

# 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



Taken from a magazine.  
We have no information about this machine.  
Can someone identify it?

## FOR YOUR INFORMATION

It doesn't seem possible that Christmas will soon be upon us and 1993 nearly gone.

We were away for the October meeting as we were on holiday in Perth and spent two weeks there.

On the evening of the Western Phonograph and Radio Society's monthly meeting Merv Thompson picked us up from our motel and drove us to Rodney and Beverley House's home where we had a very nice meal and had a look at Rodney's collection before going to the meeting which was held in an historic building on Wireless Hill. I was asked to speak to the members another evening. I visited Richard Rennie's home and enjoyed viewing his collection and another evening was spent with Merv and Dawn Thompson and we were very impressed with his collection.

I would like to thank the Perth members who made me and my wife Hilda so welcome.

You have a lovely city and we enjoyed our stay very much. We wish we could have stayed longer.

Since coming home we have found a lovely lot of material (photographs and prose) all ready for this issue.

It is very pleasing to receive so much help, interest and appreciation from members.

## NOTES FROM SECRETARY

A reminder to those members who have not yet paid their subscription. These are now overdue and prompt payment to ensure continuation of the magazine would be appreciated.

Members are reminded that under their subscription, one free advertisement in the magazine is permitted. Please send your request or whatever to Secretary or Editor (addresses on front of magazine).

Packing of members' orders will resume in February. A revised sales list is enclosed with magazine. Unfortunately many items have risen in price due to cost of materials, manufacture, etc. since our last list compiled two years ago.

Many messages of support have been received as members renew their subscriptions and these are appreciated. The magazine is obviously enjoyed for its quality and content and our parts similarly. Our thanks too for contributions submitted for inclusion in the magazine.

## ILLUSTRATIONS

### Stamps:

For the phonograph and radio stamp collector, from Japan an early radio horn speaker along with one of Hank Williams sent to us by Steven Ramm.

This stamp has Country & Western 1923-53 along the left hand edge.

### Beechams Pills:

Post card sent to us by Steven Ramm. Steven has these for sale. See advertising page.

### Sun Dials:

Harold Burtoft sent us a photo of his collection of early Roman sun dials.

### Wedding Photo:

Bill Tarling a Canadian member sent us a picture taken at his wedding to Elsie. Bill will be 80 next April and Elsie 78 in March.

He says he had twenty Society members at the wedding and twenty-five relatives and friends, plus a teacher who taught them both sixty-one years ago and is now ninety years of age.

They both hope some day to visit New Zealand. We wish them many years of health and happiness together.

### Three Record Labels:

These are samples of labels D. L. Taylor copied from his book "The English 78 Picture Book".



## Dunn collection



Industria Induphon 138.

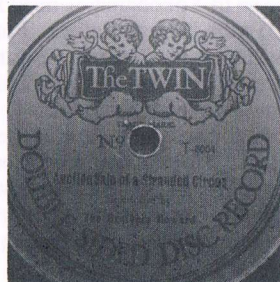
Photos — Bill Dunn.



Stewart Phonograph.



Mikkyphone.



Labels — D. L. Taylor.

### Edison Winter Home:

Four illustrations of the house which was transported to Fort Myers by two sailing schooners in 1886. Also two views inside of Edison electric lamps and moving picture projectors.

### Notes and Pictures sent in by Harold Burtoft, Australia:

I am enclosing pictures of my 'Talking Book'. As you can see, it is titled 'Le Livre d'images parlantes', (The book of the talking pictures).

Picture 1: Shows Harold holding the book.

Picture 2: Shows a child riding a donkey.

When a string near the bottom right hand page is pulled, a loud 'hee haw' is sounded.

Picture 3: Shows the mechanism which makes ten different and very realistic noises (animals).

Made late last century.

The verses are quite amusing. The one about L'âne is easily readable using a magnifying glass.

### Industria "Induphon 138":

Circular tin body of 9¾ inches diameter painted red with gold trim. This model was made by industrial Fabrich GmbH of Berlin, Germany and was advertised in April 1923. The tone arm projects beyond the side of the case and is connected to the interior by a section which turns back. A piece of cardboard around the motor forms the internal horn with the sound emerging from vertical slits at the front.

### "Stewart" Phonograph:

Manufactured by the Stewart Phonograph Corporation, Chicago, U.S.A. A metal section around the motor divides the case into a split sound chamber with vertical slits on both sides of the case. This model will play vertical or lateral cut records.

### "Mikkyphone":

Rectangular metal body measuring 8 inches by 6 inches when closed. Circa 1930 made in Japan.

A strong, well made little machine of the cameraphone type. It has a plastic carry strap and winding crank knob. The lever supporting the sound-box and horn is rotated to start and stop the motor.

## M. CHARLES PATHE . . . FILM PIONEER

With Charles Pathe's death on 26th December, 1957, the silent film era became more remote and even more a part of history. Pathe's enterprising contributions to the welfare of the silent cinema were almost limitless. In 1896, with brother Emile, he founded the firm of Pathe Freres, famous for its projection and camera apparatus, its newsreels, its amazing stencil colour process of Pathecolour and its introduction of home movies. Subsidiary companies, which were formed in every major city of the world — from Moscow to Yokohama — included Pathe-Exchange, Pathe-First National, Pathe-Cinema, Pathe-Consortium, Pathe-Natan, Pathe, Pathescope, Pathe-Baby and Associated British Pathe.

Pathe's influence was largely responsible for the fact that in 1914, 90 percent of all films shown throughout the world were French. His first business interest was, however, in the gramophone. At a fair sideshow in Vincennes, in 1894, he noticed how the playing of a record fascinated the crowd. He quickly bought out the owner of the sideshow and set up business. His company — Pathe Disques — later moved to better accommodation and lasted until the Great War, producing specially designed records which were played in reverse with a Pathe "voice-box" instead of a needle. Eventually these records were made obsolescent by improved models of ordinary gramophones, but they made a brief come-back in the twenties when the Pathe Phonographe was coupled to the Home Movie to produce the first amateur talking machine.

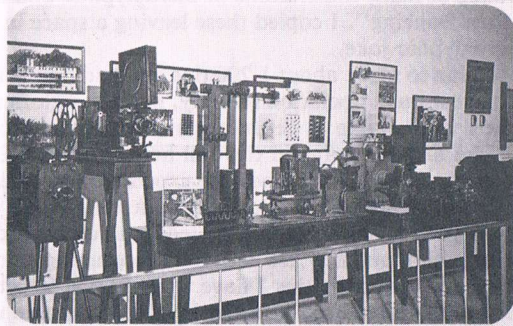
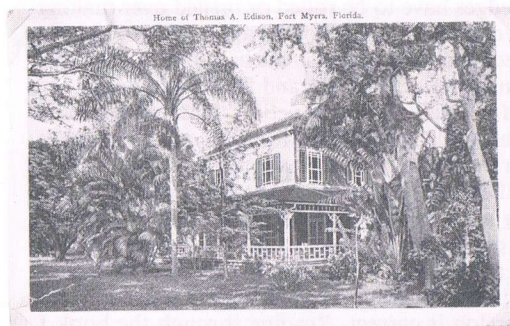
Charles Pathe retired in 1929, his working life having covered the entire silent period. He was one of the most important film pioneers of all, for his financial brilliance was as vital to the survival of the French cinema as the artistry of the finest French directors. As he himself once said, "I didn't invent the cinema, but I industrialised it".

*From Brian Blanchard, Timaru*





From the English 78 picture book  
D. L. Taylor





## REPORT ON THE A.G.M. AT THE HOME OF DICK HILLS ON THE 27th SEPTEMBER

Fourteen were in attendance and apart from Bob Wright replacing Joffre Marshall on the committee, officers were re-elected as they were last year. Joffre accepted the position of Patron.

Those who went to Ashburton on the 25th of September to visit the woodworking museum spoke in accord of the enjoyment derived.

An offer to provide for sale pyramid shaped needle tins was received from a maker in Liverpool, England. These are facsimiles of ones made commercially around 1945 and were advertised in the Gramophone as the Golden Pyramid Needles.

An interesting selection of gramophone, record, and radio news magazines and periodicals was presented by the secretary for members perusal. These were received from as far afield as England, U.S.A., Canada and Australia as well as New Zealand — the one from the Vintage Radio Society.

Robert Sleeman produced a singing doll which used an Edison type cylinder loaded from the back. The rendition of Little Boy Blue was appreciated by all present.

The productive and entertaining evening culminated with a delicious supper enjoyed by all.

## LETTER TO EDITOR



Over many years I have wanted to supply needles in tins but every tin maker presents the same problem — quantity, they want orders for a quarter of a million tins at a time. A further problem makes it difficult for me to make tins on a small scale, we now have a law which makes it illegal to sell goods in raw edged tins which means the edges have to be rolled or turned over making manufacture very complex. A few months ago I decided to have a go at making these pyramids based on the tins which were available just before and after the last war and found it to be a practical proposition for small scale production. I have now made up a series of small tools for folding, forming and closing but of course these are essentially hand made tins.

Having made the tins I had to design the decoration and one evening, watching a TV programme on Egyptology the notion of a gramophone playing to a Sphinx struck me so I went to the library to borrow a book to see what a Sphinx really looked like. The gramophone is a photograph of one from my collection and the red horned version is correct. Reading through the book I

looked at many illustrations of hieroglyphics and one fascinated me, four figures with the translation "Men Dancing". I copied these leaving a space in the middle and drew in a Trade Mark gram as my hieroglyphic joke.

I plan to make about 1,200 tins and had hoped to do this before Christmas but unfortunately I had to have a small operation recently, nothing significant but it has set all my work back and it is unlikely that I will be able to get more than a few hundred done in time.

The original pyramid tins sell here for about £15-£25 believe it or not, and whilst mine will not be as expensive as that they are expensive I'm afraid. I will be offering them at £7-50 per tin or £21 per set inclusive of U.K. postage. I am not giving a trade or quantity discount for reasons I will explain but if your members are interested I can do an order at £19 per set with postage extra. I'm sorry the price is high but they are very time consuming to make. Alternatively if some of your members want these purely for the tins I have up to about 50 sets already made up but like the samples I sent you the needles have been affected by the flux (some very badly so my claim about quality hardly holds up to scrutiny) which I can supply at £15 per set.

As I am sure I have mentioned in the past, my sales of needles in packets have swollen to enormous proportions but much of the increase has been sales to the vast number of dealers we now have in the U.K. I am not necessarily opposed to dealers but one of my objectives in setting up this business was to maintain contact with ordinary collectors and enthusiasts and to give them a reasonable deal. There



has been an enormous growth in interest in the U.K. in recent years but I feel that I haven't made sufficient contact with the new collectors and the tins are partially as advertisement hoping to reach these new people who are more interested in playing records and cannot afford to have rows of machines.

I am equally sure that I have mentioned my interest in producing some books and I am, I think quite close to having one ready for printing and another not too far behind. This project will cost several thousand pounds and a further hope is to raise some cash towards this outlay. The books incidentally are:

1. Some gramophones of the 1920s. This will be a printing of a number of gramophone catalogues into a single book which should show the shape of the gramophone supply business in the 1920s. The catalogues include 2 x Columbia, Academy, Trutone, Dulcetone, Alba, etc. plus some parts of non specialist catalogues (which include spades, gas fires, etc.) and some spare parts, etc. and some slight commentary added by myself. This one is fairly close to being ready.
2. For many years I have been trying to compose a book on repairs, etc. with little success so I have now extracted all parts relating to soundboxes and hope to finish this before too long. Most of my writing on this is complete and some of the drawings are also. I hope to add a large section of photographs of soundboxes from my collection.

I am very much an optimist and perhaps it is over optimistic but I would hope to have the first with the printer during the coming winter and the second within a year. The first is essentially dealing with the British scene but I think there may be some interest on your side of the world so I will send you a copy when I have it.

Sincerely, Barry

#### BOOK REVIEW

#### THE ENGLISH 78 PICTURE BOOK (016.7802660275)

by Don Taylor, 24C Elphinstone Road, Mount Stuart, Hobart, Tasmania, 7000.

Available from the author.

Don't be taken in by the title — certainly this book is of most import to English collectors — but collectors everywhere will find it of absorbing interest. Australians in particular will find much of direct interest, as it includes not only records made in England and Europe for sale in England, but those manufactured in England for sale in Australia. There is a surprising number of these, and of course many not made specifically for Australia found their way of here anyway.

Apart from that, the title tells it all — reproductions of over 500 labels of records made or sold in England. From A. C. DELACOUR DE BRISAY (I've never heard of it either) to ZONOPHONE the pages reveal an amazing variety of names and designs. Many record collectors will tell you that their interest is in the music, not the label, but I'm sure anyone that collects 78s feels a thrill when they pick up a Melba on the original Gramophone label, or a Gennett by the New Orleans Rhythm Kings.

There are also people who collect records for the labels, and why not? Match boxes, beer labels, why not record labels? The design of record labels is an art in itself, and as this book reveals, many of them are of considerable artistic merit. The success of Brian Rust's "AMERICAN RECORD LABEL BOOK" and the interest (and information) in the label section of "BLACK BEAUTY, WHITE HEAT" show that collectors do want this type of information in book form.

Along with the reproductions there is a short note on each label, describing the manufacturer, period of existence and other interesting details. Most reproductions are in black and white, but two picture records and twelve labels are beautifully reproduced in full colour. If one picture is worth a thousand words, these colour pages are explanation enough why collecting 78s remains such a universal hobby.

The standard of reproduction in black and white is very satisfactory — some less than perfect results are due to difficult colour combinations of the original labels that lower contrast in black and white, or to the condition of old or maltreated discs.

"THE ENGLISH 78 PICTURE BOOK" is a worthy addition to our discographical literature, not probably for a straight through read, but for reference and browsing it's a delight. Now, when do we get a book on Australian labels?

*Jack Mitchell, President  
Fellowship of Australian Discographers*



### 3ZC RADIO IN NEW ZEALAND — DECEMBER 6th, 1924

We have pleasure in re-printing an article on an early radio station 3ZC which began transmission on December 6th 1927 almost 66 years ago.

This station was later known as 3ZM and even later became 3ZB.

Grace Green was the station's second woman announcer and remained all her life in radio.

She was speaker to our members, at a Christchurch convention, then having retired from radio.

#### ANOTHER MILESTONE PASSED IN CANTERBURY RADIO

**Station 3ZC Enters on New Era. Is Finest B Class Transmitter In The Dominion.**

**Its Short-Wave Broadcasts Heard Widely. Has Pioneered This Work In New Zealand.**

Modern life changes rapidly, but at the same time these changes are almost imperceptible. Ten years ago broadcasting was unknown in the Dominion. Today it is accepted by the community as a fact calling for no amazement.

Thousands of those who listen to the concerts and other items broadcast never give a thought to the rapid manner in which this new-found form of entertainment has become established.

Broadcasting on an organised basis commenced in this country nearly four years ago. The listeners numbered a few hundreds. Today there are nearly 50,000 receiving sets in use, giving service and entertainment to at least 200,000 people. The Dominion has four A class stations, which maintain a regular schedule, and half a dozen secondary stations which are termed B class.

With the exception of Christchurch, these B class stations are not yet operated on a scale which approaches the excellent service given by the New Zealand Radio Broadcasting Company's plants.

It is in Christchurch, however, that the exception is found. Known as 3ZC, the local B class station has supplemented the service given by 3YA to such an extent that, while it has been off the air during the past fortnight, its absence has been felt by hundreds.

Now that the station is back on the air again, with its increased power and improved service, it is interesting to look back over its short but interesting history, and to review the part that it has played in making radio receiving attractive to the public of Canterbury.



**Mr F. R. Plominski**  
(Company manager  
and engineer).



**Miss Grace Green**  
(Announcer and  
programme organiser)



**Mr F. Salvesen**  
(Assistant manager)

It was just two years ago that the station was first heard. For some time the idea had been in existence of erecting a station that would give service to listeners during the time that 3YA was silent. Mr F. R. Plominski, the present company manager and station engineer, in conjunction with Home Recreations, Ltd., gave a great deal of thought to the matter.

For some time he worked on the construction of a fifty-watt transmitter, which he had designed himself, and on December 6, 1927, the first official programme went out over the air from that station. Its power was low, its studio was the corner of Home Recreations' music shop in Armagh Street, and the operator had to work in the face of many difficulties.

All the time Mr Plominski had visions of a larger station — one that would be known from North Cape to the Bluff. The idea of putting this country on the map in the outside world was all the time in the back of his mind, but these things could only be approached gradually.

Six months after the opening of the original station a company was formed, with Home Recreations holding three-quarters of the shares and Mr Plominski one quarter. The result of the formation of the company was that a new transmitter, capable of putting 250 watts into the aerial was constructed and put into operation. This was



five times the power of the original station, and soon reports were received of good reception.

From Adelaide, South Australia, came a report recording excellent reception. Another came from Central Australia, while in New Zealand reports of daylight reception, which all radio enthusiasts know is quite another matter from night reception, were received from as far north as Whangarei.

Spurred on by the knowledge that 3ZC was filling a demand Mr Plominski then set to work to put into effect his plan for letting the world know that there was such a place as New Zealand. He constructed a short-wave transmitter and commenced regular broadcasts for the benefit of overseas listeners.

After the usual trials and troubles which beset the experimenter, 3ZC got its short-wave transmitter working in first-class manner and the success of the experiment is borne out by the fact that hundreds of reports have been received from all parts of the world concerning the reception of the short-wave station. Reading these reports at random, one is assured that the station has conferred a benefit on the Dominion by making it known in all sorts of out-of-the-way places.

Ever looking forward, a public company was formed by Mr Plominski on September 21, 1929, in order to further the objects of the station which, by the way, does not cost the listeners of this country one penny. As the result of the formation of this company, a new studio was secured at Edison Hall, Tuam Street.

During the past few weeks, Mr Plominski and his staff have been busy building a new 250-watt transmitter, which has already been proved to be ever so much more powerful than the old one of the same nominal rating. A new aerial was erected of much greater dimensions than the old one which stood above Home Recreations, and which, by the way, added to the troubles of the operator by getting blown down on a couple of occasions when fierce winter gales swept through the city.

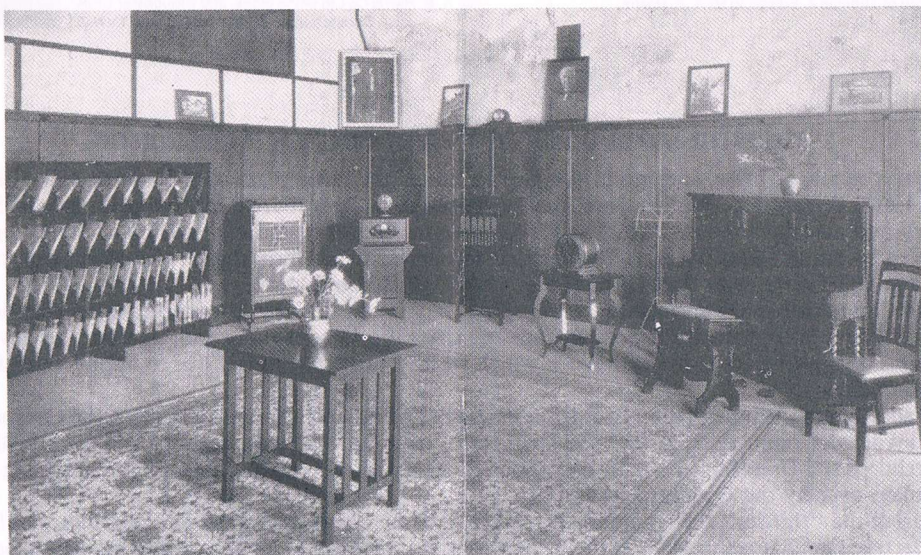
The new station is replete with every modern refinement and the transmitter itself is one of the finest pieces of work of its kind to be seen. The studio is large and has splendid acoustic properties. Everything that is necessary to make the station efficient and to give a good service to listeners has been included, and there is no doubt but that the station will be appreciated by the listeners of the Dominion.

All through its history, the station has worked in conjunction with the Radio Broadcasting Company. It had not been built with the idea of supplanting 3YA, but it acts as a supplementary service to give pleasure and entertainment to listeners when the larger Gloucester Street station is not operating.

Its morning and midday sessions and its entertainments on Tuesday nights (the silent day at 3YA) have been successful and have provided a service that otherwise would not have been given.

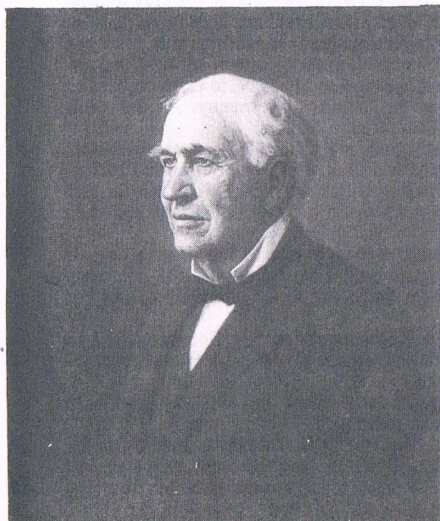
One of the interesting facts that stands out in the short, but successful history of the company, is that it is the first station in this country to have had lady announcers. First of all Miss Millicent Jennings filled this role and when she retired, her place was taken by Miss Grace Green, whose voice is known to thousands throughout the Dominion.

Whilst the improvements made have been remarkable, it is permissible to state that the ultimate has not been reached and that whenever possible, the latest discoveries in connection with radio transmission will be incorporated. At the moment, the station is replete with all the latest additions, but the engineer, Mr Plominski, is a true experimenter, and he does not intend to rest on his oars.



*A view of portion of the 3ZC studio at Edison Hall.*

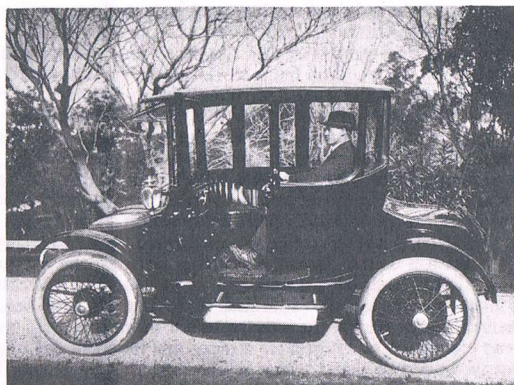




To A R Harris

*Thomas A. Edison*

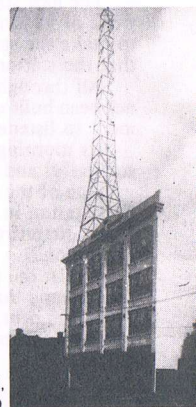
Autographed photo of Thomas A. Edison to Mr A. R. Harris.



Mr A. R. Harris driving one of the first Electric Cars in Christchurch in the early Twenties.



A. R. Harris Co. Ltd, display at Dunedin Exhibition 1928 featuring Savage washing machines.



A. R. Harris Co Ltd office block, 200 Gloucester Street, Christchurch, Built in 1926. (Now T.V.N.Z.)

## CHRISTCHURCH COMPANY'S ASSOCIATION WITH EDISON

Sixty years ago, after working in the United States for three years with Thomas A. Edison, Mr A. R. Harris returned to New Zealand, to set up business in Christchurch, marketing the Edison Storage Battery and associated equipment. The Company commenced operations in Dundas Street, on a site occupied by Smith's City Market. The decision to operate from Christchurch was prompted primarily by the completion at that time of the Lake Coleridge Hydro Station.

The Company's main business, in the ensuing sixty years, has been the marketing of electrical and industrial equipment, mostly imported from countries throughout the world, and later involving the local assembly and manufacture of goods which were in restricted supply due to import licensing and other factors.

In addition to the importation of Edison Batteries and other electrical equipment, the Company became involved around 1925, in the establishment of four YA radio stations in Auckland, Wellington, Christchurch and Dunedin. Company operations of these stations continued until the Broadcasting Service was taken over by the Government in 1932.

During the "thirties" the Company became one of the major importers and distributors of radios and electrical appliances in New Zealand, until this was brought to an abrupt end by the introduction of import licensing 1935.



## THE ADVENT OF TRUE WIRELESS TELEGRAPHY 1888-1894

by Charles R. Gibson, F.R.S.E.

### PART TWO

The next big step forward was a very simple discovery made by a French physicist, Professor Edouard Branly. He found that the electrical resistance of a mass of metal filings was greatly reduced when electric waves happened to fall upon them from the sparking of a leyden jar or induction coil. Branly discovered also that when the glass tube containing the filings was shaken the filings lost this acquired conductivity and resumed their normal resistance. It seems that these facts were rediscovered by Branly, having been observed by an early experimenter in 1838.

It so happened that about the time (1889) when Branly rediscovered the phenomena of the metal filings Sir Oliver Lodge had observed that two metal knobs or spheres if placed very close together, would actually "cohere" or apparently stick together, when a spark passed between them. If such a spark-gap, or a tub of filings, were made part of a local battery circuit in which an electric bell was placed, it is obvious that either of these breaks in the circuit will prevent the battery current reaching the bell. As soon as the resistance of the air-gap or the filings is reduced by the impact of æther waves causing them to cohere, the local circuit would be completed and the bell would ring. It will be observed that the "coherer" is analogous to an ordinary bell-push, but which may be operated from a distance by means of æther waves.

It is of interest to learn that Professor D. E. Hughes, the inventor of the microphone, had made similar experiments many years earlier, and before Hertz had made his great discovery. When J. J. Fahie was preparing his *History of Wireless Telegraphy* (1899) he happened to write to Sir William Crookes with reference to some experiments which Crookes had mentioned in an article in the *Fortnightly Review*. In reply Crookes said that he had referred to some experiments made by Professor Hughes, but as no account of these had ever been published he did not feel at liberty to say more. He suggested that Fahie should write to Hughes on the subject. The first reply said: "Your letter has brought upon me a flood of old souvenirs in relation to my past experiments on aerial telegraphy. They were completely unknown to the general public; and I feared that the few distinguished men who saw them had forgotten them, or at least forgotten how the results shown them were produced. At this late date I do not wish to set up any claim to priority, as I have never published a word on the subject; and it would be unfair to later workers in the same field to spring an unforeseen claimant to the experiments which they have certainly made without any knowledge of my work."

Fortunately, Fahie did not let the matter rest at that, but succeeded in getting Hughes to relate these early experiments. After some introductory remarks concerning his microphone, he writes: "Further researches proved that an interrupted current in any coil gave out at each interruption such intense extra currents that the whole atmosphere in the room (or in several rooms distant) would have a momentary invisible charge, which became evident if a microphonic joint was used as a receiver with a telephone. This led me to experiment upon the best form of a receiver for these invisible electric waves, which evidently permeated through all apparent obstacles, such as walls, etc. I found that all microphonic contacts or joints were extremely sensitive receivers . . . whilst a loose contact between metals was equally sensitive, but would cohere, or remain in full contact, after the passage of an electric wave.

"The sensitiveness of these microphonic contacts in metals has since been rediscovered by Mons. Ed. Branly, of Paris, and by Professor Oliver Lodge, in England."

It will be observed that Hughes uses the words "electric waves" in one sentence, although he speaks of "a momentary invisible charge" in the preceding sentence. This might lead some reader to wonder if Hughes really had a definite idea that he was dealing with electric waves in these pre-Hertzian days, or if he had merely become familiar with the idea of electric waves prior to the time of writing this letter in 1899, and therefore adopted this phraseology in referring to his early experiments. However, there need be no doubt upon this point, for in a later part of the same letter Hughes makes the matter quite definite. Referring to an occasion when three distinguished men — Spottiswoode, Huxley, and Stokes — paid him a visit to see his experiments in aerial transmission of signals in 1880 Hughes writes: "Professor Stokes could not accept my view of aerial electric waves unknown up to that time, but thought I had quite enough original matter to form a paper on the subject to be read at the Royal Society."

Then Hughes goes on to say: "I was so discouraged at being unable to convince them of the truth of these aerial electric waves that I actually refused to write a paper on the subject until I was better able to demonstrate the existence of these waves; and I continued my experiments for some years, in





Harold Burtoft  
with his talking book



1

2



3

Photos — H. Burtoft.



Elsie and Bill Tarling's Wedding.



hopes of arriving at a perfect scientific demonstration of the existence of aerial electric waves produced by a spark from the extra currents in coils, or from frictional electricity, or from secondary coils. The triumphant demonstration of these waves was reserved to Professor Hertz, who by his masterly researches upon the subject in 1887-9 completely demonstrated not only their existence, but their identity with ordinary light....I then felt it was now too late to bring forward my previous experiments; and through not publishing my results and means employed, I have been forced to see others remake the discoveries I had previously made."

It is evident that this interesting work of Hughes has no place in the genealogic tree of wireless telegraphy, as the results remained unpublished, and evidently played no part in leading others to the discoveries which they made. The work is none the less interesting, and as one writer in a newspaper article of fifteen years ago has said: "Hughes experiments of 1879 were virtually a discovery of Hertzian waves before Hertz, of the coherer before Branly, and of wireless telegraphy before Marconi and others."

To return to our consideration of the coherer, we find that Sir Oliver Lodge had given many demonstrations of signalling over moderate distances (150 yards) by the year 1894, when he read his famous paper upon the subject at the Oxford meeting of the British Association. But Lodge did not see wherein a wireless telegraphic system was to be of much practical use. In his account of *The Work of Hertz and His Successors* (1894) Lodge says: "Although the method of signalling to a moderate distance through walls or other non-conducting obstructions by means of Hertz waves emitted from one station and detected by Branly filing tubes at another station was practised by the author and by several other persons in this country, it was not applied by them to actual telegraphy. The idea of replacing a galvanometer by a relay working an ordinary sounder or Morse was an obvious one, but so far as the present author was concerned he did not realise that there would be any particular practical advantage in thus with difficulty telegraphing across space instead of with ease by the highly developed and simple telegraphic and telephonic methods rendered possible by the use of a connecting wire. In this non-perception of the practical uses of wireless telegraphy he undoubtedly erred. But others were not so blind, though equally busy; and notably Dr Alexander Muirhead foresaw the telegraphic importance of this method of signalling immediately after hearing the author's lecture on June 1st, 1894 (Royal Institution), and arranged a siphon recorder for the purpose."

This gives us the position of things in Britain up to the year 1804. During the following year Captain H. B. Jackson, of the British Navy, succeeded in transmitting wireless messages between ships, but as his invention became the property of the Government, no description has ever been published.

How were things progressing in Germany, the home of the Hertzian discovery? The German scientists do not seem to have placed much faith in coherers; they kept to the original spark-gap detectors.

In Russia, Professor Popoff, of St. Petersburg, began experiments in 1895. He used a coherer and an aerial collector in the form of a lightning conductor, but he believed there was difficulty in devising a powerful enough transmitter to operate over a great distance. Some years later his system came into use; the real difficulty had been not in the transmitter, but in the receiver not being sufficiently sensitive.

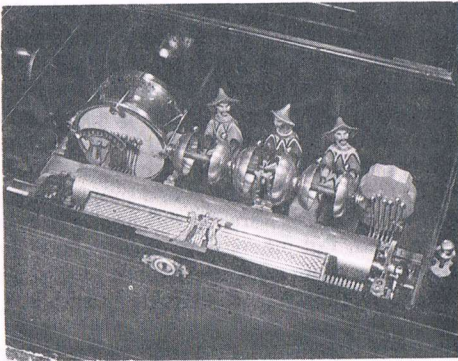
In Italy, Professor Righi, of Bologna, took up the coherer experiments in 1894. It is sometimes stated that Marconi was one of Righi's pupils, but in his Nobel Lecture Marconi said: "I never studied physics or electrotechnics in the regular manner, although as a boy I was deeply interested in these subjects. I did, however, attend one course of lectures on Physics under the late Professor Rosa, at Livorno, and I was, I think I might say, fairly well acquainted with the publications of that time dealing with scientific subjects, including the works of Hertz, Branly, and Righi." Although we see that Marconi was never a pupil of Righi, we may take it that the work of that professor had an influence upon Marconi.

Guglielmo Marconi, then aged twenty-one years, commenced wireless experiments in 1895. His first experiments were made at his father's villa on the outskirts of Bologna, over a space of a few yards and then from room to room. The next step was to try longer distances in the garden. The apparatus which he used was the same as already described in connection with the work of Sir Oliver Lodge.

The general arrangement of the transmitter and the receiver will be understood by a reference to the accompanying diagram in Fig. 7. In the lower part of the diagram we see an induction coil energised by a battery and controlled by a Morse sending key. The terminals of the secondary circuit of the coil are connected to the radiator or spark-gap. In the upper part of the diagram, which shows the receiver, we see the coherer which controls the battery current and operates a relay. When the æther waves from the transmitter fall upon the coherer, it allows the battery current to energise the magnet of the relay. This



# STAMPS



Picture post card, Swiss music box.

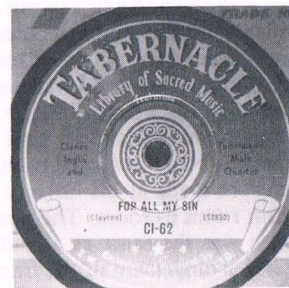


Beecham's pills — Steve Ramm.

Collection of sun dials.



Burtoft collection





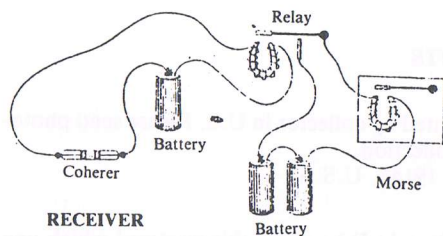
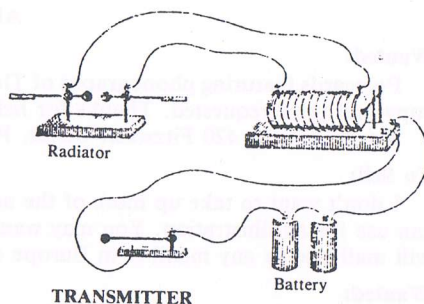


Fig. 7 — The general principle of Transmitter and Receiver



depressed the lever in the relay and thus switches on the second battery to the Morse telegraph instrument.

Marconi connected one of the spark balls to a metal can hoisted on a mast, and the other spark ball to a metal plate sunk in the earth. In the receiver he used an improved form of coherer, which he connected to a similar aerial mast and earth-plate.

It should be mentioned that Lodge used "capacities" or aerials on his coherer, but these have been omitted from the diagram for the sake of simplicity; these were not raised on masts. We have seen that Popoff, in Russia, used a lightning conductor aerial on his transmitter, but if Marconi's adoption of the aerial was not of prior date it was quite independent, for in his Nobel Lecture he said: "In August, 1895, I discovered a new arrangement which not only greatly increased the distance over which I could communicate, but also seemed to make the transmission independent from the effects of intervening obstacles. This arrangement consisted in connecting one terminal of the Hertzian oscillator, or spark producer, to earth, and the other terminal to a wire or capacity area placed at a height above the ground, and in also connecting at the receiving end one terminal of the coherer to earth and the other to an elevated conductor."

Wireless telegraphy was now ready to be launched into the practical world, and this Marconi did in 1896.

*Reprinted from Wireless Telegraphy and Telephony*

### POINTS FROM LETTERS

First stamps — I know you probably have other sources for U.S. stamps, but I thought I'd again offer my help. The Hirschfeld stamps are no longer available. Did you get a book of them with the cover (there were 20 in the book)? I may have an unused set if you want one. There was also a book of rock and roll stamps including Elvis, Buddy Holly, etc. It's still available as far as I know. They then issued a Country Western booklet and finally a Broadway Musicals booklet. If you need any let me know. I may have some cancelled ones too.

On page 36 of Vol. 28, Issue 3 a comment was made that "Vogue Picture Records sell for up to \$1,000, and more in the U.S.A." Members should not rush to try to obtain these prices for any Vogues in their possession. These colourful discs made in the late 1940's usually bring US\$25.00 to US\$30.00 at auction. There are only one or two which command higher prices. One disc is so rare that US\$1,000.00 is often offered. The most common disc, "Sugar Blues", will sell for less than US\$25.00 in the U.S. (Of course to get value in NZ\$, double the above values.)

*Steven I. Ramm, Anything Phonographic  
420 Fitzwater Street, Philadelphia, PA 19147*

### FORT MYERS Edison's Winter Home

This is the home where Thomas Edison spent the winter months.

He bought the property when he was 38, a widower and in poor health.

His doctors suggested if he didn't move to a warmer climate he might not live a very long life, so he came south.

He came to Fort Myers in 1884-85 and purchased the property for \$3,000. He filled the garden with endless exotic plants and trees, built a laboratory and a swimming pool.

The place has been preserved as a museum and everything is just as it was when Edison lived there.



## ADVERTISEMENTS

### Wanted:

Postcards featuring phonographs of Thomas Edison wanted by collector in U.S. Please send photocopy and price requested. Thanks for helping with this collection.

Steven Ramm, 420 Fitzwater Street, Philadelphia, PA 19147, U.S.A.

### To Sell:

I don't want to take up more of the next issue, but I thought I'd enclose this postcard which you can use for an illustration. You may want to note that I sell these at 6 for US\$2.55 to the U.S., but will mail one to any member in Europe or New Zealand for NZ\$2.00 or US\$1.00.

### Wanted:

Photographs of your machines, your collection, radio, music box, record labels.

Write W. T. Norris or L. Drummond, P.O. Box 5175 Papanui, Christchurch, New Zealand.

### Buy or Swap:

Novelty magnetic attachment to 78 record turntable (couple dance to music).

Wanted to buy "Polyphone Discs" 8 inches to 8 1/4 inches diameter. Columbia Commercial Reproducer Diaphragm with recorder and reproducer stylus (have head for above) Pat. 1907. 6 inch Columbia Cylinder. Note Bill Dini had one spare!

For sale or swap Triola Rolls bit weather worn on front but mostly good condition (most not used). One new set of Triola Strings.

Reg. M. Thompson, 28 Oxford Street, Como, W.A. 6152, Australia.

### Wanted:

By Dunedin (New Zealand) member. Any cylinder, overhorn or internal horn or "horn-less" machines, particularly any Edison machines in any condition. Don't mind "basket cases". Does anyone have a "Triumph" needing restoration they'd be prepared to sell?

Contact — Peter McQuarters, 54 McKerrow Street, Dunedin, New Zealand. Phone (03) 454-5224.

### Wanted:

Magic Lantern projectors. Also 8mm and 16mm wind-up movie cameras — Bolex, Keystone, Bell and Howell, etc.

Contact — Peter McQuarters, 54 McKerrow Street, Dunedin, New Zealand. Phone (03) 454-5224.

### Trade:

I have a large and varied collection of recordings dating from 1900 through to 1950 — opera, orchestral, popular, etc. I exchange cassette tapes on a one for one basis and provide good notes and dubs. Would be pleased to trade.

Please reply: Mr Tom Hood, 5093 Walden Street, Vancouver, B.C., CANADA V5W 2V6.

### The English 78 Picture Book, Don Taylor:

A must for the serious collector! An illustrated catalogue of the hundreds of English 78 labels issued from the 1890s to the 1970s. Also includes items made in England for the New Zealand and Australian markets.

Over 500 labels, over 600 pictures, some in colour. Hardback, 250mm by 176mm, 260 pages. Good value at Aus\$39.50 plus \$18.00 postage.

Available from Don Taylor, 24C Elphinstone Road, Mount Stuart, Hobart, Tasmania 7000, Australia.

### To Sell:

I still have a small quantity of original dealer's stock 1-31/32 inches mica diaphragms (better than anything made today). They fit Victrola 5 reproducers but can be cut to fit exhibition reproducers. Price US\$2.50. Also I have 2 sets of conversion gears to change a 2 minute Edison Standard to 4 minute US\$85.00 each.

Bill Tarling, 46 Beacon Road, Scarborough, Ontario, Canada, MIPIG7.