

The Phonographic Record

The Journal of The Vintage Phonograph Society of New Zealand

A Society formed for the preservation of Recorded Sound

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FOR YOUR INFORMATION

We are always sorry for mistakes, and we try not to make them. Last issue we missed out on the name of the stylus maker, Expert Pickups, P.O. Box No. 3 Ashted, Surrey AT21 2QD, ENGLAND. Also we have been asked by a member in New Zealand to make members aware of a New Vintage Magazine now being printed in England, which is called "Sounds Vintage"; for information write to 28 Chestwood Close, Billericay, Essex, England. Cost is £6.80 airmail.

We are pleased to announce that at long last we have stocks of the 8-pannelled petal horns as used on Red Gems and Firesiders — the price \$36 plus postage.

Also now available are small Gem Horns, needles and — coming up — the 14" witches Hat.

ILLUSTRATIONS

A good clear picture of Edison Dolls records and literature at the Fort Myers Museum in Florida. Edison winter home and museum Photographs taken and sent to us by Larry Schlick.

For illustration of New Zealand Edison Doll see page 22 Vol. 9. Issue 3.

Two photographs Walter Norris took of The Brehaut's Street Piano when he visited them last June.

The machine is about the size of a piano, has metal hammers and strings. This one is spring driven and plays well, and is the only one we have seen in a private collection in New Zealand. The Brehauts live in Timaru, and have a collection of music boxes and radios which is well worth seeing if in that part of New Zealand.

Two Victor pages from catalogues included for interest.

One shows the Victor C all nicely packed in a case, (for the trade mark it was leather) and the other, The Victor II 1903 model.

AN ENCYCLOPAEDIA OF BERLINER DISC PHONOGRAPHS VICTOR M.S.

1903

NO. 38

This is the same as No. 33 (see page 2 Vol. 13 issue 1 October 1977), except it has been fitted with what was then to be an improved tone arm, and much larger horn.

Horn measures 27 inches long with 13½ inch flare. Case made of oak.

EARLY CHRISTCHURCH ENTERTAINMENTS (Specially written for "The Press" by Ruby Alston)

Five months after the arrival of the First Four Ships, at Lyttelton, a move was begun for a public library. An effort was made to obtain the use of reading rooms at Lyttelton and Christchurch, which could be supplied with newspapers and periodicals from England. The Christchurch room was opened in the Land Office building on August 23, the subscription being one guinea.

When the reading room opened the suggestion was made that books which had been sent out from England for the College might be kept there, and the hope was expressed that later there would be a library or anthaen-eum in Christchurch.

In May, 1859, a meeting was held to decide the best means of establishing a Mechanics' Institute. Funds were raised by means of shares, and a half-acre of land purchased for £262 10s. Later an application was made to place control under the superintendent of the province. The reading room was to be free and the circulating library open free to the public, or, at the discretion of the management, at a charge of 20s a year.

By 1881 there were 6000 books in the library, and a good number of periodicals. The subscription was 15s a year.

Phonograph on View

In September, 1865, at the second Town Hall, a "Pantecnatheca" showing scenery of America, and a voyage across the Atlantic, was advertised in "The Press." This pantecnatheca, or diorama, also showed scenery of England and Scotland, 150 mammoth paintings being displayed each evening. Programmes were numbered, the holders of winning numbers gaining prizes. Among the prizes were gold watches, two silver tea services worth two guineas each, family sewing machines, and a number of smaller prizes. The admission price for reserved seats was 5s.

In June, 1879, one of Edison's phonographs was on exhibition at a sideshow in High Street, and attracted a good deal of attention. Admission was 1/-. It was noted that not merely were the words reproduced, but every trick of the speaker's voice.

At the back of the mouth-piece there was a metallic diaphragm capable of vibrating. At the back of the diaphragm a small steel pin was supported in a central position. When the disc vibrated the pin moved to and fro in lengths corresponding with the extent of the vibration. At the rear was a brass cylinder with a continuous spiral groove. Round the cylinder was tinfoil. The phonograph was advertised as able to speak, sing, laugh, whistle and play.

I am told that about a year later there was another talking machine at Cooper and Bailey's circus, held near what was then Scott's foundry.

In 1880 a "Sightascope" and "Musical Cabinet" were advertised at the Triangle in High Street.

Many of those who attended the Christchurch International Exhibition in 1906 enjoyed a session at West's pictures. The programme included "A Trip to the Moon." This picture was shown again many years later, when moon probes were becoming a possibility.

First Cinemas

In 1908 the Colosseum, which had previously been a skating rink, opened "Wide World" pictures. The building was a large one, and at times only part of the theatre was used. A few years later several other picture theatres had opened, Everybodys, now the Tivoli, the Queen's and the Liberty being among them.

At the Globe and the Queen's continuous pictures were shown, one session following immediately after the other. The first theatre catering for pictures alone was West's, the sloping floor enabling patrons in all seats to enjoy an equal view of the screen. Those were the days of the serial picture. The heroine would be left at the end of the session tied to the railway lines while a train came thundering towards her, or gagged and bound in a building with the ceiling descending on her. However desperate the situation, rescue always came at the start of the next week's instalment.

Most silent picture theatres had orchestras, and the incidental music, played by accomplished musicians, added greatly to the enjoyment of the audience. Many pictures of a high standard were shown, including "Quo Vadis," "The Birth of a Nation," and "The Sign of the Cross."

Though ice cream was advertised in Christchurch at an early date, it was not on sale at the theatres till many years later. The familiar call at the silent pictures was "Chocolates, Caramels, and Jubes, 3d and 6d a bag."

The Talkies

In April, 1929, in a picture called "Wings" there was some synchronised sound; but the first long talking picture was shown at the Liberty on June 10, 1929, the "Mother Knows Best." The following week a talkie was showing at the Theatre Royal.

Reports said that "in an age when apparent miracles have become commonplace the world seems to be adopting an attitude of being astonished at nothing. . . . The achievement was one of the most epoch making in expression of art. The voice has given the vital spark of life to what was formerly mere form. . . . There was a highly critical audience but the verdict was one the most ardent supporters of talkies could have wished for."

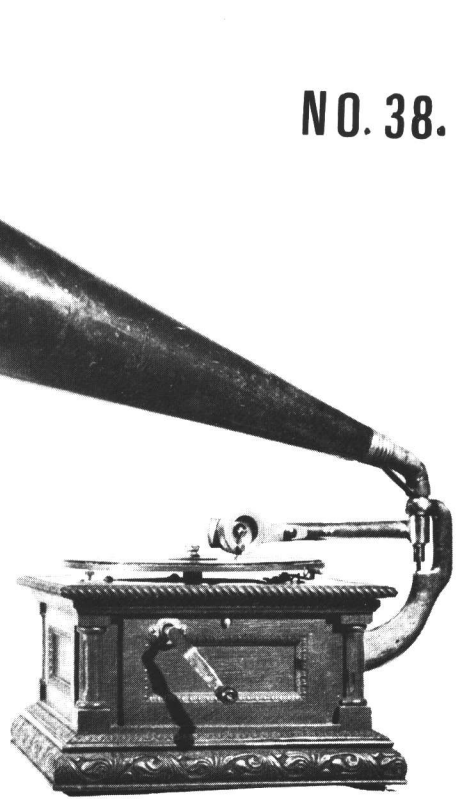
OLD RECORDS INFORMATION WANTED

by J. R. Murtagh, 509 Windsor Avenue, Hastings, New Zealand.

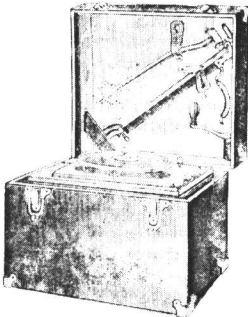
I have for many years been a theatre projectionist and besides old gramophones, phonographs, etc., have made a hobby of collecting old cinematographs, films and records associated with films. When "Talkies", as they were called, came to New Zealand in 1929, the sound was on large records which ran at 33-1/3 r.p.m. and played from the centre outwards — this saved wear on centre grooves. I have a number of these "Film Discs" — they had a numbered chart on the label 1 to 20 and a projectionist had to cross a number off each time the record was played. After 20 playings it was rejected. Two records were always sent with each reel of film. A number of popular records came out about this time.

NO. 38.

VICTOR M.S.



CANVAS COVERED
CARRYING CASE
FOR MACHINES



For Type "C" Victor Machine, made to
hold One Dozen Records
Price \$3.50

For Victor Monarch Machine, made to
hold One Dozen Records
Price \$5.00



COPY OF VICTOR II AS VIEWED
IN 1903 CATALOGUE

I am very interested in obtaining either the records or information about two of these records which were popular when "Talkies" came around 1929.

1. "My Brother Makes the Noises for the Talkies". I believe this was played by Jack Payne and B.B.C. Dance Orchestra.
2. This is a harder one as I can only hum or whistle the tune which I know well. I know a lot of the words, but not the title. Here are some of the words — but not perhaps in the right order:

In these modern days
We must change our ways
Especially in our talk
For everywhere they reach
They change the nation's speech.

We used to say yes yes
But now we're in a mess
It's enough to turn one grey
Things are topsy turvey since
the Talkies came to stay
For the Yanks say what about it
and the Cockney says O.K.

Down in sunny Sicily they say si si

That's all I know. If someone can give me all the words; supply the number and title of the records; supply the record or a tape of it, or the sheet music, I would be forever grateful.

Another later record was the song by Janet Gaynor in the picture "Sunny Side Up", "If I had a talking picture of you" (I would play it every time I felt blue); fortunately I have 2 versions of this record. One still hears it on the radio at times. Two other later records I'd like to know more about have titles something like this:

1. "Saturday night at the Movies"
2. "Sitting in the back row at the Movies".

TROUBLE SHOOTING OF PHONOGRAPH OR GRAMOPHONE

If you have a machine that you are having problems with, do some checking before removing from cabinet. Make sure brake is off, speed control set to run, turn the turntable clockwise to see if anything is holding it, check to see if motor is wound up, if not, wind carefully to see if there is tension on spring. If wound tight something in the motor is stopping it running. If crank turns a few turns and then slips back, the spring is likely broken at outer end; if no tension at all, crank turns freely, spring is likely broken at centre shaft. If crank turns but wants to spring back trouble is in the ratchet that holds spring wound up. The motor will have to be removed from case to locate the problem. If its obvious there is a broken spring it will have to be replaced as in servicing instructions. If the motor is wound tight try and locate the trouble, too tight a governor, a gear that has stripped jamming motor, or governor spring broken and governor ball jamming motor. Be very careful working on motor if spring is fully wound; removal of any gear may cause motor to spin causing multiple damage. Try to get spring unwound by turning gears in proper direction to unwind spring so it can be removed or damaged part removed and replaced.

If in examining the motor a gear is found to be stripped or a governor ball or spring is broken, such parts are available from phonograph parts dealers. Be sure to give accurate description of part you want or send the broken part for replacement.

Very little ever goes wrong with the reproducer or tone arm unless made of white metal which grows over the years and cracks or seizes up. Sometimes white metal parts can be repaired with crazy or super glue, but if badly damaged will have to be replaced. On Edison machines the stylus in the reproducer gets damaged by hard use, dropping it on mandrel or record etc. If this happens, stylus will have to be replaced. It's a good idea to replace diaphragm and gaskets at the same time. If the diaphragm in a 78 player gets damaged its an easy matter to replace it with new gaskets etc.

Edison machine are mostly driven by a narrow leather belt which over the years cracks and breaks or gets soaked in oil and stretches requiring replacement. Late model Edison Ambrola and Diamond disc machines are gear driven and do not have belts.

Another problem with some models of Edison machines is that they have a white metal bearing on the mandrel shaft that cracks and grows, seizing the machine up so tight it will not run. To correct this the old bearing must be driven out and a new pin bearing installed in its place.

Not to take anything away from Edison machines, his phonographs were geared very high having many more gears than other disc machines and were mostly belt driven requiring a much heavier spring than disc machines to drive the motor, and causing more damage if the spring breaks and spins stripping gears and throwing governor balls off. Due to size of springs in some of his larger machines such as Home, Triumph and diamond disc models, they are more expensive and scarce.

PROBLEMS RUN INTO IN SERVICING MACHINES

Machine runs slow. Check governor for free movement and that speed control working correctly and brake releasing properly. Adjustments may be needed. Governor springs may have been replaced with ones too thick not allowing them to flex enough to let machine run fast enough; solution, change springs for lighter or longer springs.

Half nut may be too tight on feed screw; loosen until free then tighten until half nut just touches feed screw.

Main spring may have been broken and shortened or too light a spring put in or spring may have lost its tension over the years.

If spring too light it may not drive the motor fast enough, if too short it will not drive machine through a record.

Spring box may be clogged with old hard grease not allowing spring to be wound up tight or unwind enough; solution clean and relubricate as in servicing instructions.

If Edison machine, the belt may be too loose or soaked in oil causing slipping; solution install new belt. Too tight a belt will also give trouble.

Governor has no play. Solution, loosen set screw holding balls and springs to shaft and move away from brake slightly or loosen bearing holding screw and give shaft some play.

On Edison the mandrel may be too tight; loosen collar on end of shaft and give more play, oil all bearings.

Problem, Machine cranks but crank will not hold, wants to unwind; ratchet gear or ratchet dog worn. Some machines have a spring wound around winding shaft, this sometimes breaks; solution replace ratchet gear or dog or ratchet spring. Never oil ratchet springs or they will slip and not hold.

Problem, Motor vibrates when being run. Solution; one of the governor springs is too long or one of the balls not of the same weight as others. All springs and weights must be identical in size, thickness and size.

Problem, Turn table wobbles or is loose on shaft. Solution; some turntables have set screw under table to attach table to shaft, make sure it is tight. If press fit, hole in table could be worn or shaft worn; wrap tape around shaft and press table on.

CAUTIONS, Some parts of phonographs and gramophones are made of white metal that grows over the years and cracks, such as reproducers, tone arms bearings, especially tone arms that turn to play Pathe records are easily broken if not regularly lubricated. Never use flame or soldering iron to repair white metal as it will melt. Use penetrating oil to free up and let soak and use hand pressure only to free up. If cracked not too badly some repairs can be made with crazy or super glue with caution in its use. If you can get parts free use emery cloth to smooth parts and lubricate well in putting them together again.

TOOLS REQUIRED TO DO YOUR OWN SERVICING

Assorted regular type screw drivers, regular type of pliers, also long nose cutting type and a pair of vice grips, a pointed and flat top punch, awl, a small oil can and light oil, fine and medium type of steel wool, one pound of light or multi purpose grease, lots of old rags, varsol, hand cleaner and roll of paper towels, a couple of files round and flat and a small hack saw.

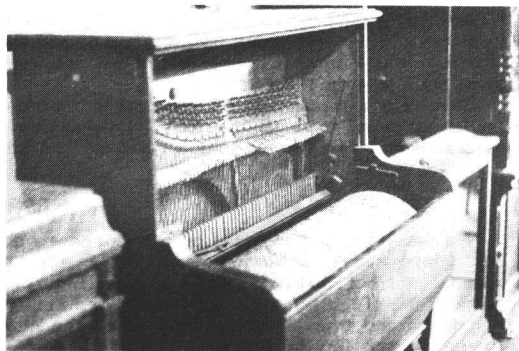
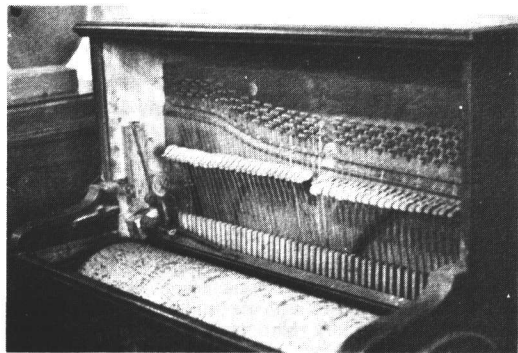
Remember a clean, well-adjusted and lubricated machine runs smoother, quieter and more evenly and will last longer giving years of enjoyment. Never overwind, but leave motor unwound with just a few turns on the crank to keep spring from becoming detached from stud on centre shaft.

REPRODUCERS

No article on phonographs or gramophones would be complete without a word or so on reproducers or sound box as they are sometimes called. Edison invented the reproducer to play his phonograph, getting his idea for it from his work with Alexander Graham Bell on the invention of the telephone. Inside the mouth piece of the old telephone a diaphragm was installed which transferred the vibration of the human voice to the diaphragm and from it to a magnet where the vibration was carried to wires and reproduced in the ear piece of the listener. Edison used the same principle in his phonograph reproducer. After many trials with all types of materials, he settled on three types of diaphragms, thin brass, cork on oiled paper and mica. The brass one was used for many years in his standard type of reproducers such as H-C and K, cork on oiled paper was used later on in his reproducers for Ambrola and diamond disc machines. Mica has become a common replacement material for both Edison and disc type machines. In all cases the diaphragm was sandwiched between fibre or rubber gaskets and held down by a threaded ring. Edison used as stylus sapphires or chip diamonds as stylus to



EDISON DOLLS IN THE FORT MYERS MUSEUM



TWO VIEWS OF BREHAUTS STREET PIANO

run in the grooves of his records, attached by a short cord or wire to the diaphragm to transfer the vibration from the grooves of the record to the diaphragm, picked up by various sizes of horns to amplify the sound. The larger the horn the louder the sound up to a point of around 26 inches in diameter.

The manufacturers of disc machines mostly used mica as a diaphragm connected to a steel needle by a small arm attached in the centre of the diaphragm by a small screw or shellac; the courser the needle the louder the sound the thinner the needle the softer the sound. A medium needle was also available, this being the only way to control the sound other than the size of the horn. Later both Edison and the disc manufacturers used a cotton ball or a slide which could be adjusted to control the volume.

Reproducers give very little trouble unless misused or roughly handled. With Edison most problems arose from damaged stylus broken off or worn down by contact with mandrel or turntable, breaking off stylus. The only solution is to replace the stylus. Some of Edison's reproducers were made of white metal as were most of those made by the disc manufacturers. These cracked and swelled up, some beyond repair and had to be replaced. Some of the disc type reproducers through abuse get damaged by the needle holder being pulled from the centre of the diaphragm, requiring a new diaphragm and gaskets to be installed. Diaphragms and gaskets are available from parts suppliers mostly in the United States. Steel needles are not being produced as they were due to small demand, consequently they are getting scarce and prices have risen drastically, but are still available from some dealers in parts for phonographs and gramophones. Quality is not as good as it was originally.

This has been necessarily a short article on the servicing of the phonograph and gramophone and the solutions to some of the problems in repairing them. The writer hopes that this will be of some guidance to those who collect machines and have need for servicing or repairing them, it was not meant to be a complete manual, but to be of some assistance to collectors.

Note: We presume varsol is a type of cleaning fluid used in Canada. We would use petrol.

SERVICING OF THE PHONOGRAPH OR GRAMOPHONE by Basil Ingrouille

Before we get into the servicing of phonographs or gramophones, I would like to clear up the difference between a phonograph and a gramophone. Thos. Edison who invented the phonograph in 1877 named his invention in his patents; the Phonograph. Emil Berliner who invented and patented his machine called it a Gramophone. Edison's machine played a cylinder record, Berliner's a flat disc record. Many machines were to follow both the Edison and the Berliner machines. They bore names such as Graphophone, Grafonola, Zonophone etc. Most of the manufacturers of this era have long since ceased operation, although many of their machines are still to be found only Victor who bought out Berliner and Columbia are still in the phonograph manufacturing business. Edison ceased operation in the 1930's, after changing from his favourite cylinder models to a disc machine that played a thick record which he called a diamond disc machine as it played with a diamond in the reproducer which was a great improvement over his previous cylinder reproducer. He made this machine in several sizes, mostly upright models with only one table model.

If you have a phonograph or a gramophone that is still in good operating condition after 50 or more years of service, then you are very fortunate. Likely all your machine requires is a little servicing, but as the machine is still running well, proper servicing has not been neglected. Any piece of machinery requires periodic servicing, if it is to continue giving good service for many more years to come. Likely all the machine requires is a good cleaning, oiling and adjusting. Before dismantling your machine to service it, examine it carefully to see how it operates. Make a diagram of it if you are going to disassemble it. Next let the motor completely run down so there is no tension on the spring or springs, as some machines have two or even three springs.

Next remove the motor from its case on its mounting board, before removing any of the spring boxes. Mark each spring box case either with a number, one to three, or left, centre and right, or make a diagram of their position, for re-assembling in their proper order. Next remove the spring boxes from the machine by loosening the set screws that hold the centre shaft in place through all spring boxes. The boxes can now be easily removed, keep a small container nearby to put all small screws etc in for safe keeping. Next remove the set screws or wire clip that is holding the spring box closed. Do one at a time, examine for broken or split springs. If found necessary to remove a spring from its box take note of the direction in which the spring is wound into the box, and scribe on the outside of the box an arrow showing direction it is wound so it can be replaced in the same direction. If the spring is not too dirty it can be left in its box and soaked in a container with about two inches of varsol to remove any old grease. After box and spring are clean turn upside down on a rag and let drain and

dry. If the spring is caked with hard grease, or broken or cracked, then the spring will have to be removed from its box. Great care must be taken in doing this as the spring is under tension and very greasy. You may wish to use an old pair of unlined leather gloves for this job. Start from centre and pry centre of spring from around the centre shaft to unhook the end from its centre stud on the shaft. Then using a long nosed pair of pliers draw the centre of the spring out so you can grasp it and gradually work it around and out of box. When completely out disconnect from stud on outside of box, soak spring and box in a large tin of varsol to clean. It may be necessary to use steel wool to remove or loosen old dried grease from spring and box. When thoroughly dry, re-install in spring box by hooking the outside of the spring on the box stud and winding spring into the box

in the direction that is marked on the outside. This is not any easy job; in some cases the spring is very thick and up to two inches wide and from 15 to 25 feet in length. I suggest you keep a pair of vice grips near at hand in case the spring gets away from you, so you can clamp the vice grips on the spring and side of the box so you can rest and dry your hands and come back to it later. When the spring is completely wound into box, the centre must be closed to the size of the centre shaft. Use a pair of long nosed pliers to squeeze the centre to right size for shaft, make sure hole in centre of spring is engaged with stud on centre shaft, then with your fingers work in to the folds of the spring three teaspoons of some grease; multi-purpose grease that they use in service stations is right for this job. Now you are ready to close up this box and repeat with second and third spring if there are more than one in the machine. After all springs have been lubricated or any broken ones replaced, put aside and attend to the rest of the motor. All old dried grease should be wiped off with a rag soaked in varsol and all gears cleaned using an old tooth brush or typewriter brush and thoroughly dry. Here again using your finger work some fresh grease into the teeth of all gears and wipe off excess on sides of gears. Use a little light oil on all bearings at end of shafts, especially governor shafts and center spindle and worm gear, check all screws on ends of governor springs to see that they are all tight and add a drop of oil on felts on brake and speed control that rubs on brake shoe of governor. Make sure governor has a slight bit of play in it or the machine will not run properly. Now you are ready to re-install all spring boxes and re-insert centre shaft and lock in place with screws at each end of shaft. Replace top plate of motor making sure all ends of shafts are in their proper holes and bolt down plate evenly. Now insert the crank and gently crank machine in a clockwise direction, making sure that there is some tension on crank so to be sure that all springs are properly engaged on their studs. After some tension has been taken up on the springs, set the brake or tighten the speed control so that governor does not turn and continue cranking motor for several more turns, then loosen brake and speed control. The governor should now turn and motor run. Do not let it run too fast or governor balls will fly off. Do not overwind motor. If running well set brake or speed control to off, check all set screws to see that all are tight and reinstall in case, replace turntable and the machine should be ready to play.

You may wish to install new felt on the turntable and remove rust from all metal parts. Felt is available at all phonograph parts suppliers, rust can be taken off with rust remover or steel wool and varsol. If cabinet is in good condition, not badly scratched or chipped, wipe down with 4-0000 steel wool and a mixture of varsol and boiled linseed oil working with the grain, then dry with soft cloth. If case is badly scratched or chipped you may wish to refinish it. Rub it down with sand paper and finish with steel wool, stain with light or dark oak or mahogany stain and finish with varnish stain of same colour. Should the case be really bad you may wish to strip down to bare wood and start fresh with stain and varnish as above. If you do not wish to do the stripping down yourself there are many places that do stripping for a nominal charge, but do not send a case that is laminated to one of the strip and dip shops as it will loosen the lamination. Send to a shop that specializes in hand stripping, and finish as before, making sure case is smooth and dry

EXTRACT FROM A LETTER FROM MR SCOTT, 40 BRAMFIELD ROAD, LONDON S.W.11.

... "There have been a couple of sales at Sothebys and Christies since your letter to me of October 12th, for which I thank you, and some of the more interesting prices are as follows;

A Horn Zonophone with Exhibition soundbox and green Morning Glory horn	£ 230
A Dulcelto catalogue 1904 and 1905/6 supplement	" 40
A Style No. 3 Gramophone (with elementary spring motor) — only in fair order.	" 600
An E.M.G. Cabinet gramophone	" 300
A Columbine A B gramophone lacking 5" mandrel.	" 360
A Fine Red Gem (Model D) an exceptional price — these machines normally make around £ 250/£ 300	£ 700
An Edison Standard Model B, Model H. repro. 2 and 4 min. gearing, Fireside horn	" 210
A 2 Minute coin operated phonograph — probably Continental in origin	" 360
An H.M.V. Model 510, "Cunier" diaphragm, original electric motor	" 550
Caruso 3 Pathe/AICC cylinders 84003/84004/84006	" 400
A collection of needle tins (17) mainly of 'dog and gramophone' themes	" 60
A good Edison Fireside, and reproducer	" 400
A gramophone shaped as a miniature grand piano	" 220
An early tinfoil phonograph, maker unknown, hand driven	£ 1150
An improved Berliner Gramophone, lacking horn, reproducer and carrier arm	" 380
A fine G & T Senior Monarch gramophone with oak horn. A very high price, but excellent condition.	" 700

Many more smaller machines and accessories etc. are sold at these auctions, but they are too numerous to list. If any of your members want more information, please give them my address, and I shall be happy to help them. I can also advise re buying and selling at the auctions if they wish". . . .