

Inside Simple Automata Mechanisms Banjorchestra to Banjo-Orchestra Dampers - an article first published in 1965

The Journal of the Musical Box Society of Great Britain

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from the editor

eturning from the excellent meeting in Ashford, I reflected on the generosity of those members who undertake to organise these regional weekend meetings. Perhaps it is the same in societies dedicated to gardening or stamp collecting, but we seem to be fortunate in having among our number people prepared to tackle the sometimes thankless task of planning a meeting for anything up to 60, with all that implies.

Accommodation, transport, meals, speakers - the list is extensive. And when it's all done and published comes a small voice of doubt - did I remember everything; what happens if a speaker can't make it at the last moment: will the coach be on time? Or, worst of all, will sufficient mem-

The Journal of th

The Editor welcomes and other contributions in the Journal. The Ec reserves the right to an any of the foregoing. Any contribution is ac understanding that its a responsible for the opin in it and the publication butions does not necessa any such opinions there the Society or its Editor. The Society and its Edi to accept and hereby di bility for the consequ inaccuracies, errors or such contributions. N tions, warranties or enany product or informa herein are given or inte verification of all produ mation appearing in this be sought from the ap

tributor.

The Music Box is printe lished by the Society February, 27th April, 7 November, from the Edi Back numbers obtain Roy Ison, 5 East Lincoln, LN2

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bers come to make it a success?

But in the event it all runs smoothly - just as planned. And Society members turn up intending to have an enjoyable time just as they do at our Christmas meetings where the hosts welcome members into their homes to share the pleasures of collecting mechanical music and to delight in the sounds produced from an age long past.

Few hobbies can challenge the world of mechanical music for the research and, of course, the pleasure of the music.

much perhaps we should introduce others to our fascinating world of cylinders and discs, of rolls and bellows, of combs, reeds and pipes. Included with this issue of The Music Box is an updated 'Introduction to the Musical Box Society of Great Britain'. If you know someone who has expressed interest in your collection, however modest, then pass this Introduction on to them, with the suggestion that they should join.

Every society or group needs new blood and MBSGB is no excepthe same spirit of those ch a grand job of organisetings, spread the word.

g by the programme for our Spring meeting - also included in this issue - we have plenty of good things to look forward to, and to offer to new members.

Alan Pratt

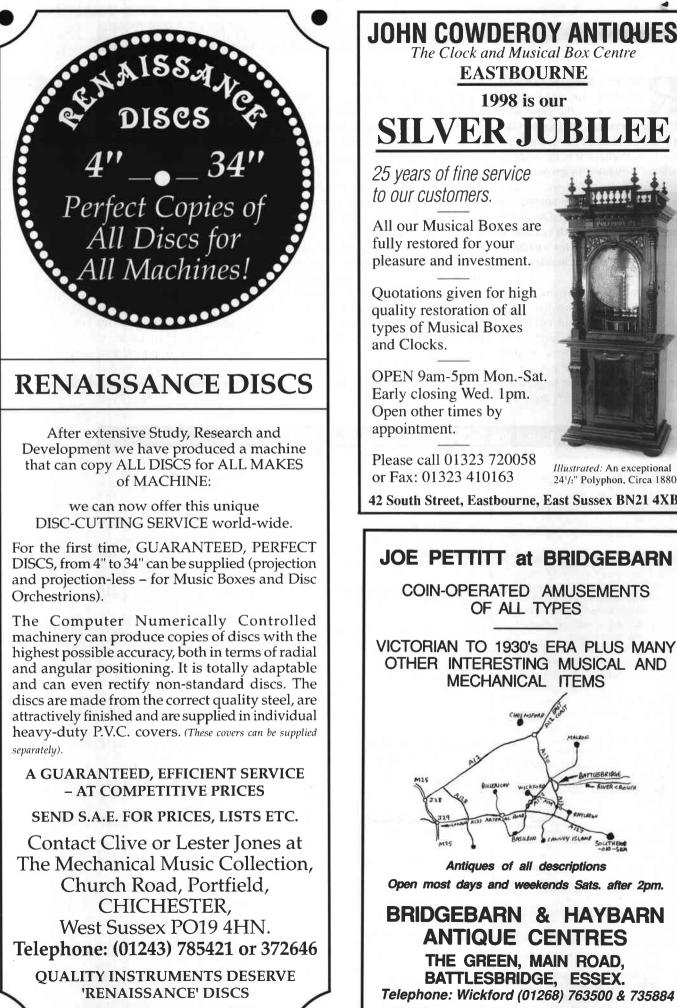
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,	pursued. Apart from the pleasure of	who do suc
ł	the actual collecting there is the	ing our mee
1	whole field of restoration, of	Judging

So, if we enjoy all these things so

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Front Cover Mignon 32 note Organette in black japanned case with gold stencils. Label of "Ph. Hakker Jr. 92 Weste, Wagensteraat Amsterdam. Courtesy of Christie's.



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The Clock and Musical Box Centre



President's Message

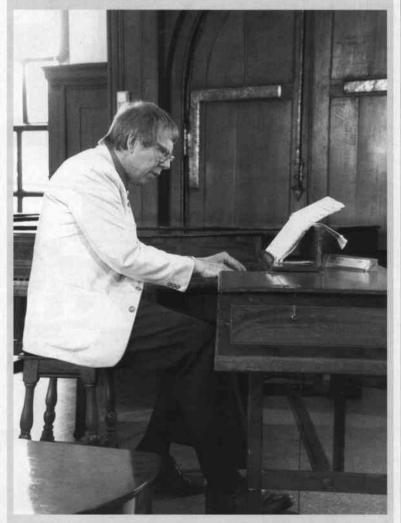
The Ashford Meeting went extremely well and members who could not attend must try to get to Finchcocks (near Goudhurst, Kent). Richard Burnett and his wife Katrina, have their presentation honed to perfection. for a steep learning curve in musical education and an equally steep curve in enthusiastic humour, timing and overall presentation, I do not think Richard can be beaten. If you do not believe me, go there.

Just to prove a point about meeting attendance, The South East has 75% of the British membership, but the meeting was no bigger than usual and there were no new faces. So to all you old faces, it was good to see you all again.

You will see two important inserts in this journal. The first is your subscription form. Please pay promptly, and do not forget you have time to do a standing order to save Richard Kerridge some paper work. The second is a membership introduction form for you to put in a safe place until you you can give it to a prospective new member. You can always whet their appetites by bringing them to an Open Day or Christmas One Day Meeting.

Our Editor is trying to get a small collection of articles on all topics so that the journal does not appear one sided. He can only print what he has been given, so rather than complain about no musical box pictures on the front cover, or too many organette articles, get your camera and pen out and let him have it.

The Spring Meeting is in Wakefield and as the two Johns are organising it you will have no time to put your feet up, so book early.



Richard Burnett at one of the keyboards. (See Ashford meeting report pages 204-205)

49th Annual Meeting of The M.B.S.I.

Report on the 49th Annual Meeting of The Musical Box Society International held 2nd-6th September at Charlotte, North Carolina, by John Turner

At the Annual Business meeting of MBSI President Kevin Kline announced that Nancy Fratti, a MBSGB member and friend of many of our readers, had been awarded the prestigious 'Trustees award for outstanding literacy contributions to the field of automatic music'. When Nancy heard of the award it was a joy to see her face and for once she was lost for words. Well done Nancy.

Murakami Taizou of Osaka presented the first report of the newly formed Japanese Chapter of MBSI.

Attending the MBSI in Charlotte gave Joyce and I the opportunity of meeting old friends once again and making many new ones. MBSGB members Ray Parkinson and Beverley Sharpe from Vancouver, Canada, send their regards to members in the UK. They both remarked how much they enjoy reading The Music Box especially the tit bits of news about members - a link with the home country. Two of our Swiss members, Arlette Rustichelli and Michel Bourgoz send their greetings.

The Convention committee, under the co-chairs of Ted and Irene Leverett and the Piedmont Chapter, are to be congratulated on their organisation. 325 registrants attended the meeting and a full and interesting programme had been arranged which necessitated some early mornings. Three coaches departed for Biltmore House, the home of the Vanderbilts, whilst two more visited Old Salem.

Bus tours were also arranged to the Charlotte Museum of History to view the permanent collection of instruments loaned by MBSI members. A BBQ lunch was enjoyed in a very large barn and after lunch a team of clog dancers entertained us. Then to the Mint Museum auditorium to see and hear a most interesting and entertaining demonstration given by Mr. Dean Shostak, of Williamsburg, Virginia, playing the

society news and topics

Glass Armonica, invented by Benjamin Franklin, also violins and the hurdy gurdy. Other tours were also arranged to a very large flea market, some of the stands fortunately in air-conditioned buildings that gave some respite from the 95°F outside. A short but noisy visit was made also to the Charlotte Motor Speedway with cars going round the circuit at up to 180 mph. We were given the opportunity to go round the track, without getting out of the coach at a steady 40? mph.

Coaches were arranged to visit the homes of Ted and Irene Leverett, Le Roy Plyer, and John and Becky Lowery of the Piedmont Chapter to view and listen to collections ranging from small bird boxes to large orchestrions. Their generous hospitality was very much appreciated.

Christian and Sharon Bailly presented an excellent talk that was well received "Birds in the Hand and other Sticky Situations: Restoration and Care of Extraordinary Automata". Siegfried Wendel, alias Herr Rudesheim, gave a humorous, interesting and factual story of "The Happiness and Sorrows of running your own Museum". One morning 19 workshops, each of one hour duration, on a variety of subjects were available for members to attend, commencing at 8 a.m., with a break for lunch, and closing at 5 p.m. Whatever their interest in mechanical music everyone could find something to suit them.

At the Banquet held on Saturday evening, entertainment was provided by Piano Virtuoso Richard (Dick) Hyman.

The mart this year held in a large room lasted for three hours no stampede - lots and lots of items available. One UK member was seen walking away with a Chordephon that I hope will be demonstrated at one of our future meetings.

A great success was an exhibition of members' instruments, open to the public for four days. Numerous questions were being asked of the members demonstrating their pieces. It also acted as a focal point.

On the day of the Annual Business Meeting a continental breakfast was served at 7 a.m., with the meeting starting at 7.30 - this ensured almost 100% attendance. Business was concluded by 10.30 a.m. Perhaps we should try this for MBSGB!

MBSI are to celebrate their Golden Anniversary Convention in Philadelphia, USA, from September 28th to October 2nd 1999.

MBSGB Autumn Meeting - Ashford

The theme of the meeting "One of my Favourite Things" was chosen by local organiser Paul Bellamy to encourage members to bring along something from their collections to share with other members.

The result was the most varied collection imaginable that ranged from clockwork novelties through to cylinder musical boxes.

But before we saw the first of these items, after dinner on Friday, Paul had devised a "Fun Quiz" where all the questions were associated with mechanical music or just simply music. All very informal but great fun!

Afterwards, Maggie Morris showed some of her clockwork novelties, and Edward Murray-Harvey played and talked about his small portable organ.

On Saturday morning we were off bright and early to Canterbury for the Society organ grind in support of the Lady Mayoress's charity, the Pilgrims Hospices and Odyssey. We had nine instruments out in the pedestrian area, and with excellent weather to bring out the shoppers there was considerable interest. The local radio and newspaper came along, so in addition to supporting a most worthwhile cause we may also have persuaded a few people to join us in our enjoyment of mechanical music.

Back to the hotel for lunch and we were off again, this time to Rye to visit The Rye Treasury, a new



Daphne Wyatt gets the locals involved



Our strolling minstrel Paul Bellamy with his Jäger & Brommer organ



Nicholas Simmons - the waistcoat - louder than the organ!

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collection of mechanical music lovingly assembled by our host for the afternoon Mick Doswell. As Mick had closed the museum to the public for the afternoon we were able to enjoy the many fine instruments at our leisure. Indeed, after the 'formal' presentations by Mick, assisted by Kevin McElhone, we were generously invited to select anything we wanted to hear again. It is always a pleasure to be in the company of someone who obviously loves the instruments being demonstrated, and the afternoon passed much too quickly.

After dinner, this time with musical entertainment, we were able to enjoy some more "Favourite Things". Our youngest member, John Ward, shared with us the sounds of his first musical box, whilst Keith Harding showed a very early cylinder movement currently being restored. This was unusual in that the bass teeth were at both ends of the comb, falling in a vee to the treble in the middle. All the teeth are individual, being separately screwed to the comb base. Ted Bowman had some brain teasing sounds for us, and Ted Brown demonstrated one of the smaller cylinder boxes from his collection.

Peter Howard played his 8[']/₄" Amorette in the form of an alpine gasthaus, complete with dancing figures revealed when the doors open as playing begins, and Nicholas Simons shared with us the fun of some of his clockwork novelties.

On Sunday we travelled to nearby Goudhurst, to Finchcocks, described as a "Living Museum of Music" - but this is a museum with a difference. Run by Katrina and Richard Burnett, Finchcocks is a collection of some 80 historical keyboard instruments housed in a fine early Georgian manor house. The collection includes chamber organs, virginals, harpsichords, clavichords and a wide range of early pianos. Many have been restored to full playing condition, and it was upon these that Richard Burnett gave us a performance which was the highlight of the visit.

I almost said 'demonstration' but, although almost a dozen of the instruments were played, Richard's outstanding keyboard skills made each piece played a performance of the highest standard. His anecdotes and delightful sense of humour bring each instrument to life and he re-creates the period in which they were developed. An amusing and informative introduction to the development of keyboard instruments. Also joining the concert, by way of a bonus, was tenor John Kerr. He sang several period pieces to the accompaniment of Richard, but the highlight for MBSGB members was probably when he accom-



John Kerr and his Gem Roller organ

panied himself on a Gem roller organ. His rendering of Gilbert and Sullivan's 'A Policeman's Lot' from 'The Pirates of Penzance' was a real gem!

After lunch members lingered in the gardens of Finchcocks before finally making tracks for home at the end of another successful Society weekend.

Forthcoming Meetings

Spring Meeting 1999 Date: Friday, Saturday, Sunday, 9th/10th and 11th April 1999.

MBSGB Registration fee £10. Hotel: Forte Posthouse Wakefield, Queens Drive, Osset, Wakefield, West Yorkshire WF5 9BE. (Tel: 01924 276388). Cost: £99.00 per person (no single supplement), inclusive of the following :-

Friday - overnight acommodation. Saturday - Breakfast, Morning Coffee, Buffet Lunch. Society Dinner; overnight accommodation. Sunday - Breakfast, Morning Coffee.

Reservations: Please contact local organisers for reservation form;

- John Turner, 33 Water Lane, Middlestown, Wakefield. (tel: 01924 272418)
- John Powell, 33 Birchwood Avenue, Leeds . (tel: 0113 2663341)

They will arrange to forward a NO DEPOSIT all inclusive hotel booking form to you.

For members attending on Saturday the 10th only. - A Day Registration charge of £25 will be made covering coach hire and the hotel's conference facility rate of \pounds 21 which includes Room Hire, Morning Coffee, Lunch etc. The Society four course evening dinner and entertainment will be an additional £18.

Notification of your intention to attend on Saturday only must be made at least seven days in advance.

An MBGSB Registration Form is included in this issue of The Music Box. Please complete and return it to Roy Ison.

Christmas Meetings

As reported in the last issue of Music Box, we have local meetings planned for the end of the year, where members have generously

society news and topics

offered to open up their collections for one-day events. Locations and dates are:-

November 28th: Ted Brown at The Old School, Bucks Green, for members in the South-East. Please advise Ted by 14th November on 01403 823533 if you intend to attend.

December 5th: Nicholas Simons in Derby will use this meeting to mark the opening of his new 'organ' room. Highlights will be the Ruth organ which we saw last year, but now with fully painted and lettered front, and the Arburo dance organ which Nicholas has been restoring over the last five years. Plus, I expect some interesting sounds from other items in Nicholas's wide ranging collection. Please advise by 21st November on 01332 760576.

Please note the meeting listed for December 5th for John Turner at Wakefield will now not take place.

Holland Coach Tour - Spring 1999

We now have advance information on this event which will be from 30th April to 4th May. We shall be visiting Utrecht, for the famous museum of course, and Amsterdam.

Full programme details in the next issue of The Music Box, but to ensure your place please contact Alan Wyatt on 01223 860332.

AGM - 1999

Next year's AGM will be held in Kettering, Northants. The location is convenient for travel by car or public transport and the date, as always, will be the first Saturday in June - the 5th. Full details in the next Music Box.



Ruth Trumpet Fairground organ (50 key) c 1886

Spring Meeting - Wakefield: Programme

Friday 9th April - Registration.

"Friday night is music night". Bring your favourite instrument to play, talk about or for others to admire.

Dr. Peter Whitehead will be displaying and playing a collection of different types of Nicoles Freres boxes. "See the difference - Hear the difference".

Saturday 10th April

Morning

Registration - 8.30 to 9.30 a.m.

9.45 a.m. - Lecture by Mrs Dorothy Robinson - "Fairground Organs" 10.45 a.m. - Morning coffee

11.00 a.m. - Lecture by Dr. Peter Whitehad -"Canon Wintle" 12.30 p.m. - Buffet Lunch

Saturday Afternoon

We will be visiting Pam and Phil Fluke at their Reed Organ and Harmonium Museum at Saltaire. The party will be split into two for convenience with a change over half way. The other half will have the opportunity to visit Bradford Industrial Museum with its collection of Jacquard Weaving Machines, locally made Jowett cars and other interesting artifacts. Weather permitting, a walk around Sir Titus Salts preserved village of Saltaire will be of interest and the David Hockney collection in Salts Mill can be enjoyed. The mill also houses an interesting collection of shops not normally found in the modern shopping complex. Just across the park is a restored cable railway up to Shipley Glen where, in days of old, fairies were said to congregate (we will check on the fairies and see if the railway is operating during our visit). On return to the hotel a Table Top Sale will be held.

Saturday Evening

Society Dinner followed by entertainment "The Sound of Brass" and other artists. An evening to remember.

Sunday 11th April

Morning

10.00 a.m. - Lecture by Mr. Nicholas Simons -"Restoration of a Barrel Organ".

10.45 a.m. - Morning cofee

11.00 a.m. - Lecture by Snr. Franco Severi "Racca - the Piano Melodica"

SUNDAY LUNCH is available from 1 p.m.

ie, Yorkshire Pudding, Beef and Vegetables at only £5.95. This is cheaper than you can buy a sandwich on the motorway! Please indicate on booking form if you intend staying for lunch.

2661 D Hanshall

Manchastar

NEW MEMBERS

TIT		2001	1. Incustian	winnenester	
We welcome the following new				Mr. & Mrs.	
memb	pers to the Society	y:-		D. Evans	Hants
2657	M. Durbridge	I.O.W.	2663	Ross Baldwin	London
2658	Mrs. S. Buckley	Surrey	2664	David Card	Reading
2659	Paul Roberson	London	2665	James Leigh	Surrey
2660	Simon Gray	Surrey	2666	Michael Nicholls	Kent

MBSGB on the Net

In our last issue we reported that we are now on the web. A reminder of our address: http://www.antique-dealers-directory.co.uk/mbsgb/ We also now have an e-mail address for the benefit of those members

who are connected:

mbsgb@kreedman.globalnet.co.uk

register news

The Register of cylinder musical boxes seems to be firmly stuck at the five and a half thousand mark with few if any register forms being returned. I believe it is more important than ever before to have musical boxes registered on a database and allocated a unique Register number.

Many police forces are disbanding their fine arts and antique squads and as a result stolen items are now being sold openly at various fairs and small auction houses. Apart from one private organisation dedicated to finding stolen property, at a price, the Register is now the only way of looking for a specific antique. Put bluntly, the Register is is now the best hope of finding a stolen box and proving ownership.

This rather depressing aspect of the Register is not however the

prime reason for its existence. It supplies masses of information for others who are keen to research our hobby and for those who simply wish to know a little more about their collection. Musicians are able to see what kind of music our ancestors enjoyed on their mechanical instruments whilst those interested in cabinet work can see the development of cases. All this leads to another request. Send in details of your boxes now. No detail is too small.

One enjoyable part of reading any magazine is seeing what is on the letters to the editor page. Like many, I make this my second port of call after looking at the advertisements. I too, like the editor, wonder why we have so few examples of both. Surely the sales and wants page is a useful way of selling not only complete

OFFICERS OF THE M.B.S.G.B. AND THEIR DUTIES

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> Joint Vice President: Ralph M Heintz 725 University Avenue, Los Altos, California, USA

> Joint Vice President: Christopher Proudfoot c/o Christie's, South Kensington, London SW7 3JS Tel: 0171 321 3272

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Membership & Correspondence Secretary: Alan Wyatt MBE MBSGB, P O Box No 299, Waterbeach, Cambridge CB4 4PJ To whom all applications and queries relating to new membership should be addressed and to whom all general correspondence should be sent.

> Meetings Secretary: **Roy Ison** 5 East Bight, Lincoln LN2 1QH Tel: 01522 540406

Recording Secretary: Arthur Cunliffe c/o The Editor, as below.

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> Auction Organiser: David Walch 11 Harford Close, Bristol BS9 2QD

Advertising Secretary: **Ted Brown** The Old School, Guildford Road, Bucks Green, Horsham, West Sussex RH12 3JP Tel: 01403 823533

Committee members:

Graham Whitehead Ashorne Hall, Ashorne Hill, Warwick, CV33 9QN Tel: 01926 651444

Robert Hough Aeolian Court, Chudleigh, Devon, TQ13 0EE Tel: 01626 853502 boxes, but also small parts and accessories. Someone somewhere must be looking for those spare discs and rolls of music that have been cluttering up the workshop for years. This can be a way of contacting another enthusiast and possibly the making of another friendship. Box numbers are always available for those of a retiring nature.

Whilst on the subject of helping, the Society would always welcome new faces on the committee. It would be most agreeable to come to the next AGM with the prospect of holding an election for new committee members. We can all make a contribution to the success of the Society and helping on the committee is one way to do it. Helping to organise a meeting is always most enjoyable and rewarding. Give it a try !

Material for the magazine is always required. If a hundred of you wrote an article about your favourite musical item and included a photograph, the editor would have enough material to last for several years. No need for any names to be published as the articles could be published under an ongoing heading of "Favourite Items" or something similar. Could every member of the committee start the whole thing off by writing their contribution ? That's throwing down the gauntlet ten times at least!

The Registrar.

Winners!

Thanks to all those readers who entered the CD competition

in the last issue. The winners, who have all received their CDs, are:-

Mrs. J. Andrews, Norwich Mr. K. Hopkins, Comber Co. Down Mr. A. A. King, Biggleswade

Mr. Jim Bence, Hamilton Mr. F. J. Williams, Llanelli

Well done!

Someone somewhere must be looking for those spare discs and rolls of music that have been cluttering up the workshop for years.

Mignon-Orgel The Minstrel Organ by Kevin McElhone

am sure you will have noticed the large 32 note model of Mignon organette on the front cover of this magazine, the first time an organette has been on the cover I think?

This is yet another make of Reed organette of which very little has been written in english, although the German society has written quite a few articles about organettes.

They were made by Bruno Geissler, Elisenstrasse 42, Leipzig and possibly 2 other German firms over the years. This may have included W.Helbig and Co of Berlin as mentioned by A.Ord Hume in his book 'Barrel Organ'. They were marketed as Drehorgeln which I think means Street Organ. This probably explains why they are so loud, but they are a nice sounding German reed organ.

Bowers book says they were made from 1890's to the early 1900's. They are certainly shown in my 1892 Ernst Holzweissig catalogue, others from 1897 and 1898 and also in a 1906 F.H.W. catalogue. I have been told by Luuk Goldhoorn that the initials were the company who took over from Ernst Holzweissig.

They were sold all over europe and I have certainly seen one with the a retailer's address of W.H.Beverido, Volksmuziekhandel, Binnenneg 108, Rosestraat, Rotterdam, Netherlands.

Many models were made playing 22, 32 or 40 note music, either in the form of rolls, called "lange noten" which were described in one translation as 'interchangeable parchment' rolls. some models played endless strips called "endlose". I have never seen either an illustration or come across someone with an old original endless loop/sheet/band so they were either unpopular as they cost more than music in the form of rolls, or self destructing after constant use.

The Standard model had turned corner legs going the full height of the organ at the rear and to the lower ledge in the front. The 'a' Fig.1

model was a larger case, with panels which opened in the ends to allow sound out and therefore act as swell controls. There were simple square corners, but with the addition of square corner feet at the bottom of the case.

The Twin Reed model with 44 reeds had the reeds tuned in

"Celeste" on the example which I have heard, but others may have been tuned differently so do let me know if you have some information.

The decoration on the case was the usual style of German gold 'twirls' and patterns with the word 'Mignon' in very large letters at the front. I have seen one which said

	22 no	**	Rolls 0.70 DM (70 Pfennings)	Endles 1.00 DI	s Sheets	
	32 no		0.80 DM	1.00 DI		
	40 no		1.00 DM	1.50 DI		
Mdl	Note	Reed	Description	Size(cm)	Weight	Price 1897 / 1900
1	22	22	Stndrd case, sml top	35x46x34	8.5 KG	23,75/45,00
la	22	22	Square Casket shaped	?	?	23.75/45.00
11/2	22	22	As 1 but endless music	35x46x34	8.5	26.00 / 49.00
1 1/2a	22	22	As 1a but endless music	?	?	26.00 / 49.00
2	22	44	Twin Reed, case style as 1	36x50x36	10.0	31,75 / 60,00
2a	22	44	Twin Reed, Square Cskt case	?	?	31.75 / 60.00
2 1/2	22	44	Twin as 2, but endless sheets	36x50x36	?	34.00 / 64.00
2 1/2a	22	44	Twin as 2a, but endless sheets	?	?	34.00 / 64.00
3	32	64	Twin Reed, rolls & endless	56,5x42x42	16.0	**3 / 110.00
4	40	120	Triple Reed - endless only	67x49x48	24.00	**4 / 180.00
**4 Thi pric	s only ce quo	appear ted in 1	appears in the 1906 catalogue rs in 1906 & also in 1898, price 1906. It has a very fancy case om edge of the case wood.	ed at only 95	.00DM, a	almost HALF the



Mignon-Orgel

'Minstrel Organ', but that could have been applied by the supplier, not the maker.

The organettes came with no music included in the 1906 list, although the 1898 list says 'including 1 proof table and case'. What this means I am not sure as something has been lost in translation from the German "Probirtafel und Kiste", perhaps someone can tell us all what this means?

As usual there were optional extras, although unlike Ariston and other makes which had many choices and options there was only one.

Model 1a or 1 1/2a with Steel Reed Tongues 3DM extra

Model 2a or 2 1/2a with Steel Reed tongues 5DM extra. The standard reeds had an alloy frame and a Brass reed riveted into it.

There was a discount in 1897 of 5% for cash within 30 days. They were described in various adverts as

'Elegant Black Polished Case'; 'Very Deep, Organ Like Tone'; 'Most Solid Make'; 'Most Effective Finish'.

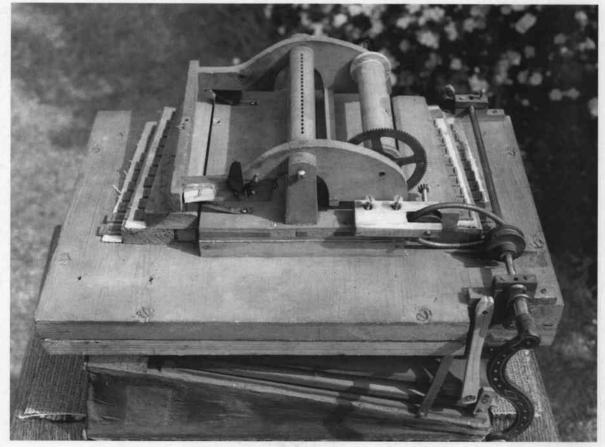
The standard 22 note organ that I have listened to had a prompt action

and was quite loud and bright and the sound would have travelled well in a small village street in the days before motor traffic. The Pneumatic motors are made of the thinnest material I have ever seen, possibly part of an animals intestine as it is rather like tissue paper but much stronger.

For a change, I do not have a list of music rolls for this style of organette as no-one at all has sent me any lists, although there is one person in U.S.A. and one in Switzerland who make new re cut rolls to replace the worn out original ones. If you can help please send me a list.

To my knowledge there are four 22 note models in U.K. two twin and two single reed models. A restorer in Dallas, U.S.A. has recently been asked to restore one of the larger 32 note twin reed models so I wonder if this was the one sold at Christie's auction, London, in April 1998. It had 15 rolls with it and I would very much like to get a list of the titles and a recording for the M.B.S.G.B.





Note the unusual way in which the two bottom bass reeds stick out beyond the reed block. Also the patterned handle.

...something has been lost in translation from the German "Probirtafel und Kiste" The Music Box

Simple Automata Mechanisms

The Flitting Bird by A. J. L. Wright

mongst the variety of objects d'art so beloved by the middle class Victorians, things under glass featured prominently. Of these, a favourite was the 'bocage', a lifelike scene of foliage containing birds, flowers, waterfalls and anything else that could be fitted in. This could be made even more impressive if the items were automated and birds flitting between branches were almost always included.

The simplest form of mechanism is shown in Figs.1 and 2. The bird is mounted on a small strap A resting on two wires B and C pivoted on centres D and E spaced apart. As B is rotated from branch 1, wire C must follow it as constrained by the strap A so that it does a gentle 'wiggle' before reaching the end of its travel at branch 2. The angle between the two branches and the way it 'wiggles' are decided by the relative positions of D and E and the length of strap A at the design stage by experiment. The wires being thin and camouflage painted, are hardly noticeable in the foliage and the vertical parts are usually hidden in a 'tree trunk' of papiermâché. The simple mechanism in Fig.1 gives a regular 'flit and wiggle' from branch to branch as the arms on the follower F are pushed alternately by the projections on cams G and H.

A more sophisticated version is shown in Fig.3. In this case the 'flit' and 'wiggle' are carried out by separate cams so that both operate at irregular intervals and the bird can wiggle on its perch as well as in transit. Cam 1 and its associated spring-loaded runner operates the 'flitting arm' though a simple linkage (all marked 1). The cam can be shaped to give any irregular timing of flitting.

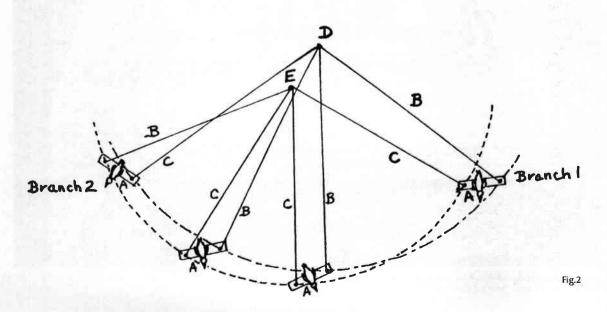
The bird sits on top of a cranked spindle pivoted in a fork on the end of the 'flitting arm' and is connected through another linkage (all marked 2) to the cam and the follower marked 2. This cam is also shaped to give any desired timing of the 'wiggle' and when combined with 1 gives a very realistic bird movement.

Alas, the birds were invariably stuffed examples of exotic species as used prolifically on Victorian ladies' hats, but now



absolutely taboo! One can, of course, always find an existing static bocage and try one's hand at automating it, with very satisfying results.

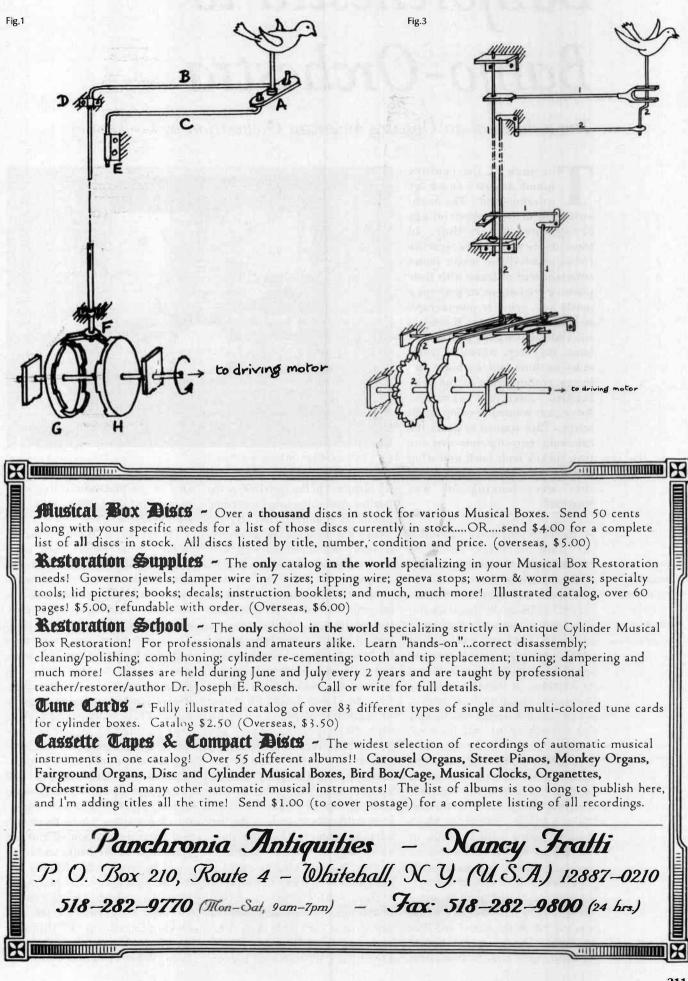
Incidentally, those who find 'wiggle' rather a non-technical word may; if they wish, substitute 'partial-pirouette of indeterminate magnitude'.



"...a partial pirouette of indeterminate magnitude"

Simple Automata Mechanisms

The Music Box



Banjorchestra to Banjo-Orchestra

The Rebirth of an Obscure American Orchestrion by C. Ramsey

he turn of the century found America eager for entertainment. The mechanization of the industrial age brought new leisure time. In those days, when there were no radios or television, people found entertainment at home with their piano or reed organ, or perhaps a music box, cylinder phonograph or even a player piano. If musical entertainment wasn't provided at home, they were willing to travel miles for it on foot, by horse and buggy, trolley, train or the newfangled horseless carriage. Americans wanted to enjoy themselves. They wanted to dance the cakewalk, two-step, one-step, fox trot, turkey trot, buck and wing and the Virginia Essence. What they were looking for was **Ragtime!**

'What they were looking for was Ragtime' At the 1893 Columbian Exposition in Chicago, the ragtime "fad" began to take shape. Musicians (primarily Black musicians) from around the mid-western United States converged in Chicago to play at the different venues around the Fair, meeting each other and exchanging ideas, crafting a new American music that would come to be known as Ragtime. It was the first truly American musical art form, born in a time when America was looking for something to call its own. Ragtime, along with the instrument from which it originated, the banjo, has its roots in the music of the African-American slave. The banjo evolved from a slave instrument called a banjar. The banjar was a hollow gourd with raccoon or woodchuck skin stretched over an opening, attached to a long handle and strung with catgut strings. Ragtime developed from the songs being sung by the slaves in the field and played on the banjar and later the banjo. The syncopated rhythms of these songs laid the foundation

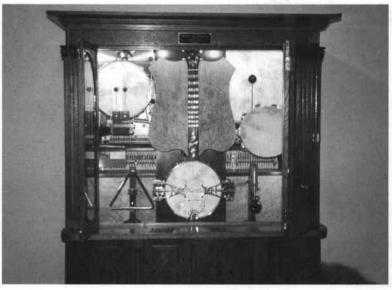


Fig 1. Picture of Banjo-Orchestra at Ashorne Hall

for ragtime. In the mid-1800's, the familiar four-string banjo was being produced commercially. By the 1870's the banjo became an accepted parlor instrument although there were many who tried to deny its African roots.

By 1900, ragtime became an integral part of minstrel shows and vaudeville acts. As the rage for ragtime spread, it was being played by brass bands and small orchestras in dancing salons and cabarets. It could be heard at night leaking from the closed doors of a "house of negotiable affection" or in the high-class sporting houses and honky-tonk men's clubs from a dark smoky corner where a "perfesser" tickled the ivories on an old upright piano. During the day, ragtime could be found in more respectable places such as the barbershop, coming from the shoeshine boy's "raggy" guitar or banjo. It could also be heard in amusement parks, department stores, confectioneries, cafes, restaurants, billiard halls, railroad depots or at the corner drug stores springing from the lively nickelgrabbing, coin-operated pianos. One of the most interesting coin pianos of the day was the Banjorchestra.

What is a Banjorchestra? Nobody really knows. There are a couple of advertisements with pictures and descriptions of the instrument, but has anybody actually seen one? Yes, at least the remains of one, or I should say, two. Thousands have seen them, perhaps you have seen one and didn't realize it. One of the Banjorchestras was discovered by Rick Crandall at Knott's Berry Farm. (This instrument has since been restored by myself and my father, David Ramey.) It was serving as a "puppet show" nickelodeon. The banjo and traps had been removed and replaced with dancing puppets. The front soundboard remained where the banjo and traps were mounted and the placement of the banjo and traps could be seen by the shadows left by sun-bleaching. The piano and banjo valve chests were left intact. The other Banjorchestra is the oddlooking Engelhardt "F" sitting in the Musée Mecanique at the Cliff House in San Francisco, California.

The banjo and traps were removed by Jim DeRoin, who sold the banjo to Tom Fretty, who later sold it to my father.

Two companies advertised their own style Banjorchestra, the Connorized Music Company and the Engelhardt Piano Company.

It is believed that the Connorized Banjorchestra was first promoted in 1914. There is an article/ad from that year in the Music Trade Review, titled "BAN-JORCHESTRA, JAMES O'CON-NOR'S LATEST INVENTION." The article describes the new instrument; "The Banjorchestra is especially adapted for the use in the high-class dancing salons and also where cabaret entertainment is in vogue and dancing is indulged in by the guests. It performs every function of an orchestra of many pieces at very much less expense. It not only supplies banjo music but the banjo is supported by piano, bass and kettledrum, castanets, tambourine and triangle." Elsewhere in the article, the Banjorchestra is said to contain "bass and snare drums," not kettledrum. The article goes on to say that the oak cabinet is "mission attractively designed, but may be furnished in any other wood on special order."

A later advertisement from a 1915 Music Trade Review features three pictures of a differently styled mahogany cabinet. This later ad shows a view with the back opened revealing a 44-note piano similar to those made by the Pianova Company and used in early models of the Mills Violano Virtuoso. The drum in the pictures looks like it was a banjo pot (a banjo without the neck attached). It probably had two beaters to serve as "bass and kettledrum" without any snares. On close examination of the pictures in the ad, there are numerous inconsistencies to be found. The pictures are not simply photographs. They have been altered or retouched, or perhaps they are not photographs at all, but artist renderings of a proposed idea. The Connorized Music Company was a music roll manufacturer and to my knowledge never manufactured pianos. I suspect that O'Connor had the idea of the Banjorchestra but never manufactured any. Perhaps he built one, as pictured in the ad, promoted it in trade papers, then sold or leased the patents to the Englehardt Piano Company.

The extant machines were made by Engelhardt. They have the name cast in the piano plate. The banjo in one of the machines is the identical banjo used in the Encore. The two extant Banjorchestras are not the same as either of the two styles advertised but closely resemble the instrument advertised by Engelhardt. The Engelhardt Banjorchestra is pictured in a smaller case, identical to the Engelhardt "F", finished in mahogany. It features a "Piano, Automatic Banjo, Chinese Drum, Tambourine, Triangle, Snare Drum and Bass Drum Effect." The pianos of the extant Banjorchestra are straightstrung 58-note pianos which play 42 notes. The cases are built of solid quarter-sawn oak, not "finished in mahogany." They appear to be Engelhardt "F" cases, except the cases were built over 4" wider to allow for the interior mechanisms and the piano back to swing out, like a Mills Violano Virtuoso.

The only drum in the machine was equipped with two beaters (probably a reiterating beater for a snare drum and a single stroke beater that struck with the snares dampened for the Chinese drum). It appears from the picture that this drum is a banjo pot. The bass drum effect mentioned in the Engelhardt ad was nothing more than a felt bass drum beater banging on the piano

The Automatic Marvel of the Age The BANJORCHESTRA

THE USE OF THE BANJORCHESTRA

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

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



ACCESSIBILITY FOR REGULATION

All the controls are directly in front of the lower part of the instrument. The hanjo in regulation size and equipped with wire atongs. It may be tuned easily, by the use of loar buttons which have been installed in the panel at the tags of the instrument which sound the four nexes of the piane to which the banjo should be russed. The entire back of the instrument opens, so that the piano may be tuned with the groatest easy. By pressing a series of five buttoms the traps may be cut of singly or no a group.

MUSIC ROLLS

Owing to their equipment and many year's experience as manufactures of high-grade music rolls, the Connoriced Music Ca, is admirably well fitted to produce music rolls of article and attractive anrangement. Those for the Banjorichetta are specially prepared for during. The shythm, expression and time which are all cut in the roll have been carefully and a semificial produced to that the greatest effect for during is had at all times. They have been cut and timed the proper length of the durice, and when teroffect commence over again for an encore. In fact, the Banjorchestm does what human hands have been doing at about one-tenth the cost.

exial rolls have been prepared for the Banjorche trainent. Each roll comprises ten selections of batest and most popular song and dance hits. when used as a coin-operated



WHAT IT COMPRISES

WHAT IT COMPRESS The Banjorchestra comprises an automatic ban'o supported by tambourine, triangle, bass and kettle drums and castanets, accompanied by an automatic piano. It is operated by an electric motor which muy be attached to any ordinary electric socket, either alternating or direct current. It may be operated with or without a coin. If operated with a coin as many as 20 coins may be inserted at one time, and the instrument will continue to play until the last coin has been used. Its case design is highly artistic. It is finished in malogany and the banjo and traps may be seen through a large plate-glass in the upper door. It is equipped with an automatic rerolling device, automatic expression devices for the pisno, and an automatic muffler for the banjo.



Fig 2. A 1915 advertisement for the mysterious Connerized Banjorchestra

The automatic

marvel of the age.

sound board. The ad also claims that the roll mechanism is "directly connected with pumping apparatus by shaft, thus eliminating belting." This is not the case with the extant machines which employ a couple of leather belts to operate the roll mechanism. The ads were somewhat misleading as to what a Banjorchestra really was.

We know what components comprised a Banjorchestra, but since no original rolls or even a tracker bar have been found, we don't know what they sounded like. We know that the Banjorchestra played 42 piano notes and it did not use the upper treble notes on a 58note piano. The banjo had the full playing capability of the Encore. The original valve chest had four picker valves and 40 fret valves. It was common in American coin pianos to use a 65- or 88-note tracker bar. Even if the Banjorchestra used an 88-note tracker bar, by the time 42 holes are taken for the piano and 44 for the banjo, only two holes would be available for all the traps, expression, reroll and shut-off controls. Perhaps it was somehow tubed to simultaneously play the piano and banjo. This would be a little tricky since the frets of the banjo must be down before the string is picked in order to get a clear tone. On a banjo roll, the fret hole comes up before the picker hole, giving it lead time before the note is played. If it was simply

So, on a cool, damp morning, the banjo would be faint and flat; by mid-afternoon it would be loud and almost in tune. "teed" to the piano, the piano note would play before the banjo. If the fret lead time on the roll was eliminated, the banjo would sound sour.

Another problem with playing the banjo and piano with the same tracker bar hole is that there are overlapping notes in the fretting of a banjo. There are 40 frets, 10 on each string, but the banjo is only capable of playing 24 different fretted notes (ex.: G# of the same octave can be played by the C or G string). Some piano notes would have to be tubed to two banjo notes. It is hard to imagine how the original instrument would have sounded.

The major stumbling block for the original Banjorchestra was that the banjo had an animal-skin head. Skin heads are very sensitive to humidity, shrinking or expanding with the slightest change. This shrinking and expanding not only affects the tuning of a banjo, but it also affects the picker mechanism. The pickers will pick the strings lighter as the head expands, to the point where they might miss the string altogether. So, on a cool, damp morning, the banjo would be faint and flat; by mid-afternoon it would be loud and almost in tune. The earlier Encore Automatic Banjo constantly had problems like this. Today, all this can be avoided simply by using a plastic head. With a plastic head, the banjo becomes quite consistent and reliable. A lone banjo going a little flat is one thing, but if it is combined with a stable piano, the skin head banjo will rarely be in tune with the piano and the result could be a little hard to enjoy. Perhaps that is why there are not more Banjorchestras that survive today.

Nearly 80 years later, the concept of a Banjorchestra was picked up by the D. C. Ramey Piano Company. Using the two ads, the extant machines and 40 years' experience in pneumatic restoration, we created our own unique version of the Banjorchestra. Since it is more of a re-creation than a reproduction, we named it the Ramey Banjo-Orchestra. We are currently producing the instrument in limited numbers, the first of which was unveiled to rave reviews at the 1994 MBSI Annual Meeting in Houston, Texas.

The new Ramey Banjo-Orchestra consists of an automatic banjo supported by tambourine, triangle, bass and snare drums, castanets, wood block and cymbal, accompanied by a 61-note piano. These instruments are showcased in a quarter-sawn oak cabinet behind a three-door hinged front. The outward appearance is like that of the Connorized Banjorchestra. The cabinet was, in fact, custom built from the pictures in the Connorized ad. The advertised Banjorchestra had a one-piece plate glass or art glass front that had to be lifted out in order to tune the banjo or expose the instruments for increase volume. Our Banjo-Orchestra was first built this way, but the front proved too cumbersome to be constantly opened for showing off the machine. Everyone who saw it preferred to listen to it with the front removed, accentuating the banjo. Therefore, we designed a three-glass-paneled front that can be readily opened to access the banjo and traps and to allow the option of listening to it with the front opened or closed.

The Engelhardt Banjorchestra utilized a decorative back board, a sort of "second sound board," in front of the piano to mount the banjo and traps. The piano is completely concealed and sounds very subdued. We mounted the banjo on a middle support while the traps are mounted on the side of the case leaving the piano exposed. The Ramey Banjo-Orchestra uses a newly cast 61-note overstrung, full perimeter plate. This type of piano was used by Seeburg in their models K and KT. The extant Banjorchestras used a 58-note straight strung piano, playing only 42 notes, while the Ramey Banjo-Orchestra plays all 61 notes. We used this type of piano because it has a far superior design than that of the Engelhardt 58-note piano. with original As the Banjorchestras, the piano of the Ramey Banjo-Orchestra swings out for easy servicing.

The roll frame in the Ramey machine is copied from a Western Electric Style A. This is a most reliable system, in part because the gears are always in mesh so there is no grinding of gears. The track-

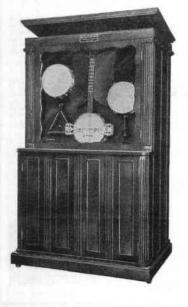


Fig 3. The Connerized Banjorchestra

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er bar has 100 holes to allow full accompaniment to the banio. The piano can play the full range of its scale and is able to carry the melody with full treble capability. It is believed that the Engelhardt Banjorchestra piano could only play accompaniment. The Ramey Banjo-Orchestra has full range by means of some multiplexing. Some holes in the tracker are tubed to both the piano and banjo but can only play whichever one is called for by a separate switch. Multiplexing leaves enough holes in the tracker bar to individually control the traps and to control the expression of the piano and traps separately from the banjo.

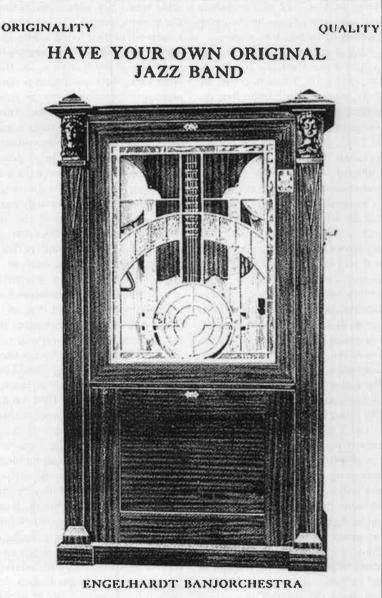
The music rolls for the Ramey Banjo-Orchestra, of course, have to be specially arranged. Art Reblitz, noted music-roll arranger, helped create a scale specifically for this new instrument. He is using original Encore Banjo rolls as a base for arranging new music. Mr. Reblitz is also adapting European orchestrion arrangements for the Banjo-Orchestra 10-tune music rolls. These were originally taken from the American dance band arrangements that were played by some of our best 1920's jazz bands and adapted to Weber, Hupfeld, Popper and other tracker scales. Some of these same exact arrangements can be heard on old American 78 r.p.m. records. This allows the Ramey Banjo-Orchestra to play some of the best music arranged for orchestrions by some of the best orchestrion music-roll arrangers. All the rolls are cut on a state-of-the-art computerized perforator.

Unlike most American coin pianos, the music rolls for this machine are arranged to be played exclusively by one machine. Therefore, the arranger does not have to compromise his composition to make sure it sounds good on a differently equipped instrument. The end result is a quality of music unlike anything ever heard from a coin piano.

The fact that the obscure Banjorchestra has been re-born 80 years later is a credit to my father's expertise. It seems fitting that he received the Lifetime Achievement Award from the MBSI at the same Annual Meeting where he unveiled his Ramey Banjo-Orchestra.

It is a shame that not one complete original Banjorchestra survived, or did it? A possible third original Banjorchestra has been found in the eastern United States. It is said to be in complete original condition, including previously undiscovered tracker bar and rolls! This historic find is yet to be confirmed or examined. Perhaps, someday, an original Banjorchestra can be heard next to the instrument it inspired, the Ramey Banjo-Orchestra. 1998 David C. Ramey, Jr.

David C. Ramey, Jr. is a second generation restorer/manufacturer of automatic musical instruments. He resides in the southern suburbs of Chicago, Illinois, with his wife Susan and their two children. His father, David C. Ramey, Sr. resides next door. Their D. C. Ramey Piano Company has produced eleven Banjo-Orchestras to date. One of the latest models can be seen on display at Ashorne Hall, Near Warwick.



Made only by ENGELHARDT PIANO COMPANY Factories and General Offices, ST. JOHNSVILLE, N. Y. Some of these same exact arrangements can be heard on old American 78 r.p.m. records.

Fig 4. The Engelhardt Banjorchestra as portrayed in an advertising brochure

Duo Art

A behind the scenes look at CD production by Gerald Stonehill

F ollowing the appearance of an initial seventeen CDs in the Grand Piano Series of Duo-Art transfers on the NIM-BUS label, I am happy to tell Music Box readers what is going on behind the scenes.

My apologies, though, to those few of you who may remember my lecture to the Society in summer 1975, very well reported by Arthur Ord-Hume in Vol.7 #2 of The Music Box magazine. However, bringing the story up to date, here goes.

By a stroke of luck, having acquired the Harrod's library of Duo-Art rolls, I had become, by 1961, owner of a comprehensive collection of these rolls, (but if anyone out there can supply roll 7401 or 7403, do please let me know). Several leading lights from England, America and Australia undertook to school me in the facts of pneumatic life, to such a point that the BBC engaged me to make archive recordings for them, first on my Weber model-12 Duo Art piano, and later on my Model B Steinway (with 3-H opposed action).

Very, very few were constructed exactly alike... My outstanding mentor was Gordon Butler Iles, chief boffin of the Aeolian Company in England. His genius was such that, at the outset of the Second World War, he designed a pilot trainer, The Silloth, made almost entirely out of reproducing-piano parts (as described in The Music Box magazine Vol.7 #4).

As a result of my own Duo-Art activity the appeals for me to share the results with the public were becoming heavily pressing in the late sixties. At the same time it was obvious that the presentation of public recitals, bearing in mind that my grand pianos were on the first floor of my London house, would result in progressive destruction of the instruments, as they wound up and down the stairs. The solution lay, so I reckoned, in the construction of the first Duo-Art vorsetzer, which I would name The Robot, deriving from the Russian word for a worker. Gordon agreed to mastermind the project on two conditions:

The sky was to be the limit, and
It should incorporate his own latest inventions, in the brainwork

department. Naturally, I agreed. Duo-Art reproducing pianos sold to the public were always in a state of flux. Very, very few were constructed exactly alike, particularly in England. Mechanics took parts off the shelves and fitted them into the pianos, with varying ideas of what was best or most practical. At the same time, they were anxious that the pianos should not blast customers out of their living rooms. So, ear-shattering concert performances were out of the question. On the other hand, the recording of performances of live pianists on the rolls enjoyed a strict discipline. This amounted to a computerised notation of the playing in binary shorthand. In other words, finger pressures were noted in terms of 0 1 2 4 8, giving 16 levels, twice over. Recording the notes and pedals was, of course, no problem at all. So what was needed for perfect performance of The Robot was perfect decoding of the computer read-out.

Some may think that reference to computers is an anachronism, but it should be remembered that computers had first been introduced in the 18th century, in the form of the Jacquard loom. Over 100 years later it was high time that they should be recruited into the service of music. Not so many years ago, IBM ran its own computers on paper cards punched with holes!

A problem with the Duo-Art system, (but no theoretical problem to Gordon Iles), was that the analytical processes involved plaving via mechanical devices, tracery, long arms, rotating levers, collapsing accordions, finger cutters, rockets and springs of various sizes and functions, all of which introduced inertia, but, more particularly, a reduction of suction power in the striving for greater loudness - in itself a demonstration of inefficiency. It has to be stressed that the reactions of the Robot had obviously to be slowed down, to synchronise with the rolls. The accuracy is,

however, now consistent and measurable. Moreover, the soft pedal is una corda, rather than the in-built half-blow - very important in relation to tone production.

Certainly, if you had attended a public demonstration at the Aeolian Hall eighty years ago, no shortcomings would have been apparent, since special measures were in place to present perfect performances. Similarly, the Robot was designed to reproduce the original recordings powerfully enough to accommodate, when necessary, a fine concert piano in a full-size concert hall. The NIMBUS transfers are achieved in the Nimbus 550-seat Performing Arts Centre (especially designed for perfect acoustics), using a 1998 Steinway D and in digital ambisonic sound.

The results speak for themselves, also in reviews by the leading music magazines. For example: Jonathan Dobson in The Gramophone summer 1998, re Friedheim: "The transfers and the playing are both superb and certainly the most realistic so far. Comparisons between roll and disc of La Campanella and the 2nd Hungarian Rhapsody reveal almost identical performances and have convinced me that, in Friedheim's case, the Duo-Art has won the argument and has added significantly to our appreciation of this underrecorded artist." Similar enthusiasm, and 5-star ratings, are confirmed in Classic CD and The BBC Music Magazine, as for example in their July 1998 editions. As one reviewer commented prophetically in 1996, "A lot of perspectives are going to have to change."

Gerald Stonehill has generously offered to answer members' technical questions about the Duo Art. If you have a query please write to the Editor at The Music Box, and we will print both question and answer for the benefit of all readers.

Kevin McElhone

projects and wants

I have had only four replies to requests in the last column, but the owners are very grateful, particularly for the Junghans discs which now enable a disc less machine to be restored. Thanks to Luuk Goldhorn for useful information about Kalliston organettes and Bob Gilson for two photos. This will enable an 'improved' article to be printed in M.B.S.I. next year about Kallistons.

Three People are looking to get some Kalliston music made. If you have any you want to exchange, sell or lend for copying or do you need music for a machine with broken unplayable strips?

If you do please write in urgently as someone has been found who is prepared to make this music.

Marc Kaufman of California from MBSI in U.S.A. wants to get in contact with anyone who has rolls which are 9 holes per inch and 98 note. They are Clark or Rossler/Hunholtz and are for a rare pipe organ system. He has only ONE badly damaged roll and would like at least one so testing can take place.

Richard Oldenburg of Washington, U.S.A needs to find someone with a HERO-PHONETTE 19 note organette. He is missing the metal keyframe hold down bar and bracket and would appreciate photos and dimensions or loan of one to copy.

Wade Jenkins, U.S.A. has a Riemers 56 key barrel organ with 7 stops. He has a very strange tuning scale written on the instrument and will gladly send anyone with experience of old barrel organs a copy of the scale in the hope that they can made sense of these strange, possibly European, characters. Some of the faces on the stop knobs are missing so names of stops are needed as well. Ted Brown, President of MBSGB, has come across some strange discs which we are not able to identify, yet! The are 11%" diameter, 4 drive holes (not same spacing as Aristonette), made of card, stamped 'Ehrlich' and they have about 28-30 notes. Can you identify them? They could be 28 note Ariston discs, but I can find NOTH-ING out about these discs, the tracks are much closer together than normal Ariston style discs.

It was nice to meet many MBSI members on the "Flying Pig" tour at the new museum at Rye, England. In fact two requests for this column were given to me in person at the museum!

A NEW CATALOGUE has been requested by several owners of Piano Melodico / Racca Pianos. These Pianos play 30, 48 or 73 note cardboard books so if you have one of these instruments do write in and let me know the titles you have, thank you.

I mention below a few of the various projects which still need help in the hope that you will find time now holidays are over.

Please send all information to Kevin McElhone who will pass on to those concerned.

Sharon and Christian Bailly of Paris, who were such generous hosts when the MBSGB visited their collection a couple of years ago, are seeking the help of members. Sharon wirtes:

"For an upcoming book, we seek all documents concerning mechanical singing birds, particularly those dating from the late 18th and early 19th centuries, and their makers (Jaquet-Droz, Frisard, Rochat, Bruguier). Information on a fragment of a

Seeking help

Paul Bellamy is seeking help with an unusual project. He says: " I want to 'read' and play the tunes on a repinned cylinder which has no comb. A dummy keyboard, using damper wire as contacts, was to be connected to an old electronic keyboard. By assuming a 'typical' Tonic Sol - Fah scale, the objective was to use the cylinder to play the keyboard. Naturally, the contacts between the cylinder and the electronic keyboard would have to be hard-wired. With patience, it should be possible to identify the principal bass notes (tonics, dominants) and then experiment to find the relevant octaves. Finally, the positions of incidentals and groups should be possible to reveal the tune and hence the tuning scale of the original comb.

As a keyboard has limited range, I wonder if the contacts can be connected to a PC with sound system to achieve the same objective. The idea would be to dedicate a tuning scale and sound pitch to each contact through the PC's key pad. Can anyone suggest how this can be done by someone without much knowledge of computers and electronics? Paul Bellamy ++44 (0)1634 252079 (In the UK 01634 252079)

mechanism attributed by some to Frisard, and at one time in the hands of Mr. Gerry Planus, is also desired."

Christian and Sharon Bailly, 1, rue du Dahomey, 75011 Paris, France.

Tel: (33) 1 43 71 96 79. Fax: (33) 1 43 71 88 51. e-mail: Cba2510@aol.com

I am sure that any help you can give, however modest, will be appreciated.

DUO-ART CDs

In the report on the new CDs from Nimbus Records in our last issue we omitted to list Keith Harding as a stockist. Apologies to Keith who tells us that he has the full range in stock, along with many other audio and video recordings of mechanical music.

Full details from

Keith Harding's World of Mechanical Music, Northleach, Nr. Cheltenham, Glos. GL54 3EU

Telephone: 01451 860181

musical box oddments no. 79

by Anthony Bulleid

The Italian composer Giovanni Pacini (1796-1867) had an adventurous and up-market life which did not hinder him from composing over 80 stage works, mostly operas, plus a pile of cantatas, songs and sacred music. His most successful operas included:

L'ultimo giorno di Pompei 1825 Saffo 1840 La fidanzata corsa 1842 Lorenzino de' Medici 1845 Il saltimbanco 1858

Though overshadowed by Rossini, Bellini, Donizetti and Verdi, these operas all appear on tune sheets sometimes as the first tune, from a recent popular success, as in Fig.1.

Super mandolin by Ducommun Girod

Pacini and Verdi both appear on the tune sheet on Fig.1, and both with 1842 operas. The box was made in 1846 or 1847 and has a $12^{3}/^{"}$ (32%cm) cylinder playing only four airs. This allows 184 comb teeth so it is a "super mandolin" type.

Even with its fine comb and helical lines of pins on the cylinder it looks quite ordinary in its typical close-fitting end-flap case, 19% by 6% inches (49 by 16cm). A photo would show nothing of special interest, though you would see the maker and serial number at back left, Fig.2, and the gamme number and a craft mark at front right, Fig.3. These markings are all confirmed on the base end cylinder cap, Fig.4.

The 184-tooth comb is fairly typical of these super mandolin boxes, so modestly referred to on its tune sheet as *Pièce Mandoline*. Its 440 and 880Hz *a* teeth are nos. 40 and 72 from the bass end. It has one group of nine teeth turned to the same pitch, and three groups of 8, four of 7 and six of 6 teeth. The groups of 8 start at tooth 65. The fairly wellknown but seldom recognised maker of this excellent one-piece comb was Boujol of Geneva; his modest stamp is shown in Fig.5.

As usual, the great wheel is stamped with its blank number, 36. Immediately above are the initials V and C, separated by a diamond, see Fig.6. The same device has been noted on Nicole serial 19813 made in 1840; it probably stands

FABRIQUE GENEN OUATRE Sa Fidanzata Consa, Quetto A bucho donosor: aria anchis ruch Vune in Roma Bellen Fruce Main Caro Oda

Fig.1 Tune sheet of serial 24858, typical Ducommun Girod except that the mask above the lyre is missing

for Vacheron and Constantine of Geneva who were quite important makers and suppliers, certainly in the 1830-1860 period.

During its 150 year life, serial 24858 underwent at least one repair, probably in the 1850s, which was duly stamped on the bedplate with figures 110 and initials J.J.B. in an oval, see Fig.7.

This repairer's work, with numbers ranging from 110 to 1246, has already been reported on boxes by Geneva makers in Vol.15 page 260. One of these was Ducommun Girod serial 22386 which had repair number 525. No hint to the identity of J.J.B. has yet surfaced.

The general quality of this movement does get a hint from the exuberant lid inlay. Framed by four lines of stringing, it measures 11½ by 3¼ inches (29 by 8cm) and contains amid its scrolling seven musical instruments. They include a triangle and a xylophone. At top centre



Fig.3 The gamme number and a craft mark, unusual on a Ducommun Girod bedplate

is the mask shown in Fig.8. It certainly makes up for the usual Ducommun Girod tune sheet mask, unaccountably missing from Fig.1.

It is rather interesting that there should be so many craft details on serial 24858, but they are not a bit of good if the music is poor. Here it is the very opposite, the box performs with a marvellous display of mandoline effects and sustained notes with accompanying trills at the piccolo end. The tune that really gets the "full works" is Verdi's *Nabucco*, highly spirited. All tunes manage to be equally appealing in their quiet and their brightly decorated passages.

All that praise demands further evidence - here it is.

The cylinder of serial 24858 is of normal 24 lignes diameter (54cm) but it is pinned to run at a

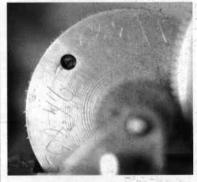


Fig.4 The bass end of serial 24858 cylinder; scribed serial and gamme numbers, with the craft mark



Fig.5 Maker Boujol's stamp on the comb base. There are no pitch markings

...the box performs with a marvellous display of mandoline effects and sustained notes with accompanying trills at the piccolo end.

musical box oddments no. 79



Fig.6. Blank 36 on great wheel, with V C and diamond, probably the work of Vacheron & Constantine, Geneva.



Fig.7. J.J.B. in 7mm oval stamp with number 110 on the bedplate of serial 24858 under the comb.



Fig.8. Marquetry mask, looking worried, on the lid of Bremond 24858.

reduced surface speed of .07" (1.8mm) per second. Tunes therefore last 1½ minutes so the whole programme takes a bit over six minutes, the same as a six-air box. Ducommun Girod produced this finesse occasionally, as with serial 22386 which was described in Vol.12 page 107 (or my first book page 65). It gives a tune 50% more space and it allows a tune arranger to add a little of what he fancies.

Here on tune 2 of serial 24858 the tune arranger decided to have a musical joke. He ran the first passage just as it would sound on a good run-of-the-mill 70-tooth comb. Then, after a long pause, he repeated it with full mandolin style, launching the brilliance of the whole tune.

Manufacture of Musical Boxes - Book of Tunes

The 60-page book with the above title gives no clue whatever to its source, locality, date or printer. It has only that text on its cover and title page, then proceeds at once to the Contents. This simply lists twenty types of musical boxes, ranging from manivelles to Concerto Symphonique Polyphone, Rechange - which is similar to Baker-Troll's Polytype. Some types are divided into separate sections for different cylinder lengths and number of tunes. Cylinder diameters are only given when they exceed the standard 24 lignes.

An example of the extensive listing is given in Fig.9. All pages have two columns, each with about 70 tunes, reduced a bit when one of the 37 section headings intervenes. So the arrangements listed total about 7,000. Of course they are not all different tunes; the Last Rose turns up in twenty different arrangements, numbered 4526 to 30746. Also there is a fair amount of duplication, when an arrangement got accidentally repeated or was entered in two languages. I think that was inevitable because this extensive listing is obviously based on several previous lists; these were sometimes in alphabetical order of tune titles so now the longer sections contain three or four groups of titles in that order separated by a

C

6520 6511

6529

few random titles. If you want to find a particular title you have to read through the entire section.

Each section covers movements with roughly the same numbers of comb teeth. Thus, for example, Section XII, last of the standard movements, is headed "10 airs 7½ et 8½ pouces. 12 airs 8½ et 10 pouces et 14 airs 13 pouces". These four have, respectively and approximately, 47, 53, 53 and 57 teeth. I expect arrangements for 57 teeth easily covered them all, given some guidance on what notes to omit for the lesser combs. (Note the 14 air box. I cannot recall seeing that before!).

Section XV gives three Mandoline Expressive sizes: 6 airs 10p, 8 airs 12p and 12 airs 20p. The first and last have 106 teeth, the middle one has only 96. I thought this was rather a large difference, and sure enough there is Section XVI exclusively for the 96 teeth 8 airs 12p boxes. But I busily checked twenty of them and found

Zampa. Ouverture.	Herold	6522 Sontag Polka	
Am schönen Rhein gedenk		6416 Tanziust	
ich dein Walzer Nº 1	K. Bela	6513 Maiblümchen	
An der schönen blauen Donau		6525 Stadt und Land Mazurka	Strauss
- Le beau Danube bleu.	Strauss	6544 La belle Hélène. Romance)0
Festival Waltz	A	6525 Ben Bolt.	
Im Damerlicht Walzer	Faust	6543 Le Crépnscule, Réverie.	
Mabel»	Godfrey	6547 Kitty Tyrrell	CW. Glower
Neu Wien - New Vienna.	Strauss	6547 Kitty Tyrrell	L. Welv
Pretty blue Danube Waltz . 1.	D	6521 Un Orage dans les Lagunes	Bergon
Les Roses Valse	O. Métra	6503 Le Ranz des Vaches-Swiss National Song.	
Vienna Children - Wiener		6491 Wien Neerlands blosd - Hymne Hollandais	
Kinder Walzer	Strauss	6534 March Coronation from Le Prophète	Meverbeer
Vienna blood - Wiener blut »		6502 Tannhäuser. Einzug der Gäste Marsch.	Wagner
La Coquette Polka	Funke	6537 Anna Quadrille Nov 1 et 2.	Strauss
Corina	Bret	6543 Orphée	Offenbach
Palmyre.	DICI	6532 Carnaval de Venise	Paganini

XXXII

Concerto Symphonique Polyphone : 8 Airs 18 1/2 Pouces 27 Lignes

12366	Sub. Harmony Soprano:	
	Myosotis Waltz Nos 1 et 2.	Waldteufel
19719	Sub. Harmony Piccolo :	and the second second
	Artist's Life Waltz Nº 1.	Strauss
19720	Sub. Harmony Tremolo: Chimes of Normandy	
19105	Sub, Harmony Tremolo:	Planquette
13120	Pretty blue Danube	C+
19979	Sub Harmony Piccolo:	otrauss
1.40714	Vorwärtz-Voran - Bioycle Galop	André
12726	Soprano : Tartaren	Zikoff
	Tremolo expressif :	
	Le 1st Amour - Die erste Liebe. Połka	
	Harp Harmonic Piccolo : Pizzicato .	Strauss
19717		THE REPORT
10700	L'Argentine Mazurka Baryton : Feinsliebchen	C. Komsak
10704	Sub. Harmony Piccolo : Fatinitza. March	C. Komsak
19797	Baryton : Alda	Verai
19718	Soprano : Home sweet Home.	(in the)
	Sub. Harmony : Monastery Bells	L. Wely
	Tremolo Expressif : The Zither player.	G. Lange
12370	Sub. Harmony Tremolo:	Construction -
	Boccaccio. Serenade	Suppi
	Sub. Harmony : Carmen. Toreulor Song	100
13131	Baryton : Les Contes d'Hoffmann, Barcarolle	Offenhauk
19712	Baryton : Ernani, Septuor, Finale.	
19716	Sub. Harmony Tremolo :	46107
	Ernani, Cavatine, Ernani involami	
	And a second sec	-

I		Bénédiction des Poignards.	Meyerbee
I	12714	Tremolo Expressif : Lucie, N*8. Sextuett.	
1		J'ai pour mon droit mon glaive	Donizetti
1	127,91	Quatuor Expression :	
1		Lohengrin, Bridal Chorus	Wagner
l	12/15	Sub. Harmony : Mikado. For I'm going to marry Yum Yum.	Sullivan
J	10204	Baryton : Martha Ouverlore 1" Partie	
1	19705		FIOLOW
1		Qualuor Expression :	
J		Martha. The last Rose of Summer	
I	13194	Baryton : Norma, Casta Diva	Bellini
l		Sub. Harmony :	
J		Oberon. Ouverture, 1re Partie	Weber
	19707	Sub_ Harmony :	
1	10104	Oberon. Ouverture 2mc Partie	
1	13130	Quintetto : La Somnambule Quartetto.	Bellini
l	10271	A fesco cielo	Verdi
ł		Harp Harmonic Piccolo:	verus
l	1.3000	W. Tell. O Ciel tu sais	Rossini
1	19708	Sub, Harmony Tremolo:	100001111
Į		W. Tell, Ouverture, Jre Partie	ø
1	12709	Sub, Harmony Tremolo:	
I		W. Tell, Ouverture. 9me Partie.	
ł	12710	Harp Harmonic Piccolo :	-
1		Zampa. Ouverture. 1re Partie	Herold
ļ	12711	Harp Harmonic Piccolo:	
J		Zampa. Ouverture. 2me Partie	a

XXXIII

Sublime Harmonie Soprano : 8 Airs 13 Pouces 36 Lignes

Barbier de Séville. lo sono docile	Meyerbeer Rossini	Cavalleria Rusticana. Intermezzo Cloches de Corneville — Chimes of Nor- mandy. Dans mes voyages	
Boccaccio. Serenade	Sabbe	Cloches de Corneville — Chœur des Servantes Carman. Toreador Song	19

Fig.9. Page 53 of *Livre d'Airs*, size 7½ by 9½ inches (19 x 24cm). Section XXXII offers arrangements in nine different styles, as listed in italics, compared with six styles offered by Baker-Troll. Section XXXIII is the only section lacking tune arrangement numbers.

"...it allows a tune arranger to add a little of what he fancies".

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The Music Bo

musical box oddments no. 79

that fourteen were exactly the same as in Section XV! So the expert pricking the cylinder was definitely considered capable of adjusting for fewer comb teeth.

A few notes were added by the owner of the original printed copy. They are in black ink and mainly in sections II to IV, the *Petites Musiques*. They note religious and Scottish tunes, and National anthems and songs, naming the country. Many tunes are marked with a tiny circle to indicate operetta, or a tiny parallelogram to indicate opera. The *Mikado* supplies nine tunes.

I think the total number of tunes is around two thousand. The latest may well be from *The Gondoliers*, first performed in December 1889. Composers are almost always given, and spelling accuracy is good.

This book is thought to have been compiled by C. Paillard, as the main Paillard company was known at that period. Copies can be had from Denis Margot whose pleasantly simple full address is 1454 L'Auberson, Switzerland.

Arthur Junod and Cesar Aubert

Back in Oddments 52 (Vol.15 page 156 or my second book page 94) I showed the Sales Catalogue of Junod, Aubert et Cie, founded about 1888. They adopted the trade mark "J.A.C." and their address was 7, rue de l'Industrie, (opposite Paillard) Ste. Croix. The company comprised Arthur Junod, his brother Louis, and his brother-in-law Cesar Aubert.

In 1891 Louis withdrew and the company was re-named Junod et Aubert; but on October 18th 1893 they closed down the joint business and each went his own way. They exhibited separately at the 1894 exhibition in Yverdon - which gets a mention in the above reference. This, of course, led to them setting up what were the third and fourth companies in the series - namely Arthur Junod-Turin in July 1895 and Cesar-Louis Aubert in January 1896.

This was very near the end of the cylinder musical box era; and, neither being involved with discs, they soon closed down. Aubert closed in July 1898 to take up commercial interests, and Junod in January 1899 to develop his several inventions which "born in his mind, worked out on sheets of paper, then took life and sound in metal." That is how it was put by J-C Piguet in his book which describes all these makers.

An important point is that Cesar Aubert was a maker of musical boxes on his own from 1894 until 1898 and should have been on my recent listing. Sorry. I hope that is the only omission.

From probably several years before 1888 until 1898 there was a continuous output from these four companies and I think it is quite in order to class all their output as by Arthur Junod, except for any items known for certain to have originated from Aubert. Even those are sure to have roots in Junod or J.A.C. Probably the same friends (and relations, being Ste. Croix) made most of the blanks and combs; surely the same tune arrangers supplied the pricking information to the same expert cylinder prickers; and undoubtedly the same girls or their daughters did the drilling and pinning.

However, they do not share one unbroken set of serial numbers, and they sometimes have tune sheets other than the pair shown in the J.A.C. catalogue - the "waving shepherd" and the "five patents in top border" (Ord-Hume 32). One such is the "Isle Rousseau" often seen and in many sizes and detail variations. It must have been widely used, in some cases for replacement of damaged sheets in the 1890s. I still find it hard to understand a Ste. Croix maker using a tune sheet with a picture of Geneva, but we now have proved cases.

Two similar Helvetia interchangeable boxes, made in about 1889, with J.A.C. trade marks, are serial 1104 with the "five patents" tune sheet and serial 1050 with the "Isle Rousseau". The latter appears again on serial 897, 6-air Mandoline Expressive with latest tune 1885; and again on serial 699, 8-air Tremolo with latest tune 1880, see Fig.10

Isle Rousseau tune sheets

A feature of these tune sheets is their scroll-shaped cartouche at top centre. It usually showsn the number of tunes, or the serial number, or cylinder length; here it claims "Marche 35 minutes". This is more commonly referred to as Longue Marche and is achieved with various types of gearing.

The gearing on Junod serial 699 was patented by Daniel Aubert and made in a factory opened by "Aubert et fils". Piguet does not mention any relationship between these Auberts. The plaque for the patent on the bedplate of serial 699 is shown in Fig.11, and the gearing in Fig.12. It needed hefty springs, about double the normal power; hence the essential reduction gear between the winding shaft and the pair of spring arbors.

In the MBSI Mechanical Music for Autumn 1992 page 2, and my second book pages 185-9, notes on the Isle Rousseau tune sheet contain two errors: (1) the patent on serial 699 is wrongly attributed to Junod; and (2) serial 3060 has G.B. & Co. stamped on the governor, but that was often done by agents like Bendon who was not a maker. Also, I can now give more data on Bremond 8873....

Marthes Same Sternolo Storenolie Store Electronis de Connectione Store Electronis de Connectione Store Electronis de Store Barlow Store Store volka Store La martie Stor

Fig.10. Isle Rousseau tune sheet, with boat and swans on the lake and several walkers at lower right, on Junod serial 699. (A larger reproduction is on page 77 of Vol.16, Autumn 1993).

"born in his mind, worked out on sheets of paper, then took life and sound in metal."

musical box oddments no. 79



Fig.11. Plaque attached to the bedplate of serial 699 recording Daniel Aubert's Longue Marche patent.

Isle Rousseau tune sheets on Bremond boxes

Bremond 8873 started life about 1865, before the days of multicoloured tune sheets. Due to some unhappy event it returned to Bremond for repair in the early 1880s. That is where and how this early box acquired a late tune sheet; it belongs to Etienne Blyelle of CABAM, Geneva, and was briefly described on page 30 of Vol.12. It has drum, bells and castanet and a drummer beating two kettle drums seen through a window in the case front.

Bremond was using the Isle Rousseau tune sheet on some boxes by 1880. One example is serial 18789, Mandoline Concerto, made

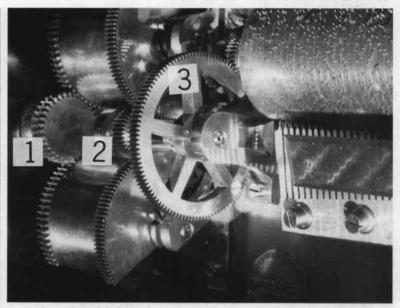


Fig.12. The crank-wind shaft carries pinion (1) driving the arbors of the two springs. Their barrel gears drive another pinion (2) on a layshaft with the large diameter gear wheel (3) which drives the cylinder gear.

in 1880. Another is serial 2006, Mandoline Harpe Tremelo, about 1883. Both have 17" (43cm) cylinders playing either airs, so possibly Bremond saved the Isle Rousseau tune sheets for his biggest and best, see Fig.13.

But they undoubtedly had other users. One appeared (without swans on the lake) size 12 by 8 inches (30 by 20cm) on a 20-air 2-per-turn box serial no. 2654, with $7\frac{1}{2}$ " cylinder and 40 comb teeth. It has a very large case and plays all pop tunes of the 1890s, each lasting 35 seconds, latest tunes 1895, and probably made in Ste. Croix in 1896. Not musically profound, but very popular and, with teeth of relative stiffness a shade over 400, it certainly makes itself heard. And it *could* have been made by Junod or Aubert.

Fig.13. Bremond 20,006 with Isle Rousseau tune sheet, no swans. Latest tune 1883. It has Bremond's type of tune selector, and their instruction card fitted on the control lever platform. Photo thanks to Sotheby's.

"...plays all the pop tunes of the 1890's"

Dampers By Cyril de Vere Green.

By Cyril de Vere Green. Article reprinted from Music Box Vol.2 No.2. Summer 1965

There can be no argument that correctly adjusted dampers beneath the teeth of a musical-box comb make a tremendous difference to its playing qualities.

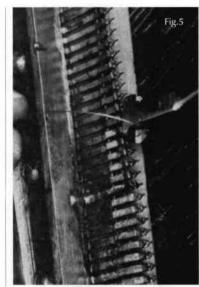
There is nothing very difficult in their making - merely to have the right equipment - and patience. I have discovered, through experience, the importance of even trivialities such as to have a table and chair of a height that will allow elbow support without fatigue. A lamp such as an anglepoise which

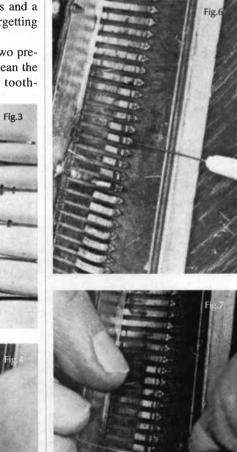
Fig.1

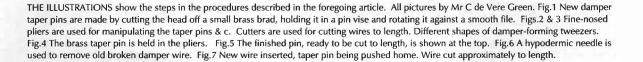
will light the work without glare is of great help. I myself like to have the comb for some procedures on a board raised $\frac{3}{2}$ at its front edge and the working surface of the table covered with a thick white card.

The other implements used are quite simple - a toothbrush, a thin card and pair of thin pointed pliers, a pair of cutters, a jig for trimming the ends of the damper wires and a few special tweezers, not forgetting a watchmaker's eyeglass.

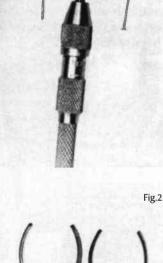
I would suggest one or two preliminaries. It is helpful to clean the comb thoroughly with the tooth-







There is nothing very difficult in their making - merely to have the right equipment - and patience.



the Music Box

brush and paraffin especially around the old damper wires and taper pins: greasy dust and fluff seems to collect here in every comb which I have examined. Next, I would suggest an inspection of the lead resonators to make sure that they have not been bent or clogged with dirt or grease and that they are quite clear from their neighbours. The only other preparation I would suggest is to make a supply of taper pins. I myself always seem to lose or bend a few and it is annoying to have to stop a routine in order to construct one. I make these by holding a brass pin in a pin vise and spinning it against a fine cut file cutting it off when tapered and then squaring the cut end with the file.

To remove the taper pins, I place the comb on the inclined board and grip the pin with a pair of fine-nosed jewellers pliers. A slight twist will usually free it. I find that it is essential to support the tooth being worked on by applying a strong downward pressure on it against the board with the index finger of the left hand. There are times when the pin will not budge and, if possible, a little leverage with a fine screwdriver behind the pin will do the trick. The most difficult pins I have found to remove are those inserted into the lead resonators. If these will not withdraw, an attempt can be made to drill them out but I have found this almost impossible and they break off as a rule flush with the lead. In these cases I have no hesitation in drilling a new hole in the lead - taking care to make the hole deep enough for the new taper pin. In many cases, the pin will adhere to the pliers as it is so very light and it should be left in them so that, should there be a 'flat' on it, it will always relocate itself when pressed back into its hole.

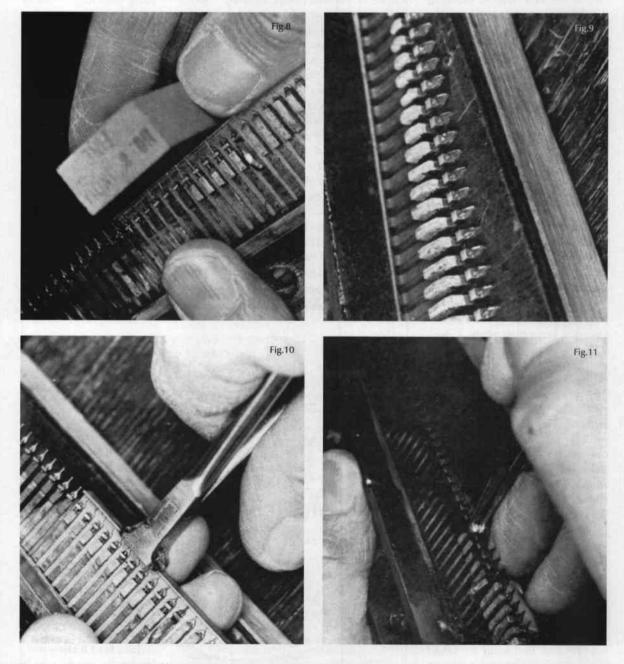


Fig.8 Using jig, wires are cut to final length. Fig.9 A fine oil stone hones square the ends of the wires. Fig.10 The dampers are formed using the specially formed tweezers. Fig.11 The completed comb with new dampers.

The removal of the old damper wire used to take me quite a time but I suggest using a No 12 hypodermic needle which is both strong and sharp and the old wire can easily be bent by the needle if need be. The selection of the gauge of damper wire is, of course of extreme importance and I have found that there is a tendency to use wire which is much too heavy and I have a personal choice for .01mm or .008mm. It will be noticed that most of the older boxes - particularly the fine-toothed overture boxes have had very light damper wire used. The next step is to insert an end of the wire through the small hole and to adjust its position centrally and laterally by lining up the wire with the tooth using the left hand. When it is correctly aligned, push home the taper pin. The tooth can now be supported again with the left hand and the pin pressed firmly home with the pliers closed. Now test the damper wire for alignment and firmness. A light tap using a 2" nail which has been flattened along 1/2" of its length will do the trick if there is some movement when you test for security.

Cut off the damper wire leaving an excess of about 2mm - the wire need not be a uniform length at this stage. Repeat the procedure with every tooth to be dampered.

It will probably sound worse than it did before you started re-dampering!

Now the jig is used to adjust the length of the dampers. This jig consists of a brass plate about 2" to 3" wide and about 6" long. This has a lip of 2mm high and about 1/2mm thick. The comb is placed flat on the top surface of the comb and the protruding damper wires are then trimmed with the cutters hard against the .5mm lip. A cut with cutters, however, produces a 'V' shaped end on the wire which is far from desirable. I would therefore suggest that the end of the damper wire be 'honed' with a fine oil stone as shown in the illustration. Following this procedure one is left with damper wires with square ends and of uniform length.

Using two pairs of specially prefabricated tweezers, one is readily able to curve the damper wire to its recognised correct shape. These tweezers are best made by soldering a rod at right-angles to the pliers. This short piece of rod should fit into a half-round piece of tube also soldered at right angles to the other limb of the tweezers. I prefer to have two pairs of tweezers - one with the rod .5mm in diameter and a half round piece of tube of equal internal diameter and the other of 1mm diameter with a corresponding half round piece of tube. These materials can readily be obtained from a dental supply depot.

A pair of tweezers ground or filed to a very small right angled projection of, say, .25mm are also extremely useful for making adjustments.

The damper wire can now be formed to its correct shape by using these three pairs of tweezers. I prefer to be able to identify these different tools by touch rather than by sight as I do not like to take my eye off the work in hand. A different number of notches or rubber bands will allow one to select one's choice by feel alone.

Adjust all the damper wires so that they stand approximately .25mm from the end of the tooth tip and the thickness of a piece of writing paper above the undersurface of the tooth point.

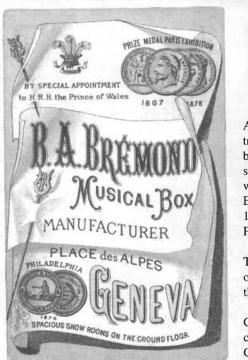
Assemble the comb and let the box play. It will probably sound worse than it did before you started re-dampering! Let it play several times and then remove the comb. You will notice that many dampers have now been misaligned. Don't despair! Adjust them all again and replay. This time only about 50% will not work. After the third or fourth adjustment, you will probably find only a few not working correctly. This is the moment to observe as well as listen to the dampers working. Mark the teeth on the top surface of the comb which are causing discordant sounds and then adjust these individual dampers. When every damper is working to your satisfaction, I suggest putting the merest trace of lubricant such as one of the graphite ones just where the wire

reduce the occasional harshness. I said at the beginning of this article that patience was required, and it is in the adjustment of the correctly-formed dampers it is really appreciated that amongst the other virtues you may possess, patience is one of the cardinal virtues.

touches the point. It seems to

If you don't believe me -"Come up and see me sometime ...!" *Editors note: As this article first* appeared around 33 years ago, the sources for materials mentioned may not now be relevant.

Mechanical Music Miscellany...



A chromo lithographed trade card 5" x $3\frac{1}{2}$ " by B.A. Bremond, showing the medals won at International Exposition in Paris 1867 & 1878 and Philadelphia 1876.

The reverse is a view od Lake Geneva from the Bremond premises.

Card from the collection of Brian Chesters

the restorer's workshop

Alternative Materials for Restoration

During the 19th century when so much mechanical music was being made, the use of materials such as ivory and tortoiseshell was seen as an indication of quality and was often a selling point.

Ivory can frequently be found as an inlay on quite modest boxes, whilst those made as presentation pieces are loaded down with it! Piano keys were faced with it and organ stops were turned from it. Tortoiseshell, because of its limited size in nature, is mostly found on the smaller cylinder boxes - snuff boxes and the like.

So, while it is perfectly acceptable to collect items containing these materials it is, of course, illegal to trade in the raw material. In many parts of the world the elephant was hunted almost to extinction to meet the demand for ivory and whilst it is still traded in China, bringing it into most other countries can lead to severe penalties. So, what is the restorer to use for replacing damaged or missing parts on a box?

Advances in plastics technology have now produced materials that are virtually indistinguishable from the real thing. Indeed, in one respect it is actually superior to the natural ivory - it does not 'yellow' with age.

On behalf of readers of The Music Box I sourced and carried out some simple tests on Alternative Ivory and Acetate Tortoiseshell to determine their ease of use and suitability in terms of appearance. Samples were kindly supplied by GPS Agencies of Chichester, who are the UK suppliers of the widest range of these alternatives.

The Alternative Ivory is a cast polyester. For the technically inclined it is an unsaturated polymerised polyester resin containing Phthalic Anhydride, Maleic Anhydride, Polyvalent Glycols and Styrene. It is non toxic and has a density of 1.2. I found that it machines easily using normal metalworking tools. It can be drilled and tapped and, with a standard round nose tool, turned easily to a fine finish which could be brought to a high polish with minimum effort. Using a small bandsaw I found it easy to cut 'slices' to less than 1mm thick, which at this

thickness retained ample strength to carry out subsequent shaping and finishing operations. All in all, a pleasant material to use with no obvious vices.

The suppliers advise that it can be 'aged' with tannic acid (there's a use for those old tea-bags) and also dyed using Dylon dyes which you can buy at your local ironmonger or haberdashery store.

Alternative Ivory is available in rod from 15mm to 125mm diameter and in rectangular bars 25 x 35mm, 33 x 43mm, 35 x 75mm and 45 x 75mm.

The material is also available in sheet form as grained ivory, bone, mother of pearl, oyster and tortoiseshell, approximately 3mm thick. Sheet sizes are 450mm x 560mm. In bar form the price is £15.00/kilo with sheets at £40.00 each (prices are plus VAT and carriage).

Of particular interest to small musical box restorers is Acetate Tortoiseshell in sheets 0.5mm thick. Whole sheet size is 1370mm x 660mm, but half sheets are priced £40.00. Two different colour densities are available and you would need to ask for samples in order to match existing materials. The appearance is indistinguishable from the real thing.

These products are not cheap but the quality is excellent and for a restoration there may be no alternative. I did however find one alternative source for grained 'ivory'. Axminster Power Tool Centre stock ivory, horn and tortoiseshell in 1" and 2" diameter blanks 6" long and

provided a sample of ivory for this report. These are intended for turning but can easily be cut to other shapes. Again, I found that the material was easy to saw and machine and, following Axminster's recommendation, polished with wet and dry paper, used wet, at 500rpm produced an excellent finish. Not available in plain ivory or in sheet form, but if a grained finish is acceptable the prices are very good - 6" x 1" diameter at £2.40 and 6" x 2" diameter at £9.60, including VAT. Delivery is free on orders over £20.

If you are faced with a restoration requiring ivory or tortoiseshell here are a couple of alternatives you may wish to investigate. Material from these suppliers is of excellent appearance and would be difficult to differentiate from the real thing.

Alan Pratt

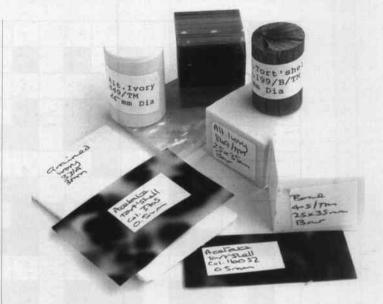
GPS Agencies

Units 3 & 3A Hambrook Business Centre, Cheesemans Lane, Hambrook, Chichester, West Sussex PO18 8XP. Tel. 01243 574444.

Axminster Power Tool Centre

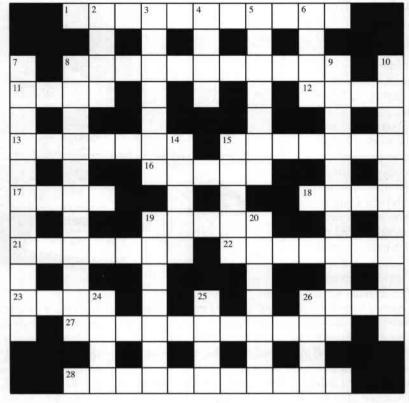
Chard Street, Axminster, Devon EX13 5DZ. Tel. 01297 33656 (Technical Sales)

As always, The Music Box and the writer make no recommendations on the suitability of these materials for any specific purpose. Members should satisfy themselves that materials meet their needs before purchase. ...in one respect it is superior to natural ivory



christmas crossword 1998

by A. J. L. Wright



For crossword answers see Page 228

Across

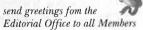
- 1. Its rising tone often starts the show. (6,5)
- Austrian bowls from which the stories came? (6,5) 8.
- 11. Sounds as if the weight was followed. (4)
- 12. A case for some free tuition. (4)
- 13. Kay's ham is only fit to hide behind! (7)
- 15. Seek a BP reserve. (7)
- 16. Revel in the reverse winder, (5)
- 17. Fair division when pro comes in first. (4)
- 18. I do like to hold a graven image! (4)
- 19. Multiple dress ---- a toothy lot! (5)
- 21. For a start, look in it, I always say. (7)
- 22. Packed thinly when I left shaken. (7)
- 23. Just one of many from 1 across. (4)
- 26. Motor copes only when it contains a coin. (4)
- 27. This dear lad grew into a noted Englishman. (6,5)
- 28. A wetter material used to make 9 down. (6,5)

Down

- 2. What one at an auction might say to stay there? (4)
- 3. The retired sailor may be. (2,5)
- 4 The Editor to his friends. (4)
- 5. For greater space I more or less change. (7)
- 6. A general helper. (4)
- 7. Musician gets in front of his instrument for an automaton. (6,5) 8. It's a sad caper when I've less tart! (5,6)
- 9 New maple deters the noise control. (5,6)
- 10.
- 5 cents to go to the cinema? It goes without playing! (11) Some take velvet for a nautical peg. (5) 14.
- Gives birth to furry animals. (5) 15.
- 19. Brief U.S. fuel to light a bright flame. (3,4)
- 20. Spring vegetable in a piece of pipe. (7)
- 24
- She confused the organ builder. (4) 25
- Some Golden Rod erupts into a European flower. (4) 26. After the Ball it carries a Turner. (4)

Christmas Greetings

Alan & Doris Pratt





The President & Committee Members

Send Christmas Greetings and best wishes For a happy and tuneful New Year to all MBSGB Members throughout the world



Seasonal Greetings

John & Joyce The "Handel Turners" Wakefield



Vintage Sounds

A new magazine under this title has just been launched. Issue One contains an interesting range of features covering such topics as vintage radiograms, buying 78s and what to look for, some background to the work of Marconi, and a profile of The Musical Box Society of Great Britain.

As part of their regular coverage they intend to feature phonographs, restorations, famous band leaders and the early days of television.

Whilst this may not be of interest to all our mem-

bers, we know that some include such items among their collections. MBSGB have been invited to contribute the occasional article about mechanical music, for we certainly fall into the category of Vintage Sounds!

We wish the new publication every success and hope to co-operate with them from time to time. If you would like more details, write to Vintage Sounds, 28 Chestwood Close, Billericay, Essex CM12 0PB. The subscription is £10 a year for four issues.

Best wishes for '99

letters to the editor

The Music Box

Barrel Organ Restoration

This barrel organ was a write-off, having been close to a fire, panels scorched and warped in places and the leathers of the hammers curling. The soundboard gave a good response and when the strings harmonised to a discordant rendering of 'Roll out the Barrel' I thought I would have a go at restoring it.

With a new side panel copied from the original I assumed that if all the dovetail joints came together again everything would fall into place; I was wrong! With everything held together with sash clamps it works, that is it makes a loud noise. The next step is to find out how to make it produce a tune! **A. Rigg, Co. Durham**

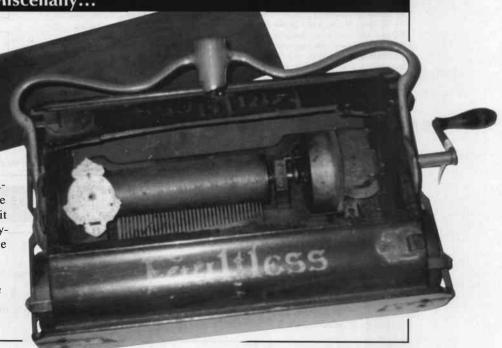




Mechanical Music Miscellany...

Music while you work We are indebted to John Turner for this picture of a musical box seen at a recent MBSI meeting in Charlotte. This unlikely item appears to combine musical box with carpet sweeper, though why anyone would dream up such a combination is a mystery. Perhaps the sales slogan was 'It plays as it sweeps as it cleans!' Does anyone know the history of the Faultless?

The editor welcomes letters on this or any other unusual mechanicalmusic applications



classified advertisements

RATES FOR DISPLAY ADVERTS

SPECIAL POSITIONS (offered as available)

(tone or two colours)Full page only £249 Outside back cover (full colour, one photograph to maximum size of 8" x 6") Full page only £560Full page £218

POSITIONS INSIDE JOURNAL (as available) Full page £150, Half Page £86. Quarter Page £54, Eighth Page £36 5cm box in classified, area £32, 3cm box in classified area £22

These charges include typesetting, but are exclusive of any artwork which may be required. Half tone, artwork and design can be provided at additional cost. Black and white half tones £15 each. Design and artwork quotes on request.

DISCOUNTS (applicable only on accounts settled within 30 days, otherwise strictly nett). Four or more consecutive insertions: Area rate less 20% A further 5% discount is given if payment is in advance

MECHANICAL DATA TYPE AREA

Full page 10%"x7%" (270mm x 180mm, Half page 10%"x3%" (270mm x 88mm) or 7%"x5% (180mm x 135mm), Quarter page 5%"x3%" (135mm x 88mm).

CLASSIFIED WANTS

Organette music wanted. Any Dolcine card music any condition. 14 note Melodia and Clariona music (on spools). All other organette music, bands, spools, discs, any condition considered. Contact Ted Brown: 01403 823 533

Wanted 11 inch 8 air cylinder in repinnable condition. 'Also, any other matching bits including baseplate 15 x 5 inches. Paul Bellamy, tel/fax ++44 (0) 1634 252079

Wanted **Barrel Pianos/Organs** Working or not, parts and carts.

Please telephone: Alan Wyatt on (01223) 860332

NOTICE

The attention of members is drawn to the fact that the appearance in The Music Box of an advertiser's announcement does not in any way imply endorsement, approval or recommendation of that advertiser and his services by the editor of the journal or by the Musical Box Society of Great Britain. Members are reminded that they must satisfy themselves as to the ability of the advertiser to serve or supply them

BLACK FOREST COLLECTOR

Seeking and ornate cuckoo clocks. Organ clocks, Animated Black Forest clocks, Musical Black Forest clocks - trumpeters etc.

Roy Aletti, P.O. Box 757 Harrison, NY 10528, USA. Phone: 010-1-(914) 835-1930 010-1-(914) 835-0830 Fax: 010-1-(914)835-0828

WANTED

Organettes, any condition, such as Kalliston, Mignon, Manopan, Herophon, Cabinetto even EMPTY cases. Small Table top Polyphon. Organettes, particularly Roll playing, large twin reed or with bells/drums. Also music discs, rings, rolls, books for ANY organette but particularly Ariston, Amorette, Phoenix, Gem Cobs. 01536 523988

> **Deadline dates for Display Advertising Copy** 1st April; 1st July; 1st October; 1st February Editorial copy must be submitted at least 8 days prior to above dates

Posting of magazine: 27th February; 27th April; 7th August; 7th November

CLASSIFIED SALES

Polyphon Disc Changing musical box, style 1N 159 notes. Holds 12 discs and changes automatically. For illustra-tion see Bowers page 159. Fachstätte Historicher, Musikautomaten. Gottard Arnold. Tel: 07253 4927 Fax: 07253 32020. 76669 Bad Schönborn 1

Calling all members - Buy and sell it here. 23 words including telephone number for the minimum charge of £5 makes it this long.

FOR SALE

Antique phonographs high quality, will ship overseas, contact Scott Vala, 16585 Hascall, Omaha N.E. 68130-2060 USA.

FOR SALE

Clearing out! A small collection of interesting old gramophones, HMV Lumiere and others. Please contact me for a full list.

John McGlvnn 01253 300100 or fax 01253 300020, also have some vintage radios and 19th c. mahogany cameras.

FOR SALE 92-KEY MORTIER

388 pipes, 15 registers, 2 hours music In mint condition, completly rebuilt by J. Verbeeck of Belgium Phone: 0161 737 2527 for more details

BARREL PIANOS

Tomasso 48 note TREMOLO barrel piano, 1940's and Keith Prowse 10 tunes, 1922, restrung, new tuning pins. Also rolls 58/116 Organ, 65/88 Piano, magazines & books. Sell or swap for items in Wanted advert. 01536 523988

Advertise your sales and wants here to a worldwide audience of enthusiasts.

CLASSIFIED ADVERTISEMENTS

LAST DATE FOR RECEIPT OF ADVERTISEMENTS FOR INCLUSION IN NEXT ISSUE: 1st February

Minimum cost each advertisement £5. Members: 16p per word (bold type 8p per word extra) Minimum cost each advertisement £9.50 Non-members 32p per word (bold type 16p per word extra)

CASH WITH ORDER PLEASE TO:

Advertising Secretary Ted Brown, The Old School, Guildford Road, Bucks Green, Horsham, West Sussex RH12 3JP Tel: 01403 823533

SOCIETY LAPEL BADGES: £1.70 (USA & Far East £2.20)

Available from: Ted Brown, The Old School, Guildford Road, Bucks Green, W Sussex RH12 3JP

Christmas Crossword Answers (see pg 226)

Answers Across

1. cimena organ; 8. Vienna Woods; 11. lead; 12. etui; 13. yashmak; 15. bespeak; 16. lever; 17. rata; 18. idol; 19. gears; 21. initial; 22. shimmed; 23. note; 26. peso; 27. Edward Elgar; 28. damper steel

Answers Down

2. ibid; 3. ex-naval; Alan; 5. roomier; 6. aide; 7. Player piano; 8. Valse triste; steel damper; 10. nickelodeon; 14. kevel; 15. bears; 19. gas lamp; 20. shallot; 24. Edna; 25. Oder; 26. race



Trumpet clock. ca. 1850 By "Emilian Wehrle, Furtwangen", Black Forest. With 4 trumpets. Great working



Barrel organ by Josephus Fuzelli, London, 1799 6 stops, 4 interchangeable barrels with 10 tunes/each. Excellent collector's item. Very decorative!



Phonograph <u>"Pathé: Le Gaulois", ca. 1902</u> Very early model with extremely rare <u>glass</u> horn!

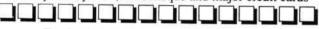
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"Piccolo" Barrel organ, 1895 By Bacigalupo, Berlin. 76 pipes, 3 register. Fully restored. Excellent working!



Gramophone "Klingsor", ca. 1907 Excellent mahogany case with wooden inlays!

Upright Swiss musical box, ca. 1870 Double combs, Excellent playing!



A Geo. Baker & Co. interchangable cylinder musical box playing six airs on each cylinder, in a kingwood case on matching cabinet. Sold for £13,225

Our saleroom in Bayswater holds specialised sales of Mechanical Music throughout the year, with sales typically including fine cylinder and disc musical boxes, automata, bird boxes and other related items.

We are currently accepting entries for our forthcoming sales. For a free valuation with a view to selling through Phillips please call Emma Simpson or Antony Jones on (0171) 229 9090.

If you are interested in buying at auction catalogues are produced for each sale and can be bought individually or by annual subscription.

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