

Broadcasting Programmes Accurately in Advance

Wireless Weekly ^{3^d}

VOL. 21, No. 1

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FRIDAY, JANUARY 6, 1933



WILL BE A

Ken-Rad

YEAR

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EASTERN TRADING CO. LTD.
SYDNEY *and* MELBOURNE

500,000 LICENCES

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I.R. 22

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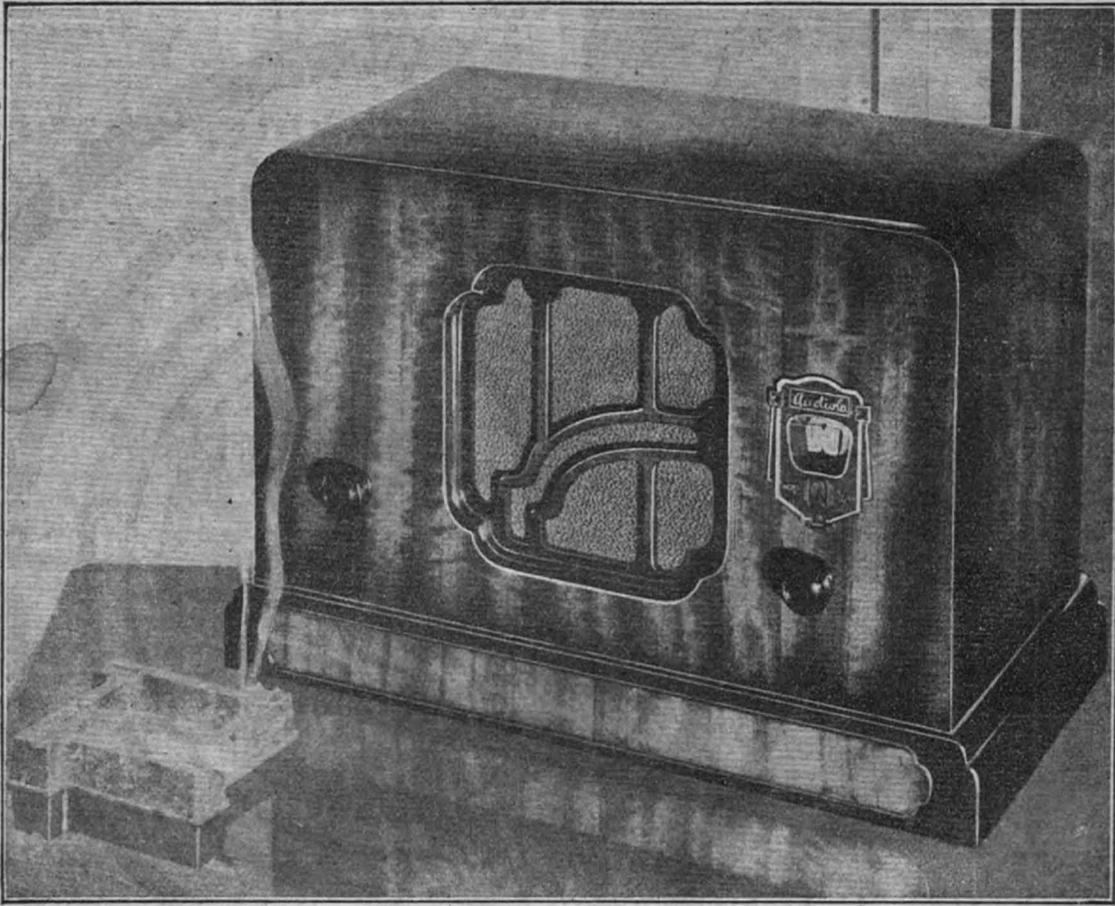
*National Union Radio Valves are
Guaranteed to be BETTER than
any other radio valves on the market.*

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in your radio set.

24¹/₂ ea.

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RADIO CO. LTD.
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A GENUINE SUPERHETERODYNE

IN the AUDIOLA you get a genuine superheterodyne, with all the advantages of superheterodyne performance, at a price within easy reach of all.

The AUDIOLA is a thoroughly-built set, using a proven superheterodyne circuit and the highest quality components, and is housed in a well-made and well-finished cabinet. Tonal reproduction leaves nothing to be desired. Only because of thorough organisation and a large output is the low price possible.

It uses 3 valves and a rectifier, and makes available at a phenomenally low price the extreme selectivity—the ability to cut out unwanted stations—of which only a superheterodyne is capable. This handsome mantel model all-electric receiver will provide all the N.S.W. programmes and the leading programmes of Victoria and Queensland—with ample volume and pleasing tone.

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Introducing—

GRAND OPERA STARS

Now Recruited for Radio

CESARINA VALOBRA (lyric soprano) was one of the most popular members of the J. C. Williamson Imperial Grand Opera Company. Petite, brunette, and very vivacious, she has appealed to the public of Australia and New Zealand. She comes from a very musical family, and has the distinction of being the youngest soprano to sing principal roles at La Scala, Milan, where she made her first appearance at the age of 18. She is now 25, and is married to a leading solicitor of Milan. At La Scala she had the distinction of being the first interpreter of the role of "Liu" in Puccini's "Turandot." She remained at La Scala for six years, and left it to come to Australia when Mr. Nevin Tait and



ILIO DEL CHIARO,
baritone.

Signor Folli engaged her for the Australian tour of the Grand Opera Company. In Australia the press and public acclaimed Valobra as the best "Cho Cho San," in "Butterfly," and "Violetta," in "La Traviata," ever heard in this country. In fact, it might be interesting for listeners to know that in eight months 41 performances of "Butterfly" were given throughout the tour. Signora Valobra will now appear with the Australian Broadcasting Commission in the following operas: "La Traviata," "Pagliacci," and "Faust," besides giving three solo programmes.

WANDO ALDROVANDI (conductor) is a noted composer of chamber music. Some of his compositions will be broadcast during the month of January. He has conducted at many of the principal theatres in South America and Europe. During the Williamson Imper-

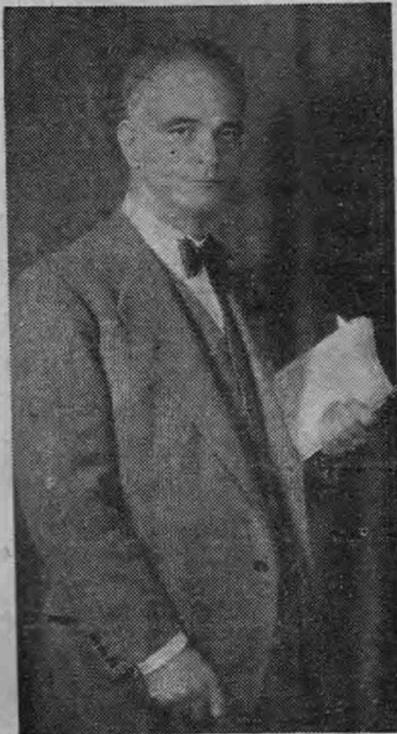


CESARINA VALOBRA.

ial Grand Opera season, whilst the company was touring in New Zealand, he made a special study of Maori music, with the intention of publishing some special work on this very interesting subject. He will conduct and direct all the broadcast performances of the grand opera series.

ILIO DEL CHIARO (baritone) is the principal baritone of the Grand Opera Co. He is a great actor, and noted for his character make-up. One well-known Sydney photographer took a special sitting of the baritone study in "Lucia" for the purpose of sending it to the world photographic exhibition. Signor Del Chiaro appeared in many of the operas performed by the Williamson Imperial Grand Opera Company, and will be particularly remembered for his forceful interpretation of Valentine in "Faust," "Beppo" in "Pagliacci," and the American Consul in "Butterfly." The two first-named operas are to be performed over the air.

MOLLY DE GUNST is the distinguished Australian soprano, who was one of the principals in the Williamson Imperial Grand Opera season. She sang leading roles in "Aida," "Cavalleria," and other operas, with outstanding success. Miss de Gunst is a Queenslander, who has always regarded the operatic stage as her goal, and critics predict a brilliant future for her in opera in other parts of the world, if ever she elects to go abroad.



WANDO ALDROVANDI,
the noted conductor.

BETWEEN YOU AND ME AND THE MICROPHONE

In the Ear of the New Year

WELL, Christmas is just over as we write this, and the New Year will be begun when you read it, and you will know the answer to that troublesome question, madam, whether you get more drunk on Christmas Eve or on New Year's Eve.

Ourself, we spent an interesting Christmas; but quiet; we finished the last act of "Ned Kelly," a play in five acts, by James Jeames James, and will show it to J. C. Williamson's early this year, to see if they will put it on. There are some stout bits of dialogue; for example (if you don't mind):

NED:

Unhand me, knave! Your cross-eyed, spitting malice
Like to a drunkard in a public bar
Enflithies ugliness. Hol! Hol! good Kate,
Bring me my barkers. I've a mind to see
If lead can do death's duty to this carcase,
Putrid, that braves corruption with corruption;
Come, stinkard! The day breaks, but for
one of us
It shall close early.

Isn't that pretty good? Won't it make Mr. Tait sit up when he sees it? Let us assure you that it is our own effort, absolutely unaided, even by the Editor; and it proves that there is yet hope for the Australian drama. Next week we may quote to you from another play we did some time ago, "The Dark-eyed Paramour"; it is even more thrilling, in parts, like the lady.

But enough of this egotistical showing-off. It must get very galling to you from time to time. The main important part of our Christmas was, of course, listening to the speech by his Majesty on Christmas night, and very nice too. At the conclusion, when they played the National Anthem, everyone stood up, and we would have, too, but our position was unfortunate.

(What do you mean, your position was unfortunate?—Ed.)

Well, the set, you know. Where we were, their set was a very old one, and to get any results from it at all you have to kneel down at the back of it, and hold down one of the valves with your hand; and when they played the National Anthem it was our turn to hold down the valve. But we would have stood up if we could.

(Thank you; that is quite satisfactory?—Ed.)

How do you mean, satisfactory?

(Don't worry, James; we just have to be careful, you know.—Ed.)

Oh, yes; we would have stood up if we could. It was a most successful relay, wasn't it? In the picture show on Monday night they put on an A.W.A. advertisement, and everyone immediately began to jabber, "Oh, did you hear the King's speech last night?" And coming down in the tram to-day, in the back of a tram, two women, one had just come from the railway station—one had got in from Canberra last night, the other

had just arrived from Dubbo—"Oh, my dear, did you hear the King's speech?" "Yes; it was wonderful, wasn't it? After all, wireless IS wonderful, isn't it?" "Yes, and to hear all those countries from all over the world—it was WONDERFUL!"

Now, you may say, Jimmy, you're always inventing things about people—you should write advertisements for face-cream, but it is not so. Those



This is Mr. WILFRID THOMAS—
He could sing inverted commas!

remarks were actually made; truth is stranger than fiction, and in the simple voice of the common people is truth more strange than the utmost profundity of scientists and writers of editorials.

(James!—Ed.)

All right, editor; now you keep quiet for a while and we shall write a little publicity for Mr. Wilfrid Thomas in England; he is a venturesome young man with a basso of some importance, and he went to England with the Glee Singers; Raymond Beatty went to England, too, you remember—it is strange how all our low singers get there sooner or later. Well, the photograph up above arrived as a Christmas present and protest against "the Mephistophelian portrait" we had been using, because "my mother, who doesn't know how ugly I really am, doesn't like it a bit."

Have it your own way, Wilfrid, but we hope you aren't as hungry as you look in the new picture; what you have been doing to get that lean, pantherish kind of look we don't know at all.

Well, now; what has Wilf. been up to in England? How is England taking to him? That's what you want to know; and he has the answer: "On January 4 (let's hope it will be a Glorious 4th) we shall sing like gentlemen and Englishmen at 9.30 a.m. or thereabouts, thus giving us time to annoy our livers with eggs and bacon and tea, and to read our names in the papers. You will see that the B.B.C. is treating us artists

more humanely than 2FC did on that long-departed occasion when we were aroused at 1 a.m. to transmit to 2LO. I am going to do a few Australian songs amongst my little lot."

So there you are, dear reader; Wilfrid is going to sing from the Empire station at 9.30 (English time) on Wednesday, January 4. We turned it up in the B.B.C. book; and here it is:

a.m. 9.30
Big Ben
BALLAD CONCERT
VERA FLORENCE (Soprano)
WILFRID THOMAS (Baritone)
VERA FLORENCE
Cherry Ripe arr. Lisa Lehmann
One morning very early. Trad., arr. A.L.
Rose softly blooming Spohr, arr. A.L.
WILFRID THOMAS
Four Australian Songs
Man and Woman Arthur Benjamin
Waata Poi Alfred Hill
(A Maori Dance Tune)
Colette Edith Harry
Stock-riper's Song William James
VERA FLORENCE
Eriskey Love Lilt Kennedy-Fraser
(Song of the Hebrides)
Comin' through the Rye arr. Clutsam
Charlie is my darling arr. Clutsam
WILFRID THOMAS
Four British Songs:
New Year's Song Albert Mallinson
Onaway, Awake, Beloved (Hiawatha)
Cowen
Stanford
The Monkey's Carol
A Ballymure Ballad Herbert Hughes

So you will probably just read this in time to get tuned in to it; and hear Wilfrid over all those miles of sea and so forth, after all this time; gladdening many a sad woman's heart.

(What sad woman's heart?—Ed.)

We don't know, editor; but we know Wilfrid.

The Harbinger of Empire.

The Hand across the Sea.

The Missing—!

Talking about links; Mr. Malcolm Frost, the young cove who toured the world looking at broadcasting, has begun coming out to Australia again with the B.B.C. recorded programmes; he is an Ambassador of Empire, and once wrote an article for "Wireless Weekly"—we don't often get articles from Ambassadors of Empire. The B.B.C. paper has a touching description of his departure in an aeroplane for Marseilles, and pictures him on his journey in "lonely farmsteads," "planters' bungalows," "missionary posts," and "wealthy Chinamen's palaces"; this is his I-tin-er-rary: London, Marseilles, Malta, Port Said, Cairo, Atbara, Kosti, Kampala, Nairobi, Moshi, Salisbury, Johannesburg, Capetown, Nairobi, Mombasa, Bombay, Calcutta, Colombo, Singapore, Hongkong, Shanghai, Yokohama, Moji, Hongkong, Manila, Rabaul, Brisbane, SYDNEY (2/4/'33 or 13/4/'33), Auckland, Suva, Vancouver, Ottawa, Havana, Kingston, Port au Prince—and so home. All we can say is:

Mr. Malcolm Frost,

We hope

You won't

Get

Lost!

James

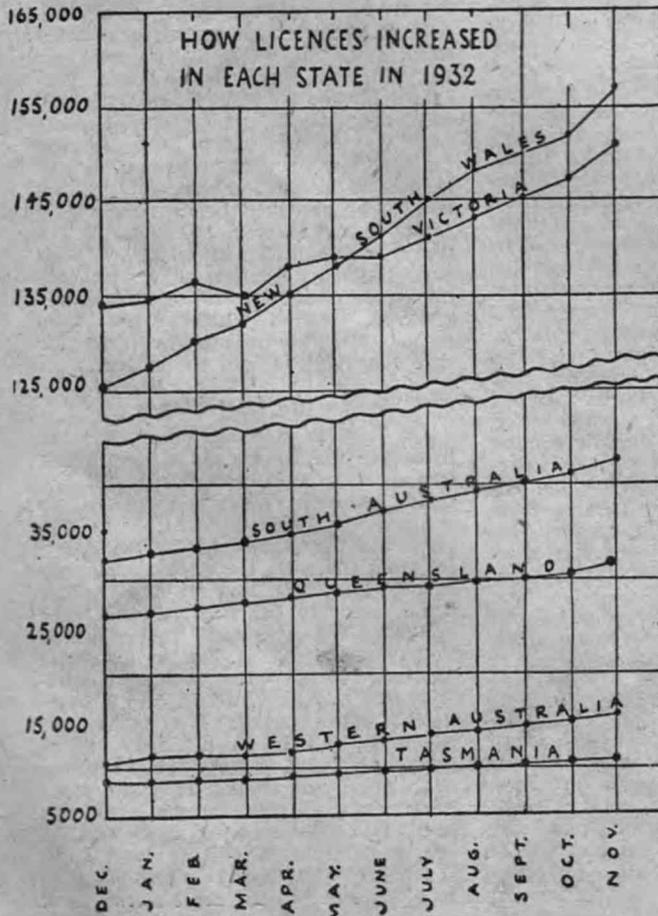
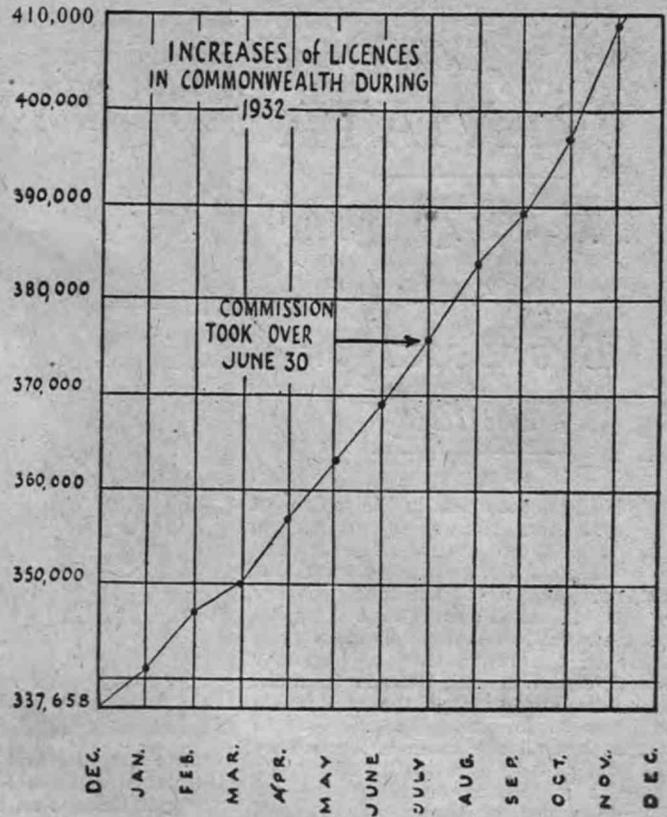
HALF A MILLION LICENCES

Before the end of 1933 the number of broadcast receiver licences in Australia should exceed half-a-million.

ALTHOUGH the official figures for December 31, 1932, are not yet complete, it is expected that they will show a total number of radio receiver licences of more than 410,000—possibly 420,000.

On December 31, 1931, the total number of licences was 337,650. This means that in 1932 the number of honest listeners increased by 82,000—the rate of increase averaging between six and seven thousand each month.

In the latter half of the year, however, when the influence of the new Commission began to make itself felt, the figures showed a tendency to jump. Between Oct. 31 and November 30 the increase was 11,774, whereas in the earlier part of the year, between Feb. 29 and March 31 (broadcasting was at a very low ebb), the increase was only 3106. If the Commission continues its good work, and the tendency towards an acceleration in the monthly figures is maintained then we may expect a total increase for 1933 exceeding that of 1932. Not more than 82,000 licences will be required, however, to bring the total figure to within the half-million mark.



The most substantial contribution towards the increase of licences in 1932 came from New South Wales, which now has more licences than any other State—a position occupied by Victoria last year. In New South Wales on December 31, 1931, there were 125,409 licences, while in Victoria there were 134,173—nearly 9000 more in the southern and smaller State. However, by June, N.S.W. was more than 2000 in the lead, and by November 6000 ahead of Victoria, the figures being 157,506 and 151,498 respectively. Victoria still claims to have a greater percentage of listeners per head of the population, although it may soon lose even this honor.

In the other States, which are far behind N.S.W. and Victoria, the rate of increase has been much less. South Australia makes the best showing, with an increase of just over ten thousand, bringing the total number of licenced listeners up to 42,312 on November 31. The influence of 5CK is just being felt, and a higher rate of increase is expected in 1933.

Queensland is next with an increase of 5000, bringing the total up to 31,534 on November 31, 1932. Western Australia follows with an increase of 4768, the total being 15,568. The new 6WF transmitter is just being erected, and when this is operating with higher power and improved transmission, W.A. expects a rapid increase of licences. Tasmania is last with an increase of 2000 odd for the eleven months, and a total of 10,846.

Thus there is every prospect of a heavy increase in licences in 1933. The improvement in the programmes and the further improvements which are in the course of being made, the musical festival presided over by Dr. Malcolm Sargent during the winter, the Empire relays, and other features, will attract more and more listeners to the swelling ranks of radio.

One factor which is likely to bring the licences up more than any other is the active campaign against pirates, which will be made in the coming year. The first note of warning will be struck in next week's "Wireless Weekly," at the request of the Commission; and so intense will be the rounding up of unlicenced sets that it is believed that thousands of listeners will be rushing to take out licences in order to avoid the ignominy of prosecution.

The extra licence money thus obtained will go towards the further improvement of the programmes, making radio entertainment more attractive than ever.

La TRAVIATA

The Story of the
Opera to be
Broadcast on
Sunday

THE first act opens in the salon of Violetta, a wealthy courtesan. She is entertaining her friends.

Among the guests are Baron Dupol, her patron of the moment, her bosom friend, Flora, with her attendant Marquis, and other acquaintances. Early in the revels Gaston, another friend, comes in with Alfredo Germont and tells Violetta that the latter is seriously in love with her. Violetta laughs, but all the same is touched by the young man's devotion. In this scene there is a spirited drinking song for Alfredo, which is repeated by Violetta and chorus. Music is heard from an adjoining room, and the guests all move towards the apartment. Violetta follows, but has to stop, overcome by a fit of coughing—she is palpably consumptive. Alfredo approaches and tells her of his love. She sings with him, gaily repeating his words, then suddenly her mood changes—she becomes serious, realizing that such a love is not for her. It is when Alfredo and the other guests have retired that Violetta, lost in contemplation, her heart touched for the first time, sings "Ah! fors' e lui che l'anima" (For him, perchance, my long-ing soul).

Selling Her Jewels

In Act 2, the scene is laid on the ground floor of a house near Paris, where Alfredo and Violetta are living. The latter has cast aside her former life and withdrawn herself from her old circle of friends. Alfredo enters and sings of the joy of their life together. From Annina, the maid of Violetta, he learns that the expenses of keeping up the country house are much greater than Violetta has told him, and that, in order to meet the cost, has been selling her jewels. He declares he will



Marie Bremner and Willie Redstone photographed in the studio during the performance of "The Student Prince" recently. Miss Bremner received many congratulations on her singing as Kathie. Mr. Redstone was the producer.

go immediately to Paris to raise money and reimburse Violetta. Soon after Violetta enters, carrying a note she has just received from her friend Flora, in which the latter has invited her to a gay party in the city. Reading aloud, she laughs at the thought of going back to the old life. A visitor is announced. It is Alfredo's father. The older Germont has come to endeavor to persuade Violetta to break off the liaison with his son. He tells her that the boy's career will be ruined, and not only that, his young, innocent and lovely daughter will be unable to marry her betrothed, whose family refuses to ally itself with one whose name is besmirched by scandal. Violetta pleads her genuine love for the younger Germont, but at length she yields, broken-hearted, and promises to release Alfredo. The father leaves and Violetta sits down and writes a letter to her lover, telling him that she is going back to Baron Dupol. Alfredo enters. She conceals the letter. He tells her that his father is coming to separate them. She kisses him tearfully, and leaves the room without Alfredo realizing that it is a parting. Soor afterwards a messenger brings him Violetta's letter. He is stricken with grief on reading its contents. At this moment his father comes in, and, believing that Violetta has betrayed him, Alfredo leaves the house. He determines to be avenged for her falseness.

"Unlucky In Love . . ."

The scene changes to a salon in Flora's expensive home, where entertainment is in full swing. Very soon Violetta comes, accompanied by Baron Dupol. Alfredo sees them from the card-table at which he is seated. He plays recklessly, wins heavily, and presently declares that he is "unlucky in love, lucky at gambling." Violetta winces

at the indirect insult, and Dupol, furiously angry, wishes to deal with him. He goes to the card-table, stakes against Alfredo, and loses. Alfredo approaches Violetta; she begs him to leave, for the baron will challenge him to a duel. Alfredo sneers at her apprehensions, intimates that it is the baron she fears for. She says she loves the baron. Enraged, Alfredo tears open the doors and calls everyone to come back. Hurling invectives at his former love, Alfredo casts at her feet his winnings at the card-table as payment for all she has had to spend on their home. She faints in the arms of Dr. Grenville. A dramatic ensemble, in which Violetta sings "Alfredo, Alfredo, di questo core non puoi comprendere tutto l'amore" ("Alfred, Alfred, little canst thou fathom the love within my heart for thee") brings the act to a close.

In the Last Stages

Act 3: Violetta's bedroom. She lies in bed in the last stages of her illness. She awakens and calls faintly for the maid, Annina enters and opens the shutters. A knock is heard. It is Dr. Grenville. The dying girl has had a letter from the elder Germont saying that Alfredo has been told all, and that he is hastening to her side. Annina, who had gone out with some money which Violetta had given her to distribute as alms, returns. Her manner is excited. She has seen Alfredo. He is waiting to be announced. A moment later he holds Violetta in his arms. Approaching death is forgotten. Nothing again shall part them. They will leave Paris for some quiet retreat. But it is too late. The hand of death is upon the woman's brow. "Gran Dio! morir si giovane" ("O, God! to die so young"). It is the end. In the arms of her lover she dies.

::: THE CAST :::

VIOLETTA VALERY,
SIGNORA CESARINA VALOBRA
GEORGIO GERMONT, Signor Franco Izal
ALFREDO GERMONT,
SIGNOR PEDRO MIRASSOU
DOCTOR GRENVILLE,
Signor Felice Mercadante
MARQUIS Rowell Bryden
BARON DUPOL Rowell Bryden
GASTON Roy Glasheen
FLORA Miss Gladys Carlyles
ANNINA Miss Evelyn Hall
CONDUCTOR, MAESTRO WANDO
ALDROVANDI.



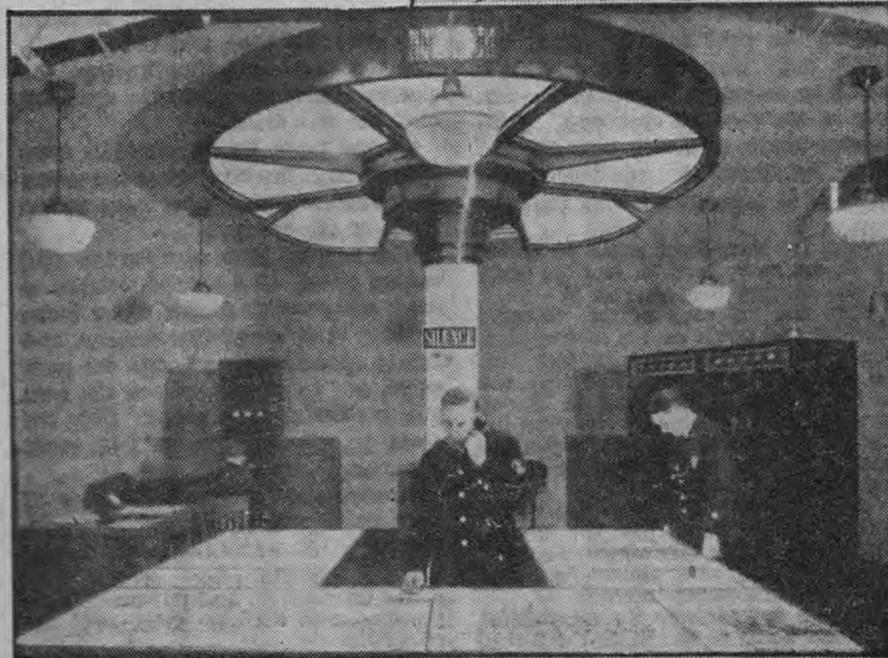
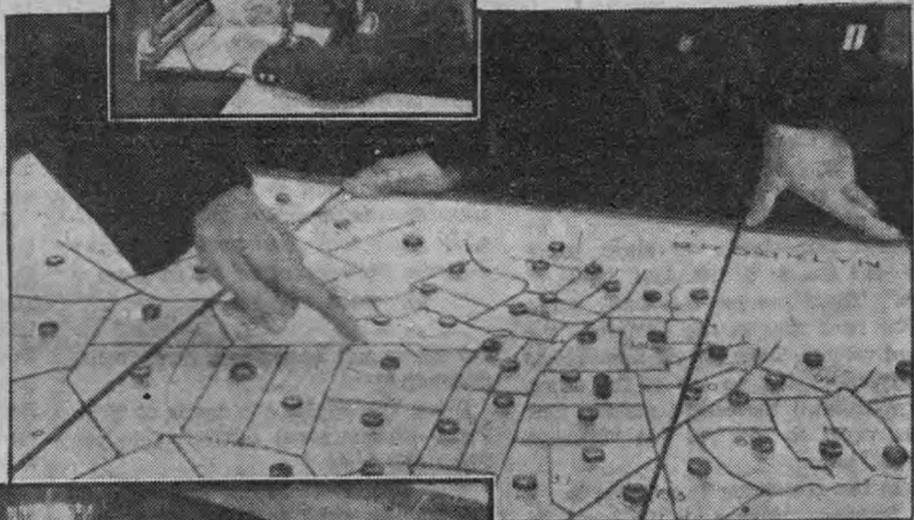
Radio as used By the NEW



YORK POLICE PATROL

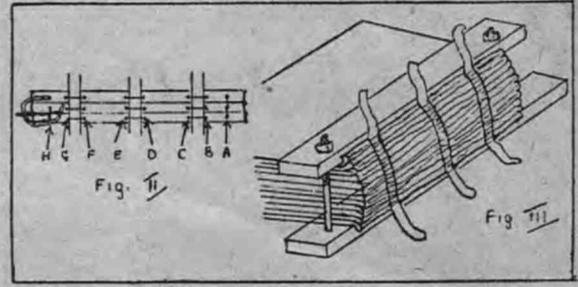
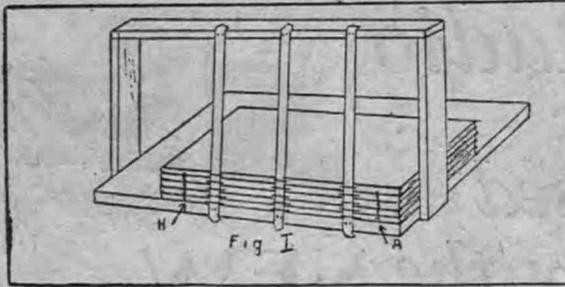
POLICE radio patrols have been used with effect in Sydney, Melbourne, and Perth for some time, but none of these cities has exploited its use as fully as New York. Perhaps it has not been necessary, you say. Quite true, but New York must not be confused with Chicago. The New York police have an extremely high record, having converted their city from being one of the most corrupt and criminal in the world to a comparatively peaceful metropolis.

Their greatest handicap has been, of course, the enormous size of New York with its labyrinth of poor quarters, negro sections, etc. And what has enabled them to overcome this handicap more than anything else is radio. Hundreds of police patrol cars, such as the one featured in the upper right



and left hand corners patrol New York all day and all night. Each car has its own section or borough, and keeps continually in touch by means of radio with headquarters, where an officer keeps the position of each car marked on a map, so that at any moment the location of any or all the police cars may be obtained from a glance at the map.

Anyone who sees a strange person hiding behind his back door, or in any other manner which arouses suspicion, phones headquarters miles away, which passes the message on by radio telephone to the nearest patrol car. In one minute—two or three at the most—a racing roadster is at the door with two officers.



How to Bind Volume 20 of WIRELESS WEEKLY

THE first requirement is a binding desk. This is made from timber $\frac{1}{2}$ -inch thick. The base of the desk measures approximately 15in. x 10in.

Nail an upright 10in. high and 2in. wide on either end of the base $\frac{1}{2}$ inch from the front. Another 2in. strip is nailed on top of the two uprights. See Fig. 1.

Next prepare the copies of "Wireless Weekly." This is done by removing the wire which fastens the leaves together. As each copy is at present numbered separately it is advisable to leave the covers on each.

Obtain four sheets of blank paper twice the size of a "Wireless Weekly" page. These are for the blank pages at the back and at the front of the bound volume. Take two of these pieces of paper, lay one on top of the other, and fold down the centre, making four pages equal in size to the "Wireless Weekly" page.

Fold the remaining two sheets in a like manner. Having all the copies in their correct order with the No. 1 copy on the top, lay the four blank pages on the bottom and the other four pages on the top of the volume.

Keeping all the copies straight with all the ends even, mark a vertical line on the backs 1in. from each end. (See A and H, Fig. 1.)

Using $\frac{3}{4}$ in. tape, tack one piece in the centre where the "Wireless Weekly" would fit on the desk, and two more pieces, each one inch, inside the vertical lines already drawn on the "Wireless Weekly" (Fig. 1 explains this admirably).

Take all the copies off the desk and turn them face down on the table.

Take the blank sheets which are now on top and place them on the desk, keeping them square against the right hand upright and level with the tapes.

Taking a darning needle and some suitable thread (the white twine used by the grocers suits best), push the needle into the pages at the vertical mark A. Draw the thread right through

"JYK," an enthusiastic reader, here describes how you may bind your copies of "Wireless Weekly" for future reference. A specially printed title page and index page will be supplied free of charge to those readers following "JYK's" lead provided their request is accompanied by a stamped and addressed envelope. We will also be pleased to assist those readers whose volumes are almost, but not quite complete. Back copies of all the numbers in volume 20 are available and will be posted to any address on receipt of 4d in stamps for each copy required.

the centre and leave about three inches protruding.

Bring the needle out again at B in Fig. 2—this is about 1-16in. before you reach the tape.

This may prove rather awkward in judging the right spot to bring the needle out. However, that problem is solved by making a hole from the outside at the required spot with either another needle or a very, very fine awl. Bring the thread over the tape and in again at C, this being 1-16in. from the tape.

Take the thread out again at D, in at E, out at F, in at G, and out again at the vertical line marked H.

Take the top copy of the "Wireless Weekly" and put it on top of the pages you have already sewn with face up. (If 27 copies are bound this copy will be No. 27, and the next will be 26, and so on.) Keep the end of the copy flat and true on top of the sewn pages. Repeat the sewing performance as before, but this time starting at H.

When having done this the needle will come out at A, pull the threads tight and tie the end which has been left protruding, thus binding the copy and the blank pages together.

Now do the same to No. 26, starting at A and going to H. Bring the thread out, and as shown with needle in Fig. 2, tie on to the piece running from H

of the blank pages to H of No. 27.

Put in No. 25; start at H, work to A, tie down, and start again at A to H, and so on, concluding with No. 1, and then the blank pages. Remove the tack from the tape and pull the tape even. It is advisable to take the job at this stage to a printer and have the edges guillotined. Cost is about 6d. Cut out two pieces of thick cardboard to form the covers, and if fancied the edges may be bevelled. When cutting these boards allow 3-16in. to overlap the front and the top and the bottom.

Before covering, the book must be glued. This is done by placing it in a letter press or some similar press and leaving about $\frac{1}{4}$ in. of the backs protrude. A simple press may be made from two strips of 2in. timber bolts, being fitted to form the press (see Fig. 3). Before tightening, work the back to form a sort of curve; this will also make a concave in the front of the book.

Tighten the press and cover the backs with hot, thin glue, and with a hammer tap the backs, thus forcing the glue in. Leave the volume in the press until the glue dries.

Cut the tapes, leaving only 1in. overlapping on either end. Place the covers in position and glue these tapes on the inside of the cover.

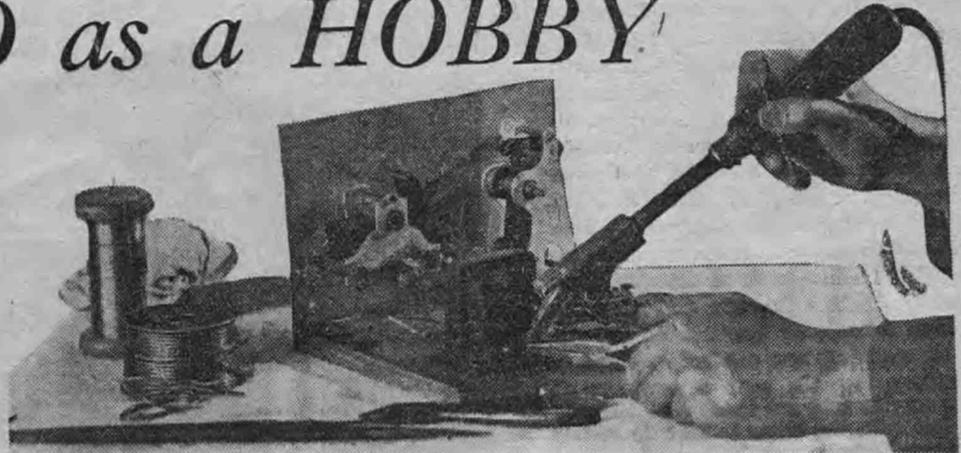
Glue a calico hinge over the top and bottom cover. Now for the material to cover the boards. Choose either bookbinders' cloth or window holland. Cut this to fit the book, and down the piece which will be on the back of the book glue a piece of stout paper. Glue the cover on, allowing 1in. to fold inside the book.

Between the cover and the back of most books will be noticed a groove. This is made while the cover is still wet. A straight piece of thin wire placed in position, and put under light pressure until the glue dries, suits admirably.

Now glue a blank page to the front cover and one to the back cover.

RADIO as a HOBBY

Are you beginning the New Year by beginning radio? Make this one of your resolutions for 1933. This article tells how interesting the hobby can be.



A beginner at work soldering up a small receiver—see how simple it is.

THE boom in radio as a hobby in England is phenomenal, and today there are about seven weekly journals devoted to serving the home builders with information on the subject. The boom is also very evident in Australia, and there is every prospect that during 1933 the amateur radio enthusiasts will have their ranks swelled by hundreds of newcomers. As a hobby radio has many attractive features, and anyone who cares to spend a few minutes contemplating the advantages of a knowledge of radio will find many reasons for the popularity of this pastime.

NO PHYSICAL QUALIFICATIONS

In the first place there are no qualifications in the radio game; it is suitable for all ages, sexes and types. There is no need for the home-builder to be big, strong, and fleet of foot or rippled with sinews. So long as he has intelligence, patience, and enthusiasm he is assured of hours of endless enjoyment. For boys of 14 the hobby of wireless

building has the same attractions as it has for the elderly gentleman who is too feeble to take an active interest in other sports or hobbies.

THE COST

The entrance fees to golf clubs may be £50 or more, to buy a stable of polo ponies may cost £500, but to start off in the radio game calls for any amount from about £5 to £15. With this amount it is possible to purchase all the necessary tools, together with sufficient components to build a decent receiver. Then as time goes by a few shillings here and a few shillings there will purchase the necessary components to add a valve or two, turn the set into a super-het, add push-pull amplification, and before the enthusiast realises it he has a receiver which can out-perform those selling around town for £50 or £60, although he will only have spent some £15 or £20 in all. As a matter of fact the radio enthusiast who has his head screwed on correctly can usually make handsome pocket money by his hobby.

MAKING MONEY

It is possible for the home builder to make quite an amount of money in his spare time by building a set or two for special clients, without in any way encroaching on the domain of the legitimate radio dealer. There are some buyers who cannot be dealt with by the average dealer. For example, a man may have an excellent gramophone cabinet, into which he wishes to fit a radio chassis. The chassis may have to be six inches wide and a couple of feet long. No commercial chassis can be purchased to suit the job, and the dealers do not like to handle the business. But it is child's play to the radio enthusiast. He can run up a special design to suit the purpose, get a special chassis folded to order, and fit the job up to perfection. To the dealer every minute spent messing about with a job of this nature is as money spent, but to the enthusiast it is simply entertainment and enjoyment. Whilst dealing with this aspect of the radio game, we might also point out that the short-wave market is almost exclusively at the disposal of the home-builder. Dealers cannot find time to spend on surmounting the vagaries of short-wave reception, but again to the genuine enthusiast it is all part of the hobby.

SAVING IN HARD CASH

But even to the man who does not want to deal in sets the home-made set offers a great saving in real hard cash. In the first place the term depreciation is unknown. When the end of the season comes the commercial sets depreciate pounds and pounds. But the home-builder promptly pulls down his old job, and by spending a few shillings converts it to take the latest valves and so on, and brings the job right up-to-date. He also has a flying start in the first place, as the home-built set is usually months ahead of the commercial job.

UP-TO-THE-MINUTE DESIGNS

This is a little hard to understand until we consider the working of a large factory. Using the latest information



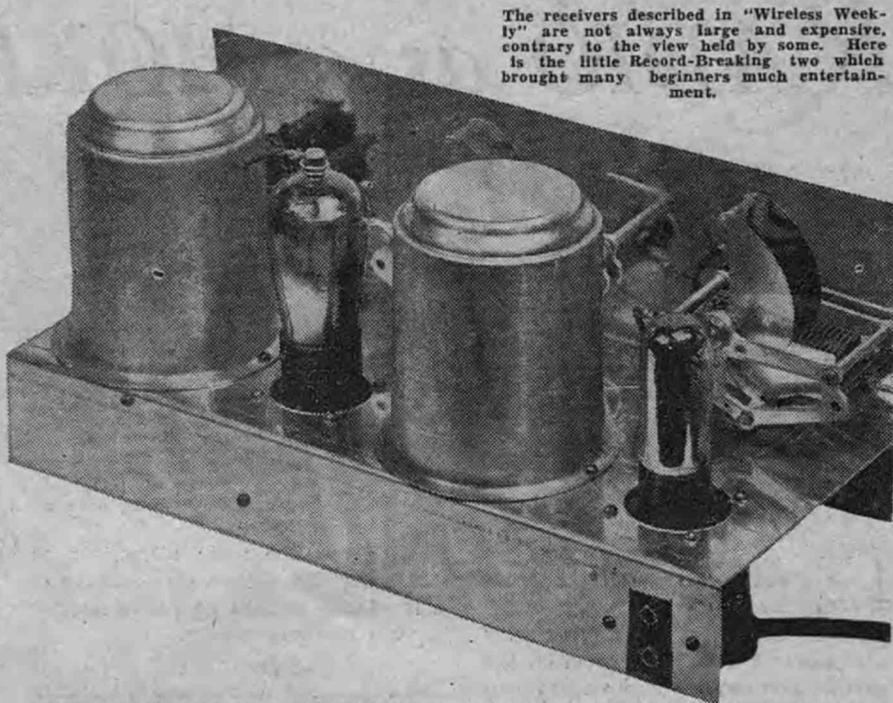
All the tools you need to practise radio as a hobby

available the designers lay down what they consider a suitable set for production. After consultations with the sales staff, tool-maker, production engineer, and so on, a design of compromising type is decided upon, and then the storeman starts to order the parts. Already the design will be a couple of months "stale." The storeman then places an indent order for the components with various importers. After at least six months' further waste of time the parts start to dribble through, and after the design is nine or ten months old the tools are ready and the factory starts to produce. By the time the sets reach the market they are obsolete in design.

But with the home builder he merely follows "Wireless Weekly" closely. Within a month of any startling design being announced in any part of the world "Wireless Weekly" designers have the circuit in hand, and within a fortnight or three weeks the design is published. The home builder can buy his paper on Tuesday and have the set in operation by the Wednesday night—about nine months ahead of the larger factories. And in the radio game as it is to-day things move so rapidly that nine months may see all sorts of improvements. For example, nine months ago superhets. were hardly known in Australia, but they had been fully described in "Wireless Weekly" for three months previously.

QUALITY COMPONENTS

But perhaps the most attractive feature of the home-built set is the fact that the components are each chosen with a view to obtaining quality. When the price is such an important factor in the selling of receivers (as clearly evidenced by the big advertisements featuring the price a lot more than the technical advantages or the quality of the set) it is only natural that there is a big temptation to the factory owners to fit the cheapest components in order to get the price as low as possible. But the radio



The receivers described in "Wireless Weekly" are not always large and expensive, contrary to the view held by some. Here is the little Record-Breaking two which brought many beginners much entertainment.

enthusiast walks into a shop and turns over the components in his hand before he buys, and can use his discretion as to what components he buys cheaply and which he purchases with an insistence for quality.

SERVICE WORRIES

The home builder knows no service man. Since he has built the job himself, it is only natural that if any component plays up, or proves in any way faulty, it is only a moment's task for it to be replaced with a new one. If the owner of a set has no knowledge of radio, then he has to rely on the integrity of the dealer or service man. Owing to the very high standard of the class of men engaged in the radio industry there is little chance of anyone being deceived by a dealer,

but there is always the stray chance that you may be the unfortunate one who is charged £5 for a service call when all that was necessary was a drop of solder worth less than a halfpenny.

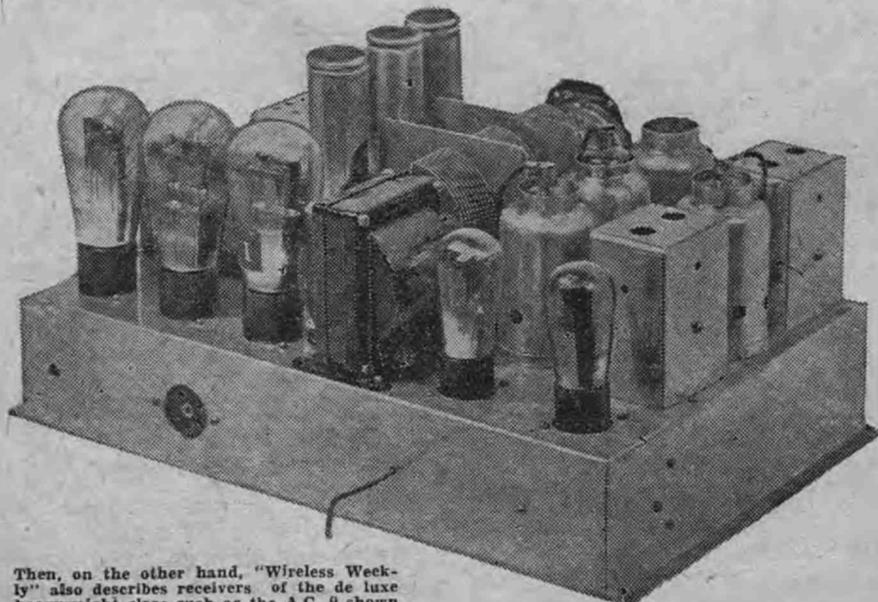
HOW TO START

By this it must be very evident that there is no doubt that you should make your sincerest New Year resolution, "I'm going to be a radio enthusiast." But "How do I start?" is sure to be your next question. Well, undoubtedly the first thing to do (even if we say it who shouldn't), is to place a regular order for your "Wireless Weekly" to be delivered every week. Starting from our next issue we will run special articles for the beginner, dealing with both the practical and the theoretical side of radio, so you want to get every one of these issues and study them up carefully. The next thing to do is to join the local radio club. There you will meet all kinds of radio enthusiasts, and if you keep your eyes and ears open you will be certain to pick up a lot of invaluable hints and tips.

TEXT BOOKS

Although you will probably find all you want to know in our columns, we also recommend you to purchase a good text book on the subject. There are dozens of these available from radio dealers and booksellers, and you should have no trouble in picking up one or two written in simple language which will tell you all you want to know. To study radio directly from a book is very difficult, but if used in conjunction with a little practical set building it is very much easier.

And we can say from past experience if you do this it isn't going to be long before you will be able to throw out your chest with pride as you tune in KFI direct from America on your home-built superheterodyne!



Then, on the other hand, "Wireless Weekly" also describes receivers of the de luxe heavyweight class such as the A.C. 9 shown here. Readers who wish to have a set

which out-performs anything available commercially or built to custom are interested in these sets.

MUSIC OF THE WEEK

MODERN ENGLISH COMPOSERS

Bantock, Bowen, Quilter and Ireland

By DR. KEITH BARRY

NEXT Tuesday from 2BL there will be a programme made up of compositions by modern English writers. Firstly, there is the group by Bantock, one of the most important of the moderns. Often does one see the relationship between medicine and music, and Granville Bantock is yet another example. His father was a well-known surgeon, and Bantock was put into a science course, where history records that he was not as successful as he might be. He insisted on being interested in music. His father bowed to the inevitable, and transferred him to the Royal Academy. Many musical adventures followed the completion of his Academic studies, till, at the age of thirty-two, he was appointed principal of the School of Music at Birmingham. He is also Professor of Music at Birmingham, and gets time to compose a great deal of music, all of which is distinguished by a welcome tunefulness and freshness of style. He has ever



RAY FOX,
Violinist, 2BL, Tuesday.

been a stalwart advocate of English music, and he struck a new note by giving concerts of "Modern English Works" as far back as 1896. It is interesting to note alongside this nationalism a love for the East and a strong tint of Eastern coloring in many of his works. He has, too, in his time, had a passionate love for folk songs of Scotland. He has a colorful personality in his music, and one that must be just as attractive to the listener as to the student. It is worthy of note that Granville Bantock was a zestful journalist in his youth, and began a paper called the *New Quarterly Review*, a progressive publication, which aroused a great deal of attention.

On the same programme, Mr. Horace Keats will play the York Bowen Ballad in A Minor. To those who are looking for piano music that is tuneful and good, one has no hesitation in speaking of York Bowen. Some of his "Suites" are delightful. He has a great ear for

a tune. He is a Londoner who is still on the right side of fifty, and is another of the Royal Academy men to mark his mark.

Then Miss Barbara Russel is to sing two songs by Ireland, who, appropriately enough, is known to all radio listeners by his little gem of piano music, "The Island Spell," which, by the way, is one of a set of pieces called "Decorations." John Ireland has just crossed the fifty border-line, and is a Cheshire man, who studied at the Royal College. Ireland has gone through different stages of development like many another good musician. One of his stages was a flirtation with the school of French Impressionism.

Lastly, there will be Roger Quilter's "Arab Love Song." Quilter is an old Etonian, who had his musical training in Germany. He is another tuneful writer, and his "Children's Overture" is always a programme pet. I do not know that there is a more lovely song written in the past few years than his "Now Sleeps the Crimson Petal."

THE RADIO CHOIR

I NOTICE that the Radio Choir is to sing some part-songs on Thursday next. I hope sincerely that the choir will not be overworked in the sense that it will be expected to sing more items than it has reasonable time to learn. Once again, it is the old question of rehearsals. We must, it is regretfully admitted, create in Sydney a feeling that "only the best is good enough." Our choral singing for the past few years has been more on the lines that "anything will do." Now, Vern Barnett is a good musician of wide experience, and I feel certain that he can do much with the radio choir, so long as he is not expected to do it all at once. This choir and the Musical Association choir must be our answer to the charge levelled at us by other States that our choral bodies are below standard.

INTERSTATE RELAYS

AND that reminds me that I think it would be a wise move to prohibit interstate choral relays from here till we are certain we can give a good one. It is particularly unfortunate that some of the relays we have given on the National circuit have been—well, unfortunate. It is not the Commission's fault, because they have bought outside concerts in all good faith and under pressure. If there is a first-class "outside concert," about the standard of which we are certain, let us pass it on over the National circuit, by all means. If there is not, let us observe due reticence.

RELAYED ARTISTS

PARTICULARLY must we be certain that we do not ask other States to judge our musical standard by inferior

soloists sometimes employed by "outside" shows. We have in Sydney, in my opinion, more good individual artists than anywhere else in the Commonwealth. And, if a choral body or a concert organisation want the Commission to buy their show, surely they should see to it that only the best is offered.

BRAHMS CENTENARY

IT is fitting that at the first opportunity this year the Brahms D Minor Sonata for Piano and Violin will be played. This is to happen on 2FC on the 8th, and the artists are Myrtle Meggy and Daisy Richards, both of whom should be able to give the work adequate justice. Brahms was born in 1833, and this is the year of his centenary, of which due observance is to be made in other lands. An early opportunity might be afforded listeners here to have an all-Brahms night.

PROGRAMME CRITICISM ECHO

RECENTLY on this page one ventured a few words of opinion on programme policy. Much comment appears to have followed, and one has received many expressions of opinion, both for and against. In conclusion, one may perhaps put forward this view:—

The Commission can afford to have listeners saying that programmes are of a better class than they used to be.

But they cannot afford to have the suggestion made that the standard of music offered is lower than it used to be.

One does not necessarily imply that such a comment would be correct. One merely suggests that there should be no question that it could be even possible.

COMIC OPERA

"THE Count of Luxembourg," that tuneful old-time opera, is down for Tuesday next. If it is as good as was "The Student Prince," it will be well worth hearing. I do not know that I have heard a better studio show than that. The cast was excellent, and the whole thing went with a snap that was exhilarating. Congratulations, everybody!



HORACE KEATS,
pianist, 2BL, Tuesday.



NORMAN MARTIN,
'cellist, 2BL, Tuesday.

Wireless Weekly

Sydney: Friday, January 6, 1933.

RADIO PIRATES TAKE NOTICE

AT Newcastle early last month fifty-five people were fined for having possessed unlicensed radio receivers. The total fines amounted to £140.

The local newspapers featured the names of those prosecuted and next day between 900 and 1000 Newcastle citizens took out licences.

These interesting facts are put forward in proof of the efficacy of the campaign against pirate listeners, which has been conducted in New South Wales since September. Similar results have been obtained in Goulburn, Moss Vale, Bowral, Lithgow, Maitland, Singleton, and Windsor, and the notable increase in licences during November and December is mainly due to this effort.

In 1933 the campaign will be redoubled. The results so far, more than justify the expense of detection and prosecution, and the Wireless Inspector's Department will be hot in pursuit of radio pirates until every country town and suburb in the State is covered.

The moral of the campaign is quite straightforward. We all know that while several hundred thousands of us pay for the upkeep of the broadcasting stations and the provision of programmes there are probably as many more listeners sharing our service but offering to pay no share in its expense. Without going into the ethics of their conduct the simple fact is that if these people are obliged to pay their licences there will be twice as much money for programmes and stations twice as good as those we now enjoy; or we would be able to maintain our present services on half the money; licence fees would be 12/- instead of 24/-.

In England the radio pirate is treated harshly. Not only does he pay a heavy fine but he also forfeits his set. Such drastic measures are not necessary in Australia. But take a tip: if you haven't a licence get one immediately and avoid a fine.

This Week's Talks



Mr. Charles Lloyd Jones joins his band of radio talkers this week, when he will speak on Sydney Festival Week.

FRIDAY

SIR HERBERT BEERBOHM-TREE—Arthur Greenaway, 3.30 p.m.—2FC.

VIENNA, THE AUSTRIAN CAPITAL—Elsie Segaert, 4.0 p.m.—2BL.

A.B.C. MODEL AEROPLANE ASSOCIATION—Conducted by Norman Lyons, 6.45 p.m.—2FC.

SOME GREAT MODERN PSYCHOLOGISTS—Mrs. M. Muscio, 8.0 p.m.—2BL.

SPORT—Claude Corbett, 9.40 p.m.—2BL.

WORLD AFFAIRS—A. M. Pooley, 9.45 p.m.—2GB.

SATURDAY

GARDENING—George Cooper, 10.40 a.m.—2BL.

A.B.C. POULTRY AND PIGEON SESSION—Conducted by Conrad Charlton, 6.45 p.m.—2FC.

SUNDAY

THE STORY BEHIND THE HYMN—Dr. Keith Barry, 4.45 p.m.—2BL.

SIDELIGHTS ON OLD SYDNEY—6.40 p.m.—2FC.

WORLD AFFAIRS—A. M. Pooley, 9.30 p.m.—2GB.

MONDAY

THE ROMANCE OF TEA—Alex A. Beer, 3.45 p.m.—2FC.

SYDNEY FESTIVAL WEEK—Mr. Charles Lloyd Jones, 7.0 p.m.—2BL.

MANCHURIA—THE VOLCANO OF ASIA—Janet Michell, 8.0 p.m.—2BL.

TUESDAY

STEAM ANTICS—Commander C. H. Rolleston, R.N., 3.30 p.m.—2FC.

LAND OF THE INCAS—W. P. Goodwin, 4.0 p.m.—2BL.

AGRICULTURAL ADDRESS—By representative of Dept. of Agriculture, 6.45 p.m.—2FC.

GARDENS—"Redgum," 7.45 p.m.—2BL.

AUSTRALIA LOOKS ON THE WORLD—Professor A. H. Charteris, 9.2 p.m.—2BL.

WEDNESDAY

BRIDGE—Graham Kent, 3.30 p.m.—2FC.

LITERARY PERSONALITIES—"Hypatia," 4.0 p.m.—2BL.

THE CRISIS IN INDIA—T. Stuart Gurr, 6.45 p.m.—2FC.

THE HISTORY AND DEVELOPMENT OF PHYSICS—Major E. H. Booth, 7.30 p.m.—2BL.

THURSDAY

TALES OF HIS MAJESTY'S INDIAN SECRET SERVICE—Leo Stark, 3.30 p.m.—2FC.

BOOK REVIEWS—"The Bookman," 4.0 p.m.—2BL.

DENTAL PAIN—Arranged by Chairman of Dental Health Education Committee, 6.45 p.m.—2FC.

ELECTRICITY—Arranged by Electrical Contractors' and Electricians' Licensing Board, 6.55 p.m.—2FC.

THE WONDERS OF THE SOIL—Professor R. D. Watt, 8.0 p.m.—2BL.

TEST CRICKET—M. A. Noble, 8.15 p.m.—2GB.

THE FAMILY PHYSICIAN—Our Duly Qualified Medical Practitioner, 10.0 p.m.—2BL.

The Safety Valve



"A BIT MORE STEAM"

Dear Sir,—I wish to heartily endorse the comments of Mr. Porter ("Safety Valve," Dec. 23), headed, "This Man Blows Off Steam." There is a lot more compressed steam throughout Australia that will have a mighty big "blow off" before long, according to the rumblings you hear on every side.

"The National Relay" system at present in vogue will kill progressive wireless. Their programmes are "nothing out of the box," anyway.

Generally a radio play or similar, and useless to the long-distance listener on most summer nights, as it must be followed word for word to be appreciated, and that is often impossible on account of static.

A hook-up of the eight principal stations in Australia is all right for crystal-set owners in the vicinity of those stations, but no encouragement to anyone

possessing a decent wireless set. We would be 100 per cent. better off if seven of those stations were scrapped, and a decent one made of the remaining one.

I thank Mr. Porter for opening this matter up, and hope a few more will follow on till something is done in this matter.—Yours, etc.,

W. ELLIOT NIXON.

Dunedoo (24/12/32).

THE KING'S SPEECH

Dear Sir,—Just a word of praise for the broadcasters' magnificent effort on Boxing Day morning. But what made Melbourne so slow off the mark? Nevertheless, it was fine. We should have a few more of these international broadcasts. Why not weekly talks, relayed from the other side of the world?—Yours, etc.,

"KENT."

Concord (27/12/32).

LOOKING
IN
ON
LISTENERS
IN
BY

When the Brighter
Breakfast Session
comes through at
the "Happy Hearts"
boarding house.



THE PICK OF THE PROGRAMMES

FRIDAY, JANUARY 6.

"Mrs. Dane's Defence"
A Play in Four Acts, by Henry Arthur Jones (*National Relay*, 9.0. P. 25.)

Military Band
The A.B.C. Military Band, Austin Punch (baritone), and Cyril Monk (violinist). (*2BL*, 8.30. P. 26.)

Organ Music
Valda Kersey plays popular numbers on the organ of the Gordon Theatre. (*2CH*, 7.30. P. 26.)

Concert
The Brisbane Municipal Band plays a number of Famous Waltzes. (*4QG*, 8.0. P. 27.)

Community Singing
To-night's transmission is from Geelong. (*3AR*, 8.20. P. 27.)

SATURDAY, JANUARY 7.

Radio Revue
"The Magic Mixture," a bright revue. (*National Relay*, 8.0. P. 29.)

Old-time Dances
The A.B.C. Old-time Dance Orchestra, Alfred Wilmore (tenor), and Doris Robinson (soprano). (*2BL*, 8.0. P. 30.)

Dance Music
Latest tunes from the Croydon Dance Palais. (*2SM*, 8.0. P. 30.)

Brass Band
Concert programme by the

Austral Brass Band, which will play many well-known numbers. (*3AR*, 8.0. P. 31.)

Variety
Popular recorded programme, which gives much variety. (*4QG*, 8.0. P. 31.)

SUNDAY, JANUARY 8.

"La Traviata"
The well-known opera by Verdi, featuring Cesarini Valobra and Franco Izal (*National Relay*, 8.0. P. 33.)

Military Band
The Bondi Beach Military Band in a concert programme. (*2BL*, 8.30. P. 34.)

Brass Band
The Colingwood Citizens' Band will render popular numbers. (*3AR*, 8.30. P. 34.)

MONDAY, JANUARY 9.

Neapolitan and Spanish Music
Domingo Caffaro's Argentine Band in bright numbers. (*National Relay*, 8.0. P. 37.)

Community Singing
To-night's programme includes the Balalaika Orchestra and Senia Chastia-koff (tenor). (*2BL*, 8.30. P. 38.)

Orchestra
Gil Dech and his popular orchestra and Senia Chostia-

Concert
The Music Teachers' Association arrange a programme. (*3AR*, 8.30. P. 39.)

Dance Music
The Wireless Dance Orchestra supply the latest numbers. (*3AR*, 9.28. P. 39.)

TUESDAY, JANUARY 10.

Light Opera
"The Count of Luxembourg," a spectacular light opera, with music by Franz Lehar. (*National Relay*, 8.0. P. 41.)

"The Specialists"
A one-act play, with four scenes, written by Enid Baumberg. (*2BL*, 8.0. P. 42.)

Concert
Concert programme arranged by the Musical Association of New South Wales. (*2BL*, 8.30. P. 42.)

String Quartette
The A.B.C. (Melbourne) String Quartette, Bertha Jorgensen and Bessie Gaunson (violinists), Dorothy Roxburgh (viola) and Tasma Tiernan (cello). (*3AR*, 8.30. P. 43.)

Community Singing
The Ipswich Vice-Regal Band will play several numbers during to-night's transmission from Ipswich. (*4QG-4RK*, 8.0. P. 43.)

WEDNESDAY, JANUARY 11.

Orchestral Concert
The A.B.C. Symphony Orchestra present a programme of popular masterpieces. (*National Relay*, 8.0. P. 45.)

Radio Revue
The A.B.C. Musical Revue Company in a Humphrey Bishop production. (*2BL*, 8.0. P. 46.)

"Scandal"
A short play by Cosmo Hamilton, which proved successful in London and New York. (*2BL*, 9.2. P. 46.)

Studio Concert
Eileen Boyd (contralto) and Les. Herford (baritone) will be heard in a concert programme. (*2GB*, 8.0. P. 47.)

Dance Music
The Wireless Dance Orchestra play for us the latest numbers. (*3AR*, 8.20. P. 47.)

THURSDAY, JANUARY 12.

Band Music
The A.B.C. Military Band, A.B.C. Radio Choir, and Bessie Blake (soprano). (*National Relay*, 8.0. P. 49.)

Concert
The Mexicano Band, Ellice Vocal Quartette, and Lionel Hickey (violinist). (*2BL*, 8.30. P. 50.)

Music and Songs
Music by a string octette and songs by Senia Chostia-koff. (*2GB*, 7.25. P. 50.)

International Celebrities
This programme includes the London Symphony Orchestra and the Philharmonic Symphony Orchestra of New York. (*3AR*, 8.20. P. 51.)

IN RADIO, WHAT DO YOU AIM TO BUY?

Undoubtedly the answer is "SATISFACTION"—Satisfactory performance of your Radio Set in all the Departments of Range, Tone, Volume, Selectivity, Dependability, and Appearance—Satisfactory Value for your money, and Satisfactory Service from your dealer.

THE HUGE NUMBER OF SETS WHICH WE HAVE SOLD DURING THE PAST TWO YEARS THROUGH THE RECOMMENDATION OF CUSTOMERS WHO HAD PREVIOUSLY BOUGHT FROM US GIVES AMPLE PROOF OF THE SATISFACTORY NATURE OF OUR SETS AND OUR SERVICE. LET US SHOW YOU A SET TO SUIT YOUR PARTICULAR NEEDS, AND YOU, TOO, WILL PURCHASE SATISFACTION.

THE 1933 "TRUVOICE" SUPERHETERODYNE FIVE

Completed and thoroughly tested Set, with full equipment of Ken-Rad Valves and Amplion or Jensen Dynamic Speaker, £15/17/6. Artistic and Attractive Modern Cabinets, in many types, can be seen on application, or write for Illustrated List.

THE UNIVERSAL BATTERY FIVE SUPERHETERODYNE

Completed set, Valves and Amplion L1 Speaker, for country areas. £17/17/6. Write for Details.

THEY DEFINITELY DO MATCH.

"TRUVOICE" COILS

"THE VERY PEAK OF EFFICIENCY."

To Suit All Circuits. Oscillator Matched.

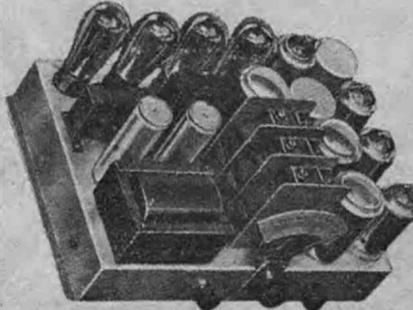
2/6 each

"Truvoice" Reinartz Coil, 2/6.



THE NEW 1933 MODEL "BELLBIRD"

8-VALVE SUPERHETERODYNE.



THE BELLBIRD IS THE MOST MODERN SUPERHETERODYNE. EMPLOYS 8 VALVES IN ALL, INCLUDING THE NEW 57 AND 58 SCREEN GRIDS. USES THE NEW PRIME CLASS "A" AUDIO SYSTEM AND DUAL SPEAKERS. COMPLETE WITH VALVES AND AMPLION DUAL SPEAKERS, £19/15/-. PARTS, ACCESSORIES, AND DIAGRAMS, £18.

THE 1933 "TRUVOICE" SUPERHETERODYNE SIX

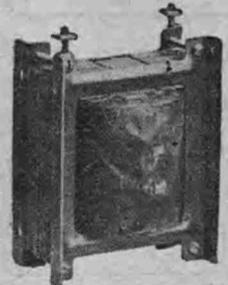
A new Long-range Superhet. of the Autodyne Type, which is remarkable for its sensitivity and freedom from background noise. Completed and thoroughly tested Set, with Ken-Rad Valves and Amplion or Jensen Speaker £17/7/6 All Sets are Guaranteed against mechanical or electrical defects for one year. Twelve months' free service and three months' Guarantee on Valves.

FILTER CHOKES

30 H. 100 M.A.

As illustrated

12/6



WE SPECIALISE IN RADIO MAIL ORDER SERVICE. Same day service to Country Clients—Accurate and safe packing and quick despatch. We specialise in the construction of sets for country areas, and carry full stocks of parts for all battery sets.

PHONE: MA2775



MAIL ORDER SPECIALISTS

IF IT'S SHORT WAVES OR LONG WAVES—SETS OR KITS OF PARTS—SEE "THE WIRELESS SHOP"

THE UNIVERSAL FOUR. EXCELLENT SEPARATION AMONGST B CLASS STATIONS. REMARKABLE DISTANCE-GETTING PROPERTIES.

ASTONISHING TONAL QUALITIES. THE KIT OF PARTS, with Ken-Rad Valves and Amplion L1 Permanent Speaker, £15. Complete, Tested, and Guaranteed, £16. With Kola, Permanent Speaker, instead of Amplion, £14 the Kit. £15 Complete.

THE UNIVERSAL FIVE (Described in the Xmas Number of "W.W.") More Sensitivity and Selectivity—No Double Spots.

Our Price: The Kit of Parts, with Ken-Rad or Radiotron Valves and Amplion L1 Permanent Speaker £16/19/- Complete, Tested, and Guaranteed, £18/5/- Your own choice of every part specified, down to last nut, Drilled Chassis, With Amplion AB6 Speaker instead of Permanent £13/19/- Complete, Tested, and Guaranteed, £15/3/-

ALL WAVE BATTERY THREE ("Wireless Weekly," 19/8/32) Kit of Parts, exactly as specified, with Mullard Valves and Amplion AB6 Speaker, £7/12/6. Assembled, Tested, and Guaranteed, £8/10/-.

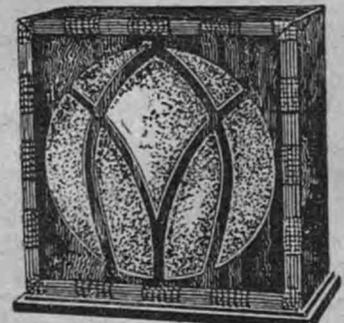
EMPIRE SHORT-WAVE SET (Xmas Number, "Wireless Weekly.") Complete Kit of Parts, as specified, with Amplion AB6 Speaker and Ken-Rad or Radiotron Valves (less batteries), £10/15/- Complete, Tested, and Guaranteed, £11/19/- Add 40/- for Amplion L1 Permanent Speaker.

NEW RADIOKES COMPONENTS.

- Radiokes Pan Full Vision Dials, 7/6. Now 5/3.
- Radiokes Full Vision Straight Type, 22/6. Now 9/-.
- Back Panel Vernier Dials, 12/6. Now 5/8.
- 30 Henry 50 mill. Chokes, 9/6. Now 4/3.
- 30 Henry 100 mill. Chokes, 12/6. Now 7/3.
- Push-Pull Transformers, Spat and Spac, 15/-, Now 7/4.
- Super Sensitive Wavetraps, 15/-, Now 5/9.
- 15,000 ohm Wire-wound Voltage Dividers, 5/6. Now 2/6.
- 25,000 ohm wire-wound Voltage Dividers, 7/6. Now 4/3.
- 10,000 ohm Wire-wound Potentiometers, 9/6. Now 3/6.
- 5000 ohm Wire-wound Potentiometers, 9/6. Now 3/6.
- Radio Frequency Choke, 3/6. Now 9d.
- Audio Transformers, Ratio 3-1, 12/6. Now 7/3.
- Lightning Arrestors, 2/6. Now 1/9.
- Marquis T.R.F. Coils, 3/6. Now 1/-.
- Radiobms, 10,000, 15,000, 25,000, 50,000, 100,000, all wire-wound, 3/6. Now 1/4.
- Power Transformers, 600 volt, Centre Tap, 5 volt, 2 amp., 2.5 volt, 5 amp., 2.5 volt, 2 amp., 12/10.

SHORT-WAVE FIVE

("Wireless Weekly," 19/8/32) Kit of Parts, exactly as specified, with Ken-Rad Valves and Amplion Speaker, £12/5/-. Complete, Tested, and Guaranteed, with equipment as above, £13/10/-.



COUNTRY LISTENERS—A REAL SPECIAL! Amplion AB6 Speakers, in Handsome Oak Cabinets. Ordinary Price, £6/17/6. 42/6 NOW Don't confuse this Speaker with others without Cabinet. As good as a Dynamic.

SUPERHET. CONVERTOR ("Wireless Weekly," 19/8/32.) Kit of Parts, as specified, with Ken-Rad Valves (no Speaker), £4/10/-. Assembled, Tested, and Guaranteed, £5/7/6.

BLUE SPOT SPEAKER UNITS (All Complete, Less Cabinet.) CONE, BALANCED ARMATURE, 29/6. WHILE THEY LAST.

Electrolytic 8 mfd. 500-volt Working Condensers, 5/9. Pilot .00035, .00025, and .00015 mfd. Condensers (Variable), 5/9.

RADIOKES MIDGET CONDENSERS—

- 23 Plate 3/-
- 13 Plate 2/4
- 11 Plate 2/2
- 5 Plate 1/10
- 3 Plate 1/8

Miss F. Wallace
THE WIRELESS SHOP
 THE OLDEST RADIO SHOP IN TOWN
 Railway Branch, 495 PITT ST. Opp. CIV. Building, SYDNEY. Phone MA4985
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"OUR REPUTATION IS YOUR PROTECTION"

Money Back Guarantee.

SAME DAY SERVICE TO COUNTRY CLIENTS. Established Eleven Years.

TRENDS in RADIO for 1933

The Technical Editor reviews radio development in 1932 and takes a look forward at what is likely to happen this year.

Diode
Detectors

Superhets.
With R.F.

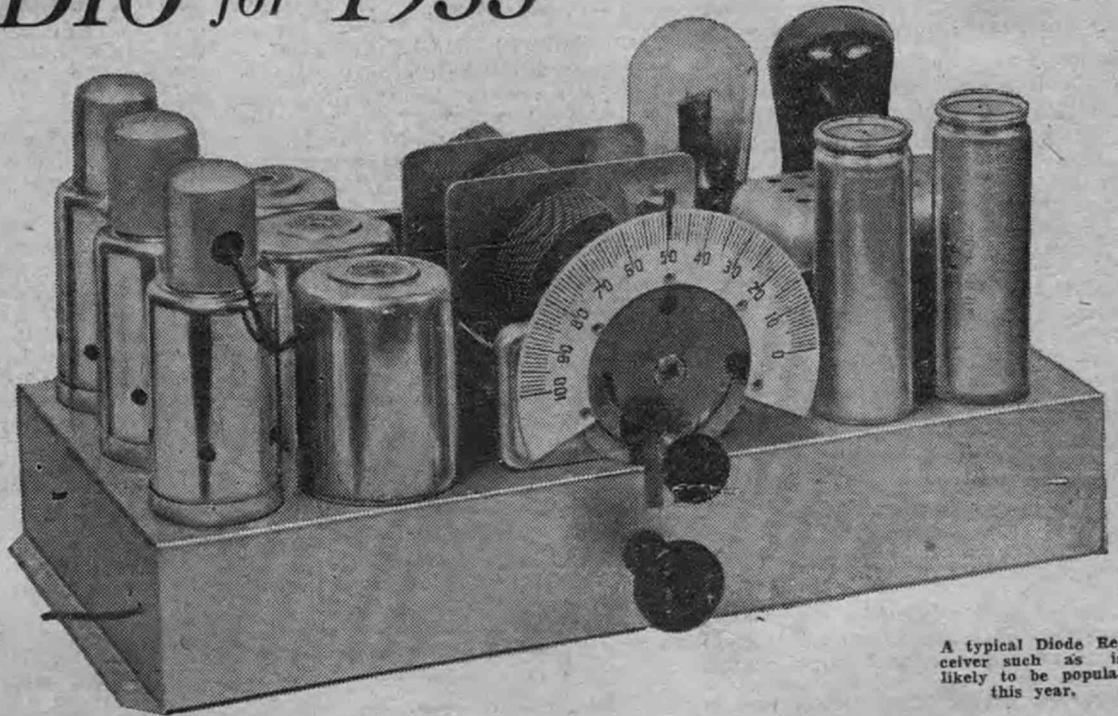
Class B
Amplifiers

Tone
Compensation

Seven-pin
Valves

Short-
Waves

Twin
Speakers



A typical Diode Receiver such as is likely to be popular this year.

ABOUT this time last year we set out a prophecy as to what were going to be the technical advances of the season. Through some fortunate circumstance practically every word we spoke bore fruit, and the superhet boom we mentioned boomed in no uncertain way. The lack of confidence in television was fully justified, and in this respect we stand pretty well to-day where we stood twelve months ago. We set out the "Advance" circuit as a suitable one for the year, and sure enough thousands upon thousands of receivers were built to almost identical circuits, and proved themselves capable of filling the bill nicely. We even forecasted that diode detectors would be popular before the year elapsed, and although they were late in coming, the 55s are now well in the boom. Now all this is not just an idle boast; in fact, we don't take any credit for the fact that things turned out as they did, but we only mention it as a justification for this article. On account of the success of the last we have been besieged with requests to "do it again," so here goes for a forecast for the season!

SALES AND PRICES.

Prices will be definitely lower than ever this season, but the trade need have no fears, as there are indications that the number of sets to be sold this season will be greatly increased, and reasonable trading margins of profit should be comparatively easily obtained. However, there will still be plenty of buyers with

some £40 or £50 to spare, and these will be catered for with super sets of the ten and eleven valve all-wave superhet class. So that to be more explicit we think that although the price of the ordinary popular receiver may remain about the same figure as previously, the set itself will be far superior with more valves and better all-round performance. Of course, the superhet will dominate the market almost exclusively, at any rate we will be very surprised if there are more than two brands offering anything but superhets at prices over £20. In this matter we fancy that one of last season's forecasts will be substantiated. We mentioned that it might take three years for the superhet to sweep the market, but it is now very obvious that the Australian designers are far more progressive than to allow that length of time to elapse before the complete swing-over.

THE SUPERHETS.

Fundamentally we fancy the superhets will follow the same lines as at present with autodynes in great favor on account of their low noise level. Many of these will have only the four valves and rectifier, but others will have the r.f. stage added. The r.f. stage only costs a few pence extra in the chassis, as three solenoids are required either way with normal intermediate frequencies, and a three-gang condenser. The only extra then is the actual valve, valve socket, and its wiring. Since it is possible to get greatly increased range with the r.f.

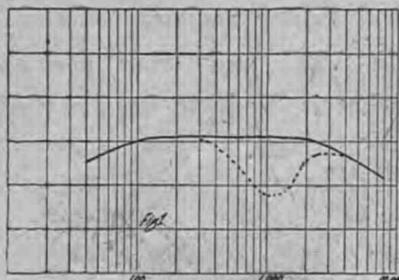
stage it should become more popular as time goes by.

THE INTERMEDIATE FREQUENCY.

There is little hope of any standardisation taking place, and the superhets for the season will be available with about a dozen different intermediate frequencies, not taking into consideration the variations in frequency due to faulty calibration of the oscillators in certain factories. 172, 175, 178 and others around that mark will probably retain the main popularity for a start with 262 and 465 coming along in the rear. Later in the season we wouldn't be surprised at anything between 15 and 550 Kc., but personally we are inclined to favor the 262 as a fair figure for Australian or, at least, Sydney conditions.

CLASS B AMPLIFIERS.

Class B amplifiers have not yet managed to justify their existence, but there are a number of reasons for this. One was the fact that certain information leaked through from the States to the effect that the 46 was not all it might be in this class of work. However, the 59 is now available, and all fears are set at rest, and one of the biggest upheavals will be in this direction. If superb tonal quality with a terrific reserve of power, reliability, and simple construction counts for anything every superhet listing at more than £30 will be fitted up with "Class B" before the end of 1933. Of course, it's only a guess, but we're guessing hard enough at that point to think



Illustrating Tone Compensation.

it worth while mentioning whilst we are on the job.

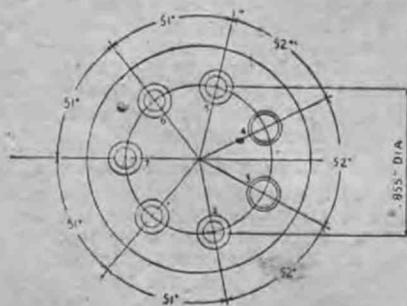
TONE COMPENSATION CIRCUITS.

To many it has become evident that although a set may appear to have brilliant tonal quality, the turning down of the volume control spells a total loss of the high and low notes, with the general reproduction going very "dead." This characteristic has been noticed in even the best amplifiers and yet was never revealed by meters or testing gear. Now it has been fully explained by the study of the human ear and its failing. (An article on this intriguing subject is due for publication in next week's issue.) Working on this theory we have been able to devise a fairly simple tone compensation circuit, whereby retarding the volume control simultaneously brings into action a tuned filter to attenuate all musical frequencies about 1,000 cycles. The result, of course, is the same as bringing up the response of both high and low notes.

With a receiver having a reserve of 20 watts of undistorted output ready to pump out the low notes this means tonal quality as never before experienced at moderate volume levels. We've already got this stunt on test in the lab., and when it is fully detailed in a few weeks time we think its going to force its way right through the length and breadth of Australia. Of course, it's not one of our own "inventions," as the papers like to call any new development, but we are out to see it through to its proper place in radio design.

SEVEN-PIN VALVES.

Long before the public has had time to get used to the catch word "sixpin-valves," we will have the newer warcry



BOTTOM VIEW
The seven-pin socket.

of "sevenpinvalves." As it happens these valves appear to have many attractive features, and it is to them that we look to put the Class B audio amplifier into the front rank. Seven or eight valves will be needed to make up a full-blooded 20-watt class B super'erodyne, but even so the actual cost a lot less than might be imagined at first glance, as the

circuit is very simple for one of its size, the output valves not requiring any bias resistors, by-passes, grid-leaks and so on. If this type of superhet is handled in the way we fancy it will be then the difference in the normal list price between the present five/six receivers and the seven/eights using Class B will be only about £5. At this price they should make such an impression on the prospective buyer that the odd fiver will not be considered as an insuperable obstacle to its purchase.

AUTOMATIC VOLUME CONTROL.

Automatic volume control in itself is more of a nuisance than anything else, but, as we've pointed out before, it's fine if automatic noise suppression is also arranged to stop the noise between stations. This introduces such complication that we doubt if it will interest the home builders, but it appears as though one or two of the bigger sets will be fitted up that way. These receivers will be the big 10 and 11 valve supers mentioned previously.

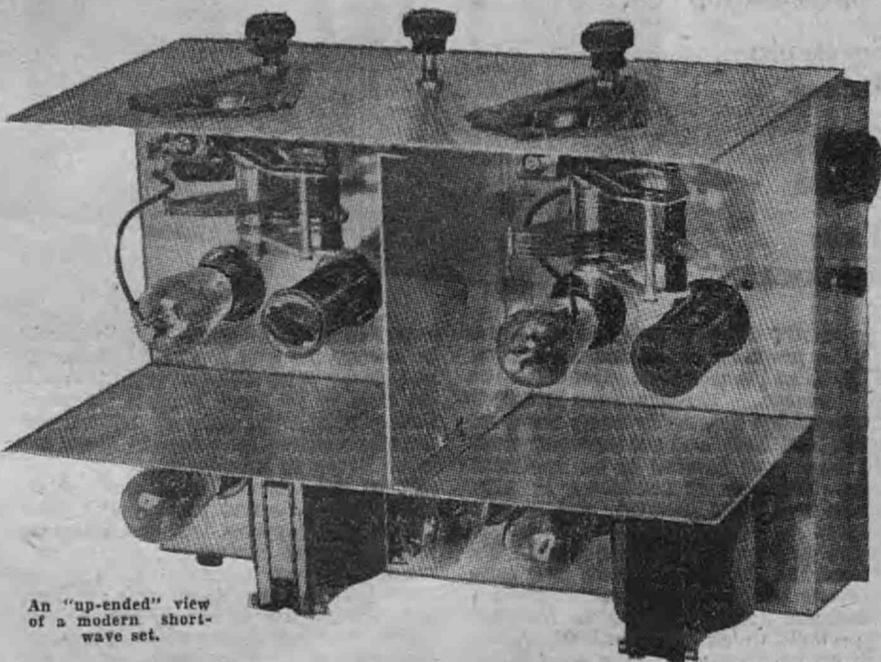
VISUAL TUNING METERS.

With receivers fitted with a.v.c. it is sometimes difficult for the novice to get

idea if the speaker manufacturers back it up by turning out properly matched and compensated pairs of speakers ready for fitting. The first speaker manufacturer to handle this matter in a really efficient manner is likely to double the sale of his speakers and more. But, as we said before, even if they have to fit two ordinary speakers the set manufacturers will do it if it means easier sales.

SUPER INDUCTANCE RECEIVERS.

The details of the new Phillips circuit, the super-inductance job, which was shown at the Olympia Show in England a few months ago made us think that there might be some significance in this receiver and its effect on future design. Through the courtesy of Phillips Lamps we have been able to borrow one of these new receivers, and although there is no doubt about the job's selectivity and tone we very much doubt whether it can hold its own with modern supers at the present stage of its development. But we learnt one very good lesson from this Phillips job, and that was that the tone of the commercial receivers in Australia to-day is not up to world-wide standard. Everybody who heard this super-induc-



An "up-ended" view of a modern short-wave set.

the receiver tuned correctly. If the receiver is set a trifle off resonance the station will be brought up to normal strength by the effect of the a.v.c., but at the same time the background noise will be brought up, and if the receiver is very selective there is every chance that the tone will be impaired. It therefore comes as fairly natural that the big supers will have visual tuning systems fitted. These will take the form of either neon type glow lamps which will indicate correct tuning by their brilliance, and by meters which will show when the receiver is correctly tuned by their deflection.

TWIN SPEAKERS.

Twin speakers are already with us, and are proving very effective in closing sales with difficult buyers. The idea of having two speakers in one set seems to appeal all right, and so the scheme is certain to be in the boom. And a proper boom will be made of the twin speaker

tance job fell under the spell of its tonal quality, but after all it should be easy enough for Australian manufacturers to attain this degree of fidelity without any great trouble.

CHEAP RECEIVERS.

The last few weeks have seen the introduction of complete mantel models selling for £8 15s. retail; in fact, we fancy one shop got down to £7 17s. 6d. These receivers sold well, and provided that they went in to selected localities gave every satisfaction to their buyers. So there is sure to be a continued sale of these sets in a small way. But if by any stroke of chance the controllers of broadcasting should see their way clear to control broadcasting and re-allocate the wave-lengths of the Sydney stations, or even insist upon the stations being grouped into one physical location, then these cheap receivers would serve 90 per cent. of the Sydney listeners with all

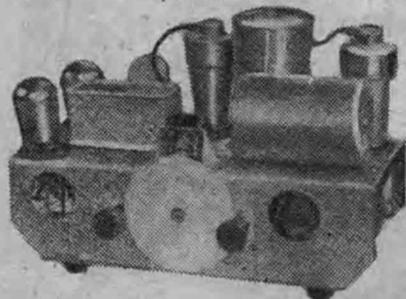
they would require and save the listeners millions of pounds. It seems so simple on paper to insist that the stations be located out Pennant Hills way or anywhere else, but nobody seems to think it their business to make any move to straighten things out. The new 2UE station has just gone up at the south-east corner of the suburbs, and put thousands of sets out of use. 2KY has a new station going up in the north-east to "kill" thousands of sets out that way, and as everybody knows already we have 2UW in the heart of the city, 2GB on the shores of the harbor, 2BL at Coogee, and the rest out in the north-west. It would hardly seem possible to more adequately cover the metropolitan area so as to put every radio receiver within close enough distance to at least one transmitter to drown all the rest. Sooner or later it is reasonable to expect that someone will have to chop down some of those masts, but we're not forecasting that such a thing is going to happen during 1933.

CHEAP T.R.F. SETS.

In an attempt to get cheap sets with selectivity the "All Aboard Four," which we detailed in these columns a few weeks ago, has already been sponsored by a firm or two, and we believe that one new firm has more orders for this type of receiver than it can handle. There is no doubt that it has many advantages over other cheap receivers, and, provided one can get over the drawback of limited volume, it should be an easy one to sell in quantities.

VALVES.

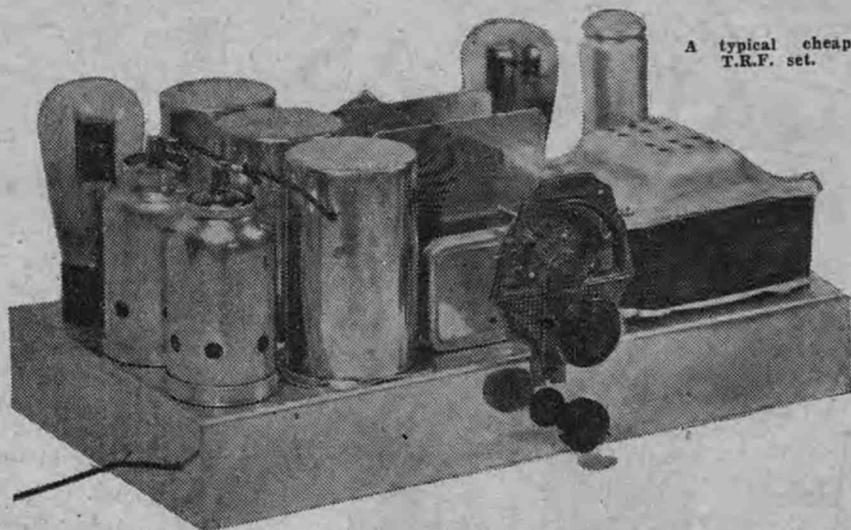
Time was when about 90 per cent. of the valves fitted to Australian sets came from England and the Continent. Then came the American invasion, and at the moment of writing we can't call to mind the name of any radio factory in N.S.W. using anything but American types. But there is no certainty that this is going to be the case much longer. By a gradual process the American valves have become more like the Continental types, having greater gain and far more efficient characteristics on paper, but not the same rugged construction and undoubted reliability which put them to the



The Philips super inductance receiver.

forefront. On the other hand, it is an open boast that at least one of the Continental firms bought out half a dozen American valve experts and put them on the job of designing Continental valves to work like draught horses, without so much of the pedigreed racehorse business.

As it stands to-day both types of valves are extremely reliable, and not one out of every hundred fails to give 1000 hours of faultless service, but what is going to happen if the American valves become more Continentalised and



A typical cheap T.R.F. set.

the Continental valves more Yankified remains to be seen

AUTOMOBILE ELIMINATORS.

A lot has appeared in our columns about the desirability of B battery eliminators to operate from the car battery or any 6-volt accumulator, and some readers by this must be thinking that this bomb is a "dud." However, far from it, and it isn't going to be long now. If everything goes along as we anticipate it we will run a constructional article on the manufacture of one of these gadgets within the next four weeks and half a dozen different types and brands will be available over the counter from any radio dealer.

BROADCASTING.

Due to the trend towards relay programmes it seems that the time is not far distant when 2FC, 4QG, 4RK, 2CO, 3LO, 5CL and 5CK will spend most of their time tied together for interstate relays. When this becomes general the "interstate" receivers to play these stations, such as the better class t.r.f. sets, will become practically useless, and the superhet with its ability to play the interstate "B" class stations should reap all the class of business where long range is a factor in the sale.

BROADCASTING TECHNIQUE.

Another development which we feel certain must come before 1933 has spread its span is the awakening of a knowledge amongst the "heads" that the broadcasting stations in Australia as a whole are not what they might be as regards fidelity, frequency, and general efficiency. Every visitor who lands on these shores pokes fun at our broadcasting stations, their lack of fidelity, their horrible hums and background noises, and their general performance. At any rate that's how it seems after interviewing a few people from other lands, and there must be some grounds for these complaints. Since some of our Broadcasting Commissioners are so wide-awake and so closely in touch with overseas conditions we feel sure we have good grounds for this particular forecast.

EMPIRE BROADCASTING.

So far the Empire Station, which aims to serve the whole of the British Empire direct from Daventry by using the short-wave lengths, has not been able to get through to Australia with any terrific punch, but it's too early yet to make

any rash statements about what they will do in a few months time when they have had a chance to find the most suitable wave-length and time for transmission. If by any chance the Empire Station comes through with sufficient strength to drown the static and with sufficient consistency to give decent entertainment value, then naturally one of the big events of 1933 will be the short-wave boom. But with things as they are to-day on the short-wave band their is too much guesswork and general unreliability. To undertake definitely to demonstrate a short-wave receiver at eight o'clock in the evening is usually too much for the average salesman, and even if the sale is completed there is every chance that the customer will "haunt" the salesman for weeks after, as the reception conditions change around with the season or due to some other cause.

ALL-WAVE SUPERHETS.

The remarks about the short-wave sets and the Empire station apply in the same way to the suggested all-wave receivers. If there is consistent entertainment available on the short-wave lengths then the short-wave and all-wave receivers will be sold. But to try and sell sets on their short-wave performance with short-waves as they are to-day must be most discouraging. Of course there will always be a limited sale for short-wave gear to the radio enthusiast, but this is not sufficient to swing any of the larger factories into the short-wave game where they may find themselves in great difficulties due to the finer points of short-wave receiver design being quite apart from ordinary broadcast work.

OUR OWN RECEIVERS.

For January we hope to put out two superhets which may be taken as our own ideas of the probable trend of design. The first will have eight valves in all, with Class B amplification, the new seven-pin valves, automatic volume and tone compensator, and a few other modern innovations. It should be ready for publication by the issue of January 13th or 20th. Then later on it will be our privilege to introduce the new Philips valves with a five-valve superhet which has been designed in collaboration with the engineers of the Philips laboratories to be ideal for Australian conditions. Al-

(Continued on Page 35)

THE "FISK SERIES" RADIOLAS



RADIOLA 55E

This powerful six-valve receiver has been expressly designed to give an exceptional quality of reproduction from a wider range of broadcasting stations. Interstate stations are received without earth or aerial. For range and richness of tone . . . for superlative reproduction . . . for hairline selectivity of stations near and far . . . for dependable, trouble-free radio reception . . . and for the greatest value at the lowest price the Radiola is without equal.

PRICE, completely equipped . . . **£37/10/-**

RADIOLA JUNIOR



The Junior is a moderately-priced console receiver combining a high quality of local-station reception with excellent appearance. Complete with four valves.

PRICE, **£24/10/-**



RADIOLETTE

This new mantel-model receiver is very compact and readily portable from room to room, yet the attractive cabinet houses a full-sized Four Valve Receiver and dynamic speaker, which gives excellent reception of all local stations.

PRICE, completely equipped **£17/17/-**

A COMPLETE RANGE OF RADIO RECEIVERS
EASY TERMS BRING THESE EFFICIENT SETS WITHIN REACH OF ALL.

RING B7581 (10 lines) and Noyes Bros. (Sydney) Ltd., will arrange with a local dealer to give a home demonstration.

NOYES BROS. (Sydney) LTD.

WHOLESALE RADIO DISTRIBUTORS:
115 CLARENCE STREET, SYDNEY. Showrooms : 39 YORK STREET, SYDNEY
11 WATT STREET, NEWCASTLE
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NOYES BROS. (SYDNEY) LTD., ELIZABETH STREET, BRISBANE

The KING'S SPEECH and the Empire Station

A report on the Christmas relay, which aroused widespread interest, and a critical examination of the work of the Empire Broadcasting station, by our short-wave correspondent,

R. N. SHAW

SHORT-WAVE listeners have become quite accustomed to new thrills over the air, and are actually always on the lookout for something new and out of the ordinary. But the most interesting of the many earlier broadcasts was literally dwarfed during the early hours of Monday morning, when multitudes of his subjects heard for the first time the actual voice of their King.

At the writer's station conditions were excellent for good reception, quiet conditions having prevailed in the ether during the preceding day. On this occasion listeners had the choice of two circuits, viz., the new Empire station and the London-Sydney radiophone. The latter was used for the official re-broadcast by the "A" class stations in Australia, whilst "B" class stations took their relay from the Empire station. Both stations were tested on our receiving station, and it was found that, generally speaking, the radiophone signals were the strongest and most consistent. The signals from stations were, however, reproduced at good strength on the loud speaker, and were easily followed by some members of the family from their cosy beds two rooms away.

Messages From 2ME

The messages transmitted via 2ME to London were also heard at good speaker, whilst other weaker signals were heard on approximately 38 metres. The several messages of goodwill from various parts of the Empire were followed word by word, although on the Canadian and trans-Atlantic "lines" there were considerable surging and transmission noises. Some of the most interesting messages came from the ships "Majestic" (Atlantic) and "Empress of India" (lying at Port Said). The clarity of the reproduction of the three minutes' message from the King was such that, aided by the slow and deliberate speech of his Majesty, most of the message could have been taken down in abbreviated long-hand.

The King's eulogistic reference to the use of wireless in linking the Empire appealed to radio enthusiasts, whilst his homely reference to the fact that he was speaking from his own home and "from my heart" doubtless appealed to all listeners. The success of the whole broadcast only goes to show what can now be done with the use of short-wave telephony, and induces the hope that the public will hear many other broadcasts of world-wide interest in the future.

THE EMPIRE STATION

WE have now had some ten nights' regular transmission from the long-

looked-for Empire station, and listeners have had a fair opportunity of testing for themselves the possibilities of success or partial failure when the service is finally established. It cannot be too strongly emphasised, however, that the service, although now of a regular nature, is still very much in the experimental stage, and must, in fairness to the A.B.C., be judged accordingly. Obviously, and as might be expected after listening to the nightly programmes, there come to us some rather critical contributions with reference to the type of programmes being transmitted. In the first place, it must be remembered that the hour of reception here corresponds to early morning in London, when the best musical programmes would hardly be expected on the air locally. Secondly, the whole programme is experimental, and is being put on the air with a view to obtaining from those interested a fair and candid opinion as to what is most desired. The term those interested embraces every possessor of a short-wave receiving set, to say nothing of those desirous of listening in on those receivers in every part of the British Empire.

It is the fervent desire of the B.B.C. that listeners should immediately forward detailed reports of reception during the whole two hours of transmission. This should include the writer's personal opinion regarding the programmes, suitability of the hour, etc. Upon these reports will largely depend the future of Empire broadcasting. If it is even found that in the Dominions there is a lack of interest in the broadcasts this will react to the detriment of the scheme in general. But from the general trend of press and private comment it is already amply obvious that the interest in the Empire station is decidedly keen and universal. Another point to be remembered is that this service is being supplied to Dominion listeners free gratis, the whole of the capital and operating costs coming out of the pockets of the listeners in Britain, per medium of the B.B. Company.

Reports Disappointing

And now a word or two on actual results. Our reports so far cover practically the whole of Eastern Australia from Cairns in North Queensland to southern Victoria, and are of a deeply varying character. With few exceptions it must be confessed that the reports are tinged with some degree of disappointment. Great things were expected from the new station, and these expectations were undoubtedly buoyed up by the extremely powerful signals listeners

had been hearing from the French station across the Channel at Paris on almost the same wavelength.

Our own personal experience since the regular service was installed on the 9th inst. shows the station at a slight discount when compared with the Parisian station mentioned. The opening hour, 7.30 p.m., is undoubtedly too early during these summer evenings for good reception in Australia, but what is more remarkable is the fact that on a number of occasions signals have gradually faded during the last half-hour, 9 to 9.30 p.m., when normally listeners would expect a rather substantial increase in signal strength. The best average reception in our own locality on the Central North Coast of New South Wales has been between 8.30 and 9 p.m., when there has been no difficulty in providing some really good speaker reception.

These remarks, of course, apply to the particular wavelength for this zone, 25.5 metres. It has been found that the dual wavelength of 31 metres provides very much weaker signals, but even on this wavelength signals have been quite clear during the last hour, and will, if continued, probably provide very good reception as summer months wane.

Tune In Other Zones

Little need be said yet regarding reception here of the broadcasts intended for other zones, other than to remark that there are rosy prospects of an excellent signal during autumn and winter months from the 49 metres broadcast to Africa, now being heard at fair phone strength during morning hours.

Many listeners in Sydney and the immediate country surroundings are complaining of interference caused by a code station on an adjacent frequency. Apparently the interference is not very acute when the station is actually transmitting C.W. The trouble appears to be in the use of an unmodulated "carrier," and the report of a correspondent at Roseville may be taken as typical: "When on C.W. there is no interference, but when the C.W. stops it is awful, and the remarkable part . . . is that it surges and absolutely blots out the Empire station." It is suggested that the offender is the powerful transmitter, VIY, at Ballan, in Victoria. It is unfortunate that listeners should experience this trouble so early in the life of the Empire station.

CHRISTMAS GREETINGS

SEVERAL of the well-known overseas stations, such as W2KAF and W1XAZ, were disappointing this year in

respect of Christmas broadcasts, and were, in our location, barely audible. But between 3.30 and 4 p.m. on Sunday afternoon a good programme of music, produced in America on Christmas Eve, was heard from W3XAL, of New Jersey. Very good reception was also obtained of the special Christmas service from London via the Empire station, and heard at fair speaker strength from about 7.40 onward on Christmas night. The words of the preacher were delightfully clear, although fading was in evidence at times.

One of the most interesting Christmas transmissions, however, came from the American station at Pittsburgh, W8XK, on the 48.86 band. Over three hours were completely taken up with the Christmas session, which was mainly intended for distant listeners in the Hudson's Bay area and the Far North of America. We first heard the station around 3.30, and it did not close until 6.48 p.m., representing 3.48 a.m. on Christmas morning in New York. During that period hundreds upon hundreds of messages of goodwill were broadcast from people in all parts of America and Canada. It was decidedly interesting.

RADIO CLUB NOTES

ZERO BEAT RADIO CLUB

THE meetings of the club, held on Tuesday and Friday evenings at the club-rooms (Room 38, Sydney Arcade, George Street), are being well attended, and very keen interest is shown by the members of the classes in the Morse and technical sections.

The general secretary reports an increase in the membership, especially in the country and other States. West Australia is now adding a large quota of new members, and, as applications are still coming in, it is expected that the numbers will be greatly increased by the end of January. These members are all keen to take up the correspondence scheme of the club, and many letters of thanks have been received by the club.

A new section of the scheme is commencing with the New Year, and, profiting from past experience, arrangements have been made for the late-

comer, as 50 extra members will be catered for to allow for those who intend to join up, but have not already done so. If you are intending to take up this course, get your application in as early as possible; new members are being enrolled every day, and it will not take long to fill up the openings which have been left. Write to the general secretary, 42 Bayswater Road, Darlinghurst, for further particulars.

Members are advised that the experimental station of the club—VK2ZB—will be transmitting slow Morse on Wednesdays, from 8 to 9 p.m., and on Saturdays, 2 to 3 p.m., until further notice.

At a meeting of the council of the club it was decided that the general secretary, Mr. J. Fletcher, be placed in full control of the arrangements of the club in connection with the flight of the Southern Cross to New Zealand, and that Mr. J. Hutchinson, better known as VK2JH, be in control of the transmitting and receiving stations engaged in the work under the club's supervision and organisation. The plans include the assistance of about 100 amateurs in the work as laid down.

NOTES ON COMING UNIVERSITY LECTURES

2BL FRIDAY

SOME GREAT MODERN Psychologists

By Mrs. B. Muscio, M.A.

IN these four lectures something will be said about three great psychologists—William James, Sigmund Freud and C. G. Jung. Because psychology is the science of the mind, it is the science which is nearest to us all. We can all look into our own minds and observe our own conduct and the conduct of our neighbors, so that we all have some material handy for the study of psychology. An intelligent study of psychology ought to keep us from being bored and help us to get on better with other persons.

2BL MONDAY

MANCHURIA THE VOLCANO OF ASIA

By Miss Janet Mitchell

THE fate of any country is largely determined by its geographical position. Manchuria is a case in point; bounded (roughly speaking) on the north by Russia and on the south by China, it was bound to be a centre of conflict between these two Powers, and as such has always been a fruitful source of trouble

2BL WEDNESDAY

WORKERS ON THE SUBJECT OF HEAT

By Major E. H. Booth, M.C., B.Sc., F. Inst. P.

WITH modern civilisation dependent as such on the interlocked applications of all aspects of all branches of physical investigations, it is difficult, if not impossible, to say that one set of observations is more important than another. Fire and heat are, however, of such importance to our very existence, and the development of heat engines has meant so much in the progress of our modern civilisation, that the history of the extension of our knowledge of heat is of especial interest.

Not only is heat applied to establish our comfort, to prepare our food, to provide light, energy, and home and commercial use—it is also applied by us physiologically in living. We take on fuel, burn it, and thus live and also perform more or less useful external work.

Speculation as to the nature of heat led to many arguments, unsupported by experiment, right down to comparatively recent times. Lucretius, the Roman author of "De Rerum Nature," to whom reference was made in the last lecture, was followed by the Greeks in his acceptance of it as a "substance."

2BL THURSDAY

The Structure & Physical Properties OF THE SOIL

By Professor R. D. Watt

WE saw last week that all soils are composed of mineral particles derived from rocks and organic matter derived from plants and animal remains. In most soils the mineral particles predominate, the organic constituents only constituting something of the order of 2 to 10 per cent., although the proportions may be reversed in the case of a peaty soil. In some instances, the soil particles consist of the actual minerals present in the rock; for example, a fragment of quartz from a rock becomes a grain of sand in the soil. In other cases, chemical changes take place, and felspar and similar minerals leave behind a residuum of clay. The organic portion may consist of practically unaltered materials, such as straw or woods recently incorporated with the soil, but mainly of a dark-colored colloidal material, known as humus, derived from them. From a physical point of view, therefore, a soil consists mainly of (1) fragments of unweathered minerals of considerable size, which we may roughly describe as sand; (2) clay derived from the chemical weathering of minerals like the felspars; and (3) humus, together with a small amount of undecomposed organic matter. Many of the most important properties of the soil depend on the relative proportions of these three fractions, although compounds of lime and iron also play a part.



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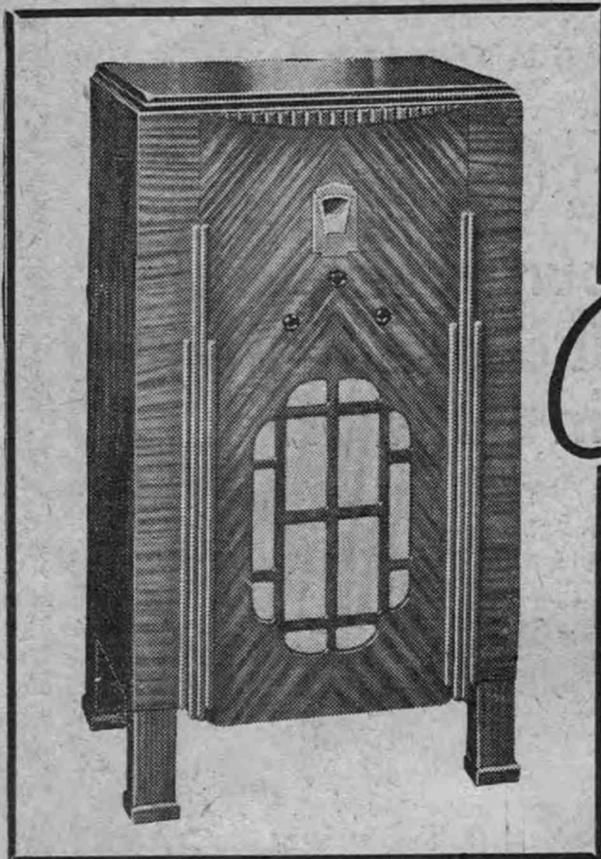
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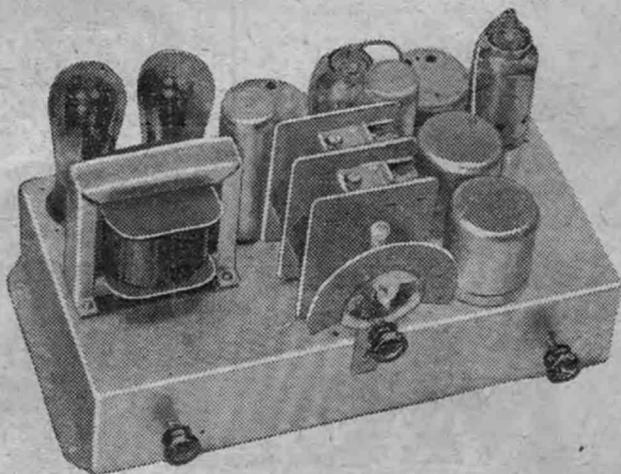
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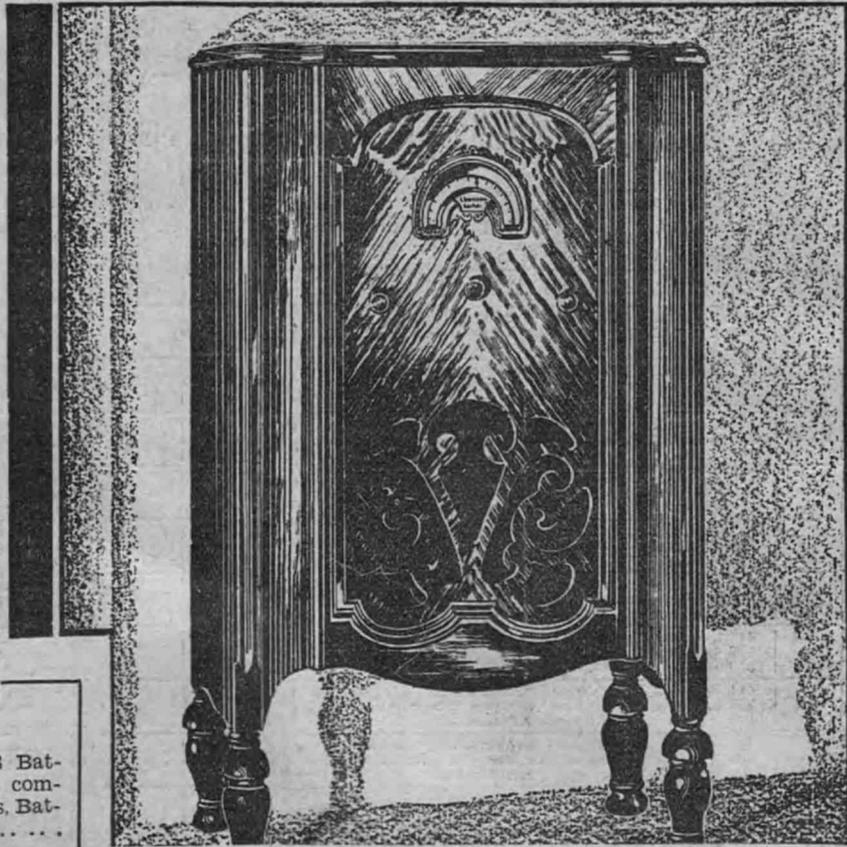
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AUSTRALIAN BROADCASTERS

A complete official list of the A and B class broadcasting stations in Australia.

*Denotes power in the aerial.

Stations 2MV and 2XL, previously in this list, are now off the air.

CALL SIGN	DIAL No.	W'LENGTH POWER, Etc.	NAME AND LOCATION	CALL SIGN	DIAL No.	W'LENGTH POWER, Etc.	NAME AND LOCATION
2CO		535.7 metres 560 k'cycles. 7500 watts.*	National Broadcasting Station, Relaying 3LO and 3AR, COROWA.	6ML		264 metres. 1135 k'cycles. 300 watts.	Musgroves, Ltd., Studio: Lyric House, Murray St., PERTH.
7ZL		517 metres. 580 k'cycles. 3000 watts.	National Broadcasting Station, Studio: Elizabeth Street, HOBART.	4BC		262 metres. 1145 k'cycles. 600 watts.*	J. B. Chandler and Co., Studio: 43 Adelaide Street, BRISBANE.
3AR		492 metres. 610 k'cycles. 5000 watts.	National Broadcasting Station, Studio: 130A Russell Street, MELBOURNE.	3YB		262 metres. 1145 k'cycles. 25 watts.*	Mobile Broadcasting Service, 430 Little Collins Street, MELBOURNE.
5CK		472 metres. 635 k'cycles. 7500 watts.*	National Broadcasting Station, Relaying 5CL, CRYSTAL BROOK, S.A.	2WG		260 metres. 1155 k'cycles. 50 watts.*	Riverina Broadcasting Co., 16 Fitzmaurice Street, WAGGA.
2FC		451 metres. 665 k'cycles. 5000 watts.	National Broadcasting Station, Studio: 96-98 Market Street, SYDNEY.	4TO		256.4 metres. 1170 k'cycles. 100 watts.	Amalgamated Wireless, (A'sia), Ltd., TOWNSVILLE.
6WF		435 metres. 690 k'cycles. 5000 watts.	National Broadcasting Station, Studio: Hay Street, PERTH.	3DB		254 metres. 1180 k'cycles. 500 watts.	3DB Broadcasting Stn. Pty., Ltd., Studio: 36 Flinders Street, MELBOURNE.
2YA		416.7 metres. 720 k'cycles. 5000 watts.	N.Z. Broadcasting Board, Wellington, NEW ZEALAND.	4MK		252 metres. 1190 k'cycles. 100 watts.*	Williams' Agencies, Ltd., Address: P.O. Box 165, MACKAY.
5CL		411 metres. 730 k'cycles. 5000 watts.	National Broadcasting Station, Studio: Hindmarsh Square, ADELAIDE.	5KA		250 metres. 1200 k'cycles. 300 watts.*	Sport Radio B'casting Co., Ltd., Studio: 81 Flinders Street, ADELAIDE.
4QG		395 metres. 760 k'cycles. 5000 watts.	National Broadcasting Station, Studio: c/o State Insur. Bldgs., BRISBANE.	2CH		248 metres. 1210 k'cycles. 1000 watts.*	Council of Churches, 77 York Street, SYDNEY.
3LO		375 metres. 800 k'cycles. 500 watts.	National Broadcasting Station, Studio: 120A Russell Street, MELBOURNE.	6KG		246 metres. 1220 k'cycles. 100 watts.*	Goldfields Broadcasters, Ltd., Bourke Street, KALGOORLIE.
2BL		351 metres. 855 k'cycles. 5000 watts.	National Broadcasting Station, Studio: 96-98 Market Street, SYDNEY.	2NC		241 metres. 1245 k'cycles. 2000 watts.*	National Broadcasting Station, Relaying 2FC and 2BL, NEWCASTLE.
6PR		341 metres. 880 k'cycles. 200 watts.	Studio: Nicholsons, Ltd., Barrack Street, PERTH.	3WR		238 metres. 1260 k'cycles. 50 watts.	Wangaratta B'casting Pty., Ltd., Studio: Reid Street, WANGARATTA.
7HO		337 metres. 890 k'cycles. 50 watts.*	Commercial Broadcasters, Ltd., Studio: 82 Elizabeth Street, HOBART.	2SM		236.1 metres. 1270 k'cycles. 1000 watts.*	Catholic Broadcasting Co., Australia House, Carrington St., SYDNEY.
4RK		330 metres. 910 k'cycles. 2000 watts.*	National Broadcasting Station, Relaying 4QG, ROCKHAMPTON.	3TR		234 metres. 1280 k'cycles. 50 watts.*	Gippsland B'casting Service, Address: Raymond Street, SALE.
3UZ		326 metres. 930 k'cycles. 500 watts.	Oliver J. Nilson and Co., Studio: 45 Bourke Street, MELBOURNE.	4BK		233 metres. 1290 k'cycles. 200 watts.*	Brisbane Broadcasting Co., Studio: King House, Queen St., BRISBANE.
2GB		316 metres. 950 k'cycles. 3000 watts.	Theosophical Broadcasting St., Studio: 29 Bligh Street, SYDNEY.	3BA		230.8 metres. 1300 k'cycles. 50 watts.*	Ballarat Broadcasters Pty., Ltd., C'wealth Bank Bldgs., Sturt St., BALLARAT.
5DN		312 metres. 960 k'cycles. 1000 watts.	Hume Broadcasters, Ltd., Studio: 29 Rundle Street, ADELAIDE.	5AD		229 metres. 1310 k'cycles. 300 watts.*	Advertiser Newspapers Ltd., Studio: Weymouth Street, ADELAIDE.
3BO		309 metres. 970 k'cycles. 200 watts.	Amalgamated Wireless (A'sia), Ltd. Studio: Kangaroo Flat, BENDIGO.	2MO		227 metres. 1320 k'cycles. 50 watts.*	M. J. Oliver, Address: P.O. Box 78, GUNNDAH.
4GR		300 metres. 1000 k'cycles. 50 watts.*	Gold Radio Service, Studio: Ruthven Street, TOOWOOMBA.	4RO		225.56 metres. 1330 k'cycles. 250 watts.	Rockhampton Broadcasting Co., Studios in ROCKHAMPTON.
3HA		297 metres. 1010 k'cycles. 200 watts.*	Western Province Radio Co., 37 Gray Street, HAMILTON.	2XN		224 metres. 1340 k'cycles. 50 watts.*	G. W. Exton, Address: P.O. Box 138B, LISMORE.
2UE		293 metres. 1025 k'cycles. 1000 watts.	Radio House, Studio: 296 Pitt Street, SYDNEY.	3KZ		222 metres. 1350 k'cycles. 200 watts.*	3KZ Broadcasting Station, Studio: 40 Victoria Street, MELBOURNE.
5PI		288 metres. 1041 k'cycles. 50 watts.*	Midlands Broadcasting Services, Studio: Ellen Street, PORT PIRIE.	4BH		217.3 metres. 1380 k'cycles. 600 watts.*	Broadcasters (Aust.), Ltd., Studio: 90-92 Queen Street, BRISBANE.
2CA		286 metres. 1050 k'cycles. 50 watts.*	A. J. Ryan, Kingston, CANBERRA.	2GN		216 metres. 1390 k'cycles. 50 watts.*	Goulburn Broadcasting Co., Studio: Auburn Street, GOULBURN.
4MB		283 metres. 1060 k'cycles. 50 watts.*	Maryborough Broadcasting Co., Wynne's Station, MARYBOROUGH, Q.	3GL		214 metres. 1400 k'cycles. 50 watts.*	Geelong Broadcasting Pty., Ltd., Studio: National Mutual Bldgs., GEELOG.
2KY		280 metres. 1070 k'cycles. 1500 watts.	Trades and Labour Council, Studio: The Block, George St., SYDNEY.	2KO		212 metres. 1415 k'cycles. 200 watts.	Newcastle Broadcasting Co., Studio: 57 Hunter Street, NEWCASTLE.
3SH		277.8 metres. 1080 k'cycles. 50 watts.	Swan Hill Broadcasting Co., SWAN HILL.	3AW		210.5 metres. 1425 k'cycles. 300 watts.*	Vogue Broadcasting Co., Ltd., His Majesty's Theatre, MELBOURNE.
7LA		273 metres. 1100 k'cycles. 200 watts.*	Findlay and Wills Broadcasters, 67 Brisbane Street, LAUNCESTON.	2WL		209.06 metres. 1435 k'cycles. 50 watts.*	Wellington Broadcasting Co., Address: 149 Crown Street, WOLLONGONG.
2HD		270 metres. 1110 k'cycles. 200 watts.*	Airsales Broadcasting Co., Studio: Civic Centre, NEWCASTLE.	2AY		203 metres. 1480 k'cycles. 50 watts.*	Charles Rice, Studio: 610 Dean Street, ALBURY.
2UW		267 metres. 1125 k'cycles. 1500 watts.	Radio Broadcasting Ltd., Studio: Pallin's Bldgs., Ash St., SYDNEY.	3AK		200 metres. 1500 k'cycles. 50 watts.*	Wron Broadcasting Service, Ltd., 490 Elizabeth Street, MELBOURNE.

FRIDAY JANUARY 6

8.0—NATIONAL PROGRAMME FROM 2FC, 2CO, AND 3LO,—TO-NIGHT, 8.0

8.0 A NATIONAL PROGRAMME
A CELEBRITY VAUDEVILLE
A Humphrey Bishop Production
9.0 "MRS. DANE'S DEFENCE"
A PLAY IN FOUR ACTS
by
HENRY ARTHUR JONES
First Produced in London at Wyndham Theatre by Mr. Charles Wyndham, Lena Ashwell, and Mary Moore.
CAST
SIR DANIEL CARTERET
Mayne Lynton
LIONEL CARTERET (His Adopted Son) *John Pickard*
CANON BONSEY *John Bevan*
MR. BULSOM-PORTER
Leonard Stephens
MR. JAMES RISBY.. *Reginald Dane*
FENDICK, A Private Inquiry Agent
John Fernside

**MRS.
DANE'S
DEFENCE**
A PLAY
IN FOUR ACTS
By
Henry Arthur Jones

ADAMS, Butler to Lady Eastney
Dion Wheeler
MRS. DANE *Nancye Stewart*
MRS. BULSOM-PORTER
Molly Raynor

JANET COLQUHOUN
Kathleen Rhys-Jones
LADY EASTNEY *Nora Cazabon*
ACT I.: Drawing Room at Lady Eastney's, Night.
ACT II.: The Same, a Saturday Afternoon about Three Weeks Later.
ACT III.: The Library at Sir Daniel's, the Following Wednesday Afternoon.
ACT IV.: The Same, the following Saturday Evening.
ADAPTED BY GEORGE D. PARKER
10.30 (Relayed to 2NC Newcastle)
(Completion of Relay to National Stations)
Late Official Weather Forecast
10.32 LATEST DANCE MUSIC (r.)
11.0 (Completion of Relay to 2NC Newcastle)
11.30 CLOSE.

ALTERNATIVE PROGRAMME OVERLEAF—DAY SCHEDULES BEGIN BELOW

2FC

SYDNEY,
451 Metres

EARLY SESSION

(Relayed to 2NC Newcastle).

- 7.0: "Big Ben." Early Rising Music. Meteorological information for the man on the land.
- 7.10: This morning's news from the "Sydney Morning Herald."
- 7.15: Cables (copyright) from the Australian Press Association and Sun-Herald News Service.
- 7.18: Studio Music (R.).
- 7.30: A short daily commentary for the man outback.
- 7.40: Radio Rhythm (R.).
- 7.45: Mails and Shipping.
- 7.48: What is on To-day?
- 7.50: Music from the Studio (R.).
- 8.15: CLOSE. (Completion of Relay to 2NC Newcastle).

MORNING SESSION

(Relayed to 2NC Newcastle from 10.40 a.m.)

- 10.30: Announcements.
- 10.32: G. VERN BARNETT AT THE STUDIO ORGAN—
"Rakoczy March" *Berlioz*
"Andante from Sonata" *Harwood*
"Priere" *Lemmens*
- 10.45: MORNING DEVOTION (conducted by Colonel G. L. Carpenter).
- 11.0: G. VERN BARNETT AT THE STUDIO ORGAN—
"Coronach" *Barrett*
"Andante Cantabile" *Tschaikowsky*
"Chante Sans Paroles" *Tschaikowsky*
"Grand Choeur" *Spence*
- 11.15: Musical Items (R.).
- 11.50: British Official Wireless News.
- 12.0: "Big Ben." Stock Exchange and Metal Quotations.
- 12.5: Studio Music (R.).
- 12.15: Metropolitan forecast and weather synopsis. Special Produce Market Session for the man on the land, supplied by the State Marketing Board.
- 12.30: CLOSE. (Completion of Relay to 2NC Newcastle).

THE LUNCH HOUR

- 1.0: LUNCH HOUR MUSIC.
- 1.57: Sectional Weather Forecast.
- 2.0: Programme Announcements.
- 2.2: Stock Exchange (second call).
- 2.4: A Glance at the Afternoon "Sun." Cables

(copyright) from the Australian Press Association and Sun-Herald News Service.

THE RADIO MATINEE

(Relayed to 2NC, Newcastle, from 2.30 to 4.30 p.m.)

- 2.30: AN ORCHESTRAL OVERTURE (r.).
- 2.38: PIANOFORTE SOLOS (r.).
- 2.45: LOTYS LESCAUT, Soprano—
Song of Songs *Moya*
I Live for You *Thompson*
Rackety Coo *Rudolph Friml*
- 2.52: LIGHT OPERA SELECTIONS (r.).
- 3.0: JOHN RYAN, Baritone—
Mary *Richardson*
Ay, Ay, Ay *Freire*
- 3.7: A HUMOROUS INTERLUDE (r.).
- 3.13: A PIANOFORTE SOLO (r.).
- 3.17: LOTYS LESCAUT, Soprano—
Hindu Song *Bemberg*
I Know a Lovely Garden *d'Hardelot*
- 3.24: Famous Waltzes (r.).
- 3.30: "THE ROMANCE OF THE ENGLISH STAGE—SIR HERBERT BEERBOHM-TREE—
A Talk by ARTHUR GREENAWAY.
- 3.45: SELECTION FOR ORCHESTRA (r.).
- 3.51: JOHN RYAN, Baritone—
Fairy Tales of Ireland *Coates*
At the Mid Hour of Night *Cowen*
- 3.58: A MELANGE OF POPULAR MUSIC (r.).
- 4.28: Stock Exchange, third call.
- 4.30: CLOSE.

EARLY EVENING SESSION

(Relayed to 2NC, Newcastle, from 5.45 to 6.45, and from 7.5 to 8 p.m.)

- 5.45: THE CHILDREN'S HOUR.
Conducted by "BOBBY BLUEGUM."
A STRAY SUNBEAM—
"Instead of a gem, or even a flower,
Cast the gift of a lovely thought,
Into the Heart of a Friend."
- 5.47: "AT HOME WITH THE WORLD'S CHILDREN." (How the Men and Women of To-morrow live, work, play, and go to school in many ways, and many climes.)
- 5.57: THE LATEST RECORD.
- 6.0: "CHRISTOPHER ROBIN" in more Pooh Stories.
- 6.15: Birthday Calls.
- 6.30: Serial Time.
- 6.45: "Sleep Tight."
(Completion of Relay to 2NC, Newcastle.)
THE A.B.C. MODEL AEROPLANE ASSOCIATION, conducted by NORMAN LYONS.
(Relayed to 2NC, Newcastle.)
- 7.5: The A.B.C. Sporting Association, conducted by M. A. Ferry, the A.B.C. Racing Observer.

7.15: Weather Report, Stock Exchange, Wool Sales, Wheat Markets, Truck Bookings, General Market Reports.

7.45: News from the "Sun." Additional News from the A.B.C. Service. Cables (Copyright) from the Australian Press Association and Sun-Herald News Service. Wireless News from the British Official Service.

7.58: To-night's Programme.
(Completion of Relay to 2NC, Newcastle.)

EVENING PROGRAMME

(See above)

2BL

SYDNEY,
351 Metres

OPENING SESSION

- 8.15: A Musical Interlude (R.).
- 8.40: Meteorological data for the country.
- 8.45: Mails and Shipping Information.
- 8.50: Memory Melodies (R.).
- 9.0: OLD FOLKS' SESSION—
A homely little heart to heart talk on age and old memories.
An old-time record.
A further between you, me, and the microphone talk, during which a suitable poem or two will be read.
A reading.
A memory melody record.
- 9.30: Melodies Grave and Gay (R.).
- 9.40: British Official Wireless Press.
- 9.45: Moments Musical (R.).
- 10.5: News from the "Sydney Morning Herald."
- 10.8: Cables (Copyright) from the Australian Press Association and "Sun"—"Herald" News Service.
- 10.10: Studio Music (R.).
- 10.35: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION SESSION, conducted by Miss Gwen Varley—"An Introduction to an Outstanding Personality" by Miss Gwen Varley. "Venice—Two in a Gondola" by Mrs. Julius Horn.
- 11.0: CLOSE.

MIDDAY SESSION

- 12.0: Announcements. Metropolitan Forecast and Weather Synopsis.
- 12.2: FROM THE SYDNEY TOWN HALL—COMMUNITY SINGING CONCERT, arranged by . . . AUSTRALIAN BROADCASTING COMMISSION, conducted by FRANK HATHERLEY.

FRIDAY, January 6 (Contd.)

8.0—ALTERNATIVE PROGRAMME, 2BL and 2NC—8.0

- 8.0 THE UNIVERSITY EXTENSION BOARD SERIES OF LECTURES "SOME GREAT MODERN PSYCHOLOGISTS" — "William James, the Father of Modern Psychology," a talk by MRS. M. MUSCIO
8.30 THE A.B.C. MILITARY BAND, Conducted by J. PHELOUNG Overture: Sicilian Vespers ... Verdi
8.38 AUSTIN PUNCH (Baritone) Thoughts Have Wings ... Lehmann That Dear Old Song ... Love
8.45 CYRIL MONK (Violinist) Four Negro Spirituals .. Benjamin
8.53 BAND Dream Melody: Ah, Sweet Mystery of Life ... Herbert Kiltie's Courtship ... MacKenzie
9.0 Late Official Weather Forecast
9.2 BAND Waltz: Des Fleurs ... Tchaikowsky

- 9.10 CYRIL MONK Second Romance, Schumann, arr. Monk Allegretto ... Boer Katey's Reel ... Arr. Hughes
9.18 AUSTIN PUNCH Castilian Lament ... Del Riego Phillis Has Such Charming Graces, Young
9.25 BAND Selection: Reminiscences of Scotland, Arr. Godfrey
9.40: AN INTERLUDE.
10.0 BAND Patrol: Jungle Drums ... Ketelbey March: Geburtstags ... Kuhne
10.15 "MOMENTS MERRY AND MUSICAL" (r.)
10.27 Late News from the "Sun"
10.30: CLOSE.

2BL—Continued

- Assisted by "John," Associate Artists: "The Black and White Duo," Entertainers.
1.0: FROM THE STUDIO—Afternoon News from the "Sun," Cables (Copyright) from the "Sun," "Herald" and Australian Press Association News Service.
1.8: Sectional Weather Forecast.
1.11: FROM THE SYDNEY TOWN HALL—COMMUNITY SINGING CONCERT, arranged by AUSTRALIAN BROADCASTING COMMISSION. Associate Artists: The Black and White Duo, Entertainers; Charles Frizelle, Baritone; Jack Murfayne, Xylophonist.
2.0: What's on the air this afternoon?
2.2: "Thirty Minutes with the Poets."
AFTERNOON ENTERTAINMENT
2.32: "STAGELAND SUCCESSES" (R.).
3.0: "MUSIC OF THE DANCE" (Folk Dances, Waltz, Polonaise and Mazurka).
3.20: "GEMS FROM GRAND OPERA" (R.).
3.40: "AN ORCHESTRAL INTERLUDE" (R.).
3.50: "MELODIES OF FRANZ SCHUBERT" (R.).
4.0: MISS ELSIE SEGAERT will speak on "VIENNA, THE AUSTRIAN CAPITOL."
4.15: "MUSIC OF THE MOMENT" (R.).
4.45: THE TRADE HOUR DEMONSTRATION MUSIC.
5.40: Weather Information.
5.45: CLOSE.
THE DINNER HOUR
6.15: DINNER MUSIC.
7.45: Studio Music (R.).
7.58: What's on the air to-night?

EVENING PROGRAMME (See above)

2CH SYDNEY, 248 Metres

- Day Sessions as usual.
EARLY EVENING SESSION
5.10: CHILDREN'S SESSION, conducted by "THE FAIRY GODMOTHER."
5.55: "THE HELLO MAN."
6.40: FRANK BLACK and HIS ORCHESTRA—Merry Widow ... Lehar Count of Luxembourg
6.48: MASTER YEHUDI MENUHIN, Violinist—Sarabande and Tambourin Leclair—Sarasate
6.52: CYRIL SCOTT, Pianist—Lotus Land ... Scott

- 9.0: JEANETTE MACDONALD, Soprano—Dream Lover ... Grey-Schertzing
9.3: ANNOUNCEMENT.
9.4: BOMBARDIERS' MILITARY BAND—Anchor's Aweigh.
9.7: J. H. SQUIRE CELESTE OCTET—Ainia ... Lincke
9.10: THE ROUNDERS—Deep Night ... Vallee-Henderson
9.13: ANNOUNCEMENT.
9.15: THIRD NEWS AND COMMENTARY.
10.0: Musical Item.
10.5: AN ADDRESS BY REV. C. J. PRICE (Presbyterian).
10.25: Musical Item.
10.30: CLOSE.

2GB SYDNEY, 316 Metres

- Day Sessions as usual.
EVENING SESSION
5.0: Birthday Calls and Songs by Uncle George and Bimbo.
6.45: Music.
7.0: J. H. Squire Celeste Octette—The Ant's Antics; An Irish Love Song; The Fly's Courtship.
7.15: The Big Four, Vocal Quartette—You're Gonna be Young; Down the Old Back Road; When the Guards are On Parade.
7.30: Regimental Band of H.M. Grenadier Guards—The Middy March; Faithful and Bold.
7.40: Hubert Eisdell, Tenor—Two Tired Old Eyes; Always as I Close My Eyes.
7.50: Zet Confrey and his Orchestra—Jack in the Box; Jumping Box.
8.0: New Symphony Orchestra—Peer Gynt Suite No. 2 (Grieg's) Ingrid's Lament; Arabian Dance; Peer Gynt's Return; Solveig's Song.
8.20: David Craven, Bass Baritone—The Sea Gypsy (Michael Head); The Star (Rogers).
8.30: De Groot and Piccadilly Orchestra—Fredrica Selection; Tina.
8.40: Virginia Bassetti, Contralto—Let Them Not Vanish (Mollinson); The Sandymen.
8.50: The Coldstream Guards Band—The Gondollers Selection (Sullivan).
9.0: Jesse Crawford, Wurlitzer Organist—Indian Love Call; You're the Cream in My Coffee.
9.10: David Craven, Bass Baritone—Two Songs by Amy Woodford—Finden Kingfisher Blue; Tibi I Wake (from Four Indian Love Lyrics).
9.20: Maori Music—Waitea Poi; Lake Music; Rotorua Maori Choir.
9.30: Symphony Orchestra—La Vida Breve.
9.35: Virginia Bassetti, Contralto—Deep River, Were You There? Two Negro Spirituals by Burleigh.
9.45: Address by Mr. A. M. Pooley.
10.0: Entertainment Club Numbers.
11.0: Slumber Music.
11.30: Close down.

2UW SYDNEY, 267 Metres

- Day Sessions as usual.
5.15: CHILDREN'S SESSION, conducted by UNCLE JACK, JILL, AND THE PROFESSOR.
5.58: MIDSHIPMAN BOB BREEZY.
6.3: DINNER MUSIC.
6.40: To-morrow's Sporting.
6.45: Music.
8.0: RELAY TO 2KO, NEWCASTLE—SPONSORED SESSION—Orch.—Dollar Princess Selections ... Fall Vocal—Were You Just Pretending? Jerome Piano—Whitebirds Selections ... Carter Sketch—Louise Homfrey—Clifford Arnold. Violin—Serenade ... Lehar Orch.—Grasshoppers' Dance ... Bucalossi
8.30: A Short Gipsy Programme, featuring Alfredo Rode and his 18 Tsiganas—Orch.—Hungarian Rhapsody No. 2 ... Liszt Gaill Curcl—The Gipsy and the Bird. Orch.—(a) Song of the Guitar. (b) The Two Guitars.
8.45: Four Australian Artists—Wm. Murdoch—Duetto ... Mendelssohn Florence Astral—Dream in the Twilight ... R. Strauss Lauri Kennedy—Cradle Song ... Brahms Harold Williams—To-morrow ... Kell
9.0: A Comedy Sketch.
9.15: Gauding Session, by Mr. S. H. Hunt.
9.30: Orch.—From Foreign Parts Mozkowsky
9.45: Band Recital—Band—Marche Indienne ... Selenick Vocal—On the Road to Mandalay Speaks Band—La Bombardier ... Pares Vocal—Shenandoah ... Terry Vocal—Morning ... Speaks Band—Radio March ... Peeking
10.0: Musical Programme.
10.28: To-morrow's Programme.
10.30: Close down.

2UE SYDNEY, 293 Metres

- Day Sessions as usual.
EVENING SESSION
5.0: Children's Session—Auntie May and Uncle Simon. 5.40: Uncle Lionel and Ambrose.

- 8.55: ANNOUNCEMENT.
8.58: JAMES McCAFFERTY, Baritone—Kitty My Love, will you Marry me? Hughes Open the Door Softly.
8.59: NAT SHILKRET and HIS ORCHESTRA—I Still Keep Dreaming of You, Davis-Burke
7.2: WARNER YORKE, Piano Novelty—Crazy Quilt ... Loan
7.5: AMELITA GALLI CURGI, Soprano—Carnations ... Valverde Little Star ... Ponce
7.8: JACK HYLTON and HIS ORCHESTRA—The Girl Friend ... Rodgers
7.14: ANNOUNCEMENT.
7.15: THE BIG FOUR—When the Guards are on Parade.
7.18: REGIMENTAL BAND OF ROYAL HORSE GUARDS—Gallantry Duo D'Amour ... Ketelbey
7.22: J. H. SQUIRE CELESTE OCTET—Killarney ... Balfe
7.25: GLADYS MONCRIEFF, Soprano—Sailing the Sea of Romance ... Samuels
7.28: ANNOUNCEMENTS.
7.30: FROM THE GORDON THEATRE—VALDA KERSEY AT THE ORGAN—Just Another Dream of You ... Burke Kiddies' Kapers ... Sherman Waiting ... Croke
7.40: DAIOS BELA ORCHESTRA—The Sphinx Valse ... Popy
7.44: DENNIS KING, Baritone—Nichavo ... Jerome-Zusca
7.47: B.B.C. WIRELESS MILITARY BAND—Carmen Fantasia ... Bizet
7.55: ANNOUNCEMENTS.
8.0: VALDA KERSEY AT THE ORGAN—A Vision of Fuji-San ... Ketelbey Moment Musicale ... Schubert Destiny Waltz ... Baynes
8.10: RICHARD TAUBER, Tenor—Ay, Ay, Ay ... Friere
8.14: YELLY D'ARANYI, Violinist—Bagatelle in D ... Gatty
8.17: DEBROY SOMERS BAND—When its Sunset on the Mill. Kennedy-Ellison
8.20: VALDA KERSEY AT THE ORGAN—The Rosary ... Nevin The March of the Dwarfs ... Grieg A Great Big Bunch of You ... Warren
8.30: ANNOUNCEMENT.
8.31: HUBERT EISEDELL, HEDDLE NASH, DENNIS NOBLE, and NORMAN ALLIN—Passing By ... Purcell
8.35: DAIOS BELA ORCHESTRA—Wedding of the Rose ... Jessel
8.39: ANNOUNCEMENT.
8.40: VALDA KERSEY AT THE ORGAN—Selection, Floradora ... Stuart Powder Puff ... Brewer
8.50: A TALK BY GEORGE GARNSEY (Official Coach of the New South Wales Cricket Association).

6.30: Dinner Music. 6.45: To-morrow's Races—Mr. Tom Ellis. 7.5: Music. 8.0: Overture—Semiramide. 8.15: Racing Service. 8.25: Music. 8.45: Racing Final. 9.0: Studio Programme. 9.30: Cricket Talk. 9.40: Selections. 9.45: Calls to Distant Listeners. 10.0: Light Opera Selection—Rio Rita. 10.10: Music. 10.45: Tranquillity Music. 11.0: Close Down.

2KY

SYDNEY, 280 Metres

Day Sessions as usual.

EVENING SESSION

6.0: Children's Birthday Session. 6.30: Dinner Entertainment. 7.15: Dinner Music. 7.30: Racing Revelations. Rufe Naylor. 7.45: Music. 8.0: Chimes. 8.1: Greyhound Coursing Prospects, Mr. A. W. Davies. 8.10: Selections and Popular Numbers. 8.45: Sport Shorts, Andy Flanagan. 9.0: Sporting Feature from the Newtown Stadium. Results of the early events. Full description of the main 15-round event, by H. E. Beaver. 10.0: Music from studio. 10.30: Closing Announcements.

2SM

SYDNEY, 236 Metres

Day Sessions as usual.

5.0: Children's Session—Auntie Goodie. 5.30: Uncle Tom. 6.0: Angelus. 6.1: Dinner Session. 6.45: Studio Music. 7.0: Turf Topics—Eric Gordon. 7.15: After Dinner Entertainment. 7.45: Studio Music. 8.0: Evening Session. 8.10: Studio Music. 8.20: Camden Morrisby—His Book of the Week. 10.0: Composing Music. 10.30: Close.

3LO

MELBOURNE, 375 Metres

EARLY MORNING SESSION

7.0: News. 7.3: Music. 7.10: Morning Music. 7.37: "Brother Bill's" Pick-me-up. "Get Up, Stand Up, and Walk." 7.40 to 8.15: As on Tuesday. ("The Age" News Service.) 10.30: Current Happenings in Sport, by Mel. Morris. 10.45: Music. 11.0: Fish Market Reports. 11.5: Music. 11.45: Morning Sales, Melbourne Stock Exchange. Mines and Metals. 11.48: Music. 12.10: News Service. 12.30: Close down.

MIDDAY SESSION

1.0: Stock Exchange Information. Meteorological Data. Weather Forecast for Victoria, New South Wales, South Australia, and Tasmania. Ocean Forecast. Rainfall Data. River Reports. 1.15: Musical Interlude.

WOMEN'S SESSION

2.0: Legends of the Rhine. St. Goar—"Lorelei" and "The High Cross at Godesberg." Miss Beatrice Touzeau. 2.15: Music. 2.20: A.B.O. Women's Association, conducted by Hattie Knight.

THE RADIO MATINEE

3.0: A.B.C. Quintette—Serenata. Sanderson Shepherd's Dance (German); Waters of Minnetonka (Lieurance). 3.10: J. Clarke Scott, Tenor—In Summertime on Bredon (Peel); The Bloom is on the Rye (Bishop). 3.17: Gordon Ireland, Novelist Pianist—Maggie (Yellen). Yesterday (White). 3.23: A.B.C. Trio—Nina (Pergolesi). 3.29: Ella Riddell, Contralto—The Song of the Emigrant (Mofat), There's Nae Luck About the Hoose (Adam). 3.35: A.B.C. Quintette—Selection of Songs. 3.43: Shirley Cooke—A Cheerful Little Airlife. 3.48: J. Clarke Scott, Tenor—On Lido Waters (Tosti), Stars and a Crescent Moon (Coates). 3.54: A.B.C. Quintette—Canto Amorooso (Martini), Might Lak a Rose (Nevin). 4.0: Gordon Ireland, Entertainer at the Piano—The Bright Young Things. 4.6: Ella Riddell, Contralto—Hush-a-ba, Birdie (Bunten), The Bonnie Brier Bush (Traditional). 4.12: Bertha Jorgensen, Violin—Request Numbers. 4.16: Shirley Cooke. 4.20: A.B.C. Quintette—Moonlight Dance (Finck), Dance from Nell Gwynn (German), Colinette (Borsch). 4.30: Close.

THE CHILDREN'S CORNER

5.45: On the Treasury Trail in Africa! That sounds like adventure! Mr. Lucius Conolly, who sang you the songs about the jungle beasts, is going to talk about hidden treasure in Africa.

EVENING SESSION

6.30: COUNTRYMAN'S SESSION. 7.2: ALL SPORTING RESULTS. ERIC WELCH will speak on To-morrow's Race Meeting at Epsom. 7.21: Results of Women's Sports. 7.25: GARDENING NOTES—"Care and Management of the Summer Garden," Mr. A. W. JESSEP. 7.35: British Official Wireless News. 7.40: News. 7.45: FOR THE MAN ON THE LAND—"Wheat-growing: Size of Head and Grain Weight," Mr. H. C. FORSTER, M.Ag.Sc.

NIGHT SESSION

8.0: A HUMPHREY BISHOP PRODUCTION. (See 2FC Programme.) 10.30: WEATHER. 10.33: "MEDITATION" MUSIC. 11.30: Close.

3AR

MELBOURNE, 492 Metres

MORNING SESSION

8.15: 'Thirty Minutes' Melody. 8.45: Weather. 8.50: Music. 9.1: News. 9.5: Music. 9.17: Weather. 9.18: Music. 9.21: Radio Serial—"Cleansing Fires" (Arthur Russell), read by "Scribe." 9.36: Music. 10.1: British Official Wireless News. 10.16: Music. 10.45: Daily Broadcast Service. 11.0: Close.

MID-DAY SESSION

12.1: Music. 12.15: Through the Glamorous East with Pressy Preston. 12.30: Music. 1.15: At Home and Abroad, by "The Watchman." 1.30: Music.

AFTERNOON SESSION

2.1: Lener String Quartette (Lener, Smilovits, Roth, and Hartman)—Quartette in B Flat Major, Op. 130 (Beethoven).

EDUCATIONAL SESSION

3.0: Bradford, Home of the Textile Industry, Miss Jessie Batchelor. 3.15: Music. 3.45: And now we Visit the National Gallery, with Stephanie Taylor. 4.0: Music. 5.1: Music. 5.30: Weather and Shipping. 5.45: Close.

EVENING SESSION

6.15: DINNER MUSIC.

7.30: Music.

NIGHT SESSION

8.1: BITS OF OLD MELBOURNE—"Celebrations," Mrs. L. GRIFFITHS. 8.20: COMMUNITY SINGING from the CENTRAL HALL GEELONG, under the direction of Mr. GALLAGHER. 10.15: News. 10.30: Close.

4QG

BRISBANE, 395 Metres

EARLY MORNING SESSION

(Relayed to 4RK.)

7.30: Music. 7.34: News. 8.0: Music. 8.30: Close.

MORNING AND MIDDAY SESSION

(Relayed to 4RK except from 11.23 to 11.30.) 11.0: The Daily Broadcast Service. 11.10: Music. 11.23: Social Notes. 11.30: Radio Harmony. 11.40: A talk—"A Family Affair," by D. L. Waraker. 11.55: What's on to-day. 12.0: The City Hall Chimes. 12.1: Radio Rhythm. 12.30: Music. 1.0: News. 1.20: Luncheon Music. 2.0: Close.

AFTERNOON SESSION

(Relayed to 4RK.)

THE RADIO MATINEE

3.0: A PROGRAMME by OLD MASTERS. 4.30: Close.

EARLY EVENING SESSION

(Relayed to 4RK, except from 6.20 to 6.30.) 6.0: For the Children—"A Musical Fairy Story," by "Bunty." 6.20: Shipping, etc. 6.30: Early Dinner Music. 6.45: Late Market Reports, etc. 7.0: Dinner Music. 7.23: News. 7.30: General Sporting. 7.45: A review of to-morrow's races.

NIGHT SESSION

(Relayed to 4RK.)

8.0: THE BRISBANE MUNICIPAL CONCERT BAND, conducted by Bandmaster E. Jackson, will feature Famous Waltzes and their Composers, including Der Romantiker, Lanner; Ten dres Balsers, Waldteufel; Die Hydropaten, Gung'l; Tanzjubilanten, Fahrbach; Donau Wellen, Ivanovici; Ensueno Seductor, Rosas; Love's Dreamland, Roeder; Jolly Fellows, Vollstedt; The Maid of the Mill, Liddell; Destiny Waltz, The Blue Danube; with special annotations by the Conductor. 9.0: Metropolitan Weather Forecast and R.A.C.Q. Week-end Road Bulletin. 9.5: THE BRISBANE MUNICIPAL CONCERT BAND—Suite—Ballet Egyptian ... Lutgini P.J. PATRICIA M'ONIGLY, Soprano—Sing, Joyous Bird ... Phillips I Know a Lovely Garden ... d'Hardelot Come to the Fair ... Taylor NELL FERGUSON—Gems from The Boree Log ... O'Brien THE MUNICIPAL BAND—

Popular Numbers—Sleepy Valley ... Hanley When the Lilac Blooms Again .. Doelle J. P. CORNWELL, Baritone—The Bedouin Love Song ... Pinsuti Little Northern Window ... Dare Gossiping ... Dodge STEPHEN BAKER—Comedy Items. THE BRISBANE MUNICIPAL CONCERT BAND — Danse Orientale ... Lubonirsky Cortege du Sardar ... Ippolitou-Ivanou 10.15: News. 10.20: BERT TUCKER AND HIS CARLTON BOYS—Dance Music. 11.0: Close.

5CL

ADELAIDE, 411 Metres

EARLY MORNING SESSION

7.30: News; Special Weather Forecast. 7.40: Music. 8.1: News and Notes of Many Topics. 8.10: Music. 8.30: Close.

MORNING AND MIDDAY SESSION

11.0: Daily Broadcast Service. 11.10: Music. 11.23: Sporting Fixtures. 11.30: Homecrafts, by "Economist." 12.1: Music. 12.15: Official Stock Exchange Information. 12.19: News. 12.30: Music. 12.50: Weather, Grain, and River Reports. 1.0: Music. 1.5: News. 1.15: Music. 2.0: Close. 3.1: Matinee Programme. 4.0: Feature Session by Victoria Reynolds. 4.15: Music. 4.30: Close.

EVENING SESSION

5.50: Children's Session. 6.22: Dinner Music. 6.50: Official Stock Exchange Information. 7.0: News. 7.5: "Silvius" gives a special late review of to-morrow's races at Morphettville and Epsom. 7.20: Music. 7.25: What of the Roads? Tourists' Special Service arranged by the Royal Automobile Association. 7.35: Music. 7.45: "In Town and Out," Weekly Half-hour with "Rufus."

NIGHT SESSION

8.15: FRIDAY NIGHT RADIO PARADE— 1. MARCHING ALONG! 2. POPULAR OPERATIC ARIAS—MARCELLE BERARDI. 3. XYLOPHONICS—AUDREY DREW. 4. WHAT A TALE! 5. COCKNEY SPANGLES—ELSIE ROSLYN, GEORGE HORTON, and DAVE HOWARD. 6. HOMELY BALLADS—MARCELLE BERARDI. 7. JAZZ JINGLES. 8. BALLADS OF THE SEA—GORDON HELE. 9. IVORY SPARKLETS—WIKI KELLY. 10. BETWEEN YOU AND I AND THE RADIO. 11. SONGS OF LONG AGO—ELSIE WOOLLEY. 12. A SAXOPHONE TALKIE—DAVE HOWARD, GEORGE HORTON, and ELSIE ROSLYN. 13. BALLADS OF THE WAR—GORDON HELE. 14. HARMONIES—WIKI KELLY. 15. REALLY IT IS A SURPRISE! 16. MEZZO-SOPRANO SELECTIONS—ELSIE WOOLLEY. 17. POT POURRI. 10.15: NEWS. 10.30: MEDITATION MELODIES. 11.0: Close.

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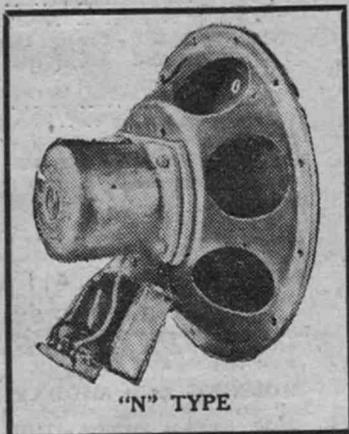
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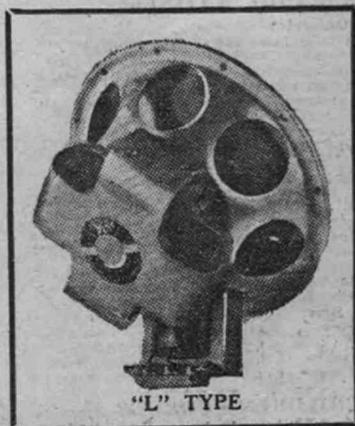
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SATURDAY . . . JANUARY 7

8.0—NATIONAL PROGRAMME FROM 2FC, 3LO, 2CO, 5CL AND 5CK—8.0

8.0 A NATIONAL PROGRAMME
(Transmission from 3LO Melbourne)

A REVIEW
SULPHITES ALL
A NON-BROMIDE REVIEW

TAKE

OF SONGS: Several
SKETCHES: Some
THRILLS: Quant. Suff.
MUSIC: Much
ARTISTRY: All the Time

CAREFULLY COMPOUNDED WITH
COMEDY

THE MAGIC MIXTURE

THE WHOLE MIXTURE

To be Taken on
Saturday, January 7th, 1933, at
8 O'clock

Futher Doses will be provided if
necessary.

F. D. CLEWLOW
CECIL FRASER
(Fizzy-icians)

10.30: FROM THE STUDIO (SYD-
NEY)

Late Official Weather Forecast.

10.32: MEDITATION MUSIC (r.)

11.30: CLOSE.

ALTERNATIVE PROGRAMME OVERLEAF—DAY SCHEDULES BEGIN BELOW

2FC SYDNEY,
451 Metres

EARLY SESSION
(Relayed to 2NC Newcastle from 7.0 to 8.5 a.m.)

7.0: "Big Ben." Early Rising Music (R.).
Meteorological information for the man on
the land.

7.10: This morning's news from the "Sydney
Morning Herald."

7.15: Cables (copyright) from the Australian
Press Association and Sun-Herald News Ser-
vice.

7.18: Studio Music (R.).

7.30: A short daily commentary for the man
outback.

7.40: Radio Rhythm (R.).

7.45: Mails and Shipping.

7.48: What is on To-day?

7.50: Music from the Studio (R.).

8.15: CLOSE. (Completion of Relay to 2NC
Newcastle at 8.5 a.m.).

MORNING SESSION

10.30: Announcements.

10.32: Musical Items (R.).

11.50: British Official Wireless News.

12.0: "Big Ben." Stock Exchange and Metal
Quotations.

12.5: Studio Music (R.).

12.20: Metropolitan forecast and weather syn-
opsis.

12.30: CLOSE.

AFTERNOON ENTERTAINMENT
(Relayed to 2NC Newcastle).

NOTE.—Scores in the International Cricket
Match, ENGLAND v. COUNTRY, played at
Bendigo, will be given at Lunch, Tea, and
Stumps Drawn, and at the fall of each
wicket.

12.50: FROM CANTERBURY:
Description of the following races:—
THE MAIDEN WELTER HANDICAP.
THE FLYING HANDICAP.
THE PARK STAKES.
THE NURSERY HANDICAP.
THE CANTERBURY HANDICAP.
THE WELTER HANDICAP.

At approx. 1.57: Sectional Weather Forecast.
At approx. 2.0: A Glance at the Afternoon
"Sun."

During intervals between races, Music from
the Studio.

4.35: Late Sporting Results.

4.45: CLOSE.

EARLY EVENING SESSION
(Relayed to 2NC Newcastle, from 5.45 to 6.45,
and from 7.5 to 8 p.m.)

5.45: THE CHILDREN'S HOUR—
Conducted by "BOBBY BLUEGUM."
A STRAY SUNBEAM—
"It is not just as take it,
This mystical world of ours,
Life's field will yield, as we make it,
A harvest of thorns or flowers."

5.47: "THE KUTIE KIDS' KOLLEGE," con-
ducted by MR. KAN KAINEM.

6.15: Birthday Greetings.

6.35: Serial Hour.

6.45: Sleep Tight.
(Completion of Relay to 2NC, Newcastle.)
THE A.B.C. POULTRY AND PIGEON SES-
SION, conducted by MR. CONRAD CHARL-
TON.

(Relayed to 2NC, Newcastle.)

7.5: The A.B.C. Sporting Service.

7.40: Weather Report, Stock Exchange.

7.45: News Service from the "Sun." Additional
News from the A.B.C. Service. Cables (Copy-
right) from the Australian Press Association
and Sun-Herald News Service. Wireless News
from the British Official Service.

7.51: Further Sporting News from the A.B.C.
Service.
Musical Items (r.).

7.58: To-night's Programme.
(Completion of Relay to 2NC, Newcastle.)

EVENING PROGRAMME
(See above)

2BL SYDNEY,
351 Metres

OPENING SESSION

8.15: A Musical Interlude (R.).

8.40: Meteorological data for the country.

8.45: Mails and Shipping Information.

8.50: Memory Melodies (R.).

9.0: Studio Music (R.).

9.30: Melodies Grave and Gay (R.).

9.40: British Official Wireless Press.

9.45: Moments Musical (R.).

10.5: News from the "Sydney Morning Herald."

10.8: Cables (Copyright) from the Australian
Press Association and "Sun"-Herald News
Service.

10.10: Studio Music (R.).

10.15: A RACING TALK BY THE A.B.C. RAC-
ING OBSERVER—M. A. FERRY.

10.30: Musical Items (R.).

10.40: Mr. GEORGE COOPER WILL SPEAK ON
"GARDENING."

11.0: CLOSE.

MIDDAY SESSION

NOTE: Scores in the International Cricket
Match, England v. Country, played at Ben-
digo, will be given at lunch, tea, stumps
drawn, and the fall of each wicket.

12.0: Announcements. Metropolitan Forecast
and Weather Synopsis.

12.2: Studio Music (R.).

12.30: LUNCH HOUR MUSIC. Note: Relayed
to 2NC, Newcastle, from 12.30 to 12.50 p.m.

1.0: Afternoon News from the "Sun." Cables
(Copyright) from the Australian Press Asso-
ciation and "Sun"-Herald News Service.

1.8: Sectional Weather Forecast.

1.11: Radio Rhythm (R.).

1.35: Studio Music (R.).

2.0: What's on the air this afternoon?

2.2: Moments Merry and Musical (R.).

AFTERNOON ENTERTAINMENT

2.30: A MATINEE featuring WORLD FAMOUS
CELEBRITIES and GREAT ORCHESTRAS OF
THE WORLD.

3.30: MUSIC IN LIGHTER VEIN.—Song, Story
and Humor.

5.0: COMPLETE RACING AND SPORTING
RESUME.

5.5: Studio Music (R.).

5.40: Weather Information.

5.45: CLOSE.

THE DINNER HOUR

6.15: DINNER MUSIC.

7.45: Musical Items (R.).

7.58: What's on the air to-night?

EVENING PROGRAMME
(See overleaf)

2CH SYDNEY,
451 Metres

Day Sessions as usual.

EARLY EVENING SESSION

5.15: CHILDREN'S SESSION, conducted by
"THE HELLO MAN."

6.40: JACK HYLTON and HIS ORCHESTRA—
Still More Old Songs.

6.48: REGIMENTAL BAND OF H.M. COLD-
STREAM GUARDS—
The Skaters Waldteufel

6.52: ELSIE SOUTHGATE, Violinist—
Because D'Hardelot

6.55: ANNOUNCEMENT.

6.58: RAYMOND NEWELL, Baritone—
The Organ Blower McGill and Burke

7.0: EMIL VELAZZO, Organist—
A Perfect Day Jacobs-Bond

7.3: DAJOS BELA TRIO—
Simple Aveu Thome

7.7: REGIMENTAL BAND OF H.M. GRENADIER
GUARDS—
Wine, Women, and Song Strauss

7.11: ANNOUNCEMENT.

7.12: LILIAN DAVIES, Soprano—
Ashes of Dreams Davies

7.15: RUDY VALLEE and HIS ORCHESTRA—
Old New England Moon.

7.18: RAIE DA COSTA, Novelty Pianist—
Reaching for the Moon Berlin

7.21: PAUL ROBESON, Bass—
Sometimes I Feel like a Motherless Child.
(Arr. Brown)

7.24: ALBERT SANDLER and HIS ORCHES-
TRA—
New Moon—Softly as in Morning Sunrise.

7.27: BLACK DIAMONDS BAND—
On With the Show.

SATURDAY, January 7 (Con.)

8.0—ALTERNATIVE PROGRAMME, 2BL and 2NC—8.0

8.0 OUR OLD TIME DANCE NIGHT
A.B.C. OLD TIME DANCE ORCHESTRA
Waltz

ALFRED WILMORE (Tenor)
Castilian Lament Del Riego

ORCHESTRA
Schottische

DORIS ROBINSON (Soprano)
Some Day Wellings

ORCHESTRA
Mázurka

DORA LINDSAY (Scotch Comedienne)
Medley of Harry Lauder Songs, Lauder

ORCHESTRA
Lancers

GEORGE EDWARDS and NELL STIRLING
In Old Reminiscences

9.0 Late Official Weather Forecast

9.2 ORCHESTRA
Valeta

SONGS OF OLDEN TIMES (By the Company)

ORCHESTRA
Washington Post

ALFRED WILMORE
Parted Tosti

ORCHESTRA
Jolly Miller Waltz

DORIS ROBINSON
Leetle Mister Baggy Breeches (By Request) Dąrewski

ORCHESTRA
Quadrilles

DORA LINDSAY
In Some Scotch Songs

ORCHESTRA
Waltz Cotillion

GEORGE EDWARDS in a Comedy Number
She's Proud and She's Beautiful

ORCHESTRA
Latchford Schottische

DORIS ROBINSON and ALFRED WILMORE, Vocal Duet
A Night in Venice Lucantoni

10.30 Late News from the "Sun"

10.33 ORCHESTRA
Boston Two-step

DORIS ROBINSON
Every Little While

ORCHESTRA
Barn Dance

ALFRED WILMORE
There is a Flower That Bloometh,
Wallace

ORCHESTRA
Waltz

GEORGE EDWARDS and NELL STIRLING in a Vocal Duet
Fancy You Fancying Me

ORCHESTRA
Schottische

OLD TIME CHORUSES BY THE COMPANY

ORCHESTRA
Bon Ton
Dolly Gray (Quartet), (r.)

ORCHESTRA
Maxina

STEPHEN COLLINS
Song Medley (r.)

ORCHESTRA
Jolly Miller Waltz

11.58 AULD LANG SYNE

12.0 CLOSE

7.33: MARGUERITA CARLTON, Contralto—
A Request Woodforde Finden

7.36: JACK HYLTON and HIS ORCHESTRA—
Lenora Silver

7.39: ANNOUNCEMENT.

7.40: THE BIG FOUR—
Waiting by the Silvery Rio Grande,
Moll and Mencher

7.43: WARINGS PENNSYLVANIANS—
Tea for Two Caesar-Youmans

7.46: FRITZ KREISLER, Violinist—
Love's Joy Kreisler

7.50: JOHN BOLES, Tenor—
The One Girl Youmans

7.53: EDWARD O'HENRY, Organist—
Selection of Wilfrid Sanderson's Popular
Songs Boosey

7.59: ANNOUNCEMENT.

EVENING SESSION

8.0: WE PRESENT THE MUSICAL FEATURE
OF THE WEEK—
Symphony in B Minor (The Unfinished),
Schubert
Played by THE ROYAL OPERA ORCHESTRA,
COVENT GARDENS.

8.24: ELIZABETH SCHUMANN, Soprano—
Cradle Song Strauss
Friendly Vision.

8.32: LEOPOLD GODOWSKY, Pianist—
Ballade Grieg

8.48: ALEXANDER KIPNIS, Bass—
Der Linden Baum Schubert
Am Meer Schubert

8.58: JASCHA HEIFITZ, Violinist—
Habanera Sarasata
Hebrew Dance Achron

9.4: ANGELO MINGHETTI—
Che Gelida Manina (La Boheme), Puccini

9.8: ORCHESTRE SYMPHONIQUE—
Orphee Ballet.

9.16: THIRD NEWS AND COMMENTARY.

10.0: Musical Items.

10.30: CLOSE.

2GB SYDNEY, 316 Metres

7.0: Breakfast Session, conducted by Mr. Len Maurice. Music. 7.8: Talk of the Town. Call-up for Employment. 7.15: Music. 9.0: Talk to Boys by Uncle Frank. 9.15: Morning Musical Programme. 11.30: Close down. 12.15: Afternoon Musical Programme. 4.40: Entertainment Club Numbers. 4.45: Uncle George's Tiny Tots' Session.

EVENING SESSION

5.0: Birthday Calls and Songs by Uncle George and Bimbo.

6.45: Music.

7.0: Motor Session, conducted by Mr. Fred Berry.

7.15: Music.

8.0: The Regent Theatre Orchestra. Overture.

8.10: Musical Programme.

10.0: Dance Music from Smith's Oriental Cafe by Jimmy Davidson and his band.

11.26: 2GB Good-night Song.

11.30: Close down.

2UW SYDNEY, 267 Metres

Day Sessions as usual.

5.15: CHILDREN'S SESSION, conducted by THE PROFESSOR.

5.58: MIDSHIPMAN BOB BREEZY.

6.0: DINNER MUSIC.

6.40: Sponsored Sporting Session.

7.0: Musical Programme.

8.0: A CAMEO CONCERT—
Orch.—Marche Tchaikowsky
Vocal—The Night Has a Thousand Eyes,
Lambert
Violin—Schon Rosmarin Kreisler
Organ—Songs My Mother Taught Me,
Dvorak
Vocal—I Know a Lovely Garden d'Hardelet
Piano—The Butterfly Grey
Orch.—Torch Dance German

8.15: IN LIGHTER VEIN WITH THE GREAT (No. 2)—
Philadelphia Symphony Orch.—El Capitan,
Sousa
Amelita Galli Curci—Kiss Me Again,
Herbert
Fritz Kreisler—Deep in My Heart, Dear,
Rowley
John McCormack—Just a Cottage Small,
Hanley
Victor Olof Salon Orch.—New Moon Selections Romberg
Amelita Galli Curci—A Kiss in the Dark,
Herbert
Tito Schipa—When You're in Love,
Donaldson
Philadelphia Symphony Orchestra—Stars and Stripes.

8.45: Petite Suite Debussy

9.5: "Plebald Philosophy" by Jack Win.

9.15: Selected Musical Programme.

10.28: To-morrow's Programme.

10.30: Close down.

2UE SYDNEY, 293 Metres

Day Sessions as usual.

12.30: Description of the Races by Mr. L. G. Melville.

EVENING SESSION

5.0: Children's Session—Auntie May and Uncle Simon. 5.40: Uncle Lionel and Ambrose. 6.30: Dinner Music. 7.0: Late Sporting Results. 7.30: Cricket Talk. 8.0: Description of the Greyhound Races from Harold Park by Mr. L. G. Melville. 8.10: Studio Programme. 10.0: Light Opera Selection, The Quaker Girl. 10.10: Music. 11.0: Close down.

2KY SYDNEY, 280 Metres

AFTERNOON SESSION

12.20: Racing Session, Rufe Naylor

EVENING SESSION

6.0: Children's Birthday Session. 6.30: Dinner Entertainment. 7.15: After-dinner Music. 7.30: Racing Revelations—Mr. R. Naylor. 7.45: Music. 8.1: Studio programme. 10.30: Closing Announcements.

2SM SYDNEY, 236 Metres

Day Sessions as usual.

5.30: Children's Session—Uncle Tom. 6.30: Dinner Session. 7.15: After-dinner Entertainment. 7.45: Cricket Talk—Stan McCabe. 8.0: From the Croydon Dance Palais—Dance Music—Theo Walters. 11.0: Close.

3LO MELBOURNE, 375 Metres

EARLY MORNING SESSION

7.1: Shipping. 7.2: Physical Exercises to Music. 7.10: Morning Music. 7.37: "Brother Bill's" Pick-me-up—"Seven for Sixpence." 7.40 to 8.15 a.m.: As on Tuesday.

MORNING SESSION

10.30: Current Happenings in Sport, by Eric Welch. 10.45: Music. 11.0: Express Train Information. 11.3: Music. 11.45: Melbourne Stock Exchange. 11.48: Music. 12.10: News. 12.30: Close.

MIDDAY SESSION

1.0: Stock Exchange Information 1.15: Music.

AFTERNOON SESSION

2.0: During the afternoon Eric Welch will describe the Epsom Turf Club's Races—Two-year-old Handicap, 5 furlongs less 20 yards; Novice Handicap, 6 furlongs; Epsom Plate, 6 furlongs; Epsom Purse, 1½ mile; Epsom Handicap, 1¼ miles; Welter Mile. Sporting results, including progress scores in the Cricket Match, England versus Country Team, played at Bendigo, will be broadcast as they come to hand, and repeated every half-hour. 5.0: Close.

CHILDREN'S CORNER

5.45: Here is a story about a Queen who couldn't bake gingerbread nuts, and a King who couldn't play the Jew's Harp. Miss Alva Hattenbach is going to tell the story. And then Mr. Ernest Kopke has promised a little concert of songs to the accompaniment of the Spanish guitar.

EVENING SESSION

6.30: COUNTRYMAN'S SESSION.
7.2: ALL SPORTING RESULTS.
7.3: Results of Women's Sports.
7.35: British Official Wireless News.
7.40: News.
7.45: ESPERANTO—Mr. R. R. RAWSON.

NIGHT SESSION

8.0: A NON-BROMIDE REVIEW. (See 2FC Programme.)
10.30: WEATHER, Etc.
10.35: DANCE MUSIC by WIRELESS DANCE ORCHESTRA.
11.30: Close.

3AR MELBOURNE, 492 Metres

MORNING SESSION

8.15: Thirty Minutes' Melody. 8.45: Weather. 8.50: Music. 9.1: News. 9.5: Music. 9.17: Weather. 9.18: Music. 10.1: British Official Wireless News. 10.15: Music. 10.45: Daily Broadcast Service. 11.0: Close.

MIDDAY SESSION

12.1: Music. 1.15: At Home and Abroad, by "The Watchman." 1.30: Music.

AFTERNOON SESSION

2.1: At the Edge o' Beyond—"Mermaids on the Menu," B. C. Ryder, F.R.G.S. 2.15: Music.

THE RADIO MATINEE

3.0: International Vaudeville—A Programme of Dance Orchestras, Comedians, and Vocalists who have charmed the world. Note: During the afternoon Progress Scores in the Cricket Match, England versus Country Team, played at Bendigo, will be broadcast as they come to hand. 4.30: TALES OF TERROR TACTFULLY RETOLD—"Unexpected Endings," J. P. Quaine. 4.45: Music. 5.30: Weather. 5.45: Close.

EVENING SESSION

6.15: DINNER MUSIC.
7.30: Music.
7.45: A WEEKLY FEATURE—Latest Musical Releases.

NIGHT SESSION

8.0: AUSTRAL BRASS BAND. Conductor: HARRY SHUGG—
Overture, Light Cavalry Suppe
March, The Standard of St. George Alford
8.10: JAMES RILEY, Tenor—
My Song is of the Sturdy North German
Serenata Toselli
8.17: CONSTANCE PETHER, Flute—
Suite: Allegretto Godard
Idyle Godard
Valse Godard
8.23: NEWSTEAD RUSH, Baritone—
The Lute Player Allitsen
London Town German
8.30: AUSTRAL BRASS BAND—
Selection, Showboat Kern
8.40: THE ORION TRIO in a Half-hour of Popular Music, which will include INTRODUCTION (Pagliacci), modulating to: ORION TRIO. Just a Song at Twilight; Violin Solo, The Old Refrain (Kreisler); Piano Solo, Russian Dance (Linda Phillips); Trio, Pal of Mine; Schg. The Swallows (Linda Phillips); Violin Solo, Fiddling the Fiddle (Rubinoff); Piano Solo, Lady Fingers, Piano Fantasy (Glogan-Zimmerman); Trio, Homing (Del Riego).
9.10: AUSTRAL BRASS BAND—
Humoresque, The Coster's Courtship Mackenzie
Spring Song Meadelssohn
9.18: A STORY told by CAPTAIN DONALD MACLEAN—"Bagdad on the Subway," New York through the eyes of O. Henry.
9.38: AUSTRAL BRASS BAND—
Fantasia, A Rustic Wedding Rimmer
9.48: JAMES RILEY, Tenor—
Love is Mine Gartner
Why Shouldn't I? Russell

9.55: CONSTANCE PETHER, Flute—
Serenade Herbert F. Sharpe
Bolero Herbert F. Sharpe
10.2: NEWSTEAD RUSH, Baritone—
Brian of Glen Aar Graham
The Sun God James
10.9: AUSTRAL BRASS BAND—
Oriental Phantasy: In a Chinese Temple Garden Kettelbey
10.20: News.
10.30: "MEDITATION" MUSIC.
12.0: CLOSE.

4QG BRISBANE, 395 Metres

EARLY MORNING SESSION

(Relayed to 4RK.)

MORNING, MIDDAY, AND AFTERNOON SESSION

(Relayed to 4RK, except from 11.53 to 12.0)

11.30: Music. 11.53: Social Notes. 12.1: Music. 1.0: News. The metropolitan race meetings will be described during the afternoon. Between events popular music will be broadcast from the studio. Progress scores in the match between England and a Victorian Country Team will be announced as they come to hand from Bendigo. 5.0: Close.

EARLY EVENING SESSION

(Relayed to 4RK, except from 7.45 p.m. to 8.0 p.m.)

6.0: For the Children—"Some Favorite Melodies." 6.20: Inter-State race results. 6.30: Music. 7.0: Mick Flanagan will review today's races. 7.15: General Sporting, including Sailing and Tennis, by Stan Phillips. 7.23: News. 7.30: Cricket notes, by J. H. Holdsworth. 7.45: Music.

NIGHT SESSION

(Relayed to 4RK.)

A POPULAR RECORDED PROGRAMME.
8.0: THE MIDNIGHT REVELLERS—
The Open Road Arr Somers
JACK McINTOSH, Cornetist—
Carnival of Venice Arr. Arban
WILL FYFFE, Comedian—
I'm the Landlord of the Inn Fyffe
THE THREE KEYS—
Somebody Loses, Somebody Wins Schwartz
Mood Indigo Bargard
THE REGAL INSTRUMENTAL TRIO—
Always Happy.
Sailor's Joy.

HARRY TORRANI, Yodeller—
Yodeller's Dream Girl Torrani
DAN HORNSBY AND HIS LION'S TRIO—
A Sailor's Sweetheart Burke
GRACE QUINE, Contralto—
Skylark, Skylark Rogers
Dolly Gray Barnes
ALBERT SANDLER'S ORCHESTRA—
Gypsy Moon Borganoff
Bird Songs at Eventide Coates
9.0: THE 4QG BOXING COMMENTATOR, JOE RIVERS, will describe THE MAIN WRESTLING CONTEST from THE BOHEMIA STADIUM.
10.15: News.
10.30: Dance Music by the Carlton Cabaret Orchestra.
11.0: MEDITATION MUSIC.
11.30: CLOSE.

5CL ADELAIDE, 411 Metres

EARLY MORNING SESSION

7.30: News. 7.40: Music. 8.1: News. 8.10: Music. 8.30: Close.

CONTINUOUS DAY

11.30: Music. 12.0: "Silvius" selections for today's races at Morphettville and Epsom. 12.6: Probable Starters for to-day's races at Epsom. 12.15: Music. 12.26: News. 12.36: Music. 1.0: During the afternoon a running description of the races at Morphettville will be broadcast by Arnold Treloar, interspersed with Cricket Scores, Epsom Race Results, and Musical Numbers from the Studio. 5.30: Close.

EVENING SESSION

6.0: Children's Session. 6.20: Children's Hospital Senior Birthday League. 6.22: Music. 6.45: Rev. G. S. Hale, B.A.—"Life's Little Problems." 7.0: News. 7.5: To-day's Cricket. 7.10: To-day's Tennis, by Ken Berriman. 7.15: All Sporting Results.

NIGHT SESSION

7.30: A NON-BROMIDE REVIEW (see 2FC programme).
10.0: SPORTING RESULTS.
10.10: Music.
10.15: News.
10.20: FROM 3LO, MELBOURNE—DANCE MUSIC by THE WIRELESS DANCE ORCHESTRA.
11.30: Close.

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SUNDAY JANUARY 8

8.0—NATIONAL PROGRAMME From 2FC, 2NC, 2CO, 3LO, 4QG, 4RK, 5CL, 5CK—8.0

LA TRAVIATA

The Opera by Verdi—See Story on Page 6



EVELYN HALL, ANNINA.

THE CAST

VIOLETTA VALERY,
SIGNORA CESARINA VALOBRA
GEORGIO GERMONT,
ALFREDO GERMONT, Signor Franco Isal
DOCTOR GRENVILLE, Signor Felice Mercadante
MARQUIS Rowell Bryden
BARON DUPOL Rowell Bryden
GASTON Roy Glasheen
FLORA Miss Gladys Carlyles
ANNINA Miss Evelyn Hall
CONDUCTOR, MAESTRO WANDO
ALDROVANDI.



ROWELL BRYDEN, Marquis and Baron Dupol.

ALTERNATIVE PROGRAMME OVERLEAF—DAY SCHEDULES BEGIN BELOW

2FC SYDNEY, 451 Metres
THE CHURCH HOUR
10.0: Announcements.
10.5: Studio Music (r.).
11.30: This morning's news from the "Sunday Sun," "Truth," and A.B.C. Service. British Official Wireless News.
10.45: Musical Items (r.).
11.0: FROM ST. ANDREW'S CATHEDRAL—MORNING SERVICE, conducted by THE DEAN OF SYDNEY.
12.15: FROM THE STUDIO—Studio Music (r.).
12.30: CLOSE.
THE AFTERNOON CONCERT
3.0: A SUNDAY AFTERNOON MUSICALE.
4.30: CLOSE.

EVENING PROGRAMME
(Relayed to 2NC Newcastle from 6.0 to 7.0, and from 8.30 to 10.30 p.m.)
6.0: A CELEBRITY RECITAL.
6.20: A RECITAL by FLORENT HOOGSTOEL, Violinist, arranged by THE MUSICAL ASSOCIATION OF NEW SOUTH WALES—
Pastorale Benda
The Merry Wives under Louis XV. Pugnani
Gavotte et Minuet Lully
Presto Standing
Adagio de Grassi
Berceuse Schumann
Prophet Bird Schumann
6.40: "SIDELIGHTS ON OLD SYDNEY."
7.0: A CELEBRITY RECITAL.
7.20: A PROGRAMME ARRANGED BY THE MUSICAL ASSOCIATION OF NEW SOUTH WALES. Featuring—
MYRTLE MEGGY, Pianiste, and DAISY RICHARDS, Violiniste, Playing: Sonata in D Minor for Piano and Violin
Allegro, Adagio, Un poco Presto e con Sentimento, Presto Agitato.
7.40: "LEAVES OF MEMORY."
And now we are to have the happy privilege of once again visiting our old friend the booklover. Once more he will entertain us with his vivid recollections, culled from pages of the books that line his library shelves. And once again will the characters he speaks of live and speak for our entertainment.
"LEAVES OF MEMORY" is adapted and performed by Ellis Price, assisted by PATRICIA MINCHIN.
8.0: A NATIONAL PROGRAMME.
(See above)

2BL SYDNEY, 351 Metres
MID-DAY SESSION
10.55: Announcements.
11.0: MORNING SERVICE FROM THE METHODIST CHURCH, Chatswood. Preacher, REV. WALLACE DEANE.
12.15: FROM THE STUDIO—Musical Items (r.).

12.30: News from "The Sunday Sun," "Truth," and A.B.C. Service, British Official Wireless Press.
12.50: A SPECIALLY ARRANGED PROGRAMME OF RECORDED VOCAL AND INSTRUMENTAL MUSIC.
1.45: FROM MY ARM CHAIR.
2.0: Studio Music (r.).
2.30: Mental and Musical Reflections.
3.0: CLOSE.
LATE AFTERNOON SESSION
4.30: A CELEBRITY RECITAL (r.).
4.45: DR. KEITH BARRY will tell Listeners about the "STORY BEHIND THE HYMN, 'A Prisoner's Romance.'"
5.0: CELEBRITY RECITAL (r.).
THE CHILDREN'S HOUR
6.0: THE CHILDREN'S SESSION, Conducted by "UNCLE STEVE."

EVENING SESSION
6.50: Musical Items (r.).
7.0: EVENING SERVICE FROM THE PITT-STREET CONGREGATIONAL CHURCH, Sydney. Preacher, REV. T. E. RUTH. Prelude: Andante, Mendelssohn; Hymn 743, "Now the Day is Over" (Gould); Doxology; Call to Worship; Invocation; Lord's Prayer; Hymn 490, "Nearer, My God, to Thee" (Sullivan); Scripture: Solo, "Come, Spirit of the Living God." Speaks, MISS NANCE CRUICKSHANK. Hymn 380, "O Saviour, I Have Naught to Plead" (Blow); Notices; Offertory; Anthem, "O Gladsome Light" (Sullivan); Offertory Prayer: Hymn 23, "Enduring Soul of all Our Life" (Gauntlett); Sermon, When We Must, REV. T. E. RUTH; Hymn 439, "Soldiers of the Cross, Obey" (Costa); Benediction; Postlude, Allegro, Peace. ORGANIST: MR. GARTH BARRACLOUGH.
ALTERNATIVE NATIONAL PROGRAMME.
(See overleaf.)

2CH SYDNEY, 248 Metres
MORNING SESSION
10.30: Celebrity Items. 11.0: Morning Service from Haberfeld Presbyterian Church. 12.30: Close.
AFTERNOON SESSION
2.30: Temperance Half-hour, conducted by Mr. Francis Wilson. 3.0: A Specially Arranged Programme of Recorded Music. 4.0: Brigadier Mary Bentley (Women's Social Secretary, Salvation Army) will give an Address. 4.30: "The Religious Question Box."
EARLY EVENING SESSION
5.0: Children's Session, conducted by Auntie Margaret. 5.45: Service for the Sick. 6.15: Close.
EVENING SESSION
7.0: EVENING SERVICE FROM STANMORE BAPTIST CHURCH—
Preacher, REV. V. J. TINSLEY.

Subject: "THE MASTERY OF LIFE."
Organist, WILL WHITE, Junr.
8.30: Studio Music.
9.15: THE C.R.E. SESSION FOR YOUTH WORKERS.
9.45: Studio Music.
9.58: "INSPIRATIONAL MESSAGE."
10.0: CLOSE.

2GB SYDNEY, 316 Metres
9.0: Music from Studio. 10.25: Organ Music from St. Alban's Church, Regent Street, Sydney. 10.30: Morning Service from St. Alban's Church, Regent Street, Sydney. Questions and Answers by Rev. Harold Morton. 12.0: Close down. 1.30: Afternoon Musical Programme. 4.0: Symphony Song and Story, conducted by Uncle Frank. 5.0: The Radio Sunday School. 5.20: The Cheer-up Community Singing Service for Children.
7.0: Address by Dr. A. L. Lewis. "Hollywood Personalities."
7.30: Address by Miss Clara M. Codd.
8.5: Address by Mr. Harold Morton.
9.30: Address by Mr. A. M. Pooley.
9.45: Music.
10.0: Slumber Music.
10.30: Close down.

2UW SYDNEY, 267 Metres
10.30: Orch.—Un Ballo in Maschero Overture, Verdi
10.35: Music—Selected items.
11.0: Symphony No. 2 in D Beethoven
11.30: Music—Selected items.
12.0: Vocal Selections—Les Cloches de Corneville Planquette
12.8: Music.
1.0: Close down.
3.0: Orch.—Mikado Selections Sullivan
3.8: Music—Selected items.
3.30: Quartette No. 10 (The Harp) Beethoven
3.45: Music—Selected items.
4.0: Piano—Sonata in B Flat Major . Chopin
4.25: Musical Programme
5.0: Choral Numbers by Famous Chors.
5.30: THE QUIET HOUR—
Orch.—From Mozart's Treasure Store, Urbach
Song—Serenade Strauss
Violin—Le Printemps Milhand
Trio—Excerpt from Trio No. 2, Tchaikowsky
Organ—Pastorale C. Franck
Song—Morgen Strauss
Orch.—Toccata and Fugue in D Minor, Bach
Violin—Concerto for Two Violins Bach
6.30: PIANO RECITAL—
Mephisto Valse Liszt
Moonlight Sonata Beethoven
7.0: Orch.—Manon—Ballet Music Massenet
7.10: Musical Programme.
7.30: Piano and Orchestra—Hungarian Fantasy.
7.45: Music—Selected items.

SUNDAY, January 8 (Contd.)

8.0—ALTERNATIVE PROGRAMME FROM 2BL—8.0

8.30 FROM BONDI BEACH BAND AUDITORIUM
Featuring the BONDI BEACH MILITARY BAND and ALFRED WILMORE and LAURENCE MACAULAY, Vocal Duets
BONDI BEACH MILITARY BAND Conductor, ALBERT H. BAILE
Overture, Oberon ... Weber
8.40 ALFRED WILMORE and LAURENCE MACAULAY (Vocal Duets)
The Battle Eve ... Bonheur
Arise, O Sun ... Day
8.47 BAND
Selection, Carmen ... Bizet
9.0 FROM THE STUDIO, Late Weather Forecast
9.2 Musical Items (r)
9.10 FROM THE BONDI BEACH BAND AUDITORIUM

BAND
Morceau, Invitation to the Valse Weber
9.18 ALFRED WILMORE (Tenor)
Duna ... McGill
LAURENCE MACAULAY (Basso)
Drake Goes West ... Sanderson
9.25 BAND
Suite, Peer Gynt ... Grieg
(a) Morning, Pastorale
(b) The Death of Ase
(c) Anitra's Dance
(d) Dance of the Imps
9.35 ALFRED WILMORE and LAURENCE MACAULAY
The Moon Hath Raised ... Benedict
In the Garden of My Heart ... Ball
9.42 BAND
Selection, Mikado ... Sullivan
March, The Great Divide ... Maurice
10.0 CLOSE

8.0: Orch.—Variations on a Theme by Haydn, Brahms
8.15: Musical Programme.
9.0: Operatic Session—Story and Music of Otello ... Verdi
10.0: Selected items.
10.30: Close down.

10.42: Bells of St. Paul's Cathedral.
10.45: DIVINE SERVICE from ST. PAUL'S CATHEDRAL.
Order of Service: Sentence; Exhortation; General Confession; Absolution; Lord's Prayer; Versicles and Responses; The Venite; Te Deum; Second Lesson; Benedictus; The Apostles' Creed; The Collects; Anthem; Prayer; Hymn. Sermon: THE ARCH-BISHOP. Hymn. Organist: DR. A. E. FLOYD.
12.15: Close.

2UE SYDNEY, 293 Metres
MORNING SESSION
9.30: Request Session. 10.0: Theatre Session. 10.30: Celebrity Recordings. 12.0: Close down.

AFTERNOON SESSION
3.0: PLEASANT SUNDAY AFTERNOON SERVICE from WESLEY CHURCH CENTRAL MISSION.
4.45: Close.
6.0: THE OPTIMISTS' CHORUS SINGERS, led by TREVOR MORRIS and "FREDERIC" in Children's Songs and Choruses.
6.55: Music.

EVENING SESSION
6.0: Bright Musical Programme. 7.0: Lecture. 7.45: Request Session. 8.0: Overture—I Pagliacci. 8.10: George Edwards, Entertainer. 8.20: Studio Programme. 10.0: Light Opera Selection—White Horse Inn. 10.10: Music. 10.45: Tranquillity Music. 11.0: Close Down.

EVENING SESSION
7.0: Inter-State Shipping News.
7.10: CITIES AND THEIR STORIES—"Manila," Mr. G. S. BROWNE, M.A.
7.30: Music.
7.35: THE NEWS BEHIND THE NEWS, by "THE WATCHMAN."

2KY SYDNEY, 280 Metres
Day Sessions as usual.

NIGHT SESSION
8.0: AN OPERATIC PROGRAMME. (See 2FO Programme.)
10.5: News.
10.15: THE EPILOGUE—"When Music Sounds."
10.30: Close.

EVENING SESSION
5.30: Social Economics. Question Box. C. E. Martin. 6.0: Request Programme, presented by H. Garden. 7.0: Entertainment, presented by Uncle Russ. 7.45: Dance Programme. 8.30: Feature Programme. 9.30: City Fashions Programme. 10.0: Request Programme. 11.0: Closing Announcements.

3AR MELBOURNE, 492 Metres
MORNING SESSION
11.0: Divine Service from Wesley Church, Lonsdale Street, Melbourne—Order of Service: Doxology, Invocation, Hymn, Scripture Reading, Solo, Notices, Anthem, Sermon (Rev. J. N. Cain), Anthem, Hymn, Benediction. Organist: Mr. W. G. James. 12.15: Selection of Leslie Stuart's Songs. The Band of H.M. Coldstream Guards; conductor, Lieutenant R. G. Evans. Les Million d'Arlequin (Drigo). Old Spanish Song (Louis Aubert). De Groot and the Piccadilly Orchestra. On the Banks of Allan Water (Horn). The Sweetest Flower That Blows (Hayley)—Edna Thornton, Contralto. Thousand and One Nights (Strauss). Legend (Rozycycki)—Niedzielski, Piano. Nocturne in C Sharp Minor (Tschaiakowsky). Minuet (Haydn)—Renee Chemet, Violin. Londonderry Air (Arr. Bridge), Emperor Quartette—Theme and Variation (Haydn)—Virtuoso String Quartette. 1.0: British Official Wireless News. 1.5: Poet and Peasant Overture—H.M. Coldstream Guards Band; conductor, Lieutenant R. G. Evans. Sarabande—Tam-

2SM SYDNEY, 236 Metres

11.0: High Mass—St. Mary's Basilica. 11.15: Sermon—St. Mary's Basilica. 12.15: St. Mary's. 1.0: Close.
6.1: Children's Session—Uncle Tom. 6.30: Father Walsh, S.J.—Lecturette. 6.50: Studio Music. 7.0: Father Meany—Lecturette. 8.0: Studio Music. 9.0: Sponsored Hour. 10.0: An Hour of Dance Music presented by Maria Dawson. 11.0: Close.

AFTERNOON SESSION
Relayed to 4RK.
3.0: A Programme by The Celeste Quartette. Among the Roses (Lake). Stabat Mater (Rossini). Two Guitars (Horlick). Valse Poudre (Popy). The Broken Melody (Van Biene). Musical Scenes from Switzerland (Langley). Gipsy Idyll (Piercy). Ah, Sweet Mystery of Life (Herbert). 4.30: Close.

3LO MELBOURNE, 375 Metres
MORNING SESSION
10.0: Latest Cricket Information.
10.5: Music.
10.20: Items of Interest.
10.22: Music.

bourin (Leclair-Sarasate). Concerto in G Major—Adagio (Mozart)—Yehudi Menuhin. Violin. Bohemian Dance (Smetana). Caprice Espagnole, Op 37 (Mozzkowski)—Wilhelm Backhaus, Piano. I Love You (Grieg). Romance (Rubinstein)—De Groot and His Orchestra. I Heard You Singing (Coates), Early in the Morning (Phillips)—Sylvia Cecil, Soprano. Air de Ballet (Chaminade), Phantom Melody (Ketelbey)—Sydney Gustard on the Organ of Trocadero Cinema, Liverpool. Dance of the Gnomes (Liszt), Love's Message (Schubert-Liszt)—Professor Egon Petri. Blonde or Brunette (Waldteufel), Tales of Autumn (Waldteufel)—Marek Weber and His Orchestra. The Isle of Mull (Arr. Robertson), Deep River (Mansfield)—Glasgow Orpheus Society; Conductor, Hugh. S. Robertson.

AFTERNOON SESSION
2.0: A Christmas Episode in France, 1918, told by Professor J. Alexander. 2.15: Music. 2.30: Arnold Colman in a Short Recital at the Organ. 3.0: Close.
4.30: Overture—The Flying Dutchman (Wagner)—Berlin State Opera Orchestra; conductor, Dr. Leo Blech. Casta Diva (Queen of Song), from "Norma" (Bellini)—Rosa Ponselle, Soprano. Piano Concerto in A Minor (Schumann), Allegro affettuoso, Intermezzo—Andante grazioso, Allegro vivace—Alfred Cortot, with the London Symphony Orchestra; conductor, Sir Landon Ronald. Komarinskaya (Glinka)—London Symphony Orchestra; conductor, Albert Coates. 5.30: Everybody's Problem—A Job for the Boy—Charles Nuttall. 5.45: A Short Programme of the Works of Sir Edward Elgar—Introduction and Allegro for String, Op. 47—John Barbirolli's Chamber Orchestra. Two Aria from "Caractacus"—(a) The Sword Song, (b) Oh, My Warriors—Peter Dawson, Bass-Baritone. Salut d'Amour—Isolde Menges, Violin. Chanson de Nuit, Chanson de Matin—London Symphony Orchestra; conductor, Sir Edward Elgar. 1. Sing the Birth—Royal Choral Society. 6.15: The Week's Good Cause. 6.24: Request numbers. 6.47: Music. 6.57: Church Bells.

EVENING SESSION
7.0: Divine Service from Independent Church, Melbourne—Order of Service: Doxology, Hymn, Prayer and Lord's Prayer, Scripture, Hymn, Prayer, Anthem, Notices, Collection, Hymn, Sermon (Rev. A. Penby Evans). Hymn. Benediction. Organist, Frederick J. Nott, Mus. Bac.

NIGHT SESSION
8.30: THE COLLINGWOOD CITIZENS' BAND. Conductor: FRANK JOHNSTON—March: Symphonic.
EILEEN CASTLES, Soprano—Ernani Involami ... Verdi
Swiss Echo ... Eckert
MADGE THOMAS—A Recital—"Manicaretto"—A Story of a Hunchback.
BRASS BAND—Grand Selection: La Reine de Saba ... Gounod
"BY THE FIRESIDE."
"SUNDOWNERS" QUARTETTE, with Arnold Colman at the State Organ.
BRASS BAND—Lyric Suite ... Brahms
EILEEN CASTLES, Soprano—Messaggero Amoroso, Arr Buzzi Peccia (After the Waltz Op. 64, by Chopin).
ARNOLD. COLMAN, at the State Organ—Minuet and Trio ... Faulkes
Solemn Melody ... Walford Davies
MADGE THOMAS—A Recital—A Ballad of John Nicholson ... Newbolt
BRASS BAND—Cornet Solo: Cleopatra. Soloist: A. FRANKS. March: On Tour.
9.58: Weather and Police.
10.0: CLOSE.

4QG BRISBANE, 395 Metres
MORNING SESSION

Relayed to 4RK.
10.30: City Hall Chimes and Music. 10.40: Weather data from the Commonwealth Weather Bureau Cable News (copyright). Australian Press Association and "Sun"-Herald News Service, Ltd. "Sunday Mail" News. 10.55: Organ Reproduction. 11.0: Divine Service will be broadcast from St. Barnabas' Church of England, Itchaca, Preacher, Canon D. J. Garland (Rural Dean of Brisbane). 12.15: Close.

AFTERNOON SESSION
Relayed to 4RK.
3.0: A Programme by The Celeste Quartette. Among the Roses (Lake). Stabat Mater (Rossini). Two Guitars (Horlick). Valse Poudre (Popy). The Broken Melody (Van Biene). Musical Scenes from Switzerland (Langley). Gipsy Idyll (Piercy). Ah, Sweet Mystery of Life (Herbert). 4.30: Close.

EARLY EVENING SESSION

Relayed to 4RK.
6.0: A Special Session for Children, arranged by the Council of Churches. 6.30: A Radio Feature—"The Seven Seas—Humor Afloat," Part 1. 7.0: Selected Recordings.

NIGHT SESSION

Relayed to 4RK
7.30: THE EVENING SERVICE will be broadcast from THE ALBERT STREET METHODIST CHURCH, BRISBANE.
8.30: An Operatic Programme (see 2FC programme).
10.30 Approx.: CLOSE.

5CL ADELAIDE,
411 Metres

MORNING SESSION

10.30: Message of Cheer. 10.31: Sabbath Chimes and Music. 11.0: Morning Service from Maughan Methodist Church. Preacher: Rev. S. Forsyth. 12.25: Items of Interest. 12.30: Close down.

EVENING SESSION

5.50: Birthday Greetings. 6.0: Service of Song, under the direction of Mrs. Lindsay Sowton. 6.30: Music. 6.50: From National Station, 5CK (6.50 to 8.20 p.m.)—Service from Scots Church, North Terrace. Preacher: Rev. N. L. D. Webster.

NIGHT SESSION

8.0: "LA TRAVIATA" (see 2FC).
9.55: News Session.
10.0: Close down.

Trends in Radio for 1933

(Continued From Page 17)

though these new valves are not yet released we have been favored with samples of them, and we might whisper that the outstanding job in the series is a special diode detector, like the 55, but fitted with a pentode amplifier in the audio section instead of the low-gain triode as in the 55. Naturally the actual gain in the detector is phenomenal. Of course, both of these receivers have already been built, and are at present undergoing tests, but we cannot give any definite guarantee as to exactly when they will appear.

THE SEASON'S PROSPECTS.

It is generally agreed that during 1933 radio is going to boom as never it boomed before. 1932 has been a remarkable year for both radio progress and radio sales, but with the returning general prosperity we anticipate a truly record year for all radio activities in 1933. As before we are going to spare no effort to see that the Australian public is supplied with receivers of the very highest quality. So we close this session with the usual wish that all readers and radio enthusiasts shall have a Happy New Year.

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RADIO TORCH or
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They do not deteriorate when not in use.
They have astonishing recuperative powers.
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They are free from battery noises, and give clear reception.

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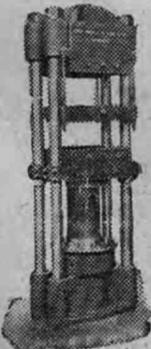
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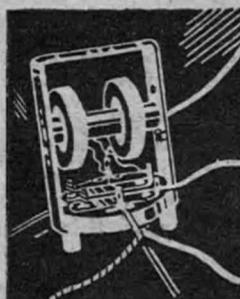
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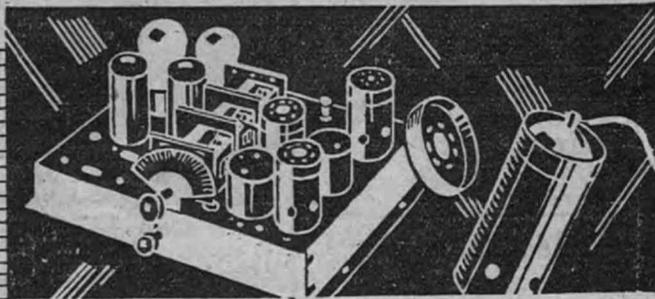
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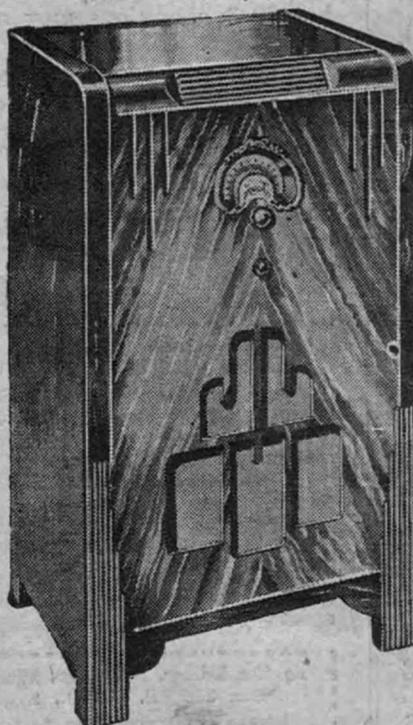
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DETAIL-BUILT is more than a phrase—it aptly describes the "Tasma" Radio Receiver and explains the outstanding performance which these new receivers give.

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Designed to take advantage of the superlative qualities of the new six-pin tubes, the 135 Model is a five-valve superheterodyne of remarkable efficiency. All Australian stations and New Zealand are within its easy reach, whilst selectivity is of a high order enabling separation of all stations. It's beauty of tone is in no small degree due to the special dynamic speaker which is built into the polished console—a triumph of the cabinetmaker's art.

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MANUFACTURED BY THOM & SMITH, DOWLING ST., SYDNEY

MONDAY JANUARY 9

8.0—NATIONAL PROGRAMME From 3LO, 2CO, 2FC, 2NC, 4QG, 4RK, 5CL 5CK—8.0

- 8.0 DOMINGO CAFFARO'S ARGENTINO BAND
 March, Grand Parade . . . Sartoris
 Tango, Asy es el Mundo . . . Canaro
- NEAPOLITAN DUO
 In Tenor and Baritone Duets, with String Accompaniment
 Santa Lucia Old Italian
 La Spagnola Di Chiara
- ARGENTINO BAND
 Encantadora—Bolero Gianni
 Tango, A Media Luz Donato
- KEN. MOUNTAIN
 A Mountain of Mirth
- NEAPOLITAN DUO
 With String Accompaniment
 Solo, Lolita Buzzi-Peccia
 Duo, Torna Sorriento De Curtis
- ARGENTINO BAND
 Intermezzo, Caucion Mora Del Barrio
 Zapateado Brasileiro Del Barrio
- KEN. MOUNTAIN
 A Mountain of Mirth
- ARGENTINO BAND
 Primevera De Caro
 La Veronica—Paso Doble Caffaro

8.50 INTERLUDE

- 9.0 LORD RICHARD IN THE PANTRY
 A Farce in 3 Acts
 By
 SYDNEY BLOW and DOUGLAS HOARE



DOMINGO
 CAFFARO
 and his
 ARGENTINO BAND
 in
 NEAPOLITAN
 AND SPANISH
 MELODIES

- CHARACTERS
 LORD RICHARD SANDRIDGE
 ARTHUR THOMPSON (*His Secretary*)
 CAPTAIN "TUBBY" BANNISTER
 CARTER (*Lord Richard's Manservant*)
 DETECTIVE-INSPECTOR BROWN (*from Scotland Yard*)
 EVELYN LOVEJOY
 LADY VIOLET ELLIOT
 COOK
 ROSE
 BRYAN
 GLADYS

Servants of Mrs. Gayford
 SYLVIA GAYFORD (*A Widow*)

WHERE IT HAPPENS

ACT ONE

Scene 1.—The Hall of Lord Richard's House, Lowndes Square, Saturday afternoon
 Scene 2.—The Same. Following Monday afternoon

ACT TWO

The Kitchen of the same House. Next day

ACT THREE

Same as Act 1. An Hour Later
 PRODUCTION, FRANK D. CLEWLOW

- 10.30 FROM THE STUDIO (Relayed to 2NC Newcastle)
 Late Official Weather Forecast
- 10.32 LATEST DANCE MUSIC (r.)
- 11.0 COMPLETION OF RELAY TO 2NC NEWCASTLE
- 11.30 CLOSE

ALTERNATIVE PROGRAMME OVERLEAF—DAY SCHEDULES BEGIN BELOW

2FC

SYDNEY,
 451 Metres

EARLY SESSION

(Relayed to 2NC, Newcastle.)

- 7.0: Big Ben. Early Rising Music (r.). Meteorological information for the man on the land.
 7.10: This morning's news from the "Daily Telegraph."
 7.15: Cables (copyright, from the Sun-Herald and Australian Press Association News Service.
 7.18: Studio Music (r.).
 7.30: A short daily commentary for the man on the land.
 7.40: Studio Music (r.).
 7.45: Mails and Shipping.
 7.48: What is on to-day?
 7.50: Music from the Studio (r.).
 8.15: CLOSE (Completion of Relay to 2NC, Newcastle).

MORNING SESSION

Relayed to 2NC, Newcastle, from 10.40 a.m.)

- 10.30: Announcements.
 10.32: G. VERN BARNETT AT THE STUDIO ORGAN:
 Epitholane
 Canzona in F
 Repos d'Amour
 Alumbat
 10.45: MORNING DEVOTION: Conducted by Rev. F. T. Night.
 11.0: G. VERN BARNETT AT THE STUDIO ORGAN:
 Berceuse
 Toccata

- Nocturne from "Midsummer Night's Dream" Mendelssohn
 March in G Luard Selby
 11.15: Musical Items (r.).
 12.0: Big Ben. Stock Exchange and Metal Quotations.
 12.5: Studio Music (r.).
 12.15: Metropolitan forecast and weather synopsis. Special Produce Market Session for the man on the land, supplied by the State Marketing Board.
 12.30: Close (Completion of Relay to 2NC, Newcastle).

THE LUNCH HOUR

- NOTE: Scores in the International Cricket Match, ENGLAND v. COUNTRY, played at Bendigo, will be given at Luncheon, Tea, and Stumps Drawn, and at the fall of each wicket.
 1.0: LUNCH HOUR MUSIC.
 1.57: Sectional Weather Forecast.
 2.0: Programme Announcements.
 2.2: Stock Exchange, second call.
 2.4: A Glance at the afternoon "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
 2.10: Musical Items (r.).

THE RADIO MATINEE

(Relayed to 2NC, Newcastle, from 3.45 to 4.30 p.m.)

- 3.30: HORACE KEATS' INSTRUMENTAL TRIO:
 Serenade
 My Lady Chlo
 Gavotte
 2.40: OLGA LE GRAY (Mezzo):
 Gipsy Moon
 After To-night we Say Good-bye

- 2.47: HARP SOLOS (r.).
 2.53: TENOR SOLOS BY RICHARD CROOKS (r.).
 3.0: HORACE KEATS' INSTRUMENTAL TRIO:
 Tauber Successes—
 Springtime Reminds Me of You (Rotter)
 Gipsy Moon
 When Yuba plays the Rumba, Hupfield
 3.10: MELODIES OF OLD ERIN (r.)
 3.22: OLGA LE GRAY, Soprano:
 Pagan Moon
 Life is Just a Bowl of
 Cherries
 3.30: HORACE KEATS' INSTRUMENTAL TRIO:
 Meditation
 Love Song
 Pas de Amphores
 3.40: VOCAL DUET (r.).
 3.45: "THE ROMANCE OF TEA," a talk by Mr. ALEX. A. BEER.
 4.0: MELODIES OF THE MOMENT (r.).
 4.28: Stock Exchange, third call.
 4.30: CLOSE.

EARLY EVENING SESSION

- (Relayed to 2NC, Newcastle, from 5.45 to 6.45 and from 7.5 to 8 p.m.)
 5.45: THE CHILDREN'S HOUR, conducted by "BOBBY ELUEGUM."
 A STRAY SUNBEAM:
 "I want to live so I can say,
 I helped someone along the way;
 I want to be a friend to all,
 And ready at another's call."
 5.47: "All about Frogs and Golliwogs," a story of the little fish-like creatures that put on four legs, absorb their tails, exchange their gills for lungs, and learn to live on land as well as in the water.
 6.0: AUNT EILY tells about fairies on holidays.
 6.15: Many Happies.

MONDAY, January 9 (Contd.)

8.0—ALTERNATIVE PROGRAMME FROM 2BL—8.0

8.0 UNIVERSITY EXTENSION BOARD SERIES OF LECTURES
MISS JANET MITCHELL will tell listeners about MANCHURIA, THE VOLCANO OF ASIA—No. 2, The Conflict of Interests; China, Japan, and the Soviet.

8.30: FROM ROCKDALE TOWN HALL
COMMUNITY SINGING, conducted by FRANK HATHERLEY, assisted by JOHN

NOTE: At approximately 9.0 from Studio Late Weather Forecast.

SUPPORTING ARTISTS

THE BALALAIKA ORCHESTRA (*Appearing in Costume*)

WITH SENIA CHOSTIAKOFF (*as Soloist*)

Russian March *Shatroff*
Waltz, Sounds from the Far East
Arr. Shatroff

Selection from Russian Folk Song
Arr. Voronoff

SENIA CHOSTIAKOFF (*Tenor*) and Orchestra

(a) Down the Petersky . . . *Arr. Saroff*
(b) Song of the Volga Boatmen
Arr. Saroff

ORCHESTRA

Shining Moon *Arr. Andreeff*
Balalaika Solo by MR. VORONOFF
Two Polkas *Arr. Voronoff*
Russian National Dance by Two Members of the Balalaika Orchestra

SENIA CHOSTIAKOFF and ORCHESTRA

(a) Evening Bells *Arr. Saroff*
(b) Dark Eyes, Russian Gypsy Song
Arr. Strokz

ORCHESTRA

Polianka *Arr. Voronoff*
Mazurka *Wieniauski*
The Red Sarafan *Varlamoff*

SENIA CHOSTIAKOFF (*Soloist*) and THE BLACK AND WHITE DUO (*Entertainers*)

10.27 FROM THE STUDIO

Late News from the Sun

10.30 CLOSE

1.0: Afternoon News from the "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
1.8: Sectional Weather Forecast.
1.11: Radio Rhythm (r.).
1.35: Studio Music (r.).
2.0: What's on the Air This Afternoon?
2.2: THIS AFTERNOON'S STORY.

AFTERNOON ENTERTAINMENT

(Relayed to 2NC, Newcastle, from 2.30 to 3.45 p.m.)

2.30: "AN ORCHESTRAL SUITE" (r.).
2.45: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION SESSION, Conducted by MISS GWEN VARLEY.
"C.W.A. NEWS," by MISS FERGUSON. Musical Items (r.).
"HOME GARDENING"—A Talk by MRS. T. J. HOWELL. A Musical Interlude (r.).
"ART—ITS EMOTIONAL AND DECORATIVE VALUE," by MRS. A. T. ANDERSON.
3.45: "IN LIGHTER VEIN"—AN AFTERNOON MUSICAL.
4.45: THE TRADE HOUR DEMONSTRATION MUSIC.
5.40: Weather Information.
5.45: CLOSE

THE DINNER HOUR

6.15: DINNER MUSIC.
7.0: MR. CHARLES LLOYD-JONES (Chairman of the Australian Broadcasting Commission), on behalf of the Citizens of Sydney Organising Committee, will speak in connection with "SYDNEY FESTIVAL WEEK."
7.7: DINNER MUSIC.
7.45: Musical Items (r.).
7.58: What's on the Air To-night?

EVENING PROGRAMME

(See above)

2CH SYDNEY, 248 Metres

Day sessions as usual.

EARLY EVENING SESSION

5.10: "THE FAIRY GODMOTHER."
5.45: Musical Items.
5.55: "THE HELLO MAN."
6.40: JACK HYLTON AND HIS ORCHESTRA—Good Old Dances.
6.48: AL SIEGEL, Novelty Pianist—Whippin' the Ivories.
6.51: EVERETT MARSHALL, Baritone—Good-bye, Old Pals.
6.54: ANNOUNCEMENT.
6.56: JASCHA HEIFITZ, Violinist—Ronda *Schubert*

7.0: R.K.O. RADIO MUSICAL AND MOVIE NEWS SESSION.
7.30: EDITH LORAND ORCHESTRA—Johann Strauss Fantasia.
7.38: CHORUS AND THE LONDON SYMPHONY ORCHESTRA—
We Are the Music Makers.
7.42: BLACK DIAMONDS BAND—Merry Wives of Windsor *Nicolaï*
7.50: ANNOUNCEMENTS.
7.54: EMIL VELAZCO, Organist—The Swallow.
7.57: GLADYS MONCRIEFF, Soprano—Come Back to Me.

EVENING SESSION

8.0: WE PRESENT THE 2CH DANCE NIGHT, featuring Leading Bands and Associate Artists.
9.15: THIRD NEWS AND COMMENTARY.
10.0: Musical Item.
10.5: AN ADDRESS.
10.25: Musical Item.
10.30: CLOSE.

2GB SYDNEY, 316 Metres

Day Sessions as usual.

EVENING SESSION

5.0: Birthday Calls and Songs by Uncle George and Bimbo.
6.45: Music.
7.0: Fifteen Minutes, Gil Dech and Orchestra.
7.15: Derek Oldham (Tenor) and Winnie Melville (Soprano)—Your Eyes; My Song of Love; Derek Oldham—Violets.
7.30: 2GB Orchestra.
7.40: Robert Radford (Bass)—In Cellar Cool.
7.45: Marek Weber and his Orchestra—Blonde or Brunette; Blumenlied.
7.55: Van and Schenck (Comedians)—Does My Baby Love.
8.0: 2GB Orchestra.
8.10: Des, Tooley.
8.20: Rio Grande Band—Valentine; Dites moi mere.
8.30: Symphony Orchestra—Chanson de Matin; Chanson de Nuit.
8.40: Des Tooley.
8.50: 2GB Orchestra.
9.0: Len Maurice and Jack Lumsdalne.
9.15: 2GB Orchestra.
9.20: Jesse Crawford, Wurlitzer Organist—Little White Lies; Tiptoe thru' the Tulips with Me; Singin' in the Rain.
9.35: Symphony Orchestra—Russian and Ludmilla.
9.40: Peter Dawson (bass-baritone)—Vulcan's Song; Brothers of the Empire.
9.50: 2GB Orchestra.
10.0: Entertainment Club Numbers.
10.8: Instrumental Music.
11.26: 2GB Good-night Song.
11.30: Close.

2UW SYDNEY, 267 Metres

Day Sessions as usual.

5.0: Musical Programme.
5.15: CHILDREN'S SESSION, conducted by JILL AND THE PROFESSOR.
5.58: MIDSHPMAN BOB BREEZY.
6.3: DINNER MUSIC.
6.40: Music and request items.
7.30: Musical Programme, including "Viennese Nights" and "Bringing Up Father."
8.0: A CELEBRITY PROGRAMME.
8.15: GEMS OF FOLK SONGS—
The Lass with the Delicate Air . . . *Arne*
The Harp That Once Through Tara's Halls, All Through the Night *Welsh*
The Road to the Isles
8.30: Gilbert and Sullivan Production—"Yeomen of the Guard"—Second Part.
9.0: CLIFFORD ARNOLD at the Piano.
9.15: A SHORT DUET RECITAL—
Fritz and Hugo Kriesler—Miniature Viennese March.
Dora Labette and Hubert Eisdell—Very Own Pierrette.
De Groot and Terence Casey—Cavatina, *Raff*
Geo. Metaxa and Peggy Wood—I'll See You Again.
Edgar Furch'd and Robert Lindholm—Waters of Minnetonka.
Derek Oldham and Winnie Melville—Your Eyes.
Fritz and Hugo Kriesler—Syncoation.
9.45: VIOLIN RECITAL by LEO CHERNIAVSKY
Spanish Serenade *Chaminade*
La Borrachita *Esperon*
From the Canbrake *Gardner*
Waltz in A Minor *Brahms*
10.0: The Casse Noisette Suite . . *Tchaikowsky*
10.28: To-morrow's Programme.
10.30: Close down.

2UE SYDNEY, 293 Metres

Day Sessions as usual.

EVENING SESSION

5.0: Children's Session—Auntie May and Uncle Simon. 5.40: Uncle Lionel and Ambrose. 6.30:

2FC—Continued

6.30: Serial Time.
6.45: "Sleep Tight."
(Completion of Relay to 2NC, Newcastle.)
BOY SCOUTS AND GIRL GUIDES' ASSOCIATION.
7.5: (Relayed to 2NC, Newcastle) A.B.C. Sporting Service.
7.15: Weather Report, Stock Exchange, Wool Sales, Wheat Markets, Homebush Markets, Truck Bookings, General Market Reports.
7.45: News Service from "The Sun." Additional news from the A.B.C. Service. Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
7.58: To-night's Programme.
(Completion of Relay to 2NC, Newcastle.)

EVENING PROGRAMME

(See panel on previous page)

2BL SYDNEY, 351 Metres

OPENING SESSION

8.15: G.P.O. Chimes. A Musical Interlude (r.).
8.40: Meteorological Data for the Country.
8.45: Mails and Shipping Information.
8.50: Memory Melodies (r.).
9.0: THIS MORNING'S STORY.
9.30: Melodies Grave and Gay (r.).
9.45: Moments Musical (r.).
10.5: News from the "Daily Telegraph."
10.8: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
10.10: Studio Music (r.).
10.15: A RACING TALK BY THE A.B.C. RACING OBSERVER—M. A. FERRY.
10.30: Musical Items (r.).
10.35: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION SESSION—Conducted by Miss Gwen Varley. "Choosing a Career for Your Daughter," by Miss Gwen Varley.
11.0: G.P.O. Chimes. CLOSE.

MID-DAY SESSION

NOTE.—Scores in the INTERNATIONAL CRICKET MATCH, ENGLAND v. COUNTRY (played at Bendigo) will be given at Lunch, Tea, Stumps Drawn, and at the fall of each wicket.
12.0: G.P.O. Chimes and Announcements, Metronomitan Forecast and Weather Synopsis.
12.2: Studio Music (r.).
12.30: LUNCH-HOUR MUSIC.

Dinner Music. 7.0: Motorists' Talk. 7.15: Studio Programme. 8.0 p.m.: Overture, Bohemian Girl. 8.15: Old-time Dance Night from the Aust. Hall; Music by Rex Shaw's Orch.; M.C. Si Meredith. 11.0: Close down.

2KY SYDNEY, 280 Metres

Day Sessions as usual.

EVENING SESSION

5.0: Uncle John and Jerry. 6.0: Children's Birthday Session. 6.30: Dinner Entertainment. 7.15: Dinner Music. 7.40: A Talk on the Garden, Mr. G. L. Gellatly. 8.1: Orchestral Selections. 8.10: Keith Collins at the Piano. 8.15: A Talk on International and Australian Topics, Aid. J. S. Garden. 8.45: Specially arranged Studio Programme. 9.10: Keith Collins at the Piano. 9.15: Music. 10.30: Closing Announcements.

2SM SYDNEY, 236 Metres

Day Sessions as usual.

5.0: Children's Session—Auntie Goodie. 5.30: Uncle Tom. 6.1: Dinner Session. 6.45: Social Chatter: Maria Dawson. 7.0: Studio Music. 7.15: After Dinner Entertainment. 7.45: Studio Music. 8.0: Evening Session. 8.10: Studio Music. 10.0: Composing Music. 10.30: Close.

3LO MELBOURNE, 375 Metres

EARLY MORNING SESSION

7.1: Shipping. 7.3: Physical Exercises to Music. 7.10: Morning Music. 7.37: "Brother Bill's" Pick-me-up—"If, then do it." 7.40: Mail notices. 7.42: What's on to-day. 7.45: Market reports. 7.53: Weather. 7.55: News. 8.1: Arrival times of Express Trains. 8.2: Music. 8.15: Close.

MORNING SESSION

10.30: Current Happenings in Sport, by Mel. Morris. 10.45: Music. 11.45: Melbourne Stock Exchange. 11.48: Music. 12.10: News. 12.30: Close.

MIDDAY SESSION

1.0: Stock Exchange Information. 1.15: Music.

WOMEN'S SESSION

2.0: Advice to the Home Gardener—"Ericas," Mr. A. Antonio. 2.15: Music. 2.30: Beauty and the Adventure of Living, Miss Madge Thomas. 2.45: Music.

THE RADIO MATINEE

During the afternoon progress scores in the Cricket Match, England versus Country Team, played at Bendigo, will be broadcast. 3.0: Ariel Concert Band—March, "The New Colonial" (Hall); Overture, Orpheus aux Enfers (Offenbach). 3.8: George Nicholls, Baritone—Two songs by Melbourne composers, Bells and Hobbies (Horace Gleason). The Quiet Boom (George Nicholls). 3.14: Rebie Saunders—Humorous Monologues. 3.20: Band—Selection, Les Cloches de Corneville (Planquette). 3.30: Gladys Lewis, Mezzo-Soprano—Pale Moon (Knight Logan). Lackaday (Ernest Crampton). 3.36: Mark Solomon and his Banjo. 3.40: Band—Waltz, Casino Tanze (Gungl). 3.48: George Nicholls, Baritone—A Hundred Moonlit Miles Away (Ivey). God Touched the Rose (Mary Helen Brown). 3.52: Mark Solomon and his Banjo. 3.55: Rebie Saunders—Humorous Monologues. 4.1: Band—Novellette, Lords and Ladies (Salzer). Popular Fox-trot. 4.9: Gladys Lewis, Mezzo-Soprano—Little Brown Owl (Sanderson). Love's a Merchant (Molly Carew). 4.15: Mark Solomon and his Banjo. 4.21: Band—Selection, Cavalcade (Coward). 4.30: Close.

THE CHILDREN'S CORNER

5.45: "Billy Bunnie" is going to tell you more. Then comes Miss Phoebe Barton with some of her pretty songs. Mr. Blamire Young is coming to talk about a very famous and very ancient painting called the Mona Lisa. It is a portrait of a smiling lady. And everyone says it is the strangest smile possible.

EVENING SESSION

6.30: COUNTRYMAN'S SESSION. 7.2: ALL SPORTING RESULTS. 7.21: Results of Women's Sports. 7.25: The Official Weekly Report of the Stock Exchange of Melbourne. 7.35: Music. 7.40: News. 7.45: INTERNATIONAL AFFAIRS—A Gazette of World Relations, Dr. G. L. WOOD, M.A.

NIGHT SESSION

8.0: (See 2FC Programme.) 10.30: WEATHER, Etc. 10.33: DANCE MUSIC by WIRELESS DANCE ORCHESTRA. 11.30: Close.

3AR MELBOURNE, 492 Metres

MORNING SESSION

8.15: Thirty Minutes' Melody. 8.45: Weather. 8.50: Music. 9.1: News. 9.5: Music. 9.17: Melbourne Weather Conditions. 9.18: Music. 10.0: Announcements. 10.15: Music. 10.30: Selections on the Grand Organ. 10.45: The Daily Broadcast Service. 11.0: Close.

MIDDAY SESSION

12.1: Music. 1.15: At Home and Abroad, by "The Watchman." 1.30: Music.

AFTERNOON SESSION

Note.—During the afternoon progress scores in Cricket Match, England versus a Country Team, played at Bendigo, will be given as they come to hand.

2.1: Grand Opera, "Carmen (Bizet). Act 1. Sung in French. Cast—Carmen, Raymonde Visconti. Mezzo-Soprano; Micaela, Martha Nespoulous. Soprano; Frasquita, Andree Vavon; Mercedes, Andree Bernadette; Don Jose, Georges Thill. Tenor; Escamillo, M. Guenot, Baritone; Dancaire, M. Rousset; Remendado, M. Mathyl. Chorus of Girls, Soldiers, etc. Accompaniment by Orchestre Symphonique of Paris, Conductor Elie Cohen. 2.36: Association des Concerts. Poulet Orchestra, conducted by M. Gaston Poulet. Redemption, Meaceau Symphonique (Cesar Franck).

EDUCATIONAL SESSION

3.0: The Week's Health Talk. "Sunstroke." Dr. J. Dale, Melbourne Medical Officer of Health. 3.15: Music. 3.30: The International Club (under the auspices of the Bureau of Social and International Affairs), Miss Nora Collisson. 3.45: Music. 5.30: Weather and Shipping. 5.45: Close.

EVENING SESSION

6.15: Dinner Music. 7.30: Love Stories of the Composers. Schubert's Unfinished Romance, Miss Frances Fraser. 7.50: Music.

NIGHT SESSION

8.0: MASTERPIECES OF SHORT STORY—Chosen from the World's Best, by PROFESSOR E. H. C. OLIPHANT.

8.30: PROGRAMME arranged by MUSIC TEACHERS' ASSOCIATION.

Trio in B Flat, Op. 97 Beethoven Allegro Moderato. Scherzo Allegro.

RITA HOPE TRIO. Come Again John Bowland Now Sleeps the Crimson Petal, Roger Quilter

Over the Mountain, . . . Arr. Roger Quilter To a Water Lily Edward Grieg

MISS MOLLY WARDEN, Soprano. Trio in B Flat, Op. 97 Beethoven

Andante Cantabile. Allegro Moderato.

RITA HOPE TRIO. Les Seuilles sont Mortes Gustave Doret Aubade, from Le Roi D'ys Edward Lalo

Berceuse Rhene-Baton MISS MOLLY WARDEN, Soprano.

9.20: Interlude.

9.28: WIRELESS DANCE ORCHESTRA—Latest Dance Numbers.

9.34: "MOONSHINE AND HONEYSUCKLE"—In "Novel Nonsense."

9.41: DANCE ORCHESTRA—A Novelty Number.

9.47: ALAN BARRY, Baritone—When You Wore a Gingham Gown, Gilbert My Mother's Lullaby Johnson

9.53: BERN. DUGGAN, Novelty Pianoforte—Spring Fever Bloom

9.56: "MOONSHINE AND HONEYSUCKLE"—In More Novel Nonsense.

10.2: ALAN BARRY, Baritone—Close Your Eyes Tennent Hummin' to Myself Fain

10.9: DANCE ORCHESTRA—Latest Dance Numbers.

10.15: NEWS. 10.30: CLOSE.

4QG BRISBANE, 395 Metres

EARLY MORNING SESSION

(Relayed to 4RK.)

7.30: The Chimes and music. 7.34: Weather data from the Commonwealth Weather Bureau. Cable news (copyright); Australian Press Association, and "Sun"—"Herald" News Service, Ltd. First general news from the "Courier." Comments on news. What's on to-day. Features from the radio programmes. Stumps drawn scores. 8.0: Music. 8.30: Close.

MORNING AND MIDDAY SESSION

(Relayed to 4RK except from 11.23 to 11.30.) 11.0: The Daily Broadcast Service. 11.10: The Morning Musicale. 11.23: Social notes from the metropolitan daily newspapers. 11.30:

Studio melodies. 11.40: A talk arranged by the National Council of Women—"Kinder-ten Work as a Career for Our Girls," by Mrs. Sharland. 11.55: What's on to-day. 12.0: The City Hall Chimes. 12.1: Musical moments by "The Celeste Quartette." 1.0: Market reports, weather data, second general news from the "Courier." 1.30: Late luncheon music. International Cricket, England v. Victorian Country—Progress scores in the match between England and a Victorian Country Team will be announced as they come to hand from Bendigo. 2.0: Close.

AFTERNOON SESSION

(Relayed to 4RK.)

3.0: Famous Jazz Bands. International Cricket, England v. Victorian Country—Progress scores in the match between England and a Victorian Country Team will be announced as they come to hand from Bendigo. 4.30: Close.

EARLY EVENING SESSION

(Relayed to 4RK except from 6.20 to 6.30.)

6.0: For the children—A Japanese Story: "The Girl in the Moon," by Professor Sherbert. 6.20: Shipping news; trains information; mail notices. 6.30: Early dinner music. 6.45: Late market reports. General commercial news. Late weather data. 7.0: Late dinner music. 7.23: First general news from the "Telegraph." 7.30: A Talk on Books by Mr. J. Doyle. 7.45: General sporting notes, including stumps drawn scores. 7.59: Eastern Australian Standard Time Signals.

NIGHT SESSION

(Relayed to 4RK.)

8.0: A NATIONAL PROGRAMME from 3LO, MELBOURNE.

PART 1.—THE ARGENTINE BAND. PART 2.—A PLAY: "LORD RICHARD IN THE PANTRY."

10.15: FINAL NEWS BULLETIN—Weather data; cable news (copyright); "Sun"—"Herald" News Service, Ltd., and Australian Press Association; second general news from the "Telegraph."

10.30: BERT TUCKER AND THE CARLTON JAZZ BAND—Dance music.

11.0: Close.

5CL ADELAIDE, 411 Metres

EARLY MORNING SESSION

7.30: News. Weather Forecast. 7.40: Music. 8.1: Shipping, Mail, Train, Weather, and Market Reports. 8.10: Music. 8.30: Close down.

MORNING AND MIDDAY SESSION

CRICKET.

ENGLAND v. COUNTRY, at Bendigo. Scores at lunch, tea, and stumps.

11.0: Daily Broadcast Service. 11.10: Morning Melodies. 11.28: Sporting Fixtures. 11.30: Homecrafts, by "Suzette." 11.45: Latest Recordings. 12.15: Stock Exchange. 12.19: News. Weather, Grain, and River Reports. 1.0: Music. 1.5: News Items. 1.15: Music. 2.0: Close down.

AFTERNOON SESSION

3.0: Topical Gleanings, by "Lady Tulliver." 3.15: Matinee Programme. 4.30: Close down.

EVENING SESSION

5.50: Birthday Greetings. 6.0: "Auntie Peggy" and "Big Brother." 6.20: Children's Hospital Senior Birthday League. 6.22: Dinner Music. 6.50: Stock Exchange. 7.0: News Service. 7.5: Sporting Service. 7.10: The 5CL Twinkler Boys' Club, conducted by "The Twinkler" (Mr. F. J. Mills).

NIGHT SESSION

8.0: ON WITH THE SHOW—A POT-POURRI OF POPULAR THEMES AND MELODIES, presented by RALPH DALY, Baritone.

TOM KING, Pianist. HARRY HUTCHINS, Violinist. LYNNIE GILBERT, Soprano. DAVE HOWARD, Entertainer.

THE NIGHTLARKS MALE QUARTETTE and THE FAMOUS BRYANT'S BELLRINGERS.

ORDER OF PRESENTATION.

1. THE BRYANT'S BELLRINGERS in Silver Organ Chimes.
2. RALPH DALY, Baritone.
3. HARRY HUTCHINS, Violinist.
4. THE NIGHTLARKS MALE QUARTETTE.
5. LYNNIE GILBERT, Soprano.
6. TOM KING, Pianist.
7. THE NIGHTLARKS MALE QUARTETTE.
8. THE BRYANT'S BELLRINGERS.
9. RALPH DALY, Baritone.
10. DAVE HOWARD, Entertainer.
11. THE NIGHTLARKS MALE QUARTETTE.
12. LYNNIE GILBERT, Soprano.
13. HARRY HUTCHINS, Violinist.
14. THE NIGHTLARKS MALE QUARTETTE.
15. TOM KING, Pianist.
16. STAR SONGS AND THEME MELODIES OF THE WEEK (by special arrangement).
- 10.15: News Session.
- 10.20: Dance Music.
- 11.0: Close down.

DEFINITELY READY MARCH 22ND

The
RADIO
TRADE
ANNUAL **RETAILER**
OF AUSTRALIA

1933

10/-

If you trade in Radio, you should have your Name included in this RADIO TRADE ANNUAL TRADERS' LIST.

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Your Trading Name, Address, and 'Phone No. included in the Directory section of this 1933 Radio Trade Annual on receipt of postal note for 2/6; or in thick black type for 4/-.

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Over 200 Pages of Valuable Information Necessary to Every Radio Trader & Service Man

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ADVERTISERS' INDEX.

CALENDARS, 1932, 1933, 1934.

DISCOUNT READY RECKONER, INC. 6% SALES TAX.

THE PROGRESS OF RADIO.

BROADCASTING SECTION.—Constitution and Organisation of the Australian Broadcasting Commission. List of A and B Stations. Growth of Listeners' Licences. Details of "B" class stations. Broadcasting Time Schedules.

LAWS AND LICENCES AFFECTING RADIO TRADERS, INCLUDING:—Shop Acts Summary. Registration of Business Names Act. Factory and Workshop Acts Summary. Sales Tax Summary. Trade Marks and Patents. Wireless Telegraph Acts and Regulations.

ORGANISATION OF THE INDUSTRY.—Trade Associations. Institutions of Radio Engineers, Australia. Radio Society of Australia.

GENERAL INFORMATION.—Postal Information. Details of Wireless Branch, P.M.C.'s Dept. Hire Purchase Business. Standards Association of Australian Rules. Imports of Radio. Customs Tariff. Supply Mains and Voltages.

TECHNICAL SECTION.—Practical Service Methods. Service Equipment. General Service Procedure. Power Supply Systems, Valves, Loud Speakers, Aerials, R.F. Amplifiers, Audio Amplifiers, Detectors, Radio Phonograph Combinations, Public Address Systems. Complete List of Valves, Valve Bases and Connections. Care and Maintenance of Accumulators. Output Valve and Speaker Matching. Interference Elimination. Explanation of Superheterodynes. Radio Symbols. Formulae and Data. Frequency and Wavelength Table. Metric Conversion Tables. Resistance Wire Table. Dictionary.

DIRECTORY SECTION.—Name, Address, 'Phone and Telegraphic. Manufacturers, Manufacturers' Agents, Radio Publications and their Publishers, Wholesalers—Alphabetical List. Proprietary (Trade) Names. Goods supplied by (alphabetical) (see separate list). Who's Who in Radio. Special Section (Advertisers), Company, Capital, Directors, Branches, Managers, etc. Radio Traders (Retail) Throughout Australia. Specifications of Latest Radio Receivers Available. Other important information will be included up to closing date.

ORDER FORM

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"Radio Retailer," 1933 Trade Annual,
15 Castlereagh Street, Sydney.

Please include the following particulars in the retail list of the 1933 RADIO TRADE ANNUAL, to be published on March 22nd, 1933 for which I enclose postal note No. to the value of in acceptance of No. offer.

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W 77

TUESDAY . . . JANUARY 10

8.0—NATIONAL PROGRAMME From 3LO, 2CO, 2FC, 2NC, 5CL, 5CK—8.0

8.0 THE COUNT OF LUXEMBOURG
(A Spectacular Light Opera)
MUSIC BY FRANZ LEHAR

CHARACTERS

RENE, Count of Luxembourg, A Young Man, about twenty-eight, of high Nobility, but penniless, having squandered all his money on pleasure

BRISSARD, A Young French Painter, also penniless. Bosom pal of the Count

THE GRAND DUKE, A Russian. He is in love with Angele Didier, a Grand Opera Star

PELEGRIN
MENTSCHNIKOFF } Grand Duke's Servants
PAULOVITCH }

ANGELE DIDIER, A Grand Opera Star

JULIETTE, Brissard's Sweetheart. Later companion to Angele Didier

LISETTE, Dresser to Angele Didier

SAVILLE
BOULANGER } Friends of Brissard
LAVIGNE }

MIMI
AURELIE } Their girl friends
CORALIE }

THE REGISTRAR

COUNTESS KOKOZEFF, A Russian Lady

THE COUNT OF LUXEMBOURG

A Spectacular Light Opera
With Music
By FRANZ LEHAR



ACT ONE
SCENE, BRISSARD'S STUDIO, PARIS
TIME, NIGHT

ACT TWO
SCENE, THE GRAND DUKE'S RECEPTION HALL, PARIS. THREE MONTHS LATER

9.30 A MUSICAL INTERLUDE

9.35 THE A.B.C. (SYDNEY) CONCERT ORCHESTRA, conducted by E. J. ROBERTS
Loin Du Bal Gillet
Pizzicato Polka Strauss

9.41 OLIVER KING (Bass)
Hear Me, Ye Winds and Waves
The Bellman Handel
Down Among the Dead Men Forsyth
Thy Wonderful Eyes Old English
Dedication Strauss
I Love Thee Franz
GRIEG ORCHESTRA
Melodious Melodies Finck
Part 2

10.0 LATEST DANCE MUSIC (r.)
(Completion of Relay to National Stations)

10.30 Late Official Weather Forecast

10.32 LATEST DANCE MUSIC (r.)

11.0 (Completion of Relay to 2NC Newcastle)

11.30 CLOSE

ALTERNATIVE PROGRAMME OVERLEAF—DAY SCHEDULES BEGIN BELOW

2FC

SYDNEY,
451 Metres

EARLY SESSION

(Relayed to 2NC, Newcastle.)

- 7.0: Big Ben. Early Rising Music (r.). Meteorological information for the man on the land.
- 7.10: This morning's news from the "Daily Telegraph" and "Labor Daily."
- 7.15: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
- 7.18: Studio Music (r.).
- 7.30: Short daily commentary for the man out-back.
- 7.40: Radio Rhythm (r.).
- 7.45: Mails and Shipping.
- 7.48: What is on to-day?
- 7.50: Music from the Studio (r.).
- 8.15: CLOSE (Completion of Relay to 2NC, Newcastle).

MORNING SESSION

(Relayed to 2NC, Newcastle, from 10.40 a.m.)

- 10.30: Announcements.
- 10.32: G. VERN BARNETT AT THE STUDIO ORGAN:
Offertoire in E Flat Guilmant
Andantino Salome
Des Abends Schumann
- 10.45: MORNING DEVOTION: Conducted by Rev. William Brown.
- 11.0: G. VERN BARNETT AT THE STUDIO ORGAN:
Contemplation Armstrong
Praeludium Grave Dubois
Andantino King
Fantasia Hugh Blair
- 11.15: Musical Items (r.).
- 11.50: British Official Wireless News.
- 12.0: Big Ben. Stock Exchange and Metal Quotations.
- 12.5: Studio Music (r.).
- 12.15: Metropolitan forecast and weather fore-

cast. Special Produce Market Session for the man on the land, supplied by the State Marketing Board.

12.30: CLOSE (Completion of relay to 2NC, Newcastle).

THE LUNCH HOUR

NOTE: Scores in the International Cricket Match—ENGLAND v. COUNTRY—played at Bendigo, will be given at Luncheon, Tea, and Stumps Drawn, and at the fall of each wicket.

- 1.0: LUNCH HOUR MUSIC.
- 1.57: Sectional Weather Forecast.
- 2.0: Programme Announcements.
- 2.2: Stock Exchange, second call.
- 2.4: A Glance at the afternoon "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
- 2.10: Musical Items (r.).

THE RADIO MATINEE

(Relayed to 2NC, Newcastle.)

- 2.30: NELL FERGUSON, Pianiste:
Serenata Cyril Scott
Mazurka Cyril Scott
Valse Caprice Cyril Scott
- 2.40: WILL CLARK, Bass:
When You Come Home Squire
Youth Allitsen
- 2.47: ORCHESTRAL SELECTION (r.).
- 2.55: A LITTLE HUMOR (r.).
- 3.1: VIOLIN SOLO (r.).
- 3.5: MELODIES BY STRAUSS (r.), (Orchestral).
- 3.12: NELL FERGUSON, Pianiste:
Romance in E Major Davis
Island Spell Ireland
Romance in D Flat Grunfeld
- 3.22: WILL CLARK, Bass:
The Mighty Deep Jude
When Song is Sweet Sans-Souci
- 3.30: COMMANDER C. H. ROLLESTON, R.N. (Retired) will speak on "STEAM 'ANTICS'."
- 3.45: SONGS FOR 'CENTRALTO' (r.).
- 3.51: ORGAN SOLOS (r.).

- 4.0: WHAT IS NEW? (New Releases) (r.).
- 4.28: Stock Exchange, third call.
- 4.30: CLOSE.

EARLY EVENING SESSION

(Relayed to 2NC, Newcastle, from 5.45 to 6.45 and from 7.5 to 8 p.m.)

- 5.45: THE CHILDREN'S HOUR, conducted by "BOBBY BLUEGUM."
A STRAY SUNBEAM:
"I want to soothe, with loving touch,
Those who are troubled overmuch;
I want to do my best to share
The sorrows some are called to bear."
All the news of "Bobby Bluegum's Sunshine Soldiers." Perhaps there will be a letter to write. Join our big club early this year, there will be lots doing.
- 5.57: THE CLUB SONG—"When Bobby's Sunshine Soldiers go to War."
- 6.0: "Billy Bookworm" is sure to have a holiday story, to-day.
- 6.15: BIG KID'S SESSION—just a cheerio to Mothers and Fathers.
- 6.20: Many Happies.
- 6.30: Do You Like Our New Serial?
6.45: "Sleep Tight."
(Completion of Relay to 2NC, Newcastle.)
- DEPARTMENT OF AGRICULTURE.
- 7.5: (Relayed to 2NC, Newcastle) A.B.C. Sporting Service.
- 7.15: Weather Report, Stock Exchange, Wool Sales, Wheat Markets, Truck Bookings, General Market Report.
- 7.45: News Service from "The Sun." Additional News from the A.B.C. Service. Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. Wireless News from the British Official Service.
- 7.58: To-night's Programme.

EVENING PROGRAMME

(See above)

TUESDAY, January 10 (Con.)

8.0—ALTERNATIVE PROGRAMME FROM 2BL—8.0

8.0 We Present the A.B.C. Comedy Players in

THE SPECIALISTS

A One Act Play, in 4 Scenes, written and adapted for Radio by

ENID BAUMBERG

CHARACTERS

JOHN GORDON, a Gentleman,

Leo Stark

PIANO TUNER Victor Gouriet

SERVANT H. W. Varna

JOHN GILES Herbert Leigh

"RED HORTON" Bert Barton

CORA Phyllis McGrath

PRODUCED BY ARTHUR GREENAWAY

8.20: A PROGRAMME ARRANGED BY THE MUSICAL ASSOCIATION OF NEW SOUTH WALES

(1st Half)

Allegro Moderato from Trio in G

Hurlstone

Piano, HORACE KEATS
Violin, RAY FOX

Cello, NORMAN MARTIN

RAY FOX (Violinist)

Faust Fantasia Gounod-Sarasate

BARBARA RUSSELL (Soprano)

The Wild Welsh Coast Bantock

Wanting is—What? Bantock

A Windy Night, from Seven Songs for Children, by Bantock
(First Performance in Australia)

8.50: PROFESSOR CHARTERIS
Challis Professor of International Law in the University of Sydney, will continue his series of talks on AUSTRALIA LOOKS ON THE WORLD

9.20: WEATHER FORECAST

9.22: SECOND HALF OF THE PROGRAMME ARRANGED BY THE MUSICAL ASSOCIATION OF NEW SOUTH WALES

HORACE KEATS (Pianist)

Ballad in A Minor York Bowen

NORMAN MARTIN (Cellist)

Ave Maria Max Bruch

BARBARA RUSSELL

Arab Love Song Quilter

Where the Wild Fowl Call Kahn

Weather Ireland

Trio, Fantasia in A Minor Ireland

HORACE KEATS (Pianist), RAY

FOX (Violinist), and NORMAN

MARTIN (Cellist)

9.52: LATEST DANCE MUSIC (r.).

10.27 Late News from the "Sun"

10.30 CLOSE

2BL

SYDNEY,
351 Metres

OPENING SESSION

- 8.15: G.P.O. Chimes. A Musical Interlude (r.).
8.40: Meteorological Data for the Country.
8.45: Mails and Shipping Information.
8.50: Memory Melodies (r.).
9.0: THIS MORNING'S STORY.
9.30: Melodies Grave and Gay (r.).
9.45: Moments Musical (r.).
10.5: News from the "Daily Telegraph" and the "Labor Daily".
10.8: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
10.10: Studio Music (r.).
10.15: A RACING TALK BY THE A.B.C. RACING OBSERVER—M. A. FERRY.
10.30: Musical Items (r.).
10.35: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION SESSION—Conducted by Miss Gwen Varley. "News from the Women's Clubs of N.S.W." by Miss Gwen Varley.
11.0: G.P.O. Chimes. CLOSE.

MID-DAY SESSION

- NOTE—Scores in the INTERNATIONAL CRICKET MATCH, ENGLAND v. COUNTRY (played at Bendigo), will be given at Lunch, Tea, Stumps Drawn, and at the fall of each wicket.
12.0: G.P.O. Chimes and Announcements. Metropolitan Forecast and Weather Synopsis.
12.2: Studio Music (r.).
12.30: LUNCH-HOUR MUSIC.
1.0: Afternoon News from the "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
1.8: Sectional Weather Forecast.
1.11: Radio Rhythm (r.).
1.35: Studio Music (r.).
2.0: What's on the Air This Afternoon?
2.2: THIS AFTERNOON'S STORY.

AFTERNOON ENTERTAINMENT

- 2.30: "NEW RELEASES" (r.).
3.0: FROM FARMER'S OAK HALL—Popular Dance Items.
3.12: FROM THE STUDIO—"SONGS OF THE SEA" (r.).

- 3.18: FROM FARMER'S OAK HALL—Latest Popular Numbers.
3.30: FROM THE STUDIO—SOPRANO SOLOS (r.).
3.36: FROM FARMER'S OAK HALL—A Popular Interlude.
3.48: FROM THE STUDIO—"MARCHING SONGS" (r.).
3.54: "PIANOFORTE RHYTHM" (r.).
4.0: A Talk on "THE LAND OF THE INCAS" (Part I.), by W. P. GOODWIN.
4.15: FROM FARMER'S OAK HALL—Dance Music.
4.27: FROM THE STUDIO—EXCERPTS FROM LIGHT OPERA (r.).
4.33: FROM FARMER'S OAK HALL—Moments Musical.
4.45: FROM THE STUDIO—THE TRADE HOUR DEMONSTRATION MUSIC.
5.40: Weather Information.
5.45: CLOSE.

THE DINNER HOUR

- 6.15: DINNER MUSIC.
7.45: "REDGUM" will tell Listeners about their GARDENS.
7.58: What's on the Air To-night?

EVENING PROGRAMME

(See above)

2CH

SYDNEY,
248 Metres

Day sessions as usual.

EARLY EVENING SESSION

- 5.10: CHILDREN'S SESSION, conducted by "THE FAIRY GODMOTHER."
5.55: "THE HELLO MAN."
6.40: JACK HYLTON AND HIS ORCHESTRA—Prelude in G Minor.
Prelude in C Sharp Minor.
6.48: PATTMAN—Indian Love Lyric Finden
1. Temple Bells. 2. Less Than the Dust.
6.50: FRITZ KREISLER, Violinist—Love's Sorrow Kreisler
6.55: ANNOUNCEMENT.

- 6.56: STUART ROBERTSON, Baritone—In Summertime on Breton Peel
6.59: H.M. GRENADIER GUARDS—Fantasia, 17th Century Music. Arr. Major George
7.7: ANNOUNCEMENT.
7.8: AMELITA GALLI CURCI, Soprano—Slumber Song Meyerbeer
7.11: JOSEF LHEVINNE, Pianist—Blue Danube Strauss
7.19: ANNOUNCEMENTS.
7.20: COURT SYMPHONY ORCHESTRA—Mary Rose Prelude. The Call.
7.26: ROYAL OPERA CHORUS AND ORCHESTRA, COVENT GARDEN—Opening Chorus, Carmen.
7.30: BAND OF GARDE REPUBLICAINE—March Indienne Sillennick
7.33: ANNOUNCEMENT.
7.34: J. H. SQUIRE CELESTE OCTETTE—Memories of Chopin.
7.42: ANNOUNCEMENT.
7.45: P. and O. TRAVEL TALK.

EVENING SESSION

- 8.0: HALF AN HOUR OF VAUDEVILLE—REGAL SALON ORCHESTRA—Electric Girl Helmberg and Holmes
8.3: ANNOUNCEMENT.
8.4: GLADYS MONCRIEFF, Soprano—I Found Happiness When I Found You. Pollack and Kappe
8.11: GRACIE FIELDS, Entertainer—Stop and Shop at the Co-op, Shop.
8.14: DUKE ELLINGTON AND HIS COTTON CLUB ORCHESTRA—What Good Am I Without You? Ager
8.17: MAURICE CHEVALIER—Right Now Russell and Robinson
8.20: MOANA ORCHESTRA—Song of the Islands King
8.23: PETER DAWSON, Baritone—Captain Harry Morgan.
8.30: JACK SHILKRET, Novelty Pianist—Just Across the Street From Heaven. Neuman-Harris-Shay
8.33: FLOTSAM AND JETSAM—Schubert's Toy Shop
8.37: ANNOUNCEMENT.
8.38: WARING'S PENNSYLVANIANS—How About Me? Berlin
8.41: SOPHIE BRASLAU, Contralto—Come to Me, O Beloved Bassani
8.45: ANNOUNCEMENT.
8.46: Forever Ager
8.48: THE REVELLERS—O, Miss Hannah Deppen
8.52: EMIL GRIMSHAW'S BANJO QUARTETTE—A Swanee Wing Song Grimshaw
8.55: WISH WYNNE, Comedian—An Embankment Impression Wynne
8.58: ELDORADO TANGO BAND—Madonna Bruna Mascheroni
9.1: RICHARD TAUBER, Tenor—The Song Is Done Stolz-Reisel
9.4: DEBROY SOMERS BAND—Funny Face Selection.
9.12: ANNOUNCEMENT.
9.15: THIRD NEWS AND COMMENTARY.
10.0: Musical Item.
10.5: AN ADDRESS BY A MEMBER OF INDEPENDENT ORDER OF RECHABITES.
10.25: Musical Item.
10.30: CLOSE.

2GB

SYDNEY,
316 Metres

Day Sessions as usual.

EVENING SESSION

- 5.0: Birthday Calls and Songs by Uncle George and Bimbo.
6.30: British Talkie Session.
6.45: Music.
7.0: Entertainment by President and St. Leger.
7.15: Marek Weber and his Orchestra—If You are Faithless: Marching Song.
7.25: Peter Dawson (Bass-Baritone)—So I Left.
7.30: Dance Music by Roy Sox and his Band.
7.45: The Two Octaves, Piano Duo.
7.55: Layton and Johnston—Swingin' in a Har-mock.
8.0: The State Theatre Orchestra—Overture.
8.10: The Two Octaves, Piano Duo.
8.20: Charles Prentice and his Orchestra—Sizletta.
8.25: Zena Moller (Soprano).
8.35: Regal Cinema Orchestra, London—A Musical Jigsaw.
8.45: Len Maurice and Jack Lumsdaine.
9.0: Regal Cinema Orchestra, London—Viennese Nights Waltzes.
9.10: Zena Moller (Soprano).
9.20: Charles Arncliffe and his Orchestra—Thrills.
9.25: Fritz Kreisler (Violinist)—Tango; La Vida Breve; Schon Rosmarin.
9.40: The State Theatre Orchestra—Entracte.
9.45: Band Recital—Air de Ballet; Callirhoe; Geisha Selection.
10.0: Entertainment Club Numbers.
11.0: Slumber Music.
11.30: Close down.

2UW

SYDNEY,
267 Metres

- Day Sessions as usual.
- 5.15: CHILDREN'S SESSION, conducted by UNCLE JACK and JILL.
- 5.58: MIDSHIPMAN BOB BREEZY.
- 6.3: DINNER MUSIC.
- 6.30: Request Items.
- 8.0: A CELEBRITY PROGRAMME.
- 8.15: Recital by Lotte Lehman—
Morgen Strauss
Thy Blue Eyes Strauss
Dreams Wagner
- 8.30: Band Music that Inspires—
(a) Fidelis Overture Beethoven
(b) Knights of the King Ketelbey
(c) Gallantry Ketelbey
- 8.45: Chamber Music—
(a) Cherry Ripe Frank Bridge
(b) Largo from Quartette Smetana
(c) Marche Miniature Viennois Kreisler
- 9.0: Talk on Foreign Affairs, by J. M. Prentice.
- 9.15: NEGRO SPIRITUALS—
(a) Swing Low, Sweet Chariot.
(b) Deep River
(c) Steal Away.
(d) Weepin' Mary.
- 9.30: ATMOSPHERIC PIANO MUSIC—
(a) Variations on a Paganini Theme.
(b) In the Night Schumann
(c) Rustle of Spring.
- 9.45: Summit Programme of latest songs and Novelties.
- 10.0: Selected Items.
- 10.28: To-morrow's programme.
- 10.30: Close down.

2UE

SYDNEY,
293 Metres

- Day Sessions as usual.
- EVENING SESSION**
- 5.0: Children's Session—Auntie May and Uncle Simon. 5.40: Uncle Lionel and Ambrose. 6.30: Dinner Music. 6.45: To-morrow's Races—Mr. Tom Ellis. 6.55: Dinner Music. 7.30: Sporty Talk by Mr. Oscar Lind. 8.0: Overture, Pique Dame. 8.10: Music. 8.15: Health Talk. 8.30: Musical Presentation. 8.55: Selections. 9.0: Sponsored Session. 10.0: Light Opera Selection. Tales from the Vienna Woods. 10.15: Music. 10.45: Tranquillity Music. 11.0: Close down.

2KY

SYDNEY,
280 Metres

- Day Sessions as usual.
- EVENING SESSION**
- 5.0: Conducted by Uncle John and Jerry. 6.0: Children's Session. 6.30: Dinner Entertainment. 6.15: Dinner Music. 8.1: Studio Items.
- 8.30: F. J. PALMER AND SON'S
PARK STREET,
COMMUNITY SINGING
FROM THE AUBURN TOWN HALL,
WITH SYD HAYNES LEADING,
ASSISTED BY UNCLE BERT,
GEORGE THE COMEDIAN,
AND
OTHER PROMINENT ARTISTS
10.20: Closing Announcements.

2SM

SYDNEY,
236 Metres

- Day Sessions as usual.
- 5.0: Children's Session—Auntie Goodie. 5.30: Children's Session—Uncle Tom. 6.1: Dinner Session. 6.45: Social Chatter—Maria Dawson. 7.0: Turf Topics—Eric Gordon. 7.15: After Dinner Entertainment. 7.45: Studio Music. 8.0: "Our Doctor" Talks. 8.15: Studio Music. 10.0: Composing Music. 10.30: Close.

3LO

MELBOURNE,
375 Metres

- EARLY MORNING SESSION**
- 7.1: Shipping News. 7.3: Physical Exercise to Music. 7.10: Morning Music. 7.37: "Brother Bill's" Pick-me-up—"Horsey, keep your tail up." 7.40: Mail Notices. 7.42: What's on To-day. 7.45: Market reports. 7.53: Weather. 7.55: News. 8.1: Arrival times of Express Trains. 8.2: Music. 8.15: Close.
- MORNING SESSION**
- 10.30: Current Happenings in Sport, by Eric Welch. 10.45: Music. 11.0: Fish Market Reports. 11.5: Music. 11.45: Melbourne Stock Exchange. 11.48: Music. 12.10: News. 12.30: Close.

MIDDAY SESSION

- 1.0: Stock Exchange Information. 1.15: Music.

WOMEN'S SESSION

- 2.0: Love Affairs of Literary Men—"Laurence Sterne and Elizabeth Willson." Miss Patricia Wilson. 2.15: Music. 2.30: Work Amongst the Children—"Social Service and Citizenship," Mrs. J. Rapke. 2.45: Music.

THE RADIO MATINEE

- 3.0: Radio Players—Gavotte (Gossec), Pale Star (Rohr). 3.6: Rita Fox, Contralto—When Song is Sweet (Sans Souci), That's All (May Brahe). 3.12: Norman Wister, Entertainer at the Piano—The Art of Entertaining (Grey). 3.18: Tom Dowling, Tenor—Two Songs by Horace Gleason—My Wee Little Hut on the Hill, The Green Jacket. 3.24: Radio Players—Serenade Norwegienne (Sandre), Bluetie (Aitken). 3.32: Kate Cornell—A Comedy Monologue—Widders. 3.38: MacDuff Williams—A Novelty Violin Number. 3.42: Rita Fox, Contralto—Down Here (May Brahe), Mountain Lovers (Squire). 3.48: Radio Players—Selection, The Mikado (Sullivan). 3.58: Norman Wister, Entertainer at the Piano—Twisted Tales (Wister). 4.4: O. Richard Chugg, Flute—Request Number. 4.8: Kate Cornell—The Lady Who Obliges. 4.14: Tom Dowling, Tenor—I Be Hopin' You Remember (Comingsby Clarke), The Kerry Dance (Molloy). 4.20: Radio Players—Selection, Katinka (Friml). 4.30: Close down.

THE CHILDREN'S CORNER

- 5.45: Do tune in and make friends with Mackay the Handy Man! He's a friend of Macandrew the Engineer, and he knows all sorts of interesting things. To-day, for instance, he is going to tell how men on boats used to send messages to each other before we had wireless. He calls it, "How Ships Learnt to Talk."

EVENING SESSION

- 6.30: COUNTRYMEN'S SESSION.
- 7.2: ALL SPORTING RESULTS—ERIC WELCH'S Selections for the Wooded Races to-morrow.
- 7.21: Results of Women's Sports.
- 7.25: ALONG THE BARRIER REEF—"Beach-combing on the Reef," Mr. VANCE PALMER.
- 7.35: British Official Wireless News.
- 7.40: News.
- 7.45: FOR THE MAN ON THE LAND—"Pseudo Poultry Plague, or Newcastle Disease," Mr. R. M. JOHNSTONE, B.V.Sc.

NIGHT SESSION

- 8.0: "THE COUNT OF LUXEMBOURG." (See 2FC Programme.)
- 10.30: WEATHER, Etc.
- 10.33: "MEDITATION" MUSIC.
- 11.30: Close.

3AR

MELBOURNE,
492 Metres

MORNING SESSION

- 8.15: Thirty Minutes' Melody. 8.45: Weather. 8.50: Music. 9.1: "Sun" News. 9.5: Music. 9.17: Weather. 9.18: Music. 9.21: Radio Serial—"Cleansing Fires," by Arthur Russell Read by "Scribe." 9.38: Music. 10.1: British Official Wireless News. 10.10: Announcements. 10.15: Music. 10.45: The Daily Broadcast Service. 11.0: Close.

MIDDAY SESSION

- 12.1: Music. 12.15: The Near East Through the Eyes of a Westerner. "Easter in the Holy Land." Regina Goldman. 12.30: Music. 1.15: At Home and Abroad, by "The Watchman." 1.30: Music.

AFTERNOON SESSION

- 2.1: Grand Opera, Carmen (Bizet). Act II. (See Programme, January 9, for details of cast.) 3.0: Something Old and Something New. "Two Physicians," Lin. MacDonald. 3.15: Music. 3.30: Some Aspects of Contemporary Literature. Bruno Frank. C.M.A. Hamer. 3.45: Music. 4.15: Contract Bridge. Problems and Play. Discussed by Wyn. Fraser. 4.30: Music. 5.30: Weather and Shipping. 5.45: Close.

EVENING SESSION

- 6.15: Dinner Music. 7.30: Greenroom Memories, Revived and Illustrated by "Thesplan." 7.45: Music.

NIGHT SESSION

- 8.0: OUR NAVY—"A Day on Board One of His Majesty's Australian Ships"—LIEUT.-COMMANDER H. M. L. WALLER, R.A.N.
- 8.20: A.B.C. (Melbourne) STRING QUARTETTE
BERTHA JORGENSEN, 1st Violin.
BESSIE GAUNSON, 2nd Violin.
DOROTHY ROXBURGH, Viola.
TASMA TIERNAN, 'Cello.
Trio Op. 29 Schubert
Allegro ma non troppo; Andante;
Menuetto; Allegro moderato.
IRENE KIRWAN, Soprano—
Margaret at the Spinning Wheel, Schubert
Faith in Spring Schubert

- MABEL NELSON, Pianoforte—
BERTHA JORGENSEN, Violin—
Sonata No. 3 in F Handel
Adagio; Allegro; Largo; Allegro.
IRENE KIRWAN, Soprano—
Like to a Damask Rose Elgar
Love Went a-Riding Frank Bridge
A Blackbird's Song Cyril Scott
STRING QUARTETTE—
Novelton Frank Bridge
9.28: A.B.C. (Melbourne) CONCERT ORCHESTRA—
Valse: Gold and Silver Lehar
9.36: A.B.C. (Melbourne) WIRELESS CHORUS,
With CONCERT ORCHESTRA—
Sanderson Song Selection.
9.46: CONCERT ORCHESTRA—
Favorite Melodies from "Sally" Kern
9.55: WIRELESS CHORUS and CONCERT ORCHESTRA—
Memories of the Sea.
10.5: CONCERT ORCHESTRA—
La Veuve Joyeuse Lehar
Standchen Heykens
10.15: NEWS.
10.30: CLOSE.

4QG

SYDNEY,
395 Metres

EARLY MORNING SESSION

- (Relayed to 4RK.)
- 7.30: The Chimes and music. 7.34: Weather data from the Commonwealth Weather Bureau. Cable news (copyright); Australian Press Association and "Sun"—"Herald" News Service, Ltd. First general news from "The Daily Mail." Comments on news. British Official Wireless News. What's on to-day. Features from the radio programmes. Stumps drawn scores. 8.0: Music. 8.30: Close.

MORNING AND MIDDAY SESSION

- (11.0 a.m. to 2.0 p.m.)
(Relayed to 4RK except from 11.23 to 11.30.)
- 11.0: The Daily Broadcast Service. 11.10: The Morning Musicale. 11.23: Social notes from the metropolitan daily newspapers. 11.30: Music by the Carlton Cabaret performers. 11.40: "What Women Are Wearing," by Margaret Burns. 11.55: What's on to-day. 12.0: The City Hall Chimes. 12.1: A programme of popular numbers. 12.30: Traders' demonstration music. 1.0: Market reports, weather data, second general news from "The Daily Mail." British Official Wireless News. 1.30: Luncheon music by "The Celeste Quartette." 2.0: Close.

AFTERNOON SESSION

- (Relayed to 4RK)
- 3.0: A programme of Gems from the Operas. 4.30: Close.

EARLY EVENING SESSION

- (6.0 p.m. to 8.0 p.m.)
(Relayed to 4RK except from 6.20 to 6.30.)
- 6.0: For the children—"Uncle Ben returns from Craow." 6.20: Shipping news; train information; mail notices. 6.30: Early dinner music. 6.45: Late market reports; general commercial news; late weather data. 7.0: The fortnightly talk arranged by the Australian Dental Association. 7.10: Late dinner music. 7.25: First general news from "The Daily Standard." 7.30: A talk arranged by the Department of Agriculture and Stock—"Poultry Culling," by Mr. J. J. McLachlan (Poultry Inspector). 7.45: General sporting news. 7.59: Eastern Australian Standard Time Signals.

NIGHT SESSION

- (Relayed to 4RK.)
- 8.0: THE AUSTRALIAN BROADCASTING COMMISSION'S FIRST NEW YEAR COMMUNITY SONG CONCERT, from THE IPSWICH TOWN HALL.
Conducted by DAVID FELSMAN,
with
TONY TRUDA
(Violinist)
MAY JORDAN
(Soprano)
WILL DUTTON
(Popular Songs)
and
STEVE BAKER
"Fucia"
(Comedian)
THE IPSWICH VICE-REGAL BAND
(Conductor, J. W. Burgemeister)
will play throughout the evening.
- 10.15: FINAL NEWS BULLETIN—Weather data; Cable news (copyright); "Sun"; "Herald" News Service, Ltd., and Australian Press Association; second general news from "The Daily Standard"; British Official Wireless News; "Queenslander" news.
- 10.30: DANCE MUSIC—Dance music from the Studio.
11.0: Close.
(5CL for Tuesday will be found on page 48)

SOMETHING NEW!

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(Regd.)

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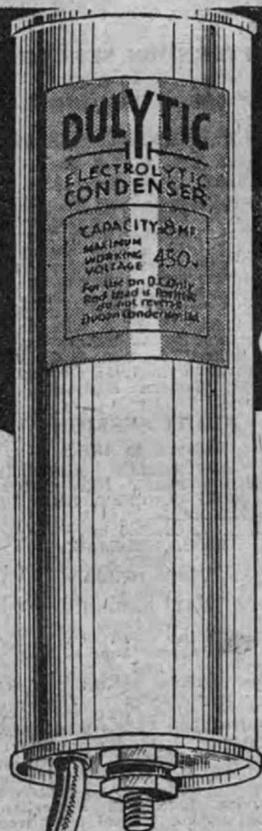
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WEDNESDAY . . . JANUARY 11

8.0—NATIONAL PROGRAMME From 3LO, 2CO, 2FC, 2NC, 4QG, 4RK, 5CL, 5CK—8.0



Violet Somerset.



Percy Code discussing this programme with Roy Shepherd.

Featuring the A.B.C. SYMPHONY ORCHESTRA Conducted by Percy Code

PART ONE

POPULAR MASTERPIECES

8.0 ORCHESTRA

- Overture, The Magic Flute . . . Mozart
- Hornpipe Louis Lavater
- Intermezzo in A Louis Lavater

Two compositions of Mr. Louis Lavater, well-known Melbourne musician. Mr. Lavater has been examiner for the Musical Society of Victoria since 1915.

VIOLET SOMERSET (Contralto)

- Ships of Arcady Michael Head
- The Little Winding Road . . . Ronald
- Forest Lullaby Bagnon

A soprano of high standing in Melbourne is Miss Violet Somerset, who has travelled, studied, and sung in different parts of the world. Born in Melbourne, she received her first instruction in the art of singing from the late Rudolph Himmer, tenor star in his day. She appeared on the concert platform with great success, and afterwards left for England. Here she studied interpretation of songs from the recognised best English master, Mr. Plunket Greene, a baritone and musician of high standing. Subsequently she took lessons in interpretation in Paris and also in Berlin. Returning to Australia she was highly successful on the concert platform. She also sang in "The Messiah" on several occasions with the Philharmonic Society. Invited to Honolulu to conduct concerts, Miss Somerset's efforts were attended with great success, and she was congratulated by the American Governor of Honolulu on the excellent conduct of the concerts.

ORCHESTRA

Two Slavonic Dances Dvorak

"Slavonic Dances" were composed by the great Bohemian composer, Antonin Dvorak. He studied music at Prague. He played the viola, and acted as deputy-conductor of an orchestra. His music was practically unknown in England in 1883, but in that year the English musician, Sir Joseph Barnaby, produced his "Stabat Mater," the performance of which created a remarkable impression, and subsequently Dvorak conducted orchestras in England, and was later appointed director of the National Conservatory of Music in New York, but after six years resigned the post to become director of music at Prague. Among his many compositions was the inevitable "Humoresque."

ROY SHEPHERD

A Short Pianoforte Recital

The young and much-travelled pianist, Mr. Roy Shepherd, at the moment on tour as soloist and accompanist for Mr. John Brownlee, but will return to Melbourne to play

with the orchestra a Concerto by Haydn, and also give a short recital. Mr. Shepherd is one of the leading pianists in Australia. He is only 24 years of age. He won the Clarke Scholarship at the University Conservatorium, studied for three years at the Royal Academy of Music (London), spent two years in Paris, where he was a pupil of that great master, Alfred Cortot. He also studied under Harold Samuel, the noted Bach exponent, and Herbert Fryer, famous as an interpreter of music, and other prominent teachers.

ORCHESTRA

- Chanson de Nuit Elgar
- Pomp and Circumstance, No. 1, in D Elgar

8.50 INTERVAL

9.0 PART TWO OF ORCHESTRAL CONCERT

THE A.B.C. (MELBOURNE) SYMPHONY ORCHESTRA

- Enigma Variations, Op. 36 Elgar

"The Enigma" was first performed at one of Hans Richter's concerts in London, on the 19th June, 1899, and the first performance in the United States was given by the Chicago Orchestra on the 3rd January, 1902. Elgar's own explanation is of interest. "It is true," he says, "that I have sketched, for their amusement and mine, the idiosyncrasies of fourteen of my friends, not necessarily musicians. A short introductory passage of seventeen bars presents the theme, which is performed by the strings. Its mood is that of friendship. The first variation represents Lady Elgar, whose firm faith in my talent so helped me during my early struggles. The music contains her enthusiasm and high ideals, and is full of inspiration. Variation two is of a light character, but No. 3 refers to a friend who stammered slightly, and made little pauses in his sentences. The fourth variation indicates a boisterous and breezy friend, who has the misfortune to be rather clumsy. He invariably knocks over chairs and tables when visiting, and then, getting confused and angry at his own clumsiness, leaves abruptly, banging the door angrily behind him. A philosopher is the subject of the fifth variation. He is a friend of mine, and has a strange falsetto laugh. He goes off into peals of high falsetto laughter, and I have often wondered why a man with so peculiar a laugh is a philosopher. A lady friend of mine, an enthusiastic viola player, gave me the idea of writing the sixth variation. This lady has a stiff right arm, and always has difficulty when playing in getting from the lowest string on to the higher one. She makes a pause, and then gets on to the high string with an audible jerk. You will hear the jerk played by the viola. Then there is a friend who loves to play the organ, and he certainly plays badly, too. He gets very excited when playing, and stamps his feet on the pedals. This effort is played by the tympani. The ways of three

old maiden ladies, who live in a dreadful country cottage, have been put to music for No. 8. A friend passionately fond of playing Brahms is the subject of No. 9. A sunny natured woman, who giggles a great deal, No. 10, and all the instruments in the orchestra giggle in this number. My bulldog and his barking is the 11th variation, and the horns have to do the barking. Represented in the 12th variation is a celebrated 'cello player, and there is a lovely 'cello solo in it. The 13th is set to a visit to a wharf at Plymouth, where a friend leaves for America. The faint thudding of the propellers as the steamer sails away is heard. The last variation refers to myself, and I paint in tone my own struggles, my doubts and fears, my hard striving to attain the ideal I had set myself, and also my battle for recognition and fame. I end it with the feeling of victory."

ROY SHEPHERD (Pianist)

- Concerto Haydn

VIOLET SOMERSET (Contralto)

- Che Faro, from Orfeo ed Eurodice Gluck

With Orchestral Accompaniment

ORCHESTRA

- Tone Poem, Finlandia Sibelius

The symphonic poem "Finlandia" was composed by Sibelius in 1894, and is supposed to record the impressions of an exile's return to home after a long absence. The work is a remarkable tone picture of the intense national spirit of the hardy Finlander, and when first performed at Helsingfors it is said to have aroused the audience to such a frenzy of enthusiasm that future performances were prohibited by the Russian Government for fear of their creating anti-Russian demonstrations.

10.0 AN ANTHOLOGY OF MODERN VERSE

FRANK D. CLEWLOW

10.15 A MUSICAL INTERLUDE

- 10.30 FROM THE STUDIO (SYDNEY)
Late Official Weather Forecast

10.32 LATEST DANCE MUSIC (r.)

- 11.0 (Completion of Relay to 2NC
Newcastle)

11.30 CLOSE

WEDNESDAY, Jan. 11 (Con.)

8.0—ALTERNATIVE PROGRAMME FROM 2BL—8.0

8.0 THE A.B.C. MUSICAL REVUE COMPANY presents MISS PARIS IN SYDNEY

Featuring Mlle. TISHA GUILLE as MISS PARIS and PHIL SMITH as MR. SYDNEY

9.0 Late Weather Forecast

9.2 SCANDAL By COSMO HAMILTON

CAST PELHAM FRANKLIN .. Eric Masters MALCOLM FRAZER .. John Fernside SUTHERLAND YORKE, John Warwick MAJOR BARNET THATCHER, Herbert Leigh

PEWSEY ... John Bevan MRS. HENRY VANDERDYKE, Loris Bingham MISS HONORIA VANDERDYKE, Winifred Green MRS. BROWN ... Edith Cowley REGINA WATERHOUSE, Margaret Honey HELENE ... Tisha Guille ROBSON ... Dion Wheeler BEATRIX VANDERDYKE, Mary MacGregor

A big success in London and New York, and also in Australia, with Maude Hannaford as Beatrix Vanderdyke, and Frank Harvey as Pelham Franklyn, and later with Mary MacGregor as Beatrix, and Leon Gordon as Franklyn.

ADAPTED AND PRODUCED BY GEORGE D. PARKER

10.2 VARIED MOMENTS MUSICAL (r.) 10.27 Late News from the "Sun" 10.30 CLOSE

6.45: "Sleep Tight." (Completion of Relay to 2NC, Newcastle.) MR. TOM STUART GURR will speak on "THE CRISIS IN INDIA." 7.5: (Relayed to 2NC, Newcastle) A.B.C. Sporting Service. 7.15: Weather Report, Stock Exchange, Wool Sales, Wheat Markets, Truck Bookings, General Market Reports. 7.45: News Service from "The Sun." Additional News from the A.B.C. Service. Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. Wireless News from the British Official Service. 7.58: To-night's Programme.

EVENING PROGRAMME (See panel on previous page)

2BL SYDNEY, 351 Metres

OPENING SESSION

8.15: G.P.O. Chimes. A Musical Interlude (r.). 8.40: Meteorological Data for the Country. 8.45: Mails and Shipping Information. 8.50: Memory Melodies (r.) 9.0: THIS MORNING'S STORY. 9.30: Melodies Grave and Gay (r.). 9.40: British Official Wireless Press. 9.45: Moments Musical (r.). 10.5: News from the "Daily Telegraph." 10.8: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. 10.10: Studio Music (r.). 10.35: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION SESSION—Conducted by Miss Gwen Varley. "A Call to Action," by Miss I. R. Stenning. A Talk on "Interior Decoration," by Miss Yolande Proctor. 11.0: G.P.O. Chimes. CLOSE.

MID-DAY SESSION

12.0: G.P.O. Chimes and Announcements. Metropolitan Forecast and Weather Synopsis. 12.2: Studio Music (r.). 12.30: LUNCH-HOUR MUSIC. NOTE.—Race Results will be transmitted as received. 1.0: Afternoon News from the "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. 1.8: Sectional Weather Forecast. 1.11: Radio Rhythm (r.). 1.35: Studio Music (r.). 2.0: What's on the Air This Afternoon? 2.2: THIS AFTERNOON'S STORY.

AFTERNOON ENTERTAINMENT

2.30: LATEST RELEASES (r.). 2.45: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION SESSION, Conducted by MISS GWEN VARLEY. A Talk on "MYTHS AND LEGENDS OF OTHER LANDS," by PAUL FURNISS. "HINTS TO KNITTERS," by MRS. A. MARTIN. 3.15: FROM THE SYDNEY TOWN HALL—AN ORGAN RECITAL BY THE CITY ORGANIST (ERNEST TRUMAN). 1.—Grand March in G ... Hill 2.—In a Monastery Garden ... Ketelbey 3.—The Blue Danube ... Strauss 4.—(a) Narcissus ... Nerin (b) Morning Mood ... Grieg 5.—(a) Il Bacio ... Ardit (b) I'll see You Again ... Coward 6.—Excerpt Student Prince ... Romberg 4.0: FROM THE STUDIO—"LITERARY PERSONALITIES," by "HYPATIA." 4.15: "FAMOUS SERENADES" (r.). 4.30: "GEMS FOR PIANOFORTE" (r.). 4.45: THE TRADE HOUR DEMONSTRATION MUSIC. 5.40: WEATHER INFORMATION. 5.45: CLOSE.

THE DINNER HOUR

6.15: DINNER MUSIC BY THE A.B.C. ORCHESTRA, Conducted by E. J. ROBERTS. 7.30: THE UNIVERSITY EXTENSION BOARD SERIES OF LECTURES.—A Talk by MAJOR E. H. BOOTH on "The History and Development of Physics; No. 2—"Workers on the Subject of Heat; Their Experiments and Conclusions." 7.58: What's on the Air To-night?

EVENING PROGRAMME

(See above)

2FC SYDNEY, 451 Metres

EARLY SESSION

(Relayed to 2NC, Newcastle.)

7.0: Big Ben. Early Rising Music (r.). Meteorological information for the man on the land. 7.10: This morning's news from the "Daily Telegraph." 7.15: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. 7.18: Studio Music (r.). 7.30: A short daily commentary for the man outback. 7.40: Radio Rhythm (r.). 7.45: Mails and Shipping. 7.48: What is on to-day? 7.50: Music from the Studio (r.). 8.15: CLOSE (Completion of Relay to 2NC, Newcastle.)

MORNING SESSION

(Relayed to 2NC, Newcastle, from 10.40 a.m.) 10.30: Announcements. 10.32: G. VERN BARNETT AT THE STUDIO ORGAN: Allegro Final ... Renaud Reverie in A ... Faulkes Allegretto Grazioso ... Holloway Legende ... Torjussin 10.45: MORNING DEVOTION: Conducted by Rev. R. P. Gee. 11.0: G. VERN BARNETT AT THE STUDIO ORGAN: Nocturnette ... d'Enry Tango ... Albentz Intermezzo ... Durham Finale ... Faulkes 11.15: Musical Items (r.). 11.50: British Official Wireless News. 12.0: Big Ben. Stock Exchange and Metal Quotations. 12.5: Studio Music (r.). 12.15: Meteorological forecast and weather synopsis. Special Produce Market Session for the man on the land, supplied by the State Marketing Board. 12.30: CLOSE (Completion of Relay to 2NC, Newcastle.) NOTE: Race results will be transmitted as received.

THE LUNCH HOUR

1.0: LUNCH HOUR MUSIC. 1.57: Sectional Weather Forecast. 2.0: Programme Announcements. 2.2: Stock Exchange, second call. 2.4: A Glance at the afternoon "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. 2.10: Musical Items (r.).

THE RADIO MATINEE

(Relayed to 2NC, Newcastle.)

2.30: MELODIES OF OLDEN DAYS (r.). 2.45: PEGGY VICKERS, Soprano: Annie Laurie ... Liza Lehmann Comin' Thro' the Rye ... Anonymous 2.52: SIM SOLOMONS, Violinist. 3.0: MUSIC OF THE DANCE (r.). Tango—Waltz—Mazurka. 3.9: PEGGY VICKERS, Soprano: Carissima ... Penn To a Miniature ... Brahe You in a Gondola ... Coningsby Clarke 3.16: MAORI SONGS (r.). 3.22: SIM SOLOMONS, Violinist. 3.30: MR. GRAHAM KENT will speak on "BRIDGE." 3.45: ORCHESTRAL INTERLUDE (r.). 3.53: VOCAL QUARTETTES (r.). 4.0: WHAT IS NEW? 4.28: STOCK EXCHANGE, third call. 4.30: CLOSE.

EARLY EVENING SESSION

(Relayed to 2NC, Newcastle, from 5.45 to 6.45 and from 7.5 to 8 p.m.) 5.45: THE CHILDREN'S HOUR, conducted by "BOBBY BLUEGUM." A STRAY SUNBEAM: "I want to live so I can die Without one sad, regretful sigh; I want to say, when life is done— 'I did my best for ev'ryone.'" 5.47: "Brer Rabbit" and his relatives. Do you know the difference between a hare and a rabbit? 5.57: A Musical Interlude. 6.0: Fun Night with "Uncle Ted" and "Sandy." 6.15: Birthday Calls. 6.30: The Serial.

2CH

SYDNEY,
248 Metres

Day sessions as usual.

EARLY EVENING SESSION

- 5.10: CHILDREN'S SESSION, conducted by "THE FAIRY GODMOTHER."
- 5.45: Music.
- 5.55: "THE HELLO MAN."
- 6.40: NATIONAL SYMPHONY ORCHESTRA—Sylvia Ballet *Delibes*
March and Procession of Bacchus.
- 6.48: BRONISLAW HUBERMAN, Violinist—Spanish Dance *Sarasate*
- 6.52: NIEDZIEKSKI, Pianist—Legende *Razyski*
- 6.56: ANNOUNCEMENT.
- 6.57: LIGHT OPERA COMPANY—Songs of the Past.
- 7.1: REGIMENTAL BAND OF H.M. COLDSTREAM GUARDS—Fique Dame *Suppe*
- 7.5: J. H. SQUIRE CELESTE OCTETTE—Come Into the Garden, Maud.
- 7.8: DENNIS NOBLE, Baritone—The Devout Lover *Pollaek and White*
- 7.11: DAJOS BELA ORCHESTRA—You, Only You *Ernest Arnold*

EVENING SESSION

- 7.15: A SCIENCE TALK, sponsored by THE AUSTRALIAN GAS LIGHT COMPANY.
- 7.30: CHARLES W. SAXBY, Organist—Spring Song, Bees' Wedding.
- 7.34: ANNOUNCEMENT.
- 7.35: GLADYS MONCRIEFF, Soprano—O, Dry Those Tears *Del Riego*
- 7.38: BAND OF H.M. COLDSTREAM GUARDS—Patience Selection.
- 7.45: RAE DA COSTA, Novelty Pianist—Selection, The Bat *Strauss, arr. Grunfeld*
- 7.53: RICHARD TAUBER, Tenor—Ideale *Tosti*
- 7.58: ANNOUNCEMENT.

8.0: TO-NIGHT:

"WIRELESS WEEKLY"
INFORMATION SERVICE.
A TALK BY THE "TECHNICAL EDITOR."

- 8.30: SPONSORED SESSION—ROBERT TURNER IN THE TRAVELS OF TEDDY.
- 9.0: ALBERT W. KETELBEY'S ORCHESTRA—Cockney Suite.
- 9.8: CONTRALTO SOLO.
- 9.11: REGAL MILITARY BAND—Friends Forever *Lacalle*
- 9.15: THIRD NEWS AND COMMENTARY.
- 10.0: Musical Item.
- 10.5: AN ADDRESS BY REV. J. P. DRYLAND (Church of England).
- 10.25: Musical Item.
- 10.30: CLOSE.

2GB

SYDNEY,
316 Metres

Day Sessions as usual.

- 12.0: F. J. PALMER AND SON'S PARK STREET, COMMUNITY SINGING AT SAVOY THEATRE, BLIGH STREET, SYDNEY DIRECTED BY UNCLE GEORGE, SUPPORTED BY LEADING ARTISTS
- EVENING SESSION**

- 5.0: Birthday Calls and Songs by Uncle George and Bimbo.
- 6.45: Music.
- 7.0: Entertainment by Heel and Toe.
- 7.15: Wurlitzer Organ—Dancing Animal Crackers.
- 7.20: Pletsam and Jetsam—Only a Few of Us Left, The Alsatian and the Pekinese.
- 7.30: Address by Mr. Charlie Taylor.
- 7.40: Orchestra—Bal Masque.
- 7.45: Soprano Solo—Roses of Picardy.
- 7.50: String Sextette—Baby's Sweetheart; Little Toddlers.
- 8.0: Berlin State Opera Orchestra—Polonaise No. 2.
- 8.10: Eileen Boyd (Contralto).
- 8.20: Orchestra—Nell Gwyn Dances—Country Dance; Pastoral Dance; Merry-makers' Dance.
- 8.35: Orchestra—Marche Hongroise.
- 8.40: Les Herford (Baritone).
- 8.50: Creators' Band—Aida—Introduction and Moorish Ballet, Act 2.

- 8.55: Symphony Orchestra—Chanson Hindoue; Sleeping Beauty.
- 9.5: Eileen Boyd, Contralto.
- 9.15: Instrumental Trio—Mirage; El Relicario.
- 9.25: Orchestra—Toccata and Fugue.
- 9.35: Les Herford, Baritone.
- 9.45: Symphony Orchestra—Valse de Concert.
- 10.0: Entertainment Club Numbers.
- 11.0: Slumber Music.
- 11.26: 2GB Good-night Song.
- 11.30: Close down.

2UW

SYDNEY,
267 Metres

Day Sessions as usual.

- 5.15: CHILDREN'S SESSION, conducted by UNCLE JACK and JILL.
- 5.58: MIDSHIPMAN BOB BREEZY.
- 6.3: DINNER MUSIC.
- 6.30: FARMYARD FIVE.
- 6.45: Request items.
- 8.0: A CELEBRITY PROGRAMME.
- 8.15: ORGANS OF THE GREAT CATHEDRALS Lyons Cathedral—Toccata *Boelelman*
St. Paul's Cathedral—Fantasia in E, Salisbury Cathedral—Bourel *Saint-Saens*
Handel
- 8.30: SONGS OF THE PAST—
(a) The Better Land *Cowan*
(b) Asleep in the Deep *Petrie*
(c) The Promise of Life *Cowan*
(d) Then You'll Remember Me *Balfe*
- 8.45: IMPRESSIONS—
(a) Piano—Gardens in the Rain *Debussy*
(b) Octette—The Song of the Waterfall, Squire de Falla
(c) Orch.—The Port *Strauss*
(d) Song—Dream in the Twilight
- 9.0: A DRAMATIC SKETCH.
- 9.30: IN LIGHTER VEIN WITH SAINT-SAENS Orch.—Le Cygne.
Vocal—Song of the Nightingale.
Piano—Etude en forme de valse.
Orch.—Dance Macabre.
- 9.50: PIANO RECITAL OF CHAMINADE PIECES BY UNA BOURNE (R.)—
(a) Pierrette.
(b) Danse Creole.
(c) Aubade.
(d) Valse Arabesque.
- 10.0: Selected items.
- 10.30: Close down.

2UE

SYDNEY,
293 Metres

Day Sessions as usual.

- 12.30 p.m.: Description of the Races, by Mr. L. G. Melville.
- EVENING SESSION**
- 5.0: Children's Session—Auntie May and Uncle Simon. 5.40: Uncle Lionel and Ambrose. 6.30: Dinner Music. 7.30: Studio Programme. 8.0: Overture, Hungarian Rhapsody. 8.10: Music. 8.30: Popular Dance Programme. 10.0: Light Opera Selection, H.M.S. Pinafore. 10.15: Music. 10.45: Tranquility Music. 11.0: Close down.

2KY

SYDNEY,
280 Metres

Day Sessions as usual.

- EVENING SESSION**
- 5.0: Conducted by John Harper and Jerry. 6.0: Children's Birthday Session. 6.30: Dinner Entertainment. 7.15: Dinner Music. 7.30: Racing Revelations, Mr. R. Naylor. 7.45: Musical Interlude. 8.1: Sponsored Programme. 8.30: Music. 10.30: Closing Announcements.

2SM

SYDNEY,
236 Metres

Day Sessions as usual.

- 5.0: Children's Session—Auntie Goodie. 5.30: Uncle Tom. 6.1: Dinner Session. 6.45: Social Chatter—Maria Dawson. 7.0: Bridge Talk—Dr. McAdam. 7.15: After Dinner Entertainment. 7.45: Studio Music. 8.0: Evening Session. 8.10: Studio Music. 10.0: Composing Music. 10.30: Close.

3LO

MELBOURNE,
375 Metres

- EARLY MORNING SESSION**
- 7.1: Shipping. 7.3: Physical Exercises to Music. 7.10: Morning Music. 7.37: "Brother Bill's" Pick-me-up—"Stars or Suns." 7.40 to 8.15 a.m.: As on Tuesday.

- MORNING SESSION**
- 10.30: Current Happenings in Sport, by Mel. Morris. 10.45 to 12.30 p.m.: As on Tuesday.

MIDDAY SESSION

1.0 to 2.0 p.m.: As on Tuesday.

AFTERNOON SESSION

- 2.0: Prevention is Better than Cure—"The Care of the Tuberculous Patient in the Home," Sister S. Pines. 2.15: Music. 2.20: Books and Women—"Good Books at Small Cost," Mrs. J. C. Miller. During the afternoon Eric Welch will describe the Woodend Races—Bulla Hurdle Race, 2 miles and 105 yards; Maiden Plate, 5/4 furlongs; Summer Handicap, 9/2 furlongs; Mayfield Handicap, 5 furlongs; Novice Handicap, 6 furlongs; Hillside High-weight, 1 mile.
- From 3.0 to 4.30 p.m. the Radio Matinee will be provided by "The Synchronising Six." 4.30: Close.

THE CHILDREN'S CORNER

- 5.45: Here comes Mr. Compton Counts with another Topsy Turvy Talk. What's it about this time? Fishing! But it's fishing the way fish would like it! That's different, isn't it? Robin Croll, the boy who loves the bush. You'd be surprised how much he knows about snakes. He's going to tell you about them—without making you feel creepy, of course!

EVENING SESSION

- 6.30: COUNTRYMAN'S SESSION.
- 7.2: ALL SPORTING RESULTS.
- 7.21: MR. PETER McALISTER will speak on "Crickets."
- 7.31: Results of Women's Sports.
- 7.35: British Official Wireless News.
- 7.45: FRENCH—MADAME SOWARD.

NIGHT SESSION

- 8.0: A.B.C. (MELBOURNE) SYMPHONY ORCHESTRA. (See 2PC Programme.)
- 10.0: AN ANTHOLOGY OF MODERN VERSE—FRANK D. CLEWLOW.
- 10.15: INTERLUDE.
- 10.30: WEATHER, Etc.
- 10.33: DANCE MUSIC by WIRELESS DANCE ORCHESTRA.
- 11.30: Close.

3AR

MELBOURNE,
492 Metres

MORNING SESSION

- 8.15: Thirty Minutes' Melody. 8.45: Weather. 9.50: Music. 9.1: News. 9.5: Music. 9.17: Weather. 9.18: Music. 9.21: Radio Serial. "Cleansing Fires," by Arthur Russell. Read by "Scribe." 9.36: Music. 10.1: British Official Wireless News. 10.15: Music. 10.30: Selections on the Grand Organ. 10.45: The Daily Broadcast Service. 11.0: Close.

MIDDAY SESSION

- 12.1: Music. 12.15: Little-known Lands and Their Peoples. "Sarawak," Captain J. E. Seaton. 12.30: Music. 1.15: At Home and Abroad, by "The Watchman." 1.30: Music.

AFTERNOON SESSION

- 2.1: Grand Opera, Carmen (Bisect). Acts III and IV. (See Programme, January 9, for details of Cast.) 3.0: Editorials that Might Have Been. 4. "The Romans Evacuate Britain." 3.45: Cameos from the Classics. "Sir Walter Scott" (Lord Dufferin). J. Howlett Ross. 4.0: Music. 5.30: Weather and Snipping. 5.45: Close.

EVENING SESSION

- 6.15: Dinner Music. 7.30: A Musician's Birthday Album. Compiled and Musically Illustrated by George Findlay, Mus. Bac. 7.45: Music.

NIGHT SESSION

- 8.0: TALES OF TERROR TACTFULLY RETOLD. Old-time Tales for the Young. J. F. CAINE.
- 8.20: WIRELESS DANCE ORCHESTRA—Fox-trot.
ANN HARVEY, Mezzo-Soprano—Ma Curly Headed Baby *Clutsam*
WIRELESS DANCE ORCHESTRA—Fox-trot.
JAMES RILEY, Tenor—You in a Gondola *Clarke*
WIRELESS DANCE ORCHESTRA—Waltz.
AUSTIN ANDERSEN, Entertainer—A Little Farce: Shot Out *Andersen*
WIRELESS DANCE ORCHESTRA—Fox-trot.
ANN HARVEY, Mezzo-Soprano—I Know *Spross*
WIRELESS DANCE ORCHESTRA—Fox-trot.
JAMES RILEY, Tenor—The Star *Rogers*
Inter Nos *Macfayden*
WIRELESS DANCE ORCHESTRA—Waltz.
AUSTIN ANDERSEN, Entertainer—A Comic Tit-bit: When Uncle Sings the Only Song He Knows *Jackson*
WIRELESS DANCE ORCHESTRA—Fox-trot.

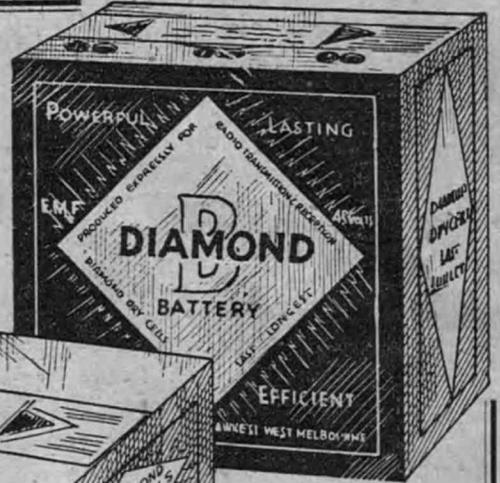
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Fox-trot.
JAMES RILEY, Tenor—
Serenata Toselli
WIRELESS DANCE ORCHESTRA—
Waltz.
AUSTIN ANDERSEN, Entertainer—
Humorous Sketch: The Competition,
Andersen
WIRELESS DANCE ORCHESTRA—
Fox-trot.
10.15: NEWS.
10.30: CLOSE.

news; train information; mail notices. 6.30:
Early dinner music. 6.45: Late market re-
ports. General commercial news. Late wea-
ther data. 7.0: Late dinner music. 7.23:
First general news from the "Telegraph."
7.30: A Talk—"Sunny Queensland—Dalby and
the Bunya Mountains," by Mr. M. J. Kirwan
(Queensland Government Tourist Bureau).
7.45: General sporting, including a swimming
talk by Norman Burns. 7.59: Eastern Aus-
tralian Standard Time Signals.

6.50: Stock Exchange.
7.0: News Service.
7.5: Sporting Service, including Woodend Race
Results.
7.10: The 5CL Bluebird Girls' Club.
NIGHT SESSION
7.30: AN ORCHESTRAL CONCERT FROM
MELBOURNE.
10.15: NEWS SESSION.
10.20: MODERN DANCE MUSIC.
11.0: Close.

NIGHT SESSION

(Relayed to 4RK.)

8.0: A SYMPHONY ORCHESTRAL CONCERT
from 3LO, MELBOURNE.
10.15: FINAL NEWS BULLETIN—Weather
data; cable news (copyright); "Sun"—"Herald"
News Service, Ltd., and Australian Press As-
sociation; second general news from the
"Telegraph." British Official Wireless News.
10.30: BERT TUCKER AND HIS CARLTON OR-
CHESTRA—Dance music.
11.0: Close.

Tuesday's Programme
(Continued From Page 43)

5CL ADELAIDE,
411 Metres
EARLY MORNING SESSION

7.30: News. Weather Forecast. 7.40: Music.
8.1: Shipping, Mail, Train, Weather, and
Market Reports. 8.10: Music. 8.30: Close
down.

MORNING AND MIDDAY SESSION
11.0: Daily Broadcast Service. 11.28: Sporting
Fixtures, 11.30: The New Idea Club, by "Sis-
ter Sue" and "Betty Blue." 11.45: Latest
Recordings. 12.1: Music. 12.15: Stock Ex-
change. 12.19: News Service. 12.50: Weather,
Grain, and River Reports. 1.0: Music. 1.5:
News Items. 1.15: Music. 2.0: Close down.

AFTERNOON SESSION
3.0: Matinee Programme. 3.30: Cameo Classics,
a talk, by Mr. H. Brewster-Jones. 3.45:
Radio Matinee (continued). 4.30: Close down.

EVENING SESSION
5.50: Birthday Greetings. 6.0: "The Wattle
Lady" and "Big Brother." 6.22: Dinner
Music. 6.50: Official Stock Exchange. 7.0:
News Service. 7.8: Sporting Service. 7.20:
Music.

NIGHT SESSION
7.30: A NATIONAL PROGRAMME from 2FO,
SYDNEY.
10.15: News Session.
10.20: Dance Music.
11.0: Close down.

4QG BRISBANE,
395 Metres

EARLY MORNING SESSION

(Relayed to 4RK.)

7.30: The Chimes and music. 7.34: Weather
data from the Commonwealth Weather
Bureau. Cable news (copyright); Australian
Press Association and "Sun"—"Herald" News
Service, Ltd. First general news from the
"Courier." Comments on news. British Offi-
cial Wireless News. What's on to-day. Fea-
tures from the radio programmes. 8.0: Music.
8.30: Close.

**MORNING, MIDDAY, AND AFTER-
NOON SESSION**

(Relayed to 4RK except from 11.23 to 11.30.)
11.0: The Daily Broadcast Service. 11.10: The
Morning Musicals. 11.23: Social notes from the
metropolitan daily newspapers. 11.30:
Musical Interlude. 11.40: A Literary Talk—
"Charlotte Bronte and Her Novels," by Miss
Mary Sydes. 11.55: What's on to-day. 12.0:
The City Hall Chimes. 12.1: Midday music.
1.0: Market reports, weather data, second
general news from the "Courier." British
Official Wireless News. 1.20: Late luncheon
music from the Carlton Cabaret. Metro-
politan Races—The metropolitan races will
be described during the afternoon. Between
events musical items by "The Celeste Quar-
tette" will be broadcast from the studio.
5.0: Close.

EARLY EVENING SESSION

(Relayed to 4RK except from 6.20 to 6.30.)
6.0: For the children—"A treat in a farm,"
by "Bebe" and "Bunty." 6.20: Shipping

5CL ADELAIDE,
411 Metres

EARLY MORNING SESSION

7.30: News. Special weather forecast. 7.40:
Music. 8.1: Shipping, Mail, Train, Weather
and Market Reports. 8.10: Music. 8.30:
Close.

MORNING AND MIDDAY SESSION
11.0: Daily Broadcast Service. 11.28: Sporting
fixtures, 11.30: Homecrafts, by "Economist."
11.45: Latest Recordings. 12.15: Stock Ex-
change. 12.19: News Service. 12.50: Weather,
Grain, and River Reports. 1.0: Music. 1.15:
News Items. 1.20: Music. 1.59: Woodend
Race Results. 2.0: Close.

AFTERNOON SESSION
3.0: Woodend Race Results. 3.2: Weekly Talk
under the auspices of the Housewives' As-
sociation. 3.15: Matinee Programme. 4.15:
A.B.C. Bridge Club, conducted by "No
Trump." 4.30: Close.

EVENING SESSION
5.50: Woodend Race Results.
5.55: Birthday Greetings.
6.0: "Miss Wireless" and "Big Brother."
6.20: CHILDREN'S HOSPITAL SENIOR BIRTH-
DAY LEAGUE.
6.22: DINNER MUSIC.

THURSDAY . . . JANUARY 12

8.0—NATIONAL PROGRAMME From 2FC, 2NC, 3LO and 2CO,—TO-NIGHT, 8.0

8.0 THE A.B.C. MILITARY BAND, conducted by J. PHELOUNG
Overture, Oberon Weber

THE A.B.C. RADIO CHOIR, conducted by G. VERN BARNETT
Give Ear, O Lord Oberthur
Rolling Down to Rio German
The Parting Kiss Pinsuti

BAND
Pot-pourri, Classical Memories Ewing

MAISIE REID AND KATIE CORNFORD, in a Two-Pianoforte Recital
Variations on Chorale (St. Anthony) Haydn-Brahms

BESSIE BLAKE (Soprano)
The King of Thule, Ballad
The Jewel Song
From Faust Gounod

8.50 EDWARD HOWELL AND THERESE DESMOND
Will continue their series of

GREAT LOVE STORIES

9.5 BAND
Naval Patrol, Britain's First Line Williams
Valse de Concert Mattei



The A.B.C. MILITARY BAND And the A.B.C. CHOIR

CHOIR
Dream, Baby, Dream Baynon
Mariners of England Pointer
When Soft Music Dies Jenkins

MAISIE REID AND KATIE CORNFORD, in a Two-Pianoforte Group
Romance Rachmaninoff
Waltz Rachmaninoff

BESSIE BLAKE
O Luce di Quest'anima Donizetti
Porgi Amor Mozart

BAND
Selection, Sybil Jacobi

10.0 LATEST DANCE MUSIC
(Completion of Relay to National Stations)

10.30 Late Official Weather Forecast

10.32 FROM THE HOTEL AUSTRALIA. Dance Music

11.0 (Completion of Relay to 2NC Newcastle)

11.30 CLOSE

ALTERNATIVE PROGRAMME OVERLEAF—DAY SCHEDULES BEGIN BELOW

2FC SYDNEY,
451 Metres
EARLY SESSION
(Relayed to 2NC, Newcastle.)

7.0: Big Ben. Early Rising Music (r.). Meteorological information for the man on the land.
7.10: This morning's news from the "Daily Telegraph" and "Labor Daily."
7.15: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
7.18: Studio Music (r.).
7.30: A short daily commentary for the man outback.
7.40: Radio Rhythm (r.).
7.45: Mails and Shipping.
7.48: What is on to-day?
7.50: Music from the Studio (r.).
8.15: CLOSE (Completion of Relay to 2NC, Newcastle.)

MORNING SESSION
(Relayed to 2NC, Newcastle, from 10.40 a.m.)

10.30: Announcements.
10.32: G. VERN BARNETT AT THE STUDIO
ORGAN:
March Salome
Canzonetta from Violin Concerto, Tchaikowsky
Dedicace Bonnet
10.45: MORNING DEVOTION: Conducted by Rev. L. A. Shakespeare.
11.0: G. VERN BARNETT AT THE STUDIO
ORGAN:
Stella Matutina Bonnet
Elves Bonnet
Song d'Enfant Bonnet
Heroic Caprice Bonnet
11.15: Musical Items (r.).
11.50: British Official Wireless News.
12.0: Big Ben. Stock Exchange and Metal Quotations.
12.5: Studio Music (r.).
12.15: Metropolitan forecast and weather synopsis. Special Produce Market Session for the man on the land, supplied by the State Marketing Board.
12.30: CLOSE.

THE LUNCH HOUR
1.0: LUNCH HOUR MUSIC.
1.57: Sectional Weather Forecast.
2.0: Programme Announcements.

2.2: Stock Exchange, second call.
2.4: A Glance at the afternoon "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
2.10: To-day's acceptances, by the A.B.C. Racing Observer—M. A. FERRY.
2.25: Musical Item (r.).

THE RADIO MATINEE
(Relayed to 2NC, Newcastle, from 2.30 to 4.30 p.m.)

2.30: GEORGE TAYLOR'S TRIO:
Prelude to Fourth Act, "Carmen" Bizet
Berceuse de Jocelyn Godard
Laughing Eyes Finck
2.40: DOT BROWNE, Popular Vocalist:
Sally Towers
Just Friends Lewis-Kierner
2.47: ORGAN SOLOS (r.).
2.56: A CHORAL INTERLUDE (r.).
3.0: GEORGE TAYLOR'S TRIO:
Simple Aveu Thome
Mvano Amadeti
Extase Ganne
3.10: DOT BROWNE, Popular Vocalist:
You Are My Heart's Delight Lehar
Shanty in Old Shanty Town Little
Paradise Brown
3.17: NOVELTY PIANO SOLOS (r.).
3.23: AN ORCHESTRAL INTERLUDE (r.).
3.30: "TALES OF HIS MAJESTY'S INDIAN SECRET SERVICE,"
Told by Mr. LEO. STARK
3.45: GEORGE TAYLOR'S TRIO:
Valse—Bitter Sweet Coward
Carissima Elgar
Second Movement, Ballet Egyptian Luigini
3.55: A BAND SELECTION (r.).
4.3: GEMS FROM OPERA (r.).
4.12: CELLO SOLOS (r.).
4.20: BARTONE SOLOS (r.).
4.23: A BAND INTERLUDE (r.).
4.28: Stock Exchange, third call.
4.30: CLOSE.

EARLY EVENING SESSION
(Relayed to 2NC, Newcastle, from 5.45 to 6.45 and from 7.5 to 8 p.m.)

5.45: THE CHILDREN'S HOUR, conducted by "BOBBY BLUEGUM."
A STRAY SUNBEAM:
"When you long for all the pleasures
Which the wealthy folk may buy,
Look around you. There are treasures
You will find, if you but try."

5.47: CLUB NIGHT! There is something special for to-night; be sure and listen in. BE A SUNSHINE SOLDIER!

6.0: Have You a Dog? Let it join the "Tall Waggers Club." Entries received at once. Listen for Details.

6.15: Many happy returns of the day.
6.30: Do You Like the New Serial?
6.45: "Sleep Tight."
(Completion of Relay to 2NC, Newcastle.)

"DENTAL PAIN."
A Talk arranged by the Chairman of the Dental Health Education Committee Australian Dental Association, New South Wales Branch.

6.55: A Talk arranged by the Electrical Contractors and Electricians' Licensing Board of New South Wales.

7.5: (Relayed to 2NC, Newcastle) A.B.C. Sporting Service.

7.15: Weather Report, Stock Exchange, Wool Sales, Wheat Markets, Homebush Markets, Truck Bookings, General Market Reports.

7.45: News Service from "The Sun." Additional News from the A.B.C. Service. Cables (Copyright) from the Sun-Herald and Australian Press Association News Service. Wireless News from the British Official Service.

7.58: To-night's Programme.

EVENING PROGRAMME
(See above)

2BL SYDNEY,
351 Metres
OPENING SESSION

8.15: G.P.O. Chimes. A Musical Interlude (r.).
8.40: Meteorological Data for the Country.
8.45: Mails and Shipping Information.
8.50: Memory Melodies (r.).
9.0: THIS MORNING'S STORY.
9.30: Melodies Grave and Gay (r.).
9.40: British Official Wireless Press.
9.45: Moments Musical (r.).
10.5: News from the "Daily Telegraph" and the "Labor Daily."
10.8: Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
10.10: Studio Music (r.).
10.35: THE AUSTRALIAN WOMEN'S RADIO ASSOCIATION—Conducted, by Miss Gwend

THURSDAY, January 12 (Con.)

8.0—ALTERNATIVE PROGRAMME FROM 2BL—8.0

- 8.0 UNIVERSITY EXTENSION BOARD SERIES OF LECTURES PROFESSOR R. D. WATT will tell listeners about THE WONDERS OF THE SOIL—No. 2, The Structure and Physical Properties of the Soil
8.30 THE MEXICANO BAND Santiago, Waltz ... Metra Rosita ... Zamecnik
8.40 THE ELLICE VOCAL QUARTET Smilin' Through ... Penn You in a Gondola ... Clarke Bowl of Roses ... Clarke
8.47 LIONEL HICKEY (Violinist) La Capricieuse ... Elgar Black Eyes ... Arr. L. Hickey
8.55 VICTOR GOURIET (Entertainer) Resolutions for 1933 Harley and Stanley (Up-to-date Verses by Victor Gouriet) Germs ... Burt and Atwell
9.0 Late Weather Forecast
9.2 BAND Espagnole Serenade ... Gomez
9.8 THE ELLICE VOCAL QUARTET Three Nursery Rhymes Old Mother Hubbard ... Wheeler Simple Simon ... Macey Mary Had a Little Lamb ... Wheeler

- 9.15 THE PROPOSALS OF PEGGY No. 4, Announcing Her Engagement Featuring VICTOR GOURIET and BRENDA GRAY
9.20 LIONEL HICKEY From the Canebrake ... Gardner Valse ... Curreno Serenade ... Heykens
9.27 QUARTET Songs of the Evening Parting ... Otto When You Come to the End of the Day ... Smith When Evening's Twilight ... Hatter
9.34 BAND Spanish Caprice ... Jottr Paquito ... Nathan
9.45 THE PROPOSALS OF PEGGY No. 5, The Wild Oat Featuring VICTOR GOURIET and BRENDA GRAY
9.50 BAND Tango Mexicano ... Cupua
10.0 THE FAMILY PHYSICIAN, by our Duly Qualified Medical Practitioner
10.15 LATEST DANCE MUSIC (r.)
10.27 Late News from the "Sun"
10.30 CLOSE

- 7.52: PETER DAWSON, Baritone—Bedouin Love Song ... Pinsuti
7.55: ANNOUNCEMENT.

EVENING SESSION

- 8.0: POT POURRI OF MUSICAL COMEDY—LONDON THEATRE ORCHESTRA—A Country Girl ... Monckton
8.6: REGAL CINEMA ORCHESTRA—Broadway Selection.
8.14: LONDON THEATRE ORCHESTRA—The Merry Widow ... Lehar
8.22: THE CASINO ORCHESTRA—Gypsy Princess.
8.30: TRADITIONAL SONGS, arranged by MANSFIELD, sung by STUART ROBERTSON and MALE CHORUS—My Bonnie, Down in Demerara, Villikins and His Dinah, Some Folks Like to Sigh.
8.36: DE GROOT AND THE PICCADILLY ORCHESTRA—Cavalleria Rusticana.
8.44: MAREK WEBER AND HIS ORCHESTRA—Rigoletto.
8.52: JOSEPH HISLOP, Tenor—Thy Tiny Hand is Frozen.
8.55: NEW LIGHT SYMPHONY ORCHESTRA—Madame Butterfly.
9.3: MODERN MELODY—GEORGE OLSEN AND HIS MUSIC—The Moon is Low.
9.6: JOHN BROWNLEE, Baritone—What the Red Hair'd Bosun Said, Harryry
9.9: NAT SHILKRET AND HIS ORCHESTRA—Who Cares What You've Been ... Wolfe
9.12: PAUL WHITEEMAN'S RHYTHM BOYS—Miss Annabelle Lee ... Claire-Pollack
9.15: THIRD NEWS AND COMMENTARY.
10.0: Musical Items.
10.5: AN ADDRESS BY MR. ROY SCOTTER—The Methodist Crusaders' Movement.
10.25: Musical Item.
10.30: CLOSE.

2GB SYDNEY, 316 Metres

Day Sessions as usual.

EVENING SESSION

- 5.0: Birthday Calls and Songs by Uncle George and Bimbo.
6.45: Boys' Birthday Club. Talk by Mr. J. Davis.
7.0: Fifteen Minutes, Gil Dech and Piano.
7.15: Dance Orchestra—You're Twice as Nice as the Girl in My Dreams.
7.20: Alfredo Rode, Violinist—Dance of the Goblins.
7.25: 2GB String Octette.
7.35: Maurice Chevalier, baritone—Louise; Wait Till You See Ma Cherie; Sweeping the Clouds Away.
7.50: Novelty Orchestra—Ginger Snaps; Danse Satelle.
8.0: 2GB String Octet.
8.10: Senia Chostiakoff, Russian Tenor.
8.15: Cricket Talk, by Mr. M. A. Noble.
8.30: 2GB String Octette.
8.40: Senia Chostiakoff, Russian Tenor.
8.45: Dajos Bela Orchestra—Narcissus.
8.50: Piccolo Duet—Two Little Finches.
8.55: 2GB String Octette.
9.5: Senia Chostiakoff, Russian Tenor.
9.15: Symphony Orchestra—L'apprenti Sorcier.
9.25: The Big Four—Fiesta.
9.30: 2GB String Octette.
9.40: Descriptive Sketch—In the Sudan.
9.45: Jack Lumsdaine and Len Maurice.
10.0: 2GB String Octette.
10.10: Instrumental Music.
11.0: Slumber Music.
11.30: Close down.

2UW SYDNEY, 267 Metres

Day Sessions as usual.

- 5.15: CHILDREN'S SESSION, conducted by UNCLE JACK and JILL.
5.58: MIDSHPMAN BOB BREEZY.
6.3: DINNER MUSIC.
6.30: Musical Programme.
7.0: TO-DAY'S TENNIS.
7.3: Music.
8.0: A CELEBRITY PROGRAMME.
8.15: SOME FAMOUS PIANO MUSIC—(a) Blue Danube Waltz ... Strauss (b) The Submerged Cathedral ... Debussy (c) The Harmonious Blacksmith ... Handel
8.30: TWO SCENES FROM OPERA—Love Duet—Madame Butterfly ... Puccini Nile Scene—Aida ... Verdi
8.45: SONGS OF TRIUMPH—(a) A Song of Thanksgiving ... Allitsen (b) Te Deum ... Baz (c) To-morrow ... Keel
9.0: Talk on Foreign Affairs, by J. M. Prentice.
9.10: Symphonic Poem—Till's Merry Pranks, Strauss
9.30: SONGS BY RUDYARD KIPLING—(a) Follow Me Ome ... Higgs (b) Smugglers' Song ... McCall (c) Boots ... McCall (d) Ce ... McCall
9.45: Song Hits and Dance Music.
10.0: Musical Programme.
10.28: To-morrow's Programme.
10.30: Close down.

2BL—Continued

Varley, "Understanding your Child," by Miss Gwen Varley. "Floral Decorations," by Miss Stella Fawcett.

- 11.0: G.P.O. Chimes. CLOSE.
MID-DAY SESSION
12.0: G.P.O. Chimes and Announcements, Metropolitan Forecast and Weather Synopsis.
12.2: Studio Music (r.).
12.30: LUNCH-HOUR MUSIC.
1.0: Afternoon News from the "Sun." Cables (Copyright) from the Sun-Herald and Australian Press Association News Service.
1.8: Sectional Weather Forecast.
1.11: Radio Rhythm (r.).
1.35: Studio Music (r.).
2.0: What's on the Air This Afternoon?
2.2: THIS AFTERNOON'S STORY.

- AFTERNOON ENTERTAINMENT
2.30: "SALON MUSIC" (r.).
2.45: FAMOUS LIEDER (r.).
3.0: "THE DANSANT"—Dance Music (r.).
3.9: A Song by Jeanette MacDonald (r.).
3.12: Dance Music (r.).
3.21: A Baritone Solo by Peter Dawson (r.).
3.24: Dance Music (r.).
3.33: A Popular Song by George Sorlie (r.).
3.38: Dance Music (r.).
3.45: A Humorous Interlude (r.).
3.51: Dance Music (r.).
4.0: "BOOK REVIEWS," by the "BOOKMAN."
4.20: FIFTEEN MINUTES WITH RUDOLF FRIML (r.).
4.35: "MUSIC OF THE MOMENT" (r.).
4.45: THE TRADE HOUR DEMONSTRATION MUSIC (r.).
5.40: Weather Information.
5.45: CLOSE.

- THE DINNER HOUR
6.15: DINNER MUSIC.
7.45: Musical Items (r.).
7.58: What's on the Air To-night?

EVENING PROGRAMME (See above)

2CH SYDNEY, 248 Metres

Day sessions as usual.

TO-DAY AT 3.30:

- "WOMAN'S BUDGET" HALF-HOUR, CONDUCTED BY CONSTANCE ROBERTSON (Editor of "The Woman's Budget").
EARLY EVENING SESSION
5.10: CHILDREN'S SESSION, conducted by "THE FAIRY GODMOTHER."
5.45: Music.
5.55: "THE HELLO MAN."
6.40: ALBERT W KETELBEY'S CONCERT ORCHESTRA—Three Fanciful Etchings ... Ketelbey
6.48: BLACK DIAMONDS BAND—The Gypsy Dance.
6.51: ERICA MORINI, Violinist—Gypsy Serenade ... Valdes
6.54: ANNOUNCEMENT.
6.55: PETER DAWSON, Baritone—On the Road to Mandalay.
6.59: REGAL CINEMA ORCHESTRA—Broadway Selection ... Gottler
7.7: WILHELM BACKHAUS, Pianist—Naila Valse ... Delibes-Dohnanyi
7.11: ANNETTE BLACKWELL, Soprano—(a) A Farmer's Son So Sweet. (b) As I Sat on a Sunny Bank, Arr. Sharp
7.15: PATTMAN, Organist—Valse Triste ... Sibelius
7.19: J. H. SQUIRE CELESTE OCTETTE—Serenade ... Titt
7.23: ANNOUNCEMENT.
7.24: B.B.C. WIRELESS CHORUS AND ORCHESTRA—Wine, Women, and Song ... Strauss
7.32: ANNOUNCEMENT.
7.33: BLACK DIAMONDS BAND—L'Africana Prelude ... Meyerbeer
7.36: MARK HAMBURG, Pianist—Waltz in a Flat ... Chopin
7.40: AMELITA GALLI CURCI, Soprano—La Villanelle.
7.43: HERMAN FINCK AND HIS ORCHESTRA—Schubertiana.
7.51: ANNOUNCEMENT.

2UE

SYDNEY,
293 Metres

Day Sessions as usual.

EVENING SESSION

5.0: Children's Session—Auntie May and Uncle Simon. 5.40: Uncle Lionel and Ambrose. 6.30: Dinner Music. 7.30: Sporting Talk by Mr. Oscar Lind. 7.45: McLean of Scotland Yard. 8.0: Overture, Stradella. 8.10: Studio Programme. 10.0: Light Opera Selection, Florodora. 10.15: Music. 10.45: Tranquillity Music. 11.0: Close down.

2KY

SYDNEY,
280 Metres

Day Sessions as usual.

EVENING SESSION

5.0: Conducted by Uncle John and Jerry. 6.0: Birthday Session. 6.30: Dinner Entertainment. 7.15: Dinner Music. 8.1: Music. 10.30: Closing Announcements.

2SM

SYDNEY,
236 Metres

Day Sessions as usual.

5.0: Children's Session—Auntie Goodie. 5.30: Uncle Tom. 6.1: Dinner Session. 6.45: Social Chatter—Maria Dawson. 7.15: After Dinner Entertainment. 7.45: Studio Music. 8.0: Evening Session. 8.10: Studio Music. 10.0: Composing Music. 10.30: Close.

3LO

MELBOURNE,
375 Metres

EARLY MORNING SESSION

7.1: Shipping. 7.3: Physical Exercises to Music. 7.10: Morning Music. 7.37: "Brother Bill's" Pick-me-up—"Take it like a Man." 7.40 to 8.15 a.m.: As on Tuesday.

MORNING SESSION

10.30: Current Happenings in Sport, by Eric Welch. 10.45 to 12.30 p.m.: As on Tuesday.

MIDDAY SESSION

1.0 to 2.0 p.m.: As on Tuesday.

WOMEN'S SESSION

2.0: Milady's Dress—A Confidential Chat by "Jane." 2.15: Music. 2.30: Successful Cookery—"Dainty Afternoon and Supper Dishes," Coral Showman. 2.45: Music.

THE RADIO MATINEE

3.0: A.B.C. Quintette—Minuet (Bocherini), Canto Amoroso (Martini). 3.6: Ernest Wilson, Baritone—There's Something at the Yardarm (Gleason), Land of Who Knows Where (William G. James). 3.12: Nell Fleming, Soubrette—He's the Last Word, There's No Depression in Love. 3.18: Tasma Tierman, Cello—Serenade (Drigo). 3.21: Gordon Ireland, Entertainer—At the Piano. 3.27: A.B.C. Quintette—Selection: The Toymaker of Nuremberg (Dudley Glass). 3.37: Freda Northcote, Contralto—June Music (Trent), Sing, Happy Birds (Liddle). 3.43: Bertha Jorgensen, Violin—Negro Spiritual (Cameron White). 3.46: A.B.C. Quintette—Eastern Romance (Rimsky-Korsakoff), Serenade (Arensky). 3.52: Ernest Wilson, Baritone—Three Songs by White: When the Swallows Home-ward Fly, A Memory, Let Us Forget. 3.58: Nell Fleming, Soubrette—I'm Wonderful, The Grass is Always Greener. 4.4: A.B.C. Quintette—I Hear You Calling Me (Marshall), At Dawning (Wakefield-Cadman). 4.10: Gordon Ireland, Entertainer—At the Piano. 4.16: Freda Northcote, Contralto—Little Brown Cottage (Dickson), The Second Minuet (Besley). 4.22: A.B.C. Quintette—Indian Love Lyrics (Woodjorde-Finden). 4.30: Close down.

THE CHILDREN'S CORNER

5.45: The Tale of the Shepherd's Daughter. This is a story Mr. Harold Moschetti has made up. And it has musical effects. It gets quite exciting sometimes. And it is funny, too. Mr. William Tainsh has a story that the boys and girls of China love. And at the end of the story he will sing a little song of China.

EVENING SESSION

7.21: Results of Women's Sports.
6.30: COUNTRYMAN'S SESSION.
7.2: ALL SPORTING RESULTS.
7.25: BOOKS—"Wise and Otherwise"—CAPTAIN C. H. PETERS.
7.35: British Official Wireless News.
7.45: OUR RADIO SERVICE TO LISTENERS—MR. H. K. LOVE.

NIGHT SESSION

8.0: A.B.C. (Sydney) MILITARY BAND. (See 2FC Programme).
10.30: WEATHER, ETC.
10.33: DANCE MUSIC, by WIRELESS DANCE ORCHESTRA.
11.30: Close.

3AR

MELBOURNE,
492 Metres

MORNING SESSION

8.15: Thirty Minutes' Melody. 8.45: Weather. 8.50: Music. 9.1: News. 9.5: Music. 9.17: Weather. 9.18: Music. 9.21: Radio Serial, "Cleansing Fires," by Arthur Russell. Read by "Scribe." 9.36: Music. 10.1: British Official Wireless. 10.15: Music. 10.45: Daily Broadcast Service. 11.0: Close.

MIDDAY SESSION

12.0: Community Singing, transmitted from the Auditorium, Melbourne.

AFTERNOON SESSION

2.1: Vladimir Horowitz, with the London Symphony Orchestra.

EDUCATIONAL SESSION

3.0: Little Essays in Literature and History. "A Famous Naval Duel. The Shannon and the Chesapeake." Captain Donald MacLean. 3.15: Music. 3.30: English Pronunciation. "The Sounding of Foreign Names." Professor E. H. C. Oilphant. 3.50: Music. 5.30: Weather and Shipping. 5.45: Close.

EVENING SESSION

6.15: Dinner Music. 7.30: Foundations of Organ Music. The Fantasy, Toccata, and Fugue in Organ Literature. 7.50: Music.

NIGHT SESSION

8.0: THE CASUAL CARAVANNERS IN SOUTH AFRICA.

8.20: PROGRAMME of INTERNATIONAL CELEBRITIES, with Special Annotations by RUDOLF HIMMER. Overture in D Minor ... Handel-Elgar LONDON SYMPHONY ORCHESTRA. Conductor: ALBERT COATES. Symphony No. 3 in E Flat (The Eroica), Beethoven

Allegro con brio. Adagio assai. Scherzo-allegro vivace. Finale-Allegro molto. PHILHARMONIC SYMPHONY ORCHESTRA OF NEW YORK. Conductor: WILLEM MENDELBERG. Salome and the Head of Jokanaan—Finale of Opera "Salome," Richard Strauss GOETA LJUNGBERG, Soprano. Piano Concerto No. 1 in E Minor .. Chopin Allegro maestoso. Larghetto-Romanze. Rondo-Vivace-Romanze. ALEXANDER BRAJLOWSKY, with the Berlin Philharmonic Orchestra, Conductor: JULIUS PRUEWER. Fete Dieu a Seville ... Albeniz PHILADELPHIA SYMPHONY ORCHESTRA. Conductor: LEOPOLD STOKOWSKI.

10.15: NEWS.
10.30: CLOSE.

4QG

BRISBANE,
395 Metres

EARLY MORNING SESSION

(Relayed to 4RK.)

7.30: The Chimes and music. 7.34: Weather data from the Commonwealth Weather Bureau. Cable news (copyright), Australian Press Association and "Sun-Herald" News Service, Ltd. First general news from "The Daily Mail." Comments on news. British Official Wireless News. What's on to-day. Features from the radio programmes. 8.0: Music. 8.30: Close.

MORNING AND MIDDAY SESSION

(Relayed to 4RK except from 11.23 to 11.30.)
11.0: The Daily Broadcast Service. 11.10: The Morning Musicale. 11.23: Social notes from the metropolitan daily newspapers. 11.30: Popular hits. 11.40: A Talk. "The Over-Sensitive Child at Home," by Miss Meta Maclean. 11.55: What's on to-day. 12.0: The City Hall Chimes. 12.1: Popular recordings. 12.30: Early luncheon melodies. 1.0: Market reports. Weather data. Second general news from "The Daily Mail." British Official Wireless News. 1.20: The Constitutional Club Lecture. 2.8: Close.

AFTERNOON SESSION

(Relayed to 4RK.)

THE RADIO MATINEE.

3.0: A programme of Latest Popular Releases. 4.30: Close.

EARLY EVENING SESSION

(Relayed to 4RK except from 6.20 to 6.30.)

6.0: For the Children—A Children's Play. 6.20: Shipping news; train information; mail notices. 6.30: Early dinner music. 6.45: Late market reports. General Commercial news. Late weather data. 7.0: The fortnightly talk arranged by the Wireless Institute of Australia. 7.10: Late dinner music. 7.23: First general news from "The Daily Standard." 7.30: A talk arranged by the Department of Agriculture and Stock—"The Cultivation of Pineapples," by Mr. H. J. Barnes (Instructor in Fruit Culture). 7.45: General sporting notes, including a Motor Cycling Talk by Hilary Buchanan. 7.59: Eastern Australian Standard Time Signals.

NIGHT SESSION

(Relayed to 4RK.)

A POPULAR RECORDED ENTERTAINMENT.

8.0: DEBROY SOMERS BAND—Stealing Thru the Classics ... Arr. Somers
MAREK WEBER AND ORCHESTRA—Flower of Hawaii ... Abraham
JOHN BOLES, Tenor—Romance ... Donaldson
After a Million Dreams ... Donaldson
BOURNEMOUTH MUNICIPAL ORCHESTRA—Dickbird Hop ... Arr. Storm
Rosewood Ripples ... Byrne
GEORGE SORLIE, Vocalist—To-day I Feel So Happy ... Abraham
Just Because I Lost my Heart to You, Abraham
HERMAN FINCK'S ORCHESTRA—Selection, Rose Marie ... Friml
RUPERT HAZELL, Comedian—The Show ... Hazell
LONDON PALLADIUM ORCHESTRA—The Birthday Serenade ... Lincke
MILDRED BAILEY, Entertainer—Lies ... Barris
LONDON THEATRE ORCHESTRA—Selection, Maid of the Mountains, Fraser-Simson

TOMMY HANDLEY, Entertainer—Tommy Handley Calling.
TERANCE CASEY, Organist—Bye and Bye ... Romaine
Auf Wiedersehen ... Ager
THE BIG FOUR, Vocal Quartette—Shamrockland ... Arr. Stoddart
ANIA DORFMANN, Pianiste—Echoes of Vienna ... Sauer
Voices of Spring ... Strauss
LAYTON AND JOHNSTONE, Vocal Duets—When It's Springtime ... Pittman
I Lost My Heart in Heidelberg, Raymond
DEBROY SOMERS BAND—A Musical Comedy Switch ... Arr. Hall
MAURICE CHEVALIER, Entertainer—What Would You Do? ... Whiting
THE LONDON THEATRE ORCHESTRA—Selection, Country Girl ... Monckton
THE MANCHESTER CHILDREN'S CHOIR—Nymphs and Shepherds ... Purcell
Hansel and Gretel ... Humperdinck
DETROIT SYMPHONY ORCHESTRA—Spanish Rhapsody ... Chabrier
DENNIS NOBLE, Baritone—Well Go, No More a-Roving ... White
FRANCIS W. SUTTON, Organist—Suite Gothique ... Boellman
Introduction—Choral.
Menuet Gothique.
Priere a Notre Dame.
Toccata.

10.15: Weather Data. Cable News (copyright), "Sun"-Herald News Service, Ltd., and Australian Press Association. Second General News from "The Daily Standard." British Official Wireless News.

DANCE MUSIC.

10.30: BERT TUCKER AND HIS CARLTON ORCHESTRA. DANCE MUSIC.
11.0: CLOSE.

5CL

ADELAIDE,
411 Metres

EARLY MORNING SESSION

7.30: News. Special weather forecast. 7.40: Music. 8.1: Shipping, Mail, Train, Weather and Market Reports. What's on to-day. Items of special interest. 8.10: Music. 8.30: Close.

MORNING AND MIDDAY SESSION

11.0: Daily Broadcast Service. 11.28: Sporting fixtures. 11.30: Latest recordings. 12.15: Stock Exchange. 12.19: News Service. 12.30: "Silvius" talks on "Racing Work of the Week." 12.40: Mid-day Melodies. 12.50: Weather, Grain and River Reports. 1.0: Music. 1.5: News Items. 1.15: Music. 1.59: Pakenham Race Results. 2.0: Close.

AFTERNOON SESSION

3.0: Pakenham Race Results. 3.2: Matinee Programme. 4.29: Pakenham Race Results. 4.30: Close.

EVENING SESSION

5.50: Pakenham Race Results.
5.55: Birthday Greetings.
6.0: "The Wattle Lady" and "Big Brother."
6.20: Children's Hospital Senior Birthday League.

RADIO QUERIES

D.M.K. (Gordon).—We must also plead complete ignorance in the matter of the peculiar performance of your set. We would immediately suspect a faulty valve, but this is obviously not the case in your set. We feel certain that if you place the whole facts of the case before the supplier of the set he will eventually trace down the trouble, and you will obtain the satisfaction expected of a receiver of this type.

NOVICE (Kogarah).—The all-electric set which you have at Kogarah would not be suitable for use at Goulburn, where D.C. mains are supplying the current. There is a fundamental difference between alternating current and direct current, and you will need a special job for d.c. operation.

D.B. (Lakemba).—The whistle on 2YA is more or less normal, and often occurs. It is claimed to be due to a heterodyne note created by the signals of 2YA and 5CL beating together. We do not think that it is any fault of the set, and there is nothing we can suggest whereby you can stop the trouble except to fit a .01 condenser across the speaker leads, and thereby cut out all high notes from the reproduction. This, of course, will also mar the reproduction of the set.

W.G. (Canberra).—There is no Crosley radio factory in Australia, the Crosley set being of American origin. We understand that the factory representatives are International Radio Co., 254 Castlereagh Street, Sydney, and they should be able to give you any information about the set. It is quite normal to find that 2FC and 2CO get through better to up country locations than other stations; but your set should be powerful enough to pull them all in when in good operating condition.

J.H. (Bundaberg).—It seems positively incredible that the fitting of the choke with the condenser shunting it could improve results, or even affect them in any way. We feel certain that you have made a faulty observation, and that the improvement is due to some other factor.

J.R. (Camperdown).—For all information credible that the fitting of the choke with the R. N. Shaw, our short-wave observer, at Wauchope. The amateurs who went up to over 200

metres when the broadcasting stations closed down are far too numerous to list, but the practice has now been stopped by order of the Radio Inspector.

CHARGER (Wynyard).—We do not know of any way of re-vitalising the metal rectifier, but would refer you to Mr. Manley, of Speakers, Ltd., Clarence Street, who is a specialist in metal rectifiers.

H.J.A. (Canberra).—We are unable to understand your query, as full details of the coils were published in our issue of November 4 of this year.

BOSCO (Paddington).—We are unable to give you the data for winding coils exactly the same as those specified, as they used stranded Litz wire, etc. You could get the set operating, however, with any short-wave coils such as those described in issue of December 23.

E.J. (Tempe).—We trust that you fully appreciate that the reaction coil is wound close to the secondary of the aerial coil, and on the same former. Then if the coil is wound in the right direction, and the coil connected correctly, it is certain that the reaction condenser will have some effect. However, a seven-plate midget condenser is hardly big enough, and we suggest one of at least 23 plates. If you care to use our reply by mail service we can let you have a diagram to give you a better idea of the coil arrangements and connections.

R.G.E. (Neutral Bay).—No, we do not favor the use of the 55 for any other purpose than as intended, i.e., as a second detector and audio amplifier combined. The shunt capacity would be 4 mfd. for preference, but 1, 2, or 4 would serve the purpose, with a slightly better low note response as the capacity is increased. We strongly advise you to use 175 or thereabouts, and on no account use the coils mentioned. You are right about the pick-up connections.

A.D. (Mayfield).—Yes, the condenser can be used to replace those of .1 mfd. in the circuit. So long as the capacity is greater than specified the condensers will be O.K. The voltage divider and the 35 type valves will also suit quite well. We would back the six-valve super against the seven in this particular case, more particularly on account of the efficiency and general merit of the coils.

J.A.C. (Eaglehawk).—So far as we know there is no connection between field and voice coil energising, and so on, and we do not think that you can harm the speaker by operating it without field current or without signal input.

C.P.N. (Hurstville) would like to know the identity of a station he has heard on 320 metres at 3.15 a.m. broadcasting a church and bells, sounding like a Roman Catholic service. G.T., of Bexley, has tuned a station at 190 metres, which closes at 4.30 on Sundays and 5.30 on week-days.

A.J.M. (Sale).—If we were in America, we would say that it would be a fine idea. But being in Australia, and sober, we have to advise that the set would be quite over the fence altogether, as far as gain and so on are concerned. Besides the difficulty of lining and adjusting the condensers, there would be so much gain in the set that it would be unmanageable, and the noise level would be terrific. Sets such as the 9 valve set described in the Superheterodyne Book represent the utmost in sensitivity practicable at the moment, and it is hard to see what use any greater gain would be, until there are a few snags ironed out of present day circuits and components.

B.T. (Paddington).—Before proceeding with the superhet., we would be inclined to get the receiver operating properly as it is. The selectivity should be better with three stages, even taking your position into consideration. Why not buy a set of matched coils, of which there are several very reliable makes at the moment? Naturally you will not get either the best range or selectivity unless the set is properly lined. If you are not satisfied with this plan, you could build the superhet. tuner, and hitch it up exactly as shown in the diagrams and descriptions. The superhet. will, of course, easily out-perform the Five in every way, particularly as far as selectivity goes, but there is no easy way out of buying a good kit. Any reliable maker guarantees his product nowadays. The transformer should take the valves O.K. Sorry, we could not undertake to design the circuit.

"DOUBTFUL" (G.P.O.).—Personally, we never did care for the tone of mantle type sets, as it is not possible to get the correct baffling effect in such a small cabinet. We therefore think your results will be greatly improved by taking the set out and building it into a console cabinet. Make sure that the cabinet is solidly designed, and the baffle board on to which the speaker is screwed is sufficiently heavy. The shape of the cabinet would not have such an important effect on the original results—the larger console should be much better all round.

Thursday's Programme

(Continued From Previous Page)

6.22: Dinner Music.
6.50: Stock Exchange.
7.0: News Service.
7.5: Sporting Service, including Pakenham Race Results.
7.10: Music.

NIGHT SESSION

8.0: AN EPIC PROGRAMME OF POPULAR COMPOSERS.

Cameos presented by:
Gregory Ivanoff, Violinist.
Francis Halls, Baritone.
H. Brewster-Jones, Pianist.
Gertrude Hoopmann, Mezzo-soprano.
Cliff Laycock, Tenor.
Arranged by H. Brewster-Jones, with annotations and recreated symphonies.
9.15: CRICKET'S IN THE AIR! Let's talk about to-morrow's opening of the Third Test Match, England v. Australia.
9.25: A B.B.C. Programme reproduced by special arrangement.
10.15: News Session.
10.20: On with the Dance.
11.0: Close.



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Replies by post will not exceed 500 words; (3) Information cannot under any circumstances be given over the telephone; (4) As nearly as possible all preferential distinctions between trade brands will be avoided; (5) No special circuits can be supplied, and no special designs for transformers, coils, or other such apparatus can be given; (6) The scope of the service does not include the answering of general questions, such as "What is Electricity?" Readers are invited to make suggestions for articles dealing at length with that phase of radio in which they are interested; (7) All questions are answered sincerely and efficiently to the best of the ability of the Technical Editor, and to the extent of the channels of information available to him. No liability attaches to "Wireless Weekly" for any misinterpretation or misdirection of the information thus supplied.

W.H.H.C. (Sydney).—Two spot tuning is due as a rule to lack of selectivity in the set preceding the first detector, and should not be present in a set which has a pre-selector or an R.F. stage ahead of this valve. If it has, and adjustment will not cure it, we would certainly get busy with a bottle of ether or something, and make tracks for the man who sold it to you! No doubt adjustments by the makers is all that is necessary, but we do not think you can do much with it yourself. On second thoughts, go easy with them as the set is really a good one, and they will probably be as concerned over it as you are. It is best to add another R.F. stage than an intermediate, as the noise level of the latter method would be higher in proportion than if the R.F. stage were added. We hope you get over the trouble all right.

W.J.S. (Toowoomba).—Many thanks for your interesting little discourse on harmonics. Let us hasten to assure you that we are tolerably well informed on the subject, and agree that there are many—in fact, most—radio men who do not know the first thing about it, and who judge a receiver by the least amount they can give for the most money. It is a strange fact, however, that even if we were able to produce sets and speakers which would include all the harmonics necessary for real tonal quality—the true tone color of an instrument—to be produced, there would be little public for it. We have ground out many weary hours designing receivers which were good to hear, and the only response the public as a whole will give is to wire a bypass condenser across the business and ruin the whole show. They call it "edgy". We know what the ideal is, but it is mighty hard work attaining it, and plenty of kicks and headaches to be collected on the way.

E.J.H. (Bowling Alley Point).—It would be possible to do as you suggest, and plug an extra speaker in place of the present one. If it is a dynamic, you must make some provision for energising the field, and this may be awkward unless it happens to be an A.C. dynamic or a permanent magnet speaker. A good magnetic would serve, but unless there is an input transformer built in there would be the danger of burning out the windings. We would not be inclined to make the extension cord too long—about 30 feet should be taken as the maximum. However, we have extended a speaker, field-energising leads, and all, nearly 50 feet, and not struck any troubles. It is not good practice, however, to use leads as long as this. We do not think any cheap little speaker would stand much chance of lasting long under the heavy current demands of the pentode.

H.P. (Punchbowl).—Some little time ago Mr. H.P., we got a deluge of indignant protest and abuse because we said that we had not seen a crystal set which would bring in and separate every local station anywhere in Sydney. We don't want any fights about it, but we would like to whisper to you the same advice, in the hope that no one else will hear. If you send in a query through the postal service we will send you a circuit which is as good as the next one, but, whether it will do what you require of it is another thing. We would be inclined to go for a single-valve set and make sure of it. The same applies to the circuit of the one-valve—we will send it to you through the postal service in place of the crystal set if you care to have it.

J.R.Q. (City).—There is not a great deal involved in the change-over from a D.C. set to an A.C. set. It is necessary first of all to know what voltage the set originally worked from. If 240 volts, then you need a power transformer (250 volts per side), which will allow the rectifier to deliver 240 volts to the filter of the D.C. set. The high voltage ends of the transformer secondary are connected to the plates of a 280. The centre tap, or one side of the rectifier filament winding, is the positive, and the centre tap of the high voltage winding the negative side of the power supply. If the valves are not of the A.C. type, they must be changed over to heater valves and lit from suitable windings on the power transformer. It is not likely that any alterations will be needed to the actual circuit of the set under these conditions unless the design of the set is unusual. These general instructions should provide you with an outline to work from.

W.E. (Bassendean).—The audio amplifier for the superhet. tuner may be almost anything you like to make it, as long as voltages are available for the tuner. The actual distance-getting properties of the audio amplifier, although it is easier to hear the weaker stations with plenty of audio amplification. The set should be quite successful.

E.A.S. (Smithfield).—Very probably the resistors are not still of their original value. If they were right in the first place, this might be the cause of the noise, through wrong voltages being present. We are inserting the notice.

W.M. (Oakleigh).—If the filament terminals of the valve are bridged by a centre-tapped resistor, from which the bias is taken, or earth connection made, there is no need to use a resistance in each leg of the winding in reducing the 5 volts to 4. This is only necessary if the earth or bias connection is made to the actual centre-tap of the winding. In this case, to use a single resistance would upset the balance of each half of the filament circuit, and spoil the accuracy of the centre-tapping.

GENERAL.—Any reader interested in short-wave work and living in Manly is invited to write to Mr. T. A. Gray, 35 Hill Street, Manly.

A.M. (South Hurstville).—There would probably be some increase in volume and sensitivity by using the newer valves. But whether it would be enough to justify the purchase of a new set is problematical. All our work on the receiver was carried out in conjunction with an eliminator of the same type as you have, and it worked very well. There is sometimes a slight tendency to feed-back in some eliminators, also rather more hum than with batteries. This, however, is not likely to be serious enough to prevent you using the unit. Better results could be looked for owing to the constant high voltage available.

GENERAL.—Any reader who has a wiring diagram or chart of a Udisco electric superhet. using 45 push-pull valves, please get into touch with Mr. L. Harber, 86 Union Road, Newtown.

GENERAL.—Any reader knowing the value of the resistors contained in the Udisco Model M6, please communicate with Mr. E. Stein, Smithfield.

J.H. (June).—We have posted the issues you requested. The speaker can be used by wiring it across the output of the pack in series with a voltage divider of 10,000 ohms. This will give you enough to energise it without imposing too much strain on the pack. A speaker of 2500 ohms resistance can replace one of 8000 ohms, in practically any circuit if wired in this way.

S.B. (Nunmbah).—The eight-valve set will probably have the greatest range, with very little between the other two. The five-valve set would probably be the lightest on "B" batteries, although there is not much to choose between them. The "Universal" drew from 10 to 12 mills., depending on the total voltage applied.

"WORRIED" (Warrnambool).—The pick-up will probably work best when connected between the grid and cathode of the detector. It is quite feasible to feed the pick-up through a transformer first, and connect the secondary in place of the pick-up across grid and cathode. The transformer should be of good quality. You can use the valves as you show them connected to the same filament winding, and the potential of the indirectly heated filament does not affect its own cathode bias. The mike has probably quite as much output as a pick-up, and it would vary with the frequency. We have no data on it.

W.R.W. (Solomon Islands).—The seven-valve set to which you refer is actually the "Infinite Six," with an output stage of "B" class push-pull amplification. The "Infinite Six" is really the "100%," minus the push-pull but plus another R.F. stage. So that, by combining these two sets, you will be able to get the circuit. The superhet. circuit you speak of is not available in detail for publication. In the Superheterodyne Book, we described several battery superhets, which should interest you. Glad to hear of your fine results, and remember handling a letter from you quite recently. Good luck with the Yanks!

X.Y.Z. (Unley).—It would, of course, be possible, but by no means practicable, to rewind the transformer of your power pack to give the increased output. For one thing, it is so built into the case that there would not be room for the addition, and, secondly, the chokes, condensers, etc., are not made to stand the overload, and may easily break down. The fact that the rectifier is actually underloaded will mean that its life will be greater, and we strongly advise you not to touch the eliminator.

H.L. (Whitwood).—Wind the coils on 1 $\frac{1}{2}$ in. formers. The aerial coil is the straight type with 110 turns secondary and 20 turns primary. Oscillator 8/10ths of this inductance—88 turns. The pick-up coil is tapped 12 turns from the bottom and has 45 turns.

"BEGINNER" (Stanthorpe).—Whether or not the "Cricket Special" would be suitable for use in your area depends entirely on local conditions, and, as we have never been in Stanthorpe, we could not definitely say. However, it would be in order to give as an opinion that, assuming reasonably good conditions, you would hear something of the Brisbane and even Sydney stations. In a good locality, a little set such as this would receive at varying strength anything worth hearing in Australia.

M.E.C. (Lisarow).—Glad to hear from you and to learn that the set is now going well. That's one of the hardest things about a query department. There is so much you don't know, even when apparently the whole story is told. In your case, fifty things might have been the cause of the trouble, whereas it only needed a little intelligent adjustment to bring in the Yanks! We note with enthusiasm your remarks about some so-called technicians. Unfortunately, their name is legion. However what really matters is that your "Super-Six" is now going as it should, and, as far as we are concerned, that is the main thing. The best of luck with it. As for the battery problem, well, in the old days, one read a book from the valves because there was no other way out. But now that there are more economical valves obtainable, people are not so keen on installing electric light built into a radio set, or using huge whacks of juice when they can avoid it. It's one of the hardest problems to solve and still satisfy everyone.

"PERPLEXED" (Bombala).—We should say that your trouble is due to the fact that the valves, or one of them, are worn out. If they have been in use for two years, no doubt this is what has happened. The power valve in particular may have reached the end of its life. If your batteries only lasted you for that short period, it appears as though the power valve did not have the right bias, and drew too much current. In this case, it would also shorten the life of the valve. Check up on them all, and replace any not right up to sample. Also look over the bias connections to all the valves, and see if any have been running with insufficient C bias.

C.W. (Thargomindah).—We do not know of the battery you mentioned, and as you did not enclose the advertisement we cannot advise you about it. There are many re-chargeable batteries on the market, and they appear to be giving satisfaction—at least, the best of them are. Valves are only human after all, and must burn out some time. As a matter of fact, when a battery has been re-charged, its voltage is a little high until it settles down to work, although we should not have thought it probable that the valves would actually have blown out due to this cause. More than likely the one in question has merely succumbed to the inevitable end of all valves. We do not think there is any advantage in using a double aerial unless it must be circumstances be a very short one. A single wire about 50ft. long is about right. A taut aerial will not swing in the wind, and makes the most of available height. But if fixed to a tree, the latter may sway too much and break the aerial.

"A NEW READER" (Forbes).—We could not say whether the Special in its present form would do the trick or not. You could build it up on a larger base, and then if it did not, it would be a simple matter to add the R.F. stage. If you require it, we would be pleased to supply you with the circuit through the postal service.

M.P. (Homebush West).—There is really no need to alter the coils simply because the set is to be converted to A.C. The tuning side of things will not be affected by the change-over, as far as the number of turns is concerned. If the coils match and line up as they are, there is no reason at all to re-wind them. The only catch with the Diode set, however, is that there were special coils needed, and as they must all match, they are produced in a set, and not easily made at home. Therefore, we could not give you instructions for making these—there is no practicable alternative to buying a kit.

"INTERESTED" (Trogmore).—Your only recourse appears to be to the wave-trap, as that receiver was not as selective as some. The wave-trap is connected in the aerial lead to the set. The aerial lead-in is taken to the correct terminal of the trap, and the other terminal is connected to the aerial terminal on the set. In operation, the set is first tuned to the offending station. The wave-trap condenser is then rotated until the station disappears, or nearly so. Then you may go ahead and tune wherever you like, and except in the immediate vicinity of the strong station's position on the dial, tuning will not be affected although the interference will have vanished. We do not know the station which you heard on Corowa's wave-length.

E.W.H.K. (Brisbane).—To tell you the truth, we have not had time to do much with this side of radio, which is a science in itself, and we have been so much occupied in designing Diode Fives and Fidelity Superhets, to pay much practical attention to it. We would suggest that you either subscribe to some overseas periodicals, or we will forward a letter of yours to the author if you send it care of this office. He is a real crank at the game, although you must not tell him we said so, and no doubt would be pleased to hear from you. He is also quite a brainy man, and his advice is well worth having.



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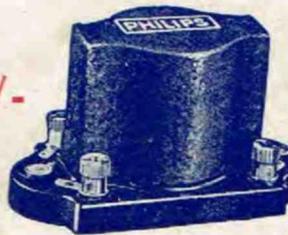
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