JOURNAL OF THE MUSICAL BOX SOCIETY OF GREAT BRITAIN

THE MUSIC BOX

a magazine of mechanical music



Autumn 1972 Vol. 5 No. 6

Keith Harding Antiques

W. K. Harding and C. A. Burnett MUSICAL BOX SPECIALISTS 93, Hornsey Road, London, 12.7.



IN LONDON? WHY NOT VISIT US?

WE HAVE \star EASY CAR PARKING AND PUBLIC TRANSPORT.

★ A FINE STOCK OF MUSICAL BOXES

★ FIRST - CLASS RESTORATION FACILITIES

★ DAMPER WIRE, END STONES, OIL. SPRINGS &c.

★ REFERENCE BOOKS.

★ FURNISHING ANTIQUES, CLOCKS & COLLECTORS ITEMS

Phone: 0I-607-6181 or -3761 Open Daily. I0a.m. to 6p.m.

THE MUSIC BOX THE JOURNAL OF THE MUSICAL BOX SOCIETY OF GREAT BRITAIN

Volume 5 Number 6

AUTUMN 1972

CONTENTS

	The Banjorchestra	
274	(Reproduction)	292
274	Bowers in Britain by Q. David Bowers	294
275	Fellow Member by Dick Baines	298
280	Snuff Box Lid	299
	Advertisement	300
283	Hidden History by Gerry Planus	302
284	Automatic Bugle	304
287	Tuning and the Clavioline	306
200	Book Reviews	307
270	Advertisements	309
291	Letters	310
	List of Members	312
291	Crossword Solution	312
	274 274 275 280 283 284 287 290 291 291	The Banjorchestra (Reproduction)274Bowers in Britain by Q. David Bowers274Bowers in Britain by Q. David Bowers275Fellow Member by Dick Baines275Snuff Box Lid Advertisement280Advertisement283Hidden History by Gerry Planus284Automatic Bugle (Reproduction)287Tuning and the Clavioline by Bob Minney290Book Reviews Advertisements291Letters List of Members291Crossword Solution

Hon. Editor: Graham Webb

Published by:

The Musical Box Society of Great Britain, Bylands, Crockham Hill, Edenbridge, Kent. Editorial and Advertising Correspondence to: 93 Portobello Road, London, W.11.

Assistant Editor (North): Grace Thompson, 8 The Oval, Harrogate, Yorks.

Editorial Assistant: Sheila Lee

The Editor writes:

With this issue of THE MUSIC BOX I have completed over one years work as your Editor. A year during which, I must admit, I have found great pleasure in teaching myself what is, after all, a new trade. With my in my notiviate have been a growing number of Members. We have all been breaking new ground, they in possibly their first assays into writing about their interests, me in my capacity of Editor, designer and general handiman of this Journal. In this current issue can be seen a cross-section of Members and others, some of whom have been writing for years, some who have started lately, and some whose very first article ever to be published is here.

All of the foregoing is not a preamble for yet another appeal for more contributions. Today your Editor is simply saying that if, as he firmly believes, an alive and well supplied Journal is the outward sign of a living and growing Society, then The Musical Box Society of Great Britain is just such an organisation.

Speaking of a growing Society, we are, in fact, adding new Members to our ranks the whole time. One has only to look at the List of Members at the back of each Journal to see that in the last year alone we have received 64 new Members. Your Committee is most pleased about this since new blood makes the Society stronger and more viable. The problem we have is that many Members have still not paid their subscriptions for this year. Unfortunately, since those who have not paid do not get this issue of the Journal, they will not be reminded of the fact that they have not paid by this editorial. We believe that in most cases of lapsed Membership it is merely that the need to pay has been overlooked in some way. May I ask that each Member who reads this makes it his or her business to remind any fellow Member that they should have had a Journal by now? If they have not received one then they should make sure that they have paid their dues for this year.

Continuing the 'happenings' in the Society and in the field of mechanical music in general I have more to report. Our good friend, Member Dave Bowers, as many will know, has got together with Member Claes Friberg of Copenhagen to open the Mekanisk Musik Museum there. In their advertisements Dave and Claes call the Museum 'an affair of the heart', knowing these two it's nicely described I think. The M.M.M. as it is known, already receives much interest and has featured several times on television.

I find myself succumbing to the temptation to



break the tradition of never placing an illustration in the editorial. The photograph shows a musical repeater watch movement of the early type cylinder variety which is one of over 100 exhibits shown in a display by the jewellers Patek Philippe of Geneva. The pieces were on loan during May and June from the famous Collection of the Conservatoire Autonome des Boites a Musique, which is jointly owned by that friend of the Society Member Jacques-Antoine Horngacher and his friend M. Blyelle. It is always a matter of regret to me to have to simply report that an exhibition has been held. I would much rather herald the advent well in advance to give Members a chance to visit the happening than tell them of it afterwards.

Members will of course be notified of the Winter Meeting, but I take this opportunity of urging all Members to attend what promises to be a fine Meeting.

GRAHAM WEBB

WINTER MEETING

The Winter Meeting of THE MUSICAL BOX SOCIETY OF GREAT BRITAIN will be held on Saturday, 14th October, 1972. The venue is once more The Great Western Royal Hotel, Paddington, London, W.2. Members are requested to bring at least one exhibit.

PROVINCIAL MEETING

In persuance of the policy of holding two Provincial Meetings each year whenever possible, the Committee of your Society are pleased to announce that a Meeting will be held at SHEFFIELD on Saturday 3rd, March 1973, at Hallam Tower Hotel. The Organising Secretary for this Meeting is Mr. G. Worrall, 4, Redcar Road, Sheffield 10.

Paucanson

Emperor of the Androides.

by Graham Webb



HIS year marks the 190th anniversary of the death of the man who has never been surpassed as a designer of automata. He made, it seems, a total of only four figures, three of which are of real importance: the Flautist; the Shepherd playing pipe and tabor and, most famous of all but of less interest to lovers of mechanical music, the Duck.

On page 187 of volume 4 of THE MUSIC BOX is reproduced an interesting and rare pamphlet describing the three automata so that we need not spend time on the technical make-up of these wonderful works of art. What we are more interested in here is the man himself and his life, together with the automata. The details in this article are culled from many sources and these are listed at the end of the article. At this point I would like to thank my wife, Jo Webb, for her help in translations from the French.

Jacques de Vaucanson was born at Grenoble, France, on February 24th 1709. His father was of the same name and his mother's maiden name was Dorothee la Croix. That they were middle class and reasonably well off there is no doubt. His mother, Dorothee, was an extremely pious woman and very strict. In his early days the young Vaucanson was not only educated by the Jesuits but on Sundays was forced to attend a Convent with his mother to read holy works.

According to Condorcet, Vaucanson spent much of his time, while supposedly worshipping with his mother and two of her pious friends, studying from a distance a clock which he could see in the next room and working out how it worked. After several months he is said to have suddenly known how the escapement was made and this gave him extreme pleasure. Later he managed to make a wooden clock with some crude tools and to make it so that it kept perfect time. His mother allowed him to build a miniature chapel and into this he put angels which flapped their wings and priests which moved.

After leaving college Vaucanson went to live at Lyon where he is said to have found great interest

in an exhibit of machinery which was on show there. This of course had a profound effect on his already strong leanings toward things mechanical. Also during his stay in Lyon there was talk of an hydraulic system to make water available to the town. He had an idea as to how this might be done but kept it very much to himself since he realised that he had neither the knowledge or the experience to take on such a task.

The young Vaucanson went from Lyon to Paris, upon which city all men of amibition set their sights. In Paris one of the first visits he made was to a hydraulic system of water supply there. He was gratified to see that the method used was exactly that which he had imagined for Lyon. It made him realise that his penchant for mechanics was matched by some talent. Still looking around his new home, Vaucanson came upon the statue of a flautist in the gardens of the Tuileries. It captured his imagination, and his mind, always interested in anatomy coupled with mechanics conceived the idea of an automaton which actually played the instrument itself.

Thoroughly dominated by the idea of an androide, Vaucanson, even so, realised that he had

a great deal to learn before he would be capable of designing such a machine. He set to work and studied physics; anatomy; music and mechanics. It is a sure sign of the genius that he undertook these studies and kept at them so as to be able to do something he had set his mind to. Although he was very guarded about his aim, he could not tesist occasionally discussing it and eventually one of his uncles heard of his intention. The uncle tried every method of persuading his nephew from an idea which seemed to be ludicrous and wasteful. At last he obtained a Lettre de Cashet to remove Vaucanson from Paris and so, he hoped, put an end to his silly ambition. Perhaps he could not be blamed for doing what many had done before, confusing genius with folly.

Vaucanson spent time in Normandy and Brittany where he continued to learn his trade, not for a moment losing sight of his aim. After three years he returned to Paris, his uncle had offered him work during this period but he had refused it, knowing that it would only serve to remove his freedom to do as he wanted. According to Chapuis and Droz, he arrived in Paris in 1735 and his first steps were in making 'moving anatomies' which he was unable to finish for lack of money. One always wonders, in these stories about people such as Vaucanson, where the money did come from. He was now 26 and, as far as we know, had not yet earned any. Perhaps he had some sort of allowance from his family.

Chapuis and Droz continue by quoting an

official document as saying . . . he (Vaucanson) had the idea "of getting assistance by producing some machines that could excite public curiousity". This is in difference with Condorcet who was after all, writing a semi official version of Vaucanson's life and so, perhaps, a little apt to romanticise.

It seems to be agreed that Vaucanson was taken ill and confined to bed for a long period. During this time he was busy designing different parts of his flautist and sending them out, by means of a servant, to different mechanics about the city. Dickens holds this to be so as to let no-one into the secret of the principle of the machine. Eventually his brain child was finished and found to work well.

The flautist caused great interest when first brought to public attention, but in many cases enthusiasm was replaced by a suspicion that the machine was no more than an animated serinette. Vaucanson was accused of being a charlatan. He asked the Academy of Sciences of examine his work and deliver a verdict. This they did in glowing terms, saying that Vaucanson had imitated both the natural movements and sounds of nature and with such perfection that even men of science could not have imagined it possible.

A thought about the intricacies of such a machine will show what genius had gone into making it. The so-called German flute which the figure played is a difficult instrument to master under any circumstances. When it was to be made to play by means of a mechanical arrangement the mind boggles in even thinking of it, so many



The three automata – from a bill which is in the French Bibliotheque Nationale.

things are involved. For the lip movements alone there are 4 levers needed.

From his deep interest in anatomy and mechanics sprung Vaucanson's second automaton, the Duck. Both Condorcet and Buchner hold that the Duck came after the pipe and tabor player, but we need do no more than quote Vancanson's own words in a letter to a friend, the Abbe de Fontaine:

"My second machine, or automaton, is a duck, in which I represent the mechanism of the intestines which are employed in the operations of eating, drinking and digestion."

Condorcet also has it that there was not one, but two ducks: (Enfin, on vit deux canards qui barbotaient etc.) but again we can refer to Vaucanson above. Other conflicting descriptions crop up from time to time. We know, for instance, that the duck was made together with it's plinth, in which was the mechanism for it's various actions. Vaucanson, in his description, tells of the duck's various activities but no-where does he describe anything which requires the bird to move its feet, indeed we know that this is not possible since all of the wires for movement run from the mechanism in the base through the feet to the body. Even so we have McCloy, writing very recently in 1952, saying that the duck "waddled". Much earlier we have part of a letter reproduced by Chapuis and Droz which contains the following"... As soon as the audience saw it (the duck) climbing on to the stage, everybody cried: "quack, quack, quack". This sometime, it seems, in the 1750's. It is quite possible that both of these mistakes are attributable to translation errors. Be that as it may, the duck was a great success.

Encouraged by his success Vaucanson designed another figure, this was the figure of a shepherd playing a tabor and pipe. The tabor is in fact a drum and the pipe a type of 3 holed flageolet which is played with one hand. This combination of instruments dates from the 15th Century and onwards when most courts would have a set among their instruments. The tabor is played with the right hand and the pipe with the left. The pipe is an even more difficult instrument to deal with mechanically than the German flute. Having only 3 holes it depends a lot on half stopping of notes and variation of wind pressure. Vaucanson himself said of this problem "... here an instrument is played upon which is very cross-gained in itself; ... That I have been obliged to give the different winds, with a swiftness which the ear can hardly follow; and that every note, even semi-quavers, must be tongued, without which the sound of this instrument is not at all agreeable." In a general description he goes on to say that the wind pressure needed to be varied from one ounce for the lowest note (an E) to fifty-six pounds for the highest note (a B).

Vaucanson's final assay into automaton figures



A view of Vaucanson's Duck (with acknowledgements to Messrs. Chapuis and Droz).

was in the shape of an asp (aspic) which he designed for the play Cleopatra by Marmontel in 1841. It is said that it would "hiss and throw itself forward at the heroines bosom". We have two comments on the asp by 'wags' of the day, both are likely to have been invented. The first is by someone who, when asked what he thought of the play replied that he would like to be the asp. The second was with the same question and the answer was a curt "I agree with the asp". Apart from this doubtful information, it would seem that very little is know of this, the fourth and last of Vaucanson's automata.

In 1746 Vaucanson, now famous for his genius, was invited by Frederick the Great to go to Prussia. He refused because he thought that he had work to do for France, although he felt that he would have done well had he joined the many clever men that King Frederick had gathered about him. Not long after this he was appointed by Louis XV's chief minister. Cardinal Fleury, to the post of inspector of Silk Manufactories in the Kingdom. Also in the same year he became a member of the Academie des Sciences. During his membership he wrote several memoires to do with his various inventions to do with the manufacture of silk. He had a talent for being able to describe clearly his works and ideas.

Silk was one of the most important products of France and Vaucanson occupied himself almost totally with examining the various methods applied to its manufacture. In particular he considered that, as with most things, preparation and the first steps in manufacture were of prime importance. He redesigned the machines which were preparing the silk before it was made up into lengths, since he considered them uneconomic. He had some extremely revolutionary ideas and these did not endear him to either the management or the workers. His idea was that it was necessary to have large, efficiently run units, rather than the existing many small manufactories. The public were against this since they considered that smaller units benefitted more people. At one point he was stoned out of Lyon by the workers. In reply he created a machine, worked by an ass, which made silk damask.

Side by side with his work on silk ran Vaucanson's other interest, this was the designing of a figure containing all of the circulatory system of the human body. The King, Louis XV was also interested in this idea and ordered him to continue on this line of work. Vaucanson wanted to go to Guiana, where worked an anatomist and where it would be possible to get the special rubber necessary for the veins of the system. The King agreed to his going but such was the red tape which surrounded such a venture that he eventually gave up the idea and, presumably, the designing of the figure.

Also in 1746 Vaucanson moved to a large house named L'Hotel de Mortagne, the address was 53 rue de Charonne, Paris. He was to establish a work shop here and stay until he died. In 1770 he was appointed to a Royal council on which he sat for the next decade until 1780, the council was set up to examine new machinery and inventions. Vaucanson was extremely active at this work and tried out many of the machines submitted to the council, in his own work shop, at the same time his own inventions were being built there. He was responsible for many improvements to existing machines and his inventions included an improved slide lathe, a drilling or boring machine and a chain making machine. The slide lathe was first built in 1760 and was fitted with a tool holder which could be mechanically operated. It was capable of working a piece 30cm, in diameter and 1 meter long, Twenty years later two men, one Henry Maudsley, an Englishman and the other an American, Daniel Wilkinson, both invented a tool carriage at the same time. Neither knew of the other, neither knew of Vancauson's invention. The reason for this was that the work of the council was very little publicised.

Although Vaucanson continued to work on his ideas for silk manufacture to be made cheaper, his many enemies continued to accuse him of different things. He was accused of vanity and of making designs which were more to suit himself than to help ' the industry. He was further accused of greed, since he insisted on being well paid for what he considered work of national importance. In fact he died only reasonably wealthy, showing that he was neither too well or too poorly rewarded for his efforts. As a true genius he had a right to be difficult. To him a simple examination of a piece of machinery was usually enough for him to know what needed to be done and he was rarely wrong in his diagnoses. As in most sciences, Vaucanson's contemporaries, when confronted with revolutionary ideas, tended to look upon them with contempt. The type of genius that he had tended to ignore the normal laws of physics and mechanics and, since most of the work must of necessity go on in the head of the mechanician until it is fulfilled, he found it difficult to convince them.

Vaucanson married at some time and his wife died shortly after giving birth to a daughter. He is known to have been a good friend and a kind master but most of all to have been an excellent father. After the death of his wife he insisted on spending a minimum of three hours each day in the personal education of his daughter. He had set ideas about the education of women and its effect on the upbringing of their children.

In later years the eminent mechanician was to travel to La Chaux-de-Fonds to visit an exhibition of some of the famous androides of the Jacquet-Droz family. He is reported to have said that Jacquet-Droz the younger had started where he had hoped to finish.

For many years Vaucanson had suffered from a serious illness, His last years were spent in an attempt to perfect an idea for the improvement of silk mills. He saw his beloved daughter married to a nobleman, the Marquis de Salvert and continue to love and appreciate her father and his talent. At the age of 73 he died,

Vaucanson had bequeathed the collection of machines and inventions which were in his work shop to the King. The work shop became a Royal establishment and the work continued, using the same workmen, under the direction of Vandermonde, who had been elected to the council. The workshop received an annual subsidy of 10,000 Livres. At the time of Vaucanson's death there were sixty machines of various types in the work shop. In 1789 the total had grown to about 200. Still, for the same reason as before, lack of publicity, these inventions and innovations had little or no effect on the industrial scene.

The Hotel de Mortagne had never belonged to Vaucanson and in 1784, two years after his death, the King bought the freehold so that the work of the man of genius might continue.



Another version of the three automata - this one from Vaucanson's own paper to the Academie des Sciences.

An interesting speculation would be the effect of the French revolution, which started less than seven years after Vaucanson's death, on his daughter, now a member of a noble family. Could her head have gone the way of that of Louis XV?

Despite all of the clever and useful work for which Vaucanson was undoubtedly responsible, one cannot help the feeling that his best work was done before he was thirty. This conviction was not held by Dickens, who said that he was a wasted genius who could have advanced the productive powers of machinery by half a century.

Bibliography

Les Automates. Elaine Maingot, Librairie Hachette, 1959. Scientific Instruments of the 17th. and 18th. Centuries and Their Makers, Maurice Daumas, Batsford, London, 1972. An Account of the Mechanism of an Automaton. Jacques de Vaucanson 1738. The Music Box, Vol.4 pps, 187 - 211.

Automata Old and New, C.W. Cooke (Odd Volumes) London, 1893.

Ouevres de Condorcet, Paris 1847 Vol.2. pps.644-660.

McCloy, French Inventions of the Eighteenth Century. University of Kentucky Press, 1952.

Ducros, French Society in the Eighteenth Century London and New York 1927.

Nouvelle biographie generale XLV.

Household Words, conducted by Charles Dickens. Vol.4, pps 503, 504. Vol.7, p.355.

Automata, Chapuis and Droz, Neuchatel 1958. pps. 233 – 242 and 273 – 278.

Histoire de la Boite a Musique et de la Musique Mecanique. Alfred Chapuis, Lausanne, 1955 pps. 45 – 48.

AN ORGAN BOX REPAIR

by Bernard Nichols

Our Editor asked me quite some time ago to have a go at writing an article for our magazine. I never seemed to get around to making a start as I find it easier to do the practical part rather than trying to explain it on paper.

First let me say that some of the ways I go about doing some of my repairs may not seem like good workshop practice but I have found that sometimes a little improvisation with unorthodox methods often proves to be the easiest way to tackle a job.

The particular subject I have chosen for this, my first effort at written theory, is the restoration of a "Langdorff & Fils." organ with comb accompaniment cylinder box.

I purchased this box some years ago at one of the first meetings I attended after becoming a member of our Society. Nobody else seemed interested in the box as the organ section was in a very poor state and when I tackled other collectors about repairing the cylinder I was greeted with grave looks and shaking of heads. Well that decided me there and then that the box should be mine and that I would be some means or other restore the box to it's original condition.

Let me state right now that while the following method proved highly satisfactory, this is a job which is by no means easy and cannot be rushed. Many times during the restoration, I felt like packing the job in and settling for what tunes I had managed to improve, but I would put the job aside for a week or two and then go back and make a start again. The complete restoration took a period of eighteen months by this stopping and starting process.

Here is a list of tools and materials used for this part of the job:

A good magnifying glass (eye-glass) Good quality long-nosed pliers Model motor – as described Small pin chuck – as described Soldering iron No.80 high speed twist drill Fine oil stone Fine pin punch Light panel pin hammer Banjo strings 2 pairs flat-nosed pliers – as described Punch – as described

The first inspection of the cylinder showed that the pins on the cylinder for the teeth were perfect but the organ section was in a terrible state. There was no sign of the movement having been run, so the damage to the organ bridges and pins were probably caused by bad adjustment of the organ playing trails, though I feel that most of the damage was wilfully done perhaps by some dear little boy, trying out a pair of pincers that same with his first tool set.

The notes of the organ section are comprised of pins, for single short notes the same as for the comb section, and wire bridges of varying lengths for sustained notes. Damage to these bridges usually occurs in one of two ways. Either the top of the bridge gets broken off and leaves just two single straight pins in the cylinder, this will of course give two short blasts on the organ note instead of one sustained note, or the bridge will have completely disappeared and left nothing but the broken ends almost level with the surface of the cylinder.

If you have ever heard an organ box playing with a cylinder which has about 60% damage to the organ section as with the box in question, you will have noticed that the music is very poor indeed, with no sense of melody at all in places. On some makes of movements the bridge notes are shown by a scribe mark on the cylinder between the supporting legs of the bridge. This tends to make things easier because without these marks, if the top of the bridge has been broken off leaving just the upright supporting leg pins, there is no way of knowing whether it should be a sustained note or two single notes. Well



The box in question

this was the trouble I experienced with my cylinder so I had to find a way of knowing which was which.



turn was heading I could tell whether this was the first or last leg of the bridge and by then rotating the cylinder to the next pin in the same tune I then knew the length of the bridge even though this other leg might be broken off level with the cylinder. In





A single pin

The leg of a bridge

the event of finding two pins which followed each other in the same tune completely broken off, I found that the only way was to fit a bridge and then play the box and listen to how this fitted in with the tune. If it sounded wrong it simply meant cutting the top off the bridge to make two single pins for single notes. Of course it pays to leave the doubtful ones until the last as, if nearly all the

Scribe marks to show a bridge is intended

I found that by using a good magnifying glass and looking at the top of the pins, the single note pins were flat and worn evenly, but where the top of the bridge was broken off the break usually occurred at the centre of the bend which was fashioned when the bridge was originally made and a slight turn should be noticed where it had broken at the top of the pin. By deciding which way the original tune is replaced first, any mistake made with these will be picked out by ear more easily at this stage. This is not as difficult as it may sound because from my experience a bridge fitted in place of two pins make a note that really sounds out of place.

The method of removing broken pins or legs was done in two ways:-

If the top of the bridge was broken off leaving the legs standing, by using a pair of good quality long nose pliers I could grasp hold of the pin and carefully draw it from the cylinder leaving a clear hole for the new bridge to be fitted.

But if the pin was broken off flush with the face of the cylinder, then a different method was needed, I found that the best method proved to be to drill the broken pin out. For this job I purchased from a hobby shop a cheap 4 to 6 volt model motor. A small pin chuck with the handle shaft cut off short was bushed to fit the motor shaft and soft soldered in place, incidentally with the cost of batteries being fairly high it did not take me long to realize that the motor ran quite well from the 6 volt tapping of my car batter charger. The drill used was a no.80 high speed twist drill kept sharp with a fine oil stone. I must add that for this feat a good watch makers eye-glass was needed to even see the cutting angles of a drill this size. Using a very fine pin punch I drove the broken pin in just below the cylinder surface to make a lead in fro the drill. As it is well known to attempt to drill a small hard steel pin out of soft brass the effect is for the drill to run off the pin and run down the side of it into the softer brass and cement that fills the cylinder. Having started the drilling in the correct position in the face of the cylinder this did not really matter as the small amount of slope given to pin or bridge legs by any slight running off could be corrected by adjustment in the same way as pin straightening on a cylinder box. If possible the running off is best controlled to above or below of the pin rather than to one side as the small amount of difference it made to the bridge was negligible. I was tempted at one time to drive the old broken pin right through the cylinder but decided against this as the hole would probably be enlarged and there is always the chance of breaking up the cement filling of the cylinder by too much hammering. The wire used for the new pins and bridges was obtained at the local musical instrument shop in the form of banjo strings. This proved to be excellent quality plated wire and ideal for the job. The wire used was .002" larger than the original to give a nice tight fit into the old holes. By using the long nose pliers the wire was bent in two places to 90⁰ANGLE to form a new bridge of the correct length with two legs approx, ½ inch long, Two pairs of flat nosed pliers were needed for inserting the bridges. The first being wide enough so that when the bridge was held by one leg with the

underside resting on the top of the jaws only a short amount of wire was left protruding from the other side of the plier jaws to give maximum support for the initial entry into the hole in the cylinder. The method used was to gently tap the top of the supported bridge wire directly over the top of the pliers with a very light panel pin hammer until just the brass of the cylinder was penetrated. When this was achieved I then switched the pliers to the second leg and repeated the procedure. Once the legs have penetrated the brass the rest of the way into the cement was fairly easy. If the wire would not enter the hole with the minimum of tapping I then found rather than increasing the effort it was safer to slightly taper the ends of the legs with a fine oil stone to give the required start. The height of the original bridges down to the correct size to act as a depth gauge at the same time supporting the wire whilst being driven home to the correct depth. Any single pins were set with a hollow depth punch. The height of the bridges is not so critical as the pins for the comb section when a slight difference can mean a broken tooth in the comb. There is enough play in the organ trails and valves to compensate for the slight discrepancy, likewise where a comb pin must be a very tight fit into the cylinder to produce a clear note on the comb tooth even with a not too tightly fitting bridge the organ valve will open and play. The aim is of course to have a good tight fitting bridge to stop the trails slipping off the side whilst playing. I found the above method produced a tight fitting bridge in most cases but if a little extra tightening was needed a punch in the shape of a small letter C was used each side of the wire to just nick the brass in.

I had originally intended to melt the cement and spin the cylinder as a final stage to lock the new wire in but found this proved unnecessary as the slightly larger wire had locked itself quite well enough into the cement to support it tight. When the rest of the movement had been overhauled and the bellows repaired and finally assembled I could only stand and listen in an exchanted trance at the high quality of the music of this box that I was mad enough to buy against all advice in the first instance.

Although all the tunes are beautifully set up 1 felt that one tune, namely the "Overture Martha" by Flotow, lacked something at the end. I was confident and ambitious enough to drill extra holes in the cylinder and fit new wires, so it now ends with a lovely chord.

The movement has a cylinder of 14" long with two combs of 37 teeth each, with a 23 note organ section playing 8 airs. The case is 25 inches long X 14 inches wide X 12 inches deep, veneered and inlaid lid, front and ends, (the handles are not original). It has a large tune sheet 14" x 9" with the makers name at the bottom but with the "J,H,S," trade mark at the top.



The photographs shown are of an interesting box belonging to Member N.H. Gale. The box, of the type generally ascribed to L'Epee, is obviously of much superior quality to the normal 'Drum and Three Bells' boxes. Although considered to be by this French Maker, the box bears a tune sheet with the legend 'Musique de Geneve' This is thought to translate as 'Music of the type of that of Geneva'. Normally a Swiss maker would use the legend 'Music a Geneve' meaning 'Music of Geneva'. Comments on this theory are welcome.



SUNDAY VISIT

A series of articles describing places of interest to lovers of mechanical music. by Graham Webb

4. THE PAUL CORIN MUSICAL COLLECTION

The visitor to Cornwall can count himself fortunate in that in this County he has, not one Collection of instruments to see, but two. In the Summer issue of THE MUSIC BOX was described the fine Collection of Member Douglas Berryman. This article relates to the other Collection, that of Mr. Paul Corin. Mr. Corin has been entrenched in Cornwall for some time now and for this reason has a good collection of pieces to delight the interested. Placed between Liskeard and Looe, and not too far from Polperro which is just along the coast to the West of Looe, the Collection presents an ideal proposition for a visit during a Cornish holiday, particularly on a dull day. The area offers other attractions for the family as a whole, such as the Wild Life Sanctuary at Trago Mills, a few miles from St. Keyne. For the romantic there is the St. Keyne Well, just down the road from the collection, a well said to have had a spell put upon it by St. Keyne about A.D. 900.

The Collection provides a good selection of instruments one of the most interesting and rare of which is the Hupfeld Phonolist Violina, Model A. These instruments are certain to cause a stir wherever they are seen. They are most imposing and consist of a piano base surmounted by a group of three violins. All are played from a paper roll. This particular example was originally coin operated and was located in a cafe in Bremen, Germany. It has a double six-roll changing mechanism, a rarity in itself, which enables a large number of tunes to be played without changing the rolls manually.

Fair-ground organs are represented in the Collection, among them one by Fritz Wrede, a German 59 note keyless organ with a bandmaster. This organ is extremely rare. There is also a small organ by Hooghuys, a more familiar name this, which has three figures.

The organ theme is continued with several organs originally used for dancing including two Arburo organs, both fitted with visible instruments. Perhaps the largest piece of all is the Mortier 102 key dance organ. This is 27 feet long and 20 feet high. Mortier of Belgium is further represented by an 84 key dance organ with visible accordion.

Of great interest to the connosieur will be the finger and barrel organ which was built by J.W. Walker in 1855. This fine and rare organ has 7 stops and 3 barrels of 10 tunes each. This is one of the very few manual/barrel organs now extant. Equally interesting, and to me the most pleasant of all to listen to, is the Welte Orchestrion. Another rarity, the Welte is a 44 note instrument with a most imposing presence with its 'fan' of brass trumpets. Members will perhaps remember an article in THE MUSIC BOX, complete with drawings of the action of this particular Welte. It appeared in Volume 3 Number 2. A second orchestrion is also a feature of the Collection. The Loche piano orchestrion also plays on paper rolls and contains, apart from the piano, organ pipes and a xylophone.

The player-piano group of instruments is represented in a novel and interesting combination. Apart from the almost obligatory Ampico grand, a Welte reproducing piano-player is shown in conjunction with the actual piano owned by Paderewski. Here we can have music originally played by Paderewski now reproduced on his own piano. A happening which we can be sure never entered the mind of the Maestro. This group also contains a Weber Unikon electric piano with a rank of violin pipes.

A really imposing instrument is the Aeolian pipe organ. Big brother of the Aeolian Orchestrelle with which most of us are familiar, the pipe organ is truly magnificent and would be well worth the trip on its own.

A late arrival in the Collection is a Dutch street organ. Made by Karl Struyss of Amsterdam, this instrument is one of the very few to be seen outside of Holland, where, of course, they are still to be seen and heard in the major towns.

Those Members who belong to the straight musical box 'crowd' will be a little disappointed once more in that the musical box is again not well represented. Perhaps one day we shall get someone to open a Museum to cater for this large section of our Membership. Meanwhile there are one or two boxes here, the most outstanding being a huge



The photograph shows a corner of the Collection.

Orphenion disc playing clock some 11 feet high. All in all it must be said that this Collection contains a good number of rare and interesting instruments. There is no doubt that a visit will be handsomely rewarded.		Telephone: Opening times:	Liskeard 43108. Open every day during the Summer Season 10.30 am to 1 pm; 2.30 pm to 5 pm; 6.30 pm to 8.30 pm. During the Winter on Saturdays and Sundays 2.30 pm	
Facts about the Collection			to 5 pm.	
Owner:	The Collection is privately owned by Mr. Paul Corin.	Admission:	Adults 20p. Children 10p. There is a free car park and refreshments	
Address:	St. Keyne Mill, Liskeard, Cornwall.		are available.	

LOCATION OF THE COLLECTION



HEROPHON LAW - SUIT

by Arthur W.J.G. Ord-Hume

The article on the Herophon published on page 224 of THE MUSIC BOX called to my mind one of the many court cases which speckle the history of the German-made instruments of mechanical music. The reasons for the turbulent history of the industry are not hard to appreciate. Trade had been very thin indeed in the early 1880's and the coming of the mechanical instruments were thus a shot in the arm to the ailing manufacturers. Even so, competition remained strong right through until as late as 1888 when the majority of musical boxes sold in Germany were still imported from Switzerland. And so those inventors who contrived things now fought like demons to protect their province.

The case of Polyphon v. Lochmann is wellknown. The attempt by Ehrlich to prevent other makers from using star-wheels is also well-known. But the case of the Herophon and its apparent infringement on the Ariston is probably not so widely known today.

As with so many patent infringement cases, this one was long drawn-out, starting in 1885. Again, as in such cases, the inventor sued not, just the guilty party, but 'his agent', Thus the famed musical instrument import house of Ihlee & Sankey of Aldermanbury (see THE MUSIC BOX, Vol. 3, page 314) which was later to become Ball, Beavon & Co. found itself facing no less a plaintiff than the Ehrlich empire.

The case was basically simple. Ehrlich patented the instrument which was to be known as the Ariston in 1881 and 1882, Ch. Pietschmann of 28 Brunnenstrasse, Berlin, patented the Herophon in 1884 (his English patent is number 7756 of May 15th that year). Both instruments consisted intrinsically of the same components. As Ihlee & Sankey were the British importers of the Herophon. so Ehrlich took that company to Court. Mr. Justice Kekewich, in February 1887, found Ehrlich's charges proven and accused Pietschmann, through their agents, Ihlee & Sankey, of patent infringement, the figure of damages and costs to be assessed later. Messrs. Wansey, Bowen & Co, of 28 Moorgate Street, solicitors acting for Ihlee & Sankey, immediately gave notice of appeal which, for those unfamiliar in the conduct of legal proceedings, meant that the status quo would be

maintained until the appeal could be heard. Since the Courts of Appeal were unlikely to hear the case for at least a twelve-month, this also meant that the Herophon and its little sister, the Herophonette, could continue to be sold quite openly to the detriment of the Ehrlich invention.

In fact, the case was not heard until June 14th, 1888. Mr. Aston, Q.C., and Mr. Roger Wallace appeared in support of the appeal; the Attorney-General, Mr. Moulton, Q.C., and Mr. W.N. Lawson were for the plaintiff, the respondent.

The case revolved (the pun is unintentional) around the Ehrlich patent of 1881 entitled 'improvements to mechanical musical instruments'. The invention, as described in the specification, related to that class of mechanical musical instruments "in which the notes or sounds are produced by the passage of a perforated sheet or surface across the levers operating the valves of reeds or pipes, and it consists substantially in the employment of a perforated disc of circular form, or of a number of like semi-circular discs, instead of the ordinary strip or band hitherto used in such instruments". As the new and important features of the instrument, Ehrlich claimed (1) in a mechanical musical instrument, the rotative music sheet, consisting of a disc perforated in accordance with the notes to be produced, and co-operating with the valve levers (as described); (2) the combination with the valve levers of a perforated disc consisting of two parts, either of which might be exchanged for others without stopping the performance, and intended to be used when a piece of music was too long to be

placed on or perforated into one disc only.

This may need a little explaining. Paul Ehrlich's original idea was to patent not just the familiar discs which we all know, but to cover with the same patent the use of half-discs. Here, he foresaw the interpretation of a long piece of music as a set of half-discs which could be played continually. As one segment rotated, so another could be positioned on the other side of the drive turntable. As we know, if this he tried, it was never produced. The Leipziger Musikwerke did produce an Ariston which played a fan-like 'disc' of segments. Trials were also made of a subsequent patented invention using a spiral tune sheet. Both these were described in THE MUSIC BOX, Volume 3, pages 371 and page 591). Now Ihlee's defence centred on the impracticability of a half-disc arrangement and the advantages of the stationary disc with rotating movement. The prosecution hinged on the interpretation of the letters patent which specified the salient parts of Ehrlich's invention, and then stated that these parts might be arranged in any order. This, it claimed, allowed for a stationary tune-sheet or a moving tune-sheet; a stationary mechanism or a moving mechanism.

The defendants denied any infringement and contested the validity of the plaintiff's alleged invention on the grounds of want of novelty and utility. Back at the February 1887 hearing. they alleged that the plaintiff's alleged invention was not a proper subject for a patent, inasmuch as it was the mere application of old mechanism for the purpose of effecting an old result with the substitution of a known equivalent in a known manner. It had, Ihlee's contended, been anticipated by patents granted in France in 1842 (Seytre's patent), and in the United States in 1863 (Peabody's patent), as well as other specifications, Mr. Justice Kekewich held that this reasoning was incorrect and especially that Ehrlich's invention had not been anticipated by either of these two listed specifications, which he believed were probably unintelligible and never at any time put into action. It was from this decision that the 1188 appeal was lodged.

What happened next was one of those long drawn-out fiascos which can only take place in an English Court of Law. Justice, being blind, has to weigh the evidence very, very carefully before the Lords Justices in whom the power of judgement is vested may decide upon which side to come down. Things began with Lord Justice Cotton, who was somewhat of a pedant and orator to boot. He sallied forth with a long and exhaustive judgement in which he described in detail the construction and operation of the instruments in use before 1882. In these, His Lordship told the court, the valves were operated upon by a band or sheet, and there were perforations so arranged in the band as to enable levers to spring up when the perforations were over them, thus opening the valves of the pipes and enabling the proper notes to issue. I hasten to add at this point that the terminology and the description is in the words of Lord Justice Cotton, not myself.

In 1882, the plaintiff (Ehrlich) conceived the idea of substituting for the flat or endless band a circular disc, which should have the perforations arranged in concentric circles, the high notes being produced by those perforations in the centre and the scale descending to the lower notes at the outside part of the disc. This disc, Ehrlich placed horizontally and arranged that the handle which turned it should, by the same operation, set in motion the bellows which filled the wind-chest (again, I am quoting from the Court records) and the plaintiff had constructed and produced a machine which was practical for carrying the idea into effect.

The whole subject of the patent taken out by Ehrlich, His Lordship stated, was not a mere substitution of discs for an endless band, but practically a new machine in which a wind chest was combined with a perforated circular disc which, instead of the old flat or endless band, acted by horizontal rotation on a vertical instead of a horizontal axis so as to produce a tune. This argument may seem a bit fatuous to us today, 84 years later. Ehrlich's 'technological breakthrough' concerned the use of the disc and this point only since all the other features of the instrument which we know today as the organette were already established - including the uniting of music-sheet transport and 'bellows' operation to the turning of a handle. But to return to the transactions of the Court of Appeal.

His Lordship now set about establishing just how revolutionary Ehrlich's Ariston really was as a means of answering the question 'is the invention the proper subject of a patent'. Obviously Ihlee & Sankey's attorney had his doubts. There was evidence, the Court was told, to show that since the introduction of the plaintiff's machines, an enormous number had been sold and that the old machines worked by tunebands had become a drug on the market. There could be not better evidence than that, concluded His Lordship.

Ihlee & Sankey's council, Mr. Aston, Q.C., now rose to his feet and addressed the Court. It could not be disputed, he began, that the first of the plaintiff's two claims - i.e. the circular disc, was not useful; but it had been argued (with regard to claim number two) that the semi-circular or half-discs were not useful since they would cockle up and not work. Although the evidence presented before Mr. Justice Kekewich in the lower court had led that court to include favourably towards the utility of the halfdiscs, a new set of tests were now run in the Appeal Court. This showed that although when not properly cut, these half-discs were liable to failure, when properly prepared as in the plaintiff's factory. they would indeed work. It was further pointed out that the trials made in court were with ordinary discs cut in half, whilst those sold for the purpose would be specially prepared, Mr. Moulton, Q.C., went on to explain that the claim was not for an instrument which played half-sheets, but for an instrument in which half-sheets could be from time to time exchanged, and though there was no evidence as to the sale of these half-sheets, it was not necessary to show that the whole of what was claimed was a commercial success. His Lordship then dealt in detail with the various objections raised by the defendants against the plaintiff's patent. As to anticipation, he said that, although certain directions might be found in the letterpress of earlier specifications, as far as public knowledge was concerned there had been no real anticipation, and there had been no actual thing produced which was in anticipation of the plaintiff's instrument. In conclusion. His Lordship held that the plaintiff's machine was a proper subject of a patent, and that the defendants had taken the very pith and marrow of the plaintiff's invention and had infringed his patent by constructing a machine which was merely a colourable imitation of that of the plaintiff.

And so rested the two sides of the case. Lords Justice Bowen and Fry, faced with weighing one against the other, concurred with the opinion of Mr. Justice Kekewich of the lower court. Ihlee's appeal was dismissed with costs.

A neat, closed book? Well, not quite. In spite of careful searches. I have been unable to find out the exact value of the substantial damages which Ihlee & Sankey had to pay to Ehrlich's Leipziger Musikwerke, Was a private settlement made? Was there some intervention by Pietschmann? Perhaps it will come to light eventually and so complete the story. Nevertheless, two significant things are known which may be related one to the other or in some way to the outcome of this case. The first one is that I have been unable to trace any references to Ihlee & Sankey after the date of this case and I have, from other sources, references to the fact that they ceased trading about the end of 1888. At this time, the business was re-formed as Ball, Beavon & Company Limited. The second is evidence of a licence agreement between Ehrlich and Pietschmann in their respective names of the Leipzig Musical Instrument Manufacturing Company and the Berliner Musik-Instrumenten Fabrik.

We have seen how the Herophon appeal was dismissed in the summer of 1888. It was thus with some element of surprise that I discovered an editorial comment in a music trades paper for 1890 in which the Herophon, its character presumably then whiter than white, was presented afresh to the public. In January, 1891, Alfred Moritz & Company of 37, Jewin Crescent, Cripplegate, London, E.C. advertised the Herophon with the following description subjoined:

"The square music sheet is fixed on the top of. the instrument, the apparatus turning round while the music sheet is immovable. Any number of pieces can be played on the HEROPHON. The music sheets are easily changed in a few seconds. The instrument is simple, but durable: should there be any repairing, the same can be easily executed. About one thousand different tunes are on sale, which number is continually augmented. There are three kinds of Herophons: the ordinary one, the Saloon Herophon, and the Double-Reed Herophon. Six tunes and one case are included in the price of the instrument."

The advertisement, which makes a point of emphasizing that the device is patented, continues:

"HEREPHONETTE (Small Size of the Herophon). The HEROPHONETTE has fewer reeds, but the music is of the same length as that of the Herophon, The sound of the HEROPHONETTE is not so loud, and is recommended to those who like soft music. The sale of the HEROPHON is now allowed by the Leipzig Musical Instrument Manufacturing Company. Address: Berliner Musik-Instrumenten Fabrik, Berlin."

The agency for the Berliner Musik-Instrumenten Fabrik was later transferred to Martin Hirsch of 9-11, Wilson Street, London, **E**,C. who began business in 1895. He was advertising the Herophon at Christmas 1895 – the same time as Henry Klein announced the arrival of a brand new disc-playing musical box – the Symphonion Eroica which played three discs on 300 teeth and cost all of 65 guineas.

So some form of licence agreement must have been made between Ehrlich and the redoubtable Berliner. A careful search through Paul de Wit's Zeitschrift fur Instrumentenbau has failed to disclose any clue.

Pietschmann & Sohn made one attempt to break into the lucrative musical box market with a discplaying machine called the Celeste. But, as the Berliner Musikwerke Fabrik, Ch. F. Pietschmann's prime contribution to mechanical musikwork lies predominantly in the sphere of the organette.

GRAND CROSSWORD

Compiled by A.J.L. Wright

Solution on page 312



ACROSS

- 1. This cylinder often lives in a drawer
- 10. Essential process for a smooth endless
- 11. The M.B.S. recently changed theirs
- 12. Result of careless cylinder handling?
- 13. St. George gets the best for polishing
- 16. Greek sort is on some discs
- 19. Disaster to a box!
- 20. What the little bird does at the end of his song

- 21. Is this organ part rolled out?
- 22. First class performer
- 23. Sanctified start to a source of musical boxes
- 24. You can replace that part if its in here
- 27. Paillard's get poorly in the middle
- 28. Sometimes used for inlay
- 30. The metric system is coming back
- 31. A measure of cylinders.
- 33. May be shown on a snuff-box lid
- 34. It plays best with its strong point at the end
- 36. A dance begins in these Halls

- 38. Old Casper's got some nautical poles
- 39. No binding here
- 41. The alcoholic content of Eckhardt
- 42. Organ-grinder's pet is holy without its tail
- 43. The Brittania hides a Regal Signature
- 44. Famous organ builder
- 46. Initially a Viennese maker
- 47. Such music could never be ridiculous
- 49. Counties without musical connotations
- 50. As one with 51 down will be an age
- 52. Always wind this way
- 53. Most combs are
- 54. Not key-wind but awkward

DOWN

- 2. That ubiquitous name!
- 3. He accepted this puzzle
- 4. Defines the pitch
- 6. 19 across will affect you thus
- 7. Conventional source of boxes
- 8. Usual output of a musical box makers
- 13. Looks well polished

- 14. What a capital maker!
- 15. He rather liked rosettes
- 16. Spoils the look of 13 down
- 17. Biblical worker on organettes
- 18. Disc symphony
- 19. Pitch depresser
- 25. Unfortunate feline owner
- 26. Author of musical box classic
- 29. Composer of opera music
- 32. Does it?
- 33. Often wrong applied to organs
- 35. Scotsman in the pianola
- 37. A healthy singing bird should be
- 38. Hit-tune to be avoided on the box
- 39. Good when you get the needle
- 40. Musical box era was one
- 43. Result of 19 across, I added
- 45. The snail makes the cylinder do this
- 47. Reference to female stopwork?
- 48. A removed resonator was in front
- 49. Remains when you put the £ in your pocket
- 51. See 50 across
- 52. Nominal coverage of M.B.S.

SOCIETY JOURNALS

It has been suggested that those Journals which are out of print should be made available to those Members requiring them, in the form of a photocopy. Since this requires some arranging, it will be done by order only.

Any Member who would like this service should contact the Hon. Secretary as soon as possible, but definitely not later than December 31st, 1972. No orders will be accepted after this date



An interesting photograph of Studt's Bioscope, complete with organ, set up at St. Giles Far, Oxford. It is taken from a post card owned by Member Richard Jefferies.

quitous name! ted this puzzle

The Automatic N The BANJC

THE USE OF THE BANJORCHESTRA

The Banjorchestra is a highly artistic automatic instrument which may be used in the place of the banjo orchestra, which has become popular in dancing salons, owing to its adaptability to the dance music of the day. Perfect rhythm for the modern dances has been worked out in the music rolls by which this instrument is operated. All the expression which is put into the music by the most extensive banjo orchestra is reproduced by this instrument. It may be used with great effect in high class dancing salons, and where cabaret entertainment is in vogue, and dancing is indulged in by the guests, at a saving of from \$100 to \$400 a week.

> The Banjorchestra may also be used in icecream parlors, cafes and places of amusement as a coin operated instrument for profit.



WHAT IT

6 ft. 7 in. high, 3 ft. i

The Banjorchestra comprises an automatic ban drums and castanets, accompanied by an autor may be attached to any ordinary electric socket, with or without a coin. If operated with a coi and the instrument will continue to play until artistic. It is finished in mahogany and the ban in the upper door. It is equipped with an aufor the piano, and an automatic muffler for th

PIANO M

should investigate our liberal proposition, an

The CONNORIZED 1

This advertising leaflet for the Banjorchestra is reproduced of the most interesting of the machines which used normally the Banjorchestra was made by the Engelhardt Piano Compan decade of this Century. This Company also made the Peerless

larvel of the Age RCHESTRA

ACCESSIBILITY FOR REGULATION

All the controls are directly in front of the lower part of the instrument. The banjo is regulation size and equipped with wire strings. It may be tuned easily, by the use of four buttons which have been installed in the panel at the top of the instrument which sound the four notes of the piano to which the banjo should be tuned. The entire back of the instrument opens, so that the piano may be tuned with the greatest ease. By pressing a series of five buttons the traps may be cut off singly or as a group.

MUSIC ROLLS

Owing to their equipment and many years' experience as manufacturers of high-grade music rolls, the Connorized Music Co. is admirably well fitted to produce music rolls of artistic and attractive arrangement. Those for the Banjorchestra are specially prepared for dancing. The rhythm, expression and time which are all cut in the roll have been carefully and scientifically produced so that the greatest effect for dancing is had at all times. They have been cut and timed the proper length of the dance, and when rerolled commence over again for an encore. In fact, the Banjorchestra does what human hands have been doing at about one-tenth the cost.

vide. 2 ft. 7 in. deep.

Special rolls have been prepared for the Banjorchestra when used as a coin-operated instrument. Each roll comprises ten selections of

the latest and most popular song and dance hits.

COMPRISES

supported by tambourine, triangle, bass and kettle tic piano. It is operated by an electric motor which her alternating or direct current. It may be operated as many as 20 coins may be inserted at one time, e last coin has been used. Its case design is highly and traps may be seen through a large plate-glass matic rerolling device, automatic expression devices banjo.

ERCHANTS

share in the profits of this 20th-century marvel.

IUSIC CO. 144th St. and Austin Place NEW YORK



Banjorchestra Showing Mechanism and Controls

y permission of Member Q. David Bowers. One nd played instruments to make automatic music, of St. Johnsville, New York, during the second utomatic Pianos.

BOWERS IN BRITAIN

by Q. David Bowers

First, some introductory words might be in order: While I have known a number of dealer members of our Society, I have not had much communication with collector members. From 1967 until my resignation earlier this year, I was co-owner of Hathaway & Bowers, Inc. – leading American dealers in automatic musical instruments. During that time I was a familiar visitor to the premises of Graham Webb, Keith Harding, and others in the trade. I also had occasion to visit private collectors from time to time. I have especially fond memories of a visit with Dr. and Mrs. Cyril De Vere Green one New Year's eve!

Since my resignation from Hathaway & Bowers, Inc. I have become co-owner (with Claes O. Friberg) of the Mekanisk Musik Museum located at 150 Vesterbrogade in the heart of downtown Copenhagen, Denmark. Claes and I have endeavoured to gather together a wide representation of automatic musical instruments – including a number of American pieces which are seldom seen in Europe. MBSGB members are cordially invited to visit the museum.

This is the first of several articles I plan to write for "The Music Box" at the invitation of your editor, Graham Webb, Hopefully you will find the articles interesting, even informative.

London holds many fond memories for me. In fact, I have spent more time there than in any other major city in the world - excepting, of course, cities in which I have lived. The reason for all of this has not been music boxes but, rather, has been my business in the field of rare coins. While music boxes have been my hobby for many years (and during the 1967-1972 Hathaway & Bowers affiliation, a business), it has been dealing in rare coins that has furnished my livlihood. London is a centre in the rare coin market - and many important sales have been held in the rooms of Christie's, Sotheby's etc. These sales have attracted international participation. In addition, as America was once a former British colony there was a great interest on behalf of British numismatists (coin collectors) to assemble sets of American coins during the 19th Century. America, with its wild west, unsettled frontiers, and all sorts of other escapades, seemed to be a rather romantic place and collecting coins from there was quite popular. At the same time during the 19th century Americans themselves were too busy carving a nation out of the wilderness to engage in the armchair pursuit of collecting rare coins. So, many of the finest American coins known today have been secured from English cabinets - and trace their origin to English collectors who had the foresight to save them a century ago. Although the intense interest

in rare coins in the past five to ten years has exhausted the English lode somewhat, such was not the case in the very early 1960's. It was then that I spent quite a bit of time in London.

Sometime around 1961 or 1962 I located in an antique shop in Portobello Road a fine upright Polyphon with matching base cabinet. The instrument used the 24 1/2" disc - the largest regular Polyphon size. It was a really superb specimen and the original ornate top railings intact and had a beautifully polished walnut case. The price, as I recall, was all of about 50 pounds - and this included a large supply of gleaming discs! So enamoured was I of my newly-acquired prize that I mentioned the purchase a day or so later when I visited Michael Millward at his coin store in Great Portland Street, Mike knew nothing of music boxes, but he did have an interest in things old and curious. When I described my purchase to him he thought he would like to have one just like it, So, I took him to Portobello Road. While there were no other 24 1/2" Polyphons there at the time, we did find a 19 5/8" upright Polyphon for which he paid 17 1/2 pounds.

Last year I stopped in to see Mike Millward, and he reminded me of our trip to Portobello Road a decade earlier -a trip which I had nearly forgotten. "Do you remember that Polyphon you had me buy



A model B Hupfeld Phonoliszt-Violina. This picture is taken from 'Encyclopedia of Automatic Musical Instruments', which is reviewed on page 307.

for 17 1/2 pounds in Portobello Road many years ago?," Mike queried. "Well, you might be interested in knowing that I just turned down an offer of 200 pounds for it!" Mike then went on to say that after our initial visit to Portobello Road he picked up four or five other Polyphon music boxes. They all have done very well as investments over the years.

I have always had a great personal interest in large orchestrions. Whenever the opportunity has presented itself I have acquired old catalogues, serial runs of musical trade magazines, and related items. In a way these are just as interesting to me as the instruments are themselves – for these old publications furnish a never ending stream of interesting and previously-unsuspected information.

Acquired along the way have been many catalogues

and sales prospectuses issued by the noted firm of M. Welte & Sons of Freiburg, Germany. Welte catalogues of the 1895-1910 era featured many instruments in many different locations. However, the most prominently featured of all was the magnificent Welte Orchestrion owned by Mme. Adelina Patti, renowned opera diva who lived in splendor in Craig-y-nos Castle in Wales. An 1892 edition of Strand Magazine featured a visit to the Patti castle. Mme. Patti was quoted as saying that the Welte was one of her favourite possessions.

After having read so much about this famous orchestrion I though it would be interesting to try to locate it! I wrote many letters on the subject – and, as might be suspected, all resulted in dead-ends. Finally I did learn that the instrument had been dissembled and moved from Craig-y-nos Castle



Adelina Patti's billiard room, complete with its model 10 Welte Orchestrion. This picture is taken from 'The Strand Magazine' in the collection of Richard Jefferies.

shortly before 1920 and had been relocated at a summer camp near Douglas on the Isle of Man. At least the trail was getting warm - and, hopefully, I soon would learn that the instrument was still there on the Isle of Man just awaiting my rediscovery of it!

Alas, no such thing was to happen. I learned from Mr. Shorrock, a piano tuner who serviced the summer camp that (in his own words), "I have tuned the pianos at the holiday camp for over 30 years and I am sorry to say that the orchestrion in question is no longer in existence. It met with a series of accidents, First it was flooded. Then it caught fire because of the lighting system. The cost of repairing it was too much. After many meetings the directors of the camp had it broken up. The whole orchestrion was burned in the boiler house furnace shortly after World War II."

The firm of Keith Prowse is, of course, well known today in England as a purveyor of theatre tickets, travel bookings, etc. In 1965, when talking with Eugene DeRoy in Belgium, I learned that Mr. DeRoy had been an employee of the Prowse firm in London during the World War 1 era. I knew that Prowse had a connection with automatic musical instruments years ago, for I had earlier seen the Keith Prowse name on several pianos – but I did not realise the extent of the Prowse activity until I talked to Mr. DeRoy, Prowse, it seems, was an active agent for many continental European firms. particularly for Ludwig Hupfeld of Leipzig. Perhaps not wanting to reveal the German origin of its instruments (for English-Germany feelings were not always the best during the early twentieth century), or perhaps not wanting to reveal its trade sources, or perhaps a combination of both, led Prowse to retouch stock Hupfeld illustrations and use them in a specially prepared catalogue featuring the whole line of Hupfeld instruments - aline ranging from small keyboard type pianos to mammoth Helios orchestrions, Ignoring Hupfeld model numbers, Prowse assigned their own designations to the various Hupfeld instruments. A merchandising effort was made through many pieces of wellprepared literature - most notably an embossedcover catalogue entitled "Skating Rink Orchestrions".

Mr. DeRoy, a native Belgian, was employed in London by Prowse at the time. It seems as though the Germany products of Hupfeld, Popper and others sold well in England – but that there was a problem with the music rolls. The Germany manufacturers did not have the production facilities or the ability to keep up-to-date with the latest fashion in English popular music. So, to further the sale of instruments Prowse decided to establish its own music roll perforating facilities. During his stay of several years in England Mr. DeRoy kept busy arranging new tunes for the Hupfeld Helios, Phonoliszt-Violina, and other instruments – tunes which reflected the latest in popular stage hits, and other melodies.

It is interesting to note that in America the Rudolph Wurlitzer Company had the same problem. Beginning in 1903 and continuing until about 1914, Wurlitzer imported over 1,000 large orchestrions from J.D. Phillipps & Sons of Frankfurt, Germany. Sold under the "PianOrchestra" label by Wurlitzer, these large Phillipps orchestrions were immensely successful, However, there was a problem with the music. American patrons of amusement parks. restaurants, beer halls, hotels, and dozens of other locations which featured these instruments liked the latest in American tunes, not the latest German hits. For a while Wurlitzer sent sheet music to Phillipps in the hopes that Phillipps could meet the America music roll demand. However, inevitable delays resulted and the result was not satisfactory. Wurlitzer then set up its own facilities for manufacturing rolls for Phillipps instruments - and the problem was solved.

During one of my London visits a steady downpour of rain kept me in my hotel room all day. Not having any business appointments I thought I would check into the Keith Prowse firm – something I had been intending to do for some time, I must have spent an hour or two on the telephone, during the course of which I was switched from one person to another. I must have talked to almost everyone on the Prowse staff – or at least it seemed as though I did! The net result of all of this was zero. No one could remember the automatic musical instrument phase of Prowse's history – and one gentlemen, a director of official I believe, told me in no uncertain terms that Prowse never engaged in that type of business!

I shall leave it to my present English contemporaries to perhaps re-approach the Prowse organisation, possibly using a different act this time, to see if there might be some interesting memorabilia lurking in the Prowse files! At one time Prowse imported large quantities of Hupfeld instruments – and it is conceivable that a few of these might be traced to the same addresses, if such are known, today.

A few years ago I received a letter from a Mr. Martin who sent me pictures of a once-beautiful Hupfeld Helios 1/22 orchestrion which he found located on a platform high above a skating rink. The Hupfeld, probably originally sold by Prowse circa 1910-1914, was missing some parts and in a rather decrepitappearing condition – but not so hopeless that proper restoration could not bring it to life once again. Fortunately, Mr. Martin expressed interest in doing just this – restoring the instrument. Hopefully the project is well under way at the present time.

FELLOW MEMBER

by Dick Baines

3. JOHN MAY

So far in this series we have featured well-established collectors, those who have built up a large collection over a number of years, so I thought it would be a change if now we described a comparatively new collector. John May joined the Society in the summer of 1970. He heard about us through a B.P. guide to Antiques, finding in it a chapter on the various types of mechanical music. He wrote to the address stated – Devonshire Place.

His interest in Mechanical Music started from early childhood, when, with the help of an accomplice, he dismembered a 'toilet-roll-type' device (Celestina?) of organette to his now lasting regret. Since then he has been fascinated by all types of Mechanical Music especially the large examples. It is only in the last four years that he has been in the position, both financially and spatially, to collect seriously.

John is also a keen apiculturialist (beekeeper) and equates this with the Musical Box Society as it is an interest which cuts across a complete crosssection of the community, and friends who are not enthusiasts are all firmly convinced of the insanity of those who are! He is a lecturer in Science Education at Chelsea College involved in higher degree work and teacher training. Married and with three children, his five year old son is already a great enthusiast, and John is thinking of putting his name down for Membership when he comes of a suitable age.

During the lunch break at the last A.G.M. we adjourned to a nearly hostelry inappropriately named "Dirty Dick's" and John told me of some of the many difficulties which beset the newcomer to collecting. The main difficulty is lack of knowledge. Here he has found the Society invaluable, especially the Secretary and Arthur Ord Hume, both of whom have helped him with information. As far as restoration is concerned he wonders if there is any possibility of evening workshop meetings. If, for example, a member was repairing an instrument would it be possible for a few fellow enthusiasts to watch?



Like many of us his Collection is not large, and with a shudder he whispered about a horrible 'cheap and nasty' box which he acquired from a colleague at work. It plays just recognisable tunes and has several broken teeth. During the fifties John was much impressed by a series of talks on the radio by the late Canon Wintle on Barrel Pianos and from that time resolved that he must own one.



THE PASQUALE COIN-OPERATED BARREL PIANO. BARREL NUMBER 402; PIANO NUMBER 1194; REGISTERED NUMBER 364814.

His first major acquisition was a Neumann piano with a Hupfeld movement. He originally heard about it from a cousin whose neighbour had recently died. After some discussion the executors were happy to exchange it for thirty pounds in used notes. When the piano eventually arrived at his home his wife was horrified at its size, it would not even go through the door. The doorframe had to be removed and at last it was installed. It had not been working since the previous owner had retired fifteen years earlier, but after some slight restoration John managed to get it playing again. He thinks it could be improved by a discerning eye and experienced hand being cast over it however. In his previous house John found a collection of dusty old music rolls in the attic hidden away under a pile of rubbish. To his surprise and delight they fitted his new machine.

There is another piano in the May Collection, a Pasquale penny in the slot barrel piano. He saw it in a shop in the Fulham Road early one spring marked up at two hundred pounds. He forgot, or rather tried to forget, about it until the following September when he enquired again. In the interim period it had been devalued to a hundred and fifty pounds and so he snapped it up. It is in good mechanical order and plays well although he has still to restore the casework. All the tunes sound good but so far nobody has been able to put a name to any of them. At present he has it at his College where the cleaners go into ecstasies of delight every time it plays as it reminds them of their childhood.

At the moment John is anxious to acquire a decent street barrel piano complete with a cart so he can take it round to fetes and rallies, perhaps one of the readers can help him here? Although he has only a small collection John is looking forward to increasing it, while we are looking forward to the time when his son becomes a Member and accompanies his father to our meetings.



The 'Pianola' Piano and The 'Pianola' Piano New 'Duo-Art' Model Illustrating the World's most famous Pianos in combination with the Metrostyle and Themodist 'Pianola' also the new 'Duo-Art Pianola' Facsimile reprint of this rare 40-page catalogue originally published in August, 1922. Illustrates many different models, both upright and grand, pedal and electric, and gives specifications and original prices ex-Bond Street, London. Invaluable collector's guide. Price 75p plus 5p postage (\$ 3 post free U.S.A). Direct from the publisher

ARTHUR W. J. G. ORD-HUME 14 Elmwood Road, Chiswick, London, W.4

Musical Fun in Wonderful Copenhagen!

MEKANISK MUSIK MUSEUM!

The New "MMM Review"

Recently we mailed you a complimentary copy of the *Mekanisk Museum Review* — our lively 20-page catalogue of music boxes, electric pianos, hi-fi records, and other items for sale. We hope you'll enjoy the *Review* and will subscribe to the many exciting issues we have planned for the future.

"The Encyclopedia of Automatic Musical Instruments"

The new Encyclopedia of Automatic Musical Instruments has just been released by the Vestal Press of New York. Written by Q. David Bowers, the new Encyclopedia features information provided by hundreds of collectors, historians, and others worldwide – including well-known M.B.S.G.B. members Arthur W.J.G. Ord-Hume and Graham Webb, to mention just two.



Copenhagen's Mekanisk Musik Museum!

The 1008-page book contains detailed information on thousands of different models of automatic instruments — including cylinder music boxes, musical watches, automata, disc music boxes, player pianos, expression pianos, reproducing pianos, coin-operated electric pianos, barrel pianos, orchestrions, violin players, organettes, player reed and pipe organs, calliopes, fairground organs, and others.

Histories of the various manufacturers are given together with illustrations and data concerning the various models. Now you will be able to identify by model and style number disc music boxes by Polyphon, Symphonion, Regina, Kalliope, etc., automatic instruments by Hupfeld, Popper, Welte, Losche, Frati, Philipps, etc. – thousands and thousands of models are pictured!

Over 100,000.00 worth of expense, hundreds of thousands of miles of travel, and ten years of time have gone into this book. Countless people have been interviewed, including many persons once prominent in the industry – Messrs. Hupfeld, Seeburg, Wurlitzer, Philipps, Rand, Bursens, Whitlock, Link, Imhof, Bruder, et al. The book is a treasure trove of information, much of it hitherto unavailable in any other publication ever published for collectors.

How to order your copy: The *Encyclopedia* sells for \$25 U.S. funds postpaid. To order your copy, send an international money order for \$25 U.S. funds (or 11 pounds English funds) to the author: Q. David Bowers; Box 1669; Beverly Hills, California 90210; U.S.A. On request he will inscribe the flyleaf of the book for you.

Guarantee: If, for any reason whatever, you are not 100% delighted with the new *Encyclopedia* just return it and your money will be instantly refunded in full – no questions asked. We know you'll be delighted with it!

An unusual incident may be of interest, for it tells of how the *Encyclopedia* has been accepted by other collectors: On June 30, 1972, the Vestal Press sent an air shipment of 48 copies of the *Encyclopedia* to a convention of the Automatic Musical Instrument Collectors' Association in Los Angeles, California. The shipping cartons were unpacked immediately after they arrived. Within five minutes each and every one of the 48 copies was sold – and dozens more could have been sold if they had been available!

The Encyclopedia of Automatic Musical Instruments: 1008 pages, large 8½x11" page size, thousands of illustrations, complete index, plus many other features. Order yours today!

Musical Instruments Wanted

We are now on a "buying campaign" to build our trading stock of music boxes, electric pianos, etc. If you have one or several choice pieces for sale, please send Claes O. Friberg a description of them. We're not seeking bargains; we're willing to pay well for choice pieces.

Our affiliated firm (and our means of earning a livelihood!), Friberg + Co., one of Denmark's largest electronics firms, has large shipments coming regularly to Denmark from England – so adding a few music boxes as part of one of these shipments is easy for us to do! We'll take care of all packing and shipping arrangements from London.

Right now we would like to buy from 50 to 100 disc-type music boxes by Polyphon, Symphonion, Kalliope, et al - small instruments as well as large upright models. Condition is not important as we have our own restoration facilities. Also we'd like to buy several dozen cylinder boxes. Offer us any you may have for sale!

Musical Fun at the MMM!

The directors of the Mekanisk Musik Museum, Claes O. Friberg (our director who lives in Denmark) and Q. David Bowers (our American director who lives in California) enjoy instruments a lot – and invite you to share their enthusiasm. Visit the MMM in person, or "get acquainted" by mail. Either way, we look forward to your friendship!

Mekanisk Musik Museum

Vesterbrogade 150, Copenhagen, Denmark

Directors: Claes O. Friberg and Q. David Bowers

hidden HISTORD?!

by Gerry Planus

I've got Elves & Pixies at the Bottom of my New Garden

I have two dogs, Susy is a big fat black bitch, who engages the attention of all visitors whether welcome or not, by running towards them like a tank going into the attack and at the same time growling in a deep brown voice. While their attention is fully focused on her, the other dog "Blackie" by name, who is so cowardly that he wouldn't face up to a jam sandwich, sneaks round the back of you and takes a nip at either ankle or calf, he doesn't seem to worry which one it is. He then jumps smartly back from you and wags his tail as if to say "it wasn't me Mister, honest!!". By which time Susy has arrived just out of your reach in front of you still growling in a deeper brown voice, in order to engage your attention again, while Blackie can then dart in for another nip. It's fascinating to watch them at work. I've often wondered why it is that people seldom seem to call on us twice. You will no doubt be wondering what on earth are two lovable, sweet natured dogs doing wandering around the pages of a musical box magazine. I had to introduce them to you, for they are two of the main characters in this fascinating bit of musical box history.

Some of you possibly remember that a couple of years ago I lived in a part of London where history of the popular type purported Henery the Eighth used to "have it away" with the scullery maids under the shade of a gnarled, blasted and twisted oak which was at the bottom of my garden, the one where the fairies were. I now live way out in the wilds of truly rural England where the Ancient Britons used to lie in wait for the Normans, Angles, Jutes, Saxons, Vikings as they came up the motorway from Londinium. The house sits in an acre of ground and is surrounded by all kinds of fruit trees, also in the acre are a couple of old bottle wells that have been filled in at some time and then there are the remains of an old stable or barn which had been levelled down before I came here.

Some of you who have the back copies of the Music Box will perhaps remember that I explained how I come to be the collector with the largest number of empty boxes in the world. When I moved here I had to have somewhere to put them. My Wife, Dorothy is one of the sweetest natured people in the world, but somehow she managed to put over to me the fact that, she was not quite 100% happy at the thought of having Boxes, Empty, Music, 2,000 of in and around the house, so that I had to erect a shed or warehouse to hold them, Those of you who have had any dealings with Local Authorities, will know how long it takes them to get into gear when you apply for planning permission to erect anything on your own ground. So I did not ask them for permission, I searched

through the local Bye-laws and found a loophole which states "One may build upon existing old foundations if the building to be erected, is not to be used for human habitation etc."

I therefore started clearing away all the old bricks, wasp's nests, etc. that occupied the site. Naturally the two dogs helped by doing the digging and carrying bits of corrugated iron onto the lawn! (where the lawn-mower found them much later). While they were helping I noticed that they continually kept going back to one certain section, where they lay down with heads cocked on one side as if listening. I went over and asked them what they were listening to, but they must have been in one of their off-moods and didn't answer me, I thought "oh well, be like that then" and went back to supervising my wife as she dug out a ruddy great lump of prehistoric concrete.

My curiosity was aroused though by the way that the dogs always went back to this one spot, I waited until they had found a rabbit and had started playing hide and seek with it, then I went and had a look at the spot that they had been paying attention to. I noticed what appeared to be a small tube sticking out from between two bricks which formed part of the old foundations. I thought I saw a flicker of movement at the mouth of the tube, but then decided that the sweat formed by supervising Dorothy's work had blurred my eyes. I sat down in order to carry out some more supervising, when suddenly "WHANG" I felt a terrific sting in my

leg and looking down I saw a little man about an inch high just raising a pick again to have another swipe. I hurriedly moved my leg out of his reach and at the same time mildly remonstrated with him suggesting that it would highly delight me if he would go and do his whanging on someone else. At the same time I was thinking "Oh no, surely there aren't Fairies at the bottom of this garden too" and then of course I realised that it couldn't be a fairy cos my Mum told me that Fairies had magic wands wot they waved and did funny things wiv, while this chap had a sharp little pick that he waved around, I saw that he was saving something by the way his mouth was moving. I couldn't hear him, so taking care to keep out of the way of his pick I got down on my knees and put my head very trustingly near his thin piping little voice saying "Gerry dear boy, I'm sorry to have attracted your attention in such a manner when we haven't been introduced. I'm a pixie and my name is Joe Frere". Suddenly there appeared another little man beside him. Joe then said "May I introduce my brother to you, his name is Nicholas Frere", "How did you know my name?" I then enquired. "The dogs told us" said Joe. "How come you can talk to dogs?" I asked, "Oh, that's nothing" said Joe, "we can talk to anyone or any animal, that's how we've managed to survive such a long time, but enough of that, we've got a problem and you are the only one that can help us". "Well old chap, just pour your problems into my shell like ears and as long as it don't cost nuffing. I'll do my best to help", I said.

"Well you see" says Joe, "my brother Nicholas and I have lived here for ages and what with the old building that was here having been gone so long, our house which is underground is getting a bit damp and wet and what with you mucking about over our heads we were getting fed up and thought of an idea where you can help us and we can help you. We were talking with the dogs and they tell us that you collect musical boxes. It so happens that we know someone who has one and if you agree and build us a new home while you are putting up your shed, we would do our best to get this musical box and give it to you as a present."

Well, dear reader, I've always been known as a chap who never looks a gift horse in the mouth, so I hurriedly agreed to lease a square foot in the corner of the new shed to the pixies and that in return they would get this musical box for me. After the shed had been up for a month and no musical box seemed to be in the offing, I had a chat with Susie (that's the big black bitch with the deep brown voice, remember?) and told here to stay on guard and let me know when the pixies next showed themselves, A couple of hours later she came and told me that Joe and Nicholas were waiting for me. When I had sat down and made myself comfortable Joe and Nicholas appeared. "Come on Joe" I said, "Where's this musical box you were going to tell me about in exchange for your lease?" "Well he says, it's a bit involved". Here we go I thought, he's going to spin me a right old yarn.

"Don't bother about the story" I says, "just give me the chap's name and address and I'll go and see him myself". "It's not quite so simple as that" says Joe, "may I suggest that you make yourself a bit more comfortable". Joe and Nicholas Frere then made themselves comfortable, Susie also made herself comfortable, while Blackie did what dogs always do, on an old overture box that had it's lid open.

Now says Joe, "you are a human being and to us you are a giant, for we are pixies. Well we are also giants to our little people and we call them elves, for they are very small indeed, most of them don't even grow as big as five-thousandths of one of your inches. Here comes the problem. You see the musical box belongs to one of the elves," "Don't be ridiculous" I say in my usual diffident dogmatic manner, "how can a tiny elf only 5thou high be the owner of a human musical box?" "No you've got it wrong" says Joe, "It's not a human size musical box, it's an elf size musical box". As you can imagine I was flabbergasted, however I quickly composed myself while the gears inside my skull starting clicking and I thought Gerry, my love this sounds like something good. You'd better get your delicate sticky fingers onto this one, an elf size musical box is something even "Thingamy Bob" hasn't got. But to get back to the true story that I'm telling you. AN ELF SIZE MUSICAL BOX, I can imagine some of you who are a bit 'blase' saying to yourself, "I don't know why he's getting all excited, he doesn't even know whether it's a Mandoline, Pianoforte or Overture box yet". Well may I just remind you, an elf is, say 5 thou tall, so in proportion an elf's musical box would be about a quarter of a thou or less in size, just ponder on that for a bit and think of everything involved.

Who is going to fix the dampers? See what I mean? If it's that small how am I going to hear it and not only that, how do I know that it's really a musical box? But then I think again and reckon there's no reason for the pixies to fiddle me, so I leave it all to Joe and ask him to do his best to ensure that I get it quickly. Joe then nips off and Nicholas stays to have a chat with me about getting central heating laid on in their new quarters. Having the musical box on my mind I delicately changed the subject by saying, "where did the elf get his musical box from? to which old Nicholas says "He told us that it had been in his family for about 300 years."

300 years I thought, this will set the cat amongst the pigeons, for as you all know, nobody is exactly

sure when the first musical box was made and nobody knows who made it. The books all vary on this subject for it seems that no records were kept, because when the first chap who made one showed it to his Boss, the Boss sacked him for wasting time on something that would never catch on. Here then, was a chance once and for all to have the matter settled. I says to Nick, "Nick old boy, though I don't wish to imply that your little elf is a liar. How do you know that he's telling the truth?" "It's quite simple really" says Nick, "it's only you humans who tell lies. We little people can't tell lies, we can read each other's minds and would know immediately so there's no point." I sat and pondered about this for a bit and then said, "How does he know that his musical box is 300 years old". Nick looked at me as if he thought I was a bit of a twit, "because it's been in his family for 300 years" he said "and in any case he's got the original receipt." Just then Joe popped out of the front door of this house carrying something in his hand, "is that it Joe?" I asked, "Yes I've got it for you and not only that, I got the original receipt and tune sheet with it too". There's a lovely fellow you are Joe, thank you very much indeed" I says, holding out my hand to take the box and just as I reached out my hand Susie gave a loud woof - woof right in my ear. It frightened the life out of me and made me start, but poor old Joe was blown right over with the blast of breath from Susie's bark as she was only a couple of inches away from him. You can guess what happened can't you? Joe dropped the musical box and it smashed to smithereens on the floor!!! You can imagine how I felt. I nearly had a unique box with a piece of unique information (who made the first musical box).

I sat there for a minute feeling all desolate and despondent, then I remembered that my old Grandad said to me once, "Gerry my sweet lovable adorable grandchild" he said "if you've never had it you can't miss it." With this very apt piece of consolation, I asked Joe to pick up the bits and let me have them. All is not lost though (remember pixies and elves can't lie), Joe has given me the remains of the musical box, also the tune sheet and the original receipt. He also told he that though the elves kids had got at the tune sheet at some time in the past, the receipt is perfectly legible with the date of 8th November 1623. So at least we know something, the maker's name and address is also there but neither the elves or the pixies can make out what it is as it is written in old style English. I got a mate of mine to put it under an Electron Microscope, in order that I should be able to have a magnified copy and then let you know who made the first musical box. Unfortunately the electron microscope is not quite fine enough, so in order that any one of you who has something bigger and better to magnify the original receipt with, I am publishing the original one:

Here it is. The dot inside the circle is it.

Automatic Bugle

The picture opposite, together with the description below, is taken from 'The English Mechanic' of November, 1892 in the collection of the Editor. It describes one of several mouth blown automatic instruments made over a long period.

We give engravings of a toy bugle provided with an air chamber divided into two compartments, in one of which is placed a disc having a series of radial slots covered by reeds. In the partition is an aperture through which air passing through the reeds can find its way into the rear chamber. In this chamber, on the prolongation of the axis of the reed disc, is placed a ratchet wheel, and on the same axis is pivoted a lever which extends through a slot in the casing. The lever carries a spring pawl, which acts upon the ratchet wheel. An induction pipe communicates with the chamber in which the reeds are located, and an eduction pipe with a flaring end is connected with the chamber containing the ratchet. The disc is revolved by vibrating the lever, causing the pawl to engage the teeth of the ratchet wheel in succession. By means of this movement a step-by-step motion is given to the disc which brings the reeds in regular succession opposite the opening in the partition, so that one after another of the notes of the music represented by the different reeds are produced and the tune is played. At the end of the tune there is a blank space, which prevents any sound being made, and this notifies the player to stop, unless he wishes to repeat the tune. In Figs. 4 and 5 is shown a disc carrying removable reeds, which admit of changing the tune by simply drawing out one set of reeds and inserting another set. The construction of the reeds is shown in Fig. 6, while the arrangement of the lever, ratchet wheel, disc, and apertures in the central partition is clearly shown in Fig. 4. A person who is not a musician may play upon this instrument as well as the best player.-Scientific American.



TUNING AND THE CLAVIOLINE

by Bob Minney

Those of us old enough to remember will recall that in small dance quartettes and bands of the 40's and 50's the pianist was often equipped with a device not unlike a small electronic organ which was fixed to the treble end of the piano. This was tuned to the piano and played with the right hand to give any desired effect and tone colour, not unlike a solo organ with various stops. For some time now this device has been ousted by the electronic organ and for the most part examples have lain for years collecting dust in attics and store-rooms.

The machine is called a Clavioline. I have found it most useful for tuning all types of instruments. It overcomes all difficulties such as being unable to keep the upper notes ringing long enough to hear the beats (musical box); unlike volume sounds (bells/combs); unlike timbre and voice (organ trumpets/piccolos/trombones/ bourdons); difficulties of split rank tuning on organs and difficulty of hearing the beats at all as with some stringed instruments. Best of all it is so quick and simple. I recently checked my 130 pipe organ through, unaided, using the clavioline.

When tuning odd teeth in a comb little trouble is experienced, especially on duplex disc type boxes when almost always a tooth of the same pitch to the untuned/new tooth can be found to copy. The same applies to the larger cylinder boxes using multiple teeth of common pitch, But it is a very different matter on small boxes which only use single teeth of each pitch, or when a whole comb is found to be flattened or sharpened with rust, or the leads have sulphated away requiring many teeth to be retuned. Indeed while some music box combs seem to perform quite well and give a good resonant and ringing tone even when some teeth are not perfectly in pitch or even widely out, I have found other combs where the octaves seen to damp each other out if they are not truly accurate for pitch. Just as two teeth of the same pitch side by side will do if the synchronizing of the beats is at a certain dissonance. I have also come across combs in which one or two teeth will not ring at all, the reason for which no immediate logical explanation can be found, e.g: comb loose on backing, loose lead or crack in the tooth. These teeth I have found almost invariably improve in tone if not become perfect when their octaves and major chord partners are correctly tuned.

The difficulty is that few people have the necessary hearing and knowledge, or yet the time, to listen to the beats between teeth a fifth apart or an octave apart and so on. In any case, although when tuning strings for instance it is possible to change the pitch at will, when removing metal from a music box comb tooth the number of times you can 'overshoot' the note is very limited! What is required is a source of sound of the correct pitch, tone, colour and volume, to copy. The obvious answer would be a master comb such as the original manufacturers used in the past. But these are few and far between and for many machines non-existent, as each instrument has its own pitch and characteristics.

Since Bach (1685-1750) was the greatest champion of tuning for equal temperament and even before this many instruments were manufactured using it; surely it is fair to assume that the 19th century mechanical musical instruments with which we are concerned would be tuned to equal temperament, even though they may be incapable of playing in more than three or four different keys? I know there are various schools of thought on this but I shall follow this line.

From Everyman's Dictionary of Music, the definition of Equal Temperament is: -

"The tuning of an instrument especially a piano and organ by dividing the octave into 12 semitones all divided by exactly the same ratio of vibrations, as distinct from intonation where intervals vary slightly and the sharps and flats are not precisely of the same pitch."

In other words, when a musical instrument is expected to play in several different keys the scale must be 'modified' by flattening the so called 'perfect fifths' slightly, in order to accommodate the 12 semitones within a complete octave (DOH to DOH). An instrument tuned to just intonation is only acceptable to play in the one key in which it is expected to play – all other keys becoming progressively less acceptable the further they are removed from the basic. A 'perfect fifth' should include seven full simitones but with the modern keyboard actually includes 7.019550008654 of them! In practice what happens is that when tuning for equal temperament (present day practice) the tuner will flatten his 5th by 1 to 1½ beats per second and then check it out using 4th, octaves, 3rds and 6ths to ensure equal temperament over the scale.

It may be possible to borrow a clavioline from a friend or purchase a secondhand instrument quite cheaply nowadays. They are inherently stable in pitch when connected to 240 volt mains, Two tuning knobs are situated on either end of the short keyboard. It is possible to 'tune the pitch in' to any desired instrument using the left hand knob. The knob at the other end of the keyboard (right hand) is then used to 'stretch' the keyboard's intervals so that the upper notes are given a 'lift' (this is done on some keyboard instruments for example, pianos, to give a bright upper range) or to tune the clavioline to a flat response with exact octaves. Some difficulty may be experienced here as it is not possible to play more than one note at once on the keyboard, so use must be made of the couplers and

your own ears to set the instrument. I use a taperecorder also at this point just to make absolutely sure of the octaves – having done this and 'set' the instrument, all that is required is to select the necessary couplers to give the correct tone colour and set the volume control. A piece of lead placed on any key will then provide a good steady note of the required pitch and colour for an exact copy to be made on the music box comb, string or organ pipe, the intervals between each note being already set!

Of course, the purists will claim that this is not tuning at all but the end result is what matters and the speedwith which the job can be carried out. Recently a musical friend of mine and I sat down with one comb off a 27" Regina, checked it and returned about two-thirds of the teeth in 4 hours with the aid of a Clavioline, after several previous abortive attempts by other means. The second comb I later copy-tuned from the first.



ENCYCLOPEDIA OF AUTOMATIC MUSICAL INSTRUMENTS, by Q. David Bowers, Vestal Press, Vestal, New York, 13850, U.S.A. Price approx. \$27 post free (retail price in U.S. \$25). 1008 pages 8¾ inches x 11¼ inches. Illustrated.

During the last few years those of us who collect mechanical or automatic musical instruments have emerged from our role as poor relations of the collecting world to find ourselves members of a fast growing and popular group. To cater for the increasing number of devotees (the demand furnishing its own supply), we have been blessed with various books on the subject. It sometimes seems that John Clark, first in England to provide us blind followers of the Art with at least a white stick, started the whole business of collecting the things, but of course even he, beatified if not already canonised though he may be, was more reporter than prophet, more follower than followed.

More lately, in the last 5 years, we have had a further 5 English books on our hobby, all contributing something to our knowledge of the subject. All too in the classic format which, it seems, all of our publishers demand' write the text and we will allow you X amount of illustrations. Drawings may be in the text but photographs must be grouped in multiples of 4 pages or spread throughout the book in no set sequence.

Meanwhile, back in the United States, we have had Q. David Bowers and the redoubtable Harvey Roehl of Vestal Press. From the beginning Mr. Bowers has flouted the conventions of ordinary publishing. With his first book on automatic musical instruments 'Put Another Nickel In', we saw the style of imparting information which has with this, his third book on the subject, come to be his very own. David's motto is a simple one. It is: if it is interesting or informative or helps the reader to understand in any way, why then, let's put it in. The criterion is whether it is a useful addition to the book, not whether it is a good photograph or whether the print of an old catalogue has reproduced poorly. The result of this very personal way or producing a book gives what could be called a bitty look to the pages but the net result is that into a book already crammed with 1008 pages is crammed on each page more incidental intelligence than, to use the American

vernacular, you could shake a stick at.

The claim inferred in calling this book an encyclopedia is a large one. The dictionary definition of the word is 'a book of information on every branch of the subject'. That the information is not complete is inherent in the subject. It would be a wonder book indeed which covered all of the field. There are weaknesses in the book. The area of early development is sparsely covered and history in general is not well treated. Where the book really scores however is in presenting a vast panorama of instruments with, in many cases, their provenance and much more. The value of this type of material is inestimable. The gap the book fills, as did 'Guidebook' to a lesser degree, is the deep need we all have when faced with a new-to-us type of machine, to find the particulars of it somewhere so as to learn more about it.

With an American book it is natural that American machines, and those which were sold in quantity there, are treated in some cases more thoroughly. Even so the fare is so rich that much about European instruments is included which I for one did not know. One does not regret the passing of the price guide which caused so much controversy in Mr. Bower's 'Guidebook of Automatic Musical Instruments', but I think there would have been a case for keeping the tables of rarity from that book.

The number of pictures in this giant of a book is enormous. Even so, although it is primarily a picture book it should not be overlooked that the text is plentiful where necessary and of a uniform good quality. All in all a most interesting and informative book. I defy anyone to browse through any few of the pages and not add to the sum total of their knowledge. In particular the book is recommended to all who have an interest in the later, larger, and more intricate machines, in general to all who like to know that little extra something about their hobby. Not pretty, but most useful!

G.W.

ORGEL-UND SPIELUHRENBAU by Karl Bormann, Sanssouci, Zurich, Switzerland, Fr.24.80. 332 pp, 4½ ins x 7⁵/₈ ins. illustrated.

Certain names stand out in the history and development of the mechanical organ. Whereas in England we might have difficulty in assigning a precedence amongst such masters as Flight, George Pyke England, Longman and others, France produced its undoubted master in Devrainville – and Germany was the home of Bruder. Sadly, Ignaz Blasius Bruder, born in Harmersbach on January 31st, 1780, has remained largely ignored by historians in mechanical music. Yet this man was to be responsible for the establishment of the Black Forest organ industry's growth and development and was to earn for himself the affectionate cognomen "der Uhrennazi".

Karl Bormann's new book, a practical-sized octavo, thus fulfills a two-fold objective. Not only does it itemise the history and achievements of the family of organ-builders which began with Ignaz Blasius Bruder, but it relates the development of the clockwork organ, street organ and show organ in Germany. We are tempted to forget the fact that these instruments all emanated from Germany and the British barrel organ tended to be quite a different thing with its own separate development. Just as the type of instrument which we today call the fair organ began in Italy, underwent development and perfection in Paris and then went further North into the Low Countries for its hegemonic period, the street organ started in Italy and then went to both France and Germany for separate development. In the hands of the Germans, it evolved in a quite remarkable manner and rapidly displayed characteristics in mechanical design and tonality which rendered it unmistakably Germanic, Much of this was the work of Bruder who progressed through street organs to dancehall organs, fair organs and recital organs which were of very high quality.

A thorough groundwork in the design and construction of the church organ is demonstrated by the Bruder organs that we can examine today. Karl Bormann produces some interesting comparisons on the scales and pipework used and taught by various makers and shows graphically something of the reason why the astute organophile may distinguish the sound of a Bruder from a Wellershaus, Ruth, Wrede or Gaudin,

Karl Bormann, well-known writer on organ matters in Germany, has produced an extremely well-written and research documentation. It is far from being just a Bruder monograph. There are 38 illustrations, some being half-tone, which are arranged a little haphazardly as regards their numbering. A valued work for the reference shelves, A.O-H.

From miniature 1/18 to magnificent 3/72

movements

Hundreds of tunes, thousands of movements in stock

Complete boxes from £2 to £350

Send for our price list and tunes list to:-

SWISSCROSS LTD., 109 NORWOOD HIGH STREET, LONDON, SE27 9JF.

Sole British Agents for Reuge, S.A.

Telephone: 01-761 0428

NORFOLK POLYPHON CENTRE

for

DISC MACHINES IN VARIETY

also

CYLINDER BOXES ORCHESTRIONS CLOCKS ORGANS

WOOD FARM BAWDESWELL NORFOLK

Telephone: Bawdeswell 230

THINNING collection. Jack Donovan has for sale, at the time of going to press, automaton figures; musical boxes (cylinder and disc); singing bird; musical oil painting; clockwork toys, etc.

Let me know you wants, maybe I can locate for you. The address is: 26, The Boltons, Portarlington Close, Bournemouth.

NEEDED in good condition: a few discs suitable for 15½ inch Polyphon. R.P. Parkinson, 41 Sun Street, Waltham Abbey, Essex. Phone Waltham Cross 23331.

MUSICAL snuff boxes wanted by Member Ripley, 79 Meads Street, Eastbourne.

MEMBERS are reminded that the next issue of THE MUSIC BOX will celebrate the 10th anniversary of The Musical Box Society of Great Britain. Any Member having material which he thinks might be of interest for this special issue, remembering that it is also the Christmas edition, is requested to send it to the Editor at the earliest possible moment. All contributions are most welcome.

CAN anyone spare some 8¼ inch Symphonion discs or 101/8inch Polyphon discs? 26½ inch Monopol discs available. Miles, Rock Cottage, Mountfield, Sussex,



LETTERS TO THE EDITOR

C.W. Cramp of Horsham writes:

I am wondering if any readers can furnish any more information on this polyphon. Sirdar is a title or a rank. The machine plays 11"size discs with one revolution for a penny.

A gun is mentioned which I have not obtained. There is no sign anywhere on the machine where it could be attached, K. Bender & Co was of course the early agent for Polyphon. I have never seen it illustrated in our magazine nor in any of the catalogues.

Keith Harding writes:

Readers of the Music Box may be interested to know that musical boxes are now appearing on the concert platform.

Mr. Peter Maxwell-Davis has written a piece entitled "Solita" for solo flue and music box. This was performed at the Purcell Rooms, London at 7.30 pm on Thursday 8th June 1972, with Miss J. Pearce on solo flute. The musical box was a good quality modern one by Reuge with 50 notes.

Alan Robb of New Zealand writes.

Referring to Jocelyn Walker's letter about gramophone recordings of mechanical music I would like to add the following information. The earliest recordings of which I am aware were issued in 1928 by the Zonophone Company. Their catalogue of that year lists two records; No 3645 Operatic Airs



(Medley). Italian Airs (Medley) played on a Street Piano. No. 122 (a) Waltz Song from "A Waltz Dream" – (b) Red Roses, from "The Man with Three Wives", Automobile March (Breitkopf & Hartel). This latter record features a barrel organ of unnamed make. I have recently found a copy of this record but it is in such poor condition now that it is very difficult to try to identify the organ.

In the 1936 Regal Zonophone catalogue there is a recording of a "Barrel Organ & Cornet". The record is No. 6120 and the tunes are "Carnival of Venice; Serenade; Jig Highland Fling; Il Bacio-Two Step". Also listed is record G21375 "Martial Moments" played on a "Mammoth Fair Organ". I have reason to believe that this record had been issued for some years earlier but I have not been able to obtain the appropriate catalogues to confirm this. Record 6032 mentioned by Mr. Walker was listed and this too I believe had been in circulation for some time.

Two other records which I have heard, and which date from the early thirties (but which had been discontinued by 1936) were Regal G21194 "Street Barrel Organ" – Knees Up Mother Brown. Here's to Good Old Beer, Augustine, Funiculi Funicula, Tesoro Mio– and Regal Zonophone G40053 "Gems of the Eighties" by the Kerbstone Serenaders. Both these records feature a street piano.

On one of the rarer labels, Rex, is found No. 8257 "Street Memories" played by a "Street Barrel Organ and Accordian". Again it is not an organ but a street piano.

Now a plea for help: I have recently acquired the box which should house a small Symphonion. Unfortunately the previous owner removed, and disposed of, the works and the discs. The interior measurements of the box are $11\frac{1}{2}$ " x $11\frac{1}{2}$ " x $5\frac{1}{2}$ ". There is a photograph on P 99 of de Waards book "From Music Boxes to Street Organs" of an identical box. Mine still has the original instruction sheet inside the lid. Can anyone supply a suitable set of works (and some discs)?

Editor's note: Alan's full address is: 16 Mount Pleasant Road, Christchurch 8, New Zealand,

R. Trender of South London writes:

Despite the generally excellent advice and answers given in the series QUESTION AND ANSWER, I'm afraid that I must disagree with the answer given to the question put by Claes Friberg. It is the experience in our workshop that it is often found that the treble end teeth of an interchangeable cylinder box have been damaged through careless handling of the cylinders while they are being exchanged. It seems to us that it is almost certain that, if pins are on the cylinder, there should be a tooth to go with them. It would have been the checker's job to remove any pins found unnecessary. The total removal of a tooth rather than the repairing of it is not uncommon, sad and bad as this may be. There is no skill involved in removing the remains of a tooth and filing the comb level, replacing it is a different matter.

It is possible to confuse this type of missing tooth with that on some movements where there are no pins for the final treble tooth although the comb is long enough to contain one. In these cases the end tooth may simply be broken off quite untidily, or finished as described by Claes. In some boxes, where there is a rim at either end of the cylinder, it would be found that a final tooth would in fact foul the rim.

A.J.L. Wright of Stourbridge writes:

I welcome your policy of more member participation in the "Music Box" and I am enclosing a crossword puzzle which you may be able to use. I shan't be offended if you reject it as I'm no expert!

Enclosed is a photostat of a tune-sheet of a hymn box I have just acquired. The only point of interest is the number 1894 at the top which at first I thought might be a gamme-number, but it doesn't appear on the box itself. Was it usual to put a date on later boxes? It's well set-up and obviously of good quality. Incidentally, the Swiss writer of the sheet evidently thought the ignorant English wouldn't understand the name of the last tune in French!

Films Colony to lo shad on Will had the power of Senser name the that will be served 6 French Etouffoirs en Acier soit à Spiraux

LIST OF MEMBERS

- 569 Brian Carter, Esq., 12 Ladywell Gate, Welton, Nr. Brough, East Yorkshire.
- 570 Stanley J. Speel, Esq., 60 Deanecroft Road, Eastcote, Pinner, Middx. HA5 1SP
- 571 Roger Burville, Esq., 63 St. Peters Place, Canterbury, Kent.
- 572 Dr, C. Payling-Wright, Dept. of Biochemistry, Baylor College of Medicine, Houston, Texas, 77025, U.S.A.
- 573 Clifford A. Alianson, Esq., 126 Marlboro Road, Delmar, New York, 12054, U.S.A.
- 574 Mr. & Mrs. Albert Choffnes, 3136 Carmen Avenue, Chicago, Illinois, 60625, U.S.A.
- 575 Mrs. P. Gulliver, 349 Bournemouth Park Road, Southend-on-Sea, Essex.
- 576 D.J. Coldwell, Esq., 128 Teg Down Meads, Winchester, Hants.
- 577 J.S. Bradshaw, Esq., 138 Hartley Road, Kirkby in Ashfield, Nottingham, NG17 8DS
- 578 Mrs. Hilda Freedman, Little Curiosity Shop, 24 The Green, N.21.
- 579 Petit Musee Ltee, 1494 Sherbrooke St. W. Montreal 109, Quebec, Canada.
- 580 Madam Daisy Schaub, Chalet "Les Tulipes", Ch 2205 Montmollin NE, Switzerland.
- 581 S. Hillard, 3 Cowper Close, Bicester, Oxon.
- 582 R.A. Alexander, St. Marys Cottage, Butlers Lane, Semley, Shaftesbury.
- 583 Benjamin Wahlstrom, Almvagen 7, 14142 Huddinge, Sweden.
- 584 Brian W. Cutler, The Chair Shop, (Antiques), High Street, Old Oxted, Surrey.

CHANGES OF ADDRESS

- 334 William H. Edgerton, Esq., 200 North Wilton Road, New Canaan, Conn. 06840, U.S.A.
- 445 L.N. Wilson, Esq., 4 Aspen Grove, Formby, Lancs.
- 405 Dr. F. Metzger, 166 LaPier Street, Glencoe, Illinois 60022, U.S.A.
- 172 Douglas G. Evans, 1428, No. Brighton Street, Burbank, CA 91506, U.S.A.

CORRECTION TO ADDRESS

325 Mrs. Mark A. Davis, P.O. Box 271, Temperance, Michigan 48182, U.S.A.

GRAND CROSSWORD SOLUTION

Across

1. Interchangeable 10. Lap 11. Scribe 12. Pinprick 13. Blood 16. Slave 19. Run 20. Retract 21. Barrel 22. Ace 23. St. 24. Stock 27. Ill 28. Ivory 30. Si 31. Ligne 33. Scene 34. Piano 36. Tara 38. Spars 39. Free 41. Dt 42. Monk 43. Ri 44. Gavioli 46 Ao 47. Sublime 49. Shires 50. Er 52. Up 53. Hardened 54. Cranky

Down

2. Nicole 3. Editor 4. Clef 5. Ha 6. Appal 7. Geneva 8. Airs 9. Lecoultre 13. Brass 14. Otto 15. Dawkins 16. Stain 17. Abel 18. Eroica 19. Resonator 25. Tippoo 26. Clark 29. Verdi 32. Go 33. Steam 35. Ian 37. Chirpy 38. Smash 39. Fibre 40. Egis 43. Ruin 45. Veer 47. She 48. Led 49. Sd 51. Ra 52. UK

THE MUSIC BOX is designed by Graham Webb and printed by Trevor-Hobbs Limited, 13 Garrick Street, London, W.C.2. It is published four times each year by The Musical Box Society of Great Britain.

GRAHAM WEBB

93, Portobello Road, London, W.11.

Telephone: 01-727-1485

SPECIALIST IN MECHANICAL MUSIC

Author of The Cylinder Musical Box Handbook The Disc Musical Box Handbook Are YOU interested in Musical Boxes?

Small Barrel Organs or Reed Organettes? Fairground Organs?

N. BUG. Y

C.DIRC. YOIG

Carry Carry

Stor Loso Loso Loso

CONTRACT OF THE THE THE THE THE

640



Musical Snuff-Boxes? Singing Birds (automatic ones!)?

Musical Automata of every other kind?

If you are, then you will quite probably derive immense enjoyment leading to a greater fulfilment of your interest by becoming a Member of

THE MUSICAL BOX SOCIETY OF GREAT BRITAIN

The aims and objects of the Society are extremely simple. The Society exists to bring together all those who share a common interest in the collecting, preservation and appreciation of all types of mechanical musical instruments.

What for? What good does the Society do? The Society brings together fellow collectors from all over the British Isles and many foreign countries including Switzerland – the accredited birthplace of the musical box as we know it. The Society publishes a guarterly Journal called

THE MUSIC BOX which is devoted to articles on all aspects of musical automata, repair and overhaul tips, descriptions of fine and unusual musical movements and, of course, it circulates Members addresses.

Membership to the MUSICAL BOX SOCIETY OF GREAT BRITAIN opens up a whole new world of musical box appreciation. Wherever you live, up-to-the-minute news of members and collections reaches you through THE MUSIC BOX. Twice a year, a full day meeting is held at which all members and their guests are invited to attend. Regional meetings, film shows, lectures and demonstrations are held at various places at intervals.

How much does all this cost? Just THREE POUNDS (U.S.A. \$8 per year! If you are not convinced that Society membership can benefit you, why not send 10/- (50p; \$ 1.50) for a specimen copy of THE MUSIC BOX? Judge critically, for yourself.

The Journal of the Musical Box Society of Great Britain, THE MUSIC BOX, is devoted to articles and material of interest to collectors, antique dealers, historians of mechanical music and enthusiasts in general. As a work of continuing reference. THE MUSIC BOX publishes much material which has never before appeared in print as well as reproducing contemporary advertisements, descriptions, articles, patents, tune-sheets, lists of types of boxes and lists of tunes which they play.

Additionally, it acts as a clearing house for the opinions and researches of Members throughout the world and carries advertisements for Wants and Disposals. The main purpose of the Journal is, of course, to act as the mouthpiece of the Musical Box Society of Great Britain and is recognised as the leading authority in all matters concerning mechanical music and mechanical musical instruments. The Society maintains archives and publishes in facsimile much out-ofprint material in its Journal.

THE MUSIC BOX contains articles of three basic types; general interest, historical; technical. Instructions on the repair and overhaul of various types of mechanical musical instrument provide a most valuable guide to such work for other overhaulers.

100 1 - DIG -

C O O

The Musical Box Society of Great Britain. Bylands, Crockham Hill, Edenbridge, Kent.

Binders

Keep your copies of THE MUSIC BOX neat, clean and immediately available for reference. Strong, durable binders in red rexine with gilt title on spine made to hold two years' issues of magazines, directory and index. Your copies can be inserted or removed in a moment. There is no need to mutilate your magazines by punching as each one is simply retained on a wire.

Post and packing free £1.00 (\$3. U.S.A.)

Available from:

The Secretary, Musical Box Society of Great Britain, Bylands, Crockham Hill, Edenbridge, Kent.

