blown like a Panpipe? Certainly, they were capable of being tuned by means of a plunger-type stop in the manner of the German flute.

The Hydraulis was invented by the Greek engineer Ctesibius, working in Alexandria in the third century BC. Each pipe was aligned on a support plate directly over its keyed pallet. Each pipe is a composite of a series of small sections of copper/zinc material connected by collars of silver. The more sections, the longer the pipe. The exact composition has been analysed but the original composition may not have been quite the same as the modern metallurgical analysis indicates since some of the material may have been lost. A small percentage of about ½% lead is also present.

Ctesibius must have been an extraordinary man of his time. Not only did he appreciate scalar notation as we know it today, his engineering knowledge resulted in an instrument with controlled air flow via a lever action air pump feeding a water-compressed air vessel, or accumulator, delivering air via pallet-type valves actuated through simple links and levers from a keyboard, (Fig. 6). The air vessel is simply an inverted dome immersed in a cylindrical vessel filled with water. The air pump causes water to be displaced and thus provides the pressure-head of water that drives air to the pipes. When played, the person actuating the pump balances the demand for air with the head of water, thereby maintaining a constant flow of air. Notwithstanding this remarkable innovation of its time, the keyboard mechanism is a clear forerunner of all instrumental keyboards. Each key has to be



Fig. 3. The reconstructed hydraulis. (Showing Keyboard and right to left ascending scale arrangement).

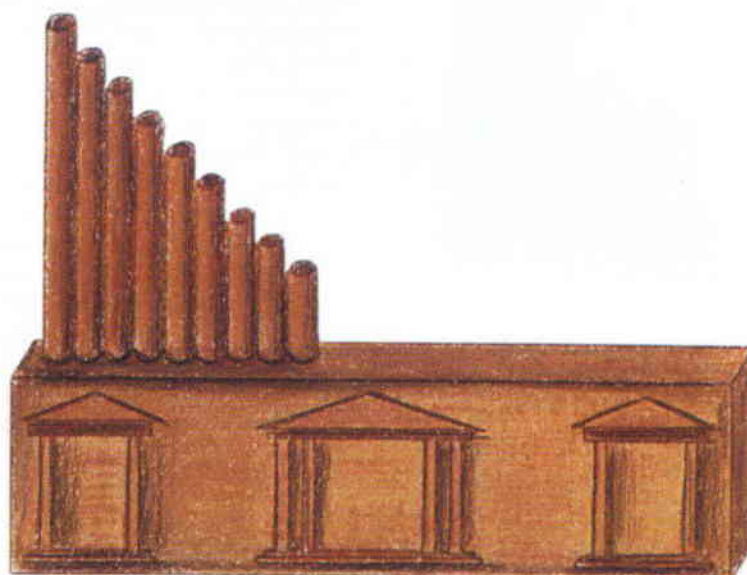


Fig.4. View of the remnants of the pipes.



Fig. 5. A replicated pipe. It is directly comparable with a modern pipe, including tuning ears.

depressed quite a long way compared with its modern counterpart. Thus it is assumed that the instrument could not be played quickly.

The organ was designed to be transportable. It was loud compared to mouth operated wind instruments. Fig. 6 shows the lever action air pump that is external

to the cabinet containing the hydraulics a slightly different arrangement to that described by Hero. Whilst later versions of the Hydraulis used bellows, the Ctesibius design had the advantage of being lighter, there being no counter-weights and springs. Without water, it could be transported quite easily, the water being added when it arrived at its destination. Water was also an effective air seal but acted as a blow-off valve in the event of too much air being pumped into the inverted air vessel.

The hydraulis was a product of an advanced urban lifestyle of the ancient metropolis of Alexandria. The powerful and attractive sound of the instrument made it very popular for use in temples, theatres, hippodromes and the Roman Imperial Court. Yes, the site at Dion spans both the Greek and later Roman periods. The impact of the hydraulis was known to be a sensation of its day. Throughout the following centuries there is clear evidence that the fundamentals of this instrument continued to be refined, its modern direct descendant being the organs of today.

The hydraulic technology was applied in numerous other ways, being comparable to the inventions of Archimedes. Eventually the early form of hydraulis was abandoned but its image was retained as a state emblem. In 757, Constantine V gave an advanced form of the instrument, using windbags, to a Frankish ruler. 816 saw the construction of the first western organ of its kind in Aachen, Germany, at the court of Louis the Pious. In Byzantium, the instrument remained the privilege of the Emperor. It is last mentioned in 1449.

Seeing the organist playing the instrument, (Fig. 7), it looked so modern. With human fingers slowly depressing a row of wooden keys one could envisage another Ctesibius thinking: 'By placing a wooden drum in front of the keyboard, turning slowly and with pegs placed correctly on its surface, I wonder if...?'

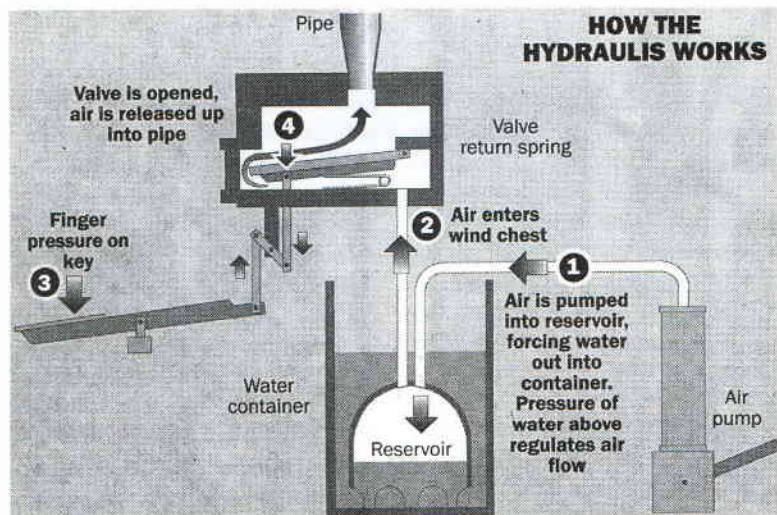


Fig. 6: An hydraulis mechanism of pump, inverted air dome within a cylindrical vessel and keyboard. As described by Hero of Alexandria.



Fig. 7. The hydraulis about to be played. Note the external lever action air pump.

From My Collection

A Beginner's Tale (Three Decades On)

by Peter Schwartz (New Zealand)

As an academic who will be retiring within the next few years, I find that my past offers more scope for pondering than my probable future (at least in terms of time!). I joined the Society nearly 35 years ago while living in Australia and even managed to attend one meeting (in 1978, when I was on sabbatical leave), but this is the first time I have ventured to write something for the journal. Not being an expert or a musical box craftsman, I have felt that I couldn't offer much. As I reflected on my history as a collector, however, I realized that readers of *The Music Box* might be interested (or at least amused) to learn of some of my experiences when I was a novice, in the early, active phase of collecting. I haven't bought any musical boxes in over 20 years and now have a small collection of only six items, so this really is a tale of the good (?) or bad (?) old days and some musical boxes I either never got or no longer have (except for the last one I'll write about).

...Orpheus disc-playing piano that had been mouldering in a shed (and dubbed 'the rat trap' by my wife),...

The musical box bug first bit me in the mid 1960s when I put a coin in the slot of a large Symphonion that was on display in a museum in Melbourne, Australia - and was rewarded with an impressive rendition of the William Tell overture. It was a mind blowing experience. I soon dragged my wife into town so that she, too, could hear it, and I decided almost on the spot to start looking for musical boxes to acquire. Ah, the innocence of those early days. Not only did I pick up some not-so-desirable items, but I didn't know what I was missing out on. Like that nice cylinder box in an antique shop that I turned down because it sounded 'squeaky', as though it needed oiling (later realized to be a comb in need of new dampers). Or probably the biggest 'miss' of my collecting

history. Somehow I heard of a musical box that had been on sale for quite a while in an antique shop in one of Melbourne's suburbs. I went to see. Sure enough - there it was: a huge Symphonion orchestral-type box with bells and discs somewhere between 25 and 33 inches in diameter. I think the dealer was asking \$A650 for it. So what did I do? I went home 'to think about it'! You're probably guessing what happened next - but you'd be wrong. I went back sometime later with the cash in my pocket and the musical box was still there. But I played it one last time before buying - and decided that something wasn't quite right with the sound. It needed adjustment. Being an outright novice, I knew nothing about whether there was anyone who could fix it, so I left it for the dealer to arrange any repairs and again went home, my money still in my pocket. By the time I recognized that there were quite a few people who could undertake the repairs and was firmly committed to buying it, it had been sold to someone in Adelaide.

I also learned of and saw a Symphonion Eroica with a clock in its pediment. The private seller was asking \$A2000 for it, far more than I, an impecunious graduate student, could afford at the time, so I passed it up, too. (I heard a rumour later that the instrument was subsequently lost in a fire, but I can't verify that.) But probably the most bizarre situation occurred when I visited a shop near the centre of Melbourne to look at an upright, coin-in-the-slot 19½ inch Symphonion without a base for holding the discs. It was nice, but the dealer wanted \$A950 for it and I felt that was too much. The dealer made me an offer: we could flip a coin for 'double or nothing'! Now I'm not a betting person at the best of times, so there was no way I was going to accept that offer and my exit from the shop was as close to

'storming out' as I've ever come. I do sometimes wonder, however, how the coin might have ended up.

Still, Melbourne in the late 1960s was a fertile ground for building my collection. In addition to a few 'ho-hum' cylinder boxes, I managed to pick up an 8¼ inch Polyphon for \$A20 (complete with bubbled veneer on its cover because it had been in a fire) and a 14 inch Stella with no fewer than 53 discs for \$A350. Even better 'deals' (at least in terms of price) were an Orpheus disc-playing piano that had been mouldering in a shed (and dubbed 'the rat trap' by my wife), which I got for free had had restored, and an 8¼ inch Symphonion that I got in return for a \$A20 donation to charity - I was able to repair it myself and bought a couple of discs for it, as all its original discs had been used as 'flying saucers' and had long since been destroyed.

By the time I left Australia at the end of 1968, I knew a bit about musical boxes and no longer made the same mistakes. I also never again got the same sort of 'bargain' - with one exception. Between 1969 and 1971, I was in the US Navy, stationed at a Marine Corps base in North Carolina. By that time, my wife and I had become antiques buffs and we jumped at the opportunity to visit a large, famous antiques dealer in a nearby town, even though we had to take a lengthy bus ride to get there as we had no car. Never had we seen such a shop before. It was huge, spread over several buildings. It had sections devoted to all sorts of items. Rather than one or a few of anything, it had lots - including musical boxes. I still recall one section displaying a long line of boxes, mostly large disc playing uprights. But the prices were well beyond anything I could hope to afford, so all we could do was look. However, as we were ferreting around the shop's basement storage/display area (still gigantic),

there on its own was an apparently intact upright 15½ inch Polyphon looking dusty and dirty and without any discs - and with no price listed. I figured it would still be too expensive for us, but my wife insisted that I ask. The proprietor didn't even know what musical box we were talking about and had to accompany us to the basement for a look - then announcing that it would cost us \$US32.50!! I didn't even hesitate, although I had no idea whether or how well it would run. We travelled back home with a loose Polyphon in the luggage compartment of the bus. And I eventually had my first coin-in-the-slot disc box running beautifully, but only after some nail biting moments when I took the motor assembly apart and thought the centre spindle was broken and then later had trouble getting the motor to run when I had it back together! I knew enough to realize that getting the 15½ inch discs would be a 'piece of cake', and so it proved.

Since my wife and I arrived in New Zealand in 1971, only once has there been even a hint of a good deal on a musical box. Because we were

still fans of antiques, my wife and I regularly attended the local antiques auctions. Early in 1977, one of the well known auction houses ran an auction that included in its minimalist catalogue a lot listed as 'Georgian musical box'. Being better educated about musical boxes by then, I was sceptical and figured that whoever had prepared the catalogue didn't know what he was talking about. When I went to the pre-auction viewing, at first I didn't see anything that even looked like a musical box, Georgian or otherwise. Finally I spotted it: a plain fruitwood cased musical box playing six airs on a 9¼ inch cylinder and a one piece comb, with the controls projecting through the left side of the case. The movement filled the case. It was in extremely good condition, played well and sounded better than any other early box I had heard (I estimated it to be mid to late 1830s). Honestly Georgian after all! I was delighted to purchase it for \$NZ460 and to learn subsequently that it had been brought out to a local landmark (Larnach's Castle) from Salisbury in England in 1950. The only thing not original about it

was that what appeared from the pinholes to have been a large diamond-shaped tune sheet had long ago been removed and replaced by a well written, old tune list on the back of a piece of card that had printed spades (of the playing card variety) on the other side. Unfortunately, there is no indication of the maker, but it remains one of the focal points of my small collection to this day.

I have long since given up hope of adding to my collection. The sorts of boxes I would really like remain out of my price range, while the boxes that do turn up locally certainly don't sell for 'bargain' prices and they are almost invariably in need of massive repair or restoration. All I can do is enjoy the musical boxes I have and relive in my memory some of the old joys and disappointments of the hunt. I hope some of you have enjoyed reading these accounts. And for those of you in the UK, just think how lucky you are. You might still actually be able to come up with a 'treasure' at a bargain price - lucky devils. I doubt that it would happen any more in this part of the world. ■

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back home
with a loose
Polyphon in
the luggage
compartment
of the bus.*

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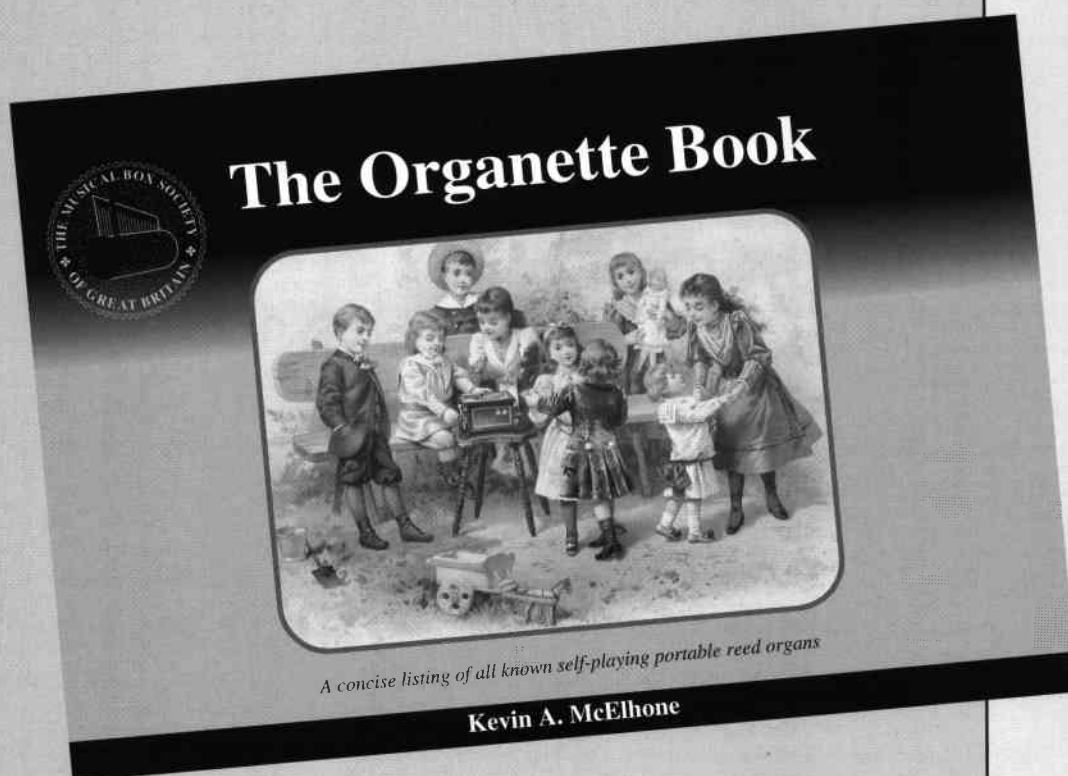
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mechanical music as well as a reference work for novice, collector, expert, auction house or prospective purchaser. Instruments not quite fitting the definition are included rather than excluded.

It is possible that many of the illustrations have never been published in a work such as this. Much of the book's content has been derived from material contributed by collectors from around the world or from prime sources. Our technical editors and contributors revealed many instruments previously unrecorded in reference works on mechanical musical instruments.

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Seeing Stars

No, this is not what happens when you drop an organette on your head! The following is from 'Stars and Telescopes' published in 1899.

"An arrangement of multiple cameras for observation of total solar eclipses was prepared in 1889 for the eclipse of the 22nd December in West Africa.

In all, 23 instruments, chiefly photographic, were attached to a massive polar axis, and pointed parallel to each other, following accurately on the eclipsed Sun.

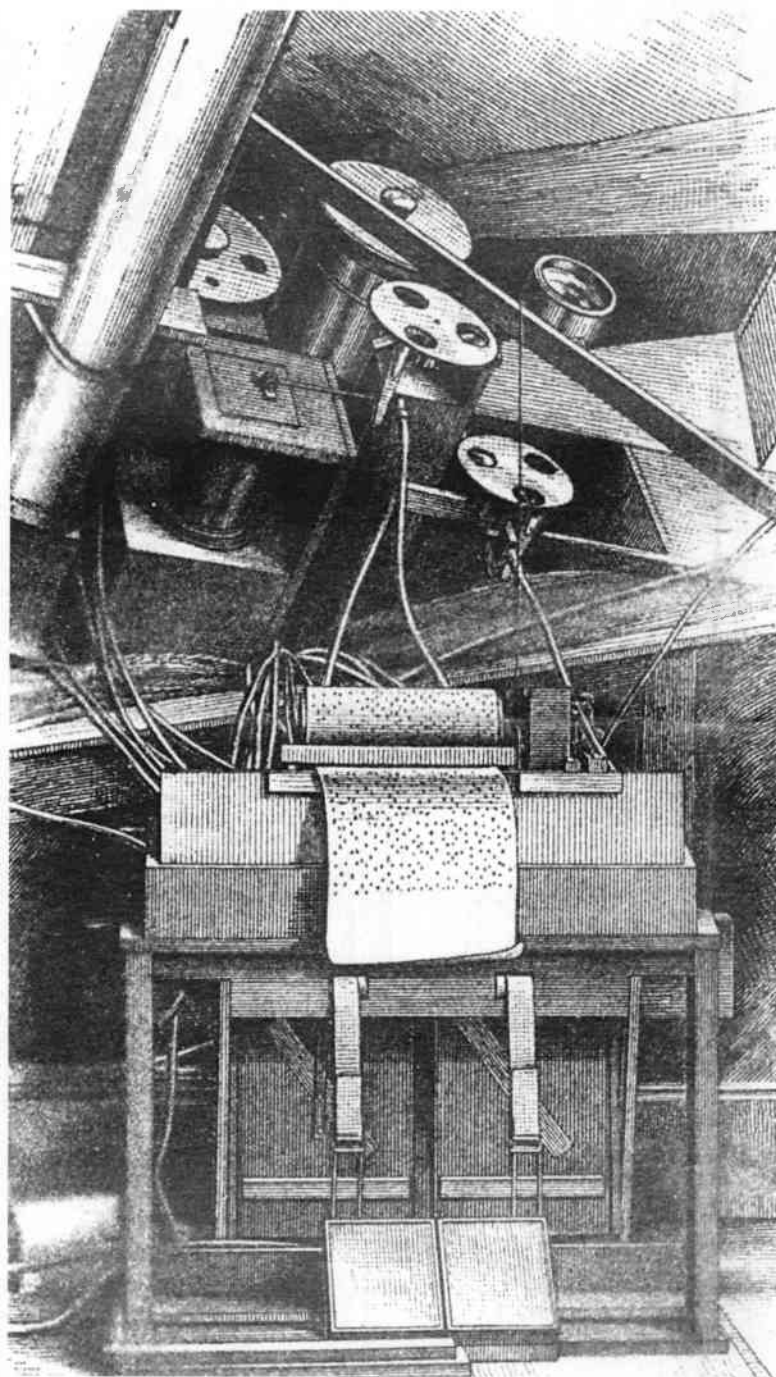
The engraving (right) illustrates many of them; also in the foreground are the pneumatic contrivances by which exposing shutters, plate-holders, and all other moving devices for eclipse observation were operated automatically.

The control was effected by a perforated strip of paper, similar to the music sheets now commonly used in automatic organs. Each perforation in the eclipse sheet represented, not a musical note, but a mechanical movement of some particular device...

The set-up worked perfectly but, unfortunately, on the day of the eclipse, the sun was obscured by clouds."

The engraving apparently was produced by a non-astronomer: although the rendering of the player-organ seems accurate (the artist probably visited a local organ store), the astronomical devices seems contrived, and the paper-roll "eclipse sheet" looks like it was the target of a shotgun blast! ■

Picture and story courtesy of Robbie Rhodes who tells me that his brother came across this in the library of Stanford University.



The Pneumatic Commutator and Photographic Battery of Eclipse Instruments (Todd)
(As mounted at Cape Ledo, Africa, for the total eclipse of December 1889)

Magic Lanterns and Optical Toys

Those members whose interests cover not only mechanical music, but also optical items, will be interested in a sale at Christie's on Friday May 10th. Over 100 items are on offer from magic lanterns and slides to zeotropes and camera obscura.

Details from Nick Hawkins or Michael Pritchard on 020 7321 3279.

Harold Smith Sale

The mechanical music collection of

Harold Smith who died recently is to be sold at Saddington Hall, Leicester, on 28th May. Details of the instruments and viewing times can be obtained from Gilding Auctioneers on 01858 410414.

Harold had some fine instruments in his collection and this should be an interesting sale.

Open Day

There will be an Open Day at The Old School, Bucks Green on 29th

June. Coffee and tea from 10.00 a.m. – 11.00 a.m. Conducted tour of members' boxes. Lunch supplied and an organ grind through the extended lunch hour. Members bring their own organs. After lunch Freddie Hill will be demonstrating his small chamber organs and serinettes, there will be more musical boxes and, finally, afternoon tea. Contact Ted Brown if interested, as numbers are limited and it is always fully booked some weeks before. ■

CD/Catalogue Review

Do you ever feel that street organ music is a bit predictable? Boring, even, hearing the same repertoire? Ian Alderman may have the answer. He says of his arrangements "The music I arrange is not what is on offer from other arrangers. I have gone out of the way to explore the unusual, unlikely areas. People so often asked for tunes they already knew but it was clear that, after the National Anthem, there were not many tunes that they could put a name to. Perhaps folk are unwilling to explore the unknown."

Ian's 24-page catalogue covers rolls for 20, 26, 31, 33 and 45 note instruments and with everything from opera to military marches, and

folk songs to concertos (and much more besides) there really is something for every taste.

To give an idea of what to expect from his arrangements, Ian has produced an excellent CD of his music played on his own 26 note instrument. This has three ranks of 26 pipes speaking 8', 4' and 2' as in a small chamber organ. In addition the six lowest notes have pipes which speak an octave lower. All the ranks are controlled by hand stops.

The resulting sound is a delight and even if you did not intend to purchase the rolls, the 21 tracks are a worthwhile addition to any collection. At £12.00 including

p&p it's a bargain (check with Ian for overseas postage).

But for organ owners, the CD is just the introduction to a sample of the arrangements. The main catalogue of music rolls covers all the usual organ sizes except standard 20 note - for which there is a separate catalogue. Twenty-four pages of musical delights await you, so ask Ian for a copy and bring a little variety to your repertoire!

Catalogues and CDs from:
Ian Alderman, Old St. James,
Chedington, Beaminster, Dorset
DT8 3HY. Tel/Fax: 01935 891437.
e-mail: ian@barrelorgan.org ■

Alexandra Sleeves



John Simpson from Australia wrote in a previous issue asking for details of Alexandra sleeves. This photograph, taken at a recent auction, shows the tune sheet from a similar box in which most of the 72 tune titles are readable.

Hope this helps. Editor.



Murtoth Guinness (1913-2002).

Murtoth Guinness died on January 20th this year and with his passing the world of mechanical music and musical boxes in particular has lost much more than simply a warm and valued friend.

Murtoth's deep interest in musical boxes most probably stemmed from his mother (née Erskine, daughter of the 14th Earl of Buchan) for it was she who introduced her son to French opera, a taste furthered in his subsequent deep love for the finest overture-playing musical boxes.

The famous musical-box collection began in the early days of the war with the purchase, around 1940, of a four-comb Sublime-Harmonie box. Like most collectors of the time, he built up a coterie of friendly dealers to find him musical boxes, many of which were then on their 'first-time round' market, being sold by the families that had originally bought them.

Murtoth's magnificent musical-box collection has been the subject of many articles in these pages over the past forty years. Here I shall not dwell on the many treasures, merely the man.

Murtoth was a long-standing friend of John E T Clark and had bought numerous pieces from or via him. When John fell on hard times that conspired with age and health to diminish his life, it was Murtoth who made it possible for John to buy a small retirement bungalow at Bidford-on-Avon where he saw out his remaining days.

John Clark's publishers had asked him to prepare a new edition of his

marvellous book 'Musical Boxes' but 'Clarkie' was in failing health. It was Clarkie who suggested to his publishers that I should assume his mantle and so came about the writing of the first of my own musical-box books.

Hearing that I was embarking on this task, Murtoth at once offered assistance and gave me access to his collection.

On many occasions he would telephone me from New York to give me some piece of information or to ask my opinion on something. At this time transatlantic 'phone calls were, like the air-fares, not cheap, but two-hour 'phone conversations, interspersed with music, were common.

Murtoth Guinness was most generous with his ever-enlarging collection. Anybody who showed an interest was welcome to his New York home and if they were seriously interested then he was only too happy to provide full and free access to everything.

The collection comprised many other instruments besides musical boxes and examples of almost every type of American mechanical musical instrument were to be found in his magnificently appointed music rooms.

Besides the musical-box display units in the music rooms, larger pieces stood around the sides of the rooms and here one could find a London-made John Longman clockwork piano (complete with drum, triangle and sourdine stop), a fine and rare Wurlitzer roll-playing harp, a triple-violin Hupfeld Phonoliszt, a 1785 Mortier compound musical clock (unrelated to the dance-organ maker of the same name), a vast plerodienique cylinder musical box and one contained an organ with which you could accompany the musical combs using a tiny keyboard.

All were kept in immaculate, fully-restored condition ready and waiting to be played.

Murtoth was that rare combination of a man with money who remained humble enough to enjoy it and to take his pleasure in sharing his treasures with others. And when, confronted with an incomplete but very rare musical clock of my own that was a sister to one in Murtoth's possession, he did not demur when I timorously asked if I could dismantle his and copy the parts that mine was lacking.

In recent years his quality of life deteriorated severely. And yet, almost to the end, he wanted to hear his instruments and, if any were not giving of their best, he would instantly indicate that things were not as they should be and show how to make adjustments.

I last saw him two years ago when I returned to him the mechanism of a Davrainville organ that fitted into a desk and which I had restored for him in Guildford. Murtoth was very frail, but he could still appreciate and love his music. We had known each other for almost forty years.

His passing robs all of us in both the MBSGB and the MBSI of a great man who inspired collectors the world over and encouraged scholarship through example. But I shall also recall his puckish sense of fun as he related some tale and then eagerly scrutinised your eyes for a response, and his droll way of recounting how he had acquired some special box.

Murtoth was a special man. And I was privileged to know him. ■

Arthur W. J. G. Ord-Hume

In preparing this appreciation I gratefully acknowledge the assistance of Steve Ryder.

OBITUARY - Robin Clark

Robin, who died recently, had been a member of the Society for over 20 years. His mechanical music collecting began on a holiday in Cornwall when a small organette caught his eye. Thereafter he was 'hooked'.

His interest in things mechanical probably stemmed from his early training as a Mining Surveyor, and he continued to be fascinated by mines throughout his life. He turned to accountancy in order to assist his father in the family practice but without the enthusiasm he had for mining.

Collecting mainly larger instruments, Robin always had a number of restoration projects awaiting his attention. Always willing to help fellow members, Robin will be remembered for his quiet enthusiasm and for the steady support which he gave to all the Society's activities. ■

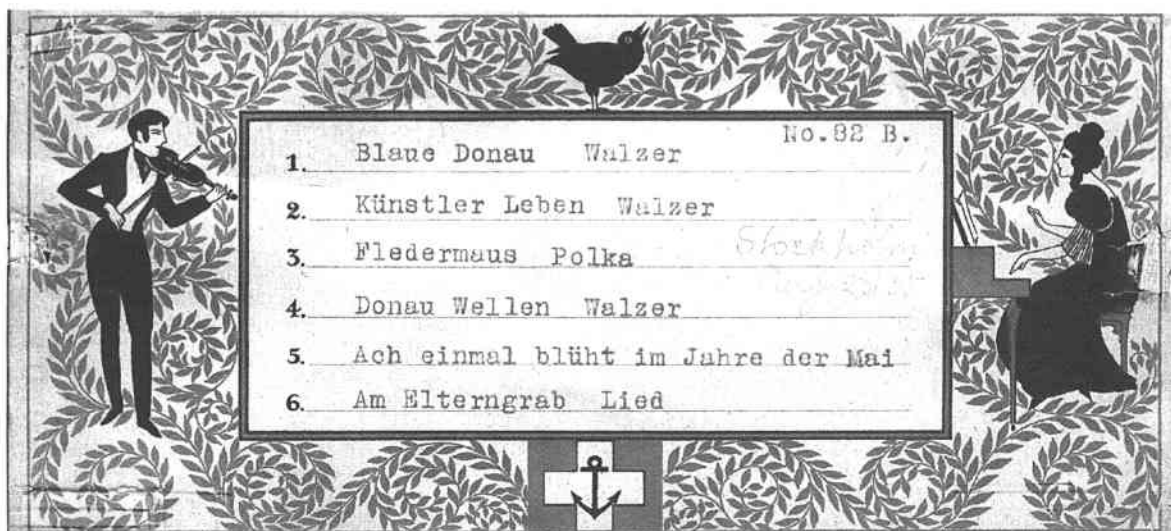


Fig. 1. Thorens tune sheet in black and gold on buff, size 7 by 3¼" (18 by 8cm), with anchor trade-mark at bottom centre. Typed titles with heading No. 82 B. The note added beside tune 4 is dated 1935, possibly its sale date.

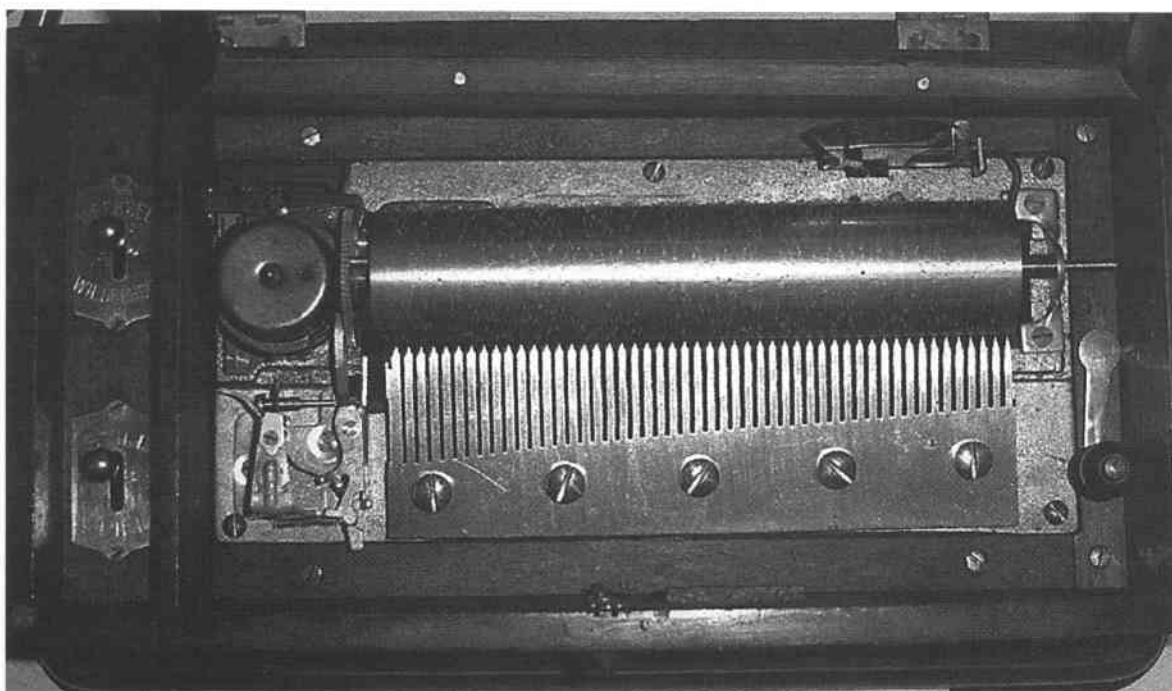


Fig. 2. Thorens type 5000 with knobbed control levers, parked crank handle, and, at back right, a tune indicator worked by a hooked rod sprung against the treble end cap. Thanks to Phil Procter for Figs. 1 & 2, and a lot of data.

Although mainly noted for *petites musiques*, many in a wide range of fancy goods and toys, Herman Thorens was also a maker of cartel boxes, - starting in or soon after August 1882.

So it is strange that, until now, we have no record of a Thorens tune sheet. Fig. 1 rectifies this long omission, and the design is confirmed because it also appears on a box he made in the 1890s - a five cylinder interchangeable. That box was described as "one of the gems of Thorens production" and it is shown on page 394 of the Piguet book.

The tune sheet in Fig. 1 is on a comparatively large tabatiere movement with cylinder 5½" (14cm) and 50 teeth, shown in Fig. 2. It has no serial number but appears to be "type 5000." The governor wormwheel is a fibre-based plastic which came into use in the 1930s. The case has a glass lid and a partition at the bass end for the control levers. A rod passing below the cylinder engages the spring arbor through contrate gearing and emerges at the treble end of the case - where the crank handle can be parked when not in use as seen in Fig. 2.

German escutcheons for the

control levers, and the all-German tune titles, show that the box was intended for the German market, - the largest after the USA. But in the very week I wrote that, another contemporary Thorens turned up! It is the same "type 5000" with no serial number. Identical mechanism, but no tune indicator. It has the same tune sheet but top corner reference is simply "No. 82" and it is rubber-stamped Made in Switzerland, which was demanded for the U.K. market. English tune titles, including *Tea for Two* and *Valencia*, which is the latest, 1926. Possibly these boxes were made just before 1930.

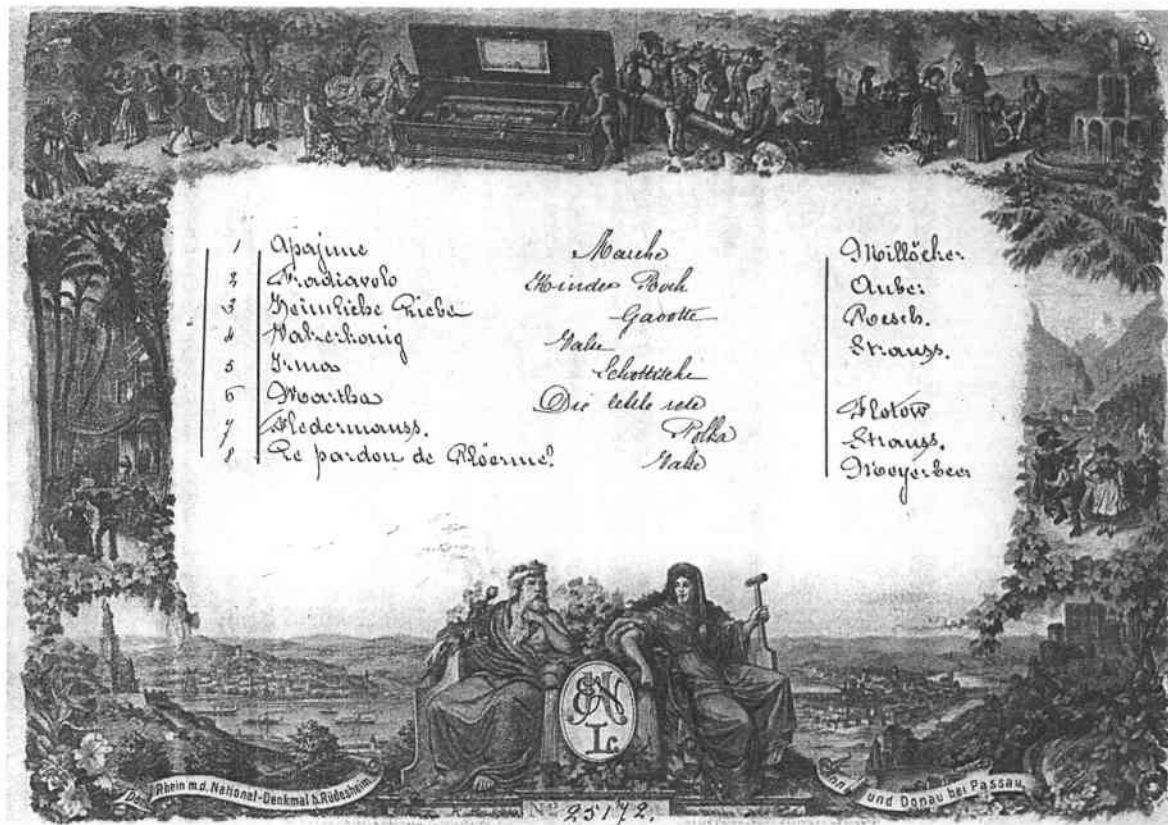


Fig. 3. Typical smaller version, 8¼ by 6" (21 by 15cm), of the Holzweissig tune sheet. The central EHN monogram stands for Ernst Holzweissig Nachfolger, meaning Successor. The L is for Leipzig. The maker's serial number is written under the monogram, here 25172.

Thorens was fluent in German and regularly attended the Fairs at Leipzig where he met the toy makers and created a growing market for musical toys. He sold increasingly into the large German market, including its recovery after the 1914-1918 war.

Nobody, least of all Herman Thorens, could have been a regular visitor to Leipzig without knowing, and quite likely supplying, the locally-based agent Holzweissig.

Holzweissig of Leipzig

This widely-known agent issued a fat annual catalogue, with bits translated into English and French. The 1892-93 issue had 186 pages, 8 by 5 inches (21 by 14cm). The first 84 pages cover all types of disc machines, organs, pianos and orchestrions. Then come a mere 4 pages of cartel cylinder boxes - they were already being elbowed out in 1892. *Petites musiques*, however, of all sizes, alone or fitted in a vast array of toys, pictures, fancy goods and automata, occupy 72 pages. Naturally, these include both singing birds and miaowing cats.

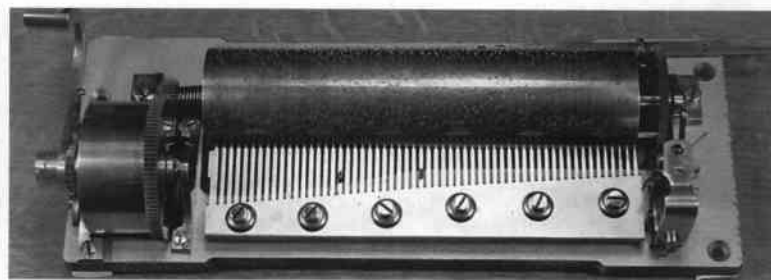


Fig. 4. Serial 25172 mounted on white spacers to prevent the cylinder touching the ground. Marked teeth are 440 and 880Hz. The bass end case-screw hole is partly visible beyond the spring barrel.

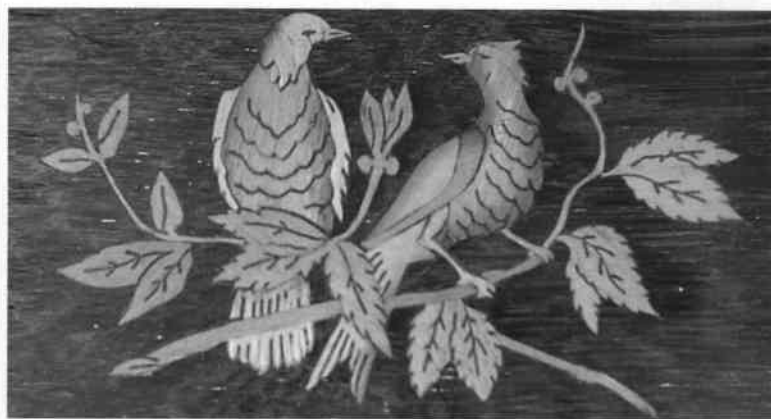


Fig. 5. Bird watchers on the lid.

More information about this and later Holzweissig catalogues can be had from our Archivist.

Except for two of Arthur Junod's "Helvetia" crank-wound interchangeables, all the cartel boxes in the catalogue are

anonymous, so it seems probable that they were all sold under the Holzweissig name, accompanied by that excellent tune sheet shown as no. 178 in our series. They are comparatively rare in the UK, but a recent example is in Fig. 3.

Then come a mere 4 pages of cartel cylinder boxes - they were already being elbowed out in 1892.

musical box oddments no. 93



Fig. 6. Serial number in line along cylinder bearing.



Fig. 7. Last three digits of the serial number on tune change lever.

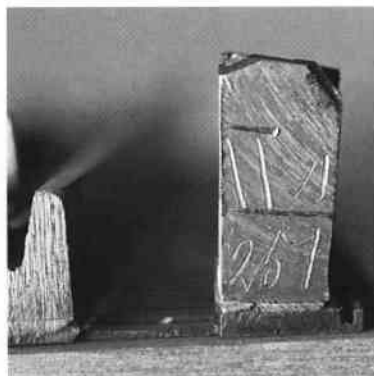


Fig. 8. Bass lead scribed 251 under a craft or reference mark.

It would be particularly interesting to know who made this box, but clues are scarce.

As usual, this box is given its maker's serial number, 25172. It is a standard 8" (20cm) cylinder movement with 58 comb teeth and no extras, as seen in Fig. 4. It is a neat fit in its 17" (43cm) case which is all grained but with effective lid marquetry, Fig. 5. Under the case are three notes in pencil: 25172; *marq* (being the instruction to the lid maker); and L C in large but indistinct capitals.

It would be particularly interesting to know who made this box, but clues are scarce. It could have started life with any one of the several blank makers. It has only one blank number, 37, on the cylinder assembly. No mark on the bedplate. Several components are marked with the serial number, Fig. 6, or just its final three digits, Fig. 7.

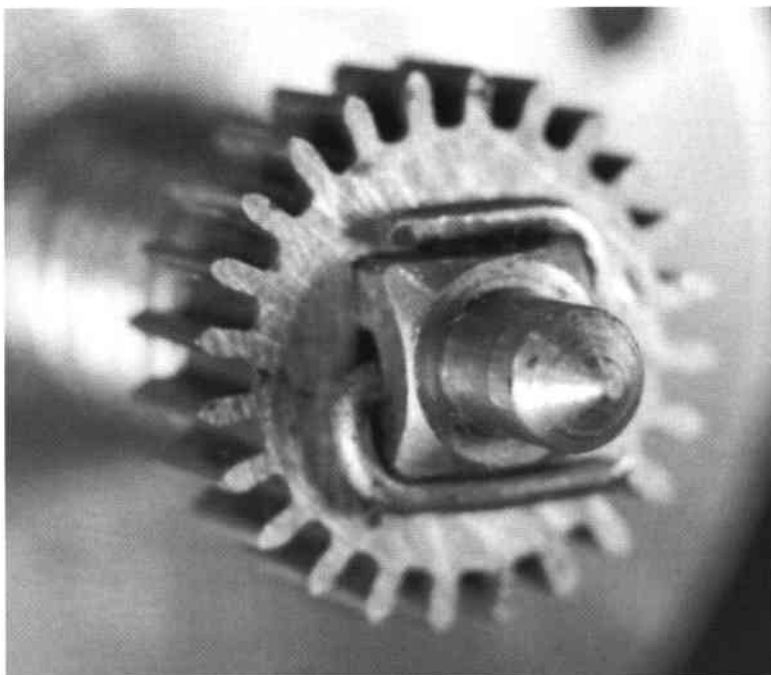


Fig. 9. Pin substitute, unusual but seen from time to time. It would be a useful clue, if definitely linked to a maker, but is more likely a restorer's dodge.



Fig. 10. The 25 by 10 1/2 inch (64 by 26cm) case of serial 7531 with podium, feet, stringing, banding and a fine lid inlay.

The only nickel-plated item is the winding lever which is uncomfortably short. I would have thought it a replacement but it is stamped 172 in matching figures - as are the two control levers. The bedplate is a simple flat rectangle with a slight recess along front and back and three csk. holes for screwing to blocks in the case, as seen in Fig. 4, which also shows how it has to be propped up each end when on a flat surface. It is 7/16" thick (11mm), and unmarked.

Gamme number 251 is stamped on the cylinder end cap and scribed on the bass lead under a scribed mark which is occasionally seen but not yet attributed; see Fig. 8.

Another unusual detail is that the usual pins for the Geneva male and the cylinder gear are replaced by a thinner wire wrapped round

the square as seen in Fig. 9.

The comb of 58 teeth, with 57 playing, has its 440Hz a tooth at no. 18 from bass end, with relative stiffness about 220. The comb base has a casting mark looking a bit like SBI but the letter S is back-to-front giving it a bogus appearance. Tune 1 is on the cylinder dots. So there is practically no doubt that it was made in or around Ste. Croix.

There is a dating clue from the tunes, Fig. 3. Tune 1 was undoubtedly chosen as an up-to-date hit from Millöcker's operetta *Apajune der Wassermann* which had its premiere in Vienna, December 1880. So the box was probably made in 1881 or 1882. But we still cannot say who made it. With serial no. 25172 and date about 1881, there are several possibilities but no certainty.

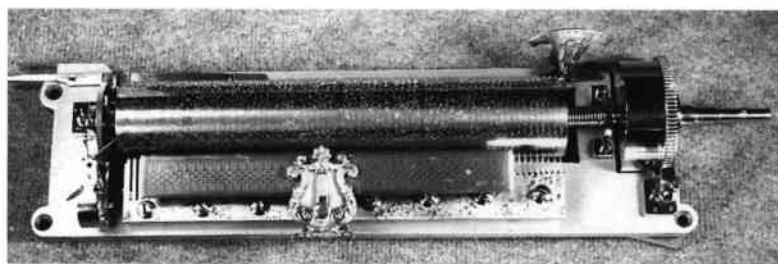


Fig. 11. Serial 7531, controls at left side. The zither is misplaced; it was intended to be fixed by the fifth comb screw, to cover the piccolo end. No governor wings in the way, with this layout.

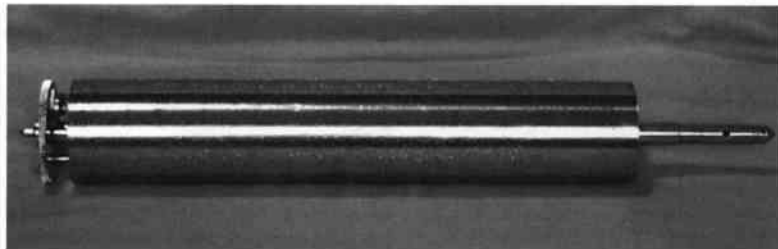


Fig. 12. The extended single arbor, with peg to engage the spring.

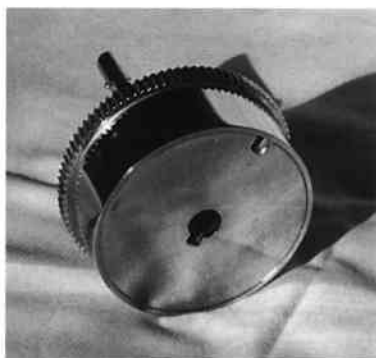


Fig. 13. Spring barrel, with slot in the cover plate.

Crank-winding

Musical boxes crank-wound at the right side first appeared in the late 1880s. They had long, light springs which provided one turn of the cylinder for each turn of the spring barrel. Therefore the spring and cylinder could be mounted on the same arbor, dispensing with two bearings and the gearing and saving manufacturing and assembly costs.

Perhaps a blank maker invented or developed some of the single-arbor varieties, enabling him to sell blanks at considerably reduced cost. One such variety could be the anonymous serial 7531. It was reported by Lyn Wright on page 32 of Vol. 20.

This is a Piccolo Zither movement with 13" (33cm) cylinder playing ten airs. No tune sheet. Its large and impressive case is shown in Fig. 10. Except for the in-line spring and cylinder,

all the components are typical of contemporary boxes but their arrangement is peculiar. The controls and governor are at the left side, bass end, and the tune indicator is at right back, see Fig. 11.

The bass end cylinder bearing, touching the great wheel, is entirely conventional; but the only other bearing is by the spring barrel and takes the thrust of the cylinder return spring. The arbor is extended right into the spring barrel and carries a peg to engage the centre coil of the spring, see Fig. 12. The slot allowing this peg to pass through the spring

cover is shown in Fig. 13.

Winding the spring is by an extension shaft screwed to the barrel and engaged by a robust handle with nearly 3" (8cm) throw - rather daunting for the spring in the hand of a forceful winder. The extension can be seen in Fig. 14, and reaches to the side of the case where a brass insert guides the handle reasonably in line with the arbor.

Fig. 14 also shows a rather bizarre effect of serial 7531's layout. A standard type of tune indicator is fitted but its scale reads backwards because the pointer is at the normal tune 1 position when the cylinder is at tune 10.

As usual, the bits that matter - cylinder and comb - take all these oddities in their stride and give a polished (nickel plated) performance. The 74 comb teeth include several groups of 3 and two of 4 teeth tuned to the same pitch, giving good decoration of the melody and a lively piccolo end.

I could find no clue to the maker, - probably from Ste. Croix region as tune 1 is on the dots. There are no casting marks, only blank number 3 stamped or scribed on most components... and twice on the main spring click bearing, as seen in Fig. 14.

A standard type of tune indicator is fitted but its scale reads backwards...

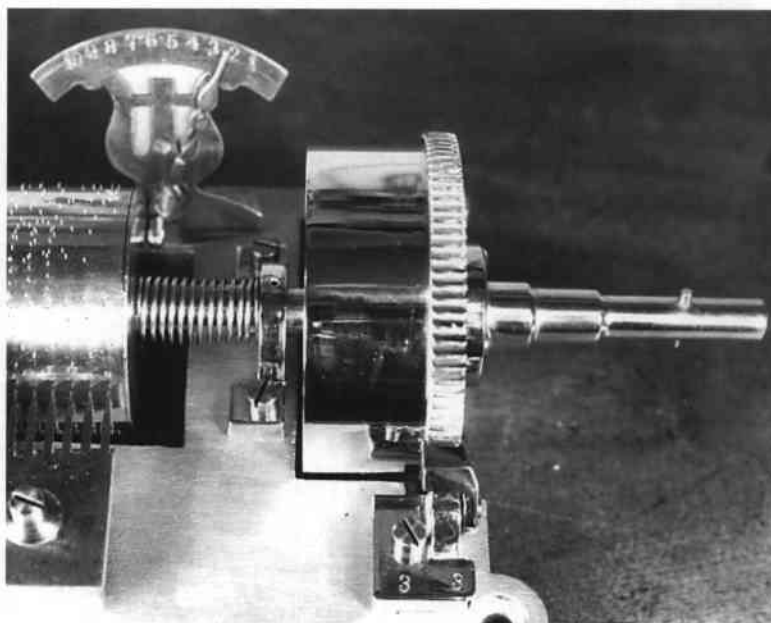


Fig. 14. Treble end of serial 7531 showing bearing with oil hole; cylinder return spring; winder extension on barrel; backward indicator scale; and blank 3 twice on click pivot holder.

Gordon Gudgeon kindly lent me this box and supplied most of the photos. An oddity being proved more newsworthy than a sterling performance, I asked him what people made of that tune indicator. He said that everyone who noticed it was quite surprised. Of course it would have been easy to retain the normal scale by placing the peg of the indicator above instead of below

the pivot... yes, but even easier just to get the scale stamped backwards.

Railway to Ste. Croix

About one mile south of the Covatanne tunnel there is a request halt on the railway named Trois Villes (Three Towns). It is perched on the high hillside, elevation 910 metres (3,000 feet), overlooking the lake of

Neuchâtel. Three towns certainly can be seen - Lausanne at 20 miles, Yverdon at five miles and Fribourg at 28 miles, all as the crow flies. The route of the railway is in Fig. 15.

A train has stopped there in Fig. 16, as captured on a postcard dated 1946, and passengers chat across the tracks. There is a hazy glimpse of the lake in the distant background. ■

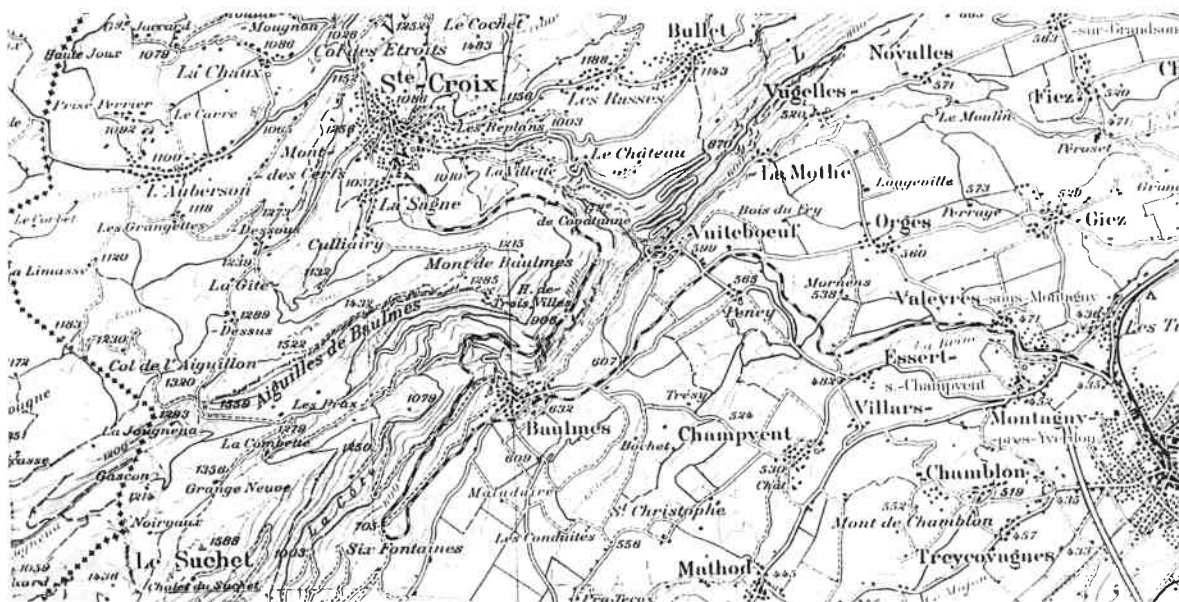


Fig. 15. Map of the L'Auberson-to-Yverdon region, 1980 issue, courtesy of the Swiss Office. Neuchâtel lake is 1400 feet above sea level, and Ste. Croix station 3500 feet. Hence the eleven loops in the road just above Vuitboeuf and the railway detour beyond Baulmes, climbing across the contour lines.

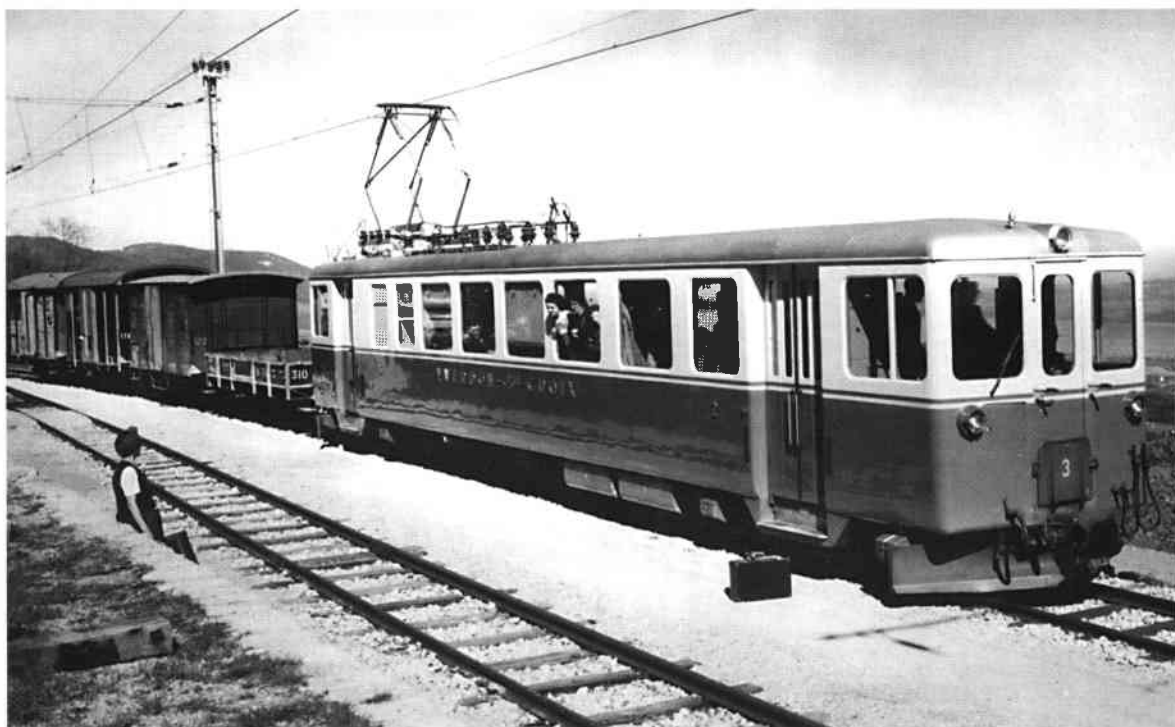


Fig. 16. A calm scene at Trois Villes halt in the 1940s. The electric rail car is also hauling a few goods wagons. Discussion across the tracks and a suitcase waiting to board hint at some rare delay. A snow plough is fitted to the rail car bogies, - unfailingly required every winter.

Early Nicole Freres Boxes

by The Registrar

This edition of Register News is concerned with early Nicole Freres and what facts the Register has revealed about this maker. I hope that those members who are interested in this sort of research will take time to analyse the information given and, if possible, make comments, corrections and supply additional information. If this could be sent to the Editor for publication in the Letters pages then responses can be cross checked by all.

I believe the majority of early Nicole boxes were of the two or three air type. Most are of the snuffbox variety. From time to time Nicole produced larger machines often playing an overture. The Register suggests that these boxes were made from 1826 to around the year 1831.

At this time each individual tune was given a number which was usually scratched on the end of the cylinder. Sometimes they are to be found on the front edge of the comb base or on the lead of the bass tooth. The highest tune number to be recorded on the Register to date is 953. I have made the assumption that Nicole never used 4 digit numbers. Few tune sheets of this period have survived and even when the tunes were hand written under the box, it is difficult to match numbers with a tune. The following examples have been recorded and are believed to be accurate:-

- 57 The Rose will cease to blow.
- 59 Waltz Gazza Ladra.
- 66 Theresa will you come closer.
- 425 Overture Griselda. Paer.
- 426 Overture Griselda 2nd part.
- 437 Barcarole.
- 527 Bid me Discourse.

Many other numbers have been noted, but cannot be linked with certainty to a tune. I am sure members will have more information.

Around 1829 - 1830, Nicole commenced using gamme numbers. Serial number 14041 has gamme number 2 whilst serial number 14046 has gamme number 1. It would seem reasonable to assume that Nicole must have realised that stamping individual numbers took up too much time and space. They appear to have started using gamme numbers with the 14,000 series. There must have been a short period when both systems were used as serial number 14081 has 4 individual tune numbers.

On the subject of gamme numbers and the use of "bis", it is interesting to note that the first recorded and certain use is on serial number 23720. However, there are boxes in the 21,000 series that are thought to have "bis" on them. What is worthy of note is that two boxes with exactly the same tunes pinned on them, but in a different order of playing, have been given different gamme numbers and these two boxes have the serial numbers 21731 and 21830. Very close indeed to the start of using "bis". What is of interest is that there are no later examples of boxes playing the same tunes being given different gamme numbers. My guess as to the date of all this is circa 1837.

Nicole must have had books of gamme numbers. Book 1 is noted on the tune card of serial number 22126 but nowhere else has there been any reference to further books. Boxes numbered in the 14,000 series all seem to have 2

figure gamme numbers ranging from 1 to 73. By the time the 15,000 series were being made the gamme numbers had risen sharply into 3 digit numbers, the highest being 953. This must indicate that the firm of Nicole must have been progressing at some speed.

The Register has produced some facts about dating early Nicole boxes that may come as a surprise to some members. These facts have been checked and do show that boxes were made a little later than previously thought. Here is the evidence:

- 7279 Spring dated 1826
- 8339 Spring dated 1828
- 8346 Spring dated 1828
- 15454 Cannot have been made earlier than 1834. Overture to Lestocq (1834)
- 15723 Also has the Overture to Lestocq.
- 15724 Has a mainspring dated 1834.
- 20518 Cannot have been made before 1836. Les Huguenots. Meyerbeer 1836

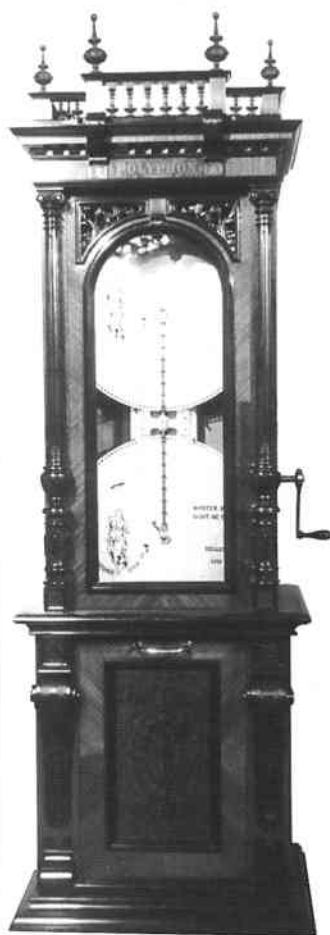
This really takes us out of the early Nicole period. I hope that the information has been of interest and I would welcome additional facts to add to the Register.

The Registrar



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- More on Practical Tuning.
- A Not-So-Dumb Organist.
- Trying not to Achieve a Breakthrough in Wooden Gearwheels.
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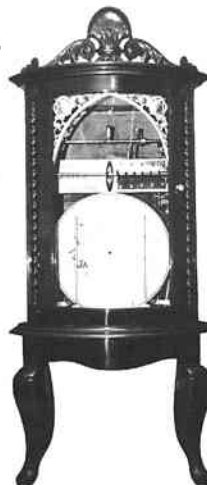
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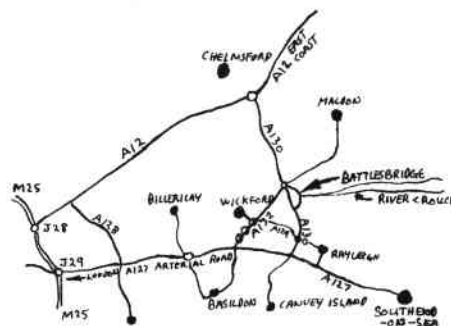
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Making Sense out of Cents

When the Tuning, Pitch and Temperament articles by John Harrold first appeared, I recognised their importance and the considerable work that had gone into their preparation. Not having an instrument in need of tuning, I did not study them in very great detail.

My situation has changed over the last three months with the acquisition and restoration of an English chamber barrel organ. Soon I will have to face up to tuning it, presumably to mean tone. I have therefore re-visited the articles with a more enquiring mind. After a long period of confusion, I think I now have a better understanding of the subject but I would appreciate confirmation of my thoughts from those more knowledgeable than I. The following is how I see it.

Taking John's octave beginning at 300Hz. and ending at 600Hz. we get a frequency difference of 300Hz. We are told there are 100 cents in each semitone and twelve semitones in an octave, making 1200 cents to the octave and, by simple arithmetic, 4 cents to 1Hz. (Vol. 19, p175, Fig1).

What if we now take the next octave up the scale from 600Hz. to 1200Hz? This time we have twice as many Hz. so, using the same mathematics as above, 4 cents would now equal 2Hz. This seemed strange to me. Worse still, if we take an octave, starting part way through the first octave

mentioned above, and finishing at the same place part way through the second octave, the cents appear to start at one value and suddenly double in value at 600Hz. Surely we cannot have a sudden discontinuity of this sort.

At this point I reckoned a cent is not an absolute unit of measurement with a fixed value of Hz throughout the whole compass of any instrument, but a fixed ratio of one frequency value to the next. If this is the case, raised to the power of 1200, the ratio will equal two. (i.e. after 1200 cent steps we get to two times the frequency). In this way we would get a smooth gradual progression throughout the frequency compass with a cent representing more Hz. at the high end than it does at the low end of the scale.

I think I can see why John Powell tells us (Vol. 20, p21.) he has never liked the words 'hertz' or 'cents'. He and I did our training and physics education at about the same time as one another and I must say I am more inclined to c.p.s. plus a good old fashioned frequency meter.

Peter Howard.

An Appreciation

I was delighted, yet again, to receive a copy of The Music Box but oh! so very sad to read the obituaries. Five people who were all personalities of the Society and whose names stir memories of good days gone by.

I recall meeting Dorian at one

of the meetings held at the Great Western Hotel, Paddington, but who played the monkey organ?

I first met Lyn Wright at the Droitwich meeting in 1970 and, of course, many times since then because he has always been so actively involved with the affairs of the Society. Beryl was always inseparable from Joe, and John was always around, helping and organising. We shall dearly miss them all and our hearts go out to Peggy, Joe and Joyce.

Finally, there are my memories of Harold Smith. Not just for the tea and biscuits that we munched late in the evenings as Harold and I rummaged around his large collection in his wonderful old house, every now and then struggling around an Orchestrelle, a 22½" Polyphon or any one of his many instruments "to be restored one day" but because of the Vaux sale at Somerton. The items on display were a sight to behold and were amongst the finest that I have ever seen. Certainly a memory to sigh over with misty eyes and never to forget! But the moment came when a very large and magnificent Orchestrion came up for sale. The price went up and up, the chatting faded as the atmosphere became quiet, hushed and tense until the hammer fell for the last time. "Your bid, sir." The audience erupted with clapping and cheering as the new owner looked proud, so very proud. Harold Smith. Well done Harold!

David Shankland

MUSIC BOX BINDERS

Now that Volume 19 is complete together with Index, this may be a good time to remind you about binders for your magazines. Each binder holds eight issues plus the index (which is included with this issue) and ensures that they are kept in good condition for future reference. The binders come packed two in a stout cardboard postal box price £12.00 plus postage as follows:

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organ (needs restoring), Edison phonograph with 200 cylinders, approximately 250 88-note piano rolls. Makers include Ariston, Thermodist & Kinstler handplayed rolls. 73-note Hupfeld rolls. 800 Red Welte rolls. For list of Welte roll numbers and photocopies of instrument photographs send s.a.e. to Ted Brown who also has one video of most instruments. For viewing or prices of items contact I. Svensson on 0046-708-233925 or e-mail snia63@hotmail.com

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Call Alan Pratt on 01564 775000 for details of any of the above.

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1st April; 1st July;

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Editorial copy **must** be submitted at
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Posting of magazine:

27th February; 27th April;
7th August; 7th November

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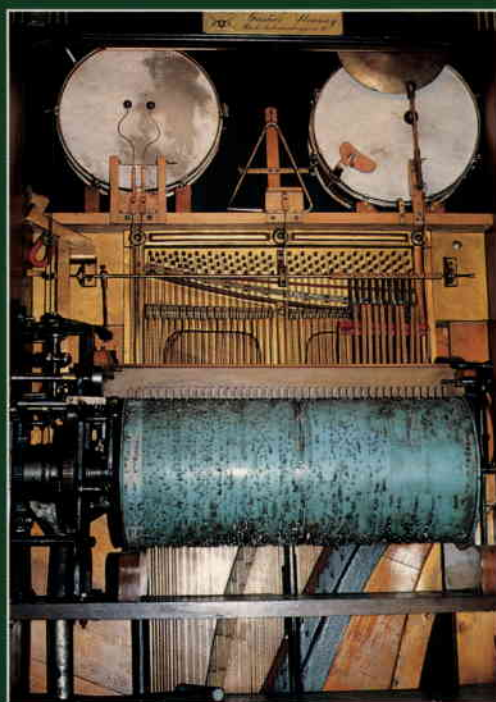
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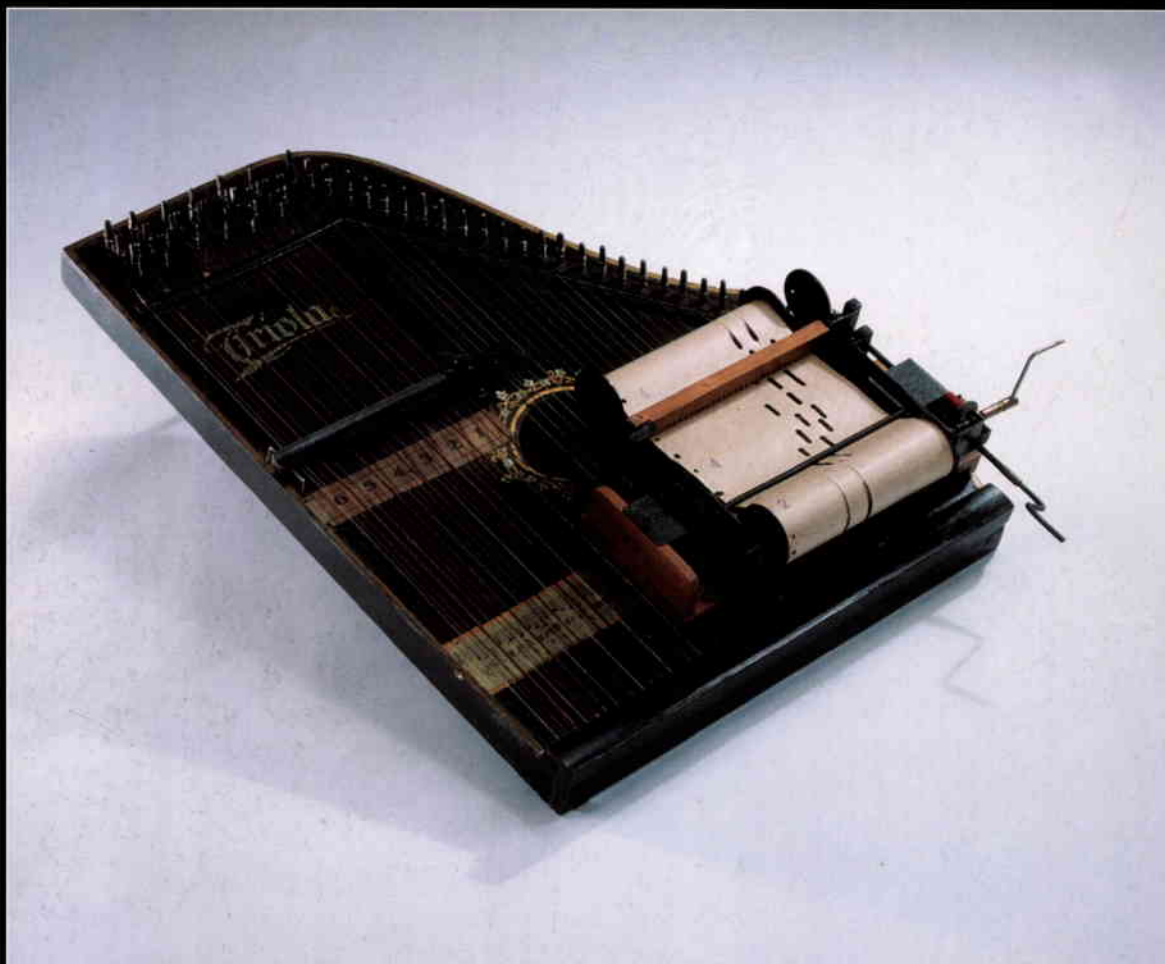
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Enquiries

Frank Barnett
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frank.barnett@bonhams.com

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Wednesday 9 October 2002
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August 2002