



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 grateful to all those readers who take the time and trouble to write to us here in New Zealand. We try to give a fair and balanced coverage, with a little about the New Zealand scene for the benefit of New Zealand members, especially for those out of town. We have fifty members in the Christchurch area, but only a fraction of these manage to find the time and interest to turn out to meetings. This unfortunately puts a load on the few.

For this reason, we are now endeavouring to have our display at Ferrymead, glassed in, in such a way as to enable the display to be open each and every day, while still being manned on Sunday when personnel are available to demonstrate to the public.

FOR SALE:

For Sale:— Aeolian Grand Orchestrelle Player Organ complete with quantity of rolls. Needs usual restoration which should be quite easy. Oak cabinet.

Also For Sale:— Edison Diamond disc console model complete and going.

Apply:— Alan Brehaut, 22A Cain Street, Timaru, New Zealand.

WANTED:

Wanted for very early Graphophone Columbia, type A, a horn; this machine came complete except for this; all enquiries address to:—

Mark Dawson, 51 Flanders Avenue, Onekawa, Napier, New Zealand.

CYLINDER MAKING BLUE AMBEROL

Over the years these have proved to be by far the best record of this type, they are silent and free from scratch.

The clear illustration is one taken by Larry Schlick of records, cylinder moulds etc, in his collection.

In May, 1913, The Edison Phonograph Monthly, announced the Blue Amberol for sale and the following information was circulated to all dealers:—

MR EDISON ANNOUNCES THE NEW BLUE AMBEROL RECORD THE NEW SEASON OPENS WITH A BANG

At different times during our history we have made announcements of improvements or additions to our line which have meant much to the Trade. Each one of these innovations has boosted sales materially and helped to wear out the cash register.

But never before since the beginning of things have we been so loaded to the muzzle with prize packages. The Blue Amberol Records, the Diamond Reproducer, two new types of concealed horn cylinder machines, the disc line and the new Home Recording campaign, based on the four-minute outfit, make an array of new features that are fairly hung with pounds, shillings and pence for every Dealer.

We have been a long time perfecting the Blue Amberol Record, but the Trade will realise that the delay was for the best when the perfection of the new Record has been proven. Our tardiness has been due entirely to Mr Edison's insistence that no Blue Amberol Record should leave the factory until not only its tonal beauty but its lasting qualities had been ascertained beyond any conceivable question. The tests to which the new Records have been subjected are as severe, if not more severe, than the experiments which any Records have ever been forced to withstand. Mr Edison assumed a temporary attitude of hostility toward the Blue Amberol and proceeded in every way that his ingenuity could devise to find weaknesses in the new Record, but he has now declared that it cannot be improved upon.

Now that it is thoroughly tried and proven it will unquestionably mark a new era in Edison business, as it will awaken interest in thousands of cylinder Phonographs all over the country. The Blue Amberol requires no attachments — that is, any machine which at present plays the wax Amberol Records will play the Blue Amberols. This is important in pushing the first sales, because the customer is actually getting an infinitely better Record than the old Record at a very slightly increased cost. Then when the Blue Amberol has been on the market a short time its popularity is bound to boost the sale of four-minute attachments. When Edison owners realise the beauty of the Blue Amberol they will be quick to procure the attachments if they have not already done so, particularly in view of the discontinuance of the Standard Record. So get ready for a great big avalanche of Edison business — the bumper crop!

The Blue Amberol Record:

The Blue Amberol differs from the old Amberol Record in volume, tone and durability. Being constructed of a hard substance it naturally increases slightly in volume of sound though it is by no means too loud — it is just right. The tone is rounder in quality and has no equal in purity among any Records on the market today. But the great feature of the Blue Amberol is that it is practically unbreakable.

THE BLUE AMBEROL RECORD HAS BEEN PLAYED 3,000 TIMES WITHOUT WEAR.

During the tests to which the Blue Amberol Record was subjected before it was announced it was played three thousand times, and a careful comparison between the first and three thousandth performances detected absolutely no difference! Think of it — the Record will not wear out, no matter how much it is played. There is not a Record in the whole Blue Amberol list, present or future, that will ever be called upon to stand this strain by any owner — but it could do it if it had to.

Not only is the Record proof against wear, but it will also survive all the minor accidents which a selection might be called upon to endure. It can be dropped upon a hardwood floor without any effect upon its reproducing ability. In fact, it can stand an almost unlimited amount of hard usage without injuring its tone. This is, of course, the great feature of the Blue Amberol, and you cannot emphasise it too strongly in your advertising and sale talks. When owners of cylinder Phonographs (no matter of what makes) choose a Blue Amberol selection they know that it is theirs for all time.

COST OF BLUE AMBEROLS:

Despite the great superiority of the Blue Amberol Record over the old Amberol, they will be sold at the following popular prices:—

	Australian		New Zealand	
	Dealer.	List.	Dealer.	List.
Regular, each, net	1/6	2/3	2/-	3/-
Concert, each, net	2/4	3/6	3/-	4/6

SHIPMENT WILL BE MADE ABOUT THE MIDDLE OF JUNE.

We are making arrangements to ship the Blue Amberol Records to our Jobbers in time to enable them to make distribution to Dealers about the middle of June. It is, therefore, imperative that Dealers place their orders with Jobbers promptly. There are thirty-four Regular Amberols and four Concert Records in this first Blue Amberol list.

American Blue Amberol Regular Records will start with Catalogue No. 1501. Blue Amberol Concert Records with Catalogue No. 28101, and British Blue Amberol Regular Records with Catalogue No. 23001. We will follow our usual procedure and eliminate from our lists such Records as are not suitable for this market. A number of those not shown in our first list will appear in the second or third lists. Dealers should, therefore, arrange their bins accordingly.

The present list was designed to meet every possible musical taste and includes all varieties of selections, so that Dealers may cater to every owner of a cylinder Phonograph.

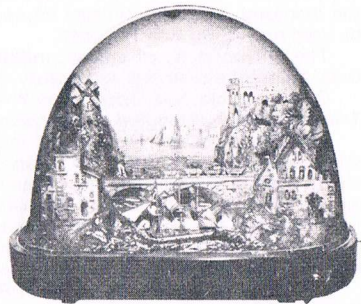
The Diamond Reproducer:

The Blue Amberol Records have made possible the use of a real diamond as the reproducer point, in place of the sapphire which we have been using on the wax Records. Though the sapphire point gave excellent results with the wax Records and gives even better results with the Blue Amberol, the diamond is a still greater



MONKEY AUTOMATON

Monkey's play violin & cello, heads and eyes move to musical accompaniment. (1860)



BOAT AUTOMATON

Windmill turns, train travels over bridge, and boat rocks—all to musical accompaniment.

MR T G FERNINGOUGH COLLECTION

TWO FAMOUS NEEDLES

THE PETMECKY MULTI-TONE
(Self-sharpening Needle)

Each Needle Plays Ten Records



DIRECTIONS FOR PLAYING THE PETMECKY MULTI-TONE NEEDLE

To obtain a loud tone, play the needle with the fattened portion facing the record. For intermediate tones, pass at these, delicate notes, the edge, from the broadest to the surface, can be obtained with fine needle. To play more than one record, change the position of the needle after each record. To turn the needle halfway round. The same needle can be used for soft and loud tone without injury to the record. Each needle will play ten records. Owing to the peculiar construction, the needle is self-sharpening and can be used on the same or different records.

Price 1/4 per packet of 100 needles.

THE SPEARPOINT TRIPLE-TONE
(The Original Spearpoint)

For use on all makes of Disc Talking Machines. Preserves the record and improves the tone quality.

Brilliant One-tune Needle



Two directions for using the Spearpoint are identical with those relative to the Petmecky, only that the Spearpoint will only play one record.

200 Needles in a box.
Price 2/6.

PATHE NEEDLE

Ada Jones & Billy Murray

SILVER STAR

1858

The Newest and Best.



No. 18. New Clamp Horn Cranes
(patent applied for) for Horns
as large as 36 inches, with
20 1/2-inch Belts.Price, \$2.00

No. 19 New Clamp Horn Crane (patent applied for)
can be used with Horns as large as 36 inches, with 20-
inch Belts, on all types of Talking Machines except the
very small ones. It can be put on in a minute and
it is so simple the entire thing can be done in 10 seconds
are driven into the cabinet of the machine. Beautifully
nickel plated and polished. Packed one in a box, with
full directions. **Price, \$2.00.**

For Sale by VICTOR H. RAPKE, 1661 2d Ave., New York City.
Liberal Discounts to Jobbers and Dealers.

improvement over the latter combination. The Blue Amberol being practically indestructible, is not worn by the diamond, but Dealers must impress upon all Phonograph owners the fact that the diamond cannot be used on the old wax Records.

The Diamond is, of course, indestructible, and will last as long as the machine itself. It imparts to the Blue Amberol a clearness and beauty of tone never before equalled by any Record on the market.

On Amberola and Opera type Phonographs the Diamond "A" Reproducer will be used, while on Alva, Triumph, Home, Standard and Fireside type Machines the Diamond "B" Reproducer will be required.

The Diamond "B" Reproducer may be used on Alva, Triumph or Home Phonographs, which are at present equipped with model "O" Reproducers, as it will fit in the same speaker arm. On Alva, Triumph and Home machines which have not been fitted with model "O" Reproducers, as also on Standards and Firesides, or where other types of Reproducers are being used, it will be necessary to obtain a special arm for each type machine (which will be included at the prices quoted for Reproducer only), and in ordering it should be plainly stated, for instance — Diamond "B" Reproducer for Standard; Diamond "B" Reproducer for Fireside etc., in order to prevent misunderstanding.

PRICES ON "A" AND "B" REPRODUCERS. In Australia, Dealer, 25/- nett; List, 35/-. In New Zealand, Dealer, 33/- nett; List, 45/-.

May 1st marks the discontinuance of the present exchange allowance on Reproducers.

Dealers must bear in mind that all four-minute Reproducers with sapphire points can be used on Blue Amberol Records. That is to say, any machine which plays the old wax Amberols will play the Blue Amberols without alteration.

Record Exchange Proposition:

A great feature of the Blue Amberol Record from the standpoint of the Dealer is the wonderful opportunity it affords for working off the old stock of wax Records. Realising that many Dealers have a considerable number of old wax Records still unsold, we have made the following liberal Return Allowance, which will be for a restricted period only.

The old allowance of 5% on wax Record purchases continues in effect.

In addition, we will allow Dealers to return to their Jobbers for credit such wax Records as they may have in stock to the extent of 20% of their Blue Amberol Record purchases.

Both of these propositions are subject to the conditions stated in Dealers' Record Exchange Bulletin No. 91 (New Zealand 87), under date of December 31st, 1912.

This means that if a Dealer purchases £5 worth of wax Records and £10 worth of Blue Amberol Records he can return to his Jobber 45/- worth of the old Records, which is a very fair proposition, and will go a long way toward cleaning up many Record stocks — provided, of course, that the Dealer will hustle and do the big business that the new Records make possible. It is a proposition in which the Dealer wins at both ends — the more Blue Amberols he sells, the greater his profits will obviously be, and the greater hole he can make in his Record stock through the exchange proposition.

Printed Matter for Blue Amberol Records:

We have prepared especially attractive and effective printed matter for the exploitation of the Blue Amberol Records. We ask every Dealer to carefully read the following list and to estimate as nearly as possible how much of the various forms he can use to advantage and to order accordingly.

Blue Amberol Catalogue, containing the first thirty-eight Blue Amberols, is a one-colour, sixteen page booklet with handsome cover in two colours, size 5 inches by 8 inches. Form A 307.

We want each Dealer to prepare a list of owners of Cylinder Phonographs of every make. We are going to furnish each Dealer, through the Jobber, as many special envelopes for mailing the catalogue as he will agree to use in mailing it to the people upon this list. The means that it will cost you exactly ½d. to mail each one of these beautiful catalogues in a handsome envelope. How many do you agree to mail? In addition to the booklets with envelopes we are going to supply others without envelopes.

PHONOGRAM — The Phonogram will appear in a new style — that of a miniature newspaper of eight pages. The standard size of all catalogues in the future will be 5" x 8", and this is also the size of the new Phonogram.

This means that the Phonogram can be enclosed in the new Blue Amberol catalogue — a fact which will undoubtedly lead many Dealers to increase their standing orders for Phonograms. The first edition is, of course, chiefly a Blue Amberol number, and ought to be a big help in starting the ball rolling. Better get one in the hands of every owner of a cylinder Phonograph in your territory.

BULLETIN — The Bulletin as usual contains a list of all the Records, and is to be hung in the window.

We have also prepared a striking placard announcing the Blue Amberol Record, and stating the fact that it has been played three thousand times without showing wear. It is Form A 304, obtainable through Jobbers.

A second placard contains this phrase: "Mr Edison announces his new Record — The Blue Amberol." It is Form A 305. Secure copies from Jobbers.

Another handsome placard printed in two colours contains the portraits of some of the artists on the Blue Amberol lists. This is Form A 306, and is also obtainable from Jobbers.

Every Dealer can make use of each of the Forms mentioned in this list. The only question is — "How many?"

NO. 50



Canadian Berliner Type Gt



METAL PLATE ON
THE CASE OF BERLINER



BERLINER TYPE D

1982 MEETINGS

May: Gavin East gave an informative talk on some very early clocks from his collection, some of which were on display.

This proved to be an interesting topic.

June: Barry Shepperd entertained members with slides of Wellington and Christchurch. The programme had been produced with commentary and background music.

July's programme was on Needles and Record Dusters. Gavin East, Robert Sleeman and Walter Norris all displaying the items they have collected.

August: This was the best attended meeting of the year, and it was held in the Administration Building at Ferryroad.

A member from Napier (Mark Dawson) was welcomed as a visitor.

During the evening members were taken by tram (driven by Joe Pickering) to the Phonograph Society's Building, where they viewed and discussed the 'glassing in' of the Display in the near future.

LETTERS

The Editor,
"Phonographic Record".

Claphams Clock Museum,
Rose Gardens,
Water Street,
Whangarei.

30/6/82.

Dear Sir,

We are extremely grateful for your article on the Clock Collection in your February-April issue, but feel it necessary to set the record straight in regards the donating of the collection to the city of Whangarei. It was not Mr Clapham's son, but Mr Clapham, himself, who presented the clocks to the City Council. For a further eighteen months he serviced and maintained the collection before he died, and was able to see them safely housed and cared for with the gratitude such a gift deserves.

Yours faithfully,
Norman Woods, Curator.

WANTED FOR EDISON HOME MODEL D:

Selector ball bearing and spring clip for two and four minute records, this is missing off the belt drive end of the mandrel.

Please contact: Mark Dawson, 51 Flanders Avenue, Onekawa, Napier, New Zealand.

Yours faithfully,
Mark Dawson.

ADVERTISEMENT

Brass Horns available soon, two foot long with one foot diameter bell, all brass. Approximate cost \$50 New Zealand.

Enquire Robert Sleeman, 86 Tankerville Street, Christchurch.

VICTOR H. RAPKE

Rapke horn and horn cranes often seem to turn up in New Zealand, and although we have illustrated a horn crane before, we thought this illustration worthwhile.

Volume 3 Issue 3, 1968, we illustrated a sheet of labels containing Numbers and Titles of different cylinders, and with this issue, we illustrate one again. These were like postage stamps and were attached to small boxes which contained three cylinders awaiting a sale on a dealers shelf.

Can someone provide us with more information?

AN ENCYLOPAEDIA OF BERLINER DISC PHONOGRAPHS CANADIAN BERLINER TYPE G.T.

1907-08

No. 10

We began this series of articles on Berliner phonographs, we did not realise so many different models existed.

This model, another from the Schlick collection, has a metal Berliner Label neatly attached to the side of the case — see illustration. Larry Schlick thinks this was the last Canadian model to appear.

Measurement — case 12" x 12" x 6". Turntable 9".

From **HAROLD BRAKER** of 2906 Camrose Drive, Burnaby, B.C. V5A 3W6, Canada, we have a very good letter with comments regarding Canadian Berliner Machines:—

"Over the years many sources have given individual descriptions of the various models of Victor or Berliner gramophones, which were manufactured internationally prior to 1212. To my knowledge, the Phonographic Record has provided more information on this subject than any other person or society.

In recent years I have come to realise (or suspect) that the total "story" of Berliner or Victor gramophones is far from complete, and that I could have contributed to the "story" years ago, perhaps it's not too late even to recall the past now.

About 15 years ago and until recently my occupation required that I travel extensively in Canada and the U.S.A. While travelling all my spare time was devoted to visiting other collectors of phonographs and following up leads, often with positive results. This was in the days when the average price of a horn machine was between 100 to 200 dollars and relatively easy to obtain (compared to now). In those days I met a Toronto collector, Gordon Reithmeier, whom I regarded as an expert on Canadian Berliners, who at the time was working on his **second** phonograph collection comprising mostly of Berliners. (Pictures enclosed of some of his collection). Gordon sold both his collections to the Federal Government National Museum in Ottawa, Ontario, the number of machines numbered well over a hundred of which many or most were Canadian Berliners. During my many visits with Gordon, I had the opportunity to see many of the different Berliner models which he had. Gordon discussed the project which he had taken on to research the models which Emile Berliner produced out of the Montreal plant. (Every collector knows why Emile Berliner moved to Montreal after losing the lawsuit with E. Johnson).

Some years went by and when Gordon decided to give up phonograph collecting, he also gave up the research partly due to utter frustration of not being able to uncover documentation of the various Canadian Berliners which he had, and had seen in the hands of other Canadian collectors. What little advertising was done at the turn of the century was mostly in the Big City newspapers — Gordon spent hours and weekends viewing the old newspapers which were all on microfilm at the main libraries, and as I later found out myself after attempting similar research, most advertising showed pictures of popular models especially the trademark model (dog model). Over the years I talked with many prominent Canadian collectors (The Toronto Society has a 100 or more active collectors) and no one was able to or could attempt to list all of the Canadian Berliner models. I have personally seen models from both ends of the alphabet and have now or had had the following models: A, B, C, D, E, G, K, P, HT (the rear mount models I believe were double letter designations with the "T" meaning rear mount as in "HT" which included models with completely carved cases with animal figures (lions, I think). It is believed that Emile Berliner produced so many distinct models that the entire alphabet was used up so that it became necessary to adopt double lettering (this is not a confirmed belief). Gordon suggested that Emile Berliner would test the Montreal market at Christmas time by introducing a small run into the Toronto and Montreal markets — evidence of discovery of many models was that they were rarely found outside of these areas.

In conclusion I wish to say that anyone devoting the time to study Berliners, should concentrate on Eastern Canada, after all this was where most of the real Berliners were made, and because documentation on Canadian Berliners is rare, the only way to acquire the data would be to visit every Canadian collector who possesses Berliners — I once thought of doing this — but — oh what an overwhelming thought — perhaps this would be a wonderful project in retirement — (some 20 years hence). However it is quite possible someone — somewhere in Canada has or is presently doing Berliner research — how interesting it would be if this information were made available someday. . . ."

RECORD LABELS (PART 6)

by D. L. Taylor

Spread around in this issue are more record labels from D. L. Taylor's large collection.

We have been pleased to hear that a number of members enjoy looking at these.

Decca, a blue Label made in U.S.A.

Diaphon, a red Label. Diaphon were an Australian Company who were better known for their extended play "multigroove" 78s. This is one of their single play discs and dates from 1952.

Durium, nine and one half inches in diameter, single-sided made of brown cardboard, sold weekly by English news agents in the early 1930's and not hard to find. It was called "the self-changing record" because both songs were on the same side. The other Durium seems to be the product of a completely different Company.

It is a conventional ten inch double-sided shellac disc with a red and gold label, and made in Italy. The numbers 8-4-48 appear in the shellac.

Electrola, red Label with gold letters, made by H.M.V. for sale in Germany.

THE TELEPHONE

We have not been able to keep this in the correct order, but as Edison had a lot to do with the telephone we thought the following information and illustrations worth reprinting. Edison was called upon by the Western Union Telegraph Company to produce for them a telephone which was to be an improvement on what was then available from the Bell Telephone Company and therefore we hope to show in this issue and the following, improvements he made.

THE TELEPHONE THE BELL TELEPHONE AND ITS MODIFICATIONS by Edward A. O'Keeffe, B.E., A.I.E.E., Demonstrator in Electrical Engineering, City and Guilds of London Technical College, Finsbury.

The original telephone of Reiss was able to transmit sounds to a distance by means of intermittent currents, these currents being produced by a primary battery, and interrupted by a loose contact between a point and a plate, the plate being made to vibrate by the sonorous waves impinging upon it. Variation of the resistance in the circuit was then the means by which the pulsations of current were generated.

The Electric Harmonica of Bell transmitted sounds — without the aid of a primary battery — by electromagnetic induction, which gave rise to pulsating currents capable of producing sound-waves in the receiver in unison with those which were imparted to the transmitter, both the receiving and transmitting instruments being of the same kind.

Passing over the different types of instrument which he subsequently devised, Figs. 122-125 illustrate the final form which he gave to his telephone.

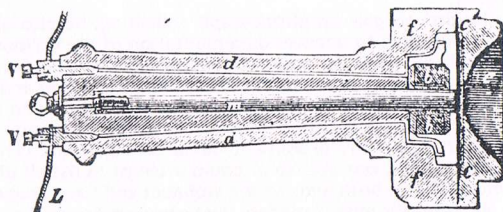


Fig. 122.—BELL'S TELEPHONE.

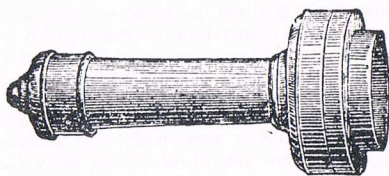


Fig. 123.—BELL'S TELEPHONE.

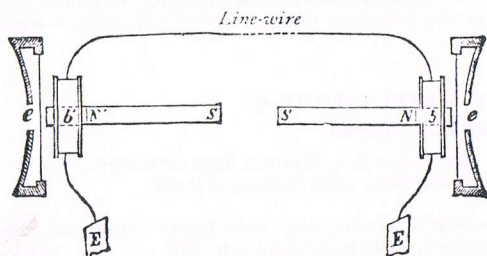


Fig. 124.—DIAGRAM OF TRANSMITTER AND RECEIVER.

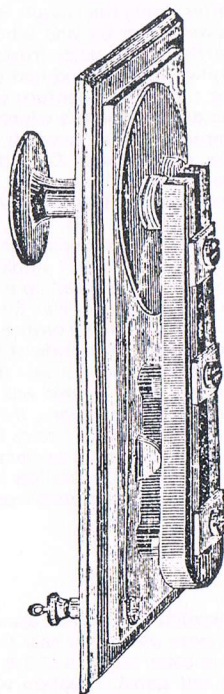


Fig. 125.—BELL'S TELEPHONE.

Fig. 123 shows the general appearance of the instrument, whilst Fig. 122 shows a section through it. The core, ff, is made of wood, through the centre of which runs a strong permanent magnet, m; on the end of this magnet, which is close to the mouth-piece, is wound a coil of fine copper wire, b b, the ends of which are brought by means of the thick copper wires, d and d, to the terminals of the instrument marked v v.

Close to the end of the magnet is fixed a disc of thin sheet iron, c c, which is kept in position by the wooden cup being screwed down over its edge: its centre is opposite to the axis of the magnet, and it can be made to vibrate by sound-waves impinging upon it through the opening, e. If the disc approaches the magnet, a current will be generated in the coil, owing to the magnet having become strengthened whilst the motion of the disc returning to its original position, and therefore receding from the magnet, a current will be induced in the opposite direction in the coil owing to the converse reason. The magnet is fixed quite close to the disc, but the distance between them can be regulated by means of an adjustable screw fixed on the other end of the magnet. The side of the disc remote from the magnet is covered with varnish or some such material to prevent it from being oxidised by the moisture from the breath being condensed upon it. On speaking into this telephone the vibrations of the air are communicated to the disc, and alternating currents are by it generated in the coil, and conveyed along the line which is attached to it; these currents on passing through the coil of a similar instrument used as a receiver, strengthen and weaken the permanent magnet which is there situated, and which in its turn attracts the disc with varying forces, and thus communicates to it a vibrating motion exactly similar to that possessed by the disc in the transmitting instrument. The air in contact with this disc will take up the vibrating motion and communicate it to the air in its vicinity, thus reproducing the original sound-waves, but necessarily in a comparatively feeble manner, owing to the double transformation of energy which has to take place in order to reproduce the sound-waves. Fig. 124 shows the connections which would be made in order to connect two stations: N S and N' S' are the magnets of the two telephones, b and b' are the coils, and e and e' are the mouth-pieces opening on the thin iron diaphragms.

When this telephone is used as the receiving instrument, it might be supposed that stronger effects would be obtained if the core of the coil was not a permanent magnet, but simply a piece of soft iron. This is the result which one would expect to obtain from a study of the curve of magnetisation of iron: small changes of current correspond to large changes of magnetism when the currents used are small — that is to say, when the iron possesses least magnetism — but this is not found to be the case when working with a telephone; it is then found necessary to use a fairly powerful magnet in order to obtain good results. The explanation of this apparent contradiction lies in the fact that in the ordinary curve of magnetisation, the element time is not taken into account, and it is quite unnecessary to do so, but in the case of telephone working this element cannot be neglected: the currents change direction extremely rapidly according to the sound transmitted, and the magnetism of the iron must change with each pulsation of current and round the coil; when the sibilant sounds are being transmitted, the number of pulsations is as high as 5,000 per second, and each

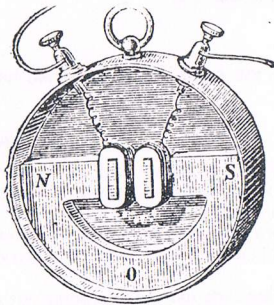


Fig. 126.—GOWER'S TELEPHONE.

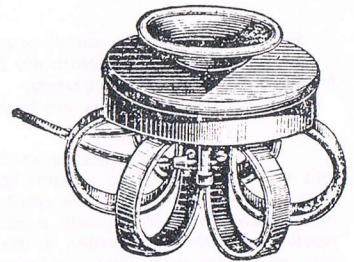
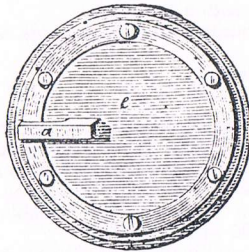


Fig. 127.—PHELPS'S CROWN TELEPHONE.

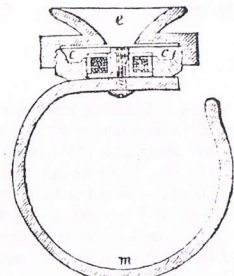
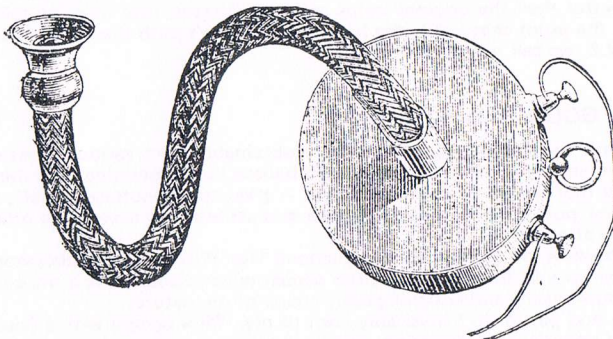


Fig. 128.—PHELPS'S PONY TELEPHONE.

pulsation must produce a change in magnetism of the core sufficient to impart a distinct note to the diaphragm. At this high rate of change the ordinary curve of magnetisation is misleading as a guide, since the greatest change in magnetisation is found to take place when the iron has previously been highly magnetised. The fact is also well recognised in the case of polarised relays.

With the instrument described, a considerable loss of energy always took place in the double transformation, and the sounds transmitted could only be heard distinctly by holding the receiver to the ear. Bell subsequently modified his telephone so as to render it suitable for reproducing words which would be audible at a distance from the instrument. His improved instrument is illustrated in Fig. 125.

The main feature is the use of a large horse-shoe permanent magnet instead of a straight rod. This horse-shoe magnet has two iron projections at the ends of the prongs, and at right angles to them, and on each of these projections is wound a coil; opposite the coils is the usual iron diaphragm, at the other side of which is a short speaking-tube. This instrument emits sounds that can be heard through a room of moderate size, and its efficiency depends upon the fact that the resistance of the magnetic circuit is reduced considerably.

Fig. 126 illustrates the Gower telephone, which is nothing more than an improvement on that of Bell, and in the same direction in which Bell himself was working — namely, the use of a powerful magnet, and a low-resistance magnetic circuit. In the figure, N O S is the powerful magnet bent into semi-circular form, and containing two projections at the ends, on which the coils are wound, e is the iron diaphragm placed in front of projections, and as close to them as is possible without making contact. This form of the instrument is small and compact, and acts as a good receiver in almost any circumstances; when used as a transmitter a short length of speaking-tube is usually attached to it, as shown in the figure.

Still further modifications, due to Phelps, are shown in Figs. 127 and 128.

Fig. 127, known as Phelps's Crown Telephone, contains six magnets bent as shown; all the poles of the same sign are connected to the diaphragm, whilst all the others terminate as the core of a coil, placed near the diaphragm in the usual manner. This as nearly approaches a complete magnetic circuit as it is possible to obtain. Fig. 128 represents Phelps's Pony Telephone, which differs but slightly from the ordinary Bell telephone, except in appearance and compactness. Numerous other forms have been brought out, but the same principle underlies them all.

The Technical Educator

HOW TO MAKE YOUR OWN BALL TYPE NEEDLE TO PLAY PATHE RECORDS WITH

Every now and then, someone comes up with a good idea.

We here have to congratulate Bas Ingrouille for what we think is one of the most useful ideas we have heard of in years, — it's a beauty.

We have tried his stylus and found it excellent. . . .

Editor.

. . . "I found out quite by accident that replacements for the pinion gear that goes out on Edison Home and the same gear only smaller for standard, gears that fit these can be bought from "Meccano" dealers; in my case I went right to the wholesaler for them, the parts numbers are as follows:— For Home, 26-19 teeth, with a base with set screws, so no soldering necessary; for standard, 26c, 15 teeth, smaller gear with set screw, as above. (The 26 gear is also available from STOKYS parts 20650) identical gear, prices for either gears are less than \$2.00 each.

I also found quite by accident that the stylus used for playing PATHE Records can be replaced with a point from a "FINE" ball point pen, with a needle pushed into the open end, I set it in with a touch of crazy glue, this plays pathe as well or better than the original stylus and lasts forever, care must be taken when inserting the needle in the back of the point that holds the ball, that it doesn't push the ball out (I'm enclosing sample — try it). . . . Editor In N.Z. we call it Elephant Glue. . . .

THE GOOD WIZARD'S GIFT

For years I tried to content myself with the sort of music (?) usually obtainable from various types of talking machines known as the steel-needle variety — tried to make myself believe I was obtaining something that was an absolute impossibility with a mechanism of that description — tried to camouflage myself, as it were, into the false belief that these metal points would reproduce **pure musical tones** unmingled with other metallic sounds — and I utterly failed in the attempt.

I am now the proud and thankful possessor of a New Edison Diamond Disc Phonograph (Laboratory Model); and I love it better than any other earthly thing of the neuter gender which I possess. It is my constant and faithful companion; satisfying, harmonising and enriching every mood of my nature.

As the nights and days regularly come and go, so do I invariably turn to my "Phonograph with a Soul" and drink of its never-ending fountain of education, consolation, and inspiration. It makes of me a better man, a more loyal and devoted citizen, and a prouder and more enthusiastic American.

As I sit here in the gloaming, musing on the beauty, poetry and harmony of it all, a procession slowly emerges from the deepening shadows that envelop my beautiful Chippendale, and pass and re-pass in review before me, disappearing again within the gathering shades of twilight. In that vast throng there appear our beloved Thomas Chalmers, Betsy Lane Shepard, Emery B. Randolph, Elizabeth Spencer, Glen Ellison, Christine Miller, Arthur Middleton, Anna Case, Guido Ciccolini, Helen Clark, Walter Van Brunt, Helen Louise, Frank Ferrera, Marie de Kaiser, Frederic Martin, Carolina Lazzari, Sodero, and a host of other vocal and instrumental artists whom space does not permit me to mention.

And so, the pictures that leap and throb and LIVE again when out from the deep throat of this wonderful instrument there floats the inspiring strains of America (My Country 'tis of Thee), and I see our own immortal Washington and his half-naked, half-frozen and half-starved fellow-patriots at Valley Forge.

In "Jesus Christ is Risen Today," I see Gethsemane and the shadowy outlines of the Cross of Calvary.

And what can surpass in magnificence the clear bugle-like notes of "Inflammatus" with its pathetic, yet sublime and ennobling sadness, supported as it is by such a wonderful background of orchestral colour harmony.

Listening to that heaven-inspired "Star Spangled Banner" I hear the impatient footsteps of Franceis Scott Key as he paces the deck at daybreak, and I see him anxiously scanning the horizon for a glimpse of his beloved Stars and Stripes.

Now, as if by magic, I am transported to the lovely islands that dot the blue waters of the southern seas and there, reclining under the waving palms, fanned by the soft ocean zephyrs, I am entranced and enchanted with the quaint, plaintive and singularly appealing melody of the native Hawaiian music. Can any one ever resist the pull on the heart strings when these dusky children of the South Seas sing, "Aloha Oe" (Farewell to Thee) to the dainty accompaniment of their diminutive guitars and ukuleles?

How the hot-red blood surges through my veins like the pounding of the surf upon the rock-bound coast as around the corner and down the street swings the Military Band making my heart swell with pride as they fling to the breeze that glorious and triumphant "Red, White and Blue." Oh, God, how good it is to be a part — a small part — of these Re-United States.

PETER DAWSON AMBASSADOR OF SONG 1882-1961

(Part 2)

Sound Recordings:

No recording career has been as poorly documented by sound scholars as that of Peter Dawson. The reason may be a result of the sheer magnitude of the task.

Where information has been published it has often been incorrect or misleading, particularly where it has been generated by the recording industry.

The publicity men of years ago credited Dawson with making between 2,000 and 4,000 titles, with total sales varying between 12 to 15 million discs. On current evidence it appears that the output is exaggerated and the sales are understated.

It is very difficult to establish how many recordings Dawson made, due to his use of pseudonyms and his anonymous participation in many vocal groups and choruses. He also recorded many masters which for various reasons were never published. Also most visits to the studio means more than one 'take' (or attempt) of which only one was normally issued. This automatically means that for every master which is pressed there is probably one or more masters which remain unreleased.

At present I have uncovered about 1,300 titles issued under his own name or by a known pseudonym. Estimating his number of recordings as a member of the chorus would at this stage be guesswork. However, it may run into hundreds of titles.

Doubts on his published sales figures was first voiced in 1961 by American discographer, Jim Walsh, who wrote in "Variety": "In his late years he (Dawson) estimated he had made 3,500 records which sold a total of 13 million discs. Something must have been wrong with his figures for they average out only about 3,500 copies per platter — well below the 5,000 mark, which used to be considered the 'break even point'."

It seems likely that Dawson has sold well in excess of the press hand-out figures. The total sales could exceed 25 million discs before the advent of the LP, where he continues to rate amongst the best sellers of the 'old school'.

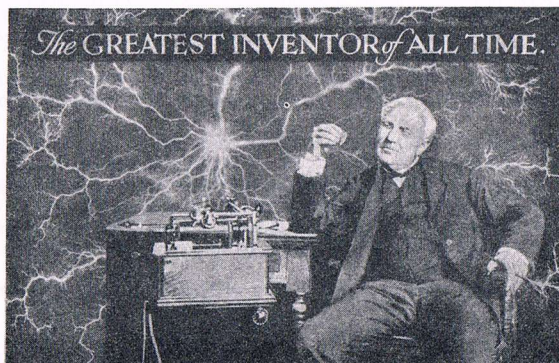
Whatever the confusion concerning accurate statistics or proper interpretation of them, we can be sure that —

1. Dawson was one of the most prolific recording artists of all time.
2. He is possibly the only artist (of his stature) to encompass ALL the major forms of sound recordings from the turn of the century to today, including two-minute wax cylinders, 4-minute amberol cylinders, hill and dale discs, standard 78's, LP's, plus reissues on cassette. His discs covered all diameters, including 7", 10", 12", and 16".
3. His recording career extended over a longer period than most other performers. A handful of artists, such

Cylinder making



COMPONENT PARTS OF BLUE AMBEROL CYLINDERS



ROYAL PURPLE BOX LTD

as Eubie Blake do exceed his time span, but they seldom match his continuing dominance of the medium, where he was regularly recorded from 1904** to 1958.

** (It is worth noting that Peter made some home-made cylinder phonograph recordings in Adelaide, probably between 1898-1901. As far as is known these private recordings have not survived. His first exposure to the phonograph may have been in the early 1890's when Professor Douglas Archibald gave public displays of an Edison machine in his home city (and recorded many local celebrities).)

This set follows a sort of "Seven Ages Of Dawson" plan, whereby the first 7 discs are presented in chronological recording order, with each LP covering an allotted time span. The remaining records document Dawson as a composer: Songs of Australia and New Zealand; and a mixed bag of the unusual for the collector.

Peter Dawson can lay claim to being the most well-known and respected recording artist of all time in the British Empire, her Colonies and Dominions.

The recordings in this set are testimony to the character and quality of his voice, which kept him at the top of his profession for almost six decades.

We shall probably never know if 7-year old Peter Dawson, schoolboy, of Cassel Street, Adelaide, ever heard the great Charles Santley during his visit to Australia in 1889.

We do know that the visit cemented a friendship between Santley and Mr C. J. Stevens, his concert promotor, which was to eventually greatly influence the career of young Dawson.

Santley (1834-1922), born in Liverpool, was regarded as the greatest English baritone of his day — being a pupil of Nava in Milan and Garcia in London. He was famous throughout the British Empire for his work in oratorio (especially "Elijah"), concert and opera.

His arrival in the Australian colonies in June 1899 was the musical happening of the year. He stayed for more than 12 months visiting most major centres as well as many country townships, as far north as Townsville in Queensland. The tour included an excursion to Auckland in February 1890, returning to Tasmania. He eventually arrived back in London on 27 December 1890 (First Class return fare £105).

As well as giving converts in Adelaide (a city of 70,000, a quarter the size of Melbourne) the famous singer spent three months at the home of Mr & Mrs Stevens. Stevens was a fine musician and the two became firm friends.

The highlight of Santley's tour took place on the second of October 1889 at the Exhibition Building, Prince Alfred Park, Sydney, where he gave an outstanding performance in "Elijah" with the Sydney Philharmonic Society Orchestra and Chorus of 450 players. His co-stars were Rosina Carandini, Madame Christian, and Armes Beaumont.

The following night seven-year old P. S. Dawson, boy soprano, made his stage debut in a concert in St. Peters Town Hall, Adelaide, given by children of the College Park Congregational Sunday School. The youngster who was accompanied by his 13-year old sister Elsie on violin, forgot his words and gave little indication of the musical career which lay ahead.

Young Dawson was the eighth child of ten born to Alison Dawson (nee Miller) (1841-1916), wife of Thomas Dawson (1842-1919) who had forsaken the sea in 1863 to settle in Adelaide, where six years later he bought the plumbing, tinsmithing and drainage business from Brown and Woods in Waymouth Street.

Thomas Dawson hailed from Kirkcaldy, on the Firth Of Forth. His wife was also Scottish. Between 1868-1883 they had 10 children — one of the six sons died as a babe.

Peter, who was the youngest boy, was born on 31 January 1882, sharing his birthday with Franz Schubert. He was christened Peter Smith Dawson. He disliked his middle name and quickly abandoned it to become known simply as PETER DAWSON.

His family were well disposed to music. Alison Dawson possessed a sweetly modulated voice and ensured her children were given a basic musical education.

As a youngster Peter attended the East Adelaide Primary School and afterwards was enrolled at Pultney Grammar, where he showed promise at painting and drawing. He developed a friendship with an older boy named Hans Heysen, destined to become one of Australia's greatest landscape painters. Together they spent many hours in the countryside sketching. Dawson retained his interest in art throughout his life and enjoyed cartooning and lampooning in the style of Phil May.

During his schooling years Dawson's interests were diverse and often unusual. He enjoyed fishing, crabbing, cricket and practical jokes, an art he cultivated throughout his life to the woe of the pompous and arrogant whom he encountered. He was a capable boxer, winning a South Australian amateur title in his teens.

To be continued

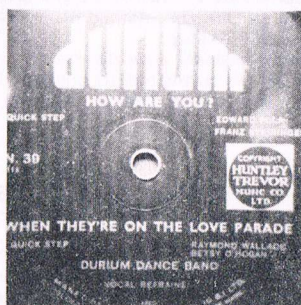
THE SONGS WE LOVE VIII — KATHLEEN MAVOURNEEN

Picture this scene: A grand banquet given in honour of the anniversary of an old veteran, in Portland, Me. The merriment and chatter of the diners is suddenly hushed, as a grey-haired patriarch rises to his feet and begins to sing a song. What makes the event particularly auspicious is that the aged vocalist is Frederick Nicholls Crouch, the composer of "Kathleen Mavourneen" and it is that beloved ballad that he is singing.

Mr. and Mrs. Thomas A. Edison



THIS INTERESTING PICTURE WAS TAKEN AS MR. AND MRS. EDISON GREETED THE LONG PARADE OF EMPLOYEES WHO CONGRATULATED HIM ON HIS 73RD BIRTHDAY. THE WOMEN EMPLOYEES OF MR. EDISON SHOWERED HIM WITH FLORAL TRIBUTES.



That was thirty years ago. Crouch was then eighty-four years of age, but those who listened to him that evening said that the song was never sung better by anyone.

Frederick Nicholls Crouch was born in Wiltshire, England. As a young man he played the 'cello well, but, at twenty, his tutor, impressed with his voice, advised him to study singing. But, despite his talents, his life was made up of hardship and misfortune. In 1849 he left England for America, where, after participating in the California gold rush of that year, and fighting in the Civil War, among other vicissitudes, he died on August 18, 1896, at the age of eighty-nine.

He married four times and had a large family.

The writer of the lyric of "Kathleen Mavourneen" was Mrs Julia Crawford, a daughter of Erin, who contributed many of her verses to the Metropolitan Magazine, where appeared the poem that attracted the attention of Crouch. It was his misfortune to sell the song outright for the small sum of fifty dollars. Calculations of the profit it made run as high as seventy-five thousand dollars. This fact rather embittered the composer. Here is the story of his famous song, in his own language:

"The words instantly attracted my attention by their purity of style and diction. I sought the authoress, and obtained her permission to set them to music. Leaving London as traveller to Chapman & Co., Cornhill, while prosecuting my journey towards Saltash, I jotted down the melody on the historic banks of the Tamar. On arriving at Plymouth, I wrote out a fair copy of the song, and sang it to Mrs Rowe, the wife of a music publisher of that town. The melody so captivated her and others who heard it that I was earnestly solicited that it should be given the first time in public at her husband's opening concert of the season. But certain reasons obliged me to decline the honour. I retired to rest at my hotel, and rising early next morning, and opening my window, what was my surprise to see on a boarding right opposite a large placard on which was printed in the largest and boldest type: 'F. Nicholls Crouch, from London, will sing at P. E. Rowe's concert, 'Kathleen Mavourneen,' for one night only!' Amazed and confused at such an unwarrantable and unauthorised announcement, I hurriedly completed my toilet, took my breakfast, and rushed off to Mr Rowe's warehouse. But, despite my reluctance, and, overcome by the entreaties of the fascinating Mrs Rowe, I appeared and sang the song to a crowded audience, with the most enthusiastic applause. On returning to London, I entered the establishment of Messrs D'Almaine, music publishers, as precensor, and 'Kathleen Mavourneen' and other songs — 'Dermot Astore,' 'Their Marriage,' 'Death of Dermot' — were published by that firm.

"These songs have been sung and appropriated by all the leading cantatrices, from Caradori, Hobbs, Hawes, Hayes, Stephens (the Countess of Essex), to Malibran, Titiens, and Adelina Patti."

Kathleen Mavourneen:

"Kathleen Mavourneen! the grey dawn is breaking,
The horn of the hunter is heard on the hill,
The lark from her light wing the bright dew is shaking —
Kathleen Mavourneen! what, slumbering still?
Oh! hast thou forgotten how soon we must sever?
Oh! hast thou forgotten how soon we must part?
It may be for years and it may be for ever,
Oh! why art thou silent, thou voice of my heart?"

"Kathleen Mavourneen! awake from thy slumbers,
The blue mountains glow in the sun's golden light;
Ah! where is the spell that once hung on thy numbers?
Arise in thy beauty, thou star of the night!
Mavourneen! Mavourneen! my sad tears are falling,
To think that from Erin and thee I must part;
It may be for years, and it may be for ever,
Then why art thou silent, thou voice of my heart?"

EDISON TRIVIA THOMAS ALVA EDISON (1847-1931) INVENTOR by Mr B. Ingrouille

Convinced that ethics had no place in business, Edison's philosophy was to protect his own interests "and set the other fellow whistle". He demanded that his employees work long hours under chaotic and unsafe conditions, yet paid them the lowest possible wages, virtually living in his laboratory, Edison seemed unaware of the existence of his family. Both of his wives suffered from severe depressions, and his eldest son, Thomas Alva Jr. became an alcoholic and a hypochondriac who committed suicide. (No wonder Edison could turn out phonographs so cheaply).

Edison's peculiar inquisitiveness as a young child impressed nobody but his tolerant mother. His first teacher described him as "addled", his father almost convinced him he was a "dunce", and his head masters warned that he "would never make a success of anything". Under his mother's tutelage, however Edison became a precocious reader, and he was soon making practical inventions. He eventually patented over one thousand inventions whose worth to mankind is incalculable.

(Remember this when a child brings home a report card with a poor showing, he may become a genius like Edison).

Although Edison constitutionally was able to survive on very little sleep, he would take a catnap of 30 minutes to an hour after a particularly strenuous period of work.

Edison's father was named Samuel, his mother Nancy, who had 4 children before Thomas Edison was born, three of these passed away prior to Thomas who was born in 1847.

Edison married his first wife a Mary Stillwell age 16 in 1871, they had 3 children in their first 8 years of marriage, Thomas Alva Jr., William and Marion.

His first wife passed away in 1884, 2 years later Edison married Mina Miller age 19, he was 37 at the time. She bore him 3 children Madeline, Charles and Theodore, all born in Orange, New Jersey.

Edison patented an average of one patent for every two weeks of his adult life.

Edison dropped the phonograph to develop the electric light bulb and dynamo, when it was finished he was spurred back to the phonograph in 1887 by the fact that Alexander Graham Bell who was prepared to market an Electric machine, that would show Edison's tin foil machine as a toy. Bell offered to amalgamate with Edison on this machine but Edison refused and started work on further developing his phonograph. The patent cylinder that Bell submitted recorded the words "I am a gramophone, my mother was a phonograph". This machine used a wax cylinder on a cardboard tube. By 1888 Edison produced and patented an electric and a treadle and water powered machine, using a solid wax cylinder, that when worn could be shaved off and recorded on again. Also in 1888 Edison invented and patented a talking doll. By 1889 his factory was turning out 500 dolls a day with a small cylinder that played nursery rhymes.

The First serious opposition to Edison's machines came from Emile Berliner who invented the flat disc record, on which the needle moved from side to side unlike Edison's machine that used the hill and dale system. The first Berliner discs played only 1½ minutes, but by 1900 had increased to 4 minutes. To counteract this Edison produced cylinders that played 4 minutes with grooves of 200 to the inch instead of 100 to the inch. He also specialised in operatic arias.

In 1913 Edison capitulated and produced the disc phonograph with thick records which he named the diamond disc phonograph as it was played with a diamond stylus, but by 1914 war broke out in Europe where Edison received the materials for his disc records which were cut off.

How many of you know that Edison collaborated with Henry Ford on producing an electric car? By 1896 Ford had already built his first horseless carriage, driven by gasoline. Edison's efforts found that the electric car needed a very large and heavy battery, that had to be charged every 50 miles. Edison eventually gave up on the electric car and concentrated on a battery to power the starter and generator and other electrical devices on the car. Edison worked for months on this battery to produce one that was not too large or heavy and would hold its charge, eventually succeeded in his early sixties.

The first effect of the 1914-1918 war on Edison was the cutting off of supplies of carbolic acid and phenol, which he used in the manufacturing of his disc records. All supplies had come from Germany and England. Edison used a ton and a half daily, and was caught with only ten weeks supply. It was thought that carbolic acid and phenol could not be made in the U.S.A. with the type of coal mined there. Edison studied the methods used to make the acid and phenol and immediately built a laboratory, hired 40 draftsmen and chemists. After one week plans were complete. Eighteen days after the plans and machinery and the process decided on the plant produced 700 pounds of acid and phenol the first day, progressing each day until he was producing more than he needed so he sold the rest of the production.

Benzol also was in big demand for making explosives at this time so he built a plant to turn this out, he also built another plant to turn out anilines for the rubber industry and another plant to turn out dyes for the fur industry.

To be continued

GRAMOPHONE CONCERTS

John A. Lee makes some interesting observations in his book "Early Days in New Zealand", from which we quote —

He says — "The Gramophone was as yet beyond the purse of most households. There were a few penny-in-the-slot gramophones. Most of the records seemed to be Edison Cylinders, the flat disc was on the way. Each record would announce the item and affirm "Edison Record". None of the records played for more than two minutes.

In the country people were paying sixpence, children half price, to go to gramophone concerts. When I was fifteen years old, that was in the late 1906, there was a Canterbury showman with a touring machine. By the time I was eighteen, I would in Invercargill, see a short at the pictures of Harry Lauder singing his Scotch songs while synchronised picture and music. Only in my lifetime did the gramophone rise from being a scientific toy to being universally used means of entertainment. It brought great musical talent to the masses.

Soon a gramophone would be a household necessity in most homes. In my infancy it was a great luxury, a novelty."

Editor:— The date he mentions shows just how early in New Zealand we had attempts at showing a sound film.