

# 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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**REPUBLIQUE TOGOLAISE**

**100e Anniversaire  
de l'invention  
du phonographe**

*Unusual Miniature Sheet*

## FOR YOUR INFORMATION

Here we are in 1990, a special year for New Zealand, as the Treaty of Waitangi was signed 150 years ago, so, for New Zealand members a year to remember.

Celebrations everywhere throughout the year.

Thanks to all those members who have sent us material old and new, for inclusion in "The Phonograph Record".

### Parts:

We are holding good stocks of the following items:

Gem Horns, Petal Horns, Edison Amberola 30 Top Grilles, Edison Cygnet Cranes, Amberola 30 and 50/75 winding handles, Columbia Q keys (flat). Wooden Handles, stained. Lugs for carrying handle, Alloy Gem pulley, Driving belt leather, Gem Lid screws, 'Thos A. Edison' transfers, 'Edison' Transfers, Gold Lines, Needles and Terry Springs.

We have most other items in stock. In order that all members may avail themselves of parts, etc., we request items such as horns, cranes, etc., be limited to three per item per order.

We still have some trailer needles at \$1.00 packet. Corner Transfer — as per enclosed sample. . . .

We now have complete sets of Gem Decals. These are for both the black and maroon (red) Gem. \$5.00 each.

### New Leaflet:

We have a small quantity of a reproduction of a leaflet put out by the Goodrich Company in New Zealand entitled "The N.Z. Record Herald" and Goodrich Gazette, has 12 pages, printed as a monthly in 1918. Please apply to the Secretary.

### Note from Secretary:

Leading up to the Christmas/New Year break the Society received many greeting cards and messages from members both in New Zealand and overseas. Not only do we appreciate hearing from members, but acknowledge the favourable comments on our magazine and range of parts available for sale. The small group of willing members who put in many hours of voluntary effort to ensure our operations run smoothly, are obviously recognised for their contributions. Banking of monies, packing and despatch of orders, liaison with parts manufacturers, etc., are all chores performed during often busy work days and are time-consuming. I would also like to acknowledge those members who assist me and make my job so much easier.

### Receipts:

With the ever rising costs of postage, despatch of receipts is often expensive. In future where applicable, receipts will be held over and included with magazine or annual sub accounts. This does not apply to members ordering parts and with whom correspondence occurs — their receipts will be sent in the course of transactions.

Secretary

## AUTOMATA

Extract from letter received by Secretary from Harold Burtoft, Australia, with reference to photos sent. . . .

"As promised, seven pictures of Automata — I do have many more. . . .

They all move of course; some smoke, or bang a drum and hit a cymbal or admire themselves in hall marked sterling silver hand looking glasses. All have musical movements. They may sniff delicately at a nosegay, or fan gently, turning heads, moving eyelids and all the important things that automata do. Some have Jumeau heads, some Simon and Halbig, Anaud Marseilles, some unmarked, but all interesting to the few avid collectors of these hundred year old (average) little people.

I'm always looking for more Automata — good prices paid. . . ."

(Harold Burtoft's address can be obtained from Secretary).

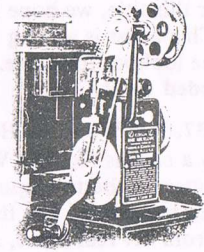
Due to lack of space we have included only 4 of the 7 photographs in this issue.

Editor

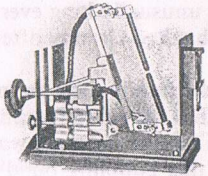
# EDISON HOME KINETOSCOPE



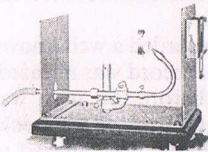
Film Container



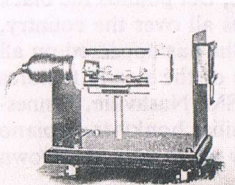
Quarter View of Mechanism



Baby Arc Lamp



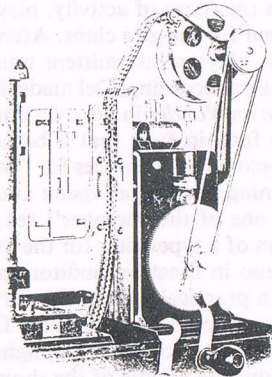
Acetylene Burner



Nernst (Electric) Lamp



Actual Size



Mechanism with Film Gate Open

THE MAN TO WHOM THE WORLD  
OWES THE MOTION PICTURE



*Thomas A. Edison.*

## BERLINER

In this issue we include four illustrations of four catalogues kindly loaned to us by Bernard Viese. Three are record catalogues and one a machine catalogue.

These were all produced by the Berliner Gram-o-Phone Company of Canada, and dated Nov. 1st. 1901, April 10th. 1902, and June 14. 1902. Of special interest especially to machine collectors, is the one on The Improved Berliner Gramophone and How to Use it.

This catalogue would be worth reproducing for machine collector members, but reproduction on paper today, has got prohibitive, unless done by photo copying.

The catalogue is small, 4¾" x 3", containing twelve pages and twelve illustrations.

The other three are of more interest to record collectors. One of 48 pages, is a little bigger, and has four illustrations. The other two are supplemental lists with 8 and 6 pages. One of these, would enable the user to play vinyl discs without scratch, and even sound quite good.

## RECORD COLLECTING

### Artist — Del Wood

Under this title, we hope from time to time to reproduce the information on records we have come across. This artist is among the best Rag Time pianists. We have collected three of her records, and are on the lookout for more. These are: Down Yonder; Hot, Happy and Honky; Honky Tonk Piano. **All recorded on R.C.A.**

#### LPM-1437. Del Wood — Hot, Happy and Honky:

"Play a chorus like Del Wood" is a familiar phrase to all commercial piano players. This is quite a compliment to bestow upon the blue-eyed, auburn-haired gal from Nashville, Tennessee. Her style of playing has earned her the title of "Queen of the Ragtime Pianists". The name "Del Wood" is derived from her real name, Adelaide Hazelwood. She started to play piano before she started school. Like all "young 'uns" when first starting piano lessons, Del hated to practice but hated her dishwashing chores even more. Her grandmother made an agreement with her — Adelaide would practice while Grandma did the dishes. Grandma, of course, made the dishwashing clatter last unusually long every night to keep those little nimble fingers busy at the keyboard. In later years, Del thanked Granny often for the little trick which had been played on her to keep her practicing.

When Del was eight years old, a German piano teacher who was a friend of the family took an interest in her musical talent and gave her the usual lessons in classical music. But Del favoured ragtime and the rhythm of the blues, much to the chagrin of her teacher. Her own natural style of playing was enjoyed by all. Fingers and toes would tap to the infectious beat produced by this bubbling bundle of rhythm. At school she was always the focus of activity, playing at dances and parties, in the school orchestra, and playing accompaniment for the glee clubs. After finishing school, Del went to work for the Tennessee Department of Health, playing intermittent music jobs on the side.

When given an opportunity to make a recording, Del made the most of it. She recorded a well-known square dance fiddlin' tune entitled *Down Yonder* in her own unique style. Once the record was released, it took off practically overnight; so fast, in fact, that it became a national hit before the artist was known and requests poured in for personal appearances for "Mister" Del Wood. One of the top booking agencies in New York, upon signing her for television and personal appearances, was amazed to find that all this power came from one of the "weaker" sex.

Now, instead of pounding the keys of a typewriter for the State of Tennessee, Del pounds the black and white keys of a honky-tonk piano in theatres, auditoriums and nightclubs all over the country, having made personal appearances in practically all of the forty-eight states. She has appeared on all major radio and television networks. Since February, 1952, Del has been one of the steady features of the *Grand Ole Opry*, which is broadcast each Saturday night over station WSM, Nashville, Tennessee and the NBC network. Along about the middle of the show comes that familiar honky-tonk piano sound, followed by thunderous applause; then the announcement, "And now we present the Down Yonder gal, Del Wood."

# AUTOMATA



words, divers hang out of the water, motor cars and buses racing backward, etc. Each film is run out on a wooden spool and, as he instantly transferred to the reel on the machine. The film is marked to show which end goes first.

You will notice that the pictures are extremely small. There are over 200 pictures per foot of film and each picture is less than three-sixteenths of an inch high and one-eighth of an inch wide. When you consider that a six foot picture can be shown in projection, you will realize how tiny they are magnified in projection. The same is true of the photographs of the automata. The same is true of the photographs of the automata. The same is true of the photographs of the automata.



Del brightens up the stage and wins over the audience at all personals, anywhere and everywhere she plays, with her sparkling personality. Her unique trick of covering up the keyboard with a heavy velvet robe, blindfolding herself, and *still* pounding out a tune is a sure-fire show-stopper.

### EDISON HOME KINETOSCOPE

Thanks to Larry Schlick, we have a very good illustration of this little home movie projector which is both unusual and rare in this country.

We are fortunate to have a catalogue on how to operate this model which contains a number of illustrations. From this, we reproduced some of these as well as some of the prose.

On an illustration page you see a photographic reproduction of a small strip of the motion picture film used on the Edison Home Kinetoscope. It is what is known as non-inflammable film. Eighty feet of this film contain as many pictures as one thousand feet of the film used in theatres, and give as long a performance — about 16 minutes. You will notice that there are three rows of pictures. The two outside rows run in the same direction and are thrown upon the screen by turning the crank of the machine to the right. The centre row of pictures is projected by turning the crank of the machine to the left. Running the machine forward throws the pictures of the first row upon the screen in their proper order. A simple shifting device brings the second or centre row into position. Running the machine backwards throws this row of pictures on the screen in their proper order and also rewinds the film preparatory to the projection of the third or other outside row of pictures by again using the shifting device and turning the crank to the right. Thus without interruption or delay all three rows of pictures can be thrown upon the screen as one continuous story.

By reversing the operation, that is to say, running the outside rows backward or the centre row forward, many amusing and startling scenes are obtained: for example: persons and animals walking backwards, divers rising out of the water, motor cars and horses racing backward, etc.

Each film is sent out on a wooden spool and can be instantly transferred to the reel on the machine. The film is marked to show which end goes first.

You will notice that the pictures are extremely small. There are over 200 pictures per foot of film and each picture is less than three-sixteenths of an inch high and one-quarter of an inch wide. When you consider that a six foot picture can be thrown upon the screen from one of these photographs, you will realise how highly they are magnified in projection. Technically this is called projection from microscopical objects, which simply means that Mr Edison has found the way to project a sharp, clear and brilliant motion picture from a photograph of such small size that a microscope is required to make out the objects contained in the photograph. The successful printing of these tiny pictures on motion picture film is in itself a notable accomplishment, and when combined with methods of magnifying and lighting that give a perfect picture on the screen enlarged to 350 diameters, or about 120,000 times the area of the picture on the film, the achievement becomes one of the most noteworthy in the history of the photographic art.

Type of Nernst Lamp can be used with either alternating current (A.C.) or direct current (D.C.) and will accommodate itself to any voltage not under 100 volts nor over 125 volts. A few cities have 220 volt service. There, a small transformer or rheostat will be necessary and can be supplied at a reasonable additional cost.

For those who desire the most intense light source obtainable for this purpose, we have designed a diminutive arc lamp known as the Baby Arc. It is exactly what its name signifies, a very small arc lamp.

As a part of the regular equipment we supply with the Baby Arc a small rheostat for direct current or a small transformer for alternating current. This equipment is for 100 to 125 volts. For 220 volts a special rheostat or transformer can be provided. All rheostats and transformers furnished by us for the Edison Home Kinetoscope are expressly designed for the purpose, and the connections can be made in an instant by anyone.

The Baby Arc lighting system may be attached to a lamp socket on any regular incandescent circuit where ten or more 16 candle power lamps are operated, provided at least ten of the total number of lamps on the circuit are turned off when the machine is being operated. This precaution safeguards against overloading the circuit.

The carbons used in the Baby Arc are supplied in the correct lengths and the cost of replenishment is very slight. They are copper-plated and do not soil the hands.

When the electric current is not available, the Acetylene equipment can be used. This equipment is entirely new and affords a light source several times more intense than that of familiar types of acetylene burner. About six ounces of Carbide will generate sufficient Acetylene for a performance of an hour and a half, and after the first filling the generator requires practically no attention. The equipment is very simple and easily understood.

A special grade of Carbide is required for this generator. It is known as Miner's Lamp Carbide and our dealers can obtain it for you.

The lamp house, meaning, of course, the hood containing the light which illuminates the pictures, will accommodate any of the three forms of lighting. It is finished in optical black to correspond with the rest of the apparatus.

The mechanism of the Edison Home Kinetoscope is along entirely new lines and is a perfect marvel of simplicity. The film does not have to be looped, and inserting it in the machine (technically known as threading the film) is as easy as putting a key in a lock.

There are no idlers nor tension rollers. The film has sprocket holes and runs on a sprocket so that there is no traction wear on the surface of the pictures. This sprocket insures a perfect register of each picture — meaning that each picture is perfectly square with the opening through which it is projected upon the screen. No mechanical movement is required to centre the pictures on the screen. No revolving shutter is needed and accordingly there is none of the flicker that such shutters create. When the machine is stopped, an automatic film protector shields the film so that it is not deteriorated by the concentration of the light rays. The mechanism is finished in black enamel and the baseboards in Flemish oak.

### PRICES ON EDISON HOME KINETOSCOPE

#### Acetylene Lighting Equipment:

Machine complete with "A" Lens System .....	\$65.00
Machine complete with "AA" Lens System .....	68.00
Machine complete with "B" Lens System .....	68.00
Machine complete with "C" Lens System .....	70.00

#### Nernst Lamp Lighting Equipment:

Machine complete with "A" Lens System .....	\$65.00
Machine complete with "AA" Lens System .....	68.00
Machine complete with "B" Lens System .....	68.00
Machine complete with "C" Lens System .....	70.00

#### Baby Arc Lighting Equipment for Direct Current:

(110 Volts, Including Rheostat)

Machine complete with "A" Lens System .....	\$72.00
Machine complete with "AA" Lens System .....	75.00
Machine complete with "B" Lens System .....	75.00
Machine complete with "C" Lens System .....	77.00

#### Baby Arc Lighting Equipment for Direct Current:

(220 Volts, Including Rheostat)

Machine complete with "A" Lens System .....	\$84.00
Machine complete with "AA" Lens System .....	87.00
Machine complete with "B" Lens System .....	87.00
Machine complete with "C" Lens System .....	89.00

**Baby Arc Lighting Equipment for Alternating Current:**

(110 Volts — 60 Cycles, Including Transformer)

Machine complete with "A" Lens System .....	\$83.00
Machine complete with "AA" Lens System .....	86.00
Machine complete with "B" Lens System .....	86.00
Machine complete with "C" Lens System .....	88.00

**Baby Arc Lighting Equipment for Alternating Current:**

(220 Volts — 60 Cycles, Including Transformer)

Machine complete with "A" Lens System .....	\$85.00
Machine complete with "AA" Lens System .....	88.00
Machine complete with "B" Lens System .....	88.00
Machine complete with "C" Lens System .....	90.00

**LASER PICKUP FOR VINYL DISCS**

Reprinted from Electronics Australia

Supplied by Neil Johnson

Japanese audio equipment maker CTI is reported to have developed a turntable for conventional vinyl records which incorporates an integral optical laser pickup, to replace the conventional pickup and stylus. The semiconductor laser beam automatically tracks the record grooves, and simultaneously reads the left and right channel stereo audio.

Completely free from physical contact with the disc surface, the laser pickup obviates all groove wear. It is also claimed to be free from rumble pickup and acoustic feedback effects.

The player is expected to sell for around \$4,000.

**ROBOT RUNNING MUSIC STORE**

Extract from Timaru Herald, 22nd November, 1989

Contribution from Bryan Blanchard, Timaru

NZPA-AP Minneapolis.

Customers at the new music store in Minneapolis get a clerk that's a model of efficiency, but they don't get a smile or a chance to chat about the weather.

It's not that the clerk has an unpleasant personality. The clerk is a robot.

The Robot Music Store, which opened yesterday, is hailed as the first completely automated retail store in the world.

The robot system lets customers listen to selections, place an order and pay by cash or major credit cards, while it delivers compact discs, returns change and receipts, restocks shelves and places its own inventory orders.

The "store" is something like a giant vending machine in the open court shopping area of a large office building.

CDs are stacked on shelves on the inside walls of a transparent enclosure covering 13 square metres and standing about 2.75 metres high.

On the outside are four earphone sets, video display screen and fixtures to take in the money or credit cards and deliver CDs and change.

And in the centre of it all is a robot arm that can rotate 360 degrees around the enclosure to grab a customer's selection and deliver it.

The idea is being tested in Minneapolis to see if it is profitable and whether customers will like buying from a machine instead of a human.



## THE COMPACT REVOLUTION CONTINUES APACE

By Terry Atkinson

Extract from the *Timaru Herald*, 24th November, 1989

In September, 1984, America's first CD plant, that of the Digital Audio Disc Corporation, in Terre Haute, began rolling out the revolutionary aluminum discs for CBS and other labels. Shipments began that October, with the 4.7-inch aluminum-and-plastic discs still considered a big gamble.

A mere five years later, the format now accounts for almost 40 per cent of United States pre-recorded music revenues. CD sales for 1989 alone are expected to reach 220 to 250 million discs.

It's not a completely celebratory birthday. The rise of the CD has meant the fall of the LP. Some record stores don't carry any vinyl, and just a few weeks ago, one of the largest record companies, Warner Brothers, announced that it will suspend production of 45 revs/m vinyl records around January. The label is also considering ending LP production early next year.

The CD player has clearly conquered the turntable. Meanwhile, the audiocassette format has held its own against the CD onslaught, thanks to its ability to copy other mediums (including the CD) and the wide use of tape in cars and Walkmans. That situation may change in the '90s, after recordable CDs are introduced and the already available car and portable CD players gain in popularity.

The compact disc has deserved its five years of ascendancy. (Actually, it's more like six years if you count the period in which the few American citizens who had CD players survived on imported CDs). A recording on compact disc almost always sounds noticeably better than on tape or vinyl. CD quality has improved with every year. With proper care, a CD sounds just as good every time you play it. A CD can hold up to 77 minutes (or more on some experimental discs). And CD players are easier, more fun and more versatile to operate than cassette players or turntables.

The CD has also had beneficial side effects ever since it first appeared. There's a new interest in reissues of classic recordings and in retrospective compilations. Recording techniques have been refined to keep up with the demands of the new digital medium. And even pre-recorded analog audiocassettes have benefitted — they're made with considerably more care than they were six years ago.

The only remaining black spot on CD's is their cost, which is still far higher than that of LPs and cassettes. On the bright side, there have been gradual price reductions. Many CD versions of older albums are issued at a budget or "mid-line" price — which means they can be purchased for about \$20 at a discount record store. And last month several labels reduced the wholesale price in the United States on top-of-the-line, major-artist new releases.

Many people have been boycotting CDs simply over the matter of cost. But now it's clear that there's no stopping the medium — and 1990 will have a lot of these hold-outs giving in. After all, anyone who keeps buying tapes and LPs now will only wind up wanting to replace them with CD versions before long.

The next five years are probably going to be just as tumultuous, exciting, challenging and confusing for the CD consumer as the last five, because in that time at least one major renovation will be introduced — one that will be costly and mean changing equipment yet will likely be irresistible. That's recordable CD. In as little as a year from now, the first recordable CD machines will be marketed.

— *Los Angeles Times Syndicate*

## SHOCKLEY DIES AT 79

NZPA-AP Stanford.

William Shockley the co-inventor of the transistor and a Nobel Prize winner whose later life became embroiled in controversy over his racial theories has died of prostate cancer at his home.

Mr Shockley, aged 79, was Professor Emeritus of Electrical Engineering at Stanford University. He shared the Nobel Prize for physics in 1956 with his colleagues from Bell Laboratories, John Bardeen and the late Walter Brattain.

The team's first semiconductor device, developed during what they later called a "magic month" in 1947, was an innovation that made the electronic age possible.

Most modern devices, from planes to wristwatches to computers, contain the technical descendants of Mr Shockley's work.

Shockley Semiconductor Company, the company he founded after leaving Bell Laboratories in 1954, was instrumental in the birth of Silicon Valley, California and the electronics industry.

His former employees later invented the integrated circuit and the micro-processor.

Mr Shockley's later life was marked by bitter controversy over his claims that intelligence was genetically determined, that blacks were genetically inferior and as a group they could not be as bright as whites.

He suggested in a theory he called "retrogressive evolution" that intellectually inferior blacks were producing children faster than mentally superior whites.

His claim contributed to debate over the use of I.Q. tests in schools and over why black Americans failed to score as well as whites.

1989, Christchurch Press

## THE CAT-WHISKER

### Reprinted from "Understanding Science"

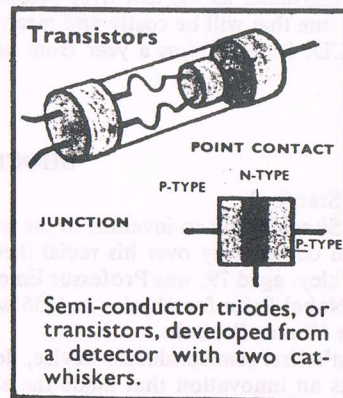
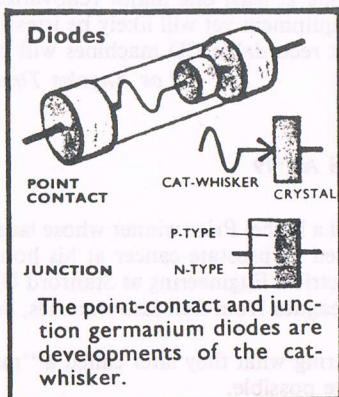
#### Part 2

During the 1930's, the crystal detector gradually went out of favour, as it was superseded by the *diode valve* detector. This is a *thermionic* valve, and it rectifies current by an entirely different principle. Thermionic valves — triodes, tetrodes and pentodes, were used in the amplifying stages of the radio sets, which became much bulkier.

The interesting properties of crystals were not, however, forgotten. Radar was developing, and the thermionic diode could not operate at the very high frequencies used in radar. Electrically it was too bulky — its *capacitance* was too large. The point-contact diode could be used at very high frequencies, because its electrical capacitance was so minute. The area of contact, which gives rise to capacitance, is very small indeed.

It was in this period also that the Russian scientist Losev, working in Nizhni Novgorod, stuck two cat-whiskers in a single crystal. He had produced the first solid-state sandwich, the fore-runner of the modern transistor.

With two cat-whiskers, even more control could be exercised over the electric current flowing through the device. It could be operated as a one-way valve, an ON/OFF switch, or as an *amplifier*. Again, the properties could be explained by the electrical "barrier" effects when two dissimilar pieces of solid material are in contact. There are two separate barriers in a transistor. But an additional electrical lead, connected to the middle part of the sandwich, in the crystal itself, is necessary. This middle region is vital to the current control.



Losev's transistor prototype was a *point-contact* transistor. As the junction diode is more efficient than the point-contact diode, so the junction transistor is more efficient than the point-contact transistor. The junction transistor was discovered in 1948 by three scientists, Shockley, Bardeen and Brittain, working at the Bell Telephone Laboratories.

The two kinds of semi-conducting germanium or silicon used for the transistor are called *n-type* and *p-type*. N-type contains an impurity which frees negative charges (electrons) in the solid crystal. P-type impurity frees positive charges (electron deficits). A transistor is either a n-type/p-type/n-type sandwich or a p-type/n-type/p-type sandwich. Both work equally well. At present the p/n/p variety is easier to manufacture, but with new manufacturing techniques this need not always be so.

At each junction is developed an electrical barrier, either increased or diminished by connecting batteries to the transistor. In one method of using the transistor, the electron gains enough energy at a tiny barrier to pass over a much larger barrier. Each barrier is really a difference in electrical voltage, (or potential). A small voltage change is turned into a much bigger voltage change, so this kind of transistor operates as a *voltage amplifier*.

The transistor is, however, usually used in a different way, as a *current amplifier*. This makes use of the most sensitive region in the transistor, the very thin piece of semiconductor sandwiched in the middle between the two electrical barriers. A very small current (the signal which needs amplifying) fed into this region can easily block the region, by neutralising the free electric charges which would otherwise carry current through the transistor from one of the sandwiches to the other. A small change can cause a much larger change in current, so the device is a current amplifier (it also gets some *voltage amplification* from the two barriers).

Many variations of the transistor have since been made. The original junction transistors could not be used at very high frequencies, because the current carriers took too long to diffuse their way through the middle region. In the latest transistors, the region between the junction is very small indeed, and they can be used at frequencies of a few thousand million cycles per second.

## GENERAL REFLECTIONS


By Robert Sleeman

After 10 years to the month of seriously collecting phonographs, I feel I should put pen to paper and note how things have changed personally, and in the field as a whole. I remember the first machine I came across quite well, for it became the turning point in my collecting. I found it in an attic in Kaiapoi, North Canterbury. It was a pixie grippa portable, and it interested me sufficiently to make further enquiries. This brought me into contact with the Society and to Bill Dini, probably one of New Zealand's biggest collectors, and whose collection is now on display at Ferrymead Historic Park in Christchurch. Bill, who sadly died a few months later, gladly showed me his collection of some 15 years and I felt like a child in a sweet shop, with all these delicious items on the shelves I could look at, but not touch, and would never envisage ever owning.

My greatest disappointment was that I could never share my collection with him, as I feel we would have gained from each other as from master to apprentice. I would like to think I took up where he left off, and have kept the thread of collecting alive in Christchurch. What makes me ponder is whether there will be any collector, from a new generation to continue to foster the interest in our hobby? I take heart in the fact that even in 1980 I was told that the type of machines Bill had, were now unobtainable anymore and I would have to content myself with portables and table models at best and over-horn and cylinder machines would be unobtainable, or out of my financial reach, on a teacher's salary. I have proved this wrong time and time again, and even yesterday picked up a Victor MS front support machine, admittedly not complete, but reasonably priced well within the reach of school-boy collectors, so the machines are still out there. In 1977 Gavin East wrote an article in which he stated that even then, new collectors would be hard-pressed to ever find any pre-1915 machines. Having had dozens pass through my hands, I'm happy to prove him wrong, and give hope to any collector starting in 1990. I am no more or less persistent than any other collector, I'm sure. I earn an average wage, live in your

# BERLINER.

THE IMPROVED  
BERLINER...  
...GRAM-O-PHONE  
AND  
HOW TO USE IT



MANUFACTURED BY  
**E. BERLINER**  
FACTORY  
2315 St. Catherine St. 907-3TH Avenue St.  
MONTREAL.  
EMANUEL BLOUT, General Manager for Canada  
FOR SALE AT  
**HUDSON'S BAY STORES,  
WINNIPEG.**


NOVEMBER 24, 1902.  
DETROIT ALL RECORDS CATALOGUES.

**Berliner**  
**GRAM-O-PHONE**



Manufactured & Sold by  
**E. BERLINER.**  
EMANUEL BLOUT  
General Manager  
for Canada  
FOR SALE AT **HUDSON'S BAY STORES,  
WINNIPEG.**

MENTION DATE OF LIST TO AVOID ERRORS  
**JUNE 14th, 1902.**  
SUPPLEMENTAL LIST OF  
7 and 10 inch  
**BERLINER**  
Gram-o-phone Records.



MADE BY **E. BERLINER,**  
2315 St. Catherine St., Montreal.  
EMANUEL BLOUT,  
GENERAL MANAGER FOR CANADA.  
For Sale at **HUDSON'S BAY STORES,  
WINNIPEG.**

Mention Date of List to Avoid Errors  
**OCTOBER 31st, 1902**  
Supplemental List of  
Seven and Ten Inch  
**Berliner**  
Gram-o-phone Records



Received according to Act of Parliament of Canada in the year 1900,  
by Emile Berliner, of the Department of Agriculture.

Particular attention is called to the improved "Master"  
records. All records in this list are made of this wonder-  
ful material, so are all old records now made, by us.  
They will wear two or three times as long as any records  
made herebefore, and should last a thousand times. Order  
a few and compare with any thing you've seen or heard.

Made by **E. BERLINER**  
Em. Mgr.  
For Canada  
**2315 St. Catherine St.  
MONTREAL.**

PHOTOS BY

BERNARD WIESE

neighbourhood house with pets and kids and don't travel more than a few hours drive from Christchurch in search of machines. The point I'm making is that literally hundreds of machines later I can categorically say it will be quite possible to amass a very respectable collection in your own neighbourhood in the 1990's if you stick with it, advertise, follow all those leads, talk to people, meet other collectors, restore your own, pick up even the most ordinary machines for future trades and share and enjoy your hobby.

### **GRAMOPHONE OR DISC RECORD-PLAYER** Extracts from Peter Dalley, Auckland, New Zealand

The first was invented by Emile Berliner, a German immigrant living in Washington D.C., who applied for a patent on 26th September 1887 and demonstrated his apparatus before the Franklin Institute, Philadelphia, on 16th May 1888. Following a visit by Berliner to Germany commercial manufacture of the gramophone was begun by Kammerer & Rheinhardt of Walterhausen in 1889. These hand-cranked machines were meant chiefly as toys and played a 5in vulcanised-rubber disc at a speed of about 70rpm. The first full-size electrically operated machines were produced by the United States Gramophone Co. Washington in 1894. These played 7in records. Ten-inch records were introduced in 1900 and 12in in 1903. The first shellac records were made by the Berliner Gramophone Co. of Philadelphia in 1897 from a composition prepared by the Durinoid Co. of Newark, N.J. The first commercial studio for disc recording and the first record-shop were opened in adjoining buildings in Philadelphia by the Berliner Gramophone Co. in 1897. Manufacture and commercial recording in Britain began with the establishment of the Gramophone Co. (Berliner Patent) in Maiden Lane by W. B. Owen in 1898. The first factory to be operated solely for the manufacture of gramophone records was established by the Gramophone Co. at Hanover, Germany, in 1898 to produce disc recordings for the English market. The factory was equipped with 14 record presses for the mass production of 7in shellac records — an innovation that proved a turning point in the record industry.

#### **Paper Labels on Disc Records:**

Berliner discs had their titles engraved on a blank space in the centre of the record. The first gramophone records with circular paper title-label were devised by Eldridge Johnson and issued by the Consolidated Talking Machine Co. (later the Victor Co.) of Camden, N.J. in 1900. The trade mark depicted on these labels was adapted from Francis Barraud's painting of a fox terrier listening attentively to a horn gramophone — His Master's Voice — for which the Consolidated Co., an associated company of HMV's predecessor, the Gramophone Co., held the US copyright. Barraud's painting had originally shown the dog Nipper listening to his master's voice (Barraud's recently deceased brother) on a cylinder machine, but having failed to sell the picture to a phonograph manufacturer, he was persuaded by the Gramophone Co., to paint out the phonograph and substitute a gramophone.

#### **Operatic Recordings:**

The first commercial releases on cylinder were made by Gustavello Affre, Adolphe Marechal and others for Pathe Freres of France in 1896. The first operatic discs were made by Ferruccio Giannini, who recorded "La Donna e Mobile" and "Questa o Quella" from "Rigoletto" for the United States Gramophone Co. of Philadelphia the same year.

#### **Opera on Discs:**

The first complete was "Pagliacci" conducted by the composer, Ruggiero Leoncavallo, and recorded in Milan by Fred Gaisberg of the Gramophone Co., London in 1903.

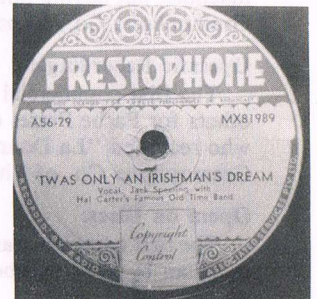
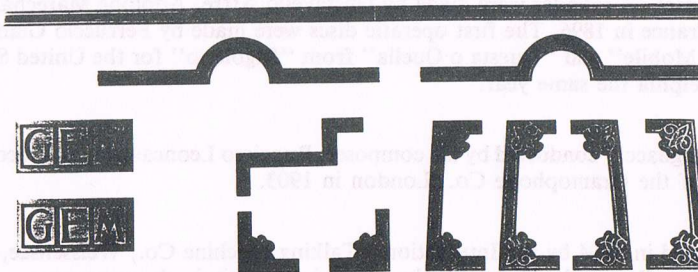
#### **Double-Sided Discs:**

The first were manufactured in 1904 by the International Talking Machine Co., Weissensee, near Berlin, under the name "Odeon" records. They were introduced into Britain the same year.



## DEL WOOD

RECORD LABELS FROM  
D. TAYLOR COLLECTION



LETTER OF INTEREST

From Mike Stitt of Canada came this interesting letter between Eldridge Johnson and Thomas A. Edison.

LONG DISTANCE TELEPHONE 3-27-22

LEON F. DOUGLASS Genl. Mgr.



EXECUTIVE OFFICE, STEPHEN GIRARD BUILDING.

PHILADELPHIA Nov. 12, 1901.

Mr. Thomas A. Edison  
c/o National Phonograph Co.

*Answer  
11/18/1901  
Mrs. J. Edison*

*Say I would be  
glad to see him  
next week  
Say Monday*

Dear Sir:

I called on Judge Hayes last week relative to a business matter, and during the course of conversation, something was said about my relations with you. Hayes said it might be a good thing for you and I to have a plain businesslike talk concerning our interests in the talking machine trade.

If such an interview would be agreeable to you, I shall be glad to call at any time or place convenient to you next week. I do not think that you and I have really anything to fight about, and perhaps a personal understanding might save the useless expenditure of considerable money.

Yours respectfully,  
*Eldridge R. Johnson,*

### Extracts from Peter Dalley, Auckland, New Zealand

#### Tape Recorder Using Plastic Tape:

The first of these was the manetophon, produced by AEG of Berlin in 1935. The tape speed was 30in a second. The application of a high-frequency bias to the oxide-coated tape of the magnetophon was made by H. J. von Braunmuhl and W. Weber in 1940. At the end of World War II 18 magnetophons were recovered by the Allies from the AEG plant in Berlin and portioned out between the British, French and US occupation authorities. Every tape recorder developed since 1945 can be regarded as a lineal descendant of them.

#### GB:

This is the DUO-Trac Cell-o-Phone introduced by British Ozaphone in 1937.

#### Tape Recorder Produced for Home Use:

The first was the Soundmirror, marketed by Brush Development Co. of Cleveland, Ohio, in 1947. The tapes used has half-hour playing time and cost \$2.50 each.

#### Pre-Recorded Tapes:

These were first offered for sale by Recording Associates of New York in 1950. Their first catalogue listed eight recordings on plastic tape, of which Reel No. 001 was entitled "Cocktail Time" and featured 11 popular songs.

#### Stereophonic Tape Recorder:

The first of these commercially produced was the Magnecord, which was demonstrated at the US Audio Fair of 1949 by Magnecord Co. of Chicago. It was developed in response to a request from General Motors for a binaural recorder suitable for analysing engine noise, monaural machines having failed to give the sound perspective required. The first home stereo outfit was produced by Livingston Electronics of New York in 1954 and the same company issued the first catalogue of pre-recorded stereophonic tapes in May of the same year. The first of these Audiosphere recordings, No. BN701, was of Schubert's Unfinished Symphony together with Sibelius's Finlandia and was issued on a 7in reel at \$10. Stereophonic tapes preceded stereo discs by nearly four years.

### ADVERTISEMENTS

#### Wanted to Buy:

Sixteen-inch discs of Australian radio programmes; early music magazines ("Tempo", "Music Maker", "Australian Musical News") and record catalogues; plus historical spoken word 78's (e.g. Harold Larwood on Columbia).

Reply: Peter Burgis, Box 83, P.O., Hall, A.C.T. 2616, Australia (062/51-6023).

#### Wanted:

I have a 1901 Victor MS 10" turntable front support machine, case and motor only and need rest, i.e. handle, horn, reproducer, front support brackets and arm.

I know it's a tall order in New Zealand — in fact has anyone even got one here? I doubt it. So if anyone overseas can help I would be grateful if you could let me know what parts you have and the price. I am still keen to buy any collections or machines in New Zealand. Just give me a ring at Christchurch. Robert Sleeman, 385-857.

#### Wanted to Purchase:

Reproducer for Columbia Graphophone — Model Q, preferably in working condition.

Also, cygnet horn crane support bracket.

Please reply: Robert Ludovici, 70 Tawa Crescent, Manurewa, Auckland, New Zealand or phone 09-2671135.