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Volume 13 Number 4

Winter 1987

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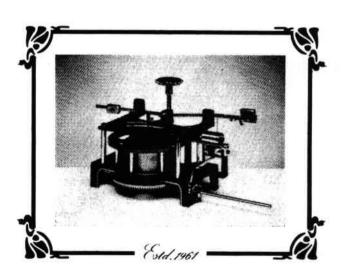
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Silver Jubilee Edition Special Commemorative Issue.

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The Journal of the Musical Box Society of Great Britain. Volume 13 Number 4 Winter 1987

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The Music Box is printed for and published by the Society quarterly 27th February, 27th April, 7th August, 7th November, from the Editorial Office, Broadgate Printing Company, Crondal Road, Exhall, Coventry CV7 9NH.

Back numbers obtainable from Roy Ison, 5 East Bight, Lincoln LN2 1QH.

Editors Notes

Congratulations . . . YOU'VE done it .

25 years old this month. The Musical Box Society of Great Britain.

Yes you, the members, the officers, both past and present have steered this organisation through it's 25 years existence and made it what it is today — an organisation with people of similar interests, with a membership that meets not just to discuss the constant flow and interchange of information, but where sincere and life-long friendships are also developed.

Right from the very beginning, the society's main objective was to produce a journal - a journal that has become accepted as the world's finest English language magazine of mechanical music. The man who put it there was undoubtedly Arthur Ord-Hume, a former Editor who held the post, although not consecutively, for almost 18 years, my task now is to keep it there. I have the honour, which I am sure is the envy of all our previous Editors, (Graham Webb and Bob Leach have both held the post) of producing the 100th edition of Music Box, our Silver Jubilee edition.

I joined the society in 1973 and many articles produced around that time, I found so fascinating, that they left an indellible mark in my memory – a mark that decided that mechanical music was not to become just an interest but a way of life for the future. My lifestyle continues in that direction with an ever inceasing involvement with mechanical music in the field of tourism.

Here then integrated with current items are some pages from the past. I hope you will enjoy reading them as much as I have done, even if for some of you they may be the second time around.

SOCIETY TOPICS



1987 AUTUMN MEETING 11th/13th September

by Reg Mayes

Some sixty of us sallied forth to the Roman town now called Cirencester, at the junction of the ancient Ermin Street and Fosse Way, to meet up at the excellent Kings Head Hotel. Our main task was to cheer up the town on a rainy Saturday morning with some sixteen organs of various sizes and their 'grinders' of various shapes, but in period costumes — didn't the ladies do well. All this effort combined to collect some £410 for Barnardo's flag day. I bet that it would have been double that if only the weather had been better.

At 2pm a coach took us to Stonehouse to visit Stroud Vintage Transport & Engine Club Rally. What a lovely surprise it was for not only were there real live fiery monsters and cars etc. from our erstwhile transport systems and farming predecessors, but low and behold, three fairground organs blowing their hearts out to good effect, demonstrating their fine condition.

Also on the site was a market that offered all sorts of items that would be difficult to find elsewhere. Alan Wyatt came away with a 'secret weapon'. It is operated like a fiddle and he says spreads seeds as one walks across a field. I would not be surprised if he doesn't fit a barrel organ mechanism by this time next year.

After our return from Stonehouse at 6pm we assembled in the old Town Hall, Bingham House for a civic reception by the Lady Mayor, Councillor Mrs. M. Marshall. I think that she spoke to each of us in turn even though our President Jon Gresham had told her something about us. It was a very convivial affair. Many thanks to the Civic Authorities for its provision.

At 7.30pm we were back in our hotel for the Society dinner which the Lady Mayor attended. After dinner we were entertained by an old time extravanganza by the St. Barnabas Players. All good fun.

On the Sunday morning we had to get up early to catch the coach at 9.15am to Keith Above: Mr. & Mrs. J. Friend make music with a cob organ.

Below: Mr. & Mrs. Lyn Wright take shelter during a rainy organ grind at Cirencester.



Harding's new abode at Northleach, where he. has his own public World of Mechanical Music.

This trip was combined with a visit to the Cotswold Countryside Collection which was an award winning museum which consists of the Lloyd-Baker Collection of agricultural history housed in an 18th century house of correction or county prison. Two exciting developments on one site. The coach party was divided into two groups to visit both here and Keiths museum alternately.

Keith seems to have taken to becoming a curator like a duck takes to water. We had a conducted tour of his exhibits and workshops. He is justly proud of his exhibits, which he played to us. He told us of the pressures he had to apply to all and sundry to enable him to move from London N5 to open in Northleach by Easter this year, but he did it. Space does not permit a detailed comment

on each of the exhibits but just to say it is very well worth a visit even if you do not get a tour of his workshops, for as is to be expected all the instruments sound very well.

After lunch in Northleach at a restaurant or a pub, we returned to Cirencester to climb the tower of the Parish Church of St. John the Baptist, led by the vicar Cannon Lewis, to see and hear the excellent carillon. The cylinder mechanism was made by Messrs Dent and recently an electrical control system had been installed. The fittest of us climbed to the top of the tower to gain a very fine panoramic view of the environs of Cirencester.

The church also boasts an historic Father Henry Willis organ dating from 1895, the latest restoration being in 1982. It has 10 Great organ stops, 11 Swell stops, 12 Choir stops and 11 Pedal stops. The Church also had a Steinway grand piano circa 1880 as well as another small free standing pipe organ.

We returned to our hotel having had a fine time full of interest and delight. This was Alison Biden's first commission as our Meetings Secretary. She has set herself a very high standard for the future and we can only applaud her and express our thanks to an understanding husband and children for their sacrifices. None the less I am sure that Alison would not wish me to close without also expressing our thanks to the man on the spot Ian Robertson, together with the local help he received from the Lady Mayor, Cannon Lewis, hotel staff etc.

Please remember

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1988 are now due

See special form enclosed with this issue.

Photographs from the top: Keith Harding demonstrates his collection to members of MBSGB. The main viewing room at Keith Hardings 'World of Mechanical Music' - Northleach.

Repairs in progress in Keiths work-shop.

Below: Organ grinders assemble outside the Kings Head Hotel.









Musical Box Society of Great Britain From a very small acorn.

by Arthur W. J. G. Ord-Hume, member No. 4.

Reminiscing is normally the prerogative of the aged and the wise. Actually to be invited to reminisce thus implies age and wisdom. I like to think that I do not fall into the first category and I hesitate at offering myself for the second. But twentyfive years of the Musical Box Society is something of a milestone and when I think back to the early days, I am conscious of the many changes which have taken place, of the familiar faces no longer with us - and, of necessity, the passing of time.

My own collecting had begun in a modest way. In those days I was head of a small light aircraft company and my work was thus a long way from music, mechanical or otherwise. Although my family seat, then at Pinner in Middlesex, was the home of my father's music library and his instruments, I was fully ensconed in the world of aviation. Indeed, I was the only member of the family to have consciously foresaken the crotchet for the drawing-board and the spanner, so to speak, even if it was a flying one. My return to the family pre-occupation with matters musical and instrumental was in no small way due to the events which followed.

In the immediate post-war years, though, I had begun to collect musical boxes. I knew nobody else who practised such a peculiar activity, nor did I consider for one moment that a wide interest could exist in such things. My hobby was really clocks and clock-making but all things clockwork had a fascination, hence the acceptance of clockwork-produced music.

Unbeknown to me, there were others who were similarly attracted to this sort of thing, albeit, I suspect, surreptitiously, up and down the country. Musical-box collecting was not something you owned up to: it was on the par with pressed flowers, porcelain thimbles and knitting - somehow not a

very apt pursuit to own up to. One day, during one of my shady parambulations around junk markets (the appellation "antique" then only applied to the elitest of the quality shops: the rest were good, homely and valuable junk), I came into contact with a man who had similar interests to mine and through him met another man who had more musical boxes than I had dreamed of. He was the then-aged Mr. Pole whose father had produced a magnificent conspectus of all the musical instruments at the Great Exhibition of 1851. Pole possessed several magnificent chamber barrel organs as well as some of the largest and grandest of the grand-format musical boxes I had ever seen. Little was I to know that years later and by several quirks of fate, two of his organs and one of the musical boxes would pass into my own collection.

However, Mr. Pole died and his great collection was dispersed as was that of another man who lived in Finchley and whose name I believe was Petrie. Both these gentlemen knew a third famed character of that age - S. F. Sunley whose musical box gallery in London's George Street just off Baker Street was a true "olde worlde" haven of musical boxes and their collectors. Samuel Sunley knew plenty of other collectors and had been a friend of A. J. A. Symons (who had died around 1942 and whose collection was dispersed at a time when no decent auctioneer wanted to be associated with anything as down-market as a musical box).



Date June 1962. A dozen pioneering collectors get together to discuss the possibility of forming a society. S. F. Sunley rises to "toast" the proposals though he himself never became a member.

Through Sunley (who died in the autumn of 1974) I came into contact with Murtogh Guinness who was also collecting in London with his friend Stanley Farmiloe. And through Messrs Guinness and Farmiloe I heard of a dental surgeon at Devonshire Place near Harley Street who also collected. And there was talk of a legendary sewing-machine shop in the Old Kent Road which served as a "front" for musical box collecting activities in the back room. The former was, of course, Cyril de Vere Green and the latter Gerry Planus. This was around the late 1950s.

Cyril was a most distinguished dental surgeon and consultant and his long career and achievements contributed to the high regard in which he was held within his profession. As Dean of the Dental College at University College Hospital and, later, leading member of the Executive Committee of the International College of Dentists, he lectured around the world on his subject and among his patients were numerous foreign dignitaries including royalty and the nobility. His home and dental surgery were stacked with musical boxes with which his patients would be soothed and calmed before, during and after treatment.

Gerry Planus, now living and working in America, ran a small and not very profitable sewing machine business in a run-down part of south-east London. His love for musical boxes, though, was (and still is) second to none and his basement was a haven of treasure - many dozens of boxes stacked on the ill-lit and dusty floor. Here in the dinginess you could, as Gerry said, hear the woodworm chomping, but you could also run into other collectors - people like the Polyphon-man, Ron Bayford, so named because he collected only Polyphons which he had in profusion. Or Sid Keast who owned a parambulator-retailing business in Ferham, Hampshire. Both are long dead now.

Now part of collecting involved repair and conservation and my spare-time hobby of clockmaking and repairing now came to my aid as I applied this knowledge and experience to musical-box work. In those days, there were many mysteries to be solved. Putting in new teeth, for example,



Stanley Farmiloe, centre, and Jerry Planus, right, discussing their ideas for a society.

was a major challenge which few tried and even fewer actually could do well. Tuning new teeth was an almost unheard-of refinement. Except for Gerry Planus who seemed to be quite good at it. He taught me how to do it and soon afterwards I could do it as well as he could. Cylinder repinning, though, was an arcane subject whispered about along with other then-impossible things like walking on the Moon and having a performing version of Mahler's Tenth

Symphony.

Through Gerry Planus, I met John E. T. Clark, author of the then-only book on musical boxes. "Clarkey", as Gerry called him, lived in a very spartan and cold room in Middleton Street, heart of the clockmaking part of town. Unfortunately, Clarkey was rapidly losing both his eyesight for close work and also his dexterity. One day, in a terribly cold winter when an abnormally heavy snowfall left the streets piled high, Gerry and I went to see him and found him in bed: the room was too cold for him to rise. We went out and scoured the streets to search out wood for a fire and returned with this and a bottle of whiskey which Gerry had provided.

Clarkey was still officially doing repairwork on musical boxes but in reality a lot of work was farmed out to Gerry and, ultimately, to me: I used to do work for both John Clark and Sam Sunley.

During these somewhat strange years of limbo, Cyril de Vere Green suggested it might be an idea to get all the collectors we knew together as a body so that we could pool knowledge. Somewhere across the Atlantic, we had heard that there was an American musical box society and it was suggested by somebody-I believe it was Murtogh Guinessthat we ought to form ourselves into a "chapter" of that organisation.

By this time I was living on the Isle of Wight and travel up to London became much more of a rarity but one informal meeting not to be missed was the evening when about a dozen of us met with Cyril de Vere Green and Murtogh Guinness to discuss the possibility of forming a society*. The prime mover behind the arrangement was Cyril who was most enthusiastic and who wrote large numbers of letters to all the interested people, each signed characteristically in green ink!

The discussion which took place centred not so much on whether we all wanted to unite as a body as to whether we wanted to become associated with our friends across the Atlantic. It was agreed that we wanted to be autonomous and wanted to have our own UK publication.

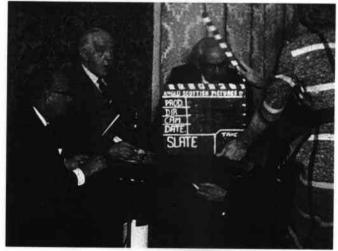
Next came the proposal to hold a proper meeting to form our association. Again, it was entirely Cyril's driving force which made all this possible. On the first day of December in 1962, thirty people from all over the country met in a room at London's Mandeville Hotel and were asked to consider the motion that there be formed "The Musical Box Society of Great Britain." The motion was carried without further ado

and we went on to consider our officers. John E. T. Clark was the obvious choice for President - after all he was the only person who knew anything about the history and development of musical boxes and had behind him a wealth of practical experience much of which he had passed on to Gerry Planus. Thus it was Gerry who found himself elevated from sewingmachine retailer and repairer to the position of Vice-President.

First Treasurer was Yarmouth-born Frank S. Greenacre. a most enthusiastic man who worked as a local government officer. He and I used to swap musical boxes and he had access to a lot of quality material from the Norfolk salerooms. Tragically, some years later he contracted a crippling nervous disease and, though young, he was confined to his bed and finally passed away on August 29th

And, for editor, I was the only volunteer and, in the circumstances, was not surprised to get the job. After all, I was the only one to possess the vital equipment to print a journal - an Ellams flat-bed one-sheet-at-a-time duplicator and an Underwood stencil-cutting typewriter plus a longarm stapler . . .

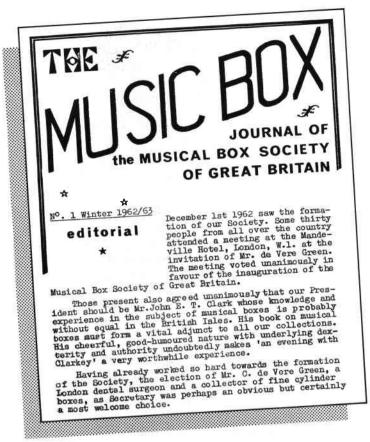
All the members who attended that first meeting were entitled to call themselves Founder Members. Of the first eight names on the role, only two are still alive - Gerry and myself.



S. F. Sunley appears as though he is about to be beheaded by the "clapper-board", whilst John E. Clark, to his right, looks on in astonishment.

In those early days, we had limited knowledge and laboured eagerly to share whatever it was that we knew. The total sum of that knowledge, however, was, with hindsight, precious little. Immediately after that formation meeting, I returned to the Isle of Wight and enthusiastically wrote the first copy of "The Music Box". Typewritten on foolscap paper, two pages to view, it comprised just 20 pages and the print run" was an ambitious 100 copies. When Gerry Planus read it he eyed me up and down and said: "It's too large you'll never have enough material to keep it going." Gerry was never wrong - except on that one point for, as very quickly happened, the magazine grew larger and so did the membership. By the end of the first volume, we were producing 32-page issues.

It is worth recalling that right from the beginning "The Music Box" went in for half-tone illustrations. Aware of the high cost of the printing blocks (because you could not run off photographs on a duplicator) and the expense of having them printed for so small a run, I used dyeline reproduction. For a run of 100 copies, this was by far the cheapest form of production and the special negatives needed were produced by a firm in Sutton, Surrey, while the prints were made for me by a local blueprint printer attached to an architect and



solicitors' office in Newport, Isle of Wight. The mixing of pictures of musical boxes with Town and Country Planning applications as well as divorce papers thus formed a frequent hazard. Collating was done at home by walking round and round the dining-room table.

By the eighth issue, however, something happened which was to change the appearance of the journal. Member number 14 was Mrs. Gilchrist who lived in Queens Road, Cowes. She ran a seafront attraction "museum" of mechanical music and automata and her husband was owner of a large printing works. Impressed by what we were doing and conscious of the necessarily-poor quality of the illustrations, I was invited to their seafront home to discuss the aims and objects of the journal. As a result, they agreed to produce for us at no cost, not just the high-quality copper-etched printing blocks from our original pictures, but to undertake the supply of the printed sheets for inclusion in the magazine. We thus became the first to produce quality pictures in any musical-box society journal.

Those early days were, as can be appreciated, a hand-to-mouth existence. There was never enough money to do all the things which were needed. Had it not been for the unflagging support of Cyril de Vere Green, we would never have survived. All postages, for example, were looked after by Cyril. All the society correspondence was attended to by Cyril and his so-able personal secretary, Chris Marks. Even when the volume of society work was such that it took many hours work out of the working day, Cyril did not for one moment question that it was right to be done. Finally, though, in November 1969, he was forced to hand over the now-enormous task of secretary to Reg Waylett who gamely shouldered this job.

Highlights of those early days were the regular committee meetings held at Cyril's home, always to the accompaniment of several bottles of the finest wine or best bottled beers. And afterwards there would be music far into the night and possibly a meal either at a close-by restaurant (Alpinos) or magnificently staged upstairs by Bertha de Vere Green.

But for the members, the delight was the meetings for, after each, there was the invitation to come back to Number 11 for the evening. I coined the Stanley Unwinesque phrase "musibox collecty-chattel" for those times. Soon, though,

the expanding society made such memorable occasions impossible to stage and, for the members, those fine occasions became but memories – memories of sitting in comfortable surroundings in good company, sitting on the stairs listening to music, standing in the kitchen discussing trademarks, companionship, good wine and magnificent hosts.

Our regular meetings, very early on increased to two per year, were always staged in comfortable London hotels. The first AGM was held at the Clifton-Ford Hotel at which 36 members and guests (out of a total membership of 51) attended. That year the winter meeting was staged at the Mostyn. The following year, 1964, the AGM was staged at the Londoner Hotel at which we stayed for several meetings. Seventy attended and we received our first media coverage when Cyril and I were interviewed by the BBC. For some years we stayed at the Londoner, then moved to Berners Hotel but, by November 1966, we were at the Great Western Royal, Paddington, where we enjoyed a long and ever-more successful series of meetings.

Regional meetings were inaugurated quite early on, the first taking place on April 8th 1967 at the home of member Mrs. Monington Miles, Kings Norton, near Birmingham. That was the first year we staged our London meeting and AGM at the Great Western Hotel, more than 100 members and guests being present to mark our highest-yet attendance.

Finding hotel rooms we could afford and making bookings was always a hard job and Cyril and I used to spend many hours driving round seeing function managers at various hotels. When finally the Great Western could not accept our booking requirements, we were forced to seek afresh and thus we moved to the Kensington Close Hotel where we enjoyed an even longer association.

The death of John Clark on October 12th 1965, led to the appointment of Dorian Dinsmore as president. Dorian collected musical snuff-boxes of which he had huge numbers. He also ran a biscuit-making business, so our meetings were always enlivened by the dispersion by digestion of a large bag of assorted sweetmeats.

After Dorian's spell as President (1965-66), the next incumbent was Robert Burnett (1966-71) followed by Cyril de Vere Green (1971-76). And after Cyril came my own appointment to this highest office which I held in duality with that of Editor until 1979.

The rest is contemporary history. I have not set out to describe in detail all that happened during those formative years and have missed out so much about so many great characters of the time – people like the late Henry Lawrence who was such a knowledgeable friend, Cecil Bruce, still with us, although very infirm, as well as others who are no more such as Philip Radford, D. E. Lubbock and Bruce Angrave (who designed the Society lapel badge), Howard and Helen



The meeting finishes, marking the founding of the society, amid applause and smiles all around.

Fitch and, of course, our great friend and so-worthy American vice-president Hughes Ryder. I have also said nothing of those who played other major roles in the world of musical boxes - the great musical-box retailers like Ron Lee, Graham Webb and the brothers Moss not to mention Keith Harding who has become a significant repairer and contributor to mechanical music engineering with his re-creation of Polyphons and invention of large twin-disc instruments.

There are so many sides to the history of our Society: much must be personal and those early years saw many difficulties for which solutions seemed ever-elusive. Not all the early days were happy for the expansion of the society very rapidly took away much of the social enjoyment of the meetings. There was a time when everybody knew everybody else, when we were all able to communicate easily and freely. As it grew, such closeness became impossible and acquaintanceships replaced much of the friendship.

One thing, though, was an ever-driving force and that was the quest for knowledge. It was the Society which created that collective knowledge and thus, even if it were not to survive another quarter-century, we can rest in the assurance that the Musical Box Society of Great Britain has made its mark. It has researched, it has published, it has been a major contributory factor to the world's knowledge of mechanical

At a personal level, I find it gratifying that all the other major societies in the world have modelled their publications on ours. When our American sister society - which is older than us - admitted that its goal would be to have a journal like "The Music Box", I was pleased. When the burgeoning French society and the German society told me the same thing, I was even more pleased. We have set a standard. We have a quarter of a century of achievement behind us.

Well, I suggest that that is about it! Don't let's have any more looking back, but let's now look forward to the mass of work which still remains to be done on mechanical music and its instruments. There are two channels into which the Society ought to direct its encouragement and effort. First is the sustained research into history and background. Then there is the development of fresh music and instruments for the mechanical interpretation of music. Shunning electronics, re-create a recording piano and let's have some fresh reproducing piano rolls.

Above all, though, look to research and the conservation of information. We've already made our mark with a paltry 25 years: let's go on for the half-century and try to complete the job!

*This historic meeting happened in June 1962. Murtogh Guinness arranged for a film crew to be present and on our societies 10th anniversary, Mr. Murtogh Guinness presented a 16mm sound film record of that first meeting. The accompanying pictures are "blow-up's" from that film. Ed.

Biographical Note:

Arthur W. J. G. Ord-Hume is a Founder Member of the Society and also founded the Society Journal, "The Music Box", which he edited from its inception through to Volume 5 number 2, and then again from Volume 6 number 2 through to the end of Volume 9. He served as President of the Society from June 1976 through to 1979 and was accorded Life Membership of the Society in consideration of his contribution both to it and to the science of mechanical music in 1982. He is author of no fewer than 12 books on mechanical music and its instruments, for which he was awarded the first Q David Bowers Literary Award by the Musical Box Society International. His definitive work on the restoration and preservation of musical boxes was also the subject of a special award by the Libraries Association as the best technical and historical book of the year. As a leading historian on musical instruments and early mechanical music his services as a consultant are widely sought throughout the world on matters concerning restoration and conservation. In addition to his writing and publishing activities, he is editor of "Music & Automata."

Christmastimes Past.

Mechanical musical instruments have probably always been high up on the list of available and acceptable items to serve as Christmas gifts although today they are probably far too expensive. On this and the following three pages, we take a nostalgic journey back through the years and through the medium of old advertisements, see what the spirit of Christmas may once have inspired us to buy. The period is from 1882 to 1923 and all the notices come from the collection of Paul N. Ottenheimer of New Jersey.

Grand Orchestral Music Boxes.



Playing any number of the most popular airs by means of CHANGEABLE STEEL DISK. It is the greatest and most durable musical novelty century. Six sizes, \$20 to \$200.00 Catalogue FREE. FRED. H. SANDER, IMPORTER,
146 FRANKLIN ST., BOSTON, MASS.

Above: Fred Sander, Boston importer, preferred to highlight the disc rather than the box itself back in 1891. Below: The earliest notice seen for McTammany's Tournaphone organette, this dates from 1882.



FOR YOUR CHRISTMAS PRESENT-A

Stella Music Box

The Music Box Par Excellence for the Home

WE state, without fear of contradiction, that never in the history of music-box manufacture has there been a production which for sweetness, harmony, and volume of tone can be compared with our Stella Grand.

We won't ask you to take our word for the wondrous charms of this magnificent instrument. All we ask is that you avail yourself of an opportunity to hear it; we will be satisfied to accept your judgment.

In justice to yourself, you should not purchase a music box without first listening to the Stella. It can be found on sale in every city of importance throughout the country. Where we have no agent will send on approval on receipt of satisfactory references or guarantee. Drop us a line and we will tell you where you can hear it. It plays with feeling, as if the notes were struck by a master hand, and with a precision and accuracy which is simply wonderful.

All the Stella Music Boxes play any tune and any number of tunes, and are the only music boxes using smooth steel tune sheets.

NO PINS
OR
PROJECTIONS
TO
BREAK OFF

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NO HOME
IS COMPLETE
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WHAT OUR CUSTOMERS SAY "If I could not procure another, nothing could induce me to part with my Stella Music Box."

JACOT MUSIC BOX CO.

59 UNION SQUARE, NEW YORK



No. 80. Oak or Mahogany finish case, with large spring motor, two duplex combs and a moderator to give the desired tempo, dimensions 18 inches long by 17 wide and 11½ high. Price including twelve steel tune sheets, 9½ inches in diameter \$33.00

No. 126. Oak or Mahogany finish case, with large spring motor, two duplex combs, and a moderator to give the desired tempo, dimensions 24 inches long by 9½ wide and 12 high. Price including twelve steel tune sheets, 14 inches in diameter \$60.00



No. 168. Stella Grand in oak or Mahogany case, with large spring motor, two duplex combs, and a moderator to give the desired tempo, dimensions 29 inches long by 22 wide and 13 high. The case has a drawer that will hold one hundred tune sheets. Price including twelve steel tune sheets, 171 inches in diameter ... \$100.00



No. 268. Stella Grand in combination cabinet, Mahogany or Golden Oak, Stella Grand movement in a handsome and artistic cabinet combining the box and stand. The lower part is subdivided by a number of vertical partitions for greater convenience in storing the tune sheets. Its dimensions are height 36 inches, width 30, and depth 22. Price including the tune sheets \$125.00

WHERE WE HAVE NO AGENTS WE WILL SEND FOR EXAMINATION Write for Full Catalogue and List of Tunes

From the Paul N. Ottenheimer collection comes this notice from The Literary Digest of 1900.



Above: Piano rolls by Q.R.S. were - and still are - ideal low-cost gifts in 1923. Nobody, not even the company itself, knows what Q.R.S. means.

Standard and popular airs

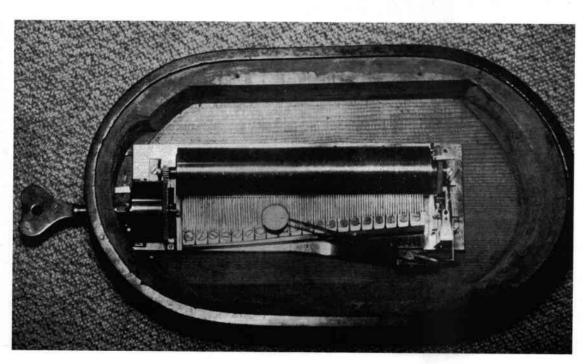
F. G. OTTO & SONS, 44 to 50 Sherman Ave., Jersey City, N. J. Send for illustrated price-list. receipt of price or C.O.D. by dealer in musical merchandise.

to advertisers.

Please mention McClure's when you write Or can be bought from any

F. G. Otto is mainly remembered for the "cuff" box named Capital, advertised above in 1896.

A hundred years before Q.R.S. promoted piano rolls for Christmas, you might have chosen to present somebody with a French ormolu clock which could play music from a musical movement in the base. Seen here (right) is the movement from such a clock which is in the Jackson Fritz collection. Made around 1820 by Henri Capt, who stamped his name on the comb base, the cylinder is 7% ins. long and the 20-segment sectional comb has a total of 100 teeth. The movement is set in motion by a rod from the clock which presses the spoonlike detent above the comb.



MIRA MUSIC

The Sweetest @ Most Pleasingly Mellow Music Ever Produced by a Self Playing Instrument



We are anxious to prove this to you by letting you hear Mira Music in your own home on free trial.

in your own home on free trial.
You will love Mira Music because it is refined music, beautifully rich in tone and variety of musical expression. Its sweet mellowness and peculiarly sympathetic quality give to Mira Music a charm that will afford you genuine enjoyment year in and year out.

Try MIRA MUSIC In Your Home For Ten Days—FREE

Let us send you a Mira on approval to be returned at our expense if you decade not to keep it. No deposit is required. Mira Music affords an almost

Mira Music affords an almost endless variety of popular and classical selections, hymns, sacred music and the old-time melodies. Indestructible, steel time discs, for nearly

all popular and classic music cost only 20 cents to 75 cents each,

The Mira is Sold on Easy Terms

Prices are from \$25 to \$250, and payments of \$1 to \$2.50 a week make it very easy for you to buy a Mira. You take no risk—your satisfaction is guaranteed by the free trial. Send for Catalog "L" and Free trial coupon. You incur no obligation whatever.

JACOT MUSIC CO. 292 FIFTH AVE. 39 UNION SQUARE NEW YORK

Charles Henry Jacot founded the Jacot Music Box Company in New York in the 1880s and became the principal distributor for Mermod's musical boxes, both disc and cylinder. Above is a 1909 advertisement for the Mira – the original is printed in colour – which describes its music in glowing terms. Right: Back in 1900, Jacot was advertising the three-cylinder Ideal Sublime Harmonie interchangeable as a Christmas gift to be had on easy terms. Below: The Orchestrion Harmonette, no doubt a popular present in 1883.

THE ORCHESTRION HARMONETTE.



The most wonderful Musical Instrument in the world. It combines both music and musician.

Novel in construction; elegant in design and decoration; powerful and melodious in effect; more notes and plays better than \$9 Organettes. It plays any tune—dance, popular, or sacred—and a little child can operate it. A short strip of perforated paper represents the tune. Place the paper in the instrument, and turn the handle, when it will play the tune perfectly. It contains many patented improvements, and is the most perfect Price of Music.

musical instrument in the market. Price of Music, only 4 cents per foot. Music can be sent by mail at any time. This is the most beautiful and acceptable present that can be made to any one. It will furnish music for any occasion, and any one can play it. Price, \$8. Special price to those wishing to act as our Agents, only \$5. Sent by express on receipt of price. Address, MASSACHUSETTS ORGAN CO., the great headquarters for all MUSICAL INSTRUMENTS, ORGANINAS, ORGANINAS, ORGANITES, ARISTONS, TOURNAPHONES, CLARIONAS, etc. Get our Catalogue and prices before buying elsewhere. 57 Washington Street, Boston, Mass.

For \$2.00 Down-To Literary Digest Readers
Only \$2.00 -A Beautiful MUSIC BOX

Even if you cannot play a single musical instrument; even if others about you cannot play, you can always, at any time that suits your pleasure, enjoy an unlimited variety of the sweetest music from this wonderful Music Box and

AT A COST OF ONLY 25 CENTS PER DAY TO DIGEST READERS.

In order to place this superb instrument within easy reach of LITERARY DIGEST readers, we make the ternarkable offer of this \$f98 Music Box for only \$100, payable \$2 with coupon below, and the balance in instalments of \$8 per month.



An Ideal Christmas

Gift



Ideal Sublime Harmonie

We offer to LITERARY DIGEST readers for the next few weeks a limited number of Ideal Sublime Harmonic Interchangeable cylinder music boxes, playing 24 tunes, with four cylinders with six tunes each in a handsomely finished Oak or Mahogany cabinet 30 inches long by 15 wide and 11 high, with drawer to hold three cylinders. This instrument is self-acting, being operated by means of two powerful springs, giving a range of twenty minutes with one winding. Each cylinder plays six tunes in rotation, and each tune can be made to repeat at will; the tempo can be regulated by means of a lever. Additional cylinders of six tunes each can be had at any time from our regular stock lists, or made to order with any tunes desired.

The Ideal Music Boxes are remarkably fine, being the best and most durable made.

The tone of the Ideal Sublime Harmonic is of great depth and volume, as this instrument has two combs or keyboards, while the execution of the music is remarkably brilliant, owing to the large number of pins in the cylinders. These instruments are not liable to get out of order, and we guarantee them for one year, but with ordinary care they will last a lifetime.

We will ship this Music Box by freight or express on trial for ten days; if not satisfactory or as represented, it can be returned at our expense. Delivered f. o. b. New York.

JACOT MUSIC BOX COMPANY, Sign and send us the following coupon

JACOT MUSIC BOX CO., 39 Union Square, New York.

GENTLEMEN: I enclose \$3.00, in return for which please send me, f. o. b. New York, an Ideal Sublime Harmonie Music Box and four cylinders (24 tunes), as advertised in THE LITERARY DIGEST of October 26th. I agree to pay the balance (\$6.00) on monthly installments of eight dollars (\$8.00) each.

SK. Zagk Zagk Zagk

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Address	 nanananan	 	

... and for Christmastime present

comes this Christmas music from P. K. Watts of 14 Rockhill, Chipping Norton, Oxon.

Roll 1 Rudolph the Red Nosed Reinder Away in a Manger

Jolly Old St. Nicholas In the Mid Bleak Winter Holly and the Ivy Oh Little Town of Bethlehem

Roll 2 Jingle Bells As with Gladness Men of Old

> The First Noel Once in Royal Davids City Frosty the Snowman

The two rolls are £40.00 plus £2.00 postage and package, these rolls are for the Hofbauer and Raffin type organs.



Some Collecting Experiences

Over the years it has been my privilege and pleasure to have purchased - either for my own collection, for the Mekanisk Musik Museum in Copenhagen, or for resale (through my former firm of Hathaway and Bowers and for the Mekanisk Musik Museum's resale department) - a number of really great automatic musical instruments. Often the acquiring of these involved interesting experiences - experiences which were as fascinating as the music boxes and orchestrions themselves! Today the collector or museum requiring instruments finds his ideal source to be the automatic musical instrument dealer or other collectors with duplicates for sale. Only rarely are instruments available in their original locations. The increased demand for old time instruments, the higher value attached to them, wide publicity, and other factors have combined to ferret most such pieces out of their original locations years ago. However, this has not always been the case - and even in the 1950s many fine pieces could be obtained from their original owners or members of the owner's families.

Over the years my search for instruments has taken me nearly to the four corners of the earth. Most fertile in the search have been America close at hand here (I have always lived in America) and Europe (I have been a frequent traveller to Europe having been there over 30 times during the past 20 years). I suspect that certain other areas of the world where I have not been would also be rewarding — South America, for example. However, I will leave it to others to find this out!

One day in 1963 or 1964 I received a letter from Harvey Roehl, owner of the Vestal Press in New York. Harvey knew I was visiting Belgium, and I suggested that during my trip I stop and pay a call on Emil Baude, a showman who operates rides and owned several fairground organs. He furnished me with Mr. Baude's address, on a street in a suburb of Ghent, Belgium. During this particular trip to Belgium I attended to important business first - and called upon Leonard Grymonprez to see what he had for sale. Leonard, whose interest has now turned. to other things, was once a very active dealer in Belgium. Many were the miles he travelled over the Belgian countryside in search for coin-operated pianos, organs, and orchestrions. Some of the nicest pieces in my own collection came from Leonard - the beautiful Weber Maesto which I have owned since 1963. for example. After visiting Leonard and purchasing some instruments from him, I then went to see Eugene DeRoy. Mr. DeRoy, who passed away several years ago, was active in the automatic

by Q David Bowers

musical instrument business from the World War I era to his death. During the early days he bought and sold instruments and made rolls for them, the latter under the "Symphonia" trademark, his own factory label. I believe Mr. DeRoy had more experience with orchestrions and pianos than anyone else I have ever met. A great deal of the information concerning European pianos and orchestrions which appears in my "Encyclopedia of Automatic Musical Instruments" book was gained through the help of Mr. DeRoy.

Emile Baude, showman

When my visit with Mr. DeRoy was concluded and after I purchased several instruments from him, I then went over my list of things to do – and decided to visit Emil Baude. Harvey Roehl did not say anything about Mr. Baude, except that he was a showman and owned a few fairground organs. There was no indication that he had any instruments for sale now or ever did in the past.

I knocked on Mr. Baude's door and was rewarded with a greeting in Flemish, Mr. Baude's language. Not being familiar with Flemish, most of our "conversation" was conducted by expressions and movements from that point on. However, the language of automatic musical instruments knows no barriers – and we were able to get along fine! After a while I was able to carry on a thread of

conversation with him, picking up his knowledge of a few English terms and using my very, very limited knowledge of a few German words (German is somewhat related to Flemish).

In the enclosed courtyard leading to Mr. Baude's home there were three immaculately-restored Hooghuys fairground organs. Each one looked as if it had been made yesterday! "Do you want to hear them?" Mr. Baude asked me. I did, of course, and for the next hour or two I was treated to a wonderful concert.

Those of you who are familiar with Hooghuys organs know that this particular brand plays louder than just about any other fairground organ on earth. It is safe to say that the concert could have been heard just as well by someone standing a mile away! Hooghuys organs, originally manufactured in Grammont, Belgium, were mainly distributed within that country, so few of them are known on the international collecting scene. However, in recent years a number of Hooghuys instruments have been exported - and now there are a few in America and perhaps some in England as well. As a matter of fact, the three Hooghuys instruments I listened to that day long ago were subsequently sold by Mr. Baude to Wallace McPeak, a dealer in Texas, USA, who has since retired.

Orchestrion hunt

When I first arrived at Mr. Baude's home it was early in the afternoon. One hour soon followed another, and time went by like magic as song after song



Who would think that this white-painted decoration in the New Batavia Restaurant, Brussels, complete with nailed-on billiard scoreboard, was a Popper Gladiator orchestrion!

was played on the fairground organs. Soon it was time for dinner – and a lovely meal was prepared by Mrs. Baude for us. During dinner Emil Baude told me his collecting experiences and how he had travelled the length and breadth of Belgium in search of fairground organs. His search was successful, and over the years he had located some fine Gavioli, Mortier, and other types – and selected from these his favourites, the Hooghuys pieces on display.

"Did you ever find any orchestrions?" I asked him. He then related that his love was fairground organs, and not orchestrions — but that yes, he indeed had heard of a few orchestrions here and there, one in Germany and two in Belgium. Did I want to learn about them? Indeed I did!

Business being business, an arrangement was made whereby I would pay him for the information should any one of these leads result in an instrument purchase. With the three addresses in hand I left Mr. Baude late in the evening.

Not being familiar with the Flemish language I then returned the next day to see Eugene DeRoy, who lived near Antwerp, and enlisted his assistance in checking out the two addresses in Belgium.

The first was a cafe on a dingy small street in Brussels. Peering through the grimy windows from the outside I could see nothing, for the inside was dark. Eugene DeRoy and I then went in. Built 40 or 50 years earlier, the cafe had changed little in the meantime. To the left was a simple bar and behind it a rack lined with bottles. To the right were a half dozen linoleum-topped tables, each with an ashtray advertising Cinzano vermouth. Against the back wall was a sign above a doorway indicating the way to the "pissoir" or men's urinal. And, that was about it . . . except for something large, lurking, and mysterious in the far corner at the back!

Standing nearly 10 feet high was a light oak cabinet. Across the top I made out the words: "POPPER'S SALON ORCHESTER". So, a Popper's Salon Orchestra – what a find! I had never seen one of the orchestrions personally, but in my avid reading of literature issued before World War I by Popper and Company, one of Leipzig's main manufacturers, I had read often of the Salon Orchestra. It was one of this German firm's most popular models. And, now I had the chance, or at least I-hoped I had the chance to buy one in person!

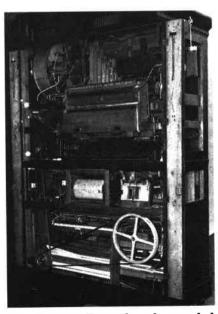
Before entering the cafe, Mr. DeRoy whispered instructions to me: Under no circumstances was I to speak in the English language, for the cafe owner would then think that a wealthy American (all visiting Americans are considered "wealthy" and higher prices might be charged accordingly) might be visiting. Instead, I was to play the part of a silent

observer. Mr. DeRoy, representing himself as a repairer and purchaser of obsolete instruments (which indeed he was) planned to go in the cafe and ask about the orchestrion. He was then going to write on a napkin the price wanted, and I could indicate whether or not it was of interest. Officially I was his "assistant" and was there to help him with some of the "dirty work" – such as peering into the orchestrion while Mr. DeRoy talked to the cafe owner. But, I am getting ahead of the story!

Cola collusion

The first thing to do upon entering the cafe was not to ask about the orchestrion. Rather it was customary, as it is in all places of Belgian hospitality private or public, to have a drink. Well, I don't mind having a glass or two of beer or two in a day, but in no way can I keep up with the typical Belgian pace of having a glass every half hour or every hour! So, I had that international beverage, a Coca Cola. Mr. DeRoy ordered a glass of Stella Artois, one of the most popular of all Belgium's beers. Following the first glass of Stella Artois, he walked up to the bar and ordered a second - at the same time engaging the cafe owner in conversation. There was no problem with this, for the establishment was devoid of patrons during this early afternoon hour. Soon the owner joined us at our table, with Mr. DeRoy treating him to a glass of his own merchandise. By this time I was on my third or fourth Coke. Conversation was at a mile a minute pace, and I didn't know what was going on except that it must be something favourable, for both people glanced frequently at the orchestrion as words were being spoken!

Then came a respite – the owner went to the pissoir, and Mr. DeRoy had a



A back-street Brussels cafe revealed this Popper's Salon Orchester seen here with the front removed.

minute or two of hurried conversation with me. Yes, the instrument was for sale – and the price seemed reasonable to Mr. DeRoy. Did I agree? Upon learning it I did agree.

"Why don't you examine the orchestrion carefully while I continue talking with the owner? Mr. DeRoy said. "I will tell him that you are checking it over for me".

Opening the door to the roll housing. I then felt around in the dark innards of the instrument and found the wooden cleats which fastened the tall doors to the left and the right. Quickly these were undone, and the doors creaked open. Despite a liberal coating of cobwebs and the accumulated dust of what must have been a quarter century, the orchestrion appeared in basically nice condition. This was my first view of the inside of a Popper Salon Orchester, and I was delighted to see that it had quite a few pipes, a bass drum, a snare drum, xylophone, and various other appurtenances which delight the orchestrion lover. On the front was a circular glass panel with reverse painting on it. A mechanical device in combination with lightbulbs transformed this into a flickering "motion picture effect" when the instrument was new and operating properly. Unfortunately, it was far from this condition now - so how this actually looked was left to my imagination.

I returned to the table and Mr. DeRoy instinctively knew that I approved of the orchestrion's overall condition. However, not a roll was in sight - and I was wondering whether any supply of music came with it. Another opportunity to converse with Mr. DeRoy occurred a few minutes later, and I asked this question. Later this question was in turn asked to the cafe owner, whereupon he bounded up from his chair and led us through the back door. Up a small flight of narrow stairs we went until we reached a small room three or four floors up, a tiny attic storage area. There were á number of rolls, perhaps several dozen in all, most of which were quite crinkled from having been water soaked and then dried several times. It seemed that these rolls were hidden there during World War II when the Germans occupied Belgium. Following the war the orchestrion was not used again, and the rolls were all but forgotten. Interestingly enough, all of the rolls bore the "Symphonia" name and were sold to the cafe owner in the 1920s by Mr. DeRoy!

Somewhere in heaven there must be a repository for statues from the front of orchestrions and piano benches from the front of pianos, for more often than not when I have purchased a grand piano or a large orchestrion, these instruments have been devoid of a piano bench or a decorative statue. The statue on the Belgian instrument was no exception. Long ago it had disappeared. replacing it was a plaster figure of a dog

. with the name of a Belgian beer lettered across the bottom.

The transaction with the cafe owner was duly consummated, and with a bill of sale in his hands Mr. DeRoy left the tavern with me. We congratulated ourselves on our luck! A few days later we returned to the cafe with Mr. DeRoy's son-in-law, Jeff and packed the instrument for export.

The next orchestrion on Mr. Baude's list was located in a restaurant called the New Batavia located on St. John the

Baptist Square in Brussels. Again, Mr. DeRoy accompanied me.

In contrast with the earlier experience, the New Batavia restaurant was large, spacious, and well lighted. Obviously it was one of that district's favourite gathering places. The walls were panelled with light wood. In the centre were perhaps 100 to 200 chairs around long tables arranged in beer-hall style. To the right was a large bar. But, where was the orchestrion?

To begin with, we didn't know what

type of orchestrion to expect, but traditionally an orchestrion is an orchestrion, so I searched for something large, dark-coloured, and hopefully ornamented with mirrors, art glass, hanging lamps, and statues. However, I saw nothing like this.

Eugene DeRoy, perhaps more experienced than I in such things, finally concluded that the orchestrion was at the back of the room. This was done after eliminating the other possibilities. No, it wasn't against the left-hand wall for the only thing that was there were a few decorations, a billiard scoreboard. and some coathangers. No, it wasn't against the right-hand wall for all that was there was a bar, and a bar with hundreds of sparkling bottles could not be mistaken for an orchestrion, at least not any kind we were familiar with. So. that left two possibilities: Either there was no orchestrion or else the whitepainted irregularly-shaped back wall of the restaurant somehow played music!

It turned out that the latter was indeed the truth. What had once been a massive (about 15 feet wide by 12 feet high!) Popper and Company "Gladiator" orchestrion had been transformed. The mirrors and the statue had been removed, as had been the decorative lights. The front had been painted a bright white colour somewhat like a refrigerator. Looking carefully at this arctic-coloured blob one could indeed make out several carvings and the outline of the front doors. Yes, it was an orchestrion! And, it was the most huge orchestrion I had ever laid eyes on!

Noting that the condition of the exterior was less than it was when the instrument had left the Popper factory in the 1920s, I wondered about the interior as well. There was not as much need for secrecy in the New Batavia restaurant for the place had perhaps a dozen patrons (some of whom looked as if they had been there since the night before), and the establishment was large enough that conversation held in one corner of the place could not be heard at the bar. Eugene DeRoy and I had a hurried conference and then he went over to the bar and talked with the owner, A Mr. Moeyersons. Things weren't so easy this time, and Mr. Moeyersons related to Eugene DeRoy that the orchestrion was as much a part of the restaurant as he was - and. in fact, it had been a "trademark".

"But the orchestrion doesn't play, so what use is it to you?" Mr. DeRoy asked. Apparently the reply was that it was of sentimental use, and it didn't make mush difference whether it played or not.

This article is a reprint from The Music Box', Volume 7, No. 1, Spring 1975 and will be continued in the next edition.

Dates for your diary

5th December, 1987:-

Once again the Oval Cricket Ground, where we enjoyed the excellent facilities last June, is to be the venue for our meeting. The Christmas Meeting will take place there on Saturday, 5th December, 1987. There will be the usual full programme of speakers, as well as the opportunity to see friends once again. Registration fee is £6. A substantial lunch will be provided for those members who have booked this in advance, and paid the £6 for it. Alison Biden, the Meetings Secretary, is endebted to Sue Holden for her valuable assistance in helping to arrange this meeting. For further details, refer to the registration form inserted in the journal.

Christmas Meeting speakers will be Freddie Hill talking about Barrel Organs from the late 18th to mid 19th Century, and Clive Jones on Items from my collection.

15th - 17th April, 1988:-

Norwich is the venue for the Spring Meeting, which will take place on the weekend of 15th - 17th April, 1988. The excellent Maid's Head Hotel, where we shall be based, is located near the Cathedral. As this hotel is extremely popular, members are advised to make their reservations well in advance in order to avoid disappointment. The provisional programme will include the chance to explore the city itself on the Saturday, as well as a visit to the Thursford Collection, and other local places of interest. On the Sunday morning there will be a programme of speakers and/or workshops at the hotel. This meeting promises to be a most enjoyable one, thanks to the local organiser's efforts, and we look forward to seeing you there. Please remember to register with the Meetings Secretary, Alison Biden, in advance, be you residing at the hotel or only a day visitor. It is most essential to know the correct number for dinner for the Saturday evening in order to avoid disappoint-

Norwich is well served by road and rail communications, and also has its own airport, which may be of interest to members coming from further afield, especially the continent.

4th June, 1988:-

A new London venue for the Summer Meeting, to be held on Saturday, 4th June, 1988. This will be the Tuke Common Room, Regent's College, Regent's Park, London, where there is easy parking and good catering facilities. Further details, including directions, will be published in later editions of the journal.

This programme may be subject to alteration.

THE NEW POLYPHON SUPPLY COMPANY

The year 1898 started with a fire which razed four Central London acres and the weather included some of the worst blizzards of the century. In May, Gladstone died and was buried in Westminster Abbey. It was also the year that two young men from Saxony set up a London musical box business which was to become the biggest of the era – and the last. They even bought up bankrupt Nicole Freres. 'The Music Box' recently met the descendants of that company and uncovered a fascinating story.



Back in 1898, if you wanted to travel, you needed no passport or other travel documents - you just put on your hat and went. For 19-year-old Arthur Ficker, the family business of cotton millers at Zschopau just outside Dresden in Saxony held little charm. Besides, he was more interested in commerce and the possibilities afforded by the new German musical box industry. Among his wealthy bachelor uncles he secured promises of cash to help him set up in business; his father, Hermann Ficker, also promised to see his son right. A letter of introduction to the manager of the Polyphon Supply Company in London was also forthcoming, and so off he set for England.

The Polyphon Supply Company had enjoyed a somewhat chequered history.



The first London distributors had been the Polyphon & Regina Company established by Nicole Freres at 21 Ely Place in 1896. At this time, Nicole Freres was already a London-owned company, having been taken over by Charles Eugene Brun who joined it originally as manager in October, 1881.

Problems and confusion

The subsequent formation of the Polyphon Supply Company endeavoured to take a large share of the mushrooming disc musical box business away from the Nicole company's offshoot. Manager was a young German named Curt Herzog. Although Ficker had never met Herzog before, Herzog also came from Zschopau close to the Czech border. In fact his father was the village schoolmaster. Four years Ficker's senior, Herzog had already been in London several years trying his best to run the Polyphon Supply Company which was largely financed by businessmen from Saxony.

The first address for the PSC (until 1898) was 3 Bishopsgate Street Without, London EC, but then it moved into the same building as Henry Klein & Co.

The story is more than usually complicated, for Henry Klein was the biggest wholesaler (trade distributor) of Polyphons in London and as such his company was sole consignee for the Leipzig agents H. Peters & Co. Peter's

New Polyphon Supply Company founders pictured after the golden jubilee luncheon of Lugton & Co. in November, 1951. Left: Arthur Ficker, born March 4th, 1879; died December 14th, 1966. Right: Curt Herzog, born September 23rd, 1875; died August 21st, 1956. founded in 1887 at Theaterplatz 1, Leipzig, was one of several principal shippers of Polyphons to England. Klein's business was at 84 Oxford Street.

When the Polyphon Supply Company moved into rooms at Klein's Oxford Street, address to serve the retail trade and to rent instruments to public houses and amusement arcades, it was obvious that confusion would soon arise. Indeed the righteous Klein was forced to insert a notice in the trade papers to the effect that his trade was quite separate from that of the PSC. These notices are to be found in *The Music Box*, Volume 5, page 322. The PSC obtained its instruments from another famous Leipzig distributor, Hugo Popper & Co., founded in 1891 at Reichsstrasse 33/35, but also bought,





Newman Street in 1906. Four upright pianos and a small grand fill the centre. Left to right: the edge of a large disc box. Then comes a Symphoniola piano-orchestrion. Next is a 15½ in. self-changing Regina (flat-fronted case) with two galleries stacked on top. The Polyphon Concerto has the *Honeymoon March* disc in place. A tuning hammer stands inside. The 24½ in. Polyphon has Sweet and Low on its spindle and a Symphonion Falstaff automaton on top of it. Next is a Polyphon clock with a 19% in. movement, and a 15½ in. Geisha with non-standard, large-diameter clock-face. On the table, right, stands a 24½ in. table Polyphon in folding-top case and three 11 in. models.

probably unwisely, from Peters via Klein.

The Polyphon Supply Company was a strangely-organised operation. Perhaps the word "organised" is to place too finer point on its management for there was a lot of personal pocket-filling going on and the business, although obviously doing good trade, was not making money—for the shareholders at any rate. Herzog was fighting a losing battle with his own supervisors.

It was with this unbusinesslike situation with its undertones of animosity from Klein and the trade that Arthur Ficker found himself. The two men from the far-off Saxony village decided that they should try to do something about it. They surveyed the Polyphon Supply Company as it tottered on the brink of dissolution brought about by the greed of its top operators. Herzog and Ficker discovered that most of the shareholders in the company were friends and it was soon agreed that the old company should be disbanded, the shares sold at par and the two Saxonians given the chance to try to reorganise the business back into a state of profitability.

New company formed

Arthur Ficker took up 7,362 shares in the new venture, and Herzog 1000. Ficker's father in Dresden took up 375. and various other relations back home added their contribution. A fresh company was registered - the New Polyphon Supply Company - at 1, 2 and 3 Newman Street, Oxford Circus. Number 1 was later to be hived off. Other shareholders in the business were G. Reicheldt (Hermann Ficker's fatherin-law), May Ficker (Arthur Ficker's wife), Anna Marie Herzog (Curt Herzog's wife) and other family members and industrialists mostly from the Dresden area.

The whole musical box business was now in its closing phase and, as so often happens at this period in the history of an industry, there were some massive changes and expansions to take place before the final crunch. Nicole Freres had made its disastrous venture into the gramophone record business (*The Music Box*, Volume 5, pages 338 et seq) and as a result, found itself bankrupt. In October 1906, the NSPC acquired all

that was left of the once-famous Ely Place musical box company. Earlier that year, Henry Klein had retired from business. At that time he was operating at 142 Wardour Street and his assets too, were gobbled up by the NPSC. On the company letterheads it now proclaimed "Incorporating Henry Klein & Co., late of Wardour Street; Nicole Freres late of Ely Place". And, just to add some reflected respectability by way of age, a line was added which said "Established 1815".

Business thrived for the two Germans. They covered large areas of the country on bicycles collecting the coppers from their hired-out Polyphons. The persons who rented machines were allowed 20 per cent of the takings. One day, Curt Herzog was cycling through a wood near Salisbury Plain when he was set upon by a Victorian mugger. He fought off his would-be attacker, laying him out cold with a swipe round the head with his bag of pennies!

Little by little over a period of years they made new deals with public houses and, in certain cases, sold them instruments. The business became very profi-



Another room at Newman Street with large disc boxes down the left side, gambling machines at the back and phonographs right. Numerous Columbia posters and one advertising Edison Gold-Moulded Records at 1/6d each line the walls. A central table carries Reginas from 27 in. folding-top table, 20½ in. Sublima down to the moulded-case 11 in. Style 19 in front. But the sight of two long shelves packed with gleaming 15½ in. discs selling at half-a-crown a time makes today's collector's heart beat faster . . .

table. Its secretary was an able accountant by the name of Sidney H. Dixon.

Prior to 1914, they met and were joined by a man named Louis Sterling of Clerkenwell Road. Louis (later Sir Louis) Sterling was to become a legend in his own lifetime. Born in a New York slum in 1877, he started as a newsboy, came to Britain in a cattle boat with just £6 in his pocket, once spent a night in London's Vine Street police station because he was penniless, and later headed up the giant gramophone company which bore his name. Sterling began his career in gramophones by joining His Master's Voice as an office boy, was closely involved in the Columbia organisation and became chairman of Electrical & Musical Industries until he resigned in 1939. He died in 1958. But as far as Herzog and Ficker were concerned, their meeting and subsequent friendship with Louis Sterling was to prove extremely fortuitous.

Interned as aliens

Meanwhile, war had broken out. To begin with, Ficker and Herzog were not worried. Their business was well away from matters of a hostile nature. In any case, they were now well established in England. However, the Trading with the Enemy Act of 1914 and its Amendment (1916) were inescapable. German-owned companies were to be sequestered, their Teutonic operators to be interned as aliens for the duration. In due course, the long arm of the law stretched out, Ficker and Herzog were arrested and the NPSC sold under the Alien Properties Act. The two men were interned in, of all places, London's Alexandra Palace which had been hastily converted as a war-time detention centre. By a strange coincidence, they were imprisoned in the tower which later became the building from which the BBC transmitted all its television programmes until the 1950s. Ficker became elected spokesman for the Germans in his section. Herzog was later transferred to Holland on an exchange basis for British prisoners of war.

With the NPSC sold off, a new name came to the fore – Robert Willis. It was he who reformed the business as the British Polyphon Company at the 2 and 3 Newman Street premises, with a branch at 27 Jamaica Street, Glasgow. His son, Gordon, later joined the management team.

When the war was over and Ficker was released, he was content to remain

in England where he subsequently married a Staffordshire girl and settled in London. Herzog also returned to England and both men subsequently applied for British nationality in the 'twenties'. They were now disassociated from the business they had so profitably resurrected in the pre-war years.

British Polyphon entered the gramophone business and, in 1927, changed its name to Dulcetto Polyphon Ltd., becoming a public company. Robert Willis was again managing director. With the trademark of a parrot, the company, factored gramophones (including its own-brand Dulcetto), wireless, radio accessories and gramophone records, emphasising the "Poly" part of the name.

The early 1930s saw the dismal trading conditions of the slump and the company entered difficulties first in 1933, recovered and then, in 1935, collapsed in one of the more spectacular bankruptcies to characterise a period in which so many gram companies, including Itonia and the Metropole Record Co., folded.

Lugton and Louis Sterling

Now we must consider the second

.half of • the story and go across to London's East End where Lugton & Co. was established.

William Lugton began business as an engraver in Glasgow back in 1860. Business prospered and he opened branches in Birmingham and London, but as the result of disagreement between the father in Scotland and his son in London, each became a separate entity. That in London secured a contract in the 1890s for the manufacture of stencils for the General Post Office when the first parcel post was introduced. Machinery installed for the making of these later proved adaptable to the production of cycle parts and by 1901 when Lugtons became a limited company, it was described as manufacturers and distributors of cycle, motor and aeroplane parts.

The first British-built aeroplane to fly included wheels, spokes and other parts supplied by Lugtons and, in later years, the company was to produce parts for the Comet airliner and even Concorde has some Lugton technology in it. But that is away ahead of the story.

William Lugton's son in London was offered the chance to buy some phonograph cylinders – they were packed in barrels at that time – he bought a number of barrels-full. When he sorted them out, he found to his dismay that there was only one title per barrel and he realised he either had to go into the record business in a big way, or get out of it quickly. He chose the first course and became factor for Edison Bell (which went bankrupt in January, 1933) and the Columbia Company with which Louis Sterling was closely involved.

Subsequently, Lugtons began making the Maxitone gramophone and its ownbrand records under the Bandmaster label. But being in the East End. Lugtons was not an important wholesaler and, as the 1920s advanced, the company was played out. The firm was on the way down. Louis Sterling remembered Ficker and Herzog, then vegetating in the country, and went to see them. He told them that he was connected with this small out-of-the-way wholesaler of gramophones and that he thought it would be a good idea if the two nownaturalised Britons from Saxony would take it over. They responded by buying majority shareholdings in the company and becoming joint managing directors. Business prospered once more in the experienced hands of Curt Herzog and Arthur Ficker.

In 1909, Lugtons had been at 150 Old Street. The business now moved to larger premises at 133-135 Old Street. A major fire forced them to move to 203 Old Street, where the company expanded in the 'thirties. When Dulcetto Polyphon collapsed Gordon Willis (son of Robert Willis) gave Herzog and Ficker a framed, coloured lithograph which had originally hung on the wall of the New Polyphon Supply Company's office at Newman

STOCK OF MUSICAL BOXES



SPECIAL OPPORTUNITY.

A Stock of Musical Boxes acquired from the Official Liquidator of

Messrs. Nicole Freres (late of Ely Place), to be sold at greatly

Reduced Prices.
A splendid money making chance for Pushing Dealers.

About 201 of the Well Known Penny-in-Slot Polyphons No. 104

Equal in every respect to new. To be cleared. Some of these are already advantageously placed in Licensed Houses.

NEW POLYPHON SUPPLY CO. 2, Newman Street, London, W. 11d.

In October, 1906, the New Polyphon Supply Company advertised the musical box stock of Nicole Freres from the Official Liquidator. This was just three years after Nicole Freres entry into making gramophone records. The NPSC said it had "acquired the goodwill and stock" of the business.

THE LATEST AUTOMATIC MUSICAL BOX.

The Sirion.

PATENT.

SUPERSEDING ALL OTHERS.

Two Airs in place of one. Full Revolution of the Disc for each Air.

SOLE AGENTS:

THE NEW POLYPHON SUPPLY CO. (LIM.)
137, Oxford Street, London, W.

Left: Earlier, in January of 1899, the NPSC published this notice concerning the two-tunes-per-disc Sirion.

Street and which had passed into the hands of the British Polyphon Company and hence to Dulcetto Polyphon. To Willis (who later joined the Collaro gramophone company) this memento was of no value. To Ficker and Herzog, though it was an instant connection with their youthful days in business with Polyphons. That picture still survives: it heads up this article.

Blown to pieces

In 1940, with England again at war with Germany, Lugtons received a direct hit and the building was blown to pieces by a bomb. A new home was found in Tottenham Court Road and Lugtons continued there until October 1974 when it moved to a spacious new warehouse at Hornsey, North London. Today the business is in radio and electrical goods wholesaling with a large proportion of the business still involving the distribution of gramophone records. Close by rises the green slopes of Muswell Hill. And on top is the dark outline formed by the ageing bulk of Alexandra Palace with its now-redundant TV mast on the tower where two men from Zschopau spent the First World War years.

Arthur Ficker lived to see the postwar success of his business and died in December, 1966. So did Curt Herzog who died in 1956. Their two sons, still hold the Lugtons reigns. Walter Ficker as managing director, and Charles Herzog as chairman, now partially retired. Hanging on the wall in the entrance hall right now is that historic picture of the jovial character listening to a phonograph – a picture probably seen by Charles Brun of Nicole Freres, Henry Klein of long-term Polyphon fame, and many an original purchaser of a Polyphon, Regina or Symphonista. Truly hi-fi, 'nineties style! And if you are privileged to enter Walter Ficker's office, you'll find a cylinder phonograph on a shelf.

This history of a famed organisation would not have been able to have been compiled had it not been for the enthusiastic help received from Walter Ficker, Charles Herzog and Chris Pickard who is the deputy managing director and, at 67, is the self-proclaimed youngster in the Lugtons management team. He's only been with the company since 1932 . . . The pictures of the New Polyphon Supply Company's Newman Street showroom are from the Lugtons archives. Both pictures survived two major fires and the bombing and were blackened by soot and smoke until cleaned for reproduction (for the first time ever) on these pages. History only just survived!

Reprinted from 'The Music Box', Volume 7, No. 3, Autumn 1975

GRAF'S DO-IT-YOURSELF DISC MUSICAL BOX

The first disc musical box to be patented operated on the pin-it-yourself principle. Miguel Boom's invention of 1882 could hardly have been a commercial proposition since, however flexible its use and programme might have been, it still demanded of its owner either a musical knowledge or, at the very least, a strong measure of intelligence and practical ability in order to use it. Now, it seems, the disc turned the full circle, for the discovery of an example of the last disc-type musical box to be patented proves that its inventor regressed to Broom's original concept by asking his customers to make their own music using a kit of parts – the Musik-Baukasten.

A few months ago, a South Coast auction room provided the surroundings for a discovery which has somewhat altered the hitherto cutand-dried history of the disc-playing musical box. For there, amid the umbrella stands, the knife sharpeners and the stuffed birds was an example of a disc musical box which, although barely 67 years old, can hardly have survived in quantity. In fact, it is the only specimen so far to have been discovered, although the thenunidentifiable part of one was offered to Arthur Ord-Hume several years ago. Since the instrument comprises so many loose components, the survival of the specimen now in the Brian Etches collection is something of an achievement in itself. And as survival in toto is only likely to have been attained by care, it is probably only to be expected that the Etches specimen is in almost perfect condition.

Invention of 1910

This remarkable atavistic instrument is Graf's Musik-Baukasten, literally "music constructing cabinet". It was invented in 1910 by a German named Graf and was manufactured in Berlin by Liebermann. It is covered by British patent number 11,617 of May 13, 1911 which was issued exactly one year after the German one.

The device comprises two cases. The larger box houses the musical movement – a cast steel bedplate mounting a conventional comb/star-wheel assembly and a central turn-

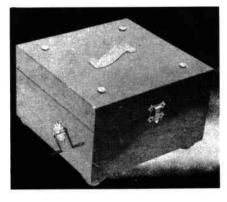


table driven via a worm gear by a dog-clutch handle (there is no clockwork motor) — while its lid contains a detachable circular tray separated into five segmented compartments. This tray, with its own detachable lid, is removed by

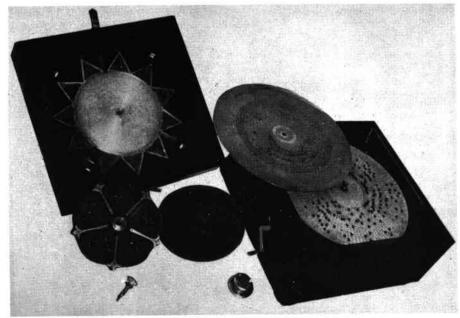
WHAT IS KNOWN ABOUT GRAF?

According to the British Patent, taken out in 1911 one year after the original German one, Heinrich Graf was Director of Telegraphs at Bielefeld in Westphalia, Germany, some 25 miles (about 44 km) south-east of Osnabruch and more than 200 miles west of Berlin.

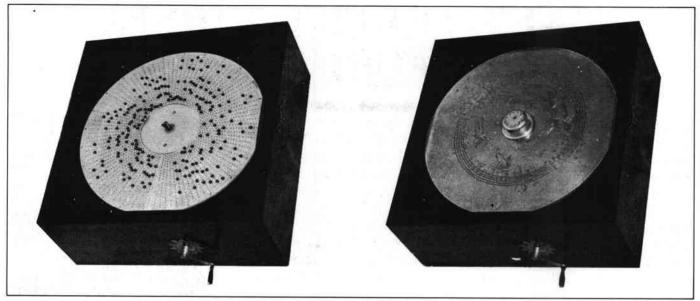
In fact, The Music Box published the abbreviated specification of this patent on page 87 of Volume 5 along with two of the patent line drawings.

A close examination of the patent shows several differences between the original design and the actual machine. It was, for example, proposed to produce the musical plans in rectangular form instead of as a replica of the actual disc. Developed into rectangular shape, it would have involved much more skill and concentration in order to pin a tune.

A paradoxical sentence concludes the patent: "It has been proposed to provide a strip with perforations into which pins are inserted and held in position by wrapping the strip round a drum". Was Graf thinking of a cylinder musical box as well?



The components which make-up the Musik-Baukasten. The lid is the tray in which the disc is rested and rotated while being pinned. The tray of pins and its red flock-covered cover is visible lower left. The small screw holds tray and lid inside box lid.



These two pictures show the musical box portion of the Musik-Baukasten. On the left is the box with the prepared pinned disc in place on the turntable so that it will play on the comb teeth. To hold the disc in place and at the same time to secure the loose pins so that they do not jump out of their holes, an engraved pressure plate lined on its underside with baize is placed over the disc and screwed down onto the centre spindle using a large round nut. This is shown in place on the right. Note the small crank handle which rotates the disc.

undoing a large central thumb-screw to leave the inside of the box lid empty save for four small pillars arranged in a circle and each mounting one small ceramic rider wheel on its inwards-facing side.

The smaller case – the same overall dimensions but much shallower in depth – is used for storing the discs, five in total. Each disc is of shot-blasted aluminium and is approximately 3/16 in. thick by 111/8 in. (29.5 cm) in diamater. Each is separated in the disc-storage box by a green leatherette-covered card disc and the stack is finally covered with an aluminium plate upon which is printed "Graf's Musik Baukasten", the German national coat of arms and the words "Aust. Patent". This

disc, the music discs and their spacers are all held securely in the storage box with the aid of another thumb-screw.

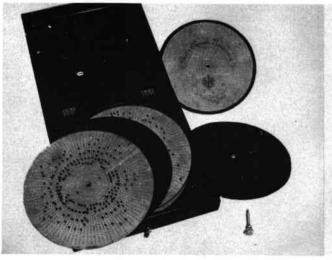
Pinning plans

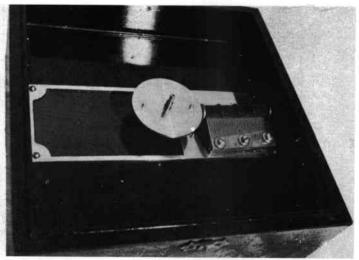
A further component which will not fit into either box is the printed sheets showing the pinning plan and the musical notation for various tunes. These sheets measure 14¹⁵/16 inches (38 cm) square and are printed in black, red and green. The colour red is used for the tune title and the treble-stave notes while green is used for the notes which form the accompaniment. Printed along the bottom of each sheet is: "Musik-Baukasten-Gesellschaft

Libermann & Co. m.b.H., Berlin W.30, Motzstr. 90".

In appearance, each sheet bears an exact replica of the perforated tune disc with the bar lines numbered radially and every hole shown in its proper place. At the start position of both the disc and of the sheet is set out the tuning scale which is marked as follows:

An examination of the fivecompartment tray in the musical box lid reveals that the compartments are filled with pins. Each pin is approximately one millimetre in diameter and has a shank length of 5mm. The head is 2½mm in diameter





Above left is the disc storage case which is quite separate from the musical box portion of the Musik-Baukasten. This case stores the five blank, perforated discs, each one separated by a green leatherette-covered spacer, and on top is then placed the metal disc with printed name visible at the top right of the picture. The screw which secures all these pieces into the storage case is seen lower right. On the right is a view looking inside the musical box showing the angled somb assembly and plain bedplate.

and about the same in height. Two of the compartments contain pins with red heads, the other three hold green-headed pins.

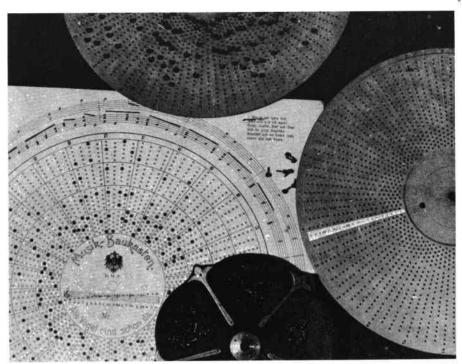
In operation, the user first selects from a number of printed sheets which, one presumes, were originally available with the instrument, one printed with the instructions for pinning the tune of his choice. He then takes the lid of the musical box portion and places in it one of the blank, perforated discs so that it sits on the four rollers. This allows the disc to be rotated while pinning.

The discs, which are the same on both sides, have 99 radial divisions indicated by impressed lines in the surface. These are numbered 1, 5, 9, 13, 17, and so on to 97.

Using the printed sheet as a guide, and aided by (a) the bar-line division, (b) the concentric divisions on the disc, and (c) the tuning scale, he then begins inserting the pins in the holes. The melody notes (i.e. right-hand of the musical notation) are printed in red and so these he pins using red-headed pins. Accompaniment notes are printed in green and so these are filled using green-headed pins.

Fitting the disc

When the disc is completely pinned, a thumb-screw on top of the musical box drive turntable is undone and the cover-plate removed. This is a 2mm thick highly polished alloy disc with a finely-executed engraved design on the top, and a layer of green blaize stuck to its underside. The pinned disc is now placed on the 37/16 inch (87mm) dia. turntable so that the two pegs engage with two



The components employed in pinning a disc – the printed tune-sheet plan, the tray of red and green pins and a blank disc. Part of a pinned disc shows at the top. Note the stop/start area of the disc. Both green and red pins are identical, colours only aiding the operator in following the music plan.

drive holes in the disc, and the coverplate is replaced and the thumb nut replaced. This serves to hold the disc down and prevent the pins from being pushed upwards by the starwheels as the disc turns.

A difference between this and conventional disc machines is, of course, that the disc is not bowed but is played perfectly flat.

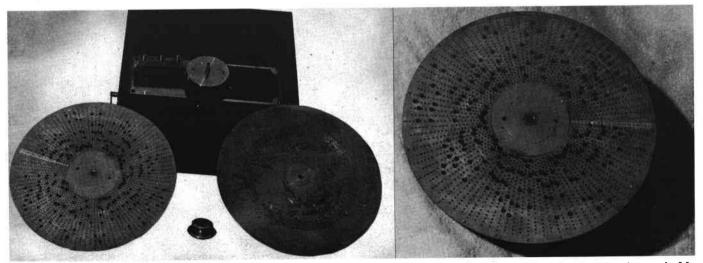
The musical comb comprises 40 teeth and operates in the normal way with starwheels and dampers which are very similar indeed to those used by Polyphon, save that they appear to be somewhat more robustly founded.

These are neither steady pins nor

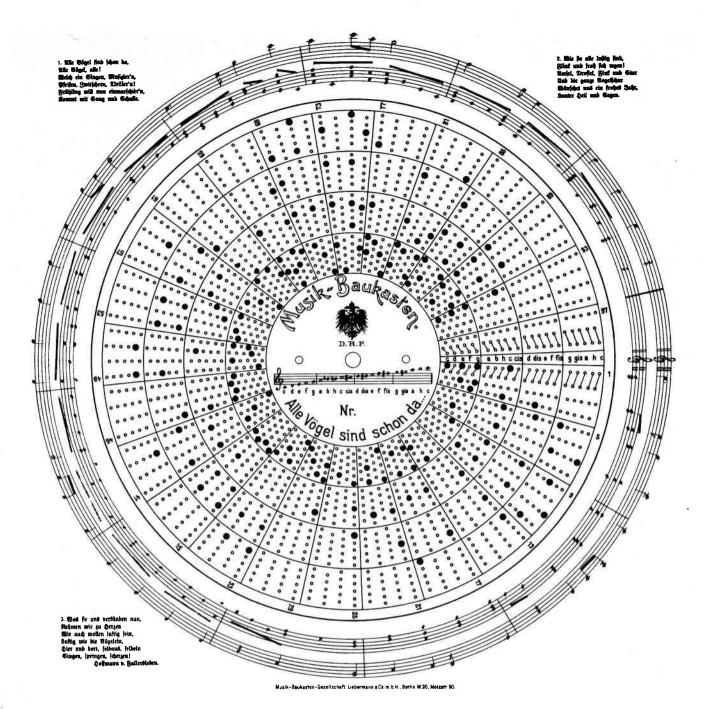
dowels and it must be positioned with infinite care in order to ensure proper plucking and adequate damping. The starwheels are arranged with three quite closely-spaced rider wheels which effectively divide the comb into four separate sections of ten teeth. Each note is represented by two teeth, so allowing a measure of rapid repitition of one note in the pinning process. This is facilitated by the piercing of the discs which is in staggered concentric rings.

Plain arrangements

Because the arrangement of the disc perforations follows a purely geometric format, the pinning of the



Preparation for playing a tune on the Musik-Baukasten involves (left picture) setting the musical box portion in a suitable position, placing the pinned disc carefully onto the turntable so that its two drive pins engage in the disc drive holes, placing the pressure disc on top and tightening up the hand nut. The ready-pinned disc is shown in detail on the right and this shows clearly the simplicity of the pinning and musical arrangement.



One of the Musik-Baukasten disc pinning guides. These are 38 cm square and feature in the centre a full-size plan of the actual disc to be pinned which has green and red blobs to indicate the pins. Around the edge of the sheet is written in conventioanl music notation the music played. Top line (treble clef) notes are printed in red: accompaniment notes are shown in green. Words for three verses are printed in corners.

music follows strictly metrical style and makes no allowances for nuance, changes in tempo (other than by the speed of turning the handle) or melodic spacing. One result of this is that the speed of starwheel turning, a factor taken into consideration by the makers of conventional discs for conventional disc musical boxes, is far more apparent. To minimise this, the comb and starwheel assembly is angled on the bedplate so that the bass notes are allowed a mechanical advance.

In tone, the box has a warm, mellow sound rather like a mediumsized Polyphon or Monopol and, with some of its musical arrangements, can produce a pleasant interpretation. However, the very basic simplicity of the instruction sheets which studiously avoid the use of available actaves (admittedly difficult with a compass of no more than 20 notes) and even thirds and fifths, tends to result in a somewhat thin sound.

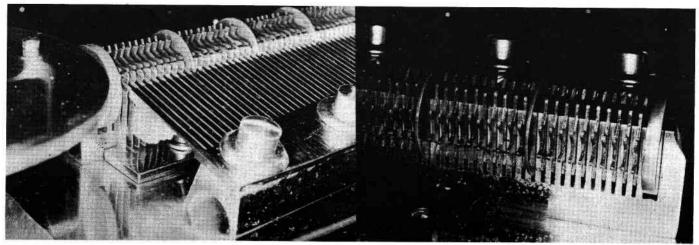
Truly high quality

The overwhelming impression when examining Graf's Musik Baukasten is of the truly high quality of manufacture demonstrated by absolutely every component. The bedplate, quite thin and cast in what appears to be steel, is machined on

both sides and is highly polished and nickel-plated. The little crank handle is finely engraved and, along with other items such as the securing screws, is silver-plated.

A recurring characteristic is the use of the five-pointed star inside an eleven-pointed star – this is no more clearly shown than on the inside of the musical box lid itself. All the thumb-screws and the thumb-nut have the same motif engraved on them which is then coloured. And the lid of the box has on its outside a rendition of the design in what appears to be brass and silver, again coloured.

The comb complete with its



A riot of reflection from the polished plating of the comb and its tuning weights, the dampers, the damper rail, the bedplate, turntable, star-wheel block – in fact everything is made to a high finish and then plated and polished. Lower pictures show detail views of both sides of a disc. The turning of a star-wheel by a round-section pin is an interesting concept. Note also that each note has two holes which are staggered.

tuning weights has also been nickelplated in toto as has the damper mounting rail and all visible components.

Late though the Musik Baukasten may be, there are no short cuts evident in its construction and it is a superbly made device, obviously well thought-out and painstakingly made.

The programme sheet

With this example, now owned by Brian Etches which forms a star item in his museum at Purbeck, Dorset, which opened in 1987, was a stack of more than 30 of the printed instruction sheets. And here something else interesting is to be found. While three-quarters of the sheets are fully printed with instructions for pinning various titles, the remainder have obviously been supplied just printed with the black outline for the owner to "write" his own musical programme. These have indeed been so "written" with green and red ink. The fully-printed sheets mainly seem to cover popular German songs and these have the words of up to four verses printed in red in each corner, suggesting that as well as pinning his own disc, the owner was then invited to sing while turning the handle.

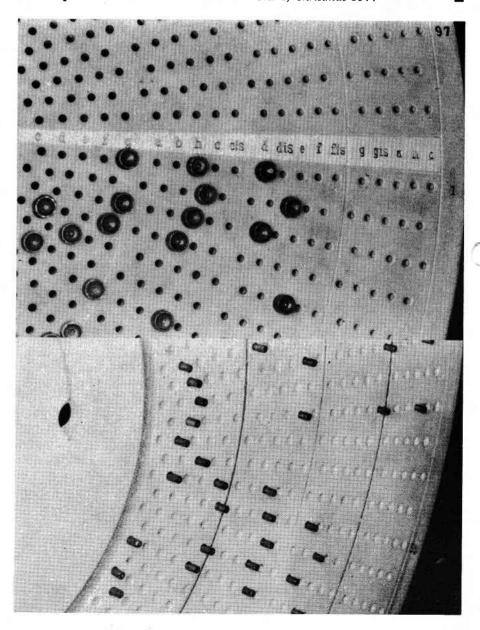
Do any more of these unusual instruments survive? About three years ago, an antique dealer reported that he had one of the unpinned discs for sale and believed that it was made of pewter. Although its sand-blasted surface may resemble the dullness of pewter, it is but a fraction of the weight. Unfortunately, it could not at that time be identified and was passed over.

Although this cannot have been a cheap instrument to make or buy, it cannot have found a very receptive market and it must be rated as a very rare device indeed. For this one to have been found virtually complete and in perfect order is a stroke of

rare good fortune.

Perhaps some of our German members may care to comment on Herr Graf and his remarkable harkback to disc machine pre-history.

Reprinted from 'The Music Box', Volume 8, No. 4, Christmas 1977



IDENTIFICATION MARKS

by Arthur W. J. G. Ord-Hume

The methods by which the manufacturers of musical boxes are identified are many and varied. With the very early makers, provenance is often far more by intuition than by features that can be spelled out. And, as with so many similar crafts during their burgeoning period, no one feature should ever be considered as definitive evidence. The way the comb is attached, the shape of the governor cock, the positioning of the motor bridge attachment screws, the marks on the bedplate - all taken together may be considered as providing evidence necessary to enable the expert to weigh and determine.

As musical boxes became other than rare curios, so makers began to make their individual marks. In their earliest form, these could be as unsophisticated as the profile of a cutter which left a recognisable mark on the metal which it worked. Much later it was to evolve into the name or other mark specifically identifiable with that particular maker.

After 1876, of course, the registration of trade marks opened up the whole field of makers' marks and made identification somewhat easier. However, the registration of trade marks in many ways served to confuse the casual observer since often these marks were applied by the importer or agent rather than the original artisan who made the piece.

Maker's marks can be broken down into two main categories: those applied in the form of an actual name (such as NICOLE FRERES à GENEVE) and those applied as but initials, e.g. BAB for B. A. Bremond.

Agents and importers marks followed a similar pattern.

The introduction of the printed tune sheet did not always aid identification since many lithographers had stock sheets which were used by several makers. Where, however, the maker applied his mark to the tunesheet, a degree of certitude was admissable. Importers and agents also had a field day once the printed tunesheet became used widely. They made, printed or marked their own, e.g. Thibouville-Lamy.

Any selection of "trade marks" must of necessity be arbitrary. I have listed no fewer than 376 different marks, but some of these are so slight that they must be considered in combination. There are marks in the form of letters and numerals, others in the form of characteristic tool stamps. There are tunesheet symbols – the field is extensive.

What I have done here is to set out 56 symbols which encompass the gamut of musical boxes. There are bedplate marks, comb marks, cock marks, some disc marks and trade-marks, there are also disc machine trade-marks and agents' marks. The selection is a good cross-section of the marks which the average collector will stumble across in his travels. I have naturally omitted some of the more obvious ones, such as name stamps (with one exception), and many of the tunesheet marks.

For each mark I give the type of application (stamped, acid-etched or printed) and its location (bedplate, cock bracket, comb tunesheet, accessories).

Where feasible, I have collected together the marks by shape, i.e. circular, oval, diamond, square, shield, inverse, and miscellaneous shapes. Each one has a number. The particular mark can thus be called up without confusion as "Ord-Hume 31", or "Ord-Hume 49". The chart, which follows on the next two pages, forms the basis of an extended investigation into makers which appears in the book "Musical Box", published in 1980 by Allen & Unwin.

Comments on these and any additions will be welcomed.

The bigh depol Cadets. March.

2 La Cigale or la Formi Magalia

Wang

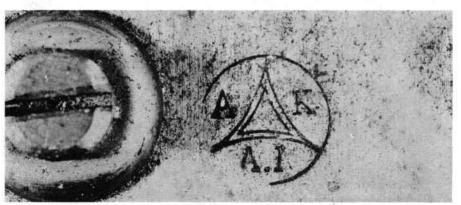
1 Excelsion Tally

5 Lagily Drowbily.

6 Fanst More date.

7 Lainy Bell

8 Sweet Framium: diethode.



Here is an unidentified mark seen on the comb of a rather ordinary 7½ in. cylinder eight-air musical box sold at Christie's on December 7, 1977. The 18 in. wide box appeared to be by Paillard and, as can be seen by the tune-sheet, it was nothing spectacular. The mark, which reads A K A.I without a double triangle, is not stamped but acid-etched into the comb as can be clearly seen in the way that various portions have been thickened. Although I have seen this mark before, I have no idea to whom it belongs. Comments from members are invited. The pictures were taken specially for *The Music Box* by Ted Bowman of Christie's South Kensington.

Reprint from 'The Music Box', Volume 8, No. 6, Summer 1978.



1. **B A Bremond** – Stamped into top of cock.



2. **B A Bremond** – Stamped into top of cock.



B A Bremond – Stamped into top of cock.



4. (Unidentified) - Etched into comb.



Ch & J Ullmann – Stamped into comb, also top of cock.



F Conchon – Printed on tunesheet ("Star Works").



7. Richter & Co – Attached medalion (stamped) and bedplate, cast.



8. **F Conchon** – Printed on tunesheet ("Star Works").



9. **Mermod Freres** – Printed on tune-sheet.



10. **Bontems** – Stamped into brass plates, ¾ in. x % in.



 Woog, Samuel – Stamped into top left of bedplate (early importer of L'Epee).



12. **Woog, Adolphe** – Stamped into top left of bedplate (early importer of L'Epee).



13. F Conchon - Stamped into top of cock, 5/16 in. wide.



 Freres Rochat – Stamped into brasswork, also sometimes in a circle.



 Ch & J Ullmann – Stamped into bedplate, 5/16 in. wide. Also found cast into underside of bedplate.



 Berens, Blumberg – Stamped into comb. Lecoultre importer.



Lecoultre Freres – Stamped into comb.



Mermod Freres – Stamped onto accessories.



Mermod Freres – Stamped onto accessories.



20. Mermod Freres – Printed design on discs for Stella.



21. J Cuendet - Printed on tunesheet.



22. **Soc Junod** – Stamped on accessories with patent numbers.



23. Charles Paillard - Stamped into top of cock.



24. **G Baker-Troll** – Stamped into top of cock and tooled into inner lid strap.



25. **Henri Metert** – Repair work stamped into bedplate.



26. Paillard - Stamped into top of cock.



27. Barnett Samuel & Co - Printed on tunesheet.



28. **Thorens** - Cast into bedplate (Edelweiss disc machine).



29. **Jean Billon-Haller** – Printed on tunesheet.

PRM 1156

30. Piguet et Meylan – Stamped into music disc (different numbers).



 Paillard, Vaucher, Fils – Stamped into comb.



 Ami Rivenc – Stamped into top of cock and reversed image printed on tunesheet.



33. **Junod** (?) - Mark stamped into bedplate (variations).



34. Berens, Blumberg & Co – Stamp top left bedplate. Lecoultre agent.



35. Francois-Charles Lecoultre – Very small mark stamped into bedplate in several places. About 5/16 in. long.



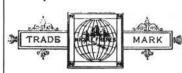
36. Nicole Freres – Very small mark stamped into bedplates of some early specimens. About 5/16 in. long.



Langdorff – Stamped into top of cock, also printed on tunesheets.



38. Ami Genoux - Stamped on brass components.



39. Nicole Freres – Mark registered, Chas Eugene Brun Aug 2, 1882, ref 28,834. Printed on tune-sheets.



40. Ludwig & Wild – Printed on discs of Orpheus disc machine.



Ch & J Ullmann – Printed on tunesheet.



 J Thibouville-Lamy - Printed on tunesheets, mostly L' Epee boxes.



43. Ernst Holzweissig Nachfolger
 Printed on tunesheets. Very large Leipzig distributor.



44. **Ch F Pietschmann** – Printed on discs of Celesta disc machine.



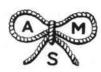
45. **Allard & Sandoz** – Printed on tunesheets.



Polyphonmusikwerke – Printed on discs, stamped on medallions.



 J H Zimmermann – Printed on discs for Adler and Fortuna.



48. Silber & Fleming – Printed on tunesheets.



49. Weill & Harburg - Printed on tunesheets.



50. Piguet et Meylan – Stamped on music disc.



51. **Heinrich Hermann** – Printed on discs for Celeste.



52. Adolphe Woog – Mark registered on Dec 8, 1876, ref 10,100. Printed on tunesheets.



53. **Mojon, Manger & Co** – Printed on tunesheets.



54. (Unidentified)
Stamped into
brass on automaton, believed
Leschot/Maillardet workshop.



55. Adolphe Woog – Printed on tunesheets. Developed from (52).



 Weissbach & Co - Printed on discs for Komet. Sometimes image reversed in cabinet door design.

HOW THE PIANO WON THE WAR

Today's airline pilots spend much of their training and procedural instruction time in a flight simulator. The first synthetic trainer was made out of player piano parts by American Ed Link. Now for the very first time can be told the story of a British achievement which played an important part in winning the 1939-45 war. Gerald Stonehill describes the mechanism Gordon Iles made out of Duo-Art components which taught men to fly bombers. It was called the Silloth Trainer and was virtually an Aeolian product.

In February of 1963, I wrote to the Imperial War Museum in London, asking them whether they were aware that World War Two had partly been won by the contribution made by the mechanical piano. They replied, advising that all papers on this subject had been destroyed at the Air Ministry and they themselves had no records on the subject. Many details of the project had been classified as secret and the manuals and photographs, when their useful life had concluded, were automatically destroyed as they, too, were either secret or restricted and had never been de-classified.

I wrote back to the Imperial War Museum saying that I knew of one copy of the manual concerned which ch of their in time in a trainer was american Ed in be told the chiplayed an 339-45 war. mechanism components it was called an Aeolian with them that I would lend it to them for photocopying on condition that they would give me a copy.

The story goes back to 1935 when Mr. G. B. Iles (perhaps the initials were no coincidence) learned to fly at the rather exclusive Cinque Ports

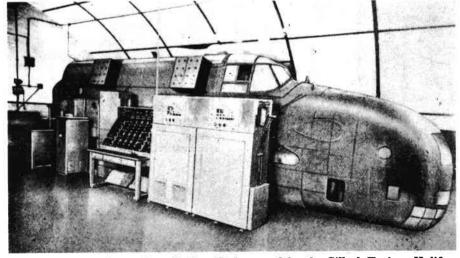
had escaped destruction, and I struck a bargain with them that I would lend it to them for photocopying on condition that they would give me a copy. They were a little hesitant to do this since, although officially non-existent, the manual was still "classified", but since the ultimatum was "no photocopy—no loan", they capitulated and confirmed in a letter of March 5, 1963, that they would let me have a "set of photostats, if we copied the manual". Although I duly lent them the manual for photocopying, I am still waiting for the photostats which were promised!

The manual dealt with the little-known Silloth Trainer, a strange combination of war-time bomber and Duo-Art piano.

Mr. G. B. Iles (perhaps the initials were no coincidence) learned to fly at the rather exclusive Cinque Ports Flying Club. Even then, flying was fairly expensive. He joined the recently-formed Civil Air Guard at Manston in Kent and became the second officer to be commissioned into the squadron. He could now fly without charge. A year before the outbreak of war, because of the shortage of flying officers, Gordon Iles was called up into the Royal Air Force.

By 1942 he held the rank of Squadron Leader and was chief flying instructor at Squires Gate, Blackpool. But sinister forces were at work and others, who must remain nameless, coveted his job.

In the political manoeuvring occasioned by this turn of events, friends of Gordon Iles at Coastal Command remembered that he was famous as an organ builder and as a pneumatic theoretician with the Aeolian Company involved with its pianola and the Duo-Art reproducing piano. They were already under pressure at Silloth in Cumberland where flying crews were being converted to fly the American Lockheed Hudson, entering service as a U-boat spotter. The training field at Silloth was littered with wrecked Hudsons and the crews were becoming demoralised. The problem was that the twin-engined aircraft had a nasty habit of swinging on take-off, usually slewing right off the runway and ending up in a heap.



Heading picture shows the still-classified manual for the Silloth Trainer Halifax resting against a Steinway Duo-Art. Above, concealing its pianistic connections, is the Trainer in its complete form. Reproduced from the old Air Ministry publication, the notes to this picture say that the Trainer was intended to be housed in a 30 ft. span Nissen hut. Cleanliness was stressed because of the delicate pneumatic action.

Thus it was that Gordon Iles was invited to apply his enormous inventive skill and pneumatic experience to designing an aircraft trainer which could rescue Coastal Command from its dilemma. In 1942, a scheme was worked out for the construction of the device, to be known as the Silloth Trainer, for the relatively modest cost of around £40,000 (then about \$150.000). Work started at once on the prototype and by 1943 it had been accepted by the recently-established Synthetic Training Committee. Acceptance was followed by a grand opening ceremony attended by the Commanders-in-Chief Bomber Command, Coastal Command, Fighter Command (who in the end did not use it), and other interested parties.

It will be remembered, of course, that Ed Link of the Link Piano Company had in America produced the first successful pneumatic trainer for pilots. This is certainly better known today than the Silloth Trainer because it was never on the secret list. Paradoxically, the Link is remembered because it was, in one way, less specifically useful. The Link Trainer was a non-particular aircraft trainer which enabled the trainee pilot to operate controls which turned and banked the mechanism in which he sat. However, a normal aircraft does not give this type of clear-cut sensation since a real aeroplane operates in a

three-dimensional mode with each mode subjected to both inertia and acceleration.

The Silloth Trainer, on the other hand, was a crew procedure trainer specifically designed to be a "type trainer". Thus, since it was tailormade for a particular type of plane, it knew the plane's secrets as regards performance, and it had a built-in obsolescence geared to the life-cycle of the aircraft which it set out to emulate. The Silloth Trainer concept appeared as the Fairy Swordfish (for the Navy), and versions for the bombers Wellington, Halifax and Lancaster, the Mosquito and the Dakota (for Transport Command), not to mention the Hudson which was responsible for starting the project.

"A pneumatic instrument"

The designer of the Silloth Trainer held it to be a fundamental truth that an aircraft is a "pneumatic instrument". As such, a true procedure trainer must have pneumatic feel. Gordon had seen Link Trainers taken apart and studied how they worked, and came to the conclusion that specific crews needed something more complete in the way of training. Today, there are complicated and costly flight simulators geared to one type of aircraft. Gordon Iles was wise enough to foresee that need 33 years ago.

Gordon Iles in 1975. Using original Aeolian Company rollperforators, he then worked at his Ramsgate, Kent, home making piano rolls under the Artona label. His company, Artona Music Rolls, was in operation for many years as a latter-day cottage industry. Gordon lles died 5 years ago.

The Silloth Trainer used a system of bellows and manually-operated valves, four bellows to simulate the effect of tilting in different directions, and an air motor for the effect of rotation. The Silloth was therefore infinitely more complicated than the Link and had an enormous number of additional function mechanisms, each containing player piano valves and special regulators. Principles developed for swell-shutter control when Iles trained with the Compton Organ Company were also incorporated. In particular, the whiffle-tree principle was used to combine components to create a differential. Further pneumatic devices were deployed in order to simulate airspeeds and give correct pneumatic reactions to engine temperature and aircraft attitude by way of artificial horizon, etc.

This was by no means the whole story. Engine and aircraft noise were also simulated to create the total experience of flying the particular aircraft. The principle of the Hammond Organ was introduced to solve that one. Tone wheels and amplifiers were linked to match the sounds expected at differing engine revolutions to give the proper level and pitch of noise. The tone wheel was a rotor of triangular aspect - the shape of the Wankel engine - which ran against a pick-up in the form of a steel electro-magnetic wheel with alternative tracks and speed control again to simulate various engine conditions. This task was simplified by the fact that, at that time, it was feasible to economise by producing only two noise-packages to encompass the engines used in the aircraft concerned (basically radials and in-line).

In discarding the Link principles, Gordon Iles debunked the theory of moving the entire aircraft, because there is no feeling of falling when banking, and the correct sensation can be achieved by using a stationary fuselage with, in some cases, a feel of fore and aft movement only. The actual flying controls terminated in enormous bellows units, so that the pilot had the impression that he was working his controls against a slipstream that varied in force according to the speed he was flying, and with the correct sponginess of air itself, combined with further special control effects such as occur from engine failure and such like. The Link, on the other hand, with its moving fuselage, took on the correct attitudes, but did

not give the pilot the correct sensation.

So successful was the Silloth Trainer that, apart from its use for cockpit drill and as a crew-procedure trainer, complete crews were put in it for fatigue tests, and to check the state of their reactions under conditions of full aircraft noise. This was useful both in itself and after training flights, in order to tabulate the crew's ability to tackle aircraft problems and their susceptibility to error under these conditions.

A secondary benefit, and one which gave Gordon Iles much personal satisfaction, was that it gave full employment to the pianola constructors of the Aeolian Company. The major production of components took place at Automatic Player Piano Actions Ltd., Southall, under the direction of the Aeolian Pianola and Duo-Art mechanics. The sound-effect components were made by the Rank Organisation in Shepherds Bush. The trainer itself was entirely the design of Gordon Iles, and the prototype was made by Iles and by Palmer (of APPA) personally. Thus, if you looked at the illustrations of the parts operating the Silloth Trainer, you would have seen gargantuan mechanisms instantly recognisable to anyone who has worked on a Duo-Art piano, the rotary blowers, the accordion pneumatics, etc., etc., in never-ending combinations.

At the height of the Silloth fame, its inventor, in the noble tradition of absent-minded geniuses, was driving a service Hillman car, when he decided to pass a lorry, near the brow of a hill, while rushing from one airfield to another to check the problems arising at different installations. Just over the hill was, unfortunately, a crossroad, and an RAMC lorry was destined to meet Iles' drab blue car in an impact of the sort which is spectacularly destructive. Fortunately, Gordon was thrown clear, zooming out through the sunshine roof, describing a graceful arc over the offending lorry and touching down in the road the other side of the crossing. Fortunately also, the lorry was carrying a doctor, who was able to treat Gordon immediately. All the same, he spent a year in and out of hospital, and for a long time was in no condition to rush round air stations tightening leather nuts and adjusting springs.

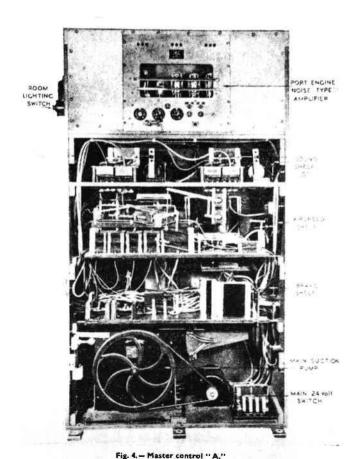
Shortage of geniuses . . .

It now became painfully clear to the Air Ministry that not all of its staff were pneumatic and electronic geniuses. More experts must be trained, so Gordon was put to lecture 30-40

people at a time at Lindholm near Doncaster for three months in 1944 in an attempt to correct this deficiency. It remains doubtful that any of his pupils could really have replaced the maestro himself. In the absence of a live-wire pneumatic industry, change was bound to come. The Silloth Trainer was in full use up to 1947, but the civil airlines had their own army of electronics experts and a changeover to electronic trainers was made in order to make use of the new-fangled, existing techniques and talents.

The nation did not, however, forget. In 1948 Gordon Iles received an inventor's award amounting to £100 for his contribution to winning the war. Certainly, at the time of the Silloth Trainer, the aircraft was in fact a pneumatic instrument, which needed a pneumatic solution to its problems. Today it is arguable that modern aircraft, with their computerised controls and jet engines have moved into the new age of electronics. It is necessary, however, that the Silloth story should be told, lest the secret of the mechanical piano at war remain locked for ever in the photographic archives of the Imperial War Museum.

Reprinted from The Music Box', Volume 7, No. 4, Christmas 1975



components and is driven by the Duo-Art pump at the bottom. Sound shelf is a Hammond organ and above it is the sound amplifier. Below: control response motors with multiple stages.

Left: the master control unit displays masses of player piano

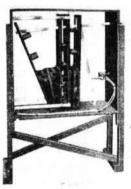


Fig. 11. - Feel of controls, ailcron.

Feel of controls boxes, fig. 11 to 13

26. There are three of these boxes one each for the aileron, rudder, and elevator, the latter two being in one unit with the rudder box mounted above the elevator box. Each has large bellows mechanically connected to the primary flying controls in the airframe which provide varying loading on the controls with the simulated speed and attitude of flight.

27. In the rudder box there are additional pneumatic components to provide the effects of swing and slip, and in the aileron box there is an additional small bellows connected to the banking system (see chap. 12.)

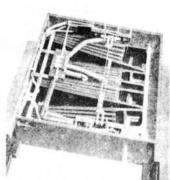


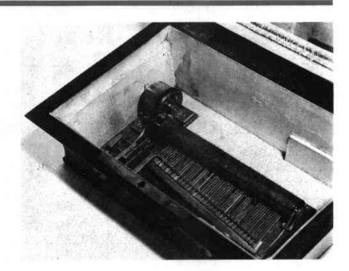
Fig. 12 - Feel of controls, rudder



Fig. 11. - Feel of controls, elevator.

Who invented the Musical Box?

At the Summer Meeting of the Musical Box Society in 1975, Arthur Ord-Hume presented a paper on his recent investigations into the history of the musical box which have cast some measure of doubt on the accepted history of the tuned steel tooth in mechanical musicwork. In this article, derived from that paper, he demonstrates that styles hitherto considered to be very early continued to be used well into the second half of the 19th century, and suggests that the musical comb was probably in use half a century before the date accredited to its invention. He also sets out to re-define what it was that Antoine Favre invented in 1796.



When first I began taking an interest in the subject of musical boxes, I naturally accepted as gospel all that I was told and all that I read regarding the history of the things. On reflection, I believe my attitude to have been both reasonable, for I was learning, and justified, for I was in no position to determine otherwise.

And so, with certain yardsticks in mind, I have journeyed many years through musical boxes, basing judgements on what I knew and making assumptions from this foundation. It did not occur to me to challenge what I had been told and it was not until recently that I began to suspect that most of that which I thought I knew might be based on suspect history.

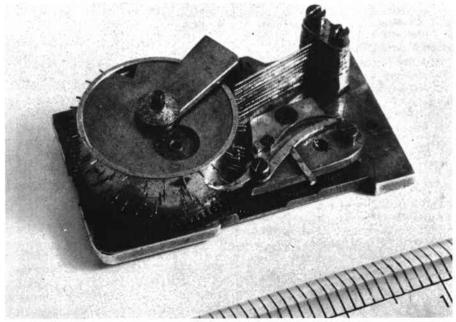
I became increasingly aware of certain doubts that have been growing in my mind over recent years concerning the circumstances surrounding the birth of the musical box. I knew, for example, that I had seen musical movements with combs and cylinders which somehow did not fit into the accepted story of Switzerland being the birthplace of the musical box. They certainly cast doubts about the date of invention being the closing years of the 18th century. The outcome was that I was forced to draw certain conclusions which are in contradiction to everything that we already know (or think we know) about the tuned steel tooth in musicwork.

Certainly the comb-playing, movement had a date and place of invention or first use and the point I make is the somewhat controversial one that we know neither the date nor the place where the first movement made its appearance. And, as a corollary, we don't know the name of the inventor, either.

I also suspect that we have got our suppositions wrong when we suggest that the earliest comb-playing movements played from discs. Now this is not to suggest that the history of the musical box is entirely wrong, or that its salient characters from the end of the 18th century forward are suspect. The argument I make is that the tuned steel tooth in musicwork existed at a much earlier date, and that the cylinder was the natural means of providing a musical programme.

During the 18th century, there was a growing interest - and associated market - for musical novelties such as clocks and watches. One of the principle problems facing the watchmaker was that of manufacturing a watch small enough to fit in the pocket, yet large enough to contain a sufficient number of bells and each of ample size in order to allow music to be played. There was obviously much need for something which would combine the ability to produce a musical sound with that of compactness. At least one man was working along these lines and this was a watchmaker named Antoine Favre who was born in Geneva in the year 1767. Favre is said to have produced a "carillon without bells" in 1796. The original documentation surrounding this event is preserved in the Register of the Society of Arts of Geneva for February 15th of that year. It has been reproduced in part on numerous occasions, but specifically in Histoire de la Boite a Musique by Alfred Chapuis and published in Lausanne in 1955. The pertinent extracts are reproduced as Figures 118 and 119 on pages 141 and 142 in that book.

Although Antoine Favre indisputably achieved this goal in the year 1796, and this is well documented, there are several writers who claim the use of the tuned steel comb had been used prior to this. Indeed there is some meagre



Top: Dressing-case musical movement owned by Keith Harding. Governor has two wheels and three pinions; 122mm long cylinder, three airs, six-point change cam with lateral engagement. Above: Tiny musicwork with pinned spring barrel and stacked teeth in the De Vere Green Collection and fitted into a gold vinaigretteo.

evidence to suggest that Antide Janvier used the tooth principle in his musical clock of 1776 and even this may not have been the first use. Some attribute the invention to Piguet in 1802. While Piguet was certainly an early pioneer and was undoubtedly the maker of the thinnest musical movements ever produced, the incontrovertible evidence of Favre predates this claim by eight years.

Other suggestions are that the celebrated clockmaker, Abraham-Louis Breguet (1747-1823), was the inventor.

Swiss claims

It might be worth mentioning here that all the claims for Favre as being the first to use the tuned steel tooth (i.e., the inventor) emanate from Swiss writers, namely Alfred Chapuis, Elie Wartmann, J. D. Blavignac and the Swiss archives. Antide Janvier, on the other hand, was a Parisian, and although he later worked at Neuchatel, so was Breguet.

One should also comment that although Favre's may have been the only recorded use of the tuned steel tooth, it does not automatically follow that it was the first.

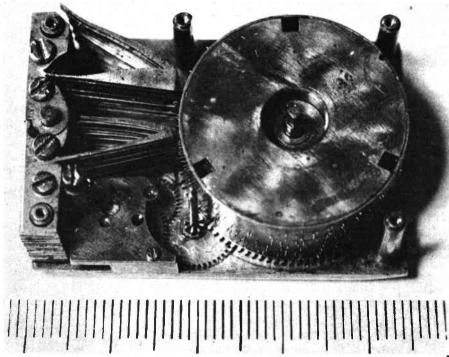
The arrival of the tuned steel tooth in the matchmaking circles of Switzerland made possible the production of musical items of extreme smallness and neatness. It was now possible to place the movement within, say, the tiny confines of a seal. According to Chapuis (ibid.) Favre used a musical movement of the type having the pins for the music arranged around the barrel of the spring so that as the barrel rotated, the pins plucked steel vibrators or teeth. This would suggest that in miniature work, it was the cylinder format which came first, but it is not conclusive evidence of such.

The sur plateau or disc movement appears to have been in use for an astonishingly long period of time. The man who perfected the sur plateau was almost certainly Isaac Daniel Piguet, born in Le Brassus near Geneva in 1775 and who died in 1841. In the Chaux-de-Fonds museum of watches there is a specimen of I. D. Piguet's work dating from the very early years of the 19th century.

A grandson of his, Louis Elisèe Piguet, was born in 1836 and lived right up until 1924. From the same Chaux-de-Fonds museum collection we find a fine sur plateau musical watch, employing the identical 1802 technology, but made well into the second half of the 19th century.

So from this we make the first deduction. Do not be misled into thinking that all sur plateau musical movements are very early: they may not be.

Because musicwork was such a cottage industry, developments and improvements in one quarter might not be taken up in another for perhaps several



The musicwork in a musical singing bird-cage clock probably by Leschot. Owned by Richmond Mason and the subject of a detailed article on page 227 (Vol. 6), the movement is 45mm long and has 32 teeth in two stacks around the spring barrel.

generations. A master craftsman who excelled in the making of one style of musicwork would probably see no reason or justification for changing to a fresh method. As a businessman. he would probably consider that the necessary "learning curve" to be spent getting used to the revised technology was not worth the effort if his present style of work was satisfactory. The Piguet story is a typical instance of this. The family (for a time the business was known as Piguet et Meylan) was famed for its extremely thin pocket watches and snuff-boxes which played music. Some of their musical movements are no more than one-quarter of an inch thick! It stands to reason that having established this capability, the technology would remain even as time went by and fashions changed, if only for occasional use.

We can now show that both the cylinder and the disc movement operated concurrently for very many years. As distinct from the pinned spring barrel of Favre's apparent early use, the definable cylinder as a separate entity was also used in musicwork for playing tuned steel teeth from a surprisingly early epoch.

In Utrecht's clock and watch museum there is on display a pocket watch with cylinder and sectional comb. The watch is perfectly original and bears the maker's name Chevalier et Cochet of Paris, and if we examine clock-maker's records, we find this to date from between 1790 and 1805 — apparently encompassing the earliest epoch of the tuned steel tooth in miniature music-work.

We now arrive at a most unusual

"missing link" musical box which survives in the Reuge collection at St. Croix. Illustrated as Figure 142 in Chapuis' Histoire de la Boite a Musique (page 162), we find that, although at first familiar in appearance, if we look closely we find an altogether unfamiliar movement. Eighteen pairs of teeth, each individual pair a different and apparently unrelated length, and each pair screwed down individually, a brass cylinder playing one air only, a motor inside the barrel and a gear train ending in a large paddlewheel air brake. This piece remains unlike anything else to have been produced in Switzerland, yet in spite of this it bears an apparent relationship to early musicwork in Paris and Vienna.

Now to the question of the sectional comb comprising in its earliest form single, separate teeth, and its apparently final form in groups of up to six teeth. It is generally supposed that after the introduction of the one-piece comb, attributed to Francois Lecoultre in 1814, the changeover to one-piece combs was effected within 15 years or so. In spite of this, sectional-comb miniature movements which are capable of being dated by their musical programmes are to be found which date from as late as at least 1840 and possibly considerably later.

Clock base movements

In Volume 6 of *The Music Box* three very different types of musical movement for use in clock-bases were illustrated. The first, on pages 332 and 333, depicted a fusee-wound mechanism

with single comb teeth. Although bass was left and treble right, the governor was at the left and the motor at the right, this being supported in accepted musical box fashion by trunnions.

The second movement, on page 334, was similar in almost every respect except that here the treble teeth were in the centre, bass being at both ends.

The third movement, illustrated on page 336 of that volume, was still in reversed layout (governor left, motor right) and with the comb base at the left. This time, though, the comb was in groups of four and the fusee-wound motor was mounted clock-fashion between plates. From the considerations of clockwork, it is my contention that only one of these is likely to be Swiss in origin, and that is the first. The third one I consider to be either French or Viennese, and the second one remains uncertain.

The argument here is the solution to the question – how did the musical box get invented in so many different styles and formats all, apparently, around the same time?

The obvious answer is that, as with a burgeoning technology, everyone was trying to reach the end result by his own design path. I grant that that is one explanation, but it assumes that the starting point in time and location was common to all and this I contest. Consider the facts: Favre invents a miniature musical movement for fitting inside a watchcase or seal. What is the connection between that achievement and something the size of a large-sized musical movement for fitting in a clockbase? Why should one automatically progress to the other? Accepting that this may have been the case, then it is equally probable that the process may have taken place the other way about. and that Favre adopted an existing technique to make a miniature movement. This is a clearer line of argument than to assume the scaling-up to relatively large proportions of a system of miniaturising music for a snuff box.

An alternative consideration is to explore the contemporary skills and level of craft to try to see if it was technically possible at the time we are considering – around the middle of the 18th century – for the tuned steel tooth to have been used.

We find a clockwork-driven carillon playing a musically-pinned barrel in the Harbrecht clock in the British Museum. This is not the earliest such use, but it is an easy one to select. It was built by Isaac Harbrecht in 1589 – 207 years before Favre's invention.

The pinned brass cylinder shifted laterally to play alternative tunes by means of a snail and cam is also of early origin. Another easy one to pick is by Le Roy built in 1759 and playing bells – 37 years before Favre's invention.

If we look at ruling styles of clockwork and find that all the salient parts of the

Disc movement in a musical watch. Note how some of the teeth are cranked to pass under the disc to engage with pins on the other side: at least three teeth are broken off. The style of movement was probably made over threequarters of a century.



musical box were known, understood and in use at least fifty years before the date of Favre's invention. Manufacturing techniques, assembly and finish, all predate Favre by at least a century. And cylinder programming for music in clocks pre-dated Favre by around a quarter of a millenium!

Illogical assumption

Based on this alone, I find it illogical to accept the assumption that the tuned steel tooth was not discovered until 1796, for how can its presence have been felt in places so far afield as Paris and Switzerland at a time when the watchmaking industry was operating largely as a diversely-spaced cottage industry without adequate means of communication?

So was the cylinder musical box beyond the capabilities of the ruling technology of the 18th century? We find the answer to be an emphatic NO.

Cylinder-programmed music in clocks was well advanced a long time before Favre's invention of 1796. And the possibility of its use in conjunction with tuned steel tooth-played music prior to Favre's time cannot be ruled out. But if this is the case — and in a moment I shall discuss evidence — then what did Favre really invent, for we have proof that he invented something!

Did Favre invent the tuned steel tooth? There would appear to be too many anomalies rearing their heads at us for us to be able to say with any certainty that he did. What he probably did do, though, was to miniaturise an existing technology to enable the musical movement to be fitted into objects smaller than clocks. Probably it was he who substituted the cylinder of the musical clock for the pinned spring barrel to comply with the information which Chapuis provides.

So was Antoine Favre the first to use the tuned steel tooth? I think not and I believe that we do not have to look too far in order to turn up some evidence to show its earlier use.

Assuming that Favre's invention concerned the modification by miniaturisation of an existing practice, then our evidence should be capable of being located in the annals of clock-making. Unfortunately, though, while many clockmakers made musical clocks and there are plenty of references to them, writers on clockwork are notoriously imprecise in their definition of the means of providing music which features in a particular clock. In so many cases, the scant reference "musical" in a clock's description conceals whether the clock features a comb-playing movement, a carillon or even an organ, or, in some cases, a combination.

For this reason, searching through clock descriptions can be a daunting and frustrating task. Even where the clock is pictured it is not always possible to determine that it is musical. It is two exceptions to this which immediately concern us. Both refer to clocks illustrated in the second volume of the three-volume work *La Pendule Française* by Tardy, and published in Paris in several editions at various dates from 1961 to 1973.

Louis XVI movement

The first illustration appears on page 320 and is of a glass-cased timepiece from the period of Louis XVI (1750-90). Described as a "Régulateur à musique, quantième", this has a large cylinder musical movement as a visible feature of the case front. The layout of the movement is conventional as regards the juxtaposition of cylinder, motor, governor and comb, and the teeth are arranged in what appear to be segments of about 10 teeth.

The second illustration appears on page 402 and features a small glass-cased clock by Breguet and clearly of the Empire period, an epoch which made itself noticeable in clockmaking about 1804-05. Although this is subsequent to Favre, the comb-playing musical movement in this item is so clearly a development of the clock carillon as to justify the supposition of interdependent conception.

The movement which Tardy illustrates in close-up on his subsequent page, has 25 separate pairs of teeth, each pair located with one screw. The comb and cylinder are directly derived from the carillon clock in style of embodiment within the clock. The cylinder is driven from behind by a spring barrel placed centrally and at right angles to the cylinder axis. The governor assembly is also arranged behind the clock plate, a layshaft axially parallel to the cylinder operates a conventional endless and air brake. Built as part of the clock, it is hard to consider this piece as dating much later than 1810.

There are other items which exist and pose this self-same question of date and place of origin.

So once again, did Favre employ the pinned cylinder at all – for this we have

seen was a ruling technology. If we reappraise the wording of the original claim made by Favre, we find that it was that he had found a way of making an artificial carillon for watches. I read this as indicating that he succeeded in making the whole arrangement very much smaller, very much more compact, so probably he made use of the spring barrel, or perhaps he was the first to use the primitive disc or sur plateau system.

Incorrect history

Of course, if all this is so, it is rather a serious matter for us, for it means that the whole history of the musical box as we know it must be re-written. And even if that is the case. we are still left with the question where did the first musical movement come from?

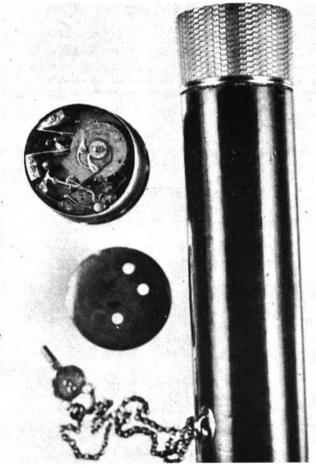
Now the cradle of the musical box, so we have always been told, is the Vallee de Joux in Switzerland – quite a distance from Geneva where Favre was at work. Close to Geneva is Le Brassus from whence we know many fine early musical movements emanated. But what about the movements in Viennese Empire clocks which have clockmaking styles of engineering rather than watch-

making? Well, they could come from Paris, but they might also with equal probability have emanated from Vienna or Prague. Both were strong centres in the making of cylinder musical boxes in later years and presumably the industry had to start sometime.

If we now relate the Viennese and Czech clockmaking styles to the picture, it becomes no wild guesswork to be able to see the musical box styles which are comparable. And somewhere between Geneva and Prague stands that early haven of musical clocks and mechanical music in general – Augsburg, famed for its art, its automata and its craftsmen as early as the start of the 16th century.

Relating clockwork to musicwork, it becomes possible to identify items in terms of two styles. Let's call them Le Brassus and Vienna, for we know that both had associations with the very early perfection of clockwork and were later centres of making comb-playing musical movements for use in clocks.

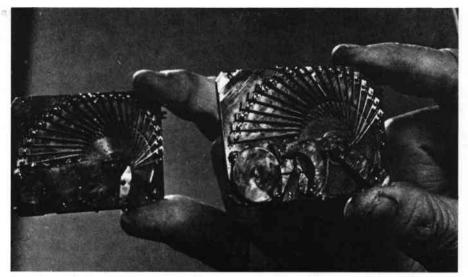
To summarise, then, we can represent the production of the musical box as we have hitherto been told it by a diagram as shown on the following page. The resemblance to a modern jet aircraft is interesting but quite incidental. At the apex we have the date of Antoine



The beginning of the 19th century saw the birth of the miniature comb-playing musical movement with its unique ability to make recognisable music from a very small mechanism. Musical seals, watches, key fobs, jewellery and similar novelties appeared in abundance. Of necessity, it was usually dictated by the size of the space available that the movement employed the pinned spring-barrel method of construction. Nowhere could this have been more necessary

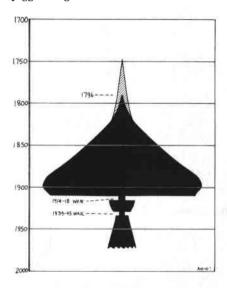


than in the case of the musical walking stick. Two such canes are known to exist, one in the collection of La Vielle Russie, New York, and the other belonging to M Jules Cavaillès. By courtesy of Catherine Dike of Switzerland, we reproduce these two pictures of the latter. Clearly visible in the left-hand picture are the two stacks of comb teeth to the left of the spring barrel the outside of which is pinned with the music to be played.



From the collection of the late Benoit Roose is this fine example of a Piguet et Meylan sur plateau movement pictured against a mirror to reveal both sides of this slimline musicwork.

Favre's invention and the outward curves show the manner in which the industry responded to the stimulus, expanding through to the turn of the century after which it began to decline until the sudden inroads of World War I which effectively stopped production. After that war there was a slight resurgence which was once more killed by the advent of World War II. And after that, modern movements have been produced in vast quantities and are still being produced to this day – hence the jagged edge to the tail.



But notice the shaded outline ahead of the nose of our futuristic jet-plane. I claim that this represents a truer picture of the comb-playing musical movement and believe that its use predates Favre's invention by around half a century. In this pre-history period, I also believe that the technology was employed by but a few clockmakers in musical clocks as an extension of the carillon technology.

In conclusion, may I emphasise one point and that is that I believe a far better understanding of the early musical box, particularly where it survives in conjunction with a clock, may

emerge from an appraisal of the musical movement in terms of clockmaking than to consider it in the light of what may now be suspect parameters regarding the musical box.

And the fact still remains that the Swiss accounts of the birth of the musical box may ultimately prove to have been coloured with a measure of chauvinism. Certainly, I believe that we should consider them with an open mind.

Reprinted from 'The Music Box', Volume 7, No. 2, Summmer 1975.

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Making the best of your Music Box Case

Arthur Cunliffe takes a look at the casework of the musical box and concludes that while it is impossible to restore the case exactly as it was when new, there is much you can do to "make the best" of what you have.

Two or three years ago, during a meeting of the Musical Box Society, I chanced to hear a fellow member say that in his opinion the first task in any overhaul of a musical box should be case restoration. What sound advice! Surely, what can be better than having a good, sound and well-finished case ready to house the restored movement!

Having said all this, one has to decide what constitutes a case restoration. It is quite impossible to have a case exactly as sold originally. The very passage of time prevents this, but I feel one should aim to make a case as near as possible to original, not worse, and certainly not better. Hence my title, "Making the best of..." rather than "How to improve..."

First ask yourself the question: What work is necessary to make the case better? Now ask the question: Have I the ability to do this work? If the answer to the second question is yes, then I hope the following hints and tips will be useful. Please note that my remarks will be concerned more with the structural side rather than the refinishing side of the job.

Spend some time examining the case to be restored and note carefully any faults and possible snags. Then, before even removing the musical movement, examine your tools, especially your screwdriver sets. Note how badly ground and generally run down they are? How many screws have been damaged and how many scratch marks have been made by faulty screwdrivers! Screwdrivers must be ground with straight ends and then cross ground to fit screw slots exactly. Drivers with rounded corners and merely ground to a pointed V-shaped blade will tend to rise out of the screw slot when pressure is applied. Always use the largest driver possible to fit the screw slot. The width of the screwdriver blade must always equal (or nearly equal) the width of the screw slot.

Using your correctly-prepared screwdrivers, remove the movement from the case being careful to (a) replace all fixing screws back in their correct locations, and (b) have a safe home for the movement whilst the case is being worked on. When working on any musical box case please remember the following points:

- Keep as much of the original case as possible. Every piece cut off or sanded off cannot be put back again.
- Use glues, timbers and materials that are in keeping with the period of manufacture. Most modern quickdry "Polly put the kettle on" adhesives are not to be used.
- Stop woodworm attack by all means but do not replace casework unless absolutely necessary.
- Work carefully on a clean and uncluttered workbench.
- Replace every screw, catch, lock or any other bit of case furniture, in the same place as originally fitted, and fitted the same way round as original.
- Your work and any replacement made must be of the highest workmanship possible with no attempt being made to deceive.

Initial preparation

After removing the movement, remove the lid, keeping a careful note of screw and hinge positions. I find it useful to lightly scratch on the back of each hinge the letters L/H and R/H to denote position. Scratch on the side facing the lid so that accidental reversal of the hinges can be avoided. Next remove the tunecard and pins, keeping them in a safe place for re-fitting later. To prevent scratching of any part of the box or lid, I find covering the bench with a thick pad of cloth can be useful.

Screws. Should a woodscrew break off during removal the remains must be removed. Attempting to re-drill and force another screw down by the side of the broken screw nearly always leads to the second screw interlocking with the first, and then that breaks, too. Then you have got trouble! Why not do it properly in the first place and drill out the broken portion? Where screw holes have become enlarged, the old dodge of gluing in a piece of soft wood as a plug is useful. Allow the glue to set before redrilling the hole.

A general note here about screws and their fixing may not be out of place. A screw forced into wood without drilling has much less grip on the wood than a correctly fitted screw. Again fitting screws in this forced way can split the wood and result in the screw breaking in half. Ideally, two sizes of drill should be used. One to give clearance for the shank, and the primary drill to give relief for the threaded portion of the screw. If the hole is correctly prepared, the screw will go in without wandering off centre or becoming too tight. It helps to dip the

screw thread into wax before the final fitting.

Lids

If the lid is undamaged and all the inlay and stringing are there, why attack it with glasspaper? Please try cleaning the dirt out of the wood first, and polish the lid trying to keep the original patina. Remember, if you sand away half the thickness of the veneer it is done once and forever. The person trying to re-restore the case in 80 to 100 years time is not going to thank you for your efforts!

Having said this, however, there is no justification for leaving a lid in a tatty, broken or previously badly restored state. Missing inlay and stringing should be replaced. Splits and cracks should be re-glued.

During the passage of time some lids have sustained damage to the lid edge. In the case of later boxes having the black ebonised bevelled edge, severe damage can be repaired by carefully cutting away the damaged part. Only the damaged length should be cut away, and only the bevel up to the flat part of the lid. Now cut a matching piece from a close-grained wood such as red mahogany or ramin. Prepare this carefully so that it makes a good butt joint and then glue and clamp it carefully into place. Leave a day to harden off (see Fig. 1). The job is completed by carving to shape, sanding down and finally ebonising with black spirit-based polish, sometimes called black French polish. This procedure is better than trying to build up a damaged portion using plastic wood or stopper which is seldom successful.

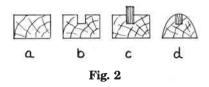


Beading and stringing

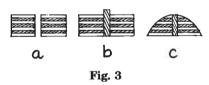
Some cases have a simple half-round beading on the edge of the lid, often with a central line of boxwood stringing. The trouble is that this beading is often of rosewood and even small sections of rosewood are quite unobtainable today. Here are two possible ways to tackle the job of replacing missing beading.

One. Select a length of hardwood timber of a colour near to rosewood. Some timbers of the mahogany family

can be near. Use a tenon saw to cut a groove lengthwise down the centre of one of the sides. This must be deep enough to glue a piece of 1/16 inch flat boxwood stringing on its edge (see Figs. 2a, 2b and 2c). Glue to the edge of the lid, and clamp in place. After the glue has set, shape and glasspaper to a halfround shape (see Fig. 2d).



This second method is not all Two. that easy to do and may be tried if all else has failed. First cut eight lengths of rosewood veneer slightly longer than the length required and half the thickness of the lid. Glue together two sets of four leaves keeping the edges as close together as possible. Allow to set under pressure (Fig. 3a). After these two pieces have fully set, glue the 1/16 inch boxwood stringing on edge between them, hold in place with veneer tape and once more allow to set under pressure (Fig. 3b). Finally complete the job by gluing to the edge of the lid, holding in place with clamps during setting. Shape to half round and sand down. This done carefully does work, and produces some interesting graining effects of the glue lines, but it is a difficult and long-winded way of doing the job. Please remember that at the corners of the lid the halfround edging must be finished with a 45 degree mitred joint.



Missing stringing can be replaced without too much trouble, but it is essential to clean old glue and dirt out of the groove before fitting the new length of stringing. If most of the line of stringing is missing it is better to take out the small remaining piece and replace the whole length. Concentrate on making good corner joints. If replacing only a short length of stringing make the join at an angle and not a square butt joint. If you are thinking of tackling a few boxes, it is essential to build up a bank of many different veneers. Sometimes borders need missing pieces replacing one at a time with careful colour and texture matching.

In the case of missing parts of an inlay the stock of various veneers is essential. Not only does the colour of the wood matter, but also the graining and texture of the veneer is most important. Matching as near as possible to the original is also important.

An example of the type of repair that can be undertaken without too much panic is the flower and leaf type of inlay.

Supposing a leaf or a petal of a flower is missing, proceed as follows: Clean away all the dirt and remaining glue from the groundwork. Scratch lightly to help the glue get a good hold, and please remember to use a good brown glue. Using good-quality tracing paper trace out a pattern of the missing shape and transfer this shape using carbon paper to your piece of replacement veneer. Make sure you trace it so that the grain is running in the right direction. There are on the market many good craft knives, so select a type you feel happy using, and cut out the shape cutting on the outside of the carbon line. If it breaks or the knife slips, start again. The words "it's near enough" really mean "it is not very good, and I can't be bothered to do better"

Carefully sand off the edge of the cutout piece and try it in position. Most likely the piece will be just too large to fit into place. Next, hold the new piece in place and score round the shape lightly with your craft knife. Put the veneer to one side for a moment whilst you cut through the markings on the lid and remove the tiny waste bits of veneer. Go carefully, and when you try the new shape in position it should fit perfectly. Use a "brown" glue to glue into place and hold the work in place with the special double gummed veneer tape. It can also be useful to place a flat weight on the part whilst the glue is setting. Do not attempt to replace too many parts all at one go. It is far better to build up a missing veneer piece by piece rather like a jig-saw puzzle.

Flatting down should be done only when all the missing pieces have been replaced and all damage repaired. Small gaps should be filled up with Brummer stopper. Various shades of stopper can be mixed together to obtain exactly the correct tone. Flat down only as far as strictly necessary using a cork sanding block and good quality glasspaper. I have found Lubrisil glasspaper in grades 320, 240 and 180 to be really excellent. The paper is well made and any clogging can be cleared easily by lightly rubbing a brass wire brush over it. The type of wire brush used for cleaning suede shoes is ideal.

Inner glass lids

Broken glass should if possible be replaced with old glass. This sometimes can be obtained from old Victorian picture frames, usually obtainable quite cheaply from local auction rooms. There seem to be two methods of holding the glass in place. The first and by far the most common is the use of fine glazing pins and a putty. The second method is to hold up the glass with a quarter round wood beading pinned into place. The second type presents few difficulties, but the snag in the first type seems to be the replacing of the putty. Common putty does not seem to be correct and

takes far too long to dry out anyway. Here is one way of effecting a repair.

Break the rule of not using very modern materials and use Exterior Polyfiller. Next obtain some water soluable powder paints in black, red and brown. Mix the colour with the Polyfiller powder to a shade to match the original 'putty" and mix to a fairly thick paste. Using a putty or an old table knife putty up the lid and allow a day or two for the filler to dry out. If necessary final shaping can be done using a sharp knife, finishing off with glasspaper. To complete the job the "putty" should be given two brush coats of French polish. Done with care it is possible to produce a result that is very little if any different from the original. I have found that there seems to be no shrinking and no parting even after a year or so.

Sometimes the inner glass lid has been removed from the box. Tell-tale screw holes in the back give the game away. It must be a matter of personal choice whether or not to put a replacement lid back into the box, but I would always advise to do so. Why there should have been a time when people took lids out of boxes seems difficult to understand. Maybe the glass got broken and it was easier to take the lid out and throw it away rather than replace the glass.

Woodworm

Should woodworm have attacked the case, it is vital that all the remaining grubs are killed off. It may be necessary to give two doses of treatment, the second a month or so after the first. The life cycle of the woodworm beetle can

take as long as three years, so this gives an indication of the period of time the case will have to be checked for the appearance of new flight holes. There are on the market many excellent fluids for treating woodworm attack, and if they are used in the proper manner there need be no real fears. Severe attack can be controlled, and spongy wood can be firmed up, so there is no real need to make a new case for your musical movement, unless the case is so far gone that it is only the woodworms holding hands that are keeping the box together! Only once have I seen this condition.

Some movements are held in place by screwing into the base of the box. If the base and/or soundboard is so badly wormed that there is a danger of the movement falling out, or the sound is being base. Use seasoned pine or deal and not new unseasoned timber. Again old Victorian dressing tables and side-boards can prove to be a useful source of well-seasoned timber. All joints and construction methods should be in keeping with the original, and made to the same standard of workmanship.

Often when the bottom of a case is very badly wormed one of the ends of the case is wormed also. Access to the bottom can be made by carefully cutting away the bottom inch or so of one end. A new bottom panel can be made and slid up into its case groove via the end. A new bottom section then has to be made for the end panel, glued into position and finally painted with scumble to match the existing part of the panel. No doubt there are other ways of tackling the problem of too badly wormed portions of box, but I have found this



From the collection of Dr. Smyly of Co. Leix, Ireland, comes this illustration of a fine 1880 period musical box lid inlay. So often this is the part of a musical box case which has suffered most damage through objects, usually flower vases, being stood on the box. This type of detail taxes the restorer to the full.

method works and to be worthy of consideration.

Finally, a word or two about case furniture. Under this heading come things like locks, hinges, lid supports and key and control escutcheons. In the case of hinges, these should be pressed back into shape if distorted. If a hinge is so cracked or worn as to have very little useful working life left, replace with a good quality brass hinge of a similar pattern and type. If necessary cut or file the new hinge to the correct shape.

Locks can usually be made to work again, and as they are of the simple two-lever type, it is not too difficult to re-file an old key so that the lock is operative again. Pack the working parts with grease to prevent vibration before refitting the lock to the case. Vaseline is quite good for this job. In all instances screws and fixing pins should be polished and slots filed square and tidy. After final fitting all these items can be lacquered.

Nickel plated parts

Some of the later period musical boxes had escutcheons added to the control levers and indeed round the key hole. These can be a source of vibration and should be checked carefully. If the nickel plating has been nearly rubbed off, and you feel it would be perfection to re-plate these items, remember the average plating shop will polish them with high-speed buffs which could remove detail. Also items tend to get lost in the day-to-day running of a busy plating shop. Why not try your own nickel plating? It is quite easy really, demanding only the most careful preparation and cleaning of the components to be plated. Great fun and I think not too costly. For the supply of veneers and all the related materials, I can recommend the Art Veneers Co. Ltd., Industrial Estate, Mildenhall, Suffolk, Tel: (0638-712550). They also produce an excellent book called "Manual of Veneering", price £3.35 inc. postage at Dec. 1987. This is well worth having, listing not only all timbers, but explaining all methods of veneering carefully and simply. A smaller publication listing materials available and with helpful tips is also available, price £1.40 inc. postage, ask for general catalogue.

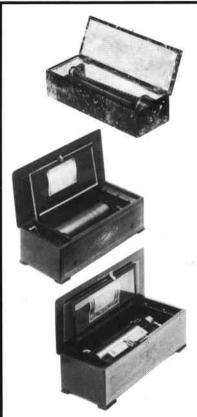
I hope these few hints and tips will have helped in some small way. There will be other methods of working, of course, and I have no doubt some of these other methods are superior, but at least I hope I have given food for thought. If you are in any doubt about any process mentioned in this article please practice on a scrap of wood first. Only work on the actual case when you are confident all will be well. Good luck and many happy hours of work!

Reprinted from 'The Music Box', Volume 7, No. 6, Summer 1976



Christmas shopping day for Musical Box collectors will be on 17th December when Christie's of South Kensington hold their next mechanical music auction.

Shown below are a few of the boxes featured in their current catalogue. Also to be included will be a 17¼" double combed Stella and many other fine stocking fillers.



Photographs from the top: Sectional comb musical box in tortoise-shell veneered case. Madolin with two-per-turn musical box by Nicole Freres, No. 46578. Paillard 'Columbia Sublimette

Piccolo' musical box.

Included in Christie's last mechanical music sale (October 1st, 1987) was a most unusual mandolin musical box. Playing six airs, with the mandolin teeth in groups of up to eight, over 34 of the comb length and bearing the number 15838. Most unusual was the heavy oak carving to the case with floral scrolls to the bevelled angles, with stag hunting scene in relief to the front, with three dimensional cresting of game birds on the lid, (£2,600). Lot 129 was an Aeolian Grand 58 note player organ. Again this was an instrument with heavy carving. This time in mahogany, the keyboard being supported by carved lions. This is one of the most beautiful Aeolian cases I have ever seen. Unfortunately, the lions have been attacked by live dogs resulting in one of the lions being completely mutillated by gnawing.



Sublime Harmony Tremolo interchangeable cylinder musical box by M. P. & Co., with 3 cylinders.

An unusual item for a mechanical music catalogue was a nine rank Compton Theatre Organ. The instrument was sold for just under the estimated price of £7 - 10,000 and is presently being removed from the Yorkshire Hall in which it was installed.



Star of Christie's October sale, a 75 note roll playing Welte orchestrion.

The most astounding piece of mechanical music sold at Christie's for a very long time was a Welte 75 note roll playing Orchestrion. Described as having 12 ranks of pipes, it actually had several less, maybe the number of ranks became confused with the number of rows of pipes. The description omitted to identify it as style number 5, an important detail for any prospective purchaser. The fact that the instrument had a total of 300 pipes also was not mentioned. However, the biggest surprise came when the selling price reached £60,000 against Christie's estimate of £5 - 7,000. I am told that initially a low value was assumed due to the fact that the instrument was installed within a cupboard, making it difficult to remove and with a major disadvantage that there was no case with the instrument. But this Welte instrument carries a secret, discovered during a probe into it's history. I hope to obtain the new owners consent to reveal this suprise discovery in the next edition of Music Box.

Organ Grinders chat by Geoff Alford

The Gremlins got into the Autumn Music Box, or at least into 30 copies, according to the printer, and no doubt our esteemed Editor will have had a lot of 'stick' on the page mix up. My purpose is merely to correct and perhaps enlarge on some of the comment on pages 74 and 75 relating to Thun. I am sure that Josef Walch and Pieter Kuindersma will be dismayed if they learn through Music Box of the loss of much of the pipework on their beautiful Ruth organs. The leading firm of A. Ruth u.Sohn were justifiably famous for their reeds giving the organs a unique sound. In common with other German builders. model numbers were allotted to organs which for some reason, which a greater authority might be able to explain, commenced at 33. As a general guide appropriate key sizes were as follows: 52 keyless (Model 33), 56 keyless (Model 34), 65-68 keyless (Model 35), 78 keyless (Model 36), 92 keyless (Model 37), and 96 keyless (Model 38). Model 39, the Double Ruth was regarded as the ultimate of which only two examples (one in Utrecht) are known. The recording of this organ made some years ago and including a superb rendition of Tannhauser is highly recommended. So the two organs depicted on page 74 are an old Ruth barrel organ converted to Model 33 (52 keyless) system and organ front wing extensions, and a Model 35b 67 keyless Ruth. For interest, Felix Strub was playing one of the new 26 keyless Heiniger roll organs. For some, the Thun Festival actually commenced on the Thursday, August 16th during the afternoon of which participants were required to register. During that evening the only official get-together of all grinders was held at the Hotel Emmental where an excellent meal was put on. Apart from this there was little opportunity for the fraternity to foregather in friendship and everyone was left pretty well to their own devices. Whilst there is no doubt that Thun is an organ bonanza (perhaps too much so with organs officially playing until 2am) it is also the most expensive by far and less is done to defray the not-inconsiderable expenses of participants than any other Organ Festival I recall attending. One would have thought that an extremely wealthy country like Switzerland could afford to invest more in this most popular event which attracts thousands of tourists. The vintage car ride around Lake Thun was open to a very limited number, many of whom returned soaked to the skin from the pouring rain (and the weather was not that warm!).

Peter Schuhknecht seems to be filling the space left by Carl Heinz Hofbauer switching to micro chip organs. But I believe that his new 'Schuhbauer' is a 26 keyless roll organ rather than a 31. The 'standard' 31 note Raffin with four 16 pipe registers is an 84 pipe organ. However, the new enlarged model has a fifth register of trumpets along the rear increasing the pipework to 100. An interesting innovation, which I have thought for some time would be a useful aid on manual register organs, is the marking of the paper roll with register changes. The standard R31/84 is now available with a pan flute option and choice of cabinet is increased with a Bacistyle front now available.

I was surprised to hear of the Bier Keller gathering on Saturday evening. Certainly it wasn't included in the programme and many of us knew nothing about it, so when our group packed in grinding around 8pm, we joined other 'auslaender' in the Freinhof Hotel (Big Balbo, the Raffin Clan, the O'Rourkes, Jan and Lilo Ten Cate etc). Possibly my reaction to Thun was coloured by Berlin two weeks earlier, where a full programme is really put on for the enjoyment of all participants and their companions and where the atmosphere is excellent. Perhaps the German temperament is more extrovert than the Swiss, or perhaps so many organs in a limited space is too much even for me! But if Thun is typical of Swiss Festivals generally I would rather keep to those in Germany where I think they have the mixture just about right (and where the drain on one's purse is less).

In Berlin we had the usual Thursday night at the invitation of the Burgermeisterin Charlottenburg Ratskeller - always a noisy occasion with organs playing. Friday we were the guests of Axel Springer Publishing in their fine Club Room on top of their high rise block by the East Berlin Wall. Here, with panoramic views of the famous City, including ominous watch towers and the British Checkpoint Charlie, we were treated to a buffet meal. Saturday morning is the event which has become the special feature of the Festival - the Abmarsch along the Kurfürstendamm. Organs assembled in groups outside the Zoo and set off with the Burgermeister and two Berlin Pickelhaube in the lead, not to mention one man band Gaston Bricka from France. At Olivaer Platz drinks were waiting, courtesy the Kindl Brewery. In the evening is the Fahrt ins Blau - Trip into the Blue. This year it was a visit to Spandau Citadelle by coach. A tall impressive halberd bearing watchman in black halted us at the gate and welcomed us in topical song. We were then allowed in to enjoy a mediaeval banquet reminiscent of those in British Castles.

Sunday morning there was a less-formal procession to the Tiergarten to play, finishing with a snack in the Biergarten. A small British group made an exhibition of themselves at the end, grinding away on the fine organs loaned by Curt Niemuth – Dorothy Robinson, Frank Holland, Leslie Brown, Ted Bowman, Peg and I. But what the hell – anything goes in Berlin. Certainly that effervescent and hard-working couple Christa Mademann and Curt Niemuth ensured the success of this festival in Berlin's 750th Anniversary Year, and if they take it on again next year we may well be back again!

I have been mildly chastised for selecting one organ builder currently developing paper roll organs. It has been brought to my attention that another builder, regular contributor Ian Alderman is also entering the field and at the time of writing is nearing completion of two 20 note 3 register instruments which sounds quite exciting and I look forward to an opportunity of inspecting one of them and seeing how the organ compares with my own 3 register Bruns. May I say that I am always delighted to try my hand at anyone's organ, especially a new model, and to offer one person's opinion as merely the person who turns the handle. But I would be wary of mentioning possible developments, news of which has come second hand.

Organ owners used to book organs are accustomed to thinking in terms of music by the metre. With paper roll, street organs it is different and rolls are available at standard prices though the amount of paper and music may vary appreciably between spools. I recall buying a spool from one well-known builder which seemed to contain an average quantity of paper. On getting it home, not only did I find that there was a very long lead in but there were big gaps between the tunes and, worst of all, a considerable length of blank roll had been cellotaped on the end. So the apparently cheap roll turned out to be quite expensive.

One of the great things about small organs is that you can turn them at any time without a red-faced neighbour suddenly appearing. I suppose that much of our organ grinding, as a group, is done purely for personal pleasure. So, being selfish, I tend to choose music mainly for the personal pleasure I get out of playing it and less for what I would call 'commercial' playing or what the public in general enjoy. So when Ted Bowman presented me with a roll of six Haydn Flötenuhr pieces I was absolutely delighted and they sound absolutely superb on the 20 note Raffin. Anyone interested please contact Ted. At the more commercial end, the Mel Colebrook roll for this scale should at last be available by the time this reaches print (Our Director, On Mother Kelly's Doorstep, Yellow Bird, Four Leaved Clover, In the Summertime/Lets Twist Again) I am pretty sure that this selection will sound OK on any roll organ.

By the time this is read, Llandrindod Wells Street Organ Festival will be over but writing this in mid-August I am starting to suffer from what may well be termed 'first night nerves.' Will everything go alright; will everyone turn up; will it pour with rain every day. Goodness, what must it be like to be more involved in a much larger event? What is good news is that, all being well, there will be a 2nd Llandrindod Wells Street Organ Festival on the same weekend next year when, hopefully, more MBS members can come and participate.

Address Change

Roger Kempson, Auction Organiser and Corresponding Secretary has recently moved house. Please note his new address on the contents page.

Music Box Discovery

by George Toth

Museums are great places to learn about music boxes. I discovered a special place recently while visiting in Hannover, West Germany. Be sure to visit the Historisches Museum Am Hohen Ufer, Pferdestrasse 6, Telephone 1 68-30 52. Opening times are Tuesday 10am to 8pm, Wednesdays to Fridays 10am to 4pm, Saturdays and Sundays 10am to 6pm, closed on Mondays. Admission is free. It is located near the city mitte.

Although you can find three different style mechanical musical instruments on silent display throughout the museum exhibit areas, the best place to go is the museum cafeteria, located on the top floor. Just across from the coffee and cake counter you will find a magnificent Polyphon Style 54 Music Box. You are encouraged to put in two 10 phenning coins, and actually hear it play a beautiful original disc song called "The Bird Seller". This is a well made large music box in excellent condition. The Bowers Encyclopedia of Automatic Musical Instruments indicates that the instrument has 159 teeth and uses 241/2 discs. It is further described as "being of extra large size and special construction, whereby an enormous loud and powerful tone is produced." Further, "the unexcelled music arrangement produces tone effects which have never before been heard in any musical automaton".

I fully agree and it is certainly worth a visit. Many senses were aroused, as it was truly an outstanding listening, viewing and tasting experience.

BOOK REVIEW

CYLINDER MUSICAL BOX DESIGN AND REPAIR

H. A. V. Bulleid. Published by Almar Press, 4105 Marietta Drive, Binghampton, New York 13903, U.S.A. 234pp 5% in. x 8½ in. Photographic and line illustrations. Soft cover. ISBN 0-930256-16-6.

Yet another British author on musical boxes forced to go to the United States to be published, Anthony Bulleid is well known by Society Members for his interesting and erudite articles regularly published in this journal under the all embracing title 'Musical Box Oddments'. This would have made as good a title for his book as the one chosen.

That is in no way to denigrate the book. Mr. Bulleid, knowing the field has been fairly well served in recent years, has woven his way, in an esoteric fashion, into and through the many gaps that appear, in the normal way of things, however, many books are published even on such a narrow subject as musical boxes.

The author is most painstaking in his research, particularly when it comes to repairs. He is often seen to go outside the area of musical boxes to find an expert here, or one there, who is able to give advice.

The chapter on musical box theory is one the cognoscenti will find absorbing. For the sake of the book however it is sad that this is found, charts and all, at the beginning. There is much in the book of interest to the tyro, and it may well be that, faced with a wealth of facts and figures, the prospective buyer will go no further. If however, he gets to page 2 to find the information that the speed of lift of a tooth by a pin is so slow that at the same rate a cricketer would take two hours to complete a single run between wickets, he may well be intrigued by the mind that makes the comparison.

The authors personal opinions, and in a work such as this there are many, are sometimes arguable. In chapter 1 the first figure shows, among other things, a comb setting of an angle of 7° to the bedplate. This angle is subject to variation. On L'Epée movements for instance the angle tends to be wider, while Olbrich set the comb almost parallel. On the other hand his careful review of musical box theory and the problems of repair add to the sum total of knowledge.

The authors penchant is towards boxes from the second half of the 19th century. This period was full of variation in the playing of music and also abounded with excellent composers. Given his obvious love of music it is not surprising that Chapter 9, 'The Music: Composers', is so full of interest. Certainly every reader will find something worthwhile, and all of it absorbing.

Most striking about the book is its devotion to interesting minutia. Did you know that the coin drawer of a Polyphon holds approximately 960 old pennies, about £4? Also striking is the humour of the author, continuously apparent. Even the most serious and detailed of subjects is often spiced with a quick smile. Deep into a detailed discussion of playing times comes: 'Stop me if I'm being too

I recommend this book because I feel there is something in it for everyone, whether deeply interested in the subject or only vaguely so. Get a copy for Christmas, it will be worth it.

Graham Webb

Anthony Bulleid's book, 'Cylinder Musical Box Design and Repair', recently published by Almar Press, New York, may be obtained from Artmusique Publishing Co., 31 Perry Hill, London SE6 4LF. Price £9.95 plus £1.75 post & packing. (Cheques payable to Artmusique).

Address Change

Treasurer Bob Holden has recently moved house. Please note his new address on the contents page.

Llandrindod Wells Festival



Organ grinders take a photo call, during the Victorian Festival held on 12th September, 1987.

Musical Box Oddments

by H. A. V. Bulleid

Number 35

Tune three on the Langdorff tune sheet of Fig. 1 is by the Italian composer Saverio Mercadante, 1795-1870. He turned out sixty operas and musical plays between 1820 and 1860, and was the leading Italian composer from about 1840 until overtaken by Verdi. While he was a student at the Conservatory of Music in Naples Rossini wrote to the Director saying "Your young pupil Mercadante begins where we finish." Now Mercadante is only remembered for his opera Il Guiramento (1837) from a Victor Hugo story. His other operas include his first big success in 1821 with Elisa e Claudio, and . . .

Donna Caritea	1826
Gabriella di Vergy	1828
Francesca da Rimini	1830
Il reggente	1843
Orazi e Curiazi	1846

Tunes from these successes must have appeared on many tune sheets. Mercadante took over as Director of the Naples Conservatory in 1840 till his death in 1870.

Langdorff

The tune sheet of Fig. 1 belongs to one of those early boxes with the stamped name on the bedplate (in this case H. METERT) struck out and an Agent's name added, see Fig. 2. Being serial number 2293 it was made in 1845, and should have the earlier type of tune sheet with square piano. Also, the bass end cylinder cap should have the year '45 scratched on it; but instead the year is '48, see Fig. 3.

The reason for these two anomalies emerged during re-pinning. The end caps were second-hand, having seen previous use on another cylinder, as proved by superfluous cut-outs to clear non-existent cylinder pins and by second sets of securing pin holes. I think there can be no doubt that the box got damaged and was returned to Langdorff for repair in 1848, when the current date would be scratched as per routine on the end cap and the current type of tune sheet was the only replacement available.

Thanks to help from several members there are now 40 recorded Langdorff boxes and a copy of the list can be had by sending a stamped, addressed envelope to our Archivist, Peter Howard – for his address see Contents page.

3-comb Sublime Harmonie

Charles Paillard's 1874 Patent covers "two or more separate combs... each a complete and independent scale" but in spite of this almost all Sublime Harmonie movements have only two combs; and where there is a third it is almost always in a Sublime Harmonie Piccolo or Sublime Harmonie Tremolo arrangement, simply adding an accompaniment.

Fortunately a purely Sublime Harmonie 3-comb movement has turned up, serial 2699, made by C. Paillard; and by a further piece of good luck one could still read, very faintly pencilled on the back of the tune sheet, part of a name and the date, – 7 Aug 74. "Aug" is the German abbreviation and is appropriate because the box was first sold by a dealer in mainly German-speaking Bern. (Berne is the French spelling).

The coloured tune sheet, of typical Paillard design, is abnormally large at 14% by 9% inches; and I suspect that only after it had been elaborately inscribed was it found to be



Fig. 1: Typical second-stage Langdorff tune sheet, here with up-to-date Verdi tunes of 1842 and 1843 for serial 2293.



Fig. 2: Typical Langdorff style of bedplate serial numbers, here with H. Metert obliterated and substituted by Lion Freres a Hambourg (French spelling).



Fig. 3: Typical Langdorff markings on base and cylinder cap, – serial 2293 and G201-48. Where, as here, the bore has been closed in by hammering it is wise to check that the cylinder is still reasonably concentric and the pin tips accurately concentric with the arbor.

too big to fit on the lid. This difficulty was surmounted with effortless ingenuity by simply leaving it loose – not entirely unusual, as some tune sheets were undoubtedly supplied unfixed, lids being free from the marks of any pins. It accounts for a few of the many lost tune sheets. Here the large tune sheet, printed on fairly tough card, survived 110 years of getting its top and bottom centre areas repeatedly pierced by the lock striker plate peg, resulting in the repairs shown in Fig. 4. By cutting off about a quarter of an inch of margins I could just fit the repaired sheet between the striker plate and the hinges. I hope it is now safe.

The 17 in. by 2¾ in. diameter cylinder plays six airs on the three 54-tooth combs as shown in Fig. 5 with <u>a</u> teeth (440 Hz) marked. The usual 2-comb type of movement similarly marked is shown in Fig. 6 for comparison.

The three combs of Paillard's 2699 conform to the Patent by each being a complete scale, but they do not have appreciably "shorter prongs." The accompanying table gives the a teeth dimensions, all about 22mm long whereas it is more common to find such teeth between 23 and 26mm long. The stiffness of the teeth is decidedly less than usual, and for example rather less than half the stiffness of the Ami Rivenc teeth shown in Fig. 6.



Fig. 4: The 14% by 9% in. coloured tune sheet of Paillard 2699, with "Expressive" emphasizing the then (in 1874) novel description of "Sublime Harmonie." Harpe-Zither is given, very wisely I think, less prominence.

Paillard linked the cylinder described as 16 pouces 31 lignes (= 17 by 2% in.). These old measures may have died more slowly in Ste Croix than in Geneva.

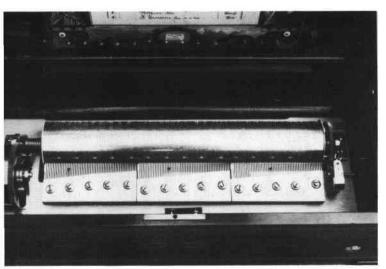


Fig. 5: The three 54-tooth combs of Paillard 2699 with 'a' teeth marked, showing that the governor-end comb has the greatest number of bass teeth.

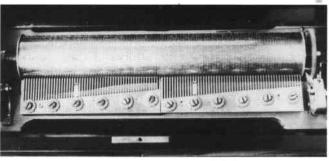


Fig. 6: A typical 2-comb Sublime Harmonie movement, Ami Rivenc serial 39897, with 'a' teeth marked. This became the conventional comb arrangement, with the greater number of bass teeth in the left, "bass end" comb.

Position of comb	Position of <u>a</u> teeth	Dim length	ensions ir width	n mm thickness	Relative stiffness	Teeth under zither tissue		
Left side	14 & 15	22.3	1.72	0.50	96	21 to 54		
Centre	18 & 19	22.5	1.73	0.51	102	16 to 54		
Right side	23 & 24	21.3	1.56	0.51	97	13 to 41		

Table comparing the <u>a</u> teeth (440 Hz) positions and dimensions in the three combs of Paillard serial 2699.

The tooth dimensions are sufficiently different to provide different overtones for the Sublime Harmonie effect, but they are all of nearly equal stiffness to give the same volume for a given amount of lift.

The comb with the greatest number of bass teeth is at the right, governor end of the cylinder.

Tooth numbers are counted from the bass end.

The combs are wider than normal at just over $2\frac{1}{2}$ ins., the same as on a Nicole Grand Format, and with wider brass bases to match. As usual they cannot be misplaced as the dowels vary in spacing. With the $2\frac{3}{4}$ in. cylinder the tunes last 90 seconds. The governor cock is stamped C/P/&/C in the usual square arrangement.

The zither housing covers all three combs, but the tissue

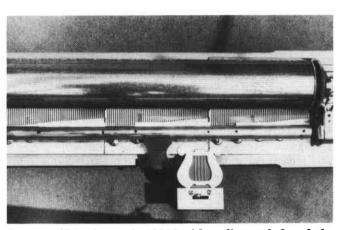


Fig. 7: This shows the 2699 zither dismantled and the original (damaged) tissue extending over the 'a' teeth on two of the combs. I put dots on the tissue carrier to mark the exact lengths of tissue. The zither, with support screwed directly to the bedplate, is applied by moving the small lever to the right.

was cut away so that the teeth affected were only those shown in the table and in Fig. 7. Whether this was the intention of Paillard or some later restorer one cannot be sure, but the effect was unsatisfactory and it seemed foolish to damp so many teeth right in the main Sublime Harmonie range. So I tried applying the tissue only to teeth 25 to 50 on all three combs. It seemed better. Zither not applied was best.

The zither support had a non-adjustable on-off lever which pushed the tissue housing down against a pair of brass springs. One spring was missing and the other unserviceable at auction viewing, so the box was permanently zithered with the tissue bulging into the track of the cylinder pins, an unsatisfactory situation.

The major point of interest about 2699 is that it entirely bears out the claims made in the Paillard Patent: "to produce the different shades of musical expression, such as the pianos, the crescendos, the fortes, the decrescendos, I let one or more combs play together, according to the effect I wish to introduce." It is hard to imagine a more effective demonstration of these effects, and in such mellow style—the teeth of less than normal stiffness give exceedingly pure tones and not a trace of harshness.

Yet it was a costly exercise, involving 162 comb teeth for only six tunes from a 17 in. cylinder. Moreover, it must have needed a prince among tune arrangers to sort out these special effects and their timing on the three combs, without getting into a fearful muddle. Hence perhaps the great scarcity of the sublime harmonic effect arranged on more than two combs.

Case problems

The case of Paillard 2699 was fairly bulky at 28½ by 11½ by 8½ ins. high, and I strongly suspect that it had been dropped onto a hard surface. The base was cracked and the bedplate legs had dug in, worsening the minor indentations one so often sees. A previous restorer had screwed two wood straps 2 in. wide and ¼ in. thick underneath to repair the base, and I retained these but substituted nuts and bolts with large washers for the previous wood screws: such straps if close fitted do not appreciably impair the sound radiation. as I have learned from previous occasions. I drilled out to ½ in. diameter the damaged wood under the bedplate legs and fitted close-grained dowels, finishing carefully flush with the base. This had the satisfactory effect of restoring the bedplate securing screw holes central with the holes in the front and back of the case. One of these screws was missing and the nearest replacement size was 5mm so I lengthened and tapped the existing threaded hole in the bedplate to this size.

Another casualty of rough treatment was the lid, which had become unhinged and had been repaired by adding a second pair of hinges, the originals being mere passengers as their screws hardly held. This was due to the wood splitting, easily repaired by thoroughly scraping out all debris and strained wood fibres from the crack and then checking that it is clean by clamping tight when there should be no trace of a bulge in the cracked zone. Then insert Resin W adhesive to the full depth of the split using a fine feeler, and clamp very tight again. Finally wipe off surplus adhesive and leave tightly clamped to set for a few hours. Exactly the same treatment fixed two of the case corners which were slightly sprung. It takes time and patience to scrape all debris out of thin, deep cracks but this step is essential. If, as one sometimes sees, it is done badly, stuck fast but bulged or out of line, then the corrective work needed is extensive.

Dead teeth

I had a folorn hope that someone might come up with convincing support for John Powell's comforting theory about dead teeth, printed in the Summer 1987 **Music Box**. Meanwhile I obtained further technical advice and we now agree with the resulting data, as follows . . .

A vibrating steel cantilever like a musical box tooth sounds its almost pure fundamental note which, unlike a stringed instrument, is completely free from any harmonics.

These fundamental vibrations will, however, have overtones. These consist of additional, superimposed vibrations which always have the following three characteristics . . .

- 1. amplitudes much less than the fundamental
- 2. frequencies much higher than the fundamental
- 3. no phase relationship with the fundamental.

It follows from item 3 that these overtones cannot have any extending or damping effect on the fundamental vibrations of a tooth.

The mathematical proof for items 2 and 3 is given on page 158 of **Vibration and Sound** by P. H. Morse, and I quote the significant sentences . . .

"Equation (15.7) shows how far from Harmonics are the overtones for a vibrating bar. The first overtone has a higher frequency than the sixth harmonic of a string of equal fundamental pitch."

I must admit that my expert sources say the above notes oversimplify a "very complex problem," but they think that the conclusion reached is valid.

This still leaves unanswered two points raised in John Powell's letter, namely (1) why some teeth ring better than others and (2) why "dead" teeth can sometimes be improved by altering their dimensions.

I think (and here the experts fully agree) that both these are entirely due to minute metallurgical irregularities in the crystal structure of the hardened and tempered steel tooth.

It is easy to visualise that the position of a small defect is significant. For example, if it is near the surface of the metal it cannot be so serious – after all one finds perfectly ringing teeth with horrible rust pitting. So presumably a defect near the node of vibration may be very serious, but its effect may be lessened if the node position is altered by removing metal from the root radius. This certainly sometimes gives an improvement, as John Powell reported.

Noise from dead teeth

Dead teeth should certainly be seen but not heard when the box is playing. If they are heard, the noise is either a tuneless thump or simply an accident type of sound e.g from a pinched damper or from scraping a bent cylinder pin.

I have heard the tuneless thumps often enough, and always found them at the bass end and due to either a loose tooth or, very occasionally, a loose lead. The loose teeth were replacements that had been inadequately fitted or soldered but looked quite sound at a casual glance. The loose lead I have only twice seen, and both on the same comb; the soldering was only holding in one corner and in this condition the tooth would not ring.

Fair play

An interesting example of a musical box used to accompany a song occurs in the 1947 film Life with Father directed by Michael Curtiz for Warner Brothers. This is a period piece set in 1883 New York, and towards the end I. Dunne soothes her obstreperous husband, W. Powell, by singing a verse of Sweet Marie. For accompaniment she opens a nice-looking musical box, about 10 in. cylinder and with 8-air tune sheet of typical design but with unusual rounded corners. The only error is that she switches it on by operating the change/repeat lever; but the tune is very well recorded, sounds absolutely genuine, and correctly runs for about 50 seconds.

So almost full marks to Warner Bros. The film was based on a successful Broadway play and it would be interesting to know if a musical box was used on stage.

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Posting of magazine: 27th February; 27th April; 7th August;

7th November

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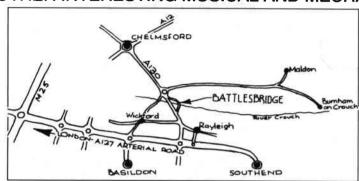
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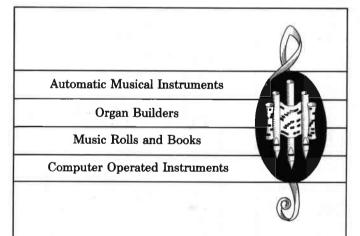
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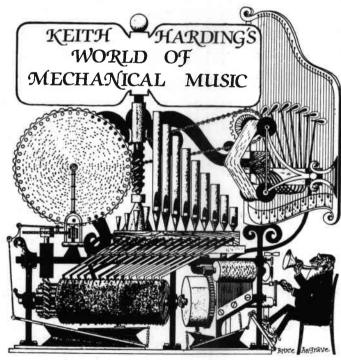
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