

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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THE COMPLIMENTS OF THE SEASON.

The end of one year and the beginning of another is often a time for reflection and so it is this year, as we come to the end of 1970 and begin to plan for the 365 days of 1971 which lie ahead. From the Society's point of view, it has been a tremendous 'year of progress'. Our membership has grown enormously and we are now well launched into the project of part reproduction manufacture and reprint of printed matter concerning the talking machine. In Christchurch, fund raising is beginning, to enable us to work towards a dream some of us have had for some time - our own Club-rooms, so that we may serve more efficiently our cause 'the preservation of recorded sound'. We would like to take this opportunity of thanking all those members who have been with us for some time for renewing their subscriptions and also of saying how pleased we have been to welcome in so many new members. It is always exciting entering a new year; we hope that when it ends we may be able to look back on another year which has advanced the cause of the talking machine and that many more of such machines will have 'found their voice' because of parts made by the Society. It only remains for us to wish you all the very best for Christmas and may the New Year be better than ever.

Our contribution to the Festive Season is this 'extra page' issue of The Phonographic Record. We hope you enjoy it.

A CLASSIC WHICH BECAME A MILLION SELLER.

Christmas brings with it thoughts of carols and choir boys and on our illustrations page we reproduce a photograph of a choir boy who made a record, a million copies of which have been sold. And quite a number of these have turned up in New Zealand! The boy is, of course, Ernest Lough, and the recording 'Hear My Prayer'.

This recording, made by the Temple Church Choir with Lough as soloist, was one of the first commissions of the mobile van, which was purchased by the Gramophone Company after the advent of electrical recording, allowing 'on the spot' recordings to be made. The issue of 'Hear My Prayer' brought such fame to the Choir that the Temple Church was inundated with overseas visitors, so much so that admission tickets had to be issued. The record was made in 1926 when Lough was between fourteen and fifteen years of age and it was one of those 'fortunate' records in which the church acoustics and the talented boy combined to make a record, H.M.V. C1329, which sold like wildfire. The royalties, even after a bonus for each member of the Choir, enabled a scholarship to be founded.

AN ENCYCLOPAEDIA OF EDISON PHONOGRAPHS

The 'Suitcase' or Early Model A Home

Introduced in 1896, the Home was originally referred to as a clockwork phonograph to distinguish it from the Spring Motor, introduced in 1895. The Model A ultimately came in two styles of cabinets but it is the first which is the subject of this article. This model, which continued till 1901, had an oak cabinet with the cover secured by four suitcase clips, two in the front and two at the back. This gave rise to the nickname 'suitcase' model, commonly used in New Zealand. The case had square corners with the top plate extending to the edges and kept in register by two metal dowels. The Home was smaller than the Spring Motor, height 12", base 16½" x 8" and weighed 25lbs. Very early models had a combination start-lever and speed control, but this was soon superseded by separate controls above the top plate. Some early models had a wheel supporting the front of the reproducer arm and no banner or scroll on the lid. At first a shaving device was fitted, but was later discarded as its single spring (which played six records on a single winding) did not prove powerful enough for efficient shaving. This makes one wonder why a more powerful double-spring version also introduced in 1896 and called the 'Peerless' was not continued. The 'suitcase' top-plate (which was finished in black and gold) and body were in two pieces, joined by two bolts but not located by bosses cast on the plate as in the 'Spring Motor'. The 'suitcase' had a swing arm securing bolt at the end of the straight-edge and a black cast-iron handle with slots, and except for very early models had a very handsome transfer on the lid, the scroll proclaiming 'Edison Home Phonograph' in large red letters. The reproducers or speakers as they were first called were at first the 'standard' speaker, a combination recorder and reproducer; and later the 'automatic reproducer' and a separate recorder were supplied. Suitcase Homes were also supplied with a 14" brass horn, two-way hearing tubes, an oil-can and camel-hair chip brush. A speaking tube was supplied instead of the horn, on request.

Our member, Bill Dini, has an immaculate Suitcase Home Phonograph. He tells us that the price of the Suitcase Home was \$40.00. He has also pointed out a typing error in the article on the Spring Motor Phonograph. The original price was of course \$100 and not \$10. Our apologies!

THE BETA RECORD

by Walter Norris

Records with this label are often found in New Zealand and I would imagine, judging by the picture of the kangaroo on the label, also in Australia. I have seen them both red and green in colour. I do not know anything about the agent or company for whom this label was made; what I have discovered is on at least one record, if the kangaroo label is soaked off, it will be found that there is an Edison Bell label underneath.

The one I have, has a Winner label under the Beta label. I feel that, like the Minstrel and Herald records which Edison Bell manufactured for the Christchurch firm of E.W. Pidgeon Ltd., (see The Phonographic Record, Volume 2 Issue 5, pages 35 and 37 for information on Minstrel and Herald), the Company manufactured the Beta label for a talking machine company, probably based in Australia. I would welcome any information from anyone who can supply any more detail on this subject.

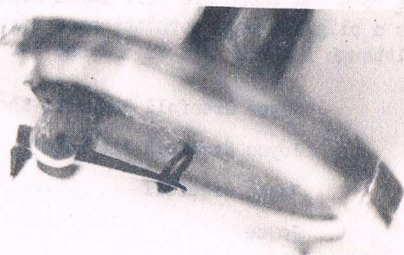
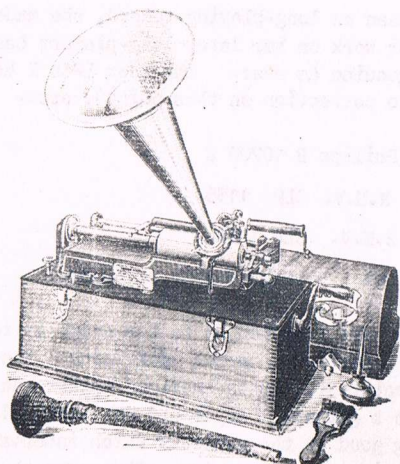
THE PERFECT ENTERTAINER - JOYCE GRENFELL.

by Pamela Rogers.

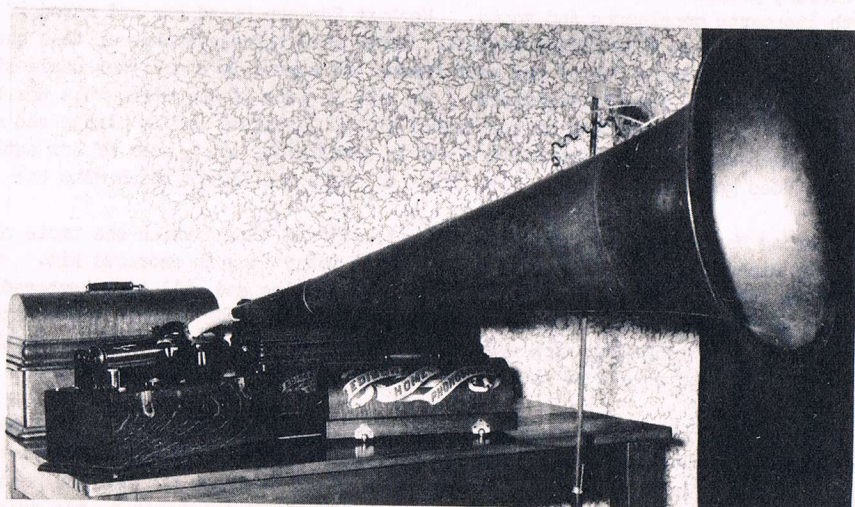
What constitutes the perfect entertainer? In my mind this is someone who can walk onto the stage of a large theatre and entertain - everyone. There are few who can do this, except to a specialised audience. By this I mean a top-line singer would entrance an audience of music lovers but the ordinary man-in-the-street would probably be bored to tears. But to be capable

The Edison "Suitcase" Home

NOTE THE SUITCASE FITTINGS



THE Vicsonia SOUNDBOX



of entertaining a cross section of the community, the performer must have something extra, a certain gift which is only given to a few; a humanity which reaches out and says to each member of the audience 'I am no longer myself - I am your Aunt Mary, your teacher in the third standard; the woman in the grocery store!' Such a reaching out will find a response in an audience because these are the people they know. To be able to walk out on the stage and say 'Good evening, how nice to see you!' and to convince the audience that it is true is more than talent - it is magic.

One of today's entertainers who has that magic to a degree not often surpassed is the English actress, comedienne, mimic, star and very human Joyce Grenfell. It will remain one of my happiest theatre-going memories - evenings spent in the Theatre Royal, Christchurch, being entertained and enthralled by a tall elegant person with a radiant smile and a human understanding rarely seen.

Although much of Joyce Grenfell's recorded work has been on long-playing record, she made several 78's and these are well worth looking out for. Her work on her later long-players has perhaps a slightly more sophisticated air, but she is as genuine as ever. The four LP's I have (and although I think this is all she has made I am open to correction on this point), are:-

| | |
|--------------------------------------|------------------------------|
| Joyce Grenfell Requests the Pleasure | Philips B 10700 L |
| Joyce Grenfell 'At Home' | H.M.V. CLP 1155 |
| Joyce Grenfell | H.M.V. CLP 1810 |
| Joyce | Col. SCXM 6362 (N.Z. Number) |

After reading about so many singers and actresses who were 'carried on to the stage at the age of two weeks' it is refreshing to read of one who had a perfectly normal upbringing. She was the daughter of a British father, an architect and a caricaturist, and an American mother who was a brilliant mimic and who liked to entertain by singing to a guitar. Joyce did not particularly distinguish herself at school; like most of us only being good at the subjects which interested her. At 19 she married Reggie Grenfell, a marriage which is as happy as ever after over thirty years. In her early days of marriage in the 1930's, long before the advent of taperecorders and long-playing records, people made their own entertainment and Joyce Grenfell amused herself and her friends with impromptu monologues and songs. Herbert Farjeon heard her and asked if she would appear in his production 'The Little Revue'. There were three editions of this show and Joyce appeared in them all, doing one of her most famous and certainly one of her earliest monologues of a demonstrator at a Women's Institute. As with so much of her work, this was based on something she knew. She WAS President of her branch of the Institute and as always she managed to make her fellow members laugh at themselves - not in a malicious way - none of her satire is - but in a way which does good to everyone. She likes to share the things which make her laugh.

During the Second World War, she entertained the troops and a song which she wrote and which was set to music by Richard Adinsell, 'I'm Going to See You Today' was an enormous hit. This song has been recorded on 78's. Joyce Grenfell has made several films and will be remembered for some outstanding comedy parts, often only cameos, but perfect in their way. These little bits of perfection come through her recording work and her words to the song entitled 'Three Brothers' has caused it to be described as one of the most outstanding of modern songs.

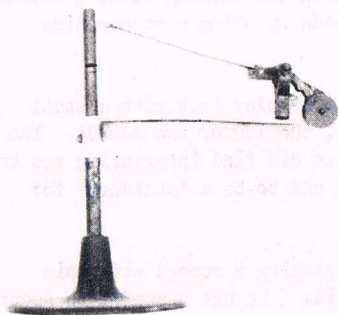
Joyce Grenfell always appears on stage in a very elegantly designed frock with three-quarter sleeves. Her views on frocks are in line with much of her thinking - practical but just right. With the use of a scarf, a shawl, a hat or a pair of gloves - a chair or a table she becomes an ingenue schoolgirl hero worshipping an author, a distracted kindergarten teacher, the prim and 'sat upon' spinster sister of 'three brothers', one of three lady choristers, or a cockney woman farewelling her family as they emigrate. She rests lightly on the pathetic and the humorous - she



Photograph by "The Christchurch Star"

Joyce Grenfell

— ON THE OCCASION OF A NEW ZEALAND TOUR



AN UNUSUAL SPEED TESTER

**FRESHMAN
MASTERPIECE**



Chas. Freshman Co., Inc., 106 Seventh Ave., New York

entertains!

So, if one day, Joyce Grenfell 'requests the pleasure of your company', I hope you'll accept.

THE ORO-TONE COMPANY.

Can anyone help concerning the origins of this company? We know practically nothing about the company itself, but quite a lot about its products. What we do know is that it was based at 1000 - 1010 George Street, Chicago, U.S.A. From here was turned out a quantity and variety of products, much of which has turned up in New Zealand. These included mainly attachments and needles which fitted other machines - predominately Edison, as evidenced by material found in this country.

RECORDING ATTACHMENT. This attachment fitted to the Edison Diamond Disc machines and plugged in where the reproducer was. It included a floating horn which plugged into the side of the floating arm (Marked 'C' in the illustration at the top of the page).

RECORDING JEWELS. The Recording Jewel (See No. 50 on the illustrations page), was a brass turned holder in which a ground diamond was, by some obscure process fixed to the tip. The other one illustrated, No. 91, we believe was used with a reproducer such as Cheney, Jewel, etc., to play Diamond Discs on such machines. We feel there must have been a recording jewel No. 100 to go with the attachment; we also show the instruction sheet for home recording. The jewels themselves were mounted on card and came wrapped in cellophane. We have no idea of the cost.

The small straight recording horn (illustrated) was about 6" long and was made of metal. The person recording was exhorted to speak clearly and distinctly and advised that the louder the speech or song, the louder the recording.

RECORDING DISCS. These were a plain aluminium blank disc, 6½" in diameter and the ones we have seen were made by the Pathe Company. As the record cover mentions both Pathe and Oro-Tone, we feel that there must have been some affiliation between the two companies in producing this attachment.

The record we have studied was engraved with the following:- 'Patent No. 1421045 27/6/22 of Pathe Disk for Home Recording. Radio Corporation, 20 Grand Avenue, Brooklyn, New York, U.S.A.' The records we have seen were engraved with the familiar trademark of the Pathe cock, and the packet is marked 'Send a Voice Message'.

The late Mr. C.E. Woledge who was connected for many years with the talking machine industry in Christchurch told us that an equally good recording could be made by using a copper disc. We have not tried this!

Once the record was made, the person recording was warned not to play back with a steel needle, but to use a short fibre needle. The shorter the needle, the louder the sound! The reproducer had the familiar V cut to take a fibre needle. What we did find interesting was that, with each attachment, was sent a sample partial recording. This was to be a 'standard' for quality.

NOTE: Excellent copies of the full instructions for making and playing a record with this attachment can be obtained from the Secretary at 65 cents post paid. We are grateful to Roger Cole for lending this to us.

(To be Continued).

A NOVEL SPEED TESTER.

Despite having an excellent photograph of this we must be honest and admit we know little about it. It contains no maker's name, but was apparently used by a gramophone motor repair man. It rested on the turntable, the centre having a countersunk hole which sat neatly over the turntable spindle. When the correct speed was reached the weight swung outwards, bringing the indicator point downwards to opposite a groove cut in the spindle. If the speed was too fast the indicator point was below the groove, too slow - above the groove.

THE RADIO COLLECTOR (III) by J. Whitley Stokes

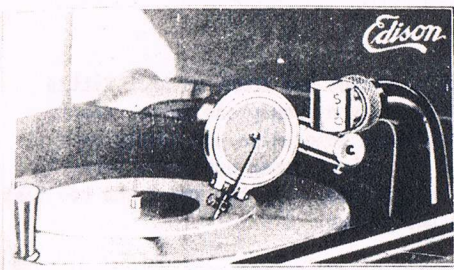
To commence on a philosophical note; just recently I added to an already quite extensive library, another book about wireless. This was 'All About Your Wireless Set' by P.P. Eckersley, published in 1925. A paragraph in the foreword caught my eye - "On occasions one is troubled by the intricacies of wireless reception and by the philistine obtrusion of the apparatus itself". In my case I must admit that the 'philistine obtrusion' has virtually become an end in itself - the ways and means have overshadowed the end results. Perhaps this series should have been entitled **The Confessions of a Philistine!**

So to continue with this radio collecting business; probably the most common early type radio to be found will be a set using five valves and having some resemblance to the one illustrated, the distinguishing feature being the three large tuning dials accompanied by two or more smaller knobs. Because of the need to adjust the three tuning dials simultaneously when tuning in a station these sets were sometimes known as three handers.

These radios were almost exclusively of American origin and bore such well-known brand names as Atwater-Kent, Fada, Grebe, Crosley, Hammarlund-Roberts, Stewart-Warner, to name but a few. They were made between the years 1924 and 1927, the days of the American Broadcasting boom, and were sold throughout New Zealand during the early years of broadcasting in this country. However New Zealand-made radios were in existence even in those high and far off days. The Auckland firm of Radio Ltd. commenced manufacturing under the Ultimate brand as far back as 1923, and another Auckland firm, Johns Ltd., were also in the picture with sets bearing Maori names such as Hinemoa, Kiwi, and Rangitira. (Remember when houses used to be given Maori names and a suitably inscribed copper name plate adorned the front verandah?) Due to the extremely small quantity of sets produced by these pioneer New Zealand manufacturers there are consequently very few still in existence and so, from a collector's point of view, any early New Zealand made receiver represents a real 'find'.

During this period many of the American manufacturers marketed what were known as kit sets, sometimes in addition to making completely assembled receivers. The kit sets were really a complete radio in knock-down form ready for assembly by the purchaser although, as in the case of the factory built sets, there were still many additional items such as valves, batteries, speaker and aerial equipment which had to be purchased before listening-in could be accomplished. As in the case of home-made sets generally, kit sets are not really collectors items, but there may be some readers who feel that a kit set or home-made set is better than nothing at all, at least it will do until something better comes along.

At this stage, it might be advisable to pause and consider whether, in the process of building up a collection, one desires simply to have some 'objets d'art' or whether it is desired to have these same objects in working order. Of course this same consideration applies equally to the collecting of talking machines, but with the difference that there is usually less technical knowledge needed to put a phonograph into working order. Another aspect in comparing the two media, if regarding them as providers of entertainment or enlightenment, is the rather obvious difference



PLAYING BACK A HOME RECORDING
(Note the fibre needle)

Oro-Tone
QUALITY FIRST

No. 100

**Combined Recording, Repro-
ducing and Radio
Attachment**

Patent Applied For



Recording on the Edison with the Pathe
Aluminum Indestructible Record

You Can Play All Records on the Edison
with this No. 100 Attachment

You Can Make Your Own Records
with this Attachment

**THIS ATTACHMENT WILL MAKE
YOUR EDISON A LOUD SPEAKER
FOR YOUR RADIO SET**

FRONT PAGE OF THE INSTRUCTION LEAFLET

The Oro-Tone Co.

Oro-Tone
QUALITY FIRST

No. 91

EDISON SAPPHIRE



SAFETY

POINT

EXTRA LOUD

**LARGE SIZE
METAL SHANK**

The Oro-Tone Co.
1010 George St. Chicago
U.S.A.

Oro-Tone
QUALITY FIRST

No. 50

RECORDING NEEDLE



FOR RECORDING ONLY

**WITH No. 50 EDISON
RECORDING ATTACHMENT**

The Oro-Tone Co.
1010 George St. Chicago
U.S.A.

in their respective capabilities to provide the listener with satisfying end results. Whereas the gramophile has only to crank his machine and place record and reproducer in position, the radiophile is rather in the position of a vintage car owner who has a vehicle but nowhere except a modern motorway on which to drive it. This means that when it comes to final results, the radiophile has to be content with whatever is being broadcast, unlike the gramophile who can choose his own programme. Nevertheless, it is possible to get quite a lot of fun out of listening-in on early radios and more so if one has a fellow enthusiast with whom to compare results.

(To Be Continued)

MORE ABOUT VICSONIA.

In Volume 3 Issue 6 on pages 46 and 50 of The Phonographic Record, we illustrated and described the Vicsonia reproducer to be played on either a Grafonola (Columbia) or Victrola (H.M.V.) machine. At the time of writing the original article we had not seen such a reproducer but gained our information from an advertisement. We were delighted to hear from one of our American members that we had managed to identify something he had had for years without being able to identify it.

Since then we have obtained a complete reproducer which we have photographed for you. This clearly shows the stylus arm with jewel and silken cord which attaches to a plain black diaphragm which appears to be made of some composition material.

WANTED TO BUY ... anything pertaining to EDISON, COLUMBIA, STANDARD DISC and VICTOR. Parts, Reproducers, Horns, Records etc. In fact, anything that is possible to secure. Latest Announcement List for a quarter. A. Nugent Jr., 3804 Charles City Road, Richmond, Va. 23231 U.S.A.

WANTED TO BUY ... old and unusual phonographs for a museum; E.T. Drake, P.O. Box 110, Martinsville, Indiana, 46151 U.S.A.

WANTED TO BUY ... Neophone machine or parts and Marathon machine or parts. Would exchange Edison machine or parts. Walter Norris, 'Waipapa', Swannanoa, Rangiora R.D., New Zealand.

WANTED Pattern and dimensions of grille for Hepplewhite Diamond Disc Machine. Contact Secretary.

COLLECTORS' CORNER by Roger Cole

FRITZ KREISLER.

Violinist.

Born February, 1875, in Vienna. As well as being renowned as probably the greatest violinist of all time, he is also remembered as the perpetrator of a hoax the musical snobs will not forget for many, many years.

Studied under Hellmesberger at the Vienna Conservatoire, then at the Conservatoire de Paris under Massart and Delibes. He then switched to a study of medicine, but although good at his studies, this profession did not hold him, and he soon switched to painting, becoming the perfect 'impoverished painter', so much so that for a time he lived mainly on oranges and water!

He did his turn at compulsory military training, then on his discharge, once again had to

"His Master's Voice" Records



Master E. Lough, Soloist, Temple Church Choir.

Organist, G. Thalben Ball.

12-inch Double Sided Plum Label Records 76.

- | | | |
|--------|-----------------------------------|-------------|
| C1329— | Recit.: Hear My Prayer—Part I | Mendelssohn |
| | Recit.: Hear My Prayer—Conclusion | |
| | Aria: Oh, for the Wings of a Dove | Mendelssohn |
| C1398— | I Waited for the Lord | Mendelssohn |
| | O Come, Everyone that Thirsteth | Mendelssohn |

Soloists, Masters E. Lough and R. Mallett

decide which profession to follow. We now know where this decision led him, but for a time there was quite a struggle to make himself known. Eventually, Kreisler established himself as a great soloist. He had a habit of entertaining his audience with little pieces introduced as transcriptions from the works of such composers as Couperin, Martini and Vivaldi, interspersing some of his own works among them, and was severely castigated by the critics for including his own trifling works with those of composers worthy of the name. It was not until a very persistent critic could find nothing like the piece attributed to him in the works of a certain composer that Kreisler had to confess that all the pieces were his own work, and that he had attached the names of well-known composers to them in order to have them listened to, as to have performed them under his own name would have resulted in nothing but criticism.

The result, of course, was a sensation, unparalleled in musical history, as many well-known critics had roundly abused the works performed under Kreisler's name, while praising to the skies those attributed to the other better known composers.

He recorded for H.M.V., making a very large number of discs, so many that there is rarely a collection found that does not contain at least a few of his recordings. While they are indeed common, the musicianship of the artist is far from common, and his records should be respected by all lovers of music.

Now for a couple of "Christmas" artistes.

ELISABETH SCHUMANN.

Soprano.

Born 13 June, 1891, in Merseberg, Germany. Died in New York on April 24, 1952. Her main teacher was Alma Schadow of Hamburg where Elisabeth sang in the Hamburg Opera for four years from 1910 to 1914. In 1914 she joined the Metropolitan Opera Co. in New York, making her debut as Sophie in *Der Rosenkavalier*. This role became almost her own property, due largely to her clarity of enunciation and the purity of her high notes, but also due in no small measure to the freshness and charm the young soprano brought to the part.

Later, she appeared at the Residenz Theater in Munich, where she perfected her interpretations of Mozart's operas. Her success was always assured, and she grew more and more revered as a great soprano. She also gained world wide repute as a singer of *Lieder*, and it is in one such song that she becomes a worthy "Christmas" artiste. Her recording of "Coventry Carol" on H.M.V. DA 1667, backed by "Holy Night, Peaceful Night" is a real trimmer; her sincere, beautiful singing makes this disc one of the best she made, and a worthy addition to any collection. It is certainly one I will never part with.

ERNESTINE SCHUMANN-HEINK.

Contralto.

Born in Lieben, Czechoslovakia, in 1861, and died in Hollywood in 1936. A woman of a most homely countenance, Ernestine was none the less one of the greatest of the true contraltos, having never, unlike so many other contraltos of her time, ventured outside the alto range, but achieving her fame within its boundaries. She was the first Klytemnestra, and her criticism of the role was devastating. It did no apparent harm to her popularity, however, and she was widely known as a singer of both Opera and *Lieder*.

Married three times, she was in the unenviable position during the First World War of having sons serving on both sides.

For years after she retired, she made a ritual of singing "Silent Night" over the radio on Christmas Eve. This hymn she recorded for H.M.V. on DB 412, backed by *Agnus Dei*, and one cannot

listen to these recordings without sensing that the singer is deeply involved in the song. Although I am not greatly enthusiastic about contraltos, Ernestine Schumann-Heink is one I would never pass by.

Holiday time is a good time for reading. We draw your attention to:-

ADDITIONS TO THE LIBRARY.

39. "Puccini" - The Man - His Life - His Work - by Richard Specht.
40. "Gertrude Lawrence" as Mrs. A. - by Richard Stoddard Aldrich.
41. "Musical Boxes" - A History and an Appreciation - by John Clark.
42. "Le Phonographe" - Les Documentaires (French Ed. with Illust.).
43. "High Fidelity" - The Why and How for Amateurs - by G.N. Briggs.
44. "European Clocks" - by E.J. Tyler.
45. "Value of Old Violins" - by E. Polonaski.
46. "Book Binding" - Work Handbook Series (Cassell & Co. Ltd.).
47. "Wood Finishing" " " " " " " "
48. "Electric Primary Batteries" " " " " " "
49. "Brass Founders' Manual" - by Walter Graham.
50. "Small Electric Apparatus" - Amateur Mech. & Work Handbooks.
51. "Oxy-Acetylene Welding" - " " " " " "
52. "The Handyman's 1,000 Practical Receipts" - by Bernard E. Jones.
53. "Radio Simplified" - (American Ed.) by Kendall and Koehler.
54. "Training of a Salesman" - by William Maxwell.
55. "How to Make and How to Mend" - by Geo. Allen & Unwin Ltd.
56. "If I Were Twenty-One" - (Tips from a Business Veteran) by William Maxwell.

MAKING A SUBSTITUTE 'C' REPRODUCER OUT OF AN EDISON RECORDER by Bill Dini.

Many collectors are desperately short of reproducers, indeed it is a fortunate collector who has a reproducer for each of his Edisons. At the moment I am experimenting with the production of 'C' and 'H' reproducers for the Society, but this is a long term project so please don't inundate our Secretary with orders until details are announced in the dim future. There are some exacting requirements when trying to manufacture reproducers; also there is, as usual, the time factor. A large number of 'new' Edison recorders have come to light and these are easily adapted to play 2-minute wax records as substitutes for a Model 'C'. Not many collectors have blanks for recording so the recorder is surplus to their needs and in converting it to reproduce, no mechanical change is required and it can just as easily be re-converted to a recorder if desired. Firstly, the cutting stylus and stylus bar are carefully removed from the diaphragm with a thin blade and put away in case of re-conversion. Then a piece of sheet lead about the size of a penny with a deep 'U' cut out of one side is fitted above the floating diaphragm flap and stuck in position with adhesive with the 'U' cut towards the hinge. This makes the weight about equivalent to that on a 'C' or 'H'. The next requirement is a 'dum-dum', or stylus mount and can be made by driving the round head of a wood screw into a piece of thin sheet copper (or soft brass or aluminium) and forming a little soldier's or builder's 'tin helmet' about $\frac{3}{8}$ " in diameter across the 'brim' and $\frac{3}{16}$ " high. This is pierced with a sharpened nail at the top and a stylus made of hard glass stuck in with adhesive. The 'tin hat', trimmed with scissors to a $\frac{3}{8}$ " circle is stuck on the bottom centre of the diaphragm approximately where the original cutting stylus bar was located. A 2-minute stylus can be made with a piece of hard glass (such as pyrex) held in a bunsen flame and drawn out to the thickness of heavy thread. One end is then held in the flame and a blob forms the ball end, which with a stalk about $\frac{1}{8}$ " long, is stuck into the 'tin hat'. This operation is not beyond any handyman and although more prone to jumping grooves than a 'C', the first one I converted is still functioning, not as loudly as a 'C' but giving enjoyment to an Edison owner and his family who, for many years possessed an instrument, records, a recorder, but no reproducer and therefore no sound, no music and no pleasure.