

MECHANICAL MUSIC WORLD Issue 17 Summer 2019

Meetings April 28th 2019

Meeting June 1st 2019

Repairing a Manivelle Ted Brown describes restoration techniques

A Three-Dimensional Automaton Picture Ted Brown on a piece restored by Lyn Wright

Restoring a Cylinder Musical Box Chris Fynes on how he worked on one

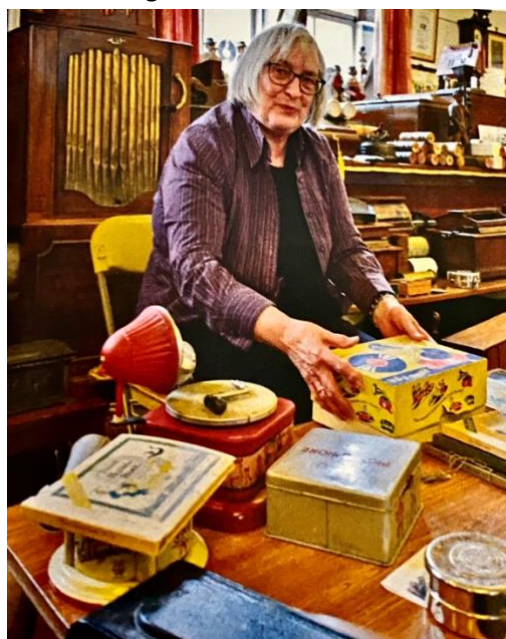
Kinetic Sculptures and Automata David Soulsby visits a collection in Glasgow

Heinrich Zumsteg and his LP Musical Box David Evans describes a recent auction item

A Birthday's Treat Juliet Fynes and friends visit Rüdeshheim

Meetings April 28th 2019

This meeting was remarkable for the variety of the items brought for play, display and discussion. The



meeting featured some toy and novelty gramophones. Juliet Fynes, who researches and has published a number of articles and booklets on novelties and children's toys of the 20th century and up to the present day, demonstrated a Selcol Kid-E-Phone as featured in MMW Issue 10, Autumn 2017. The cardboard box had survived the nursery in very good condition and claimed around its sides that when played: 'Your favourite nursery rhymes come to life!' As with all advertising statements, it was a matter of opinion as to the gramophone's ability to achieve sufficient acoustic perfection to satisfy even a child's ear. It certainly could not. The quality of the sound box was incapable of doing justice to the record, as was demonstrated later by Paul Baker - and the reason why will be explained in a later article.

Paul demonstrated several pre-war German tin-plate gramophones, by Bing and Nirona, belonging to him and other members. Also, on the table was Juliet's collection

of children's disc records including of the Bubble Book series. These are quite delightful, actually very well made and capable of pod sound reproduction when played on a quality gramophone, as demonstrated later by Paul Baker.

The interest in miniaturisation was also illustrated by Paul Bellamy's Russian camera phone. It is an exact and extremely well-made copy of a Thorens Excelda, but with the Russian maker's name. They are so named because they looked like an early form of Kodak camera. In fact, this one looks like some of the modern hi-tech digital versions but these are much smaller.

Of course, even the modern ones can record and play music; what once went around has now come around once more. Like all these compact portable gramophones which could be fitted into a pocket (although very heavy), they were serious musical instruments capable of playing large diameter records. Here you see the Excelda in playing mode and packed away.....



Meeting June 1st 2019

Ted Brown began with a demonstration of his first musical box. The meeting continued with Chris Fynes playing two of his small musical boxes. The first, a tortoiseshell snuffbox which came in its original red leather case, was made by M. Bordier (the movement is described in MMW Issue 16). It played two tunes on an 83-tooth





single piece comb, very similar to movements made by Henri Capt. Although it came in its original leather case the box had been in a sorry state with bits of tortoiseshell missing and an unsightly repair to the lid. Chris had replaced the missing pieces and applied some cunning paintwork to resemble tortoiseshell on the ugly lid repair. Also, the scruffy leather case had been revived with the application of two different shades of red polish to achieve the right colour. The highlight was his sur-plateau silver snuffbox, with 39 teeth playing the Sailor's Hornpipe. The entire movement comprising spring motor, disc (called the sur plateau - meaning pinned on a disc), stack of teeth and gearing were compactly accommodated between two plates barely 1/4 inches apart (see article in Issue 13). Ted then demonstrated his early sectional-comb tortoiseshell snuffbox, with a finely painted scene framed in an oval cartouche on its lid. It played two tunes, one being a Ranz des Vaches. This same tune, with more

embellishments, occurred on the Bordier box. It is an example of a melody traditionally played on an Alpenhorn to call in the cows. Paul Bellamy brought in his fully restored child's automaton musical picture.

Repairing a Manivelle Ted Brown describes restoration techniques

"I recently repaired a manivelle for a lady from one of the visiting groups and thought I should pass on a few of the tips learned when you repair them. The case screws, 1/2 inch long and size no. 2s, were all missing (I have plenty if anyone needs some). As usual, a previous attempt had caused damage, splitting the case when undoing the bottom and bending the playing handle. The handle was seized but with a decent pair of narrow-nosed pliers holding the winding shaft, a quick jerk anti-clockwise loosened the handle from the shaft, as it usually does. As yet I have never found a handle riveted on but occasionally one has been glued with a modern glue. Once the handle has been wound off everything is straightforward. Hopefully the comb is complete; broken combs are only repaired as a labour of love. The teeth are very fine and often get broken off in large sections. This is nearly always due to the winder being wound anti-clockwise, which depresses the teeth instead of lifting them, either breaking them off or bending them downwards. If the manivelle has survived this damage, take off the plate that holds the winding shaft. Usually, the top end of the endless is a shaft with a small diagonal pin protruding either side. The shaft slides up into the winding handle, which is a pipe having a double recess that drives the shaft but slides off the pins when wound clockwise but disengages when the handle is wound backwards (anti-clockwise). This action must be very free."



A Three-Dimensional Automaton Picture Ted Brown on a piece restored by Lyn Wright.

Some years ago a good friend of mine, Lyn Wright, died and his collection was sold. One item was a diorama picture with moving people, a windmill and a watermill. I remember having a conversation with Lyn, who was a well-established maker and restorer of automata, about this particular picture. He said that it was in a sorry state when he got it, but that luckily as it was worked only by a series of pulleys and twine it was relatively easy to restore. There was no problem with timing between cogs and wheels, the only problem was working out which loop of twine went where and which tensioning pulley worked on which loop. As usual you need to sit down and think, preferably with a coffee or whisky, to work out the alternatives. Lyn sorted this out and, other than having to put a few extra figures on the moving bridge, was able to reassemble the picture as near to the original as possible.

Once having seen the inside of this picture you can see how simple it would be to make one of your own. In these days of computers and printers it is simple to get a picture enlarged to an appropriate size and once you have looked at a few auction catalogues or museum pictures you can see that many have a church tower with clock, a bridge with people crossing and a water mill/windmill and/or a blacksmith in a forge. With a little imagination and modern technology, you can construct something similar. Do start with an easy one to interest the children, and then move up to something a little more advanced. If you have success please send us an article and pictures to show our members. The front cover of this issue has a photograph of this amazing automaton picture.

Restoring a Cylinder Musical Box Chris Fynes on how he worked on one

Chris tells us in intimate detail, with a host of photographs his restoration work. "It is important to preserve our heritage for the future, and if we can save any musical box from the scrapheap all well and good. I am by no means a professional restorer and as we live in a small cottage, I have no space for large tools and so have to do almost everything by hand. Nevertheless, I do attempt occasional restorations and thought it a good idea to share my experiences with anyone who feels apprehensive about tackling this task.

Some time ago, I bought a cheap musical box movement on eBay to restore. Fortunately, I managed to take some before and after photos showing its transition back to life. Before purchasing it, I tried to assess the amount of damage. A careful look at any photos and a chat with the vendor is often, I find, a helpful guide. It was clear, there was quite a lot wrong with it, as can be seen in the accompanying pictures, but the kind of problems that I thought I could handle on my own with a little bit of patience. What immediately stood out was the heavy rust on the comb; however, this was red rust which could be scraped off. The amount of red rust had probably not affected the tuning very much and if care was taken removing it, the tuning would remain unchanged. In all other respects, the comb was complete with no replacement teeth or tips. The pins on the cylinder also looked in reasonably good condition with a few that were bent and only one or two broken off. Without major facilities at hand, the comb and cylinder are definitely the two most important parts to have in good order and it was surprising that this happened to be the case in this instance, as mechanically the rest of the movement was in very poor shape and could not possibly run."



Kinetic Sculptures and Automata David Soulsby visits a collection in Glasgow

"My wife and I recently paid a visit to the Sharmanka kinetic theatre in Glasgow. The description of



the show in the advert, was intriguing:- *'Hundreds of carved figures and pieces of old scrap perform an incredible choreography to haunting music and synchronised light, telling the funny and tragic stories of the human spirit as it struggles against the relentless circles of life and death'*. Not everyone's cup of tea, I grant you, but I was keen to experience the performance and also get an insight into the difference between kinetic sculptures and Automata. Sharmanka is the Russian word for barrel organ, the representation of mechanical music,

synonymous with Fairs and having a good time. Certainly, there are elements of this in the show but also there are darker more threatening images as well. The creator Eduard Bersudsky was born in St.Petersburg in 1939; and was witness to some of the insidious as well as the uplifting aspects of the Soviet Union. He is now retired but his amazing constructions are regularly exhibited in Glasgow and on tour in the UK.

We were shown into a darkened room by an unassuming Scotsman in a black T-shirt and jeans and seated in the front on one of several rows of benches, about half an hour before the show was due to start. We wondered if we were going to be the only ones there, but after about 15 minutes a number of others shuffled in and there were about 30 of us there when the show got underway. In front of us there were a number of weird and wonderful machines, some illuminated and others in darkness. These are from Bersudsky's early work constructed in Russia. Opera glasses were provided so you could view close-ups of the proceedings. At the centre of the display was a construction, entitled the Tower of Babel which was the first to spring into life accompanied by rousing music. The amount of movement is staggering, wheels turning, bells ringing, figures tugging on pulleys, others swinging on ropes or suspended by chains. Shadows of the moving figures are cast on the wall with ever changing colours from synchronised lighting. There are some characters from Russian history included, Lenin making a speech and Stalin swinging an axe. As the lights go out on some figures, they stop moving and others become alive as the light falls on them. A single mannequin turns a wheel reeling up a figure suspended by its ankles releasing it over and over; another in a top hat endlessly launches a fishing rod with an industrial size hook at the end. There are around 30 figures taking part in this tableau alone."

Heinrich Zumsteg and his LP Musical Box by David Evans.

David tells us:- "Over the years there have been several attempts to make a musical box run for longer.

Two mainspring barrels in series is perhaps the most common - where the barrels arranged side by side, the centre arbor passing through both and floating, just hooked to the inner ends of both mainsprings. The mechanism is driven as usual by a toothed wheel on the right hand barrel, the winding by a ratchet wheel attached to the outside of the left hand barrel. This arrangement approximately doubles the playing time of the box on a single full winding. Another way is to increase the diameter of the music cylinder. Often used on overture boxes and two-per-turn ones, this also can double the playing time, if the circumference is doubled and the linear surface speed remains constant. Another way would be to increase the diameter of the mainspring barrel, but this has its limitations, not least the need for extra long mainsprings with the attendant risk of early failure. In 1886 Heinrich Zumsteg of Kulm, Aargau, Switzerland, applied for an American patent, the application filed on July 24th. On December 28th 1886 the application was granted and Letters Patent No. 355,244 was granted to him. He assigned it to Adolf Karrer, musical box manufacturer, also of Kulm, for whom he presumably worked. What he claimed as his invention was: 'The combination of a single spring enclosed in a box and provided with the spur-wheel e. an intermediate shaft provided with the spur-wheel l, and the pinion g, gearing into wheel e, a tune-cylinder provided with the spur wheel m, and the long pinion k, gearing into wheels m and l, thereby increasing the length of time for which the cylinder will be turned by the spring"



A Birthday's Treat Juliet Fynes and friends visit Rudesheim

Juliet tells of her visit to Rudesheim on her birthday, but first a trip to the local market there. "We were greeted at the hotel with a complimentary glass of sparkling wine, just as a nearby carillon began to play. We were charmed to find that this was housed in a tower that is part of the 18th century

Schloss, now the hotel. It plays several tunes on the hour, on fourteen bells, whilst a procession of figures symbolising the four major wine vintages of the 20th century parade around in and out of the tower..

Our room afforded us a view of Siegfried's from the bathroom window. The next morning it was off to the mart with high hopes of finding some little treasure I hadn't realised I wanted. This was our first, eagerly anticipated, visit so we didn't know what to expect. Being musical box collectors, initially it was with slight disappointment that we discovered most stallholders were selling gramophones, phonographs and related items; spare parts, needle boxes and records galore. There were some disc boxes but very few cylinder musical boxes, Nevertheless, I quickly spotted my heart's desire, a small Selcol Kid-e-Phone, which I had come across when researching Selcol for, yes, you've guessed it - a magazine article! Sadly, it was not to be as someone had already bought it. I was also attracted to the numerous Bing and Nirona toy tinsplate record players on offer but, spoilt for choice, was uncertain which to buy. In the meantime snapped up two albums of children's records as there weren't many of these on offer and by now, I felt sure I would be getting some sort of toy gramophone.



As we continued looking around, we spotted a small odd-looking instrument, identifiable as some sort of gramophone by its turntable and pick-up. The seller demonstrated it playing one of my records and then showed how to dismantle it, a very tricky business, until all the components were ingeniously packed into its nickel-plated case. This circular container is about the size of a tin of travel sweets, but heavy as it is very well made. The winding key gives it the appearance of a giant cased pocket watch. This little "Mikiphone" impressed me with its cleverness and build quality and soon became my chosen birthday present."

Juliet then continues her article with her visit to Siegfried's Mechanical Music Cabinet.