## The Music Box

an international magazine of mechanical music

THE JOURNAL OF THE MUSICAL BOX SOCIETY OF GREAT BRITAIN

Volume 9 Number 7 Autumn 1980



Rebuilding the Story & Clark Orpheus; tuning characteristics of musical box combs; William Snoxell's catalogue of automata; George Pyke's barrel organ; Tokyo's Nymph & Parrots automaton.



## Christie's South Kensington

85 Old Brompton Road, London, SW7 3JS

Telephone 01-581 2231

SALES OF MECHANICAL MUSIC

## THE EMI COLLECTION OF PHONOGRAPHS AND GRAMOPHONES



on Saturday, September 27th, 1980, at 1 p.m.

Catalogues (including four colour plates) £5.30 post paid from the above address.

The next Mechanical Music sale is planned for October 15th.

Catalogues £1.20 post paid from the above address.

# The mechanist Music Box

The second of the second of the second

an international magazine of mechanical music



THE JOURNAL OF THE MUSICAL BOX SOCIETY OF GREAT BRITAIN

#### The Editor writes. . .

IN MY last words on this page, I recounted that the office of secretary was to be the subject of some changes. Happily that has now been resolved and details of the new establishment appear elsewhere in this issue.

However, there are to be some changes. I announced at the Annual General Meeting that I would also be resigning at the end of this volume,

As the founder of the Society's journal, I have had the pleasure of watching it grow during the 18 years of its existence. Indeed, with the exception of seven issues published during 1972-73 (which were ably edited by Graham Webb), I have controlled the publication for most of that time.

Now as the pressure of my other work mounts and I am forced to undertake more and more overseas travel, the task of producing *The Music Box* has sadly changed from being one of pleasure to one of burden which takes from me the very last moments of spare time. I have done my best to ignore the problem, but now it has caught up with me in a big way and I must stand down. As much as anything else, I need a break and the journal can benefit from another hand at the helm.

There is another side to this and that is that there is much that I want to do that I cannot do at present for want of time. Without the burden of the journal production, this I may be able to get on with. The outcome will be twofold. First I shall be able to contribute more written material to the journal (for the consideration, naturally, of the new editor), and second, I shall be able to proceed with my own self-acting musical

Volume	9	Number	7	Autumn	1980
	_				

Contents	page
The Story & Clark Orpheus by Nicholas J A Simons	306
Musical Box Oddments by H A V Bulleid	311
Mermod Ideal instruction sheet	315
George Pyke's Barrel Organ	314
Tuning Characteristics of Musical Box Combs by J M Powell	316
Tokyo's Nymph and Parrots automaton	320
Ideal Soprano musical box tune list	321
Editor's Notebook	322
The Catalogue of the Collection of William Snoxell 323	- 330
Society Meeting Report	334
How to Re-String a Piano by Harvey N Roehl	336
Book Reviews	338
Letters to the Editor	342
Electronics and the Modern Musical Box	346
Record Reviews	347
List of Members	348

Cover picture: This extraordinarily ornate serinette in a richly ornamented and parquetry case with ormolu mounts is in the collection of the Victoria and Albert Museum in London. There are two ranks each of ten pipes and eight tunes are played. The winding handle is not original.

Hon Editor: Arthur W J G Ord-Hume Editorial offices:

14 Elmwood Road, London, W4 3DY Telephone: (01-) 994 3292

Advertisement manager: Arthur Heap

Advertisement enquiries:
Riversway, 7 Victoria Crescent,
Queen's Park, Chester CH4 7AX
Telephone: (0244) 675991

©Copyright 1980 by the publishers, The Musical Box Society of Great Britain, 141a Hallgate, Cottingham, East Yorkshire. Telephone: 0482-648511 (Hon. Secretary: Dr Peter Whitehead).

THE MUSIC BOX is designed by Arthur W J G Ord-Hume and published four times a year by The Musical Box Society of Great Britain.

ISSN: 0027 4275

instrument project. This has been on the stocks for so many years that it has become an embarrassment, yet when it is completed, my intention is to make plans available, through the Society, to all who would like to re-create a brand new automatic instrument.

I have given to the Society virtually all my spare time for practically 18 years. I feel the time is right to call a halt to that situation. Few members appreciate the amount of work which is needed to produce a journal to the standard of ours. Even fewer have the wisdom to determine and assess the amount of research, both pure and applied, which goes into its writing. Of course it is inevitable that a society should polarise into those two most common factions those that do and those that don't. And it comes as no surprise to find that the former is by far the smaller.

However, now we are seeking somebody to take on this task. He will need to be thick-skinned to cope with those who think they could do so much better and those who will be quick to criticise on small issues while ignoring the cumlative one. He will need to be coaxing and persistent in order to get contributors to contribute, and he will have to be a diplomat. A knowledge of mechanical music would be an advantage . . .

Elsewhere in this issue, President Jon Gresham makes an appeal for such a person. The incumbent will take on not just the task of producing the magazine, but the responsibility of housing the Editor's archive material in the way of photographs, negatives, plates, papers and other materials which are Society property.

Volunteers (and it is not really a bad job) should form a queue! ARTHUR W J G ORD-HUME

## STORY & CLARK ORPHEUS

by Nicholas J A Simons

SELF-PLAYING reed organs were manufactured by a number of companies around the turn of the century and of the various makes and makers Aeolian became best known with the early Aeolian 46-note organ and then their "Grand" and "Orchestrelle" models.

Other makes of organ included names such as Wilcox and White with their "Symphony", "The Phoneon", Maxfield Kimball—and the Story and Clark "Orpheus".

The Story and Clark "Orpheus" came to London in 1898 and sold for £75. It was said that Melville Clark had worked on the design for six years. A number of models was available, ranging from the small "Parlor" organ, described herein, to the large "Orpheus Grand" playing 12 sets of reeds. All Story and Clark organs played the same music rolls and these were not interchangeable with other makes of self-playing organ. A notable feature of these instruments was the method of roll

Of the many player organs which were built, one of the once-popular models was the Story & Clark Orpheus Parlor, the smallest produced by this once-famous maker. Very expensive in its time, few are known today. The author has just restored one and outlines its unusual organette-like characteristics.

drive. This comprised a large clockwork motor to both play and rewind the rolls.

#### General description

The Orpheus Parlor organ was probably the smallest in the range of Story and Clark self-playing organs, being no larger than an ordinary American organ. It has a 61 note keyboard playing only two full sets of reeds.

In an American organ the reeds



are situated below the keyboard and the pallets are opened by pitman rods acted on directly by the keys. This leads to a high keyboard and all woodwork above the stops is purely decorative. In the Orpheus the reeds are placed behind and above the keyboard and are operated pneumatically from both the roll and the keys. The keyboard can therefore be at the standard height.

There are only nine stops fitted which operate as follows: from left to right, Rewind, Diapason, Viola, Bass Coupler, Treble Forte, Treble Coupler, Celeste, Melodia, Tempo. The four speaking stops control the two ranks of reeds split into bass and treble sections. Both treble sections speak in 8ft whereas one of the bass sections speaks in 4ft. The couplers work on the keyboard so do not affect the playing of the roll, octave coupling being cut into the roll. There are no half-stops fitted which is no great disadvantage as they are extremely difficult to adjust. Their main use was by manufacturers who wished to increase the number of stops on show to impress the gullible purchaser.

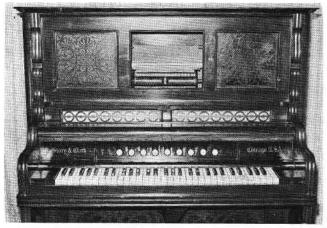
Another notable absentee from the list of stops is the Vox Humana or "wow-wow" stop. The lack of these two features certainly gives this instrument the stamp of quality! The break point for the reeds and couplers is at middle C. Bass and Treble Forte are controlled by the right knee lever and

the Grand Ieu is the left.

Above the keyboard are two sliding panels. The central one opens to give access to the rollbox. The tracker bar is of wooden construction and contains 58 ports spaced at six openings to the inch. The right-hand panel gives access to the winding handle.

#### Clockwork roll drive

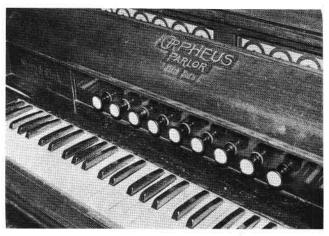
A large clockwork motor and drive train is fixed to the right hand side of the roll-box. When the Tempo stop is pulled out the motor starts and the roll winds onto the lower take-up spool. Speed is controlled by a fly-ball governor. The further the stop is pulled the faster the roll will play. There is no speed indicator and the rolls are marked only slow, medium, fast etc. The Rewind stop



The pleasingly ornate front of the Orpheus showing the stepped front to the case to accommodate the protruding lower edge of the swell box. In true har-

changes gear to give a fast rewind. A full wind of the spring will give sufficient power to play and rewind four average length rolls.

The instrument is built into a solid wood case, the wood appearing to be walnut. The front panels are embossed and coloured to give the appearance of fretwork. The rolls play 58 notes from C to a<sup>3</sup>. This is identical to the 58-note Aeolian Grand rolls but the two types are not interchangeable. The Orpheus Grand rolls are 10 7/16 inches wide and are fitted onto spools having female ends, the right-hand driving end being a  $^{3}/_{16}$ inch square hole. The Story and



monium style, the keyboard fall is multiply hinged to lie flat on this step. The light-coloured panel with circular fret fits over the swell shutters.

Clark Orpheus Grand rolls are identified by a single letter followed by a serial number. The letters are either O, P, C or S. From the tunes identified by each of these prefixes they appear to stand for Operatic, Popular, Classical and Secular respectively. QRS also made rolls to fit these organs.

#### Operating principles

The main components are built into two units. The smaller of these is the roll box and drive motor. This is fitted to a crossframe which is screwed to the sides of the organ case. All other working parts are fitted to a horizontal frame just below the key-board. Below this are fitted the two exhausters and the equaliser.

The keyboard and stop mechanism are fitted to the front of the frame. The octave couplers are of conventional design and are hinged upwards under the keyboard to operate. Each key rests on the front of a horizontal lever, centrally pivotted and sprung downwards at the back. The underside of the back end is fitted with a leather pad which closes a hole at the bottom of the vacuum chest. This and the corresponding tracker-bar is covered by a hinged

#### "Pianos and Their Makers"... Alfred Dolge wrote in

AMONG the pioneers of the music trade in the west, Hampton L Story's name stands foremost. Born at Cambridge, Vt, June 17, 1835, he showed an inborn talent for music, and his first employment was in a music store at Burlington, Vt, at the princely salary of \$50 per month and board. Having saved a small capital from his wages as schoolteacher, he bought out his principal in 1859. Not satisfied to be merely a dealer, he joined a piano maker by name of Powers, manufacturing the Story and Powers piano in 1862. This was perhaps the first piano factory in the State of Vermont.

The business prospered, but the field trade in the west, Hampton L Story's

The business prospered, but the field was too limited for enterprising Story, and when in 1867 Jacob Estey offered him the agency for the Estey organs, in the western states, Story closed out his business at Burlington and established himself at Chicago. In 1868 he admitted Isaac N Camp as partner. The firm of Story & Camp soon became one of the leaders in the piano and organ trade of the west, having stores at Chicago and St Louis, con-trolling a large wholesale and retail trade through the entire west.

With his characteristic keenness and foresight, Story observed that the west would eventually manufacture its own musical instruments, and he therefore retired from the firm of Story & Camp and in 1884, with Melville Clark and his son, Edward H Story, founded the firm of Story & Clark, for the manufacture of reed organs.

Melville Clark was known as an expert reed-organ builder, who had

patented many improvements. business was successful from the start, and in 1888 the Story & Clark Organ Company was incorporated, with E H Company was incorporated, with E H Story, son of the founder, as president, and Melville Clark, vice-president. The foreign trade grew so rapidly that a factory was erected at London, England, in 1892, under the management of Charles H Wagener, and another in 1893 at Baylia Company 1893 at Berlin, Germany.

The organs designed and made under the supervision of Melville Clark were of the highest order in quality and tone, and, when in 1895 the making of pianos was commenced, the same high standard was maintained. Melville Clark severed his connection with the company in 1900, to start the Melville Clark Company, and the management has since been in the hands of Edward H Story. The demand for pianos increased at such a rate that the erection of larger factories became necessary, and in 1901 the company erected its model plants at Grand Haven, Michigan, Counted among the largest producers of high-grade pianos, the com-pany is its own distributor, controlling a chain of warerooms in the principal cities of the United States.

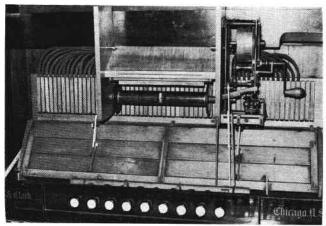
Melville Clark's name will forever be printed upon the pages of the organ and piano industry as one of the most prolific inventors. Born in Oneida County, New York, he inherited a love for music and became an enthusiastic student. Desirous to learn all about the construction of pianos and organs, he served an apprenticeship as a tuner

and took to travelling. Landing finally in California, he started a factory for the production of high-grade organs. The enterprise was a success, but the market for the product was limited, and in 1877 he sold out his interest. After a short stay in Quincy, Ill, we find him in 1880 at Chicago making organs under the firm name of Clark

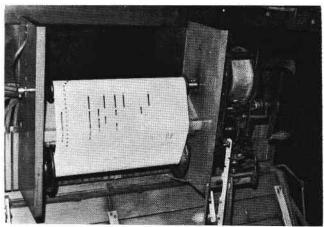
and Rich.

In 1884 he joined H L Story under the firm name of Story and Clark.

Desirous of devoting himself entirely to the development of the piano-player mechanism, Clark severed his connecmechanism, Clark severed his connection with the Story and Clark Piano and Organ Company in 1900, after 16 years of zealous activity, and started the Melville Clark Piano Company with a capital of \$500,000, erecting modern factory buildings at De Kalb, Ill. The patent records tell the story of Clark's activity and success in his Clark's activity and success in his efforts in that direction. Clark produced his first 88-note cabinet player in January, 1901, and his 88-note interior player piano in 1902, while his first grand player piano was completed in 1904. He had the satisfaction of seeing his self-playing grand piano used in a public concert at New Orleans in December, 1906, under the auspices of L Grunewald & Company. Among the many improvements in player mechanism for which Clark obtained patents may be mentioned the application of the downward touch of the cation of the downward touch of the key and his transposing device, the latter having been adopted by other player-piano makers under Clark's natent.



In this view of the organ with the front fall removed can be seen the row of narrow vertical primary pneumatics which extend behind the roll-box. The second-



ary motors are inside the bass and treble swell boxes. The simple, almost rudimentary, spool-box is seen, right, with a music roll in position.

leather faced wooden flap.

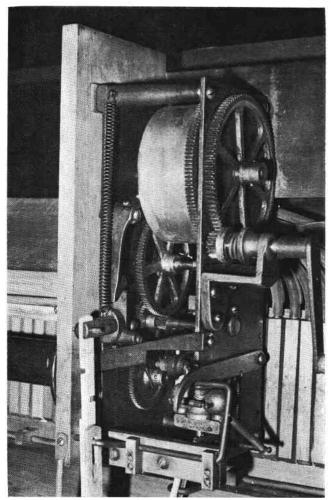
The vacuum chest is vertical and placed directly over the equaliser. The diagram shows a section through this. The two rows of reeds are fitted vertically in chambers on the front of the chest. The stops operate long hinged valves fitted over the back of the reed chambers. The front of the reed chambers open onto a flat angled face over which are 61

leather faced pallets, each being one side of the secondary motor. These are all enclosed in the bass and treble swell boxes.

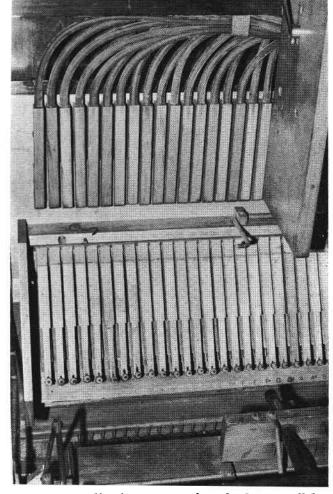
#### Secondary motors

The secondary motors are covered in thin split leather and are only  $\frac{1}{2}$  inch wide and spaced at  $^{9}/_{16}$  inch intervals. The entire reed stack is therefore slightly wider

than the keyboard. Each motor is mounted on a linen hinge so it can be lifted to allow access to the reeds. This, however, means that the airway to the motor must pass across the hinged gap. The sealing faces are leather covered with sufficient resilience to allow slight vertical adjustment of the secondary motor by means of the screwed rod at the front. This is necessary to provide a perfect seal



The clockwork drive motor in detail showing the governor at the lower right and the reverse (rewind) control on the left. Note the winding crank handle at the right. Picture, right, reveals the secondary



motors and adjusting screws after the bass swell has been removed. View this in conjunction with the diagram on the facing page. The swivel hooks which secure the swell shutters can be seen.

onto the reed chamber.

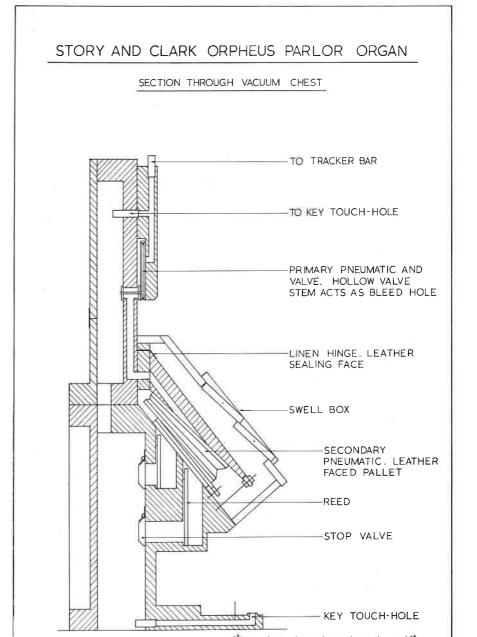
Above the reeds and secondary motors are the primary valves. These are not operated by the commonly found leather pouch but by a small bellows. The valve is mounted on a horizontal shaft passing through the front of the vacuum chest. The passage to the secondary motor is brought up the centre of the chest front to the centre of the primary valve. In its rearmost position the valve opens the secondary motor to vacuum which causes the reed to sound. The front valve disc is fitted to the back of the primary motor. The motors are only 2 inches  $x \frac{1}{2}$  inch and covered by leather a mere four-thousandths of an inch thick. They are tubed to the tracker bar and keyboard touch-holes and connected via a bleed hole to the vacuum chest.

#### Finding the bleed hole

Knowing that there ought to be a bleed hole is one thing, finding it is another! On initial examination the rubber tubes which pass through the vacuum chest to connect the primary pneumatics to the keyboard touch-holes had small holes in some, but not all. This would certainly suffice to act as bleed holes but surely this must have been a botch rebuild by a previous "restorer" who didn't understand the instrument.

It was not until I was rebuilding the primary valves that I discovered the true bleed hole. The shaft holding the two valve discs to the motor is a fine bore alloy tube with its bore drilled through into the motor. This is of about 40 thou' inside diameter but had become blocked with dirt and corrosion over the years.

Because the primary motors are placed outside the vacuum chest,



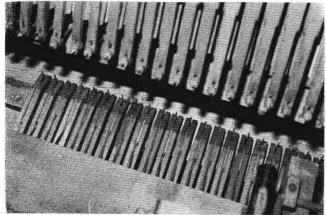
the operation is opposite to the conventional pouch system. When no note is to be played the bellows closes via the bleed hole and pulls the valve forwards opening

17/4/80

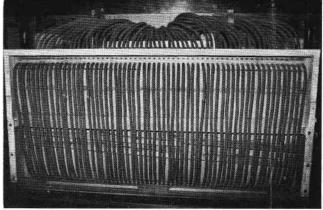
N.J.A.SIMONS

the secondary motor to atmosphere. When the primary motor is exhausted to atmosphere via the tracker-bar or keyboard touchhole it is in equilibrium and air

**INCHES** 



Below the secondar motors are the keyboard pallets. Just visible in the picture above are the holding springs. By removing the back of the vacuum chest the tubes which unite the key touch-hole to the primary pneumatic access (see diagram above) are



revealed as seen in the picture above right. In the lower half can be seen the valves which control the stops. These flaps are top hinged and held shut with wire torsion springs. This follows the ruling standards of American organ manufacture.

pressure on the valve causes it to move backwards and connect the secondary motor to vacuum. This closes and allows air to be admit-

ted through the reed.

The back of the vacuum chest is closed by a hinged panel secured by means of catches, not screws. On the back of this is a sheet giving a long list of patent numbers and dates, from 1892 to 1897. All joints between sections of the vacuum chest and main frame are leather faced.

#### Rebuilding

The instrument had not been played for 60 years and was therefore in rather a sorry state. It was full of dirt and all the rubber tubing was rock hard. Pulling out any stop caused all notes to play immediately while feverishly pump-ing the pedals. The case, however, was in good condition and required little work.

The first job after dismantling was to recover the exhausters and equaliser. This was a straightforward task using double texture rubber cloth. When stripping the equaliser care was taken to prevent the internal "V" springs flying out. The keyboard and stop mechanism were overhauled and all felt and leather was renewed.

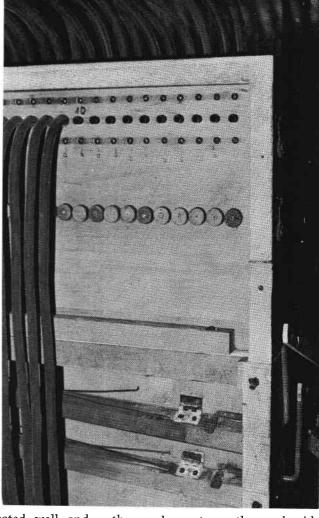
Next tackled was the roll box and clockwork drive. This required only cleaning and oiling and the manufacture of a new roll centre as the original one was missing. This I made to include a small ball-race which allows easier movement of the music roll.

The hardest and most time consuming job was the rebuilding of the vacuum chest including the primary and secondary pneumatics. The primary motors are very delicate and were carefully checked for leaks. Luckily only three required recovering and this was done with Zephyr and thin scotch glue. This glue was used through-out the rebuild and allows future restorers to work unhindered by modern chemical glues. Not only is scotch glue cheaper than most other glues but it is the only one which will satisfactorily leather and felt, and be removable later.

A number of valves had to be rebuilt and new valve stems made. I used threaded brass rod for this which necessitated repositioning the bleed holes. A short length of copper tube was set into the rubber tube in the vacuum chest and drilled with a 40 thou' hole. The valves were set to give a movement of around 1/32 inch.

The leather on the secondary

The illustration at the lower right of the previous page showed the back of the organ with the cover to the suction chest removed. In this detail view, some of the tubes uniting the keyboard touch-holes with the primary valve inlet have been removed to show the back of the primary valves with their hollow stems.



motors had also lasted well and none needed recovering. The leather pallets on one side of each motor were dirty and hardened round the edges where they seal around the reed cavities. At this stage the leather was just brushed clean and no recovering was done.

The action was reassembled and tubed up to the keyboard with neoprene. The connections to the tracker-bar were sealed so that setting up could be done from the keyboard with the roll box out of the instrument since this makes most of the primary motors inaccessible. All of the secondary motors were adjusted so that the pallets appeared to seal.

However, on playing, a large number of the reeds squealed. A small leak across the pallet causes the reed to sound at a high frequency and not at its fundamental. So many were doing this that it proved impossible to determine which were faulty without remov-ing all reeds and replacing them one at a time. Leaking pallets were recovered in situ, as this is the only method of obtaining a good seal. A piece of leather and cushion felt were stuck together and held perfectly flat, then cut into strips. Each strip was placed over

the reed aperture, the underside of the secondary motor glued and brought down into position. The leather must be perfectly flat otherwise the reed will sound continuously since the only force holding the pallet closed is from air pressure.

The case required little work as it was in reasonably good condition. The scratches were touched up with wood stain and varnish and the whole case was wax polished. The pedals were recovered with brown Dunlop carpet tiles. The only area needing special care was the maker's inscription on the outside of the keyboard fall. This was almost worn away but the words "Orpheus Parlor Clark Pats" could just be deciphered. This was retouched using "Connoisseur Liquid Leaf" brass paint and given one coat of varnish to protect it.

On completion the organ plays perfectly with an extremely rapid action. It is reasonably quiet, as would be expected from having only two sets of reeds, and has a

resonant bass.

After sixty years of lying dormant the organ returns to life to give pleasure just as it did in Victorian parlours eighty years ago.

## **MUSICAL BOX ODDMENTS**

#### by H A V Bulleid

I BEGAN last time with some really obscure composers, but what about the works of some of the more popular—and prolific—men whose work turns up so regularly on our musical boxes. Knowing just when a work was composed can help in dating a box. Let's start with one of the most popular composers not just of his time but still to this day . . .

#### Verdi

Giuseppe Verdi, 1813 to 1901, achieved and still achieves the very highest critical acclaim as an opera composer. As a young enthusiast he tried for a scholarship at the Conservatory in Milan but was refused, as lacking musical aptitude. So he persisted with private study and returned to Milan to compose operas in 1837. His first major success and the betterknown of his 26 operas are as follows:-

JWS:-	
Nabucco	1842
Ernani	1844
Joan of Arc	1845
Attila	1846
Macbeth	1847
Luisa Miller	1849
Rigoletto	1851
Il Trovatore	1853
La Traviata	1853
Les Vêpres Siciliennes	1855
A Masked Ball	1859
La Forza del Destino	1862
Don Carlos	1867
Aida	1871
Othello	1887
Falstaff	1893

Such was Verdi's eminence by 1860 that he unwillingly became, at Cavour's insistence, a prestige member of the new Italian Parliament, representing his birthplace, Busseto.

Long before, and typically, a Verdi pupil wrote in an 1846 letter that "Within a few weeks of the first performance of *Joan of Arc* its tunes were heard on the barrel organs of Milan; and after the opening of *Attila* cheering crowds, with torches and a brass band, accompanied Verdi to his lodging."

Musical box arrangers also did well with the Verdi tunes, and for example of the 79 written-up tune sheets illustrated in the Ord-Hume book, 26 have tunes by Verdi and of these 15 are from *Il Trovatore* (The Troubador) or *La Traviata* (The Girl led astray).

The opera Aida was commissioned, fee 150,000 francs, for the new Italian Theatre in Cairo. It was a sensational success both there and at its Italian premiere at La Scala, Milan, in 1872. Verdi's popularity and eminence caused people to flock to see and admire this new opera. A young man from Reggio went to Parma to see it and found he was the only one who didn't like it. So he went again but still did not like it, and he wrote to Verdi forecasting that it would soon be banished to the dust of the archives, and requesting the refund of his expenses,two rail and theatre tickets and two dinners, in all 32 lire. Verdi, in a witty reply, actually forked out 28 lire, disallowing the dinners, on condition that the young man kept away from his operas in the future, to spare him further ex-

In February 1887 Verdi, aged 84, turned out what some critics call "the perfect opera," Othello. And he rounded off a remarkable life's work with Falstaff, 1893, which he claimed he wrote purely for his own pleasure. Tunes from these last two very successful operas are comparatively rare on cylinder musical boxes, due to their late dates. Verdi's span of composing, 1839 to 1893, ran close to the life span of the cylinder musical box.

#### Lecoultre craftsmen

Craft finesse in a musical box can be the work of either the original craftsman or a dedicated repairer. Occasionally one can prove it to be the original work, as I have found on some Lecoultre boxes where all the comb screws are coded in Roman figures between the head and the screwed portion. I need hardly add that these markings had been overlooked or ignored by previous repairers and the screws were not in their correct order.

I have found these markings on a box with comb stamped LB for the Lecoultre brothers at Le Brassus, which is about half way between Geneva and Ste Croix, and I wondered if their craftsmen had so marked the screws. Then along came a hidden-drum-and-bells box with the comb stamped LF/Gve in a lozenge, for the Lecoultre brothers at Geneva, and it had exactly

the same Roman figures filed on the comb screws. The chances of these two boxes having both been through the hands of the same subsequent repairer must be nil, so the markings must be original, and they link the Lecoultres yet again. There is also a nice piece of superfinesse on the bell box; it has one screw for the 16-tooth drum comb, nine screws for the music comb. and again one for the 16-tooth (8 bells) comb. The two screws for the small combs are shorter than the others, to avoid fouling the felt stop brackets. So the craftsman did not bother to code them, but he subtly coded the nine music comb screws from II to X. Such finesse from the 1850s is rather a delight, though I must say in this case it borders on the fastidious. the craftsmen found this extra task for an apprentice, because not all Lecoultre boxes have these marked comb screws.

#### Super Mandoline

Purists claim that a mandoline musical box, if it is to deserve its title, must have groups of at least eight teeth tuned to the same pitch. This claim naturally disappoints owners of those many excellent mandoline boxes in which the groups are limited to five teeth. So?

The group-of-eight has the outstanding technical advantage that it enables one note to be held indefinitely, because by the time the 8th tooth is played the first can be played again. With groups of five the time interval is not long enough except at the treble end.

But the group-of-eight has the corresponding disadvantage that it involves a great number of comb teeth. At least ten notes have to be grouped in eights and several more in fives and sixes. This accounts for a hundred teeth, and with reasonable bass support and treble decoration the comb requires at least 160 teeth. For six tunes this means a 16in. cylinder.

Top class key-wound Nicole and Lecoultre mandoline boxes, made around 1860, played six airs on a 19in. cylinder and the comb had 198 teeth. They are doubly impressive when playing well because the mandoline effect also gives the effect of a sustained note, sometimes playing the same note twenty or even more times and thereby holding it for about two seconds

and filling a gap in the tune ar-

ranger's repertoire.

But one could also buy a wide choice of mandoline boxes, typified by the 6-air Nicole with 11in. cylinder and 115 comb teeth. These boxes had two groups of six and several groups of five teeth. They applied the mandoline effect more sparingly, but always at key points of the tune, and they jettisoned the long-sustained-note effect. Their cylinders clearly display the characteristic grouping of sets of pins along helical lines. They were a lot cheaper and I suspect some people preferred them to the "super mandoline" type which, if all six tunes are played consecutively, do provide a rather strong mandoline dose.

Presumably after spotting the popularity of these groups-of-five mandoline boxes, some makers moved in with what one can only describe as part-mandoline boxes. These can be recognised from their cylinders, which only exhibit a very few of the characteristic lines of pins. They may have only three or four groups of four or five teeth tuned to the same pitch, cannily chosen to give the effect at key points of some of the tunes. These are the boxes about which newcomers enquire, "Is it mando-line?" the cylinder looking a bit ambiguous. The answer must be, "Part mandoline." Unfortunately, rather a small part.

On the above evidence (to which any extension would be very welcome) I think it is reasonable to apply the term mandoline, or tremolo, to all those groups-of-five boxes, whose tune sheets are always so marked. I think we should apply "Super mandoline" to the groups-of-eight, the real McCoy. They were too good. Why else did they fade away after the 1860s?

#### Change-over panic?

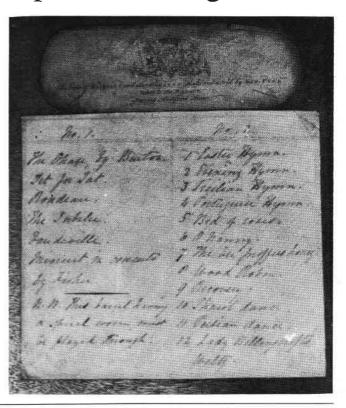
Think of the repercussions among musical box case and component makers, when it became obvious, perhaps too suddenly for comfort, that the customer would no longer put up with the old-fashioned key-winding.

Nicole Freres seem to have taken the change very calmly, and spread it over at least two years. Despite their large output it is rare to find a Nicole box with any intermediate arrangement between their usual key-wind and leverwind types.

But a bit of panic seems to have struck the Lecoultre brothers, as illustrated by the hidden drum and bells box mentioned above. They

## Barrels spiral and single-tune

On page 130 is a handsome secretary containing a barrel organ made by George Pyke and dated 1772. This organ is the subject of a pictorial article on pages 314-5. Here is the tunelist from this piece showing that while one barrel played 12 tunes, single there was also a spiral barrel playing six pieces, including Fisher's (sic) Minuet (see page 268). The dual knife for this also features on a Pykes organ in the Editor's collection.



converted the mechanism quite neatly by shortening the key arbor and mounting on it a lever with ratchet. This of course was very close to the end of the case so the handle on the lever turns to the right as in many early lever-winds. The three control levers under the bed plate were replaced by three of Nicole type sprung against a brass plate mounted on a robust wooden mount sliding in the old key compartment grooves.

There must have been quite a number of such conversions, because the winding lever and handle are an integral brass casting, and I have seen two different types. So far so good, and incidentally the fact that the conversion was done in course of manufacture is confirmed by the mechanism serial number appearing on case components such as the mount for the operating levers and the glass lid.

#### Glass lid arrangements

It is in the glass lid arrangement that one sees the slight signs of panic. Late Lecoultre key-wind boxes had hinged glass lids covering the mechanism and sometimes also covering the key compartment; and hidden drum and bells boxes also had a narrow fixed section behind the glass lid, usually consisting of a wooden frame carrying perforated or patterned wood or card. The trouble arose with this narrow fixed section be-

cause in the converted box it fouled the winding lever. So they hinged it to the back of the case. It was already hinged to the glass lid so the result was a floppy double-hinged affair, only too likely to sag in the middle; and I think it did well to survive, almost intact, until its current restoration.

By the early 1860s almost the entire musical box industry had standardised on the separate compartments for winding lever and operating levers, with the glass lid neatly between.

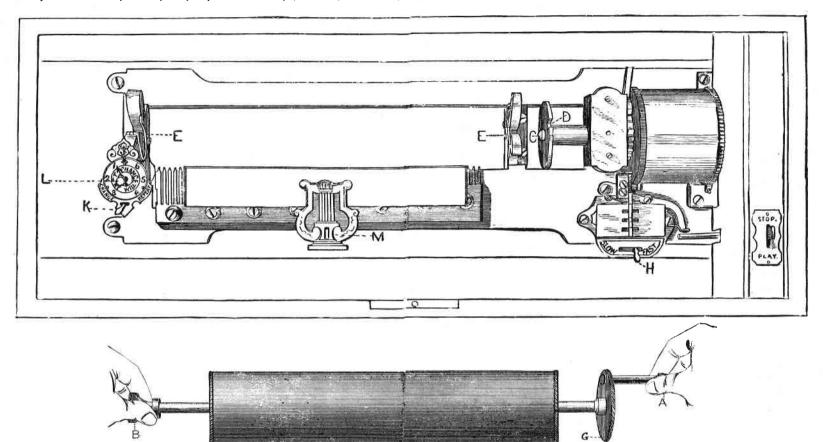
#### Tune sheet repair

Many tune sheets were printed in black and had an approximately symmetrical border design. So when repairs are needed, due to a corner or side having been torn off, it is helpful to make a photo copy and then to use the most similar part of the copy as a patch for the missing piece. Any unwanted detail on the part to be used can be "whited out" with white paper over the original before the copy is made.

After fitting the patch carefully to the original and gluing both onto a good card base for their future protection, two further touchings-up are needed: Indian ink applied with a fine nib to all lines broken at the join, and a water-colour wash to blend the stark white copy with the soiled, yellowed original tune sheet.

MERMOD'S Ideal patent interchangeable cvlinder musical boxes were not just very practical instruments, but they were an outstanding commercial success. If in the early days Nicole Freres became best known thanks to the subtle advertising of their many products, Mermod's Ideal was the equivalent forty years and more on. Apart from such distinctions as a very simple speed control using a horizontal and highly characteristic fly, the Ideal used Mermod's perfected cylinder changing mechanism which removed once and for all any possibility of damage to the comb teeth from an incautiously-positioned cylinder. Unless vou actually dropped the cylinder onto the comb, or failed to hold it by its obvious handle, such hitherto common catastrophes were at once dispensed with. Another feature of the Ideal was the simple yet extremely effective change and repeat control. robustly and practically constructed. Recently Vice-President Hughes Ryder came across this instruction sheet for the management of the Ideal. He has loaned it for reproduction (see also page 321).

## Directions for Ideal Interchangeable Cylinder Music Boxes.



TO PUT THE CYLINDER IN PLACE.—Wind up the box a few turns, and see that starting lever is at stop, in order to bring the notch D in the right position.

Take the cylinder at points A with the right and B with the left hand, and set it between the bearings E and E, lowering the right end first and pressing the cone C into the driving wheel by means of disc G, taking care that arm A falls into the notch D.

- TO REMOVE THE CYLINDER.—See that the box is stopped at the end of a tune by means of starting lever. Take the cylinder at points A and B, press to the right-and raise it.
- TO REGULATE THE SPEED.—Move lever H of Moderator toward "fast" or "slow."
- TO REPEAT.—Move lever K to "repeat."
- TO CHANGE TUNES AT WILL.—Turn Arbor L until the Indicator shows the desired tune.
- TO OPERATE HARP-ZITHER.—Move forward lever M.

N. B.—All the bearings should be oiled every few months, and also the worm of fly wheel.

## GEORGE PYKE'S ORGAN

ON page 130 appeared a colour picture of a most handsome and unusual musical, secretary containing an organ mechanism dated 1772 and signed by George Pyke. The tune sheet of this rare and striking instrument appears on page 312.

The organ is the property of Mr R Ison of Nettleham, Lincoln, who has completely restored the instrument and, while undertaking this task, has meticulously recorded full details on the pipe-

work and its scaling.

The organ has 32 keys serving five stops. The Diapson and Flute ranks total 64 pipes and are of wood throughout. Principal, Twelfth and Fifteenth run throughout as before and total 96 pipes, all metal, making a grand

total of 160 pipes.

Two barrels survive with the organ, one being pinned with 12 single tunes and the other with six tunes played on a spirallynoted barrel. This unusual combination is also found in another George Pyke organ in the collection of the Editor and serves to demonstrate the interesting arrangement which makes this possible. The tune-changer knife, as seen in the picture, right, has two "legs", one engaging with barrels having a central bolt (as would need to be the case with spirallypinned barrels wherein the bolt is also the barrel axis) and the other engaging with the off-centre bolt, usually attached to the bottom of the barrel carrier and employed where single-revolution tunes are pinned.

Mr Ison's organ, illustrated on these pages, stands 95ins high, is 41ins wide and 26ins deep. The organ is contained in the lower

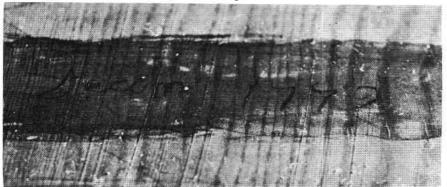
portion of the case.

An unusual and interesting find was the date 1772 inside the chest. This is illustrated below.

The organ upperwork is the subject of the heading picture on the

facing page, showing the neat arrangement of the five ranks of pipework.

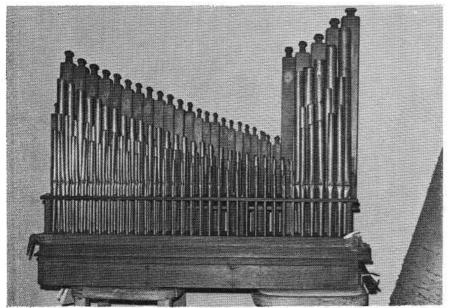
The two lower views on the facing page show the instrument with and without the barrel in place.



There has been much confusion over the years about the true origins of George Pyke as a maker and some years ago, Donovan Dawe of the Guildhall Library in London researched Pyke for a paper which was subsequently published in *The Musical Times* for January of 1974.

In this article, which will shortly appear in facsimile in *The Music Box*, Donovan Dawe finds that George Pyke was born possibly around 1725. His father, John Pyke, was a watchmaker who died in the first week of May, 1762.

George Pyke was apprenticed to Henry Page, a member of the Clockmakers' Company about whom virtually nothing is known today. His apprenticeship began



on September 3rd, 1739, for a duration of seven years.

Immediately he was free, he began in business himself although he did not become a member of the Clockmakers' Company until June, 1753. At that time he was operating from his father's old premises in Bedford Row and described his profession as "finisher".

However, he seems to have acquired both a taste and a talent at barrel organ building and the making of organ clocks. His surviving work is all to a very high standard indeed.

George Pyke appears to have died at the age of about 52 years in May of 1777 and in his will he describes himself as "organ builder and clockmaker".

It was in the closing decade or so of his life that Pyke really excelled himself. He had four apprentices at least, one of whom was Samuel Green, a most eminent 18th century London organbuilder. Apprenticed to Pyke in 1754, Green later was in partnership with Byfield, Bridge and John Jordan, his work with Byfield being proved by an exist-

But to return to George Pyke, it seems that all his finest musicwork dates from the period mid-1760 to the time of his death in 1777. His first apprentice and

the well-known maker of musical

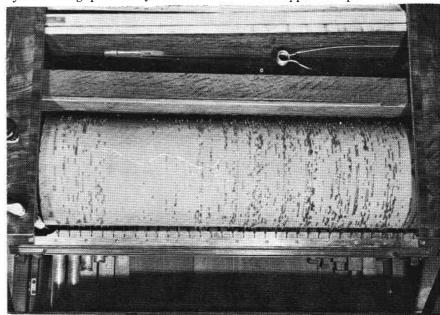
and astronomical clocks.

nephew was Henry Holland who carried on afterwards advertising as "successor to Mr Pyke"

Pyke not only made barrel organs for the advertisement advising the sale of his effects includes barrel and finger organs, finger organs, machine organs, harpsichords and organ clocks. At the sale of the effects of the Marquis of Anglesey held on January 12th, 1905, Christie's catalogue described:

"A PIPE ORGAN, by George Pyke, one manual, sixty-two notes (G to AO), with seven stops:

1 Open Diapason 8ft metal 2 Stopped Diapason 8ft wood



ing reference dated 1768.

Green later married Sarah Norton, daughter of Eardly Norton

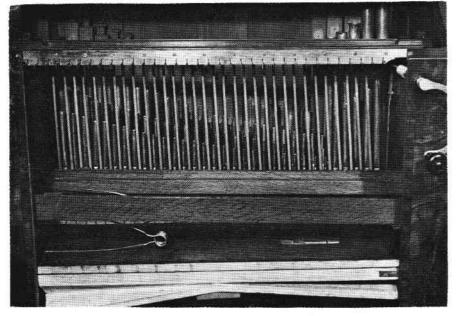
- Flute 4ft wood
- Principal 4ft metal
- Twelfth 3ft metal
- Fifteenth 2ft metal
- Sesquiatra (sic) 3 ranks metal

Chippendale mahogany case, finely carved with garlands of flowers, scrollwork, laurelwreath and ribands, in high relief and with carved mouldings round the borders—12ft 6ins high, 7ft 4ins wide. This organ is very similar in design to 'Organ CIV' illustrated in Thomas Chippen-

dale's 'Director'."

This particular organ sold 430
10s. 0d, so it must have been a particularly fine instrument but, according to Michael Wilson of the Victoria and Albert Museum, all efforts to trace it have failed.

A George Pyke organ clock dated March 1765 survives in the collection of Leeds City Council at Temple Newsam.



## Tuning Characteristics of Musical Box Combs

#### by J M Powell

TWO excellent and informative articles on this subject have so far been published in this magazine. The first was by Keith Harding who measured the primary frequency of teeth in a Nicole Freres comb and suggested from these results a possible tuning pattern. These results were published in Volume 6 No 1 of Spring 1973. The second more recent article by Norma Worswick was published in Volume 9 No 2 of summer 1979 and suggests other aspects of comb tuning which will have been the result of much observation and work with combs.

I would like to add to this fund of information from a different viewpoint perhaps more mechanical than musical and trust that it will extend understanding of this subject a little further. Comb repair is one of the more challenging aspects of musical box collecting and it is necessary to understand or appreciate the tuning structure of a comb if an attempt is being made to re-establish the combs original characteristics. I cannot suggest why tuning was carried out in the individualistic manner which tuning analysis reveals, nor would I suggest that this method of solution is completely correct. Others may read more into these results than I have been able to.

#### Established tuning patterns

Keith Harding explains very clearly in his article, the principles of mean tone and equal temperament tuning and goes on to show

that the Nicole Freres comb taken as an example does not follow either of these patterns. He then suggests that the tuning might have followed the ancient Pythagorean scale, the octave of which is made up of five equal tones and two equal hemitones. The article includes a table on page 37 Volume 6 which has been constructed from calculated frequencies using combination of perfect octaves and perfect fifths to support the Pythagorean scale. For the short section of the comb shown there is close agreement but this agreement is lost over the bass and treble ends of the comb.

Having sought for, but not found, a pattern that would fit actual comb frequencies, thought was given to the question as to why should a music box scale necessarily follow any established form? After all, all three temperaments mentioned employ adjusted intervals in conjunction with perfect ones. The ear accepts a perfect interval more readily than an adjusted or tempered one but the ear is also very tolerant and can accept a surprisingly large divergence from perfect before it sounds intolerable. Most people who have written on comb tuning agree that most combs that they have en-countered show "stretched" tuning to the extent of up to one semitone over the compass of the comb compared to a scale using perfect octaves. Could each comb then have its own pattern of tuning using "stretched" intervals and could this be responsible in part for the unique sound of the music box? It only remained to obtain a means of measuring tooth frequency to present the resulting pattern in a sensible and useful manner.

#### Graphical presentation

The graphs or patterns shown have been constructed in the following manner.

Step 1 Measure the fundamental frequency of all comb teeth. The instrument used for this is described in this article.

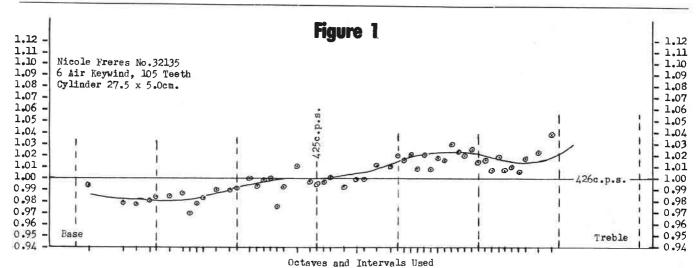
Step 2 Determine the intervals either from the comb marking or from the frequencies. These will be in the ratio of approximately 1.06 to each other or in multiples of this ratio.

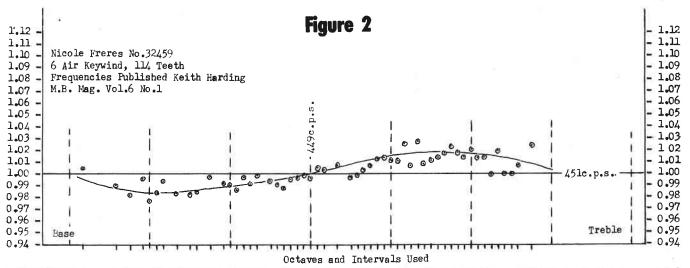
Step 3 Decide a base for comparison. The equal temperament scale has been chosen as being the simplest to work with where the octave is pure and contains twelve intervals each one changing by a factor of 1.05946 (ie the twelfth root of two).

Step 4 Work out the frequency values of the equal temperament scale starting from some convenient point in the middle (say, A equals 440 or A equals actual measured frequency of tooth).

measured frequency of tooth).

Step 5 Divide the measured frequency of each tooth (or average frequency of a group of teeth) by the calculated equal temperament frequency for that note.





Step 6 Plot this ratio using the comb notation as a basis.

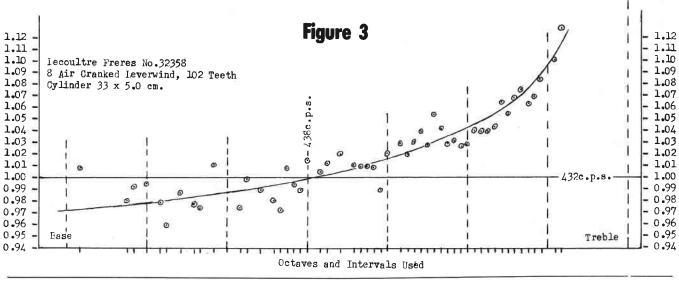
Comparison of results

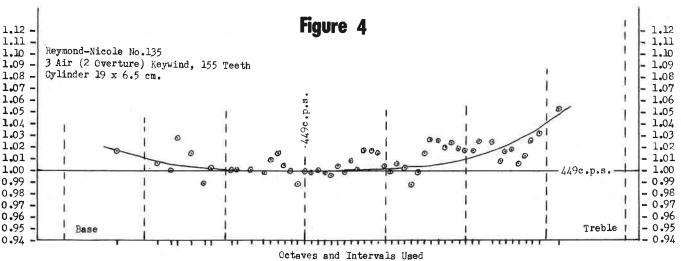
All graphs have been drawn in the same proportion to allow a direct comparison of results to be made. The mean curve has been drawn to cross the base line where the actual frequency is nearest to 440 c.p.s. The actual tooth frequency at that point is shown as well as the equal temperament base frequency.

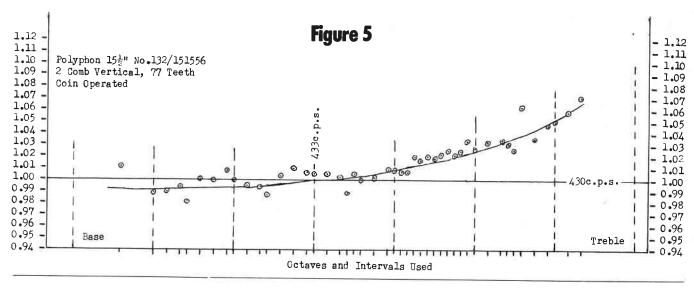
Figs 1 and 2 These were chosen to use Keith Harding's published results and to compare two machines by the same maker and of a similar age. It also allows comparison of frequencies obtained by different methods. The measured frequencies were identical for several points and the graph characteristics show marked similarities. This gave a measure of confidence to proceed.

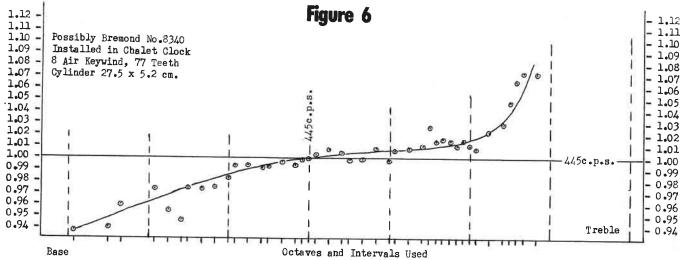
Figs 3, 4, 5 and 6 These boxes were chosen to provide a variety

of reasonable quality combs which appeared to be in their original condition. As a reminder, if the combs were tuned to equal temperament, all points would lie on or parallel to the 1.00 line, the nearest to this being the Reymond-Nicole Fig 4. The majority of curves show a "stretch" in tuning by rising from left to right although on some the centre section could approximate to equal temperament. A "shortening" in tuning is shown by the curve falling









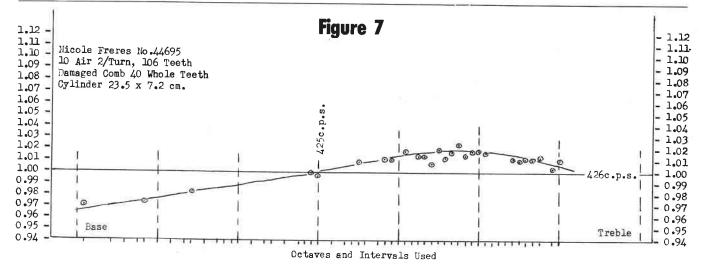
from left to right. I think it can be seen that there is a variety of ways in which combs were tuned. Some examples do not follow the mean curve as closely as might be expected, the Lecoultre comb Fig 3 being more haphazard than most. Could this have been the result of tuning by ear and not with the use of a master comb?

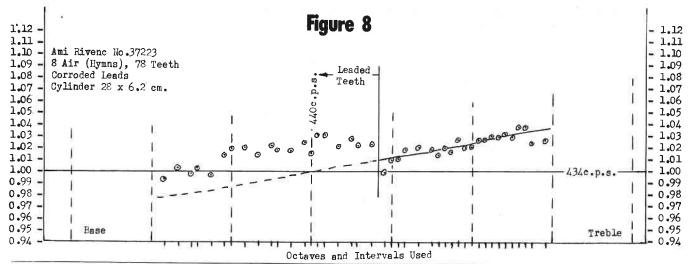
#### Uses for this proceedure

Having a positive picture to work to makes tuning new teeth

much easier and increases confidence in the end result. One of the attractions is that it does away, in part, with the need for musical skill and whilst it may not be necessary to go to these lengths for one or two new teeth, the following examples give some indication of what can be tackled. Fig 7 shows a graph produced from 40 remaining teeth out of a total of 106. The 40 teeth were broken off at the root and 26 base teeth were broken forward of the lead. There

is sufficient information remaining to be reasonably sure that the correct pattern has been established and all new and repaired teeth now conform to this curve. An added complication to this repair was that the comb marking consisted of octave marks only and the notation of many of the missing teeth had to be determined from an analysis of the cylinder pinning. Fig 8 shows the results of measurements taken from a comb with moderately corroded





leads. The box had not been disturbed prior to measuring and a relatively small amount of powder was lying in the bottom of the box. The tuning pattern was drawn out and an estimate made of the original curve (shown as a dotted line). Having determined that this could be brought back to its original condition, the corroded leads were cleaned off, built up with solder and tuned to the estimated curve.

#### Frequency meter

This is a "do-it-yourself" instrument similar to a proprietory electronic tuning fork and its manufacture which was described in Practical Electronics magazine of November 1975. A kit of parts is still available from one of their advertisers and total probable cost today would be in the region of £50. The tuning fork described allows a signal to be fed in and compared with a selected frequency generated in the instrument. The difference between the two frequencies is indicated by a flashing light, the nearer the frequencies get to one another, the slower the light flashes. The instrument was intended to allow, for instance, a piano to be tuned to these preset frequencies.

A small modification has been made to replace a fixed condenser by a variable one with a graduated dial which allows the instrument to be brought to zero against a

fixed input signal. Calibration is straightforward using 50 fairly cycle mains frequency but one must bear in mind that this does fluctuate locally. The instrument is checked during use with a normal tuning fork to ensure accuracy. Tooth vibration is picked up by small microphones. Pick up from the middle and treble sections of the comb is by air-transmitted sound, but for the bass end, the microphone is placed adjacent to the vibrating tooth to allow interference with the speaker's magnetic field. This is not a difficult instrument to make even with no knowledge of electronics and have so far found it invaluable for use in this work.

## Player organ in excelsis

ELSEWHERE in this issue are details of the restoration of a small Story & Clark player reed organ. As stated in the opening of this article, there were many different types of player organ although today most collectors would be hard pressed to name other than the Orchestrelle and the Symphony.

There was, however, one outstanding instrument in the reed organ world which rapidly earned for itself the reputation of being the Rolls-Royce of reed organs, better even than the best of Estey and Mason & Hamlin.

The Paris company founded in 1853 by Victor Mustel began with the manufacture of harmoniums but by assiduous study of the tone-producing charac-

teristics and capabilities of the best French reeds, Mustel & Fils took the art and science of the harmonium way beyond anybody else and the instruments they produced are keenly sought after by collectors today.

On pages 179-182 are reproduced the pages of a brochure introduced to publicise Mustel's self-playing version, the Concertal Mustel. This used rolls manufactured especially by L'Edition Musicale Perforée (Editions Salabert) at 64 Rue la Boetie, Paris 8°.

Mustel organs were sold in London from the early 1900s until the close-out sale of the early 1930s. The notice reproduced below appeared in *Musical Opinion* for December 1909.

THE

## CONCERTAL MUSTEL.

THE CELEBRATED

ORGAN with SELF-PLAYING ATTACHMENT
All Particulars of

MUSTEL & CO.

41, Wigmore Street, London, W.



### PIANOS, ORGANS, CELESTAS,

OF EVERY DESCRIPTION.

Write for Illustrated Catalogues.

MUSTEL & CO.

41, Wigmore Street, London, W.

## TOKYO'S NYMPH & PARROTS

THERE is an understandable tendency today for the world of specialists and collectors to polarise into two factions — those who do not accept anything modern as having anything to do with their subject, and those who believe that ancient and modern should rub shoulders with equal right.

Somewhere between the two exists the right approach. No museum of antique musical instruments, for example, would display amidst its early pieces a modern electric guitar or the trappings of a pop orchestra, yet any collection claiming to be representative must show progress to date. For this reason, Holland's Nationaal Museum van Speelklok tot Pierement displays a brand new Porter disc musical box alongside its early pieces. And for the same reason, The Music Box believes it would be failing in its job if it chose not to chronicle the work of people who today make musical boxes and automata. The historians of the future would certainly not thank us for failing to record our contemporary events.

Pictured on this page is probably the most extraordinary automaton to have been created in recent years. Using mixed technology and advanced processes, it is the brainchild of Shun-ichi Mizuno, a professional display director in Japan. It was commissioned by one of Tokyo's largest department stores, the Matsuya Ginza, and by sheer luck, the Editor happened to visit the store on the first day of its showing.

Entitled Nymph and Parrots as in Fantasy, the piece occupies quite a large area of the store at street level. It comprises a lifesize model of a girl seated on a crescent moon of neon tubes. Hanging from the ceiling to one side of her are three stars also formed of lighting tubes, and supporting stylised and highlycoloured parrots. The figuure of the girl is moulded in an almost lifelike synthetic flesh substance and she wears a plastic mini-dress. To emphasise the fact that she is artificial, she has a pair of horns protruding through her fine, dazzling white wig. On the ring finger of her right hand is a small bird.

Visible in the picture are the two control units, each housed in a transparent plastic case and comprising a Technics loudspeaker, an air cylinder containing rotating valves, and an electro-pneumatic switching appartus, the detail of which remains a trade secret of the



inventor.

The key to the operation of the ensemble is a special piece of pop music — a track called *La Femme Chinoise* from Yellow Magic Orchestra's first album (published on the Horizon label, SP 736). The piece of music plays for six minutes and the performance is repeated after a three-minute interval.

In operation, the music starts, the crescent moon lights up and the girl moves to the music, closing her eyes, smiling, simulating singing, and moving her torso and her hands. At certain times through the performance, the stars also light up and the parrots move in time to the music.

The piece of music is the clue to the operation: it contains a very strong rhythmic beat which causes the whole system to be pulsed in time with the music. All actual movements of the girl appear to be pneumatically controlled — there are plenty of visible tubes and, in fact, the whole control mechanism can be watched in motion.

Like all great mechanisms, though, there is an aura of mystery about it. Watching closely for some considerable while, it was still not possible to determine with absolute accuracy exactly which motion was being initiated by which control, so the services of Mr Keith Yamamoto, merchandise co-ordinator and international relations officer for the Matsuya, were enlisted. Having revealed that he knows *The Music Box* and has been reading it for some years, Mr Yama-

moto wrote the following:

"Cylinders are forced to work, by means of air compressor, to give action to the nymph doll, parrots, stars and crescent moon. As the nymph sings, her mouth, hands and eyes move — also she sometimes does smile and shut her eyes for meditation.

"Electronic system controls musical sound and twinkling lights in perfect harmony, all in automatic operation."

When pressed for further and more detailed description, Mr Yamamoto very politely regretted that, after lengthy discussions with his superiors, it was decided that he must be excused from providing such information. He added that so great had been the response to this extraordinary piece that "most giant stores in this country have already asked us to rent the whole set-up."

It is to be hoped that in the fullness of time this piece of modern automaton technology will find its way into a permanent exhibition of automata or into a museum.

For the time being, though, anyone with the good fortune to be in Japan should telephone Mr Yamamoto at the Matsuya and find out if — and where — it is to be seen in operation.

Incidentally, Matsuya had another unique piece of automata on show this summer — a lifesize replica of Marilyn Monroe singing to her recorded songs. This really did stop the traffic as she (it) was so realistic.

### ANY OF THE FOLLOWING CYLINDERS CAN BE FURNISHED FOR THE

## IDEAL SOPRANO,

#### WITH ZITHER.

Besides these Lists, which we always carry in stock, we can make to order Cylinders with any combination of tunes. For those, however, there is an additional charge.

No. 500.

William Tell—Overture, Lucia—Duo, Rigoletto—Preludio, Norma—Hear Me, Norma, Carmen—Polka, Nanon—Waltz.

No. 501.

Il Trovatore—Anvil Chorus.

Bohemian Girl—I Dreamt I Dwelt,
Faust—Soldiers' March.

Boccaccio—Serenade.

Mascot—Gobble Duet.

Black Hussar—Waltz.

No. 502.

Carmen—Song of the Toreador. William Tell—Tyrolienne.
Lohengrin—Bridal Chorus.
Lucia—Septuor.
Black Hussar—March.
Little Tycoon—Waltz.

No. 503.

William Tell—Prayer.
Tannhauser—March.
Child of the Regiment—Salut à la France.
Il Trovatore—Miserere.
Erminie—Soldiers' March.
Excelsior—Mazurka.

No. 504.

Clover—Waltz.
The Gondoliers—Gavotte.
Chimes of Normandy—Servants' Chorus.
Dorothy—Quartette.
Gypsy Baron—Waltz.
Hunters' March.

No. 505.

Poor Jonathan—March.
Beggar Student—Waltz.
The Oolah—Listen to My Tale of Woe.
Erminie—Vocal Gavotte.
New Paris—Waltz.
Rhapsodie Hongroise.

No. 506.

The Gondoliers—Cachuca.

Chimes of Normandy—Dans mes Voyages—
Waltz.

Pearl of Pekin—Waltz.

Gasparone—Waltz.

The Little Fisher Maiden—Waltz.

Le Verre en Main—Polka.

No. 507.

La Gitana—Waltz. Mandolinata. Carnival of Venice. El Paso--Mazurka. Spanish Song. La Paloma. No. 508.

Erminie—Lullaby.

Mikado—Behold the Lord High Executioner.

Lorraine—Waltz.

A Trip to Africa—Waltz.

Hoffmann's Tales—Barcarolle.

Marie—Mazurka.

No. 500.

Mocking Bird.
Last Rose of Summer.
Old Folks at Home.
Annie Laurie.
Auld Lang Syne.
Home, Sweet Home.

No. 510.

Blue Bells of Scotland.
Robin Adair.
Marching Through Georgia.
Dixie's Land.
America.
Marseillaise.

No. 511.

Turkish Patrol.
Blue Alsatian Mountains.
Kelton's Reel.
My Queen—Waltz.
Windsor Schottische,
Monastery Bells.

No. 512.

Nearer My God to Thee. Rock of Ages. Come Ye Disconsolate. Missionary Hymn. Old Hundred. Coronation

No. 513.

Emmett's Lullaby.
Rock-a-Bye, Baby.
Little Annie Rooney.
Marguerite.
Stephanie—Gavotte.
Blue Danube—Waltz.

No. 514.

Tannhauser—Pilgrims' Chorus.

II Trovatore—Duo—Back to Our Mountains.

Bohemian Girl—Then You'll Remember Me.

Merry War—Waltz.

Erminie—When Love is Young.

Southern Roses—Waltz.

No. 515.

Mikado—Waltz.
Poor Jonathan—Waltz.
Boccaccio—Coopers' Song.
Mandolina—Mexican Serenade.
Mascot—Quadrille.
The York—Mazurka.

The numbers of musical boxes which have survived without their tunesheets is legion! Somewhere, one feels, there has to be a vast stock of these pieces of fragile ephemera, silently proclaiming titles of tunes for the benefit of nobody.

But if the actual tune-sheet has failed to survive, in many cases identification of the music is possible from the gamme number—if a master list of gammes with their programme titles is maintained. Keith Harding has been attempting to do this for some time with Nicole Freres.

As regards the early boxes, success means diligent searching and collation of information and some tunes remain elusive and unidentified.

But with the later musical boxes, particularly those with interchangeable cylinders, it was fairly common practice to publish a list of the music on the replacement cylinders. This is a boon to the owner of a musical box sans tune list.

Of all the variants of Mermod's Ideal, the *Soprano* was, it seems, one of the less common. Recently Vice-President Hughes Ryder came across a specimen in America and with it was a list of the tunes played on each of the 16 six-air cylinders available for it. This list is reproduced *in toto* on this page.

## Editor's Notebook

#### —Things seen, heard and experienced—

WHILE looking through a music trades directory in Germany recently, I found a rather interesting if confusing link between De Kleist and Criterion musical boxes. The directory entry listed Eugene De-Kleist Musical Instrument Manufacturing Company as makers of the "Piano-Concert" piano player, as well as "DeKleist and Criterion musical boxes (musikwerken). The date of this information is 1909—some years after the Criterion musical box had apparently ceased production.

And what about a musical box, probably disc-type, called a Cymbalophon? The same source lists this as being made by Wilhelm Dietrich of Klostergasse 3, Leipzig 1, a firm founded in 1882 and then managed by Otto Dietrich. Operating also as musical instrument wholesalers, the business also manufactured the *Spezialophon* talking machine, Was the Cymbalophon, I wonder, just a brand name on something like a Polyphon? Anyone any ideas?

#### Akio Morita's piano

Chairman and managing director of Sony is Akio Morita who is not only involved with the making of hi-fi equipment which is famous throughout the world, but is also probably Japan's leading collector and enthusiast for reproducing pianos. He has a very large roll library and keeps several top-quality instruments in his home.

When we had one of our rare meetings in London earlier this summer, I suggested to him that *The Music Box* ought to publish some information and pictures on these interesting pianos and he readily agreed to provide data for a future issue. As they say, watch this space!

#### The past catches up . . .

Back in the days when I used to do a great deal of musical box repairwork and had, as they say, a workbench on the Isle of Wight, I systematically rebuilt a collection of nine very nice boxes for a Midlands collector. They were very fine pieces and I always said that if ever he came to part with them, I should have the first offer. Of course, since that time a quarter of a century or so ago musical boxes have become rather expensive.

Quite by chance recently I met my one-time client's wife only to be told that he had died a year earlier. Apparently he had said that he wanted me to have his boxes for what they had cost him. Of course, this very fine offer was also very unrealistic but apparently the old man's request was not to be taken other than the way he wanted it. Never a man to join societies, he remained outside the MBS, but knew several other collector members besides myself

However, the problem of nine topclass musical boxes offered at 1950's prices seemed insoluble until I hit on an idea to satisfy both propriety and the intent of the bequest I bought the lot for an average of £27.50 each, sold several back to the lady urging her to realise on them in the salerooms, and honoured her love of good music with a good hi-fi set-up. At the end of the day all parties seemed happy, although I am now very broke. . . .

#### 'Reflected Glory' piano rolls

Somebody somewhere should perfect a special type of piano roll series. It starts with a roll of five-finger exercises, complete with mistakes, pauses and re-takes and with occasional temper-chords. Roll two is a bit better than the first one and includes a few badly-played simple tunes, again with mistakes and repeats. Roll three is slightly better with a halting attempt at the Moonlight Sonata rich in wrong notes and repeated passages. Roll four is a lot better and includes a badly-played rendition of the Waldstein. The final roll can be any good reproducing roll of, say, Paderewski,

The idea is that the owner of a reproducing piano and a desire to impress his neighbours can open the lid and his windows, shove on Roll One, set it to "Repeat" and play it nonstop for several hours a day. Then he can graduate to the second roll and finally, after a few weeks, he can start playing his collection of Duo-Arts, Ampicos or what have you, This way, he is certain of having the word spread around that he is a pianist and not just the owner of a crummy player-piano.

#### Breaking up a piano party

Which reminds me of an old trick which I used to play on reproducing piano-owning friends. As you all know, a piano party is notable for the prone position rapidly adopted by the guests, visitors and, of course, the owner himself. All lie down under the instrument with their gins and tonics, presenting to the casual intruder what must at first sight appear to be the aftermath of a devilish piano-pounce on a group of people, or a modern costume performance of the end of *Hamlet* 'neath a Steinway

Now this penchant for prostrating oneself beneath a piano is as old as it is universal. They do it in America, in Germany, parts of Hampstead, vast areas of the Midlands and as far south as Australia (where, of course, due to Australia being upside down in any case, there are added problems). The big thing about it is that it bestows upon the participants an incontrovertible air of authority as if they know exactly what they are looking at.

My dodge is to join the party, a task readily facilitated by the convivial atmosphere under most pianos. They're always willing to shuffle over and make room for another back to stretch out. It is, after all, another potential witness for earnest gems of wisdom on subjects like intensity valves, accordions, pressure reducing

valves and knife-valves.

When I am comfortably lying on the carpet cheek by jowl with my newfound friends all eyeing the activity under the soundboard above, I surreptitiously deposit on the carpet a brass elbow with a two-inch length of rubber tube attached to one end. This I have prepared ahead of the visit and have secreted in the palm of my left hand in anticipation of just such an occasion as this. Having dropped my little piece of brass and tube, I carefully slither away from it in such a way that I am some distance from the scene before somebody else shatters the glowing pride of the owner by saying: "I say, what's this?" He bends down (if he's standing up) or reaches over (if he's lying down) and holds high the offending bit of pneumatic stuff.

At once pandemonium breaks out. The piano is switched off and everybodys starts searching to see where it might have come from. Within half an hour, the underworks of the piano are spread out all over the carpet, the stack is out, the tracker bar disconnected, the individual valves heaved out and placed in a heap, the pump in pieces and in general a state of chaos created.

#### The gentlemanly ploy

Now the insensitive man will witness all this and then leave for the safety of his own home and piano, leaving the home of his erstwhile host under threat of permanent disarray for an indefinite period until the offending article has been accounted for.

That, I'll warrant, is a thoughtless way to behave. The correct behaviour is somewhat different. Having dropped the bit of spurious piano innards, you hastily and very noticeably leave the room, stating very loudly a plausible excuse such as a need to go out to the tobacconist for ten minutes, or to get gas for the car (if you are American), or to chat up Fifi the au pair. You absent yourself from the scene long enough to ensure that chaos has ensued Now you return, all fresh-faced and innocent and, surveying the scene, you look crestfallen as you announce, loudly, that there won't be much chance now of your finding the lost piece of your own piano which must have slipped out of your pocket while you were under the piano.

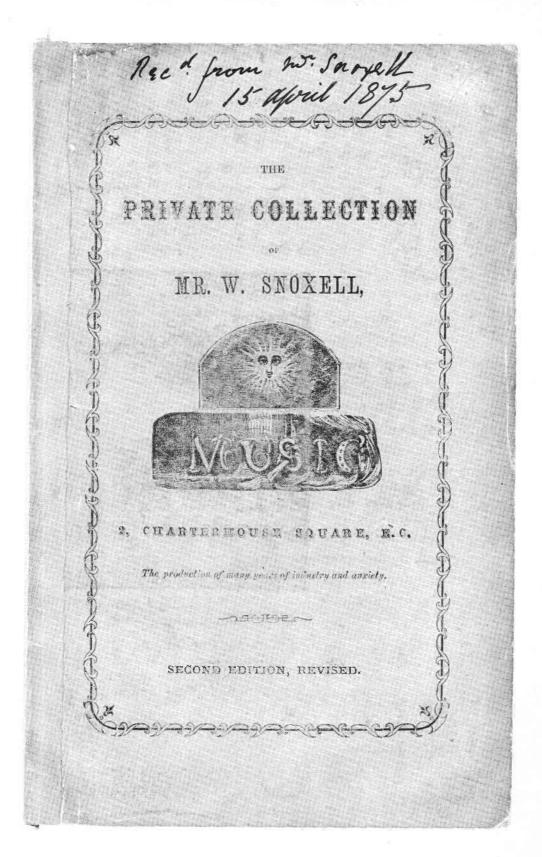
while you were under the piano.

Why this ploy is the gentlemanly one is, of course, that it brings an immediate end to the reigning situation, transfers any possible guilt you may have directly to the others who, in their welter of knowledge, failed to identify your extra bit of piano, and allows you to live another day.

#### The redundant mangle ratchet

Where did I learn this trick? Well, many years ago I witnessed a man trying hard to fit a redundant mangle ratchet to the engine of his Austin Big Sixteen, just because I had happened to mention that there was something metal lying in the road under his car. I had told him in case it pierced his Dunlops and had certainly not im-

Continued on page 331



OF ALL the private museums and cabinets which once played so vital a part of the rich tapestry that was London life in times past, none seem so little remembered as the collection of William Snoxell of Charterhouse Square.

Indeed, little seems to have survived regarding its undoubtedly much-travelled and wealthy owner. William Snoxell's collection embraced many things from musical boxes and "piping bullfinches" to exotic automata and the unusual relics so popular in his time.

Snoxell had a catalogue of this, his private collection, printed in 1873. A second edition subsequently appeared and surviving examples of this little booklet are so rare that an exhaustive search for some years

has only revealed two specimens — one in the British Library at the British Museum, and the other in the private collection of the Editor. It is this latter example which is here reproduced for the interest of members. The front page, reproduced above full-size, was printed in black on a chalk-glazed magneta pink paper. The remaining pages, printed on laid paper watermarked "East Malling Kent", are reproduced in somewhat reduced size.

Four years after this catalogue was produced, the owner of the collection died and the sale of his treasures netted a meagre total of £1,740. Tucked into the specimen reproduced here was found the newspaper cutting describing the sale. It is reproduced at the end.

#### PRIVATE COLLECTION

#### OF

#### MR. W. SNOXELL,

#### 2, CHARTERHOUSE SQUARE, E.C.

The production of many years of industry and anxiety,

#### SECOND EDITION, REVISED.

The motive for publishing this inventory is to facilitate the knowledge of the various qualifications composed in this combination of mechanism, and a medium to assist the visitor in finding any required production.

#### LONDON

PRINTED BY J. C. LARRANCE, 94, ALDERSGATE STREET, E.C.

#### 1873.

INDEX.

iv.

#### INDEX.

#### ~~

	PAGE
1 Female Rope Dancer, and two Musicians	7
2 Piping Bullfinch on revolving ball	7
3 Phoenix feeding her young birds	7
4 Continuous Rolling Ball on moveable stand	8
5 Skeleton Clock, performs 15 months at one winding.	8
6 Spiral Rod Ball Clock, with horizontal index	8
7 Triumphal Chariot, with a Turkish Emperor	9
8 Astronomical Clock, with moveable Orrery	9
9 Vase containing a Clock with horizontal time circle.	9
10 Picture Clock striking, with the echo	9
11 Carriage striking Clock, with three indexes	10
12 Canary Bird in Cage, sings and hops from perch to perc	h 10
13 Magician seated and rising to answer questions	10
14 Bear that opens his mouth at striking the hours	11
15 Lady playing music on 10 bells with her hands	11
16 Similar Lady accompanied by two figures dancing .	11
17 Drinking Fountain with mechanical water	11
18 Humming Birds singing and hopping on branches .	11

PA	
19 A Clock with 4 figures playing on 8 bells, others !	12
promenading	
20 A Clock with figures moving round gallery, and a	
Turk striking the bell	12
21 Dunio ox-P a z	13
22 Fountain playing in basin ornamented with statues	13
23 Clock playing music on 10 bells	13
24 Picture Clock, strikes and sounds the Vesper bells	13
25 Musical Box, plays 6 tunes	13
26 Pianoforte, self playing	14
27 Skeleton Clock, curiously constructed	14
28 Similar Clock, profusely jewelled	14
29 Fountain with waterfalls, stars, and revolving	
pyramid of glass streams	14
30 Drummer Boy playing fife and drum	
31 Musical Machine, playing on 16 large bells	15
32 Lady playing the organ with her fingers	15
33 Similar Lady performing, but of less stature	15
34 Sea Piece, two ships sailing, a castle and battery	16
35 Elephant supporting mechanical productions	16
36 Glass Star, double faced, centre revolving	16
37 Centrifugal large glass Revolving Star	17
38 Two Ottoman Shrieking Foot Stools	17
39 Clock with birds singing, and figures dancing to music	17
40 Stag holding a Clock and bowing his head, with	
moving jewellery	18

INDEX.	V.
41 Large Clock with Organ, figures playing, picture face	18:
42 Clock, two Turks striking bells, with moveable scenery	18
43 Similar one in scenery, but profusely jewelled	
44 Clock of elaborate mechanical acquirements	
45 Representations of a pantomimic scene	
46 Musical Watch Seal playing a waltz	20
47 Self-playing Pianoforte, with key board	
48 Australian Singing Bird flapping its wings & warbling	
49 Crab crawling sideways with every natural motion	21
50 Tower Clock, with bells in gallery	
51 The Travelling Billiard Ball manœuvre	
52 Brass Ball movement within a clock	21
53 Cat Shrieking Chair	
54 Arithmomêtre, or Calculating Machine	
55 Piping Bullfinch in gold box	22
56 Similar Piping Bullfinch in silver enamelled box	
57 Chirping Wren fluttering its wings, in silver box	. 22
58 Landscape with Farm, and figures, in silver box	. 22
59 Orrery on table, with all appliances for elucidation	23
60 A Tellurian and Lunarian	23
61 Orrery of the solar system by mechanism	. 23
62 A Standard Weighing Machine	. 23
63 Anvil and Hammer of the Harmonious Blacksmith	. 24
64 Watch of George Frideric Handel	. 24
65 Original Will of George Frideric Handel	. 25

	' P	AGE
66	A Comical Looking Glass	25
67	A Large Concave Looking Glass	25
68	Collection of upwards of 500 Miniatures	25
69	Collection of 100 Small Paintings	26
70	Collection of 80 Large Paintings	26
71	Large collection of Autographs	26
72	Collection of Prints illustrating past events	26
73	Medals, Coins, and Casts of ancient gems	27
74	Bronzes and Mechanical objects	27
75	Musical Books, Instruments, and Library	27



8

#### (4)

hours, the time adjusted by a small running polished ball on a balance grooved plate, called "Congreve Perpetual Motion" The machinery supported on four brass columns surmounted by an eagle. Under glass shade and stand 12 inches square and 20 inches high.

#### (5)

In unique Skeleton Silver-mounted Clock supported by two Elephants, with elaborately engraved workmanship, decorated with a foreign ancient order or star of merit, a jewelled pendulum with a star containing a caricature of the face in three positions, by Hogarth. The clock power is driven by springs, and goes 15 months at one winding, performing 10950 hours, striking the same number of hours or strokes separately on the bell 70980 times. Under glass shade and stand of open work 17 inches wide, 12 inches deep, and 34 inches high.

#### (6)

A Horizontal Mechanical Clock driven by a large ball on a perpendicular worm or spiral steel rod; the time denoted on two moveable horizontal circles, one the minutes, the other hours, supported by two brass columns; on the summit of each are two figures, one holding the sun, the other the moon, while the globe revolves to the clock in position; ornamented with a large jewelled pendulum. Under glass shade and marble stand rimmed with brass fret-work 14 inches in diameter and 28 inches high.

#### MECHANICAL.

1000

#### (1)

In Automaton Female Rope-dancer, accompanied by two musicians playing on instruments to the music of the several tunes during the performance on the tight rope, erected under an ormolu temple with a small clock. Under a glass shade, on large gold stand 12 inches in diameter and 21 inches high,

#### (2)

Mechanical Piping Bullfinch, perched on a moveable revolving ball, in ormolu cage, representing a Temple with a small clock. Under glass shade and gilt stand 9 inches in diameter and 22 inches high.

#### (3)

A Mechanical Automaton Phoenix, the head moving in the performance of pecking its breast, and representing the act of feeding her young birds with its blood, and flapping its wings. Ornamented with jewellery; standing on an ormolu pedestal, with frogs, lizards, &c., and resting on a velvet ornamental cushion. Under glass shade and shade 27 inches wide and 27 inches high.

9

#### **(7**)

Triumphal Chariot, surmounted by a temple containing a Turkish Emperor, driven by a flying dragon to the guidance of two figures; jewelled wheels and richly chased throughout; the machinery enclosed in the body of the car, and at one winding will travel 400 feet. Enclosed under glass shade and stand 24 inches wide and 30 inches high.

#### (8)

An Astronomical 28-day Clock with an horizontal Orrery; the Sun, with the globe and the moon, traversing the zodiac, each rotating round its axis, showing its different phases and positions through the year, also shewing the day of the month and the signs of the zodiac. The pendulum jewelled, with pin escapement. Under glass shade and stand 14 inches in diameter and 28 inches high.

#### (9)

Elegant-shaped Vase containing a clock, strikes the hours; the time denoted on two circular horizontal rims, a cupid on the lid with a dart pointing to the time, pendulum portrait jewelled. Under glass shade and stand 8 inches in diameter and 20 inches high.

#### (**10**)

A large Picture Clock in gilt frame, view of a cathedral containing a 14-day striking clock, with the echo, afterwards playing fine music; 50 inches wide and 32 inches high.

#### (11)

Carriage Clock, strikes the hours, open work with three index faces, giving the date of the month, the day of the week, and the month, with duplex escapement. Under glass shade and stand 8 inches wide, 5 inches deep, and 12 inches high.

#### (12)

In Automaton Canary in ormolu open-work cage, singing and hoping from perch to perch, making every natural movement, and changing the melody three times; enclosed in an octagon glass shade. The under part of the cage contains a 14-day quarter striking clock, duplex escapement with open face, rim, and glass, seconds hand, with brass rims; 13 inches in diameter, the whole being 22 inches high.

#### **(13)**

Mechanical Figure of a Magician seated at the base of a marble pillar, 21-day striking clock with richly jewelled pendulum. The figure seated on a chair, and on a visitor requiring and enclosing the question in a drawer in the base of the clock, the music plays; when finished the figure rises from his chair, waves his wand, and shakes his head; a pantomimic scene arises, and the answer to the question is revealed by two cherubs falling back to allow sufficient time to read the answer, then sink, and the figure resumes his seat. The stand is embellished with two jewelled trees and three articles of astronomical furniture. Enclosed in a glass shade and stand 18 inches wide, 11 inches leep, and 38 inches high.

#### 12

#### **(19)**

An elegantly-designed Standard Clock, on diamond chased table, supported by four elephants, with seconds, minutes, and hours; the hour-bell struck by a male figure under a canopy on the summit of the clock, the quarters by four reclining male and female figures on eight bells outside the front. These figures play 6 different melodies, accompanied by moveable figures traversing two galleries in front of the clock face. Closed by a jewelled circular glass face, the whole mounted on scroll standards, with figures and four jewelled pine apples in vases, and two jewelled trees in same. Enclosed in a gilt glazed frame and stand on a turntable 23 inches wide, 17 inches deep, and 46 inches high.

#### (20)

A Mechanical Standing Musical Clock, striking quarters and chimes on eight bells, plays six tunes, with two enamelled dials, one showing mean time, moon's age, day of the month, and hour time at different parts of the world, with large seconds hand; the other dial with the hours and minutes. The clock is surmounted by a gallery of painted pictures, the figures moving round; on the top of the same is a temple containing the figure of a Turk striking the bell at the hours, and surrounded with imitation revolving pillars of streaming water; while the music plays the figures traverse round the gallery. Enclosed in a brass framed glazed shade with doors 22 inches wide, 61 inches deep, and 48 inches high; the whole standing on a brass turntable supported on four bronzed rhinoceros on marble plinths with a double turntable.

#### **(14)**

A Daucing Bear chained, containing a clock, which, on striking the hour, opens and closes its mouth at each stroke on the bell. Under glass shade and stand 6 inches wide, 8 inches deep, and 13 inches high.

#### (15)

A Mechanical Performing Lady playing music on ten bells, using and moving her arms and wrists to accomplish the performance, beating time with her foot; with two figures, one on each side, accompanying the same. On an ornamental base contained in a square glazed frame 18 inches wide,  $9\frac{1}{2}$  inches deep, and 28 inches high.

#### **(16)**

A similar Performing Lady playing different tunes, under square glass frame, same dimensions.

#### (17)

A small Mechanical Drinking Fountain, under glass shade and stand 7 inches in diameter and 14 inches high.

#### (18)

A group of seven Humming Birds, singing and flying from bough to bough on a geranium, some drinking, and one pecking a beetle on a rocky base. The whole contained within a glass shade and stand 18 inches wide,  $9\frac{1}{2}$  inches deep, and 28 inches high.

#### 13

#### ( 21.)

A small Battle Ship in a storm, rising and falling with the waves of the sea; also a distant view of the Bay of Naples. In glass shade 13 inches wide, 7 inches deep, and 15 inches high.

#### (22)

An Imitation Fountain moved by machinery, consisting of upwards of 50 moveable glass streams falling into a basin with plants, flowers, allegorical figures, statues, and Naiades surrounding the imitation pond of water; the same resting on an ornamental base under glass shade 11 inches in diameter and 28 inches high.

#### (.23)

An Eight-day Clock, seconds hand, fitted on an onnamental base, with music playing on ten bells six tunes, with index hand on the music circle, and fastened on a gallery; an ormolu eagle on top. Ten inches wide, 7 inches deep, and 31 inches high.

#### (24)

A Picture Clock, view in Italy; the Cathedral clock strikes the hours, and every 12th hour ringing the vesper bells with the addition of fine music. In gilt frame 38 inches wide and 32 inches high.

#### (25)

A full-sized Musical Box in rosewood case, plays 6 tunes 17 inches long, 6 inches deep, and 5 inches high.

#### (26)

A self-playing Imitation Pianoforte, in mahogany case, consisting of 6 barrels; 36 inches wide and 57 inches high.

#### (27)

A singularly constructed Skeleton Clock with cross chains to the moving power, leading over branch pullies with three weights, and wound up in the base of same by a pull line; the whole supported on two brass columns, with thermometer. Under glass shade 15 inches wide, 5 inches deep, and 25 inches high.

#### (28)

A similar clock, profusely decorated with jewellery, surmounted by a female figure holding a compass. Same dimensions.

#### (29)

An elaborate Mechanical Fountain with waterfalls, ships, glass cones, and revolving stars, surmounted with a moveable pyramid of streams, consisting of five tiers of figures moving in circles, and a two-faced jewelled clock, chiming quarters and hours on bells in a belfry; the whole standing on an ornamental base with dolphins spouting into cockle shells. The machinery consists of upwards of two hundred and fifty movements. Under a large glazed frame with two doors 20 inches square and 69 inches high, standing on an outside pedestal 18 inches square and 20 inches high.

16

#### (34)

Mechanical Sea Piece with tower and striking clock in the castle built on a rock, strongly guarded with cannon. Two ships are in motion, one rising and falling with the waves, the other sailing across the sea and returning. Enclosed in imitation rocky base under glass shade 24 inches wide, 14 inches deep, and 30 inches high.

#### (35)

A well-designed Bronze Elephant, performing the act of turning up his trunk, moving his eyes, shaking his ears, and wagging his tail by mechanism, supporting four curious performances, one side of which contains various moving figures, as shewn by a theatrical curtain drawing up, and a performance, with water falls, revolving stars, &c. Second side is a pantomime, with two figures dancing to the performance on the violin. Thirdly, are various figures waltzing in a ball-room. Fourthly, are figures promenading in a garden, with two waterfalls, &c. This mechanical production stands on a richly ornamented case, with pictures on sides containing Bell Music, and richly ornamented.

#### (36)

A curious double-faced revolving Glass Star on an ornamental standard, with revolving streams from the centre, with a contrary centre star jewelled, surmounted by a vase containing a clock with a goddess in a gondola drawn by a dolphin. The upper portion inclosed in a glazed frame and door 18 inches wide by 11 inches deep, and 36 inches high. The whole height 6 feet 9 inches.

#### (30)

An Automaton Musical Drummer Boy, of 5 feet stature, playing 3 tunes on the fife with the fingers of his left hand, accompanying the same on the drum with his right hand, the whole worked by mechanism. Dressed in the theatrical costume of Italy. Enclosed in glass case with door, 24 inches square and 6 feet high.

#### (31)

A large Musical Machine playing 10 tunes on 16 large musical bells, in mahogany case, mounted on wheels; 3 feet 2 inches wide, 1 foot 2 inches high, and 1 foot 6 inches deep.

#### (32)

In Automaton Lady sitting at the organ and playing with her fingers on the key-board of the instrument, producing the musical tune by their action, moving and nodding her head round, and directing her eyes to the company. The Automaton is a full-sized figure in Spanish costume. The whole, including the organ, within a glass case with five doors, on stand with brass castors, 3 feet 11 inches wide, 3 feet 9 inches deep, and 6 feet 4 inches high.

#### (33)

A similar Automaton Lady playing the organ with her fingers, and moving her head and eyes as fig. 32, but of smaller stature. In glass case with five doors, on strong table with castors, 3 feet 7 inches wide, 2 feet 3 inches deep, and 6 feet 2 inches high.

17

#### (37)

twisted glass cones on points radiating from ormolu mountings. The star is 36 inches in diameter, the centre containing a jewelled rim clock 9 inches in diameter. The star enclosed in glazed frame standing on an octagon cone pillar on base 26 inches square and 7 feet high, with organ music accompaniment.

#### (38)

Two Ottoman Square Foot Stools, covered with red cloth and fringed, which, on pressure with the foot, produces a shricking noise.

#### (39)

An Ornamental Clock, shews seconds, strikes quarters on 2 bells, surmounted with a jewelled mechanical tulip which opens and closes. On a frame of scroll-work is a two-faced looking-glass, standing on a richly chased base containing an organ and bell music; when playing two large gilt birds sing, flutter their wings, and move their beaks; figures dance in landscape to musical performances in three compartments. At the ends are cascades, with fish leaping out of the water. At the opposite end Naiades rising and sinking in moveable streams of water. The works and base supported by four chased dragons. The whole elaborate piece of work and mechanism enclosed in a brass frame glazed 2 feet 5 inches wide, 19 inches deep, and 4 feet high, standing on a buhl case containing bell music

#### (40)

In eight-day clock with two faces, strikes quarters on eight melodious bells, shewing seconds, minutes, hours, moon's age, and date of month, The clock mounted on the back of a stag containing machinery that revolves stars of jewellery in the saddle cloth, moving the stag's head gracefully; standing on a brass table supported by four lions. Enclosed in a brass case, glazed, 2 fect 5 inches wide, 17 inches deep, and 4 feet 1 inch high, standing on a turntable.

#### (41)

A handsome and bold designed eight-day standard clock, strikes hours and half-hours, shews moon's age and day of month, on a fine painted dial face, with characteristic figures of the days of the week, the nine muses playing on different instruments, one beating time with her hand, accompanied with organ music. On a large carved wood gilded clock case, surmounted with three dancing figures. Case glazed; plays nine tunes. 2 feet 9 inches wide, 18 inches deep, and 8 feet high.

#### (42)

A magnificently designed Eight-Day Clock, strikes quarters by two Turkish figures under ornamental canopies on bell, the hour on top of clock by a lady under canopy on a bell, with figures revolving representing dancing. On an elaborately chased gilt ormulo case containing music with

20

#### (45)

Representation of the Scene of a Pantomime. Music playing, the curtain rises, shewing figures dancing, with waterfalls, rivers running, gondolas sailing, and numerous other objects in action; at the termination of performance the curtain falls and the music ceases. The case on all sides has waterfalls in rocky scenery. This piece of mechanism is in an ormolu finely-chased framed case with sea horses and dolphins at corners, surmounted by an eight-day clock in brass case within a gallery. The whole enclosed in a glazed framed case on turntable, 18 inches wide, 14 inches deep, and 32 inches high.

#### (46)

A Gold Mechanical Musical Seal, playing a waltz.

#### **(47)**

A mechanical self-playing upright Pianoforte, can be used by performers or otherwise, with pianoforte actions, playing 60 tunes; 3 feet 9 inches wide, 2 feet 2 inches deep, and 6 feet 9 inches high.

#### **(48)**

An Australian Singing Bird on cross perch, flapping its wings, opening its beak, and shewing every natural action of a living bird. In a large brass cage 18 inches in diameter and 32 inches high, enclosed in a glass shade on gilt stand.

scenery, watertalls, a number of figures passing to and fro over the bridge, with ships sailing, boats, swans, dogs, &c. moving along the water. The decorative case supported by four griffins standing on plinths, enclosed in a glazed brass frame with hinged doors, 32 inches wide, 19 inches deep, and 4 feet 3 inches high, mounted on a turntable.

#### (43)

similar Clock with spiral movements and figures moving on the top of two scroll pillars. The looking-glass frame jewelled, with front and back profusely decorated with jewellery. The same height and width as No. 42.

#### (44)

bells, the hour bell by a Roman warrior on a pedestal under canopy of glass streams, with quarters, seconds, minutes, and hours; the organ music accompanied by bells. When playing, moveable figures pass through trees, with fountains playing, streams running, and other figures revolving on several parts of the clock case on top, and both sides, front and back. A quantity of revolving jewelled stars moving on the dial. An elaborate piece of performance surmounted with a revolving jewelled star. In black ebony case mounted in ormolu on solid brass beading 31 inches wide, 21 inches broad, and 2 feet 3 inches high, in a brass glazed case with two doors.

21

#### (49)

The Mechanical Performing Crab, crawling sideways, naturally moving its claws and legs on rocks, &c. Enclosed in a glass case 12 inches wide, 10 inches deep, and 12 inches high.

#### (50)

Tower Clock, with turret movements. The quarters struck by two figures on bells, the music playing every hour, consisting of six tunes, on 24 musical bells hung over clock pyramidically in four galleries, the hour bell in the apex standing on a tower 9 feet 6 inces high and 24 inches square.

#### (51)

Magnificent-designed Glazed Case, wherein is seen a large-size Billiard Ball, travelling about 20 yards perpendicularly, up and down, to and fro, performing various circles and gyrations at the back of the case; such being supported by two square ebonized pillars, supporting a striking clock and mounted on an crnamental base; the tout ensemble being an unique combination of mechanical arrangement and calculation. The dimensions are 4 feet 8 inches wide, 2 feet 10 inches deep, and 8 feet 6 inches high.

#### (52)

A highly-finished Standard Clock, of peculiar design. In the upper portion is a glazed chamber, whence a small brass ball is seen performing various perpendicular movements on the back of the case in lines and circles. The whole surmounted by an Eagle, with other ornamentations, producing a pleasing variety, 8 feet 10 inches high.

#### (53)

X Cat sitting under a chair, the seat of which, on being slightly pressed, produces the shriek of that animal when in great torture.

#### (54)

Arithmomètre. A machine for calculating from units, and so on, ad infinitum.

#### (55)

The Piping Bullfinch, in an enamelled gold snuff box, beautifully chased. On the lid opening the bird springs up singing; when finished suddenly returns into the box, the lid closing immediately. Enclosed in a morocco case.

#### (56)

A similar Silver-chased enamelled Box containing a Piping Bullfinch with varied notes. Enclosed in morocco case.

#### (57)

It small engraved Silver Box containing a Chirping Wren, fluttering its wings and moving its beak while warbling; when finished singing, remarkable distinct fine music follows. Enclosed in morocco case.

#### (58)

A large-size engraved Silver Box, containing a beautifully-designed Farm-yard with trees, &c, the landscape enamelled on gold; a shepherd performing music on his pipe, moving to and fro, while cows, horses, and sheep are feeding, with a running stream at back. The whole composition an unique work of art and mechanism, with musical accompaniment. Enclosed in a morocco case.

#### 24

#### MISCELLANEOUS.

#### <del>~~~</del>

#### (63)

The original Anvil and Hammer of the "Harmonious Blacksmith," from which Handel composed his celebrated melody "The Harmonious Blacksmith." On the oak block presented by Lady Plumer, Cannon's Park, is the memorial brass plate let into the block. For full description see "Reminiscences of Handel, and History of this Anvil," by Richard Clark, of the Chapel Royal, &c., published for the editor, 19, Picket Street, Strand, 1836, The anvil's length from right to left is 18 inches 3 eighths; depth of front, 10 inches one quarter, which, being struck on the point with the hammer, gives the two notes which Handel has made use of as the key-notes, viz., B and E. Extract (in writing of anvil): - "Yet, if all the anvils, as recommended, were produced and tuned by Broadwood's best tuner, and then even the Editor himself placed by them, he could not produce, with all his skill, or hammer out with all his might, the one tone wanted, viz., the E of Powell's anvil without tuning." Vide more particulars.

#### **(64)**

The Watch of George Frideric Handel, long in his possession, and authenticated by guarantee and a receipt for repairs by a watchmaker at the period. Dated 1745, with the maker's name.

#### (59)

An Orrery, on circular table with the earth, moon, and all the appliances for showing the solar and planetary system, also all the planets and moons from the Sun to Saturn, the machinery regulated to place them in position revolving to their due time. The table marked with the zodiac. The planets, with their satellites, are preserved in a wainscot box 19 inches high, 10 inches wide, and 3 inches deep; the diameter of table 26 inches and 30 inches high.

#### (60)

A Tellurian and Lunarian, by Dr. Pearson, in which the motions given to the earth and moon, as well as the planets, are shown by clock-work (watch movement.) Nicholson, Brewster, and Dr. Pearson, have fully described the same in Rees' Cyclopædia.

#### (61)

An Orrery of the Solar System, a most complicated and beautiful piece of machinery, the motion by clock time, and worked by the same; originally made for Queen Caroline, wife of George II. Enclosed in a brass circular glass case 25 inches by 20 inches, on a table with looking glass top, and ornamented stand 30 inches high.

#### (62)

A Standard Weighing Machine, with Mechanical Circular Index of singular construction and arrangement.

#### - CONTRACTOR

#### 25

#### (65)

The original Will and Codicils of George Frideric Handel, vide "Victor Schoelcher's Life of Handel," published by Trubner and Co., 60, Paternoster Row, 1857. "The will is written in English from one end to the other, and is entirely in Handel's handwriting. It is easy to see he took great pains about making the duplicate, which is now in the possession of Mr. Snoxell. \* \* \* \* Mr. Snoxell also possesses the inventory of Handel's household goods, drawn up on the 27th of August, 1759. \* \* \* \* All the furniture sold to his servant John de Bourke was only valued at £48 sterling. \* \* \* \* An extract was given of this inventory and acknowledged thus:—"From the original in the possession of Mr. W. Snoxell, who has kindly permitted me to publish it."—Victor Scheelcher.

#### (66)

A Comical Presenting Looking Glass, revolving on two centres, on gilt stand, distorting the object presented in various positions, causing much amusement; 12 inches wide and 2 feet high.

#### (67)

A large Concave Looking Glass, 33 inches in diameter, of great magnifying power and rariety. In consequence of the dimensions it is mounted on a tripod stand with finely-carved stem and legs, in the most perfect state.

#### (68)

A choice collection of upwards of 500 Miniatures, consisting of Enamels, some on gold, porcelain, and ivory; mostly portraits of celebrities, NO PHOTOGRAPHS. Framed in ormolu, brass and gilt frames.

#### (69)

Another collection of about 100 Small Paintings some on ivory, copper, and wood. Framed in ormolu, gold, and brass frames.

#### (70)

About 80 large-sized Original Paintings, including a portrait of Handel by Woolfand (authenticated.) They are chiefly of a musical character, being the collection of some years to that purpose by the proprietor.

#### **(71)**

**A** large and scarce collection of Autograph Letters, illustrative of various periods, and some of early date; including royal personages, poets, authors, political, clerical, musical, theatrical, scientific, military, naval, and other interesting denominations.

#### (72)

A rare collection of prints, illustrating the various incidents of different epochs, classified descriptively:—Advertisements, Places of Amusement, Auctions and Sales, Accidents, London Bridges, various Fairs, Bartholomew Fair, Fires, Guy Fawkes, Gunpowder Plot, Balloons, Tradesmen's Tickets, Street Sing Songs, Grub Street, Theatres, Old Play Bills, Assassinations, Murders, Last Dying Speeches, Funerals. Noted Malefactors, Pugilists, Admission Tickets Lotteries, Wonderful Characters, Autiquities, Astronomers, Naval and Land Battles, Volcanos, &c., &c., with separate illustrations of London, Westminster, Clerkenwell, St. Pancras, Spitalfields, Stepney, Kensington, Middlesex, &c., &c., por-

traits of celebrities in every department of notoriety, Old English Deeds, Manor Rolls of the early period with seals attached in perfect preservation, and important documents—a collection too large to be here enumerated.

#### (73)

X collection of War Medals, Orders of Freemasonry, Prize Medals of die sinking from the exhibition of 1852, large quantities of Tradesmen's Tokens, in five folio trays. Ancient Coins in silver and bronze, upwards of one thousand Casts of the choicest Ancient Gems in 54 trays, Casts of the Cartoons, beautiful series of Shells collected in India.

#### (74)

Some fine Bronzes in figures, animals, and reptiles; several clocks, peculiar in their mechanism and finish, not of sufficient importance to be specially noticed; three working models of steam engines, &c., &c.

#### (75)

An extensive collection of Music for all Instruments, with a choice selection of Violins, Tenors, Bass, &c. The Library, consisting of upwards of 1000 volumes, some very scarce, but chiefly of England's established authors, &c. &c.

It is contemplated producing an Addenda more descriptive of the Miscellaneous, especially the autograph letters, containing Dr. Johnson's Letter and unpublished prayer; Burns, portion of his poems, water-colour illustration of his domestic life; Evelyn's diary and architectural drawings, with important correspondence of the early period, which has never appeared in print.

#### ANTHEMS, HYMNS, AND SONGS,

COMPOSED WITH

Pianoforte Accompaniments

387

#### MR. WILLIAM SNOXELL.

~<del>19⊕E</del>~

- No. 1. Wine, wine, Ruby Wine.
  - 2. Oh had I the wings.
  - 3. What to sad hearts yields relief.
  - 4. The Present lets enjoy.
  - 5. How sweetly Love steals the soul away.
  - 6. Dear early Home.
  - 7. Come to day lets happy be. (Duetto.)
  - 8. Success to Old England--Scena. (Duetto.)
  - 9. A Health to the English Tar. (Duetto.)
  - 10. My Heart no more can beat for thee.
  - 11. Day Glad Day.
  - 12. A Morning Hymn.
  - 13. An Evening Hymn.
  - 14. There's a Star that shines in sadness.
  - 15. Come fond hope.
  - 16. Of Laughter I sing.
  - 17. Glittering Gold.
  - 18. Love shield me from harm.
  - 19. Hope is dead within each heart.
  - 20. There's a Charm in the past.
  - 21. An Irish Serenade.
  - 22. The Passion Flower.
  - 23. The Captive's Song. (Duetto.)
  - 24. Anthem, LVII. Psalm.
  - 25. Anthem, LXXXVII. and CXI. Psalm.

ART SALES.—Messrs. Puttick and Simpson last week brought to a conclusion a four days' sale of the well-known collection of antiquities, mechanical automata, and other curiosities made by the late Mr. William Snoxell, of Charterhouse-square. The first day (Monday) was devoted to the miniatures and enamels, mostly classical and historical, and including fine specimens of Bone, Cosway, Watteau, Gainsborough, &c. The 220 lots realized £338. The second day (Tuesday) was devoted to the pannings, medallions, bronzes, china, and miscellaneous articles, including a brass suufflox, said to have belonged to Dr. Johnson, and a filigree card-case picked up on the field of Waterleo soon after the battle. The 200 lots fetched £301. On the third day (Wednesday) were sold the most interesting specimens of bygone curiosa, orreries, mechanical ships, clocks, pantomimes, piping bullfinches, singing wrons, drummer-boys, musical ladies, drinking fountains, phenixes, rope dancers, dancing bears, an elephant, and triumphal chariots; with these were the articless described in the catalogue as "the original anvil and hammer of Handel's 'Harmonious Blacksmith.' The sum realized by this day's sale was £821, including £13 fetched by the "Handel relics." The fourth and last day was occupied by the sale of theatrical dresses and Court costumes, musical boxes, harps, violins, violencelli, and other instruments, chonized cabinets, &c. This day's sale realized £280. The entire collection. comprised in 730 lots, fetched £1,740.

Continued from page 322

plied that it had fallen from his car. His demonstration of unbridled enthusiasm for trying to fit the thing to it stirred within me the curiosity which made me wonder if such an event could be tried with other things like pianos.

Some years ago, a very large American aircraft carrier dropped anchor in Portsmouth Harbour. It had masses of aircraft on it, all packed with their tails hanging over the edge. All one had to do was to row a rowing boat alongside, shout up at somebody on the bridge and tell him that something large had just fallen into the water. It could take hours for them to count all those planes...

#### New-era automatic music

I'm one of those people who don't really believe in "jet lag" which is the colloquial term for having your body clock messed around by the whims of different time zones, I believe it is all psychological — and that is what I've been telling myself as I fall uncontrollably asleep every afternoon at three following my return from across eight hours of time-shift in

My visit to Japan came at the time of the cherry blossom and was thus more than usually picturesque. I began in Osaka looking at some of the very latest examples of electronic organs including specimens with the sort of memories which enable them to play back faithfully what you have just played. And it is all done without recourse to perforated paper or pins in a barrel. Never let it be said that

self-playing instruments are dead — they've just changed out of all recognition!

At Kyoto, ancient capital of the country, I visited the electronics factory of National better known as Panasonic outside Japan, to see the first prototypes of a remarkable silicon chip circuit — a musical harmoniser. Electronic circuits capable of playing one note at a time from a memory are quite old-hat these days — they've been around in those musical doorchimes that play selectable tunes for at least two years. But a circuit capable of producing more than one note at a time, i.e. harmonising, has been something reserved for the large and expensive electronic organs. Now National has altered all that at its Nagaokakyo factory outside Kyoto.

#### City of automata

Rather generously I thought, especially since only three of these things exist, they gave me one of their newera "musical boxes" to enable me to publish a picture of it in *The Music Box* and to show it to you at the next meeting. Being hand-made, I imagine it stands them in at a tidy sum whether you look at it in yen, pounds sterling or dollars.

After that, I boarded one of the celebrated "bullet trains" which pioneered high-speed rail travel more than 15 years ago — they travel at about 160 mph — and headed for Tokyo hoping to catch a glimpse of the elusive Mount Fuji which is hidden by cloud for most of the year. I managed to catch sight of its very summit towering high above the murk and thought about the privations of the team of chaps whose job it is to man the re-

search station up there right on its vast rim.

Japan is filled with modern automata — figures outside shops which beckon to you display unreadable signs before you, and indicate which direction to take. This is a sort of extension of the Japanese taste for nonmoving imitation policemen which stand at many road intersections to remind you that the next one just might be a real one.

#### Keeping cool in an earthquake

Have you ever been in an earthquake? Well, I was in a big one in Africa many years ago and the experience is one which I shall never forget. The human body selects instant terror in a split second as the countryside around you heaves and shudders. I was on the seventh floor of one store looking at some hi-fi equipment when one of Tokyo's many earth-tremors occurred. The building swayed noticeably and the stylus groove-jumped on a demonstration turntable. That feeling of terror returned and I was jolly glad to regain the comparative safety of the pavement below where one risks only being trampled to death by the 30,000 pedestrians who seem to want to use the same paving slab as you at any given moment of time. Fortunately, I had made my mandatory trip up the Tokyo Tower that morning and had eyed the seismographs placed at strategic levels. Wild horses, I now decided, wouldn't get me to repeat the exercise.

#### The 400 year-old automaton

My first indication that Tokyo had more to offer than just the worst and most frustrating traffic jams in the world — besides the quite frequent wobbles of the earth's crust — came while reading my copy of the Mainichi Daily News over breakfast. In a diary piece on the goings-on in the city, mention was made of an exhibition of karakuri ningyo or automaton dolls from Japan and France taking place in one of the city's numerous giant department stores. And when I read that one of the exhibits was a 16th century French marionette which did handstands on a chair, I decided that I ought to go there immediately.

The fashionable shopping area of Tokyo is the Ginza which is a street, indeed a whole area, where giant department stores demonstrate mutual tolerance and goodwill for each other by rubbing shoulders together. They also all seem to stock the same merchandise and look alike from the inside. My destination was Matsuya Ginza, a store where you can get your pet petted for 500 yen per hour while you shop, be it cat, dog rabbit or canary. They also shampoo pets (6,000 yen for a biggish dog) and sell you replacements for the ones that got away (150,000 yen for a Chinchilla).

#### Electronics and technology

However, not having a pet to park (and being unable to read or speak the language and hence unable to avail myself of any no-doubt equally attractive offers), I began at the musical instrument department. One of the first things that greets you as you enter the store is a PianoCorder installed in a Yamaha upright piano. These are apparently potentially big sellers in Japan

where they have only been offered on the market for a few months. The style P50 which plays, only costs 280,000 yen (the yen runs at about 545 to the £ and 230 to the \$), while the R50 (record only) costs 85,000 yen. The P100 which will playback and record, costs 365,000 yen. For the grand piano (or any other piano, come to that), the vorsetzer version is, not unnaturally, the most expensive at 445,000 yen.

The latest electronic organs, of which there was a very large display, almost all incorporate memory circuits and so allow the creation of chords from the playing of a single note, the automatic accompaniment by rhythm or note sequence, and many other features which one associates with automatic operation. After ten minutes with a brand new Technics instrument I was left wondering what Aeolian's engineers would have made of this wizardry in the Orchestrelle had it been available to them.

#### The nymph on the moon

The display of automata did not, needless to say, feature a 400-year-old acrobat, but what really did take my fancy was a most remarkable automaton placed just inside the door of the store. This piece was such an attraction that photography was almost impossible due to the crowds of people it attracted.

In form, it consisted of a girl about five feet tall seated cross-legged on a neon-tube crescent moon. Her body was a solft-moulding in some form of silicone rubber compound and she was dressed in white fish-net stockings and a plastic mini-dress. Her artificiality was deliberately emphasised by her large white wig through which protruded a pair of Spock-like pointed ears, And to the ring finger of her right hand was attached a small bird. Above her were several neon-tube stars upon which sat stylised tropical birds of the parrot type (I am no ornithologist: they may have been macaws).

#### Lifelike realism

Key to the operation of this piece was one special piece of electronic pop music played through two Technics speakers either side of the main moongirl complex, or switched to the birds on the stars which had their own speaker systems.

The girl featured movement of the torso, the arms, the head in all directions, the eyes, the mouth, the nose (it could wrinkle) and the facial articulation. Additionally, the provision of synthesized speech was matched by mouth and lip movements.

#### Remarkable pieces

Control of the whole piece was electro-pneumatic via a control box placed each side of the girl and containing the loudspeakers for stereo sound. Additionally, each of the two clusters of birds on the stars above had control boxes with speakers. These boxes were made of transparent plastic so that the internal workings could be seen.

All in all, this was a pretty remarkable piece of equipment which was a clear demonstration that automata have moved some considerable way from clockwork and cams into the age of the microprocessor and related electronics. It is to be hoped that this piece

will not be dismantled after the exhibition in Matsuya Ginza but may find its way, justifiably, into a permanent show or museum.

#### V & A gallery closed

And while talking about museums it is worth recording that the musical instrument gallery at London's Victoria and Albert Museum (where a representative selection of musical boxes is to be seen) will be closed for up to a year. Earlier this summer work began to renew the dome roof over this part of the exhibition and to facilitate this, the whole area has been closed off, probably for at least a year. Just before the swathing in tarpaulins, I was involved in advising on the music to be issued in due course on a museum recording. This is still some way away, but we managed to get the tapes made before the builders took over. Although all the major major items are in locked glass cases (themselves masterpieces of museum showcase-maker's art with special locks which take an age to open even with the right key!) I was dismayed to find that since last I had played the boxes, several had mysteriously been got at and left in the middle of their tunes. Since nobody is responsible for this dreadful business the conclusion is that the musical box gallery is haunted, possibly by one of the Nicole Freres' failed apprentices who was fired for making a libertine musical box with naughty dancing dolls...

#### Steam organ saga

While on the subject of museums, one of my recent involvements has been in planning a mechanical musical instrument gallery for one of our more go-ahead provincial town museums. It was while preparing drawings for the housing of this collection that the keeper of the museum, a widely-qualified person, advised that there was a small fairground organ on offer and would it be possible to incorporate it in the plan. I answered yes and made some suggestions. Later I was told that the powers that be, led by the keeper, had decided against the organ as there was no steam available to drive it...

Business took me to Chicago in July—and while the South-Western States sweltered in that killer heatwave, Chicago was shivering in a cold snap which broke records for lowest temperatures. Wishing that I had an overcoat with me, and hearing that New York was warmer, I took the first opportunity to dash off there for a few days on the way home.

#### **Edelweiss mystery**

While there, I went out to see Hughes and Frances Ryder at Cranford in New Jersey. I also learned, by way of experience, where all New York's failed racing drivers are—they all work for the Somerset Bus Company! It would not be all that bad, only the roads in and around that part of America must be among the worst this side of North Africa and hitting a knee-deep pothole at 65 miles an hour is no joke.

A day at the Ryders naturally means a day in the basement with the musical boxes. Jere Ryder has now established a really well-equipped workshop where he restores musical

automata and hopes to be making new pieces shortly.

But an interesting experience was coming face to face with a large Edelweiss disc musical box playing 22½ inch (58.5 cm) discs. Most interesting of all is the fact that this one, acquired by Steve Ryder for a European client, also plays a 19-note reed organ. This means that, like the Fortuna Style Z, the discs have provision for playing combs over their greater portion, while the outer portion is given over to provision for playing reed notes. I choose my words carefully for, as we all know, the Edelweiss is the same as the Helvetia which means that it is a lever-plucker and has slots instead of projections.

There obviously has to be some difference between the styling or numbering of the discs for the ordinary comb-only machine and the comb/organ variant. Edelweiss/Helvetia discs bear only a small and almost invisible number hand-stamped into the zinc near the disc drive perforations at the stop/start or blank portion of the metal. The ones we checked for the Helvetia were nominally three-figure groups, i.e. 189, but some have a letter suffix such as 189 H, 135 A. And some have a single numeral above the group —

#### 5 189**H**

#### Research needed

The real surprise came when we tried to compare the style of Edelweiss organ/comb disc with the ordinary Helvetia comb-only discs. We could find no difference in markings: there appeared to be no readily identifiable pattern in numbering or classifying, all varieties appearing in both types.

It would be interesting to have other members' views on this subject as there is obviously scope for some research

America gave me a fantastic sendoff when I left for home. The skyscraper next to my Park Avenue, New York, hotel took fire and I had the awesome sight of a live "towering inferno" rather too close for comfort.

#### Paean for Pally

Although everybody remembers (or should I say "knows about") the Great Exhibition of 1851 and the Crystal Palace, not so many know of the Great Industrial Exhibition of 1862 staged in a special building erected for the purpose at South Kensington.

the purpose at South Kensington.

After that show, it was thought that just as the Great Exhibition building had been re-erected at Sydenham as the attraction of South London, why not re-erect the South Kensington building as an attraction for North London.

A site was selected — the summit of Muswell Hill — and the proposed building was to be named after the Princess Alexandra. The scheme was plagued with problems. To begin with, Muswell Hill was in truth a number of hillocks of gravel on a seam of soapy London clay and after the first wet winter of building work, the contractors reported that the hills had "been slipping about like anything." Adequate drainage took a long time during which the hills were in almost constant motion and only then was it possible to sink the foundations of the Alexandra Palace deep into the soil. Proof came one night when a landslip of almost four acres took place close by, but the Palace stayed put.

It was a grand building, beautifully decorated in the Renaissance style and the eight colums which supported the great central dome were surrounded by statues in groups, all set in a floral display. And the centrepiece was a great organ built by Henry Willis,

The Palace opened to the public on May 24th, 1873 with a grand concert presided over by Sir Michael Costa. The auspicious opening heralded a brief life for, at noon on June 9th that year, fire broke out through the carelessness of a workman repairing the roof of the dome. He apparently let lighted tobacco fall into a crevice. The whole place was destroyed with a totality which was distressing. Absolutely nothing was left: even the stonework collapsed.

#### Rising from the ashes

Rebuilding began at once and the second Alexandra Palace opened on May 1st, 1875, its Great Hall which could seat 12,000 plus an orchestra of 2,000 being adorned by a second great Henry Willis masterpiece.

The building was not a financial success and never approached the popularity of the Crystal Palace at Sydenham. Even so, it became a centre for many exhibitions and concerts and as early as 1885 it was the venue for an exhibition of musical instruments. Opened on March 31st of that year, George Mount presided over a grand performance of Mendelssohn's Hymn of Praise. The exhibition itself included a number of musical box manufacturers and also was one of the earliest public shows to feature the organette in Britain, Draper of Blackburn showing his "English" models.

#### Internment centre

Fondly dubbed "the Ally Pally", this somewhat incongrous Victorian pile with its acres of glass in its roof dominated North London. During the First World War, it was used as an alien internment centre and, as reported in *The Music Box*, volume 7, page 92 et seq, the founders of the New Polyphon Supply Company were incarcerated there for the duration

My grandfather, who conducted Sir Arthur Sullivan's memorial concert, among many others, at the Crystal Palace, also conducted occasionally at the Ally Pally.

On November 30th, 1936, the Crystal Palace took fire, As a small child I can recall standing on Pinner Hill and watching the flames almost 18 miles away across a London not as brightly lit as today. The next morning, Paxton's palace had gone, and with it the great Walker-rebuilt fourmanual Gray and Davison organ.

#### War damage and decline

It was around this time that I was taken to the Alexandra Palace for the first time and stood there, small and awe-filled, listening to the organ. A few years later, an enemy bomb exploded close to the giant rose window and the organ was damaged by blast and subsequent over-long exposure to the weather. In times of war, neglect of all but essentials is an unfortunate fact of life.

I always cherished the hope that I might again stand in that great hall and hear the organ. In the years since the war, the economic vicissitudes which have reigned made raising the

## NORFOLK POLYPHON CENTRE

(Norman and June Vince)

We specialise in the Sale and Purchase of all forms of

#### **MECHANICAL MUSIC and CLOCKS**



A wide range is stocked and offered at highly competitive prices.

DISC MACHINES

CYLINDER BOXES

**ORCHESTRIONS** 

**ORGANS** 

SINGING BIRDS

AUTOMATA

AND FINE CLOCKS



A PRETTY LITTLE SYMPHONION HALL CLOCK.

The case stands 79in high, finished in pale golden walnut. The musical movement plays the  $11 \frac{7}{8}$ in discs and has been very carefully restored and has the usual settings for playing at will, automatic play every other hour, or silent over-ride.

## Wood Farm, Bawdeswell, East Dereham, Norfolk

ON B1145 ONE MILE EAST OF BAWDESWELL VILLAGE

Telephone: Bawdeswell (036-288) 230

We are always available during weekends. Please confirm weekday visits beforehand.

Planes and trains can be met in Norwich.

cost of rebuilding the organ a difficult matter. Henry Willis the Fourth removed most of the pipework from where it had been badly stored and trodden on and the hall was restored along with the Victorian organ facade. Only the organ buffs knew that great forced of parts with the victorian organ. facade of show pipes was a chaotic and mute void. Funds were started to raise cash. Rebuilding the Alexandra Palace organ become a long-term topic

of conversation.

The rest of the Palace had become offices and studios for the British Broadcasting Corporation and it was

from here that the first regular television broadcasts in the world began. And it was from here, in 1947, that I made my own first appearance on TVa cartoonist on Mary Malcolm's

Picture Page programme!

On July 10th this year, with a new management in operation, funds for restoration guaranteed and work already begun, fire again broke out in the building. This time, though, the winds fanned the hilltop building and the emergency water supply tank had been drained for restoration. By early afternoon, the Willis organ had gone

along with the great hall and the next morning it was apparent that twothirds of the seven acre building was no more.

There are pressures to rebuild it a second time, but one knows that this old Victorian institution really does have no place in London today. And although most of the organ pipework survived through absence, nobody can ever again recreate the ambience of that organ in the hall where I stood all those years ago, holding my father's hand and spellbound.

#### Society Affairs

#### Summer meeting, GM report

THE Summer Meeting of the Society held on Saturday, June 7, 1980 at the Kensington Close Hotel, commenced with the Annual General Meeting. Dr Peter Whitehead, in confirming his resignation as Honorary Secretary, reported that as the volume of secretarial work was beyond the capabilities of any one person, the Committee had decided to allocate the Secretary's duties between four volunteers, Christopher Proudfoot would be the Corresponding Secretary, Frank Vogel the Subscription Secretary, Reg Waylett would enrol new members and Tim Chapman-Webb, the Meetings Secretary, would assume responsibility for notices to members of meetings and registrations at them.

A unanimous vote of thanks to Dr Peter Whitehead was enthusiastically carried for the way in which he had single-handed undertaken the duties of

Honorary Secretary for six months.

Arthur W J G Ord-Hume announced his intention of resigning from the post of Honorary Editor at the conclusior of the present volume of *The Music Box*, that is at the end of the current year. This announcement had been re-ceived with regret by the Committee, said the President, but in view of the Honorary Editor's long and disting-uished service in that capacity, it would have to be accepted. An appeal was made for suggestions as to a pos-

sible replacement.
The Honorary Treasurer recommended a continuation of the present subscription for next year and the Honorary Archivist, Keith Harding, whose open invitation to visit his workshops the previous day had been accepted and enjoyed by many of the members, made an appeal for donations and bequests to the Society's Archives. Other Honorary Officers made their reports and the revised Constitu-tion and Bye-laws of the Society as circulated were unanimously carried by the meeting and are to be printed with the new Membership List.

The Committee's recommendation that Cyril de Vere Green be awarded Honorary Life Membership, in recognition of his role in forming the Society and of his services and devotion to the Society was carried with acclaim the Society, was carried with acclama-tion and Cyril de Vere Green was presented with a framed certificate marking the award. A similar certificate was presented to Marie Waylett, who had received Honorary Life Membership at the Annual General Meeting in 1979, and a further certificate was exhibited which would be forwarded to Frank Holland, MBE, the Society's other surviving Honorary Life Member.

There then followed a surprise presentation, by Cyril de Vere Green,

to Reg Waylett of a silver salver inscribed with the Society's crest and the words "Presented to Mr Reginald Waylett as a token of appreciation for his years of devoted service to The Musical Box Society of Great Britain."

The Honorary Officers, as circulated, were duly elected and under "any other business" the cost of meetings and publicity for the Society, were among the subjects raised from the

Immediately following this somewhat lengthy meeting, Bill Nevard introduced "Collectors Items," a slide presentation with taped commentary depicting noteworthy pieces from his own col-lection and others that he had seen and pictorially recorded in his travels round the world. The many and varied items shown embraced the widest possible range of interests and every taste must have been catered for in an engrossing presentation that had obviously involved considerable prepar-

Immediately before the luncheon interval, member Graham Whitehead projected a short colour film with sound that he had taken at the Arosa Barrel Organ Festival in Switzerland in 1979. Of professional quality, the film formed a reminder of the Society's forthcoming Barrel Organ Festival at Leeds in September.

The afternoon commenced with our Honorary Editor Arthur Ord-Hume sitting behind a welter of electronic wizardry and flanked by two large loud Barrel Organ music. After having satisfied the audience that one of the five pieces played by the Henri-Louis Jacquet-Droz "La Musicienne" was not composed by her creator, we were

treated to the music of organ clocks from Scandinavia and Vienna. One of the pieces of music played was indentifrom the floor by David Tallis. Included in the programme was a pre-viously unknown work by Beethoven and the music from the "missing" Nemec organ clock for which Haydn composed the tunes. The recordings were a pleasure to listen to, in some instances improving upon the original. This concert must have satisfied those who complain, with some justification, that our meetings tend to neglect the raison d'etre of mechanical musical instruments, — their music.

After the tea interval, Christopher Proudfoot conducted with professional profesionary the Society's Agreed Age

proficiency the Society's Annual Auction, during which a considerable number of lots found new owners, to the mutual advantage of vendors, purchasers and the Society. This was the first auction organised by Roger Kempson and it is a compliment to him, and his many helpers, that it followed the same standards of smoothness and efficiency established by his predecessor, Jim Colley.

Brian Young from Brighton, an expert in the art of French poliching

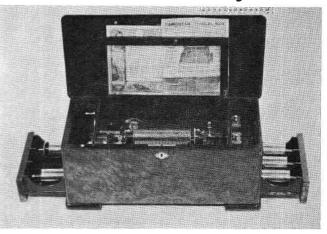
expert in the art of French polishing, demonstrated his skill at a table at the rear of the room following the auction. The crowd of members surrounding him was proof of the degree of interest in the techniques used and advice freely given by this professional craftsman.

Thus ended our Summer meeting for 1980. There was no Annual Dinner this year, a decision taken by the Committee which had been endorsed by a majority of those present during the Annual General Meeting.

(A Correspondent)

## Paillard's Amobean style

If Mermod was successful with its ideal range of interchangeable cylinder musical boxes, then Paillard was no less successful with its Amobean range. This example, sold at Christie's South Kensington earlier this year, has six cylinders each playing six airs, spares being kept in drawers.





## **GRAHAM WEBB**

II Ship Street Gardens, Brighton, Sussex

Telephone: 0273-21803/772154

#### **CURRENT STOCK INCLUDES**

Six air key wind Le Coultre.

Four air fine comb casket mandolin.

Austrian automatic musical clock.

Key wind six-air Nicole Freres.

Large coin-operated sublime harmony cylinder movement.

Nicole Freres twelve air 2 per turn.

JUST SOME OF OUR CAREFULLY SELECTED PERIOD PIECES.

Between Ship Street & Middle Street

Open: 10.00—5.30 Tuesday—Saturday



## JACK DONOVAN

93, PORTOBELLO ROAD,

LONDON, W.11.

Telephone 01 - 727 - 1485

Specialist in
Mechanical Music
Automata
Singing Birds
Music Boxes
Polyphons
Juvenalia
Unusual Clocks
Phonographs
Gramophones
&c

## How to re-string a Piano

#### by Harvey N Roehl

THE purpose of this article is to show interested amateurs how to accomplish the re-stringing of an entire piano. It is not necessarily the way work is done by professional re-stringers, nor is it the way work is done in a factory. But it works and works well, as evidenced by numerous instruments in the Vestal collection that have been done this way.

This paper does not attempt to go into all sorts of problems that may or may not have to be taken into account when doing a restringing job. It is assumed that the bridges and the pins in them are sound, that the pin block is good enough to accept tuning pins and will hold them properly, that the soundboard has the proper crown, and so forth. It of course assumes that the piano is of sufficient value to justify the work. The idea is to make clear that any piano hobbyist can easily do this work, once shown how.

Before starting, you will need to have on hand the following tools: wire cutters that will cut piano wire (Vise-Grip pliers with a cutter work well); ordinary pliers, roundnose pliers; small drift, 4-lb hammer, small hammer, tuning pin driving punch, short needle-nose pliers, micrometer or wire gauge, string hook, 2 machinists jacks or an auto cantilever jack or 2 wood shingles plus some blocks of wood (to support pin block in a grand piano), coil lifter, tuning hammer or wrench, 6in ruler (or your own gauge), flexible steel rule or wood carpenter's rule.

You will also need the following materials: quantity of plain piano wire of proper sizes; set of replacement bass strings; set of tuning pins of proper length and diameter; wood bushings (if required).

#### Procedure:

- 1. Put the piano on its back, with good firm support under the pin block (wrest plank). If a grand, make sure the pin block is adequately supported under where new pins are to be driven, by placing jacks and blocks (or 2 mating shingles and blocks) between the pin block and the key-bed.
- 2. When removing old strings, be sure to release the tension uni-

Quite often when acquiring a player piano, rusted or broken strings dictate re-stringing. This is not a superhuman task for the careful amateur. Here Harvey Roehl, a registered craftsman of the Piano Tecrnician's Guild, sets out the steps and the processes involved.

formly across the width of the instrument. Since the total tension is many thousands of pounds, a great deal of potential energy is involved which can be dangerous if mishandled.

- 3. Make some sort of chart of all the plain strings (as opposed to the "wound" or wrapped strings) using a wire guage or micrometer as they are removed, to insure getting the right sizes back in place. Observe the stringing "pattern", and especially any strings which are "single" rather than "looped" strings. Be sure to note the height of the pressure bar above the plate or pin block.
- 4. Put all the "wound" bass strings in the right order on a wire loop, so when you send these off to a string manufacturer he'll know what to do with them.
- 5. It is easiest to start restringing at the treble end of the piano, because the smaller wire is easiest to handle, and as one gains experience the heavier wire presents less difficulty than otherwise might be the case.
- 6. Drive in new wood bushings (if the piano uses them) using the pin-driving punch (it is handy to put in at one time just those that apply to a group of wire size; then one doesn't lose count). Drive in the first two pins (or one, if a single-wire is used at the end of that section) such that the wirehole is at right angles to the length of the string, and such that the hole is ½in above the surface of the plate or the pin-block if the plate doesn't cover it.
- 7. Measure the distance from the hitch-pin to a point mid-way between the tuning pins just placed. Add 8 inches to this

measurement; then cut a piece of wire to this total length.

- 8. Hold the ends of the wire parallel to each other in one hand, with the ends apart the distance that the new pins are apart from each other. Using the other hand, locate the end of the loop so formed. Using the round-nose pliers, form a hairpin bend at this point of such a diameter as to accommodate the hitch-pin.
- 9. Some leave the pressure bar in place when re-stringing; others put it in place after all strings are in. If it is left in place one must of course feed the hairpin end of the newly-looped piano string under it, then over the treble bridge, and then hook it to the hitch pin. On a grand piano, feed the strings under or through the agraffes and capo d'asto bar, as appropriate.
- 10. Each wire should extend past its tuning pin just 3 inches. If too long, cut off the excess. If too short, make a new wire!
- 11. Using pliers, put a sharp  $90^{\circ}$  bend with a  $\frac{1}{4}$ in leg in the end of each wire, pointing toward the hole in the pin.
- 12. Place the end of the wire in the pin hole. Using the small pointed pliers, hold the wire in such a manner that the tuning pin can be turned with the tuning hammer letting the wire feed neatly around it. It takes about three turns to draw the wire snug, and the distance from the bottom of the newly-formed coil will be about ¼in from the plate or pinblock as a result.
- 13. Repeat this process with the other leg of the looped wire.
- 14. Make sure the wire is properly placed around the bridge pins before drawing really snug. Us the small drift to insure that the hairpin bend is snug in the notch behind the hitch-pin. If necessary, pinch the two wires together just above the hitch-pin to insure that they are going to remain parallel.
- 15. Draw the wires snug, and no tighter at this time. Examine the coils formed, to make sure they are neat, packed together, and at right angles to the pin. If they are not, the small drift and hammer can be used to move the top

continued on page 344

### Belle Vue Box Repairs

Kent Road, Congresbury, Near Bristol. BS19 5BD. Tel. STD (0934) Yatton 832220

We not only repin musical box cylinders (more than TWO HUNDRED so far) but carry out complete overhauls to what we consider are very high standards. For example, mainsprings are removed and properly cleaned and lubricated. Cracked spring ends are dealt with, barrel hooks refurbished or replaced, barrels and bridges rebushed. Governors are stripped, cleaned and inspected. We take no chances here; any worn part, be it endless, wheel or pinion is replaced. Combs are cleaned by the gentle impact of tiny glass beads which remove rust and dirt but leave the steel untouched so that the tuning is not altered as it can so easily be by the usual abrasive methods. If comb tips are badly worn they are cut back a few thousandths of an inch using special equipment, Cases are repaired and hinges, catches, locks and screws polished and lacquered.

#### This is what we mean by a complete overhaul.

We supply a detailed Estimate which must be agreed before work starts. We do not know it all, but we do know a bit about

#### REPAIRS TO CYLINDER MUSICAL BOXES

We also sell restored items of mechanical music.

#### THE PLAYER PIANO PEOPLE

for players and everything to do with players, new and old

NEW UNIVERSAL AMPICO REPRODUCING PIANO —

NEW UNIVERSAL PLAYER PIANOS

NEW AEOLIAN PLAYER PIANOS — PEDAL AND ELECTRIC

NEW KIMBALL PLAYER PIANOS — ELECTRIC

NEW PLAYER ORGANS - NICKELODEONS

#### **PIANOCORDERS**

Klavier, Mastertouch, Jazzmaster, Evergreen and QRS music rolls available from stock Klavier, Duo-Art and Ampico new rolls

Secondhand players and music rolls, 88 and 65 note usually in stock

Repair materials and books. 18 sizes tubing, 4 types of leather, 4 types of cloth in stock

WRITE FOR FREE CATALOGUE



3 Lyndewode Road, Cambridge CB1 2HL;



(Call by appointment

#### **Book Reviews**

MECHANISCHE MUSIKIN-STRUMENTE FRUHERER ZEITEN UND IHRE MUSIK by Ernst Simon. Breitkopf & Härtel, Wiesbaden, West Germany. 115pp, s of t covers, 240mm  $\times$  170mm ( $9\frac{1}{2}$ ins by  $6\frac{5}{8}$ ins). Frontispiece, nine pages of music. DM 20.

Simon's valuable work on the music of mechanical instruments was first published in 1960 and rapidly became one of the most important reference works on the musical aspects of early specimens. As befitted such a work, it was soon out of print and has not been available for many years.

Now twenty years on comes a reprint, lithographed from the original. The main difference is that the new edition has the pages of musical examples bound in as part of the text rather than in the form of a separate pamphlet contained in a pocket at the back.

While this book remains as distinguished a work as ever, it is a pity that it has not been revised to include the author's erudite comments on the work which has taken place in the intervening years since the first edition. There is, for example, the music of the Mozart organ in the Utrecht museum, and the various Handelattributed abbreviations of Handel music for Clay clocks which have been discovered.

It is to be hoped that this valuable reference work will be updated and produced in English translation before too long: it remains too valuable a document to be limited just to the German language.

MEN WHO HAVE MADE PIANO HISTORY by Alfred Dolge. Vestal Press, New York. 242pp, hard-bound, 242mm  $\times$  160mm (9½ins by  $6\frac{3}{8}$ ins). Numerous illustrations.

Many are familiar with the magnificent book "Pianos and the Makers" by Alfred Dolge which was first published in 1911 and produced in facsimile by Dover Publications in 1972. This study of the history of the piano, with some major emphasis on the birth of the player piano in America, is one of the most interesting documents on its subject.

Dolge was born in Chemnitz, Saxony, on December 22, 1848 and was educated at Leipzig. At the age of 17, he left for New York

having completed an apprenticeship at the piano factory of his father. He returned to Leipzig in 1867 for but three months tempted by the offer of a partnership in his father's firm. However, he chose to return to America and work towards establishing a German-style manufactury there. A fortuitous position with Frederick Mathushek was secured where this inventive makers' experimentations proved useful to the young man. An account of his successful move to consign a dozen of his employer's square pianos to the furnace is given in the title already mentioned.

It was in 1869 that Dolge realised that the best leather for the making of pianos, not to mention the best piano felts, came from Germany. He began in business importing and selling German piano sundries. In 1871 he started up the Eagle Felt Company and began manufacturing. Within three years, his business was expanding at a fantastic rate and by 1876 he was the recipient of two medals and diplomas at the Philadelphia Centennial Exposition.

As piano and organ building expanded, so did Dolge's business and in 1878 Dolge branched out into soundboards — the result of early seeds of experimentation sowed with Mathushek.

It was in 1875 that he set up business in a small township North of New York which had a population of not more than 100: this was to become the legendary Dolgeville.

In the early part of 1898, through a series of well-documented and unfortunate circumstances, Alfred Dolge entered financial difficulties and by the summer of that year, he was bankrupt and his empire had collapsed. This was in 1898, not "shortly after the turn of the century" as this new book states.

"Pianos and their Makers" was for a long time thought to be the only work of the man who was so close to everybody in the industry during these formative years. However, it appears that he wrote a second part to this book with the same title but sub-titled "Men who have made Piano History". This was first published in 1913 and must be one of the least well-published books of all times since its existence is not even catalogued.

Now the Vestal Press has produced this in facsimile. It would be fatuous to take even one example from the wealth of information in this fine book: no random

choice could do it justice. Dolge is able to write so clearly on the people whom he knew and obviously respected. He tells us in gentle asides how Rudolph Wurlitzer was an authority on violins whose judgement was accepted by other experts, that Charles Steinway was the man who "discovered" Paderewski, and that the said gentleman "saw the light of the world on June 3, 1857, is a room directly over the first warerooms of Steinway and Sons, in Walker Street, New York, and lying in the cradle he could hear the best musicians of those days play on the pianos built by his father and grandfather."

There is, of course, a lot about player pianos and the men who made them. Indeed, this is truly the companion volume to that earlier one and the serious historian will want to use the two together. Highly recommended reading.

HOW OLD IS MY MUSIC BOX? by David R Young, published by the author at 210 Glen Ellyn Way, Rochester, New York, 14618. 32pp, paper covers, 230mm  $\times$  95mm (9ins by  $3\frac{3}{4}$ ins). Line illustrations. \$3.

This is a little pocket-book intended to be carried by the prospective collector on his perigrinations around junk markets and antique shops in the quest for musical boxes. It sets out the parts of the musical box and shows the novice how it works.

Written in an essentially popular vein and illustrated more for representation than accuracy (there is a drawing of a snail cam with eight steps and about 16 teeth, and a grossly out-of-proportion sketch of the parts of a musical box guaranteed to confuse the representationalistic realist) this should serve as a stepping stone to better things. Some of the descriptions are open to criticism. For example, Mr Young writes: "Before 1814 the sounds made by music boxes (sic) were high-pitched, buzzy and squeaky". Further on, he says: "About 1839 or 1840, a new innovation (sic) appeared. Two combs, mounted side-by-side, were used to create a new and different sound." This description of the forte-piano, presented without illustrations, will conjure up all sorts of marvellous mechanisms to the reader who omits to translate "side-by-side" as "end-to-end".

A basic sketch of a simple table disc machine would have been of

## John Cowderoy Antiques





Fine Victorian Musical Bracket Clock in walnut, with a 12 air, 2 per turn Nicole Fréres piano forte musical box in the base.

### EASTBOURNE'S MOST INTERESTING ANTIQUE AND COLLECTOR'S SHOP

Antique Musical Boxes, Clocks, Barometers, Furniture, Dolls, Silver, Gold, Collectors' Items

### THE MUSICAL BOX CENTRE

All our machines are restored for your pleasure and investment.

### **FULL RESTORATION SERVICE**

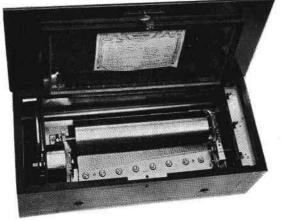
quotations given for the repair and restoration of

### ANTIQUE CLOCKS and MUSICAL BOXES

(Including gear cutting, making missing parts and re-conversions to original state) i.e. anchor to verge, work carried out by expert B.A.D.A. Distinction Diploma Qualified craftsmen (West Dean College).

> 42 SOUTH STREET, **EASTBOURNE Telephone (0323) 20058**

# Sotheby King and Chasemore



A fine quality musical box inscribed Nicole Freres a

A line quanty musical box inscribed Nicole Freres a Geneve circa 1875, no. 42981 playing 12 airs, sold on July 29th, 1980 for £1,100.

BI-MONTHLY SPECIALISTS SALES OF MUSICAL BOXES POLYPHONS, PHONOGRAPHS, CLOCKS, WATCHES, SCIENTIFIC AND MUSICAL INSTRUMENTS are held at the Pulborough Salerooms.

Contact our Specialist Jeremy Walters for details. Sotheby, King & Chasemore, Pulborough, Sussex Telephone: (07982) 3831 RH20 1AI



### **Lesley Evans**

PLAYER PIANO SPECIALIST

High Quality Grand and Upright Player Pianos Restored throughout to the Highest Possible Standards usually available from stock.

### A Large Stock of Original Rolls (88 and 65 note)

Plus the entire range of NEW JAZZMASTER AND RAGMASTER **ROLLS** 

Always available at Competitive Prices

#### VISIT US AT LISS

(phone Liss 3382 for appointment) or send S.A.E. for details to:-

P.O. Box 12 . ALRESFORD . HANTS.

value.

The booklet concludes with a useful list of dates for American patents from Patent Number One of 1836 through to Number 3,781,914 of 1974 — hardly, I should imagine for a musical box.

A useful, if very basic, pocket guide but with the cost of musical boxes today, the prospective purchases, one feels, will wish to equip himself with a deal more knowledge of the subject before setting forth for the shops.

**COLLECTING PHONOGRAPHS AND GRAMOPHONES** by Christopher Proudfoot. Christie's South
Kensington Collectors Series.
Studio Vista, London. 120pp, hardbound, 252mm  $\times$  200mm ( $9\frac{7}{8}$ ins by
8ins). Extensively illustrated with
colour and black and white pictures
and some line drawings. £6.95.

Many musical box collectors also collect talking machines of various kinds and for a long time there has been a noticeable absence of anything approaching a guide for collectors.

Now the new secretary of the Musical Box Society of Great Britain (who is also chairman of the City of London Phonograph and

Gramophone Society besides being head of Christie's South Kensington mechanical music department) has produced such a book.

The opening section looks at the position of three of the major names in the business — Edison, Columbia and HMV - followed by an alphabetical section on other, lesser makes. The concluding section discusses in practical terms how to assess the merits of a prospective purchase, how to date a machine and finally how to go about repair and restoration. A glossary of terms is then followed by two pages of what must be the most dubious part of the book a guide to prices. Christopher Proudfoot knows along with everybody else the problems and pitfalls of price-guides. However, his estimates (no doubt out of date already!) allow plenty of room for manoeuvre and the pages also serve as an index.

This interesting book is the more valuable not just for the wealth of knowledge and experience imparted to it by its author, but by the outstanding quality of the illustrations. Even musical box buffs will be moved to respect this . . .

LYNDESAY G Langwill, author of Church and Chamber Barrel Organs, is now in his 83rd year, yet remains as redoubtable a historian as ever. His Index of Wind Instrument Makers first appeared twenty years ago and has been expanded through five editions, the last being in 1977. Now, to the delight of the student and historian alike, he has done it again with a brand new edition — the sixth — priced at £13.50. The first was fewer than 200 pages in length: this one has 331 pages packed with a wealth of small-type information. A commendable labour this and a most valuable documentation

CATALOGUE 1978-81 (The Player Piano Co, Inc, Wichita, Kansas). 180pp. Fully illustrated, \$3.50.

It is a departure from normal book review practice to feature a suppliers' catalogue of wares, but this very unusuual work warrants such a deviation. The Player Piano Company is run by one of our members, Durrell Armstrong, who, it will be remembered, several years ago created a stir among piano rebuilders by scorning modern plastics and so-called rubberised cloth and put back into production high-quality rubber cloth to the exact specification used by Aeolians at the turn of the century.

Armstrong, one at once sees, is an enthusiast who is in business to give vent to his enthusiasm for player pianos. Besides listing his wares in the normal commercial manner in this attractive A-4-sized booklet, he provides so much extra information that I am in no doubt that this should be re-classified as a reference work.

There is an extensive list of piano playing actions and which makers used which types, there are helpful hints in identifying actions and how they work together with high-quality drawings and photographs, there is a masterful description of how to re-

cover pneumatics and equally noteworthy and helpful tips in abundance. A valuable series of articles describing the entire process of restoring a number of more popular actions is included.

This catalogue is not just a valuable guide to the player owner, but it is the best value for money you can find today.

WATCHES OF FANTASY (MONTRES DE FANTASIE) 1790-1850 by Oswaldo Patrizzi and Fabienne X Sturm. Tribune Editions, Galerie d'Horlogerie Ancienne, Geneva, Switzerland. 150pp hardbound, 245mm x 188 mm ( $9\frac{5}{8}$ ins by  $7\frac{1}{2}$ ins). Numerous full colour illustrations, also some black and white, £25.

This beautifully illustrated book is the result of the collaboration between the technical manager of the Swiss horological auction hous Galerie d'Horlogerie Oswaldo Patrizzi, cienne, and Fabienne Xavière Sturm, the curator of the Musêe de l'Horlogerie et de l'émaillerie in Geneva. It concerns a private collection of unique and exquisite watches dating from the end of the 18th century through to the mid-19th century. All are outstanding examples of the crafts of watchmaker and enameller. number of them with musicwork.

Like many modern Swiss books, this one is bi-lingual being first in French, and then the second half in English. The illustrations, however, run through both parts with captions in French and English. Strangely, this otherwise satisfactory approach is somewhat spoiled by printing the English text in an italic typeface, so making it somewhat harder to read.

The book traces the development of the Geneva makers' overseas market, pointing out that many Oriental buyers bought everything in pairs, so it was not uncommon for a "unique" specimen to be represented by two matching examples for the same customer. The richness of the Chinese market and the fact that many of the pieces made for that part of the world featured music is described in a generally well-written and fascinating text.

The book is enriched not only by its colour plates but by a 31-page list of watchmakers who practised in Geneva beaween 1750 and 1850. This is a fine complementary list to any musical box makers' list and adds much to our knowledge. This, incidentally, is in French only, but is easy to follow.

### Pamphlets and Facsimiles

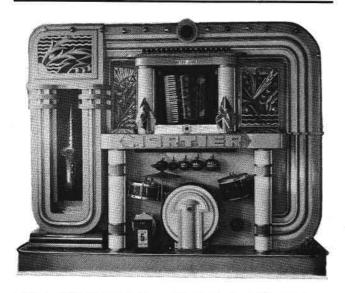
The indistrious Peter Schuchnecht of the Musikhistorische Gesellschaft has just produced in facsimile a catalogue first published during the 1890s by Frati and Co of Berlin. This 20-page reprint illustrates barrel pianos, street and dance organs, a very smart-looking drawing room instrument called the Quintett-

Orchestrion available in 96-key version (eight registers) down to 64-key, and the familiar range of portable and portative street organs. This also quotes prices.

Recently, Mr Schuchnecht reproduced from the Editor's personal collection the catalogue of Wellershaus organs published around 1900.

### Mortier 92-Key Dance Organ





Completely restored and in excellent working condition.

Mains driven compressor.

Dimensions approximately:-Width 3·20m. Height 2·50m. Depth 2·00m.

### Price £12,000

Write:- Janet Lawfer, 'Four Winds', Haynes West End, Bedfordshire

Telephone: (0234) 740258



# paydisc Reco

INTRODUCING MUSIC OF THE THREE-DISC SYMPHONION (Eroica) — From the Bornard Collection, New York: RCB 7 (disc or cassette).

This magical sound is produced by the set of 3, 13½ in diam. discs playing simultaneously on 6 double combs. 24 items incl. Tales of Hoffman, Aida March, Bells of Corneville, Stephanie Gavotte, The Mocking Bird, Estudiantina Waltz. Von Hummel (Choral), Symphonion March, La Poloma, Silent Night, Ave Maria, Verlassen Verlassen, Skater's Waltz, Monastery Bells, etc.

also from the Bornard Collection on disc or casette:

AB3: CHRISTMAS MUSIC BOX — 15 favourites from 5 boxes.

boxes. RCB4: MUSIC BOX WALTZ MELODIES — 26 waltzes from

RCB4: MUSIC BOX WALTZ MELODIES — 26 waltzes from disc and cylinder boxes.

AB5: GOLDEN MUSIC BOX FAVOURITES — popular music from the Gay 90's and Stephen Foster songs.

RCB6: REGINA SINGS OPERA — 20 opera favourites from 27in. discs, Regina music box; the Accordion folding top type. other mechanical music releases: on record only, except where marked:

MUSIC FOR THE MAGIC LANTERN (SDL 297): 4 street pianos, Penny Piano, Pianola, etc.

SUBLIME HARMONIE (SDL 303): Popular classics from a 24jin. Polyphon and Nicole Freres, etc. boxes.

MECHANICAL MUSIC HALL (SDL 232): various disc and cylinder boxes, plus Orpheus Disc Piano, street and player pianos.

The office of th

cylinder boxes, plus Cipical 2...

PARRY'S BARREL ORGAN (SDL 234): the Longman's pipe barrel organ of c.1805 restored to excellent condition.

PIPES, BARRELS and PINS (SDLB 271, also on cassette): 17 instruments incl. Kuhl and Klatt Mandoline and Xylophone Piano, Violana Virtuoso, Poppers Clarabella, Weber (Inika).

Send: £4.75 for SDL/AB/RCB prefix: £3.75 for SDLB/prefix. POST FREE (you may deduct 35p for each item ordered after the first).

Overseas: add 75p per item postage, plus 55p to total if paying in own currency.

SAYDISC RECORDS, INGLESTONE COMMON, BADMINTON, GLOS. GL9 1BX
Please mention ref. MB3 when ordering or requesting lists.
(Trade enquiries invited — special commissions undertaken).

Westerstein stein stein

#### SPECIALIST DISC BOX REPAIRS



### J. D. WEIR F.B.H.I.

370 Victoria Avenue, Southend - on - Sea, Essex. Telephone: Southend 614684.

All aspects of work on cylinder boxes undertaken.

Services offered include :-Cylinder re-pinning—no limitation to size.

- Eccentric or worn cylinder pins re-ground true to cylinder pivots.
- All manner of comb work.
- Cutting back. Re-tuning.
- Re-leading and Tuning.
- Re-facing star wheels.
- Setting up and adjusting gantries.
- Motor repairs.

In fact anything necessary to completely overhaul your musical box.

Work can be collected and delivered anywhere. Distance genuinely no object.

### Letters to the Editor

### Junod and Cuendet

Robert P Atkinson writes from Kendal in Westmorland:

AS A matter of interest, I have seen An matter of interest, I have seen some Juned-type tune-sheets of the very colourful card variety with the Cuendet trade mark on the bottom left-hand corner. (This is the "anchor" trademark with the letters J and C either side of the shank at the top and the letter T centrally beneath the anchor). As you say, these cards must anchor). As you say, these cards must have been supplied by one manufac-turer and ordered by various musical box makers. My own specimen was given to me by Baud Freres when I visited them in 1964.

Editor's comment: Mr Atkinson also sent a photocopy of a tune-card by Allard & Sandoz (the style shown as number 3 in Appendix II to the book Musical Box) with the trademark but without the names and legend engraved in the top border. Other than this, every other detail of the card is identical as is the style of writing of both the tune titles and the composers (two separate hands as usual) and also the gamme number above the centre of the bottom edge. The tune-sheet shown in the book is No. 4526, 13<sup>n</sup> 27<sup>m</sup>. That of Mr Atkinson is No. 4267, 16<sup>n</sup> 27<sup>m</sup>. Whereas the one printed in the above-mentioned book shows the music of two cylinders of an Organo-cleide, Mr Atkinson's is headed "8 airs Concerto-Piccolo".

### New barrel organs

Ian Alderman writes from Blandford Forum, Dorset:

YOU may be interested to know that after doing a degree course at university (English, not mechanical engineering!) I am setting up a workshop in Dorset specializing in the manufacture of small barrel organs. I aim to present the classical repertoire of these instruments, leaning heavily on the major contributions to it of Haydn, Mozart, Beethoven, Handel and C P E Bach. In due course I hope to be able to offer repair facilities for old organs, and to make new barrels for old

organs.

Having started my career with the restoration of early pianos, my interest in mechanical instruments was stimulated from that idle curiosity with lated from that idle curiosity with which most people regard them, to a desire to emulate it, by a small and exquisite instrument by Davrainville. This was dated 1823 and had a chromatic compass of 27 stopped wooden pipes. It was driven by clockwork and had 3 barrels. It played operatic airs from Rossini operas. It was very beautiful. After I repaired it, it went to live on the Isle of Man it went to live on the Isle of Man

I am presently working on two of the barrels, one of which plays 11 of the Haydn pieces, and the other 13 to the Mozart Andante "Fur perform the Mozart Andante "Fur Ein Orgelwalze", (K616) This last piece is the full 143 bar version, not that which omits the development

I trust that you find the information

of some interest

Editor's comment: I hope that Mr Alderman will favour us with more details—and pictures—in due course.

### **Comments from Copenhagen**

Claes Friberg writes from Copenhagen's Mekanisk Musik Museum:

A FEW days ago I received the highly interesting Journal of the Musical Box Society of Great Britain. It was fun to read in the "Editor's Notebook" about your travels around Europe, but it was a pity that this time you could not visit Mekanisk Musik Museum here in Copenhagen. However, I feel that you could accumulate much informa-tion when visiting collections on the continent, and I urge you and other collectors to do so.

My purpose for writing to you today is to make a few comments which you might want to publish in the Journal.

Polychanger Prototype. Surely this Polphon  $24\frac{1}{2}$  inch changer is an early one, and I assume that this must have been the forerunner for the Model 1N. I have seen two of these within the past few years, and also I have at two separate occasions bought Polyphon separate occasions bought Polyphon 24½ inch discs that were not round but trimmed. The idea of course is that when the changer places the discs in the bottom storage where they are resting directly on the flatbottom-plate, then they are always correctly lined up to be lifted into place at the starting point next time they are being played. A primitive idea—but it works well. It is interesting that the instru-ments I have seen both came from the Munich area. Since some instruments are around today they cannot be pro-totypes, but definitely have been in production probably to a smaller extent using the ideas from Symphonion (although they had the motor mounted in the top of the cabinet) until the special Polyphon changer patents were ready for production. That the name of the tunes on the discs is printed

upside down on all of the 8-corner shaped discs indicate that the bedplate with combs was supposed to be at the top of the cabinet!

Hollow cylinder piano. This instrument with the perforated metal cylinder was made by Paul Lochmann in Leipzig from around 1905 to 1920. The system was incorporated in piano/ mandolin pianos as well as small orchestrions with piano and percussion. The instrument in the Walt Bellm Museum as well as the orchestrion in in the Lindwall collection both came from me years ago. I could definitely say that they were made by Lochmann from catalogues that I had on hand. In the "Encyclopedia of Automatic Musical Instruments" on page 488 the instrument in the very middle is a typical metal-cylinder-barrel type. Notice the drive holes on each side of the barrel!

Musical clock extravaganza. Many years ago I had the opportunity to acquire in Sweden a Petter Strand clock (manufactured in 1802) with 12 barrels. As far as I know it is the only clock of this type surviving outside of Sweden.

The repertoire on the barrels is interesting. Since the clock is still waiting for restoration at a time in the (hopefully) not too distant future, I have not been able to listen to the tunes, but there is music by Haydn, Mozart and Grenser! To put things right I might mention that the Strand clock mentioned in your report was manufactured several years after the Swedish King Gustav III had died, so of course it was not made for him but probably for another person in the royal family. The organ here in Denmark has got 35 keys, 2 of which are used for register-changes.

### Barrel organ by Butler found

Ian Mason Hill writes from Crawley,

BACK in 1976 I managed to purchase a barrel organ and although basically sound it was not in playing order and indeed had not been since it was pur-chased in the 1930s. All 18 keys were rusted into the keyframe and half of the metal pipes were badly distorted. All the leatherwork needed renewing and the gilding and gesso had fallen off the rank of dummy pipes on the front of the case.

As I slowly dismantled it, more serious damage became apparent. Fortunately I knew somebody who was able to give me valuable advice on the pitfalls of restoration and also realising my own limited knowledge I started to look for someone who could undertake the specialist restoration required. These jobs, such as the rebuilding of the windchest, slides, bellows and so on, I eventually had done by some professional organ builders on a freelance basis.

Before I delivered the bits for restoration, I dismantled as much as I felt confident and replaced various broken pallet springs and sorted out the keyframe and followers. Inside the windchest I came across the maker's label and now feel that it was very remiss of me not to have photographed it. I am reluctant at this moment to remove the front of the chest because I had so many problems before with rusted screws that I feel it is best to leave well alone. As far as I can recall,

the label read:
"Made by James Butler, late of G
P England"

and the address was either Oxford Place off Regents Street or Regents Place off Oxford Street. It was also dated 1810.

This label would appear to confirm that Butler did at least make one barrel organ and, judging by the barrel tune lists, the instrument would appear to be a chamber organ as the tunes are mostly secular.

Editor's comment: This is indeed an interesting discovery. Regents Street in London was not created until long after 1810, the main thoroughfare from South to North being the somewhat squalid and narrow Swallow Street which today survives as but a very short street, its old course largely obliterated by Regents Street.

### Indian programmes

Jim Hall writes from Kendal, Cumbria: RECENTLY I had in for repair a large and heavy musical box with organ accompaniment. It is unusual to find a long-play box with four mainspring barrels which is not interchangeable. The organ underpart was completely missing, and I have renewed it, making a new bellows and cuckoo feeder

### **CALENDAR 1980-81**

September 6th, 7th

First Leeds City Barrel Organ Festival, Leeds, England

September 24th, 25th, 26th, 27

Musical Box Society International. Annual meeting and convention, Marriott Hotel, Stamford, Connecticut, USA

December 6th

Musical Box Society of Great Britain. Winter Meeting, Kensington Close Hotel, London, England

March 21st, 1981

Musical Box Society of Great Britain. Regional meeting, Moor Lodge Hotel, Branston, Lincoln, England. (Meeting organiser: George Worswick)

July 17th-19th or 24th-26th, 1981 (dates to be confirmed)

Second Swiss Barrel Organ Festival, Thun, Switzerland

June, 1981 (date to be confirmed)

Musical Box Society of Great Britain. Annual General Meeting and Summer convention, London, England

September, 1981 (date to be confirmed)

Musical Box Society International. Annual meeting, Dearborn, Michigan, USA

Convention and event organisers are invited to send in dates for regular publication in "The Music Box" to aid members throughout the world in planning their participation.

### **MUSICAL BOXES**

**BOUGHT AND SOLD** 

at

# Preston Park Antiques

88 Beaconsfield Road, BRIGHTON, SUSSEX, BN1 6DD

(Situated on the A23 one-way road system into Brighton)

Tel.: Brighton (0273) 508327 mornings otherwise 507775



A selection of both restored and unrestored boxes are available



OPEN: Mon.—Fri. 10 a.m.—1 p.m. or by appointment

## Harwood Gallery.

Full overhauls
polishing and complete
restoration
of
Mechanical Musical
Instruments

We specialise in stringed instruments melodicos, barrel pianos orchestrions etc.

We always have a variety of restored/unrestored instruments for sale which Clients are most welcome to view

# Town Centre House Merrion Centre Leeds

Tel: 0532 440666 daytime

0274 617172 evenings

frame, with new ribs and leatherwork, and linkage to the governor. All four female Geneva stops were missing, this being the cause of one mainspring having come disconnected from its hook. The musical box must have been exported to India, because it played Indian tunes. The case was in a deplorable condition, with veneer lifting and missing, no doubt due to the climate. Also there was a peculiar smell (incense?) about the box when opened. I have had in for repair other boxes with this peculiar smell about them, with the sides of the cases invariably coated with a black solution over the brown grained finish. One such box with a Jerome Thibouville Lamy tune sheet listed six tunes:

l Suratha 2 Behaga 3 Bhup Bibasch 4 Rhasha 5 Ragini Saranga 6 Bhupaht and painted on top of the lid in large letters:-

#### H HORMUS JI- DEBOO 1907

An acquaintance of mine has been to India 22 times, and has brought back various items of mechanical music, and no doubt other people are bringing back to this country, items from India as well.

### The big one . . .

A correspondent writes from Japan: I AM a new member of The Musical Box Society. I have a book "Clockwork music". I want to make a music box  $(15\frac{1}{2})$  double comb. But, I have not materials. Please answer me these question. (Detail please). I am interested in making a music box. I am a piano-tuner.

Editor's comment: Anybody wishing to make a musical box would be well advised to begin by making a detailed analysis of a number of existing mechanisms and then start by making a copy of one. On the success of this first venture should be based any notion of setting out on a path towards original design.

### **Identity problem**

Ronald Leach writes from The Devon Museum of Mechanical Music, Holsworthy, Devon:

WE have in the collection a box containing a hidden drum and three bells. There is no tune sheet. The cylinder is  $11\frac{5}{3}$  in long and  $1\frac{1}{3}$  in diameter.

The snail makes six changes but only five tunes are pinned none of which have been allocated a title—due to the fact that no one has yet been able to do so.

The only mark other than the number, are the initials JB on the bed plate.

A number of members and also a party of our American counterparts have not been able to give this box a makers name. Not being in any way an expert on music boxes, I wonder if any members can say who the maker was?

Editor's comment: This is the age-old problem with so many musical boxes wherein the maker has not left his mark. Generally speaking, it was the later boxes which went nameless, but some of the early specimens were anonymous. It is, though, unusual to find a hidden drum and bell box in this category. JB usually means that the bedylate was made by Billon. It seems a very late example.

### Problems with an organ box

Bert Walsh writes from Sydney, Australia:

I WONDER if you could help me with a problem that we have with regards to an organ music box. We are in trouble with the scales. Could you or would you know how the scales run normally: the marks that are on mine are as follows:

(There follows Mr Walsh's transcription of  $2\frac{1}{2}$  octaves in sol-fa notation.)

This is as the marks appear to read but having not had to do up an organ box before I am a little stuck but I would guess there would have to be an octave in there somewhere but which one are they usually tuned to, the first, second, third or fourth octave on a piano? There is no tune sheet so we can't tell the maker but it looks like a Heller. Since we have taken this one in for restoration we have had several inquiries to restore others but have hesitated because of the scales. Are there any books on the subject of scales and notes on organ boxes that you know of?

This one we are working on now was in such a mess that you could not believe we had to make the organ

section completely. Every part of it had been in a shed for years and rats were living in it, their urine had rusted teeth and pins right off and split all the timber and they had eaten most of the leather of the bellows. Its taken quite a lot to get it to this stage but is finished apart from the notes, so if you could help me out on this one I would be most grateful.

Editor's comment: Here is a classic example of a little knowledge being a highly dangerous thing! Never attempt to tune a musical box, be it combs or reeds, to a piano. Since, Mr Walsh, you presumably have the old reeds or their frames you will be able to judge the pitch of the reeds (usually four foot, sometimes eight foot). The tuning scale you already have, so all that remains is to match the first organ note with a comparable comb note. This will give you concorde on pitch and a basis for tuning. Next I would urge you to avoid any possible damage to your work so far and have a competent musical box restorer complete the task for you.

### The pitch of Nicole's master combs

Joseph Kubin writes from Battimore, Maryland:

MR. JOHN CLARK mentioned in his book, that he had the original Nicole Freres, master, tuning comb. Is it possible for me, to beg, borrow or buy from someone a copy of an electronic, strobe-tuner reading of those scales? I am in the process of repairing a badly "out-of-tune" comb, from a 38,000 series box. Being a perfectionist in my work, I would like to tune it correctly. I have taken readings from two other Nicole boxes and found it somewhat confusing. Even if I were to transpose the scales, (my comb is E-flat) it wouldn't be of much help. For example: The first box was in the key

of A and most of the notes read 12 to 37 cents sharp. The comb of the second box was in the key of D, but the largest percentage of those notes were 3 to 25 cents flat. Then too, on the comb itself, the same notes varied from octave to octave. Although, these two music boxes sounded reasonably well, I am certain that years of wear has caused a uniform change of all their notes, some slightly more than others.

I would greatly appreciate any help you can offer me in solving this problem.

Editor's comment: At least two Nicole master combs survive. Perhaps their present trustees would care to reply.

### Piano re-stringing

Continued from page 336

coil down if necessary, and the string hook and coil lifter can be used to raise the bottom coil. Use the latter tools in one hand, and the tuning hammer in the other, to effect this process. Piano wire seems real difficult to handle at first, but like everything else, it gets easy with a bit of experience and one shouldn't become discouraged if the first few coilings have to be re-done.

16. After all 88 notes are restrung (assuming it's a full-sized piano) they can be gradually brought up to pitch — but only after insuring that the pressure bar (on uprights) is at the proper level. It is good practice to go across the entire set of pins about four times to keep the tension uniform across the piano in accomplishing this. After this is done, one can proceed to tune the piano, and it usually takes three or four

tunings before the instrument will stay in tune, if it is in good shape generally. The tuning itself does not have to be done gradually; bring the strings right up to pitch or maybe even a little bit higher; it will settle back a little bit no matter what is done to it.

The maintenance and adjustment of pianos is a highly skilled job which is, nevertheless, within the scope of the amateur who is prepared to take great pains and to acquaint himself with the principles of piano action — by no means as simple as it at first seems.

In this connection, the budding restorer is advised to obtain and study a good book on piano actions. Much good advice and detailed help is provided in Art Reblitz's book, "Piano Servicing, Tuning and Rebuilding".

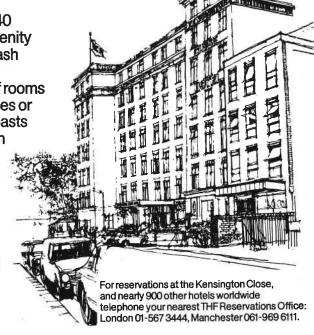


quietly at your service

Just off Kensington High Street, this 540 bedroom hotel offers quests every amenity from a swimming pool, sauna and squash courts to two inspiring restaurants and intimate bars. There is a wide variety of rooms available for conferences, dinner dances or even small meetings. And the hotel boasts the enviable peace and quiet of its own water gardens.

For further details contact The Manager, Kensington Close Hotel, Wrights Lane, Kensington W85SP Tel: 01-9378170

Selected by the Musical Box Society of Great Britain as the venue for its London meetings.



### Classified Advertisements

Members: 5p per word (bold type 7p per word).
Minimum cost each advertisement £1.
Non-members: 10p per word (bold type 14p per word).
Minimum cost each advertisement £2.
CASH WITH ORDER PLEASE TO: Advertising Manager.
Arthur Heap, 7 Victoria Crescent, QueensPark, Chester, CH4 7AX, England.

#### FOR SALE

ORGANS, Pianolas, Musical Boxes, Phonographs and other Mechanical Music wanted and for sale. Monkton House, Old Craighall, Musselburgh. 15 minutes from Edinburgh City Centre, Callers by appointment 031 665 5753. CHAMBER BARREL ORGANS are now being made in very limited numbers. The cabinets are of finely figured mahogany with gilt display pipes. We supply three large barrels and specialise in pinning the mechanical organ music of Haydn, Mozart, Beethoven, C. P. E. Bach and other Masters from

### SPECIAL NOTICE

Due to circumstances beyond the Editor's control, it has been necessary to hold over several important features from this issue. The next issue will complete our article on the construction of a player electronic organ, will continue the occasional series on photography, will contain a paper on Musical Clocks.

the eighteenth Century. Enquire of Ian Alderman, 29 Orchard Street, Bland-Dorset. Telephone Blandford (0258) 55397.

YOU HAVE A FRIEND IN AMERICA! At AIG we are constantly shipping music boxes, organs, orchestrions, reproducing pianos, and other automatic instruments to MBSGB members in Great Britain and elsewhere. Our low costs, plus economic shipping, have made our values so attractive that a large percentage of our business is now to European clients (just the reversal of the situation a few years ago when we imported heavily from Europe). A bank draft for \$5. US funds will bring you a sample copy of our latest catalogue (regular price \$10). Or send us a bank draft for just \$30 and you will receive an air mail subscription to our next six issues. Complete satisfaction guaranteed. And here's a special invitation. If your travels bring you to California, stop by for a visit. We would be delighted to see you. Hundreds of automatic musical instruments are on view awaiting your selection. American International Galleries, Department MG, 17792 Fitch. Irvine, CA 92714 USA.

Geoff Worrall can supply you with most materials for PNEUMATIC MECHANICAL INSTRUMENT Repairs, Best quality imported rubber and synthetic cloths as well as cheaper British cloths available. Also stocked, rubber tubing. Adhesives. Cork and neoprene bonded cork gasket sheeting. Zephyr skin for bird boxes. ORCHESTRELLE cloths and reeds etc. Send 15p for samples and list to: — M.I.M. Supplies, 16 Barber Road, SHEFFIELD, S10 1ED. ALWAYS a very large stock of orchestrions, monkey organs, music boxes, fairground organs, automata etc. Be a subscriber to our free mailing list. Retonio's Mechanical Music and Magic Museum, Blumenrain 16, CH-9050, Appenzell, Switzerland. (071) 87 25 44.

#### WANTED

MONOPOL Gnome Automaton with disc mechanism Symphonion style 25GS "Gambrinus" 19th century Whistling Automaton Ornate Dutch Street Organ. US denomination slot machine with music box attachment. Will purchase outright or offer items in trade. Martin Roenigk, 26 Barton Hill, East Hampton, CT 06424, United

WHETHER you want something or just have something to sell or exchange, advertise it in *The Music Box.* Your notice will be read all over the world by those who are interested in mechanical instruments.

ORGANS and orchestrions operated by cardboard music, barrel or paper roll wanted, even not working. Bob Price, 3 Bridle Crescent, Bournemouth. 0202

ALL KINDS of mechanical music instruments. We pay high prices for outstanding music boxes, orchestrions, automata, barrel organs etc. We especially look for Mills Violano, Hupfeld Violina, Chordeophon, Encore Banjo, Eroica disc changer, orchestral disc boxes, working models, merry-go-round with horses, interchangeable orchestra table music box, very large orchestrions etc. Retonio's Mechanical Music and Magic Museum, Blumenrain 16, CH-9050, Museum, Blumenrain 16, CH-9050, Appenzell, Switzerland. (071) 87 25 44.

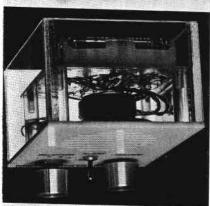
# Electronics and the modern musical box

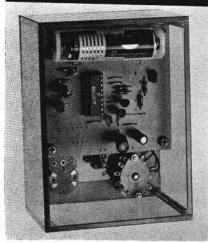
PURISTS among collectors tend to turn up their noses at things which do not operate by springs, belts, valves, perforated paper, tuned steel combs and cardboard.

Yet over the past few years, such strides have been made in the design of electronic musical instruments and in memory circuits that self-playing musical instruments and programmable devices now approach the sophistication of their more revered antecedents.

Recently the editor visited the factories of Matsushita Electric, National Panasonic and Technics in Japan and was shown the latest developments in musical instrument technology. These







make quite fascinating changes in our concept of electronics in music.

Dealing first with electronic organs, one of the major criticisms levelled at these things is that they do not really replicate the sounds of the instruments they claim. Certainly the early Hammond organs of the 1930s did much to deter the purists from electronics where a circuit was induced to try to copy a known sound.

Today, though, the process is reversed. Every musical sound can be represented graphically by a line on the screen of an oscilloscope. That profile is the profile of that sound. Using computer technology, it then becomes possible to design an electronic circuit to replicate that profile. If the two profiles coincide, then the result has to be the same sound.

By designing a circuit for the sound rather than accepting an arbitrary sound produced by a circuit, just about any tone can be copied.

Today's electronic organs can be designed to produce the identical sounds of a church pipe organ with every chosen voice. The editor was shown a cathedral organ built for South Africa and the effect was staggering — it was the sound of a vast cathedral instrument. ment.

At the Technics showroom in Osaka, the latest range of home organs offers a wide range of tonal possibilities which, when used with a memory device or used as the playback unit to an encoded programme tape, clearly in-dicates that the era of the player organ is back with us again.

Pictured on this page is a tiny musical box, one of only three prototypes manufactured by Matsushita Electronics Corporation at its Nagaoka factory near the ancient capital of Kyoto.

Key to the operation is what is loosly called a computer chip — in this case a CMOS LSI with the mellifluous title of MN6221. Its special characteristic is that it can generate not just a simple tune, but its simultaneous harmony.

Programming the chip can produuce a maximum of seven melodies, each of 128 + 15 divisions. It will produce two tones at once which can them-selves be subdivided into, say, a crochet and two sequential quavers. It will also play continuously and the switching off operation, regardless of the place in the melody, automatically returns the sequence to the start again.

Power for the chip comes from an ordinary 1.5v penlight cell.

MEC's one-chip micro-computer is designed for clocks, chimes, rhythm or tempo generators (an answer to the metronome demand?), and telephone tone production. But the specimen seen here plays two tunes — one of them a delightful version of Greensleeves — and with its transparent case, is tiny enough to hold in the palm of the hand. It is, of course, not a production item but goes to show what can be done with medium to handless. with modern technology.

Will the collector of the future need a degree in microelectronics in order to repair his musical boxes? It could well

### Letter from the President

AT OUR Annual General Meeting on June 7, 1980, our honorary editor Arthur W J G Ord-Hume announced his intention of resigning at the conclusion of the current volume of *The Music Box*. There is one more issue in the current volume, the Christmas number, so in effect the post will be vacant at the end of this year.

Having edited some 63 of the 70 editions of *The Music Box* produced by the Society, and having established the enviable standards of quality by which the publication is recognised, we owe an enormous debt to Arthur and he has fully earned a rest from these arduous duties, which other commitments are rendering more and more difficult for him to discharge.

The Committee has already asked Arthur to reconsider his decision, but

have been assured it is final. We must

have a new editor.

To the majority of our members, the journal is the society and its production is, in my opinion, without doubt the most important single function of the society.

Replacing Arthur is a formidable task, but one that has to be done, and as the Committee does not know the capabilities and enthusiasm of every single member in the United Kingdom they feel it highly desirable, because of liaison with the printers, that the editor should reside in the United Kingdom), I am addressing this request to the UK membership for a volunteer or suggestions of somebody whom we could approach.

I do not believe it essential that the editor should be a proficient and pro-lific author with an encyclopaedic knowledge of the subject. He, or she, can always turn to others for articles and for advice on the accuracy of articles and for advice on the accuracy of articles submitted. In fact, I fear, that someone attracted to the post of editor as a means of self expression might write themselves out within two or three issues. It is my opinion that what we need is someone who knows the technique of laying-out a magazine the technique of laying-out a magazine and able to prepare contributions for publication, or is willing to be taught this by Arthur, with an understanding of good English and an ability to solicit and encourage the members to contribute to what is, after all, their magazine. Given a choice of an enthusiastic would-be author and someone willing and able to diplomatically shoulder the administrative duties, I would choose the latter — at the same time hoping for a combination of both.

The editorship of such a publication as ours will involve considerable work, but give immense satisfaction in view of its international standing and reputation. The society needs—desperately needs—a candidate for this vital honorary post. May I appeal to all the members to seek and suggest such a person, who will receive every help and backing from the Committee, including the retiring editor, together with the thanks of the society.

JON GRESHAM, President.

### **Record Reviews**

IT IS always exciting when a newlyrestored self - acting instrument plays for the first time in recent times. Those who rebuild orchestrions or fair organs know the thrill when the task of converting a mute pile of remains into a working instrument is crowned by the first time music is produced.

In 1961, the remains of a Bruder organ were found at Gouda. Although largely complete, it had suffered from age and exposure and was what our transatlantic members would identify as a "basket case". Although its early history remains somewhat sketchy, the instrument was given a new lease of life by Jan Gilet of Rotterdam and now, named *De Troubadour*, it belongs to a private collector in Holland.

Le Troubadour de Volendam (Arion ARN 33542) is a new release distributed in Britain by Conifer Records of West Drayton, Middlesex. A total of 13 tracks provide us with the fine sound of this 56-key organ. The sleeve notes, however, tell us that the organ has "56 touches à anches libres" which is patently incorrect and seems to demonstrate that organ specifications are likely to get confused in any language!

The fine Bruder trombones come over well in this recording although it must be said that some of the arrangements are a little on the thin side. Even with 56 keys, the master arrangers in the Low Countries have been heard to do much better! Also, although this is an organ of German origin, I have heard Dutch-owned organs is better tune: this one is decidedly off in parts.

The quality of the recording and the stereo balance is good. The mix of music is good and, in terms of musical arrangement, the selection on side two is the better.

The first Swiss barrel organ festival held last year at Arosa was such a success that it is to be repeated next year. It certainly seems to have been a valuable gathering of organs from all over Europe and thus it is nice to be able to have a memento of the occasion in the form of 1. Schweizerisches Drehorgel-Festival Arosa (Claves D 907), the product of what seems to be a pretty good quality record company based at Thun — significantly the location chosen for the second festival

This is a delightful disc featuring quality recordings of a number of



instruments recorded on the streets of Arosa. However, there is one very big problem — there are absolutely no descriptions of the tracks or the instruments. Somewhat arbitrary sleeve notes, in English, French and German, tell us that there were 76 organs, "the smallest: 12 notes, half the size of a shoe-box, the biggest: a Dutch street organ, fixed (sic) on a truck, the youngest: a band-organ by Oehrlein with a bettery played in public for the first time, . . . everything that makes mechanical music with bellows and cranks." Hardly, you will agree, of much help.

What makes it all the more regrettable is that this is such a good recording in a splendid open-out sleeve full of pictuures. Somebody should have avoided spoilling this fine ship for a ha'porth of tar!

But one track in particular is very interesting and worthy itself of considerable attention. This is a duet between a small free-reed mechanical organ played by Heinrich Brechbühl and an unspecified church organ at an unspecified venue. This plays God Save the Queen with organ obliggato and variations complete with shades of Beethoven, Bach and a fine mimic of the street organ playing off-key.

It is fair to assume that Claves will record the next Festival as well. This time they should complete the exercise they have started so admirably and tell us exactly what instruments preferably with specifications) we are listening to.

In conclusion I want to make reference to a record that I have so far only heard a small part of. The reason for this is that the disc arrived from Holland without any protective packing and my local postman is a dab hand at getting a 12in square package through an ordinary 9 x 2 letterbox opening!

Confrontation (Philips 6410 767) features the Müller organ in the famous St Bavo Church in Haarlem playing in concert with three Dutch street organs (de Arabier, de Oranjestead and a 25-key flute organ) from the stable of Gijs Perlee. It was recorded on July 10th last year and features special arrangements of an early French dance from 1325, dances by the Polish composer of 1525, Jan van Lubin, Mendelssorn's Sonata opus 65 No 3, and the title piece, Confrontation, by the famed Dutch organist/composer Piet Kee.

Being left with only the closing tracks of each side intact on my review copy, I can vouch for the fact that there are some very interesting effects and exciting sounds on this most unusual disc. Kee's composition calls for some clever book-cutting for the three organs, and even more clever playing by the grinders themselves. The sleeve notes tell us that the former was the work of Tom Meijer — and the latter by walkie-talkie radio!

From what I have heard, then, this is a fascinating collector's item and should be added to the discography of the mechanical organ. There is a fine sleeve picture in full colour of the Marcussen-rebuilt Christian Müller organ in its magnificent setting in the St Bavokerk flanked by the organs of the street (see picture), and a somewhat whimsical picture on the extensive notes accompanying the disc show "one Gijs" with The Arab inside the church while municipal organist Piet Kee eyes the monster and rubs his head!

### LIST OF MEMBERS

R H Hall, Woodlands, Barrells Road, Thurston, Bury St Edmunds, Suffolk, IP31 3SF

Roger M Brooks, Draffin Lea, 5 Loudoun Street, Stewarton, Ayrshire, KA3 5JD, Scotland T Sauter, 12709 MacDuff Drive, Tantallon, Maryland, 20022, USA
Susan M Wedlock, The Vines, Amesbury Hamlet, 1620

1621

Timsbury, Bath, BA3 1HF Peter D Smith, 3619 Syracuse Avenue, San Diego, 1622

California, 92122, USA
Robert Grainger, 25 Hill Top Avenue, Cheadle Hulme,
Cheshire, SK8 7HZ 1623

Franssen, PO Box 50, 2110 AB Aerdenhout, 1624 Holland

1625 John King, Kosy Korner, 34 Beachwood Avenue, Worthing, Sussex

1626

1627

1629

Worthing, Sussex
Keith Gayton, 15 Shore Road, Ainsdale, Southport,
Merseyside, PR8 2PU
Cdr D K Hale, Cornwall Aircraft Park (Helston) Ltd,
Clodgey Lane, Helston, Cornwall, TR13 0GA
Keith A Reedman, 107 Curzon Street, Long Eaton,
Nottingham, NG10 4FH
Frank C Beal, 734-24th Street, Santa Monica,
Carlifornia 90402, USA
Ian Rutherford, Venton Greenacres, Lilley, Luton,
Bedfordshire, LU2 8LS
Kellermann Burkhard. Hahndorfer Strasse 1, 8000 1630

1631

1632

Kellermann Burkhard, Hahndorfer Strasse 1, 8000 München 70, West Germany
Henri Klein, 4243 El Cajon Boulevard, San Diego, California 92105, USA
Sam V Bell, 10913 North 29th Street, Tampa, Florida 33612, USA
R Yates, "Grassgards", Charney Well Lane, Grange over Sands, Cumbria, LA116DB
Douglas Heffer 4 Villa Montrolm F 75018 Paris 1633

1634

1635 Douglas Heffer, 4 Villa Montcalm, F-75018, Paris, France

1636 Andre Monnot, 8 Place Henri Bergson, 78310 Elancourt, France

1637 Trygve Kile, Vestre Haaland, 4500 Mandal, Norway

Robert Waugh, 639 Main Street, Watertown, Connecticut 06795, USA Anthony G B Paice, 35 The Ridgway, Sutton, Surrey. 1638

1639

1640 L Webster, 25 Hanbury Road, Clifton, Bristol, BS8 2EP

1641 R Taylor, 15 Dunstarn Lane, Adel, Leeds 16, Yorkshire

John A Ianieri, 418 Madison Road, Willow Grove, Philadelphia, USA 1642

Carl Semon, 8310 Octavia, Miles, Illinois 60648, USA 1643

John Bernhardt, 813 Lincoln Avenue, Addison, Illinois 1644 1645

60101, USA
Gordon Hall, Slack Cottage, High Wray, Ambleside, Cumbria, LA22 0J9 1646

Mrs Margaret J Evans, 11 Salem Drive, Saratoga Springs, New York 12866, USA Bill Kap, 14130 Euclid Avenue, East Cleveland, Ohio 44112, USA Ronald N Palladino, 1656 Fir Avenue, Solvang, 1647

1648

1649

California, USA

Mrs Pamela S Brown, 171 East 84th Street, New York 10028, USA

Mr and Mrs John Haas, 512 Holly Hill Drive, Evansville, Indiana 47710, USA

Werner D Allison, 1817 Clark, Burbank, California, 91506 1150 1650 1651

1652 T

T L and A D Dordell, 2240 Lorain Road, San Marino, California 91108, USA
R Dauphinee, 7 Hennessey Drive, Acton, Massachussetts 01720, USA 1653

C C Cones, 3440 Meier Street, Los Angeles, California 90066, USA

#### CHANGE OF ADDRESS

John E Davis, 123 Easthampton Road, Wokingham, Berkshire

John D Lyon, 928 South Serrano Avenue, Los Angles, California, 9006, USA T V Wetherell, 9 Skirlaw Close, Glebe Village, Wash-

598

ington, Tyne and Wear William L Scolnik, 1001 2nd Avenue, New York, 10022, USA

Dr P H Schram, T Nawijnstraat 25, 8245 HH Nijbeets, 891 Holland

Mr & Mrs J Binder, Chateau de Tusey, 55140 Vaucouleurs, France 1245 1321 Shane Seagrave, 75 Queens Drive, London, N4

1440 Wiesmann, D Winterhurerstr, 69 CH-8006, Zurich Switzerland

Paul A Hebden, 25 Moor Flatts Avenue, Leeds, Lancashire, LS10 3SS

### CORRECTION TO ADDRESS

1610 W C Visser, Kerkstraat 30, 5126 GC, Gilze-Rijen, Holland



### The Symphonion.

On Tuesday we had, at the invitation of Messrs. Ellis Parr and On Tuesday we had, at the invitation of Messrs. Ellis Parr and Co., an opportunity, together with other members of the press and gentlemen interested in the musical instrument trade, at 16, Long Lane, to inspect a number of the automatic musical-boxes, which, under the name Symphonion, have already made a certain name for themselves. The great feature of these instruments, which have been invented and improved by Mr. Ellis Parr and Mr. Lochmann, is that they are fitted with steel tongues worked by a rotating disc, as shown in our engraving, instead of a barrel. This disc being changeable, a great variety of times are played by the instrument, according to the number of discs used. Against the excellence and power of the tone of these instruments nothing can be said. The great advantage is, of course, the low price at which a really superior instrument can



THE SYMPHONION

be supplied and the simple construction, which prevents the instrube supplied and the simple construction, which prevents the instruments getting out of order, which is a peculiarity of a good many musical-boxes. The most popular type of the Symphonion is the £7.7s. instrument, which is excellently finished and ornamented, but it is supplied as cheap as £2.2s., while small toy boxes also with cheap changeable discs are brought out as low as 5s. Even a musical top is made on the same principle, the tunes being produced by a changeable disc whilst the top is spinning. We understand that a company is about to be formed to acquire the patents and the manufactory where the instruments are manufactured, and to thoroughly develop the invention. thoroughly develop the invention.

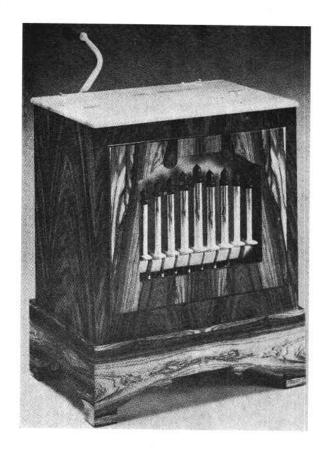
The story of Ellis Parr and Paul Lochmann is weil known. The news item, reproduced from the work English Mechanic and discovered for us by Graham Webb, appeared sometime early in February of 1888. Compare this with the item reproduced in The Pall Mall Budget for 16 February that year and reproduced on page 113 of "Clockwork Music'

What is interesting in the above notice is that it quotes the price which, at seven guineas, must have put it very much into the luxury goods bracket.

The big question-mark hangs over exactly what Parr invented and in what respects he believed it matched the invention of Lochmann, for an examination of Parr's patents show a motley assortment of devices, only one of which bears any relationship to the Symphonion. Parr seems to have hit on the idea of usuing an organette-type perforated disc with a comb but his drawings show that he had little idea how to realise the goal. The Editor is inclined to think that Parr's part, hailed as being large, was insignificant and that the disc musical box rightly remains the concept of Paul Lochmann.

# New from Keith Harding

The splendour of the barrel organ renaissance is captured in our new street organs from the House of Hofbauer. More than ten decades of experience in traditional organ building has made it possible for Hofbauer to produce these outstanding instruments, whose quality and technological excellence guarantee their impressive performance and lasting value.





These organs are a modern development of the traditional street barrel organ incorporating the latest materials and techniques. The use of perforated paper rolls with primary pneumatics in the manner of the much larger fairground organs ensures a rapid attack and decay with a minimum of mechanical noise and wear. The skilfully voiced pipework blends to give the characteristic tone colour of the traditional street organs which is neither too loud for indoor use, nor too soft for the occasional outdoor gathering. A wide selection of music is available by well known arrangers such as Carl Frei and others.



### SPECIAL OFFER

We are pleased to give our Friends and Customers the opportunity to acquire one of these delightful organs at a remarkably low price.

A twenty-note, two-stop organ, with a choice of either Pan Flutes or stopped wooden "Gedeckt" pipes displayed at the front, backed with a two foot metal "Principal" on a slider, which can be cut out for indoor use. The organ comes with one roll, others being available.

Only £1,495

(plus V.A.T. to U.K. residents)

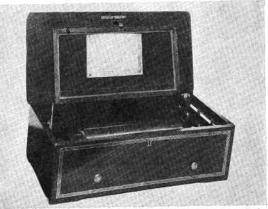
Direct from Britain's Leading Restorers of Clocks, Musical Boxes and Automata

KEITH HARDING 93 Hornsey Road, London N7 6DJ Phones: 01-607 6181; 01-607 2672

# Sotheby's Belgravia holds regular sales of Mechanical Music



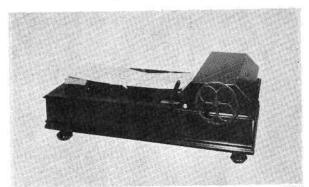
A 12 in Imperial Disc Music Box, Swiss, early 20th century, sold for £700 in June 1980



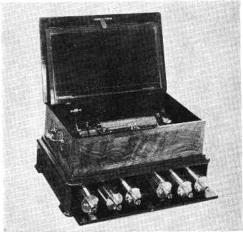
A Nicole Freres 'Forte-Piano' two per turn cylinder musical box, Swiss, c. 1880 sold for £1,900 in June 1980



A 11 in Symphonion Roccoco style disc musical box, German, c.1900, sold for £1,200 in June 1980



A 48 note Fratelli Curci Mandoline Piano Melodico Italien, c. 1900, sold for £1,900 in June 1980



A Jean Billon-Haller interchangeable cylinder musical box, Swiss, c. 1890, sold for £1,100 in June 1980



AF. Couchon 'Sublime Harmonie Bells in Sight' interchangeable Cylinder Musical box, Swiss, c. 1890, sold for £2,300 in June 1980

Our next specialised sale is scheduled for 5th December 1980 For further information please contact Hilary Kay

# Sotheby's Belgravia

19 Motcomb Street, London SW1X 8LB. Telephone: (01) 235 4311 Telex: 24454 SPBLONG Telegrams: Gavel, London