

JOURNAL OF
THE
MUSICAL BOX
SOCIETY OF
GREAT BRITAIN

THE MUSIC BOX

a magazine of mechanical music



Vol. 4 No. 6

GREAT BRITAIN'S PREMIER
MECHANICAL MUSIC SPECIALIST

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THE MUSIC BOX

THE JOURNAL OF THE MUSICAL BOX SOCIETY OF GREAT BRITAIN

Vol. 4 Number 6 SUMMER 1970

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The Editor writes:

IT WAS OBVIOUS during the A.G.M. held in May that there is, in some quarters, a growing feeling of disquietude over the manner in which the Society is being run. This was highlighted by the announcement that there were vacancies on the Executive Committee for which the Members had not been allowed time, under the terms of the Constitution, to render nominations. Our President came in for a certain amount of harangueing and harassment on this point.

As was stated at the Meeting, this state of affairs arose because of resignations which occurred within the six-week advisory period and over which the Committee could exercise no control. It was thus all the more unfortunate that the serving officers of the Society should have come under attack. Quite obviously, this is your Society and, in return for your yearly subscription, you expect a certain standard of conduct from the honorary officers of the Society. At the same time, we should all remember that those who serve at the helm have the interests of the Society at least as much in mind as have the ordinary Members. There are no paid staff who might be accused of misplaced ideals – we are all fundamentally equal enthusiasts (and this, I like to think, goes for most of the musical box dealers as well) with equal interests – and, perhaps, failings.

However, because there is, so we are told, no smoke without fire, a special meeting of the Committee was held recently to discuss in depth all the points raised at the A.G.M. As a result, certain changes are being considered, among them the revision of the six-week rule and the publication of requests for advance nominations in THE MUSIC BOX. Secretary Reg Waylett will shortly advise Members of any changes suggested along with the possibility of holding an Extraordinary General Meeting in conjunction with our Winter Meeting in order to consider changes to the Constitution.

ARTHUR W.J.G. ORD-HUME



"De Blauwe Trommel". Note the three-wheeled chassis powered by a 7 h.p. JLO engine driving the front wheel. The organ, of course, is hand-turned.

STREET ORGANS IN AMSTERDAM

By
Arthur W. J. G. Ord-Hume

THOSE FAMILIAR with Amsterdam return home starry-eyed with tales of the beauties of the canals, the old town where the word 'vertical' (if one can judge by the angles at which the buildings lean) seems to have been an architecturally dirty word, and the Rijks Museum. Others rave about the street organs, known to the Dutchman as the *Draai Orgels* and to the Amsterdamians (can that be right?) as the *Pierement*.

Faced with the task of attending a large conference in the Dutch capital, I recalled these tales and decided to seek first of all some time for a *draai orgel* seeing tour – and then to seek the *draai orgels*. Initially, my free time was late in the evenings when all self-respecting *draai orgels* could be expected to have their reservoirs empty and their facades covered up. I used these opportunities to quiz all those who I met, always starting with the traditional opening gambit of the inveterate English gentleman when let loose abroad – “Do you speak English?” Fortunately for me, almost everybody speaks either good English or knows enough to get by with using suitable complementary gestures. “Oh yes”, they chuckled. “De orgels!” they smirked. “They are everywhere” adding a suitable, all-encompassing gesture. Needless to say, the orgels were not. The landlord of the “Blue Bell” pub said “Yes, go down such-and-such straat between nine and ten and you’ll see them”. The taxi driver said “They are around the so-and-so gracht between noon and teatime”. The policeman eyed me curiously. “*Draai orgels*? Why do you want to see them?”

My chance came – a free morning. I haired off into the middle of Amsterdam with great enthusiasm, feeling not a little like a Christmas tree the night before Yuletide for I was heavy with cameras, tape recorder and bags.

I walked the miles across the city (it’s even more impressive if you translate it into kilometres!), exploring all the *straats*, the *wegs* and the *grachten* (plural of *gracht* which means



canal). I did find two orgels cossetted in their tarpaulin nightdresses parked by the side of the Keisers Gracht. Now to the uninitiated, a *draai orgel* in a tightly-sewn, dirty brown cover is unrecognisable. To the rabid enthusiast, the sight of that shape on a three-wheeled cart is nevertheless unmistakable – *draai orgel*! But there is no shy virgin who guards her charms more securely and is tighter laced and covered up than a slumbering *draai orgel* and examination of these revealed not even a chink of carved ankle.

I carried on walking, my feet feeling decidedly unwilling to prolong the exercise much longer. It was now 10.0 and there had not been so much as a smell of a live *draai orgel*. Dejectedly, I walked past the moored canal buses and decided that I would make for the nearest street bar, have a glass of draught Dutch Beer (and good it is, too!) and then head back to my hotel – a grey concrete and glass wonder on the outskirts of town, erected, no doubt, as a phallic gesture to some noted anti-Dutchman. My illusions of Amsterdam were shattered. I felt as if I had just been told a story about a Dutch miller who had broken his arm because his windmill had backfired whilst he was swinging the sails to start it up.

Now, when I am abroad, I adopt a system of behaviour which is best summed up as the passive, conformative defensive. This works on the principle that if you are inescapably faced with the discovery that you are a temporary foreigner, then you must make an effort not to let it show. If the natives spit in the gutter, then you should nonchalantly do likewise. But the whole business is really important when crossing the road. Pedestrian crossings in Rome, for example, are nothing more than selected areas of highway where the motorist can be sure of getting more pedestrians for minimum effort. The secret lies in going with the masses and it is necessary if you want to survive. If you want to get across the road, find somebody else who’s got

the same idea, stand next to him and do what he does. I've always done this even if only because there's a measure of safety in numbers and in a foreign city you never quite know from which direction the next trolley car, scooter or corrugated tin motor car is likely to come.

This time, though, I forgot. I stepped off the kerb – and was suddenly on the receiving end of a high-pitched blast on a motor horn. I did a mid-air back somersault, leapt for the safety of the nearest railings – and turned to see the fate I had just missed so narrowly.

I had just missed being run over by a *draai orgel*.

There on a three-wheeled cart powered by a tiny petrol engine which appeared to have been culled from a lawnmower whilst its owner was away probably clipping his hedge – there was a beautiful street organ. The entire assembly was moving under its own power controlled by two men who sat huddled close together on a little box betwixt orgel and motor-driven front wheel. The traffic lights had changed to red, so I had the opportunity to talk

to my erstwhile assassins. I said I would like to hear the organ and they indicated a spot further down the *gracht* where they would play. I pursued the somewhat incongruous caravan to the appointed spot where the two dismounted, backed the organ into a place outside a cafe – and proceeded to introduce me to the organ in a less potentially painful way. The organ was *De Blauwe Trommel* hired from one of the two big Amsterdam agents, D. Mohlmann, and these two men had had regular charge of it for nine years. It played 62 keys.

The gramophone records of these instruments do not really do them justice and the true beauty of their sound is, I believe, best brought out in what is their natural surroundings – the traffic and the hurly-burly of city life. After suitable entertainment, rewarded in the expected and accepted manner, I headed off, content with having found at least one orgel.

But as I set off back to the Dam, I heard more music and to my surprise and delight found that each corner of the formerly deserted square now sported a *draai orgel*. The nearest one was



"De Klok", the trailer being fitted with handles for pushing, and a front-wheel motor for driving. Details of the organ and its team are also shown at the top of page 363, the upper pictures on page 365 and the lower one on page 366



none other than the famous *De Klok* with its renowned four carved bellringers on the front which together beat time with the music. This organ was built in 1927 and has 56 keys.

Draai orgel operations are normally carried out by a team of two men. The first has the task of turning the large handwheel at the back which sets in first has the task of turning the large handwheel at the back which sets in motion the which sets in motion the whole mechanism, whilst the second one – the *manser* rattles his little oval tin to exhort small change from the passers-by. This little tin is an interesting accessory and they all seem to be the same. It is in the form of a highly-polished sardine tin with a tin-mug-type handle at one end. The top half of the sardine tin top is open and the lower half closed. This enables cash to be inserted and the tin rattled invitingly in time with the music without fear of the hard-earned cents being broadcast like seeds to the winds. To those for who his antics and entreaties for cash are anathema, he is known not so much as a *manser* but under the less polite term of *bietser*.

Across the square was a Gossling organ – *The Ship* – which was operated by one man who, I could not help feeling, was cheating rather. His organ was driven not by the muscles of a *stijldraaier* – an artistic handle-turner – but the duties of a not-so-mute mate were being performed for him by a small petrol engine driving a large pulley through a length of flat belting. Although the organ played well, it was nowhere near so attractive or so brightly decorated as the others and, alas, its *manser* displayed similar outward signs of neglect.

Just around the corner was a truly brilliant organ, *De Carillon*, again operated by a petrol engine and one man – a bearded, bespectacled fellow of great character who clowned hard for his cents and the occasional guilder. This organ, which the *manser* wrote down for me was made by Burssens and had 56 keys (although de Waard says 64!), had a most endearing register reminiscent of a German piccolo. My enquiries on this resulted in my being taken round to the back of the organ and allowed to insert my head into the works, perilously

close to that belt-driven pulley, to see three rows of small, large scale wooden pipes which produced this tone and thus gave the organ its name.



Thus had to end my *draai orgel* jaunt, although I did go out to 119 Westerstraat and peer through the glass in the tall doors of Gijs Perlee's famous rental establishment. It was, though, closed when I called.

My taxi driver told me "These men can earn up to 400 guilders a day". At eight-and-a-bit to the pound, that's not bad money. Estimates as to the numbers of organs to be found on the streets varied from 15 to 30 and I saw at least seven in a short space of time. Another informant advised that the organ operators were all "men with no merit" who

"The Carillon" and its clowning manser. He is also seen on page 365, bottom picture. The organ is driven by a small petrol engine.



would not do other work and they all lived together in one particular slum and ate communal meals. He admitted, he disliked the *draai orgels*.

A friendly Dutchman proffered the information that all the organs were licensed by the civic authorities, that the licence was renewable annually for the price of a few guilders and that

although some of the operators owned their own organs and were thus able to make a good living, most had to pay a high rental for their machines – and that was a different proposition. The law says that the organs must not spend too long in one place and every half hour or so, they move on a few hundred yards. It was easy to see, though, that places for playing music at were not selected in any haphazard fashion and that every team had its own 'beat' which was, I have no doubt, guarded jealously. I had already quizzed one operator why there was a box at each end of the organ on its frail-looking cart. "In one end", said the *manser*, "there is food for the organ and in the other there is food for us!" He demonstrated the books of music at the back and the sandwiches at the other end. . . .



At Schiphol Airport for the flight back, my Dutch colleague said he hoped that I had enjoyed my stay and that I had not missed seeing the Oude Zijds Achterburg Wal in the old city where the girls sit in cunningly-lit windows and invite further inspection from passing men. "Most of the unaccompanied men", said my friend in one of those confidential whispers that can be heard a mile off, "spend all their money there". "Really" I countered. Somehow, though, I did not think it would have been right for me to tell him that I had spent all my spare cash on listening to the *draai orgels*.





By no means as brightly-painted and as attractive as the other organs, "The Ship" produced very good music, although slightly out of tune. The manser stands in front holding his collecting tin. All organs have tarpaulin tops to lower when it rains. Mostly these are found well-furled at the top of the instrument. Some operators, though, are not energetic.....

Expression by Machinery.

By J. SWINBURNE.

It has often been said lately that though the mechanical piano exists it will never be possible to have the violinola,—unless it is only a kind of soap. This is not so. I remember wandering about the Paris Exposition of 1878, and being surprised at the sound of a string quartet among the pianos. On going to where the sound came from, I found a man producing this music with a keyed instrument; but he was not playing the music in French. I must digress to explain what I mean by playing in French. In 1878 the crime of producing everything tremolo was especially French. All the singers sang tremolo and every instrument that could play tremolo did so; even the *cors de chasse* played in this hysterical way. The tremolo microbe got out all over the world, and everybody sings tremolo now and plays tremolo when he can; so playing in French has, in 1904, no distinct meaning. Perhaps if I talked of playing with expression it would be clearer, for tremolo performers are always said to perform with so much expression. Well, the Frenchman was not playing in French; he was playing without expression in this sense. The instrument was like a piano, except that each string, at the point where it would be struck in a piano, had a piece of catgut attached, sticking out at right angles to the string. Each tag of catgut passed between two little rollers, so as not to touch either normally. There were thus two little rollers for each note: they were rotated continuously by a pedal. On pressing a key, the corresponding rollers were brought together on the tag, and as they were resined the string gave the characteristic tone of the violin. The harder the key was pressed the louder the note. No doubt the speed of the rollers also affected the tone and loudness.

Now a piano engine could certainly play this contrivance, so not only would we have a fiddling machine but we would have a viola and a 'cello one at the same time. But could such a machine give the main characteristics of the hand played viol? The solo violin normally plays very rapid music, and no violinist can conscientiously perform music that he *could*

play; so he is always attempting something beyond his powers and is therefore always out of tune. I do not believe any human being could design a machine that could perform quite such exasperating gymnastics as an ordinary solo violinist. Certainly a violinist must play slow things occasionally, and he might easily play them in tune; but then he puts them out of tune by waggling his left finger on the string. This, and leaning his head on his fiddle, is the violinist's chief idea of expression! The 'cellist, however, revels in it. In order therefore to make the fiddling engine come up to the hand performer in the matter of expression, it must play fast music out of tune and slow music tremolo (or rather with wobbly intonation). Now it would not be difficult to arrange a mechanism like that connected with harp pedals which would put the machine out of tune for brilliant virtuoso music. By vibrating this mechanism rapidly a tremolo should be obtainable which would give all the expression the most hysterical 'cellist could desire. There is thus no real difficulty in making a fairly successful fiddle engine that would be just as deleterious as the hand worked counterpart.

As to the piano machines, we are all familiar with them. The pianist does not play tremolo, perhaps because he cannot. If the pianist is a lady, he can put the bass of his chords down before the treble and produce what the Germans call the "ladies' arpeggio," and the piano machine can do this just as well. Musicians complain that phrasing is impossible on the piano engine, but that does not seem to matter to the engine drivers. They can make the whole louder or softer, and they say that is expression. Look at the advertisements of the engine builders. One builder gives "all the expression of which the player (*sic*) is capable!" Another affords "unlimited expression." No doubt you pull the expression lever hard over and run for your life!

A piano engine was erected in our court this spring. It pounds out the desecrated bones of Chopin's works at all sorts of queer speeds; but it is terrific in the overture to "Tannhäuser," with the Pilgrims' March in the

tenor as an inaudible accompaniment to the deafening percussion of the strings in triplets in the treble. I went off to the country; but no one would rent my house. Since then I see from the papers that a couple of horses, without any apparent motive, suddenly started off and went down an area at the end, with the carriage on the top of them. No doubt the explanation is that they heard the Walkyries' wild horses cantering about on the pianist with gusts instead of with accents. No artistic horse could stand that!

It has often been said that the organ has no expression. It is curious that, though an organ engine can do everything an organist does (including accenting a note by clipping the one in front) and can control the swell pedal and the stops just as well as he can, the organ engine is hardly known in England. In America it is more common; the St. Louis organ, for instance, is to have one. Perhaps it is because the organ has no power of expression that the organ engine is not common: it might be because organists are so often musicians. The want of expression of the organ is easily remedied. The chief means of expression is, of course, the tremolo. Many organs have a tremulant on the swell or solo, but it is not used nearly enough. What is wanted is a tremulant which acts on the whole organ—full great and pedals and everything—and cannot

be turned off. This would bring the organ down to the level of the human voice. The vox humana and tremulant is an attempt in that direction, which only reaches as low as a bleating goat and not quite so far down as a tenor. The application of the tremulant to the whole organ has not taken place yet, partly because an organist's taste is not like a singer's and partly because he knows he might get shot by a musician if he played on such an arrangement. But with an organ engine driven by a churchwarden, think what a paradise of hysterical expression the ladies of the congregation would enjoy! And surely nobody would shoot a churchwarden!

There is no difficulty in abolishing the solo violinist and solo 'cellist, as well as a pianist; and no end of expression can be provided by machinery. The organ engine is coming, and we have something further to look forward to. All the artistic results of these machines can be permanently recorded on the phonograph, whose only fault at present is that it does not make enough noise. Ingenious brains are engaged on the development of a stentorian megahooter.

In the near future it is to be hoped that the orchestra will go, and we will have a complicated and noisy mechanism, all playing tremolo, driven by one of those steam things that work merry-go-rounds!

Damaging a Polyphon.

AT the Marlborough Street Police Court, last month, Mr. C. M. Barham, a public house broker, of John Street, Bedford Row, was summoned before Mr. Denman for maliciously, wilfully, and unlawfully damaging a polyphon belonging to the New Polyphon Supply Co. (Lim.), of Oxford Street.

Mr. H. C. Biron, barrister, prosecuted; and Mr. Cecil A. Lumley, solicitor, appeared for the defence.

Mr. BIRON, in opening the proceedings, said that the main object of the prosecution was to show that persons would not be allowed to damage the machines of the company with impunity. The company had a number of machines in various licensed houses in the metropolis, and it would therefore be readily seen how important it was to them that their instruments should not be tampered with.

Mr. WALTER COOMBE then deposed that on October 15th last he was in the "Carpenters' Arms," Whitfield Street, Tottenham Court Road, on behalf of the official receiver. While he was in the house the defendant, who was a public house broker, and who was acting on behalf of Miss Hicks, the lessee, came in. Mr. Barnum began to take stock on behalf of Miss Hicks. The polyphon in question was in the bar, and with the piece of iron produced and a mallet he broke the drawer of it open and abstracted the money from it, remarking as he did so,—"If any inquiry is made about this give them my name and address."

Cross examined.—Mr. Barham told him he had written to the Polyphon Company. He also told him that as the company had not called he felt bound to open the polyphon.

Mr. SIDNEY H. DIXON, secretary of the New Polyphon Company, Oxford Street, said he estimated the damage done at the minimum of two pounds. The persons who rented their machines were allowed twenty per cent. of the takings.

Mr. CECIL A. LUMLEY said his client was willing to pay for the damage done, and that the case was a frivolous one.

Mr. DENMAN said that he was not sitting in the court to protect the Polyphon Company, but to decide whether there was wilful damage, and whether the defendant thought that he was acting within his rights. Perhaps the parties might put their heads together and come to some arrangement.

The legal gentlemen concerned in the case then held a discussion in private, but were unable to come to any arrangement, it being eventually decided that the magistrate should deal with the matter.

Mr. DENMAN, in giving his decision, said that the view he took of the matter was this. Mr. Barham had committed an act which he could not justify, and by a wilful act had damaged this property illegally. Though he did not intend to do it for the purpose of damaging the company, he resorted to an act which he had no business to do. It came, therefore, to a question of damage. The wood the machine was made of did not appear to be of a very valuable description, and the magistrate thought that a sovereign compensation would be sufficient, with three guineas costs.

Reproduced from
"Musical Opinion" dated
1st December 1899 from the
collection of The Editor.

From the museum at Tallinn, Estonia, comes this picture of an interesting automaton – The Boy with the Piglet. The complete piece stands 82 cm. high and the movements comprise: legs, eye-lids, shoulders, mouth. At the same time, the piglet has motion of its head and tongue. Musical accompaniment is provided by a small comb-playing movement 7 cm long and having 55 teeth.



FABRIQUE DE GENÈVE

IMITATION MANDOLINE.

1	Rigoletto. _____	La Dona e mobile. _____	Verdi.
2	Le Songe d'une nuit d'été. _____	Couplets. _____	Thomas.
3	Ernani. _____	Canz Involami. _____	Verdi.
4	Le Réveil des Oiseaux. _____	Polka. _____	Giroud.
5	Un ballo in Maschera. Fanno, l'amo e lagrima _____		
6	Home sweet Home. _____		Sinclair.

Ne 5406.

This unusual tune-sheet, submitted by Founder Member Frank S. Greenacre, comes from a semi-mandoline musical box of around 1870-1880. The interesting thing is that the "mandoline" effect, imitation or otherwise, is considerably better than the effects created by later boxes described as "mandoline".

JOCELYN R. WALKER WRITES ON

CLEANING UP RUSTED MUSICAL

BOX DISCS.

SOME months ago I was fortunate enough to acquire a number of discs for the 19 5/8" Polyphon. This was an instrument that I much admired but which held only an imaginary place in my collection, as the only examples I ever seemed to come across were wrecks, not for sale or had only that morning been promised to someone else. So the discs which were covered with rust on both sides waited in patient silence in the garage to be called upon to do a tuneful turn at the drop of a penny.

Happily imagination has since become reality and 'Poly' towers like a Victorian nursemaid over brood of little cylinder boxes gamboling around her skirts. With this machine came a further supply of discs, many of which were also in a sadly rusted condition.

My efforts at cleaning these were exhausting and fruitless. I brought various derusting products which only worked to a limited extent, usually creating more mess than they removed. In one case the discs needed to be immersed in a prepared solution. What does one put a 19 5/8" disc in — the bath being already full of coal? Dustbin lids are not big enough. I was given an oil drip-tray by a garage. This was made of plastic, a fact which I did not take into consideration when making up the mixture using boiling water. The sides promptly collapsed and the back yard was awash with hot acid and the surrounding atmosphere thick with evil

smells and even worse language. After this I abandoned all but a simple scrubbing with paraffin.

Further enquires and thoughts on rust removal brought me, at last, to a very satisfactory solution of the problem. A few minutes with the telephone directory and I was in conference with the manager of a small plating works. After some discussion I sent along a couple of discs for experimental work. These were dipped in what ever was required to completely de-rust them and then plated with cadmium. The result was not satisfactory; the discs being white and lustreless. Further trials with *nickel* plate proved to be excellent and as a result I have had all the rusty discs treated in this way. At ten shillings each it was a very good method of restoring to these tired old troopers a fair semblance of their youth.

Perhaps at some future date I shall complete the face-lift by re-titling these discs with contact lettering perhaps!



"Then after I had waited 25 years to get my name on a parking space they spelt it wrong."

SOCIETY MEETING

The Provincial Meeting of the Musical Box Society of Great Britain was held at the Raven Hotel, Droitwich, Worcestershire, on Saturday, 14th March, 1970. Arrangements for the meeting were made by courtesy of our Member, Mr. A. J. L. Wright of Stourbridge. Thirty Members and guests were present.

The tail end of winter, with sleet and fog, was thought to be responsible for the rather poor attendance and it was suggested during the day that future provincial meetings might better be staged on a Sunday. This was discussed at the later Annual General Meeting in London (see report following).

After morning coffee, the meeting got under way with a question and answer panel under the chairmanship of President Bob Burnett. The smallness of the meeting provided an opportunity for this to be held as an informal discussion group. Among the many interesting tips which emanated from the panel of experts was the fact that rusted discs can be polished and restored to much of their former brilliance using Kiwi brown boot polish, this being the only brand which works.

Lunch was taken in the hotel, giving those present the chance to sample the very good food available at sensible prices in this charming old coaching house.

The afternoon session was devoted to a lecture, illustrated with slides and tape recordings, devoted to some unusual musical boxes. This was presented by Member Hugh Miles. After this, the formal meeting terminated and Members had the chance to examine the many boxes brought along for show. At 5.30, the meeting was concluded.



Jocelyn Walker plays his Olympia



An unusual musical photograph album — this one features a disc movement

The Summer Meeting and Annual Meeting of the Musical Box Society of Great Britain was held at the Great Western Royal Hotel, Paddington, London, W.2, on Saturday and Sunday, 16th and 17th May, 1970. More than one hundred Members and guests attended.

After morning coffee, the planned programme began with a talk by Richard Baines which, although entitled *Mechanical Pianos*, was devoted to the story of the book "Christie's Old Organ", by Mrs. O. F. Walton and published in 1882. Dick Baines had been fortunate enough to obtain lantern slides of the original illustrations for this book, which features an early portable street piano, and these he projected using a contemporary magic lantern. He also demonstrated a barrel piano made in Italy by Francesco Getto.

The luncheon interval followed, after which was held the Annual General Meeting. One of the items discussed was the holding of the Provincial Meetings on a Sunday rather than on a Saturday. This was voted out by a narrow majority and some doubt was expressed by the Committee as to whether it was worth holding out-of-town meetings if they were to be so poorly attended as was that at Droitwich. A second point for discussion concerned the discontinuing of the Associate grade of membership, it being explained that rising costs of overseas postage plus the cost of the Journal meant that at present Associate Members were actually costing more to service than U.K. Members. It was

therefore voted that this class of membership be abolished.

It was put forward, and unanimously adopted, that Member Henry A. J. Lawrence of Leamington Spa, whose recovery from his recent serious illness may take some while, be elected to Honourary Membership.

Member J. Rodrigues, it was announced, has kindly consented to act as Hon. Auditor to the Society. His services, it was agreed will be of great value to us and we are all most appreciative of his kind gesture.

Arthur Ord-Hume, Hon. Editor, re-affirmed that he was finding it increasingly difficult to devote



▲ Cyril de Vere Green poses with his musical clock



◀ Cyril and Bertha with flowers, clock and book

sufficient time and effort into continuing in office and, in offering his formal resignation, agreed to remain in office until a replacement acceptable to the Committee can be found.

In declaring the Officers of the Executive Committee for the coming year, it was revealed that a vacancy had occurred in the few weeks preceding the meeting. The Committee had co-opted Member Peter Ward to fill the vacancy created by the resignation from the Committee of Member Graham Webb, and the position of Vice-President remained

open. There was some strong criticism from two Members concerning the fact that notice of these vacancies had not been given to Members in time for them to offer nominations. President Bob Burnett pointed out that, under Article 4, Section 4 for the Constitution, (the "six-week rule"), this had not been possible since the re-shuffle had come too close to the Meeting. The issue was further complicated by the desire of Treasurer David Tallis to retire at an early date. The Committee agreed to re-examine the whole position regarding nominations with a view to the possible revision of this section of the Constitution.

Member Graham Webb, retiring from the Committee, was thanked most sincerely for his untiring and sincere efforts on our behalf which have included taking responsibility for mailing the Journal – no easy task.

Editor Arthur Ord-Hume, during his report on the year's progress with THE MUSIC BOX, introduced as his guest our new printer, Mr. Phil Hobbs, who attended the day's events.

Treasurer David Tallis presented a detailed financial statement showing the Society to have a balance in hand of £737 . 9. 0.

Secretary Reg Waylett, in concluding the report of his first year in office, announced that the American Musical Box Society International was planning a visit to Europe next year and that accordingly we had arranged our Summer meeting for 1971 for Saturday and Sunday, 22nd and 23rd May in order to coincide with this event. Our American friends plan to be in England several days, leaving on 25th May for Amsterdam, Brussels, Switzerland and Paris, and our Secretary stated that it was hoped that Members of our Society would join the US party for this musical-box-orientated European tour. Several Members present immediately indicated their wish to participate in this.

After concluding the formal Annual General Meeting, it was announced that there was to be a further item in the afternoon's programme – the presentation to our founder and first secretary, Dr. Cyril de Vere Green, and his wife, Bertha. From a special subscription fund comprising donations from Members, the Society presented Cyril with an ornamental striking clock containing a musical movement having a sectional comb within its base. A list of contributing members, printed and bound in green with gilt lettering, was also presented to him whilst Bertha received a large bouquet of flowers.

Both Cyril and Bertha, in separately acknowledging their respective 'goodies', spoke of the immense pleasure which they had derived from the burgeoning years of the Society and how mechanical music had brought them into touch with so many fine new friends. Literally all over the world.

Returning to the organised programme for the day, Member Graham Webb gave a most interesting talk on choosing a disc musical box which was well illustrated. He also played tape recordings of two newly-composed tunes which had just been trans-

cribed and 'issued' on Polyphon discs. Both pieces, set up for 19 5/8" disc size, were clearly virtuoso compositions designed to show off the capabilities of the instrument and it is interesting to compare these 1970 discs and their 1970 musical offerings with the Polyphon music of the 1890's for, with a few notable exceptions, no music was composed expressly for the instrument and thus it was used in its day as an interpreter of existing music rather than as a vehicle for customised 'new' sounds.

Graham Webb's talk was followed by a question and answer panel under the chairmanship of Secretary Reg Waylett. The panel comprised Members Mike Gilbert, David Tallis, Cyril de Vere Green, Keith Harding and Freddy Hill. As usual, this feature proved both entertaining and useful.

This concluded the set programme for Saturday and members and guests spent the rest of the evening engaged in musibox collecty chattel. Due to the lack of support, it had been decided not to hold the usual Society dinner on this occasion.

The Sunday morning practical meeting began at 10.15 with a talk by Mr. Colyn Gates, a guest of Member Graham Webb, who delivered a fascinating practical demonstration of minor repairs, touching in and French polishing musical box cases. The facility with which he transformed a badly disfigured and uninteresting-looking box into an eye-catching work of art held the audience spellbound.

Following the coffee interval, Member David Tallis demonstrated, for the benefit of our newer Members, the correct way in which to dismantle and re-assemble a cylinder musical box. Since time was running short, David Tallis completed his task in what must surely be record time – under half an hour!

The final demonstration was by Member Arthur Ord-Hume who went through the various steps in recovering the bellows for mechanical organs. Using large sketches, a selection of bellows assemblies out of various organs and a range of materials and sundries, he, too, was "fighting the clock" but managed to show some of the skills needed in this specialist job.

The meeting concluded just after 1.0 p.m.

Pictures by Graham Webb and The Editor.

LATE ANNOUNCEMENT

Shortly after the A.G.M. reported above, Member David Shankland of Cardiff kindly offered to take on the duties of Hon. Treasurer. Accordingly, he has been co-opted on to the Executive Committee under Sections 3 and 5 of Article 6 of the Constitution. The Officers of the Committee are now as follows:

President: Robert Burnett
Vice President: Office Open
Secretary: Reginald Waylett
Treasurer: David Shankland
Editor: Arthur Ord-Hume
Members: David Tallis
 Jocelyn Walker
 Peter Ward

Auditor: John Rodrigues
 (Note: All officers are honorary)

The following article appeared in the May, 1970, issue of MUSICAL OPINION. It generated correspondence which was published in the June and July editions. These pieces are reproduced here with grateful acknowledgement to MUSICAL OPINION.

The Apollonicon—what was it?

By W. L. Sumner



Half a century ago a crossword puzzle in one of the London papers contained the clue: A chamber organ (11 letters), and this is how most of the dictionaries and encyclopædias of the time defined the Apollonicon. The *Encyclopædia Britannica* said that it was a harmonium, which it certainly was not. For "chamber" we should no doubt read "not-church"!

The Apollonicon was a large pipe organ which could be played both by barrels and a team of organists, though it was adapted later so that one skilful organist could give a reasonable account of much of its potentialities. It was intended to stand in the place of an orchestra. In the post-Waterloo period there were few good organists in England and money was not often forthcoming for musical activities. Many of the London church organists were women, and many country churches were happy to rely on "the music that goeth with a wheel", as the sounds of a barrel organ were called. The Apollonicon has been something of a mystery, but reference to various nineteenth century publications enables us to grasp its nature.

It was built by Flight & Robson in their "rooms" in St. Martin's Lane, London and cost at least £10,000 initially, though more money was spent on it later. The firm was incorporated about the year 1800, and the partnership continued for nearly four decades. Benjamin Flight was then about 70 years old, but the business continued well into the 'fifties under the style of Joseph Robson & Son. The firm has never received its due acknowledgement in the history of organ-building: presumably because such giants as the Walkers, Hills and later, Willis were to stand astride the field in Britain. Thus, the great work of Flight, Nicholson and others hardly less worthy, has not been properly estimated. Before the extremes of romanticism had denuded the organ of proper chorus work and mutations, Flight & Robson were even making pedal mixtures. Their diapason choruses were bright and transparent; their flutes were of exquisite intonation and their reeds represented a high point in voicing both imitative and chorus ranks. Moreover, they were always inventing new mechanical devices, some of which went into the Apollonicon. The question of temperament, that is, of tuning the scale, was very much in the minds of both acousticians and practical instrument-makers at the time. The compromise of equal temperament tuning was disliked by many keyboard instrument-makers, whose ears were more

sensitive to niceties of pitch than they would be today. Flight & Robson constructed a number of enharmonic organs, which could be played in the extreme keys with purer intervals than those which obtained with either the mean tone or equal temperament systems of tuning. Some of these were exhibited at the Great Exhibition in 1851. These, in spite of their ingenuity of design, could have little more than academic interest, because of the large number of keys and pipes for each octave and the consequent high cost, not to mention the difficulties of playing such instruments. Nevertheless, such experiments were worth undertaking, because, even today, sensitive ears soon become wearied of the dissonance of the major thirds of equal temperament, particularly on the organ, with its sustained tone.

The Apollonicon had six sound-boards which were known as scales, because of their respective compasses.

Scale I—This was a great organ of five octaves from GG 12 ft. (a fourth below the present lowest note): 1, Open Diapason (bold); 2, Open Diapason (delicate intonation); 3, Stopped Diapason; 4, Principal; 5, Twelfth; 6, Fifteenth; 7, Flute (4 ft. ?); 8, Sesquialtera III ranks; 9, Cornet (various); 10, Trumpet.

There were five keyboards, originally placed side by side for the same number of performers, and the great organ could be played from the central clavier. (Some accounts said that there were six players.)

Scale II was a pedal department which could also be played by the fingers. It was based on the Great Pedal Open GGGG 24 ft. I imagine that various modifications were made from time to time, both in the tonal and the mechanical parts of the instrument. The "Repertory of Patents", 1828 (Christopher Davy), mentions only this one pedal stop, but later accounts add a Bourdon and a reed stop. This Scale was played by a short cylinder which also controlled drums, cymbals, indeed "traps" of the cinema organ of the present century.

Scale III—This was a Swell organ of four octaves compass from "Gamut G": 1, Diapason Corni (Horn Diapason); 2, Stopped Diapason; 3, Violoncello; 4, German (Vienna) Flute (4 ft.); 5, Wood Fifteenth; 6, Trumpet.

Scale IV—Flute, Clarinet, Viola.

Scale V—Flute, Oboe, Cornet.

Scale VI—Piccolo, Vox Humana, Bassoon.

Scales IV-VI were of three octaves compass from Fiddle G upwards and were in a Swell box.

The tunes were set on three barrels or cylinders: two were 8 ft. long by 2 ft. 2 ins. diameter and the third was 3 ft. 9 ins. long and was used for the "pedal" and drums, etc. The tunes were pinned spirally on the cylinders so that the barrels not only revolved but moved laterally. Nine revolutions, which gave a continuous line of 65 ft., "was found to be ample for the performance of the longest overture or symphony".

When the organ was played by five performers they sat at their little consoles, facing the audience. The player who commanded the great organ also had a pedal-board.

"At the first opening of the Apollonicon, in 1817, the pieces set on its barrels were the overtures to Anacreon and Clemenza di Tito. Since then, new sets of cylinders have been added containing the overtures to Prometheus, Zauberflöte, Figaro, Idomeneo, Freischütz and Oberon. For several years Mr. Purkiss, who first displayed its powers in 1817, has performed selections on it on Saturdays."

Fétis, the well-known French musicologist and critic, who heard Samuel Wesley play on it in 1829, wrote that it was the best organ which he had heard in England and said that the builders had used in it certain contrivances unknown before. The chief of these was a "double-acting" device, a "Maltese" cross movement, a precursor of the poppet-pedal. The stop combinations were controlled from pins in the cylinders. A pin would bring on a stop and an identical movement from another would take it off. Steam power was used for blowing and rotating the barrels but it proved unreliable and usually this was done by man power, but the whole action of the instrument was a remarkable feat for the same decade as the Battle of Waterloo. The instrument made a deep impression on all who heard it. It is said that W. T. Best, then organist at St. Martin in the Fields, near to the Apollonicon rooms in the later days of the organ, strove in his solo playing to imitate its orchestral potentialities. Certainly he followed closely the ingenuity by which orchestral scores were "realised" on its barrels.

I remember Somers Clarke, the former Surveyor of the Fabric of St. Paul's Cathedral, telling me in the early 'twenties how the Apollonicon had made a profound impression on him in his youth. The instrument had been lent to the Colosseum, then a large building for the display of Panoramas—precursors of the travel film—in Regent's Park. "The organ was not visible. First very pleasant music prepared the audience for the raising of the curtain. Calmness and repose. We saw the bosom of the Tagus and a lovely sunrise. Calamity was not far off. The sky began to darken, the music changed and its quality became agitated. At last a horrible black darkness closed in upon us. We and the whole building trembled, the Apollonicon screamed, raved and bellowed. The music changed and became more comforting, the light increased and we saw before us the terrible picture of Lisbon in ruins. Whilst this miserable scene was before us the music was skilfully changed in its quality; a calm was spread over the audience and there was conveyed to the mind that strange sense that, while poor little mankind may be utterly overthrown, the great calm of Nature resumes its sway."

The Apollonicon, failing to pay its way, was broken up in the late 'forties and its materials found their way

into other organs. Abdy Williams, the author of *The story of the Organ*, suggested, in a letter written to *The Organ* in 1922, that the organ in Boldre Church in the New Forest contained some of the pipe-work.

It would seem that since the original Apollonicon was so successful, various other barrel-organs were subsequently given this name. The Colosseum organ was described as "new and large", and some accounts give Bevington as the builder. Mr. Arthur W. J. G. Ord Hume, than whom there is no greater authority on the matter, has kindly pointed out to me that, in the publicity for the 1851 Exhibition, there is mention of a Flight & Robson Apollonicon giving regular evening concerts in the Strand.

Further, at least two, and I suspect more, smaller models were made for private residences; and, when Webster's Music Hall was re-opened in Holborn in 1868 as the Royal Music Hall, the concert bills showed performances by the "great mechanical" Apollonicon.

Letters to the Editor

THE APOLLONICON

SIR,—I was most interested to read in the May issue of *Musical Opinion* the article by Dr. Sumner on the Apollonicon. Last year my firm rebuilt the old Robson organ in Jesus Christ, Forty Hill, Enfield, and during the dismantling certain things came to light which led me to believe that some of the Great organ and possibly the Pedal Bourdon may have come from the 1817 Apollonicon.

While on the subject of player organs, readers may be interested to know of the Welte instrument which originally stood for many years in the music department of Harrods store. When the music department was moved to the third floor, the organ was sold to an Indian Maharajah who later cancelled his purchase because he thought that cow-hide had been used for the bellows. In 1932 a wealthy doctor purchased the organ and presented it to Clements-wood Baptist Church, Ilford, where it was installed minus its player action, although some parts of this are still tucked in odd corners of the instrument. Its frightful specification consisted of a Swell of 11 stops, nine of which are of 8 ft. pitch, a Great of 10, six at 8 ft., and a Pedal organ of six independent ranks. This organ is to be rebuilt later this year when a few ranks of pipes from both Swell and Great will be used again for part of the Swell together with new upperwork. The Great organ will be new to the instrument. An illustrated article about this instrument recently appeared in the American magazine *The Console*. BRIAN H. BUNTING.

Epping, Essex, May 11th, 1970.

THE APOLLONICON

SIR,—I was interested to read W. L. Sumner's notes on the Apollonicon (*Musical Opinion*, p. 433), and, having spent some four years in the quest of details of the organs which bore this name, I would offer a little extra information in order that many past errors of omission and commission regarding the Flight & Robson instrument might be perpetuated no further.

John Purkis, the blind organist (organist at 101 St. Martin's Lane for 21 years and also of St. Peter's, Walworth, who died at the age of 68 on April 10th, 1849), assisted Flight & Robson (partnership founded in 1805) in the tonal design of a barrel-and-finger organ for the Earl of Kirkwall in 1807. Joseph Robson fitted this chamber organ with his then newly-invented and patented combination panels and the instrument featured the triple stack slider, twin-pallet chest invented by Benjamin Flight, Snr. In this system, the stops were each controlled by three superimposed stop slides. Whatever mode of operation the organ was performing under, two of these slides were always aligned with the opening in the chest, the third one cutting off admission through the upper board. One slide was controlled by Robson's pedals, the second by the normal action of the draw-stops and the third by the stop selection mechanism operated by special barrel pins. Of the double pallets, one was worked by the barrel mechanism and the second by the normal keyboard action.

Encouraged by the success of the Kirkwall instrument (upon which Flight himself played at the opening ceremony), the makers, again in co-operation with Purkis, conceived the biggest barrel-and-finger organ ever built—the Apollonicon. This was opened in 1817 under the patronage of the Prince Regent with a band of organists under Thomas Adam. Each recital was preceded by the mechanical rendition of a piece of music via the barrels. Following application to the Lord Chamberlain for a licence, Saturday (and later mid-week) "pop" concerts were given by Purkis.

The instrument was modified in 1829 in order that it might perform the overture *Oberon* and a separate echo organ was constructed and attached outside the main case. In all cases, all the music played mechanically by the Apollonicon was pinned by John Flight, Jnr., using an instrument which he invented and justly named a *micrometer*. Drawings and details of this device survive.

A smaller, three-console Apollonicon was demonstrated at 101 St. Martin's Lane in 1832 prior to its installation at the home of a baronet in the West Country.

Due to the enormous cost of the many lavish presentations made by the makers, the partnership failed in 1832 and the entire works and stock (including the Apollonicon) plus the premises came under the auctioneer's hammer in November of that year. The sale was, it seems, a political move on the part of Robson, for he successfully re-acquired all the business and continued it as before, leaving Flight to re-establish his business on his own in King William Street, Strand (where, incidentally, he was subsequently given the job of disposing of Cummings's great "hydraulic machine organ" constructed for the Earl of Bute).

The lease of 101 St. Martin's Lane expired in 1845 at which time the Apollonicon was dismantled and re-erected at the Music Hall in the Strand where it was performing in 1851. Gregoir subsequently wrote, in 1865, "Cet instrument est aujourd'hui dans un délabrement complet".

The instrument was subsequently acquired by Hill, who extensively rebuilt it and did, in fact, provide the sixth desk (the confusion over the number of soundboards and the number of organists who could play the Apollonicon at

one time is legion!). In this condition, it was installed in the Royal Music Hall, Lowther Arcade (off the Strand), in 1868.

A point which should be made clear is that the Flight & Robson Apollonicon never moved away from the immediate area of its original construction until after 1868.

The instrument, which made a brief appearance in 1848 at the Royal Cyclorama adjoining the Colosseum in Albany Street, Regent's Park, was a totally different organ—probably better described as the theatre organ of its day—and was built expressly for the Colosseum by Bevington. It was played by a Mr. H. W. A. Beale. It may have been due to the failure of Horner's enterprise so soon after its opening which resulted in the makers re-possessing their Apollonicon because, when the building was re-opened by Dr. Bachhoffner in 1857, the organ had gone and was replaced by "a Patent Grand Harmonium by Pilcher of Great Portland Street".

The Bevington organ disappeared without trace and I have been unsuccessful in tracing where it went. The only positive description of it survives in Hamilton's *Catechism of the Organ*, from which it seems certain that, although this organ could be played upon by six organists at once (as the subsequent Hill-reworked Flight & Robson Apollonicon), it was not designed as a mechanically-operated concert organ.

The Flight & Robson Apollonicon is, it is believed, still in existence although it has been drastically modified, re-cased and no longer contains its mechanical mechanisms. I must be excused from dwelling further on this until I have had the opportunity to investigate the organ in detail to confirm or disprove this information provided by a kindly informer.

The full details of all these organs, together with detailed drawings of the original Flight & Robson Apollonicon and John Flight's *Micrometer* are to be published in my book, *The History of the Mechanical Organ*, due to be published next year by George Allen & Unwin Ltd.

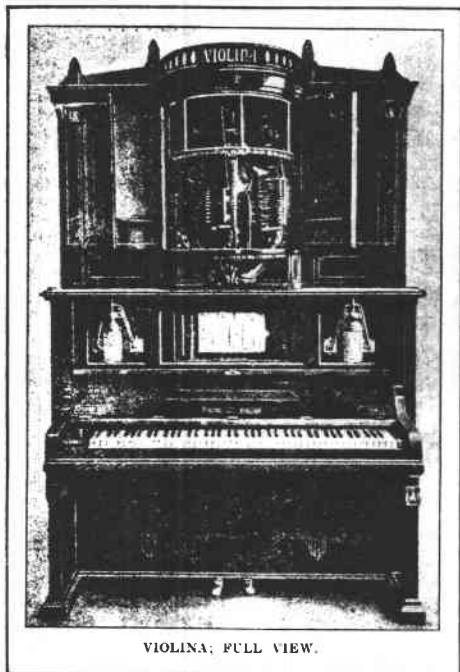
In conclusion, I would like to comment on the remarks of my good friend Noel Mander (*Musical Opinion*, p. 445). An editor needs to know as much (at least) as his contributors. If he meets this requirement, then he can probably find more lucrative things to do than just being an editor! I will agree, though, that the number of people who are knowledgeable enough to take an interest in the organ and to write about it seems to be diminishing. As one who has built three small mechanical organs and restored rather a lot of barrel organs, player organs and flute-playing clocks, I consider myself to be nothing more illustrious than an enthusiastic amateur and would remind those novices who aspire to awarding themselves higher titles that just to voice a rank of pipes takes years of practice and skill. They might be better off starting with piano-tuning. It takes only eight years, so I have been told, to become a top-grade wire-tightener.

ARTHUR W. J. G. ORD-HUME.

London, W.4, May 14th, 1970.

A PLAYER-VIOLIN

THE FACT that a mechanical violin player has been devised, together with a description of the principle on which it works, has been announced already in these columns. We are now able to give a more detailed account of the instrument, together with illustrations of it, from an article contributed by A. Troller to *La Nature* (Paris, June 8). Every one, says Mr. Troller, knows the mechanical piano, whose latest form reproduces faithfully even the interpretation of a talented artist. Its performances are surely worthy of being called wonderful. But what word, asks our writer, shall we find for this new instrument, which associates the violin and the piano?



VIOLINA: FULL VIEW.

The violin, if we are to believe those who play it, is the most difficult of musical instruments—that which requires from the player the finest ear, the most skilful manipulation, and the greatest musical sensibility. How can it be that these qualities may be obtained from a mechanism—no matter how complex and ingenious? Mr. Troller answers:

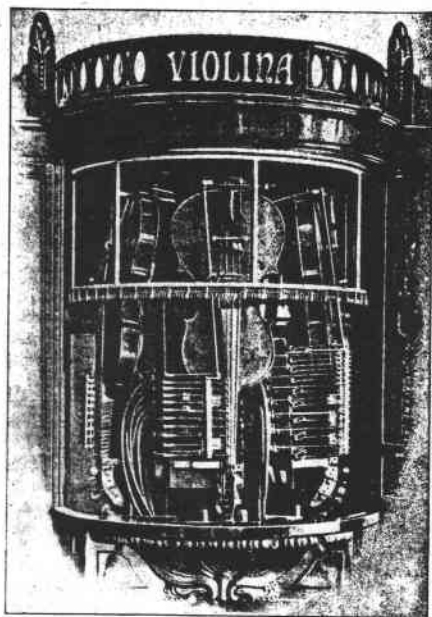
"The results given by the 'Violina,' which is the instrument's name, are really surprising; an ample and varied tone, perfect modulation, without leaps or shocks, and all the accustomed effects of the violin.

"We are not prepared to say that to hear the 'Violina' is the same as to listen to a virtuoso; the emotions that it evokes are not, and can not be, so deep; but they are still of a high artistic quality, and it is to be hoped that the mechanical violin may rid us forthwith of all our mediocre performers.

"The mechanical piano, as is well known, depends essentially on the following arrangement—a roll of paper, properly perforated, turns before the openings of a series of tubes, connected with a reservoir of slightly compressed air. The air that is allowed to pass through the perforations in the paper enters the tubes, which conduct it to what are practically so many little compressed-air motors, actuating the hammers of the piano. . . .

"In the 'Violina' the mechanical principle is the same—pneumatic control of all the movable organs, regulated by means

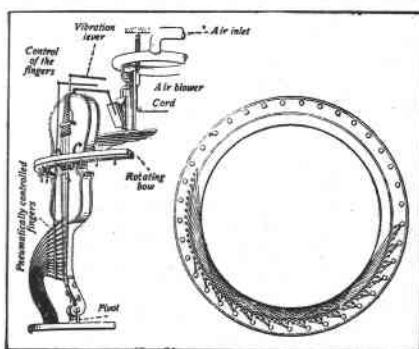
of a roll of perforated paper. But there can be no question . . . of causing the strings of the violin to vibrate by means of an ordinary bow. The solution found by the inventors of the 'Violina' is of remarkable originality; it constitutes the essential



THE THREE VIOLINS AND THE ROTATING BOW.

novelty of the instrument. The bow of the 'Violina' is formed, as our figure shows, of numerous fibers stretched on a movable horizontal circle. As it would be difficult to act simultaneously on the four strings of a single violin, it was decided to use a group of three violins, each having only one active string.

"The circular bow turns, and its speed, sometimes retarded, sometimes accelerated, is controlled by one of the little compressed-air motors of which we have spoken. Ordinary violins, whose stems are hinged on pivots, are prest against the turning bow, and the pressure of contact corresponds to the intensity of the sound that is to be obtained. Movable fingers, actuated



THE VIOLIN AND ITS PNEUMATIC CONTROL.

Continued in lower right-hand column of facing page

These two articles appeared in THE LITERARY DIGEST — that on the left on August 17th, 1912, and that below on July 27th of the same year. From the collection of The Editor.

PHOTOGRAPHING MUSIC

TO RECORD the performance of a pianist in such a way that it may be reproduced at will with all its peculiarities and individualities—to make a record, in short, that will turn the mechanical player with which it is used into a Paderewski or a Joseffy—if either of them officiated when the record was formed—this is the feat that has been successfully accomplished, we are told, by Melville Clark, of Chicago. Robert H. Moulton, who writes of it in *The Technical World* (Chicago, July), tells us that many of the ablest minds in the commercial field of music have been turned to the solution of this problem—that of devising a means for the making of music that shall be an actual and permanent record of a performance, instead of a mere musical score, and have pronounced it an impossibility. He goes on:

"There is a man in Chicago, however, Melville Clark, for whom the word impossible has never held terrors. So he quietly set to work a couple of years ago, convinced in his own mind that he would succeed where others had failed. Mr. Clark is generally acknowledged to be one of the greatest designers and builders of pianos and piano-players in the world. He was the first to build a piano-player to operate over the entire keyboard.

"Consequently when he announced a short time ago that he had perfected a device which would not only make a permanent record of a performance on a piano, but do it so faithfully and accurately that not a single eccentricity of the pianist's individuality would be lost, the respectful attention of the musical world was immediately forthcoming.

"Naturally there were many skeptics—men who desired to be shown. One of these was a pianist and composer of international reputation.

"Of course, Clark," he said, when told of the new invention, 'I know you have accomplished wonders in your line. But in this case your claims sound, ah—'

"Preposterous," said Mr. Clark. 'Sure! I don't blame you at all for thinking so. But just come along to my office and see for yourself.'

"Together they repaired to Mr. Clark's private office, where a piano was in readiness. In one corner of the room stood a little closet. The pianist also noticed that a wire ran from the electric light fixture in the middle of the room into the closet.

"Just a moment," said Mr. Clark, as he turned on the current. Immediately there issued from the closet the soft hum of a tiny dynamo.

"The recorder is in that closet," explained Mr. Clark, 'and this current operates it. Now all you've got to do is to fire away, and the recorder will do the rest.'

"The pianist fired. Resolved to make the job a good one and test the instrument to the limit of its capabilities he improvised a selection as fiery and brilliant as a thunderstorm.

"When he had finished, Mr. Clark went into the closet and returned with a roll of paper, similar in appearance to those used on piano-players. Placing the roll in another piano with a reproducing attachment, he set the reproducer in motion with his feet.

"The effect was startling. The exactness of the record—even

to the cunningly introduced 'accidentals'—made the very presence of the composer at the piano seem a certainty. His tempo, his style, his pedaling, the power of his stroke on the keys, and the sensuous element—the expression—were reproduced in such an accurate way that the mechanism seemed to be endowed with a human mind.

"The operation of Mr. Clark's device—which he calls a recorder—may best be explained in the simple statement that the pressure of a button, turning on the electric current, sensitizes every playing part of the piano—keys, pedals, and all—to the slightest touch of the performer, and secures in perfect relation every playing movement made.

"While the importance of this achievement in the field of the mechanical player can be readily appreciated, its influence upon the development of musical history represents its chief value. It is from this standpoint that it appeals most to its inventor. He frankly states that he does not think it has commercial value.

"To be able to sit down at the piano, imprint one's individuality in all its phases upon the interpretation of any given musical composition, have the music so produced cut, and then to use it on a piano-player and hear oneself play, certainly seems the fulfillment of the composer's wildest dream.

"But that is not all. The recorder relieves the composer of the manual drudgery of putting his thoughts down on paper with pen or pencil. Also, it enables him to preserve the continuity of his thoughts, which is difficult when he is forced to stop to jot down his composition."

Possibly in the near future some one will tell us just how the "recorder" works, but the mechanical details are apparently a secret for the present—a fact that will make some malicious critics suspect Mr. Moulton's assurance that commercial success is not the inventor's aim.



From "The Technical World Magazine" (Chicago).

MELVILLE CLARK.

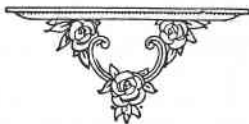
Whose invention records musical compositions automatically.

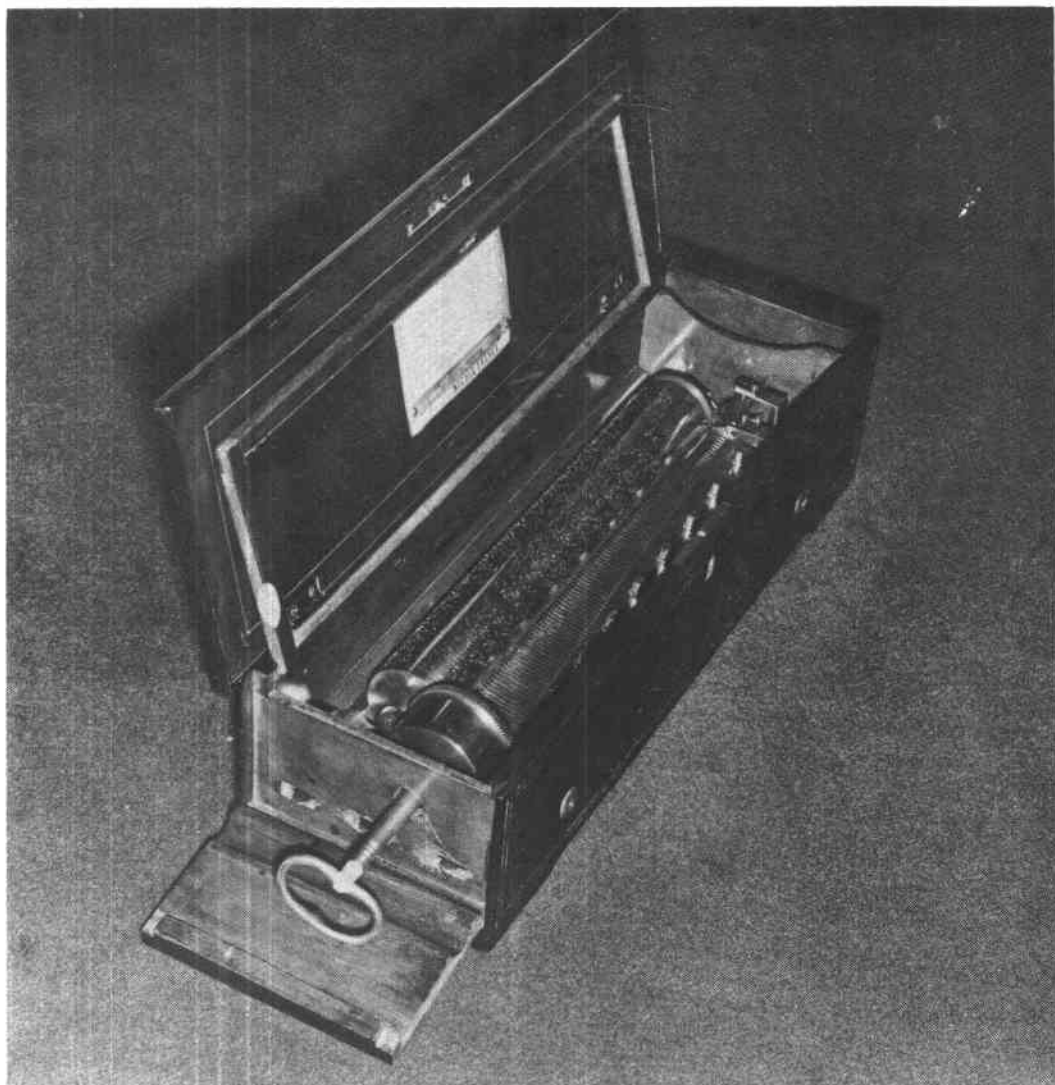
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also by pneumatic means, depress the string at the desired moment, so as to give the tone its proper pitch.

"How are the perforated rolls prepared that control the movements of the three violins? They are executed with minute care by workmen who are at the same time musicians of the first rank. Here must be noted a sensible inferiority of the 'Violina' to the latest model of automatic piano. The latter may reproduce the performance of a master, the perforation being done automatically by the playing of the artist. It is not the same with the 'Violina.' It would hardly be possible for a violinist in manipulating his bow to actuate a perforating mechanism and so prepare rolls adapted to the instrument.

However this may be, the automatic piano and violin combined offer us a most agreeable duet and an infinitely varied repertory. The instrument reflects the greatest credit on the mechanical skill of its inventors, five Austrians whose names deserve to be recorded here—Messrs. Bajde, Karl and Ernst Henning, Froensdorf, and Hupfeld."—*Translation made for THE LITERARY DIGEST.*



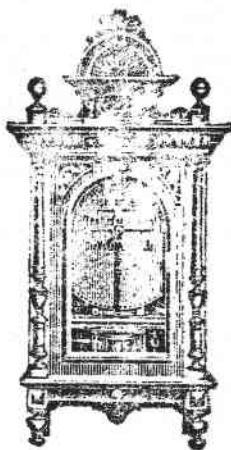


Yet another unusual Nicole Freres musical box is represented by this picture of one belonging to Member Jocelyn R. Walker of Reigate, Surrey. The box, an eight-air movement, is in the late 39000 series having an inner glass lid but is a genuine key-wind. It plays six tunes from *L'Africaine* by Meyerbeer, Gounod's *Faust Valse No 1* and Godfrey's *The Guard Waltz*. A Keith Prowse label is affixed inside the back of the case and stuck onto the tune sheet. The box has commendably smart attack and roundness to tone.

The catalogue on the subsequent pages is from the collection of The Editor.

LIST OF TUNES

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In ordering Tunes mention only the corresponding numbers. It is
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When ordering kindly mark a few extra numbers,

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No.	TITLE.	COMPOSER.
5001	Adoration à la Valse	Weber
5002	Al nostri monti	Verdi
5003	Rakóczy Indulója	Il Trovatore
5004	Feinsliebchen	March
5005	Wie mein An'l	Polka Mazurka
5006	Sei nicht böse	The Bird Seller
5007	Loin du Bal	The Master Miner
5008	Under the Double Eagle	Gillet
5009	Beim Fensterl'n	Wagner
5010	Bridesmaid's Chorus	Koschat
5011	King Charles' March	March
5012	On the marvellous Rhine	Lohengrin
5013	Intermezzo	Wagner
5014	Kde domov můj	Carinthian Song
5015	Artists' Life	Wagner
5016	Sports March	Unrath
5017	Verlassen, Verlassen	Foerster
5018	Meditation on J. Bach's 1st Prelude	Mascagni
5019	Radezky March	Skroup
5020	Singers' Joy	Strauss
5021	At Supper	Kunoth
5022	Les Cloches du Monastère	Koschat
5023	Prayer	Strauss
5024	Torgauer March	Gounod
5025	Wiener Blut	Strauss
5026	Stephanie Gavotte	Waltz
5027	Retreat and Prayer	Czibulka
5028	Reise-Abenteuer	Bortianski
5029	The Dandy Queen	Lincke
5030	Herzklopfen-Polka	Lincke
5031	Mikado	Kromser
5032	Rosen aus dem Süden	Sullivan
5033	Blue Danube Waltz	Waltz
5034	Quintetto	Waltz
5035	Waltz	Martha
5036	Bitte schön	Flotow
5037	Die schöne Polin, Mazurka	Planquette
5038	Waves of the Danube	Strauss
5039	Morgenblätter Waltz	Millieker
5040	Still Night, Holy Night	Ivanovici
5041	O Sanctissima	Strauss
5042	Prodaná nevěsta	Christmas Song
5043	Valse Brillante	Bohemian Song
5044	Cyclists' March	Smetana
5045	Prayer	Schuloff
5046	God Save the King	Hoeller
5047	Polonaise	Der Freischütz
5048	Kossuth Lajos azt üzente	Carey
5049	Lugger March	Thomas
5050	Austrian National Anthem	Mignon
5051	Cumel	Hungarian Song
5052	My Austria	Miska
5053	March on Carinthian Songs	Jenő
5054	La Polona	Nerradt
5055	Duet	Preis
5056	Costa Diva	Preis
5057	Friesach Promenade March	Seifert
5058	Sousedská and Vrsovic	Gradier
5059		Mozart
5060		Bellini
5061		Nozicka

No.	TITLE.	COMPOSER.
5062	Vzdylt jsme jen jednou	Bohemian Song
5063	Hultajski Mazur	Schuster
5064	Krewki, Mazur	Vogt
5065	Kujawiczek	Lewandowskiego
5066	Overture	Golitscha
5067	Spinn, Spinn	Herold
5068	Honyadi László induló	Zampa
5069	Im tiefen Keller	Swedish Song
5070	Hosts' March	Hungarian Air
5071	Austrian March	Drinking Song
5072	A Nest of Finches	Fischer
5073	La Marseillaise	Kutschera
5074	The Beehive March	A. G.
5075	Legujabb Budapest	Longey
5076	The Old Folks at Home	R. de l'Isle
5077	Impudence	Schneider
5078	Grüss Euch Gott, Polka	Palotasy
5079	O Dales, O Mountains	Schottische
5080	Cavalleria Rusticana	Macey
5081	Violetta Polka	Zeller
5082	Calm is the Sea	Song
5083	Funiculi, Funicula	Duet
5084	Husitska	Mascagni
5085	Nevéra	Strauss
5086	Beztechzen Kuplet	Pfeil
5087	Bozicku mladost to je prec	Denza
5088	Pochod ceskych turistu	Krov
5089	Casino Csardas	Soukop
5090	Edes babam mert vagey	Chvalat
5091	Nase Majana	Pospisila
5092	Song	Henrik
5093	Nazareth	Erno
5094	Over the Hills, She'll now be a Lady, Shop Girl	Vodicka
5095	The Lost Chord	Gounod
5096	Sobre las Olas	Caryl
5097	El Tambour de Grenaderos	Sullivan
5098	Russian National Hymn	Rosas
5099	La Giralda	Cape
5100	My dear Captain	Lwof
5101	When the leaves so softly fall	Lincke
5102	Montenegrian National Anthem	"
5103	Finnish National Hymn	Pacius
5104	Suomis	Adam
5105	The Postilion of Lonjumeau	Sellenick
5106	Marche Indienne	Valverbe
5107	La Segunda Tiple	Wagner
5108	Austrian March	Kennedy
5109	Say au Revoir, but not Good-bye	Potter
5110	Private Tommy Atkins	Connor
5111	She was one of the early Birds	Der Tannenbaum
5112	Christmas Song	Pennariale
5113	Italian Song	La Père la Victoire
5114	Polish Song	Faust
5115	Jewel Song	Le Grand Mogul
5116	Waltz	Aida
5117	Trumpet March	Verdi
5118	Halka	Moniuszki
5119	Zdy men Pozarow	Nikorowicza
5120	Boze cós Polske	Kurpinskiego

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No.	TITLE.	COMPOSER.
5132	Austrian Grenadier March	Wiedermann.
5134	La Gran Via Waltz	Valverde
5135	Country Wake Waltz	Austrian Dance
5139	Hula Babula Oherok Mazur	Polish Air
5137	Ach könnt ich noch einmal so lieben	Lewandowskiego
5138	The Blue Bells of Scotland	Aletter
5139	Daisy Bell Waltz	Dacre
5140 Polish	Panhans
5141	Panhsberg
5142 Waltz	Trisici
5143	
5144 Italian Song	
5145	Diescher
5146	Kutschera
5147 Messiah	Händel
5148 Athalie	Mendelssohn
5149 March	Truzzi
5150	Purca
5151	Souat
5152	Knoch
5153 Mazurka	Breton
5154	Gramm
5155	G. Capitani di V.
5156	Aletter
5157	Frederick II.
5158	
5159 March	
5160	Bennet Scott
5161	
5162	Leslie Stuart
5163 March	
5164 Spanish Song	Cabellero
5165	Breton
5166 Spanish Air	Nogues
5167	Arditi
5168	
5169 Mazurka	André
5170	Ketterer
5171 Spanish	Gottschalk
5172 The Geisha	Sidney Jones
5173	
5174	
5175 Bohemian Song	Schuster
5176	
5177 March	Král
5178	Steidl
5179	
5180	Luther
5181	Attenhoffer
5182	Wehrli
5183	Petrella
5184	
5185	
5186 Serenade	Kuhn
5187	
5188 Danish March	Fröhlich
5189	Möller
5190 Waltz	
5191	
5192	Sidney Jones

No.	TITLE.	COMPOSER.
5193	Overture Light Cavalry	Suppé
5194 Danish Song	
5195 Il Trovatore	Verdi
5196	
5197	Gyula
5198	Mendelssohn
5199	Lumley
5200 March	Peter
5201 Danish Waltz	Jespersen
5202	Teich
5203	Carl
5204 Les Dragons de Villars	Maillart
5205 March	
5206 The Magic Flute	Mozart
5207	Sommerlatt
5208	Meyerbeer
5209 Le Prophète	Paladine
5210	
5211	
5212	
5213	
5214	Nesmüller
5215	
5216 Faust	Gounod
5217 Il Trovatore	Verdi
5218 La Dame Blanche	Boieldieu
5219	
5220	
5221	
5222 William Tell	Rossini
5223	
5224 Norwegian Song	Kjerul
5225 Czar and Carpenter	Lortzin
5226 Danish Song	
5227	
5228	Engelhardt
5229	Ziehrer
5230 Faust	Gounod
5231	
5232 The Figaro's Wedding	Mozart
5233 Vienna Song	Peter
5234 Tannhäuser	Wagner
5235	Suppé
5236 Gavotte	Sacker
5237	Götze
5238	Thum
5239 Mignon	Bizet
5240 Carmen	Lincke
5241 German Song	Schrammel
5242 Vienna March	Strauss
5243 Polka Mazurka	Strobl
5244	Strauss
5245 Der Zigeunerbaron	
5246	Strobl
5247	Ziehrer
5248	Pertl
5249	
5250	Keyll
5251	Krettnner
5252	Strauss
5253	Jouberti
5254 Stryian Song	Schmölzer

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No.	TITLE	COMPOSER.
5255	Nur einmal blüht im Jahr der Mai	Keiser
5256	Huntsman's Chorus Der Freischütz	Weber
5257	Vienna Mazurka	Ziehrer
5258	Military March	Gerold
5259	Vienna Fiacres' Song	Pick
5261	Lagunen Waltz A Night in Venice	Strauss
5262	Még azt mondjak Hungarian Song	Pista
5263	Weaner Madeln Waltz	Ziehrer
5264	Salute and Victory Military March	Schneider
5265	Soldiers' Chorus	Gounod
5266	Du liebes Aug', du lieber Stern	Reichardt
5267	Vienna Heart March	Schild
5268	Some Day	Wellings
5269	Fata Morgana Waltz	Einödshofer
5270	Edelweiss Song	Peuschel
5271	Andreas Hofer Tyrolese National Song	
5272	The Bat Waltz	Strauss
5273	Unter dem Siegesbanner March	Blon
5274	Wine, Woman and Song Waltz	Strauss
5275	Overture Merry Wives of Windsor	Nicolai
5276	Boccaccio Waltz	Strauss
5277	Rokitsansky March	J. Wagner
5278	Falstaff's Song, The Merry Wives of Windsor	Nicolai
5279	The Silverfish Fantasia Mazurka	Ketterer
5280	The Last Rose of Summer	Michaelis
5281	Türkische Schaarwache	Foster
5282	My Old Kentucky Home	Schlögel
5283	Vienna Swallows March	Sandor
5284	Hungarian Air	Michaly
5285	"	Faust
5286	Theresa Waltz	
5287	The Village Blacksmith	Wilhelm
5288	The Watch on the Rhine	Aht
5289	Waldandacht Song	Czibulka
5290	Love's Dream after the Ball	Behr
5291	Plappermäulchen Mazurka	Stuart
5292	The Soldiers of the Queen	Holzer
5293	Pour avoir la Fille	Maquis
5294	Anciennes et Nouvelles Song	Varney
5295	La Sérénade du Pavé	
5296	Sicilienne and Chorus Robert le Diable	Meyerbeer
5297	German Popular Song	Kalliwoda
5298	Styrian Song	Schild
5299	Swedish Dance	De Wahl
5300	Swedish Song	Collan
5301	Leipzig March	Schmidt
5302	Pa Begäran Hambo Polska Swedish	Holtz
5303	Pa Fältmanöver March	
5304	Cujus Animam	Rossini
5305	Einsam bin ich, nicht alleine Preciosa	Weber
5306	Stances à Manon	Delmet
5307	Swedish Song	Svensson
5308	Swedish Waltz	
5309	Russian March	Ganne
5310	Thou Fairest of Lands Swedish Song	
5311	The Rejected Lover	
5312	For You, Hambo Polka Swedish	Holtz
5313	I Dalom, " " " " " " " "	"
5314	Wien Neerlands Bloed Dutch Song	

No.	TITLE.	COMPOSER.
5315	Serenade	Schubert
5316	Wenn du noch eine Mutter hast	Heiser
5317	La Robertsau Marche	Selenick
5318	Westphalian Song	Hawerkampe
5319	I Hennes Hem Swedish Song	Tegner
5320	La Housade, Military Waltz	Ganne
5322	Rappelle-toi	Rupes
5323	O schöner Mai	Strauss
5324	La Ballade des Agents Polka	Cueteville
5325	Alsatian March	Sali
5326	Die Fledermaus (the Bat) Polka Mazurka	Strauss
5327	Si j'étais Roi Romance	Adam
5328	Lebt denn meine Male noch	Teich
5329	Stances Melodies	Flegier
5330	Christmas Hymn	Adam
5331	The Mill in the Black Forest Idyll	Eilenberg
5332	Starhemberg March	Schultz
5334	Verse Margot Chanson	Doria
5335	Boccaccio March	Suppé
5336	Seid'l March	Kreipl
5337	Vergiss das arme Mädchen nicht	Rozsa
5338	Les Fauvettes Polka	Kutschera
5339	Die steirische Rous Styrian Song	Bousquet
5340	Holzknechtlied	
5341	s'Gamsjagern	Schmölzer
5342	Der Steirer Land	
5343	Ein Schütz bin ich Bivouac de Granada	Seidler
5344	Cologne March	Kreutzer
5345	Das Mailüfterl Spring Song	Gruber
5346	Pavane des Mignons	Turlet
5347	Die Liab Styrian Song	
5348	Der steirische Wullázá	
5349	D'hochi Alm	
5350	Die z'widern Weiber	
5351	For Home and Glory	St. Quentin
5352	There's only one Girl in this World for me	
5353	I'll take you Home again, Kathleen	Westendorf
5354	Sweetheart May	Stuart
5355	I Want yer, ma Honey	Templeton
5356	Those Wedding Bells shall not ring out	
5357	The Man that Broke the Bank at Monte Carlo	
5358	The Song that reached my Heart	
5359	Jack's the Boy The Geisha	Sidney Jones
5360	Star of my Soul	
5361	Le Fremersberg	Koennemann
5362	Alt Deutschland Heil Military March	Schweichert
5363	Nightingale's Song (Characteristic Piece)	Necke
5365	Queen of the Earth	Pinsuti
5366	Venus auf Erden	Lincke
5367	The Children's Home	Cowen
5368	Libeszauber March	Lorenz
5369	Aus der Heimat Mazurka	Strauss
5370	La Troika Russian Polka	Hausner
5371	Le Régiment de Sambre et Meuse	Genet
5372	My Stage Struck Family	Perry
5373	Belle Madelon Polka Piquée	Sambin
5374	Berline Française Dance de Salon	Thuillier
5375	Pas de Deux	L Hervilliers
5376	Blumenlied	Lange

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No.	TITLE.	COMPOSER.
5378	The Ship I love	McGlenon
5379	They wanted Oiling	Westerman
5380	The Last Greeting	Westerman
5381	Das Jag'n is a wahre Freu! .. Styrian Song	
5382	Staring me in the Face	Murray
5383	Selection from Overture	Humperdine
5384	Behüt dich!	Nessler
5385	The Holy City	Adams
5386	Pochod z baletu	Haan
5387	She wore a Wreath of Roses	Knight
5388	The Better Land	Cowen
5389	The Old Brigade	Barrie
5390	Ora pro Nobis	Piccolomini
5391	Jocelyn Berceuse	Godard
5392	Scherbelberg Waltz	Munkelt
5393	God Bless the Prince of Wales	Richards
5394	Royal Italian March	Gabetti
5395	Kyllhäuser March	Hülberg
5396	Students' March	"
5397	Auld Lang Syne	"
5398	Marche des Petits Pierrots	Bosc
5399	Rheinzauber Waltz	Schweichert
5400	Norsk National Song	Nordaak
5401	Soldatessen	Finnish Song
5402	Duet	Faust
5403	Frühlingsboten Waltz	Schweichert
5404	Der alte Berner March	"
5405	Mon Amant est loin	Finnish Song
5406	A la Côte	"
5407	Die Lust am Walde	Schäfer
5408	Funeral March	Chopin
5409	March of the Men of Harlech	"
5410	After the Ball	Waltz
5411	The Water Fairy	Kiefert
5412	Walzerhebe	Förster
5413	Süss Lach	Wollhelm
5414	Eye of Christmas	Lehner
5415	Nya Folkssången	Doring
5416	Långo-Lieder	Finnish Song
5417	Our Lodger's such a nice Young Man	Murray
5418	Anchored	Watson
5419	True till Death	Adams
5420	The Star of Bethlehem	"
5421	Bay of Biscay and Rule Britannia	"
5422	Rogers' Coverley	"
5423	The Keel Row	"
5424	Lithuanische	Song
5425	The Ambassador	Waltz
5426	Waltz	Circus Girl
5427	Royal Prussian Army March, No. 186	Kiefert
5428	The Penny Whistler	Fox
5429	Tom Bowling	Dibdin
5430	A Night on the Wheel	Redfern
5431	I'm not particular	Baker
5432	I'm the little bit of Sweetstuff	LeBrunn
5433	My Gal is a High-born Lady	Fagan
5434	Gjultarne	Danish Air
5435	Big Ben struck one	"

No.	TITLE.	COMPOSER.
5444	I know that my Redeemer liveth	Messiah
5445	The Diver	Händel
5446	O! Rest in the Lord	"
5447	Good-bye Polly	Mendelssohn
5448	Pas de Quatre	"
5449	Whisper and I shall hear	Meyer Lutz
5450	I've got the Opezzootie	Piccolomini
5451	The Golden Dustman	Forman
5452	The Sailor's Hornpipe	LeBrunn
5453	The Willow Pattern Plate	"
5454	Little Dolly Daydream	Leslie Stuart
5455	March of the Gordon Boys	"
5456	The Dandy Fifth	Adair
5457	Yes! let me like a Soldier fall	Leslie Stuart
5458	Land of my Fathers	Wallace
5459	Finnish Army March	James
5460	"	"
5461	Widborgs Finnish March	"
5462	The Heart bowed down	Bohemian Girl
5463	Jos hravts in propala	Balfe
5464	Dear Home Land	"
5465	Daddy	Slaughter
5466	Song of the People	Behrend
5467	Indiana Waltz	Pfict
5468	Bourrée-Caprice	"
5469	Les Noces de Jeannette	Souvenir d'Auvergne
5470	Spring Cleaning	Mills
5471	Soap	Connor
5472	Tatchu	Rogers
5473	Ach Luby, Lilly, Lilly	"
5474	A R, Rip, Rip	Parisian Life
5475	Duet	La Mascotte
5476	White London's fast asleep	Audran
5477	Why did I leave my little Back Room	Dacre
5478	The Garden of Sleep	Mills
5479	Believe me if all those endearing young charms	de Lara
5480	La Paimpolaise	"
5481	Romance Berceuse Panurge	Feantrier
5482	An Old Garden	Planquette
5483	Les Blondes	Temple
5484	The Harp that once through Tara's Halls	Stanislas
5485	MacGregor's Gathering	"
5486	Hail to the Chief	"
5487	Draw the Sword, Scotland	"
5488	Spaansche Schooner	(Les Cigarières)
5489	Dat's onze Puckie	Delormel
5490	Die drei Hochzeiten	Reyding
5491	Sei mir gut	Kutschera
5492	Mandolino—Aubade	"
5493	Au Pays d'Auvergne	Rosenzweig
5494	Sempacher March	Turlet
5495	La Diane	Vargues
5496	Le Retraite	Fries
5497	Le Ranz des Vaches d'Ormont	"
5498	Le Ranz des Vaches, Départ pour les Alpes	"
5499	Queen of Angels	Piccolomini
5500	Die Zaubertrompete	Hamm
5501	Arm und reich	Kutschera

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No.	TITLE.	COMPOSER.
5518	Come back to Erin	Claribel
5519	Zug a vihar Hungarian Song	Sandor
5520	Kathleen Mavourneen	Crouch
5521	Killarney	Balfé
5522	Gay Gordons' March Cock o' the North	Bonheur
5523	Fancy Meeting you	Clifford
5524	Partant pour la Syrie	Beauharnais
5526	Louka Zelena Valcik	Breka
5528	La derière Gavotte	Vargues
5529	Kolo	
5530	Dzesair Turkish March	
5531	Was kann wohl süßer sein	Schultze-Buch
5532	She wandered down the Mountain side	Clay
5533	I dreamt that I dwelt Bohemian Girl	Balfé
5534	There is a Flower that bloometh Maritana	Wallace
5535	Once again	Sullivan
5536	When other Lips Bohemian Girl	Balfé
5537	Come into the Garden, Maude	
5538	Bez tebe draga Ljubezna	
5539	Vesela je Srbadzina	
5540	Golden Days	Sullivan
5541	Remember me no more	Robinson
5543	Sweet Marie	Moore
5544	Wearing of the Green	
5545	Annie Laurie	
5546	Ye Banks and Braes	
5547	Zivila Hrvatska	
5548	U boj	
5549	Bojna pyejna	
5550	Spitzin and Spatz	Lackenbacher
5551	Les Allobroges	Lucas
5552	Venus steig hernieder Waltz	Lincke
5553	La Polka des English's	Aller
5554	In Friendship's Name	Graham
5555	Shepherd of Souls Sign of the Cross	
5556	The Golden City	Kemp
5557	Pozdraw Valachu Praze Bohemian Air	Frycage
5558	Scots wha hae wi Wallace bled	
5559	Comin' thro' the Rye	
5560	L'Americain, Quadrille (5 parts)	Legendre
5561	The Star Spangled Banner	
5562	Hail Columbia	
5563	Secret Love Gavotte	Resch
5564	Le Talisman, Quadrille (5 parts)	Turlet
5565	Oesterreichischer Zapfenstreich	
5566	Die Kapelle	Kreutzer
5567	Yankee Doodle	
5568	De Paris à Londres French Pas de Quatre	Lataste
5569	La Parisienne French Song	Chaudoir
5570	Les Variétés Parisienne, Quadrille (5 parts)	
5571	Souvenir d'Ostende French Dance	Gangloff
5572	La Ronde des Matelots Fantasia	Henri Cas
5573	Berceuse Bleue Song	Yann-Nibor
5574	Manzelle Nitouche	Hervé
5575	Les Petits Pavés	Vaucaire
5576	La Valse des Pruneaux Waltz	Pourny
5577	Bell' Petit' Femme la ! Song	Christine
5578	La Fête du Village	Doria
5579	La Valse des Lilas Dance	Queille

No.	TITLE.	COMPOSER.
5580	Tarara Bumdera March	Derfla
5581	Lancers Quadrille (5 parts)	Desormes
5582	Ousqu'est Saint-Nazaire ?	Courtois
5583	Les Gardes Municipaux	
5584	Allume ! Allume ! Spanish Waltz	Desormes
5585	La Marche des Commis-Voyageurs	Nove
5586	Nouveau, Menuet de la Cour	Desgranges
5587	L'Elégante Danse Nouvelle	Lyon
5588	La Franco-Russe Dance	Chaudoir
5589	Album Duet Miss Helyett	Audran
5590	Le Chant des Zouaves	de Suchas
5591	Colonel's Song La Femme à Papa	Hervé
5592	Couplet du Casque, Le Coeur et la Main	Lececy
5593	Le Groggnard March	Parès
5594	Camart, Quadrille (5 parts)	Turlet
5595	Josephine ! elle est malade ?	Vargues
5596	Le Cheval du Municipal March	Courtois
5597	Tantchen aus Polzin	Ehrke
5598	Munkel March	Frankl
5599	Grand Waltz Les cent Vierges	Lececy
5600	Adele ! Tes Belle	Gueteville
5601	Un Quadrille à la Préfecture Song	Pieriet
5602	Chon Kina The Geisha	Jones
5603	Sally in our Alley	Carey
5604	Baby	Rogers
5605	Honeymoon Waltz	Klein
5606	There 'll come a time some Day	Harris
5607	Bid me Good-Bye for ever	Tahara
5608	Sons of the Sea	McGlennon
5609	I don't want to play in your Yard	Petrie
5610	Gascogne Cadets March Cyrano de Bergerac	Poujade
5611	Gigue Américaine French Song	Leillerc
5612	Le Palais de Glace Salon Dance	Sallée-Viard
5613	Danse du Flirt French	Flament
5614	La Marche de l'Alliance	Fauchey
5615	Angels ever bright and fair Theodora	Händel
5616	La Bernayenne Danse Nouvelle	Lust
5617	Rejoice greatly The Messiah	Händel
5619	The Honeymoon March	Rosey
5620	Dixies Land	Ermett
5621	With Verdure clad The Creation	Haydn
5622	Natur'sänger, Waltz	
5623	A Geisha's Life The Geisha	Jones
5624	Julchen Polka	Nentwich
5625	Coletta-Waltz Das Modell	Suppé
5626	Hrvatska Polka Krotian Air	
5627	Brod nek cuti udarka	
5628	Brodar	
5629	Ja sam Hrvat	
5630	Natilitza Waltz	Millöcker
5631	Frühlingslied Spring Song	Mendelssohn
5632	Ljebimo te nasa diko Krotian Air	
5633	Miruj, sree moje	
5634	Razstanak	
5635	Bubanj	
5636	On Mighty Pens The Creation	Haydn
5637	Tief im Böhmerwald	
5638	Couplet Die Jungfrau von Bellevilla	Millöcker
5639	The Red, White and Blue	

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No.	TITLE.	COMPOSER.
5640	Mit fliegenden Standarten March	Drück
5641	Aus den Alpen	Kremser
5642	Mona	Adams
5643	O for the Wings of a Dove	Mendelssohn
5644	Nosim zdravu misieu	Krotian Air
5645	Djaska pjesma	"
5646	Slavija se digla	"
5647	Crnogorac Crnogorki	"
5648	Lied ohne Worte (E-Flat)	Mendelssohn
5649	Be wise in Time, and, You swear to be good and true	Dorothy
5650	Queen of my Heart, Waltz	Schweichert
5651	Rikiki-Waltz	"
5652	Minuet	Boccherini
5653	Frauenlist, Gavotte	Der Glücksritter
5654	Prussian Army, March No. 51	Czibulka
5655	Freundschaft und Liebe	Götzky
5656	Entr'acte Gavotte	Thomas
5657	See the conquering Hero comes	Händel
5658	Lebe wohl	Czar und Zimmermann
5659	Vie Elegante	French Waltz
5660	Fränkopanka	Krotian Air
5661	Noeni strazari	"
5662	Hrvatska Polka	"
5663	Yuga	"
5664	Svećanje	"
5665	Mornarska	"
5666	Slava mladoste	"
5667	Tam gdje stoje	"
5668	Selsko Kolo	"
5669	She is the Belle of New York, and, When we are Married .. The Belle of New York	Kerker
5670	My little Baby	"
5671	Oh, teach me how to kiss .. Belle of New York	"
5672	They all follow me, and, We'll stand and Die together Belle of New York	"
5673	The Purity Brigade, and, The Anti-Cigarette Society Belle of New York	"
5674	Wachet auf! ruft uns die Stimme	Schrammel
5675	Die Nussdorfer	Konti
5676	Der Königstanz	Flora Waltz
5677	The Blind Boy	Moore
5678	Strathspey and Reel o' Thuliechan	"
5679	I can't think of nothing else but you	Dacre
5680	Theo Gavotte	Schmidt
5681	The Farmer's Boy	"
5682	Dresdina Gavotte	Malemberg
5683	La Sérénade	Spanish Waltz
5684	Military March	"
5685	Wie schön leuchtet uns der Morgenstern	"
5686	Eins ist Not, ach Herr, dies Eine	"
5687	When a Fellah has turned Sixteen	Rogers
5688	The Lily of Laguna	Leslie Stuart
5689	Gelb und weiss	Sommerlatt
5690	All over Town	Dillon
5691	A Tour round London	Clarendon
5692	Some would marry anything with Trousers	LeBrunn
5693	Santiago	Spanish Waltz
5694	Romance du baiser	La Mascotte
5695		Audran

No.	TITLE.	COMPOSER.
5696	Marche des Sous-Offs	Faidey
5697	Sourcouf	Waltz Rondeau
5698	March de l'Armée Française au Tonkin	"
5699	Duo de Portrait	Miss Helyett
5700	Chanson de Magali	Mireille
5701	Méchante	Manuel
5702	Polka des Fantoques	Cazaneuve
5703	Mobilisons	March
5704	Les Voltigeurs de la 32me	Schottische
5705	Bonheur des Dames	Jac Coen
5706	Po-Paul	Polka
5707	Valse des Tziganes	Michiels
5708	La Jota	Turlet
5709	Pi .. out Polka	Hervé
5710	Bell Song	Cloches de Corneville
5711	Les Pioupiou d'Auvergne	"
5712	Chanson du Cidre	Cloches de Corneville
5713	La Sale Rosse	"
5714	Le Petit Vin de Bordeaux	Garnier et Jost
5715	La Kremling	Wenzel
5716	Les Victimes du Devoir	Walter
5717	Couplet du Mousse	Russian Mazurka
5718	Clair de Lune	Woog
5719	Général Dodds	Cloches de Corneville
5720	Marche des Tziganes	Mazurka
5721	Esperanza	Marche Heroïque
5722	Niniche	Polka
5723	Gavotte des Mathurins	Spanish Waltz
5724	L'Angelus	Suite des Valses
5725	Mary of Argyle	"
5726	Caller Herrin'	"
5727	Fair fa' the Gloaming	"
5728	O for the Bloom of my own Native Heather	Glover
5729	The Hundred Pipers	"
5730	March of the Cameron Men	"
5731	Petersburg Army March	Campbell
5732	La Machtigouine	Haas
5733	Irene	Ouyard
5734	Louisiana Lou	Buisson
5735	Ich weiss ein Herz, für das ich bete	Leslie Stuart
5736	Cyclamen	Rodominsky
5737	Quand l'Oiseau chante, Aubade	Walter
5738	Plaisirs Montmartois	Deguin
5739	Regimental March	Lincke
5740	Le Flegme	"
5741	Les Demi-Mondaines	Del-Fragson
5742	Sérénade d'Elle à Lui	Holzer
5743	El Pronunciamiento	Vargues
5744	Train-Deauville	Dédé
5745	Cabriolet Polka	Cazaneuve
5746	Polka des Canaris	Desormes
5747	Ivanovna Polka	"
5748	Les Chevaliers-Gardes	Polish Air
5749	La Voluptueuse	Marche
5750	Brillante Etape	Polka Mazurka
5751	Thérèse March	Polka-Marche
5752	Gayant, Pas Redoublé	"
5753	Le P'tit Quinqu	"
5754	Let 'em all come	"
5755		Wohanka
5756		Turlet
5757		Michiels
5758		Delahaye
5759		Desrousseaux

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No.	TITLE.	COMPOSER.
5762	Confidential Song	Greek Slave S. Jones
5763	I should rather like to try	" "
5764	I want to be popular	" "
5765	I'm a naughty, naughty Girl	" "
5766	Xenia	Intermezzo Victor Parma
5767	Wanderlust	March Trenkler
5768	Largo	Händel
5770	Hail! Smiling Morn	Sporforn
5771	Big Ben	Pontet
5772	Down the River again	Klein
5773	El Capitan	March Souza
5774	Gambrinus March	Hahn
5775	Liebeswerben	Waltz Ohliger
5776	Merry Men of Hanover	" "
5777	Dansk Arbejder	" "
5778	Heil dir, o Oldenburg	" "
5779	The Mistletoe Bough	" "
5780	The Gallant Twenty-First	Crook
5781	They were all occupied	McGlennon
5782	Columbian National Hymn	Sindici
5783	The Norwich Favourite	" "
5784	Where is my Boy to-night.. ..	Lowry
5785	Little Teddy Brown down at Margit	Dickson
5786	Sunshine above	Sidney Jones
5787	They're coming on again	Murray & Leigh
5788	It's a great big shame	Le Brunn
5789	All in a Row	Deane
5790	The Sunshine of Paradise Alley.. ..	Bratton
5792	Half-past Nine	Le Brunn
5793	Le Noël des Gueux.. ..	Vargues
5794	Lobe den Herrn	Neander
5795	Nun danket alle Gott	Kröger
5796	Ihr Kinderlein kommt	Schultz
5799	Blumen-Waltz	Blum
5800	Le Pays de Mireille	Bres
5802	Sumava	Waltz Song Blobner
5803	Ave Maria	Schubert
5804	Danse du Ventre	Polka Clark
5805	Der Blumen Pracht.. ..	Gavotte Klose
5806	Cadets March	Métra
5807	Am Weihnachtsbaum die Lichter brennen	" "
5808	Deo Gratias	Yates
5810	Ecco ridente in cielo	Il Barbier di Seviglia Rossini
5811	Such is Life	Waltz Pealer
5812	The Subbubs	Darnley
5813	A little bit off the Top	Murray
5814	I'll take a lot of that to upset me	" "
5815	The Marble Arch	Bennet Scott
5816	Gabrielle de la Périne	Polka Mazurka
5819	Glorious Beer	Goodwin
5820	Josephine	" "
5821	De Tennessee Christ'nin	" "
5824	The Sly Cigarette	The Runaway Girl Monckton
5825	Land of my Home	" "
5826	Not the sort of Girl.. ..	" "
5827	The Singing Girl	" "
5828	Follow the Man from Cook's	" "
5829	Far away over the Sea	" "
5830	Soldiers in the Park	" "

No.	TITLE.	COMPOSER.
5831	Beautiful Venice	The Runaway Girl
5832	The Boy guessed right	" "
5833	Ist den kein Stuhl da für meine Hulda.. ..	Wolff
5835	All in the Hush of Twilight	" "
5836	Sweet Rosy O'Grady	The Runaway Girl
5837	Written in the Lining of his hat	" "
5838	Verlor'nes Glück	Sprohache
5839	Ridder Rap O' Ridder Ro.. ..	Danish Song
5840	Ben Bolt	" "
5847	Gustave III. March	" "
5848	Meeting of the Waters	" "
5849	Mainzer Narhalla March	Zulehner
5850	Die kleine Witwe	Aletter
5851	The Man of the wide, wide World	" "
5852	The Bugler	Pinsuti
5853	Bedouin's Love Song	" "
5854	The Miner's Dream of Home	Dryden
5855	I'll Marry Him	Darnley
5856	Dotty-Oh	L. Arnold
5857	A Midnight Son	" "
5859	For all Eternity	Mascheroni
5860	I'll give him Dolly Daydream	" "
5861	The Dream of Paradise	Gray
5862	Let me Dream again	Sullivan
5863	Selection	La Belle Hélène Offenbach
5864	You've got a long way to go	" "
5866	Cockles and Mussels	" "
5869	Kitty of Coleraine	" "
5870	Love's young Dream	" "
5871	O steer my Barque to Erin's Isle	" "
5876	The Rose of Tralee	" "
5877	What will you do Love ?	" "
5882	The Daughter of the Regiment	Donizetti
5883	Turkish Polka	C. D'Albert
5884	Nice Station	" "
5887	Divorce Polka	J. Talon
5893	Hark the Herald Angels sing	Hymn
5896	As your hair grows whiter.. ..	H. Dacre
5899	I want my Lulu	St. Clair
5900	Honey Dear, I do love you	Lennox
5901	Humpty umpsy ay	McGlennon
5902	I'm throwing myself away	Rogers
5903	There are moments when one wants to be alone	" "
5904	Everything in the Garden's lovely	Le Brunn
5905	All together	Pearl
5906	She's good enough for me	William
5907	Oh ! If Mamma only knew	" "
5908	Landjäger March	Rixner
5910	Bier Waltz	" "
5919	How can I be poor, Baby Loo	" "
5921	Bundeslied	Chant patriotique
5922	Es lebt in jeder Schweizerbrust	Weber
5923	An mein Heimatland	Baumgartner
5924	O du himmelblauer See	Millöcker
5927	Das Grütli	Swiss Song Greith
5928	Le Petit Garçon Suisse	" "
5929	Départ pour les Alpes	" "
5931	Adieux aux Montagnes	" "
5932	Swiss Hymn.. ..	" "

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No.	TITLE.	COMPOSER.
5947	Shall I be an Angel, Daddy ..	Collins
5951	There is a green hill far away ..	C. Gounod
5952	Freedom Song A Greek Slave	S. Jones
5953	The Girl of my Heart	"
5974	Selections " Maritana	Klein
5975	May Queen Mazurka	"
5983	High-class Chaperone A Gaiety Girl	"
5984	Jimmy on the Chute	"
5985	I really find it better far	"
5993	Home Sweet Home	"
5998	For old Times Sake	C. Osborne
50,001	Serenade Berceuse	Gounod
50,002	Tricks on Travellers	"
50,003	Don't you know	Stahl
50,004	Let us be friends as before	Tillbury
50,005	Rolling, Bowling along	Dacre
50,006	My Little Octoroon	Stuart
50,007	Couldn't do without you Loo	Stuart
50,008	Kelly the Carman	Murphy
50,009	I'd like to go halves in that	F. Leo
50,010	A Jovial Monk am I La Poupée	Audran
50,011	Ma Onliest one	Templeton
50,012	A hot time to-night	Metz
50,013	We've all got something to show	"
50,014	Topsy	Murphy
50,015	Hush now, don't you wake him	Newman
50,016	All Coons look alike to me	Hogan
50,017	Murphy's Talking Parrot	Wincott
50,018	A Story of a Musical Box	Stephens
50,019	Ringing the Changes	"
50,022	The Gipsy's Warning	"
50,023	Break the news to Mother	"
50,024	What ho! She Bumps	"
50,025	Good-bye and God bless you Jack	B. Scott
50,026	I got married this morning	"
50,027	A Frangese March	"
50,028	The Coon Drum Major	"
50,029	The Cake Walk	"
50,031	You do get something for your Money	Perry
50,032	Johnny	Perry
50,035	Unto you is born this day Hymn	"
50,036	The first Noel	"
50,037	Good King Wenceslas Carol	"
50,038	O come all ye Faithful Hymn	"
50,039	Oft in the Stilly Night	Moore
50,040	Barney O'Hea	"
50,041	Christians Awake Hymn	"
50,042	Sally Sally, Shilly Shally	"
50,043	The Angel's Whisper	"
50,045	Kathleen O'More	Glover
50,046	The Fairy Tempter	"
50,048	Molly Mavourneen	"
50,050	St. Patrick's Day	"
50,051	Coster's Sister	J. W. Nublely
50,053	Brothers in Arms	Newton
50,054	In the pale Moonlight	Clifford
50,055	Waltz Cotillon	"
50,056	Exile of Erin	"
50,057	Dh' h, de Moon am Shinin'	Stromberg

No.	TITLE.	COMPOSER.
50,061	They were very very good to me	"
50,062	It's all up with Rastus	"
50,063	Absent Minded Beggar	Sullivan
50,064	Sons of our Empire	Bradford
50,065	See-Saw Waltz	Crow
50,066	Stars and Stripes for ever	Sousa
50,069	Mignon Salon Dance	"
50,073	Alice, where art thou?	Ascher
50,089	The British Volunteer	C. Wade
50,090	The Last Muster	"
50,091	The Promise of Life	Cowen
50,095	I'll be your Sweetheart (Blue Bells)	"
50,099	Le Temps March	"
50,104	Hello! my Baby	Emerson
50,105	Commissionaire	Hastings
50,114	Loreley	"
50,119	Mary was a Housemaid	"
50,120	The Naval Brigade	"
50,122	Roberts to the Front	Quintin
50,123	Obedient to the Call	Fanning
50,124	The March to Pretoria	Bonheur
50,127	The British Grenadier	"
50,135	Bravo Dublin Fusiliers	"
50,136	What do you think of the Irish now	"
50,137	The Bore of Béal Green	"
50,138	When the Boys come Home Messenger Boy	"
50,139	A good old London Town Girl	"
50,140	Tact Florodora	"
50,154	L'Amour Mystérieux, Polka Carmen	Bizet
50,155	Mia matre io veggo ancor	Bizet
50,161	Sons of Victoria	"
50,162	Cavalry March	Jude
50,164	For Queen and Country	"
50,169	It is well Hymn	P. Bliss
50,170	Safe in the Arms of Jesus Hymn	"
50,171	Ninety-and-Nine	"
50,172	Beautiful Home	"
50,184	Lorina Waltz	"
50,185	The Home over There Hymn	"
50,186	Lo! He comes with clouds	"
50,187	O, what a Saviour!	"
50,188	Hark, hark my Soul!	"
50,189	Shall you, shall I?	"
50,190	My Soul has found abiding rest	"
50,191	O worship the King!	"
50,192	Shall we gather at the river?	"
50,195	Sweet Bye-and-bye	"
50,196	Ring the bells of Heaven	"
50,197	I know He is mine	"
50,198	Waiting and watching	"
50,199	The Lads in Navy Blue	"
50,200	It's hard to say Goodbye	"
50,203	The Handy Man	"
50,205	There's air	"
50,209	Lady's Maid San Toy	"
50,210	Petals of the Plum Tree	"
50,211	The Moon	"
50,212	Love has come from Lotus Land	"
50,213	Butterfly	"

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No.	TITLE.	COMPOSER.
50,214	Chinese Soger Man	San Toy
50,215	The Silver Star of Love	Florodora
50,216	When I leave Town	"
50,217	The Fellow who might	"
50,218	Phrenology	"
50,219	The Millionaire	"
50,220	Whistling Song	"
50,223	Rhoda and her Pagoda	"
50,224	I must love someone	Florodora
50,225	Under the Shade of the Palm	L. Stuart
50,226	Ambolena Snow	G. Maywood
50,227	Idylle Valse	Military Ballad
50,228	Souvenir Valse	"
50,229	Pogotoure Polka	"
50,230	My Love	Schottische
50,231	The Empire	March
50,233	In Sanft-ruhiger Nacht	Waltz
50,234	Two Dark Eyes	Song
50,235	The Victoria Cross	Fantasia
50,236	I've an Inkling	Florodora
50,237	Am Worther See	Waltz
50,238	She is a Sensible Girl	"
50,239	Sweet Katie Morgan	"
50,240	My Pretty Kitty Mahone	"
50,241	Molly	An American Beauty
50,242	Walters' Prize Song	Die Meistersinger
50,244	Gigertl March	Wagner
50,245	Santa Lucia	Neapolitan Song
50,249	Love's Old Sweet Song	"
50,253	Schon die Abend Das Nachtlager von Granada	Kreutzer
50,255	Chin Chin Chinaman	The Geisha
50,257	In diesen heil'gen Hallen	The Magic Flute
50,258	Beauty's Eyes	"
50,260	The Last Watch	"
50,262	Excelsior	Duet
50,264	Marching	"
50,265	Quanti a te lieta	Marguerita
50,266	For ever and for ever	"
50,267	Cooee ma Girl	Messenger Boy
50,268	Love or Gold	Song
50,269	Poppyland Waltz	"
50,270	Little Tam O'Shanter	"
50,271	Ma Curly Headed Baby	"
50,272	Away in Ohio	"
50,273	Plenty of room in the Park	"
50,274	Julie Jewell	"
50,275	The Empire and the Tivoli	"
50,276	If you love, tell me, do!	"
50,277	Smoke, Smoke (Framed in Oak)	"
50,278	Sweeter dan de Sugar from de Cane	"
50,279	The duty of a wife	"
50,280	The Lambeth Walk	"
50,285	Der flotte Studio March	The Jolly Student
50,300	Boccaccio	Serenade
50,302	Spring Song	"
50,305	La donna è mobile	Rigoletto
50,309	High School Cadets' March	"
50,310	It's nice to have a home of your own	"
50,311	Take her and be to her as I have been	"

50604. I've Ken John's Peel.

50606. Hands Across the Sea.

50607. Amoureuse.

50608. When I marry Amelia

50609. Archie Lreader.

50610. Peace. Peace. Country Girl

50611. Go ho - little Girls.

50612. Under the Cedar.

50613. Liddlee Bits

50614. Martha Spanks.

50615. A Sailors Life

50620. The Horse the Missis etc.

50625. The millers Daughter.

50626. The Automobile Honeymoon

50627. Looping the Loop with Loop

50628. Good bye mignonette

50629. I've made up my mind to be
away

as some may be out of Stock.

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No.	TITLE.	COMPOSER.
50,312	Three Women to every Man	
50,313	Goodbye Daddy!	
50,314	The Boers have got my Daddy	
50,315	Just as the Sun went down	
50,316	When the Boys in Khaki all come Home	
50,317	The Scroll of England's Glory	
50,318	Everybody loves you	
50,319	The Banshee	
50,326	I guess I'll have to telegraph my Baby	
50,327	The Girl you Love	
50,328	Ma Tiger Lily	
50,329	The Civilian	
50,330	Ma Blushin' Rosie Song	
50,357	Just One Girl Song	Udall
50,358	Are we to part like this Bill?	Collins
50,359	She's my Wife Song	Rogers
50,380	Valse Bleue	A. Margis
50,390	Ma simple little String Circus Girl	
50,395	Because I love You	
50,396	Once we were Sweethearts	
50,397	Morris Dance Henry VIII.	Germain
50,398	Shepherds' Dance	"
50,399	Torch Dance	"
50,417	Come, little girl, and tell me truly .. Silver Slipper	
50,418	Two Eyes of Blue	
50,449	Parisienne Dance	
50,420	Four-and-twenty little Men	
50,421	Class	
50,426	If you wish to appear as an Irish Type	
50,427	When Alfred's friends their King forsook	
50,428	Oh, setting Sun, you bid the world goodbye	
50,429	Oh, have you met a man in debt	
50,430	Oh the age in which we're living	
50,435	Whistling Rufus March	Mills
50,436	A poor little Dummy am I La Poupee	E. Audran
50,437	Love, could I only tell Thee Song	Capel
50,438	I can't tell why I love You	Edwards
50,439	Mary of Argyle and Allen Water	
50,440	Sally in our Alley and Campbells are coming	
50,441	Ye Banks and Braes and Robin Adair	
50,453	Sweet and Low Lullaby	Barnby
50,480	Liza Johnson; or, The Ragtime Coster	Brunn
50,502	Honeysuckle and Bee Song	Penn
50,503	Goodbye Dolly Gray	Hill
50,509	A Bird in a Gilded Cage	
50,538	You can have a Sweetheart any day	Le Brunn
50,539	Down South	
50,540	Coronation Day Song	G. Everard
50,541	The Smithy in the Wood	Michaelis
50,545	Lustige Brüder (Jolly Brothers) Waltz	Vollstadt
50,546	Coronation Prize March	Percy Godfrey
50,558	Oh, Flo! Motor-car Song	Dacre
50,568	I may be crazy, but I love you	Stuart
50,575	Everybody's loved by Someone	Scott
50,576	The Permans' Brooklyn Cake Walk	Thurban
50,594	By the Swanee River; a Coon's Dream	Myddleton
50,595	What a Funny Game Song	Mills & Scott
50,596	The Artist	
50,597	Cindy, my Black Belle, do?	Clark "

No.	TITLE.	COMPOSER.
50,598	You will excuse me, won't you?	Dix
50,606	The Child of Nazareth	Gray
50,611	My Queen Waltz	Coote
50,617	The Skater's Waltz	Waldteufel
50,618	La Czarine Mazurka	Canne
51,133	Castaldo March	Novacek
52,066	Espana Waltz	Waldteufel
52,117	Estudiantina Waltz	
53,664	Dear little Jappy-Jap-Jappy The Geisha	S. Jones
54,344	La Traviata Libiamo	Verdi
54,844	Wolf March	J. Strauss
57,668	The Greek Slave Waltz	Kiefert
57,988	Les Chambres Chanson	Christine
58,099	Norma Duet	Bellini
58,222	I would that my Love	Mendelssohn

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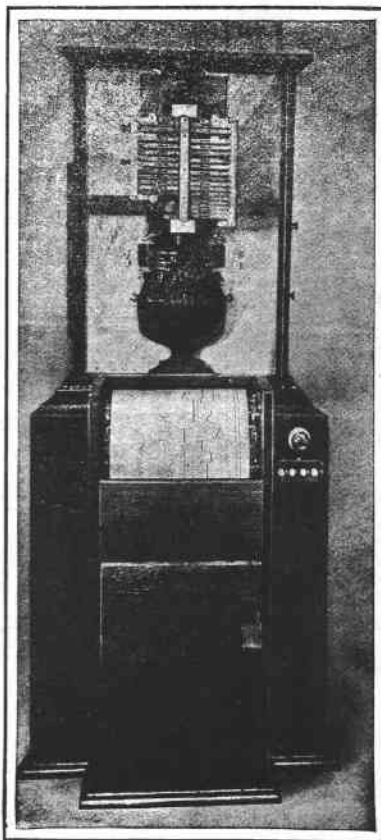
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AN AUTOMATIC VIOLIN PLAYER.

BY GEORGE GILBERT.

In view of the present popularity of the piano player, and the marvelous perfection this instrument has attained in reproducing the work of the best musicians, it is very evident that it will be only a question of time before other musical instruments must similarly surrender to mechanical control. The latest development along this line is a machine which will play violins and kindred instruments. As may well be imagined, the violin offers difficulties which are peculiar to itself, and we are not surprised to learn that the violin player illustrated herewith is the culmination of seven years of continuous labor and experiment.

The instrument requires no alteration in the violin itself, and any violin may be placed in the player and removed without injury. The parts are pneumatically controlled in a manner similar to that of the ordinary piano player. A perforated music sheet selects the notes which are to be sounded. This sheet travels over a "tracker board," provided with the usual ducts in which an exhaust is maintained. There are two ducts for each note, and as these are uncovered by perforations in the music sheet, the air rushing into one of the ducts acts through the medium of the usual valves and pneumatics to press a finger down on one of the violin strings at the proper point on the finger board, while the air in the other duct puts into operation the bowing mechanism of this string. The bowing is done by means of four crystal disks, one for each string. In the accompanying drawing the details of the bowing mechanism are shown. Fig. 1 illustrates a section taken through the body of the violin A. The strings are indicated at B. The disks C, with which the bowing is done, are an inch in diameter and $\frac{1}{8}$ of an inch in thickness. They are mounted in the ends of levers D, which are connected to the pneumatics E. When one of the bow ducts is uncovered, it operates a valve, which connects its respective pneumatic E with the exhaust chamber of the machine. The pneumatic is thus deflated, swinging the lever D to which it is connected, and bringing the disk C on this lever into contact with the selected string B. The disk C is rotated at high speed by means of a belt, which is guided along the lever D, as best shown in Fig. 2, and runs over a pulley F at the opposite end of the lever. When the lever D is swung into operative position by the pneumatic E, the pulley F is brought



Front View of the Automatic Violin Player.

into contact with a driving pulley G, and is set in motion by a frictional contact therewith. This motion is communicated to the disk C, which operates on the violin string. The speed of revolution may run up as high as 2,000 revolutions per minute. The rate at which the disks revolve determines the loudness of the tones. A device is provided for applying rosin to the disks. This consists of a small cup attached to a spring arm and containing rosin, which bears against the revolving disks.

The fingers of the violin player are sixty-five in number, although more can be added if desired, to reach the extreme high range of the A and E strings. There is a finger for each note. The model shown employs fingers reaching the seventh position. In front of each string is stretched a rubber band, upon which the ends of the fingers strike, thus producing a touch like that of the human finger, and making it possible to imitate the "slide." The tremolo is produced by a set of four hammers, which are actuated by electric vibrators of the type used in call bells. When a hammer vibrates against a string, next to the bridge, the tremolo effect is produced on that string. All the

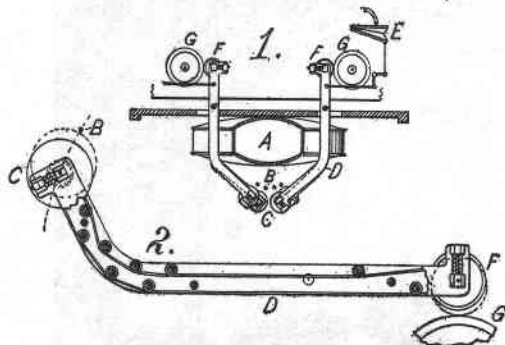
strings may have this effect, or one, as the character of the music demands.

Directly over the violin are four small pitch pipes, which are blown, on pressing a button, by causing air to pass through the pipes, each of which gives the tone of one of the strings, *G*, *D*, *A*, or *E*. The operator then tunes the violin in unison with the pitch pipes.

Violinists know that it is hard to keep a violin in tune. But few appreciate that this is due to the sweat of the player's fingers, which makes the strings stretch. Strings on instruments placed in the violin player do not need much tuning. Silk *E* strings have been found to last two months, and have stayed in tune two weeks without attention.

The tempo is varied by means of a friction pinion which is moved radially on the face of a large driving wheel. This device for varying the tempo enables the simulation of rubato passages when it is operated by a skilled musician.

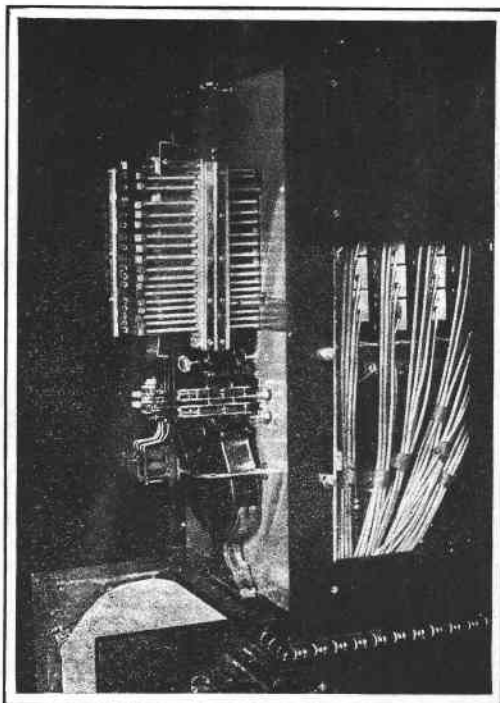
Instruments of the violin family have four strings, each with a range of two octaves. The violin player enables each string to be treated, at will, as a separate violin, as each bow is controlled by a separate mechanism. In the model shown, the higher portions of the *G* and *D* strings are not utilized, but they can be by supplying extra fingers. Notes on a violin are found sometimes on each of the four strings. For instance, the *G* above the treble staff may be struck on all the strings; so that if a trill were being performed on that note on one string, an arpeggio passage containing the



Details of the Bowing Mechanism.

same note could be produced on the other strings. Of course, no human player could do that. It is possible for the player to render a solo part, with a cello accompaniment on the bass strings, or a solo with two accompanying violin parts, all on one violin. The possibilities for combinations of orchestral effect, therefore, are seen to be many.

Harmonics are produced by the application of just enough pressure to a finger to make it rest lightly in the string sounded, thus imitating the action of the human finger. Trills are produced with striking clearness by providing a series of small perforations in the



Side View of the Player Casing Opened to Show Ducts.

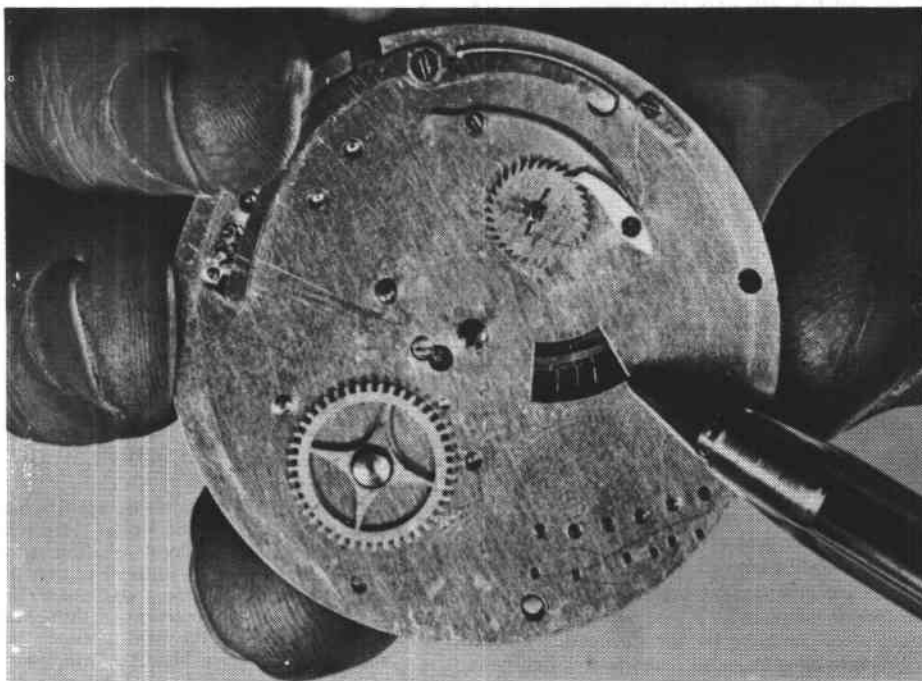
AN AUTOMATIC VIOLIN PLAYER.

music roll. The same principle applied to the bow pneumatics produces springing bow and flying staccato.

In making the first music rolls for the player, the inventor, Prof. Wauters, of Binghamton, N. Y., had many technical details to solve. Instruments having fixed strings or tones are played on the tempered scale. But violins play on the untempered chromatic scale, and therefore it was necessary for Prof. Wauters to lay the groundwork for producing music rolls for instruments of that character.

TRUTH CANNOT BE CIRCUMLOCUTED

Your editor recalls an amusing event which took place a while back in the United States when a sleek official of the Federal Aviation Administration was assuring a group of journalists that damage to buildings from sonic booms was usually in peoples minds. At that very moment, a thoughtless pilot in an F-104 dragged the field at supersonic speed — and the shock-wave blew the windows out of the building leaving the said FAA man hopefully looking for a Wurlitzer to play him out. . . .



An early Swiss musical watch made by Henri Capt and featuring a barrel mechanism in a gold case. From the collection of Member Dr. Benoit Roose of Antwerp, Belgium.

THE
HUPFELD
PLAYER-PIANO



SOLOPHONOLA
DUOPHONOLA
TRIPHONOLA



THE HUPFELD PLAYER-PIANO.

CIRCULATING LIBRARY.

Rolls can be obtained on the Circulating Library System.

RATES:—

For Solophonola	4	Guineas	per	annum.
„ Duophonola	6	„	„	„
„ Triphonola	6	„	„	„

For further details see special prospectus.

From the library of The Editor

THE HUPFELD PLAYER-PIANO.

THE firm of **Hupfeld** was originally established in 1892 for the purpose of manufacturing on a large scale all kinds of mechanical musical instruments. At that time mechanical music was mainly produced by instruments of the musical box type. The tinkling sound resulting from the turning of a handle was looked upon as the utmost that could be hoped for in the way of producing music, unless one were prepared to spend years in learning and practising the Piano, Violin, etc.

For some years, however, attempts had been made to use Rolls of perforated paper for the purpose of playing the organ. Mr. Hupfeld had carried these experiments a step further. He was convinced of the possibility of playing the Piano by means of a perforated roll, and as a result of his experiments a Piano Player in Cabinet form was evolved, that is to say, a machine in no way forming part of the Piano, but an entirely separate entity placed in front of the keyboard.

This was very quickly perfected and numerous patents were obtained. For some years the factory was almost entirely engaged in the production of these Piano players. It was not until the early years of the present century that a successful method was found of embodying the player mechanism inside the Piano. Numerous technical difficulties stood in the way, but by 1904 these were overcome and the present day Player Pianoforte came into being.

The first **Hupfeld Player Pianos** were of the 73 note type only, that is to say, large sections of the Piano in the extreme bass and the extreme treble were not operated by the Player mechanism at all.

THE HUPFELD PLAYER-PIANO.

About 1908 the full compass player, playing the whole of the 88 notes of the Piano was perfected, and this is the type now in general use all the world over. Numerous special devices for emphasising the melody notes, working the loud pedal, etc., were added, to which further reference will be made later.

The **Hupfeld Player** acquired an enormous reputation on the Continent of Europe, where in fact for many years it was practically without competition. So busy indeed was the manufacturer kept by his continental orders that little or no effort was made to develop the English market.

In 1910, however, a few Blüthner Pianos were sent to London which were fitted with the **Hupfeld Player**, and these at once roused considerable interest amongst connoisseurs. The ease with which they could be operated, the responsiveness to the touch of the operator, the superlatively high standard of workmanship, were something of a revelation to the English Piano dealers. With little or no advertising the **Hupfeld Player** was proclaimed as a product of the very highest class. It may almost be said to have won its reputation "overnight."

Ever since that time there has been a steady demand for the **Hupfeld** productions, particularly, it should be added, amongst those who may be described as Player Piano enthusiasts. Improvements are of course constantly being effected, the firm of **Hupfeld** possessing in fact not less than 250 patents.

Amongst other features it is interesting to note that in its present form the use of wood and rubber has been almost entirely eliminated, and the action is now mainly a metal product.

The great bulk of the Player actions produced by the factory in the past has been of the well-known type operated by pedals. In recent years however, additional types operated by the ordinary electric light current of domestic use, having for their object the reproduction of the performances of the great Pianists, have been introduced. As a result it is now possible to buy the **Hupfeld Player** in three different forms :

THE HUPFELD PLAYER-PIANO.

1. The ordinary foot-blown Player referred to above, which is known as the **Solophonola** ;
2. The player reproducing the original performance of a Pianist and operated solely by the electric current, known as the **Duophonola**, and
3. The player which can, at the option of the owner, be operated either by pedals like the Solophonola, or used in the same way as the Duophonola. This is the famous **Triphonola**.

Inasmuch as all these instruments can, of course, be used by hand as ordinary pianos, it will be seen at once that every conceivable requirement is provided for.

Those who want to play themselves, giving vent to their own musical feeling, that is to say, those who wish to enjoy all the sensuous delights of playing the Piano with the facility of a brilliant Pianist, will naturally turn their attention to the Solophonola. The purchaser who, although a lover of music, is doubtful of his own ability to give an adequate performance of the works of the Great Masters, will tend to be interested in the Duophonola, while the Triphonola caters for both types of buyers.

It is largely a matter of taste. We must confess that we ourselves favour either the Solophonola or the Triphonola, because of the possibility of using them oneself. **To play the Piano** is the ambition of most people; both the Solophonola and the Triphonola enable them to do so, while the Duophonola, although to a great extent controllable by levers, is mainly intended to relegate the owner to the position of listener.

In the following pages will be found a description of the varying types.

THE SOLOPHONOLA.

It has been explained above that this is a Player which is operated by pedals only, that is to say, without the human element the instrument is dumb. We emphasise this because we want to bring it home to the reader that in this player it is the human element, with its varying moods and emotions, that predominates. With the Solophonola you play the Piano yourself every bit as much as you would were you playing by hand, and this is so because the makers have solved the problem of making the action respond to the lightest touch of the operator. The pedals are so sensitive that with the slightest extra pressure a forte or fortissimo effect can be obtained, while only the very minimum of effort is required to obtain the pianissimo and more delicate shades of tone. Another point is the feeling of "touch" which the operator enjoys through the pedals. Every nuance of expression is attainable. He can stroke out the tone of the Piano as does the most soulful pianist one can imagine. In short, the Solophonola turns the untrained music-lover into a magician who can charm not only himself but also his hearers. With little or no practice every vestige of mechanical effect is eliminated.

It must not be supposed that the pedals are the only means provided for obtaining musical expression. The auxiliary "gadgets" of the Solophonola are unique in their efficiency and above all in their simplicity. There is, for example, the SOLODANT, which enables the performer to emphasise the melody notes. Easily worked (its use can be learned in a minute or two), this device in itself makes the Solophonola stand out pre-eminent amongst Piano players. Then there is the lever for graduating the accompaniment. With this the melody or theme of a composition can be emphasised while the accompaniment can be made to rise or fall to the will of the performer. There is, too, a device for **automatically** operating the "**loud**" or **sustaining Pedal**, and also for making the so-called "soft Pedal" come into action when necessary without any effort on the part of the performer. You can by means of the TRANSPOSER play any composition in NINE different keys. The advantage of this in accompanying Songs need not be

THE HUPFELD PLAYER-PIANO.

enlarged upon—it is obvious. A TRACKING DEVICE to keep the Music Roll in position is of vital importance. In the Solophonola the tracking device does its work silently and efficiently.

It only remains to add that the Solophonola is the very last word in high-class workmanship. Remove the front panel of a **Hupfeld Player Piano** and you will experience the same glow of pleasure that you enjoy when you open up the bonnet of the tip-top motor car. Its conglomeration of highly finished metal parts proclaim it at once a “proper engineering job.” Every note is a single unit interchangeable with any other note. One of these units can be removed and re-inserted in a few seconds if desired. Accessibility has been considered in the construction. The prospective owner need not be alarmed at the prospect of having to make continual adjustments; he need never touch the action. Should, however, any small adjustment be found advisable by the Piano tuner, for example, this accessibility constitutes a great advantage. What might take hours in the old-fashioned wooden Player can be done in a few minutes on a **Hupfeld**. All parts are made of a non-corrosive metal, which ensures not only durability but also enables the whole mechanism to withstand the most adverse climatic conditions.

To sum up, the **Hupfeld Solophonola** is, without doubt, the very finest example of Player Piano construction in existence, and can be thoroughly commended to the discriminating purchaser.

The DUOPHONOLA and the TRIPHONOLA.

We now come to the more recent developments in the Player world, the so-called Reproducing Pianos. We have mentioned above that the **Hupfeld Duophonola and Triphonola**, with the aid of the ordinary electric light current, can reproduce the performance of the great Pianists. This result is of course only attained by using a special type of Music Roll on which the performance in question is faithfully recorded. Before going into further details concerning the Player action, it may be as well to give a short explanation of the method by which this record is obtained.

THE HUPFELD PLAYER-PIANO.

Instead of taking the score, the manufacturer engages a pianist of recognised ability and distinction, who is capable of performing a composition in a way to satisfy even the most punctilious critic. The artist is informed that it is desired to obtain a reproduction of say, a Nocturne of Chopin. He seats himself at the piano, and performs his nocturne precisely as he would do were he performing at a concert in the presence of a critical audience. He gives rein to his emotions and plays the composition as he feels that it should be played. He introduces into his playing all the *rallentando*, *accelerando*, *rituendo* effects, and nuances which go to make up an artistic as compared with a mere mechanical performance.

The making of the actual record is a perfectly simple matter. Every note of the piano is connected by an electric wire to a corresponding row of pencils which are superimposed on a strip of paper revolving on a drum. Every time the artist strikes a note, the corresponding pencil is brought into contact with the paper. So long as the artist keeps his finger on the note, the pencil produces a line on the paper. Immediately he releases the note the pencil leaves the paper and the line is brought to an end. It will thus be seen that if the pianist strikes a chord with even the slightest *arpeggio* effect, this is immediately reproduced on the pencil record. When he plays a scale each note is reproduced just that length of time during which the artist holds his finger on that particular note. If he makes a pause on any one note, so is this shown on the record by the extra length of pencil line resulting from this pause. Should he accelerate a certain passage, so will this be recorded by the shortening of the pencil lines. When he has finished the composition, the strip of paper with the pencil lines is taken from the drum of the reproduction instrument, and wherever the pencil lines are visible the paper is perforated. From this "Master Roll," rolls to an unlimited number can be manufactured.

The touch or dynamic force is recorded by means of a separated pneumatic contrivance which records the force with which each note is

struck by the Pianist. This record is then combined with the record of the tempo explained above, by the addition of extra side perforations at the margin of the Roll. These are generally called the expression perforations. *

It is not proposed to give a long description of the technical working of these expression holes. It is sufficient here to explain that they control the touch of the Player action in precisely the same way as the human operator does through the pedals of the Solophonola. From the lightest shades of pianissimo to the heaviest fortissimo the original touch of the Pianist is recorded.

We can now visualise a performance by the Duophonola or the Triphonola. Imagine, for example, we want to hear the Ballade in G minor played by Busoni. The Roll is inserted, the button is pressed and immediately a veritable miracle is performed. The opening phrase of this monumental work swells out with all the majesty and force that the Great Master, Busoni, could give to it. We hear his interpretation of one of the world's masterpieces. On the Duophonola or the Triphonola you can actually hear Grieg play one of his own compositions. In short, The **Hupfeld Reproducing Piano** brings the world's greatest composers and performers into your own home. In lighter vein you can have Jazz and dance music. And what better accompaniment to dancing in the home than that of a full-toned Piano? Remember, it is the instrument itself you hear, not a mere distorted reproduction. Press the button, the music you want is there. At the end of the piece, the Roll, without your moving a finger, will re-roll itself automatically, ready for another performance. Such is the Reproducing Piano!

* In this connection it is interesting to note that with many if not all Reproducing Players except the Hupfeld, there are no additional expression perforations on the margin of the Roll. The holes at the end of the scale, that is the extreme bass and treble, are used for expression purposes, with the result that the notes at both ends are dumb. The Duophonola (and of course, the Triphonola) plays every note on the score and the original record need never be faked as is the case with other Players.

Do not, however, imagine that you have no control whatever over the Reproducing Pianoforte. The Tempo can be set to suit your liking and if you wish you can put in your own expression, when using an ordinary roll, by means of the Expression levers and buttons provided. Full instructions how to do this are given in our Brochure—"How to play the **Hupfeld**," which gives in simple language the little help that is needed to enable you to obtain the utmost satisfaction from all three types of Players—Solophonola, Duophonola, and Triphonola. Thus the Duophonola need not be entirely automatic, although, of course, as already explained, it is primarily constructed for those who want to listen rather than perform.

So-called, because it can be used in three ways, electrically, by pedalling, or by hand, the **Triphonola** is the culminating point in automatic Piano playing. It can be used with pedals like the Solophonola, by those who wish to perform themselves, or it can be used as a reproducing Player as described above.

With the **Triphonola** all tastes are catered for, and this, too, at a very small extra cost as compared with the Duophonola. We would recommend the purchase of a Triphonola in preference to a Duophonola for many reasons. One does not always want to be only a listener. Remember that, sooner or later, the owner or one of his friends will want "to have a shot at it" himself. Electric light currents have been known to fail: with the Triphonola you always have the pedals as an alternative. **You can use the same** Rolls for either purpose, so do not be alarmed at the prospect of having to keep a double stock on hand. But, above all, we repeat, remember that **if you want to do so you can play the Triphonola yourself.** Think well of this before you are tempted to buy a Player without pedals. The real joy of a Player Piano lies in the fact that you can play it yourself, whereas with the wireless or the Gramophone you can only listen. Therefore, say we, buy a Player Piano!

TERMS OF PURCHASE.

Hupfeld Player Pianos can be bought either for cash or by instalments spread over any period up to three years. Only a small charge for interest is made; the extortionate methods sometimes associated with Deferred Payments are not countenanced by us. Any model, whether in the Blüthner or the less expensive Pianos will be delivered immediately on receipt of the first instalment (a heavy deposit is not demanded) and the purchase can be completed while you enjoy the use of the instrument.

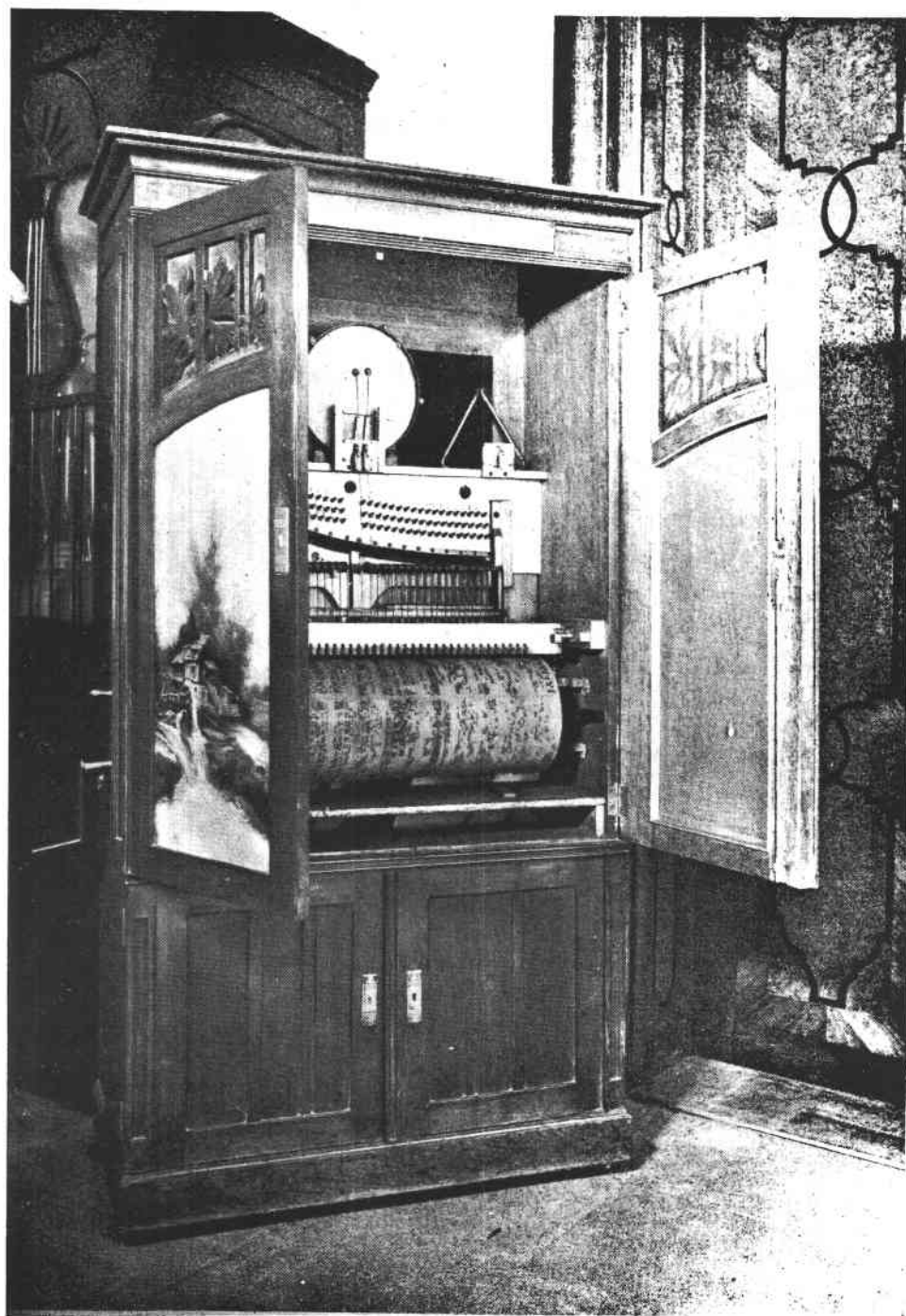
ANY MAKE OF PIANO WILL BE TAKEN IN PART PAYMENT.

ANIMATIC ARTIST ROLLS.

The **Hupfeld Solophonola** can be used with any standard 88 note Roll, but the Animatic Artist Rolls give the best results. We have already described above how the Rolls for the Duophonola and Triphonola are manufactured. Rolls made in similar fashion are also supplied for the Solophonola. Although of course, the touch or dynamic force with which the note is struck is in the case of the Solophonola controlled by the operator, the phrasing and tempo are provided by the skilled musician who has made the record. Thus all trace of mechanical effect is eliminated. You can still control the tempo by means of the levers, but the general "shape" of the composition is properly set out and a really bad performance is an impossibility. There are thousands of rolls in existence made from records of the world's greatest Pianists.

It should be added that these rolls can be supplied on the Circulating Library system on terms set out over-leaf.

A complete catalogue and list of artists will be sent on application.



ČESKÉ AUTOMATOFONY

ЧЕШСКИЕ АВТОМАТОФОНЫ

CZECH AUTOMATOPHONES

When, in 1922, Alfred Schnerich discovered original compositions by Haydn on the cylinder of a flute-playing clock made for Prince Esterhazy by his Librarian, a Czech called Primitiv Němec, music historians turned their attention to the automatophonic instruments.

Hitherto, however, no monograph has yet been written about them. This has been due partly to the fact that people with a musical education have always been against mechanically produced music and partly because automatophonic instruments were not considered as musical instruments proper. Meanwhile, these grew fewer and fewer every day as soon as the modern gramophone and radio came upon the scene. Museums did not pay much attention to this aspect of musical culture and before they realized it, it was too late. Only a few automatophonic instruments have been preserved, most of which are of exquisite make and considerable artistic value, bearing vivid testimony to man's skill and wit. These are scattered about in the collections of various museums and most of them have never been expertly catalogued.

In 1948, the National Museum in Prague did not possess a single automatophonic instrument and the National Technical Museum, where these instruments would have been equally in the right place because of their mechanisms, was not much better off. To-day the Music Department of the National Museum has 75 such instruments which are mainly of Czech origin and it is the study of these instruments which has led me to write this monograph.

In order to play a musical instrument one needs a certain amount of talent which is not granted to everybody. So, from time immemorial, people have sought to create such musical instruments as could be played by anybody having neither skill nor any previous musical education. The mechanisation of musical instruments is as old as music itself. At the beginning man was content to perfect his own voice and the technique of playing on musical instruments. But then, however, primitive musical instruments miraculously began to develop into instruments which were technically becoming more and more complicated and to-day, all musical instruments are really mechanical.

The development of musical instruments shows that man has constantly added to the mechanical devices he used in the production of music and that each addition bettered the quality of music produced. The playing on any musical instruments involved a certain amount of mechanism and all music becomes more and more mechanical the less it involves the

use of any part of the human body, such as lungs, mouth or hands, in its production. The following instruments mark the rising scale of mechanisation: string instruments, tinkling instruments with a finger-board, wind instruments, pianos and organs. At the head of this scale is the human voice used in singing which is absolutely non-mechanical, and, at the bottom, are the automatophonic musical instruments which stand for the absolute mechanisation of music playing. Just as the singer produces music only with his own self, so the automatophonic instrument plays only upon its own self and requires no outside intervention.

Musical instruments such as the gramophone and radio that are now constantly within man's reach throughout his life, have had their origin in automatophonic musical instruments. Up to the first thirty years of our century, hand-organs, mechanisms with nail-studded cylinders, orchestriones, pianolas and other automatophonic instruments have reigned supreme among music-rendering mechanisms that enjoy a tradition of many centuries upon European soil and whose history is joined to the history of the evolution of mechanics in general.

There exist only some isolated reports concerning the efforts made to impersonalize music and render it independent from the individuality of the musician during the Middle Ages in Europe. Such instruments spread wider afield during the tempestuous and artistically sensitive Renaissance which raised mechanics above art. Of course the idea to render music through some exact mechanism could only be carried out when the art of clock-making replaced sand and water clocks with artistic clock mechanisms. That is why the history of automatophonic instruments is so closely connected with that of the art of clock-making.

During the seventeenth century automatophonic instruments became the subject of much thought on the part of contemporary scientists and writers. The vigorous spread of automatophonic instruments during the eighteenth century kept pace with the lively interest which music enjoyed during this century. A penchant for creating queer and eccentric things, so typical of this century, found a full outlet also in automatophonic musical instruments. Longing for what is transcendent, for the exciting utterances and manifestations it involved and the eager willingness to take part in any sudden intervention by the power of God such as a miracle, caused people to readily accept mysticism and superstition, thus lending themselves without difficulty to deception and illusions. They heard supernatural and mysterious powers in the sounds produced by Aeolian Harps and automatons were transformed into living beings in their eyes. They were now no longer content to imitate human motion, but wanted the automaton to speak and sing as well.

Towards the end of the eighteenth century a talking machine made by Wolfgang von Kempelen of Pressburg caused a great sensation. This imitated the voice of a child and uttered distinctly simple words. At the beginning of the nineteenth century Prof. Robertson produced his phonogon. Joseph Faber's Talking Turkish Woman who could not only pronounce whole sentences in various languages, but could also sing, was considered by contemporary specialists as a triumph for human inventiveness. The German physiologist, Johann Müller tried to lure melodies out of a



carefully treated throat by blowing through it. Here threads and weights replaced muscle action. Müller suggested to the opera theatres to buy the throats of dead men and women singers which, after being treated, would sing the most beautiful songs and arias and so fees paid to living singers could be saved. This fantastic suggestion shows how great was the human longing for the preservation of sound. J. N. Forkel and the French theorist for the production of automatophonic instruments, F. Engramelle, wanted to preserve the music played by great artists and the works of composers with the help of automatophonic musical instruments. Engramelle, for instance, expressed his regret that works by Lully, Rameau, Couperin and other famous composers have not been preserved in this way.

The literature of music is rich in works composed for automatophonic musical instruments. Hans Leo Hassler composed a song for "a kind of organ which would play of itself without any interference from another singer whatsoever!". A. Kircher published a *Ricerca ta* by the German composer J. K. Kerll as an example of what kind of compositions are suitable for automatophonic organs.

Automatophonic instruments flourished considerably during the period of the Vienna classics when there even came into being a considerable independent musical literature formed of compositions by the greatest masters. It has only recently been discovered that Joseph Haydn composed at least 32 works for flute-playing clocks. W. A. Mozart has also composed pieces for automatophonic instruments. Altogether three such compositions by Mozart have been preserved. Mozart entered the first of these composition into his list of themes as "Ein Stück für ein Orgelwerk in einer Uhr" (K.V. 594). The second (K.V. 608) he called "Orgelstück für eine Uhr" and the third is marked as "Für eine Walze in eine kleine Orgel" (K.V. 616). Even Beethoven did not avoid composing for a flute playing clock. His four compositions for this instrument are to be found in his copy-book where are also four out of six variations for four hands on the theme of Goethe's song: "Ich denke Dein!". Beethoven's work "Wellingtons Schlacht bei Vittoria" had originally been composed for Mälzel's automatophonic instrument called the panharmonikon. The Viennese pianist and favourite composer at the time, A. Eberl, as well as Cherubini and Salieri wrote compositions for the automatophonic instruments of the Mälzel brothers.

At the beginning of the nineteenth century when the mentality of the period was reflected everywhere, whether in the delicate porcelain bibelots or in the house interiors, the automatophonic instruments with nail-studded cylinders came into being. In a short time these began to compete seriously with all other automatophonic instruments hitherto produced, because of their small size and charming sound.

The rapid rise in production power created favourable conditions for solving problems which people had earlier attempted to solve in vain. Capitalism, which developed practical sciences on a hitherto undreamed-of scale, had at its disposal numerous outstanding scientists and famous inventors who could satisfy human longing for new scientific knowledge and discoveries. Thus even where automatophonic instruments were concerned,

there was no invention which was not used to further the developing production practice.

The most important of these inventions was a pneumatic mechanism which was put to full use in the production of all automatophonic instruments and of the pianola in particular, which could be controlled by man in so far as timing and dynamic effects were concerned. The electric pianola and the trifonola were capable of reproducing to some extent the music of the artist who "played" the perforated rolls. Hence the people's growing preference for the playing of famous piano virtuosos to that of mediocre interpreters. The Berlin radio broadcast pianola music side by side with that of gramophone records as late as 1930.

Hitherto, inventors and constructors of automatophonic instruments had been driven by the ambition that their instruments should play music that came as near as possible to that interpreted by living artists. The music played by automatophonic instruments had been composed mostly for other musical instruments. However, when pneumatic instruments were introduced, this encouraged the composition of music only for these instruments—a music which could not even have been played by man, but only by an automatophonic musical instrument. And only from this moment on, has the automatophonic instrument been placed on a basis of equality with other musical instruments and become capable of producing a music of its own, for there now existed a music for it just as there existed piano or orchestral music.

P. Gaubert composed scenic music for Calderón's "The Miraculous Magician". This composition is for a small choir and orchestra, the chief instrument of which is the pianola. Igor Stravinskij mentions a piece he composed for the pianola. His interest in this instrument was revealed not only by his efforts to help pianists in the correct interpretation of his works, but also by the fact that the problems which pianola music presented, enriched his creative work. G. Antheil followed in Stravinskij's footsteps with his "Ballet Mécanique" and so did P. Hindemith and E. Toch, who, in 1925, presented their compositions for automatophonic instruments at the chamber music celebrations in Baden, and a year later at Baden's Donaueschingen. However, the tendency to consider the pianola not merely as an automatophonic kind of piano, but also as a new instrument for which it is necessary to compose in a quite different manner than for the piano and for which it is even necessary to compose in a new way, taking into account its specific peculiarities, began to gain ground already at a time when musical instruments were swiftly and irretrievably driving it into the background. That which followed the trifonola was already a new art, the art of perfect sound registration and its faithful reproduction, the art of musical instruments.

If we follow the development of music in Europe beginning from the Middle Ages, we see that it emerges from vocal music and develops into instrumental music, i. e. it emerges from organic music and moves in the direction of mechanical music. This effort to eliminate from the production of music the intervention of man whose technical performance is subject to so many physical and spiritual shortcomings has been best rewarded by the automatophonic musical instruments. The capable mechanics and

courageous inventors who created and fashioned them often had to suffer for their skill and courage at the stake, for they were considered to be magicians and charlatans.

Automatophonic instruments alone have preserved for us the practice of music in olden times. Their playing cylinders and perforated rolls served the same purpose and fulfilled the same function as modern sound registration. They afford us, therefore, valuable information concerning the tuning of musical instruments and the ornaments and tempo of the composition of the time. The constructors of orchestronees rendered a valuable service to the instrument trade by the use of new mensural organ pipes with which they tried to gain a tone-colour more similar to that of orchestral instruments than those of organ stop pipes. Automatophonic instruments with tongues have contributed a great deal to the development of musical instruments where freely vibrating tongues produce the tone.

The research work hitherto undertaken in this field leaves us no doubt that organology can give a satisfactory explanation of the origin of piercing tongues only after the so-called "pipe" automatophonic instruments have been thoroughly examined.

Winkel's genial automatophonic instrument, the componium, marks a considerable step forward in freeing music from the individuality of man. Winkel has shown with his instrument that certain compositional processes, such as variations, can be confided to mechanism. The pneumatic automatophonic instruments of our century have emphasized these possibilities still further. The use of the pneumatic mechanism has made actual the old problem of "scientifically perfect music" which has sprung from the assumption that music as had been rendered hitherto was not perfect. The pneumatic automatophonic instruments replaced the interpreter's playing by a perforated roll on which the notes were registered in the manner of a melogram. If the notes on this roll were registered by different artists playing the same piece, various deviations resulted. And it was these deviations from the standard, that is, from the geometrical precision of the drafted picture of this same composition that expressed the "personality" of the playing and, if need be, the personality of the player. The finer and more sensitive the registration, the better did it register the individuality of the artist. But when the composition was not played by another artist but was registered direct by the composer himself, then the melogram showed a most perfect picture of geometrical exactitude with its corresponding sound effect: an exactness which could never be achieved by human interpretation—a perfect realisation and a perfectly dehumanised playing.

The doom of automatophonic instruments has not, however, spelt an end to the tendency of replacing man by a mechanism in music. On the contrary, the process of dehumanisation has been strengthened by a development which is following two separated ways, the one leading to musical and the other to electrophonic instruments. There is no doubt that automatophonic musical instruments have played a great part in this evolution which has made the most daring dreams of acousticians and inventors of the past become a reality.

To-day music is being reproduced mechanically with absolute fidelity and the voices of famous singers are preserved to posterity without the

need of treating their throats after death as was suggested by the physiologist Müller. And although to-day automatophonic instruments have only a historical value, we nevertheless view them with respect. For it is solely to the tireless efforts of their creators—the real pioneers in the use of the technique of music—that we owe the wonderful achievements we have reaped in the technique of sound registration.

That is why the glory of to-day's mechanical art—by this is meant the art which is transmitted from the artist to the public by mechanical means, i. e. the film, radio or gramophone record—is really due to the discoverers and inventors of earlier times. Radio and television, electrophonic instruments and modern sound-registering machines would certainly not be existing to-day, were it not for the courageous discoverers and inventors of the automatophonic musical instruments.

Book Review

Church and Chamber Barrel-Organs

Their Origin, Makers, Music and Location
A Chapter in English Church Music

SECOND REVISED & ENLARGED EDITION
1970



by
Lyndesay G. Langwill
and the late Canon Noel Boston

When Lyndsay Langwill and Canon Noel Boston decided to collaborate on preparing a book on church barrel-organs, fate alone knew that Canon Boston would pass on ere their

task would be complete. The work was completed by the former author, published in 1967 and reviewed in *THE MUSIC BOX* vol. 3, page 210. Privately published with the help of a guarantee from the Marc Fitch Fund, it speaks well both for the interest in the barrel organ and in Langwill and Boston's book that the first edition was sold out inside a year.

Now we have before us a second, revised and enlarged edition. Much of the doubtful typography of the preceding edition has been revised and the layout markedly improved. Six new illustrations bring the number of plates to 33 and two further appendices are included which provide fifteen specimen tune-lists and a listing of the sources and composers of sacred tunes. Also new is a short foreword by W.L. Sumner of Nottingham University who rather surprisingly makes reference to the Dutch "dray-organ". The present reviewer cannot record ever having seen a musical beer cart, be it Dutch or Austro-Musicale! The editor of *THE MUSIC BOX*, Arthur Ord-Hume, has once again provided a chapter on barrel organ mechanisms.

One criticism remains of Mr. Langwill's book — and, indeed, could there be a kinder one? It is, simply, that the title of his work may deter the interested but unadventurous reader. This book may be "a chapter in English church music" — it is also a most interesting peek into the history of a once-maligned and now very collectable instrument.

R.A.

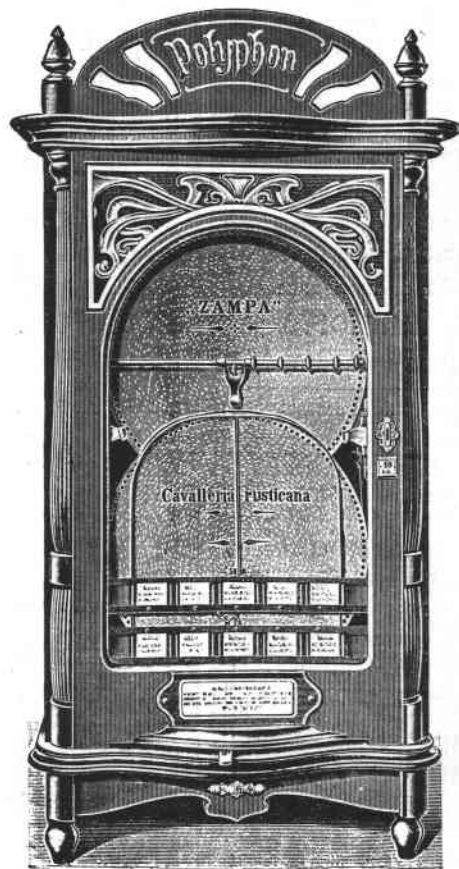
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WINWICK CHURCH

BARREL ORGAN

by
K. G. Parrott

I FIRST heard of Winwick Church Barrel-organ in July 1968 but the story really began three years earlier, for it was in 1965 that I first became aware of Mechanical Musical Instruments. It was during my second visit to a traction engine rally that I first saw the wonderful Golden Gallopers with a fair organ in the centre. For many years I had enjoyed music of various sorts, though I could not distinguish a minim from a semi-quaver. But here was a mechanical device which could play the most wonderful music all by itself – it was from this point that my interest in mechanically produced music began.

Unable to afford – or accommodate – a fair organ, I bought a player piano. It was about forty years old and had not been used for some time. Before long the air motor developed leaks and then more and more notes refused to play as the old and brittle fabric on the pneumatics began to crack. I knew nothing about the “works” of the instrument so I decided to learn “the hard way” and set about stripping it down to re-cover all the pneumatics. By the time I had finished I knew how it operated, and had a fully working instrument once more.

After the player piano came two musical boxes. Firmly believing that these instruments should be heard and appreciated by as many people as possible, various friends were invited in to hear them. It was from one of these friends that I learned of the existence of the Winwick barrel-organ, and some weeks later I made the first of many visits to Winwick Church. There was the organ, standing in a corner of the South Transept. The bats had left their marks upon it, as had the decorators and it had clearly been neglected for many years. Two or three barrels stood in the corner, dirty and battered with countless bridges reduced to broken bits of wire. All I could do was look at them, saddened by the thoughts of such neglect.

More weeks passed and then I received a message that the Vicar was interested in having the organ restored. I met him at the church, checked over the organ, and finding that the most serious defect was a shortage of wind due to leaky bellows, decided that although I had not worked on an organ before it was a job I could attempt having gained so much experience on the player piano.



The Winwick organ was presented to the church by the then Rector about the year 1864, but there is reason to believe that it may have been built twenty or thirty years earlier. The "maker's" label is that of William Prowse, late Keith Prowse and Co., 48 Cheapside, London, and this is the only barrel-organ known to carry his label.

I do not propose to describe here the detailed operation of a barrel-organ as this has already been done in Chapter 2 of *Church and Chamber Barrel-Organs* by Langwill and Boston, and elsewhere. I shall therefore give only the details applicable to the Winwick organ.

There are eighty-four pipes arranged in five stops-Bourdon, Diapason, Stopped Diapason, Principal and Fifteenth. There is a dual use of pipes at the lower end of the diapason stops but basically the Bourdon and Stopped Diapasons are wooden flue pipes, the remainder being metal. Twenty-one keys are operated from the barrels which are rotated by a detachable crank handle. The notes do not form a chromatic scale but are only those needed to play tunes in the keys of G and D. Wind is provided from a weighted reservoir

and bellows operated by a foot lever. The organ was unusually well provided with music, having seven barrels each of ten tunes, one barrel being chants, the remainder hymns. Fortunately complete lists of all the tunes still existed in good condition.

The first step in restoring the organ to working order was to remove the incredible amount of dirt which had found its way inside. The key frame, pipes and pipe rack were removed from the organ case, a careful note being made of the position of each pipe before removal. Taking out the sound board was a fairly lengthy job as many of the screws were badly corroded, but once this was done the slides were exposed. A few minor repairs were carried out on the key frame and then all parts thoroughly cleaned and re-assembled.

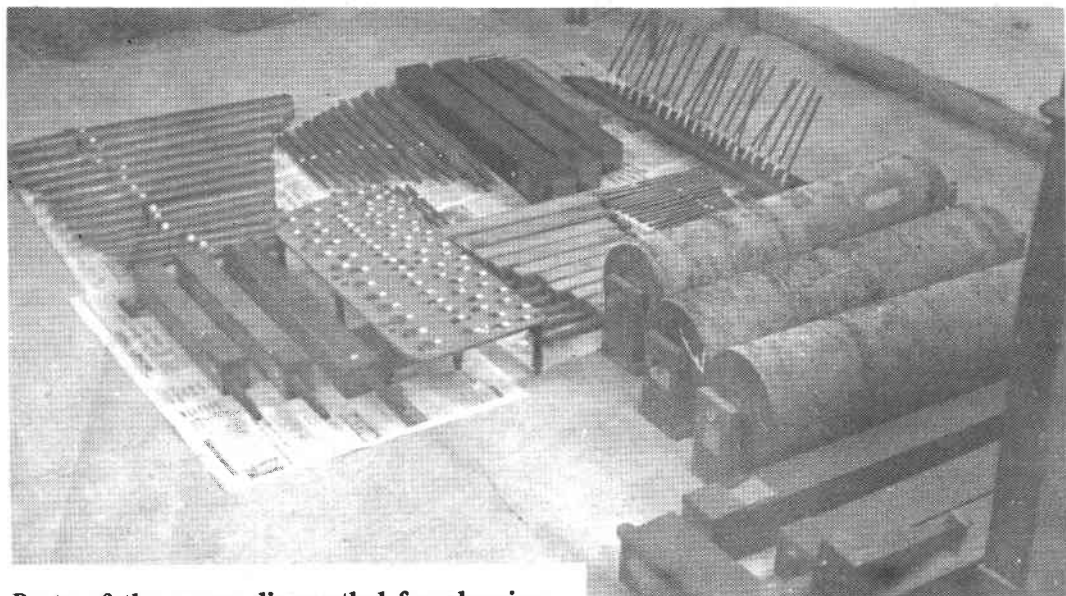
Despite the removal of all obvious foreign matter from the pallet facings a number of notes persisted in sounding without the keys being operated. At one stage I was convinced that there must be leaks due to cracks in the woodwork, but closer inspection revealed some very tiny particles of plaster left in the pallets and once these were removed the trouble ceased.

The organ was still short of wind due to holes in the white skin corner pieces of the bellows which had obviously been patched by some previous repairer. All the old skin was removed and replaced with new material, a satisfactory wind pressure then being obtained. At last the time had come to really try the organ. A barrel was inserted – and at that point I realised I had left the crank handle at home!

While all the above work was being done I had also been searching for a course of rectangular section wire for repairing the damaged bridges on the barrels. This I eventually discovered from a fellow member of the Fair Organ Preservation Society who had done a similar job on a barrel operated fair organ. Although the tunes on the barrels were recognisable not one was complete so I chose fourteen of the best known tunes from three barrels and set about repairing each of these. Fortunately in most cases the bridges were only cracked at one of the corners or had the top of the bridge missing so that it was easy to remove the old wire, leaving two holes in the wooden barrel for insertion of the new. Some bridges, however, had broken flush with the surface of the wood, and these were a little more difficult, in the first place to find, and when found, to remove. The number of bridges to be replaced varied considerably from tune to tune and barrel to barrel but on average it took about two hours per tune to replace all damaged bridges.

All that remained to be done was to check the tuning of the pipes, and this was a job for someone with experience. My interest in barrel-organs had led me into correspondence with Mr. L.G. Langwill and in checking the present condition of some of the other local church barrel-organs for the second edition of his book I met Mr. E.W. Timmins, an organist and choirmaster in Rugby, who had done a great deal of work on organs and who offered to tune the Winwick organ. The wooden pipes, being stopped, are readily tuned by adjustment of the





Parts of the organ dismantled for cleaning.

stopper in the end of the pipe. The metal pipes are tuned by coning, that is the pipes are cut by the organ builder to almost the exact length for the note to be sounded, final adjustment being made by bending over the top edge of the pipe to give exactly the right effective length. Normally only very small adjustments are required, but over the years and apparently due to inexperienced tuners, a number of pipes had been severely distorted and the ends split so that it was no longer possible to obtain the correct pitch. In these cases the damaged tops had to be cut off and new pieces soldered on to bring them back to the proper length. In some cases too, excessive hammering of the coning tool had caused the hole in the foot of the pipe (by which the air enters) to close up, and these had to be opened up again to enable the pipe to sound correctly. A few pipes also required some adjustment of the mouth. All this work on the pipes was done by Mr. Timmins as a preliminary to the actual tuning procedure.

The organ was now in usable condition and it was felt that the occasion should be marked by using it in some kind of special service. A service of Evensong followed by Hymn Singing was therefore arranged for a Sunday evening in August 1969 and the use of the organ for this service was announced in the Parish Magazine and a Rugby paper. After the many hours of labour by Mr. Timmins and myself with the assistance of our respective families the interest aroused was most gratifying. We were interviewed by Coventry and Northampton newspapers and given a most generous amount of space including a large photograph in each. The B.B.C. learnt of our activities and as a result an interview and recording of the organ was broadcast on the Midland Region

programme on the morning after the service – a broadcast heard by friends as far away as Edinburgh and the Welsh coast. Two special demonstrations of the organ were also arranged and these were attended by a total of just over forty people.

Although the organ had been made usable, there was still room for improvement in the condition and adjustment of certain parts. During the following winter months there was little opportunity for using the organ so these parts were dismantled for further work to be done. Several of the wooden pipes had split at the joints and have been stripped down and remade. The key frame had warped and was no longer parallel to the surface of the barrel so that some keys were lifted more than others. By prolonged natural drying it has become nearly straight once more and we hope that sealing it with varnish will prevent it warping again. With this work and a few other minor repairs and adjustments completed the organ can again be put into playing order. This done, attention may once more be concentrated on repairs to the barrels, so that we can hear the hymns and chants as our predecessors heard them a hundred or more years ago.

Acknowledgements.

I would like to thank the Rev. M.T. Porteus, Vicar of West Haddon with Winwick, for permission to work on the Winwick Barrel-Organ and to publish this article.

I would also thank Member L.G.Langwill for his interest and encouragement, and for including photographs and revised notes on the Winwick organ in the second edition of his book.

CURIOSITIES
FOR
THE INGENIOUS:

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1822.

Automaton Chess Player.

THE construction of machines, capable of imitating even the mechanical actions of the human body, shew exquisite skill; but what shall we say of one, capable not only of imitating actions of this kind, but of acting as external circumstances require, as though it were endowed with life and reason? This, nevertheless, has been done. M. de Kempelen, a gentleman of Presburg, in Hungary, has constructed an Androïdes, capable of playing at chess! Every one, who is in the least acquainted with this game, must know, that it is so far from being mechanically performed, as to require a greater exertion of the judgment and rational faculties than is sufficient to accomplish matters of greater importance. An attempt, therefore, to make a wooden chess-player might, *à priori*, seem almost as ridiculous as to make a wooden preacher, or counsellor of state. That such a machine really was made, however, the public have had ocular demonstration. The inventor came over to Britain in 1783, and exhibited his automaton to public inspection for more than a year. He paid this country a second visit in 1819, when his invention excited as much wonder as ever, notwithstanding the vast progress made in the interim in mechanical science.

The room where it was exhibited, when seen by the writer of this article, had an inner apartment, within which appeared the figure of a Turk as large as life, dressed after the Turkish fashion, sitting behind a chest of three feet and a half in length, two feet in breadth, and two feet and a half in height, to which it was attached by the wooden seat on which it sat. The chest was placed upon four castors, and, together with the figure, might be easily moved to any part of the room. On the plain surface, formed by the top of the chest in the centre, was a raised immovable chess-board, of handsome dimensions, upon which the figure had its eyes fixed, its right arm and hand being extended on the chest, and its left arm somewhat raised, as if in the attitude of holding a Turkish pipe, which was originally placed in its hand.

The exhibitor begins by wheeling the chest to the entrance of the apartment within which it stands, and in front of the spectators. He then opens certain doors contrived in the chest, two in front and two in the back, at the same time pulling out a long shallow drawer at the bottom of the chest made to contain the chessmen, a cushion for the arm of the figure to rest upon, and some counters. Two lesser doors, and a green cloth screen contrived in the body of the figure and its lower parts, are likewise opened, and the Turkish robe which covers them is raised, so that the construction both of the figure and chest internally is displayed. In this state the automaton is moved round for the examination of the spectators, and to banish all suspicion from the most sceptical mind that any living subject is concealed within any part of it, the exhibitor introduces a lighted candle into the body of the chest and figure, by which the interior of each is in a great measure rendered transparent, and the most secret corner is shewn.

The chest is divided by a partition into two unequal chambers. That to the right of the figure is the narrowest, and occupies scarcely one-third of the body of the chest. It is filled with little wheels, levers, cylinders, and other machinery used in clock-work. That to the left contains a few wheels, some small barrels with springs, and two quarters of a circle placed horizontally. The body and lower parts of the figure contain certain tubes, which seem to be conductors to the machinery. After a sufficient time, during which each spectator may satisfy his scruples and his curiosity, the exhibitor recloses the door of the chest and figure, and the drawer at bottom, makes some arrangements in the body of the figure, winds up the works with a key inserted into a small opening on the side of the chest, places a cushion under the left arm of the figure, which now rests upon it, and invites any individual present to play a game of chess.

To avoid, however, the obstructions which might be occasioned by the inattention of stranger antagonists, in moving the pieces as required exactly to the centre of the squares, the adversary does not play at the same board with the automaton, but has a chess-board to himself, on which he copies the automaton's moves and makes his own; while a person, who attends at the automaton's board, copies with due precision for the automaton the adversary's moves.

The automaton makes choice of the white pieces, and always gives the first move. It plays with the left hand, the right arm and hand being constantly extended on the chest behind which it is seated. This slight incongruity proceeded from inadvertence in the inventor, who did not perceive his mistake till the machinery of the automaton was too far completed to admit of the mistake being rectified. At the commencement of a game, the automaton moves its head as if taking a view of the board; the same

motion occurs at the close of a game. In making a move it slowly raises its left arm from the cushion placed under it, and directs it towards the square of the piece to be moved. Its hand and fingers open on touching the piece which it takes up, and convey it to any proposed square. The arm then returns with a natural motion to the cushion, upon which it usually rests. In taking a piece, the automaton makes the same motions of the arm and hand to lay hold of the piece which it conveys from the board, and then returning to its own piece, it takes it up and places it on the vacant square. These motions are performed with perfect correctness, and the dexterity with which the arm acts, especially in the delicate operation of castling, seems to be the result of spontaneous feeling, bending at the shoulder, elbow, and knuckles, and cautiously avoiding to touch any other piece than that which is to be moved, nor ever making a false move.

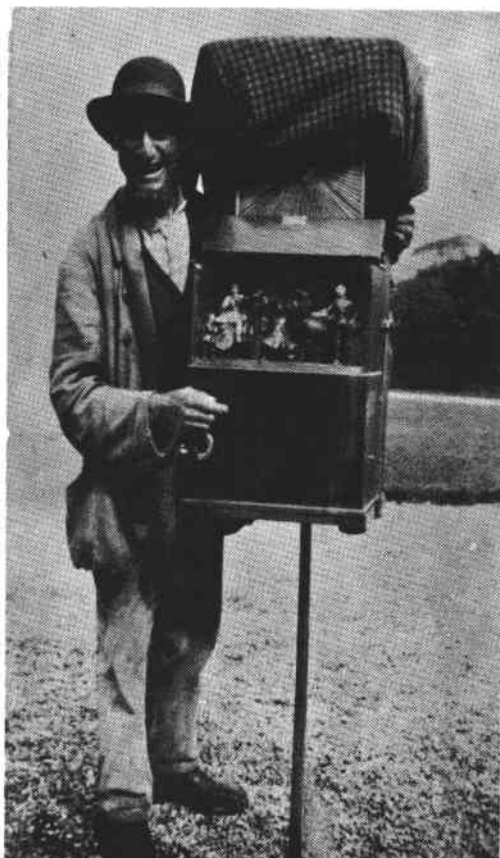
After a move made by its antagonist, the automaton remains for a few moments only inactive, as if meditating its next move, upon which the motions of the left arm and hand follow. On giving check to the king, it moves its head as a signal. When a false move is made by its antagonist, which frequently occurs through curiosity to observe in what manner the automaton will act (as, for instance, if a knight be made to move like a castle), the automaton taps impatiently on the chest with its right hand, replaces the knight on its former square, and not permitting its antagonist to recover his move, proceeds immediately to move one of its own pieces, thus appearing to punish him for his inattention. The little advantage in play which is hereby gained makes the automaton more of a match for its antagonist, and seems to have been contemplated by the inventor as an additional resource towards winning the game.

When a move is once made, no alteration in it can take place, and if a piece be touched it must be played somewhere. This rule is strictly observed by the automaton. If its antagonist hesitates to move for a considerable time, it taps smartly on the chest with the right hand, which is constantly extended upon it, as if testifying impatience at his delay.

During the time the automaton is in motion, a low sound of clock-work running down is heard, which ceases soon after its arm returns to the cushion, and then its antagonist may make his move. The works are wound up at intervals after ten or twelve moves, by the exhibitor, who is usually employed in walking up and down the apartment in which the automaton is shewn, approaching, however, the chest from time to time, especially on its right side. It is pretended, indeed, that the automaton cannot play unless M. de Kempelen or his substitute is near to direct its moves; but it is very certain that the whole mystery lies in the chest, and that there can be no connexion with the floor or any part of the room, as the inventor advertises his willingness to exhibit at private houses. A person, who could beat M. de Kempelen, was of course certain of conquering the automaton. It was made in 1769. His own modest account of it was "that it was a mere bagatelle, not without some merit as a piece of mechanism, but the effects of which depend chiefly on the happy means employed to produce illusion."

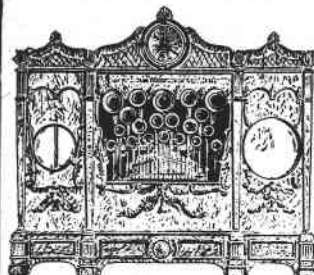
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## THE FRUITERY:

The Model of a neat rural Mansion, and contains the following Figures: First, the PORTER, which stands at the Gate, and on being addressed, rings a Bell, when the Door opens, the FRUITERESS comes out, and any Lady or Gentleman may call for whatever Fruit they please, and the Figure will return and bring the Kind required, which may be repeated, and the Fruit varied as often as the Company pleases; it will likewise receive Flowers, or any small Articles, carry them in, and produce them again as called for. As the Fruits are brought out they will be given in charge to a WATCH DOG, which sits in front of the House, and on their being taken away, will begin to bark, and continue to do so until they are returned.

—The next Figure belonging to this Piece is, the LITTLE CHIMNEY-SWEEPER, which will be seen coming from behind the House, will enter the Door, appear at the Top of the Chimney, and give the usual Cry of "Sweep!" several Times, descend the Chimney, and come out with its Bag full of Soot. — Third,

## THE LIQUOR MERCHANT and WATER SERVER.

These are on a Platform of about two Feet square, which (as the former Pieces) will be placed on a Table. The Liquor Merchant stands at a small Cask, from which it will draw every Kind of Spirits, Wine, &c. required. The Water Server stands at a Pump, and will fill a Tumbler with Water as often as called for. — Fourth,

## THE HIGHLAND ORACLE;

A Figure in the Highland Dress, stands on a Time-Piece, and gives the Hour and Minutes whenever asked, by striking its Sword on a Targe; it gives a rational Answer (by Motion) to any Question proposed; it calculates Sums in Arithmetic, and gives the Amount instantly of any Number of Pounds, Yards, &c. at any given Price, beats Time to Music, &c. &c.

The Table the different Pieces will be placed on contains an ORGAN, on which the Proprietor introduces a few Notes; also,

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From L. G. Langwill, 7 Dick Place, Edinburgh EH9 2JS.

In response to your article on Nicole Freres in the last issue, I would like to offer some further information gained from the examination of a considerable number of boxes by this maker. In particular I suggest that Nicole did not cease production of their own boxes around 1880, but continued manufacture until 1903.

Firstly if we look at Clark's list of serial numbers and dates, it appears that in the twenty years from 1843 to 1863 they produced about 15,000 boxes, yet in the following FORTY years, 1863 to 1903, they produced only 12,000 boxes. This includes an output of only two thousand boxes in the last five years 1888-1903.

These figures suggest that there must have been some sort of a re-organisation as early as the 1860-70 period. As the demand for boxes was still very good at this time, it is likely that Nicole started handling boxes of other makes then, to supplement their own output. This could explain the existence of some boxes bearing a genuine Nicole tune sheet, but with a movement quite definitely not of Nicole manufacture. It is also significant that even today, in spite of their greater age, just as many earlier pre-40,000 series boxes turn up as do later ones.

Looking at the construction of the movements, they are unquestionably "typically Nicole" up to at least the middle of the 46,000 series, or about 1882. A twelve air two-per-turn No.46684, apart from being leverwind, is basically the same as two-per-turns of thirty or more years earlier. After this date bigger changes do creep in. Movements of all makes tend to take on a coarser and more standardised appearance at this time, and Nicole was no exception.

I believe there may have been firms that the big manufacturers sub-contracted to, churning out nothing but governor assemblies, mainspring assemblies etc. S.B.I. certainly was doing a roaring trade in bedplates and comb bases for most makers.

A straightforward 8 air box No.47172, c.1885, with cast iron bedplate, has a completely anonymous design of governor, untypical of earlier Nicole products that could lead one to think that the movement was not of Nicole make. However, the musical arrangement is typical and the comb is stamped Nicole Freres in the same style of lettering, about 1/16" high, as has been used from the beginning. The name is stamped in larger capitals a little later. Another feature that runs right through their production from 1839 to 1903 is the practise of neatly stamping the serial number on the end of the cylinder at the extreme edge. Nicole were also the only make to consistently stamp the serial number on the bedplate during the cast iron period. It is presumably easier to put a stamp on brass than cast iron, therefore most other makers were content to put numbers on the cylinder bridges etc.

I have seen a forte piano box No. 52784 with the forte comb having the base teeth on the left and the piano comb having the base teeth on the right, as in all their earlier forte piano boxes. This

## LETTERS TO THE EDITOR

particular comb arrangement seems to be unique to Nicole. Though made right at the end, the musical quality of this instrument was superb.

My conclusion is that from the early 1880's Nicole ceased to manufacture all the component parts of their boxes, but in most cases used standardised parts obtained from specialist manufacturers, and were just responsible for the combs and cylinders. In fact Clark states that some of the cylinders were set up at the London premises after 1888.

I am keeping a record of the serial number, type, programme, and other details of each Nicole that I handle, and from this one can establish quite accurately when certain constructional changes took place.

- (1) It is well known that the change over from keywind to leverwind took place at the end of the 39,000 series, about 1863. However, this only applies to the standard production 4, 6, 8, 12 air types. Lever winding seems to have appeared at least five years earlier on the more elaborate types of movement. I have recorded two examples in the 34,000 series. No.34915 hidden drum and bell, No.34924 six overtone. Both have internal 3 lever control platform, date about 1857. Earlier boxes than these with leverwind seem to be converted keywind.
  - (2) The third instant stop control was dropped on standard models in the 42,000 series, about 1872, but appears on more elaborate boxes as late as the 46,000 series, ten years later. No 46566 forte piano four overtone is an example.
  - (3) The smooth polished brass bedplate gives away to a ribbed bedplate early in the 44,000 series, about 1880 Cast iron bedplates first appear in the late 46,000 series, but brass bedplates continue on some elaborate movements to the end. Interchangeable full orchestral No.52119 is an example.
  - (4) It seems that Nicole painted all their bedplates gold from the later 46,000 series whether made of cast iron or brass. I recently acquired No.46566 with painted bedplate and assumed it to be cast iron until removal of the combs showed that it was brass. I put this down to a later overhaul until a second box turned up with a similarly painted brass bedplate, No.52119 See (3).
- This seems to be more than a coincidence so perhaps members owning a late Nicole with painted bedplate should examine it to see if it is brass.
- (5) Nicole continued production of their familiar 10 and 12 air two-per-turn boxes into the

46,000 series, No.46,684 mentioned earlier being the latest example I have seen. Coarse comb 10 and 12 air boxes, with cylinders no longer than the two-per-turns, appear in the 42,000 series No.42,133 12 airs, 13" cylinder, normal diameter, is an example. Thus over a period they were offering boxes with long programmes in two qualities, a definite sign of the competition being felt from the makers of cheaper grade boxes. (Those I have heard are still quite good musically) Certainly from this time on Nicole did produce some slightly inferior boxes.

*D.B.Ellison of Filey, Yorkshire, writes:-*

I have recently unearthed a small musical box that I am rather curious about. It is a 'snuff box' fitted in a tin 'transit box', the bedplate is stamped 'Freres Nicole' and the comb is stamped 'F.Nicole'. With this information the date of manufacture should be about 1839/1840, but, the serial number is only 12638, which is much lower than the 17000 of the 1839 period.

Although the escapement is faulty, I have been able to identify the tune by turning the cylinder by hand, it is 'The Barber of Seville' overture, played in two revolutions of the cylinder without pause.

What I would like to know is, do I go by the serial number and assume that the box is earlier than 1839? Were boxes made by one or other of the Nicole brothers in the 1820/1830 period stamped 'Freres Nicole'?

I wonder whether you or any M.B.S. member have any observations as to the early serial number, considering that we are supposed to believe that Nicole Freres started numbering at about 17000 in the late 1830's.

## RED FACES . . .

Unfortunately, a large number of spelling mistakes crept into the last issue. Of more importance, however, was the omission of part of a paragraph in the article "Nicole Freres" by Arthur Ord-Hume on page 321. In the right-hand column, the second paragraph should read as follows:-

Several months ago, I was restoring two boxes, each stamped NICOLE FRERES and with serial numbers indicating the years of manufacture as being 1875 and 1885 respectively. There was an obvious and broad-banded difference apparent in almost every aspect of the two movements. As part of my examination, I scraped out a small amount of the cement from the inside of each cylinder. To my surprise, the earlier box produced a fine, dark brown-coloured cement and the later one a coarse, gritty red cement. This latter cement, when matched with that scraped from an acknowledged Paillard musical box of the same approximate date, appeared, without chemical analysis, to be similar in every way.

*Cyril de Vere Green writes:*

May I crave space in our Journal, please?

I should like to thank all those Members who contributed so generously to the magnificent clock and the book presented to me at the A.G.M. Both are things that I shall always treasure with great affection, and I assure everyone that they will recall so many happy memories to Bertha and myself.

I hope one day to write personally a letter of thanks to each and every one but at this moment time - and the difficulty in reading some of the signatures - are against me!

Thank you all again.

Member Hugh Monington Miles happened to have his camera handy when our President, Bob Burnett, took part in the B.B.C. Television programme, Going For A Song, transmitted at the end of March. Whether or not the piece he is looking at was "early Woolworth's" or a Pheonician *forte-piano* musical box is not recalled. . . . .



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## CORRECTION TO NAME

- 130 Mrs. P. Wolford, 23, Bury Drive, Goring-by-Sea, Worthing, Sussex

## NEXT SOCIETY MEETING

The next meeting of the Musical Box Society of Great Britain will take place on Saturday, November 21st, at the Great Western Royal Hotel, Paddington, London. Details of the programme will be circulated in due course by our Secretary.

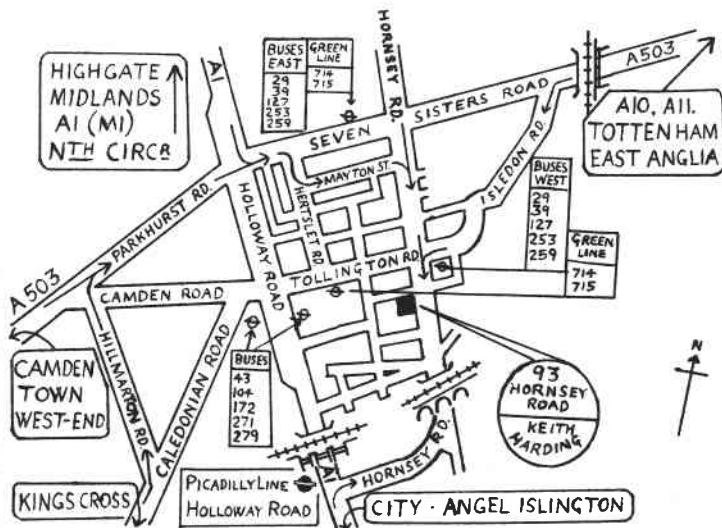
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