

From the Editors' Desk

We were delighted to receive an article from Juliet Fynes on the Fisher Price Company for inclusion in this issue. Fisher Price toys featured largely in our children's lives – colourful, musical and robust, they were hugely popular. Now they are collectable too. We can testify to the toys' robustness – our record player survived dunking in the paddling pool among its other adventures. As parents we also appreciated that these loved toys could be taken apart and repaired when necessary. We kept a spare 'radio' and 'record player' in the Nickelodeon to remind the public that what we were showing them was, in many cases, the technology that led to the toys they loved as children. We are expecting to cover more makers of these collectables in future issues, in the meantime, part two of Fisher Price will be in the next issue.

Fred the Head has popped up again in the introduction to Automata, a timely article, as next month there is the first "Automata Convention" to be held at the Morris Museum in Morristown, New Jersey. As we go to press we hear that the response has been so great that the organisers have extended the weekend to include extra events on Sunday. More details of this Convention are to be found on Page 11.

It was with great sadness that we learned of the death of Dr. Jan Jaap Haspels. He was such a pivotal figure in the development of the wonderful 'Van Speelklok tot Pierement' mechanical music museum in Utrecht, Holland, being its curator from 1970 to 2006. Visits to the museum were always made special by his presence – he loved sharing the music and instruments with fellow enthusiasts. We extend our sympathy to all our Dutch friends – the world has lost a remarkable man who combined scholarship and humanity to an amazing degree, and one who will be much missed by his many colleagues, friends and fellow collectors.

Thank you to all our contributors to this issue - hurry in with your article, dear members, for the next issue is already filling up and we would love to hear from you!

<i>CONTENTS</i>	
Editorial.....	1
Chairman's Message.....	2
On Music	3
Siegfried's Musik Kabinett	4
An Uncommon Ducommun.....	7
Harry's Polyphon.....	10
AutomataCon.....	11
Eldorado Piano Orchestration.....	13
Meeting Dates.....	17
Autumn Meeting	19
Oh! Mr Porter!.....	20
Yesterday's Toys	22
Introduction to Automata	25
Wonderful Wurlitzer	28
News and Views.....	30
For Sale.....	32

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*Note: As an Association AMBC does not give valuations or take responsibility for advice or guidance nor imply any form of guarantee for the accuracy or consequences arising from information so given.

Chairman's Message

Well, this is the first full year since our Association was formed. Our membership numbers are more than anticipated and we will have to increase the print run of our periodical. I would like to thank all of our members for their generosity in financial support and particularly strong support at meetings. Sadly two of our founding members have passed away, Stephen Kearney and Colin Durham. We extend our sympathy to both Sheila Kearney and Gladys Durham. In tribute to their work, please read Sheila's article 'An Uncommon Ducommun' and Colin's article on the Rye Wurlitzer meeting.

Our website team has done a marvellous job. We receive a lot of interest from overseas as well as here in the UK. Go to ambc.org.uk to see the latest updates, which include video and sound.

We should support our advertisers whenever possible and give their details to others interested in mechanical music.

The last group of visitors to my collection in 2015 was another group of schoolchildren* and as usual I gave them every encouragement for a future interest in our hobby. Remember, if you have friends or groups who show an interest in mechanical music, let us know. They may like a talk or wish to join us.

Do not forget to let us know your feelings about how we are doing. It is your Association and we intend to make it as good as you wish it to be. Please supply us with information and pictures that may be of interest to others. Our team of experts can provide any assistance or advice in support – so do not be embarrassed about approaching any of us for advice and guidance.

It is with sadness that I have to report the death of Dr. Jan Jaap Haspels, the first curator of the Utrecht, Holland, mechanical music museum and a good friend of ours for many years. His knowledge of both music and mechanical music was amazing. His knowledge of English, both technical and colloquial, was superb. He appreciated the English sense of humour. Who else would pin "Rule Britannia" on the Dom Tower clock barrel and play it just because a British group was visiting the museum? He will be sorely missed by all who knew him.

I hope you have noticed the subscription reminder in this issue. We continue with the low membership rate for another year. Please pay promptly to save our officers from extra work. Remember, the membership year starts on 1st March 2016.

Finally, on behalf of our members I would like to thank all Societies associated with us for the encouragement and support for our new Association.

Ted Brown

**Ed: For many years Ted has given talks to schoolchildren. They are tailored to meet the academic requirements demanded by the modern school curriculum. Thus he will emphasise the basis of Mechanical Music in support of history, sociology, science, technology and music. See the short article entitled: 'A Christmas Carol' on page 25.*

Notice of membership renewal

The next membership year starts 1st March 2016.

For existing members, contact the Membership Secretary, Kay Brown (See List of Officers for contact details. UK Fax/Phone 01403 823 533.)

New members please contact the Treasurer, Paul Bellamy:

bellamypaul@btinternet.com

The full year's subscription is due at the time of application. Those joining after 1st January get the period to the end of February free but must pay the full subscription for the following year at the time of application.

The Constitution of the Association of Musical Box Collectors known as AMBC

Article 1. Aims and objectives:

- 1.1. To promote interest within the body of membership of AMBC for the mutual enjoyment, entertainment and research relevant to musical boxes and all other associated forms of programmed musical instruments generally known by the term 'mechanical music'.
- 1.2. To establish formal links and working relationship with other Societies who wish to be associated with AMBC.
- 1.3. To provide social opportunity for meetings of musical and non-musical entertainment, of historical or social interest. Meetings may adopt the established format of the private Chanctonbury Ring meetings hosted by Mr. E. Brown.
- 1.4. To publish research, articles, books and pamphlets for members on all forms of musical instrument including musical and non-musical automata, covered by the term 'mechanical music', and in order to promote public interest.

For new members! Please note the AMBC Constitution: Article 2, Membership.

- 2.1. Application for membership will be by means of an AMBC membership form.
- 2.2. Acceptance of membership will be at the discretion of the AMBC Committee.
- 2.3. Applicants must accept the terms of the AMBC Constitution and abide by Committee rulings in the application of those terms.

On Music

from the mid 18th Century

“Music is reckoned among the liberal arts, only as it is studied as a genteel and pleasant accomplishment, calculated to sooth the mind and unbend its most racking cares and anxiety; but in this country especially, those who practice it for bread are in but small repute. ..

Brisk martial music communicates a vivacity to the soul of man, that makes him despise all danger and meet death clothed in all his terrors with intrepidity and resolution; whereas soft airs, and elaborate melody has the contrary effect: From whence it is observed, that the spirit of most nations may be learned by the nature of the music with which they are delighted. Florid sprightly airs denote a fierce, hardy and valiant people; but soft, delicate and harmonious notes bespeak the effeminate, lazy and voluptuous coward. While the music of Italy was full of discord, and consisted more in noise than harmony, then was she the mistress of the world: Her hardy sons fought to the tune of their rude artless instruments, with courage and intrepidity and courted death in the most distant climes, but since she refined in her taste of music, and has been polished out of her rustic melody, by degrees she has degenerated into what she is, a nation of priests, something less than women, into a race of mere effeminate cowards.

What may be observed of the Italians will be found true of nations nearer home: As Italian music, and the love of it, has prevailed in these islands, luxury, cowardice and venality has advanced upon us in exact proportion...

From all this I would only infer, that a refinement of our taste into a love of the soft Italian music, is debasing the martial genius of the nation; and may one day be a means to fiddle us out of our liberties. I would chuse (sic), if we are to be improved in music, that the composers would keep to the old British key, and let us sing English as well as speak it.”

From *The London Tradesman* by R Campbell, written in 1747.

Projects & Wants

AMBC Tune sheet library project:

The late Anthony Bulleid donated his entire library of tune sheet information to AMBC. Many of his published photographs were in poor condition but he adopted a ‘publish and be damned’ approach as a matter of research necessity.

Members from all societies are asked to donate better quality colour photographs (say, 350-400 pixels in print quality) taken face-on to avoid distortion and with the tune sheet dimensions. Additional information such as serial number, gamme number, maker, etc., is welcome, as is a cross-reference to the Bulleid tune sheet numbering system.

Please do not be put off if any of the tune sheets are damaged although the best possible condition is preferred.

The project is a long-term one because HAV Bulleid produced 400 tune sheets (and plaques) in his lifetime. If members have copies that were not published in his book ‘Musical Box Tune Sheets’ (known as The Tune Sheet Book) and its three supplements, these will also be welcome. They may be sent to the Editors or any of the officers - see page 1.

PROPOSED SEPTEMBER AMBC WEEKEND IN SUFFOLK

Subject to enough members wishing to participate, we plan to visit Suffolk for a two or three night break on the weekend of Friday 23rd to Sunday 25th September. This would be on a self-drive basis with half board accommodation at a local hotel. The programme would include the highlight of a visit to the Mechanical Music Museum at Cotton and also to the private collection of Curator Jonny Ling. There would also be two or three visits to other museums or private collections.

Please would anyone interested contact me as soon as possible and in any case before the end of March. If there is sufficient interest we will then finalise the programme and calculate costs.

Juliet

Email: julietfynes@hotmail.com Tel: 01798 342353

A VISIT TO SIEGFRIED'S MECHANISCHES MUSIKKABINETT

And a Sad Story – quite unrelated.

For a special anniversary we decided to go on a Rhine/Moselle cruise. The choice was largely dictated by a wish to visit Siegfried's Mechanical Music Museum in Rudesheim. The first few days were spent gently cruising up the lovely meandering Moselle River, between steep tree-topped, vine-clad hillsides, and the occasional picturesque towns and villages clustered on the narrow banks.

Our stately progress was interrupted by a number of locks, brutal post-war concrete structures that added nothing to the scenic beauty of the river. We also had to pass under a few very low bridges that necessitated the lowering of the superstructure on the top deck. This included the roof of the bridge, leaving the comical sight of the captain's head sticking up through a hatch, whilst a couple of crewmen made sure that all passengers remained seated. This reminded me of another potential hazard, not to lean too far out over the rather low rails, as I didn't wish to emulate the fate of a previous owner of one of our musical boxes.

The box is a rather nice Nicole Frères 3-Air Overture Box (Serial No. 2453, Gamme No. 512) dating from about 1846. It has a 9-inch long cylinder and 171 teeth, playing "Overture la Dame Blanche" (Boieldieu), "Overture le Dieu et La Bayadere" (Auber) and "Overture der Freischutz" (Weber). Unusually it came to us with some provenance.

It had originally belonged to the Winstanley's of Braunstone, Leicestershire, England. They were a prominent local family, holding positions of high office.



Nicole Frères 3-air Overture box

It seems likely that it was bought by Lt Col Clement Winstanley J.P. (Justice of the Peace) who died in 1855. His nephew and heir died in mysterious circumstances whilst travelling in Germany – his body was found floating in the Moselle. The last Winstanley owner, Major 'Bobo' Richard Winstanley, who died in 1954, is recorded as remembering the box in the nursery at Braunstone.

We were treated to an unexpected musical performance when moored at Traben-Trarbach. At 4pm the 28-bell carillon on the old tower on the Traben side of the Moselle played a selection of tunes, repeated at 5pm, whilst we were wandering around the town. We heard it again to even better effect across the river as we made our weary way back to the ship at 6pm.

We cruised back to the Rhine to continue our journey, and eventually reached Rudesheim. Our group was taken by one of the ubiquitous little "land trains" right up to the gateway to the museum. This is a particularly grand example of a house typical of many we had seen, half-timbered with ox-blood-red beams and many turrets. Called the "Bromserhof", it was the ancestral home of the Bromser family, the oldest parts dating from the 16th century. Over the years the building underwent many changes and served a variety of purposes, until in 1998 Siegfried Wendel acquired it as a fitting home for his wonderful collection, and named it his "Mechanical Music Cabinet".

The conducted tour got off to a rousing start with "Die Lorelei" played by the Weber Maestro Orchestrion, a whole orchestra and jazz band in one instrument. After a demonstration of a magnificent Symphonion we were led into a part of the cellars, where facing us was a very pretty oriental-looking 80 key Gebruder Bruder Fair Organ, circa 1910, which had been rescued in a sorry state from Budapest. The catalogue listing claims it has the musical effect of a band of 40 men. The tour continued briskly upstairs through several rooms, with one or two instruments per room played for us. I was particularly pleased to see and hear the Hupfeld Phonoliszt-Violana playing "La Donna e Mobile". I had





The Bacigalupo workshop as set up at Siegfried's

been intrigued by such an instrument on the AMBC visit to the Mechanical Music Museum at Kew, which sadly was not played. That instrument had three violins, but here was one with six!* Three were vertically mounted on either side and it was fascinating to watch, especially when the tempo quickened and the two circular bows went into overdrive.

We passed through several more rooms, hearing more instruments along the way, including a Bechstein Reproducing Grand Piano and a fascinating orchestrion, by Bernhard Dufner of Buffalo, with an orchestra of dolls. This has a richly carved mahogany and walnut case containing a 1.8m long, 24cm diameter cylinder, holding 11 tunes played on 76 keys. There are 27 automata, richly dressed dolls and monkeys, each playing an instrument or performing an action.

A magnificent vaulted hall and chapel in the oldest part of the building are decorated with well-preserved frescoes and paved with original floor tiles. Here we were shown a modern reproduction of a singing bird box, made especially for the museum and on sale in the shop. The tour ended at the reconstructed workshop of



Automata on the Dufner orchestrion

Giovanni Bacigalupo from Berlin, giving an insight into the making and restoration of barrel organs, before the group passed out through the inevitable gift shop.

The visit was over all too quickly and, fascinating though it was, we were left wanting more. Inevitably these guided tours have to be geared to large groups of “lay” visitors, and concentrate on the larger, noisier and more flamboyant exhibits with the “wow” factor. We certainly were wowed, but we would have loved to hear a few of the cylinder boxes we passed by on shelves and in cabinets. We had hoped that the proprietor might be there so that we could “name drop” AMBC members who are personal friends of his, and perhaps wangle a little extra demonstration – but alas he was not around.

Juliet Fynes

(Ed: Thanks Juliet for such an interesting account of the Kabinett and the carillon. For the mechanical musical enthusiast, many towns and cities in Europe have carillons, and Rudesheim actually has two for the price of one. One of them is in the tower of the castle in the Drosselgasse. It has wooden figures that symbolize the four main wine vintages of the region. The other one has bells made of original Meißen porcelain and can be admired in the windows of Siegfrieds Kabinett, playing half hourly. Both play daily from 9.30am to 10pm.

The Traben-Trarbach carillon is a recent creation constructed for the 100th Anniversary of the City, dedicated in September 2004. Its 28 bronze bells were cast by the Bachert Family from Karlsrühe, which also cast the world famous bells of the Frauenkirche in Dresden. The largest bell weighs 80 kg and the smallest 7.6 kg. It plays daily on the hour from noon until 6pm but it also plays special arrangements on festive days.)

* Siegfried made up a number of these new violin playing tops as he had several basic Hupfeld reproducing pianos available.

Can anyone identify this overture?

Johan Goyvaerts (Welcome to the Association, Johan!) asks if you can identify this overture on his fine Henri Metert forte-piano musical box. Go to YouTube here:

<https://www.youtube.com/watch?v=n4RoQv1VPTI>

If you know it, you can post a comment directly on that site or let the Editors know and we can pass on the information.

Thank you!

An Uncommon Ducommun



Fig 1a. Ducommun inlaid case

Many members have a favourite item, maybe more than one, but do not consider themselves sufficiently informed or inclined to put pen-to-paper. So be re-assured, anything that interests a member may well interest the membership at large. The role of the AMBC Publications committee is to bring these two 'poles' together as best we can. We do not claim to be experts but we are willing to commit our thoughts to paper, to invite comment and to apply whatever expertise we collectively have. Thus we are grateful to Sheila Kearney for releasing her valued possession to our care and inspection together with the story behind her purchase and supporting information supplied at the time of purchase.

She told me: "When I was growing up, my step-father who was an antique dealer, bought several music boxes and at the age of 12, I was considered old enough to be trusted to play the musical boxes on my own. I was captivated by the lovely sound they made and I am still captivated. This eventually led to me purchase via Ebay a Ducommun Girod orchestral music box and a few more boxes since, but none so beautiful as the first."

Thus it was the Internet and Ebay that first claimed her attention, a magnificent giant of a musical box. Sheila admits that she was smitten yet knew almost nothing about the object of her attention, a situation even the most expert amongst us might admit to if pressed to do so. She sought basic advice from the seller, a very wise thing to do. Always ask as many questions and get as many assurances, in writing if necessary, that the object is what the seller claims it to be, as well as the advice of others. Fortunately, to become the proud new owner, husband Stephen also had to be convinced. Without going too far into those familial discussions, the outcome was that she did indeed become its proud new owner. Figs 1a shows the box. Figs 1b (the case front) & 1c (the lid) show the detail of the fine quality marquetry.



Fig 1b. Inlaid front

The case has some points of interests. Both lid and front are superbly finished with the finest quality marquetry. Although the organic dyes of the floriate design may have faded a little and the polish finish not original, the quality shines through. The lid has two bands of double stringing on top with the outer pair curved to match the rounded corners of the lid. The underside of the lid also has a line of double stringing as does the frame of the inner glass lid. The front of the case reflects the lid with two twin bands of stringing. Thus the case is quality throughout with possibly one minor exception – the sides and back have a form of scumble finish simulating another wood cut in light and dark bands. The finish seemed to be original and extremely well done although untypical of the grained-type of scumble.



Fig 1c. Inlaid lid

The basic details are shown in fig 2:

Case in inches: 22 long x 13½ wide x 12 high. Weight 28 lbs. Standard 13½ x 2¼-inch cylinder. The comb has 81 teeth. A 15 reed organ in play at all times, its comb situated at the governor end. An 8-striker drum with brass 'skin' and on/off control lever plus an 8-striker woodblock, both actuated by as one with an on/off lever control. 4 bells with one striker each. The comb for drum, bells and wood block in that order are at the drive end.

The cylinder dimensions are for a standard 13-inch movement and the standard-type cast iron bedplate of



Fig 2. Movement layout

rib-machined cast iron, large enough to accommodate the two extra combs, the 15-tooth organ one to the right and the 8-tooth drum/ woodblock/bell comb to the left. The bedplate is not stamped with either name or serial number, these being stamped on the T-bar of the winding lever (fig 3) with the serial number 8399 stamped on the side of the winding lever.

The Bulleid Ducommun dating chart has two date lines. The first ranges from about 1830 to 1862 at which the second starts again reaching serial 16000 by 1885, the end of the Ducommun era. As he wrote: *“A side effect of the two sets of serial numbers is that Ducommun actually made two boxes with every number from one to 15,000. I eagerly await the first such pair to grace the Register”*. Alas, Anthony did not live long enough to fulfil that wish but a future reader of this article may be able to do so! So how does one choose which dateline applies, not an easy task for the less informed. Lever-wind movements are almost exclusively post 1860 and so the second line gives the date as about 1874. Once again, the accompanying comments that Bulleid supplied with his dating charts also identify which Ducommun was the maker: *“The complication with Ducommun dating is that their serial numbers revert to 1 during the key-to-lever-wind period. So I assumed it must be the year 1862, when the 40-year-old F. W. Ducommun-Girod became L. Ducommun et Cie. Now seven years later I think this date is undoubtedly correct. It means that the first series stopped just short of serial 40,000”*. Note the hyphenated version, Ducommun-Girod hence the un-hyphenated one seems to be date related, perhaps a little later. Thus it is quite possible the son reverted to his male-line family name, Girod being his mother’s maiden name.

Bulleid also wrote: *“Late Ducommun Girod boxes, lever-wound with serial numbers up to 9,000, were probably all made by Ducommun et Cie, initially at 7 rue Mont Blanc, starting about 1862.... They probably started a new line of serial numbers about that time but*

retained their old style tune sheets. The business closed in 1874”. Thus we have a problem in resolving the Bulleid date line that he continued with justification to 1885 with the statement that the business closed in 1874, as stated in his book *Cylinder Musical Box Technology* page 14. Perhaps this is a typing error for 1884?

In respect of the dating chart and his movements, Bulleid used the dating information in a wider context of the key-to-lever-wind changeover period: *“The are few lever-wind boxes over 36,000 in the first series; and conversely a few key-winds numbered below 1,000 in the second. So their changeover ran from 1858 to 1863. Fairly typical”* By this he meant it was typical of all manufacturers whether based in Geneva or Ste.-Croix.

David du Commun, who died in 1837, was born in the late 1700s. His son, Frédéric-Guillaume du Commun (1795-1862) was born in the Canton of Neuchâtel, the eldest from his first marriage. Chapis refers to Ducommun as an arranger of music for the early musical box period so this was presumably a reference to David. Just as the name ‘le Coultre’ became Lecoultre so did ‘du Commun’ become Ducommun. It is thought that his first wife died, after which he married his second wife in 1812. She also had been married and her husband’s name was Girod. Her daughter by her first marriage was Jeanne-Catherine Girod and she was the same age as Frédéric-Guillaume. They married in 1816, both aged 21, and had four children. Their first son, Louis, was born in October 1821 followed by the second son, Jean, born in 1830. They also had two daughters. Louis and Jean both eventually joined the business.

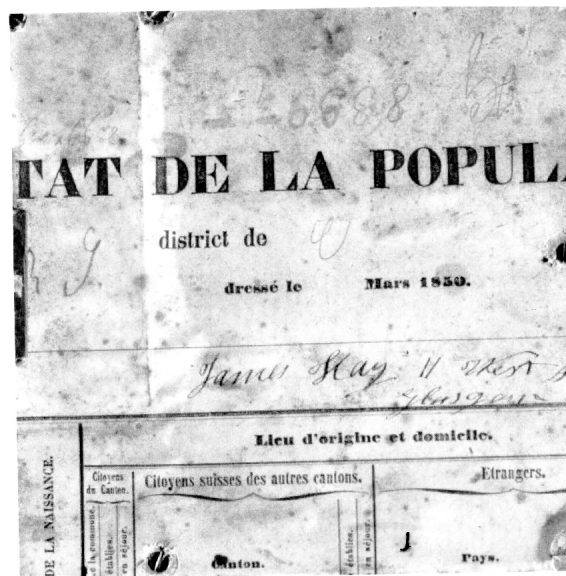


Fig 3. Paper attached to the organ bellows

Frédéric settled in Geneva about 1815, that signal year deemed to be the foundation year of Nicole Frères as well as the beginning of the true cylinder musical box era. He adopted his wife's family name in hyphenated form as was the custom of the time as well as incorporating the 'du'. Father David together with brother Henri worked and lived in the watch-making district of Geneva, the Saint Gervais Ward, registered as clockmakers. In 1822 Frédéric was registered as a *faiseur de musiques* (maker of musical boxes), working with his father and brother. The 1826 directory records him as 'Curtet & Ducommun, méc.-mus., rue Tour de Boël.' He moved to Quai des Bergues 29 about 1838, which he owned and where he died. This lies adjacent to the Rhône as it exits Lac Lemman (Lake Geneva).

He was one of two makers in Geneva who followed typical Ste.-Croix practice in pinning their first tune 'on the dots', i.e. on the track lines of the cylinder, as is the case with serial 8399. The other was Lecoultré. Neuchâtel is in the German-speaking part of Switzerland, not far from Bern and Ste-Croix. Thus it suggests that, in pinning tunes, he simply continued with the convention adopted in that part of Switzerland, which was opposite to that in Geneva. In later years the firm reverted to Geneva practice with last tune 'on the dots'. This makes commercial sense if outworkers did most of the cylinder pinning work.

From 1830 onwards the Geneva directories recorded Frédéric as a maker of musical boxes. In May 1869, son Louis Ducommun took a partner, Louis Mittendorff, which lasted five years. The trade name was then Ducommun & Cie, discarding the 'Girod', still at Quai des Bergues 29. Bachelor Louis continued to occupy the premises from 1865 to 1872, the year in which the building was pulled down. After that date there appear to be no physical traces of the firm but he was living with his brother Jean in 1882 but the 1890 the Geneva census does not mention him. Also, the Bulleid date line terminates at 1885. The conclusion is that the firm did not survive the market and technological changes affecting Geneva at that date. We know also that Jean had settled in a suburb of Geneva as a *fabricant de blanques à musique* (blank maker) until about 1885, again indicative of the downturn in musical box production. He then ran a factory of chemical products. He retired in 1896 and died in 1899. That was the end to a remarkable era by this remarkable family of musical box makers.

Returning to serial 8399, the Nicole Register indicates that their organ and orchestral boxes ranged from about 1860 to 1890 and is probably indicative of the market for this type of musical box. This one was described as a 'magnificent Victorian full orchestral cylinder musical



Fig 4. The organ section

box', a perfectly justified description except for the date, 1850. It does not equate with the Ducommun date line. Thus there is another puzzle. The seller found a piece of newspaper in French with the words 'dressé le Mars 1850' attached to the organ bellows, Fig 3.

Unless one has a thorough knowledge of French at this time, the phrase seems to indicate that the information was not the actual date of the musical box. The sense of the verb today is 'to erect' or 'to form'. The paper is a scrap torn from what appears to be a population survey giving details of citizens with dates of birth, the location of their commune (administrative region or district), where they were established and where they are staying (*séjour*) as well as their place of origin and dwelling. The details relate to Swiss citizens and *Étrangers* (foreigners). There is also some reference to a district. Thus the date seems to be irrelevant and the paper just a scrap used to note other more important details. The hand-written DG 8399 indicates that the writer attributed the movement to David Ducommun. The other writing is in a distinctly different 'hand', that of James Kay of Glasgow. This Scots gentleman was probably the famous artist of that name but is this and the other details relevant? Perhaps not but what is relevant is the piece of paper itself, part of the provenance of the musical box. The 1850 census is a reflection of the times showing the extent to which the Swiss maintained a record of both Swiss and foreign persons.

Musically, many modern listeners prefer the accoutrements to be turned off. Bulleid rarely appreciated playing a movement with these percussion devices in play. Whatever one's personal choice, the instruments should be set up sensitively and for this instrument both items played with just the right amount of impact. The 4 bells were well tuned. Although each had a single striker they also supported the main programme of music. Lastly, the reed organ can be a major letdown because of the critical mechanical nature of the drive mechanism. Fig. 4 shows the organ part of the cylinder with its bridges

and linkages. The bellows is driven by an otherwise fairly standard governor that has static but adjustable vanes and a flywheel to smooth out perturbations in cylinder surface speed caused by variations in load imposed on the cylinder by the combs. The circular crank has barely a ½-inch radius throw but is just sufficient to charge the main air pressure reservoir and to meet the demands made by the arranger. Even with the comb wound to just above minimum power the organ, although faint, played evenly. At full spring power, the organ was a little louder and probably in original playing order. The organ is located at the front below the pierced cover.

Finally, returning again to the front panel, Ted Brown noted that it was quite unusual to find what was a female riding theme, not necessarily a hunting one, with a lady's hat with flowing floral ribbons, a neatly figured curved-handle crop plus two musical instruments. Our conclusion is that this delightful example of an orchestral box was made for a discerning lady and now resides with another discerning lady.

Harry's Polyphon

Dear Members,

First of all, I would like to introduce myself, my name is Harry Sheldon.

I first met Paul Bellamy when he came to my house to buy a Christmas tree stand music box from me. I mentioned to Paul that I had recently bought a Mikado Polyphon although at the time it was away being restored by Lester Jones, a well-known restorer. I am sure some of you may have used Lester's skills yourselves.

After a brief talk about my Mikado, Paul asked if I wouldn't mind doing a short story for the Magazine, about the Mikado and it's restoration. So here we go -

For many years, I have admired the Mikado, as the sound they produce is so unique. As you can imagine, when I was given the opportunity to buy one, I was delighted. The Mikado was actually in Devon; so with my partner, Janette, we travelled down to have a look at it. When we arrived, we were so thrilled when we saw it; the cabinet was outstanding with a lovely etched glass front panel.

"Majestic" is the only word to describe it. The decision was made, there and then, to buy it, and we brought it back home with us the same day.

Although we were delighted with my new addition, there were one or two issues. This is when we decided to give Lester Jones a call. Lester suggested we let him take a look at the Mikado, as he thought it needed some remedial work on it. So it was agreed, and once more

the Mikado was to make another journey south, this time to Chichester.

It was away for 3 months going under a full restoration. Then we received a call to say all was well, and our Mikado was working as it should, and was ready for collection. On the Friday night, we travelled down to Chichester via Beaulieu, visiting the auto-jumble on the Saturday. (Classic cars and motorbikes is also another passion). Then on the Sunday morning we made our way to Lester's Church/workshop. His first port of call was to put the kettle on. While having a cuppa and a long chat about music boxes, we felt so privileged to be in his company, with his wonderful collection.

Eventually, it was time to hear the Mikado play. Lester then put a penny in the slot and away she went, the sound was just "amazing", the only way to describe it. We were over the moon.

It is with our special thanks and gratitude to Lester Jones and his brilliant workmanship that we have our fully restored Mikado back, and every time it is played it never ceases to amaze us. What a wonderful Music box the Mikado is.

Well, this is the end of my short story, thank you for reading it and I hope you have found it interesting.

Just before we sign off. One more thing to add, we would like to wish you all the very best, with your new Musical magazine.

Janette Sheldon..

(Ed: Many thanks for such a delightful account. Do other readers have a story to tell about one of their favourite items?)



Morris Museum Hosts Conference Celebrating Automata and Related Kinetic Art

(Morristown, NJ)— The Morris Museum is proud to announce that it will host the first ever AutomataCon, a convention celebrating automata and related kinetic art. The event will be held at the Morris Museum, home of the Murtoth D. Guinness Collection of Mechanical Musical Instruments and Automata, on Friday, March 18 to Sunday, March 20, 2016.

AutomataCon will convene premier artists, collectors, historians, and authors in the automaton community from around the

world to share ideas, build relationships, and grow interest in automata. The idea for the convention stemmed from the fellowship shown on the Automata / Automaton Group and Mechanical Adventures Group on Facebook. The two-day (*now three-day - see Editorial - Ed*) event will feature panel discussions, Museum tours, live demonstrations, and social gatherings.

Tickets:

Saturday and Sunday Pass: \$30

Includes access to all AutomataCon programming on these days, as well as admission to the Museum. Tickets are limited, and we recommend that they be purchased in advance.

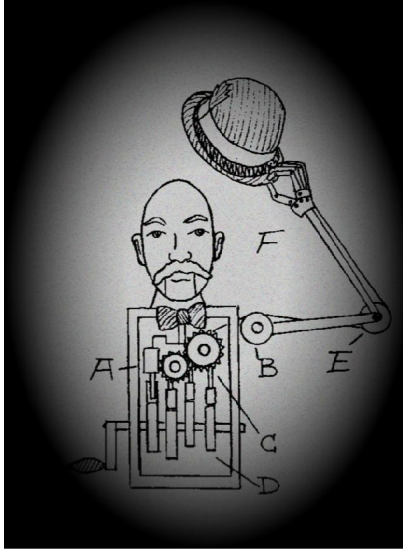
Saturday General Museum Admission: \$10

Includes access to select programming tailored to a general audience, as well as admission to the Museum.

Schedule:

Saturday, March 19, 11:00AM - 5:00PM

Programming will include panels on the history of automata, the secrets of automata creation, and the exhibition of automata.



Premier showing of historic film, "Le Monde des Automates"

Saturday, March 19, 11:00AM

This 1928 Swiss film documents rare and unique automata and mechanical music.

Sunday, March 20, 11:00AM – 2:00PM

Sunday programming will include additional, less formal panels and programming. Demonstrations of the Guinness Collection will be given at

2:00PM.

Images

"Pierrot Ecrivain" (Pierrot Writing), G. Vichy, c.1895, Paris, France, Photo credit: SFO Museum

"Crescendo," by Tom Haney, 2012. Photo credit: Gregory Campbell

Further program and ticket information is available on the convention's website, www.automatacon.org.

Sir Thomas Beecham

'My father nourished a passion for musical-boxes of every description, and the house almost overflowed with them. . . . The visitor who hung up his hat on a certain peg of the hall rack, or who absent-mindedly abstracted the wrong umbrella from the stand, would be startled at having provoked into life the cheerful strains of *William Tell* or *Fra Diavolo*. But others were serious and solid affairs, elaborate of build, full of strange devices . . . how I loved them then, and how I lament their absence now!'

From *'Beecham Stories'*, compiled by Harold Atkins and Archie Newman, London, 1978.

The Snuff-Box according to Grove

'A Dictionary of Music and Musicians (A.D. 1450 – 1880)', edited by George Grove, D.C.L., was conceived as a result of Grove's observation that "The want of English works on the history, theory, or practice of Music, or the biographies of musicians accessible to the non-professional reader, has long been a subject of remark." He commenced work on it in 1874. Volume one of the first edition was published in 1879, when it was anticipated that it would be in two volumes. Volume 2 appeared in 1870, by which time the edition had become three volumes. In 1883 Volume 3, by that time of four volumes, was published and George had become Sir George. The final volume arrived in 1889, by which time the entire edition had grown to 3,125 pages. Further editions followed, the third one published in five volumes in 1927/28, now edited by H C Colles MA.

The first edition has the following entry:

"SNUFF-BOX, MUSICAL. A mechanical invention which has given pleasure to thousands from the peculiar - what for want of a better expression we may call Aeolian - charm arising from the production of harmonics in the solid part of the steel comb which provides the necessary reinforcement to the sounds emitted by the teeth of the comb. The motive power is a pinned cylinder resembling the barrel of a mechanical organ, and made to shift on the same principle; the working power is a spring; the mechanism and rotation are closely allied to those of a watch or clock; and the teeth of the comb which produce the notes are measured to scale.

Musical boxes were invented about the beginning of the present century, probably in Switzerland, the chief seat of their production, where there are now some twenty principal manufactories. About 30,000 are said to be made annually, half of which are below the selling value of 50 francs each. The original musical boxes are small and not unlike a snuff-box in appearance. They are now made of all sizes, the cost ranging from 20s. to 50l. (*i.e.* 20 shillings to £50 – *Ed.*)

About 1830, a very favourite composition with amateurs of the pianoforte was the 'Snuff-box Waltz,' the composer of which preserved anonymity under the initials M. S. The scale and arpeggio passages, played with much use of both pedals, produced something of the musical box effect upon the hearer, enhanced a few years later by the introduction in pianos of brass bridges and harmonic bars, which are to a certain extent subject to the acoustical conditions which affect the musical-box combs. Such a passage as the following, from the 'Snuff-box Waltz,' illustrates the kind of imitation that

was possible:



The 'Snuff-Box Waltz', by M.S.

Of late years, bells, drums, castagnettes, free reeds worked by bellows, and more recently a 'zither,' produced by a sheet of thin paper resting on the teeth of the comb, have been introduced, and have not raised the musical value of the instrument, any more than similar introductions early in the century raised the value of the pianoforte. As pointed out by Mr. Moonen in his recent Report on the Melbourne Exhibition, the real improvements have been in the mechanical portion, by the accurate 'pointing' or adjustment on the cylinder of as many as 36 airs; the obtaining a constant movement for an hour and a half without requiring to wind up the spring during that time; the possibility of shifting the barrel in such a manner that an air 'noted' may be played without the necessity of going through all the others in rotation, and the important one of the interchange of barrels made to fit any box. [A.J.H.]"

From Grove's Dictionary of Music, Volume 3, London, 1883. The contributor, A.J.H., was A. J. Hipkins, a well-known author on the subject of musical instruments.

The Eldorado Barrel Piano Orchestrion

David Evans

Some years ago we acquired a small and somewhat derelict piano orchestrion which, with the aid of Herbert Jüttemann's excellent book 'Orchestrien aus dem Schwarzwald' (Bergkirchen, Germany, 2004) we have been recently researching.

The instrument (Fig 1) has twenty-four piano notes plus another eight reiterating notes, a two-beater snare drum and crash cymbal. It was originally weight-driven, though it did not come with one, and the long-term result of this method of drive was that the case was badly split, almost into two parts. Accordingly, we modified it to electric motor drive instead. There are basically two ways of driving a train of gears – either with a large torque from a slow-moving source at the start of the wheel train (such as a weight) or a small torque high speed source applied at the opposite end of the train. Thus we opted to drive the transmission from the governor end with a small electric motor. Fortunately there was more than half an inch of arbor protruding above the top governor pivot bracket on to which a pulley could be attached. Experimentation revealed that the barrel needed to rotate one revolution in about 45 seconds to give a reasonable tempo, which also made the governor balls swing out about half way, so pulley sizes could be worked out from counting the wheel train

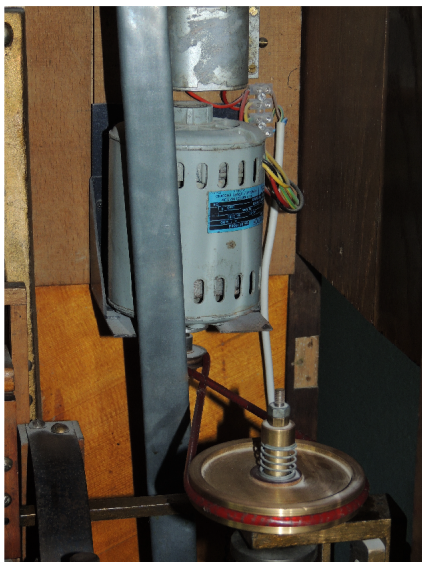


Fig 2. Spring friction device on drive pulley



Fig 1. Eldorado Orchestrion

and knowing the speed of the motor. There is a weighted mechanical stop lever which arrests the governor when it drops into a gap in a roller in much the same way that a musical box stop lever operates. In this case the roller has two gaps and is mounted on an arbor with a six-tooth ratchet wheel which is indexed by a pin on the great wheel (which carries the barrel), so that the stop operates after three revolutions of the barrel (or one can select six, if you can stand it that long!) It quickly became apparent that the stop action is so sudden that any metal pulley mounted on the top of the governor spindle either flew off or would break the spindle! It was necessary to greatly reduce the inertia of the drive system, so that the governor

could be arrested instantly without damage. We made up a brass pulley of suitable diameter and mounted it loosely on a brass arbor. A fibre washer was introduced between the two and a compression spring placed above the pulley so that the amount of friction could be adjusted by changing the compression of the spring (Fig 2). Now the governor can stop instantly while the pulley and motor continue to slow down (takes less than a second in actual fact).

The felt piano hammers were completely worn through so we had them re-covered by our piano material house, who returned them looking like new. We also replaced the felt washers on the adjusters which arrest the reiterating hammers. These are wedge-shaped hardwood blocks. Fortunately the strings and pin block were in good shape so just tuning was needed in this area. The key frame has the scale marked on it, but we tuned it a tone flat of modern concert pitch. It does have an iron frame, but we prefer to tune older instruments a bit flat to reduce the stress on the frame etc. Obviously, had this instrument had a xylophone, we should have to have tuned the strings to the pitch of that.

The snare drum was devoid of skins, apart from a few remains, but we had part of an old velum document bought for the purpose, which made two good drum heads, along with some gut line to make up the snares.

Cleaning, lubrication and various adjustments resulted in music, depending on your definition of the word of course! See the tune list below. We have three barrels for the instrument, but due to



Fig 3. Hammers - the 8 reiterating hammers to the right.



Fig 4. The snare drum.

being in the middle of a house move, we only have one here at present (Fig 5). The end label, or tune sheet, is very decorative and is marked in ink 'Eldorado IV' together with the number 654 and the titles of the six tunes. 'Roses from the South' (Johann Strauss II) was the only tune we actually recognise, though several of the others are identifiable through the good offices of Google and Youtube. Rather strangely, it has the Danish National Anthem as tune number six.

Searching Herbert Jüttemann's book we discovered that the firm of Paul Bretschneider & Co marketed the Eldorado, though did not actually make it.

Jüttemann states:

A close trade connection existed between the Stern company and Bretschneider & Co of Leipzig. The



Fig 5. Barrel end showing tune list.

German Instrument-Zeitung (newspaper) from the year 1920 reported:

“The Paul Bretschneider company of Weststr. 24, Leipzig, will exhibit at the coming Autumn Fair again in the old exhibition halls, No. 17 Peter Street, Leipzig, II. The fair exhibition will be much more extensive than the Spring Fair and is of great importance to all users of the entire music industry. In this Division it will present the universally famous Eldorado and Pianova barrel orchestrions with weight drive and barrel pianos with spring drive.”

He goes on:

But, as shown in the display image (Fig 16.14 in the book), the Eldorado instrument is nothing more than the Stellina from the Stern company. The Bretschneider company changed the cabinet only slightly, especially in the glazing, and promoted the orchestrion as a separate product. Today we see other instruments with the mark of the Stern company, a changed cabinet and a sign implying a different manufacturer.

The following information is gleaned from Herr Jüttemann’s book:

Paul Bretschneider & Co.
 Leipzig, Weststr. 24

Telegramme: Bretschneider, Weststr. 24
 Telefon: 14623 Nebenstelle

Giro-Konto: Bank für Handel und Industrie
 Postscheck-Konto: Amt Leipzig Nr. 60652

Abteilung I

Marke: Eldorado
 Walzen-Orchestrion mit Mandoline und Xylophon

Marke: Pianova
 Mechanisches Walzen-Klavier ohne Klaviatur

Walzen-Orchestrions mit Gewichtsauzug

Walzen-Pianos mit Federaufzug

Fig 6. Bretschneider advertisement

Joseph Stern Company

General

Joseph (or Josef) Stern was born in 1848 in Fischbach-Sinkingen, situated near Königfeld in the Black Forest area of Germany. He learned Orchestrion building from Hubert Blessing in Unterkirnach. After that he was apprentice to Luke Schönstein who had founded a business in 1865 in Villingen. During his time as a journeyman Josef Stern was noted for the quality of his work. Honold wrote in 1875, that at Luke Schönstein’s the work of the journeyman Josef Stern was remarkable [55; 1875; P 3]. From this mention it was already apparent that he had great ability. With the commissioning of the Black Forest Railway in 1873 more Orchestrion building companies came to Villingen. Thus the metal pipe-producer Jakob Wiedel moved there, and the musical works manufacturer Tobias Heizmann moved to Villingen in 1873. In 1875 Josef Stern founded his own workshop at 6 Brigachstrasse (former house number 666) in Villingen. In the 1903 directory the address 11 Brigachstrasse is also registered to him. Presumably this was a factory expansion. Finally the musical instrument makers Fridolin Hirth and Josef Benz came to Villingen.

In 1875 Josef Stern married Franziska Reichert, who bore him four children with the names Josef Stern jun., Gustav, Lina and Klara. The first Black Forest industrial exhibition took place in Villingen in 1876. In the exhibition catalog under No. 306 a Harmonium-Orchestrion by the Stern company is recorded.

Development after 1900.

Josef Stern died in 1902. His wife Franziska and her son Gustav continued to lead the company until 1906, when they completely took over. At this time the manufacture of piano orchestrions was important. In addition, it became more and more popular to produce Orchestrions with a pneumatic control system with paper rolls. The Stern company began well with this control system, but went back on it.

Instead, Gustav Stern intended building small barrel orchestrions, because in this way the price could be kept low. He offered these mainly to restaurants. They should reflect Gassenhauer (i.e.



Fig 6. The interior

street songs), and play popular operetta melodies. In addition, they were meant for dancing purposes. He did not make quality overstrung pianos as many other companies did, but remained with the simple straight stringing with no more than 33 notes and renounced almost entirely all expression possibilities. He also avoided the expensive bellows for the wind power for playing music with pipes. The pinned barrel as the sound information carrier was now adequately provided for by the large diameter of 250 mm and more. Karl Bittman, who visited a wood barrel maker in the Orchestrion industry in 1907, wrote about Orchestrion barrels:

“The wood barrel maker has hardly received any more orders for one year; by the advent of Orchestrion work with pneumatically actuated mechanisms, the old barrel maker has almost completely disappeared from the domestic industry; instead, a roll of paper is produced, on which the longer or shorter slots are cut. In recent times though it has become cheaper to manufacture Orchestrions, especially for the country market, by doing away with the pipes and trumpets and building a stringed piano frame with mechanics and adding in some percussion - drum and triangle. Thus one has reverted to the old system of barrels and weight drive.”

Gustav Stern also laid emphasis on simple instrumentation. As an additional instrument to the piano, he preferred a mandolin or a xylophone; sometimes he put both on at the same time. The strings of the mandolin he added to the piano frame; a wood ratchet roller (see Fig 3 at the bottom) got the fast beating of the mandolin

hammers. For percussion, a large and a small drum and a cymbal were added.

For many small restaurants and cafés now an Orchestrion was affordable and the sales turned out to be extraordinarily good. Of the music quality no high hopes were expected in these places.

In a report by the Villingen Chamber of Commerce from the years 1905/1906 it is stated:

“Very strong was the demand for piano orchestrions, especially after Mandolin Piano orchestrions became instantly very popular with the audience. In the main, the customer now wants small instruments in prices ranging from 2000 to 3000 marks. For the past year many barrel pianos are made again, such as those built 25 years ago, the instruments require and find their equity due to good sales.”

The company was rated highly at the Villingen anniversary and crafts exhibition of 1907. For this purpose, it is stated in the Villingen Volksblatt newspaper dated 17 August 1907 that Josef Stern, Villingen, makes the first xylophone-like music. “But we must say that, as a conscientious chronicler, we can not warm to this type of music, as it falls on the nerves.” For the Leipzig Spring Fair (1913), however, this note applies: “The Orchestrion manufacturers increasingly attached importance to the quality of their musical instruments and the number of musically undemanding barrel orchestrions is constantly decreasing.”

An early small Art Nouveau orchestrion from the firm of Stern can be seen with opened doors (Colour picture XXV in the book). Apart from a straight strung piano with 28 strings and a xylophone with ten bars, there are, as percussion, a snare drum with two drumsticks, a cymbal and a triangle installed. Overall, the Orchestrion box has 43 notes. Unfortunately, the name or model number for this instrument remained unknown. It is now exhibited in the Black Forest Museum in Triberg. The Villingen Volksblatt from August 17, 1907 reported that an Orchestrion with xylophone named Titania, of which the Stern company has delivered 443 pieces since 1 July 1904, it stands to reason (the report said) that this is the previously mentioned Orchestrion, or similar.

Picture 16:13 of Jüttemann’s book shows the

workforce in the year 1900. Apart from the owner, wearing a cap, 16 employees can be seen here. By 1906, the company had 13 employees. The largest workforce was reached in 1913 with 24 employees, but then their number fell again; by 1934 there were only 13 employees.

So, our Eldorado is a Stern Stellina:

“The ‘Stellina’ Orchestrion has a tasteful oak case with faceted mirror disks. After each throw of money the barrel rotates twice. It is recommended for dancing and entertainment.”

Actually, comparing our example with the table of details in the book, it has more in common with the Astra:

“The ‘Astra’ piano Orchestrion is offered as an easily-affordable instrument. It has a colored glass and two large mirrors. An Astra Orchestrion outlasted its time in the Forelle Gasthaus in Groppertal in Villingen forest. They sold it in 1994 to the Franciscan Museum in Villingen, where it can be seen today.”

The Astra has just one small drum and a cymbal for percussion, as our Eldorado does.

The decorated glass panels in the doors of many of the orchestrions were created by employed artists. One of the best known, according to Herbert Jüttemann was

Albert Säger

Among the most famous Black Forest orchestrion glass painting artists was Albert Säger (1866 - 1924) from Villingen. Jacob Gerssen wrote about him:

The Orchestrion maker Josef Stern of Villingen cooperated with the Villingen painter Albert Säger in Rietstrasse 30. Säger came from a family of painters in Villingen, studied art in Munich, but later continued his father's painting business. He devoted himself to art only in his spare time. He worked for Stern, but also for other Villingen and Unterkirchner orchestrion firms, including Ambros Weisser. For Hubert Blessing, he created elaborate paintings on glass for the instrument facades.

An example of his work shows the facade paintings

AMBC Meeting Dates

Please contact the host to ensure a place is reserved and for needs to be catered for. Include any guests you may be thinking of bringing. Also please advise if a booking has to be cancelled so that places can be offered to others.

Sunday 28th February 2016: Chanctonbury Ring meeting from 10.30 am. at The Old School, Bucks Green. Book Sale in aid of AMBC Book Publication Fund. Please bring items for sale.

Saturday 9th April: British Horological Institute Open Day, 10am – 4pm at Soper Hall, Caterham, Surrey. AMBC will be present to demonstrate and entertain.

Sunday 24th April 2016: Chanctonbury Ring Meeting from 10.30 am at 46 Longfield Ave., High Halstow, Near Rochester, Kent, ME3 8TA. Tel: 01634 252079. Host Paul Bellamy.

Picnic lunch: Please bring a plate of savoury finger food for sharing. Ted is bringing puddings. Drinks provided. Come and see Paul's museum and eclectic collection, but let him know in advance. **Table Top Sale:** Hand in items for sale on arrival and note your name and price. Items need not be mechanical music related. Sales commence at lunchtime with a 10% commission of the sale price towards AMBC funds. **NOTE: If you have specialist books or higher priced items for sale we recommend you keep them back for inclusion in our Autumn Auction (date TBA)**

Saturday 4th June: AGM followed by Organ Grind. Meet at the Old School from 10.30 am.

Saturday 16th July: Special Event: Amberley Museum and Heritage Centre. AMBC members and the public will be entertained by AMBC members in Character.

of the ‘Marinka’ piano mandolin xylophone orchestrions (Fig 16.7 in the book).

The decorated door panels on ours look more like prints than hand-painted on glass, so we probably

don't have an example of Albert's artistry.

We discovered on the coin drawer various penciled notes which are records of the machine's takings between its purchase (in 1909) and 1916. Between May and August of 1915 it took 74 Marks. Over the whole year it took 109.70 Marks, so if it cost 2000 Marks, that was about 5%. Between January and May 1916 it took 73.8 Marks compared with 42.90 for the same period in 1915, so its popularity seemed to be increasing. (Fig 7.)

TUNE LIST

Barrel marked 'Eldorado IV No. 654'. Label marked 'Ernst Kaufmann, Deponirt No. 402', probably the label lithographer.

Tune	Title
1	Küssen ist keine Sünd – Eysler (Kissing is no Sin, from the operetta “Bruder Straubinger” by Edmund Eysler)
2	Nurimer reinem ...?
3	Berliner Kreuz Polka – Daase (Berlin Cross Polka (nebst Anleitung zum Tanz – along with instructions on how to dance it): Op. 494; für Pianoforte by Rudolf Daase). 1st edition published in 1900.
4	Wen die Spätzen schlafen - Rhineland ... Grunow. (<i>Wenn die Spatzen schlafen geh'n</i> - When the sparrows go to sleep – Rheinländer-Couplet (Adolf Grunow / Hermann Frey)).
5	Rosen a.v. Suden, Walzer – Strauss (<i>Rosen aus dem Süden</i> op.388 - Johann Strauss II – Roses from the South)
6	Kong Kristian Lied – Rogert. (King Christian (Royal Danish Anthem) song and lyric)

It has long been debated who composed the music to the song. It was originally accredited to Johann Hartmann, the same composer who wrote the score for the original play “Fiskerne”, where the lyrics had first appeared, however his original romantic

score for the vaudeville was entirely different from the score commonly used today. Following the dismissal of the possibility that Hartmann could have composed the score, it was suggested that a friend of Johannes Ewald, High Court judge Ditlev Ludvig Rogert, who was known to have played the violin, had been the original composer – a claim that was backed up by several 19th century

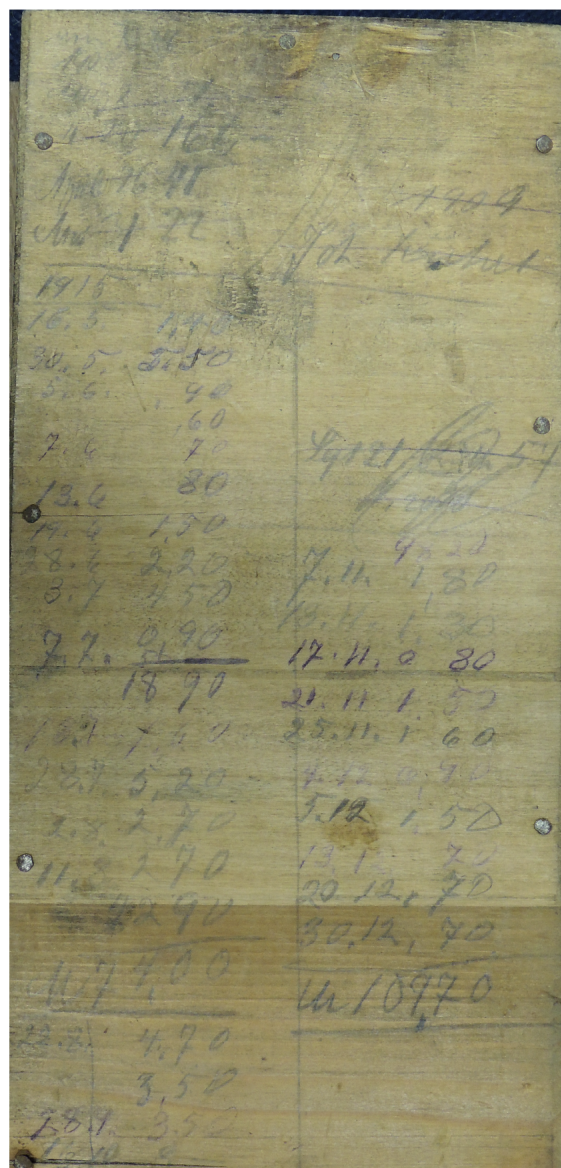


Fig 7. List of takings

Autumn Meeting 2015

One of the themes for this meeting was the Austrian family Strauss. Johann Strauss was born in Vienna, Austria, in 1804 and died at the early age of 45. His parents were innkeepers. They had no high ambitions for him and apprenticed him to a bookbinder. His musical talents shone through and he became an accomplished self-taught violinist and violist. He was then fortunate to have as a teacher Ignaz von Seyfried of Vienna who had studied law but was persuaded by others to pursue the study of music. Ignaz did so under the now largely forgotten Leopold Kozelech but also Haydn. Thus JS gained a broad knowledge of orchestration, arrangement and performance. As a 15 year old he played what



Paul Baker in full flow

we nowadays would probably call ‘gigs’, as a player in private string quartets. He progressed to dance orchestras and conducting; thus music and dance became his passion.

Johann Strauss is known as Johann Strauss the first, the patriarch of that famous family of musicians, the dynasty of Waltz fame. There were so many of that family with similar names that who-composed-what still confuse many today. His sons were Johann Strauss the second, Josef Strauss the first and Eduard the first. Then followed sons of Eduard the first, Josef the second and Johann the third. Not to be outdone, Josef the second produced Eduard the second and he in turn produced Eduard the third. However, the dynasty effectively ended with Eduard Strauss II when he died in 1969!

More to the point, some Strauss family music was transcribed to be performed on mechanical music machines as well gramophones and phonographs. Thus we were entertained with mazurkas, polkas and waltzes. Those present at the meeting heard a number of different instruments playing ‘Strauss’. One of the most popular pieces is the rousing Radetzky March by JS the first. It was dedicated to Field Marshal John Joseph Wenceslaus Anthony Francis Charles Graf Radetzky von Radetz, a quite extraordinary military man whose bravery and fighting skills outmatched his extraordi-



Memories in play!

nary name.

Another topic was associated with music hall. The equivalent term for this form of entertainment in the USA is vaudeville. Vaudeville is a corruption of Vau (or Val) de Vire or Valley of the Vire. It was a French location noted for miscellaneous performance of songs and sketches as early as the 15th Century. From this came the word Vaudevillist, a person performing there or in a manner similar to that location. One notable performer of the time was Olivier Basselin, a poet born in Val de Vire.

Paul Baker informed and entertained us with gramophone and phonograph examples of bar-

rel piano music. He explained much about the performers of the day and venues such as the Music Halls. In the UK it started in bars and taverns, some of which expanded by having rooms or halls attached to the premises before custom-built halls became the standard venue. One can only look forward to hearing more of Paul’s profound knowledge on this and other related subjects.

The meeting included other contributions, one of which was a very unusual musical glove box. This was a late Victorian example in an excellent state of preservation. Musical novelty movements found themselves in an extra-ordinary variety of



A Late Victorian Glove Box

artefacts. This once-treasured example was designed to protect the most exquisite pair of tailored ladies kidskin leather gloves, an essential accoutrement for a woman moving in ‘social circles’. It has nothing at all to do with keeping one’s hands warm. High fashion demanded high standards. Gloves were expensive and so finely stitched and tailored that they were more a work of art than just a fashion accessory. Putting them on and taking them off was itself a skill as was the doing and undoing of buttons. Thus the glove box had two items to facilitate the processes – a pair of ebony glove finger-stretchers and a buttonhook. How times have changed – or have they? Velcro may be a modern replacement for the button but fashion still demands items of quality and distinction, be they ‘shades’ or stiletto heels. In those days, fine gloves were *de rigueur* for a woman of standing!

Oh! Mr Porter!

What follows has nothing to do with the well-known music hall song by Marie Lloyd or the film of that name by comic actor Will Hay. It is merely a title to draw attention to another Porter, the Porter Music Box Company Incorporated of the USA. Details of their product range are readily available on the Internet including audio samples of instruments. AMBC policy is to address modern as well as old instruments, sometimes by means of single articles that deal with just one instrument, as will be the case for many future articles. The fact that disc and cylinder musical boxes, singing bird automata, orchestrions, etc., are still being made in various countries a generation or so after they were first made is both remarkable and encouraging. It is testimony to the fact that despite the modern tendency to reject the past it shows that the market for 'mechanical music' that existed over a century ago still exists to an extent today. Also, that quality counts.

My first acquaintance with a Porter was its sound. Nearly every instrument has a distinctive voice, be it a Symphonium, a Polyphon, a Regina or any other make or model of instrument. I heard this instrument before I saw it and wondered why I had no idea who the maker might have been. I expected it to be a finely restored model of one of the early makers and was astonished to see a modern instrument, the one illustrated on the front cover of this periodical. It is the Porter twin-disc 15½-inch model (*see front cover - Ed*). It plays two identical discs each machined to be an exact match. My understanding is that two single discs not so machined may not give the same quality of musical reproduction. Thus one can select arrangements from a wide choice of paired discs expressly made for this model. There are few examples in the UK.

The instrument plays the two 15½-inch diameter discs on a pair of musical movements ganged together. Each disc has an identical musical programme. Each comb has 76 teeth. However, the comb teeth of one mechanism, although tuned to the same scale, have a slightly different frequency to its counterpart on the other mechanism. As both vibrate in unison they interact to give a pleasant sound. For cylinder musical boxes this could be described as sublime harmony.

The mechanical components of the mechanisms are made to the very highest quality and the combs superbly tuned. The musical arrangements are also to a high standard. Always a personal choice, those who have heard my selection agree that the musical renditions and interpretations are extremely pleasing. The Italian-made, marquetry inlaid casework is of all round quality and thus the instrument sits well in the centre of

a room. The visual impact of the highly polished golden (copper-coloured) edge-driven discs is also a delight.

There are similarities between the Porter 15½-inch models and the 15½-inch Polyphon. Both are to the same tuning scale and dimensions. Of course, it would be unwise to play one of a pair of Porter discs on another machine or to play a single disc, old or new, on the Porter instrument. The machine was designed precisely to play specially paired discs. Porter (as do other modern suppliers) make discs to play on a variety of old instruments as well as their own single comb versions. The picture illustrates a Polyphon playing a single Porter disc, of which there is a wide choice for several sizes of instrument.

A brief history of the disc musical box

The disc musical box superseded the cylinder musical box. The first commercial disc musical box was made in Germany and exhibited in Leipzig about 1886. There were many different sizes of disc and hence many different types of machine to play them. Discs were rarely interchangeable between different makers.

The accepted category of Disc Musical Box does not normally include all instruments that use discs, such as organettes. They are best defined as those that play a tuned steel comb. The main difference between a cylinder and a disc musical box is that the cylinder plays the steel comb directly whereas the disc plays each tooth of the comb via a 'star wheel', one for each comb tooth. A star wheel is a simple form of cog with teeth around its periphery. Discs have protrusions (sometimes holes) whereas a cylinder has pins. As the disc rotates, a protrusion (or hole) engages with a tooth of the star wheel and it too rotates until it disengages. As it does so, another tooth on the star wheel lifts and releases its associated comb tooth. The lowest bass tooth is located near the centre of the disc and treble teeth towards the periphery.

Discs can be removed and replaced by another quickly and easily. Makers produced a huge range of tunes. Once purchased, the owner of the disc musical box could buy as many discs as desired from the maker's catalogue. There was a huge variety of type and size of machine to play the discs, some with additional bells and others with automata. Many were coin-operated and became the forerunner of the juke box.

The idea of a pinned disc that played a tuned musical comb is about as old as the cylinder musical box. Small disc-playing movements called *sur plateau* (meaning on disc) used a pinned disc in the same way as the cylinder version, the pins directly interacting with tuned teeth. It took many years for this principle to be adapted to interchangeable discs. When that happened, the only practicable way was to

use an intermediate device called a star wheel because of its shape.

There were other technical considerations that may have delayed the first practical patent. Cylinder musical box technology was very well advanced but towards the end of the 19th century there was an increasing demand for a wider choice of music. Several attempts were made such as the 'rechange' musical box but these had limitations. Although the cylinders were interchangeable they had to be made at the same time as the instrument. The manufacturing tolerances were so tight that each interchangeable cylinder had to be pre-



15 5/8" Polyphon playing a Porter disc

cisely adjusted at the time of manufacture to the original movement. There was no possibility of buying further cylinders at a later date. Later cylinder interchangeable movements had coarser tolerances to overcome this problem. Even so, the machines were expensive and choice limited. In fact, there is little evidence that there was much of a market in the subsequent demand for extra cylinders!

When one considers the musical arrangements, there were other problems to surmount. Each track of a cylinder movement is exactly the same length whether playing notes at the bass end or treble end. Not so for the disc. For a 15½-inch disc the length of the outer track is about 47 inches but the inner one is only 5½ inches. The number of tracks and hence notes required for a comparable musical arrangement played on a cylinder musical box is mainly dependent on the diameter of the disc. For example, a 15½-inch Polyphon has only 76 notes. Duplex ones have 152 but two teeth are played at the same time. The 24½-inch Polyphon has 159 teeth.

Thus the cylinder musical box seems to have a distinct advantage in performing very complex arrangements as found on the great Overture arrangements often found on cylinder movements described as grand format. These had many teeth, often in the order of hundreds. Would it have been possible to transcribe such an arrangement, note for note, onto a disc? Another factor is that in the late 1800s there was much litigation. Patents had to be registered in several countries. Although there was a clear market for interchangeable cylinder musical boxes it took courage to attack that market with the new innovation, the disc musical box. New technology needs finance and determination to implement. Whilst the major centre of manufacture, Saint Croix, had expertise it failed to anticipate or

properly resource this new technology. Space there was scarce and money in short supply. Effectively, the musical box industry moved to Leipzig and catered mainly for the burgeoning USA market.

That is not to say that the Swiss did not attempt to take up the challenge although one of the major players for about 10 years was not Swiss. Barnett Henry Abrahams was a shrewd UK businessman who moved to Saint-Croix, Switzerland, in 1895 to manufacture disc musical boxes. His manager was Charles Cuendet (Cuendet-Seeger). Barnett died in 1902 and his son, Joseph, joined

with Charles to continue production but the company liquidated in January 1905. Although some of Abrahams' models used cheap paper-printed simulated wood, they were also noted for their fine decals. These were rather beautiful detailed coloured transfers, often printed over a gold or silver substrate. His market was the United Kingdom of Great Britain and its Empire. Despite the use of decals and printed paper he also used fine large veneers, sometimes folded out in 'butterfly wing' formation producing a very attractive finish.

His models and trademarks were Imperial, Britannia and Alexandra (after Queen Alexandra, the much-loved wife of King Edward VII.) His largest Swiss made model played a 25½-inch diameter disc. His repertoire of music and the names of the models catered largely for the British taste of the time, rousing airs, music hall songs. His instruments were designed to play with an equally strong voice. The names were not attractive to the USA market, even if he attempted to do so.

Thorens was amongst the few other Swiss exceptions, their largest model playing a 22½-inch disc, circa late 1890s. Mermod also produced a model called Stella. Paillard entered the USA market in partnership with the Société Anonym Fabriques Reunies with a model called Gloria. Both Mermod and Paillard exported parts to avoid strict import tariff barriers imposed by the American government. It was a clever ruse because those who took the parts also took their expertise and many took up residence in the USA! One such model designed to avoid tariffs was called New Century. Patent disputes transpired and ended with the withdrawal of funds and the collapse of the venture in 1903.

Submitted by: The *Wondering Minstrel*.

YESTERDAY'S TOYS – TOMORROW'S ANTIQUES

FISHER-PRICE VINTAGE MUSICAL BOX TOYS from the 1960s, 70s and 80s

by Juliet Fynes, with assistance from Ted Furcht



Fig 1. The Jack and Jill Radio

All parents and grandparents will surely remember with affection these lovely musical toys from childhood!

A BRIEF HISTORY

The Fisher-Price company was founded in 1930 by Herman Fisher, previously involved in the manufacture of games, Irving Price, retired from P.W. Woolworth and Helen Schelle, owner of a toy store. In addition to their combined experience they brought a shared vision; that their toys should be educational, appeal to the imagination of children, be well made and value for money.

Despite being an inauspicious time to launch a new business, the company weathered the Great Depression. Their first 16 products, made from wood decorated with colourful lithographs, were an immediate hit with children.

Production of toys was suspended in 1943 whilst the company contributed to the war effort. Post war they began to use the new material – plastic, which was durable, colourful and lent itself to the production of an increasingly wide range of toys. Though wood was still used, sometimes in combination with plastic, for musical box toys, into the 70s.

In 1969 Herman Fisher retired at the age of 71 and in the same year his controlling interest in the company was bought by Quaker Oats. In 1991 Fisher Price regained its independence and became a publicly traded company, but in 1993 it became

a wholly owned subsidiary of Mattel.

THE RADIOS

In 1959 the company made its first wind-up toy with a Swiss musical movement, the *Jack and Jill* TV Radio. This was invented by Ralph Crawford and Leslie Sly, both of whom worked for Fisher Price in the Research and Development department. The Patent for this radio was granted in 1963 and was applied to all future musical radios made by Fisher Price. It had an all wood case, decorated with nursery rhyme lithographs and with a carrying handle and moving spring antenna on top. The front featured a plastic "speaker" grille with centre winding knob, which wound the musical movement. Above the knob was an open window through which scenes of the Jack and Jill story could be viewed as the song played. The back of the radio carried the words to the song, encouraging children to read and sing along. In 1961, the *Ten Little Indians* TV Radio appeared - the same toy, except for a different litho scheme, colour scheme, and song. In 1962, Fisher Price also began to use musical movements imported from Japan.

In 1963, the *Farmer in the Dell* TV Radio appeared. The song is basically the same as our



Fig 2. Pocket Radio

familiar game "The Farmer's in his Den", which ends with everyone enthusiastically patting the dog. In the American version the dog gets a cat, which gets a rat which takes the cheese. This was followed by *Pop Goes the Weasel* in 1965. Again the rhyme is different to the English version, but children on both sides of the Atlantic would prob-



Fig 3. Tote-a-Tune Radio

ably be bemused by someone going “up and down the City Road, in and out The Eagle”. Like so many nursery rhymes, whose origin and meaning are lost in time, this makes little sense to modern ears. There are a number of possible interpretations. The first recorded mention is as a dance tune in the mid 19thC, with words soon added. The Eagle still exists as a pub in City Road. At the time the tune was put to words it was a music hall, near the centre of the London clothing trade, which at that time was in decline, with much poverty in the area. A weasel is a name for a mechanical yarn measuring device which makes a “pop” sound after the desired length of yarn is measured. An alternative explanation is that the weasel had to be “popped” or pawned to pay for visits to The Eagle. A weasel can also be a tailor’s flat iron, but as both these weasels are tools of his trade it seems unlikely that he would pawn them. It was common for pawnbrokers to take just about anything as a pledge in return for a small amount of money to tide someone over till pay day, so another theory is that the weasel refers to his Sunday suit, to be redeemed in time for the following weekend. This is based on Cockney rhyming slang – “weasel and stoat” equals “coat”.

In 1966 a *Baa Baa Black Sheep* TV radio was produced, and finally, *Little Boy Blue* in 1967, at which point the original style TV Radios were discontinued.

Briefly from 1968 to 1970 F-P made a taller, narrower TV Radio, unique amongst the musical toys, it has a round window in the back through which the movement can be seen. A *Jack and Jill* TV radio from 1968 (Fig. 1) contains a Sankyo 18 note movement. The case is part wood and part a sturdy yellow plastic. The only other version plays *The Old Woman Who Lives in a Shoe*. These are now quite rare.

In 1966, Fisher Price introduced the Music Box

Pocket Radios, following somewhat belatedly the craze amongst older “cool kids” for their “trannies”. These were smaller radios (Fig. 2) with a plastic carrying strap, which contained 12 note musical movements from either Japan or Switzerland. These radios also had an open front window above the winding knob, but did not have an antenna or a window showing the movement. The first pocket radios of 1966 were *Frere Jacques*, and *Twinkle Twinkle Little Star*. The bodies of these radios were originally ponderosa pine. The body material was changed in late 1967 to a composition wood like material. From 1966 to 1977, 17 different pocket radios were made, each with a different colour, litho scheme and song. The traditional nursery rhymes had begun to be give way to popular songs of the day, sometimes from films.

In 1978 the Tote a Tune Radios were introduced, which were all plastic, with the addition of a pretend programme selector which clicked as it moved up and down. These also contained 12 note musical movements, from either Japan or Switzerland, and had the open window above the winding knob. They were made until the early 1990s, 24 versions in all, with different colours and tunes (Fig. 3). They were superseded by similar more curvy models.



Fig 4. Teaching Clock

THE CLOCKS

The Musical Tick Tock Teaching Clock was first made in 1962 (Fig. 4). The concept was developed by Duane Spengler, affectionately known as Duke to his colleagues. This toy resembled a small Grandfather clock. It featured a large clock face on the front, with moveable hands. The face was protected with clear plastic and there was a plastic carrying handle on top. It played *Grandfather's Clock* when wound by the knob in the back, accompanied by a tick-tock sound. In



Fig 6. Giant Screen TV Musical Box

1962 and 1963, the toy contained a Swiss musical movement. From 1963 Japanese 18 note Sankyo movements were used exclusively. In 1964, the clock was given new graphics, with a tan background. This version was made until 1967. In 1968, the clock was changed to a little red schoolhouse design. Essentially the same as the first two clocks, this version was made until 1981. In 1971 an all plastic clock radio (Fig. 5), with an antenna, was made, playing *Hickory Dickory Dock*. As the music plays the story is illustrated in the window and the clock hands turn.

THE TELEVISIONS

Fisher Price also made musical box TVs. In 1964 the *Hey Diddle Diddle* Double Screen music box TV was introduced. It was a small square TV type toy with an aquamarine blue plastic case, wooden chassis base, spring antenna, carrying handle, and two viewing screens: one large screen on the front, and one smaller screen in the top of the toy. The TV contained a Swiss or Japanese musical movement, which played the *Hey Diddle Diddle* song as the pictures went past the front screen. The top screen showed different circus animals riding on a moving train. A large knob under the front screen wound the musical box and two smaller knobs at each side of the winding knob provided extra play value. This TV was made until 1970. In 1965 a version was introduced in yellow plastic of *Mary Had a Little Lamb*, with illustrations to match the tune. This was discontinued in 1967.

In 1966, a Giant Screen TV Musical Box was introduced which played two different songs; *London Bridge is Falling Down* and *Row Row Row Your Boat*. It was produced until 1983, and then resurrected in 1988 with updated graphics. There were two other versions, and one from 1981 for the European market playing *Frère Jacques* and *Sur le Pont d'Avignon* (Fig. 6).

Part two of this article will appear in the next issue of Mechanical Music World - Ed.

A Christmas Carol.



Just before Christmas my wife, Kay and I had our annual visit of schoolchildren from Apple Orchard School, Partridge Green, in Sussex, England. It is their last event of the year before 'breaking up' for the Christmas season and festivities. They have visited 'The Old School' every year for about 8 years and their ages range from 9 to 16 years. This year the boys were studying the mechanics of levers and linkages. They brought along some of their wooden automata. I was able to steer this year's talk on to some of my automata, particularly a demonstration model called Fred the Head* as well my usual prepared talk on automatic music of all kinds. I kept them entertained for the allocated two hours. Kay supplied them, 30 in all, with nearly 5-dozen mince pies, orange juice and tea. The talk included cylinder and disc musical boxes, Chamber organs, player pianos, and many other items, including a large number of modern musical novelties. These included a musical Christmas card that is 23 years old and still plays with its original battery!

Ted Brown

* See Issue 1.



A Group of Enthralled Pupils!

An introduction to Automata - Fred the Head

Lyn Wright was a serious collector, restorer and hobbyist of automata. To convey the sense of fun as well as understanding about how these mechanical devices work, he constructed a set of 'skeleton' models to show how some of the basic functions worked. Before we continue with Fred a summary of his forbears is due:

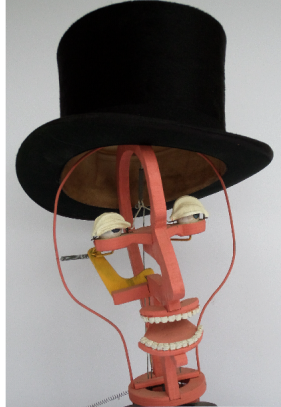
A Brief history of time!

There is much to be found on the Web. For practical purposes it is better to ignore the mythology behind the making of automata even if true, particularly those made to mystify the ignorant observer as if magic was at work or the ancients attempting to produce

a mechanical form of human being – although that appears to be approaching reality today!

The Ancient Greeks seemed obsessed with the latter notion. Their philosophers had great mathematical, investigative and technical skills. They made animated statues for ceremonial use, no doubt to impress and overawe their audience in order to convince them that supernatural powers were at work. Oracles and soothsayers were part of the human psyche then as now, so a little human intervention by way levers and cams, etc., operated by hand, steam or water power, did not come amiss! Of course, the Greeks were not alone and other cultures have allegorical and written evidence of such activity.

For example, there was once a statue of a king called Amenhotep, near ancient Thebes. It produced a melodious sound when struck by the sun's rays. One assumes some form of human intervention and perhaps the use of organ-type pipes. It was not until about the 1400s that highly technical crafted automata were being made in substantial numbers. They were status symbols, a form of entertainment for the very rich. Behind this façade of amusement was the advance in technical skills; technology and learn-



Fred the Head

ing that had practical application in trade, navigation, research and war such as clocks, watches, orreries, navigational aids and other devices. It is similar to modern times when warfare and space age technology transfer into everyday life including the automation of industry, medical prosthetics, video games and the amazing (and often annoying) battery-operated automata toys.

Flight was an early example of simulating nature. Johannes Muller is credited with making an artificial flying eagle that flew to greet the Emperor Maximilian as he entered Nuremberg in 1470 and then flew back again (the bird, not the Emperor). No doubt

an exaggeration because remote control had not been invented. There seems to be no details but could it have been some form of controlled kite? Leonardo da Vinci (1452-1519) made a lion that moved, stopped, opened its chest with its paw and pointed it to the French coat of Arms. No doubt that wooden gesture was enough to boost Maximilian's already rather large ego. A little later (1500-1585) Gianello della Tour of Cremona built a number of automata as entertainment for the very rich. There was a walking playing lutist, flying birds, automated trumpet-blowing and drum-beating soldiers who were said to fight. Salomon de Caus used water-powered automata singing birds. Christian Huygens (1629-1695) made automata for the King of France. One example in 1680 consisted of an automated army.

There was a brilliant polymath called Athanasius Kircher (1602-1680). This remarkable man was a Jesuit scholar who published important works ranging from the modern concept of comparative religion, medicine, geology, and ancient writings. Like all great men, some of his work in translation has been proven to be guesswork but he was successful, along with others, in making links between Coptic (i.e. modern Egyptian) and ancient Egyptian. His work has been compared to that of Leonardo da Vinci. But, not to digress too far from automata, he had an inventive mechanical mind, devising a magnetic clock, the first megaphone, the magic lantern and yes - automata! Unfortunately, there is little detail about the latter.

In 1731, Maillard (who was he?) produced a manivelle horse employing gears. He was working in a period when one of the greatest of automata makers existed, Jacques de Vaucanson, 1709-1782 whose most famous work was a gilded, water-splashing, drinking, quacking duck. He also made a full-scale flute and tabor (a small drum) playing musician.

John Joseph Merlin (1735-1803) was born in Huy,



A Group of Griesbaum Whistlers



Reuge Singing Birds Automaton

Belgium. He worked with the London inventor James Cox (1723-1800) to make a life-size automated silver swan in 1773 that housed a cylinder musical box. It resides in the Bowes Museum, Barnard Castle, England. The mechanism is based on a complex series of cams that operate the swan's neck. A simulated stream comprises a series of twisted, parallel, glass rods, which house a stationary silver fish. The swan preens itself and then its neck bends to 'eat' the fish whilst the musical box plays.

Jean-Henri-Nicholas Maillardet (1745-1830) was a Swiss clockmaker. He spent some time in the workshops of Pierre Jaquet-Droz. He then worked in London with his brothers Jaques-Rodolphe and Jean-David making automata magicians. His masterpiece was an automaton figure that could write in French and English as well as draw. It survived but it was not until it was restored in 1928 that his name was revealed when it wrote: 'written by the automaton of Maillardet'. That was a truly masterly touch in more than one sense!

Jacques Vaucanson (1709-1782) made full-size flute (a small drum) and tabor players. He was an inventive French engineer who was admitted to the Académie des Sciences, Grenoble in 1746 when the 'de' was added (de Vaucanson). He was sent to study at the Grenoble Jesuit

School and then encouraged 'to take up Orders' at the age of about 18 with Les Ordre des Minimes. His mechanical talents were obvious and the religious Order encouraged him by providing a workshop. However, a visiting dignitary of the Order considered his work profane and ordered workshop to be destroyed (no pun intended). It prompted him to leave the Order and go to Paris for a few years to study medicine and anatomy. He then departed for Rouen in 1731 where he met the surgeon and anatomist Claude-Nicolas Le Cat (1700-1768) who had an interest in replicating human anatomical movements. Yet another Frenchman François Quesnay (1694-1774), a surgeon and economist, encouraged him to construct mechanisms to replicate humans and animals; perhaps more for research and demonstration rather than entertainment.

In 1733 he was contracted by Jean Colvée (1696-1750) to build and exhibit an automaton but he squandered the funds. Undeterred, he signed another agreement with Jean Marguin, to build an automated flute player, which he finished in 1738 and demonstrated to the French Academy of Science. Thus he expanded the business and made other automata. He toured France, Italy and England with his exhibits. *The life-sized flute player* played the transverse flute using mechanical fingers for the notes and mechanical lips to modulate the flow of air. It could play 12 airs. It was a truly incredible invention. He surpassed this with two more androids, a flute and tambourine player that played 20 tunes and then his masterpiece, a mechanical duck called The Digesting Duck (Canard Digérateur). The duck not only ate but also demonstrated the passage of time from its nether end!

An unusual instrument with limited movement was made for Tipu, the Sultan of Mysore. He was known as The Tiger, which was also his emblem. He was a skilful warlord who backed the French against the British. Known as Tipu's Tiger, it was a rather gruesome lion made of wood with an 18-note organ inside. The tiger



A Modern Egg-laying Duck Automaton

savages the image of a British soldier whose arm moves in somewhat passive agony whilst the instrument grunts by means of sound generated by organ pipes playing in unison. The tiger expressed Tipu's hatred of the British East India Company. British troops found the tiger in 1799 and it now resides in the Victoria & Albert Museum, London, a trophy of war. Whatever the Brits thought of Tipu, the Indians were and still are rather proud of him!

Pierre Jaquet-Droz (1721-1790) was a Swiss-born watchmaker and brilliant mathematician specialising in mechanics and horology. Aided by his son and his adopted son he constructed three automata, the Writer, the Draughtsman and the Musician. These survive and can be viewed at the Swiss Museum of Art and History. The writer is programmed to produce 40 letters using a quill pen and ink, the draughtsman draws using graphite and the female musician plays an organ by depressing and moving mechanical fingers across a keyboard. She even bows at the end of her performance.

Jean-Frédéric Leschot (1746-?) made singing birds in cages but unlike Jaquet-Droz and Bontems, used small organ pipes to produce the bird sound rather than the sliding (Swanee) whistle that enabled a compact 'organ' to be made and the mechanism to be miniaturised, circa 1884. It gave rise to the 'true' singing bird box. The slide-whistle enabled a very sensitive interpretation of bird sound, not just the intricate trills by the glissando effect that some birds produced by raising and lowering the note smoothly. He took over from Jaquet-Droz when Henri-Louis died.

Jacob Frisard was born in Violleret, Switzerland (1753-1810) before settling in Geneva and working with Jaquet-Droz. Leschot and Frisard collaborated but it was Frisard who developed the mechanism that allowed the bird to open its wings as it exited the box and to close them upon re-entry. He was not a very successful businessman. Despite this, he developed a spiral cam mechanism that allowed smooth step-less operation of the Swanee whistle and hence realistic bird song. He became a supplier of this intricate part to other makers such as Frères Rochat.

Frères Rochat was a firm formed by the three sons of watchmaker father David Rochat (1746-1812), François-Elisée (1771-1836), David-Frédéric-Henri (1774-1854) and Henri-Samuel (1777-1854). They were from the Brassus, in the Joux valley, Switzerland. Initially they manufactured the *ebauches* (the basic assembly of parts) for Jaquet-Droz. When Leschot retired and Frisard died they continued but moved to Geneva at Terreaux de Chantepoulet (that roughly and aptly translates as the muddy place of the singing chicken!) By 1820, François remained there with his son Ami-Napoléon whilst Frédéric and Samuel moved to rue du Coutance 76, aided by his sons Antoine-Auguste-Frédéric (1779-1882) and Charles-Louis-François (1795-1862).



A Small Modern Singing Bird Automaton by Reuge

There were other Rochats working in the same field such as Louis Rochat from l'Abbaye in the Joux valley. There was a lot of working interaction between the members of this large family group. In 1814 Louis and his brother François formed an association with Pierre-Daniel Campiche called Frères Rochat et Compagnie. The Rochat clan were involved in some of the finest and smallest of the singing bird automata as well as many other forms of automata.

Joseph Faber (1800-1850), an Austrian, made an automaton called Euphonia, which produced sounds simulating the human voice. It took 25 years to develop and could recite the letters of the alphabet and then 'How do you do ladies and gentlemen' in English but with a German accent. It could whisper, sing and laugh as well, apparently, as asking and answering questions.

Blaise Bontems (1814-1893) was a French maker of automata singing birds. His son Charles-Jules and grandson Lucien continued in the business of making singing bird musical boxes (*boîte à oiseau chanteur*) and other singing bird automata although the idea originated from Jaquet-Droz.

Karl Griesbaum started his company in 1905 in Triborg making singing bird automata and carved wooden figures called 'whistlers' that worked on the same principle as the Swanee Whistle.

George Moore made a walking man in 1893 that worked from steam produced by a gas-fired boiler. It reached a speed of 9 miles an hour. There is, of course, much more to the history of automata. In subsequent issues of Mechanical Music World we will return again to Fred the head! The four modern examples, plus fig. 5 on page 7 of Issue 1, show how automata are just as popular today as they were in YesterYear.

Submitted by: The *Wondering* Minstrel.

An Afternoon with a Wonderful Wurlitzer

Colin Durham



Richard Moore

On an October Sunday afternoon AMBC members were treated to a very enjoyable concert at the Rye Academy in West Sussex, England. The afternoon commenced with a mid-day lunch and liquid refreshment at a hilltop hostelry, The Kings Arms. At about 2pm, all proceeded down a 'secret short cut', a winding, narrow country lane known only to the local

inhabitants. This led to the Academy and its Milligan Theatre named after local inhabitant, the comedian Terence Alan 'Spike' Milligan. This wonderful, eccentric man was born in India of British parents. He served and suffered in World War II, settled in the UK and applied for a British passport. He refused to swear an Oath of Allegiance to the Queen and was refused a British passport. Of Irish descent, he claimed Irish nationality but remained in the UK for the whole of his life. His humour remains on his headstone, written in Irish *Dúirt mé leat go raibh mé breoite* (I told you I was ill). At the Theatre, organiser and compère Richard Moore showed us to our reserved seats and gave us V.I.P treatment.

Before I progress further, I feel that this is the place to narrate a short history of the Rye Wurlitzer:

The organ was installed in 1925 at the Palace Theatre, Tottenham, London. Rye Grammar School, as it was then, subsequently purchased it for £450 and installed it on the balcony of the school hall in somewhat less than complete form. During the 1950s & 1960s it received regular maintenance and was often played for the school. In the 1970s this ceased due to lack of funding and its condition deteriorated. In 1980 a newly appointed Chemistry Master, who was also an organist, breathed some life back into the Wurlitzer and it was playing once again. When he left about 10 years later the organ was going to be sold.

The Rye Old Scholars Association came to its rescue and organised fundraising concerts but these made a loss! Having grown attached to the organ, the Scholars Association chairman, Richard Moore, formed the Friends of the Rye Wurlitzer Association, which still

exists to this day. This time concerts made a surplus used to restore the organ. Richard also gathered together a team of technicians and obtained grants. By 2003 the Wurlitzer had been restored to its former 1925 glory. Also, the console was moved from the balcony to assume pride of place on the centre stage of

the school hall, complete with a pit and lift as in cinemas of old, which some of us may well remember!

Pupils are also taught to play the organ. At the time of writing four are to attend an award ceremony in London, a wonderful achievement for Richard and his team on what is the second oldest Wurlitzer in Great Britain. The oldest is in a church in a little coastal town called Beer, South Devon. (*Ed: What a delightful name!*) Regular Sunday afternoon concerts are held normally on the last Sunday of the month from March to November, excluding August. Everyone is welcome to attend to hear a variety of top grade organists.

Now moving on to the afternoon's performance: Richard, in his opening address, welcomed our Association to the concert before introducing the main organist, John Mann. John has played the Wurlitzer every year for the past twenty-four years and has his own Fan Club, being very popular in the South Coast resorts of Bexhill, Worthing and Eastbourne where he performs on his electronic organ. The stage curtains were drawn and John ascended majestically from below. He has a very whimsical sense of humour and set the scene with one of his many jokes: John: "Doctor, I have a bad cold". Doctor: "I can't cure a cold but go home, take a cold bath, don't dry yourself, stand in a draughty corridor and you will get pneumonia. I can cure that!" He then proceeded to play a beautiful rendition of Ave Maria followed by a selection from the 1920s including the musical The Boy Friend.

A large screen displayed the virtuosity of his hands and feet, supplemented by excerpts of 1920s & 1930s black & white film. He played two innovative pieces especially for AMBC. One depicted a clock shop with all





Fig 2. Rye Wurlitzer Console

the various chimes; the other a musical box including the sound of the winding lever (or key, of course!). After an interval, another accomplished organist, Sarah Bryant*, took command of the Wurlitzer whilst he played her electronic keyboard as a piano. They featured a series of signature tunes by famous concert organists of the past and the days of 'steam radio', early film and television as the video screen showed their images. John finished with his own signature tune: Sussex by the Sea as he descended into the organ pit – only to rise again for a series of well-deserved encores.

John, Sarah, Richard and their video/lighting technical team gave the audience an afternoon of musical expertise and nostalgia interspersed with jokes and comedy actions, including audience participation, clapping to a Strauss polka. Long may the Rye Wurlitzer continue to give enjoyment to future generations!

*The late Sir Terry Wogan described Sarah as 'Britain's favourite lady organist' - Ed

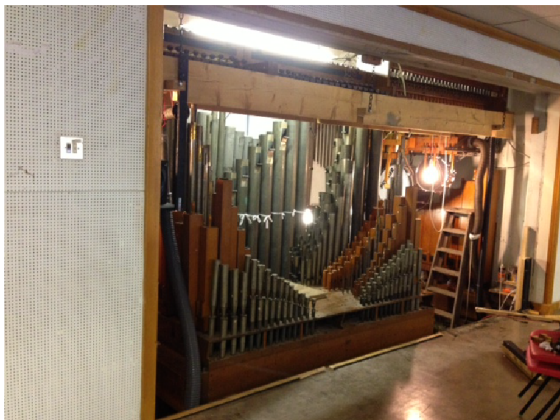


Fig 3. The Organ Loft



Fig 4. Main windchest and some of the ranks



Fig 5. Gladys and Colin Durham

It is with great sadness that we report the sudden death of Colin Durham just days after receipt of this article. Colin was a former director of the prestigious Coutts Bank. He was a quiet and unassuming person with a vast range of interests. He collected old cars and buses as well as having a passionate interest in steam trains. He also played his part in local community care.



Rye Town

NEWS AND VIEWS

This is a new feature here in Mechanical Music World. If you have something you would like to share with the rest of us, please let the editors know. It can be anything relevant, such as a new museum opening, as below, or a new tune sheet you have discovered, an addition to your collection, a piece of music you particularly enjoy - it's your chance to get into print with a snippet!

Taikou Murakami: A new Music Box Museum will be opened in 3 years collecting masterpieces from the world, including Sankyo's. Shigenobu Nagamori (71 years) made this announcement according to the interview of the Shinano Mainichi Shinbun newspaper in the Nidec headquarters in Kyoto on December 22. Mr. Nagamori is the Chair of Nidec Sankyo, also the chairman and president of the parent company of Nidec. He is planning to open a new museum of music boxes in Tokyo or Kyoto after 3 years investing his own money. He said it would be the top one in the world and tourists should enjoy the charm of mechanical music.

Sankyo Seiki Mfg. Co. was founded in 1946, making the first mass-produced music box in Japan, accounting for about 90% of the world's production when in its heyday. He listened to the sound of music boxes when Nidec was participating in investing in Sankyo in 2003. He said, "It's strange that the splendour is still not well known to the people of today's world."

Sankyo is now renovating their Lake Suwa Music Box Museum - Someikan (opened in 1996) in Shimosuwa, it will be re-opened in the middle of March 2016 with the new name, Nidec-Sankyo Memorial Museum of Music Boxes. Mr. Nagamori decided to build a new one at his expense at another place where people gather from all over the world.

He dispatched Nidec employees and independent experts to music box museums in Europe last month to investigate and now is determining construction, location and exhibition methods. Mr. Nagamori said, "I will not make an incomplete one. I shall collect top exhibits and find the best location for gathering tourists with 100 billion Japanese Yen units." Relevant web page: Nidec Sankyo,

<http://www.nidec.com/en-Global/corporate/group/sankyo/>

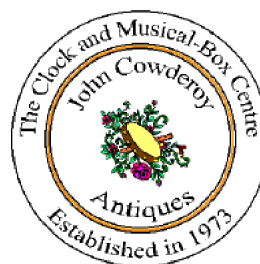
A note from Roger Bryan, from the USA to AMBC: "Thank you so much for your very interesting and extensive response to my question about the number of Brémond music boxes that might currently exist. The music box makers, like Brémond, must have operated like little production-line factories given their capability

to produce several relatively complex boxes per day. It boggles my mind just thinking about the placement of the thousands(?) of pins on the cylinders – the process of converting a tune (air) to precise pin locations is remarkable. As you can perhaps tell by my awe I'm not a music box collector and know little about them other than the physical and tonal beauty of the Brémond box I was fortunate enough to acquire. I acquired the box only after seeing it on the TV program "Blacklist" wherein it held a featured role – the box I have happens to be the one that actually appeared on TV – sort of provenance of a strange kind. Thanks again for your educational response."

The editors have closed the Revelstoke Nickelodeon Museum in British Columbia, Canada, and have relocated to Vancouver Island. We hope to re-open the collection to invited guests around the summer of 2016. Should you be travelling to British Columbia, do contact us in advance. We shall be pleased to welcome friends old and new at our new home. See Officers panel on Page 1 of this issue.

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The following items are for sale to AMBC members and those of its associated organisations. Surplus from sales will fund AMBC administration costs. The primary allocation will be towards research and further publication for the benefit of AMBC members and that of associated organisations.

Contact P. Bellamy or Ted Brown for P&P details: bellamypaul@btinternet.com or 01403823533.

A Passion for Barrel Pianos by Milly & Colin Williams. (See illustration)

This delightful and informative limited edition has over 60 illustrations and charts, most in colour. There are 12 sections dealing with aspects of casework, barrels, gearing, musical arrangement, marking and pinning.

The booklet is A4, ring-backed binding for easy use, with 40 pages of information between the covers.

UK price: £10 + P&P with comparable European and overseas costs to be negotiated.

Cylinder Musical Box Design & Repair by HAV Bulleid. This A5 234 page book, long out of print, is available brand new for the bargain price of £10 + P&P.

Cylinder Musical Box Technology by HAV Bulleid. This A5 290 page book, long out of print, is available brand new for the bargain price of £10 + P&P.

***Disc Musical Box Book** by K. McElhone. This exceptional A5 book comprises over 490 pages in full colour throughout. It is a compendium about all forms of disc and related instruments. Although second hand, it is in mint condition for the bargain price of £50 + P&P.

***The Nicole Factor in Mechanical Music** by Paul Bellamy and contributing authors Cunliffe and Ison. This A5 book comprises over 250 pages with colour centrefold of 16 pages illustrating 118 pictures plus ample charts and pictures in B&W. There are a few unused mint-condition copies purchased by the principle author for personal gifts but now donated to AMBC. A bargain price of £35 + P&P.

***Musical Box Tune Sheets** (The Tune Sheet Book) and three supplements, by HAV Bulleid. This A5 book and its supplements illustrate 400 tune sheets with dating charts for 15 makers. Contact E. Brown for details. They are in mint condition, purchased by Mr. Brown at the time he edited and compiled the book for Bulleid.

***The Organette Book** by K. McElhone. This 10 x 7-inch landscape edition has nearly 220 pages and hundreds of illustrations including a colour centrefold of 16 pages and 33 illustrations. Although second hand, it is in mint condition for the bargain price of £35 + P&P.

***Street musicians on Postcards** by Paul Bellamy. This 9 x 6½-inch book is in full colour throughout, comprising 108 pages. It is in the form of a 3-act play, each act in 4 scenes thus describing 12 categories of post card types. The intervals tell the history of postcards and the story of Christie's Old Organ. These are mint condition copies bought by the author originally for personal gifts but now donated to AMBC. A bargain price of £8 + P&P.



A Passion for Barrel Pianos



Milly & Colin Williams

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