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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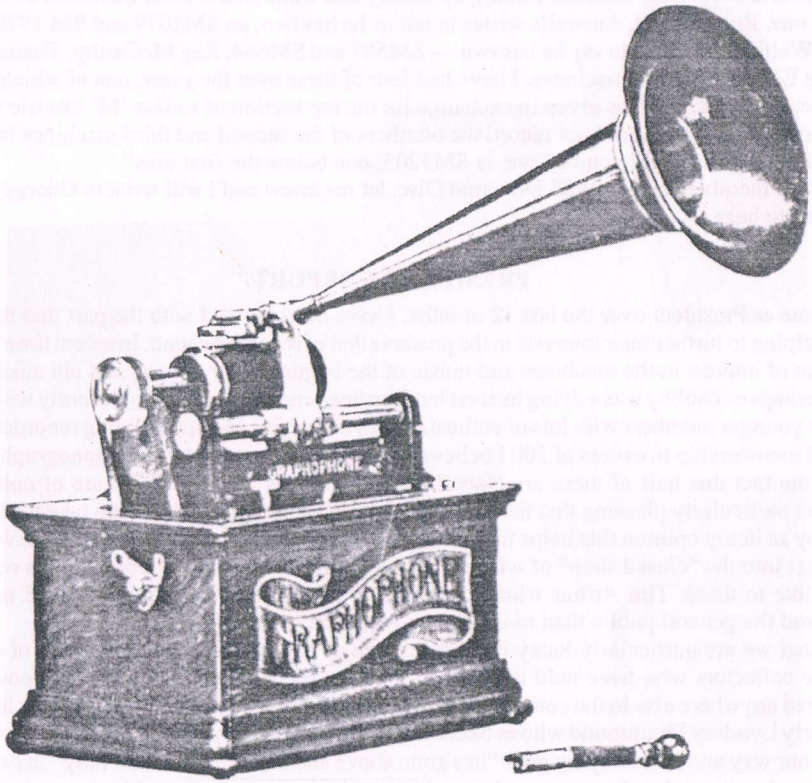
Merry Christmas To All



The Columbia Model AT Graphophone

FOR YOUR INFORMATION

Well, our Society has had another annual meeting with little to report.

This was our thirtieth annual meeting and another milestone passed.

President, Vice-President and Executive all remain the same, with the same Patron and Secretary.

We are pleased to report on the interest taken by overseas members in our Society and we are grateful for the letters, material and photographs they send us.

SECRETARY'S NOTES

A reminder to members who have not renewed their subscription for the 1995/6 year — if you have a red spot on the front of your magazine, then subs are now outstanding as per account sent 1 September 1995. Prompt payment would be appreciated and ensure continuation of magazines.

Packing of orders has now ceased for the year to give our packer, Peter Mattison, a well deserved rest. Orders can still be sent in, and packing will resume in February 1996.

We have good stocks of parts, including folders for Society magazine, books (Item Nos. 83 and 84 on your sales list) and 'The Edison Cylinder Phonograph Companion' by George Frow — price $50.00N.Z. plus p. & p. New in are HMV/Victor elbows for Monarchs etc. at $36.00N.Z. Stocks are limited of Frow's book also the elbows, so be in a.s.a.p.

In the last issue of the magazine, local member David Peterson mentioned in his 'Market Report' an Edison A-35 Diamond Disc machine turning up locally and wondered if other members on this side of the world own one. Ron Corbett, Australia writes to tell us he has two, an SM1079 and SM 1970, whilst Leon Clements, Wellington writes to say he has two — SM587 and SM664. Reg McCarthy, Thames also writes: "Regarding Edison A85 disc machines. I have had four of these over the years, one of which was SM1206 my first one. This machine was given in exchange for the top section of a class 'M' electric which I found in a coal bin in Whangarei. I did not record the numbers of the second and third machines but the number of the one I have now would you believe, is SM1205, one below the first one."

If any other members own an A85 Diamond Disc, let me know and I will write to George Frow; he will be interested to hear.

PRESIDENT'S REPORT

In my time as President over the last 12 months, I have been pleased with the part that the Society has played in helping to further their interests in the preservation of recorded sound. In recent time I have noticed a resurgence of interest in the machines and music of the bygone era by young and old alike. At one time I thought perhaps our hobby was a dying interest but I am heartened by the fact that recently we have acquired a lot of new younger members with lots of enthusiasm for collecting and appreciating recorded sound. With a continued membership in excess of 200 I believe we still are the second largest phonograph society in the world and the fact that half of these are New Zealanders augers well for the future of collecting in this country; it is particularly pleasing that locally at least we have antique dealers who take a genuine interest in our hobby as in my opinion this helps facilitate collecting for newer members who otherwise would not be able to get into the "closed shop" of what is fast becoming an expensive hobby. In this respect I would especially like to thank Tim Arthur who has generated far more interest in the last 12 months among collectors and the general public than most dealers would have in 12 years.

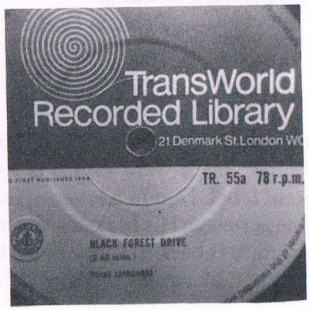
I think that we are particularly lucky in Christchurch to have a small cohesive body of decicated and enthusiastic collectors who have held the society together for 30 years, a feat I doubt could have been accomplished anywhere else in the country. My thanks must go out to the following poeple in the last year, in particularly Lyndsey Drummond who as Secretary has fielded every problem and a few compliments that have come our way and as the saying goes "has gone above and beyond the call of duty" in carrying out her job, thank you Lyndsey. Another person who could never be forgotten in Peter Mattison who I think I could safely say and most people would not realise probably doesn't let a day go past without pursusing some

The McKean Sisters

Record Labels

Tanza

Tempo



Transworld Recorded Library

Trutone

From
D. L. Taylor

society business, be it packing parts and parcels or banking foreign exchange and other business transactions; Peter's contribution often goes unsung and I would like to say Peter that the work you do is very much appreciated and I don't know how we'd manage without you. We must also not forget the contribution that Walter has made for many years in writing the magazine virtually single handedly. Next time you receive a magazine stop and think how much effort and time has gone into it's production, how many nights Walter has had bits of paper over the floor to ensure it's compilation by the due date, thank you again Walter. I must not forget to thank Dick Hills, Dick is our face to the the public without Dick the public of Christchurch and further afield who visit Ferrymead would not know the society even existed. Again Dick is an indispensable part of the team. Thanks to Bernie for his organizational abilities in regard to functions and his meeting write-ups. Finally thanks must go to Tony Airs for his invaluable help with Phonograph spares. Tony seemed to step into the breach as it were at just the right moment when we were looking for somebody with the enthusiasm to take over the manufacture of our parts. I guess each and every society member could be and should be thanked for their contribution however large and small over the previous 12 months. The fact remains that without each and every one of us doing a little bit however small, the society could not exist. So next time Walter wants an article or Lyndsey wants a question answered or Peter wants some parts packed or anybody needs a hand with anything in the Society I know that there will always be somebody there to lend a hand or give some advice so that the Society can continue for another 30 years.

REPORT ON THE AUGUST MEETING AT THE HOME OF TONY AIRS, AUGUST 13, 1995

Despite the very cold and wet conditions prevailing at the time there was a good attendance at this meeting. Several new faces were evident and this was a good sign for the future.

In the informal discussion which inevitably follows the formal part of the meeting, the current prices being asked today in New Zealand for machines and cylinders of all kinds when compared to those sought in the 1960's were examined at length.

Others reported that the prices of machines in Australia, Melbourne especially, tend to be lower for phonographs in many cases than gramophones. This was attributed to the more readily available flat records compared to the prices being sought for cylinders. Prices for 78s are now tending to firm universally. Perhaps for the collectors, or squirrel who has a couple of thousand 78s in the attic, who couldn't bear to consign them to the dump ten years ago, the sun will shine again.

On the 4th of September a social gathering of members of the Society met at the home of Lyndsey and Bill Drummond to view a video tape of the extensive collection of memorabilia belonging to Larry Schlick of the U.S.A. Photographs of items from it are regularly published in the 'Phonographic Record'. The tape was made by Georgena and Folly Hamill, Invercargill, who recently visited with Larry at his four storey house, if one may include the cellar and the attic. From the amount of items he has amassed I think a fifth story is inevitable!

A very acceptable supper provided by Lyndsey topped off a most pleasant evening.

Reports by B. A. Bisphan

RECORD LABELS

In correspondence with Don Taylor we have gained and given information on labels we both have come across. Don enquired for information on Herald and Minstrel records which were supplied by Bell in England with a label stuck over the top, with either Minstrel or Herald label. Don in a letter to me tells of a Jumbo label with a Vitaphone label stuck on top of it. He has also come across an His Masters Voice English red label DA series except for the fact that the dog and gramophone picture is back to front. In his last letter to the Secretary he relates a little on the English Bell accordions label we had illustrated on page 50 last issue;

Ron Corbett and wife Ronda

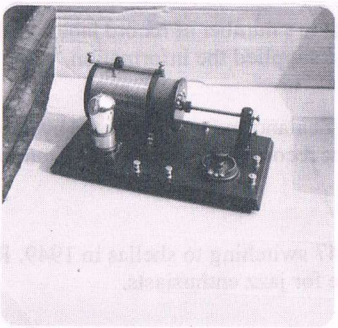
Ron and Walter

Hilda, Ronda, Lyndsey

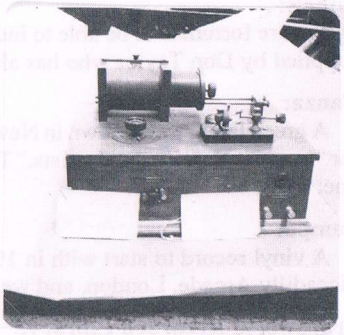
English Stamp

Early Radio's

Photos W. Hoffman, U.S.A.



Omnigraph Portable



Adams-Morgan Receiver

he says obviously late Vintage and English. The Standard label was blue on off-white, while for Scottish they had a tartan label. Catalogue series started at AB0001 and CD0001.

One of their titles was "Holiday for Strings" which put the recording date at 1943 or later (and which sounds very strange on accordions). One reference book gives a possible issue date for the AB series as 1946.

Notes from Don Taylor

ILLUSTRATIONS

COLUMBIA

1903 **No. 25** **MODEL AT**

This model is the same as the early model AT except was redesigned with a $2^1/_2$" high aluminium trunion to allow the reproducer to play in horizontal position.

It is found in either the redesigned (1905) plain case or the earlier AT pillared case.

The lid is made higher to allow for the $2^1/_2$" higher trunion. This model in its day cost $20.00 U.S.

The McKean Sisters:

Photo supplied by Joff Marshall. These two have performed with the Slim Dusty Show. Joy, left, is Slim Dusty's wife, and Heather on the right his sister-in-law. They sing and yodel together and are very much appreciated by those who enjoy country music having become well known in Australia and the two video tapes available are well worth while.

Ron Corbett and his wife Rhonda:

They visited us in New Zealand during late summer. Ron is a farmer in Victoria, Australia and has a fine collection of phonographs. Ron and Rhonda toured in the South and North Island visiting a number of members.

Radios:

These radios belong to W. Hoffman, U.S.A. **The Omnigraph Portable Radio Receiver** inside cabinet. Mr Hoffman says it is the only one known to have survived. **Omnigraph Portable** out of cabinet. **Adams-Morgan Receiver,** really an early crystal set, 1912 model.

English Stamp:

Stamp of Marconi's first wireless message 1895, therefore 100 years ago this year.

Labels:

We are fortunate to be able to include a number of record labels with this issue. Mostly these have been supplied by Don Taylor who has also supplied the information.

Tanza:

A green label, well known in New Zealand and was marketed by the Columbus radio shops. Tanza stood for "to assist New Zealand artists." The records are numbered and some collectors have tried to collect every one.

Tempo:

A vinyl record to start with in 1947 switching to shellas in 1949. Ron Davis produced records from a Piccadilly Arcade, London, and were for jazz enthusiasts.

Transworld Recorded Library:

Pressed by C. H. Rumble Ltd., Surrey, England for Television Ltd. Was active in 1964. Of high quality with a silent surface, coloured green and white, speed '78.

Trutone:

Unknown label, pressed in South Africa.

Faultless Concert Record:
A colourful label, red and brown 10" by John M. Smith and Company, Chicago, Illinois, U.S.A. This illustration supplied by Larry Schlick.

T.P.L. Production:
Unusual looking label, eye on one side and ear on the other, book in the middle. Red with white background, 78 speed. Manufactured in England in 1950 by Nicholas Sandor. A new idea, see the pictures, read the book and hear the record.

Piccadilly:
Owned by L. Schlick, is a 10" English label. Don Taylor in his book says they were good value, costing only one shilling and sixpence to start with, dropping to one shilling and one penny. Came on the market in 1928 and were produced by a Metropote Gramophone Company.

Missionary Gramophone:
Photographs of a round metal machine which Leon Clements of Melody Farm Music Museum, Pukerua Bay, Wellington, has sent us. The case appears to be made of metal.

Stroh Violin:
Pictures came from Reg McCarthy who saved it from being dumped when an old house was cleared out. We have had photographs of these before. Collectors find them and wonder what they were made for. Invented by a German by the name of Augustus Stroh. He took out a patent in 1901 and it appears they were used for making violin records before the advent of electrical recordings.

Nirona:
Camilla enjoying listening to a 'Nirona' machine. These were made by German makers Nier and Ehmer. They were sold in France for 120 francs in 1929, the price being reduced to 99 francs in 1932. Ole Bachmann Photo.

'Our Finest Hour' Cassettes:
Pictures supplied by B. A. Blanchard of Timaru of cassettes which are still available in England, along with Songs that Won the War and Evergreen Melodies. Bryan says 'Our Finest Hour' has two parts to it and is very good.

The Victorian Electrophone:
As far as we know no system like this was ever used in New Zealand and find the article very interesting. It was broadcasting 23 years before the B.B.C. was born.

All Wound Up:
All Wound Up and in the mood (see article)

OUR FINEST HOUR

To mark the 50th anniversary of D-Day, "This England" presents a unique souvenir of wartime memories as a tribute to the magnificent spirit of the British people.

"Our finest hour" is a 60-minute cassette tape designed to restore our national pride by reflecting on the wonderful spirit that made Britain the envy of the civilised world during the Second World War. It includes short snippets from the stirring speeches of Britain's greatest leader, Winston Churchill, plus historic broadcasts by Neville Chamberlain, Princess Elizabeth (age 14), General Eisenhower, and even Hitler and "Lord Haw Haw". It also includes a collection of songs that won the war. Twenty-one hits of the period, from the outbreak of the war in 1939 to the D-Day landings of June 1944.

Track Listing for "Our Finest Hour":

Side One:

1. "Sieg Heil" — German troops on the march; Hitler speaks.

2. The Prime Minister Neville Chamberlain broadcasts to the nation: "This country is at war with Germany" (September 3rd, 1939).
3. Air Raid Siren: "Alert".
4. Gracie Fields: "Wish Me Luck as You Wave Me Goodbye".
5. Flanagan & Allen: "We're Gonna Hang Out the Washing on the Siegfried Line".
6. Lord Haw Haw: "Germany Calling . . .".
7. Army choir: "Roll Out the Barrel".
8. Vera Lynn: "We'll Meet Again".
9. Winston Churchill: ". . . This was their finest hour" (June 1940).
10. Noel Coward: "Don't Let's Be Beastly to the Germans".
11. Chick Henderson: "Till the Lights of London Shine Again".
12. Vera Lynn: "Goodnight Children Everywhere".
13. Princess Elizabeth broadcasts to evacuee children (October 1940).
14. Carroll Gibbons: "My Sister and I".
15. Al Bowlly: "Somewhere in France".
16. Deanna Durbin: "The Rose of No-Man's Land".

Side Two:

1. Churchill: ". . . Never in the field of human conflict . . ." (August 1940).
2. Vera Lynn: "When the Lights Go On Again".
3. George Formby: "Bless 'Em All".
4. Charlie Kunz: "I'll Get By".
5. Elsie Carlisle: "A Nightingale Sang in Berkeley Square".
6. The Nazi Song.
7. Churchill: "Give us the tools and we'll finish the job" (February 1941).
8. Anne Shelton: "Kiss the Boys Goodbye".
9. Marlene Dietrich: "Lilli Marlene".
10. Gen. Eisenhower: Announcing Allied landings in France (June 1944).
11. Glenn Miller: American Patrol.
12. John Snaggs: BBC report of D-Day landings (June 1944).
13. Vera Lynn: "White Cliffs of Dover".
14. Air Raid Siren: "All Clear".
15. Donald Peers: "When They Sound the Last All-Clear".
16. Church Bells.
17. Massed Choir: "There'll Always Be An England".

This England
Sent in by Bryan and Marian Blanchard, Timaru.

THE VICTORIAN 'ELECTROPHONE'
It was 'broadcasting' 23 years before the BBC was born

The invention of the wireless has been hailed as a great revolution in entertainment history; yet in Victorian England — nearly a quarter of a century before the first BBC broadcasts — people were listening to live concerts in their own homes with the aid of a device called the "Electrophone". This ingenious instrument was basically a telephone with several receivers, through which subscribers in London and Bournemouth, wearing headsets, could "listen in" to concerts, music hall events or church services.

Subscribers had the choice of two tariffs — either £10 a year, which entitled them to the loan of four receivers on a stand and a selection of concerts; or £5, for which they got two receivers to be hung on a wall and no choice of music. The stand came equipped with a transmitter, enabling listeners to converse with the operator, while the £5 subscribers had to use their telephone to ask for a connection.

The service began in 1899 and was operated by the National Telephone Company (now British Telecom) and the Electrophone Company. The Post Office bought out the Electrophone Company when it took over the telephone system in 1911 and by 1923 there were over 2,000 subscribers to the Electro-

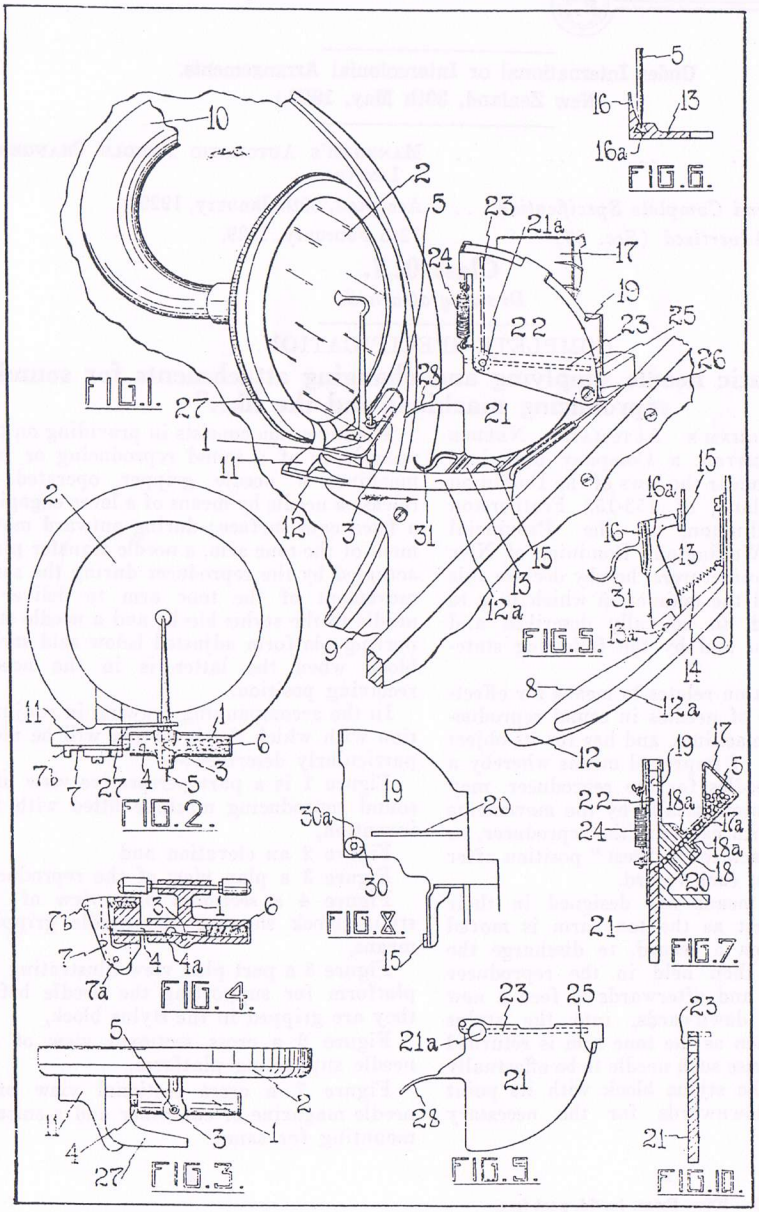
(Continued on Page 9)

AUTOMATIC NEEDLE SUPPLYING AND CHANGING ATTACHMENT

Walter Norris

It appears Jack Hopkins came across an application for a patent device to change needles on a gramophone automatically. What is even more interesting is that this is a New Zealand invention and patented 12 February 1929. He has found other needle changers in Australia but has never come across one of these. The needles were contained in a little tin which is attached to the sound box.

Jack Hopkins would like to know if these were ever manufactured in New Zealand and has anybody ever seen or heard of them. It was through the kindness of Lex Finch that we obtained what follows:—



B

No. 13,314/28.

APPLICATION DATED

15th May, 1928.

Under International or Intercolonial Arrangements.
(New Zealand, 30th May, 1927.)

Applicant .. .. MANGHAM'S AUTOMATIC NEEDLE CHANGER LIMITED.

Application and Complete Specification .. Accepted, 30th January, 1929.

Acceptance Advertised (Sec. 50) .. 12th February, 1929.

Class 01.7.

Drawing attached.

COMPLETE SPECIFICATION.

"Automatic needle supplying and changing attachments for sound reproducing machines and the like."

We, MANGHAM'S AUTOMATIC NEEDLE CHANGER LIMITED, a Company organized and existing under the laws of the Dominion of New Zealand, of 153-155 Featherston Street, Wellington, in the Provincial District of Wellington, Dominion of New Zealand, Manufacturers, hereby declare this invention and the manner in which it is to be performed, to be fully described and ascertained in and by the following statement:—

This invention relates to means for effecting a change of needles in sound reproducing and like machines, and has for its object the provision of improved means whereby a change of needles for the reproducer, may be effected automatically by the movements of the tone arm carrying the reproducer, as it is moved back to its "rest" position after the playing of each record.

The said means are designed in their operation, first as the tone arm is moved outwards from a record, to discharge the used needle then held in the reproducer stylus block, and afterwards to feed a new needle point downwards, into the stylus block, and then as the tone arm is returned inwards to cause such needle to be effectually gripped in the stylus block with its point projecting downwards for the necessary distance.

The invention consists in providing on the reproducer of a sound reproducing or like machine, a needle gripper operated to release a needle by means of a lever engaging a fixed cam surface; during outward movement of the tone arm, a needle transfer plate actuated by the reproducer during the same movement of the tone arm to deliver a needle to the stylus block; and a needle supporting platform adjusted below said stylus block when the latter is in the needle receiving position.

In the accompanying drawing in conjunction with which the invention will be more particularly described:—

Figure 1 is a part perspective view of a sound reproducing machine fitted with the invention,

Figure 2 an elevation and

Figure 3 a plan view of the reproducer,

Figure 4 a sectional plan view of the stylus block showing the needle gripping means,

Figure 5 a part plan view illustrating the platform for supporting the needle before they are gripped in the stylus block,

Figure 6 a cross sectional view of the needle supporting platform,

Figure 7 a cross sectional view of a needle magazine or container and a suitable mounting for same,

296.—26/2/29.—100.—Price, 1s. 6d. post free.

Figure 8 an elevation of the face plate through which the needles are fed from the magazine or container to the transfer plate which delivers them to the stylus block, and Figures 9 and 10 an elevation and cross sectional view respectively of a pivoted needle transfer plate.

The stylus block 1 of the reproducer 2 is constructed with a needle receiving passage 3 extending down right through it so that it extends in a more or less radial line from the reproducer centre. The passage 3 is crossed at right angles by a pin or plunger slidable in the block 1, and which is afterwards referred to as the locking pin 4. This locking pin is formed on one of its sides with a notch 4a having a transversely inclined or wedging surface so designed as to provide that when the locking pin 4 is moved to bring the notch 4a fully into coincidence with the needle passage 3, a needle 5 may pass freely down through the latter and when the pin 4 is moved along in one direction the passage 3 is more or less closed. A needle 5 in the passage 3 will be thus gripped by the wedging nature of the notch 4a. A spring 6 acts on the locking pin 4 to normally move it in the direction to cause the notch 4a to engage and grip a needle 5 inserted in the passage 3.

For moving this locking pin 4 against the action of its spring 6 a lever 7 (Figures 2 and 4) is pivoted at 7a to the stylus block 1 and is formed to engage in a cross slot in the outer end of the pin 4, and also with a nose 7 adapted to engage a cam surface 8 on a guide 12 (Figures 1 and 5) fixed upon the sound reproducing machine bed 9 in such a position, that as the tone arm 10 is swung outwards to its "at rest" position, the nose 7 of the lever 7 will engage said cam surface 8 and turn said lever 7 on its pivot 7a to move the locking pin 4 to cause the large end of its notch 4a to come into coincidence with the needle passage 3 of the stylus block 1. This engagement and movement is designed to take place just before the tone arm 10 reaches the limit of its outward swing in order that the needle 5 that may then be in the block 1 will be freed and will drop clear before the tone arm 10 finishes its outward movement. The locking pin 4 will then be held in this position by the contact of the lever 7 with the cam surface 8 to permit of another needle passing into the needle passage 3 while the tone arm 10 remains in the position of "rest" at the limit of its outward movement with the lug 11 of the reproducer resting on the grade 12. When the tone arm 10 is moved inwards again the lever 7 is freed of the cam surface 8, and the spring 6 acting on the locking pin 4 immediately causes it to wedge or grip the needle 5 that has been fed into the passage 3 by means to be hereinafter described.

To hold the needle 5 fed into the stylus block 1 from dropping right through the needle passage 3, and also to position it therein to provide for the correct projection of its point, a platform plate 13 (Figures 1 and 5) is pivoted at 13a on the sound reproducing machine bed 9 to swing in a horizontal plane. This plate 13 is so governed by a tension spring 14 and a stop 15 that the outer portion thereof is normally located immediately beneath the reproducer stylus block 1 when the tone arm 10 is at the "rest" position or at the limit of its outward swing, and with the needle passage 3 open. A needle 5 falling through the said passage 3 will therefore strike the said plate 13 which will hold it from dropping right through and being properly disposed in its level will prevent the needle from projecting more than the required distance below the stylus block 1. This outer portion of the plate 13 is made with a vertical flange or projection 16 at one edge, and the needle 5 as the tone arm 10 is swung inwards, engages said flange or projection 16 and causes the plate 13 to turn on its pivot 13a with the tone arm 10, until the latter has moved far enough to cause the lever 7 to clear the cam surface 8 and the new needle to be gripped. Further movement of the needle 5 towards the centre of the machine brushes the plate 13 aside, after which the latter is returned to against the stop 15 by the spring 14 ready for use on the next occasion, the stylus block 1 is in the needle receiving position, the return movement being checked by the arm 31 engaging and finally clearing the needle. The releasing of a used needle on the outward swing of the tone arm 10 is timed to take place before the reproducer 2 reaches this plate 13 so that the latter will not interfere with the dropping clear of the used needle.

In order that the dropping of the needles 5 through the passage 3 in the stylus block

1 on to the plate 13 will not injure the points of said needles, the plate 13 is provided with a dove-tailed groove 16a into which the needle points project as shown in Figure 6.

In Figure 1 of the drawing, the tone arm 10 is not shown at the extreme limit of its outward movement, but for the sake of clearness of illustration it is shown with the lug 11 just resting on the end of the guide 12, and in order to bring the tone arm 10 completely to the "at rest" position it must be moved by sliding the lug 11 along the guide 12 until the limit of the outward swing of said tone arm 10 is reached, and in order to ensure the latter being kept in the one horizontal plane during the latter portion of the outward movement, and the first portion of the inward movement of the tone arm, so that the lever 7 operating the locking pin 4 will be maintained in contact with the cam surface 8, an upper guide 12a is placed on the guide 12, the lug 11 being slid or passed between said guides 12 and 12a.

For the purpose of supplying needles one at a time to the reproducer 2 as required, a container or magazine 17 is provided, the latter having the needles 5 placed horizontally therein with their points directed inwards, said container or magazine 17 tapering downwards to a passage 17a of such a width that the needles 5 can only pass down same in a single row.

The container or magazine 17 is detachable from the machine and is intended to be manufactured and loaded with needles 5 in a factory for sale as a complete unit, said container or magazine having flanges 18a which slide into a groove 18 at the back of a plate 19 mounted on the bed 9 of the machine, so that the lower end of the passage 17a in the container or magazine 17 will register with the upper end of an inclined slot 20 the lower end of which opens horizontally through said plate 19.

A further plate 21 pivoted at 21a to the face plate 19 is mounted between the latter and a cover plate 22 and contains in its face which contacts with the face plate 19 a recess 23 large enough to receive and accommodate a single needle 5 said plate 21 under the action of a tension spring 24 attached thereto and to the cover plate 22, being normally maintained in the position indicated in Figure 1 with the recess 23 horizontal and registering with the lower end of the inclined slot 20 opening through the plate 19, a lug 25 on the plate 21 by engaging a stop 26 between the plates 19 and 22, limiting movement of the plate 19 under the action of the spring 24 and causing the registration of the recess 23 with the slot 20.

With the recess 23 in a horizontal position as described it receives a needle 5 from the container or magazine 17 by way of the slot 20, the point of the needle being directed toward the pivot 21a and as the tone arm 10 is moved by sliding the lug 11 outwards or in the direction indicated by the arrow (Figure 1) between the guides 12 and 12a, an arm 27 (Figures 1, 2 and 3) extending from the reproducer 2, strikes an arm 28 (Figures 1 and 9) projecting from the plate 21 below its pivot 21a, whereby said plate 21 is caused to swing upwards, through a quarter circle and change the position of the recess 23 from horizontal to vertical (see dotted positions Figure 1).

Simultaneously with the bringing of the recess 23 to the vertical position the tone arm 10 comes to its "at rest" position with the needle passage 3 in the stylus block 1 directly below the now vertical recess 23, and over the plate 13, and also directly below a vertical passage 30a in the boss 30 on the plate 19 on which boss 30 the plate 21 pivots, so that the needle in said recess 23, transferred from the horizontal to the vertical will drop point downwards through the passages 30a and 3 on to the plate 13, and when the tone arm 10 is returned inwards over the machine, said needle will be locked or gripped in the block 1 and will clear the plate 13 as before described.

The stop 15 against which the plate 13 is held by the spring 14 extends from the plate 19 (Figure 8) and as the plate 13 is returned by said spring 14 with a quick movement it strikes the stop 15 a sharp blow which serves to ensure the passage of needles down the slot 20 to the recess 23.

Having now fully described and ascertained our said invention and the manner in which it is to be performed, we declare that what we claim is:—

1. Means for changing the needles of sound reproducing and like machines, comprising a needle gripper on the stylus block thereof, operated to release a needle, by means of a lever engaging a fixed cam

surface; a plate actuated by the reproducer adapted to receive a needle and to transfer same to the stylus block; and a needle supporting platform below said block, when the latter is in a needle receiving position.

2. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle gripper comprises a spring actuated locking member slidable in the stylus block.

3. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle gripper comprises a spring actuated locking pin containing a notch crossing the needle passage in the stylus block.

4. Means for changing the needles of sound reproducing and like machines according to Claim 1, wherein the needle gripper comprises a spring actuated locking pin containing a notch crossing the needle passage in the stylus block, and wherein the lever is pivoted on the reproducer and engages in the end of said pin.

5. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the cam surface is formed on a guide fixed on the bed of the machine and positioned so that the the needle gripper is opened during the outward movement of the tone arm but prior to the finish of said movement.

6. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle supporting platform is pivoted and is normally at rest below the stylus block, when the tone arm is at the limit of its outward movement.

7. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle supporting platform travels with the needle it supports, when the tone arm is moved inwards, and until the needle is gripped in the stylus block.

8. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle supporting platform is spring actuated to normally occupy a position to support a needle when the latter is fed into the stylus block, said platform having a flange for engagement by the needle and containing a groove for the point of the latter.

9. Means for changing the needles of sound reproducing and like machines, wherein a needle transferring plate transfers a needle from a horizontal to a vertical position during the outward movement of the tone arm, by the engagement of an arm on the reproducer with an arm on said plate.

10. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle transferring plate is pivoted and contains a recess which receives a needle from a source of supply, while in the horizontal position, said plate being returned under the action of a spring.

11. Means for changing the needles of sound reproducing and like machines, according to Claim 1, wherein the needle transferring plate is pivoted between a plate containing a slot connected with a detachable needle magazine, and a cover plate, said pivoted plate containing a recess adapted to receive a needle, from said slot and to transfer same to the stylus block when the latter is over the needle supporting platform and the needle gripper is open.

12. In means for changing the needles of sound reproducing and like machines, a detachable needle magazine containing a passage for delivering needles singly to a needle delivery orifice.

13. In means for changing the needles of sound reproducing and like machines, a detachable needle magazine loaded with needles and containing a passage for the delivery of needles singly and sideways through a needle delivery slot; and a transfer plate for receiving said needles and delivering same to a stylus block.

14. In means for changing the needles of sound reproducing and like machines a detachable needle magazine as in Claim 13, formed with flanges, slidable in a groove on a plate through which the needles are delivered.

Dated this 15th day of May, A.D. 1928.

CECIL W. LE PLASTRIER,
Phillips, Ormonde, Le Plastrier & Kelson,
Agents for Applicants.

Witness—Jack Nance.

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by H. J. GREEN, Government Printer, Canberra.

phone service, participating in "hearings" every evening, on Saturday afternoon, Sunday morning church services and Sunday afternoon concerts.

However, with the advent of the wireless in 1922 and the soaring popularity of broadcasting in the following years, the Electrophone service began to decline. Theatre managers, fearful of the wireless, refused to allow their shows to be transmitted at all, even by telephone, and subscriber fees no longer covered the installation and recovery of Electrophone equipment. By December 1924 the Electrophone Company realised it could not keep up with the competition from the BBC, and the Postmaster General refused to grant it another licence for the London area after June, 1925. The Bournemouth service continued until 1937, but the Electrophone inevitably went the way of all innovations, overtaken and forgotten by the onward march of modern technology.

The Electrophone equipment can still be seen, accompanied by the recorded voices of Dame Nellie Melba and the great Caruso, at the Telecom Technology Showcase, 135 Queen Victoria Street, London.

Beverley Fisher, This England, Winter 1989
Sent in by Bryan and Marian Blanchard, Timaru.

ALL WOUND UP AND IN THE MOOD

Wickham and Kimber's musical treasure shop in the heart of Hove (Sussex) was a mecca for countless record enthusiasts during the big band bonanza of the post-war years. Single-mindedly, the butcher, the baker and the clerk, flocked to the inviting, disc-packed shelves, where His Master's Voice called the tune alongside the versatile range of Brunswick and Decca.

"Don't tell me it's on ration!", would be a typical cry from a disappointed connoisseur, whose five shillings was doubtless burning a record-size hole in his pocket! Such was the frustration in an austere era when the gramophone, wound to capacity, strained to spin the turntable into a dream world at 78 revolutions per minute.

And what revolutions they were. Bing Crosby, the old groaner, warming the cockles of legions of hearts, and the flawless Ink Spots transporting their fans into realms of clover with the evergreen *Whispering Grass.* And the inimitable Glenn Miller orchestrating happiness as he put Britain well and truly *In the Mood.*

Thus the radio and cinema channelled the hit songs of the day into the eager retail arms of Wickham and Kimber, whose window display was a magnet to one and all, drawing them faster than bees at the prospect of a "jam-session". For without the whimsical distractions of television, the gramophone reigned supreme, with a favourite record played repeatedly and relished until the needle knew its giddy way round blindfold.

"Swop you a Sinatra for a Crosby." That was a fair exchange rate between collectors, with the deal clinched perhaps with a Deanna Durbin thrown in for good measure. The records, as worthy and substantial as the valued coins which paid for them, were hot property as they passed from one possessive hand to another.

Wickham and Kimber's shop is there no longer, and the old gramophone is a fossil of a bygone age. Gone are the 78s, as the 33⅓s and the cassettes flaunt their modern jackets near the pullovers and socks in the big stores. Boy George is a far cry from George Formby, and the Andrews Sisters have stepped down over the years to the likes of The Three Degrees. But the memory lingers on — foraging in Hove, heading for home with a heart-rending Vera Lynn or the latest Tommy Dorsey, then winding up the trusty old machine, and the smug satisfaction as the needle made its presence felt in the grooviest way imaginable on the favourite record of my choice.

F. R. Harris, This England, Summer 1991
Sent in by Bryan Blanchard, Timaru

KELLY'S GOLDEN MOMENT

Timaru Girls High School seventh former Kelly Blanchard is this year's winner of the New Zealand Gold Guitar Award.

Kelly, 17, took the title from 32 other finalists in Gore on Sunday night, with the song *"Three Chain Road.* She also won the female vocal section.

Kelly Blanchard . . . she never imagined she would win the top award. Now she has to make a decision on future competition.

And although in tears, and lost for words on the night, last night the win had sunk in, and Kelly was rapt.

She had entered the junior and intermediate sections of the Gold Guitar for the last four or five years. This was her second year competing in the senior section, and she never imagined she would get this far so soon.

"I thought I would still be entering that sort of thing when I was 30 — some people just keep coming back, year after year.

"It's a bit scary actually, it means you have to go on to a more professional career. I had planned on entering other awards around the country, but once you've won Gore, you get frowned on if you enter any of the other amateur awards.

"It's like I'm so young, and all my friends are still entering the other awards. It's the end of an era, but then it's opening another door. I have to decide what I want to do with the win."

Some of the decisions are already taken care of. Kelly's prize includes a trip to Tamworth, Australia, and $2000 of recording time at Radio New Zealand studios in Wellington.

She will go to Wellington in the next few months to do a four-track demo tape. She will send that in her applicaitons to enter talent quests in Tamworth.

The trip to Tamworth will include guest spots on two music shows, and she will also apply to enter Star Maker, Tamworth's big talent quest. Only 20 performers from Australia and New Zealand are selected for the show.

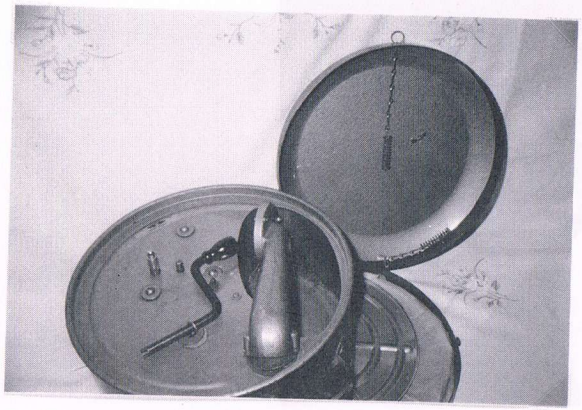
Timaru Herald, 6th June 1995
Sent in by Bryan Blanchard, Timaru

"THE CINEMA TODAY"

by D. A. Spencer and H. D. Waley

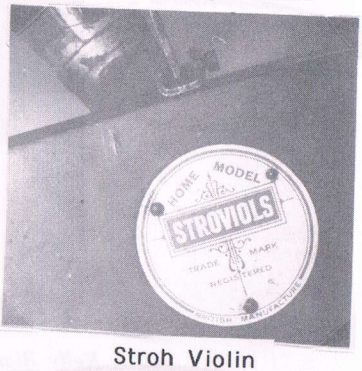
SOUND RECORDING (Part 3)

It must be remembered that whereas the picture itself is enlarged from film to screen approximately 300 times, the sound is amplified several million times from the intial impulses of the photo-electric cell to the point where it is projected from the loud speakers; and a flaw on the film which on the picture area results merely in a momentary and perhaps unnoticeable spot of negligible size, may produce a deafening crash if it occurs on the sound-record. However carefully the film is processed it is difficult to avoid tiny particles of foreign matter, minute scratches which accumulate dirt, etc, from appearing

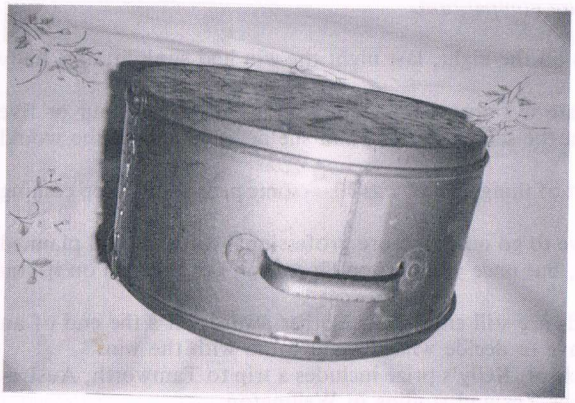


Missionary Gramophone

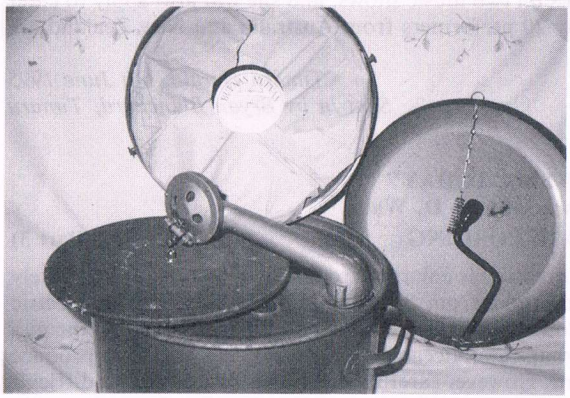
Reg McCarthy Photos



Stroh Violin



Leon Clements Photographs



Camilla Nirona

Photo by Ole Bachmann

on the transparent area of the track. As every foreign particle passes in front of the exploring beam it cuts down, for a fraction of a second, the intensity of the light, and it is the presence of a considerable number of such interruptions which results in the so-called 'ground-noise'. Ground-noise is most noticeable during quiet passages, and the principle upon which systems of 'noiseless' recording depned is to lower the average transmission of the film with decreases in the sound-level. In variable-density systems the sound-track is fogged to a predetermined extent during silent passages, which in variable-width recording the area of the clear portion of the track is reduced to the minimum necessary to accommodate the requisite modulation. In the former case this is accomplished by rectifying a portion of the incoming signal and using it to operate a biasing winding on the light-valve ribbons, so that when so sound-current flows they remain closed; the negative resulting is clear and the positive is, therefore, opaque. In variable-area systems this subsidiary current is either used to operate a slow-moving shutter in such a way that the clear portion of the track is reduced to a width that will just accommodate the modulation Fig. 19(c), or else, in those systems where the moving beam of light in the recorder is triangular

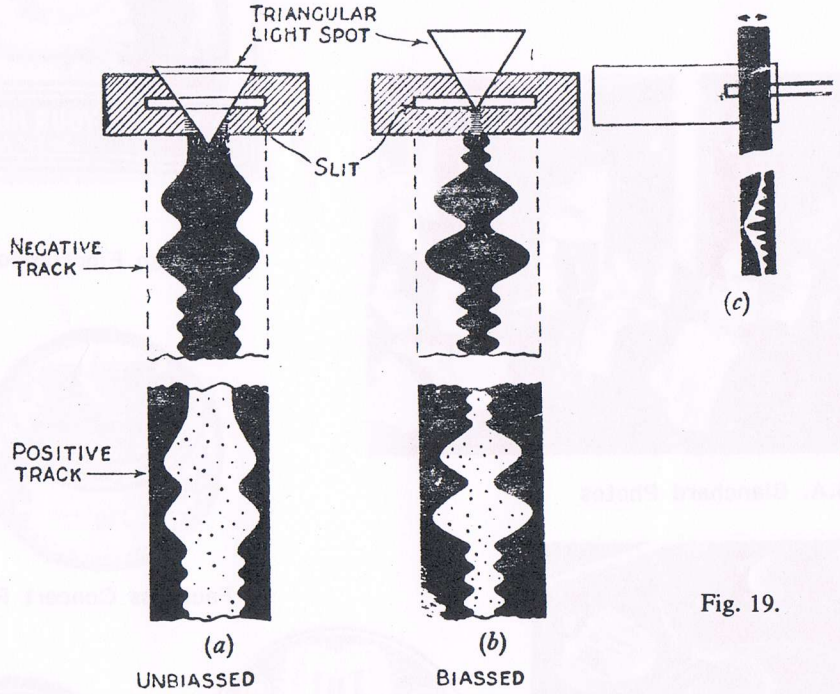
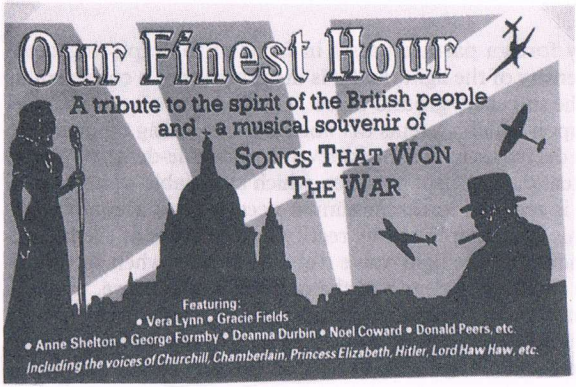


Fig. 19.

in section, by flowing through a biasing winding on the galvanometer, it ensures that during silent passages only the apex of the triangle is exposing the film. In 'noiseless' recording, therefore, the ribbons of the light valve in the variable-density systems and the spot of light reflected from the galvanometer mirror in variable-area systems have two separate motions: the first is due to the sound-currents only, and the second is a superimposed movement which follows the envelope of these sound-currents, and is caused by currents corresponding to the average value of the sound-currents at any instant. In the positive print it is the relative width of the transparent area between the two halves of the track which determines the pitch of the sound, and by this technique the width of this gap is automatically controlled so that at any moment it is only just wide enough to record the relative variations in the shape of the record, and only foreign particles in this minimum area will now result in ground-noise.



Victorian Electrophone

B.A. Blanchard Photos

Faultless Concert Record

All wound up

TPL Production

Piccadilly

Photos courtesy Larry Schlick

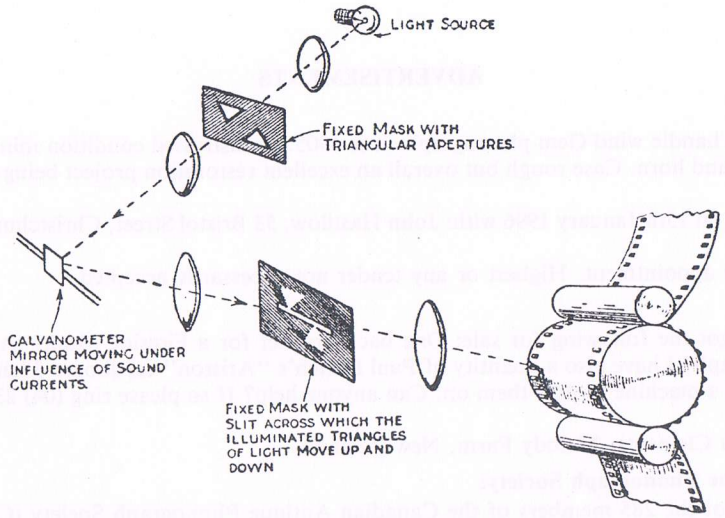


FIG. 20.

Push-pull Recording (Fig.20):

In this system ground-noise can, in theory at all events, be reduced to the absolute minimum, because only the area actually occupied by the sound-record is transparent. The single triangular mask illustrated in Fig. 19 is replaced by one with two triangular openings. An optical image of the two opposing triangles is reflected from the galvanometer mirror on to the slit. The apices of the triangular light-spots are just clear of the slit when the galvanometer mirror is at rest. When modulation of the electric current causes the galvanometer mirror to move, the triangular light-beams vibrate in a vertical plane so that only one light-spot is moving over the slit at any instant. As a result the track which is produced consists of two separate records, one of which carries the positive portion of the impressed wave, and the other, alongside it, the negative portion. In reproduction the positive and negative impulses are electrically recombined to re-create the original sound. As yet, however, push-pull is only used for recording, since theatres are not equipped to play a push-pull sound-track. As, however, on the positive film, the only clear track is that representing the actual modulation, there is a definite gain in recording the sound as a push-pull track and then recording from this a positive track of the conventional type, since other distortions in addition to ground-noise, which are encountered in conventional recording, are balanced out by this system, and it becomes possible to amplify the reproduced sound considerably beyond the limits that would otherwise be tolerable.

Monitoring and Synchronizing:

The sound-track is recorded on the film within an area which is 1/10th of an inch wide, and it is important to confine the movement of the edge of the exposing light within this limit. Accordingly, a portion of the light on its way from the light valve or galvanometer mirror to the recording slit passes through a glass plate mounted at 45 degrees to the beam. The plate reflects a portion of the beam on to a white screen which is at such a distance that the vibrating image is greatly enlarged. On this screen predetermined marks show the recording engineer the limits within which the movement of the light-spot must be kept if the sound-track is not be overloaded.

On the positive film as projected the sound-record is printed alongside the picture areas, but it is not of course, necessary that this track should have been recorded on the original picture negative. In the studio, where portability of the equipment is a minor consideration, it is customary to employ two films, one to receive the picture and the other to record the sound, the sound-recording apparatus being quite distinct from the camera. In the reproducing apparatus the film passes successively through the picture projector and the mechanism for sound reproduction. Accordingly, in order that the sound and sight should synchronize, the records are arranged on the film in such relative positions that the two records simultaneously reach the mechanisms for reproducing them.

(to be continued)

ADVERTISEMENTS

For Sale:

Edison Black handle wind Gem phonograph circa 1905. In distressed condition minus reproducer, carrying handle and horn. Case rough but overall an excellent restoration project being sold on behalf of contact.

Tenders close on 15th January 1996 with: John Hastilow, 53 Bristol Street, Christchurch. Telephone (03) 355-8722.

Inspection by appointment. Highest or any tender not necessarily accepted.

Wanted:

Has anyone got the following for sale: One back bracket for a Fireside Model 'A' combination Edison phonograph? I have also a quantity of Paul Ehrich's "Ariston" cardboard 33cm 24 note discs that I would like a machine to play them on. Can anyone help? If so please ring (04) 239-9307 collect anytime.

Thanks. Leon Clements, Melody Farm, New Zealand.

Canadian Antique Phonograph Society:

The interests of the 285 members of the Canadian Antique Phonograph Society (CAPS), now in its 25th year, range across all aspects of sound recording and its history: phonographs and gramophones, all types of sound recordings of historic importance, and related memorabilia. There is particular emphasis placed on the history of recorded sound in Canada.

Membership is $25.00 U.S. per year and includes a 6-issue subscription to CAPS newsletter, Antique Phonograph News.

For more information please contact: Canadian Antique Phonograph Society, Bill Pratt, Secretary/Treasurer, 122 Major Street, Toronto, Ontario, M5S 2L2 Canada.

Wanted to Buy:

Automatic brake and turntable suitable for HMV 157 or 163 (the small re-entrant). Also, Gramophone Co. triple spring motor with screw on spindle cap.

Please reply to: A. Hartt, P.O. Box 418, Mudgeeraba, Queensland, 4213, Australia.

Telephone (07) 55 302-386 anytime.

For Sale or Trade:

Small items for collectors, e.g.

1. U.S.A. Edison Light Bulb Stamp.
2. U.S.A. Edison's Bust Stamp.
3. **Common** U.S.A. Postcard of Edison Home Fort Myers, Florida.
4. First Day of Issue Covers 1877-1977.

My prices range from $1.00 U.S. upwards. Also — would like to find small collectables, such as stamps relating to Edison etc, First Day of Issue Covers, postcards, as well as 'copies' or newspaper articles of Edison, phonographs and the like.

Please reply: Mrs Joan Lehman, 1970 Temple School Road, Dover, PA 17315, United States of America.

Wanted:

Miniature phonographs and gramophones from all countries. Also postcards showing phonographs.

Please reply: Steve Ramm, 420 Fitzwater Street, Philadelphia P.A. 19147, USA.

Phonograph Society of South Australia:

An organisation of enthusiasts interested in the collection and preservation of the artifacts of sound recording and reproduction; and research into their evolution. The PSSA Newsletter, containing interesting articles and news, appears eleven times a year. Relevant books and reprints are also sold. Annual dues (Australian currency): N.Z. $28.00; Canada and U.S.A. $32.00; U.K. and elsewhere $34.00. Write to: The Secretary, PSSA, P.O. Box 235, Kent Town, S.A., 5071, Australia.