THE MUSIC BOX

a magazine of mechanical music

Volume 6 Number 5

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Journal of
The Musical Box Society of
Great Britain
Hon. Editor: Arthur W.J.G. Ord-Hume

Volume 6 Number 5

Contents

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The Musical Box Society of Great Britain,
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The Editor writes:

THE LAST issue of our Journal was produced at a time of great National stress which, coupled with the general affairs of the world, made its appearance both late and a marvel. Now, happily, things are if not exactly back to normal, then certainly much easier.

Throughout the first six months of this year, I have completed a lot of travelling and, axiomatically, viewed a lot of musical boxes. My most fruitful experience was a short week spent with our Member, Dr. Jan Jaap Haspels and his wife, Usine, at their home in Utrecht. During my stay and in addition to a detailed viewing of the many interesting items in the Nationaal Museum van Speeldoos tot Pierement, we made several interesting discoveries including one of great importance to our study of the development and construction of the early musical box.

Unseeing Eyes

Perhaps we take too much for granted when we look at a musical box today. Innured largely by modern technology, itself an inadvised foundation upon which to build our analysis of past times, so many of us tend to generate an oblivion to enshroud from view the plain fact that today we know very little as to how the first musical boxes were made. Wild guesses abound and sometimes these are thrown out with a degree of aplomb no doubt intended to imply the statement of authority. Amidst all this, though, we are slowly unravelling some of the past history and systematically wrenching from the wreaths of time's mists some of the secrets hitherto lost. Systematically

it becomes possible to re-write our understanding of the processes associated with the development of the musical box.

Errors and misquotations have oft times been perpetuated to the point where they may be accepted without question. That it is often richly rewarding to go back to first source is the premise of the systematic reseacher.

A yet richer reward is sometimes to be gained by the researcher who will take the pains to study a broad spectrum of related subjects and then apply what he knows, or justly assumes, to have been reigning technology contemporary with his research period.

Technology develops in two ways, although it is probably safe to say that in this present age, all, or almost all, technological progress is as the result of clearly-defined research paths. But originally the greater part of technological advance was achieved not so much by striving towards a goal, but by a strange admixture of accident and endeavour.

This is clearly shown in some instances by the complete failure of the inventor concerned to appreciate exactly what he has invented. It has taken time, wisdom and hindsight to identify the true merits of much early inventive work – the radio valve is one clear example. In other cases, engineering processes have systematically been cluttered with unnecessary processes through the failure of a basic understanding of what is taking place and what the final product is expected to do.

The evolution of the musical box frequently acts as a clear demonstrator of cumbersome thought processes and the lack of what we today, with typically twentieth-century jargon, would describe as 'critical path analysis'.

Not until the advent of Paillard and his first musical box factory, Cuendet and his production techniques, and other conceptually unfettered manufacturers, was the musical box properly re-engineered. It can often successfully be argued that this was not undertaken without loss of character, certainly without loss of that hard-to-define quality, style. But nevertheless, the original musical box really was a strangely-engineered gallimaufry of bits, all called upon to relate one to the other with resolute will.

All this really relates to the discovery we made at Utrecht back in April. This is the subject of an article in this issue and describes a little piece of technology which has been both forgotten and its extant evidence ignored in the intervening 175-odd years since its inception.

A Varied Content

A second major feature this months concerns a little-known musical box manufacturer known only to a few of us for his consistently high-quality musical boxes. He now emerges as one of the more important figures in the Geneva musical box manufacturing circles during the second half of the last century.

The subject of musical box tuning is one about which we have by no means heard the last. But one which has so far received scant treatment in the pages of THE MUSIC BOX is that of tone and, although much can be done to tonality by the design of the case, the fundamental tone of a musical box concerns the shape and form of the comb tooth. Member Alfred Thompson has now thrown down the gauntlet with a plea for some detailed analysis into comb tone in this issue.

At a recent meeting of the Committee of the Society, I was able to report that, thanks to the combined efforts of so many Members, we have a fine reserve of excellent material for the Journal. This is not to say that we do not need more, but it is indicative of the fact that we have Members who are prepared to spend a little time to pass on to other fruits of their hard-earned knowledge.

MBSI's Quarter Century

Our sister organisation, the Musical Box Society International, celebrates its 25th anniversary this September. Several of your Committee Members, including myself, will be attending the four day event in New York and it looks as though there will be plenty of 'side events' as well. Our Member Harvey Roehl, who runs the Vestal Press, tells me that he is having an open-house on the Wednesday before the meeting and

on the Monday following. The Roehl collection is varied indeed but majors on coin-operated pianos. Since Vestal is a suburb of Binghampton where many such instruments were originally made, perhaps this is not surprising. Anyway, those in New York State for the American meeting should not miss out on this kind invitation.

The actual MBSI meeting takes place at the Marriott Motor Hotel, Saddle Brook, New Jersey on September 26, 27 and 28 and the hotel is easily reached by direct airport limousine services from New York and New Jersey airports.

For me this promises to be my first MBSI meeting. Cyril de Vere Green, however, is quite a familiar figure at these conventions. Sadly, though, our earlier plans to arrange a group charter flight for Members to fly across the Atlantic had to be abandoned due to the uncertainties earlier this year.

A Question Of Size

Because of the delay in producing THE MUSIC BOX this year, and because last year we were effectively one issue short, our production schedule has fallen far behind. In fact, this present issue should really be the first for 1974! I am planning to try to catch up quickly on this shortcoming, In this issue we have some more outstanding pictures of most interesting and fascinating instruments. The next issue is planned to appear in August and then I will try to produce a bumper end-of-year issue to include the report on the MBSI Anniversary meeting. This will then help to return us to our stated policy of four issues a year.

While on the subject of magazine production, I personally would like to see THE MUSIC BOX change shape and format to either 10in by 8in, or the A4 size. This might quite conveniently follow the completion of the present volume. The disadvantages of changing size would, I feel, be outweighed by the enormous production advantages of a more economic size. My own feeling is that THE MUSIC BOX has been fettered by its present size, a non-standard legacy of the time when I used to produce it on a flat-bed hand-operated duplicator from typewritten stencils. This is just a suggestion. Does anyone have any comments to offer?

ARTHUR W. J. G. ORD-HUME

THE CORONATION
MUSICAL BOX

MEMBER Lyn Wright came across the advertisement for the Coronation (facing page and overleaf) in a copy of the magazine *Leisure* for 1904 and has kindly loaned it for reproduction here.

The Coronation was made by Junghans in Germany, at that time Germany's largest manufacturer of cheap, mass-produced clocks. It appears to play the same S-sized discs as the familiar Junghans and Symphonion small musical clocks. All the discs of these bear the Junghans trade-mark, a large letter J in an eight-pointed star, and it is probable that the discs were either made by Symphonion or under some form of licence since they are interchangeable. They measure 4.17/32" in diameter (116 mm).

The Coronation musical box itself is the same as the small-sized Style 20 Symphonion (which had a slightly different case) and is virtually identical with the Silvanigra, produced for sale in Germany in about 1902.

As for the name, one would expect it to have been produced around the time of the coronation of Edward VII in 1901. This, however, cannot have been the case in view of the date of the advertisement. None of these boxes is known to survive.

ERRATA

The Editor apologises for the following errors: page 138, after line 7 (top left) the following line should appear: 'organisation to do great things'.
The left-hand column of text on page 229 contains a transposition. The top ten lines should follow after the bottom line.
The item on page 230 was contributed by Member Graham Webb.

SELF-ACTING MUSIC BOX

Plays Hundreds of Tunes
Requires only Occasional Winding
Music can be changed almost instantly

Any Child can operate the Coronation Music Box

EASY PAYMENTS. NO GUARANTOR REQUIRED

The Coronation Music Box is an up-to-date musical invention. It is not one of those affairs that you are required to extract music by turning a crank like a hand organ, but is self-acting. You wind it up with the same ease that you would wind a clock, after which it is in readiness to play a large number of tunes. These tunes are represented by metal discs, each bearing the incisions essential to produce the particular song, waltz, gavotte, march, reel or other style of selection that may be desired.

You can quickly and easily change the Music Discs, any child can learn to operate the Coronation Music Box.

Our Special Price for the Coronation Music Box is only a guinea, which is the usual price at which small music boxes are sold which must be operated by turning a crank. Hence the Coronation Music Box may be easily valued at two or three guineas.

With each Coronation Music Box we give free, a set of five discs, of popular music. With the box we will send a long list of other selections, for which we will supply discs, as required, at only ninepence each. You can give an evening's concert of various pieces of music by keeping a variety of the discs at hand.

The musical notes emitted by the Coronation Music Box are sweet, delicate and very pleasing to the ear. You can play all the popular pieces such as "Florodora," "San Toy," "Belle of New York," and other latest operatic selections, "Lustige Brüder," "Soldiers of the King," Dan Leno's and other noted comedians' songs, "Auld Lang Syne," "Home, Sweet Home," Sousa's beautiful marches, religious selections, dreamy music, lively melody, and in fact, a great range of the music that you naturally like to hear.

Price only twenty-one shillings, including five discs. Sent packed, postpaid to any part of the British Isles for one shilling extra. Remit by money order or postal orders made payable at **London G.P.O., to Symonds' London Stores.**

On Easy Payments. Send only six shillings and agree to pay six shillings monthly for three months, making a total of twenty-four shillings. The Coronation Music Box will be sent upon receipt of the first payment. We do not send to foreign countries or the Colonies on the easy payment plan but require full payment with the order.

Now is your Opportunity. This is the time to buy a Coronation Music Box and gain rare enjoyment. Our terms are so exceedingly liberal that money need not stand in the way of making the purchase. You cannot buy a Coronation Music Box from any other firm. We are the sole importers of this most pleasing musical producer. Keep in mind, we will deal with you just as honourably by post as if you were to call upon us. **Address:**

SYMONDS' LONDON STORES

124-128, CITY ROAD, LONDON, E.C.

Also at 246, Edgware Road, London, W.; 64-72, Lombard Street, Birmingham; 126, Tottenham Court Road London, W.; 14, Peter Street, Manchester; 47-49, Newington Butts, London, S.E.

F 37

SELF-ACTING

UP-TO-DATE INVENTION

SYMONDS'
LONDON
STORES
PRICE

ONLY **21/-** ONLY

COMPLETE WITH A SUPPLY OF MUSIC

Will be Sold to You on

EASY PAYMENTS

Read our Offer on the next page.

PRICE COMPLETE, ONLY ONE GUINEA

INTRODUCTION

As a manufacturer of musical boxes, L.A. Grosclaude is a mysterious figure about whom little has hitherto been unearthed. I have seen perhaps half a dozen or so boxes by this maker, including the one which Murtogh Guinness jokingly referred to as his 'garbage box'. All have displayed a high standard of workmanship. Baillie tells us of two Grosclaudes – Abraham who came from Le Locle and who flourished at Basle in 1760, and Auguste of Les Brenets who, early in the last century, worked with Olivier Quartier on the design and manufacture of wheel-cutting machines. At the Great Exhibition in London held in 1851, Charles Henri Grosclaude of Fleurier in the Canton of Neuchatel showed two unusual and exotic watches.

Eugene Jaquet and Alfred Chapuis in their *History of the Swiss Watch* are presumably referring to Charles Henri Grosclaude when, on page 120, they write:

'Spain was an important outlet for the industry at Fleurier in the second half of the nineteenth century, through the intermediary of the firms of . . . Grosclaude . . . '

In the *Histoire de la Boite a Musique,* Alfred Chapuis quotes the official catalogue of the Exposition Nationale Suisse of 1896 regarding the works of F. Conchon and Grosclaude as follows:

'Des deus pieces de F. Conchon, toutes remarquables, l'une de seize pouces, 36 lignes, dit 'polytype' et la troisieme, une *rechange* de 17 pouces, 27 lignes: nous ne nous occuperons que de la derniere. Celle-ci est pourvue d'un systeme tres simple, invente par M. Grosclaude et qui permet le jeu continu a l'aide d'un declenchement applique a l'un des supports du cylindre; puis elle contient sur son cylindre de 27 lignes autant de musique que l'on en mettait precedemment sur un cylindre de 46 lignes, procede qui permet de reproduire des morceaux beaucoup plus longs; enfin on y constate l'effort d'arriver a de l'expression, c'est-a-dire a faire des nuances parmi des crescendos, des diminuendos, des accelerandos, des rallantandos, etc. Une fois sur cette voie, la bonne, on doit pouvoir aller plus loin.'

In this article, Pierre Germain of Geneva, gives the results of his research into this man who must surely be accorded a high place in the annals of the invention and perfection of the musical box.

A. O-H.

L. A. GROSCLAUDE, GENEVE

by Pierre Germain

MURTOGH D. Guiness, in the Autumn 1973 issue of the Bulletin of the Musical Box Society International, presenting his 'garbage' box, writes: 'On the left plate of the escapement cage, there is engraved L.A. GROSCLAUDE, GENEVE, presumably the name of the maker'.

Keith H. Harding and Cliff Burnett, in the Summer 1972 issue of THE MUSIC BOX, enquire: 'Can any member throw light on this manufacturer?'

To the best of my knowledge, Grosclaude is not mentioned in any of the books on musical boxes, except in the one by Alfred Chapuis. He claims that he could not find evidence that Gay had tried to introduce pipes and bells in musical boxes, an idea which was carried out later on by L.A. Grosclaude. He also indicates that at the Swiss National Exhibition of 1896, a certain Grosclaude was credited with an invention permitting an unbroken execution of a (long) tune (Chapuis refers, I suppose, to a helicoidal or semi-helicoidal movement).

In May-July 1880, an International Exhibition was held in Geneva. It concerned machines and tools used in the clock-making, jewellery and musical box industries. It was not really international since one counts less than 10 non-Swiss exhibitors out of about 90. The illustrated cata-

logue of this exhibition is well worth consulting.

As far as Grosclaude, L.A. is concerned, it contains the following information:

(i) an advertisement - reproduced hereafter – clearly stating that he was a maker of musical boxes;

(ii) a two-line notice concerning a table he published on calculations of springs in clockwork mechanisms;

(iii) a ten-page article that he wrote on musical boxes;

(iv) he was a juror at the exhibition.

The article *Les Boites a Musique*, although for the layman, is interesting for it gives some indications on the manufacture and trade before and around 1880. For instance:

(i) It was Ducommun and Kimmerling who introduced a reed organ to the musical box;

(ii) during its best period, Geneva produced up to 12,000 large musical boxes per year, with prices ranging from 20.– to 10,000.– francs*;

(iii) the nickel plating of nearly all musical box parts was a reality. Amongst the advantages, he mentions: an attractive presentation and a protection against rust for the steel parts, especially important for overseas exports.

(iv) movements existed allowing long playing times. For example, Grosclaude mentioned an unabridged overture of Guillaume Tell, lasting 10 to 11 minutes.

(v) a double-barrel clockwork mechanism had been invented by Billon and Isaac who were important makers of parts for musical boxes *(Fabricants de blancs)*.

* *For comparison, around 1870 a watchmaker was earning about 5 francs per day. The average price of a musical box of the 'cartel' type must have been about 250 francs.*

As far as point (iv) is concerned, he is most certainly referring to a box made by F. CONCHON and displayed at the International Exhibition of Paris in 1878, according to Conchon's advertisement in the 1880 catalogue.

The first point is quite interesting too because, contrary to Chapuis, Grosclaude attributes the reed organ invention to Ducommun and Kimmerling, and not to himself. He does not say anything about the time of this realization, but an official report on the clockmaking and musical box industry in Geneva in 1868, already indicates the existence of the reed organ. On the other hand, this report does not mention helicoidal or semi-helicoidal movements. The information concerning the nickel plating of musical box parts in 1880 is curious too since generally, one dates its introduction to musical boxes at around 1890.

L.A. Grosclaude must have been an important make and a good one too since he won a silver medal at the International Exhibition of Paris in 1878; the highest award given to a musical box maker at this exhibition, as he proudly points out in his advertisement.

The official Swiss report, published after the exhibition, gives the list of makers who received an award in 1878: 7 out of 9 exhibitors. The three highest awards went to Geneva firms:

GROSCLAUDE, L.A.
BREMOND, B.A.
LANGDORFF, D. et fils

Amongst the four others, two were from Ste Croix, one from Geneva and one from Teufenthal. Curiously enough, Alfred Chapuis, who must indeed have consulted this Swiss report, mentions only the Ste Croix makers.

A catalogue of the Swiss participation in Paris, lists the items displayed by L.A. Grosclaude in 1878 as:

(i) an orchestra box including a reed organ;
(ii) a box playing tunes of different lengths and capable of playing 40 minutes;
(iii) a 'harpe harmonique piccolo' with tune selector;
(iv) two musical clocks.

Grosclaude must also have had some interest in tools for musical boxes for, in the 1880 catalogue of the Geneva Machine and Tool Exhibition, one finds:

GROSCLAUDE, L.A., 2 bis rue Saint-Leger: 'Outils a pente reguliere pour boite a musique'.

I have no idea what this tool was supposed to do.

Note that this address is not the one in the advertisement. In fact, only to mention the 1878 and 1880 catalogues, I found four addresses associated with Grosclaude, L.A.:

5, rue du Mont Blanc
16, rue Kleberg
10, quai de la Poste
2 bis, rue Saint-Leger

Finally, it is worthwhile mentioning that in 1880 Grosclaude did indeed know who invented the musical box with a steel comb. He writes: 'The Musical box came into existence in 1796 only, when Antoine Favre invented the steel comb which still nowadays is the main feature of this instrument'. Apparently, this information was lost until Alfred Chapuis, thanks to his patient work, rediscovered it in 1954.

This article was first published in THE ORGAN, No. 98, Volume XXV, October, 1945, and is reproduced here with grateful acknowledgement to the publishers, Musical Opinion Ltd, and to the work of the late Andrew Freeman.

Thomas Dallam's Turkish Organ

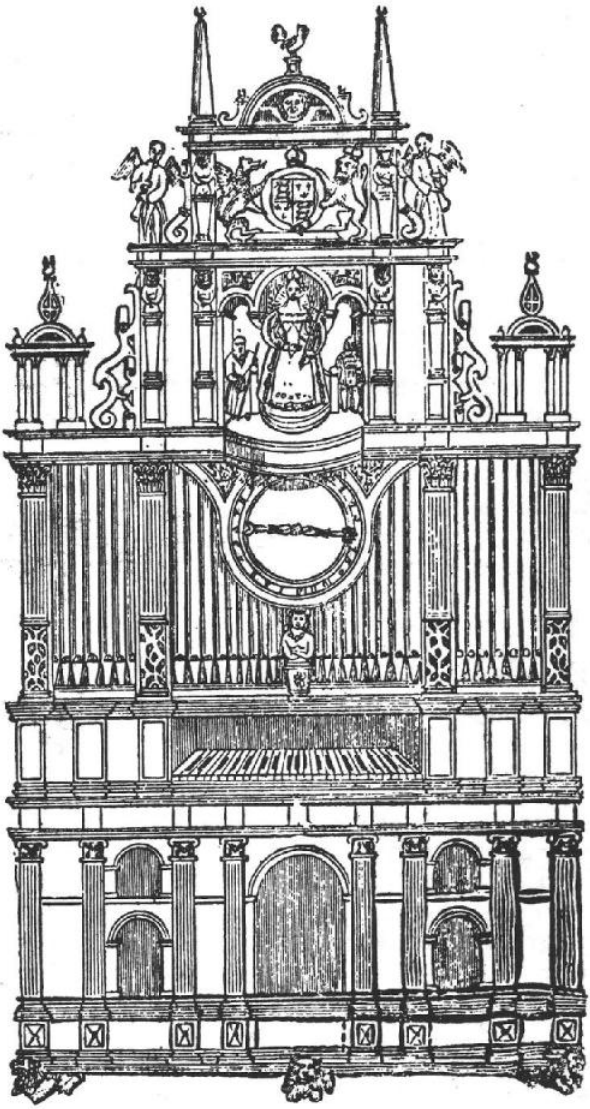
By ANDREW FREEMAN

IT is nearly sixty years since I first began to collect pictures of organs. They were very rare at that time, and only a small proportion were what one would call good. If they were culled from the illustrated periodicals they were mostly woodcuts, and often they were carelessly drawn, at least as regards the pipes. One artist, overcome by his experience at a mid-nineteenth century Norwich Musical Festival, put the front pipes of the organ at St. Andrew's Hall upside down. I felt that was wrong, and it was—though some famous Continental craftsmen had actually forestalled the imaginative draughtsman—but I kept the picture, and have it still. Amongst others that were acquired by means of cutting out expeditions of the same youthful period was an illustration and description that serves as the theme of this present essay. I remember wondering whether the thing was worth incurring parental discovery and rebuke, for it did not represent the kind of organ in which I was then interested. The decision was that scissors should be employed, and more than once since then I have rejoiced that I had the sense (or was it instinct?) to cut out and preserve a thing that is now rare as well as extremely interesting.

The picture is of a mechanical organ that was made about 1598 to the order of the Company of Merchants trading to the Levant. Nominally it was "a Present from the Queen," and an expensive one, but Elizabeth had nothing to do with the settling of the bill: that was the concern of the Levant Company,—their way of opening new markets or gaining concessions. I have made many attempts to discover the whereabouts of the original, but although I have come across many references to the instrument, I have not yet succeeded in my search. The most annoying thing is that the name of the Library or Museum was not stated by the unnamed contributor who made his discovery known in the pages of *The Illustrated London News* of October 20th, 1860. Could he have b-b-borrowed it? Here, at any rate, is his article in full :—

> PRYING among the unnoted treasures of our national manuscripts, we lately chanced upon a remarkable drawing on parchment, which represents an elaborate but nameless instrument of the Elizabethan era. This drawing has attached to it a specification and contract, not a whit less curious than the design itself, between Randolf Bull, citizen and goldsmith of London, on the one part, and Richard Stapers, governor of the merchants' company trading to the Levant, for and on behalf of the said merchants, on the other part.
>
> The document sets forth that the said merchants desire to have "a new instrument of extraordinary kind, and endowed with various motions,

both musical and of other special use, such as for the rarity and art therein used may render it fit to be sent from her Majesty to any Prince or Potentate whatever" ; and in consequence of this their wish having been expressed to Randolph Bull, the goldsmith, he had devised the one which is delineated in the drawing and described in the contract. In height, this instrument, which our Engraving shows in miniature, is stated as twelve feet and a half or thereabouts ; the breadth, five feet and a half ; and the depth, four feet and a half : the whole raised and supported six inches from the ground by five small brazen lions of diverse forms.



The principal outward features of this work may be thus briefly described : The basement is of carved oak. Above it is a panel-arch, "garnished with very curious pointed work of gold and other rich colours" ; on each side of it are two smaller panel-arches, with sixteen fluted and carved pillars, of which only the eight front ones appear in the drawing. After the second frieze, which is of oak, carved, with mortise and rebate work, there is a keyboard, the purpose of which was probably to direct and control the motions afterwards specified.[1] Its use, however, is not described, nor is there any explanation of the dial-plate which stands above, and has twenty-four hours marked upon it ;[2] but "the shutting

[1] It was, of course, the keyboard by whose means the organ was played.
[2] It was merely a twenty-four-hour clock dial.

in of the pipes" on each side of the dial and the eight Corinthian pillars are to be of oak, carved and gilded. After another frieze carved in oak there are four towers, one in each corner, each tower supported by sixteen pillars, and the whole surmounted by a vase and crescent. In the centre of the platform whereon these towers stand is the part named "The Presence," displaying a figure of Queen Elizabeth, adorned with sparkling diamonds, emeralds, and rubies, cut and set, to the number of forty-five. Encircling her Majesty are eight other figures, formed to move in the manner we shall presently explain. Above the next frieze are the Royal arms embossed, painted and gilded, and on each side a trumpeter. Above the next is a head endowed with mechanical motion to announce the hour ; and crowning the fabric is a cock in the centre, with a pyramid on each side,—finished with a gilded crescent.

The appended document goes on to state : "There shall be placed in the lower part of the said instrument three several strong, forcible, and artificial bellows, with a very strong, sufficient motion of wheels and pinions, and all other engines and necessary instruments and helps, very well wrought, and sufficient to drive and move the bellows at all times from time to time, for the space of six hours together, whensoever the wheels and pinions shall be applied to such purpose ; and that there shall be contained within the said instrument, a board called a sound-board, with certain instruments or engines called his barrel and keys, and five whole stops of pipes—*viz.*, one open principal, unison recorder, octavo principal, and a flute, besides a shaking stop, a drum, and a nightingale" [!] By means of the bellows, the barrel, keys, and other "engines" moving the said bellows, the pipes are to sound forth musically four or five songs without the hand of any person on the keys, and are to continue playing for six hours "without any intermission, or ceasing, or discord," at the pleasure of the person directing the instrument ; "and shall in the same way sound the shaking stop, the drum, and the nightingale, and every one of them severally" for six hours together, at the will of the director. Such are the functions of the instrument as a barrel organ, and the description would be perfect if it only added the names of the tunes played. Those which belong to it as a time-piece are set forth as follows : "Within the middle part of the instrument, and behind the dial and pipes, there shall be placed and contained nine several motions, very strong and artificially wrought, which shall perform from time to time the several actions and gestures following, viz.:—The first motion, being a clock, shall drive, make to go and move the true course of the sun and of the moon, and shall show the age of the moon truly every day, with her increasing and decreasing ; and it shall also show the reigning planets every day very truly. The second motion shall move an armed man, who shall be placed on one of the towers, and shall strike the quarter of the hour upon a fine, loud, and sounding bell. The third motion shall move an armed man in another of the towers, and shall strike the twelve hours of the day in their time upon a greater bell, very loud. The fourth motion shall make the cock to crow very loud every

hour, and as often as the director of the said instrument shall appoint; and the same cock shall be made strong, of metal, and shall be very artificially wrought, and made to flutter with his wings. The fifth motion shall be in the lower part of the instrument, and shall be a great barrel with a chime of very tunable bells, and shall be made to set to play a chime at any hour, as the person directing the instrument shall dispose. The sixth motion shall make all the persons (that is, the eight figures above described) to go in the presence and make their obeisance to the Queen's Majesty's image, and her personage to move her hand with her sceptre to every one of them as they pass before her. The seventh motion shall make the two trumpeters to lift up the trumpets to their mouths and to sound as often as the director shall set the time. The eighth motion shall move and open the mouth of the great head, and make the eyes thereof to move and turn every hour at the striking of the clock. The ninth motion shall move or turn an hour-glass which an angel shall hold in his hand, and turn it every hour."

The rest of the document stipulates that the instrument is to be finished and delivered before the feast of the nativity of John the Baptist next ensuing—a period only of ten months from the time when the articles were signed and sealed. The machine is guaranteed to keep in order for seven years, and the maker is to alter or amend it at the pleasure of the merchants. He is permitted also to deviate from the original plan with the sanction of a portion of them. The stipulated price is £550—nearly £3,000 at the present day—part of which is to be advanced at certain specified dates, and the remainder paid on the completion and delivery of the work. One of the concluding stipulations is that, if there shall not be three hundred ounces of pure silver used, the goldsmith is to pay his employer at the rate of six shillings and eightpence for every ounce there may be short of this quantity. There is no record to show how this singular instrument sped, or how the Queen was pleased to dispose of it, if, indeed, it ever came to her disposal.

This is all that the contributor had to tell of the wonderful mechanical organ, but he appends a couple of paragraphs dealing with musical clocks, barrel organs, and such like from the time of Plato to Flight & Robson's Apollonicon of 1817.

It will be noticed that there is no mention of Thomas Dallam in the document, yet he was, I am convinced, the maker of the organ part, and probably helped Randolf Bull, the contractor-in-chief, in the construction of some of the other parts of the marvellous contraption. Here is the evidence.

Volume LXXXVI. of the Hakluyt Society's publications contains a reprint of Thomas Dallam's Diary of his voyage to the Levant in charge of the instrument, edited by J. Theodore Bent. The late F. G. Edwards printed a considerable portion of the Diary in *The Musical Times* for October, 1905, including a page in facsimile, and Mr. Jeffrey Pulver also wrote an interesting article ("The Marvellous Adventures of an Organ Builder") on the same subject in *The Organ* for October, 1931, so there is no need for me to quote

from the Diary except such parts as have to do with the mechanism of the instrument,—for there are slight differences, though no more than would be reasonably expected between the designing of so complex a machine and its completion. The description is very brief, and refers to only some of the movements mentioned in the "specification" ; quite possibly not all of them were found to be practicable.

This description we get in the account of the first performance before the Sultan, and in Dallam's own words :

"The Grand Sinyor, beinge seated in his Chaire of estate, commanded silence. All being quiett, and no noyes at all, the presente began to salute the Grand Sinyore ; for when I lefte it [Dallam was not in the presence chamber but outside, within call] I did alow a quarter of an houre for his cominge thether. Firste the clocke strouke 22 ; than The chime of 16 bels went of, and played a songe of 4 partes. That beinge done, tow personagis which stood upon to corners of the seconde storie, houldinge tow silver trumpetes in there handes, did lifte them to theire heades, and sounded a tantarra. Than the muzicke went of, and the orgon played a songe of 5 partes twyse over. In the tope of the orgon, being 16 foute hie, did stand a holly bushe full of blacke birds and thrushis, which at the end of the muzicke, did singe and shake theire wynges. Divers other motions thare was which the Grand Sinyore wondered at." The Sultan was, indeed, much intrigued by all these wonderful goings on, and, like the many thousands who have watched the clock at Wells strike the hours, he also wanted a repeat performance. Would the thing go through all these movements again at the next hour? he asked the Coppagaw, or Chamberlain. The Coppagaw said "Yes," but, not being any too sure of himself, slipped outside to ask Dallam. Dallam said it would if he touched a certain pin which he had previously shown him. So the Coppagaw went back and when the clock had struck 23, "tuched that pinn, and it did the lyke as it did before." The Sultan was near enough to notice that when the organ played the keys moved. He asked how this was, and was told that they were the means whereby it could be played on at any time. This led to Dallam being called in. He was kept waiting for a quarter of an hour, during which time he used his eyes to take in the strange magnificence of his surroundings, and at length was told to play. This he did, though in some trepidation, because it involved turning his back on the Sultan and even brushing against the sacred person,—"which no man, in paine of deathe, myghte dow, savinge only the Coppagaw."

All went well, however, and Dallam was rewarded with a handful of gold.

An order to remove the organ to another room made Dallam miss his ship, but by travelling overland he managed to catch up with it and in due course to reach England,—in the spring of 1600, after an absence of about fifteen months.

A complicated piece of mechanism such as this could not be expected to remain in good working order for very long after its maker — or part-maker— had gone away, but the probability is that some of its movements continued to function for several years. (It had a seven years' guarantee.) Even then

it does not seem likely that the whole thing would have been scrapped, and it is not incredible that parts of it may still be in existence, waiting for one of the Young Turkish Party to turn from politics and reform to antiquities. When that happens he may be able to write a postscript that shall tell us whether anything corresponding to the Queen's present has been discovered: it would be satisfactory, though rather disappointing, if the search had only negative results, for at least we should know that the effort had been made.

As for Thomas Dallam and his family, records of their work have accumulated during the last half century. This is not the moment to speak of it or of them, but we may leave off with the thought of this, the earliest known of their many instruments, and of the head of the family as he recalled in after years his adventures and experiences when, as a young man, he was charged with the delivery of this present from Queen Elizabeth to the Sultan.[3] Surely no organ builder has ever had a more exciting tale—here merely hinted at—than that which Thomas must often have told to ready listeners whilst he was occupied with work of a more ordinary kind. Those who have access to the periodicals named might well turn to them and read, or re-read, the very interesting extracts from his diary there given. No wonder some of his sons inherited their father's taste for foreign travel.

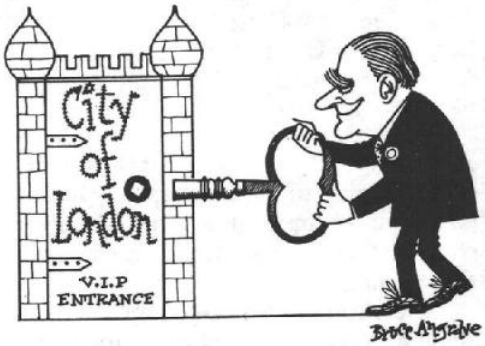
[3] A State Paper, dated January 31st, 1599, says: "A great and curious present is going to the Grand Turk which will scandalise other nations, especially the Germans."

CITY FREEDOM FOR MBS PRESIDENT

At a ceremony held in London's historic Guildhall in May, the President of the Musical Box Society of Great Britain, Cyril de Vere Green, received the Freedom of the City of London.

He was sponsored by the Worshipful Company of Fan Makers after which he was elected a Liveryman of the Worshipful Company of Fan Makers.

This singular distinction accorded to Cyril de Vere Green is in recognition of the work undertaken by Mrs. Bertha de Vere Green in researching for publication the history of the fan. Her book on the history and development of the fan is to be published early next year by Frederick Muller Limited. Since there are no ladies admitted to the Company, the honour has been bestowed upon her husband.



WHAT DETERMINES THE TONE OF A MUSICAL BOX?

by Alfred Thompson

IT was when my wife bought a PVF box with a tune sheet marked 'Expressive' that I first really began to think about the reasons for different tonal qualities in different boxes. It was an apparently straight forward fairly late box, with a three inch diameter cylinder which caught the eye, but only an ordinary looking single comb, thirteen inches long with a hundred and thirty teeth. Yet this box immediately struck one as having a remarkable and actually varying tone, which was well exploited in the musical arrangements and fully justified the description 'expressive'. I suddenly realised that I had merely accepted, with insufficient sense of wonder, the vast differences of tone between different boxes: and that I had merely believed, with insufficient thought, various generalisations which I now suspect are misleading: such as that fine tooth combs sound sweet and broad tooth combs sound harsh. What, I asked myself, were the really curcial factors governing the tonal quality of a music box?

It was while I was musing about this question that I first read Dr. Joseph Roesch's article in the American magazine* on dampering, in which he wondered, in a footnote, what determined tonal quality; and I then read Keith Harding's article in the Music Box about whether tuning scales were natural or tempered. Neither of these articles actually helped me, interesting though they were in other ways, but they did confirm my belief that the question I was puzzling over was interesting to other people as well as myself. I still haven't solved it, but I am offering my thoughts so far, in the hope that they may spur someone else into helping towards the solution.

Strings and pipes are the commonest vibrators in musical instruments because they have not only a single fundamental frequency of vibration which the ear recognises as a note of definite pitch, but also a small group of higher frequencies called overtones, which are simple harmonics of the fundamental, and which the ear interprets not as a chord but as the tonal quality of the fundamental note. Percussion instruments are less common because their overtones are not harmonics and their tonal quality is therefore harsh. An interesting half way house between 'normal' and 'percussion' instruments is the bell. A simple bicycle bell has non harmonic overtones and is harsh, but a good bell which has been shaped and profiled to make its overtones harmonic can sound very rich.

Where does a music box tooth fit into this scheme of things? The vibrations of a simple tooth, with a uniform thickness and a uniform width which are both much smaller than its length, are calculated in the standard textbooks. (e.g. Morse, *Vibration and Sound* – McGraw Hill). There is a single fundamental frequency, a very high first overtone which is not harmonic and has a frequency above the fifth overtone of a string or pipe, and other non-harmonic overtones very much higher still. A large weight near the end of a bass tooth will introduce lower frequency overtones and the characteristic thickening usually found at the root of a good tooth will raise the frequency of the overtones. It is therefore possible that good teeth are so carefully shaped and loaded that, like good bells, their overtones are made harmonic to cause a pleasant tone. It is also possible that the overtones in the vibration of each individual tooth are negligible, in which case tone-creating harmonics must be created elsewhere.

Even if there are no significant harmonics in the vibration of an individual tooth, harmonics can be provided by pinning the cylinder to sound harmonically tuned teeth at the same time. Pinning to provide tone-creating harmonics as well as more complex chord-creating harmonies is very common and it is possible that this is the primary source of tone-creating harmonics in a music box. However, there are other possibilities as well. In some musical instruments a vibrator can produce sympathetic resonant vibrations in other suitably tuned vibrators.

* *Thoughts on Music Box Resonance, Dr. Joseph* Roesch, Vol. XX, pp. 86–92, *Bulletin,* Musical Box Society International, New Jersey, USA.

That this happens in a music box is simply proved by plucking and then damping out a single tooth. A neighbouring tooth tuned to the same note starts to resonate in sympathy and continues to vibrate after the first tooth is damped; but a neighbouring tooth runed to a different note never starts to vibrate at all. It is possible that a little resonance also occurs between a plucked tooth and others tuned harmonically to it. Something like this clearly happens in a piano. If a single note is struck with the pedal on, the tone is certainly different from when it is struck with the pedal off. But a piano string is itself rich in harmonic overtones and it is not easy to distinguish between the effect of a harmonic overtone exciting resonance in another equally toned string and the effect of the fundamental exciting resonance in a harmonically tuned string.

Finally most musical instruments consist not only of one or more vibrators but also of a sounding board or box. A good sounding board is quite different in design and function from a good vibrator. It does not have one single note-creating fundamental frequency of vibration with a few tone-creating harmonic overtones. It must be able to resonate with, and so amplify, all the different frequencies created by the vibrators, and it is these resonant vibrations in the sounding board that we principally hear. Tone-creating harmonics are probably not created by the sounding board, but some frequencies are usually amplified more than others so that a sounding board does alter tonal values. A large 27" Regina autochange with a back constructed like a piano certainly sounds different from a similar 27" Regina movement in a small foldable table top case; just as a single note sounded on a violin sounds different from the same note sounded on a cello. However, it seems unlikely that the striking differences in tone between different music boxes are due entirely to bedplate and case design and not to cylinder and comb design.

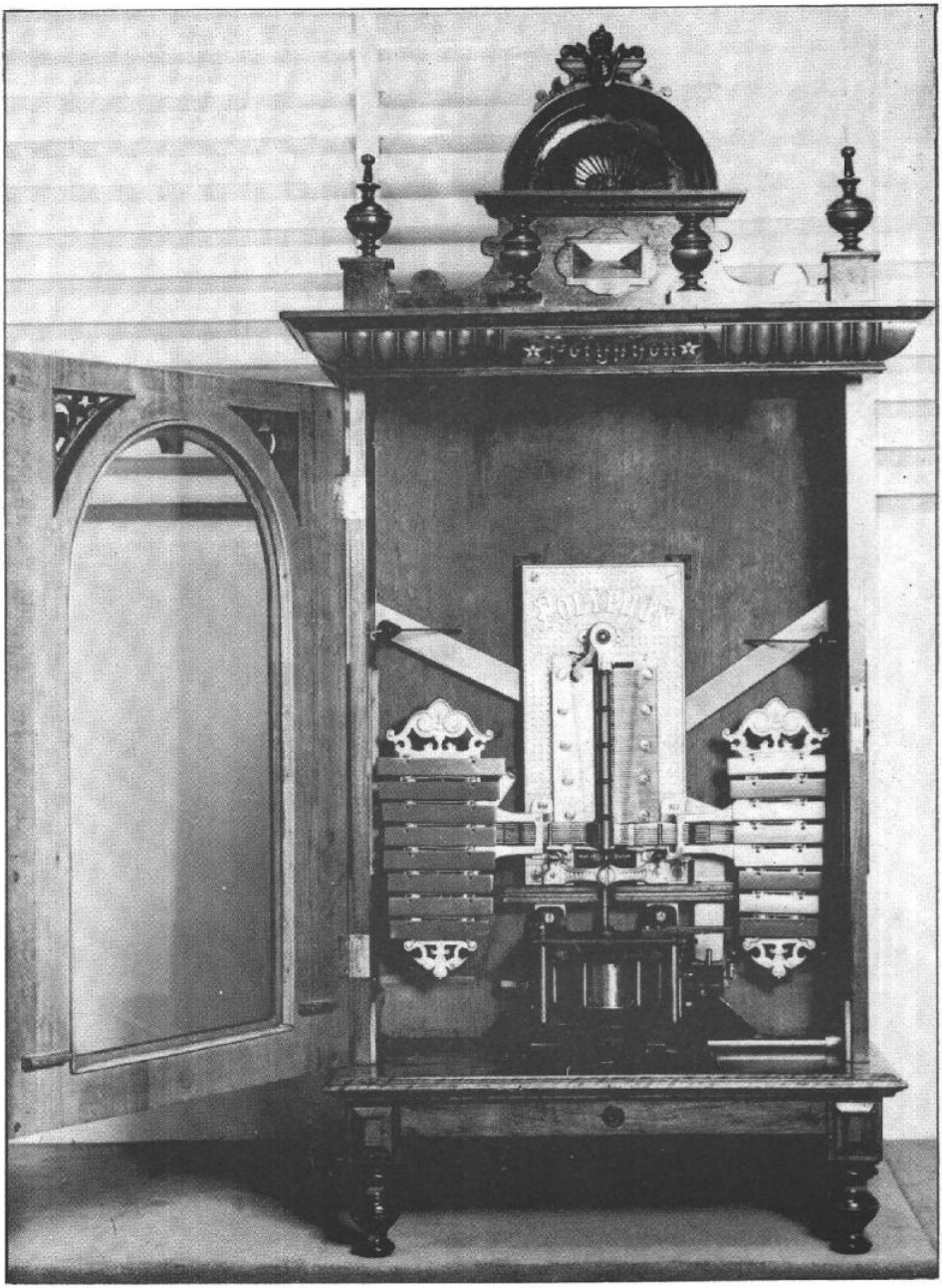
So what principally controls tone: individual tooth design, whole comb design, pinning arrangement or bedplate and case? These various possible sources of tone in a music box could be sorted out by anyone who could get together apparatus to photograph wave forms for harmonic analysis, or even better to provide instant harmonic analyses. It would be necessary to determine the overtone content, if any, of a tooth vibrating on its own with all the other teeth clamped, and then vibrating with the other teeth free to resonate; and then to repeat this for a number of teeth in a number of different combs, both in and out of their cases.

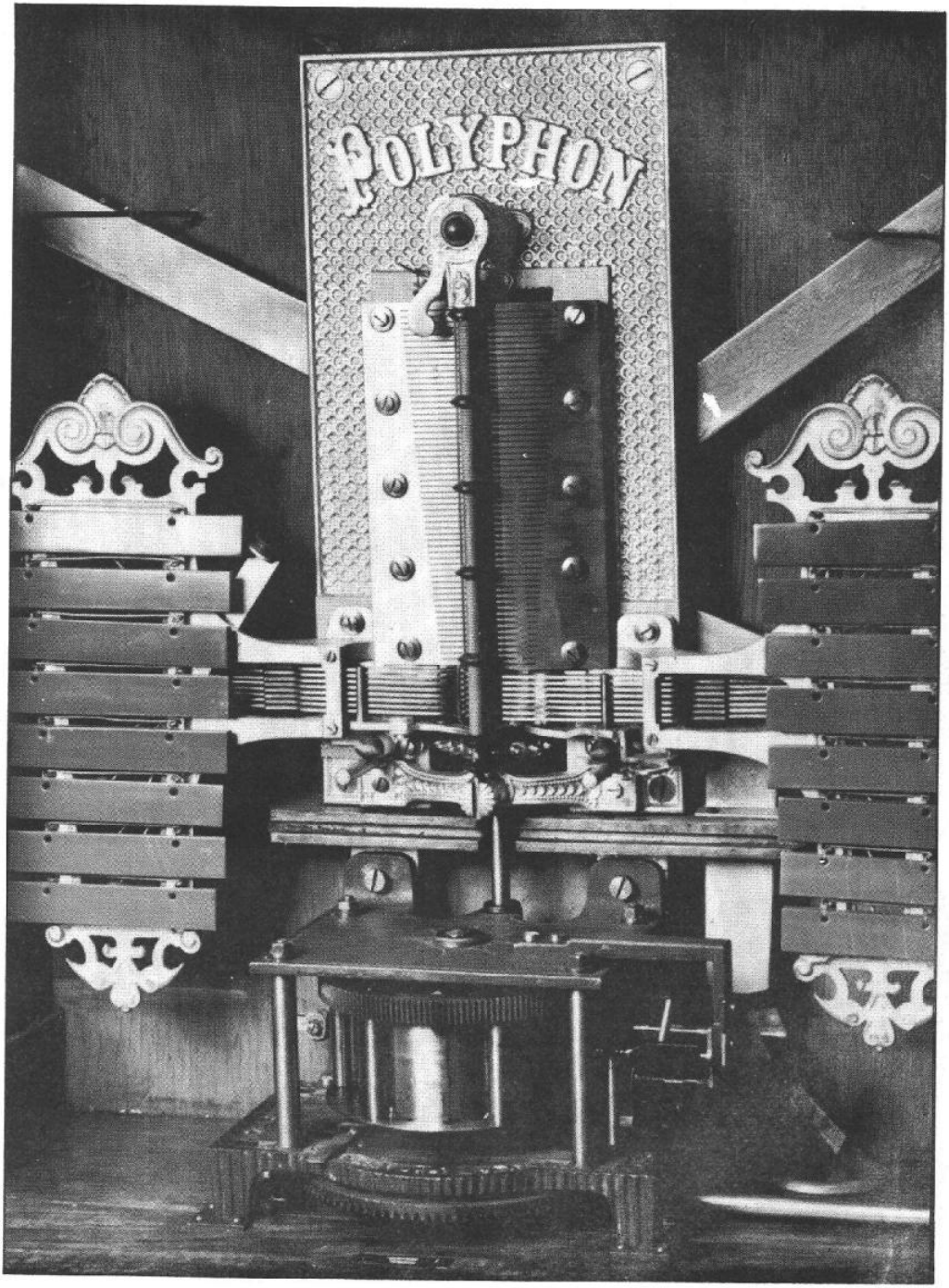
Apart from its sheer interest, such research would have the practical benefit of helping in tuning and repairing combs. If there are substantial harmonic overtones in the vibration of individual teeth then tooth shape is vital to tonal quality. If not, then tooth shape is unimportant. If harmonics are only caused by pins contacting harmonically tuned teeth simultaneously, then tuning need only be accurate enough to satisfy the ear. Whether teeth are turned to a natural scale with intervals in simple arithmetic ratios, or to be tempered scale as used in keyboard instruments, will be of little significance. On the other hand if harmonic resonances are present, then accuracy of tuning to a natural arithmetically simple scale may well be very important. The accuracy of tuning needed to promote strong resonances may well be greater than the accuracy needed merely to make each tooth sound reasonably in tune to a person of ordinary hearing. This is quite likely because strong resonance depends on low internal damping in the metal of the tooth; and when there is low damping resonance only occurs with particularly accurately matched frequencies. So hard steel and good tempering may be just as important in improving tonal quality by promoting harmonic resonances as they are in providing each tooth with a good long 'ring'.

If my suspicions are correct, then the harmonics providing tonal quality are laid out visibly as teeth in a music box instead of being locked up in the mathematics of individual vibrations as in a stringed or piped instrument. This would explain how tone could alter in that PVF Expressive. My suspicion is therefore that if tonal quality depends on anything more subtle than cylinder pinning, it is an attribute of the whole comb and is not an attribute of individual teeth. On this theory differences from box to box in numbers of teeth, tuning scale and accuracy of tuning would cause differences in tone, but differences in individual tooth width would not. And yet there are so many mysteries left to explain. For instance a quite small inaccuracy in register between tooth and pin does terrible things to tone. So I would dearly like to see the results of the experiments I have suggested. They would be sure to be useful and could be very surprising.

From the Fortnum & Mason collection comes these pictures of a late 19.5/8in Polyphon with dulcimers (shown in detail overleaf).


Warsch




POLYPHON


Popper & Co.
Neul
Neul

THE CHORDEPHON

by The Editor

ON the facing and subsequent pages are illustrations of an instrument which is not only extremely attractive in appearance, but which is unusually pleasant to listen to. It is also, dare I say it, very rare.

The instrument pictured here is a Chordephon from the collection of Member Weber Baus of Fuldatel, Western Germany. The largest sized model made, this one plays 58 notes and employs peripherally-driven discs 19.75 inches in diameter. The majority of models which are found today are the popular 44-note size which plays 36-cm discs (about 14.5 inches in diameter). The only other instrument of this type and size to turn up was a table-type coin-operated one and this is illustrated on pages 90 and 91 of Volume 4 of THE MUSIC BOX.

The Chordephon was the invention of three Germans in Leipzig – T.B. Püttmann, M.O. Claus and P.R. Püttner in 1895. Their British patent, No. 18,427, was granted on October 2 of that year. Finance was sought from industrialist Hans E.C. Felix and a company was formed called Fabrik Mechanischer Zithern Chordephon Claus & Co with premises at Waldstrasse 20, H, Leipzig. Secretary to the company was one Armin Kreckler.

Initial production machines were available in time for Christmas of that year and these were all hand-operated rather like giant manivelles. Early in the following year, clockwork models were offered and, furthermore, 'add-on' clockwork motors were available to motorise existing hand-turned Chordephons.

Horror!—A new invention, known as the "galvanic piano," opens up untold agonies for the next door neighbour. It is made for the endurance not of the piano, but the player, and to add the last straw to that of the unfortunate hearer. The keys are of zinc instead of the usual white and black ivories; cold to the touch at first, but gradually the galvanic attachment gets to its work, and administers a very gentle current of electricity, governed by a little knob in front of the piano. The results claimed by the patentee are the prevention of pianist's cramp, and a valuable remedy for nervous diseases. There may be something in it if the patentee will arrange for the next door neighbour to have control of that little knob and turn on the full blast of electricity at will.

From the magazine *Electricity*, October 6, 1893.

A second patent was taken out during the following year (the British patent, number 12,579, was issued on June 8) this time linking Felix's name with those of Claus and Püttmann. Shortly afterwards, upright models came on the market in cases not unlike the upright disc machines which emanated contemporarily from Leipzig, only the Chordephon was of slightly slimmer proportions due to the extended length of the cast-iron string frame.

On August 26, 1897, Claus and Püttmann were granted a British Patent (No. 19,653) for improvements to 'tune-sheets, barrels &c' for mechanical instruments wherein dampers are made to operate at variously predetermined positions to give individual nuances to performances.

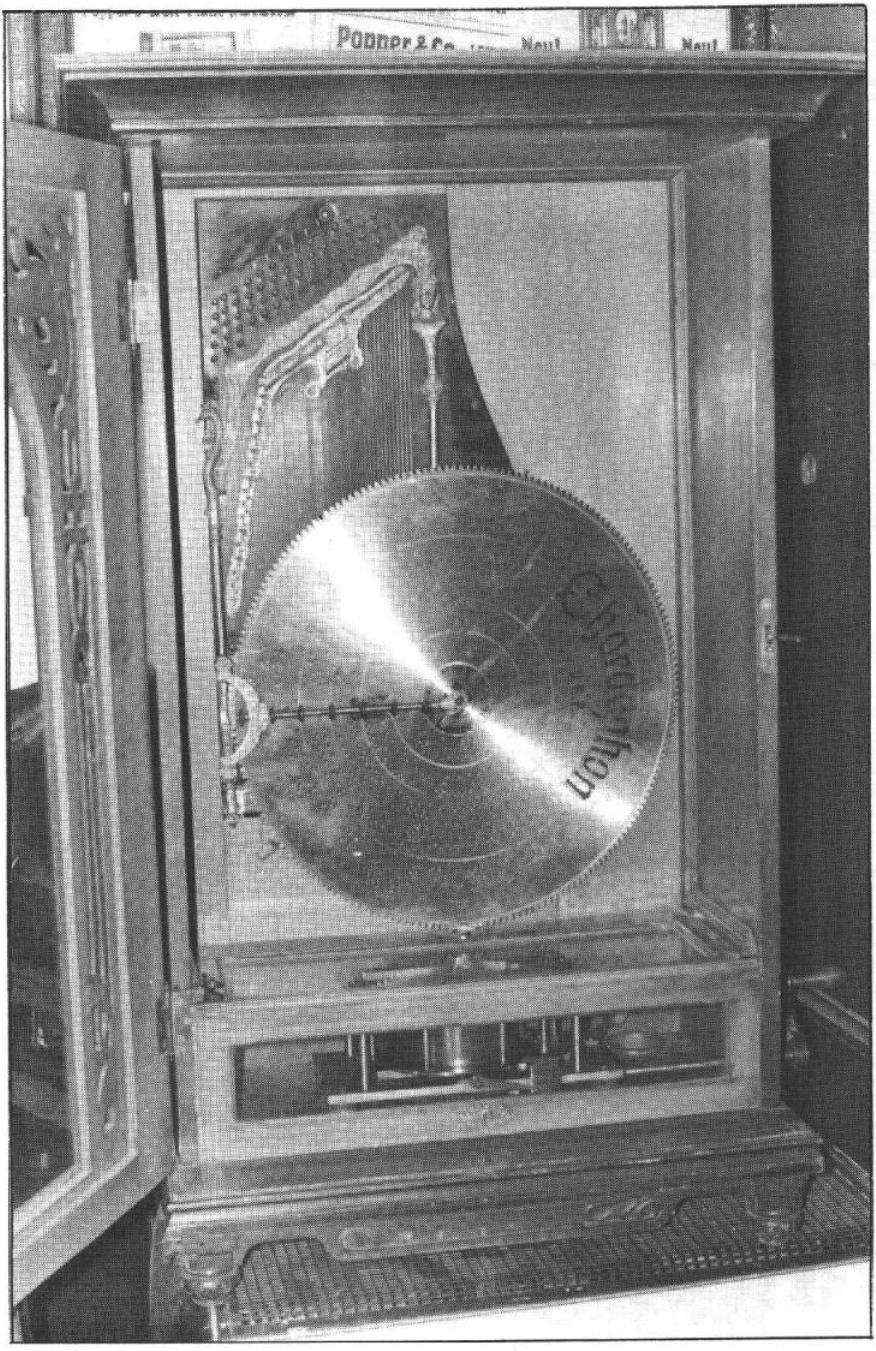
The last traceable British patent granted to the Chordephon enterprise was issued to M. Claus on March 23, 1901 (British Patent No. 6144) for a device for stopping strings of automatically-played stringed instruments.

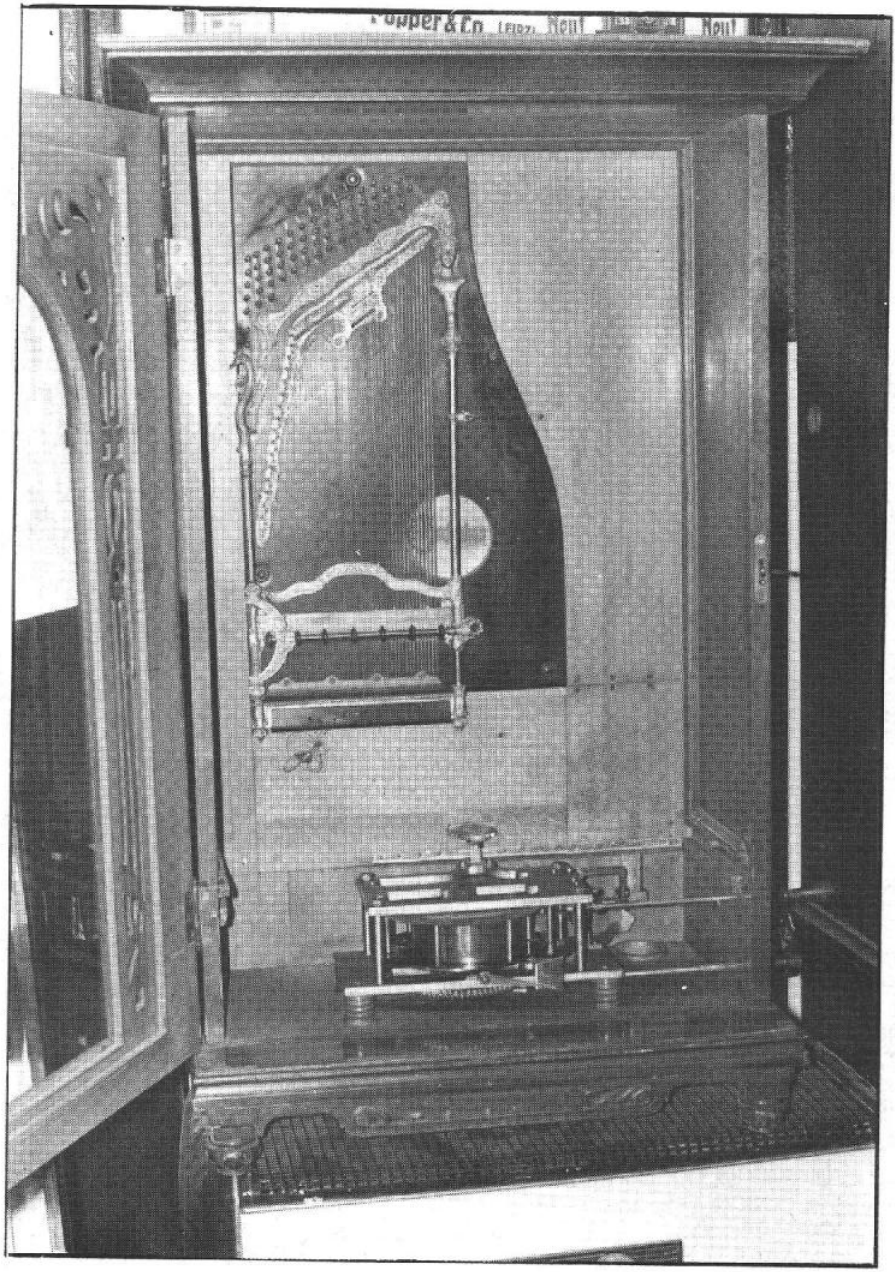
The Frabrik Mechanischer Zithern Chordephon was one of the many minor mechanical instrument makers and, although it remained in operation from its foundation in 1895 right through to the years immediately preceeding the Great War, its output must be judged as having been small. This assumption is borne out by the small number of instruments which survive, even in Germany.

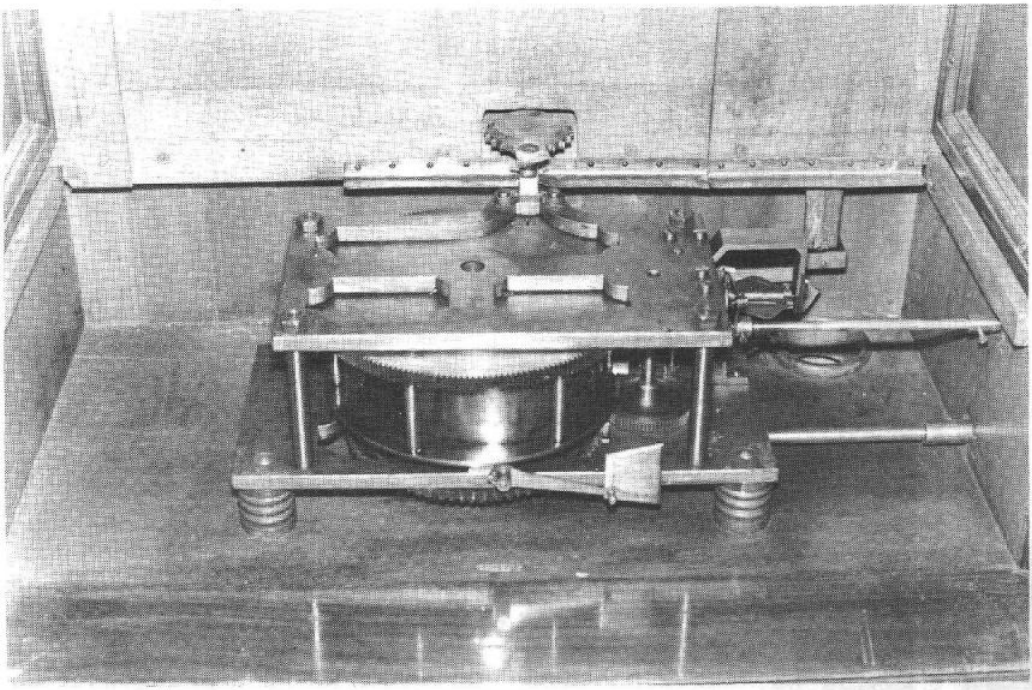
Characterised, in the upright versions, by the tall ornamental, glazed door revealing a disc which appears somewhat small in proportion to the rest of the case, the Chordephon produces a sound which, when the instrument is properly adjusted, is at once pleasing. All the advertisements for the clockwork machines make a point of emphasizing how long they play on one winding and they appear to have varied from six to 24 minutes!

Member Q. David Bowers told me last year that he had come across advertisements for the Chordephon published around the year 1912 showing the name Weissbach & Co rather than Claus as manufacturer. It might be that Weissbach acquired the Claus business but this is as yet uncertain.

The pictures here have been provided by Member Werner Baus and the instrument forms part of the Museum which he has recently set up in Fuldatel.


Polyphon





UNCONSIDERED TRIFLES

Being a random selection of odd, unrelated items from the past collected and conducted by The Editor.

During the summer of 1900, Jules Heinrich Zimmermann introduced into England his twin-disc Fortuna. Playing two 26" diameter discs, this stood 6 ft. high and was 5 ft. wide. It sold for the sum of £90 and at this price it is small wonder that very few were ever sold. Today, the twin Fortuna is nowhere to be found.

Thomas Dawkins & Co., musical instrument importers, were established in 1781 and had their London offices at 17, Charterhouse Street, Holborn Circus, London, E.C.

Another disc-playing musical box was the Gloria. This was made by the house of Billon established in Geneva in 1844. The makers changed their name to Societe Anonyme and under this name opened a London office at 3, New Union Street, Moorfields, E.C. where they operated as wholesalers.

The brothers Paul and Georg Simon set up in business at Ernst Holzweissig Nachfolger in Leipzig in the year 1872. Their address was Reichstrasse 23 and they also had associate addresses in Berlin (Ritterstrasse 91) and Hamburg (Neuer Wall 64/66). They advertised as 'manufacturers of all kinds of musical boxes and musical articles: Export to all parts of the world". Among the many items which they handled, if not manufactured, were singing birds, electric pianos, Mars, Phadra and Lux orchestrions, Symphonion and Kalliope musical boxes and "Original Dance Automaten". In 1907, the firm introduced a disc-playing musical box called the "Lipsia" which appears to have been produced only as an upright instrument in a true Georgian-style cabinet showing the Germanic version of Empire classicism. The Lipsia must have been a short-lived enterprise for only one of these instruments appears to be on record in a collection in Germany. The name Lipsia, however, was also used by EHN for their gramophone. The most famous of all EHN gramophones, though, was the then very advanced Hymnophon cabinet phonograph which featured an "internal horn".

ELECTRICAL OPERATION OF MUSICAL INSTRUMENTS.

The following notes and sketches explain the leading features of a new system, evolved by Mr. N. G. Meade, for the remote electrical operation of musical instruments, using perforated "master" strips of paper such as are already familiar in connection with automatic pianos. The present equipment enables the control of pianos or organs from any convenient spot.

Air is exhausted from the vacuum chamber shown in section in fig. 1, by a motor-driven pump. The perforations in the music strip uncover, from time to time holes *c* in the cover plate *b* of the vacuum chamber, thus admitting atmospheric pressure, *via d*, to the plunger *f*, the downward motion of which closes the contact *gh*. Similar contact devices are arranged in positions and to a total number corresponding to the number of keys in the piano or organ to be played. Additional contacts provide for the automatic regulation of "time" and "expression" as explained below. During the playing of a piece, a nut traverses a screwed shaft so that, when the piece is finished, the reciprocating vacuum pump is stopped and the music strip wound back again, ready for re-use, before the main driving motor comes to rest.

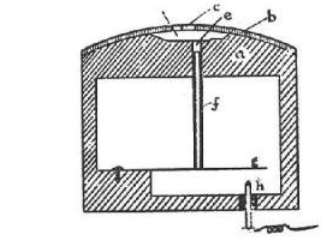


FIG. 1.

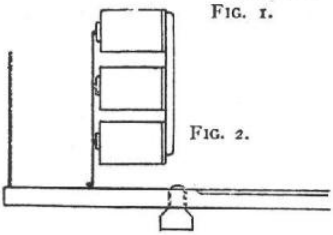


FIG. 2.

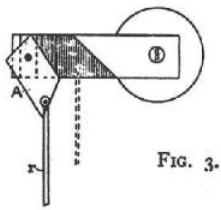


FIG. 3.

A magnet 1, controlled by the contact *g*, fig. 3, varies, by means of a pawl and ratchet gear, the resistance R in series with the key-operating magnets M*k*; thus the "expression" is controlled. A similar magnet 2 controlled by the contact *h* (operated by corresponding perforations in the music strip), inserts or withdraws resistance from the driving motor circuit and thus controls the "time" of playing.

The key striking magnets may be placed below or above the keys; fig. 2 represents the latter arrangement. Each magnet has an almost closed magnetic circuit with a pivoted armature A; on excitation of the magnet winding, A rises and operates the key through the coupling rod *r*.

The general scheme of the electrical connections is as shown in fig. 4. Any type of driving motor, capable of speed regulation, may be employed; the attached diagram assumes a compound d.c. machine. A comparatively high supply voltage is used and the motor switch and its automatic trip gear are represented at S. Contact fingers *d*, *e*, *f* operate the electro-magnetic switches Sp, fig. 4, which, in turn, control the magnets N, the cores of which are coupled to the pedal rods of the piano or organ.

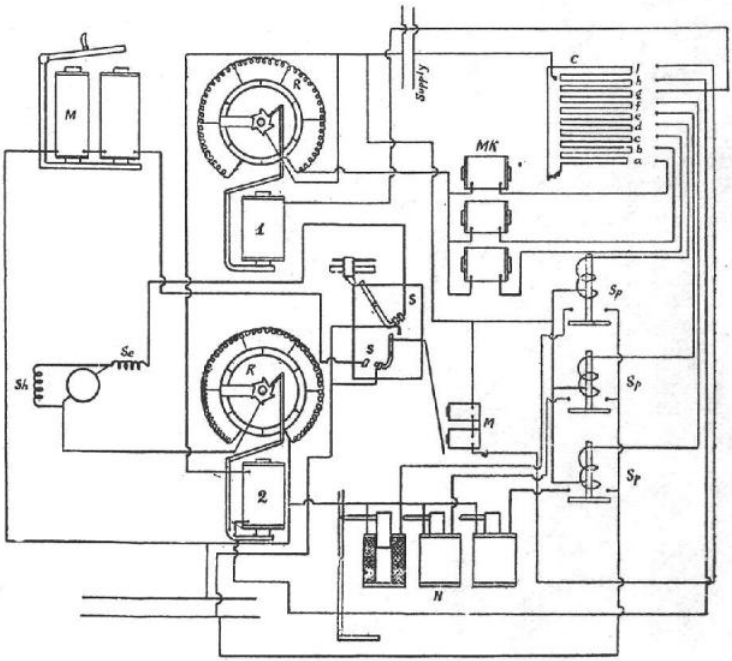


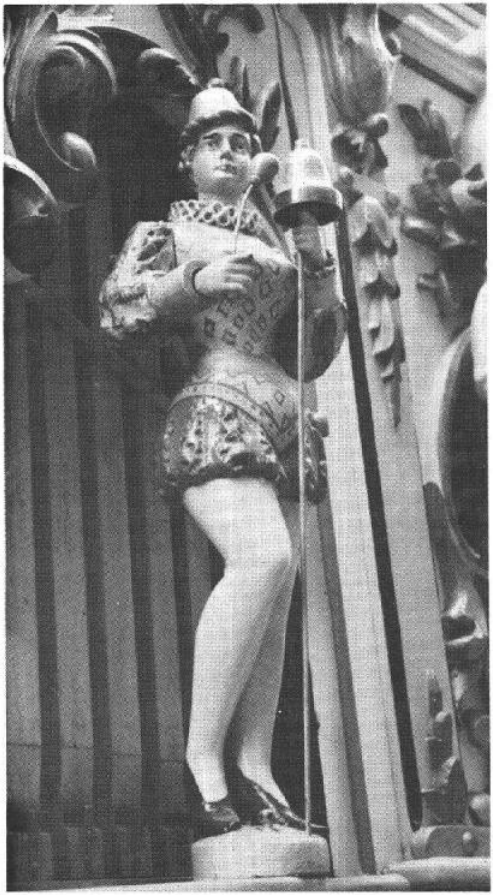
FIG. 4.

Various refinements are introduced into the system as actually applied, but fig. 4, showing all the chief control-elements and three key magnets, will provide a sufficient general indication of the scope and working of this ingenious system.

From the collection of The Editor.

DUTCH STREET ORGANS -- A DISTURBING REPORT

by Arthur W.J.G. Ord-Hume



THE Amsterdam street organ may soon be a picturesque relic in memory alone unless a check is put on sales abroad. This is the upshoot of my findings during a recent stay in the capital city of the Netherlands.

Certainly there appeared fewer organs on the streets this summer than during my previous visits and, apart from such old favourites as De Klok, some of the organs I remember well will never again be heard in Amsterdam. For the simple facts are that these colourful and tonally pleasing instruments are being avidly sought by collectors from all over the world. The *Cello*, for example, is now in Canada and is among the latest to join the growing number of Dutch *draaiorgels* in the continent of America.

On the credit side, Gijs Perlee, 65 years of age this year, has a thriving business in repair and restoration and, thanks to his two sons, Gijs, jnr, and Cornelis, the Perlee factory on Westerstraat would seem assured of continuance for years to come.

Over the past five or six years, the Dutch street organs has become the ideal of many a collector, particularly in the United States. All these organs have a pedigree which for the major part is individual and therefore unique and each one that leaves the streets leaves a void which can never be filled. It speaks volumes for the durability of these organs that, even after daily use for many years (in some cases the organs have been in fairly continuous use, with occasional rebuilds, for over half a century), they are still in fine order. Maintenance is of a very high standard with each instrument receiving expert and patient tuning every Monday morning. Sadly, those which pass into private hands seldom receive anything like so much care, however much love may be bestowed upon them, and Gijs Perlee, when I visited him, was about to leave for Canada to repair one of his former organs which had not fared well at the hands of its new owner.

For my part, I have heard street organs and former street organs in many parts of the world but only in Holland have I consistently heard instruments in perfect tune. An American collector who proudly showed me such an organ a few years back, was completely oblivious to the fact that it was out of tune and of the many fine and large organs in English collections (which includes organs that have been featured on gramophone records) are so poorly tuned that they are painful to

Gijs Perlee (right) and son Cornelis pose with a 75 year-old Limonaire-carved lady bellringer resplendent in a new coat of paint.

listen to.

Some few years ago, when prices were ground-based, you could buy a street organ for between £1,500 and, maybe, £4,000. Now they are considerably more expensive but, accepting that everything has its price, there are still those who will buy at almost any price.

For my money, though, I would rather see an export licence embargo and a minimum price of £1m put on the *draaiorgel* just to preserve them in their accepted environment. Somehow these organs never look right anywhere else but in Holland. Admittedly several of the Dutch organs have visited England and other parts of the world and last year Perlee Snr came to London with an organ and took part in the stately if somewhat seedy pageantry of the Lord Mayor's Show.

The plain fact is that, at the present rate of horse-trading, Holland could well be denuded of its street organs by the 1980s. Accidents to the organs in their own country are bad enough: three of Perlee's organs were burned in the streets two years ago by vandals, and the occasional mishap with the Dutch traffic takes its toll, fortunately usually only of a temporary duration. And in past years, one organ took an unexpected dip in a canal and another was run at high speed into a wall during towing.

But now a new factor has struck close to the heart of the Amsterdam street organ. The Perlee business is faced with an enforced upheavel which will bring the works to a close for a while. The reason is not shortage of, work, or labour, or materials, but is due to Amsterdam's own peculiar battle with existence. The whole city is built precariously on sand and buildings gradually subside or lean. Now the large Perlee workshop has fallen victim to the ever-present risk and is in danger of collapse. Now, under compulsory measures from the City, the business must move in the

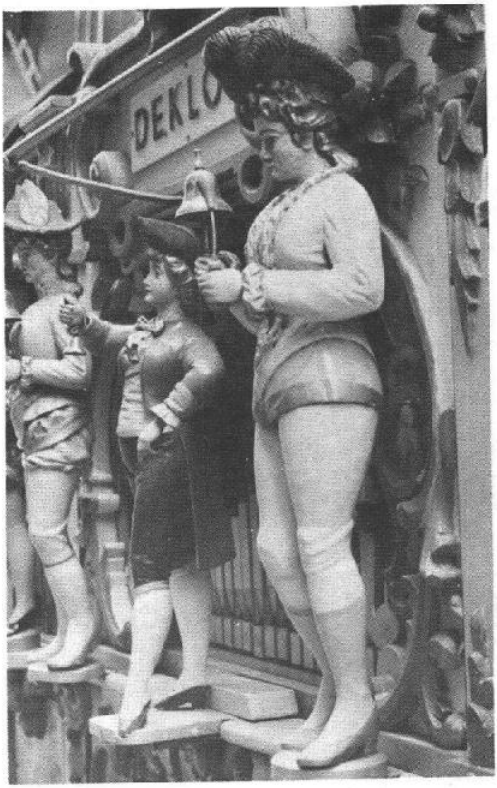
next month or so.

Not that any great financial hardship will be involved in finding new premises, because the City of Amsterdam assumes responsibility for finding new premises for citizens or businesses who are, as it were, displaced in this way. Even so, it will mean a tremendous amount of hard work to move the vast bulk of organs and parts in the store.

With this whole picture in mind, what, then, is the future of the organs of the streets of Amsterdam? I believe that they should be permitted to stay there and not be allowed to become the barter-ground of the avaricious.

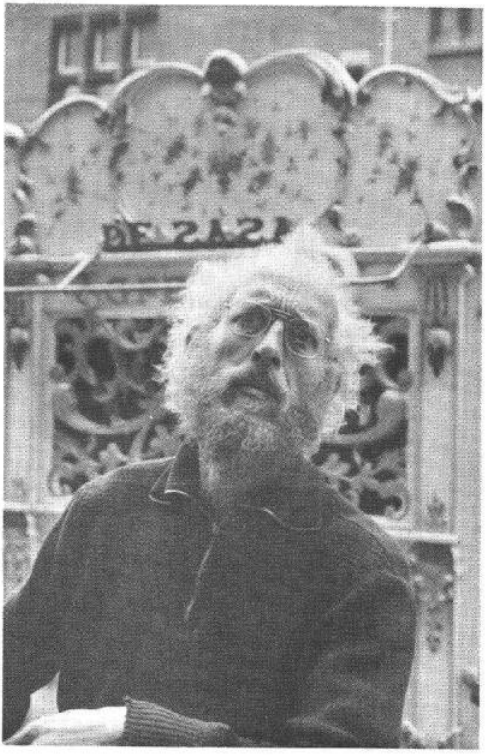
The 'organ-grinders' are all intelligent men who love their instruments. As one told me amidst the Saturday morning shopping crowds in the Kalverstraat: 'Each organ sold means one organ less on the streets, and at least two men out of work'.

The Dutch street organ is, after all, rather like any other work of art. It should be retained for the enjoyment of everybody, and not locked up in a private collection. For those of us with bank balances to match our greed, leave the *draaiorgels* where they are so that future generations can appreciate them.



Right: Posing provocatively in pants and painted wood, one of the lady bellringers on "De Klok", seen below in an Amsterdam street.

Right: "De Zaza", with its unusual lettering and motor drive, with its bearded *manser* below. Far right: This 58-key organ is from the Gossling stable and is cart-mounted with motor drive and a luxurious cab to house its crew.



MUSICAL BOX MANUFACTURE IMPORTANT CLUE DISCOVERED

by Arthur W.J.G. Ord-Hume

IT is strange to relate that, although during the last century hundreds of thousands of musical boxes were made, we know surprisingly little today as to how they were manufactured.

Now, though, one small but nevertheless important clue to the engineering of their manufacture has come to light and from this has emerged enough evidence to enable certain conjectures to be made.

The discovery concerns the row of markings on the musical box cylinder which is normally placed at a position corresponding to that of the stationary or tune-change position of the cylinder. Most of us are familiar with the sight of this line – a series of small indentations, probably made with a centrepunch, and arranged in a lengthwise straight line which corresponds to the tip of each comb tooth either at the number one tune position or to the last tune position. It is a feature of practically all cylinder musical boxes.

What has now been discovered would appear to prove that this was the continuance of a process, in modified form, from a much earlier and infinitely more important jigging procedure.

One sunny April morning this year, I was taking some detail pictures of musical boxes in the collection of the Nationaal Museum van Speeldoos tot Pierement in Utrecht. Museum director Dr. J.J.L. Haspels, a noted Member of our Society who is known to many of us for his lectures at our recent meetings, was with me.

Anxious to obtain a specific close-up of a very early single-tooth sectional comb movement dating from 1800–1805, my attention was initially drawn to the unusual fact that the register line was not in the normal situation, namely in the clear space provided by the end-of-tune position, but was aligned actually in the musical pinning about a quarter of an inch into the music.

Focussing on this portion of the cylinder with a high-power macro lens, I found that I was looking at what I assumed to be a broken pin. A quick check of all the other 'indentations' proved that they were, in fact, cylinder pins, each one driven down below the level of the musical pinning, but all left proud of the cylinder surface by an estimated seven thousandth of an inch.

Each of these pins aligned respectively with a tooth of the musical comb.

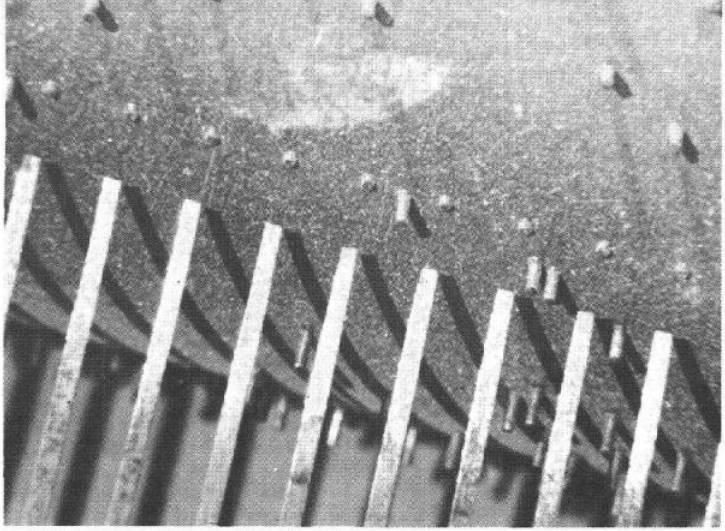
The immediate conclusion was that these pins might have served to align the individual teeth in the three dimensions necessary for proper operation, viz: in the up and down plane, in the sideways or left to right plane, and in the in and out or clearance position necessary to ensure an equal amount of plucking for each tooth.

A likely sequence of operation then emerged. First the prepared and pricked cylinder would have these register points drilled through and a set of tight pins driven in (these brass tubes which formed the earlier cylinders are often found to be relatively thick and so a tight pin would stay in position). Then the cylinder would be lathe-spun and the pins ground off to a pre-determined position somewhat shorter in length to those of the later musical notation pins.

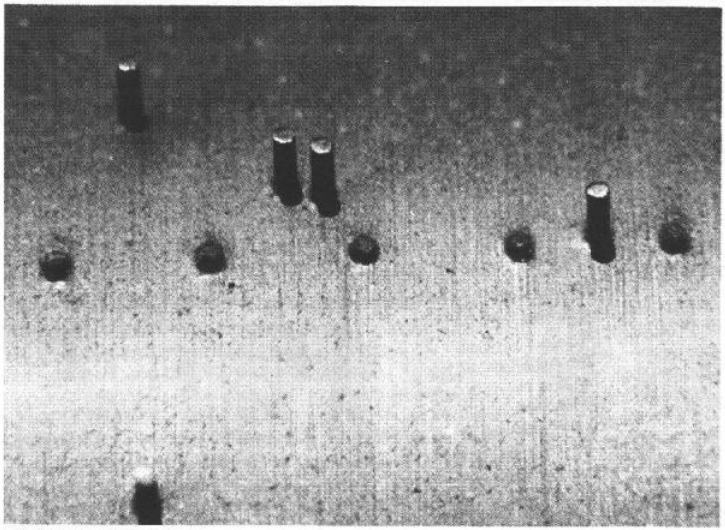
The cylinder would then be placed in the musical movement and the tedious task begun of aligning each individual tooth by first of all butting the tip of the tooth against the register pin and then drilling, pegging and screwing the tooth to the comb base.

Once all the teeth were properly fitted, these register pins would then be tapped flush with the cylinder (in the case of the Utrecht specimen, left a fraction proud) and then the cylinder pinned with the music and finished and ground as normal.

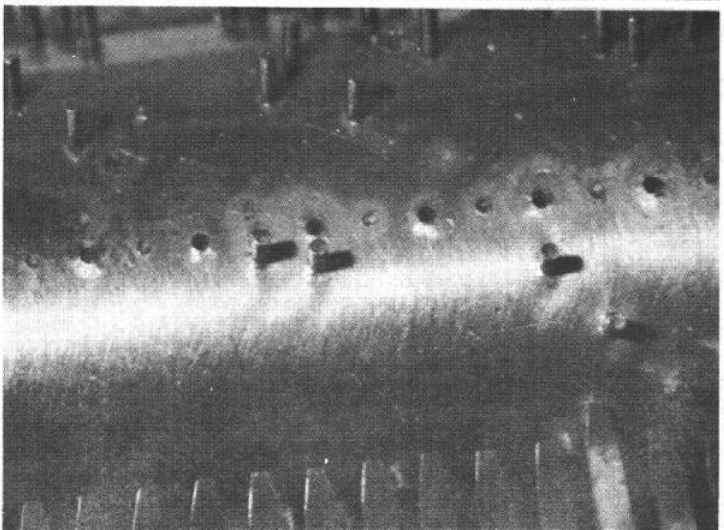
This would appear to be the only logical explanation to account for these pins seen on the Utrecht movement and shown in the illustrations here. It remained, however, to establish some proof of this conjecture as being part of a system-



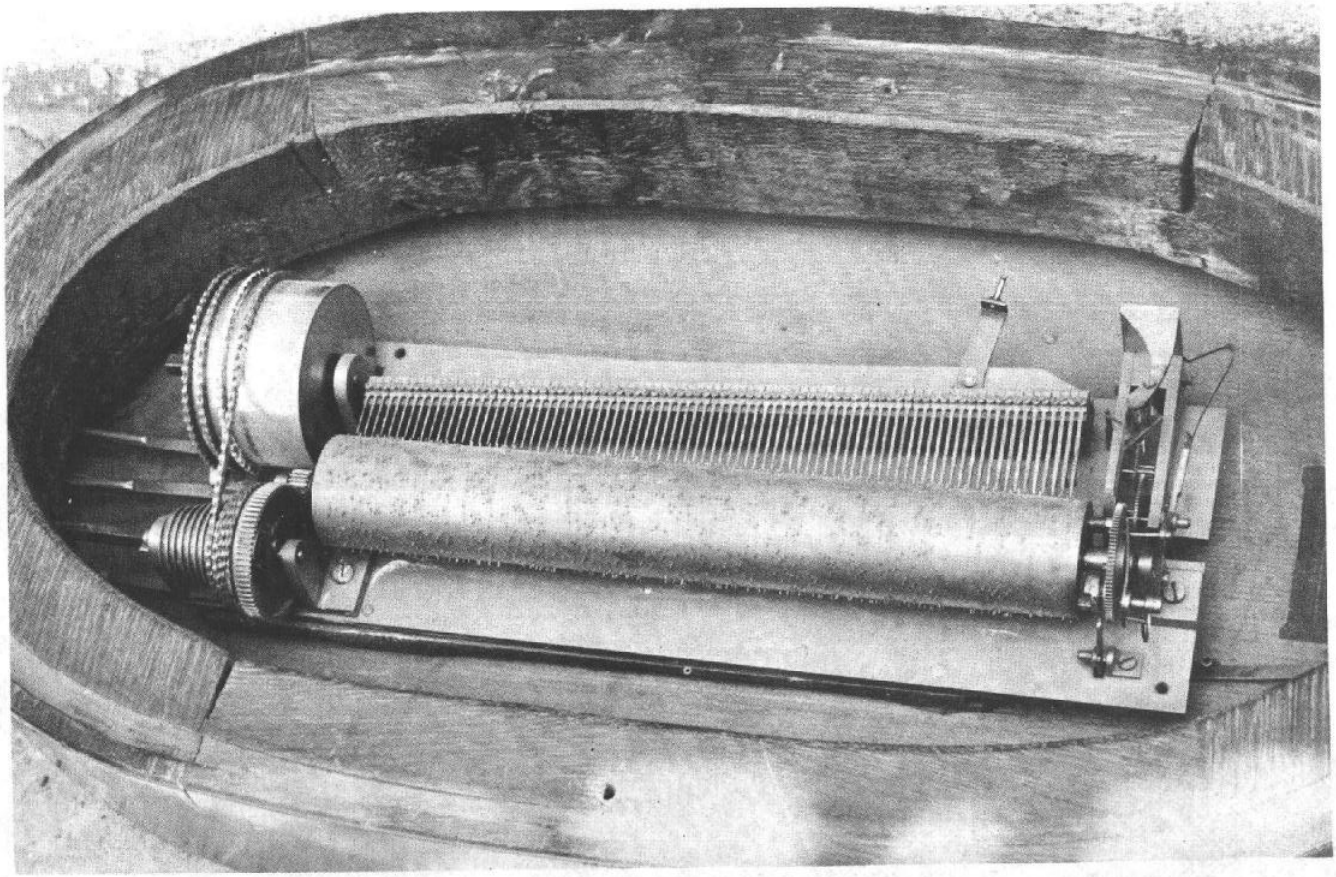
Unlike most subsequent cylinder movements, the register pins do not lie in the plain cylinder land between tunes, but are placed about seven degrees into the tune pinning.



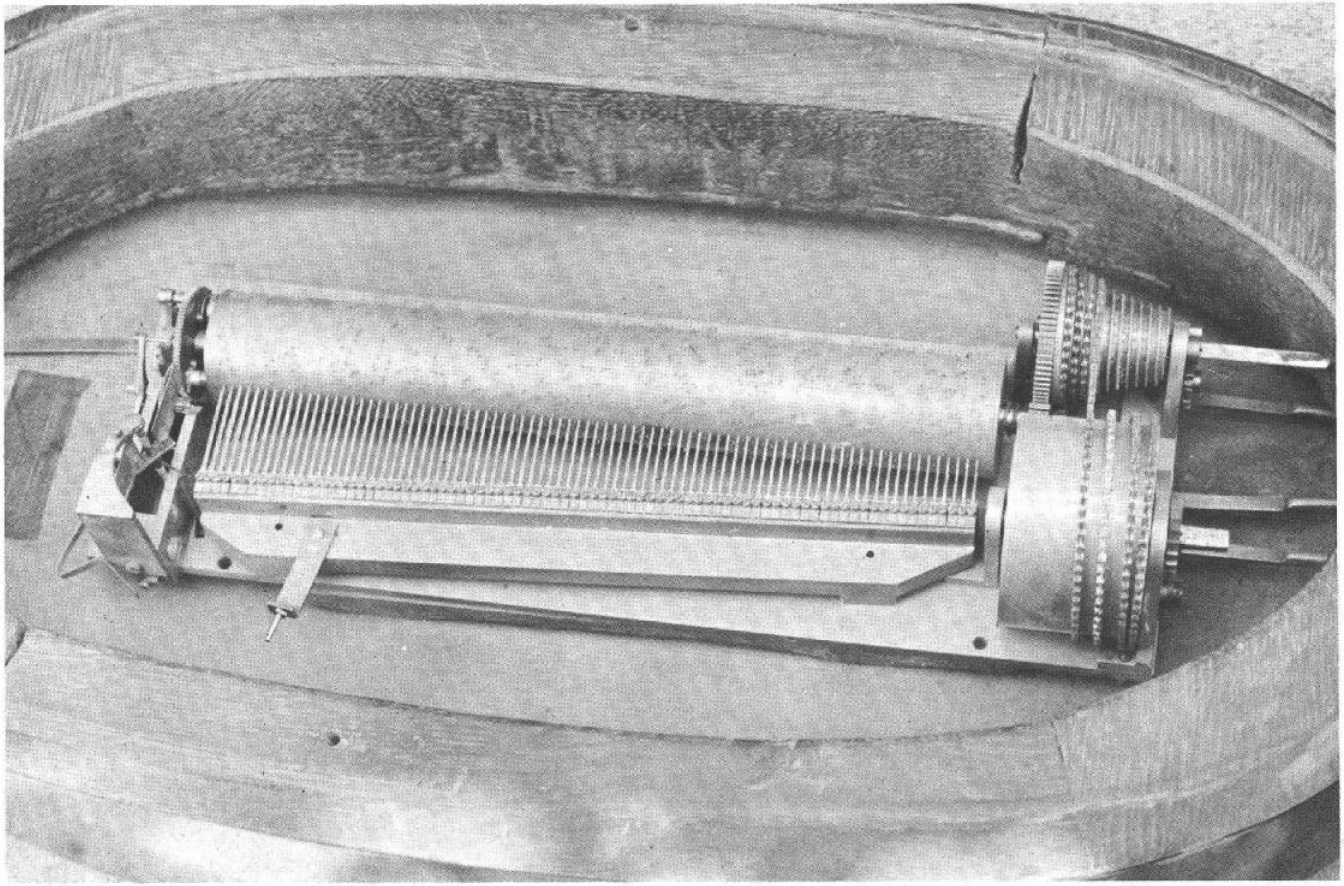
This picture shows very clearly the row of register pins just protruding from the surface of the cylinder. The complete movement, forming part of a clock base, is illustrated overleaf. It bears no name.



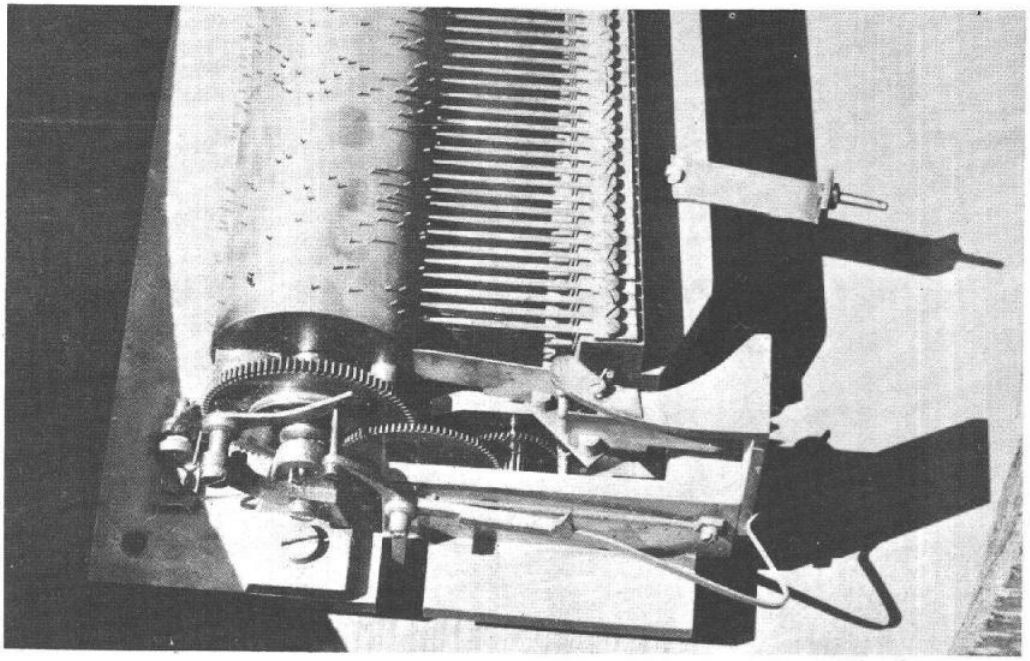
By contrast here is part of the cylinder of a small snuff-box-type movement of about 1830-40 with teeth in groups of three. In this picture it will be seen that every other pop mark has been drilled and pinned, these pins later driven down to the surface of the cylinder.



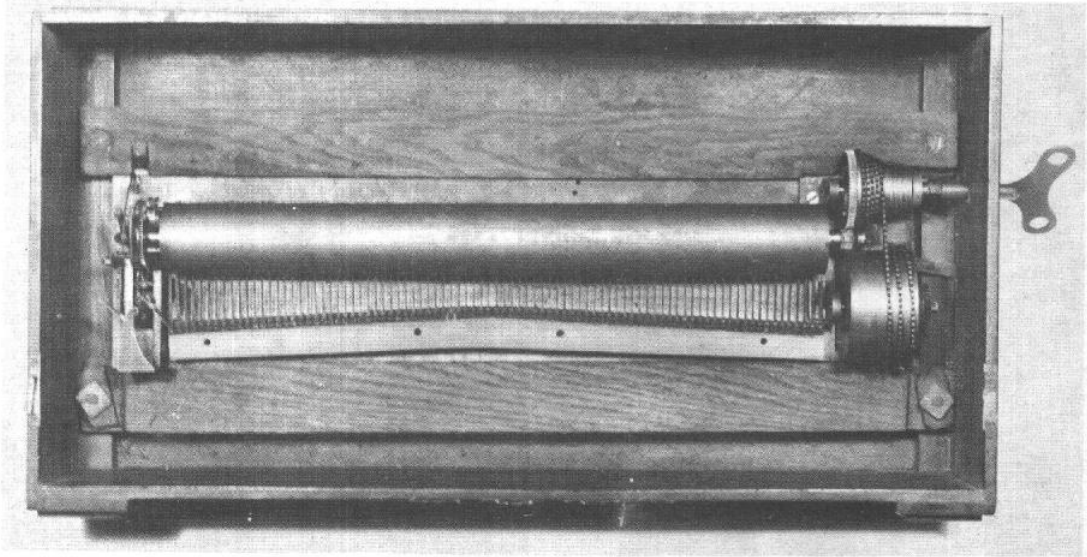
The clock movement at the Nationaal Museum van Speeldoos tot Pierement which led to the discovery pictured overleaf. Notice how the assembly is apparently the wrong way round with comb behind the cylinder.



Notice the unusual shape of the end of the cock. The bass teeth have integral curved weights formed beneath the tips. This can just be seen in the picture on page 336.



Detail of the bass end of the comb showing the attachment of the teeth and also the small curved weights integral with the bass teeth. Below: The clock-base movement in the collection of Cyril de Vere Green (this has the treble teeth in the centre) has exactly the same feature as that found on the Utrecht specimen above.



ised manufacturing process by making a detailed examination of other boxes of a similar period. If a control batch, on examination, revealed the same characteristic, some considerable measure of probability might be added to the conjectural basis of the argument.

I recalled that our President, Cyril de Vere Green, has a very early clock-base musical movement of about the same period. Unlike the Utrecht specimen which has the teeth arranged in a logical sequence from bass (left) to treble (right), the de Vere Green specimen has the treble teeth in the centre and the bass notes at each end. This movement was illustrated in an issue of THE MUSIC BOX many years ago and is shown again here*.

This movement was now examined afresh and displayed almost precisely the same characteristic – a pin aligning with the end of each comb tooth. The difference, however, was that on this movement the pins were driven flush with the surface of the cylinder.

Here, then, were two movements, probably by different makers, displaying a similar characteristic. Further proof was now sought and this came unexpectedly from a source hitherto unconsidered.

Cyril de Vere Green loaned me the movement of an unusual snuff-box so that I could photograph it in detail. This, shown as the subject of an article on page 384, has teeth in groups of three. Under examination through a high-power lens, it became apparent that the alignment indentations were, in fact, pins and in this case they had been driven just below the surface of the brass so that they were very hard to see. The next discovery was that although there has been a clear indentation, to show the proper position of each tooth in each group of three, only the first and the last of each group of three marks had been drilled for a register pin. If one thinks on this it is easy to see that with three teeth arranged in a group, it would only be necessary for the outer teeth to have register pins since the central tooth would assume an inviolate location between and in line with its neighbours, assuming its accurate original manufacture.

So far, then, two large movements of the first decade of the last century had demonstrated this feature, and one snuff box, probably of the 1820–1830 period showed a later development of the same feature. I now examined two snuff-box movements in my own collection, one with a three-tooth sectional comb and the other with a four-tooth comb, and found precisely the same feature. On the four-tooth comb, the register pins only catered for the first and last tooth, the two central teeth in each group being represented solely by tiny dents or centrepops in the cylinder surface.

At this point, it seemed logical to assume that a control group had been established from which credence could be given to the earlier assumptions.

Examination of a larger musical movement with a four-tooth sectional comb showed that it, too, fitted in with the evidence already deduced.

One can now see how, with the advent of the single-piece comb, this type of alignment would only be needed by register pins at each end of the cylinder – just two for the whole comb, irrespective of its length. In fact, they could be dispensed with and the same function performed by accurately-machined slips (rather like a feeler-gauge). Thus this whole time-consuming operation could be dispensed with.

The actual alignment indentations continued to be needed to register the whole comb laterally and to afford a visual sighting for the level of the comb relative to the cylinder so that, in short, the bass tooth might drop off at precisely the same instant as the treble tooth when simultaneously plucked by two cylinder pin in lateral alignment.

And so a manufacturing sequence emerges which must have been something like the following:

1. Preparation of the bare brass cylinder by the circumferential division of the surface into bands or spaces to indicate the position of the points of the comb teeth.
2. Marking a true lengthwise line on the cylinder to indicate the alignment of the comb teeth points relative to the axis of the cylinder.
3. Centrepunching the intersection of this line with the circumferential lines, i.e. 'pricking'.
4. Division of the cylinder lengthwise into time intervals predetermined according to the musical programme to be pinned.
5. Drilling through the centrepunched register marks.
6. Pinning the register holes.
7. Lathe-turning the cylinder and grinding off the register pins to the proper height.
8. Aligning and fixing the comb teeth using the register pins.
9. Pressing in out of the way all the register pins on completion of comb fitting.
10. Pricking the cylinder for its musical programme.

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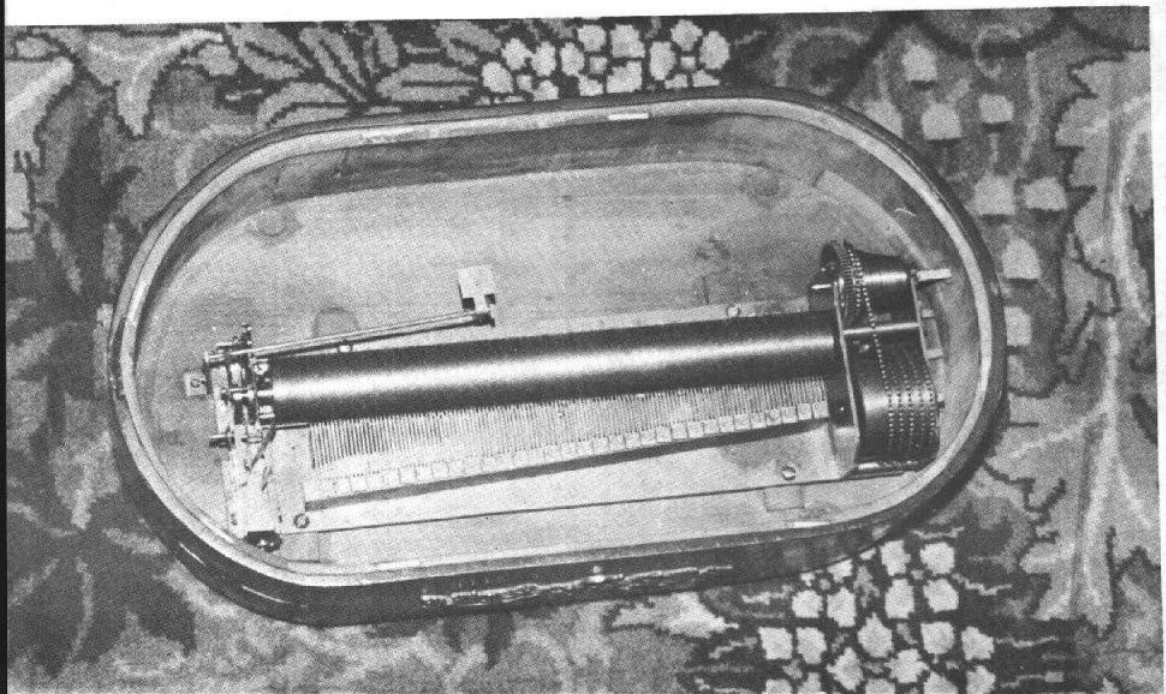
* *It is also shown as Plate 10 of 'Collecting Musical Boxes & How To Repair Them' by Arthur W.J.G. Ord-Hume.*

Detail showing the unusual shape of the bass teeth and clearly showing the progressive thickening of the tooth from the root together with the small curved weight. Below: Another sectional-combed clock-base movement with the self-same characteristic.



11. Drilling the pin holes through.
12. Pinning the cylinder.
&c.

The system of preparing the cylinder surface as a grid for the so-called rigid notation scheme is found on early boxes by Nicole, Lecoultre and others.

With the introduction of the one-piece comb, the above 12 operations were at once reduced to just six, namely 1, 2, 3, 10, 11 and 12.

I would welcome hearing from other Members, by way of Letters to The Editor or further papers for publication, as to any comments they would like to offer on this subject.

CYLINDER CEMENT

by G. Worswick

JUST to add a few more words to the article 'An Odd Cylinder'*, I might make mention of the mix as generally used for cylinders. The liquid constituent is sometimes referred to as 'shellac', sometimes as 'pitch'. Which it is I do not know, but it will certainly have the following properties: It will be 'crude', ie. unrefined, and therefore contains impurities which, when hot, act as a cleaning agent for brass (how convenient!). It also sometimes dries out, leaving the inside surfaced crazed like a dried-up river bed and crumbly wherever exposed to air. Overheated, it will smoke and possibly catch fire; it has no definite melting or freezing temperature.

The 'liquid' component has added to it a variety of powders, grit, crushed stone or brick, or various grades of sand. All will have the property of being almost incompressible and chemically inert. Their purpose is two-fold. The obvious first is to add weight without using more liquid and use up what may be industrial waste. The second is possibly less well known; shrinkage of the liquid would be very great on cooling, and could pull itself from the cylinder walls. The inert additive considerably reduces this shrinkage to such a level that it could be comparable with that of the brass. Hence the additive is an essential ingredient, so don't refill a repinned cylinder with modern refined shellac without adding a high proportion of sand.

A common cause of cylinders not sliding freely on their spindles is age-old accumulations of lubricating oil mixing with the liquid, then drying out after running onto the spindle. The cure in most cases is to gently heat the spindle before pushing it out (it has to be too hot to handle). If force is used to extract a spindle, the driven end-cap could well come off as well! But don't forget that the other reason for a seized spindle could be rust, and that is another story ....

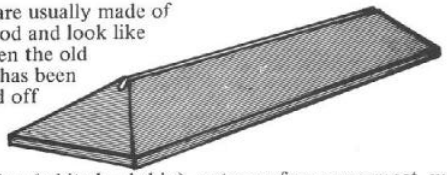
As a development of this, can any member undertake analysis of samples of mix, for publication in the journal. I can supply plenty of samples, and either the member or I can tabulate and publish under either name.

* *page 294*

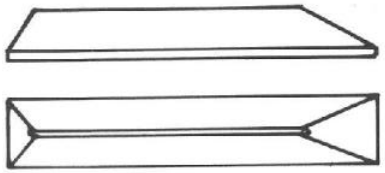
PICTORIALLY VIEWED

This time Arthur Ord-Hume takes a look at recovering the pallets of barrel organs on page 338. Use Evostik Resin W woodworking PVA adhesive and see that none gets on the surface of the leather. Always press the lightly-glued pallet on to the outer surface of the leather to glue it and ensure an even surface by doing this on a smooth board or a sheet of glass.

On page 339, Arthur Ord-Hume describes how to make new pallet springs for windchests using brass spring wire or thin piano wire. Always use the same thickness as the original and remember that the spring must only be strong enough to close the pallet against the weight of the sticker. The tougher the spring, the greater the load on the pins in the barrel – and the shorter the life of the instrument.

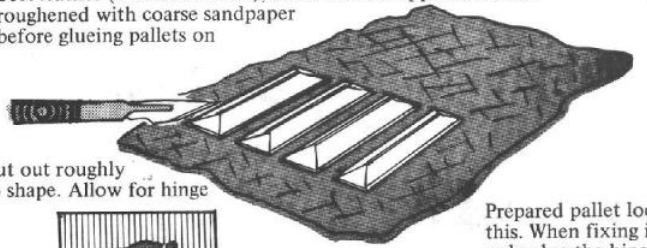


Pallets are usually made of soft wood and look like this when the old leather has been stripped off

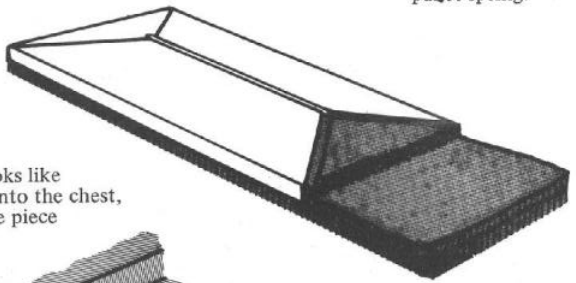


Three-view drawing of typical small organ wooden pallet. The saw kerf along the top locates the pallet spring.

Soft leather (white lambskin), outer surface uppermost, well roughened with coarse sandpaper before glueing pallets on

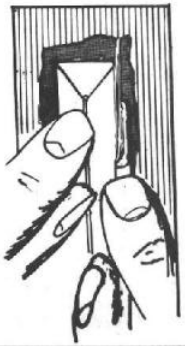


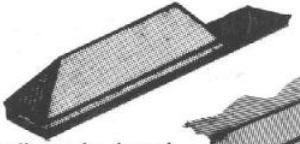
Cut out roughly to shape. Allow for hinge



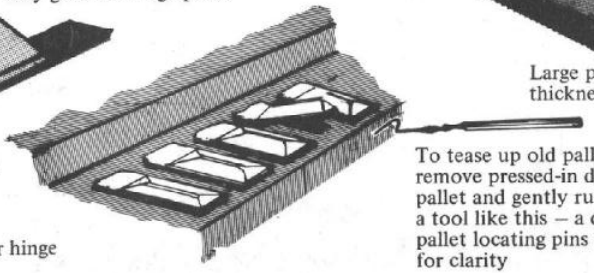
Prepared pallet looks like this. When fixing into the chest, only glue the hinge piece

Large pallets have double thickness hinges like this

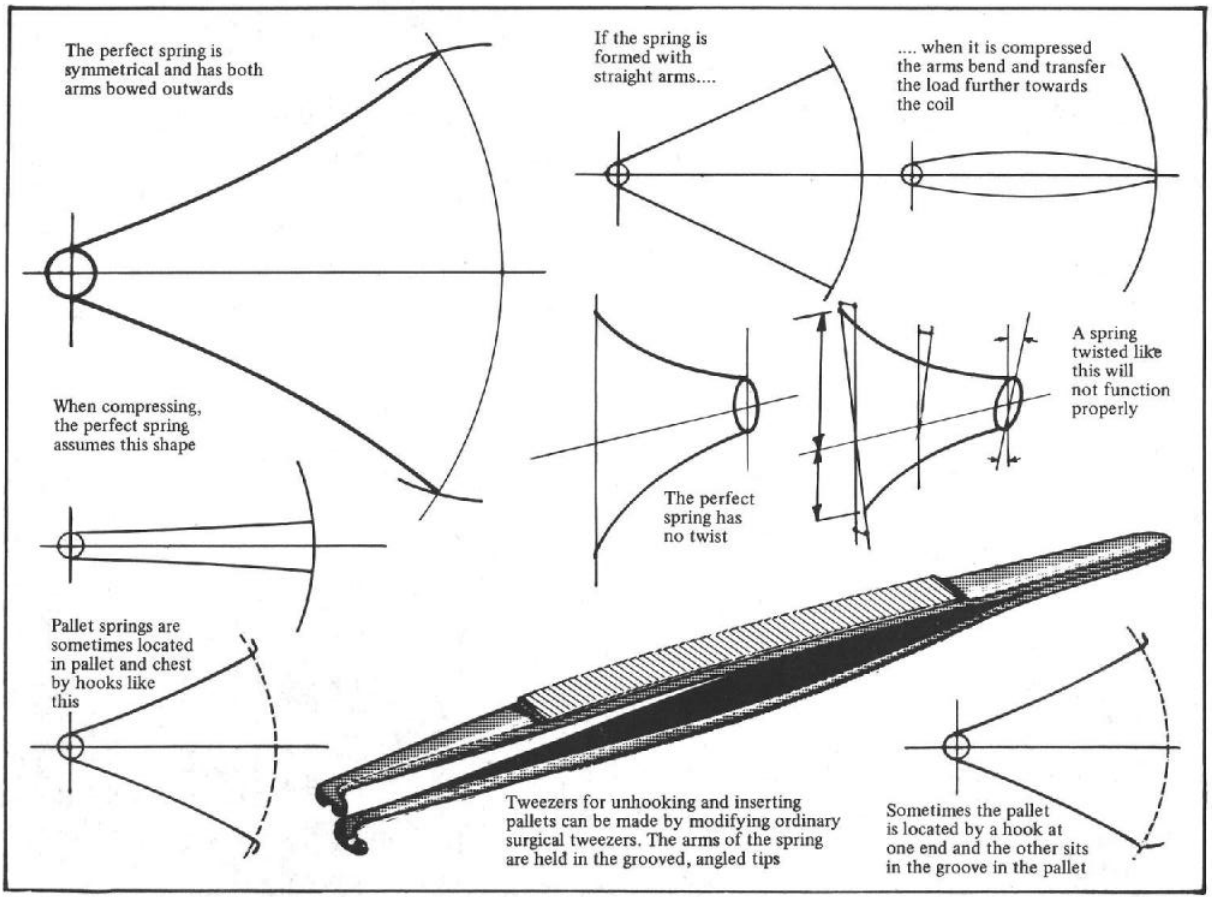




Hold pallet on hardwood block and cut round it using a sharp scalpel held vertical against the pallet sides. Leave ½in for hinge



To tease up old pallet leather and to remove pressed-in dirt, lift up the pallet and gently rub up the nap using a tool like this – a dental probe. The pallet locating pins are ommitted here for clarity


The perfect spring is symmetrical and has both arms bowed outwards
When compressing, the perfect spring assumes this shape
Pallet springs are sometimes located in pallet and chest by hooks like this
If the spring is formed with straight arms....
.... when it is compressed the arms bend and transfer the load further towards the coil
The perfect spring has no twist
A spring twisted like this will not function properly
Tweezers for unhooking and inserting pallets can be made by modifying ordinary surgical tweezers. The arms of the spring are held in the grooved, angled tips
Sometimes the pallet is located by a hook at one end and the other sits in the groove in the pallet

SOCIETY MEETING REPORT

THE Summer meeting of the Musical Box Society of Great Britain, combining the Annual General Meeting, was held on Saturday and Sunday, June 8th and 9th, 1974, at the Kensington Close Hotel, Wrights Lane, London, W.8.

Despite a steady downpour of rain, Members and their guests were not deterred from turning out in force and as usual a fine display of musical boxes soon graced the green baize-covered tables. Notable among the exhibits not just in number but in size were some of the impressive items from the collection of Alex Duman from Glasgow. He had despatched a van all the way from North of the Border containing a 33-inch Symphonion, a large street barrel organ, a self-changing, bow-fronted Regina, a most interesting disc-playing piano orchestrion with bells and drums, and several other items.

The first talk of the day was given by our guest speaker, Jack Shaylor, who is the Honorary Secretary of the Player Piano Group. His talk, 'My Life with the Player Piano', was illustrated by slides and tape recordings. He described his early association with first the piano player, then the player piano and finally with the reproducing piano. His talk was very well received and served to illustrate the growing number of player piano enthusiasts which we have in our midst.

Our second speaker was Member Dick Baines whose talk, 'An Unusual Organ', was a most entertaining and well-presented description of the restoration of his Lincoln chamber barrel organ. His talk, illustrated with slides and tape recordings, described how our Editor, Arthur Ord-Hume, had rebuilt the instrument and discovered that of the four signed barrels accompanying the instrument, two were tuned to one scale and the other two to a completely different scale.

After the luncheon interval, the afternoon session began with the Annual General Meeting under the chairmanship of our President, Cyril de Vere Green. Secretary Reg Waylett stated in his report that we now have 593 members of which 305 are in the United Kingdom, 225 in the United States of America, 44 in Europe and 18 in the rest of the world. Since last year, we have enrolled 79 new members and lost 34 members through resignation or death.

Our President showed an illuminated address prepared by Dick Baines for presentation to the Musical Box Society International on the occasion of their 25th Anniversary Meeting this September.

Vice President David Tallis described the second auction held by Member George Worswick at Lincoln and urged all present to support any future Society auctions.

The Treasurer, Keith Harding, explained that due to difficulties associated with the transfer of the Bank account from Cardiff to London, there were problems in finding out who had paid, particularly those who paid by Bankers' Order. This was now being sorted out but it did mean that it was not possible to present a Balance Sheet at this moment in time. The finances of the Society, however, were sound and a sum of £1,000 was on deposit with a Building Society.

Next followed the report of the Editor, Arthur Ord-Hume, who explained in detail his plans for the Journal, THE MUSIC BOX, over the coming months. He explained how the recent increase in the print order from 650 to 850 had effectively lowered the unit cost of each magazine. In thanking Member Dick Baines for his skilled editing of the recent Directory of Members, he revealed that thanks to the sale of advertisement space in this, the cost to the Society was only £76.

He then went on to say how he would like to see the magazine increased in page size and explained some of the beneficial results from such a change. It was suggested from the body of the meeting that the Editor be authorised to take whatever steps he thought necessary in the interests of improving our journal and that the Committee be empowered to act one way or the other without further reference. This proposal was duly seconded.

Announcing that due to pressure of other business, Dick Baines found it necessary to resign from the Committee, President Cyril de Vere Green said that there was one Committee nomination for the vacancy, Member Alex Duman of Glasgow. Mr. Duman having agreed to serve, and there being no further nominations, he was duly welcomed to the Committee.

The business meeting having overrun its allotted forty-five minutes by something in excess of half an hour, there had to be some re-shuffling of the programme. Member Stephen Cockburn then spoke on 'Living with an Orchestrion' and illustrated his talk with tapes and slides of his Imhof & Mukle

instrument. Confessing that it rather dominated his Sussex home, we all understood what he meant when he said that it was an inescapable conversation piece.

This was followed by an illustrated talk by Member Alfred Thompson entitled 'Collecting for Variety – Keeping one of a Kind'. Featuring some of the fine boxes in the collection of both Grace and Alfred Thompson, the colour slides were accompanied by a taped quiz in which the audience were invited to try to match music to instrument – by no means an easy task in many instances.

Both the talks by our Editor and President had to be cancelled due to time and so the final official session of the afternoon was a demonstration of selected musical boxes from the exhibits on show by Secretary Reg Waylett. Among these was an outstanding Poirot church and chamber barrel organ restored by F. Hill and belonging to Chris Thompson of Cheltenham.

The evening was devoted to the Society Dinner and the first-ever dance sponsored by Member Alex Duman. During the after-dinner addresses, President Cyril de Vere Green revealed that he and Bertha were to celebrate their 40th wedding anniversary on the following day.

The dance was considered by all to be a great success and Member Alex Duman kindly presented every table with a bottle of whisky.

Sunday morning was devoted to the workshop session and, although for some Members who had partaken a little too much wassail the night before attendance proved too much, a goodly turnout of Members and guests were present.

The first session was devoted to musical box comb repairs under the management of Cliff Burnett. Two youthful apprentices from Keith Harding and Cliff Burnett's workshop showed commendable prowess in preparing a comb for letting in new teeth.

This was followed by a talk and demonstration on case restoration by Keith Harding with the assistance of Miss Sandy Waters who showed her skill at French polishing.

So concluded the Summer meeting. Some one hundred and five Members and guests registered although it is believed that several Members ommitted the formality of parting with a little cash for Society funds at the door. Sixty-one attended the dinner and dance. During the Saturday afternoon, two modern electronic singing birds were raffled along with the last two remaining Society lapel badges. The raffle made approximately £9 profit.

ANTON PLUER

New name in Street Organs

VISITORS to the ancient city of Utrecht will almost certainly be greeted by the music of a brand-new street organ built in the best traditions of the Dutch instruments

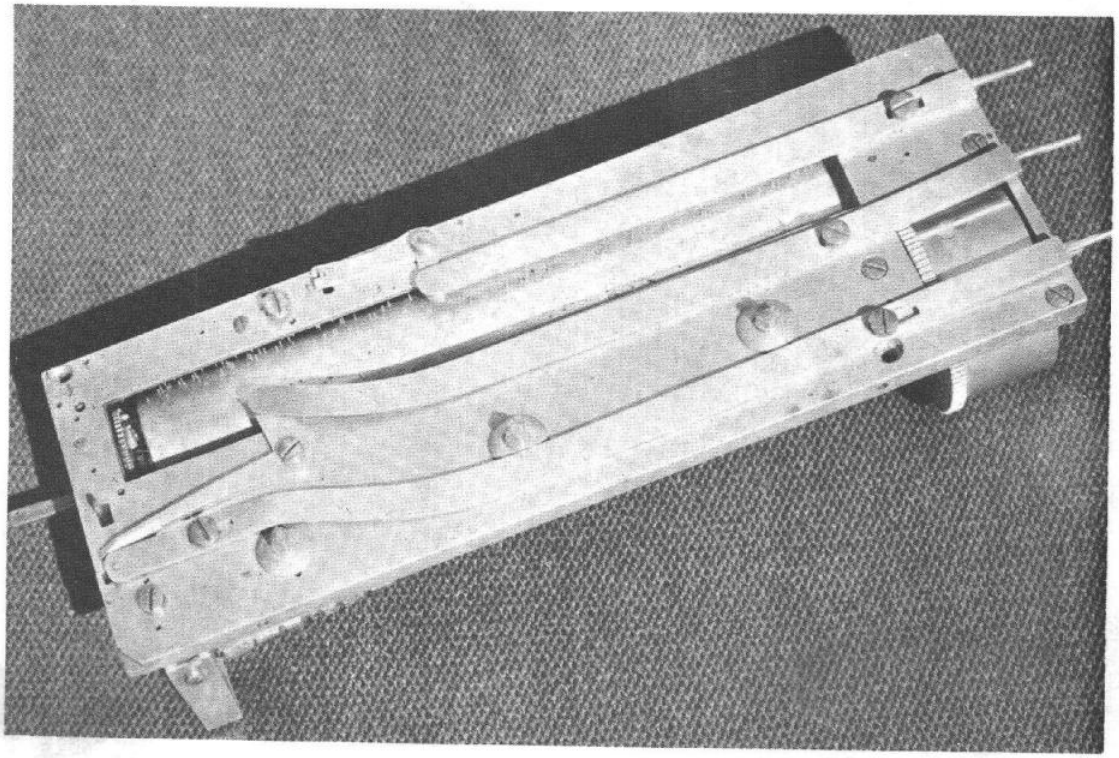
Named (for all Dutch organs bear an identity) *Hummeltje*, this is a 48-key instrument newly manufactured by Anton Pluer of Bussom. *Hummeltje* is Dutch for 'toddler'. Pluer himself is a man in his mid-fifties who is the son of an organ-grinder. Organ-building is as yet a spare-time occupation, for he works in a furniture factory.

Nevertheless, his first organ, the *Harmonica*, is now accredited as being one of the best organs in Holland and is to be heard in play in the town of Amersfoort.

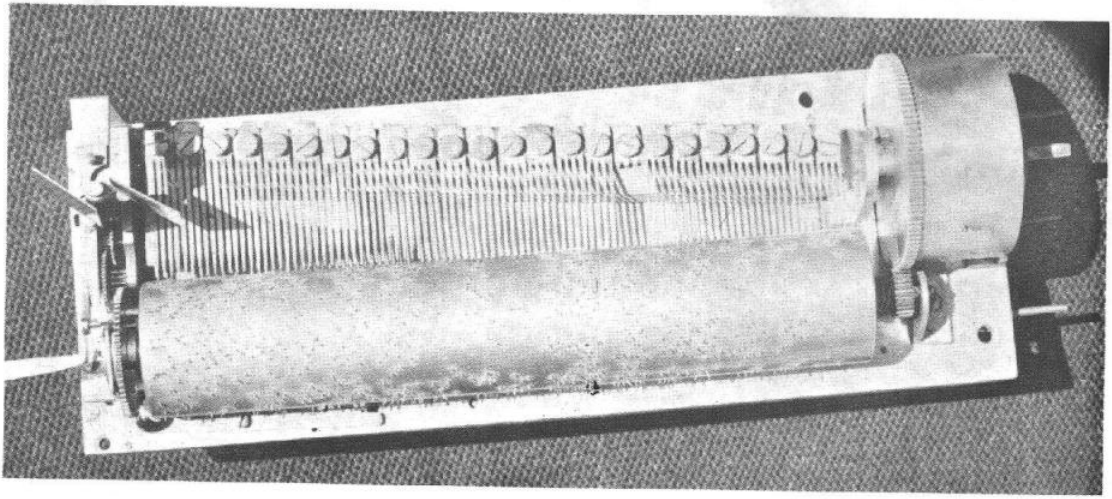
From "The Pictorial Magazine" of December 20 1902 comes this advertisement for candle reflectors. Henry Klein was England's largest Polyphon dealer.

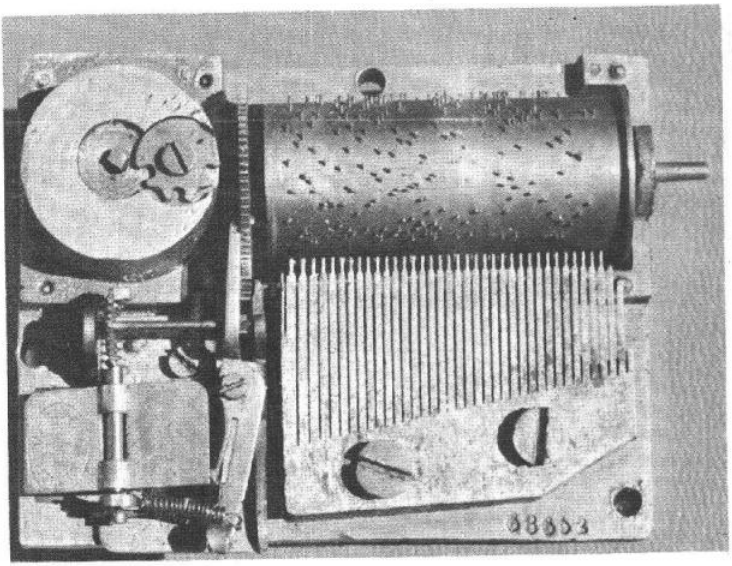
CLIFF BURNETT

Cliff Burnett, who recently suffered a nervous breakdown through overwork, was taken ill again during June and has been admitted to hospital. We all wish him a speedy and thorough recovery and trust that it may not be too long before his prowess at musical box restoration is once more being put to good use.

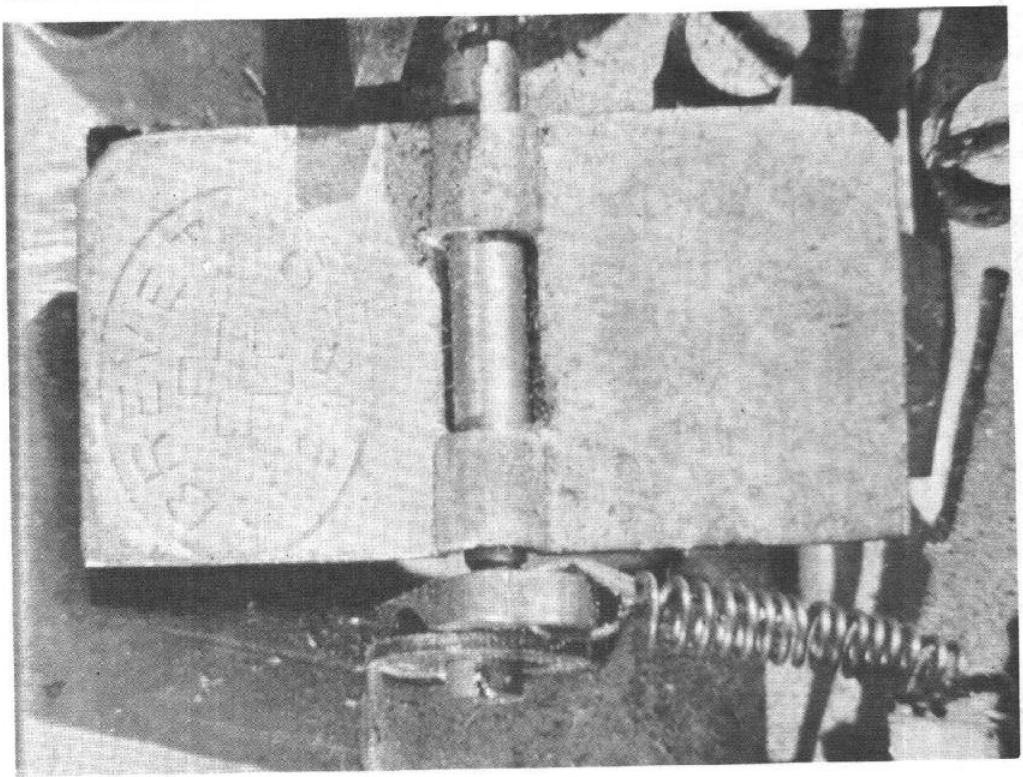


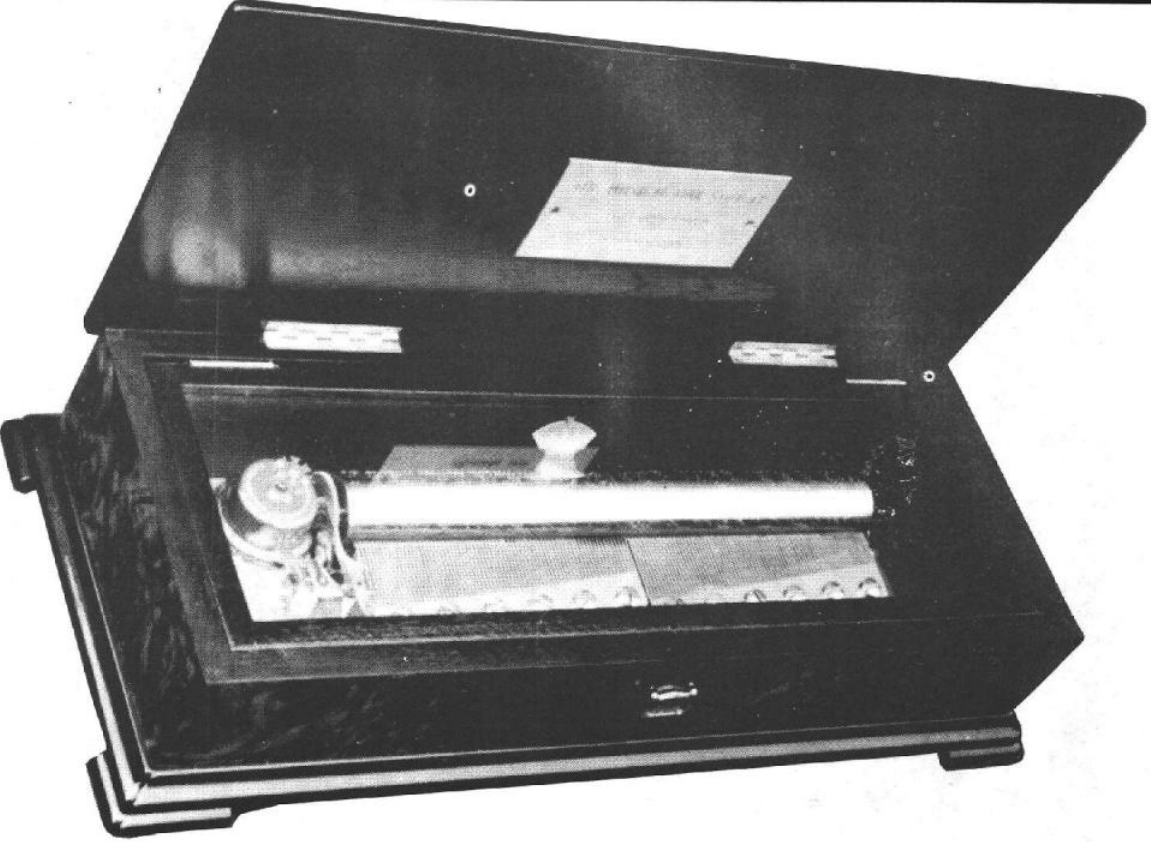
From the Nationaal Museum van Speeldoos tot Pierement comes this extremely fine early cylinder musical movement with an unusual system of pivoted control levers under the bedplate. Notice also the square-headed screws and domed washers used to attach the solid brass comb base to the bedplate.



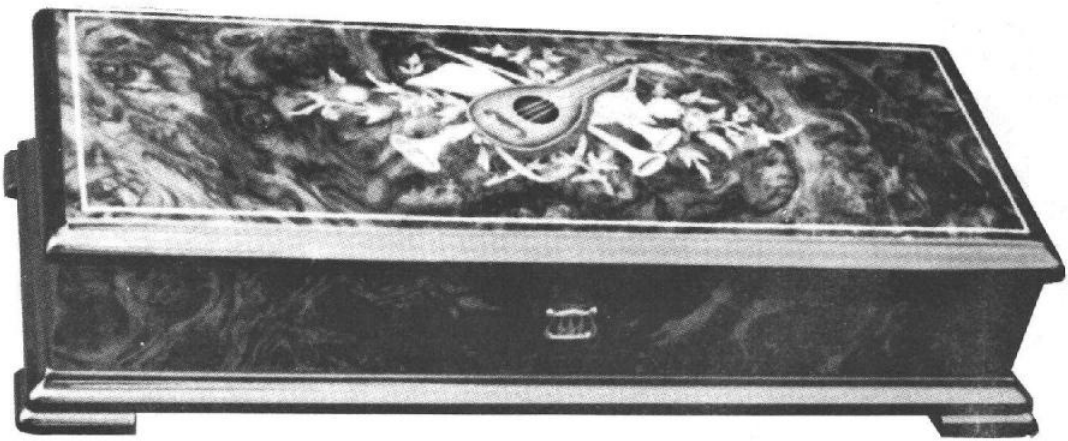


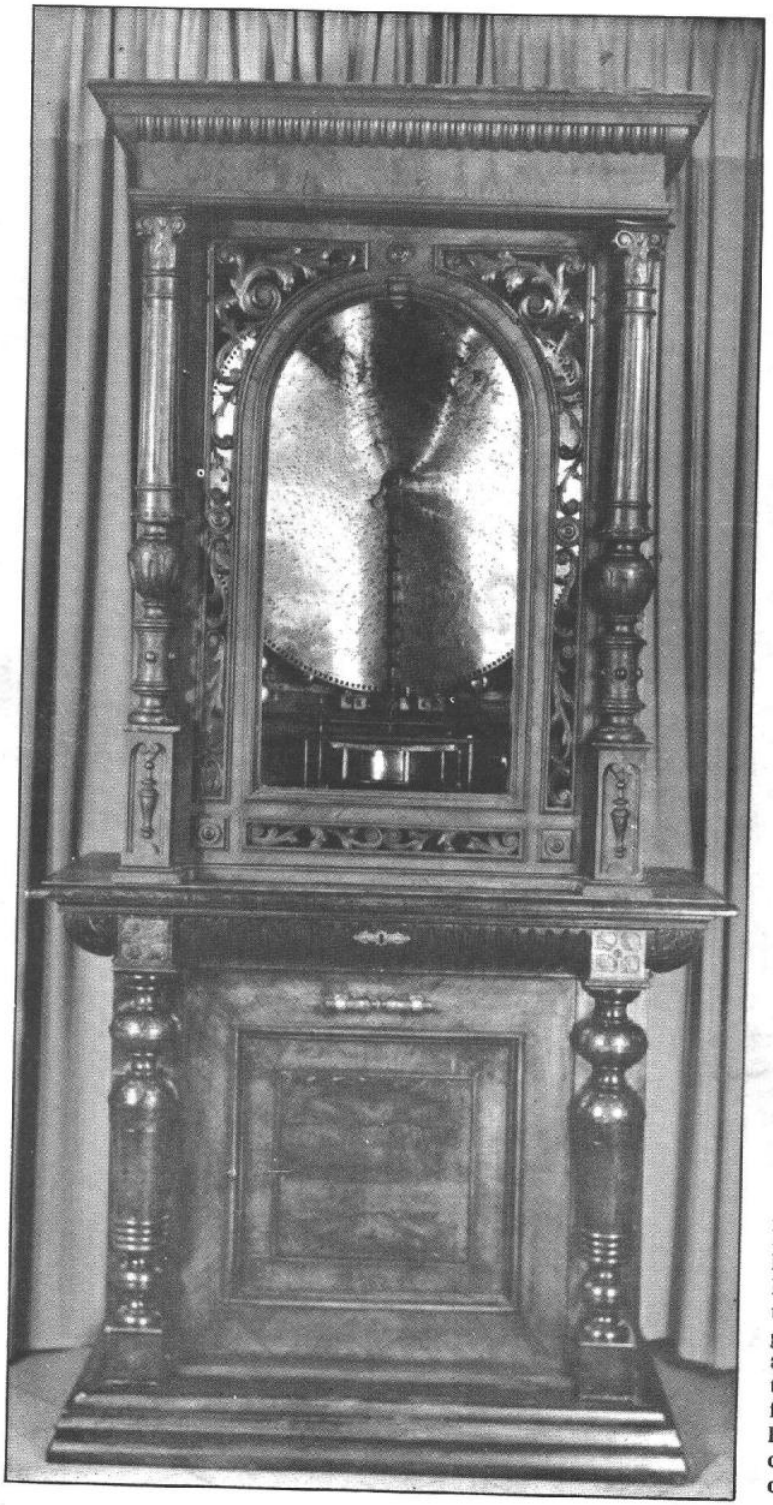
From the collection of Dr. J.J.L. Haspels comes this unusual miniature movement probably made around the turn of the century with a diecast bedplate and Mermod-type horizontal fan.





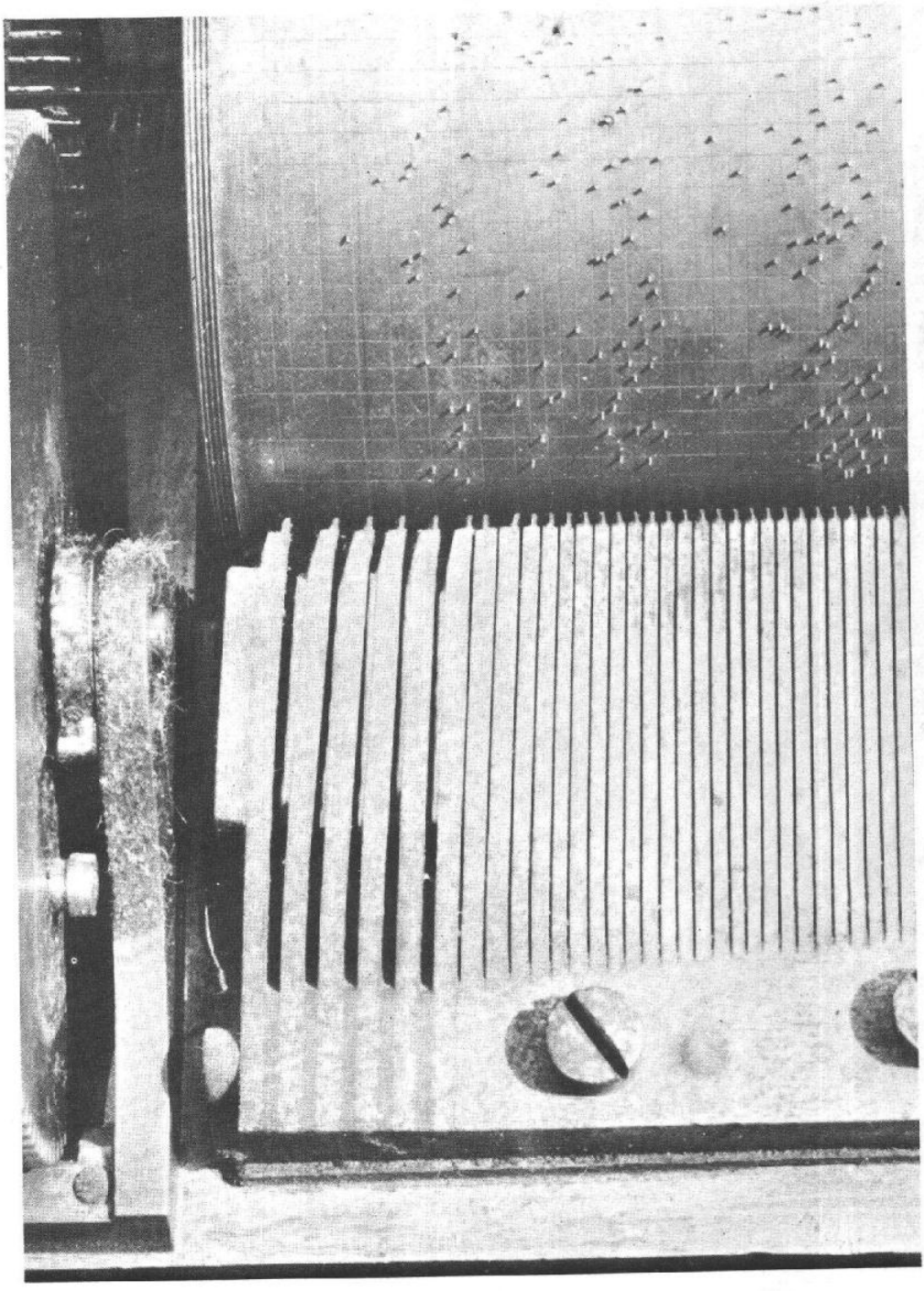
The Musical Box Society International, which is celebrating its Silver Anniversary this September, has arranged for the manufacture of a limited number of these large-size *sublime-harmonie* musical boxes. Each playing three tunes and with two combs totalling 144 teeth, the box comes in a burr walnut case and each one is consecutively numbered. A choice of six cylinders is available offering music ranging from waltzes to overtures. Your Editor inspected the prototype of this box last autumn at the home of Hughes Ryder in New Jersey and can vouch for the fact that it plays remarkably well and above all the music is well arranged. The price is $495.00 and details are available from the MBSI at 495, Springfield Avenue, Summit, New Jersey, 07901, USA.





On page 40 of Volume 2 we pictured a Komet musical box which turned up at the hands of one of our former members. Playing discs 33.3/8in in diameter, this giant instrument stood, sadly, in a reproduction modern case. Recently our Treasurer, Keith Harding, enroled a new Member from Germany, Herr Klaus Pevler of Dortmund. He produced these two pictures of his giant Komet in its original appearance. With awe we thank our new Member from Germany and Keith Harding for so successfully depriving him, temporarily, of the pictures you see here.

A characteristic of early boxes is the uneven spacing of tooth tops occasioned by the need to get the maximum width (and thus weight) of the tooth in order to produce a low enough note. A most interesting clock-base movement is to be seen at the Nationaal Museum van Speeldoos tot Pierement in Utrecht. The close-up view, left, reveals the "rigid-notation" grid layout of the cylinder surface plus the fact that the last six teeth in the bass are individually made and screwed into the end of the comb separated by spacers. Note how the tips are bent to align with the circumferential cylinder rulings. The ribbed bezel on the left end of the cylinder engages in a small steel comb screwed to the bedplate at the back and ensures accurate registration of the cylinder while playing. At the change position, the bezel is cut away. Normally a feature of early Lecoultre boxes, this movement, seen above, has its combs made by F. Nicole. The name, barely visible is stamped between the third and fourth comb screw from the right. Below, the camera shows in magnification the faint stamping of the name.




D·R·P
LIBELLION
U·S·P
PARIS
1900

THE LIBELLION

by Arthur W.J.G. Ord-Hume

MUSICAL boxes playing music from cylinders and discs all ultimately face one major design snag. There is a limitation as to the length of tune which they can play. The so-called 'telescopic' and *plerodienique* cylinder musical boxes strove to overcome this, and boxes playing tunes of different length are not uncommon. But still the problem remained. Three hundred and sixty degrees was the maximum you could get into a circle. Admittedly you might turn that circle on a spiral, thereby allowing your 360 deg to be multipled by the number of turns, but still it was a complex, costly solution. Ehrlich devised Ariston organettes which played fan-shaped 'discs' of some considerable length, and attempts were made by several manufacturers to play helical 'discs', spiral ones and so forth.

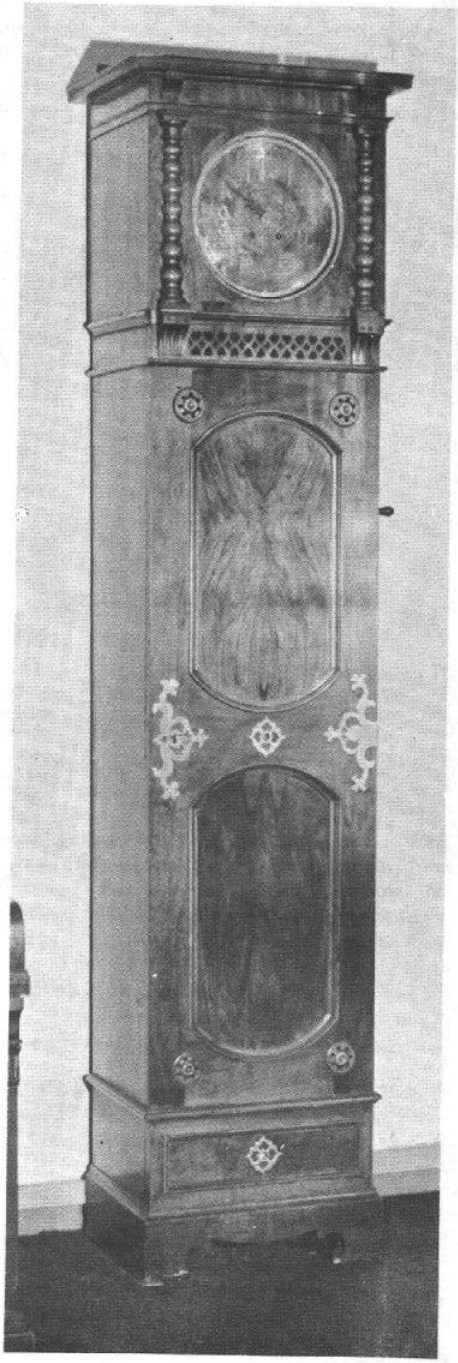
The basic answer, though, was simple. Do away with music in any form of circular mode, as had the earliest of organettes, and your music could be whatever length you chose.

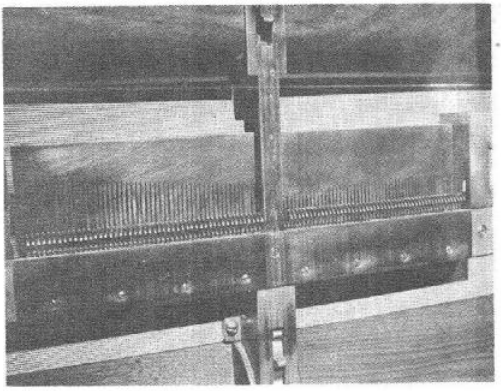
The inventors came and went. The Arno was one of them. On an earlier page we described the Roepke. The frailty of the cardboard music, called upon as it was to pluck a steel tooth in its travels, was no doubt responsible for the survival of so few such instruments and, in so many cases, the specimens which have come down to us have done so without their music.

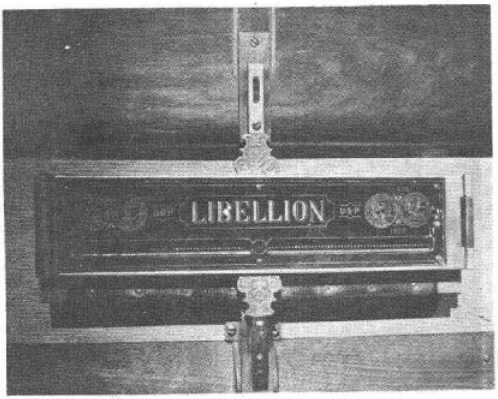
Thus it is even more remarkable that one of these mutation musical boxes (we might even call it musically liberated) has recently come to light in almost perfect condition and with a really large repertoire of music, all in perfect playing condition.

The Libellion was made in Rudolstadt by the firm of Friedrich Adolf Richter. Richter's original advertising literature was reproduced in THE MUSIC BOX, Volume 2, page 288, and a detailed description of the instrument and its principle of operation, along with facsimile reproductions of the patents relating to it, appeared in the same Volume, pages 362–367.

A few months ago, the Nationaal Museum van Speeldoos tot Pierement in Utrecht obtained a large Libellion resembling a long-case clock. The piece, somewhat austere in style and appearance, contains the musical movement which is very similar to that of the Roepke clock described on







Top: The music transport surface showing the central drive cogs, the bottom one being driven by the clockwork while the top one is free. Below: The pressure bar in position across the combs. The bass teeth are at the left and the scale runs up to the centre, then jumps to the far right and runs up to the highest note which again is central, to the right of the drive path.

page 2 of Volume 4 of THE MUSIC BOX. A book of music, placed on the lower shelf of the case, is carried up and over the musical comb against which it is held by a hinged pressure bar. Unlike the Roepke which drives from each side, the Libellion drived its music from the centre, a row of square drive holes being provided in the music. To ensure that the music tracks properly, these drive holes engage in two widely-spaced sprockets, one eblow the comb and one above. Only one sprocket wheel is driven by the clockwork motor, the other being free. The music passes up and over the soundboard, then passes down inside the back of the case, to refold again by gravity at the bottom shelf.

Each drive hole is reinforced by a square plate of zinc-plated iron (this is different from tinplate and it just what it says). The plates are arranged diamond-fashion over the square hole and a X-shaped cut in the centre produces four triangular tabs of metal which are then folded in and hammered flat. This provides a strong, tear-resistant reinforcement for the cardboard. The comb-plucking lever slots in the card are not reinforced and since the action is so smooth and requires very little force, no signs of wear are apparent.

To listen to, the Libellion in Utrecht produces an extremely pleasant sound having the round, full-bodied tone of a Polyphon with the softness and bell-like clarity of a Symphonion. The comb teeth are slender and of high aspect ratio (length/breadth). Clearly audible from the front is the gentle and by no means obtrusive rhythmic chatter of the spring levers as they fly back into place under the music card.

Unspectacular from the public point of view (most visitors to the Museum measure quality by noise output: not always a valid judgement), the Libellion clock is one of the choice items to be seen by visitors to the Museum.

Letters to the Editor

Treasurer David Tallis writes from London S.W.11:

While repairing a composition musical snuff-box recently, I found for the first time a box-maker's mark impressed on the horn. I have had many of these boxes through my hands but have never seen the case marked before, nor have I heard of the same from anyone else.

The mark was impressed inside the back of the bottom of the case as shown. The box is of good

quality but not too early, the date being about 1880, I should say. The lid is impressed with the scene *Vue du Pont de Tours* in good-qualityhigh relief, and the edges of the lid are rounded as on all the better cases. The 2-air movement is a single-unit comb and well-pinned. It plays *Scots wha' hay* and a tune that sounds like *Roger de Couverly* but isn't.

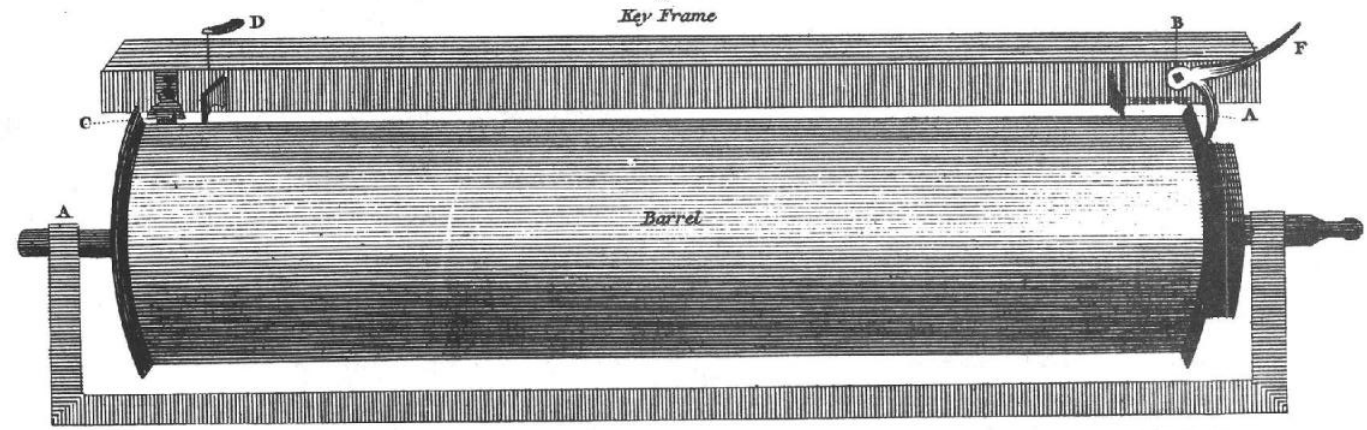
Finding the mark does not prove very much, but it does establish that the cases were made in Paris as we had thought. What would be interesting would be to know whether the movement of this box was of French or Swiss origin, or if the same mark had been seen in conjunction with, say, a movement by P.V.F. As far as Parisian makers are concerned, it would be interesting to go into the affairs of Alibert in detail; the business affairs of course!

Three Limonaire girls standing quietly in the workshops of Gijs Perlee in Amsterdam waiting for the chance to bring alive the facade of another street organ.

Articles and photographs as well as original material, catalogues, advertisements and tune sheets for reproduction in THE MUSIC BOX should be sent to The Editor, THE MUSIC BOX, 14, Elmwood Road, London, W.4.

Longman's Patent Barrel- Organ.

Fig. 1.



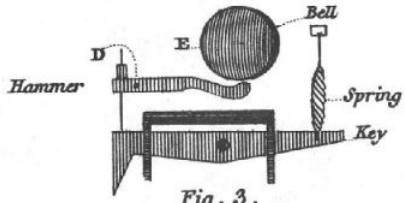


Fig. 3.

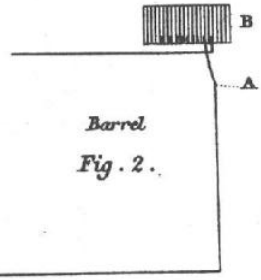


Fig. 2.

John Longman of 131, Cheapside, London, formerly as Longman & Broderip, started business on his own in 1801 and on January 27th that year was granted Patent Number 2468 for "Improvements to Barrel Organs". His Patent covered the addition of drum and bells to the barrel organ and the above reproduction of his patent drawing came into the hands of your Editor recently. "Parry's Barrel Organ", recent record release from Saydisc and reviewed on page 369, features the sound of an organ with this invention incorporated. On the facing page is a testimonial from J. Fackler, musical box repairer and former friend of MBS Founder, John E.T. Clark. Member Graham Webb found the original of this.

J. FACKLER,

PRACTICAL REPAIRER OF MUSICAL BOXES,

JAVENS CHAMBERS,

112, CLERKENWELL ROAD, E.C.

(Facing Red Lion Street).

I have the pleasure to inform you that I have now a complete plant of Tools and Machinery, the same as is used in Switzerland for the making and repairing of Musical Boxes. This, coupled with my long experience in the Trade, places me in the most favorable position to undertake the Re-pinning of Cylinders, inserting of New Teeth to Combs so as to be undetectable, and to guarantee putting in the most perfect playing order any Musical Box, however dilapidated. Should you favor me with your Orders you may depend on having the work done accurately, promptly, and at moderate charges.

I also undertake the repairing of all kinds of Musical and Chime Clocks.

References can be given to the largest and best houses in London, for whom I have done work for many years.

ESTIMATES FREE.

G. AJELLO & SONS, LTD.,

Pianoforte Manufacturers,

. . CAMDEN TOWN, N.W. . .

HINTS AS TO THE KEEPING IN ORDER . . OF AJELLO PLAYER ACTIONS. . .

These remarks are intended only for the trader—who is regularly handling Players and who, knowing that the great majority of properly constructed Players do not give trouble, knows also, that, for various reasons, there is a possibility of trouble occurring after the Player leaves the factory—to point out the most likely causes of trouble arising, and the simple means of remedying them. It should not be understood that these things are **all** or any of them bound to occur or likely to occur, but owing to Players being sometimes severely shaken in transit and to other causes, little things do sometimes in rare instances happen after the instrument has been sent out; these can however invariably be put right without difficulty, provided you know exactly where to look for the trouble and how to set about putting it right, and in this connection we should like to point out that in remedying any little defect, it is just as important not to interfere with any part of the mechanism which should not be touched as to put right the part which is out of order, and we endeavour here following to explain exactly which part or parts to deal with and in what manner.

The chief causes of trouble in a Player are dust or dirt, which choke the air-passages, and damp, so care should be taken to guard the instrument against these; the dust in the air, the "fluff" which rises when the carpet is swept and the small punchings of paper which hang on the perforations in the music rolls all help to choke the Player, while damp is liable to disadvantageously affect all parts of it.

"THE MOTOR,"

Being most susceptible to damp and grit, is a common cause of trouble. If the music roll travels with a jerk over the tracker bar, and at the end of the roll, or with heavy pedalling stops, look at once to the sliding valves. First see that the **bottom** regulating button is tight up to the wooden portion through which it passes; if not, tighten this up and test further. If still jerky, examine the valves and see if they are "bedding" quite flat on the face of motor; if not, remove the valves one at a time by unscrewing **bottom** button (never interfere with **top** regulating button) and with a sheet of fine glass paper on a flat board, rub down the valves till flat, afterwards polishing the face of the motor and valve slides with the finest dry blacklead (or preferably graphite); before replacing, make sure to remove all evidences of dust or grit from the face of motor or valves.

Should the motor driving chain stretch and become loose on the sprockets, build up the motor wind-chest with a thin packing of paper or cardboard, or where Idle pulleys are attached adjust these to take up the slack.

If the tempo lever works stiffly, unscrew from the bellows the box through which the tempo valve works, and clean valve and wire.

The motor used by us is known as a double-exhaust or six-unit motor, while the ordinary motor is a three or four-unit motor. The six-unit motor generates more power, and being divided into six units is more positive and makes the music travel more smoothly.

"THE ACTION."

To keep the vents or bleed-holes clear, and so ensure responsiveness and repetition, an occasional use of a suction pump (such as we can supply) is recommended. Place the shaped portion of this on the tracker-bar and a vigorous use of the pump will clear the air passages and vents.

"THE WIND CHEST."

This is not likely to cause any trouble. The larger reserve is the main wind supply, the smaller one being the controlled governor which regulates the speed of the motor. You can increase the power of motor by shifting the V spring nearer the head of bellows, but do not forget that this also increases the speed of the tempo. If a feeder spring should creak, it is because it has shifted from its original position, and can easily be replaced.

The pedal movements should be lubricated occasionally, as should the running parts of motor, spool-box, &c.

Don't let oil get on to the rubber cloth or tubing, or on the face or slide valves of motor.

G. Ajello were makers of cheap to middle quality player actions for pianos. Established in 1863, the firm had premises at 104 Park Street, NW, and 285, Upper Street, N. This instruction sheet was sent out with all their player actions and has been loaned for reproduction by Mr. Brian N. Gregory of Matlock, Derbyshire.

Your Committee is anxious to broaden the scope of our London and Provincial meetings and would be interested to hear from any Member who would like to speak at meetings being planned. Talks, normally lasting 45 minutes, can be on any subject relating to mechanical music and its instruments and if required can be illustrated by slides, cinematographic film or tape. If you would like to offer your services, please write with details of your suggested contribution to The Meetings Secretary, c/o The Secretary, The Musical Box Society of Great Britain, Bylands, Crockham Hill, Edenbridge, Kent.

From an aged street organ in the possession of your Editor comes this tune-sheet of Fritz Loos. On the original, the Hersbruck address had been obliterated and the Nurnberg address penned in. The camera has successfully penetrated the obliteration. The organ was originally built in Paris by Gavioli and rebuilt in the German style with piccolos on display on an off-wind chest.

PHOTOGRAPHY AND THE MUSICAL BOX

by The Editor

AS your Editor, I receive an encouraging number of photographs of musical boxes, pianos, organs and other musical automata from Members all over the world. These are items which other members would love to own, certainly to see portrayed on these pages. And, all too often, the pictures are not really suitable for reproduction because they are just hastily-taken snaps.

I thought it might be prudent to offer a few words of advice on the gentle art of photographing musical automata both from the point of improving the pictures sent in for reproduction and from your own valued standpoint.

There are several golden rules in photographing objects like these. The first is never to use a flash. Whether you are shooting black-and-white or colour, a flash will 'bounce' back off the centre of the object and the glare will over-expose the centre of the picture. This is called 'burning out' and very effectively spoils the picture.

The next point is always use the smallest lens aperture you can and, if necessary, use a time exposure. This means, in most indoor cases, using a tripod. If you use a tripod, then you should always operate the camera shutter using a cable release as use of the finger in the normal way could shake the camera. Small lens opening (a higher "f" number) means greater sharpness and better depth of field (area in focus from furthest to nearest the lens).

Avoid, where possible, reflections from windows, mirrors and suchlike. Look for these through the camera viewfinder, not with a 'free eye', since it is the camera which sees the picture, not you.

If your subject has a highly-polished case, then it will pick up reflections from violently-patterned wallpaper, carpets and so on and even if you mask out the background on the final print, you will be left with an unaccountably-patterned case.

The expert photographer will reduce oblique lighting reflections using a cunning device called a polarising filter which fits on front of the camera and can be turned to cut down glare.

Always try to avoid picturing an object geometrically, i.e. full on the front, the side or the top. Try to go for a slightly angled view as this not only looks better, but also means less risk of reflections on indoor lighting.

If you use a good modern single-lens reflex camera (SLR) this makes life very easy and it means that your picture will stand a good chance of being one hundred per cent right each time.

For black and white photography (and remember that it does not make for good black and white prints to work from a colour original), if you are photographing predominantly wood items, such as the case of a musical box, the use of a light blue filter will improve contrast. Polished mechanisms in a dark case interior look better if you use a light yellow filter.

A word on exposure. If you expose for the brightest part of the subject (the gleaming cylinder of a Nicole, for instance), the rest of the box will be under-exposed. Conversely, if you expose for the rest of the box, then the cylinder will 'burn' out the exposure. Better to adjust your exposure so that the brightest parts are over-exposed by about one full stop to bring up the contrast of the surround.

When photographing something which is inherently reflective, such as a domed glass automaton-cover, or the domed glass of a clock-face, you will probably find that the camera will see a very bright, often intense, reflection in one part. You can 'kill' this either by spraying on a little aerosol air-freshener immediately before clicking the shutter or, just as effective, breathing on the glass. In both instances, the effect is very short-lived, so have an assistant do it right before you make your exposure. Here again a polarizing filter may remove the worst of the reflection.

Lenses come next. A wide-angled lens lets you take shots of very large objects from a very short distance and is a boon in congested spaces. It does, though, distort the proportions of the piece quite a lot and so only use a wide-angle lens for picturing a room-full of objects, or for objective use from a

Fabbrica di piani a cilindro della ditta Ceasar Maserati & Co. in New York.

This illustration of Caesar Masarati's street piano factory at 92, New Chamber Street, New York, comes from the superbly illustrated catalogue to the Museo di Strumenti Musicali Meccanici in Ravenna, Italy.

We are pleased to announce that all back issues of THE MUSIC BOX are now available following a programme of re-printing all those which were out of print. The cost is rather high for the earlier editions but a necessary price justified by the very small quantity which we have had to print. From Volume 1 Number 1 to the current issue the price is £1.00 per copy ($2.60) plus postage at the rate of 10p (25c) up to 3 issues, 20p (50c) from 4 to 10 issues and 40p ($1.00) for 11 issues and more.

reasonable distance. Distorted perspective can sometimes be used to good advantage, but select its use with care.

A telephoto lens allows excellent close-up shots from a distance and is a boon for picturing, for example, high or inaccessible details without the distortion arising from trying to get close enough to see the detail through your normal lens. I use a 135mm lens for this sort of work.

If you have a good camera with a zoom lens, you can select your viewpoint and then adjust your object size until it fills the picture.

Having said earlier that you must never use flash, let's say a few words about additional lighting and also show how you can sometimes use the flash to lighten not the object but the background.

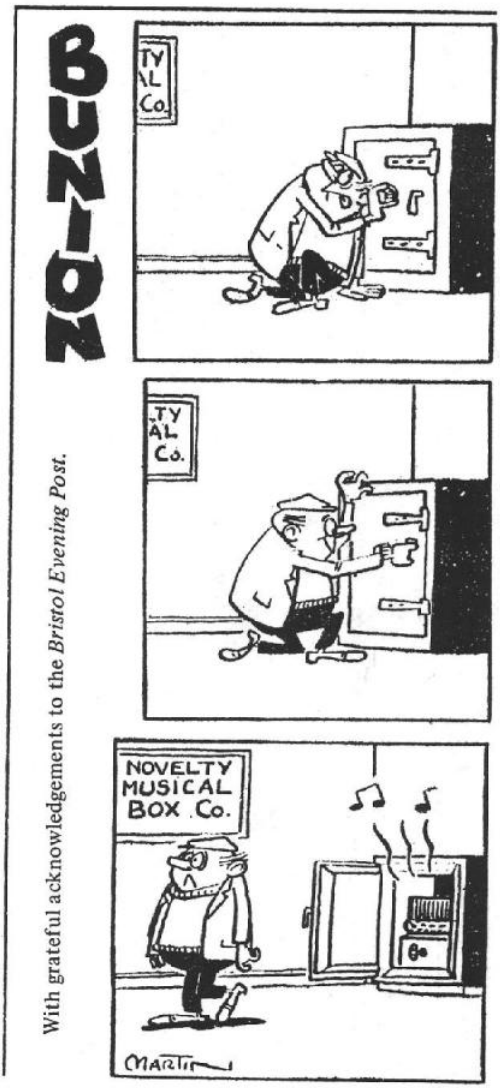
A good bright 1000-watt cine light is a boon to the serious photographer. Two if you want to make a really professional job. This light can either be hand-held or mounted on a separate stand or tripod. You can either use it for direct illumination, i.e. pointing it at the subject, or indirectly by 'bouncing' the light off the wall or ceiling. The advantage of indirect or bounced light is that it is softer and casts less violently contrasting shadows. With your lights switched on, set your aperture and exposure – easy if you use the SLR camera. Viewing through the camera, try moving the lights around to find the best position and the one presenting the least flare or glare. Once you have found that setting, remember not to move the lights otherwise you will upset the lens setting for that exposure.

If your subject is properly illuminated, you may find that the background is rather dark. If you wish you can now lighten this by the use of the electronic flash. Do not point the flash at the subject – this will 'burn' out the picture and destroy all your careful preparation – but point it at the ceiling. Assuming that the ceiling is white and fairly smooth, this will reflect just enough background light into the picture without upsetting the exposure.

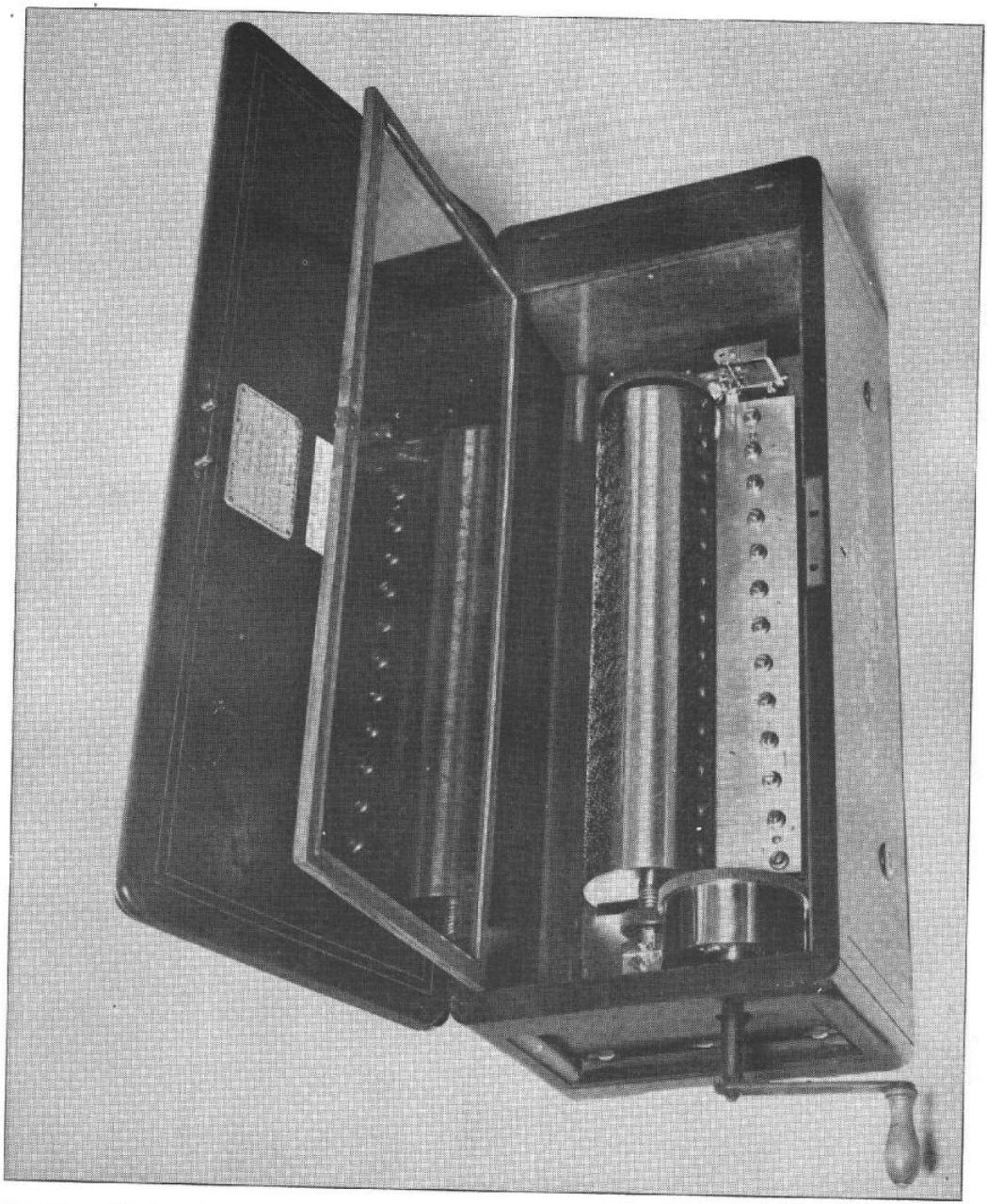
By the way, do not forget that tungsten-filament cine-lights get very, very hot indeed. A thoughtless grab at the light can produce serious burns: a carelessly-laid down light will burn the veneer off your musical box, or singe the best carpet. Another point is that, even when cold, you must not touch the filament tube since grease from even a clean hand will cause the tube to crack or discolour when it is switched on.

And finally, if you really want to take those marvellous pictures, you do not need desparately expensive equipment, just care and patience and the will to succeed. But Polaroid pictures just are not on. You must use a roll-film camera.

I hope these words will be of use to you, and don't forget to send me the results for reproduction. And if you have doubts as to your prowess as a budding photographer and you have something really good to picture, then why not have a photographer friend come along and do it for you?



With grateful acknowledgements to the *Bristol Evening Post*.



From the collection of our Treasurer, Keith Harding, comes this fine cylinder box featuring a ratchet handle-wind as the intermediary between key wind and the later general lever wind. Notice how the control levers still protrude below the winder, yet the box features a right-hand case divider which is provided with a hinged lid. This is for the storage of the winding handle. The box is by Nicole Freres and is Number 27801 playing four overtures (Gamme number 1235).

MUSICAL BOX INDUSTRY IN 1909

The following directory of musical box makers and main agents is compiled from a 1909 copy of Paul de Wit's Weltadressbuch der Musikindustrie and also from his Zeitschrift für Instrumentenbau, both published in Leipzig.

At the end of the basic listing are two short additional ones, the first showing the musical box industry in L'Auberson for that year, and the second showing the makers of Musical Photograph Albums.

Generally speaking, the names listed here exclude those already listed in available reference works such as COLLECTING MUSICAL BOXES.

ACKLIN, ALOIS Herznach (Aargau), Switzerland. Musical box maker.

BREITINGER & KUNZ 39, 9th Street, N. Philadelphia. Musical box agents and dealers. Louis Breitinger and Gustav Kunz. Est. 1877.

CLERC Baulmes, Switzerland. Musical box maker.

CLUNE, Wm. H. 727 Main St. E. Los Angeles, USA. Dealer in musical boxes.

DELAY, L. Baulmes, Switzerland. Musical box maker.

DUCRAUX, L. Baules, Switzerland. Musical box maker.

FABRIK FEINMECHAN. MUSIK-u. FEDERTRIEBWERKE GRUONER & BULLINGER Winterbach-Schorndorf, Germany. Est. 1904. Xaver Bullinger. Makers of musical christmas tree stands and musical box novelties.

FURST CO, THE 127, Newark Avenue, New Jersey, USA. Musical box dealers.

HELLER, J.H. Interlaken, Switzerland. Run by H.C. Heller also with an address in Bern (Bundesgasse 20). Maker of musical boxes.

IRION, JOH. Felsentra. 57, St. Gallen, Switzerland. Maker of musical boxes and other mechanical musikwork. Est. 1880.

JACOT MUSIC BOX CO. 39, Union Street, New York City. Est. 1898. Musical box importers and dealers.

JEANRENAUD In 1909, under the management of Paul Jeanrenaud, Ste. Croix, a business existed in Milan, Italy, under the name Societa Italiana di Macchine Parlanti at Monte Napoleone 25, to sell gramophones and records made by Jeanrenaud in Ste. Croix.

KALLIOPE MUSIKWERKE A.-G. Bitterfelder Str. 1, Leipzig. Directors: – Emil Wacker and Hugo Zetzsche, Manager: Wilh. Muller). Est. 1898. Kalliope musical boxes.

KARRER, S. Teufenthal (Aargau) Switzerland. Musical box maker and exporter.

REINER, MAX Bälliz 20, Thum, Switzerland. Est. 1896. Distributor of musical boxes.

TROUBADOUR-MUSIKWERKE, B. GROSZ & CO. Gellerstr. 8, Leipzig III. Founder: Siegmund Schauer. Makers of Troubadour musical box.

SUN MUSIC BOX MANUFACTURING CO., SCHRAEMLI & TSCHUDIN, 2, rue des Pâquis, Geneva. Est. 1902. Makers of the Sun disc musical box.

MACHEFER, L. 32 rue du Faubourg Poissoniere, Paris. Agent and distributor of Swiss musical boxes made by Guissaz Fils & Cie in Auberson.

MEINEL & CO., OTTOMAR Wittenberger Str. 30, Leipzig-Eutritzsch. Est. 1902. Makers of a toy drum operated by a tune sheet.

MÜLLER, LEONHARD Austr. 7, Nurnberg. Est. 1897. Maker of musical boxes.
NICOLE FRERES LIMITED 51, Long Street, Box 1383, Capetown, South Africa. Musical Box handling. Also in Johannesburg. Headquarters in London.
OLYMPIA MUSICAL AUTOMATEN CO. 70, Newark Avenue, Jersey City, USA. Musical box manufacturers.
ORIGINAL MUSIKWERKE, PAUL LOCHMANN GmbH Querstr. 15/17, Leipzig. Operated by Paul Lochmann and Ernst Lüder. Est. 1900. Factory in Zeulenroda. Makers of Lochmann's 'Original' Musical Box.
OTTO MFG. CO. 107, Franklin Street, New Jersey, USA. Musical Box makers.
PASCHE, LOUIS Saubraz, Switzerland. Maker of musical boxes.
REGINA COMPANY, THE 259, Wabash Avenue, Chicago. Founded 1892.
SPERRY, N.A. 85, Pratt St., Hartford, Connecticut, USA. Dealer in musical boxes.
ULLMANN, CHARLES & JACQUES 11 rue du Faubourg Poissonniere. Est. 1881. Add: Paris distributors of Symphonion musicwork.
VALLE Y HERMANO, FELIPE 11a de Tezontlale 6, Mexico, South America. Musical box maker.
WÜRKER & CO., SCHWEIZER AUTOMATENWERKE. Unterer Mühlsteg 2/4, Zurich. Dealer in musical boxes.
ZIMMERMANN, JULES HEINRICH Querstr. 26/28, Leipzig. Factory address Sedanstr. 17, Leipzig. Est. 1886. Fortuna musical boxes.
ZUST, J.E. Speisergasse 17, St. Gallen, Switzerland. Est. 1840 Musical box agent.

Musical box industry in Auberson (1,000 population) in 1909 comprised:
BORNAND-PERRIER, EMILE
CUENDET, JULES (Est. 1828)
CUENDET, PHILIPPE
GUEISSAZ FILS & CIE
HARMONIA SOCIETE ANONYME (Est 1897)
JACCARD, E
JACCARD & MARGOT SUCCR., L. (Est. 1830)

Manufacturers of Musical Photograph Albums, fl. 1909:
LIEPE, CL. AUG. Schönhauser Allee 146, Berlin, N.58. Est. 1888
SCHARPKE, ROB. Alexandrinenstrasse 49, Berlin, S.14. Est. 1874
DITTMAR, A. (Max & Hans Dittmar) Prinzessinnenstrasse 29/30, Berlin, S.42.
BOSSERT, F.W. (Otto Bossert's Wwe.) Bernardstrasse 26, Offenbach a Main. Est. 1859.

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Subscriptions fall due on January 1st. Owing to the disproportionately high cost of postage, Members will only receive one reminder if their subscriptions are not renewed within four weeks of that date. After that, if no payment is received within six weeks, their membership will be considered to have been terminated and re-admission to the Society will involve payment of an entrance fee as a new member. Please help your Treasurer and, through him, your Society by ensuring that your membership subscriptions are payable when due, namely January 1st, 1975 and on the first day of each subsequent year. Monies and remittances should be sent to Keith Harding, Treasurer, either care of The Secretary or direct to 93, Hornsey Road, London, N7 6DJ'


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Record Review by Arthur Ord-Hume

DE ARABIER SPEELT BACH, Philips 6440 147, Stereo.

Here is one of the most unusual discs I have come across for a long while and one to be thoroughly recommended if, like me, you appreciate the out-of-the-ordinary.

The Arab is one of the better-known of the Amsterdam street organs and has quite a history. Built around 1926 in Antwerp by Pierre Verbeeck, it finally came into the care of the Perlee family. A few years ago, somebody suggested trying to arrange classical music for the Amsterdam street organ. The task was tackled by the famed Dutch organ enthusiast and carilloneur, Rompke de Waard, and Dr. J.J.L. Haspels of Utrecht, one of our Members.

The outcome of this talented trio (for the organ is the overt star) is this recording, the title of which means 'The Arab plays Bach'. Side one is all-Bach, beginning with a strangely lilting, poetic transcription of 'Jesu, joy of Man's desiring' in which the arrangement is clearly shown to dictate a total sympathy with the scale and tonality of the organ. This is followed by the aria 'Erbarme dich' from the St. Matthew Passion, the Musette in F (transposed up from D), the popular Minute in D and then the Bandinerie from the Suite No. 2 in B.

Finally on this side comes a transcription of the Toccata & Fugue in D in which this bright little organ, with its very limited bass compass, really does a passable job with those monumental opening bars. Because of the limitations of the instrument and its lack of what would properly be termed a 'pedal department', the third phrase is disguised admirably by the addition of drumroll and bass drum. Bach purists will no doubt wince, but it remains great music. In several places, the organ has been patently incapable of following Bach's scoring and so, rather than Polyphonise the music (a reference to the disc-musical box arrangers' habit of abbreviating and abridging out of recognition and into the wrong key), some splendid cadenzas and links have been added by Dr. Haspels.

Side Two begins with Offenbach's 'Orpheus in the Underworld' and ends with the overture to 'La Gazza Ladra' by Rossini.

Truly a historic and worthwhile disc well-recorded and presented with copious sleeve notes – in Dutch!

PISTON POLKA. Volume 9 in Saydisc's 'Golden Age of Mechanical Music' series. SDL 209 (Mono).

Subtitled 'The Carl Frei Dutch Street Organ', this disc features a 67-key instrument which was restored in 1969 by Henk Mohlmann (whose name is mis-spelled in the sleeve notes) of Amsterdam and then sold to an English collector.

Horribly out of tune at the time of this recording, the organ would have been hounded off the streets of Amsterdam in this condition. There at least organs are tuned expertly at least once a week. And the recording engineers have 'lost' the drums, the percussion being reduced to an occasional faint side-drum rattle and a tubular bell.

The record receives its name from one of Frei's masterpieces, 'Piston Polka' on Side One. Several of the arrangements elsewhere on the disc, including a subtle reading of 'La Reve Pass', are from the pen of this master.

Not helped by a flat-fi recording and no credit to Frei, Amsterdam or, I'm afraid, to the respected record company. If you are desperate for fair-organ sounds, or want to hear Frei's 'Piston Polka', then buy this. But discs of well-maintained and well-recorded Dutch street organs abound.

PARRY'S BARREL ORGAN. Volume 11 in Saydisc's 'Golden Age of Mechanical Music' series. SDL 234 (Stereo).

Sir William Edward Parry was one of the pioneers of British Arctic exploration and he made three expeditions to seek a short sea route through the Canadian Arctic to the Pacific Ocean – the notorious North-West Passage. On his last voyage in 1827, he attempted to reach the North Pole from Spitsbergen. He failed, but he went farther North than anyone had ever been before, a record not to be beaten for half a century.

In equipping his ships for these arduous voyages, one item he called for was a barrel organ to include a repertoire of music suitable for the entertainment of his men six days of the week, and for playing hymns on Sundays. He bought such an instrument from John Longman of 131 Cheapside, London, and the organ accompanied him on all four of his missions.

The organ was Longman's 'New Invented Patent Barrel Organ' with bells, drum and triangle and must have been built between 1801 and 1816, By a strange and unrelated coincidence, a copy of an illustration of the mechanism was found recently by the present reviewer: it is reproduced on page 354.

Parry died in 1855 and in 1954 his great grandson presented the organ to the Scott Polar Research Institute, Cambridge. By now it was in a sad state. Its many miles of travel having taken its toll, it was left mutely on display, a strange relic of an instrument whose one-time musical capability remained locked up in a tangle of damaged mechanism.

In 1971, though, our Member Freddy Hill undertook to restore the instrument and, after seven

months of extensive rebuilding, the organ is once more in playing condition.

This record is well-produced and comes, literally, like a voice from the past. Who cannot fail to feel an Arctic shiver run up his spine as the sounds which once filtered across the silent white wastes of the Land of the Midnight Sun emerge from his loudspeaker?

As ever, hymns are better on most barrel organs than the often spiky-sounding jigs and dances. All five barrels made for the organ survive and every tune is included here, among them some stunning arrangements of hymns (the 100th Psalm is particularly fine), and the sound of Adeste Fidelis (known as 'Portugese') played with the bells has about the same quality as the quaint *cymbelstern* found on some 18th century recital organs and now back in favour.

The record comes with extensive and adequate sleeve notes plus a four-page illustrated leaflet on Parry and his organ. This one should not be missed by the connoisseur.

THE REALM OF THE MECHANICAL MUSIC MAKERS, CRY 3007. Crystal Records, distributed by President. Stereo

A new pressing of one of the old Hathaway & Bowers recordings, this one is of extremely good quality and features instruments which are probably audibly known to the English collector such as the Weber Maestro, Seeburg Automatic Piano, Wurlitzer Piano Mandolin Orchestra, Lyon & Healy Mechanical Piano, Cremona Flute Piano, Seeburg Orchestrion and Bursens Dance Orchestra.

The instruments recorded are all in peak condition and clearly demonstrate the sheer technical ebullience of the hey-day of mechanical music both in Germany and in America. The fantastically rapid repetition of the Wurlitzer Piano Mandolin Orchestra must be heard to be believed. What certainly emerges for this reviewer is how the basic player piano was developed into a copious mechanical orchestra with tonal capabilities far and away in excess of those ever thought possible in the 1880s.

Apart from some strange electronic sounds after one track, and rather sketchy sleeve notes, this disc makes a good addition to the library.

AUTOMATIC MUSICAL INSTRUMENTS, CRY 3014. Crystal Records, distributed by President. Stereo.

Another of the Hathaway & Bowers recordings and once more a splendid recut of better quality than the old out-of-print original. This one features the Wurlitzer Style 1 Nickelodeon, a Style D with organ pipes, a Model CX Orchestrion and a Model LX, a Coinola X Orchestrion and a Wurlitzer Mandolin Quartette, all of which play well and with gusto the sort of music which typifies America in the quarter-century from 1905. Party music with smiles and never a wrong note to jar. Here and there, the stereo sound has been 'engineered' a little clumsily. The Mandoline Quartette again shows off a sostenuto repetition which, in the upper registers, reminds one of walking into the teeth of a hailstorm.

An otherwise enjoyable record is spoiled by two really dreadful tracks. One is an Encore Automatic Banjo which is hopelessly out of tune and in need of adjustment. Since I have heard several Encores and all played better than this, I cannot understand recording an instrument in this condition. Sadly the same goes for the second bad track. This is of a Mills Violano-Virtuoso in which it is not just the violin which is out of tune, but about a quarter tone higher than its piano which is far too prominently recorded.

An interesting record with some splendid recordings of intrinsically American instruments – but you'll only want to hear the Encore and the Mills tracks the once.

SPEELDOOS TOT PIEREMENT, Phonogram (Philips) 6810 218. Stereo

Hollands National Museum Musical box to Barrel Organ at Utrecht is described on page 152 Its superb collection of instruments, all in fine playing order and kept perfectly in tune, includes a number of items which are rare indeed anywhere in the world, and at least one which is unique –the little clockwork barrel organ made by D. N. Winkel.

It is thus with open arms that we may greet the issue of a recording of many of the museum exhibits. Here we find a Baker Troll cylinder box playing Bizet and Mozart and for the first time on record we hear the clear-cut, precise tone of the book-playing Libellion comb musical box. There is also the Hupfeld Phonolisz-Violina which has three real violins, and the Philipps Paganini orchestrion which has realistic violin-toned organ pipes. The famous Aalster Gavioli organ plays Mozart, a superb Carl Frei street organs renders the Sailor's Hornpipe in a way that makes this hackneyed tune refreshingly new, and the great Carl Frei organ, *De Schuyt*, plays some Strauss and then the closing passages of Wallace's *Maritana* overture. The unique Double Ruth copes with the waltz from the Dollar Princess and the little Winkel clockwork organ plays a lilting arrangement of God Save the Queen and also the Mozart arrangement of the popular Austrian song which Winkel pinned for the Six family of Amsterdam.

All in all, the programme is well-balanced and represents instruments which I have personally heard and made my own recordings of. But what has the Philips record company done to make this record sound like a re-recording through a non-electric gramophone? In almost all cases, the

percussion and bass notes are lost in a melee of muffled sound. This is most noticeable in the tracks of De Schuyt and the Double Ruth. In the latter, microphone-placing has failed to allow for the alternate arrangement of pipework from the left side of the long case to the right with the result that some notes stand out above the others and produce a strange effect.

The Mozart on the Winkel sounds too shrill because the sound engineers have concentrated too much on filtering out the slight mechanical noise made by the organ. In doing this very effectively, the bass has blurred, The Hupfeld sounds strange and I suspect this is due to the use of the wrong microphone. By comparison, the Paganini has been "doctored" at the master tape stage and variations in the loudness of the piano part have been added which are neither attractive nor mechanically possible.

On the plus side, the bell-like treble of the Libellion is a sound

Records reviewed here are available from many good record shops or from specialist dealers such as Keith Harding or Leslie Brown.

quite new to the majority of us, and the Baker Troll playing Carmen demonstrates in a charming manner the problems of a limited musical scale and how the cylinder-pinners did a skillful job of making the best of what was available.

My criticism is due to the fact that I know the record could be better. Even so it still deserves a place in the library for the new sounds it contains.

Since preparing the above review, left over from an earlier issue due to pressure of space, my comments to the Museum have been taken to heart and, as a direct result, Philips has now issued a brand new pressing made from new master tapes. Almost all the short-comings listed against the first disc have been overcome.

However, there is one minor problem and that is that both the old and the new discs have exactly the same number, label and sleeve and, since they are pressed from totally different masters, the discerning buyer, if in doubt, must resort to checking the master pressing number. This is pressed into the record in the run-off groove between the outer edge of the label and the end of the recording. The first pressing bears the marks AA 6810 218 1Y2 670 1 04 on one side, the reverse substituting 2Y1 in the middle and 03 at the end. Incidentally, these last two figures are some distance around the record from the main group.

The new pressing bears the identification AA 6810 218 1Y3 670 1 with the addition of 06 All rather complicated but worth checking.

YOU HAVE A FRIEND IN DENMARK!

You have a friend in Denmark: the Mekanisk Musik Museum! If you're interested in purchasing cylinder or disc music boxes, player pianos, reproducing pianos, coin-operated electric pianos, orchestrions, organette, organs, or just about anything else in the field of automatic musical instruments the chances are excellent that we have some really fine values in stock right now – just right for you! Our illustrated magazine, the *MMM Review,* contains articles and notes of interest and importance plus a wonderful selection of instruments for sale. Single copies are available for 70 pence; a subscription to the next six issues is yours for 3 pounds. Send for a sample copy today! Guarantee: if you don't find the *MMM Review* to be "just right" for you, then keep the issue–and we will refund your money without question! So, you see you can't lose a thing. On the other hand you can gain a lot: by finding out where many of the collector and dealer members of the MBSGB find their best values!

Visiting Denmark? We invite you to stop by to see us! If you're coming to view the permanent museum collection, come anytime Tuesday through Sunday 10 a.m. to 6 p.m. If you're coming to view instruments for sale it is best to write first and give your specialty or main interest–so we can have some interesting things for you to see. We have a "space problem" at the MMM, so our for-sale instruments are in three or four warehouses scattered around town!

Thinking of selling? Claes O. Friberg and Q. David Bowers, directors of the MMM, offer you: (1) An immediate decision on all items offered to us; (2) Immediate confidential cash payment in full for all items purchased; (3) Complete care of all shipping arrangements; (4) A pleasant and enjoyable transaction. And, one more thing . . . We know the loving care you've put into your collection. We appreciate this, and we assure you that each of your instruments will find a new home where it will be enjoyed and appreciated in the future. Thinking of selling? Make the "right decision." Think of the MMM.

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The Latest News from the Mekanisk Musik Museum!

New Catalogue Released!

Issue No. 4 of our *Mekanisk Musik Museum Review* has just been released. And what an issue it is! In 88 pages you'll find offered for sale a wonderful array of disc and cylinder music boxes (from the MMM stock of several hundred recently purchased!!!), reproducing pianos, player pianos, band organs, orchestrions, nickelodeons, photoplayers, phonographs, automata, and many, many more things!

Are you a collector of disc-type music boxes? Then you'll be interested in knowing that Polyphon, Kalliope, Troubadour, Regina, Symphonion, and other instruments are offered by the dozens: singly, in wholesale lots, or even an entire container full(!) if you want that many! The reason for all of these in our stock now? The answer is simple: recently we purchased the Andersen Collection, a grouping which on its own would have made one of the most extensive music box collections ever catalogued and offered for sale. And then just before we were ready to go to press things were set back a few weeks by our obtaining 134 – yes, 134! – more instruments! If you want a music box for a few hundred dollars or a few thousand dollars; a music box weighing just a few pounds or an impressively huge one standing eight feet tall; a common 15½" Polyphon or Regina or a rare (we've never heard of another anywhere) Lipsia; a plain-case box or an ornate one; or whatever–chances are good you'll find it for sale in our catalogue!

STE. CROIX AND MUSICAL BOXES TODAY

by W. F. Crossland

HIGH in the Swiss Jura mountains, Ste. Croix daily turns out thousands of musical movements for export to America, Germany, Italy, Spain, and Great Britain. Mostly these are 1/12 and 1/18 size which means that they play one tune and have twelve or eighteen teeth to the comb.

As everywhere else, times have changed and with them musical box manufacture. Instead of the young son of the family going with his little barrow to the factory in order to obtain the parts for his mother to assemble at home, a small van leaves the components outside the front door, and collects the finished articles later. In spite of production line techniques in component making, the final assembly is still largely a cottage-style industry.

Who makes all the movements, and what has happened since the war? I suppose the one great tragedy was the demise of Thorens. Once manufacturers of high-quality musical boxes and movements, they were taken over by Paillards and now they in turn have been taken over by the Austrian Humig concern. Even the record reproducers of Thorens are now made in Germany. Jean Paul Thoren has a small factory in L'Auberson and calls himself Melodies S.A., but I have been given to understand that he has to pay Paillards to use his own name of Thoren on his movements.

All this has left Reuge as the real one great manufacturer of quality movements and boxes. Today the business is under the guidance of Mons. Guido Reuge, now a man of seventy years of age as he revealed to me only a few weeks ago. His nephew, Jean (who some of you have no doubt met), is also now in the business, However, it is the name of Guido's mother, Madame Reuge, which still lingers in the memories of the older generation. She was the power absolute, but in spite of this she was known to make many a kindly visit and payment to the sick and needy.

Reuge consistently refuses to make movements smaller than the 1/12, claiming that it costs almost as much to make one of these as it does to produce a 1/18. The latest product of the company is a musical alarm watch with automaton figures on the face. This retails at almost £200 and is a reproduction of one of Mons. Guido's own wonderful collection.

In size, after Reuge, comes Lador in Ste. Croix. He told me a few weeks ago that his father, who died many years ago, would have been amazed at the output of three million movements a year. Mons. Lador has rationalised and cut down the types of movement made as well as no longer supplying complete boxes. He also does a lot for Fisher Price of America.

That leaves Mermod Jaccard who, although not large by the standards of the others, always has a full order book. Although some of his movements come to England each month, the remainder find their way to the States. Mermod Jaccard is the second oldest in the business today and is operated by the son-in-law of the founder.

I will leave to the end who have come and gone since the war, but we will now traverse the two miles to L'Auberson where Cuendet keeps very busy. Guissez also has a full order book. The quality of Cuendet is excellent and Guissez makes thousands of 1/12-size movements. His wife went to school with my wife – but for all that he will not allow me a better price!

I did mention Jean Paul Thoren and I hardly need to mention Baud Freres who, whilst not makers of movements, must be known to all in the Musical Box Society.

Frank Margot still produces some movements, and Paul Margot turns out some beautiful boxes, putting Thoren's (Melodies S.A.) larger movements in them. I almost forgot: Jean Paul Thoren now makes disc-playing boxes once again. Also I must

not forget to mention Matthew who also works for Fisher Price. He is further down the mountainside towards Yverdon.

Now to deal with some of those who have come and gone since the war. Jean Calame started up in a few huts, and then had a factory built at Ste. Croix. Alas! he did not stay the course, and the factory now produces rubber goods. Premilex (or Milleron as the owner's name was), has also folded up, and nothing more is heard of M.A.P.

Breitler was a fair-sized manufacturer at one time, but only makes a few movements now having lost some money, I believe, in America.

Apart from Thorens, all those who have tried since the war to make musical movements have fallen by the wayside. If there is a moral in this, I certainly do not know what it is, unless it is that experience counts.

Member Bill Crossland is Managing Director of Swisscross Ltd of 109 Norwood High Street, London SE27 9JF, who are importers and stockists of modern musical movements and musical boxes. A description of the Swisscross business is contained on page 117 of this volume of THE MUSIC BOX.

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Built in 1927 and features piano, mandoline, triangle, cymbal, bass drum, snare drum. Described in Bower's Encyclopaedia of Automatic Musical Instruments, page 588. Fully restored and in beautiful playing condition. Illuminated from behind the drum painted with instrumentalists. With 10 music rolls. $6500.

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Dating from 1915, this is one of the rarest of all Hupfeld instruments. It is fully restored and is an enjoyment to listen to. (Read pages 311-316 of Bowers' Encyclopaedia). With 30 music rolls. $4000.

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8. Some Phonographs, Gramophones, Organs, unrestored Pianos &c

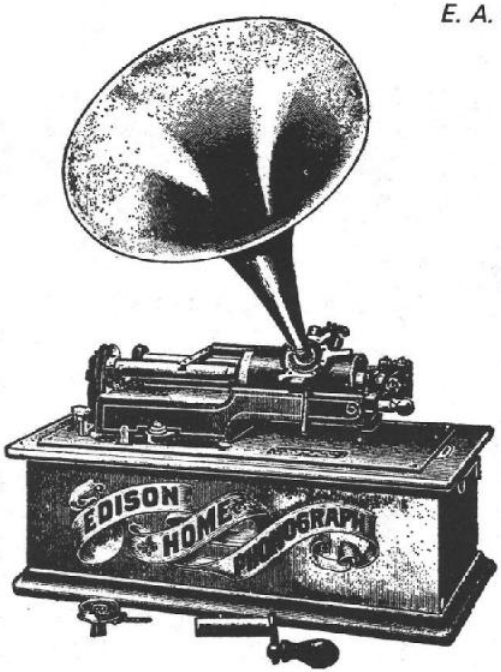
Please contact:

Mechanisches Musik Museum,
3501 Fuldatel II/Kassel,
Gruner Weg 26,
Germany
Director: Werner Baus, Telephone 0561/81 14 12
or 0561/81 29 51

*** The instruments marked with an asterisk have been restored by myself and Mr Herrholz who is one of the last instrument makers in Germany. Please read the article in THE MUSIC BOX Volume 6 Number 4 (pages 250–254) about my Poppers Violinova.**

Musique Automatique

E. A. GILBERT



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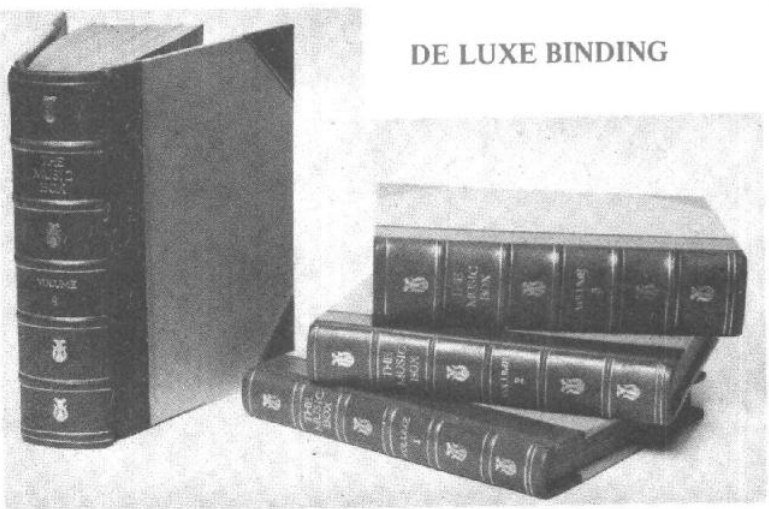

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