

ECIAL ART How to tune-in ELECTION RESULTS

Daniel Crocker

Wireless Weekly

3^D-

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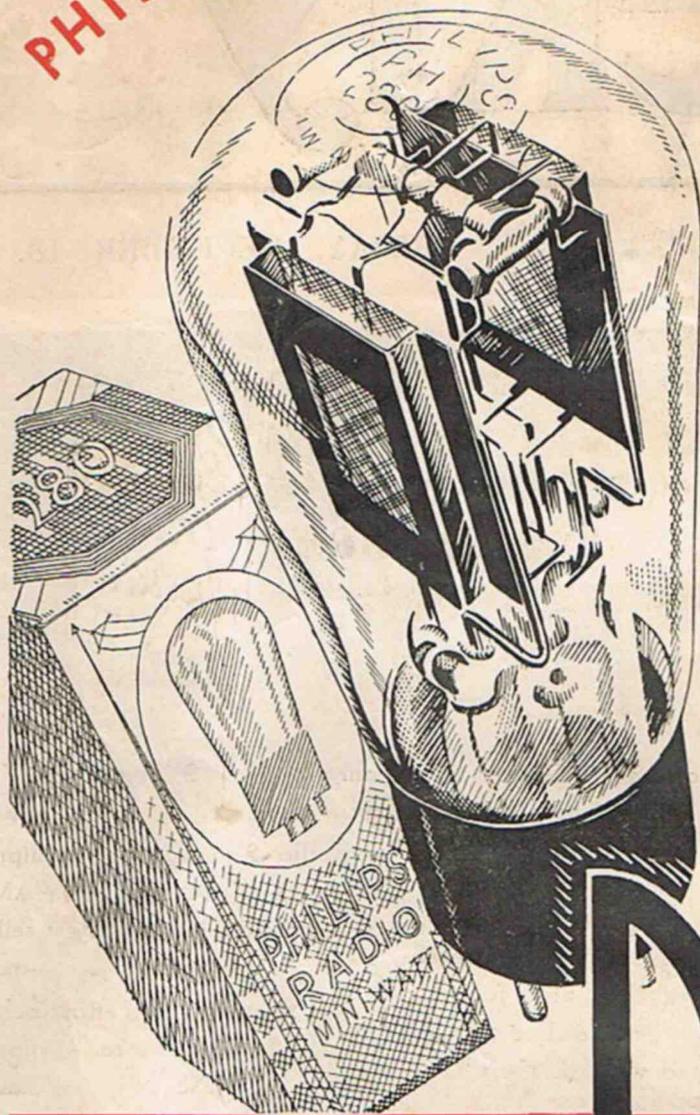
FRIDAY, DECEMBER 18, 1931



See Article Inside

UNCLE HUGHIE
of 2UE

PHILIPS SET THE 1932 STANDARD



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Use	PH227 Gen. Pur.	PH245 Power Amp.	PH224 Det. Amp.	PH235 V.Mu.	PH247 Pen- thodo
Fil. Voltage	2.5	2.5	2.5	2.5	2.5
Fil. Current	1.75	1.5	1.75	1.75	1.5
Plate Voltage	180	250	180	180	250
Screen Voltage	—	—	75	75	250
Plate Current (M.A.)	8.8	32	4	9	32
Screen Current (M.A.)	—	—	(A)	(A)	7.5
Grid Bias (Volts) ..	12	50	1.5	1.5	16.5
Impedance (Ohms) ..	9,000	1,750	400,000	200,000	38,000
Mutual Conductance ..	1	2	1	1.1	2.5
Amplification Factor ..	9	3.5	400	—	—
PRICE	17/6	19/-	22/6	25/-	22/6

(A) Not over 1/3 plate current.

PH280

Fil. Volts 5
 Fil. Current 2
 A.C. Voltage per
 plate 350
 D.C. Output Current
 125 M.A.

PRICE 15/-.

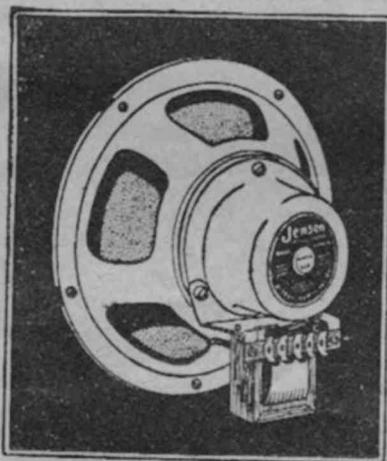
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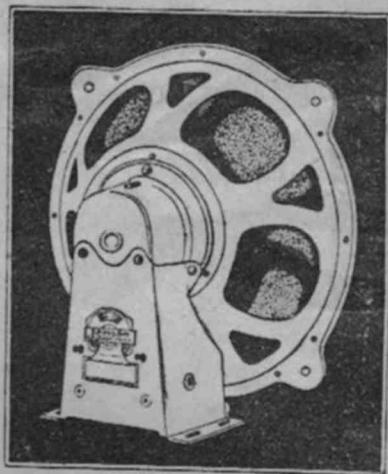
2.5 VOLT
VALVES

(Advt of Philips Lamps (Australasia) Ltd. (Radio Dept.) Head Office and Showrooms, Corner Clarence and Margaret Sts., Sydney, N.S.W.) IR.46

Sweeping! Australasia!



Model D15
7 ³/₄ in. Cone



Model D9
10 in. Cone

TWO AMAZINGLY SENSATIONAL
NEW DYNAMIC SPEAKERS
BY Jensen

Never before have Dealers seen such a swing to a new Speaker! Orders are flowing in! The slump is over for those Radio Set Manufacturers who are incorporating JENSEN DYNAMIC SPEAKERS in their sets, and also for the Dealers who are selling Radio Sets equipped with JENSEN DYNAMIC SPEAKERS!

From one end of Australia and New Zealand to the other, the Public have realised that JENSEN DYNAMIC SPEAKERS are the

only Dynamic Speakers with "Reproduction True as the Original."

Radio Sets that are equipped with JENSEN DYNAMIC SPEAKERS are the fastest-selling Radio Sets in Australia to-day.

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NOTE THAT THE MODEL D.15 AND D.9 D.C. SPEAKERS DRAW APPROXIMATELY AS FOLLOWS:—

2500 ohms Model draws 40 milliamps at 110 volts to 70 milliamps at 190 volts.
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Send for New Catalogue 48

INTERNATIONAL RADIO COMPANY LTD.

229 CASTLEREAGH ST., SYDNEY



AN INTERSTATE EVER CHASSIS
A "Kriesler" Product !!!
VALVES:— 224 S.G.
 235 Variable Mu (2)
 247 Pentode
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 CHASSIS, VALVES and DYNAMIC,
£17/10/0
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An Xmas Gift That Will Be Appreciated !!!
Electric Soldering Iron
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 Complete with flex
25/-

ALUMINIUM !!
 Our While-you-wait cutting and bending service is popular !!
 Only best British highly polished metal used.
1/4 d sq. in.

Xmas Special !!!
Radiokes Full Vision Dial
 (As illustrated above)
 Usually 22/6
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 Customers holding our register receipts with any of the following numbers will be entitled to State Lottery Ticket Free!!!
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COMPETITION CLOSED ON 11th DECEMBER

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FROM 55/-

Radiokes NEW Standard
Geared Vernier Dial
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 With modern attractively designed escutcheon plate.
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 Will receive all local stations without aerial
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ADD FREIGHT

PRICE'S RADIO SERVICE
 THE RELIABLE STORE
ANGEL PLACE

RETURN POST SERVICE

Introducing SOME 2UE PEOPLE

POPULAR PERSONALITIES HEARD
ON THE AIR

MR. C. V. STEVENSON
(Uncle Hughie). See cover
also.



HOW
UNCLE
HUGHIE
GOT HIS
NAME

"UNCLE Hughie," Mr. C. V. Stevenson, was so christened by one of his little listeners at the children's session. Hearing her mother say, "I'll tune in to UE," the little girl thought she said "TO HUGHIE," hence the name which has since become so popular.

Mr. Stevenson was the first person to be granted a B Class broadcasting licence. That was in November, 1924, and he started to operate 2UE on January 26, 1925, since which date he has continued an uninterrupted service.



2UE Radio Aunts and Uncles.—Simple Simon and his merry band; Aunt Willa, Mr. C. V. Stevenson, Auntie May, Uncle Rex, "Ambrose," Auntie Kath, and Auntie Maud.

SINCE the inauguration of Station 2UE seven years ago, the station has grown from a small 50 watt outfit to one of the largest in the State, for the new station about to be erected at Lilli Pilli will be second to none both in power and quality.

Station 2UE, from its commencement has been continuously under the management of the proprietor, Mr. C. V. Stevenson, and the staff has grown with the station until it includes ten announcers, as well as engineers and clerical staff. One of its features is its spotting service. It was first to introduce descriptions of pony racing. Incidentally Mr. Melville, who now describes these races so vividly, is counted by many to be the best racing announcer "on the air."

Throughout the last football season all the big matches were broadcast, and the popular announcer, Mr. Si Meredith, received congratulatory messages from all over Australia and New Zealand.

An outstanding feature of 2UE's programme is the Old-time Dance Night. These dances are held fortnightly, and have become so popular that the station could easily allocate 2000 tickets to each dance if room were available. As it is, the attendance has to be limited to one thousand, and there is always a waiting list of from two to three thousand people anxious to attend. Rex Albert's Radiolans' ten-piece orchestra provides the music, and the station receives many letters from other States and from New Zealand listeners saying how much they enjoy the broadcast of these Old-time Dances.

2UE was the first station to start a Theatre Entertainment Club in this State, and the membership is now 5000.

Mothers—and fathers, too—are loud in their praises of Auntie May (Mrs. Filmer), who conducts the women's and children's sessions on Station 2UE. Her voice is remarkably clear and sympathetic, and adults and children alike all adore her. Her bedtime story session is a fitting termination to a youngster's day of school and play.

Simple Simon (Mr. Si Meredith), who has firmly established himself as the practical joker of the radio pack, is a combination of brother, uncle, and father to tens of thousands of juvenile radio fans.

If you have attended or listened-in to the 2UE Radio Party on Saturday morning, you will appreciate Simple Simon's spontaneous and ready wit, and also his wonderful control of the children. He is also very popular with his "big kids," as he calls the mothers and fathers.

Mr. Arthur Carr—"Ambrose"—is a newcomer to the radio field, but he has come to stay. For years he was a popular figure on the legitimate stage, and specialised in children's entertainment. He now joins in the 2UE Radio Party on Saturday mornings, and his antics are the cause of the great bursts of laughter you hear from your loud-speaker. He calls himself Beautiful Ambrose—the nuisance of the party.

WORLD-WIDE RADIOS

SETLESS and SIGHTLESS RADIOS

ENTER, a net "setless" and "sightless" radios. The first consists simply of a loud speaker of special design that would be fed a choice of several programmes via telephone or electric power lines from a central receiving station. Proposed by Captain P. P. Eckersley, former chief engineer of the British Broadcasting Corporation, this system does away with the need of sets or tubes in the home, and is somewhat

STOP ALL BROADCASTING TO TEST WEATHER THEORY



ECHOES of the day not long ago, when certain self-selected soothsayers blamed the drought on radio waves, and asked weather bureaus to declare a moratorium on all radio transmission, have been heard by the League of Nations. Someone has written to Geneva, asking that all European broadcasting be stopped for five or six weeks, to determine whether radio is responsible for the prevailing wet weather. The signer of the letter urged the appointment of a "competent commission" to make observations of the climate conditions during the radio-less lull, and then to publish a report that would either condemn or acquit the radio waves.

like the "wired radio" system frequently discussed in this country.

The "sightless" radio is an actual accomplishment of an American manufacturer and is now on the market. Receiver or combination radio-phonograph unit, with or without furniture housing, may be hidden away out of sight or built into a wall. A walnut-finish control box, 10 inches long and weighing only one pound, has a series of push buttons which will start or stop the radio or phonograph, adjust their volumes, switch on or off any one of four loud speakers, and tune any one of eight stations. The control box is connected to the instrument by a flexible cord or may be built into the wall.

Beyond The Ultra Highs

GOING beyond even the so-called ultra-high frequencies, the International Communications Laboratories, Holtsborough, N.J., unit of the I.T. and T. Co., has asked the Federal Radio Commission for authority to erect two transmitters to operate between 1,000,000 and 3,000,000 kilo-cycles—small fractions of 1 metre. A European subsidiary of I.T. and T. recently conducted tests with high frequency voice transmission across the English Channel with favorable results, but these are the shortest wave lengths ever sought from the authorities.

High Power for U.S.

THE U.S. Federal Radio Commission has just licensed nine stations for 50,000 watts power and seven to 25,000 watts. There were 20 applications for the higher rating.

Swedish Anti-Fade Device

FROM Stockholm comes a report that K. E. Ylander, Swedish engineer, of Ostersund, has perfected and successfully demonstrated a fading compensator that can be attached to radio sets to eliminate the fading out of programmes from distant stations.

Must Declare Radios

MOTORISTS with radios attached to their cars must announce this fact to Customs officers in going into Canada, and also pay a fee of one dollar. The fee is required for all radios in the northern country. It may be paid through postmasters in the larger cities and towns. After touring Canada, motorists should call attention to the radio so that it may be checked off their Customs permit.

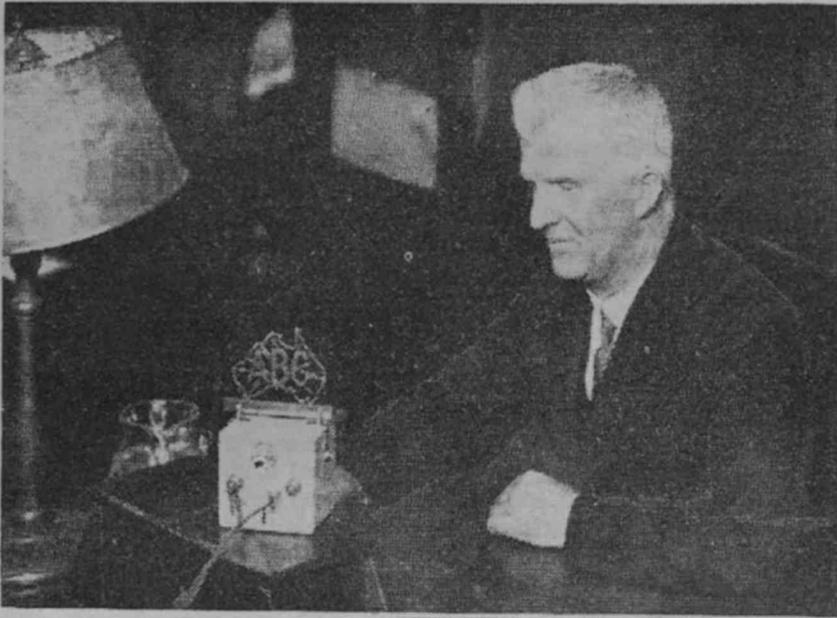
Giant KW Tube in London Display

EXCEEDING even the giant six-foot tubes used by KDKA, Pittsburgh, in testing radio powers up to 400,000 watts, the highest ever used in broadcasting is the 500,000 watt tube that has been constructed for the British Post Office Department's Transatlantic station at Rugby. Described as "a continuously evacuated valve," the British tube, a giant counterpart of the ordinary receiving set tube, but used only for high-power transmitting purposes, is said to be the largest in the world. It was recently displayed at the Faraday Exposition in London by the Metropolitan-Vickers, Ltd., its manufacturer.

Photographs of the tube reveal that it stands not much higher than a man. It does not stand as high as the Westinghouse tube but appears to have at least double the diameter. Claims made for it far exceed those for the Westinghouse tubes, which are rated at 200,000 watts. The latter are rated as 200 times as powerful as the tubes used in the average radio station and 50,000 times as powerful as ordinary receiving tubes. Westinghouse has conducted its super-power experiments after midnight on the KDKA wave length.

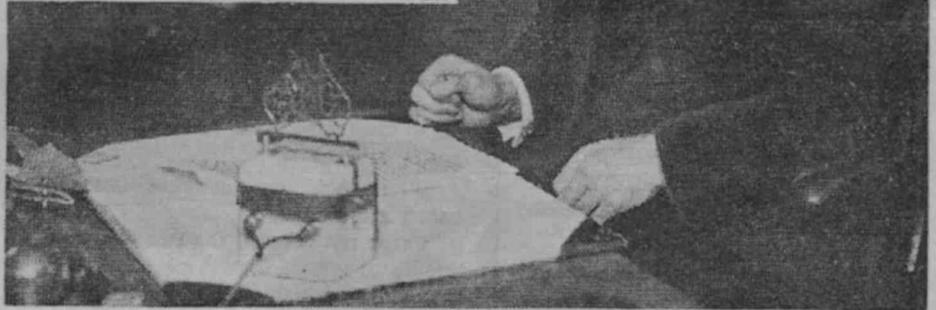


This unusual picture shows workmen installing a lightning arrester on the 105th floor of the Empire State Building, New York. The arrester is to protect the aerial of the National Broadcasting Company's television apparatus on the 66th floor.



On the Left: Mr. Scullin broadcasting his policy speech from 3LO Melbourne at the opening of the campaign.

Below: Mr. Lyons giving the U.A.P. policy speech from the same studios.



How to tune in the

ELECTION RESULTS

Before turning to the list of candidates beginning on Page 14, read how the results will go over the air.

ON election night, Saturday, December 19, New South Wales listeners will be able to choose from five separate broadcast services—2FC, 2UW, 2GB, 2KY, 2UE.

As everyone knows, returns from every electoral district are sent progressively by telegram to the main tally room at the Sydney Post Office. Here they are checked, added, and filed, and the progressive figures for each district are chalked up on a huge blackboard in the press room, where reporters sit at a long table, clutching telephones with loving hands, and calling the numbers through to their papers figure by figure, as they are chalked up. The broadcasters have been granted rooms adjoining the tally room, and microphones have been installed, connected direct to the studio by landline. Each station has its staff to compile lists of the figures and to calculate from time to time the position of the parties. The first return usually arrives at about 8.20 p.m.; and returns then arrive slowly till about nine o'clock. From nine o'clock till midnight the figures change almost continuously, after which the result of the election is generally pretty firmly established.

The description from 2FC, Sydney will be given by Mr. H. P. Williams, who will be on the air at 8.20 with the first return, and every fifteen minutes

thereafter. After 10.30 p.m. 2BL also will broadcast Mr. Williams' description, and the broadcast will continue from both stations till 1.30 a.m. on Sunday. Between 1 and 1.30 a.m., Mr. Williams will sum up the position throughout the Commonwealth. Similar broad-

casts will be carried out by 3LO, Melbourne; 4QG, Brisbane; 5CL, Adelaide; 6WF, Perth; and 7ZL, Hobart.

A most complete service has been arranged by 2UW, which will relay a description by Tom Gurr, junr., through 4BC, Brisbane; 3DB, Melbourne; and 5AD, Adelaide, from the Sydney tally room. This station will also be in trunk-line communication with the tally rooms at Brisbane, Melbourne, and Adelaide, so that the earliest possible information from all States may be received in Sydney and transmitted immediately through the interstate book-up. Messrs. E. H. Collis, E. G. Knox, and G. H. Goddard, all experienced political journalists, will help to compile this service, and possibly a late summary will be given by Mr. A. M. Pooley. The service may also be relayed by country stations, and even so far north as Townsville. It will continue till about 1.45 on Sunday morning.

As usual, Mr. George Saunders will give 2GB's description from the G.P.O. tally room until about 2 on Sunday morning.

From 2UE a very lively programme has been arranged for the occasion, with "Si and Maud," "Ambrose," Harry Hayes, novelty pianist, and Dick O'Donahoe, singer, between broadcasts of returns.

Until 2 a.m. on Sunday, 2KY will broadcast the returns direct from the tally room.

GOULBURN'S BROADCASTER A NEW STATION.

A NEW broadcasting station will be opened at Goulburn, N.S.W., this month. It will be owned and operated by the Goulburn Broadcasting Co., Ltd. A contract has been entered into with Amalgamated Wireless to manufacture and install a transmitter of the most modern design, which will deliver a carrier wave to the aerial of 50 watts, capable of being modulated 100 per cent. The transmitter is being installed on a block of land about two miles from the Goulburn Post Office. A clear view in all directions is obtained from the site, so that there will be very little absorption. The two masts supporting the aerial are 160ft. high and 428ft. apart. The new station will operate on a wave of 215.827 metres (1390 kilocycles), and should give a very effective coverage to Goulburn and surrounding districts. Amalgamated Wireless will act as advertising agents in Sydney and Melbourne.

2FC and 2BL Features Before and During Christmas

FRIDAY, 18th

Concert Programme, Musical Association of N.S.W., 8.0: 2FC.

SATURDAY, 19th

Results in the Federal election will be broadcast as received; 2FC.
"The Messiah," Welsh Choral Society, 8 a.m.: 2BL.

SUNDAY, 20th

Concert programme, arranged by Ronald Marston, 3 p.m.: 2FC.
Concert programme, Bondi Beach Symphony Orchestra, 8.30 p.m.: 2FC.
Orchestral programme, relayed from 3LO (Melbourne), 8.30 p.m.: 2BL.

MONDAY, 21st

Community singing from Ashfield Town Hall, 8 p.m.: 2FC.
Wienlawski "Concerto in D Minor," Cyril Monk (violinist), in association with the National Broadcasting Orchestra, 9.6 p.m.: 2BL.

TUESDAY, 22nd

Radio Dance Night, A.B.C. Dance Band, 8 p.m.: 2FC.
Hour of Christmas music from the Presbyterian Assembly Hall, Scots Church, 8 p.m.: 2BL.
"A Message from Mars," A.B.C. Players, 9 p.m.: 2BL.

WEDNESDAY, 23rd

Dee Why and District Choral Society, Howard Carr conducting, 8 p.m.: 2FC.
"Banjo" Paterson in reminiscent mood, 8.14 p.m.: 2BL.

THURSDAY, 24th

"Waratah," Australian Xmas pantomime, 8 p.m.: 2FC.

FRIDAY, 25th

Band programme, Bondi Beach Concert Band, 8 p.m.: 2BL.
Hurlstone Park Choral Society, V. Peterson conducting, 8 p.m.: 2BL.

SATURDAY, 26th

Musical hour, featuring A.B.C. Cetette and the A.B.C. Orchestra, 8 p.m.: 2FC.

Waratah

MR. FREDERICK WHAITE, whose radio music comedy, "The Tin Soldier," was so successful recently, is as good as his word. He said then that he would have an Australian pantomime ready for Christmas; and it is ready now, and has been in rehearsal at the A.B.C. for the past several weeks. Now, Mr. Whaite wants to make it quite clear that this is a dyed-in-the-wool Australian pantomime, and breathes the delightful atmosphere of this fair land of ours, and no other atmosphere. For Mr. Whaite is an Australian composer and learned his art in this country. He began as a boy, reading play "books" for the scenes his father, then the best scene-painter in the country, was to illustrate; and this bred in him an understanding of stagecraft and the other black arts which one has to understand if one is to write musical comedies. Then he studied pianoforte, and very soon was composing little songs and dances of his own. By himself, he has picked up a very considerable knowledge of harmony and counterpoint, and his wide experience throughout Australia as a conductor of theatre orchestras has finished his knowledge of every point which goes to make a successful production. It is not easy, although it may look easy, to write a good "song-success"; and it is quite as difficult to write the words. Anyone can imitate a popular song; but very few who have not served their time to

THE WIRELESS WEEKLY & MORE

the craft can make either the words or the music sound other than gawky and unnatural. That is why you have to hand it to Mr. Whaite—he writes good songs, and he writes both the words AND the music. Also the play. From his fertile imagination has proceeded the story of "Waratah." It is a story of a Princess who desired the ultimate good, and came to Sydney to find it.

That, according to Mr. Whaite, is what the Royal Historian of Fairyland says in chapter ten of the fifth Book of the Doings. The King and Queen of Fairyland were having breakfast in the Loowie Cans room of the Imperial Picture Show, London, when in comes the beautiful Princess Waratah, weeping, wailing and gnashing all her teeth (another Nash). This perturbed the King so much that he upset the marmalade all over his new robes of state, and a royal time they had scraping it off again, and he said:

"Weep not, my daughter—Beasley hasn't got a hope."

"That's not it," said the Princess, continuing to gnash.

The Queen, having now digested an impolite slice of bacon and egg, remarked: "Those beastly Communists are at the bottom of it."

"That's not it," said the Princess, weeping miserably.

"Can she possibly have seen Mr. Lang?" asked the King.

"That's not it," said the Princess, and wailed woefully all over the carpet.

"Then let us have a truce to guessing competitions," said the King, growing angry. "We must not be mistaken for a 'B' class broadcasting station."

Upon which the Princess dried up considerably, and took her seat and sat upon it, after which she spoke:

"Well, it's like this—"

It appeared that the beautiful Princess Waratah craved for only one thing, and that was for the Greatest Treasure in All the World. (And here listeners will observe a certain similarity between fairy princesses and ordinary women.) When the desire of the Princess was made patent to the King he was heard to mutter: "Anything for a quiet life"; and he called in the Court Magicians. The Magicians withdrew, and did certain things; then they returned and informed the King that the Greatest Treasure in All the World was to be found in the Heart of Australia.

What do you think of that for a subtle guess?

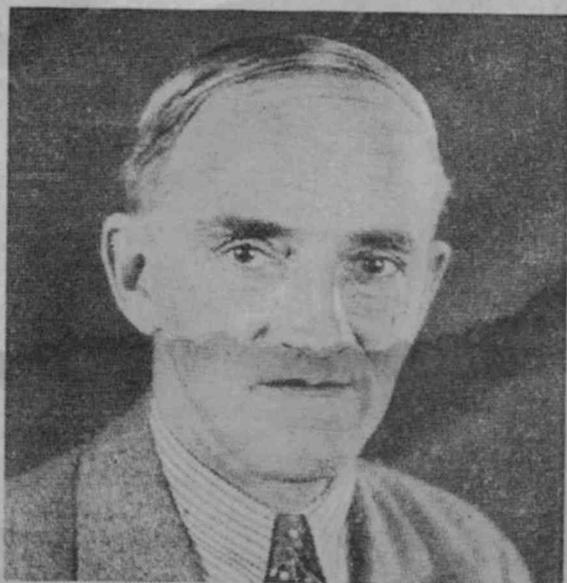
Well, the King asked for an atlas, and his Grand Vizier pointed out where Australia was; and the

King and the Queen and the Princess and all the Royal family, including the Grand Vizier, the Chief Chamberlain, the Chief Chambermaid, the Chancellor of the Exchequer, the Minister for War, the Poet Laureate, the Vice-Regal Patronage, and the Vice-Regal Tobacco (medium strength) were transported to Sydney in the twinkling of an eye (just too late for the elections); and here they were. And what a noise their coming made at Potts Point; and what a fluttering there was at Darling Point; and didn't they jump about at Rose Bay! And how they fought for tickets in the better class areas of Kirribilli! You'd almost have thought the Balokovics had returned—you would indeed.

But after the junketing and gate-crashing had a little subsided, and the King of the Fairies had told the last pressman who thought it was worth while to call his views on the Harbor Bridge, Sydney's Bevis of Sun-tanned Beauty, the Sheep's Back being What We Live On, and whether a Girl should Kiss a King Before or After Meeting, a difficulty rose and stood in the way. It was discovered that the keys to the Greatest Treasure in all the World were held by a big, bad, bold black giant called—

Now, the reader is asked not to allow his political prejudices to interrupt the smooth flow of the story. The Treasure was NOT in the New South Wales Government Savings Bank.

Called Boolaboo. The giant's name was Boolaboo. He had two hands, two eyes, AND two legs; but only one nose. When he walked he wobbled. So the King decided the only way out of the difficulty would be to publish a procla-



FRED WHAITE,
author of the Christmas pantomime, "Waratah."

THE MICROPHONE

mation that whoever found and secured the Treasure would receive the beautiful Princess Waratah to be married to; and would thereafter rule the land (and presumably the Princess) with a magic sword.

In the meanwhile the Princess had not been idle. Not a bit. She had joined the Sydney Hikers' Club, and it was during one of her solitary jaunts in the Kurrajong district that she met Beanstalk Jack, and fell in love with him. He was a pleasant young man, whose only fault was a tendency towards social climbing, as you will find later on in the story. Jack had an orange farm near Kurrajong, where he lived with his Mother Hubbard and his sister Jill, and when he saw the proclamation he decided to find the treasure. But what happened? What do you think Boolaboo was doing all this time? Do you think he was satisfied with just controlling the Upper House? Not him. He, also, had read the proclamation, and he decided that the only way to get control of the Commonwealth was to kidnap the Princess. A daring scheme? That's nothing. You should have seen what he did to the price of bread.

There is not space to detail the several important scenes which follow, not even the final scene, in which the Harbor Bridge opens, and all the children march across, singing "How do you do, North Sydney?" the greeting from the South to the North. It is enough that listeners to 2FC on Christmas Eve may hear the entire production, directed by Laurence Halbert, musical ensembles arranged by Madame Grieg, A.B.C. Orchestra, conducted by E. J. Roberts.

"The Messiah"

THIS Saturday night, from the Sydney Town Hall, 2FC will broadcast Handel's "The Messiah," with 700 voices—the Welsh Choral Society, conducted by Dr. Cyril Jenkins, and led by Ida Turnbull, soprano, Marie Gordon, contralto, Fred Williamson, tenor, and Oliver King, basso. Mr. Ewart Chapple will be at the organ, and Mr. Lloyd Davies will lead the orchestra.

Howard Carr

A CONCERT programme by the Dece Why and District Choral Society under the direction of Howard Carr will appeal to all lovers of choral music from 2FC and 2NC on Wednesday night, December 23. Howard Carr is a distinguished conductor and composer, being particularly well known for his settings and quaint old traditional and nautical songs. Mr. Carr conducted the London production of "The Lilac Domino," to which he contributed several numbers, and has conducted and arranged numerous programmes from 2FC and 2BL.

Message From Mars

AN hour of Christmas music arranged by Livingstone C. Mote, M.A., will be broadcast from the Presbyterian Assembly Hall, Scots Church, by 2BL on Tuesday, and will feature the appearance of the Scots Church Choir; and will be followed by "A Message From Mars," a fantastic comedy in three acts, by Richard Ganthony, presented by the A.B.C. players directed by Laurence Halbert at 9 p.m. The story tells of Horace Parker, a young scientist, who is the very personification of egotism. In the opening scene Horace has promised to go to a dance with Minnie Templar, his adopted sister and fiancée but in the end refuses to go. Minnie is quite willing to give up her own pleasure to satisfy Horace's every whim, but Aunt Martha is determined that her nephew shall not have matters all his own way, and herself takes Minnie to the dance. Horace, left alone by the fire, is drowsing, when suddenly he becomes conscious of another presence in the room—a stranger has entered, and announces that he has come from the planet Mars.

Cyril Monk

AN outstanding feature from 2BL on Monday will be the Wieniawski "Concerto in D Minor" played by Cyril Monk in association with the National Broadcasting Orchestra conducted by E. J. Roberts. Mr. Monk will also play the "Sjogren Sonata" with Haagen Holenbergh, the well-known Danish pianist. Adam Wieniawski was a Polish composer, born at Warsaw in 1876. He was a pupil of Noskowski in his native town of Bargiel, and of Faure in Paris. Sjogren, the Swedish composer and organist, was born at Stockholm in 1853. He studied at the Royal Conservatorium there, and later in Berlin. As a composer he was a follower of the romantic school, and his sonatas and pianoforte compositions

3LO and 3AR Features Before and During Christmas

FRIDAY, 18th

A symphony concert—the A.B.C. Wireless Symphony Orchestra, conducted by Percy Code, assisted by Alexander Sverjensky, pianist; Alexander Raff, bass. To be featured, Rachmaninoff's Concerto No. 2 in C Minor for Piano and Orchestra: 3LO, at 8 p.m.

SATURDAY, 19th

Election night! The programme will be devoted to the broadcasting of the paramount item of interest to the Australian public—viz., the progress counts in the Federal elections: 3LO, at 8 p.m.

SUNDAY, 20th

Alexander Sverjensky, pianist, in a short Chopin recital—the Melbourne Philharmonic Society—J. Howlett Ross, "Last Days of Hercules," with incidental music by Arnold Coleman at the organ: 3LO, at 8 p.m.

Special performance of "The Messiah," by Handel. Sung by leading English soloists and the B.B.C. Choir, with orchestral accompaniment. The whole performance under the direction of Sir Thomas Beecham: 3AR, at 4.30 p.m.

MONDAY, 21st

A cameo of the famous opera, "La Traviata" (Verdi). All the familiar airs and selections, sung and played by Gladys Verona, soprano; Tom Downie, tenor; J. Howard King, bass-baritone; and the A.B.C. Concert Orchestra, arranged to clearly tell the story: 3LO, at 8 p.m.

"No Admittance Except on Business," a broadcast description of the Chief Telegraph Office, Melbourne: 3LO, at 9 p.m.

TUESDAY, 22nd

Modern dance night, with Paul Jeacle and his Radio Dance Band; interludes by vocal artists: 3LO, at 8 p.m.

"Tilly of Bloomsbury," a comedy in three acts by Ian Hay; produced by Frank D. Clewlow: 3AR, at 8.20 p.m.

WEDNESDAY, 23rd

"A Magic Christmas Eve," a children's play, by Violet Parkinson; for kiddies by kiddies: 3LO, at 6 p.m.

Choral and orchestral programme by Bartleman Male Choral Society and the A.B.C. Concert Orchestra; also a piano recital by Alexander Sverjensky: 3LO, at 8 p.m.

THURSDAY, 24th

"Scrooge," adaptation from Charles Dickens' "Christmas Carol," produced by Maurice Dudley: 3LO, at 8.40 p.m.

"Princess Waratah," an Australian pantomime by Fred. White; presented by A.B.C. Musical Comedy Company. Two acts and twelve scenes. Place Australia; time, in the Good Old Fairy Days: 3AR, at 8 p.m.

FRIDAY, 25th

Special Christmas Night programme—Christmas carols; an organ recital by Dr. W. G. Price; "The Story of the Carol," by J. Howlett Ross; the Malvern Tramways Band, and vocalists: 3LO, at 8 p.m.

SATURDAY, 26th

"December Doings," a decorous, deft, and dainty delivery from a distance of delightful digressions, droll doggerel, drama, and dialogue, devised and dished up dexterously by Frank D. Clewlow: 3LO, at 8 p.m.

Special carol service by St. Paul's Cathedral Choir; at the organ, Dr. A. E. Floyd, Mus. Doc.: 3AR, at 8 p.m.



MR. LIVINGSTONE MOTE, who has arranged the hour of Christmas music on Tuesday.

are greatly admired. The assisting vocalists will be Barbara Russell (soprano), who has chosen a group of songs by Phyllis Norman-Parker for her first appearance, and Clifford Lathlean (basso), whose items will include a group by Brahms.

Christmas Services

THE service will be broadcast by 2FC from the Central Methodist Mission, Lyceum Hall, where the Rev. R. J. Williams will conduct the service, assisted by the Rev. A. J. Gould, and by 2BL from St. Mary's Basilica, where the Rev. J. McCooe will be the celebrant.

Wireless Weekly

Sydney: Friday, December 18, 1931.

ANOTHER LANG PLAN

IN another place we print the reference to broadcasting by Dr. Earle Page in his policy speech; a particularly sound statement of what most listeners want. On the other hand there is the Lang radio plan, which stands in direct contrast to Dr. Page's views.

The scheme of which Mr. Beasley spoke in Mr. Lang's policy speech provides that licence fees shall be reduced to ten shillings a year, collected by the Commonwealth, and paid proportionately to the State Governments; and that all the "A" class stations shall be "nationalised" under the control of the State Governments. When you consider that "A" class broadcasting stations are already nationalised under the Commonwealth Government, you begin to observe a contradiction in terms. Obviously, to take broadcasting stations from the nation, and give them to the States, is denationalisation. What Mr. Lang wished to do in Mr. Beasley's policy speech was to give the impression that his party would do the democratic thing and fulfil the Labor policy; what he wished to gain under cover of that impression was three powerful broadcasting stations in New South Wales, 2FC, 2BL, and 2NC. Then New South Wales listeners could scarcely help hearing what a fine fellow Mr. Lang was, every night in the week, including Sunday.

So audacious a Lang plan can scarcely be expected to succeed; but since it proves that Mr. Lang wants a powerful broadcasting station it has given birth to rumors that, if the Beasley party fails in the present election, Mr. Lang will defy Commonwealth regulations and set up his own State transmitter. If he does this (and he has given ample proof of his ability to try everything unsuccessfully), there will probably be a long and wearisome battle in the law courts, since the right to control broadcasting is not stated specifically in the Commonwealth constitution. It is a small point; but the sooner the Commonwealth takes steps to alter the constitution in this regard, the better it will be for listeners, broadcasters, and the nation.



DR. KEITH BARRY, the well-known music critic, who is giving a talk on Christmas carols on Christmas Eve.

STORIES of the CHRISTMAS CAROLS And Other Talks

DR. KEITH BARRY will tell "The Story of Christmas Carols" from 2BL at 4.45 p.m. on Friday, December 25.

Very few people who hear Christmas carols sung on Christmas Day know very much about their origin and history. It will surprise many of them to know that a carol was really a dance accompanied by song, in its original meaning. This, and many other interesting points will be explained by Dr. Keith Barry in his talk on Christmas Day. For this talk Dr. Barry has collected stories grave and gay about Christmas carols, among which is a rather dramatic little story of a Christmas carol sung in the trenches.

Butter and Butter

"THE Butter you can Cut with your Knife" will be the title of the talk by R. E. Figgis, Vice-President of the New Health Society, on "Better Food for Better Health," from 2FC, at 6.45 p.m. on Saturday, December 26.

This talk will deal with the virtues and value of cheese, an Australian product, which is not as widely appreciated as it might be. Cheese is of great value by reason of the calcium it contains, and is particularly beneficial to the growing boy and girl who are not obtaining as much milk as is essential to their welfare.

English Language Talk

"CHARLES Dickens and Christmas" will be the title of the English Language Talk by R. M. Crawford, B.A., from 2FC, at 6.45 p.m. on Thursday, December 24.

Dickens is an obvious Christmas author, not only for his Christmas carols, but also for the spirit of all his work. He has the two essentials of Christmas—its festive spirit and its humanity—its plum pudding and its goodwill to men. The former is the manifestation of the latter. The winter Christmas of England suits his art because the glow of the fire within and the winter without, gives him the same sort of contrast as cheerfulness and surliness.

Christmas Here and There

MR. C. PRICE CONIGRAVE, by reason of his long residence in the little known parts of Australia, has the outlook of the bushman and outbacker, and the talk entitled "Christmas Here and There," which he is to give from 2FC on Christmas night (December 25), at 6.40, should, therefore, be of special interest. He will describe to listeners some of the places where he has spent Christmas Day in years gone by,—on lonely islands—on the fringe of the great inland desert—and elsewhere here and there throughout the Continent.

The Carribean Islands

COMMANDER C. H. ROLLESTON, R.N. (Retired) will tell listeners of "The Caribbean Islands" from 2FC at 6.30 p.m. on Sunday, December 20. These islands occupy waters that were much used in the course of trade by all the European nations in the latter half of the 18th century. Many of the islands possessed useful anchorages, and provided valuable bases for the fleets of those days, and consequently changed hands with great frequency as the nations, anxious to acquire possessions in the new world, enjoyed temporary supremacy.

Trinidad, the largest and most southerly of the Caribbeans, may perhaps be taken as typical of them all, as it lacks no feature of beauty or interest that can be found in any of the others.

Schedule for 2CO Corowa

THE new relay station, 2CO, at Corowa, about 300 miles from Sydney, and not far from Albury, is relaying the programmes of 3LO and 3AR. The station is the most modern of its kind in Australia, and cost £20,000 to build. It has a power of 7.5 kilowatts in the aerial. The wavelength is 535.7 metres. The programme schedule is as follows:—

SUNDAY, DECEMBER 20.			WEDNESDAY, DECEMBER 23.		
1.0 a.m. to 12.30 p.m.	See 3LO	1.0 p.m. to 4.30 p.m.	7.30 a.m. to 8.15 a.m.	See 3LO	1.0 p.m. to 4.30 p.m.
1.0 to 3.0 p.m.	See 3AR	5.40 p.m. to 6.0 p.m.	10.30 a.m. to 12.30 p.m.	See 3LO	5.40 p.m. to 6.0 p.m.
3.0 to 4.30 p.m.	See 3LO	6.0 p.m. to 10.15 p.m.	1.0 p.m. to 4.30 p.m.	See 3AR	6.0 p.m. to 11.0 p.m.
5.0 to 10.30 p.m.	See 3LO		5.40 p.m. to 6.0 p.m.	See 3AR	
			6.0 p.m. to 11.0 p.m.	See 3LO	
MONDAY, DECEMBER 21.			THURSDAY, DECEMBER 24.		
7.30 a.m. to 8.15 a.m.	See 3LO	7.30 a.m. to 8.15 a.m.	7.30 a.m. to 8.15 a.m.	See 3LO	10.30 a.m. to 12.30 p.m.
10.30 a.m. to 12.30 p.m.	See 3LO	10.30 a.m. to 12.30 p.m.	1.0 p.m. to 4.30 p.m.	See 3LO	1.0 p.m. to 4.30 p.m.
1.0 p.m. to 4.30 p.m.	See 3AR	1.0 p.m. to 4.30 p.m.	5.40 p.m. to 6.0 p.m.	See 3AR	5.45 p.m. to 11.0 p.m.
5.40 p.m. to 6.0 p.m.	See 3AR	6.0 p.m. to 11.0 p.m.	6.0 p.m. to 11.0 p.m.	See 3LO	
6.0 p.m. to 11.0 p.m.	See 3LO				
TUESDAY, DECEMBER 22.					
7.30 a.m. to 8.15 a.m.	See 3LO	7.30 a.m. to 8.15 a.m.	10.30 a.m. to 12.30 p.m.	See 3LO	
10.30 a.m. to 12.30 p.m.	See 3LO	1.0 p.m. to 4.30 p.m.	1.0 p.m. to 4.30 p.m.	See 3AR	
		5.45 p.m. to 11.0 p.m.	5.45 p.m. to 11.0 p.m.	See 3LO	

SAFETY VALVE

The pressure gauge of public opinion

A Racing Service Worth While

Dear Sir.—There has been quite a deal of correspondence re programmes from the various stations, but I think the palm should be handed to 2UE for the excellent service that this station rendered to the racing enthusiasts last Saturday, November 28.

They broadcast each event from Warwick Farm and also gave a splendid idea to the listeners by ringing a gong when each race was started from the ponies, and almost immediately the race was over announced the winner. They also dispensed between races a musical programme.

Now why can't we get something like this from A class stations, who get some monetary consideration from the listeners. When the ponies are on in the mid-week the A class stations take about 10 minutes to give the results, and their organisations should be able to do a lot better than they do.

Now, you racing listeners, give a boost to the station that gives you such a wonderful result.—Yours, etc.,

"WELL-WISHER."

Darlinghurst (11.12.31).

4QG in Fiji

Dear Sir.—I have read in the "Safety Valve" several times complaints from listeners-in regarding reception of 4QG. It might interest listeners in Australia to know that 4QG is mushy in Fiji, due to overlapping by a Jap. station.

Not being a radio expert precludes me from expressing an opinion in regard to this, but all sets here (about six) have the same trouble. Immediately 4QG shuts down (12.30 p.m. here) the Jap. roars in. It is possible with a Grebe 5 to have both stations working together I mean to hear a musical item from 4QG and the Jap. giving his blah-blah.

It amuses me at times to read denunciations of various stations by your correspondents in regard to bad nights. At least, I always put it down to a bad night when a station refuses to come in, not to the transmission engineers, the announcer, or the poor programme directors. By the tone of your correspondence it would appear that the listener-in in Aussie has been fraudulently dispossessed of his licence cash. With so many stations on the air it seems ridiculous to think that any person even possessing a modest crystal set cannot tune-in to one item that interests him. If some of your Disgusteds, Pro Bono Publicos, etc., could put in a week here and try to pick up a station they would be jolly glad to listen to what was going on.

"Justice" ("Safety Valve," 9.10.31) has a proper moan on about his dinner-music, and I don't blame him. This dinner-music stuff should be cut out, and also the children's session. Probably he would appreciate the evening session then, if he only had two hours at night instead of all day. I consider it creditable that programme compilers can put on a show from 8 a.m. till 10.30 p.m. day after day and make such a varied daily assortment of items at a cost of less than one penny per day for listening fees.

Fair play is bonny play.—Yours, etc.,

VINAKA LEON.

Lautoka, Fiji (24.11.31).

English Elsewhere

Dear Sir.—Re "M.H.R.'s" letter ("W.W.," Nov. 27), in which he points out that English is understood in most short-wave listening countries of the world, I am inclined to agree with Mr. Fraser, his adversary, in this, that the only foreign overseas station that I have heard depart from its mother tongue to use English is Radio Saigon. None of the nearer Dutch E.I. stations speak it, nor have I heard it from FYA, and apparently we are condemned to remain in ignorance of the items broadcast from RV15. What an opportunity for propaganda Lenin is missing in not putting an English speaker on, as the fine music must attract a large audience in the Pacific basin.

Some months ago I wrote to RV15 and Radio Saigon, and reported on reception, enclosing international reply coupons, but received no replies, suggesting that English is not well understood up North.

As regards the second part of "M.H.R.'s" letter, perhaps the new Wireless Board will make an arrangement with A.W.A. to broadcast the "A" stations' programmes on the higher-frequency stations.—Yours, etc.,

"EARNEST."

Northgate, Q. (30.11.31).

2FC Weak in Brisbane

Dear Sir.—In your issue of December 4 you state that the programmes of 2FC and 2BL have been changed. May I now appeal to the A.B.C. that the sporting session be returned to its original time, if not a little later? In Brisbane the reception of 2FC is very weak about 7 p.m., but is quite good about 7.30 p.m. The session is of special interest to us.

I would also like to make a suggestion to the "B" stations about the announcing of records. If they announce the full particulars first, then after it has finished give the name only, I think they would find it more satisfactory to listeners who tune-in after the record has started. I wish they would do it in Brisbane anyhow.

I often read the comments of listeners on the Sydney stations. All I say for them is to come to Brisbane, and they would have reason to complain. As was so truthfully said, 4QG's programmes are the same as you would expect at an old village concert.—Yours, etc.,

"I.L.P."

New Farm, Brisbane (4.12.31).

The Caudle Lectures

Dear Sir.—In your current issue I notice an article by Mr. Ellis Price in which he refers to the "Caudle Lectures," and expresses surprise that these have not been heard over the air. For the last five years Miss Windle and myself have broadcast these lectures under the title, "Poor John" or "Caudle Up-to-date." It is flattering to realise my version has been so original as to be unrecognised.

Caudle lectures, in their original form, in my opinion, would be old-fashioned and tedious. It took me many months to re-write and build-up my version which I did by courtesy of the owners of copyright.—Yours, etc.,

J. WIN.

Kirribilli (4.12.31).

"W.J.J." Replies

Dear Sir.—Having "bought" a fight by criticising the dismal and unpalatable "A" class programmes, I have pleasure in standing up for the second round.

Mr. A. C. Massey has butted in on behalf of the "poor country listener," and desires a continuance of the rotten value in return for licence fees. We pay nothing towards the upkeep of "B" class stations, and as we make the "A" class "punk" possible by paying for it, we certainly have a right to criticise.

I say emphatically that my circle of wireless friends is large, and, without a single exception, they are unanimous in condemning the "A" class piffle with which the air is polluted. Screeching amateurs, misguided and ill-trained musicians, "punk" and jokeless comedians, are forced upon us, and we pay the piper.

The absorption of the whole time, or practically so, from 7 a.m. to 7.45 a.m. with newspaper news is wicked. I do not object to country people getting the news, but I certainly take exception to our newspapers being rendered partially valueless by news being broadcast at that early hour. What difference would it make if the aerial distribution of news was postponed until 8 a.m. or 9 a.m.? It is a wonder to me that the newspaper people allow the broadcast of news before subscribers have purchased their papers, and I personally know of many cases where the morning paper has been dispensed with and the news taken over the air.

My desire is a musical session from 7 a.m. to 8 a.m., then tell the country people the news as long as they desire. A newspaper is something to look forward to, but it is robbed of its value if one is told of its contents beforehand. Then why not dispense with it and save one's lid. Mr. Massey pays 24s licence fee, and by getting his news free saves that amount, whereas the city man makes an up-to-date paper possible by keeping its circulation up to requirements, and pays his licence fee in addition.

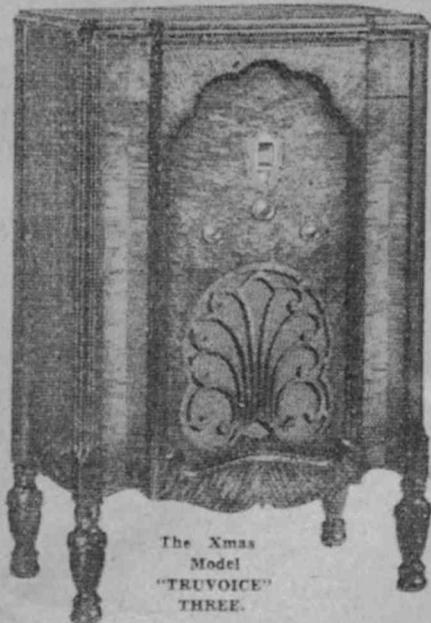
One has a perfect right to expect service from A class stations to meet the wishes of the majority who subscribe to their upkeep, which I believe to be more music and less talk from 7 a.m. to 8 a.m.

Mr. Editor.—Your "Wireless Weekly" is a valuable and very interesting paper, which I would not be without, and must have a large circulation. What about testing this much-talked-of matter by having a friendly ballot as to whether all music should be broadcast during the initial hour and news afterwards?

My set is a 45E Radiola, and it has no superior in the Commonwealth, hence the sneer by Mr. Massey is quite in keeping with his puerile attitude. Under no circumstances do I wish to deny the country people the city news, but I do object to my newspaper being second-hand when I get it. One can surely not be censured for attempting to urge programmes to meet the wishes of the majority, who meet the financial bill.—Yours, etc.,

"W.J.J."

Hornsby (4.12.31).



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- Philips UX245 Power Valves 6/9
- Wire Wound Bias Resistors, all sizes 1/6

- Pilot 1285L Illuminated Single Control Dials 16/6
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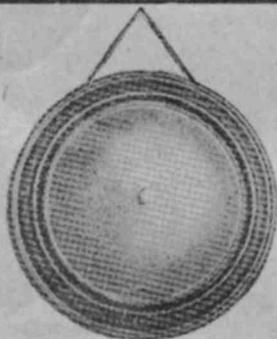
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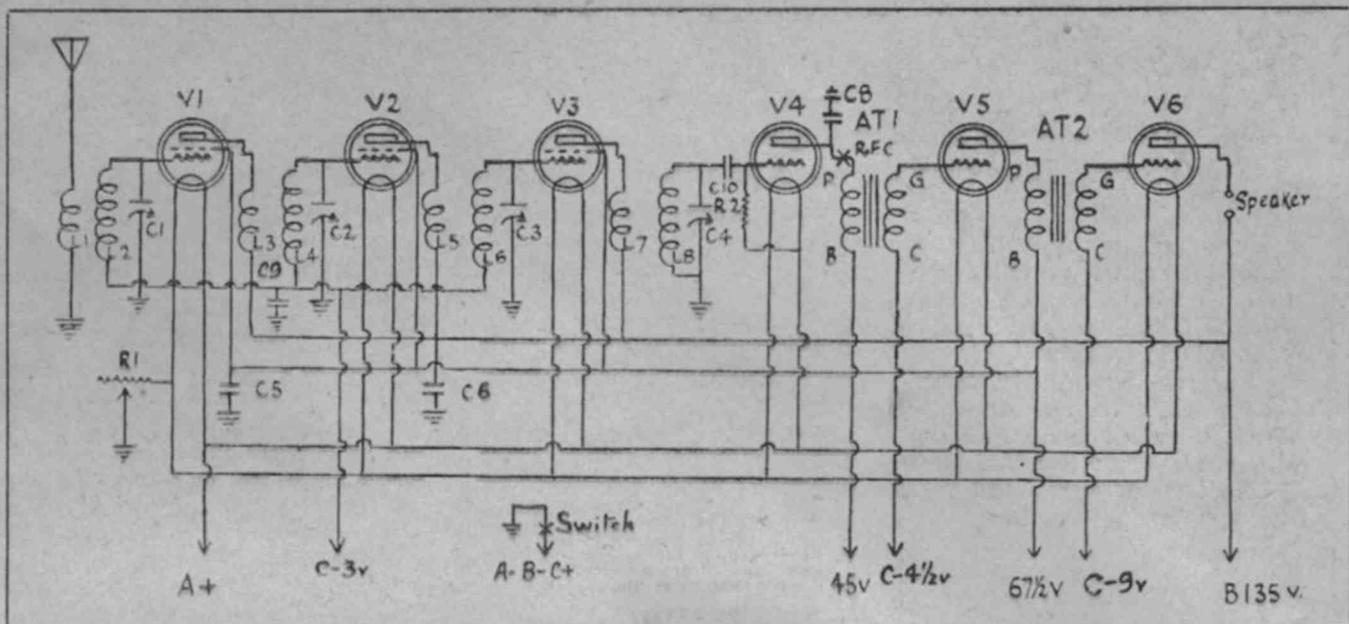
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More About The Infinite Six

IN last week's issue we described a most modern design of six-valve battery set, which incorporated one or two rather unconventional arrangements of the circuit. Since we know that many readers are a little afraid to tackle a set of unusual design, we are giving in this short article a slightly modified circuit, which brings the set into line with the accepted practice of arranging bias, etc. With the original "Infinite Six" we arranged an automatic method of obtaining bias by means of wire-wound resistances. In this set we have reverted to the old style of "C bias battery" method. The chief difference in the modified set is simply the greater number of leads to the batteries and its chief disadvantage merely the extra trouble necessary to "hook-up" the set in the first place.

AN ADVANTAGE

EVEN this slight disadvantage is set off by the increased efficiency which probably will be obtained with the greater range of voltage variations. For instance, the voltages on the screens of the r.f. valves and on the plate of the detector can be varied in proportion to a variation of the bias voltages in order to get the very last ounce out of the job.

THE PARTS LIST

THE only differences in the parts lists for the original and modified sets will be as follows:—Instead of a 400 ohm potentiometer R1 will be a 30 ohm rheostat. The resistor R3 and the condenser C7 both will be omitted and the only extra item necessary will be a 9 volt "C" battery. It will be seen that the actual cost of the job will be lowered by a matter of a few pence.

THE WIRING

THE general arrangement of the wiring will be as originally described, with the exception of the leads from the bottoms of the secondary windings of the coil units. Instead of running straight to earth these leads will be brought out to one side of the condenser C9, the other side of this condenser being earthed. We strongly recommend the builder to make these leads all as nearly equal in length as possible, and they should run straight out of the cans and over to the condenser rather than that they should be connected together, with a

Here is another and more conventional version of the Infinite Six featured in our last issue. Those country listeners who plan to build this set will find the accompanying circuit less difficult to comprehend if they are not well up in radio practice.

single lead over to their by-pass condenser. The point is not critical, but may help a trifle.

LEADS TO THE "C" BATTERY

THE following additional leads will be required from the set for the "C" battery:—One from the condenser C9, just mentioned, which will require to be attached to about C minus 3 volts, one from the C terminal of the first audio transformer, which was previously earthed, but will now run to C minus 4 1/2 volts, and a third lead is required from the C terminal of the second audio transformer, and will run to the 9 volt negative terminal of the "C" battery, instead of to B negative, as previously.

THE FILAMENT WIRING

THE filament wiring is also little altered except that the negative side of the filament wiring is earthed through the rheostat and the negative lead from the "A" battery runs straight to earth

through the main switch of the set. If the switch is fitted in the negative lead and the B negative and C positive terminals all connected to the battery end of the lead, then the switch will definitely cut off all batteries simultaneously.

THE VOLTAGES

THEORETICALLY we expect that the voltages for best results will be about 3 volts bias for the r.f. valves, 45 volts bias for the audio amplifier, and 9 volts for the output valves. On the screens of the r.f. valve probably 67 1/2 volts will be required, with 45 volts for the detector, and the entire maximum for the plate of the output valve. Whilst there is no doubt that the set will operate well on these voltages, it is as well for the set builder to experiment with different voltages. On the plate of the detector, for instance, 22 1/2 volts may give better results. The voltage on the screens of the r.f. valves will be lowered to 45 volts if oscillation is encountered, but even if the set is absolutely stable this voltage must not be increased beyond 90 volts. The bias voltage on the r.f. valves can also stand considerable variation; in fact, it may be found that the valves will work better without any bias at all, the lead being taken straight to the C positive terminal. At all times it should be remembered, however, that the higher the bias voltages used the lower will be the drain on the "B" batteries.

USING OTHER TYPE VALVES

GLANCING through the queries mail reveals that several readers have built the original "Super-six" and the "Forty-Four," using British and Continental valves of other types than those originally specified, and claim very excellent results from them. The chief difference between the valves, of course, is the connection to the cap. With the American type valves the nickel cap of the valve is the grid connection with the "G" terminal of the valve socket connected to the screen. With the Continental type valves the bakelite cap is the plate connection, the "P" terminal of the socket being the connection for the screen. The different methods of arranging the connections can be most confusing to the novice, and if at all in doubt it is a wise plan to go slowly at this point of the wiring, as incorrect connections to valves can be most expensive.

Q.S.L. CARDS

Q.S.L. cards for the following have arrived at "Wireless Weekly" and will be posted to amateurs on receipt of address and stamps:—

2-AP. AT. AX. BA. BE. CE. CI. CK. CR. CV. EU. GK. GM. GR. HB. HC. HD. HM. IM. JC. JH. JZ. LD. LJ. LI. LO. LV. LX. LZ. MR. ME. MH. NG. NZ. OC. OP. OY. PA. PK. PS. RN. SA. SD. TW. TX. TY. WA. WD. WE. WL. WN. WZ. XU. YK. YR. ZU. ZW. ZX.
3-AC. BW. GP. LQ. MY. OC. RG. RH. WL. WM. ZZ.
4-OK. W.
5-CP. ML. OH.
6-AY. EN. EX. FB. GF. WI.

ELECTROLYTIC CONDENSERS

Advantages and Disadvantages. A comparison with other types of condensers. How they are used in modern set construction . . . how not to place them in layout.

INTRODUCED to the Australian market a few months ago, the electrolytic condenser has taken the trade's fancy, and to-day practically every set manufacturer in Sydney uses electrolytic condensers in the filter circuits of his sets. Naturally enthusiasts are interested in the change over from paper to electrolytic condensers, and some pretty fierce debates on their merits have taken place between members of one radio club and probably in others. To show that the subject has many points to be considered, it is only necessary to notice that technical journals from both England and America are divided on the subject, some supporting the electrolytic, whilst others say they are a failure and will soon become discarded.

What is an Electrolytic Condenser?

AN electrolytic condenser is much the same as any other type of condenser in its action, but vastly different in construction. The electrolytic condenser has an anode of metal as the positive terminal, with an electrolyte as the negative terminal and a layer of gas between them as the dielectric. The principle is much the same as with the old-time electrolytic rectifier. It is quite an easy matter for current to flow from the electrolyte liquid to the plate, which is usually made of aluminium or tantalum, but the passage of current from the aluminium anode to the electrolyte is difficult.

The Capacity

THE factors determining the capacity of the electrolytic condenser are mainly the area of the anode's surface, the material it is made from, and the thickness of the gas film. The thickness of the film actually depends upon the voltage first applied to the condenser after its manufacture. The higher the initial voltage the thicker will be the film, and of course the lower the capacity. After the condenser is manufactured it is subjected to a voltage for about ten hours in order to form the film correctly. On this account it is also noticed that a condenser after arrival from overseas will spit, crackle, etc., when first connected to a set here, but soon settles down to normal operation after a few minutes' service.

Self-healing

THE chief advantage of the electrolytic condenser is its ability to heal itself after a breakdown caused by the application of a higher voltage than normal.



A typical electrolytic condenser.

With the old style of paper condensers a breakdown resulted in causing a short-circuit, and in cases of filter condensers this breakdown usually resulted in a burntout rectifier valve, or perhaps a burntout filter choke, and in fact even a burntout power transformer. One of the reasons why electrolytic condensers became popular with traders was on account of a belief that an electrolytic condenser could not short-circuit internally. Actually it is quite possible for an electrolytic condenser to break down and cause just the same amount of damage as the ordinary condenser. The main difference, however, lies in the fact that the electrolytic will heal itself if the power is switched off as soon as the condenser breaks down. On this account it would be a sound idea if all set manufacturers fitting electrolytic condensers were to issue a warning to buyers to always switch off the set if it fails in operation. The cause of the breakdown may be merely a temporary overload caused by a line voltage fluctuation, and the switching off of the set may save further damage. When switched on again the con-

densers will have sealed themselves again.

Advantages

SO we find that the chief advantage of the electrolytic condenser lies in its compact size, the ease with which it can be mounted in a chassis without screws, rivets, etc., its compactness and manner in which it can be stowed away in an odd corner of the base, and its additional capacity, as most electrolytics are rated at 8 microfarads as against the usual 4 microfarads of the normal paper dielectric filter condenser. In actual practice this extra capacity seldom appears to have any beneficial effect upon the hum level of the output.

Disadvantages

THE disadvantages of the electrolytic condensers are many and varied, according to various opinions. Some dealers claim that the electrolytic condensers increase the drain on the power transformer by 30 milliamps—a most serious factor. Others blame the electrolytics for giving them sizzling noises in the speaker, and to others the thought of having cans full of electrolyte in a radio set is not acceptable. Thought out in the most logical way, we still fail to find any justification for the positive "boom" which is at present being enjoyed by electrolytic condensers.

A Warning

WHILST on the subject of electrolytic condensers there is another point we would like to bring up, and this is the matter of the placing of the electrolytic condensers on the chassis. Most manufacturers appreciate that an electrolytic condenser must be mounted in an upright position, but few seem to trouble further, simply filling up any vacant spaces on the chassis, rather than fitting them in any special position. We think this is very bad practice, and feel sure that in the future a lot of trouble will be caused on this account. The electrolytic condenser is filled with electrolyte, which can readily evaporate if the condenser gets hot. Yet in several cases we have noticed the electrolytic condensers fitted right against the rectifier and near the power valve or pentode. All of these valves get very hot in operation, and in some sets we've had on test the electrolytic condensers have been so hot after a few hours running that they were too hot to touch. Naturally under these circumstances their life is only a few months, and when the electrolyte is completely evaporated—well, then the electrolytic condenser ceases to be very electrolytic.

DR. PAGE ON BROADCAST CONTROL

The only party leader to make a definite reference to broadcasting policy during the election campaign has been Dr. Earle Page, who made a general statement of his views on the subject in a broadcast talk from 2FC on December 8. Dr. Page's statement is quoted verbatim below.

Before summing up,

"I would like to deal with that very vexed question of the future control of Broadcasting in Australia. While the Country Party is not prepared to admit that broadcasting in Australia has failed under the private contract system, there seems to be a general idea among licenced listeners that the time has arrived to put this vast public utility under a Board of Control.

"If this is to be a success, the Country Party is firmly of the opinion that any of the features which militated against the private contractors must go, and the British Broadcasting Corporation system in its entirety must be installed. It is no use making a half-hearted move in this matter. If Broadcasting is to be removed from the exigencies of politics, it must be placed under a Board operating upon a charter which gives it full responsibility over both the programme matter and the technical administration, without any interference directly from the Government of the day, or indirectly through the interference of the Civil Service, which in turn can be nothing more than the mouth-piece of the Government.

"On the question of finance, the Country Party would not suggest that at the moment there should be any reduction in the present licence fee, as there is any amount of room for improvement alike in programmes and transmission services.

"The existing system of absorbing in the consolidated revenue a large section of the licence fee is wrong, and in fact it was always intended that money so raised would be used for improvements in the system, and the money received for the purpose of broadcasting should be operated through a fund entirely removed from other Government accounts.

"It would, however, be quite within the ambit of the Government to charge a regular percentage against each licence as a form of amusement tax, and in doing this it would only be following out the precedent established in Great Britain. Other than this, the entire financial ramifications of the broadcasting service would be within the control of its own administration.

"The business control would be empowered to enter into contracts for its services with the Postmaster-General's Department, and also to charge for its services with the Postmaster-General's Department, and also to make contracts with other bodies whose services are essential to a successful broadcasting undertaking. Under its charter the Broadcasting Commission will retain their seats upon similar terms to those of the Directors of the Commonwealth Bank, and cannot be removed during their term of occupancy except by the action of Parliament. This will assure the Commission of sufficient independence to withstand any attempt to influence its operations through political pressure, and at the same time it will be subject to the wish of the community as a whole through the Federal Parliament.

"Anyone who has carefully studied the charter under which the British Broadcasting Corporation operates, must re-

TRADE BULLETIN NEXT WEEK.

Owing to the incidence of the Federal elections and the large number of pages devoted to listing candidates for broadcast results, the Trade Bulletin, which was to have been a feature of this issue, has been held over, and will appear next week.

cognise that it is only in the appointment of a body of equal strength and independence that we can remove Broadcasting as an established and accepted institution, carrying possibly the greatest influence in the life of the community, beyond the exigencies of either direct or indirect political attack. Any suggestion of political control will be rigidly opposed by the Country Party,

which recognises that Broadcasting is a utility that can only answer the requirements of the public at large, when it is given an independence equal to that under the British Broadcasting system.

"As I have already said, the Country Party advocates a constitutional change, giving broadcasting and wireless control over to the Commonwealth, and then preventing the danger of duplicating between the Federal and State authorities.

"The radio can do more for the Commonwealth than any other factor in making the conditions of the men who live outback satisfactory, and grant to them some of the attractions which come to their more fortunate fellow citizens in the great cities."

YOUR CALL SIGN BOOKLET

November Amendments and Additions to the list of Broadcasting and Experimental Stations, published in the Wireless Weekly Supplement, November 27, 1931.

ADD TO BROADCAST STATIONS

3AK	200 metres, 1500 k/cycles 50 watts*	Akron Broadcasting Co. 490 Elizabeth St., MELBOURNE.	5 a.m. to 7 a.m. 11.30 p.m. to 2 a.m.
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AMATEUR EXPERIMENTAL STATIONS. ADDITIONS

Call Sign.	Name.	Address.
VK 5MA	White, C. R.	69 Curran Street, Kilkenny, S.A.
VK 30J	Stevens, R. E.	33 Auburn Grove, Auburn, E.3, Vic.
VK 3YJ	Wookey, G. W. L.	Ridge Road, Mt. Dandenong, Vic.
VK 3MQ	Setford, H. R.	11 Percy Street, Balwyn, E.8, Vic.
VK 5MK	Bentley, F. E.	20 Neil Street, Cowandilla, S.A.
VK 4NG	Jonasson, R. P.	Alberton, Queensland.
VK 3BJ	Hanham, F. S.	161 Napier Street, Essendon, W.5, Vic.
VK 3UY	Fromholtz, C. A.	15 Iramoo Street, Balwyn, E.8, Vic.
VK 3DY	Dyer, C. A. R.	162 Roseneath Street, Clifton Hill, N.8, Vic.

VK 2KF	Kurri Kurri Radio Club, (E. M. Austin)	Lang Street, Kurri Kurri, N.S.W.
VK 3TP	Prentice, T. F.	4 Edith Street, Caulfield North, S.E.7, Vic.
VK 3LD	Richardson, L. R. N.	"Millera," The Basin, via Bayswater, Vic.
VK 2PN	Weeden, R.	Capper Street, Tumut, N.S.W.

CHANGES OF ADDRESS.

VK 6XF	Chaffer, M.	"Wentworth Hotel," William Street, Perth, W.A.
VK 3YZ	McKeown, A. M.	C/o Exide Battery Service, 221-225 Ryrie Street, Geelong, Vic.
VK 3YW	Waring, C. C.	"Mitiamo," 80 Balwyn Road, Canterbury, E.8, Vic.
VK 2MW	Manley, W. M.	75 Hubert Street, Leichhardt, N.S.W.
VK 6LJ	Mead, J.	Cannington Terrace, Cannington, W.A.
VK 4WI	Wireless Inst. of Australia, (Qld. Division)	Box 5, Toowong, Q'land.
VK 7RS	Hope, R. S.	"Roseville," Clare Street, Hobart, Tas.
VK 3JP	Michell, H. E.	12 Huntly Street, Elsternwick, S.4, Vic.
VK 4QL	The Queensland Listeners' League	C/o N. W. Atkinson, "Alynbrook," St. Osyth Street, Toowong, Q'land.
VK 4HK	Kinzbrunner, H. C.	Mareeba, Q'land.
VK 30G	Menon, G. J.	41 The Grove, Moreland, N.13, Vic. (Formerly 20G, Croydon, N.S.W.)
VK 5LA	Atkins, L. M.	20 Lynnington Street, Tasmore, S.A.
VK 20J	Arnold, E. N.	Forrest Hill Avenue, Albury, N.S.W.
VK 3PA	Anderson, P. J.	18 Arthur Street, Preston, N.18, Vic.

CANCELLATIONS.

VK 4JK	Snape, F. R. De B.	Willis Island.
VK 4JH	Williams, J. H.	64 Nelson Street, Mackay, Q'land.
VK 3RC	Clay, R. G.	85 Wingrove Street, Fairfield, N.20, Vic.
VK 2ZJ	Simpson, A. W.	23 Sibbick Street, Five Dock, N.S.W.
VK 3LM	Lee-Archer, E. L.	55 Aintree Road, Glen Iris, S.E.6, Vic.
VK 2ZO	Willmot, T. R.	Coramba Road, South Grafton, N.S.W.

ALTERATION TO CALL SIGN.

VK 30G	Menon, G. J.	Formerly 20G, Croydon, N.S.W.
VK 4NS	Townsville Radio Club	Formerly 4NQ.
VK 4PW	Wood, P.	5 Omar Street, Ipswich, Q'land, formerly 4RO.

FEDERAL ELECTION RESULTS

Almost every station in Australia will be broadcasting the results of the polling in the Federal election as they come to hand on Saturday evening. Whatever station, however, you are tuned in to, the following pages will be found useful for keeping a record of the progress of the parties. See article on page 5 for further details.

Senate Candidates for New South Wales

ANDERSON, C. E. (S. Lab.)			
ARTHUR, T. C. (State Lab.)			
BARKER, E. E. (State Lab.)			
BAILEY, J. (Fed. Lab.)			
BLACKBURN, H. J. (F. Lab.)			
GARDINER, A. (Fed. Lab.)			
*COX, C. F. (U.A.P.)			
*GREENE, W. M. (U.A.P.)			
HARDY, C. Jun. (U.A.P.)			
DOOLEY, J. (Ind. Lab.)			
McDONALD, G. R. W. (Prot.)			
SHARKEY, L. L. (Comm.)			
TAYLOR, A. E. (Ind.)			

Senate Candidates for Victoria

*BRENNAN, T. C. (U.A.P.)			
*GUTHRIE, J. F. (U.A.P.)			
*PLAIN, W. (U.A.P.)			
CAMERON, D. (Fed. Lab.)			
SHEEHAN, J. M. (Fed. Lab.)			
WOLLIS, A. R. (Fed. Lab.)			
KELLY, A. (Young Nat.)			
MURCHISON, W. (Ind. U.A.P.)			
PARTRIDGE, H. F. K. (C.)			

Senate Candidates for Queensland

BROWN, G. (Fed. Lab.)			
COLLINGS, J. S. (Fed. Lab.)			
MACDONALD, J. V. (F. Lab.)			
*COOPER, W. J. (U.A.P.)			
*GLASGOW, T. W. (U.A.P.)			
*THOMPSON, W. G. (U.A.P.)			
PATERSON, F. W. (Com.)			

MR. H. P. WILLIAMS WHO WILL BE ANNOUNCING THE RESULTS FROM 2FC AND 3BL.



At the time of going to press the Senate nominations for South Australia, Western Australia, and Tasmania had not been announced. The Senate figures, however, will not be received until the House of Representatives candidates are almost complete.

U.A.P.—United Australia Party led by Mr. Lyons and Mr. Latham.

Fed. Lab. or A.L.P.—The Australian Labor Party led by Mr. Scullin and Mr. Theodore.

State Labor.—The Lang Plan Party led by Mr. Beasley.

U.C.P.—The United Country Party led by Dr. Earle Page.

Ind.—Independent.

Ind. L.—Independent Labor.

Prot.—Protectionist.

Comm.—Communist.

RETURNED UNOPPOSED
WIDE BAY (Q.): Corser, B. H. (U.C.P.). MORETON (Q.): Francis, J. (U.A.P.) FORREST (W.A.): Prowse, J. H. (U.C.P.). GIPPSLAND (Vic.): Patterson (U.C.P.).

An asterisk denotes a retiring member.

House of Representatives Candidates for New South Wales

BARTON	1929 poll: Tully (Labor) 43,207. Myhill (Nationalist) 20,722				
*ELDRIDGE, J. C. (S. Lab.)					
LANE, A. (U.A.P.)					
*TULLY, J. T. (Fed. Lab.)					
CALARE	1929 poll: Gibbons (Labor) 20,492. Howse (Nationalist) 19,252				
*GIBBONS, G. A. (Fed. Lab.)					
THORBY, H. V. C. (U.C.P.)					
WATSON, T. W. (State Lab.)					
COOK	1929 poll: Riley (Labor) 34,221. Pickup (Nationalist) 6409				
GARDEN, J. S. (State Lab.)					
*RILEY, E. C. (Fed. Lab.)					
ROBINSON, C. (U.A.P.)					
WRIGHT, T. (Comm.)					

COWPER

1929 poll: Page elected unopposed.

*CUSACK, J. J. (Fed. Lab.).

*PAGE, E. C. G. (U.C.P.).

ROACH, T. W. (State Lab.).

DALLEY1929 poll: Theodore (Labor) 31,276. Morrow
(Nationalist) 8870.

LITTLE, W. C. (Ind. Nat.).

MASSEY, S. (U.A.P.).

ROSEVEAR, J. S. (State Lab.).

SYLVESTER, J. W. (Comm.).

*THEODORE, E. G. (F. Lab.).

DARLING1929 poll: Blakeley (Labor) 24,124. Doe (Nation-
alist) 10,259.

*BLAKELEY, A. (Fed. Lab.).

CAMPBELL, H. E. O. (U.C.P.).

QUINTRELL, R. E. (S. Lab.).

TRIPP, E. C. (Comm.).

EAST SYDNEY1931 by-election: Ward (Labor) 19,975. Courtenay
(Nationalist) 16,333. Mountjoy (Communist) 611.

BUCKLAND, G. H. (F. Lab.).

CLASBY, J. J. (U.A.P.).

*WARD, E. J. (State Lab.).

EDEN-MONARO1929 poll: Cusack (Labor) 19,732. Perkins
(Nationalist) 19,692.

CHRISTIAN, A. J. (U.C.P.).

O'SULLIVAN, G. J. J. (F. L.).

PERKINS, J. A. (U.A.P.).

GWYDIR1929 poll: Cunningham (Labor) 20,873. Abbott
(Country Party) 18,014.

ABBOTT, C. L. A. (U.C.P.).

BROWN, A. (U.C.P.).

CUMMINS, E. F. (State Lab.).

*CUNNINGHAM, L. L. (F. L.).

HUME1929 poll: Moloney (Labor) 23,144. Fitzpatrick
17,743.

COLLINS, T. J. (U.C.P.).

*MOLONEY, P. J. (Fed. Lab.).

REGAN, L. A. R. (State Lab.).

HUNTER

1929 poll: James elected unopposed.

BAILEY, A. (Ind.).

BURNHAM, H. (Comm.).

HOWIE, A. (Fed. Lab.).

*JAMES, R. (State Lab.).

LANG1929 poll: Long (Labor) 28,898. Dein (Nationalist)
14,736.

BENNETT, A. E. (U.A.P.).

DEIN, A. K. (U.A.P.).

*LONG, W. J. (Fed. Lab.).

MULCAHY, D. State Lab.).

MACQUARIE1929 poll: Chifley (Labor) 25,349. Dash (Nation-
alist) 13,271.

*CHIFLEY, J. B. (Fed. Lab.).

DEVENEY, R. (Comm.).

LAWSON, J. N. (U.A.P.).

LUCETTI, A. S. (S. Lab.).

MARTIN1929 poll: Eldridge (Labor) 31,804. Pratten
(Nationalist) 25,218. Beeby (P.P.) 4459.

ABBOTT, M. (U.A.P.).

CATTS, J. H. (Fed. Lab.).

HANKIN, C. H. (State Lab.).

HOLMAN, W. A. (U.A.P.).

NEWCASTLE

1929 poll: Watkins elected unopposed.

CLARK, C. R. (U.A.P.).

KIDD, J. (State Lab.).

SIMPSON, J. S. (Comm.).

SKELTON, W. P. J. (Ind. L.).

*WATKINS, D. (Fed. Lab.).

NEW ENGLAND1929 poll: Thompson (Country Party) 21,005.
Wilson (Labor) 17,489.

CAMPBELL, A. B. (Ind.).

*THOMPSON, V. C. (U.C.P.).

NORTH SYDNEY1929 poll: Hughes (Ind. Nat.) 33,263. Nott (Nat.),
29,298. Banko (Ind. Lab.) 618. Judd (Coc.) 180.

COWPER, N. L. (U.A.P.).

*HUGHES, W. M. (U.A.P.).

NELSON, N. C. L. (State Lab.).

PARKES1931 by-election: Marr (Nat.) 31,227. Martin (Lab.)
22,394. Blake (E. R.) 986. Tripp (Comm.) 382.

GARDEM, H. L. (State Lab.).

GIBBS, W. A. (Fed. Lab.).

*MARR, C. W. C. (U.A.P.).

PARRAMATTA1929 poll: Rowe (Labor) 30,686. Bowden (Nation-
alist) 26,874.

BROWN, A. (Ind.).

PATTERSON, V. D. (S. Lab.).

*ROWE, A. E. (Fed. Lab.).

STEWART, F. H. (U.A.P.).

REID1929 poll: Coleman (Labor) 49,909. Carr (Nation-
alist) 16,977.

*COLEMAN, P. E. (Fed. Lab.).

GANDER, J. H. (State Lab.).

UEBEL, R. N. (U.A.P.).

RICHMOND1929 poll: Green (Country Party) 24,400. Gibson
(Country Party) 13,748.

FREDERICKS, J. (S. Lab.).

GIBSON, R. C. (U.C.P.).

*GREEN, R. F. H. (U.C.P.).

GREENING, L. E. (U.C.P.).

TIGHE, P. E. (U.C.P.).

RIVERINA1929 poll: Killen (Country Party) 22,200. Nulty
(Labor) 19,606. Nock (Country Party) 1224.

HANKINSON, R. H. (U.C.P.).

HEISS, J. A. (State Lab.).

LEVY, L. J. (Fed. Lab.).

NOCK, H. K. (U.C.P.).

ROBERTSON1929 poll: Gardner (Nationalist) 19,188. Fitzgerald
(Labor) 18,077.

FLEMING, W. M. (Ind. U.C.P.).

*GARDNER, S. L. (U.A.P.).

ROBB, P. (State Lab.).

TURNBULL, W. E. (F. Lab.).

SOUTH SYDNEY1929 poll: Riley (Labor) 34,978. Adkins (Nation-
alist) 17,782.

JENNINGS, J. T. (U.A.P.).

*RILEY, E. (Fed. Lab.).

STEWART, J. (State Lab.).

WARRINGAH1929 poll: Parkhill (Nationalist) 25,129. Windéyer
People's Party) 22,638.

DUNCAN, W. L. (Ind. U.A.P.).

*PARKHILL, R. A. (U.A.P.).

WENTWORTH1929 poll: Marks (Independent Nationalist) 31,991
Manning (Nationalist) 22,878.

HARRISON, E. J. (U.A.P.).

*MARKS, W. M. (U.A.P.).

WERRIWA1929 poll: Lazzarini (Labor) 28,213. Grogan
(Nationalist) 14,903.

*LAZZARINI, H. P. (S. Lab.).

McNICOLL, W. R. (U.C.P.).

SHEPPARD, M. P. (Ind.).

TULLY, E. B. (Fed. Lab.).

WEST SYDNEY1929 poll: Beasley (Labor) 28,121. Thompson
(Nationalist) 4404.

*BEASLEY, J. A. (S. Lab.).

BUTTERELL, A. W. (U.A.P.).

DONALDSON, J. (Fed. Lab.).

House of Representatives Candidates for Victoria**BALACLAVA**

DENYER, J. P. (Ind.).

STEWART, E. (Fed. Lab.).

*WHITE, T. W. (U.A.P.).

BALLARAT

BROMFIELD, H. A. M. (U.C.P.).

*McGRATH, D. C. (U.A.P.).

MILLER, J. S. (Fed. Lab.).

BATMAN

BLAKE, F. E. J. (Aus. Dem. P.).

*BRENNAN, F. (Fed. Lab.).

DENNIS, S. (U.A.P.).

HANNAN, J. E. (Comm.).

BENDIGÖ

HARRISON, E. F. W. (U.A.P.).

*KEANE, R. V. (Fed. Lab.).

BOURKE

ADIE, J. (Comm.).

*ANSTEY, F. (Fed. Lab.).

IVEY, J. L. R. (U.A.P.).

NORMAN, W. H. (Ind.).

CORANGAMITE

*CROUCH, R. A. (Fed. Lab.).

GIBSON, W. G. (U.C.P.).

CORIO

CASEY, R. G. (U.A.P.).

*LEWIS, A. (Fed. Lab.).

LISTER, J. H. (Ind. U.A.P.).

ECHUCA

FITZPATRICK, J. (Ind. U.A.P.).

*HILL, W. C. (U.C.P.).

MOSS, W. L. (Ind. U.C.P.).

STEWART, G. (Ind. U.C.P.).

FAWKNER

*MAXWELL, G. A. (U.A.P.).

McKENNA, J. L. (Fed. Lab.).

ROBERTSON, D. (Ind.).

FLINDERS

BRUCE, S. M. (U.A.P.).

HAYWOOD, A. H. (Fed. Lab.).

HENTY

*GULLETT, H. S. (U.A.P.).

KATZ, F. (Fed. Lab.).

INDI.

HUTCHINSON, W. J. (U.A.P.).

*JONES, P. (Fed. Lab.).

WALTER, A. L. N. (U.C.P.).

KOORYONG

*LATHAM, J. G. (U.A.P.).

LOUGHNAN, C. A. (Fed. Lab.).

MARIBYRNONG

BECKETT, W. J. (Fed. Lab.).

*FENTON, J. E. (U.A.P.).

SCOTT, W. E. (Aus. Dem. P.).

MELBOURNE

*MALONEY, W. R. N. (Fed. Lab.).

SMITH, I. (U.A.P.).

MELBOURNE PORTS

*HOLLOWAY, E. J. (Fed. Lab.).

HOUSTON, T. A. (State Lab.).

HOWEY, W. (Ind. U.A.P.).

KERBY, N. (Ind.).

Le HURAY, T. W. (Comm.).

ORR, W. J. (Ind.).

WANNON

*McNEILL, J. (Fed. Lab.).

RODGERS, A. S. (U.C.P.).

SCHOLFIELD, T. H. (U.A.P.).

WIMMERA

DOWSLEY, A. (Ind.).

LOCKHART, S. (U.C.P.).

McCANN, W. J. (Ind. U.C.P.).

McCLELLAND, H. (U.C.P.).

MORGAN, W. A. (U.A.P.).

YARRA

BRANAGAN, P. J. (Ind.).

DAVIS, J. C. (U.A.P.).

*SCULLIN, J. H. (Fed. Lab.).

THORNTON, E. (Comm.).

House of Representatives Candidates for South Australia**ADELAIDE**

GOODE, Mrs. A. K. (Ind.).

HOWARD, T. P. (Lang Plan).

STACEY, F. H. (Em. Committee).

VAUGHAN, C. (Ind.).

*YATES, G. E. (Fed. Lab.).

ZWOLSMAN, J. (Comm.).

ANGAS

FRASER, D. S. (Fed. Lab.).

*GABB, J. M. (Em. Committee).

BARKER

*CAMERON, M. D. (Em. Committee).

HASSE, G. T. (Fed. Lab.).

STEHR, P. T. (Ind.).

BOOTHBY

LINDSEY, S. (Single Tax).

*PRICE, J. L. (Em. Committee).

SKITCH, C. E. L. (Fed. Lab.).

GREY

BARNES, A. W. H. (Ind.).

HODGSON, J. A. (Single Tax).

*LACEY, A. W. (Fed. Lab.).

McBRIDE, P. A. N. (Em. Committee).

HINDMARSH

EVANS, E. A. (Em. Committee).

*MAKIN, N. J. O. (Fed. Lab.).

O'FLAHERTY, S. W. (Lang Plan).

WAKEFIELD

COLLINS, M. (Ind. Country Party).

*HAWKER, C. A. S. (Em. Com.).

House of Representatives Candidates for Queensland**BRISBANE**

*CAMERON, D. C. (U.A.P.).

LAWSON, G. (Fed. Lab.).

TALTY, H. P. (Lang Plan).

CAPRICORNIA

*FORDE, F. M. (Fed. Lab.).

STAINES, R. (U.C.P.).

DARLING DOWNS

GROOM, E. L. (Ind.).

*MORGAN, A. C. (U.A.P.).

HERBERT

FRANCIS, G. A. (U.A.P.).

*MARTENS, G. W. (Fed. Lab.).

KENNEDY

CLARKE, R. J. (U.A.P.).

*RIORDAN, D. (Fed. Lab.).

LILLEY

COSTELLO, A. J. (Unofficial Lab.).

*MACKAY, G. H. (U.A.P.).

MASON, F. E. (Douglas Social Credit)

MARANO

FERRICKS, M. A. (Fed. Lab.).

*HUNTER, J. A. J. (U.C.P.).

OXLEY

BAKER, F. M. J. (Fed. Lab.).

*BAYLEY, J. G. (U.A.P.).

PFORR, F. J. (Lang Plan).

*House of Representatives Candidates for Western Australia***FREMANTLE**

*CURTIN, J. (Fed. Lab.).

WATSON, H. K.

WATSON, W.

KALGOORLIE

*GREEN, A. E. (Fed. Lab.).

PICKERING, W. G. (Country P.).

RAINSFORD, G. H. (Boulder N.P.).

PERTH

MOLONEY, J. D. (Fed. Lab.).

*NAIRN, W. M. (U.A.P.).

SWAN

FERGUSON, C. (U.C.P.).

FRASER, J. McI. (U.C.P.).

*GREGORY, H. (U.C.P.).

REYNOLDS, A. G. (Ind.).

*House of Representatives Candidates for Tasmania***BASS**

BERNARD, H. C. (Fed. Lab.).

*GUY, J. A. (U.A.P.).

SOLOMON, H. J. (U.A.P.).

DARWIN

*BELL, G. J. (U.A.P.).

McGRATH, J. W. (Fed. Lab.).

DENISON

*CULLEY, C. E. (Fed. Lab.).

HUTCHIN, A. W. (U.A.P.).

FRANKLYN

BEARD, A. E. (Ind.).

BLACKLOW, A. C. (U.A.P.).

*FROST, C. W. (Fed. Lab.).

WILMOT

BECKER, G. G. (Fed. Lab.).

*LYONS, J. A. (U.A.P.).

PULLEN, G. G. (Nat.).

House of Representatives Candidates for Northern Territory

EASTON, W. R. (Nat.).

McMILLAN, J. A. (Comm.).

*NELSON, H. G. (Fed. Lab.).

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Happy and Prosperous New Year*

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WATCH THIS JOURNAL FOR FULLER ANNOUNCEMENT

FRIDAY DEC. 18

★2FC & 2BL TO-DAY★



SOUTH AFRICA
v.
AUSTRALIA

A description from the Sydney Cricket Ground

2FC SYDNEY, 451 Metres

Early Session

7.0 to 8.15 a.m.

(Relayed to 2NC, Newcastle.)

Morning and Afternoon Session

10.30 to 4.30 p.m.

(Relayed to 2NC, Newcastle between 10.40 and 12 noon and 2.30 and 4.30 p.m.)

12.5: FROM THE SYDNEY TOWN HALL COMMUNITY SINGING CONCERT, arranged by THE AUSTRALIAN BROADCASTING CO., LTD.

12.30: IMPORTANT NOTE:—Scores in the match, South Australia v. N.S.W., played at Adelaide, will be given at the fall of each wicket, lunch and tea adjournments, and stumps drawn.

Scores in the match, Victoria v. Queensland, played at Melbourne, will be given at lunch and tea adjournments and stumps drawn.

1.15: FROM THE SYDNEY CRICKET GROUND—Description of the play in the match, South Africa v. Australia, Second Test.

Relayed to the National Stations.

1.30: FROM THE SYDNEY TOWN HALL—COMMUNITY SINGING CONCERT, arranged by the AUSTRALIAN BROADCASTING CO., LTD.

2.15: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test Match, South Africa v. Australia.

4.0: THE COURT SYMPHONY ORCHESTRA (recorded)—H.M.S. Pinafore Selection .. Sullivan

4.8: ALFRED O'SHEA, Tenor (r.)—What a Wonderful World It Would Be, Kohr

4.11: RUDY WIEDOEFT TRIO, Saxophonists (recorded)—Sax-o-phun .. Wiedoeft

4.14: THE H.M. GRENADIER GUARDS BAND (recorded)—Nell Gwyn Dances .. German
1. Country Dance.
2. Pastoral Dance.

4.20: THE MAESTROS, Vocal Quintet (r) English Medley .. arr. Evans

4.24: VICTOR ARDEN and PHIL OHMAN, Two-Piano Item (r.)—Maple Leaf Rag .. Joplin

4.28: Stock Exchange, third call.

4.30: Close.

Early Evening Session

5.40 to 8.0 p.m.

(Relayed to 2NC, Newcastle.)

5.40: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test match, South Africa v. Australia. Relayed to the National Stations.

6.0: Children's Stories, by the "Hello Man." Errol, Boy Soprano, will entertain.

THE BOY'S AERO CLUB,

7.5: A.B.C. Sporting Service.

EVENING PROGRAMME

8.0 to 11.30 p.m.

(Relayed to 2NC, Newcastle between 8.0 and 11.0 p.m.)

8.0: A CONCERT PROGRAMME, arranged by THE MUSICAL ASSOCIATION OF N.S.W.—

"Sonata for Two Violins .. Handel
Largo and Allegro.

CYRIL MONK and ROBERT MILLER.

8.8: PEGGY DUNBAR, Contralto—

Unmindful of the Roses, Coleridge Taylor
If There Were Dreams to Sell .. Ireland

The Wind .. Bantock

★ TO-NIGHT AT 8.13 ★



Quartet for Piano, Two Violins, and Cello .. Mitchem

FRANK HUTCHENS, Pianist;
CYRIL MONK, Violinist;
ROBERT MILLER, Violinist;
and CEDRIC ASHBURN, Cellist.

8.30: PEGGY DUNBAR, Contralto—

When I Am Dead, My Dearest, Coleridge Taylor

Virgin's Slumber Song .. Rager
The Dreary Steppe .. Gretchaninoff

8.35: CYRIL MONK, Violinist—

Wiegenlied .. Brahms
Humoreske .. Benjamin
Canzonetta .. Paradies

8.45: PEGGY DUNBAR, Contralto—

Silent Moon .. Vaughan Williams
Love Went a'Riding .. Bridge

8.50: FRANK HUTCHENS, Pianist—A Group by Debussy—

Little White Donkey.
Toccata.

9.0: "REDGUM" will tell Listeners about their "GARDENS."

9.15: RELAYED FROM 3LO, MELBOURNE—THE A.B.C. WIRELESS SYMPHONY ORCHESTRA—

Symphony in E Minor, Op. 95—The New World .. Dvorak

10.0: FROM THE STUDIO—

RICHARD TAUBER, Tenor (r.)—Si vous aviez compris .. Denza

CEDRIC SHARPE, Cellist (r.)—Menuet .. Valenshin

CONCHITA SUPERVIA, Soprano (r.):

★5CL & 2BL TO-DAY★



SOUTH AUSTRALIA
v.
NEW SOUTH WALES

Results from 2BL. A description from 5CL.

Barber of Seville—Cavatina di Rosina .. Rossini
10.15: A talk on the day's play in the Second Test Match, South Africa v. Australia, by the A.B.C. Sporting Editor. Relayed to the National Stations.

10.30: RELAYED FROM 5CL, ADELAIDE—A talk on the day's play in the match, South Australia v. N.S.W., played at Adelaide.

10.45: FROM THE STUDIO—Late Official Weather Forecast.

10.47: FROM THE BALLROOM OF THE ORIENTAL—Jim Davidson's Orchestra.

11.30: Close.

2BL SYDNEY, 351 Metres.

Opening Session

8.15 to 11.0 a.m.

9.0: OLD FOLKS' SESSION.

10.35: THE AUSTRALIAN BROADCASTING COMPANY'S WOMEN'S ASSOCIATION, conducted by Miss Gwen Varley—

"Commonsense Housekeeper's Service."

"Handicraft," by Mrs. Mary Liddell

Midday Session

12 noon to 2.30 p.m.

(Relayed to 2NC, Newcastle, between 12 noon and 1.30.)

NOTE: Scores at the fall of each wicket, at lunch and tea adjournments, and stumps drawn in the match, SOUTH AUSTRALIA v. NEW SOUTH WALES, played at Adelaide; and lunch and tea adjournments and stumps drawn in the match, VICTORIA v. QUEENSLAND, played at Melbourne.

12.0: FROM THE SYDNEY CRICKET GROUND (Relayed to 2NC, Newcastle) A Description of the Second Test Match, SOUTH AFRICA v. AUSTRALIA.

IMPORTANT NOTE: Between 1.15 and 1.30 Description will be relayed through the National Stations.

Afternoon Entertainment

2.30 to 6.0 p.m.

2.30: RECORDINGS.

FRIDAY, . . . DECEMBER 18, (Continued)

- 3.0: POLA NEGRI, Soprano (recorded)
(a) Farwell, My Gypsy Camp . . . *Trad.*
(b) Black Eyes *Trad.*
- 3.6: SELECTIONS.
- 3.22: HAROLD WILLIAMS, Baritone (recorded).—
Limehouse *Hyden*
- 3.25: BEATRICE HARRISON, Cellist (recorded).—
"Hassan" Serenade *Delius*
- 3.28: ELSIE AND DORIS WATERS, Entertainers (recorded).—
Twenty Thousand Scotchmen Shouted "No" *Weston*
I Only Met Her on Sunday . . . *Weston*
- 3.34: COURT SYMPHONY ORCHESTRA (recorded).—
The Yeomen of the Guard Selection
Sullivan
- 3.42: STUART ROBERTSON AND JOHN TURNER, Vocal Duet.—
A Ballad When at Sea *Byng*
- 3.46: J. H. SQUIRE CELESTE OCTET (recorded).—
Song of Sleep *Seur*
- 3.49: ALFRED O'SHEA, Tenor (r.).—
To a Miniature *Brahe*
- 3.52: RADIO RHYTHM (recorded).
- 4.15: FROM THE SYDNEY CRICKET GROUND.—
A Description of the Second Test Match, SOUTH AFRICA v. AUSTRALIA.
IMPORTANT NOTE: Between 5.40 and 6 p.m. Description will be relayed through the National Stations.

The Dinner Hour

6.15 to 8 p.m.

EVENING PROGRAMME

8.0 to 10.30 p.m.

- 8.0: THE A.B.C. ORCHESTRA.—
"The Marriage Market" Selection
Jacobs
- 8.10: FRANK PARSONS, Baritone.—
(a) Come to the Fair *Easthope Martin*
(b) Praise *Haydn Wood*
- 8.17: THE A.B.C. ORCHESTRA.—
Two Hungarian Dances *Brahms*
- 8.24: WARWICK ARMSTRONG, Entertainer.—
The Giddy Little Girl *Bugnal*
- 8.31: RUBY LESLIE, Soprano.—
(a) Always In All Ways
Whiting and Hurling
(b) In Memory of You *Burke*
- 8.38: THE A.B.C. ORCHESTRA.—
Rubeville Suite *Lake*
- 8.45: DOROTHY DEWAR AND JOHN PICKARD, in a Short Sketch, entitled.—
The Baroness and the Painter . . *Molner*
- 8.55: FRANK PARSONS, Baritone.—
(a) Roadways *Lohr*
(b) A Farewell *Samuel Liddl*
- 9.2: THE A.B.C. ORCHESTRA.—
Selection, "Three Musketeers" . . *Friml*
- 9.15: WARWICK ARMSTRONG, Entertainer.—
The Schoolmaster *Scott-Gordon*
- 9.22: RUBY LESLIE, Soprano.—
(a) Where Are You Now? . . . *Belfils*
(b) Ma Curly-headed Babby . . *Clutsum*
- 9.29: THE A.B.C. ORCHESTRA.—
Valse Celebre *Moszkowski*
- 9.36: CLAUDE CORBETT WILL GIVE HIS SPORTING TALK.
- 9.56: THE A.B.C. ORCHESTRA.—
New Musical Switch *Hall*
- 10.6: DOROTHY DEWAR AND JOHN PICKARD, in a Radio Sketch, entitled.—
A Railroad Adventure *Molner*
- 10.16: THE A.B.C. ORCHESTRA.—
"Maytime" Selection *Romberg*
- 10.25: Late News from "The Sun" and "World."
- 10.28: Late Weather Forecast.
- 10.30: Close.



WARWICK ARMSTRONG, who will be heard from 2BL to-night.

2GB SYDNEY, 316 Metres

- Day Sessions as usual.
- 8.0: Orchestra. Overture. 8.10: Soprano solo. 8.15: Storyette of Industry. 8.16: Violin solo. 8.20: D. Marwell, baritone. 8.28: Orchestra. 8.33: Dorothy Wood entertainer. 8.41: Organ solo. 8.46: Tenor solo. 8.51: Piano solo. 8.56: Soprano solo. 9.0: Weather report. 9.3: D. Marwell, baritone. 9.11: Organ solo. 9.16: Violin solo. 9.21: Dorothy Wood, entertainer. 9.29: Band selection. 9.34: Tenor solo. 9.39: Flute solo. 9.44: Orchestra. 9.49: Choir. 9.54: Soprano solo. 9.59: Orchestra. 10.0: Instrumental music. 10.30: Resume of Saturday's sporting events. 10.45: Slumber music. 11.15: Close down.

2UW SYDNEY, 267 Metres

- Day sessions as usual.
- During the afternoon, latest scores in the cricket match, South Africa v. Australia, at Sydney, Second Test Match, at 12.5, 12.30, 12.45, 1 p.m., 1.15, 1.30, 2.39, 2.45, 3 p.m., 3.15, 3.30, 3.45, 4 p.m., 4.15, 4.30, 4.45, 5 p.m., 5.15* and 6 p.m.
- 5.15: Farmer's Children's Session, conducted by Uncle Jack and Jill. 6.0: Farmer's Dinner Music. 6.30: Fox-Hoyts Radio Club. 6.40: Musical Programme. 7.30: Commentary on to-day's play in the Second Test Match, by Captain E. W. Ballantine. 7.45: Short commentary on the matches, South Australia v. N.S.W., and Victoria v. Queensland. 7.50: Music. 8.0: Political Address. 9.0: Music. 9.10: Result of Musical Competition. 9.15: Victor Radio Session. 9.45: Music. 10.30: Close down.

2UE SYDNEY, 293 Metres

- Day Sessions as usual.
- EVENING SESSION.
- 6.0: Aunt Willa and Simple Simon. 7.10: Resume of To-morrow's Races, Mr. Tom Ellis. 7.30: Talk on Gliding, Mr. E. E. Lyons.
- 8.1: Overture—"If I Were King." 8.10: Studio Programme. 8.50: Weather. 8.53: Selections for Saturday, by Oscar Lind. 9.1: Federal Labor Party. Final Appeal. 10.1: State Labor Party.

Final Appeal. 10.30: Musical Selections, Birthday Calls. 11.0: Close down.

3LO MELBOURNE, 375 Metres

- Day Sessions as usual.
- 2.0: About It and About—
"Children and Fairy Tales"—
Isobel Ann Sheeh.
- 2.20: The A.B.C. Women's Association—
Conducted by Hattie Knight.
- AFTERNOON SESSION.
- 3.0: The Radio Players—
"Rustic Revels" (Fletcher).
- 3.8: Molly Mackay, Soprano—
"Rose Saffly Blooming" (Spohr).
"The Bird" (Fiske).
- 3.14: "The Master Four" in Harmonised Numbers—
"Waiting at the End of the Road."
"Come to the Fair."
- 3.20: The Radio Players—
"Language of the Flowers" (Cowen).
- 3.30: Margaret Kerr—
"Silver Poplars," by Grace Crowell.
"The Elfin Artist," by Alfred Noyes.
"Summer," by Christina Rossetti.
- 3.36: Don Howley, Cello—
"Danse Rustique" (Squire).
- 3.40: Molly Mackay Soprano—
"Flower Rain" (Schneider).
"To a Wild Rose" (MacDowell).
- 3.46: The Radio Players—
Selection: "The Damask Rose" (Clutsum).
- 3.56: Margaret Kerr—
"Christmas Surprises."
- 4.2: "The Master Four" in Harmonised Numbers—
"Two Little Blue Little Eyes."
"The Girl of a Million Dreams" (Gay).
- 4.8: Mrs. Maurice Dudley and Rita Hilton Present a Coster Sketch—
"Bill Awkins."
- 4.20: The Radio Players—
"It's Easy to Fall in Love" (Goetz).
"In the Shadow of the Rockies."
- 4.30: Close down.
- During the afternoon progress scores in the Second Test Match, South Africa v. Australia, played at Sydney; also in the Sheffield Shield Match, South Australia v. New South Wales, played at Adelaide, will be broadcast as they come to hand.
- 5.45: The Children's Corner.

EVENING SESSION

- 6.35: Recitals of School Literature—
"In a Queensland Jungle" (Price Fletcher).
"The Woman of the West" (G. Essex Evans).
"The Dignity of Labor" (Newman Hall).
—Mr. J. Howlett Ross, under the auspices of the Education Department of Victoria.
- 7.25: Gardening Notes—
"Bush House and Fernery"—
Mr. W. R. Hawkins, under the auspices of the Garden Week Committee.
- 7.46: Sporting America—
"Caveman Football"—
Mr. G. S. Browne, M.A.
At approximately 7.0 p.m. "Stumps" in the Second Test Match, South Africa v. Australia, played at Sydney; also in the match, South Australia v. New South Wales, played at Adelaide, will be broadcast.

NIGHT SESSION.

- An Orchestral Concert by the A.B.C. Wireless Symphony Orchestra, Conducted by Percy Code.
Leader: Edouard Lambert.
Assisting Artists: Alexander Raff, Bass. Alexander Sverjensky, Pianist.
- 8.0: A.B.C. Wireless Symphony Orchestra—
"Les Preludes" (Liszt).
Alexander Raff, Bass.—
Two Songs by Koeneman.
"The King and the Jester."
"When the King Went Forth to War."
Alexander Sverjensky, Pianist—
Concerto No. 2 in C Minor (Rachmaninoff) With Orchestra.
Moderato—Adagio Sostenuto—
Allegro Scherzando.
- 9.0: My Scrap Book—
"Queer Tales"—
Bernard Cronin.
Part II. of Orchestral Concert (Relaying to 2FC and 2NC).
- 9.15: A.B.C. Wireless Symphony Orchestra—
Symphony in E Minor, Op. 95—
"The New World" (Dvorak).
(Conclusion of Relay).
Alexander Raff, Bass.—
A Bracket by Martin Shaw.
"A Stave of Roving Tim."
"The Egg-shell."
"Cargoes."
- The Orchestra—
Overture: "Ruy Blas" (Mendelssohn).
Test Cricket.
(Transmission from 2FC, Sydney).
- 10.15: Summary of the day's play in the Second Test Match, South Africa v. Australia, played at Sydney.
- 10.30: A Resume of the day's play in the match Victoria v. Queensland, played at the Melbourne Cricket Ground.
- 10.45: Weather, etc.
- 10.50: Dance Music.
- 11.30: Close down.

3AR MELBOURNE, 492 Metres

Day Sessions as usual.

MID-DAY SESSION.

- 12.0: Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at Melbourne Cricket Ground.
- Test Cricket (relayed from 2BL, Sydney).
- 1.15: A Relayed Description of Test Cricket, Australia v. South Africa, at Sydney Cricket Ground.

AFTERNOON SESSION.

- 2.0: Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at Melbourne Cricket Ground.
- 4.15: Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at Melbourne Cricket Ground.
- 5.40: Test Cricket (relayed from 2BL, Sydney) — A Relayed Description of Test Cricket, Australia v. South Africa, at Sydney Cricket Ground.
- 6.0: Stump Scores and Weather Data and Shipping Information; Close Down.

EVENING SESSION.

- 6.15: Dinner music.
- 7.32: Sporting Results. Stump Scores in Cricket Matches, Test Cricket at Sydney, Australia v. South Africa, and Sheffield Shield Cricket, at M.C.C., Victoria v. Queensland.
- NIGHT SESSION.
- 8.0: Everyday People: "The Widow's Mile" — Mr. Charles Nuttall.
- 8.20: Community Singing, transmitted from Mechanics' Hall, Geelong, under the patron of Will Sampson.
- 10.15: News Session.
- 10.30: Close down.

4QG BRISBANE, 395 Metres

Day sessions as usual.

- 1.15: A description of the play in the Test Match between South Africa and Australia will be broadcast from the Sydney Cricket Ground. Progress scores in the Sheffield Shield matches between Queensland and Victoria, and South Australia and New South Wales, will be announced at intervals.
- 7.30: A.B.C. Sporting Session, including stumps drawn scores in the Second Test, and the Sheffield Shield Matches.
- 7.45: Mick Flanagan will review to-morrow's Races.
- 8.0: Mrs. Matthew's Cadenza Plectral Club and Banjo Band — Overture, "Gloriana" (Weidt).

- Leo Crump and the Banjo Band, Popular Numbers.
- Clare Mathews, Violinist — "Meditation" from "Thais" (Massenet).
- Harry Borradaile, Entertainer — Ten minutes of Humor.
- The Cadenza Plectral Club — "La Dame Blanche" (Boildieu).
- Sally Miller, Soprano — "My Wonderful Garden."
- "Somewhere a Voice" (Tate).
- Mrs. Matthew's Banjo Band — "Bim Bam Boo" (Bickford).
- Albert Falk, Baritone — "The Bandolero" (Stuart).
- "Pals" (Squire).

- 8.50: The Royal Automobile Club will broadcast a week-end Bulletin for Motorists.
- 8.59: Metropolitan Weather Forecast.
- 9.0: The Cadenza Plectral Club — Valse Espagnole — "Lucia" (Bertram).

- Harry Borradaile — More Fun.
- Andrew Kager, Banjoist — "Twelfth Street Rag" (Reser).
- Sally Miller, Soprano — "Love Pipes of June" (Day).
- The Cadenza Plectral Club — Dance grotesque, "Chimney Corner" (Eno).
- Albert Falk, Baritone — "So Fair a Flower" (Lohr).
- "World That Was Once" (Lohr).
- Clare Mathews, Violinist — "Bolero" (Kabaila).
- Leo Crump and the Banjo Band — Popular Numbers.
- A Humorous Interlude.
- Mrs. Matthew's Cadenza Plectral Club and Banjo Band — "Hitting the High Spots" (Weidt).
- 10.0: Final News Bulletin.
- 10.15: A Review of the Day's Play in the

Second Test Match between South Africa and Australia, relayed from Sydney.
10.30: A Review of the Day's Play in the Sheffield Shield Match between Queensland and Victoria, relayed from Melbourne.
10.45: Dance Music.
11.0: Close.

5CL ADELAIDE, 411 Metres

Day sessions as usual.

During the day description of the Sheffield Shield Match, South Australia v. New South Wales, will be broadcast by Len Ford and G. R. Pamprell from the Adelaide Oval, and scores of the Second Test Match, South Africa v. Australia, at Sydney, will be broadcast immediately they come to hand. Descriptions of the Second Test Match will be broadcast by relay from Sydney at 12.45 p.m. and 5.10 p.m.

- 12.45: From the Sydney Cricket Ground. Description of the play in the Second Test Match, South Africa v. Australia.

EVENING SESSION

- 5.10: Description of the play in the Second Test Match, South Africa v. Australia.
- 7.30: "Silvius" gives Selections for Kadina to-morrow, and discusses Christmas Racing.

NIGHT SESSION

- 7.55: Friday Night Musical Reproductions.
- 8.0: Meanderings by "Rufus."
- 8.20: A Symphony Orchestra Concert by the A.B.C. Wireless Symphony Orchestra, relayed from 3LO. (See programme).
- 9.45: Transmission from 2FC, Sydney. Summary of the day's play in the Second Test Match, South Africa v. Australia, played at Sydney.
- 10.0: Sheffield Shield Cricket. A Resume of to-day's play in the Sheffield Shield Match, South Australia v. N.S.W., at Adelaide Oval, by Len Ford. (Relayed to Sydney.)
- 10.15: News Session.
- 10.25: Art Chapman and his Rex Orchestra.
- 11.0: Close down.

6WF PERTH, 435 Metres

Day sessions as usual.

Tea adjournment and Stumps Drawn Scores, South Australia v. N.S.W., Victoria v. Queensland.

- 8.55: Stumps Drawn Scores. 7.0: Leo Ryan, Sporting and Athletic Review. 7.15: Russell Sandeman, Racing Anticipations and Acceptances. 7.45: News Service.
- 8.0: Dajos Bela Orchestra, "Eldgaffeln" (Lauden).
- "Electric Girl" (Holmes). 8.7: Herma Finck and his Orchestra, "Melodious Memories" (arr. Finck).
- 8.15: The A.B.C. Cricket Commentator will relay from Sydney his impressions of to-day's Test Match. 8.30: New Light Symphony Orchestra, "Ballet Egyptian Suite" (Loisim).
- 8.45: Aureliano Pertile, tenor, "Ah Vieni amor mio" (Verdi), "Celeste Aida" (Verdi).
- Benvenuto Franci, Baritone, "O Mighty Monument." Act I, "La Gioconda" (Ponchielli); "Fisherman, thy Bait now Lower," Act 2 "La Gioconda" (Ponchielli).
- Ivar Andresen, Bass, "The Force of Destiny" (Verdi).
- 9.5: The Symphony Orchestra, "The Wand of Youth" Suite (Elgar). 9.40: Musical Travelogue, "Wandering" (midst Sun-kissed Beaches and Coral Islands). 10.15: Announcements. 10.30: To-day's Cricket Scores.
- 11.0: Close.

7ZL HOBART, 517 Metres

Day sessions as usual.

- 6.1: Children's Corner, with "The Rainbow Man" and "Smiler."
- 7.25: Educational Session, Madame Helen George, Talk: "The Teaching of a Musical Appreciation."
- 7.40: Sporting Interlude.
- 7.45: Re-broadcast from 3LO, Melbourne, Eric Welch's Racing Selections for to-morrow's Races.
- 8.0: 7ZL's Dance Night. Music by 7ZL's Dance Band, interspersed with Vocal Recorded Numbers.
- 9.45: Talk: "Popular Psychology—The Human Mind Culture and Control," by F. S. Shaw.
- 10.3: News.
- 10.15: Dance Music.
- 11.0: Close down.

NEW ZEALAND STATIONS

- 1YA (Auckland)—Studio Concert by Salon Orchestra, Rewa Hiwell (soprano), J. Ansley Daglish (tenor), L. G. McKeown (banjoist), and The Asquiths (entertainers).
- 2YA (Wellington)—Miscellaneous Concert by Christina Young (contralto), W. Roy Hill and Charles Williams (tenors), Will Gaudie (baritone), W. Binet Brown (bass), and 2YA Orchestra.
- 3YA (Christchurch)—Studio Concert by Hilda Hutt (soprano), Douglas Suckling (tenor), A. J. Miles Cadman (bass-baritone), Muriel and Louie Waugh (banjo and piano duetists), and Studio Octet. Scenes from Shakespeare and Sheridan, by Naare Hooper and H. L. Shaw.
- 4YA (Dunedin)—Popular programme by The Philharmonic Four, Mrs. F. Peake (mezzo-soprano), Maud Kenward (contralto), J. Swan (tenor), P. M. Peake (baritone), L. Hunter (cellist), A. H. Pettit (solo pianist), and Instrumental Trio.

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Exide Battery Service (Gibson, Battle, and Co., Ltd.), Hunt and Commonwealth Sts. (Off Wentworth Av.), Sydney. Also Noyes Bros. (Sydney), Ltd., 39 York St., Sydney.

POWER EQUIPMENT

Transformers in stock suitable for all modern circuits, from 17/6.
Cans to suit same, 2/- ea.
Stepdown Transformers, 240 volts to 110 volts, from £1 ea.
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use only OSRAM VALVES
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Keep up the quality—keep down the cost—the constant aim of the owner of a battery operated set, which is made possible of achievement by installing Osram Valves. Tremendous "punch" and sparkling performance are assured by the Osram range of battery valves, which at the same time possess a high degree of electron emission at low temperatures, ensuring low loss of efficiency and the minimum of battery consumption.

A.C. Osram Valves are available in all voltages for Battery or A.C. Sets, including 2.5 A.C. Write for literature on the type of valves your set employs.

L.410.

R.F. Detector and Amplifier.
Characteristics.
Fil. Volts, 4.0 max.
Fil. Current, 0.1 amp.
Plate Volts, 150 max.
Amplification Factor, 15.
Impedance, 8500 ohms.
Normal Slope, 1.77 m.a./volt.

L.610.

General Purpose 6v. Battery.
Characteristics.
Fil. Volts, 6.0 max.
Fil. Current, 0.1 amp.
Plate Volts, 150 max.
Amplification Factor, 15.
Impedance, 7500 ohms.
Normal Slope, 2.0 m.a./volt.

P.625A.

Super Power Valve 6v. Battery or A.C.
Characteristics.
Fil. Volts, 6.0 max.
Fil. Current, 0.25 amps.
Plate Volts, 200 max.
Amplification Factor, 3.7.
Impedance, 1600 ohms.
(Measured at Plate Volts 100, Grid Volts 0.)
Slope, 2.3 m.a./volt.
Max. Plate Current, 25 m.a.

P.425.

Super Power Valve 4v. Battery or A.C.
Characteristics.
Fil. Volts, 4.0 max.
Fil. Current, 0.25 amp.
Plate Volts, 150 max.
Amplification Factor, 4.5.
Impedance, 2300 ohms.
Normal Slope, 1.95 m.a./volt.

M.X.280.

Rectifier for 2.5 A.C. sets.
Characteristics.
Fil. Volts, 5.0.
Fil. Current, 2.0 amps.
Plate Volts, 350 plus 350 R.M.S. max.
Max. Rectified Current, 125 m.a.
Plate Volts, 400 plus 400 R.M.S. max.
Max. Rectified Current, 110 m.a.

Osram Valves

Made in England

SATURDAY. . . DEC. 19

2FC

SYDNEY,
451 Metres

Early Session

7.0 to 8.15 a.m. Relayed to 2NC to 8.5.

Morning and Afternoon Session

(Relayed to 2NC, Newcastle from 12.50 p.m.)

IMPORTANT NOTE: Scores in the Match, South Australia v. N.S.W., played at Adelaide, will be given at the fall of each wicket, lunch and tea adjournments, and stumps drawn. Scores in the match, Victoria v. Queensland, played at Melbourne, will be given at lunch and tea adjournments and stumps drawn.

- 12.50: FROM RANDWICK: Description of the following races in the running—
1. The Hurdle Race.
 2. The December Nursery Handicap.
 3. The Villiers Stakes.
 4. The Novice Handicap.
 5. The Holiday Handicap.
 6. The Highweight Handicap.

NOTE: Description of the play in the Second Test Match (from the Sydney Cricket Ground), South Africa v. Australia, will be relayed to the National Stations between 1.15 and 1.30, 3.45 and 4 p.m.

At approx. 1.57 p.m.: Sectional Weather Forecast.

At approx. 2 p.m.: A Glance at the afternoon "Sun" and "World."

- 4.35: FROM THE STUDIO. Late Sporting Results.

Early Evening Session

5.45 to 8.0 p.m.
(Relayed to 2NC, Newcastle.)

- 5.40: FROM THE SYDNEY CRICKET GROUND. Description of the Second Test Match, South Africa v. Australia. Relayed to the National Stations.
- 6.0: Children's Stories by the "Hello Man."
- 6.45: BETTER FOODS FOR BETTER HEALTH—MR. R. E. FIGGIS, Vice-President of the New Health Society of N.S.W., will speak on "That Daily Dose of Iodine."
- 7.5: A.B.C. Sporting Service, etc.

EVENING PROGRAMME

8.0 p.m. to 2.0 a.m.
(Relayed to 2NC, Newcastle.)

- 8.0: RESULTS IN THE FEDERAL ELECTION WILL BE BROADCAST AS RECEIVED THROUGHOUT THE EVENING.

FEDERAL ELECTION RESULTS

To-night From All Stations

(See special chart elsewhere in this issue)

DURING THE INTERVALS FROM THE STUDIO THERE WILL BE A MUSICAL PRESENTATION BY THE A.B.C. ORCHESTRA conducted by E. J. ROBERTS.

- 10.15: A Talk on To-day's Play in the Second Test Match, South Africa v. Australia, by the A.B.C. Sporting Editor, relayed to the National Stations.
- 10.30: RELAYED FROM 5CL. ADELAIDE: A Talk on the day's play in the match, South Australia v. N.S.W., played at Adelaide.
- 10.45: FROM THE STUDIO: Late Official Weather Forecast.
- 10.47: FEDERAL ELECTION RESULTS.
- 2 a.m.: CLOSE.

2BL

SYDNEY,
351 Metres

Opening Session

8.15 to 11 a.m.

- 10.40: MR. GEORGE COOPER will speak on "GARDENING."

MIDDAY Session

Noon to 2.15 p.m.

- 12.0: FROM THE SYDNEY CRICKET GROUND—A Description of the Second Test Match, SOUTH AFRICA v. AUSTRALIA.

NOTE:—At approx. 12.10: Metropolitan forecast and weather synopsis will be given.

Between 1.15 and 1.30 p.m.: Description will be relayed through the National Stations.

IMPORTANT NOTE:—Scores at the fall of each wicket, at lunch and tea adjournments, and stumps drawn in the match, SOUTH AUSTRALIA v. NEW SOUTH WALES, played at Adelaide, and at lunch and tea adjournments and stumps drawn in the match, VICTORIA v. QUEENSLAND, played at Melbourne.

Afternoon Entertainment

2.15 to 6.0 p.m.

- 2.15: FROM THE SYDNEY CRICKET GROUND—A Description of the Second Test Match, SOUTH AFRICA v. AUSTRALIA.

NOTE:—Between 3.45 and 4 p.m.: A Description of the match will be relayed through the National Stations.

- 4.15: FROM THE SYDNEY CRICKET GROUND—A Description of the Second Test Match, SOUTH AFRICA v. AUSTRALIA.

NOTE:—Between 5.40 and 6 p.m.: Description of the Match will be relayed through the National Stations.

- 6.0: Close.

The Dinner Hour

6.15 to 7.58 p.m.

EVENING PROGRAMME

8.0 to 2.0 a.m.
(Relayed to 2NC, Newcastle, between 8.0 and 11.0 p.m.)

- 8.0: FROM THE SYDNEY TOWN HALL, "THE MESSIAH," by THE WELSH CHORAL SOCIETY.

Principals—

(See panel)

- 10.25: FROM THE STUDIO: Late News from "The Sun" and "World."

- 10.28: Late Weather Forecast.

- 10.30: FROM THE BALLROOM OF THE ORIENTAL:

Jim Davidson's Orchestra.

NOTE: FROM 10.30 p.m. to 2 a.m. RESULTS IN THE FEDERAL ELECTION WILL BE BROADCAST AT REGULAR INTERVALS.

- 2 a.m.: CLOSE.

★ ★ ★ ★ ★ ★ ★ 2BL TO-NIGHT AT 8.0 ★ ★ ★ ★ ★ ★ ★
FROM THE SYDNEY TOWN HALL



Handel's Immortal Oratorio

THE MESSIAH

By the Welsh Choral Society

Principals:—

Ila Turbull, Soprano
Marie Gordon, Contralto
Fred Williamson, Tenor
Oliver King, Basso
Conductor—Dr. Cyril Jenkins
Organist—G. Vern Barnett
Leader of Orchestra—Lloyd Davies



SATURDAY, DECEMBER 19 (Continued)

2GB

SYDNEY,
316 Metres

7.0 a.m.: Breakfast Session, conducted by Miss Etta Field. Music. 7.8: News from "The Daily Telegraph." 7.15: Music. 9.0: Morning Musical Session. 10.0: Storyette of Industry. 10.1: Music. 11.30: Close down. 12.15: Saturday afternoon musical programme, by Lionel Lunn. 4.30: Storyette of Industry. 4.32: Music. 4.45: Uncle George's Tiny Tots' session. 5.0: Children's Session, by Uncle George. 6.0: Choco's Aeroplane Trip. 6.45: Music. 7.45: Storyette of Industry. 7.46: Piano solo by Clive Henry. 8.0: Musical session. 8.10: Storyette of Industry. 8.11: Musical session. 8.30: Shell Radio Dance Night. 12 mid-night: Close down.

2UW

SYDNEY,
267 Metres

Day sessions as usual.

During the afternoon the station will be kept open for Cricket Results in the Second Test Match, played at Sydney Cricket Ground, interspersed with Music.

5.14: Latest Scores, Second Test Match. 5.15: Farmer's Children's Session. 6.0: Farmer's Dinner Music. 6.30: Fox Movietone Radio Club, Latest Scores in the Second Test Match. 6.40: Music. 7.30: Commentary on To-day's Play by Captain E. W. Babentine. 7.45: Short commentary on the matches—South Australia. 7.50: Music.

8.0: From Paling's Concert Hall, the drawing of the United Charities Art Union. 8.10: "Piebald Philosophy by Percival." 8.20: Music. 8.30: First Federal Election results broadcast from the polling room of the G.P.O. 8.35: Music. 8.50: Election Results. 8.55: Music. 9.0: Election Results. 9.10: Music. 9.20: Election Results. 9.35: Music. 9.45: Election Results. 10.0: Music. 10.10: Progress Results in Election. 10.25: Music. 10.35: Progress Results. 10.55: Music. 11.0: Election Results, interspersed with Music, until counting ceases at approx. 1.45 a.m. Close down.

2UE

SYDNEY,
293 Metres

Day Sessions as usual.

Children's Party, conducted by Simple Simon. Special Christmas Tree presentation.

12.30: Description of the Races from Randwick, Mr. L. Melville.

Musical Selections, interspersed with races.

6.0: Auntie May and Simple Simon.

7.1: Late Sporting Results. 7.10: Health Talk, T. Gordon Marsden.

8.1: Overture—"Pique Dame." 8.10: Selected Musical Programme, interspersed with Election Results. 9.1: Birthday Calls and Requests. (Election results as received). 10.1: Light Opera Selection—"Lilac Time." 10.15: Close down.

3LO

MELBOURNE,
375 Metres

Day sessions as usual.

During the afternoon descriptions will be given of the amateur athletic championships at the Motordrome.

Sporting results, including progress scores of the Second Test Match—Australia versus South Africa—played at Sydney, also in the Sheffield Shield Match—South Australia versus New South Wales, played at Adelaide, will be broadcast as they come to hand, and repeated at every half-hour.

Sporting descriptions will be interspersed with a Studio Programme of specially-selected recorded music.

6.45: The Children's Corner.

EVENING SESSION

7.1: Countryman's session, Stock Exchange information, Corn Exchange report, Associated

Stock and Station Agents' official report; weather synopsis; rainfall data; river reports. 7.25: Songs and Their Singers—"The Works of British Composers," Part 4. Mr. Harold Browning.

7.45: Esperanto—Mr. R. R. Rawson.

8.0: ELECTION NIGHT.

The programme will be devoted to the broadcasting of the paramount items of interest to the Australian public, viz., the progress counts in the Federal Elections.

Music will be provided between the election news by the A.B.C. Concert Orchestra and the "Master Four" Quartette.

10.15: Test Cricket. Summary of the day's play in the Second Test Match—South Africa versus Australia—played at Sydney.

10.30: Sheffield Shield cricket. A resume of the day's play in the match—Victoria versus Queensland—played at the Melbourne Cricket Ground.

10.45: Weather, etc.

10.50: Dance music.

The station will remain open until the final election count for to-night is available.

3AR

MELBOURNE,
492 Metres

Day Sessions as usual.

MID-DAY SESSION.

12.1: Description of Sheffield Shield Cricket, Victoria v. Queensland, at the Melbourne Cricket Ground.

1.15: A Related Description of Test Cricket Match, Australia v. South Africa, from Sydney Cricket Ground.

AFTERNOON SESSION.

2.0: Description of Cricket Match at Melbourne Cricket Ground, Victoria v. Queensland.

3.45: A Related Description of Test Cricket Match, Australia v. South Africa, from Sydney Cricket Ground.

4.15: A Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at the Melbourne Cricket Ground.

5.40: Test Cricket (Relayed from 2BL, Sydney)—A Related Description of Test Cricket Match, Australia v. South Africa, from Sydney Cricket Ground.

6.0: Weather Data, Shipping Information, Stump Scores, and Close down.

EVENING SESSION.

6.15: Dinner Music, supplied by the Radio Players.

7.32: Sporting Results, Stump Scores of Cricket Matches, Test Match, Australia v. South Africa, at Sydney Cricket Ground, and Sheffield Shield Match Victoria v. Queensland, at the M.C.C.

NIGHT SESSION.

8.0: A Variety Programme, with intermittent Dirt Track Events descriptions.

The A.B.C. Concert Orchestra will play—"Two Light Syncopated Pieces" (Coless).

"Dances Miniature de Ballet" (Ansell). Melodies from "A Country Girl" (Monckton).

Vell Dance: "Mystic Beauty" (Finck). "Lily of Laguna" (Stuart).

"March Militaire" (Fucik). "Florentina" (Fucik).

Stan Jones, Bass, will sing—"The Late Player" (Allisen).

"The Song of the Tinker" (Ernest Elliott). "Blow, Blow, Thou Winter Wind" (Sergeant).

"Leannin" (Sterndale Bennett). Jimmy Williamson, the Popular Comedian, will supply the lighter side of the Programme.

Linda May, Soprano—In a group of Light Popular Numbers "Little Blue Sun Bonnet" (Hemery).

"Irish Eyes Are Smilin'" (Ball). "Waiata Poi" (Hill).

"Smilin' Through" (Penn). Note.—At intervals during the evening descriptions by Eric Welch of High Speed Racing at the Motordrome, and by Mel Morris of Dirt Track Racing at the Exhibition, will be given.

In order that the most exciting races may be described, the usual practice of detailing the times at which descriptions will take place has been abandoned. This will allow of greater flexibility in running the programme, and will ensure that no race will be missed through last-minute changes in the time-table, or other unforeseen circumstances.

10.20: News Session.

12.0: Close.

4QG

BRISBANE,
395 Metres

Day Sessions as usual.

1.15: A Description of the Play in the Second Test Match between Australia and South Africa will be relayed from the Sydney Cricket Ground.

The B.A.T.C. Races will be described from the Albion Park course. Between races music will be broadcast from the studio.

Three-year-old Handicap.

Flying Handicap.

Welter Handicap.

Novice Handicap.
The Plate.
The Purse.

Progress Scores in the Sheffield Shield Matches between Queensland and Victoria and South Australia and New South Wales, will be announced at intervals.

EARLY EVENING SESSION

8.0: Interstate Race Results.

7.0: Mick Finahan will review to-day's Races.

7.15: General Sporting News, including Stumps Drawn Scores.

7.37: Sadling Notes by Stan Phillips.

NIGHT SESSION

8.0: Billy Romaine and his Tivolians in a Musical Divertissement from the Tivoli Theatre.

8.10: An Electrically Reproduced Variety Entertainment featuring—

Clem Williams, Baritone.

Grace Fields, Comedienne.

Gil Dech, Pianist.

Elsie Suddaby, Soprano.

George Olsen and his Music.

9.0: Joe Rivers will describe the main Wrestling Bouta from the Bohemia Stadium, South Brisbane.

10.0: Pinal News Bulletin.

10.15: A Review of the Day's Play in the Second Test Match between South Africa and Australia, relayed from Sydney.

10.30: A Review of the Day's Play in the Sheffield Shield Match between Queensland and Victoria, relayed from Melbourne.

10.45: A Session of Meditation Music.

11.30: Close.

5CL

ADELAIDE,
411 Metres

Day sessions as usual.

During the day a description of the Sheffield Shield Match, South Australia v. New South Wales, will be broadcast by Len Ford and G. E. Lamprell, from the Adelaide Oval, and Scores of the Second Test Match, South Africa v. Australia, at Sydney, will be broadcast immediately they come to hand. Descriptions of the Second Test will be broadcast from Sydney at 12.45, 3.15, and 5.10 p.m.

12.1: "Sivlvis" Selections for To-day's Races at Kadina.

12.45: From Sydney Cricket Ground, description of the Second Test, South Africa v. Australia.

During the afternoon a description of the Races at Kadina will be broadcast by Arnold Treloar. Interspersed with Musical Numbers. At 3.15 p.m. a description of the Second Test Match from the Sydney Cricket Ground.

7.5: Cricket Notes, by Len Ford.

7.15: Tennis Talk, by K. Berriman.

7.20: The 5CL Weekly Sketch, conducted by Kerwin Maegrath.

7.30: Rev. G. E. Hale, B.A., will deliver an interesting talk.

7.45: All Sporting Results.

EVENING SESSION

8.0: News Service. Cricket Scores in the Second Test Match, South Africa v. Australia, at Sydney, and the Sheffield Shield Match, South Australia v. New South Wales, at Adelaide.

8.5: Cricket Notes, by Len Ford.

7.15: Tennis Talk, by K. Berriman.

7.20: The 5CL Weekly Sketch, conducted by Kerwin Maegrath.

7.30: Rev. G. E. Hale, B.A., will deliver an interesting talk.

7.45: All Sporting Results.

NIGHT SESSION

8.0: Federal Election Night. The programme will be devoted to the broadcasting of the paramount item of interest to the Australian public, viz., the Progress Counts in the Federal Elections.

Music will be provided between the election news by the Gardeners' Concert Party.

8.45: From 2BL, Sydney. Summary of the Day's Play in the Second Test Match, South Africa v. Australia, played at Sydney.

10.0: From 5CL Studio, Resume of To-day's Play in the Sheffield Shield Match, South Australia v. New South Wales, at the Adelaide Oval.

10.15: News Session.

10.20: Dance Music and Popular Vocal Numbers. The station will remain open until the final election count for to-night is available.

6WF

PERTH,
435 Metres

Day sessions as usual.

During the day progress scores will be broadcast of Second Test Match at Sydney, South Australia v. New South Wales, Victoria v. Queensland.

Race Results from Belmont Park Racecourse.

7.0: Stumps Drawn Scores, Second Test Match, South Australia v. New South Wales, Victoria v. Queensland. 7.20: State and Interstate Sporting Results.

8.0: Radio Rhythm. 8.15: The A.B.C. Cricket Commentator will relay from Sydney his impressions of to-day's Test Match. 8.30: The A.B.C. Vaudevillians, led by Harry Graham—Dorothy Manning, Soprano; Lou Vernon, Entertainer; Harry Webster, Comedian; Phyllis Gillet, Contralto; Billy Edwards, Entertainer.

David Lyle, Tenor; Phyllis Blott, Pianist. 10.0: Late Weather Forecast and Announcements.

10.30: To-day's Cricket Scores. 12.0: Close.

7ZL

HOBART,
517 Metres

Day sessions as usual.

EVENING SESSION

8.1: All Sporting Results. "Bridge"

7.25: Jack O'Hara, Talk "Bridge"

7.45: "Dinah" Green surveys the Cricket Field.

7.1: A Recorded Programme of Pastoral Music, interspersed with Election Results.

SUNDAY . . . DEC. 20

2FC

SYDNEY,
451 Metres

The Church Hour

10 a.m. to 12.30 p.m.

- 10.0: Announcements, Music, News.
- 11.0: Morning Service from the Churches of Christ.

Afternoon Concert

(3 p.m. to 4.30 p.m.)

CONCERT

FROM FULLERTON
MEMORIAL CHURCH

arranged by

RONALD MARSTON, L.T.C.L.

Chairman: Rev. Geo. Cowie, B.A.

- 3.0: RONALD MARSTON, Organist—
Hallelujah Chorus Handel
- 3.7: Prayer by Rev. Geo. Cowie, B.A.
- 3.10: ROCKDALE SALVATION ARMY
SILVER BAND—
Gems from "The Messiah" Handel
FULLERTON CHOIR—
Christians Awake Maunder
- 3.20: VOCAL QUARTETTE—
While Shepherds Watched.
- 3.30: BANDSMAN WOOTTEN, Cornet
Solo—
"I Know That My Redeemer Liveth"
Handel
- 3.35: ROCKDALE SALVATION ARMY
SILVER BAND—Christmas Carols—
Holy Night,
Brightest and Best.
- 3.40: A Christmas Message from the Rev.
GEO. COWIE, B.A.
- 4.0: IRIS HERON, Pianiste—
Liebestraume Liszt
- 4.5: MALE VOICE PARTY—
Comrades in Arms Adam
- 4.10: RONALD MARSTON, Organist—
Shepherds Awake Guilmant
Let Us Sing Noel Guilmant
- 4.20: BANDSMAN WHITLOCK, Vocal
Solo—
All Is Well Coles
- 4.25: ROCKDALE SALVATION ARMY
SILVER BAND—
Worthy is the Lamb Handel
- 4.30: CLOSE.

EVENING PROGRAMME

6.0 to 10.30 p.m. Relayed to 2NC between 6 and 7 p.m. and 8.30 and 10.30 p.m.

- 6.0: A RECORD RECITAL, with Annotations by Discobolus.
- 6.30: COMMANDER C. H. ROLLESTON will tell listeners of "THE CARIBBEAN ISLANDS."
- 6.45: RECORD RECITAL, Continued.
- EVENING SERVICE FROM THE CENTRAL METHODIST MISSION, LYCEUM HALL:
Conducted by Rev. R. J. Williams.
Choir Conducted by Mr. V. Peterson, B.A., B.Ec.
Anthem: "O Come All Ye Faithful"
Introit, "Jesu Stand Among Us" (Mann).
Invocation, "Let the Words of My Mouth," Hymn 767: "Jesus Shall Reign." Brief Prayer and Lord's Prayer. Hymn 128: "As with Gladness Men of Old" (Kochner). Lesson, Gwyneth Lascelles, Soprano: "The Holy City"

(Adams). Prayer. Intimations and Offering. Anthem: "Christians Awake" (Maunder). Hymn 122: "Hark the Herald Angels" (Mendelssohn). Silent Prayer. Sermon: Rev. R. J. Williams. Hymn 102: "My Heart and Voice I Raise." Benediction.

★ TO-NIGHT AT 8.30 ★

CONCERT

BY THE BONDI BEACH
SYMPHONY ORCHESTRA



ALBERT H. BAILE

Conducted by
ALBERT H. BAILE

Assisting Artists—
HEATHER KINNAIRD, Contralto,
SENIA CHOSTIAKOFF, Tenor.

NOTE: At approx. 9.30 p.m.—
"SIDELIGHTS ON OLD SYDNEY."

10.30: CLOSE.

2BL

SYDNEY,
351 Metres

Midday Session

(10.55 a.m. to 3 p.m.)

- 10.55: ANNOUNCEMENTS.
- 11.0: MORNING SERVICE FROM ST. JUDE'S CHURCH OF ENGLAND. Rector: CANON CAKEBREAD. Organist: MR. F. R. COOKE.
Organ Voluntary: "Chant Pastorale" (Dubois). Hymn: "Hark the Glad Sound." Confession—Absolution. Lord's Prayer, Versicles, Venite. Psalm 94—1st Lesson, Isaiah 32. Benedicite—2nd Lesson, St. Luke 1, 26-45. Benedictus, Creed, Prayers, Anthem: "Hosanna in the Highest." Prayers, Notices. Hymn: "Once in Royal David's City." Sermon by "CANON CAKEBREAD. Hymn: "O Quickly Come Dread Judge of All." Benediction.
- 12.15: Music, News, etc.
- 12.40: A Specially Arranged Programme of Recorded Vocal and Instrumental Music.
- 1.45: FROM MY EASY CHAIR, by A. C. C. STEVENS.

Late Afternoon Session

(4.30 to 6 p.m.)

- 4.30: A RECORD RECITAL—
BRUNO WALTER AND THE SYMPHONY ORCHESTRA (recorded)—
Siegfried Idyll Wagner
- 4.45 "BRINGA" will speak on "THE BLACK HAND."
- 5.0: RECORD RECITAL (Continued)—
ISOLDE MENGES, Violin, and HAROLD SAMUEL, Piano (recorded)—
Sonata No. 3 in D Minor Brahms
LOTTE LEHMANN, Soprano (r.)
Frauen liebe und leben . . . Schumann
LONDON SYMPHONY ORCHESTRA (recorded)—
"The Fair at Svratechinski, Moussorgski
Mlada Rimsky-Korsakoff

The Children's Hour

(6.0 to 6.50 p.m.)

- 6.0: The Children's Session, conducted by JUDITH

EVENING PROGRAMME

(6.50 to 10 p.m.)

- 6.50: Recordings.
- 7.0: EVENING SERVICE FROM ST. STEPHEN'S PRESBYTERIAN CHURCH. Preacher: REV. HUGH PATON. Organist: HARRY CHANDLER.
Sanctus, Invocation, Hymn 28: "Bethlehem" (Mendelssohn). Lesson: Isaiah 42. Prayer. Hymn 88: "St. Magnus." Lesson: John 9. Anthem: "And the Glory," from "The Messiah" (Handel). Prayer, Hymn 31: "Adeste." Sermon: Text, "THE LIGHT OF THE WORLD." John 8, 12. Prayer, Hymn 172: "Vox Dilecti." Benediction.

CONCERT

Relayed From 3LO, Melbourne

- 8.30: THE A.B.C. LIGHT ORCHESTRA—
Selections from Merrie England. Gorman
- 8.40: J. HOWLETT ROSS—
"Last Days of Herculaneum Atherstone With Incidental Music with ARNOLD COLEMAN at the Grand Organ.
- 8.50: CHRISTINE FRAILLON, Cellist—
Serenade Braga
Harlequinade Squire
- 8.58: MELBOURNE PHILHARMONIC SOCIETY (Conducted by WILLIAM G. JAMES)—
9.8: ALEXANDER SVERJENSKY, Pianist—
Poem Fibich
Eugene Onegin—Concert Paraphrase,
Tchaikovsky-Pabst
- 9.18: THE A.B.C. LIGHT ORCHESTRA—
Ballet Suite, La Source Delibes
- 9.28: MELBOURNE PHILHARMONIC SOCIETY—
The Twenty-ninth Psalm Elgar
With Orchestral Accompaniment.
- 9.35: THE A.B.C. LIGHT ORCHESTRA—
Kamenoi Ostrow Rubinstein
- 9.45: ISABEL BIDDELL, Contralto—
Devotion Schumann
Standchen Strauss
- 9.52: J. HOWLETT ROSS—
A Child's Dream of a Star Dickens
- 9.59: Late Weather Forecast.
- 10.0: CLOSE.

SUNDAY, DECEMBER 20 (Continued)

2GB

SYDNEY,
316 Metres

- 9.0 a.m.: Music from Studio.
10.25: Organ music from St. Alban's Church, Regent Street, Sydney.
10.30: Morning Service.
12.30: Close down.
2.0: Afternoon Musical Session.
3.0: The Radio Domain, conducted by Uncle Frank, from Savoy Theatre.
5.0: Radio Sunday School, by Uncle Frank.
5.15: Cheer-up Community Singing Service for children, conducted by Uncle Frank.
6.45: Music.
7.0: Address by Mr. A. E. Bennett.
7.30: From Savoy Theatre, address by Mr. Harold Morton. "Strange Psychic Adventures."
8.20: Music.
A Programme by Australian Artists
8.30: Orchestra—
"Hungarian March" (Berlioz).
8.36: Soprano Solo—
"Blue Danube" (Strauss).
"Voices of Spring" (Strauss)
8.46: Cello solos—
"Londonderry Air" (Arr. Kennedy).
"Old Scotch Melody" (Arr. Kennedy).
8.56: Bass solo—
"The Mighty Deep" (Jude).
"Song of the Volga Boatmen" (Gainsberg).
9.6: Band selection—
"Pagliacci—On with the Motley" (Leoncavallo).
"The Switchback" (Sutton).
9.14: Flute solo—
"Concert Piece" (Hoffmann).
"Concertino" (Chaminade)
9.24: Baritone solo—
"Invictus" (Huhn).
"Trees" (Rasbach).
9.32: Orchestra—
"Coppelia Ballet" (Delibes).
9.38: Contralto—
"Caller Herrin" (Traditional).
"Five Little Piccaninnies" (Anthony).
9.46: Piano solo—
"Shepherds, Hey" (Arr. Grainger).
"Country Gardens" (Arr. Grainger).
9.52: Baritone solo—
"I Travel the Road" (Thayer).
10.0: Close down.

2UW

SYDNEY,
267 Metres

- 10.30: Music and Request Items. 11.0: "Concerto No. 4 in G Major," for Piano and Orchestra (Beethoven). 12.0: Music and Request Items. 1.0: Close down.
3.0: Music. 3.30: "Unfinished Symphony" (Schubert). 4.30: Request Numbers. 5.0: Close down.
5.15: The Quiet Hour: Memories of Sullivan (Sullivan). 5.23: Organ, Bridal March. 5.27: Song, For Unto Us, Messiah (Handel). 5.30: Orch., Rosenkavaller Waltz (Strauss). 5.38: Song, Glory to God (Handel). 5.42: Orch., Hungarian Rhapsody No. 1 (Liszt). 5.57: Violin, Goin' Home (Dvorak-Kreisler). 6.0: Song, To the Children. 6.4: Organ, Postlude in C. 6.12: Violin, Song of Volga Boatmen (Kreisler). 6.16: Octet, Octet in E Flat Major (Mendelssohn). 6.30: Piano Recital by Frank Hutchens. 7.0: Musical Programme.

Note.—If the result of the Federal Elections is still in doubt, further results will be given from the Tally Room of the G.P.O. during the evening.
8.45: Shuron Programme, "Your Eyes," Piano, Alice, Where Art Thou (Ascher).

- 8.48: Vocal, Queen of the Earth (Pinsuti).
8.52: Cello, Flowers of the Forest (Scotch). 8.56: Trio, That Tiny Tea-shop (Raymond). 9.0: Operatic Session, Selected Scenes from Parsifal (Wagner).
10.0: Music. 10.30: Close down.

2UE

SYDNEY,
293 Metres

MORNING SESSION.

- 11.0: Mass from St. Mary's Basilica. 1.0: Close down.

EVENING SESSION.

- 6.0: Music 6.15: Talk on Religion, by Rev. Monsignor Meany. 7.15: News from the various Catholic Journals of the World. 7.30: Address by Rev. Father Thompson, interspersed with Musical Selections. 8.1: Overture, "Bohemian Girl." 8.10: Selected Studio Programme. 9.1: Birthday Calls and Requests. 10.1: Light Opera Selection—"Mikado." 10.10: Music. 10.15: Close down.

4QG

BRISBANE,
395 Metres

MORNING SESSION

- 10.30: Music and news.
11: The Morning Service will be broadcast from All Saints' Church of England, Wickham Terrace, Brisbane
12.15: Close

AFTERNOON SESSION

- 3: A recital by Wallace Kotter at the Wurlitzer organ of the Regent Theatre. Between organ selections reproduced vocal numbers will be broadcast from the Studio. The programme will include the following by Mr. Kotter—
"Ah! Sweet Mystery of Life" (Herbert); "Medley of Christmas Carols"; "Angelus" (Grieg);

3LO

MELBOURNE,
375 Metres

MORNING SESSION

- 10.0: Federal Election Results. Latest Cricket Information. Programme Review.
10.30: Bells of St. Paul's Cathedral.
11.0: Service from Baptist Church, Collins Street, Melbourne.
Order of Service: Invocation, Lord's Prayer (Choral), Hymn, Scripture, Chant, Children's Address, Children's Hymn, Notices, Offertory, Offertory Prayer, Anthem, Prayer, Hymn, Sermon (Rev. W. D. Jackson, B.A.), Hymn, Benediction, Christmas Carols, under the direction of Madame Ella Kingston
12.30: Close down.

AFTERNOON SESSION

- 3.0: Pleasant Sunday Afternoon Service from Wesley Church Central Mission.
4.30: Close down.
6.0: The Children's Corner.
6.15: The Optimists' Chorus Singers.

EVENING SESSION

- 7.10: Glimpses of Modern America—"California, the Golden State," Mr. G. S. Browne, M.A.
7.35: "The News Behind the News," by "The Watchman."

NIGHT SESSION

- 8.0: A.B.C. Light Orchestra (conductor: Percy Code)—
"A Christmas Overture" (Coleridge Taylor).
8.10: Isabel Biddell, Contralto—
"Whilst I With Grief Did On You Look" (Purcell).
"Bright is the Ring of Words" (Vaughan Williams).
8.17: Alexander Sverjensky, Piano—
A Chopin Bracket:
"Nocturne in F Sharp Major."
"Impromptu in F Sharp Major."
"Etude No. 3 in E Major."
"Etude No. 4 in C Sharp Minor."
Remainder of programme relayed to 2BL. See overleaf.
10.10: News Session
10.30: Close down

3AR

MELBOURNE,
492 Metres

MORNING SESSION.

- 11.0: Service from Wesley Church, Melbourne.
Order of Service: Doxology; Invocation; Hymn; Scripture Reading; Solo; Anthem; Notices; Hymn; Sermon, Rev. J. H. Cain; Anthem; Hymn; Benediction; Organist, Mr. William G. James.

MID-DAY SESSION.

- 12.15: A Studio Programme of Special Reproduced Music.
"Selection of Favorite Hymns."
—Band of H.M. Royal Air Force, with Vocal Quartette.
"Prometheus Overture" (Beethoven).
"Finale Eroica Symphony" (Beethoven).
—Symphony Orchestra, conducted by Albert Coates.
"Ave Maria in Venedig" (Thiel).
"Ave Verum" (Mozart).
—The Basilica Choir, Berlin.
"Songs Without Words" (Mendelssohn).
Hunting Song—Venetian Gondola Song.
—Ignaz Friedman, Pianoforte.
"Folk Songs" (Arr. C. J. Sharp).
"The Bonny Lighter Boy," "Dance to Your Daddy."
"A Farmer's Son So Sweet," "On a Sunny Bank."
—Annette Blackwell, Soprano, with Piano.
"Songs Without Words" (Mendelssohn).
—Ignaz Friedman, Pianoforte.
"First Psalm of David" (Traditional).
"God Hear My Prayer" (Archangelsky).
—Don Cossacks Choir; Conductor, Serge Jaroff.
Selection from "Princess Ida" (Sullivan).
—New Light Symphony Orchestra; Conductor, Dr. M. Sargent.
"O Mistress Mine" (Sullivan).
"Maid of Athens" (Allen).
—Francis Gleeson, Tenor, with Piano.
"The Thistle," Selection of Scotch Airs (Arr. Myddleton).
—The London Orchestra.
Vocal Gems from "Rigoletto" (Verdi).
—Light Opera Company, with Orchestra.
"Serenade Millions d'Arlequin" (Drigo).
—Albert Santler, Violinist, with Piano.
1.45: "Questions and Answers."
2.15: Arnold Coleman at the Grand Organ—
Will illustrate the Story of the Opera, "Lucia di Lammermoor," by Donizetti
3.0: Close down.

AFTERNOON SESSION.

- 4.30: Special Production of "The Messiah," by Handel.
Dora Labbette, Soprano.
Muriel Brunsell, Contralto
Herbert Eisdell, Tenor.
Harold Williams, Baritone.
The B.B.C. Choir and Sir Thomas Beecham's Orchestra.
The whole performance under the direction of, and conducted by, Sir Thomas Beecham. No performance of Christmas music would be complete without the rendering of Handel's "Messiah," an oratorio that is sung in every English-speaking country at Christmas-tide. Handel makes use of his extensive knowledge of Opera and often utilises the choir as a dramatic medium. Especially is this noticeable in the "Messiah," when the magnificent "Hallelujah Chorus" sounds the clarion of victory. When "The Messiah" was first produced in Dublin, in 1742, it was not well received, but, contrary to general expectations, on its subsequent production in London in 1754, where it achieved an instantaneous success, it attracted the English people, and since that time there has been no dearth of performances. On April 6, 1759, Handel presided at an Organ performance of "The Messiah," and died on April 14. It should be remembered that at the first performance of "The Messiah" the magnificence of "The Hallelujah Chorus" so gripped the audience that they rose as one to do honor to the Composer. Since that time it has become customary for an audience to rise when two numbers are being given—"The Hallelujah Chorus" and "The National Anthem."

EVENING SESSION.

- 7.0: Service from St. Paul's Cathedral, Melbourne.
Order of Service: Hymn; Sentence; Exhortation; General Confession; Absolution; Lord's Prayer; Psalm; First Lesson; Magnificat; Second Lesson; Nunc Dimittis; The Creed; Collects; Anthem; Prayer; Hymn; Sermon, Canon Langley.
8.30: From the Studio—Programme arranged by Professor Bernard Heinze, F.R.C.M. (Relayed to 2BL, Sydney).
Artists: Constance Ziebell, Violinist; Roy Tartakover, Baritone; Winifred Gardner, Mezzo-Soprano; Roy Shepherd, Pianist.
"Sonata for Pianoforte and Violin" (Haydn).
Andante—Allegro.
Songs: (a) "Per la Gloria" (Buononcini).
(b) "Se su m'smi" (Pergolesi).
Pianoforte: Sonata, Opus 137-1 (Schubert).
Allegro molto; Andante; Allegro Vivace.
Recitative: "Thus Saith the Lord" (Handel).
Aria: "But Who May Abide" (Handel).
Violin: "Swing Song" (Ebel Barnes).
"The Bee" (Francois-Schubert).
Songs: (a) "Dream Valley" (Quilter).
(b) "Anne's Cradle" (Armstrong Gibbs).
Sonata for Pianoforte and Violin in A Major, Op. 100 (Brahms).
Allegro amabile; Andante tranquillo; Allegretto grazioso.
Songs: (a) "The Dew it Shines" (Rubinstein).
(b) "The Azra" (Rubinstein).
Pianoforte: "The Girl With the Flaxen Hair" (Debussy).
"Reflections in the Water."
10.0: Close.

"Songs My Mother Taught Me" (Dvorak);
 "Hymns of the Old Church Choir;" "Inter-
 mezzo-Cavalleria" (Mascagni); "Medley of
 Christmas Hymns;" "The Holy City" (Adams);
 "Waltzing Doll" (Poldini); "The Old Refrain"
 (Kreisler); "Gloria in Excelsis Deo" (Old
 French); "Silver Threads Among the Gold;"
 "Adestes Fideles" (Trad.); "Love's Old Sweet
 Song" (Molloy); "Jesu Bambino" (Turton).
 4.30: Close.

EARLY EVENING SESSION

6: A Special Children's Service.
 6.30: The Children's Own Hour—"Uncle Ben"
 and Co.

NIGHT SESSION

7.30: Benediction will be broadcast from St.
 Stephen's Roman Catholic Cathedral, Bris-
 bane.
 8.45: Relay from 2FC. (See Programme.)
 10.0: Close.

5CL ADELAIDE,
411 Metres

MORNING SESSION

10.30: Music.
 11.1: Morning Service from Unitarian Church,
 Wakefield Street. Preacher, Rev. G. E.
 Hale, B.A.
 12.30: Close down.

AFTERNOON SESSION

3.0: A Pleasant Sunday Afternoon Service from
 Maughan Central Mission.
 4.30: Close down.

EVENING SESSION

6.0: Children's Birthday Greetings.
 7.0: Evening Service from Pirie Street Methodist
 Church. Preacher, Rev. J. G. Jenkin.

NIGHT SESSION

8.30: Relay from 3LO (see programme).
 9.50: News session.
 10.0: Close.
 8.48: The A.B.C. Light Orchestra—Ballet Suite,
 "Le Source" (Delibes).
 8.58: Melbourne Philharmonic Society—"The
 Twenty-ninth Psalm" (Elgar), with orchestral
 accompaniment.
 9.5: The A.B.C. Light Orchestra—"Kamemol
 Ostrow" (Rubinstein).
 9.15: Isabel Biddell, Contralto—"Devotion"
 (Schumann), "Ständchen" (Strauss).
 9.22: J. Howlett Ross—"A Child's Dream of a
 Star" (Dickens).
 9.30: The A.B.C. Light Orchestra—"Berceuse"
 from "Jocelyn" (Godard); "Music Box"
 (Friml); "Gavotte and Musette" (Raff).
 9.40: From 5CL Studio—Sunday Night Celebrity
 Reproductions.
 9.50: News session.
 10.0: Close down.

7ZL HOBART,
517 Metres

11.0: Divine Service this morning will be
 broadcast from Holy Trinity Church, Hobart.
 Preacher: Archdeacon Blackwood.
 3.0: A Programme of pleasant Sunday after-
 noon Music.

EVENING SESSION

6.0: Children's Community Singing.
 6.45: Original Tales and Stories.
 7.0: Evening Service from Davey Street Con-
 gregational Church, Hobart. Preacher: Rev.
 H. J. Ralph.
 8.30: A Concert Programme by the Franklin
 Methodist Church, under the direction of
 Mr. D. H. Thomas.
 Soloists: Mrs. Cameron, Contralto; Lila
 Harvey, Soprano; D. Thomas, Baritone.
 9.45: News.
 10.0: Close down.

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THE 2GB WOMEN'S SERVICE

By DOROTHY JORDAN

THE CARE OF GOLDFISH AND THE LIGHTING OF THE AQUARIUM.

When lighting an aquarium never introduce the electric lamp right in the water, so that the water can creep along the cord, making a dangerous connection. This will very likely electrocute the fish, and as aquariums are usually kept in a damp porch or tiled verandah every care should be taken that the person handling the attachments should be safeguarded. There is a well-insulated rubber-covered flexible wire which is very suitable for connections, and whatever method you employ

for your lighting scheme be sure to have it properly installed and tested. The most effective method is to have one or two striplights resting on the glass top of the aquarium, and raised slightly above it for ventilation. Do not on any account have clear glass lamps unless you put a strip of ground glass between them and the aquarium, as the naked bright light is extremely harmful to the fish and tends to blind them.

Frosted lamps are quite suitable, and the effect of one or two colored lamps could be tried.

If you keep tropical fish, and they are

the most fascinating and gorgeously colored creatures, you should have some method of heating the water to a suitable temperature and guard against any sudden drop in temperature. This can be done by putting a very small candle power electric lamp inside a glass or otherwise watertight container, so that there is no possibility of the lamp itself or any of its connections coming in contact with the water. The small amount of air in the container is then heated up and the heat gradually distributed to the water. The water should be kept at about 70deg. to 75deg. Fahrenheit, but it may be allowed to go to 85deg. during the hottest time of the year, or as low as 65deg. during the winter; the changes always must be very gradual. A thermometer is absolutely necessary with a tropical tank, so that you can watch the temperature for yourself. When handling lights or heating apparatus always remember to turn them off at the switch first, as you will probably have damp hands and perhaps be standing on a concrete floor. Keep your "safety first" motto in mind, also see that everything is safely and correctly installed and tested in the first place. Answers to further inquiries will be made by Mrs. MacKenzie during the morning talk on Thursdays.

CRYSTALLISED CHERRIES.—To every lb. of cherries allow 1lb. of sugar and 1 cup of water. Make a syrup of the sugar and water, boil ten minutes. Put the cherries in; boil another ten minutes, then put them in a bowl. Next day drain the syrup from the cherries, boil, pour while boiling over the fruit; repeat this for three days. On the fourth day boil the syrup with 1lb. of extra sugar added to every lb. of fruit; put cherries in this, boil ten minutes. Place them on a sieve, sprinkle with coarse sugar; when drained a little place on paper and put in the air to dry.

CHERRY CONSOME.—Allow 1lb. of sugar to each lb. of fruit, and 1 pint of water to each 1lb. of sugar and whatever juice comes from the fruit. Boil syrup very fast for ten minutes; meanwhile have a pan of water boiling, into which just plunge the cherries placed in a colander, strain, and throw into syrup; boil till cherries are tender and the syrup thick.

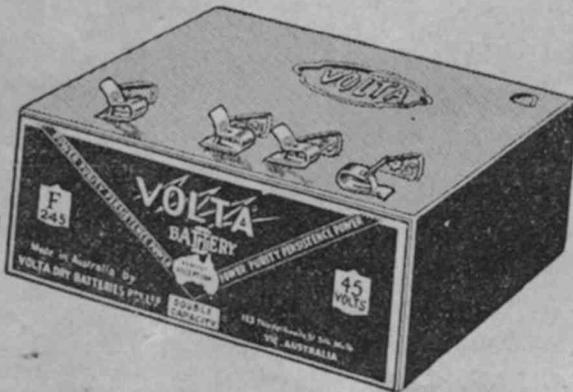
CHERRY BUTTER.—Three cups of pulp and 2 cups of sugar. Boil till thick. (Choose firm, ripe fruit.) Put cherries in with a little water; when cooked rub through a sieve, add the sugar, cook till thick.

HOW TO MAKE A GOOD TRIFLE.—Cut up a good sponge cake and spread with jam; pour over a glass of sherry. Make a custard with three or more eggs, a quart of milk, and a teaspoonful of arrowroot and one large teaspoonful sugar. When cold pour over the cake. Whip up one half-pint of cream, spread on trifle, and decorate with blanched almonds or ratafias.

Brandy snaps filled with whipped cream are sometimes served with this trifle.

MINCEMEAT FOR XMAS PIES.—1lb. currants, 1lb. raisins, chopped small, 1lb. mixed peels, 1lb. citron peel cut very finely, 1lb. beef suet, 1lb. apples minced. Mix all well together, then add 1lb. brown sugar, 1oz. spice, grated rinds of 3 lemons and 3 oranges. Press into an earthenware jar, add 1/2-pint of good brandy, cover tightly.

This last may be included with the recipes for Xmas cake and pudding.



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MONDAY DEC. 21

2FC

SYDNEY,
451 Metres

Early Session

(Relayed to 2NC, Newcastle, 7 to 8.15 a.m.)

Morning Session

10.30 a.m. to 12.30 p.m.

(Relayed to 2 NC between 10.40 a.m. and 12.0 noon.)

Cricket: Scores in the match South Australia v. N.S.W., played at Adelaide, will be given at the fall of each wicket, lunch and tea adjournments, and stumps drawn. Scores in the match Victoria v. Queensland, played at Melbourne, will be given at lunch and tea adjournments and stumps drawn.

The Lunch Hour

1.0 to 2.15 p.m.

1.15: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test Match, South Africa v. Australia, relayed to the National Stations.

The Radio Matinee

2.15 to 4.30 p.m.

(Relayed to 2NC from 2.30 p.m.)

2.15: Description of the Second Test Match, Australia v. South Africa.

4.0: KETELBEY'S CONCERT ORCHESTRA (recorded)—
A Group by Ketelbey—
Cockney Suite,
Bank Holiday,
Jungle Drums.

4.8: CLAIRE DUX, Soprano (recorded)—
In the Time of Roses . . . Reichardt

4.11: CEDRIC SHARPE, Cellist (r.)—
Melody in F Rubinstein

4.14: KATE HEIDERSBACH and MAX LORENZ, Duet (recorded)—
Tannhauser—O Furstin Wagner

4.18: META SEINAMEYER, JARO DWORSKY, and EMANUEL LIST, Instrumental Trio (recorded)—
Faust—Make Haste, Make Haste,
Gounod

4.22: THE SOUTHERNERS, Dance Band (recorded)—
Teardrops and Kisses Little

Good-night, Sweet Dreams Solomon

Early Evening Session

5.40 to 8 p.m.

(Relayed to 2NC, Newcastle, between 5.40 and 6.45 and 7.5 and 8.0 p.m.)

5.40: Description of the play in the Second Test Match, South Africa v. Australia, relayed to the National Stations.

6.0: Children's Stories, by the "Hello Man" and Aunt Eily.

6.45: THE BOY SCOUTS AND GIRL GUIDES SESSION.

7.5: Sporting Service, etc., etc.



EILEEN BARLOW, who will be heard during the community singing concert to-night.

EVENING PROGRAMME

(Relayed to 2NC Newcastle between 8 and 11.0.)

★ TO-NIGHT AT 8.0 ★
From the Ashfield Town Hall

Community Singing

Under the direction of

CHARLES LAWRENCE

Assisting Artists—GRACE QUINE and EILEEN BARLOW, Vocalists—

I'm Alone Because I Love You Young I've Got One Arm Round Mary. Elton Macushla MacMurrough

Watching My Dreams Go By,
Dubin and Burke

Heartaches Klenner and Hoffman

If You're Really and Truly in Love,
Butler and Wallace

'Cause I'm in Love Donaldson

Nine Little Miles,
Sherman, Lewis, and Conrad

FRANK RYAN, Comedian—
I Wonder if My Mother Ever Knew,
Laurence

The Miner's Story Newman

BAREND HARRIS, Basso—
Off to Philadelphia Haynes

Because D'Hardelot

My Old Shako Trotere

The Floral Dance Moss

The Floral Dance Moss

10.15: The A.B.C. Sporting Editor will give a talk on the day's play in the Second Test Match, relayed to the National Stations.

10.30: Relayed from 5CL, Adelaide—A talk on the day's play in the match, South Australia v. N.S.W., played at Adelaide.

10.45: Weather Forecast.

10.47: Dance Music from Romano's.

11.30: CLOSE.

2BL

SYDNEY,
351 Metres

Opening Session

8.15 to 11.0 a.m.

10.35: A.B.C. WOMEN'S ASSOCIATION, Tennis Queries and Their Answers. Intimate Facts About Fashion, by Mrs. Mary Liddell.

Midday Session

12 noon to 2.30 p.m.

(Relayed to 2NC, Newcastle between 12.0 and 1.30 p.m.)

12.0: FROM THE SYDNEY CRICKET GROUND—

A Description of the Second Test Match, South Africa v. Australia.

Between 1.15 and 1.30 p.m. a description of the play will be relayed through the National Stations.

Scores at the fall of each wicket, at lunch and tea adjournments, and stumps drawn in the match, South Australia v. N.S.W., played at Adelaide, also at lunch and tea adjournments and stumps drawn in the match, Victoria v. Queensland, played at Melbourne.

Afternoon Entertainment

2.30 to 6.0 p.m.

2.30: NEW QUEEN'S HALL LIGHT ORCHESTRA (recorded)—
Petite Suite de Concert,
Coleridge Taylor

La Caprice de Nanette,
Demande and Response.

2.38: DORIS VANE, Soprano (recorded)
A Song of Thanksgiving Allitsen

2.42: W. H. SQUIRE, Cellist (r.)—
Si mes vers avaient des ailes Haha

2.45: THE WOMEN'S HOUR,
C.W.A. News, by Miss Ferguson.

The Noble Work of Elizabeth Fry, by Miss Curtin.

Touring New Zealand, with Mrs. Schmitt.

A Christmas Play Reading, by Miss Doris Fitton.

3.45: SIR THOMAS BEECHAM AND THE ROYAL PHILHARMONIC ORCHESTRA (recorded)—

Summer Night on the River Delius NINON VALLIN, Soprano (recorded)—
Solveig's Song Grieg

3.57: IGNAZ FRIEDMAN, Pianist (r.)—
Songs Without Words Mendelssohn

4.9: SELECTIONS.

4.15: FROM THE SYDNEY CRICKET GROUND—
A Description of the Second Test Match, South Africa v. Australia.

The Dinner Hour

6.15 to 8.0 p.m.

6.15: THE A.B.C. STRING SEPTET.

7.35: THE UNIVERSITY EXTENSION BOARD LECTURES—AUSTRALIAN EXPLORATION—

Mr. G. V. PORTUS, M.A., B.Litt., will lecture on:

"LEICHHARDT AND KENNEDY"

THE second series of exploration began with Adelaide as a base. They were continued from Queensland—not then a separate colony. Ludwig Leichhardt came to Sydney in 1841, and was attracted to exploration. With private backing he organised a party, and set out to pierce the north (1844). In ten months he penetrated to the Gulf of Carpentaria, skirted it, struck across Arnhem's Land, and reached Port Essington—the most northerly settlement in Australia. On his return to Sydney he had a hero's welcome, and funds—both public and private—were quickly supplied for a more ambitious project—the crossing of Australia from east to west. With a huge equipment he started off (1846), but was back in six months without having accomplished anything. Again (1848) he started out to cross to Perth—this time very ill-prepared. But



BAREND HARRIS and FRANK RYAN at Ashfield to-night.

MONDAY, DECEMBER 21, (Continued)

he was never seen again. His fate is an unsolved mystery.

Meantime, Sir Thomas Mitchell had opened up the Western Darling Downs, and his lieutenant, Kennedy, in 1848, started on his fatal journey to explore the promontory of Cape York. The story of this attempt is a tragic one, redeemed by the heroism of Jacky-Kennedy's faithful black boy. Ten out of the thirteen explorers perished. Kennedy's expedition concludes the second series of explorations. Books to be consulted:—

The History of Australian Exploration by Ernest Favenc.

Australian Discovery, Vol. II.—By Land, edited by Ernest Scott.

Australasian School Atlas. Bartholomew and Cramp.

EVENING PROGRAMME

8.0 to 10.30 p.m.

ORCHESTRAL CONCERT

8.0: THE NATIONAL BROADCASTING ORCHESTRA, conducted by E. J. Roberts—

- The Force of Destiny Overture Verdi
8.7: BARBARA RUSSELL, Soprano—
A Group by Phyllis Norman-Parker—
(a) Quies Amoris.
(b) Jack o' Lantern.
(c) November's Thrush.

Golden Hair ... Frank Bridge

8.15: THE NATIONAL BROADCASTING ORCHESTRA—
Ethiopian Rhapsody ... Hosmer

★ TO-NIGHT AT 8.24 ★



HAAGEN HOLENBERGH, Pianist, and CYRIL MONK, Violinist, playing

Sonata ... Sjogren

Allegro, Allegretto Amabile,

Andante Sestenuo,

Allegro con brio.

8.44: CLIFFORD LATHLEAN, Basso—

A Group by Brahms—

Klage (Plaint),

Von Ewiger Liebe (Love Eternal).

8.51: THE NATIONAL BROADCASTING ORCHESTRA—

Ballet Sylvia ... Delibes

9.1: BARBARA RUSSELL, Soprano—

La Nuit ... Tchaikowsky

Romance ... Debussy

Le Furet du Bois Joli ... De Breville

★ TO-NIGHT AT 9.8 ★



CYRIL MONK,

in association with

THE NATIONAL BROADCASTING ORCHESTRA,

conducted by E. J. ROBERTS,

playing violin.

Concerto in D Minor ... Wieniawski

Allegro, Romance, Alla li Zingara.

9.30: CLIFFORD LATHLEAN, Basso—

Old French Carol ... Liddle

9.33: HAAGEN HOLENBERGH, Pianist—

Scherzo in E Flat Minor, Op. 4,

Brahms

9.43: THE NATIONAL BROADCASTING ORCHESTRA—

Oxford Symphony ... Haydn

10.3: CLIFFORD LATHLEAN, Basso—

Two Carols by Eric Thiman—

As Joseph was a-Walking,

I Saw Three Ships.

10.6: THE NATIONAL BROADCASTING ORCHESTRA—

Dance Macabre ... Saint-Saens

Violin Soloist, W. J. GRIEVES.

Five Modern Songs ... Arr. Savions

(a) Elegie ... Massenet

(b) Cradle Song ... Brahms

(c) One Who Has Learned Alone,

Tchaikowsky

(d) Mandoline ... Debussy

(e) I Love Thee ... Grieg

10.25: Late News from the "Sun" and

"World"

10.28: Late Weather Forecast.

10.30: CLOSE.

2GB SYDNEY, 316 Metres

Day Sessions as usual.

8.0: Orchestra—

Overture, "Pirates of Penzance" (Sullivan).

8.10: Tenor Solo—

"Boat Song" (Harriet Ware).

8.15: Peggy and Pam will entertain you—

"All I Can Hope About is You" (Little)

"I Only Hope That You're Not Fooling Me" (Rich).

8.25: Orchestra—

"Scarf Dance" (Chaminade)

8.30: Pam and Her Violin—

"Ah, Moon of My Delight" (Lehmann).

"Nymphs and Fauns" (Logan).

8.38: Baritone Solo—

"Boots" (McCall).

8.43: Orchestra—

"The Flatterer" (Chaminade).

8.48: Organ Solo—

"Longing" (Wood).

9.0: Weather Report.

9.3: Peggy at the Piano—

"Just Like a Melody Out of the Sky" Donaldson).

"My Canary Has Circles Under His Eyes" (Golden).

9.13: Tenor Solo—

"To a Miniature" (Brahe)

9.18: Orchestra—

"El Tango" (Cowan).

9.23: Peggy and Pam will entertain you—

"Them There Eyes" (Tracy).

"Wrap Your Troubles in Dreams" (Barris).

9.33: Orchestra—

"Busy Bee" (Bendix).

9.38: Baritone Solo—

"The Smugglers' Song" (Mortimer).

9.43: Organ Solo—

"Broken Dreams" (Spitalny).

9.50: Orchestra.

10.0: Instrumental Music.

10.45: Slumber Music.

11.15: Close down.

2UW SYDNEY, 267 Metres

Day sessions as usual.

During the afternoon latest scores in the cricket match, South Africa v. Australia, at Sydney, Second Test Match, at 12.5, 12.30, 12.45, 1.0, 1.15, 1.30, 2.30, 2.45, 3.0, 3.15, 3.30, 3.45, 4.0, 4.15, 4.30, 4.45 5.0, 5.15, and 6.0.

5.25: Farmer's Children's Session, conducted by Uncle Jack and Jill. 6.0: Farmer's Dinner Music. 6.30: Fox-Hoyts Radio Club. 6.40: Music. 7.0: Request Items. 7.30: Commentary on to-day's play by Captain Ballantine. 7.45: Short commentary on the matches South Australia v. N.S.W., Victoria v. Queensland. 7.50: Music. 8.0: Piano Recital by William Murdoch. 8.30: Song Recital by Mr. Fred Williamson, well-known Adelaide Tenor, who is making an appearance through 2UW before leaving for England. 8.42: Continuation of Piano Recital by William Murdoch. 9.0: Improvisation, C. J. Arnold. 9.10: Musical Programme. 10.30: Close down

2UE SYDNEY, 293 Metres

Day Sessions as usual.

EVENING SESSION.

6.0: Aunt Willa and Simple Simon. 7.1: Dinner Music. 7.55: News from the "Sun." 8.1: Overture—"Dance of the Hours." 8.10: Broadcast of the Station 2UE Old-time Dance, held in Mark Foy's Empress Rooms, Castlereagh Street, commencing with the Grand March. 8.20: Waltz. 8.30: Polka. 8.40: Song—Miss Ivy Phillips, with Community Chorus. 8.45: Barn Dance. 8.55: Veleta. 9.5: Boston Two-Step. 9.15: Comedy Interlude—"Ambie and Si and their Silly Girl Friend." 9.29: Schottische. Interval. 9.55: Irish Quadrilles. 10.6: Song—Miss Ivy Phillips 10.11: Band Novelty. 10.22: Barn Dance. 10.32: Destiny Waltz. 10.39: Bon Ton. 10.50: Medley—Schottische, Polka, Waltz. 11.0: National Anthem. Close down.

3LO MELBOURNE, 375 Metres

Day Sessions as usual.

2.0: The Week's Work in the Garden—"A Lesson in Laying Out a Garden"—Mr. A. Antonio, under the Auspices of the Royal Horticultural Society of Victoria. 2.20: The A.B.C. Women's Association, conducted by Hattie Knight. This Session will include an interview with a Prominent Woman. THE RADIO MATINEE 3.0: St. Vincent de Paul's Boys' Band—Selection, "Rigoleto" (Verdi-Hartmann). 3.8: Harold McKelvie, Baritone—"In Summertime on Bredon" (Graham Peel). "Time, You Old Gipsyman" (Maurice Besley). 3.14: Margot Ramage, Comedienne—"I Want to Sing about You" (Dreyer). "Gonn! Get a Girl" (Ash). 3.20: Band—Intermezzo, "On the Road to Zag-a-Zig" (Fink). Minuet, "Queen Anne." 3.30: "East and West" in Popular Duets. 3.36: Comedy Sketch—"Tea and Shrimps," by Gearge Vincent. Characters:— The Seaside Young Man ... D'Arcy Kelway The Seaside Flapper ... Rita Hilton Scene:— A Balcony overlooking the Sea. 3.50: Band— Waltz, "Enchantress" (Bennett). March, "The Association" (Anderson). 4.0: Harold McKelvie, Baritone—"Down Here" (May Brahe). Selected. 4.6: Band— Overture "Royal Windsor" (Greenwood). 4.14: Margot Ramage Comedienne— Latest Popular Numbers. 4.20: Band— Selection, "Roberto le Diavolo" (Meyerbeer). 4.30: Close down. During the afternoon progress scores in the Second Test Match, South Africa v.

Australia, played at Sydney; also the Sheffield Shield Match, South Australia v. New South Wales, played at Adelaide, will be broadcast as they come to hand.

EVENING SESSION

- 8.35: Women in Sport—A Summary of the Week's Activities—Miss M. A. Beckingsale.
- 7.25: The Financial Barometer—The Official Weekly Report from the Stock Exchange of Melbourne.
- 7.45: School Life and Sport—Mr. E. C. H. Taylor.

At approximately 7 p.m. "Stumps" Scores in the Second Test Match, South Africa v. Australia, played at Sydney; also in the Sheffield Shield Match, South Australia v. New South Wales, played at Adelaide, and Victoria v. Queensland, played at the Melbourne Cricket Ground.

NIGHT SESSION

(Relaying to Station 2CO, Corowa until 11.0 p.m.)

- 8.0: An Hour of Grand Opera—**"LA TRAVIATA" (Verdi),** Presented by **THE A.B.C. CONCERT ORCHESTRA,** with

GLADYS VERONA, Soprano.
TOM DOWNIE, Tenor, and
J. HOWARD KING, Bass-Baritone.

A Cameo of This Famous Opera, Including

- All the Familiar Arias and Selections, So arranged that the Story is clearly told.
- 9.0: No Admittance Except on Business—A Broadcast Description of the Chief Telegraph Office, Melbourne.
- 9.30: A.B.C. Concert Orchestra—**"Suite" Gracieuse (German).**
- 9.38: Francis Halls, Baritone—**"The Fuchsia Tree" (Quilter),** **"Son tutta duolo" (Scarlatti),** **"Sea Fever" (Ireland).**
- 9.45: C. Richard Chugg, Flute—**"Bolero" (Pessard).**
- 9.50: A Short Recital from the Works of C. J. Dennis by Keith Desmond—**"The Old, Old Story,"** **"Joe,"** **"Here,"** **"Communism Rhymes."**
- 10.0: Francis Halls, Baritone—**"Slow Coach" (Bennett),** **"Comrades of Mine" (Wm. James),** **"Lezlie Lindsay."**
- 10.7: A.B.C. Concert Orchestra—**Favourite Melodies from "The Student Prince" (Romberg).**
- 10.15: (Relayed from 2FC, Sydney.) Summary of the day's play in the Second Test Match—South Africa v. Australia, played at Sydney.
- 10.30: From the Studio (Relaying to 4QG, Brisbane)—A Resume of the day's play in the Match, Victoria v. Queensland, played at the Melbourne Cricket Ground.
- 10.45: Weather etc.
- 10.50: Dance Music.
- 11.30: Close down.

3AR MELBOURNE, 492 Metres

Day Sessions as usual.

MID-DAY SESSION.

- 12.0: Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at Melbourne Cricket Ground.
- 1.15: Test Cricket (Relayed from 2BL, Sydney)—A Relayed Description of Test Match, Australia v. South Africa, at Sydney Cricket Ground.

AFTERNOON SESSION.

- (Note—During the afternoon, Progress Scores in Second Test Match, at Sydney, and Sheffield Shield Match, South Australia v. N.S.W., at Adelaide, will be broadcast as they come to hand).
- 2.0: Further description of Sheffield Shield Match, Victoria v. Queensland at Melbourne Cricket Ground.
- 4.15: Further description of Sheffield Shield Match, Victoria v. Queensland, at Melbourne Cricket Ground.
- 5.40: Test Cricket (Relayed from 2BL, Sydney)—A further relayed description of Test Cricket Match, Australia v. South Africa, at Sydney Cricket Ground.
- 6.0: Stump Scores—Weather data and Shipping Information and Close down.

EVENING SESSION.

- 7.32: Sporting Results, Stump Scores in Cricket Matches—Second Test Match, at Sydney, Australia v. South Africa; Sheffield Shield Match at Melbourne Cricket Ground, Victoria v. Queensland; and Sheffield Shield Match, South Australia v. N.S.W., at Adelaide.

NIGHT SESSION.

- 8.0: Evolution: No. 12, "Biographical"—Dr. O. W. Tegs.
- 8.20: Concert, by The Royal Victorian Institute for the Blind. Musical Director, Mr. D. L. Palmer. Superintendent and Secretary, Mr. S. W. Hedger. Overture: **"The Bohemian Girl" (Balfe),**—Blind Institute Orchestra. Songs: (a) **"My Prayer" (Squire),** (b) **"Vale" (Russell),**—Lena Wilson, Soprano. Pianoforte: Three Pieces from **"The Fantastic Stucke"**—(a) **"Whims,"** (b) **"Why,"** (c) **"The End of the Song" (Schumann),**—George Pindly, Mus. Bac.

- Solo: **"Love Lily" (Thomson),**—Fred. Sutcliffe, Tenor.
- Violin Solo: **"Hungarian Dance" (Brahms),**—Albert Harris.
- Solo: **"Sink, Red Sun" (Bel Riego),**—Ivy Williams, Contralto.
- Humorous Sketches at the Piano. —Austen Anderson.
- Vocal Duet: **"It Was a Lover and His Lass,"** Ethel Hall and Fred. Sutcliffe.
- A Short Address from the embossed Braille Type, by Austen Anderson.
- Solo: **"The Star" (Rogers),**—Duna (Magill).
- Will Rule, Tenor.
- Pianoforte: Novelty Numbers. Master Laurie Wilson.
- Solo: **"Kashmir Song" (Woodforde-Findent),**—George Alrton, Baritone.
- Selection of Popular Songs. —Blind Institute Orchestra.
- Vocal Duet: **"Say a Little Prayer For Me,"**—George Alrton and Will Rule.
- Vocal Solo: **"Time's Roses" (Barry),**—Ivy Williams, Contralto.
- Vocal Quartette: (a) **"Doan Ye Cry, Ma Honey" (Noel),** (b) **"Little Tommy Went a-Fishing" (Galacy),**—Blind Institute Quartette Party.
- Pianofortes, by—Austen Anderson.
- Vocal Solo: **"I Hear a Thrush at Eve" (Cadmans),**—Fred. Sutcliffe, Tenor.
- March: **"Aurora" (Lincoln),**—Blind Institute Orchestra.
- 10.15: News Session.
- 10.30: Close down.

4QG BRISBANE, 395 Metres

- 1.15: A description of the play in the second Test match will be relayed from the Sydney Cricket Ground for 15 minutes.
- Progress scores in the Sheffield Shield matches between Queensland and Victoria and South Australia and New South Wales will be announced at intervals.
- AFTERNOON SESSION**
- Progress scores in the second Test match will be broadcast at intervals, and a description of the play will be relayed from the Sydney Cricket Ground between 5.40 p.m. and 6.0 p.m.
- 7.30: A Talk on Books by Mr. J. Doyle.
- 7.40: A.B.C. Sporting Notes, including latest scores in the Sheffield Shield and Test matches.

NIGHT SESSION

- 8: The Cambrian Choir (Conductor, Leonard Francis)—Madrigal, **"No, no, Nigella" (Morley);** part song, **"Who Is Sylvia?" (Galway);** Mrs. Cuthbert (Soprano)—**"Farewell To Summer" (Johnson);** Ladies' Choir—Part song, **"Beauteous Morn" (German);** Male Choir—**"Crossing the Plain" (Price);** Messrs. Evans and Parkinson—Vocal duet, **"My Task" (Ashford);** The Cambrian Choir—Part song, **"Let Me the Canakin Clink" (McEwen);** Hugh Campbell (Baritone)—**"Frankadillo" (Molloy);** The Cambrian Choir—Part song, **"Hymn To Music" (Buck);** Ann Sammon (Soprano)—**"Pur Dicast" (Lotti);** The Cambrian Choir—Part song, **"Bells of St. Michael's" (Stewart);** Max Hooper (Tenor)—**"A May Morning" (Denza);** Ladies' Choir—Part song, **"To a Skylark" (Lloyd);** Lex Campbell and the Choir—Plantation Song, **"Ring Tailed Coat" (Scott Gatty);** Doris Berry and Mrs. Cuthbert—Vocal duet, **"In Springtime" (Newton);** The Cambrian Choir—Chorus, **"For Unto Us" (Handel);** 9.0: Metropolitan Weather Forecast.
- 9.1: The Cambrian Choir—Madrigal, **"What Saith My Dainty Darling?" (Morley);** part song, **"Meeting of the Waters" (Dunhill);** Lyla McGuire (Soprano)—**"Salve Maria" (Mercadante);** Ladies' Choir—Part song, **"O Lovely May" (German);** Male Choir—Part song, **"The Beleaguered" (Sullivan);** Theima Tunstall (Contralto)—**"Love's Coronation" (Aylward);** The Cambrian Choir—Part song, **"The Sea Hath Its Pearls" (Pinsuti);** G. Harley (Baritone)—**"The Witch of Bowden";** The Cambrian Choir—Part song, **"The Singers" (McKenzie);** Gwen McMurdy (Soprano), **"Cupid" (Sanderson);** The Cambrian Choir—Part song, **"Miss Hannah" (Deppen);** Mabel Wright (Contralto)—**"Columbus" (Chapman);** Male Choir—Part song, **"The Gongs Are Beating" (Otto);** Hugh Campbell (Baritone)—**"The Blue Dragon" (Russell);** Lex Campbell (Baritone) and the Choir—Plantation Song, **"Good-night" (Scott Gatty);** The Cambrian Choir—**"Hallelujah Chorus" (Handel);** 10: Final News Bulletin.
- 10.15: A review of to-day's play in the second Test Match between Australia and South Africa—relayed from Sydney.
- 10.30: A review of to-day's play in the Sheffield Shield match between Queensland and Victoria—relayed from Melbourne.
- 10.45: Dance music.
- 11.0: Close.

5CL ADELAIDE, 411 Metres

Day sessions as usual.

- During the day a description of the Sheffield Shield match, South Australia v. New South Wales, by Len Ford from the Adelaide Oval, and scores of the Second Test Match, South Africa v. Australia, at Sydney, will be broadcast immediately they come to hand.
- Descriptions of the Second Test will be broadcast by relay from Sydney at 12.45 p.m. and 5.10 p.m.
- 12.45: From Sydney Cricket Ground—Description of play in the Second Test Match, South Africa v. Australia.

EVENING SESSION

- 6.10: From Sydney Cricket Ground—Description of play in the Second Test Match, South Africa v. Australia.
- 7.9: Sporting Service, including Port Adelaide acceptances for Christmas Handicap day, cricket scores in the Second Test Match, South Africa v. Australia, at Sydney, and the Sheffield Shield match, South Australia v. New South Wales, at Adelaide Oval.
- 7.30: The 5CL Twinkler Boys' Club, conducted by "The Twinkler" (Mr. F. J. Mills).
- 7.50: Let's Talk "Of Places and Things, of People and Kings."

NIGHT SESSION

- 7.58: Coming Events and Federal Election Figures.
- 8.3: Christmas would not be Christmas without Pantomime. It is with pleasure that we present the ever popular Pantomime—**"CINDERELLA"** Arranged and produced by Dave Howard, the popular English Comedian. Cast: Cinderella—Blanch Bell. The Ugly Sisters—Frens Bohning and Mavis Tierney. The Prince—Mostyn Skinner. The Baron—George Horton. The Page—Dave Howard. Fairies—The Sunshine Kiddies. Music by The A.B.C. Octet. Synopsis

- Opening Scene—Meeting of the Huntsmen at the Forest. Introducing song and chorus—"Tally Ho!" Humorous number—"Jockey Joe." Cinderella gathering wood in the forest. The Huntsmen pass by. Song—"I Wonder How It Feels to be in a Door." Speciality Number—Wedding of the Birds, by the Fairies, introducing Fairy Godmother. Cinderella meets the Prince. Duet—"If I Had a Girl Like You." Baron Seeks Cinderella—Gives Advice, Keen Walking.
- Scene 2—Cinderella's Home. Introducing her Ugly Sisters. Topsy Turvy Talk. The Baron and Buttons—The Wise Man and the Pool. The Prince's Invitation to the Ball. When Everybody Smiles—Carnival. Departure for the Ball.
- Scene 3—Cinderella's Home. Cinderella and Buttons. The Fairies and Godmother. Cinderella goes to the Ball.
- Scene 4—The Ballroom. Dancing. The Baron Entertains the Guests. The Prince Meets Cinderella. 12 o'clock: Cinderella's Hurried Departure. Good-night, Sweetheart.
- Scene 5—After the Ball. Back to Cinderella's Home. The Prince Hunts for Owner of Shoe. Cinderella becomes Princess. Wedding Bells—Grand Finale.
- 9.45: From 2FC, Sydney—Resume of to-day's play in the Second Test Match, South Africa v. Australia, at Sydney.
- 10.0: From 5CL Studio—Resume of to-day's play in the Sheffield Shield match, New South Wales v. South Australia, at Adelaide Oval (relayed to Sydney).
- 10.15: News Session.
- 10.25: Modern Dance Music.
- 11.0: Close down.

7ZL HOBART, 517 Metres

Day Sessions as usual.

- 7.25: Educational Session. Professor A. B. Taylor, M.A. Talk: **"The English Language, The Causes and Characteristics of Dialects."**
- 8.0: **"Bethlehem" (Mauder),** rendered by Chalmers Presbyterian Church Choir, under the direction of Frank J. Carter. **The Shepherds' Gifts.** A little Shepherd Boy, Miss V. Harper, Soprano; an Old Shepherd, Mr. Eric Stranger, Tenor; Angels, Shepherds, Chalmers Church Choir. **The King's Gifts.** An old well in the desert. Night, Balthasar resting with his train. Balthasar, J. L. Carter, Baritone; Gaspar, T. Goward, Bass; Melchior, A. C. Palon, Tenor; The Caravan, Chalmers Presbyterian Church Choir.
- Our Gifts. Before the Inn at Bethlehem. Mary, the Mother of Jesus, Miss V. Harper. Talk, **"Uanmee's" Old Curiosity Shop, by "Uanmee."**
- 10.0: News.
- 11.0: Close down.

2BL WOMEN'S SESSION

THE NOBLE WORK OF ELIZABETH FRY.

"The Noble Work of Elizabeth Fry" will be the title of a talk by Miss E. V. Curtin, from 2BL, during the Women's Session, commencing at 2.45 p.m. on Monday, December 21. Elizabeth Fry (1786-1845) was one of the greatest workers for prison reform that England has ever known, and she also achieved considerable reputation as a preacher. She belonged to the Society of Friends, and it was greatly owing to her efforts that teachers were organised to instruct the children of the prisoners. Not the

least part of the work of Elizabeth Fry was the visiting of the convict ships, where she saw, as far as possible, to the comfort of those condemned to serve their sentence in the Colonies. Something of the work undertaken by this noble woman will be realised by those who have read such works as "Little Dorrit," by Dickens, which reveal the appalling conditions of prison life in the 18th and early part of the 19th centuries.

TOURING NEW ZEALAND.

FOR the fourth of his series of talks on "Touring New Zealand," from 2BL during the Women's Session commencing

at 2.45 p.m. on Monday, December 21, Mr. Schmitt, Commissioner for New Zealand, has chosen to discuss the North Island. The chief scenic attractions of the North Island are the great Tongariro National Park, the world-famous Wanganui River, and the majestic cone of Mount Egmont, Taranaki. Tongariro National Park, in the centre of the North Island, is twenty-five miles in length, and about twenty miles in width. Of its remarkable attractions, it has been said by Mr. James Cowan in a book on the subject: "It is a region of extraordinary mingling of the Alpine and Sylvan and the Volcanic and Hydro-thermal. There are not many remarkable physiographic or geographical features of all New Zealand's national parks that one may not discover here. Steaming craters, sulphurous pits, a boiling lake, icecold lakes, alpine slopes for snow sports, torrents and bubbling springs, rapids and waterfalls, huge cliffs and rocky pinnacles, forests and wild fern gardens, mountain meadows bright with leagues of flowers—to enumerate the varied scenes of the Tongariro Park is to make a catalogue of all New Zealand's landscapes."

The Wanganui River was said by the old-time Maori to owe its course to the passage made by a tired mountain god as he fled from a rival, and to the Maori to-day, it is a river of mystery. The Wanganui offers splendid scenic attractions, and at many places on its banks there are found the remains of earthworks where Maori strongholds were erected in the old days. For this region was the scene of much fierce fighting between various Maori tribes. Mount Egmont, known as the "Tower of Taranaki," is 8200 feet high, and was named by Captain Cook in honor of the Earl of Egmont, First Lord of the Admiralty.

POSTAGE STAMPS.

STAMP collecting is one of the most popular hobbies ever invented and all those interested in the subject should tune in to the talk by Mr. S. Williams, President of the N.S.W. Philatelic Society, from 2BL during the Women's Session, commencing at 2.45 p.m. on Wednesday, December 23. Mr. Williams has chosen "Postage Stamps Worth Fortunes" as the title of his talk.

XMAS EVE SUGGESTIONS.

MISS VARLEY has some last-minute suggestions to make in reference to making that delightful personage, Santa Claus, more real than ever this Xmas, and she will give listeners some helpful ideas on the subject from 2BL during the Women's Session commencing at 10.35 a.m. on Thursday, December 24.

To-day's Toilet Hints

Your hair is not lovely unless bright, gleaming, colourful, ever so faintly fragrant. No matter whether you be blonde or brunette, whether your hair be black or grey, use stallax granules to cleanse the scalp and beautify the hair. After a stallax shampoo you'll find hair so easy to dress. To restore grey hairs to their natural colour, touch them with tannin. Please don't use dye—it ruins hair. Remove unwanted hair from face or under arms with pheninol. Painless, harmless, it takes away hairs instantly.

Mercolized wax makes and keeps skin clear and fresh and lovely. This matchless skin beautifier acts by harmlessly removing worn, discoloured surface skin, and taking away skin imperfections such as sallowness, roughness, moth-patches, and freckles, thus enabling the fresh, fine-textured skin beneath to show its loveliness. Splendid for sunburn and windchaps. To keep the lips in perfect condition, rosy, and free from cracks, use soft proclatum. Buy from your chemist.

"WETLESS" CONDENSERS

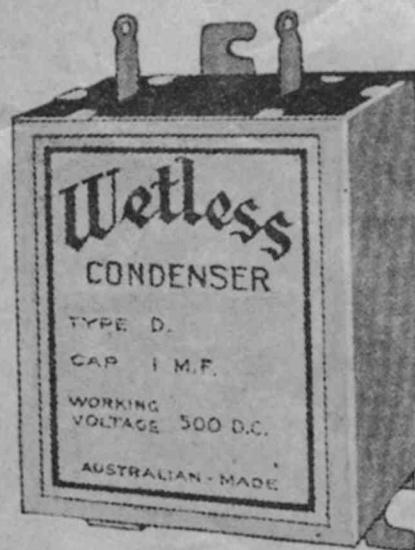
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TUESDAY . . . DEC. 22

2FC

SYDNEY,
451 Metres

Early Session

(7 to 8:15 a.m. Relayed to 2NC, Newcastle.)

Morning Session

(10:30 a.m. to 12:30 p.m. Relayed to 2NC between 10:40 a.m. and 12 noon.)

Cricket: Scores in the match South Australia v. N.S.W., played at Adelaide, will be given at the fall of each wicket, lunch and tea adjournments, and stumps drawn. Scores in the match Victoria v. Queensland, played at Melbourne, will be given at lunch and tea adjournments and stumps drawn.

The Lunch Hour

(1 to 2:15 p.m.)

1.15: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test Match, South Africa v. Australia. Relayed to the National Stations.

The Radio Matinee

(2:15 p.m. to 4:30 p.m. Relayed to 2NC from 2:30 p.m.)

2.15: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test Match, Australia v. South Africa.

4.0: JOHN BROWNLEE, Baritone (r.)—*Moither O' Mine* *Tours*

4.3: TOSCHA SEIDEL, Violinist (r.)—*Liebesfreud* *Kreisler*

4.6: COVENT GARDEN OPERA COMPANY (recorded)—*Die Fledermaus* *Strauss*
Brother Dear and Sister Dear.

4.10: ARNOLD BRILHART, Saxophonist (recorded)—*Caprice Futuristic* *Signorelli*

4.13: H.M. COLDSTREAM GUARDS BAND (recorded)—*Callirhoe—Air de Ballet* . . *Chaminade*

4.17: MARGUERITA CARLTON, Contralto (recorded)—*My Prayer* *Squire*

4.20: STOCKHOLM ROYAL OPERA HOUSE ORCHESTRA (recorded)—*Eugene Onegin Polonaise and Waltz—*
Tschaikowsky

Early Evening Session

(5.40 to 8 p.m. Relayed to 2NC, Newcastle, between 5.40 and 6.45 and 7.5 and 8 p.m.)

5.40: FROM THE SYDNEY CRICKET GROUND—Description of Second Test Match, South Africa v. Australia. Relayed to the National Stations.

6.0: Children's Stories by the "Hello Man."

"BRINGA" will speak of the Aboriginal Children.

6.45: DEPARTMENT OF AGRICULTURE—

Mr. J. N. Whittet, Agrostologist, will speak on "Improvements of Pastures in Coastal Districts."

7.5: Sporting Service, etc., etc.



VERA WINN, soprano, 2FC to-night.

PHIL SMITH, comedian, 2FC to-night.

EVENING PROGRAMME

(8 to 11.30 p.m., Relayed to 2NC, Newcastle between 8 and 11 p.m.)

RADIO DANCE 2BL NIGHT

with the
A.B.C. DANCE BAND

2.0: THE A.B.C. DANCE BAND—

Foxtrot
Blues
Quickstep

LESLIE REID, Baritone—*Four Jolly Sailormen* *Hood*

Blues
Foxtrot
Quickstep

PHIL SMITH, Comedian—*My Best Girl* *Donaldson*

Waltz
Waltz
Foxtrot

VERA WINN, Soprano—*Youth and Spring* *Strinel*

Blues
Quickstep
Foxtrot

LESLIE REID, Baritone—*Trottin' to the Fair* *Stanford*
Rose in the Bud *Forster*

Foxtrot
Blues
Quickstep

PHIL SMITH, Comedian—*Humpy and Dumpty* *Chevalier*

Waltz
Waltz
Foxtrot

VERA WINN, Soprano—*Vale* *Russell*
Advice *Carew*

Blues
Foxtrot
Quickstep

LESLIE REID, Baritone—*At Grendon Fair* *Marie*
Eyes That Used to Gaze in Mine *Lohr*

Blues
Quickstep
Foxtrot

PHIL SMITH, Comedian—*I'm Telling the Birds, Telling the Trees, How I Love You*
Friend and Brown

Waltz
Waltz
Foxtrot

VERA WINN, Soprano—*Angus MacDonald* *Roedel*

Foxtrot
Blues
Quickstep

10.15: THE A.B.C. SPORTING EDITOR will give a talk on the day's play in the Second Test Match, South Africa v. Australia.

10.30: RELAYED FROM 5CL, ADELAIDE—A talk on the day's play in the match South Australia v. N.S.W., played at Adelaide.

10.45: Weather Forecast.
10.47: DANCE MUSIC.
11.30: CLOSE.

SYDNEY,
351 Metres

Opening Session

(8.15 to 11 a.m.)

10.35: THE A.B.C. WOMEN'S ASSOCIATION—

"Making the Most of Yourself."
"What is Your Color?"
"Flying for Women."

Midday Session

(12 noon to 2.30 p.m. Relayed to 2NC Newcastle between 12 and 1.30.)

12.0: FROM THE SYDNEY CRICKET GROUND—A Description of the Second Test Match, South Africa v. Australia.

NOTE.—At approx. 12.10, metropolitan forecast and weather synopsis.

Between 1.15 and 1.30 a description of the play will be relayed to National Stations.

Scores at the fall of each wicket, at lunch and tea adjournments, and stumps drawn, in the match South Australia v. N.S.W., played at Adelaide, also at lunch and tea adjournments and stumps drawn in the match Victoria v. Queensland, played at Melbourne.

Afternoon Entertainment

(2.30 to 6 p.m.)

2.30: Recording.

3.0: DANCE MUSIC FROM FARMER'S.

3.8: LILIAN DAVIES, Soprano (r.)—*Ashes of Dreams* *Davies*

3.11: W. H. Squire, Cellist (r.)—*Reigen* *Popper*

3.14: DANCE MUSIC FROM FARMER'S.

3.21: JOHN McCORMACK, Tenor (r.)—*(a) At Dawning* *Cadman*
(b) I Hear a Thrush at Eve . . *Cadman*

3.27: DANCE MUSIC FROM FARMER'S.

3.34: GILLIE POTTER, Comedian (r.)—*Mr. Potter Waxes Historical* . . *Potter*

3.40: DANCE MUSIC FROM FARMER'S.

3.48: BROWNING MUMMERY, Tenor (recorded)—*The Love Lily* *Thompson*

3.51: ALFREDO RODE, Violinist (r.)—*La Clochette* *Paganini*

3.54: DANCE MUSIC FROM FARMER'S.

4.2: PERCY HEMING, Baritone (r.)—*Before the Dawn* *Lang*

4.5: MORIZ ROSENTHAL, Pianist (r.)—*Valse in C Flat Minor* *Chopin*

4.15: FROM THE SYDNEY CRICKET GROUND—A Description of the Second Test Match, South Africa v. Australia.

The Dinner Hour

(6.15 to 8 p.m.)



ELEANOR STANTON and EDITH MARTIN, who will be heard together from 2BL to-night.

TUESDAY, . DECEMBER 22, (Continued)

2UW

SYDNEY,
267 Metres

★ 2BL TO-NIGHT AT 9.0 ★

The A.B.C. Players in A Message From Mars

A Fantastic Comedy in Three Acts.

By RICHARD GANTHONY.

CHARACTERS:

HORACE PARKER.
AUNT MARTHA (Miss Parker).
MINNIE TEMPLAR (Adopted Sister of H. P.).
ARTHUR DICEY.
A TRAMP.
A MESSENGER FROM MARS.
MRS. CLARENCE.
SIR EDWARD VIVIAN (An Astronomer).
DR. CHAPMAN.
A WOMAN OUTCAST.
A POLICEMAN.
A NEWSBOY.
A WOUNDED MAN.

SCENE: London. Time: Present.

ACT I: A Room in Horace Parker's House—9 p.m.

ACT II: Outside Mrs. Clarence's House.

ACT III: Same as Act I. The same evening.

EVENING PROGRAMME

(8 to 10.30 p.m.)

★ TO-NIGHT AT 8.0 ★
FROM THE PRESBYTERIAN ASSEMBLY HALL, SCOTS CHURCH—

An Hour of Christmas Music

Arranged by

LIVINGSTONE C. MOTE, M.A.

Organ—LIVINGSTONE C. MOTE—
Fantasia on Two Carols . . . West

THE SCOTS CHURCH CHOIR—
Chorus: And the Glory of the Lord,
Handel

CLIFFORD LATHLEAN, Basso—
Thus Saith the Lord . . . Handel

THE SCOTS CHURCH CHOIR—
Two Carols—
In Dulci Jubilo.

Good King Wenceslas.
EDITH MARTIN, Soprano, and ELEANOR STANTON, Contralto—
Duet, Cradle Song . . . Bairstow

LIVINGSTONE C. MOTE, M.A., Organist—
In Dulci Jubilo . . . Bach

ANTHEM—SCOTS CHURCH CHOIR—
Hail Gladdening Light . . . Martin

ELEANOR STANTON, Contralto—
Slumber Song from "Christmas Oratorio" . . . Bach

THE SCOTS CHURCH CHOIR—
Two Carols—
Ring Christmas Bells . . . Bridge

Ring Out Wild Bells . . . Bairstow
THE SCOTS CHURCH CHOIR—
Chorus: Nazareth . . . Counod

9.0: THE A.B.C. PLAYERS in "A MESSAGE FROM MARS." (See panel above.)

10.25: Late News from the "Sun" and "World."

10.28: Late Weather Forecast.

11.30: CLOSE.

2GB

SYDNEY,
316 Metres

Day Sessions as usual.

8.0: 2GB Instrumental Quartet (leader, Horace Keats)—
"Selection of Melodies" (Sullivan).

8.10: Soprano Solo—
"Always in All Ways" (Weatherley).

8.15: Storyette of Industry.

8.16: Dan Scully, Violinist—
"Valse Bluette" (Drigo).

8.20: 2GB Quartet—
"Preghiera" (Luigi Cecchi).
"Valzer del sospiri" (Luigi Cecchi).

8.28: Baritone Solo—
"Songs of Songs" (Moya).
"Ah, Sweet Mystery of Life" (Herbert).

8.38: Horace Keats, Pianist—
"Minuet" (Elgar).
"Valse Triste" (Sibelius).

8.46: Novelty Orchestra.

8.51: Cedric Ashton, Cellist—
"Aria" (Porpora).

9.0: Weather Report.

9.3: Contralto Solo—
"Five Little Piccaninnies" (Anthony).

9.8: 2GB Quartet—
"Selection of Schubert Songs."

9.15: Flute Solo.

9.20: Tenor Solo—
"Passing By" (Purcell).

9.25: Organ Solo—
"Hawaiian Sandman."

9.30: 2GB Quartet—
"Nocturne in E Flat Major" (Chopin-Keats).
"Slumber Song" (Squire).

9.37: Baritone Solo—
"Lolita" (Peccia).
"Santa Lucia"

9.47: Orchestra—
"Desert Song" (Romberg).

9.50: Band Selection.

10.10: Instrumental Music.

10.45: Slumber Music.

11.15: Close down.

2UE

SYDNEY,
293 Metres

Day Sessions as usual.

6.0: Auntie May and Simple Simon. 7.10: Resume of To-morrow's Races. Mr. Tom Ellis. 7.30: Sporting Talk. Mr. Oscar Lind. 7.40: Billiards Chat. 8.1: Overture—"Maritana." 8.10: Selected Studio Programme. 9.1: Birthday Calls and Requests. 10.1: Light Opera Selections—"Florodora." 10.10: Music. 10.15: Close down.

2KY

SYDNEY,
280 Metres

Day Sessions as usual.

6.45: Dinner Entertainment.
7.30: Racing Revelations, Mr. Rufe Naylor.
7.45: Musical Interlude.
8.0: F. J. PALMER and SON'S, PARK STREET, COMMUNITY CONCERT, FROM THE AUBURN TOWN HALL, UNDER THE DIRECTION OF UNCLE BERT, ASSISTED BY SID HAYNES AND OTHER PROMINENT ARTISTS. 10.30: Closing announcements.

3LO

MELBOURNE,
375 Metres

Day Sessions as usual.

5.45: The Children's Corner.
6.0: "Bobby Bluegum," "Auntie Edie," "Grace," and "Ector," that famous quartette from SBOE, present—
A Cameo Concert.
(a) "Oh! Mum Where's My Chewing Gum."
(b) "Tom Thumb and Tiny Teena."
(c) "Turn Your Face to the Sunshine."
(d) "So the Blue Birds and the Blackbirds Got Together."
(e) "In My Old Feather Bed."
EVENING SESSION.
6.35: At Home and Abroad, by—"The Watchman."
7.25: For the Man on the Land—"Fruit Crop Prospects and Export Season," Mr. J. M. Ward, under the auspices of the Department of Agriculture.
7.45: Propeller Talk—
"Aero Club Notes and News"—
Captain Eric Roberts, under the auspices of the Aero Club of Victoria.
8.0: At approximately 7 p.m. "Stumps" Scores in the Second Test Match, South Africa v. Australia, played at Sydney, also in the Sheffield Shield Match, South Australia v. New South Wales, played at Adelaide, and Victoria v. Queensland, played at the Melbourne Cricket Ground.

WOMEN'S SESSION.

20: About It and About—
"Last-minute Christmas Presents"—
Isobel Ann Sheed.
During the afternoon Eric Welch will describe the Moonsee Valley Race Meeting.

Trial Hurdle Race, 2 miles.
Orphanage Handicap, 6 furlongs.
Welter Plate, 6 furlongs.
St. Vincent de Paul Handicap, 2 1/2 furlongs.
Welter Purse, 9 furlongs.
St. Augustine Handicap, 7 furlongs 60 yards.
From 3.0 to 4.30 p.m. the Studio Programme will be provided by—

- A.B.C. Quintette—
"In a Kentish Garden" (Rawlinson).
"Valse Moderne" (Ivy).
Selection—"La Boheme" (Leoncavallo).
Suite in Old English Style from "Henry VIII." (John Foulds).
"Plymouth Hoe" (Ansell).
Ernest Kopke, Tenor—
"I Look Into Your Garden" (Wood).
Two Songs by Coningsby Clarke—
"The Dove."
"The Hawk."
"Remember the Rose" (Simons).
Two Songs by Mona Raymond—
"Sometimes I Think."
"Jes' a-Smokin'".
Compton Coult, Comedian—
"Nonsensical Nothings."
Clare Davis, Mezzo-soprano—
"Bridal Dawn" (Easthope Martin).
"Gipsy Spring" (H. Oliver).
Three Scottish Songs—
"Turn Ye To Me" (Old Highland Melody).
"My Mary, Sweet and Brown" (Kilner).
Selected.

4.30: Close down.
During the afternoon progress scores in the Second Test Match, South Africa v. Australia, played at Sydney; also the Sheffield Shield Match, South Australia v. New South Wales, played at Adelaide, will be broadcast as they come to hand.

NIGHT SESSION.

DANCE MUSIC

by

PAUL JEACLE AND HIS RADIO DANCE BAND.

Songs by

JEAN LEWIS, Contralto; GEORGE NICHOLLS, Baritone; Comedy Interludes by JOHN STUART.

- 8.0: Paul Jeacle and His Radio Dance Band—Fox-trot.
George Nicholls, Baritone—
"Carnival" (Molloy).
Dance Band—Fox-trot.
John Stuart, Comedian—
"She Can't Make Up Her Mind" (Raymond Wallace).
Dance Band—Waltz.
Jean Lewis, Contralto—
"The Glory of My Garden" (Daniel Wood).
Dance Band—Fox-trot, Blues.
George Nicholls, Baritone—
"Queen of My Heart," from "Dorothy" (Collier).
Dance Band—Fox-trot.
John Stuart, Comedian—
"And So Do All My Pals" (Harris Westcott).
8.0: The Mystery Room—
"A Description of the Train Control Room, Spencer Street, during the peak period."
9.15: Dance Band—Fox-trot.
Jean Lewis, Contralto—
"Song of Florian" (Godard).
Dance Band—Viennese Waltz.
George Nicholls, Baritone—
"You Are My Heart's Delight," from "Land of Smiles" (Lehar).
Dance Band—Fox-trot, Blues.
John Stuart, Comedian—
"Wave To Me" (Harris Westcott).
Dance Band—Fox-trot.
10.0: Jean Lewis, Contralto—
"Where My Rainbow Ends" (Conriche).
Dance Band—Fox-trot.
John Stuart, Comedian—
"Girls, Past and Present" (Leslie Elliott).
10.15: Test Cricket (Transmission from 2FC, Sydney)—Summary of the day's play in the Second Test Match, South Africa v. Australia, played at Sydney.
10.30: Sheffield Shield Cricket (From 3.50, Relaying to 4QG)—A Resume of the day's play in the Match, Victoria v. Queensland, played at the Melbourne Cricket Ground.
10.45: Weather, etc.
10.55: Popular Dance Numbers.
11.30: Close down.

3AR

MELBOURNE, 492 Metres

Day Sessions as usual.

MID-DAY SESSION.

- 12.0: Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at Melbourne Cricket Ground.
1.15: Test Cricket (Relayed from 2BL)—A Relayed description of Test Crickes Match, Australia v. South Africa, at Sydney Cricket Ground.
AFTERNOON SESSION.
2.0: Description of Sheffield Shield Cricket Match, Victoria v. Queensland, at Melbourne Cricket Ground.
4.15: A further description of Sheffield Shield Match, Victoria v. Queensland, at Melbourne Cricket Ground.
5.40: A further relayed description of Test Cricket Match, Australia v. South Africa, at Sydney Cricket Ground.
6.0: Stump Scores. Weather data and Shipping Information and Close down.

7.30: Sporting Results. Stump Scores of Cricket Matches—Second Test Match, Australia v. South Africa, at Sydney Cricket Ground; Sheffield Shield Match, Victoria v. Queensland, at Melbourne Cricket Ground; and Sheffield Shield Match, South Australia v. New South Wales, at Adelaide.
7.45: Fifteen Minutes with Famous Song Writers: Robert Schumann—by Beryl Hahnbourg.

NIGHT SESSION.

8.0: Everyday Psychology—
No. 12: "Character and Personality"—
Dr. R. D. Colman, B.Sc., B.A.
8.20: "Tilly of Bloomsbury."
Comedy in Three Acts, by Ian Hay.
(Adapted from the Author's Novel, "Happy-Go-Lucky.")
Characters (in the order in which they are heard):
Abel Mainwaring, M.P.
Milroy (Butler to the Mainwarings).
Sylvia (Mainwaring's daughter).
Lady Marian Mainwaring.
Rev. Adrian Rylands.
Constance Damer.
Richard (Mainwaring's son).
Tilly (Welwyn's daughter).
Percy (Welwyn's son).
Amelia (Welwyn's younger daughter).
Grandma Banks (Mrs. Welwyn's mother).
Mr. Metha Ram (a law student).
Mrs. Welwyn.
Lucius Welwyn.
Mr. Stillbottle (a Sheriff's Officer).
Mr. Pumpherson (another law student).
Synopsis of Scenery—
Act I:
The Towers, Shotley Beachamp.
Saturday afternoon, November.
Act II:
The Welwyn's Drawing-room, Bloomsbury.
Monday afternoon.
Act III:
Same as Act II. Tuesday morning.
The action of the play takes place at the present time.
Incidental Music by
The A.B.C. Concert Orchestra; Conductor,
Percy Code.
Produced by Frank D. Clewlow.
10.15: News Session.
10.30: Close down.

4QG

BRISBANE, 395 Metres

Day Sessions as usual.
1.15: A description of the play in the second Test Match will be relayed from the Sydney Cricket Ground for 15 minutes.
Progress scores in the Sheffield Shield matches between Queensland and Victoria and South Australia and New South Wales will be announced at intervals.
Progress scores in the second Test Match will be broadcast at intervals and a description of the play will be relayed from the Sydney Cricket Ground between 5.40 p.m. and 6.0 p.m.
7.30: A Special Talk to Farmers, arranged by Department of Agriculture and Stock—"The Origin of the Angora Rabbit, Its Wool as an Article of Commerce," by Mr. J. W. Munroe.
7.40: Sporting Section.

NIGHT SESSION

- 8.0: Relayed from 4RK, Rockhampton.
9.45: A short reproduced musical programme from the Studio.
10.0: Final News Bulletin.
10.15: A review of to-day's play in the second Test Match between Australia and South Africa—relayed from Sydney.
10.30: A review of to-day's play in the Sheffield Shield match between Queensland and Victoria—relayed from Melbourne.
10.45: Dance music.
11.0: Close.

5CL

ADELAIDE, 411 Metres

Day Sessions as usual.
During the day descriptions of the Sheffield Shield match, South Australia v. N.S.W., by

Len Ford, from the Adelaide Oval, and scores of the Second Test Match, South Africa v. Australia, at Sydney, will be broadcast immediately they come to hand. Descriptions of the Second Test Match will be broadcast by relay from Sydney at 12.45 p.m. and 5.10 p.m.

12.45: From the Sydney Cricket Ground—Description of the play in the Second Test Match, South Africa v. Australia.

AFTERNOON SESSION

- 4.20: Cricket scores.
EVENING SESSION
5.10: From the Sydney Cricket Ground—Description of the play in the Second Test Match—South Africa v. Australia.
7.0: Sporting Service, including cricket scores in the Second Test Match, South Africa v. Australia, at Sydney, and the Sheffield Shield Match at Adelaide Oval. Stock Exchange information supplied by the Stock Exchange of Adelaide; market reports.
7.25: Musical reproductions.
7.35: Mr. H. Brewster-Jones—A Talk entitled, "Off the Beaten Track."
7.45: Musical Reproductions (continued).

NIGHT SESSION

8.0: From the Little Theatre—"SCROOGE"
Adapted from Charles Dickens' "Christmas Carol" by Gertrude Anderson, and produced by The Radio Players, under the direction of James Anderson.

Characters:
The Ghost of Xmas Past.
The Ghost of Xmas Present.
The Ghost of Xmas Future.
The Ghost of Jacob Marley.
Ebenezer Scrooge.
Bob Cratchit (his Clerk).
Fred Wayland (his Nephew).
Mr. Middlemark.
Mr. Worthington.
Scrooge's Sweetheart.
The Cratchitt Children.
Martha.
Belinda.
Peter.
Tiny Tim.
The Boy Scrooge.
Fanny (his sister).
Scene: "Office of Ebenezer Scrooge."
Time: "A Foggy, Frosty Christmas Eve."
Carols by Ye Olde Waits.

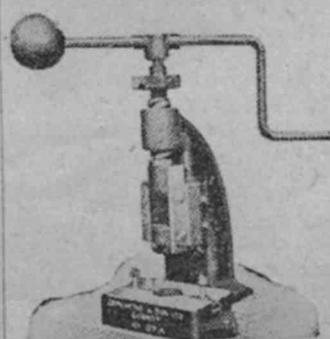
- 9.0: Intermission for the man on the land. Wheat, market, and weather reports.
9.5: A Violin Recital, by Katie Yoerger.
9.11: Ye Olde Waits Quartette—Seasonal Selection.
9.15: A Shire Musical Comedy, "The Couple Next Door," produced by The Radio Players.
9.25: Ye Olde Waits Quartette—Novelty number.
9.30: A Pianologue by Walter Hurst and James Anderson.
9.38: A Christmas Play, "While Shepherds Watched," produced by The Radio Players.
9.45: From 2FC, Sydney—Resume of to-day's play in the Second Test Match, South Africa v. Australia, at Sydney.
10.0: From 5CL, Adelaide—Resume of to-day's play in the Sheffield Shield Match, South Australia v. New South Wales, at Adelaide Oval (relayed to Sydney).
10.15: News Session.
10.25: Special Yuletide Dance Music.
11.0: Close down.

7ZL

HOBART, 517 Metres

- Day sessions as usual.
7.25: Educational Session, C. Malthus, M.A. Talk: "French Language; Maurols L Conversion de Brommit."
7.45: W. E. Fuller, Talk: "Literary Lapses and Library Lists."
8.0: Light Orchestral Concert, A.B.C. Orchestra.
7. Tourbillon (Geroult).
10.0: News.
11.0: Close down.

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Radio Club News

Leichhardt and District.

THE Leichhardt and District Radio

Society held its 110th monthly business meeting on Tuesday, December 1, with Mr. Pinnell (VK2ZR) in the chair. The minutes of the previous month's activities were read and accepted. An application for membership was received from Mr. Callinan, who was duly elected to the society. It was decided that the society hold a competition for home-constructed radio apparatus. Full details are being arranged by the technical committee, and the competition will be held early in the new year. Our schedule of slow morse code transmissions on 80 metres has been re-arranged and is now as follows:—Monday, by VK2VW; Wednesday, by VK2BX; Thursday, by VK2WD; Friday, by VK2DW; Sunday, by VK2MW.

The transmissions will take place from 7.30 p.m. till 8 p.m., and the stations concerned would greatly appreciate reports from any listeners hearing them.

We wish to congratulate the Association of Amateur Radio Clubs on the success of its first short-wave test, which was held on 80 metres during November. The members of this society consider the test "very fine biz" and hope that the association will keep up the good work in future.

The society's meetings are held every Tuesday evening at the club rooms, 35 Albert Street, Leichhardt. All inquiries should be addressed to the Hon. Secretary, Mr. D. Maclaren, 56 Hawthorne Parade, Haberfield.

Harringtons.

THE secretary of the club is pleased to announce that six out of the eight members who sat for the recent A.O.P.C. examination have passed, and they are now awaiting their call-signs. The executive of the club take this opportunity of thanking Mr. John Oile, VK2OZ, who was in charge of this section and coached the boys for the examination.

Interest is increasing every day in the club's "C Grade" examination, which is to take place on December 18.

The club is pleased to announce that the hon. executive secretary has been chosen to go to New Zealand and broadcast the Wizard Smith attempt at the motor speed record. Mr. Jack Duffy will take the portable transmitter of VK2HR with him and transmit direct from the beach in New Zealand, to be picked up at the headquarters station at Waverley, Sydney, and then by landline to Station 2UW to be rebroadcast.

The portable transmitter will be operating on a wave of 26 metres, and is at present being tested out on both 41 and 26 metres, prior to leaving for New Zealand on December 24. All reports on the transmission would be greatly appreciated by Mr. Duffy. Kindly address all reports to the club headquarters or to the station at Stanley Street, Waverley.

During the absence of Mr. Duffy, Mr. J. Hutchison, VK2JH, will be in charge of the club, and will also be in constant touch with the portable transmitter. He will be operating the headquarters station, VK2HR, at Waverley. All official transmitters and receiving stations of the club are asked to stand by for the

(Continued on page 42)

EVER READY

TORCH REFILLS & RADIO BATTERIES

WEDNESDAY.. DEC. 23

2FC

SYDNEY,
451 Metres

Early Session

7.0 to 8.15 a.m.
(Relayed to 2NC, Newcastle.)

Morning Session

10.30 to 12.30 p.m.
(Relayed to 2NC, between 10.40 a.m. and 12.0 noon.)

Note:—Race results from Rosebery will be transmitted as received. Between 12.30 and 1.0 p.m. the results will go through 2BL.

The Lunch Hour

1.0 to 2.15 p.m.

1.15: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test Match, South Africa v. Australia, relayed to the National Stations.

The Radio Matinee

2.15 to 4.30 p.m.

(Relayed to 2NC from 2.30 p.m.)

2.15: FROM THE SYDNEY CRICKET GROUND—Description of the Second Test Match, South Africa v. Australia.

4.0: B.B.C. WIRELESS MILITARY BAND (recorded)—

Le Reve Passe Helmer
Hungarian Dance Moskowski

4.8: JOSEPH HISLOP, Tenor (r.)—
The Grey House Messenger

4.11: RUDY STARITA, Xylophone Solo (recorded)—
Dance of the Raindrops Evans

4.14: A HUMOROUS INTERLUDE BY CLARKSON ROSE AND OLIVE FOX (recorded)—
P'liciman, P'liciman, Hold My Hand Kennedy

Put Your Worries Through the Mangle Wallace

4.20: THE BIG FOUR, Vocalists (r.)—
Reaching for the Moon Berlin

4.24: ARTHUR RUBENSTEIN, Pianist (recorded)—
La Cathedrale Engloutie Debussy

Early Evening Session

5.40 to 8.0 p.m.
(Relayed to 2NC, Newcastle, between 5.40 and 6.45 and 7.5 and 8.0 p.m.)

5.40: FROM THE SYDNEY CRICKET GROUND—Description of the play in the Second Test Match, South Africa v. Australia, relayed to the National Stations.

6.0: Children's Stories, by the "Hello Man" and Aunt Eily. Uncle Ted and "Sandy" will entertain.

6.45: THE HISTORY OF THE SYDNEY HARBOR BRIDGE.
Main Bridge—Erection of Steelwork, by Dr. J. C. C. Bradfield.

7.5: News, Sporting Service, etc.



HOWARD CARR, directing the Dec Why concert to-night

EVENING PROGRAMME

8.0 to 11.30 p.m.

(Relayed to 2NC, Newcastle, between 8.0 and 11.0 p.m.)

★ TO-NIGHT AT 8.0 ★ CONCERT

arranged by

DEE WHY AND
DISTRICT CHORAL
SOCIETY

(Under the direction of HOWARD CARR.)

10.15: A talk on the day's play in Second Test Match by the A.B.C. Sporting Editor, relayed through the National Stations.

10.30: Late Official Weather Forecast.

10.32: MEDITATION MUSIC.

11.30: CLOSE.

2BL

SYDNEY,
351 Metres

Opening Session

8.15 to 11.0 a.m.

10.35: THE A.B.C. WOMEN'S ASSOCIATION—

Understanding Your Child.
Knowing Australia, by Miss Lyall Hilliard.

Middy Session

12 noon to 2.30 p.m.

(Relayed to 2NC, Newcastle, between 12 noon and 1.30 p.m.)

12.0: FROM THE SYDNEY CRICKET GROUND—

A Description of the Second Test Match, South Africa v. Australia.

Note:—At approx. 12.10 the Metropolitan forecast and weather synopsis.

Between 12.30 and 1.0 p.m. race results from Rosebery will be transmitted as received.

Afternoon Entertainment

2.30 to 6.0 p.m.

2.30: WILLIAM MURDOCH, Pianist (r.)
La Campanella Liszt

2.45: THE WOMEN'S HOUR, conducted by the A.B.C. WOMEN'S ASSOCIATION.

Crochet Creations, by Mrs. Eugenia Bailey.

A Musical Interlude (recorded).

Memories of Christmas in Other Lands, by Mrs. Glanville.

Musical Items (recorded).

Postage Stamps Worth Fortunes, by Mr. S. Williams (President, N.S.W. Philatelic Society).

Moments Musical (recorded).

Concrete in the Household, by Mr. T. A. Robinson.

3.45: SELECTIONS

3.53: EMMY BETTENDORF, Soprano (recorded)—

The Love Waltz Liebmann

3.57: ELSCHUGO INSTRUMENTAL TRIO (recorded)—

Andante Saint-Saens

4.0: BOOK REVIEWS.

4.15: FROM THE SYDNEY CRICKET GROUND—

Description of the Second Test Match, South Africa v. Australia.

The Dinner Hour

6.15 to 8.0 p.m.

EVENING PROGRAMME

8.0 to 10.30 p.m.

8.0: THE SAVOYANS in Symphonies—
Selections from On With the Show, Nicholls

Spanish Tango—In a Little Cafe, Newbans

8.7: THE ELLICE QUARTET—
Serenade Schubert

Where Are You, Dream Girl Smalle
In Absence Dudley Buck

8.14: A. B. ("BANJO") PATERSON, in REMINISCENT MOOD.

8.29: THE SAVOYANS—
Selection from the Overture, Zampa, Herold

Trumpet Solo, with Orchestra—Moonlit Shadows Knight-Logan

8.36: DOROTHY NALL, Monologues—
Christmas Bells Harris

When Whittington Heard Those Bow Bells Chime Elliott

8.43: LES. HARRIS, Saxophonist—
Supplication Guarante

8.46: DOROTHY CHARLSTON, Contralto—

Two Mexican Songs, by Woodforde-
Finden—

Flower of My Heart,
Invitation to the Dance.



MRS. EUGENIA BAILEY, Women's Hour 2BL to-day.



LES HARRIS, saxophonist, 2BL to-night.



DOROTHY CHARLSTON, contralto, 2BL to-night.



EDITH COWLEY, entertaining from 2BL to-night.

WEDNESDAY, DEC. . . 23 (Continued)

8.53: ERIC MASTERS and EDITH COWLEY in a Sketch entitled—

According to the Point of View, introducing After All Hylton

9.3: PETER PIPER AT THE PIANO—Shades of Blue Claypool

9.6: THE ELLICE QUARTET—Absent Metcalf, arr. Lynes I Bring a Love Song,

Hammerstein, arr. Chappell

Bowl of Roses, Coningsby Clarke, arr. Lucas

9.13: DOROTHY NALL, Monologues—In My Young Days Hastings

Viewing the Baby Weston Lee

9.20: THE SAVOYANS in a Symphonic Arrangement of Beethoven's Sonata, Arabian Romance Pollow

Arr. Katzman

9.28: SIDELIGHTS ON OLD SYDNEY.

9.43: DOROTHY CHARLESTON, Contralto—

That's All May Brahe Only a Rose Friml

9.50: DON ROYAL, Xylophone Solo—Lonesome Little Doll Cowan

9.54: EDITH COWLEY and ERIC MASTERS, in a Sketch entitled—

Tender Hearted, featuring Song of the Highway Valerie May Tender Hearted Henty

10.4: THE SAVOYANS IN DANCE MUSIC.

10.25: Late News.

10.28: Late Weather Forecast.

10.30: CLOSE.

2GB SYDNEY, 316 Metres

Day sessions as usual.

12.0: F. J. PALMER'S COMMUNITY SINGING. FROM SAVOY THEATRE. Conducted by UNCLE GEORGE.

EVENING SESSION

8.0: Orchestra. 8.10: Oscar Larsen, Baritone—"Bachelor Ships" (Richards).

"My Love's an Arbutus" (Stanford).

8.15: Storyette of Industry.

8.17: Violin solo.

8.24: Piano solo by Clive Henry.

8.28: The Melody Duo—"Hawaiian Blue Bird" (Porter).

"Aloha oe."

8.38: Violin solo.

8.42: Piano solo by Clive Henry.

8.46: Oscar Larsen, Baritone—"The Garden of Sleep" (de Lara).

"Love's Journey" (Sanderson).

8.54: Cello solo.

8.58: The Melody Duo—"Coral Sands."

9.0: Weather Report.

9.3: Melody Duo—"River of Golden Dreams" (Shilkret).

9.10: Piano solo by Clive Henry. 9.15: Violin solo. 9.25: Cello solo. 9.30: Contralto solo. 9.40: Instrumental quartet. 9.50: Band selection. 10.0: Instrumental music. 10.45: Slumber music. 11.15: Close down.

2UW SYDNEY, 267 Metres

Day sessions as usual.

During the afternoon latest scores in the Second Test Match, South Africa v. Australia, at Sydney, at 12.5, 12.30, 12.45, 1.0, 1.15, 1.30, 2.30, 2.45, 3.0, 3.15, 3.30, 3.45, 4.0, 4.15, 4.30, 4.45, 5.0, 5.15, and 6.0 5.15: Farmer's Children's Session, conducted by Uncle Jack and Jill. 6.0: Farmer's Dinner Music. 6.30: "Farmyard Five." 6.45: Gardening Talk by Mr. S. H. Hunt. 7.0: Music. 7.15:

"Snapshots of Sports" Session, by Mr. O. Lawson. 7.30: Commentary on today's play by Capt. Ballantine. 8.0: Recital by Fritz Kreisler. 8.30: Final appearance of Mr. Fred Williamson, the well-known Adelaide Tenor, before his departure for England. 8.42: Music. 8.45: Shuron Programme, "Your Eyes." 9.0: Talk on Foreign Affairs by Mr. J. M. Prentice. 9.10: Music. 9.15: Fox Talkietones from their Miniature Theatre. 9.45: Music. 10.30: Close down.

2UE SYDNEY, 293 Metres

Day Sessions as usual. 12.15 p.m.: Description of the races from Randwick. Mr. L. Melville. 4.30: Close down.

EVENING SESSION

6.0: Auntie May and Simple Simon. 7.5: Model Aero Club, Mr. Ivor Freshman. 8.1: Overture, "Rigoletto." 8.10: Selected Studio Programme. 8.30: Popular Dance Music. 9.1: Birthday Calls and Requests. Interspersed with popular dance items. 10.1: Selection, "Lily of Killarney." 10.15: Close down.

3LO MELBOURNE, 375 Metres

Day Sessions as usual. 2.0: Oddments—"Christmas in Other Countries." Miss Moira Shackell. 2.30: The A.B.C. Women's Association, conducted by Hattie Knight.

THE RADIO MATINEE

3.0: The Radio Players—"Serenade" (Svendsen). "Polonaise," from "Eugene" (Tchaikowsky). 3.10: Fred Walker, Baritone—"Two 'Freebooter' Songs by William Wallace.

3.16: Bessie Gaunson, Violin—"Mazur" (Mlynarski). 3.20: Phil McGuire, Soprano—"Laughing at the Pain" (Gilbert). "She Hadn't Up Till Yesterday" (Haines).

3.26: Radio Players—Selection, "Tales of Hoffmann" (Offenbach). 3.38: Tom Downie, Tenor—"Home o' Mine" (McKenzie Murdoch). Request Number.

3.42: C. Richard Chugg, Flute—"Oriental Serenade" (Kohler). 3.45: Fred Walker, Baritone—"Two Songs by Easthope Martin. "The Wayfarer's Night Song." "The Crown of the Year."

3.51: Phil McGuire, Soprano—"Reaching for the Moon" (Berlin). The Latest Hit. 4.0: Tom Downie, Tenor—"Two Irish Ballads. "Little Town in Auld County Down." "The Kerry Dance."

4.16: Radio Players—Selection, "Natoma" (Herbert). 4.30: Close down.

Progress scores in the Second Test Match, South Africa v. Australia, played at Sydney, will be broadcast as they come to hand. During the afternoon results of the Lancelot Races will be broadcast as they come to hand.

5.45: The Children's Corner. 6.0: "A Magic Christmas Eve." Specially written for Radio by Violet Parkinson and presented by Freda Northcote. Characters in the Play.

Father Time Freda Northcote Grandpapa Dulcie Trevaskis Rosemary Audrey Stokes Nancy Eileen O'Leary Molly Norma Lambert 6.20: Birthday Greetings by "Little Miss Konkaburra."

EVENING SESSION

6.35: French—Madame Soward. 7.25: University Extension Board Lectures—"The Origin of the Santa Claus Legend" Mr. G. S. Browne, M.A. 7.45: Our Radio Service to Listeners—Mr. H. K. Love.

At approximately 7.0 p.m. "Stumps" scores in the Second Test Match, South Africa v. Australia, played at Sydney, will be given.

NIGHT SESSION

AN ORCHESTRAL AND CHORAL PROGRAMME 8.0: A.B.C. Concert Orchestra (Conductor, Percy Code)—Overture, "Miralia" (Gounod). "Aubade" (Massenet).

8.10: Bartleman Male Choral Society—"Ring Out, Wild Bells" (Percy E. Fletcher). "Fallen Heroes" (Cyril Jenkins). 8.18: Edouard Lambert, Violin—"On Wings of Song" (Mendelssohni). "The Girl with the Flaxen Hair" (Debussy). "Canzonetta" (L'Ambrósio). 8.26: Bartleman Male Choral Society—"Am Meere" (Schubert). "Holy Night" (Beethoven). "Ständchen" (Schubert). 8.34: A.B.C. Concert Orchestra—Ballet Music, "Rosamunde" (Schubert). 8.44: Bartleman Male Choral Society—Two Sea Chanties, arranged by A. Fagge "Rio Grande." "Shenandoah." Part Song, "The Lee Shore" (S. Coleridge Taylor). 8.50: A Piano Recital by Alexander Sverjensky (a) "Barcarolle" (Ljadoff). (b) "Prelude in B Minor" (Ljadoff). (c) "Christmas Tree Valse" (Rebikoff). (d) "Etude Tableau, Op. 33, in E Flat Minor" (Rachmaninoff). (e) "Fairly Tale in F Minor" (Metner). (f) "Fairly Tale in E Minor" (Metner). (g) "Etude in C Minor" (Stravinsky).

8.5: My Scrap Book—"Ring Lore." Bernard Cronin.

LIGHT MUSIC.

9.20: A.B.C. Concert Orchestra—Four Dances from "The Rebel Maid" (Phillips). 9.30: Rebbie Saunders, Monologues—"Don't I Wish I Were a Man" (Hilda Bertram). "Why" (Phyllis Fergus).

9.37: A.B.C. Concert Orchestra—Valse, "Artist's Life" (Strauss). 9.45: "Master Four Quartette"—"Medley of Popular Songs." "Polish Facts." 9.51: A.B.C. Concert Orchestra—Melodies from "Rio Rita" (Tierney).

10.0: Rebbie Saunders, Monologues—"Soliloquy of a Safety Pin" (Eva Ployer). "On a String" (Mildred Carey Wallace). 10.7: A.B.C. Concert Orchestra.

10.15: Test Cricket (relayed from 2FC, Sydney). Summary of the day's play in the Second Test Match, South Africa v. Australia, played at Sydney. 10.30: Weather, etc. 10.33: "Meditation Music." 11.30: Close down.

3AR MELBOURNE, 492 Metres

Day Sessions as usual.

MID-DAY SESSION.

12.15: The March of the Mongols—"The Story of the Terrible Genghis Khan." Part 4—Captain Donald MacLean. 1.13: A Relayed Description of Second Test Match Australia v. South Africa, at Sydney Cricket Ground.

AFTERNOON SESSION.

2.1: Concerto in D Major (Tchaikowsky).—Fritz Kreisler and State Opera House Orchestra, Berlin. 2.49: Rosetta Pampaloni. Conchella Veladquez and Alessandro Grande.

2.57: J. H. Squire Chamber Orchestra. Note: Progress Scores in Test Match, Australia v. South Africa, will be broadcast as they come to hand. 3.0: Education in U.S.A.—"Organisation of Education"—Mr. G. A. Osborne, M.A.

5.40: A further relayed description of Second Test Match, Australia v. South Africa, at Sydney Cricket Ground.

NIGHT SESSION.

6.0: Great Shrines of the World: No. 8, "Westminster Abbey"—Mr. J. S. Gawler. Dance Music and Variety.

6.20: Regal Trio—Will Cotterill, Tenor. Pauline Just, Whistler and Contralto. Les Barry, Baritone. "Land of Dreamy Nights" (Watkins). "Blue Ridge Mountain Home" (Robinson). "Old Man Jazz"—Whistling Solo.

6.30: Art Chapman and his Rex Orchestra—Latest Dance Numbers. 6.37: Edward Beachcroft, Tenor—"My Prayer" (Squire). "The Trumpeter" (Dix).

6.44: Art Chapman and his Rex Orchestra—Latest Dance Numbers. Solo: Selected. 6.48: Ken Mountain—"A Mountain of Mirth."

6.56: Art Chapman and his Rex Orchestra—Latest Dance Numbers. 9.3: Frances Nicholl, Soprano—"That's All" (Brahe). "Happy Song" (Del Riego).

9.10: Neapolitan Serenaders—A Trio of Novelty Instrumentalists—"Pot Pourri" (arr. Neapolitan Serenaders). Valse: "Eremonto" (Sartori). "Pale Moon" (Logan).

9.17: Edward Beachcroft, Tenor—"Friend o' Mine" (Sanderson). 9.24: Art Chapman and his Rex Orchestra—Latest Dance Numbers. 9.31: Regal Trio—"Cornfield" (Jones). "On the Beach With You" (Greer). "Twilight Song" (Wright).

- 9.37: Art. Chapman and his Rex Orchestra—Latest Dance Numbers.
- 9.44: Frances Nicholl, Soprano—"Dawn Skies" (Drummond), "Daffodil Days" (Dawson).
- 9.51: Neapolitan Serenaders—"Barcarolle" (Offenbach), "Red Butterfly" (Dinart).
- 10.0: Ken. Mountain—"A Mountain of Mirth" will supply A Further Comedy Interlude.
- 10.8: Art. Chapman and his Rex Orchestra—Latest Dance Numbers.
- 10.15: News Session.
- 10.30: Close down.

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4QG

**BRISBANE,
395 Metres**

- Day Sessions as usual.
Should the second Test Match between Australia and South Africa not have concluded, 4QG and 4RK will both remain open to broadcast a description of the play from the Sydney Cricket Ground between 9.40 p.m. and 6.0 p.m.
If the game has finished, both stations will close down as usual at 4.30 p.m.
- 7.30: French, "How to Say It. How to Put It." No 1, by Dr. E. A. D'Edgerley.
 - 7.40: Sporting Section.
 - NIGHT SESSION**
 - 8: Silkstone Apollo Club—"O Come, All Ye Faithful" (Oakley).
 - J. Thompson (Baritone)—"Star of Bethlehem" (Adams).
 - The Aloha Trio—Xmas Tunes.
 - Silkstone Apollo Club—"Christians Awake" (Wainwright).
 - D. Owens (Elocutionist)—"Home for the Holidays" (Anon.).
 - Silkstone Apollo Club—"Santa Clause is Coming in the Morning" (Jenkins).
 - Thelma Marsh (Pianiste)—"Christmas Pieces" (Mendelssohn).
 - The A.B.C. Sketch Company in a Comedy Sketch by "Banjo" Paterson—Cast: Jack, Bill, Carstairs, "Banjo" Paterson.
 - The Silkstone Apollo Club—"The Gosling" (Bridge).
 - 9: Metropolitan Weather Forecast.
 - 9.8: Silkstone Apollo Club—"Once in Royal David's City" (Gauntlett).
 - Gladys Rogers (Soprano) — "Lullaby" (Brahms).
 - The Aloha Trio—Medley of Airs.
 - T. A. Jones (Tenor)—"New Year's Eve" (Lewis).
 - The Silkstone Apollo Club—"Diadem" (Ellor).
 - Thelma Marsh (Pianiste)—"Cradle Song" (Schubert).
 - D. Owens (Elocutionist)—A Christmas Story.
 - J. Allsop (Baritone)—"Light of the World" (Adams).
 - Gladys Rogers (Soprano)—"The Gift" (Vehrend).
 - The Silkstone Apollo Club—"See in Yon Manger Low."
 - 10.0: Final News Bulletin.
 - A review of the day's play in the Test Match between South Africa and Australia will be relayed from Sydney.
 - Dance music.
 - 11.0: Close.

5CL

**ADELAIDE,
411 Metres**

- Day Sessions as usual.
During the day scores of the Second Test Match, South Africa v. Australia, at Sydney, immediately they come to hand. Descriptions of the Second Test Match will be broadcast by relay from Sydney at 12.45 p.m. and 5.10 p.m.
- 12.45: From the Sydney Cricket Ground—Description of play in the Second Test Match—South Africa v. Australia.
 - AFTERNOON SESSION**
 - 3.1: Lancefield Race Results.
 - 3.2: Mrs. G. Cameron (one of the vice-presidents of the Housewives' Association) will speak.
 - EVENING SESSION**
 - 5.10: From the Sydney Cricket Ground—Description of the play in the Second Test Match, South Africa v. Australia.
 - 7.0: Sporting service, including Lancefield Race Results and Port Adelaide acceptances for Port Cup day. Cricket Scores in the Second Test Match, South Africa v. Australia, at Sydney. Stock Exchange information supplied by the Stock Exchange of Adelaide, market reports.
 - 7.25: The 5CL Bluebird Girls' Club, conducted by "The Bird Lady."
 - 7.45: Boy Scouts' Corner—An Address to Boy Scouts.
 - NIGHT SESSION**
 - 8.0: Radio Parade of Popular Artists in LISTENERS' SPECIAL REQUEST NUMBERS.
 - Artists—
Elsie Woolley, Mezzo-Soprano.
O. H. Summerton, Cornetist.
The Neapolitan Quartette.
Signor Lombardi, Violinist.
James Wilson, Violinist.
Guido Giacchino, Cellist.
Lynnie Gilbert, Soprano.
Stan Brown, Trombonist.
Richard Smith, Xylophonist.
William Robertson, Clarinetist.
The Harmony Duo.
Gordon Hale, Baritone.
James Riley, Tenor.
Bill Runga, Entertainer.
 - 9.45: From 2FC, Sydney—Resume of to-day's play in the Second Test Match, South Africa v. Australia.
 - 10.15: News Session.
 - 10.25: Austradio Dance Music.
 - 11.0: Close.



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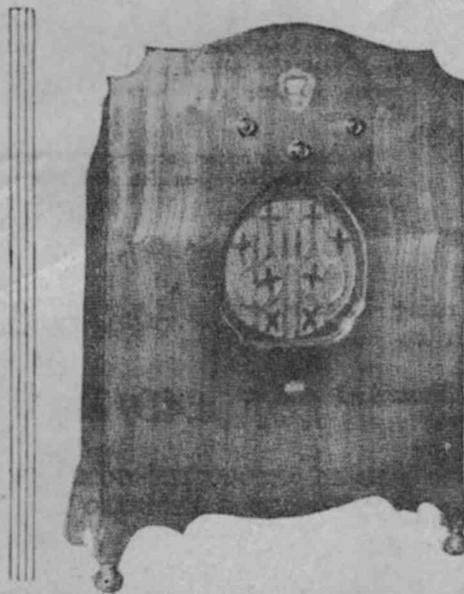
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Radio Club News

(Continued from page 38)

portable transmitter and forward all reports to Mr. Hutchison.

The Bathurst branch of the club is progressing very well, and expects to be on the air with the transmitter early in the new year. The P.M.G. Department has approved of its licence, and it is endeavoring to obtain the call sign VK2BC. This branch of the club meets every Wednesday night at No. 8 Park Street Bathurst.

All interested in the club are asked to visit the meetings at 386 George Street, Sydney, every Friday night. The general meeting begins at 7.15 sharp.

Lakemba:

THE Lakemba Radio Club held its 40th general meeting at the club rooms, 85 Haldon Street, Lakemba, on Tuesday, December 1, at 8 p.m. The president (Mr. Luckman) presided over the meeting. The attendance is getting better, but we would like to see more of the old gang. We know they are still around, so why not come along next club night? We welcome to the club the two new members, Messrs. Owen and Petty. It looks as if we will have to do away with the back seat or ask the president to make more use of the mallet. I noticed Mr. McReadie and Mr. Pollock were enjoying a joke. Perhaps they were relaxing after the sleepless nights of the test.

There being no lecture the meeting was closed at 9.15 p.m. to allow members to inspect a proposed club room. Intending members are asked to call at the above club rooms or to the hon. assistant secretary, W. G. Picknell, 79 Park Street, Canterbury.

A Christmas Appeal

THE T.B. soldiers in hut No. 17 at Randwick have headphones connected to a set at the main office, but would greatly like to be able to select their own programmes from a loud-speaker set. Appreciating the joy which would be given to these fellows by a decent radio set, Mrs. P. C. Charlton, of Alma Street, Pymble, has collected £5 towards the cost of such a set, and would be pleased to get in touch with any other charitably-inclined people who can help her achieve her ambition to get a set installed in the hut. Mrs. Charlton's 'phone number is JX 1517.



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THURSDAY Xmas Eve DEC. 24

2FC

SYDNEY,
451 Metres

Early Session

(7 to 8.15 a.m., Relayed to 2NC, Newcastle)

Morning Session

(10.30 a.m. to 12.30 p.m. Relayed to 2NC from 10.40 a.m.)

CRICKET.—Scores in the match N.S.W. v. Victoria, played at Melbourne, will be given at the fall of each wicket, lunch and tea adjournments, and stumps drawn.

The Lunch Hour

(1.0 to 2.30 p.m.)

The Radio Matinee

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

- 2.30: Announcements.
- 2.32: THE A.B.C. STRING SEPTET—
The Vagabond King, Selection .. *Friml*
- 2.40: ANNE MELHUISE, Soprano—
You Are My Heart's Delight .. *Lehar*
Twilight Land *Guest*
God Put a Rose in My Garden .. *Lohr*
- 2.47: SIDONIA BULOW, Pianiste—
Etude *Liszt*
- 2.54: THE A.B.C. STRING SEPTET—
To Love and To Hold You in My
Arms *Burke*
Janina *Drumm*
- 3.1: THELMA HOUSTON, Contralto—
The Arrow and the Song *Balfe*
My Prayer *Squire*
- 3.8: YVONNE CURTL, Violinist (r.)—
Madrigale *Simonetti*
- 3.11: THE A.B.C. STRING SEPTET—
An Eastern Romance *Haines*
Sheep and Goat *Guion*
Serenade *Mendelssohn*
- 3.21: ANNE MELHUISE, Soprano—
A Legend *Tchaikowsky*
Come a Waisaling *Shaw*
- 3.24: THE A.B.C. STRING SEPTET—
Lollita *Friml*
I Wanna Sing About You *Friend*
- 3.30: A HUMOROUS INTERLUDE BY
FRANK CRUMIT (recorded)—
Don't the Dub *Crumit*
And Then He Took Up Golf .. *Crumit*
- 3.36: THELMA HOUSTON, Contralto—
Still as the Night *Bohm*
- 3.39: THE A.B.C. STRING SEPTET—
Invano—Valse Serenade *Arnadei*
- 3.43: MALCOLM McEACHERN, Basso
(recorded)—
Aylesbury Ducks *Harding*
- 3.46: ROTORUA MAORI CHOIR (r.)—
Karannatia.
- 3.49: THE A.B.C. STRING SEPTET—
I Can't Write the Words *Fields*
Minuet—G Minor Symphony .. *Mozart*
Tea Cup Tinkles *Logan*
- 4.0: ANNE MELHUISE, Soprano—
Unto Us is Born a Son *Trad.*
- 4.3: SIDONIA BULOW, Pianiste—
Trinity Chimes *Decker*
- 4.10: THELMA HOUSTON, Contralto—
The Snowdrop *Craxton*
- 4.13: RADIO RHYTHM (recorded).
- 4.28: Stock Exchange, Third Call.
- 4.30: CLOSE.

Early Evening Session

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

- 6.45: AN ENGLISH LANGUAGE TALK
BY MR. R. M. CRAWFORD, B.A.
- 7.5: News, Sporting Service, etc.

★ 2FC TO-NIGHT AT 8.0 ★

*The A.B.C. Musical Comedy
Company in*



“WARATAH”

An Australian Christmas Pantomime
in Two Acts.

By FRED WHAITE

CAST OF CHARACTERS:

- Jack
- Baron Bluegum
- Willie (His Son)
- Giant Boolaboo (The Big, Bold, Bad Giant of Australia)
- The King Who Counts His Money
- The Queen of Hearts
- Mrs. Hubbard (Whose Cupboard is Always Bare)
- Jill and Anna (Her Daughters)
- Queen Boronia (Queen of the Australian Fairies)
- Mountain Devils, Boys and Girls Employed on the Farm, etc.
- Place: Australia
- Time: In the Good Old Fairy Days

SYNOPSIS OF SCENERY:

Prologue: A dark, deep recess in the Jenolan Caves, Blue Mts., N.S.W.

ACT I.—Mrs. Hubbard's Orange Farm at Kurrajong, N.S.W.

- On the Road to Sydney.
- Outside the Dew Drop Inn, at Windsor, N.S.W.
- Outside the Palace Gates, Sydney.
- Ballroom of the Palace, Sydney.

ACT II.—The Aerodrome, Mascot.

- Up Among the Clouds.
- The Haunted Forest.
- Outside the Giant's Castle.
- Interior of Giant's Castle.
- Entrance to Sydney Harbor Bridge.
- The Beautiful Palace of Waratahs.

Produced by Laurence Halbert.

Musical Ensembles by Madame Grieg.

The A.B.C. Orchestra, conducted by E. J. Roberts.

THURSDAY, DEC. . . . 24 (Continued)

EVENING PROGRAMME

(8.0 to 11.30. Relayed to 3AR and to 2NC between 10.30 and 11.0.)

8.0: THE A.B.C. MUSICAL COMEDY COMPANY in "THE WARATAH PRINCESS."

(See Panel overleaf)

10.0: Late Official Weather Forecast.

10.2: DANCE MUSIC FROM THE AUSTRALIA.

10.15: RELAYED FROM 3LO, MELBOURNE—A talk on the day's play in the match Victoria v. N.S.W., played at Melbourne.

10.30: DANCE MUSIC.

11.30: CLOSE.

Overture—The Mill on the Rock,

Reissiger

8.10: FRED. WILLIAMSON, Baritone.

8.13: THE A.B.C. MILITARY BAND—

Berceuse *Jarnefeldt*

Waltz—The Skaters *Waldteufel*

8.23: EILEEN BOYD, Contralto—

The Enchantress *Hatton*

In Haven *Elgar*

8.30: SIGNOR TORZILLO, Harpist—

Halian Aria *Parish Alvers*

Abide With Me *Carey*

8.37: THE A.B.C. MILITARY BAND—

Pot-pourri—Melodious Memories,

Arr. Finck

8.55: FRED. WILLIAMSON, Baritone.

9.2: THE FAMILY PHYSICIAN, by our

duly qualified Medical Practitioner.

9.17: THE A.B.C. MILITARY BAND—

Classical Memories *Arr. Ewing*

9.30: EILEEN BOYD, Contralto—

Knowest Thou That Fair Land, from

the Opera, Mignon *Thomas*

Where Corals Lie *Elgar*

9.37: THE A.B.C. MILITARY BAND—

Trumpet Solo—Australis . . *Lithgow*

(Soloist, BANDSMAN STANTON.)

Ole South *Zamecnik*

9.45: FRED. WILLIAMSON, Baritone.

9.48: THE A.B.C. MILITARY BAND—

The Doll's House Suite . . *Engelmann*

9.58: SIGNOR TORZILLO, Harpist—

Old Folks at Home (Trad.).

Love's Old Sweet Song,

Molloy, arr. Torzillo

10.5: THE A.B.C. MILITARY BAND—

Selection, Vagabond King . . *Friml*

Christmas Carols.

10.25: Late News from the "Sun" and

"World."

10.28: Late Weather Forecast.

10.30: CLOSE.

2GB SYDNEY, 316 Metres

Day sessions as usual.

7.30: Address by Mr. Charlie Taylor.

7.40: Music.

8.0: Orchestra—

"Carnaval Overture" (Dvorak)

8.10: Violin solo—

"Estrellita" (Ponce).

8.15: 2GB Male Quartet singing Christ-

mas Carols—

"Far Away" (Rivers).

"Christians, Awake."

8.25: Orchestra—

"Spaventa" (Van Parry).

8.30: Jack Lumsdaine, The Radio Rascal.

8.40: Orchestra—

"Love's Last Day" (Benatsky).

8.45: Soprano solo—

"Danny Boy" (Weatherley).

"I Know Where I'm Going" (Hughes)

8.55: Piano solo—

"Bees' Wedding" (Mendelssohn).

9.0: Waldos Shoe Interlude.

9.15: 2GB Male Quartet—

"John Peel" (arr. by Fletcher).

"Mammy Lou" (Cartwright).

9.25: Jack Lumsdaine, The Radio Rascal.

9.35: Orchestra—

"Adoration" (Bianco).

9.40: Violin solo—

"Serenade" (Drda).

9.45: Organ solo—

"Chanson" (Friml).

9.50: Tenor solo—

"Drink To Me Only" (Johnson)

9.55: Novelty Orchestra.

10.0: Instrumental Music.

10.15: Slumber Music.

11.15: Close down.

2UW SYDNEY, 267 Metres

Day sessions as usual.

If the Second Test Match is still unfinished, scores and comments will be given as usual during the afternoon.

5.15: Farmer's Children's Session, conducted by Uncle Jack and Jill. 6.0: Farmer's Dinner Music. 6.30: Fox-Hoyts Radio Club. 6.40: Music. 7.0: Request Items. 7.30: Musical Programme. 8.0: Special Recital of Xmas Songs, Ballads, and Sketches. 9.0: Talk on Foreign Affairs. 9.10: Music. 10.30: Close down.

2UE SYDNEY, 293 Metres

Day Sessions as usual.

EVENING SESSION

6.0: Auntie May and Simple Simon. 7.1: Sporting Talk. Mr. Oscar Lind. 7.30: Sporting. 8.1: Overture, "Carmen." 8.10: Studio Programme. 10.1: Light opera selection, "Gondoliers." 10.10: Music. 10.15: Close down.

3LO MELBOURNE, 375 Metres

Day Sessions as usual.

WOMEN'S SESSION.

2.0: A Woman Sees New York— "Women's Social Residential Clubs"— Mrs. E. M. Beveridge. 2.30: A Goodwill Message, from the Bureau of Social and International Affairs— "Xmas Greetings from Overseas"— Miss Nora Collisson, Secretary of the Bureau.

THE RADIO MATINEE.

3.0: Austral Brass Band— Selection—"Lucia di Lammermoor" (Donizetti). 3.10: Merna Stewart, Soprano, and signor Cerasoli, Harpist, in— Ten Minutes of Old-time Melody. 3.20: Amy Stringer— And Her Mandoline. 3.26: Austral Brass Band— March: "Under Allied Banners" (Ollerenshaw). Waltz: "Will o' th' Wisp" (Bourne). 3.34: "The Master Four"— In Harmonised Numbers: "Toytown Party." "Stealin' Thru." 3.40: Edith Parnell, Piano— "Mazurka in G" (Chopin). 3.43: Merna Stewart, Soprano, and Signor Cerasoli, Harpist, present— A Cameo of Modern Music. 3.53: Austral Brass Band— Fantasia: "Gems of Harmony" (Arr. Wagner). 4.0: Amy Stringer— And Her Mandoline. 4.4: "The Master Four"— "I Know of Two Bright Eyes." "Sweetheart." 4.10: Austral Brass Band— Ballet Music from "Coppelia" (Delibes). 4.20: Acceptances and barrier positions for the V.A.T.C. Races at Caulfield on Saturday (Boxing Day). 4.30: Close down.

During the afternoon progress scores in the Second Test Match, South Africa v. Australia, will be broadcast as they come to hand.

5.45: The Children's Corner. 6.0: Our Christmas Pantomime, "Up the Chimney." A Christmas Fantasy produced by "Bobby Bluegum," "Ector and Orace." Cast: Dorothy, Elise, Ernest, Flossilda, the Fireplace Fairy; a Fairy, Santa Claus, Max, the Foreman of Santa Claus' factory; Bingo, the Police Force of Santa Claus' Land; Bog Bingo, Dog Jingo; Fairies and Workmen. Time: The Night before Christmas. Place: Santa Claus' Land. 6.45: "Bobby Bluegum," "Ector" and "Orace" wish you Many Happies.

EVENING SESSION.

(Relaying to Station 2CO, Corowa, until 8 p.m.) 6.35: At Home and Abroad, by— "The Watchman." 7.25: Christmas in Strange Lands— "How Some People Keep It"— Mr. George Matthews. At approximately 7 p.m. "Stumps" Scores in the Cricket Match, New South Wales v. Victoria, played at the Melbourne Cricket Ground, will be given.

2BL SYDNEY, 351 Metres

Opening Session

8.15 to 11.0 a.m.

10.35: THE A.B.C. WOMEN'S ASSOCIATION—

Christmas Eve Suggestions.

Health Education, by Miss I. Beetson.

Midday Session

12 noon to 2.30 p.m.

Note:—Scores at lunch and tea adjournments and stumps drawn in the match, N.S.W. v. Victoria, played at Melbourne.

Afternoon Entertainment

2.30 to 5.45 p.m.

2.30: Recordings.

2.42: SYD. BRIGHT, Banjoist (r.)—

Banjovality *Bright*

2.45: ALLEN McQUHAE, Tenor (r.)—

Sound of the Irish Bells . . . *Trent*

Come to the Fair *Martin*

2.51: Selections.

3.0: FRAULEIN LANGE will give a German Language Talk.

3.15: Dance Music from Farmer's.

3.22: FRITZ KREISLER, Violinist (r.)—

La Vida Breve *Arr. Kreisler*

3.25: SIGRID ONEGIN, Contralto (r.)—

The Fairy Pipers *Breuer*

3.28: Dance Music from Farmer's.

3.36: CLAPHAM and DWYER, Comedians (recorded)—

On Photography *Dwyer*

3.42: Dance Music from Farmer's.

3.50: PETER DAWSON, Baritone (r.)—

The Gay Highway *Drummond*

The Vagabond *Williams*

3.56: Dance Music from Farmer's.

4.2: Recordings.

4.12: Dance Music from Farmer's.

4.19: ANNA CASE, Soprano (recorded)—

Doreen *McGee*

Alleluja *Mozart*

4.25: Dance Music from Farmer's.

The Dinner Hour

6.15 to 8.0 p.m.

EVENING PROGRAMME

8.0 to 10.30 p.m.

(Relayed to 2NC, Newcastle, between 6 and 10.30 p.m.)

8.0: THE A.B.C. MILITARY BAND,

conducted by J. PHELOUNG—

March—State Street . . . *Whitey*

NIGHT SESSION.

7.48: Transmission from Mordialloc

The Official Opening of the Mordialloc Carnival by the Prime Minister.

Christmas Eve Programme (From the Studio.)

8.0: A.B.C. Concert Orchestra—"A Christmas Carol" (Coleridge Taylor).

8.10: Christmas Carols, sung by The A.B.C. Carol Singers.

8.20: A Descriptive Novelty—Isobel Ann Shead describes the Christmas Eve shopping rush.

8.30: A.B.C. Concert Orchestra—Fantasy: "A Dream of Christmas" (Keteibey).

8.40: "Scrooge," Adapted from Charles Dickens' "A Christmas Carol," by J. C. Buckstone.

Characters: The Ghost of Jacob Marley, Ebenezer Scrooge, Bob Cratchitt (His Clerk), Fred Wayland (His Nephew), Mr. Middlemark, Mr. Worthington, Mrs. Cratchitt, Scrooge's Sweetheart, The Cratchitt Children—Martha, Belinda, Peter, Tiny Tim, The Boy Scrooge, Fanny (His Sister).

Scene: "Office of Ebenezer Scrooge."

Time: A Foggy, Frosty Christmas Eve. Produced by Maurice Dudley.

Appropriate Carols by the A.B.C. Carol Singers.

9.20: A Christmas Fantasy, with The Southern Choral Society and Stanley Brookes.

9.30: "The Fairy Bells," played by Dave Morrison.

9.35: Christmas Carols, sung by The A.B.C. Carol Singers.

9.45: Christmas Message, A.B.C. Concert Orchestra—"In a Monastery Garden" (Keteibey).

10.0: Christmas Greetings, "In a Clock Store" (Orth).

10.5: "The Fairy Bells," played by Dave Morrison.

10.10: A.B.C. Concert Orchestra—Trumpet Solo: "The Star of Bethlehem" (Adams).

Soloist: J. Geary, Sheffield Shield Cricket. (Relaying to Station 2FC, Sydney.)

10.15: Resume of the day's play in the match. New South Wales v. Victoria, played at Melbourne Cricket Ground.

10.30: Weather, etc. 10.35: Dance Music.

12.0: Christmas Carols, sung by The A.B.C. Carol Singers.

12.15: Close down.

3AR

MELBOURNE, 492 Metres

Day Sessions as usual.

12.1: Community Singing transmitted from the Melbourne Town Hall. Conductor: Mr. Frank Hatherley.

AFTERNOON SESSION.

2.0: Description of Sheffield Shield Cricket Match, Victoria v. New South Wales, at Melbourne Cricket Ground.

4.15: A further description of Sheffield Shield Cricket Match, Victoria v. New South Wales, at Melbourne Cricket Ground.

6.0: Weather data. Shipping information. Stump Scores and Close down.

EVENING SESSION.

6.15: Dinner Music.

7.32: Sporting Results, Acceptances and Barrier Positions, also Selections for the V.A.T.C. Races at Caulfield on Saturday, December 26, by Eric Welch.

NIGHT SESSION.

8.0: (Relaying to Station 2CO, Corowa)—Christmas Pantomime, "Princess Waratah."

Book and Lyrics by Fred. Whaité. (Relayed from Station 2FC, Sydney). (Programme not to hand).

10.15: News Session.

10.30: Close down.

4QG

BRISBANE, 395 Metres

Day Sessions as usual.

1.20: Luncheon scores in the Sheffield Shield Match between New South Wales and Victoria. Note.—If the second Test Match has not concluded a description of the play will be relayed from the Sydney Cricket Ground between 1.15 p.m. and 1.30 p.m.

Progress scores in the Sheffield Shield match between New South Wales and Victoria will be announced at intervals.

EARLY EVENING SESSION

6.15: Christmas Hymns for the children, by St. Barnabas' Sunday School Scholars.

6.45: Combined Bedtime Story-tellers of 4QG will hold a party in the Studio.

7.30: The Royal Automobile Club of Queensland will provide a special holiday road bulletin for motorists.

7.40: News and Sporting.

NIGHT SESSION

8.0: The "Radio Sparks" will present a bright, amusing continuous entertainment, featuring The Monocled Males (singers of quartettes), Little Hermie (Comedian), Phyl Maude (Novelty Pianiste), Harry Borradaie (Entertainer), Pat Malar (Soubrette), Rae Cahill (Songs at the Piano), David Felsman (Bass-baritone). Incidental music by the A.B.C. Concert Orchestra.

9.15: Canon D. J. Garland will describe a personal visit to the little town of Bethlehem.

9.35: Frank Coughlan and his Carlton Orchestra will provide a little dance music.

9.55: Aviation Notes, by Major W. E. Gardner. A resume of Christmas activities in the air.

10.45: A Musical Interlude from the Studio—David Felsman Basso—"Ave Maria" (Cooper), H. Scott MacCallum (Violinist)—"Cavatina" (Raff).

Phyllis Dauth (Soprano)—"Peace" (Schubert).

A Few Minutes of Humor.

10.0: Final News Bulletin.

10.15: Dance Music.

10.30: The A.B.C. Concert Orchestra—"A Dream of Christmas" (Keteibey).

The Metro Male Quartette—"Adeste Fideles" (Hammerel).

Harry Borradaie (Elocutionist)—"Christmas at Sea" (Robt. Louis Stevenson).

The Concert Orchestra—"The Sacred Hour" (Keteibey).

Will Donald, junr. (Tenor)—"The Star of Bethlehem" (Adams).

The Metro Male Quartette—"Hark the Herald Angels."

The Concert Orchestra—"Sanctuary of the Heart" (Keteibey).

Ernest Harper (Baritone)—"Nazareth."

The Metro Male Quartette—"We Have Seen His Star in the East" (Simper).

H. Scott MacCallum (Violinist)—"The Lost Chord" (Sullivan).

Tom Muller (Entertainer)—"Christmas Bells."

The Concert Orchestra—"Christmas Carols."

Harry Borradaie (Entertainer)—"Christmas Eve on the Overland Express" (Murphy).

Max Muller (Cellist)—"Largo" (Handel).

The Metro Male Quartette—"Christians Awake."

The Concert Orchestra—"Evening Star" (Wagner).

Will Donald (Tenor)—"The Holy City" (Adams).

The Metro Male Quartette—"While Shepherds Watched."

The Concert Orchestra—"Dawning Day" (Fronmel).

12.1: The Solemn Midnight Mass will be broadcast from St. Stephen's Roman Catholic Cathedral.

1.15: Close.

5CL ADELAIDE, 411 Metres

Day Sessions as usual.

During the day scores of the Sheffield Shield Match, N.S.W. v. Victoria, at Melbourne, will be broadcast immediately they come to hand.

7.30: "Silvius" selections for Saturday's races at Cheltenham and Caulfield.

7.35: XMAS EVE, Xmas Eve Recital of Seasonal Recordings.

8.0: A SPECIAL CHRISTMAS CAROL PROGRAMME

By The Moonta Cornish Choir (75 Voices), conducted by Mrs. J. L. Davey, with Novelty Instrumental and Vocal Selections by The Lyric Male Quartette and The Plaza Trio. The Plaza Trio—Overture of Popular Selections.

Christmas Carols by The Moonta Cornish Choir—(a) "While Shepherds Watched." (b) "The New Born King." (c) "Awake With Joy."

The Plaza Trio—Selections. The Lyric Male Quartette—Negro Spirituals. The Plaza Trio—Selections. Moonta Cornish Choir—Xmas Carols: (a) "It Came Upon the Midnight Clear." (b) "Hark, What Music Fills Creation." (c) "Hail, Ever Hall."

The Plaza Trio—Selections. Lyric Male Quartette—Request numbers. Moonta Cornish Choir—(a) "Calm on Listening Ear of Night." (b) "Joy to the World, The Lord Is Come."

The Plaza Trio—Selections. Lyric Male Quartette—Request Numbers. The Plaza Trio—Popular numbers. Moonta Cornish Choir—(a) "High Let us Swell Our Tuneless Notes." (b) "The First Noel."

The Plaza Trio—Novelty Selections.

10.15: News Session.

10.25: Special Christmas Eve Reproductions.

11.0: Close down.

7ZL HOBART, 517 Metres

Day sessions as usual.

7.45: Miss M. Rowlands, Talk: "A Joyride Round the World."

8.0: A Christmas Story.

9.5: Christmas Medley in reproduction presenting Christmas Eve in the Old Home-stead, A Jolly Christmas, Christmas Eve in the Barracks.

10.0: News.

11.0: Close down.

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Also, at least one of these four issues contains a special constructional section giving complete details and diagrams for a tested and tried-out receiver of new design and performance, and another contains a Trade Bulletin—a special section dealing with the latest developments in the radio industry. Two of the four issues (fortnightly) contain short-wave notes by our own special observer, Mr. R. N. Shaw, and an extensive and complete list of all broadcasting stations in Australia, with wavelengths, schedules, etc.

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READERS' QUERIES ANSWERED

DXIA (Auckland).—The transformer will serve although slightly under the power originally specified. Price's Radio Service, of Angel Place, Sydney, will probably supply the plan for a small charge of, say, 6d. Feel sure, however, that once you obtain the base and the components you will be able to fit them up as shown in the photographs without difficulty.

H.F. (Haberfeld).—Well designed and constructed cabinets, such as the better quality types turned out by leading cabinet factories, are capable of acting as efficient baffles, and a loud speaker fitted in one of these cabinets will be capable of giving excellent results. Some cranks prefer a large baffle board of inch thick celotex, about five feet square. Theoretically this practice should give the best possible reproduction of low notes. A solid inch thick board in one piece will serve instead of the celotex.

W.S. (Darlinghurst).—Any of the radio schools will issue a diploma or certificate to their successful pupils, but if you don't want to take a course of study these certificates will not interest you. Again, the Wireless Institute conducted some examinations some time ago. Probably they would issue you with the kind of certificate you require. Get in touch with the secretary at 15 Castlereagh Street.

Dissatisfied (Tamworth).—(1) Can only guess at the valves being sick. (2) Get the set into decent working condition and you should be able to get the same results as about 2000 other readers did who worked from the same instructions. (3) Check over and find out what components are faulty. (4) There was no need to deviate from the original instructions in any respect. (5) No. (6) All the hints we could ever imagine have already been published and since they seem to have been sufficient for 99 per cent. of our readers it appears to bear out our idea that probably one of your valves is below standard, the batteries flat, speaker stuck, aerial not sufficiently insulated, earth not effective, or something like that. The mere fact that originally on completion the set gave such clear, undistorted, and terrific volume is certain proof that the trouble lies at your end, not ours.

A.W.K. (Artarmon).—The circuit shown is O.K. and should give satisfactory results. However, if you want to be certain of immediate satisfaction without any experimenting, you would be safer with the original circuit, as in that case the comparatively high bias on the power valve means that resistance values are not nearly so critical as with the pentode.

J.A.D. (Waratah).—The simplest and quickest way out of the trouble is to take back the speaker and have it exchanged for the type specified. There is no other easy way of accommodating it in the set.

L.M.H. (Sandgate).—Afraid there is no easy way out of the trouble. If you fit fixed condenser permanently it is probable that the set will not tune down low enough. Since we take it that you do not want to have three switched for the fixed condenser, we can only suggest that you add more turns to the secondary windings of the coils. About ten or fifteen turns will be required on each unit. Add the same number of turns throughout, and try to keep the tension and the spacing of the windings the same. There should be no need to insulate the last condenser in the manner mentioned. Try the P.F. valves without any bias, returning the C bias lead to earth instead of to the eliminator 2 volt tapping. R.F. chokes in the screen leads may make the job more stable, but if fitted you must also arrange by-pass condensers from the screens to earth. You are certainly getting good results, but even these may be improved with careful matching of the tuning circuits.

E.P. (Belmore).—The reason why you cannot pick-up any station below 2KY is beyond us, particularly since it appears that your condensers are not fully open when you are on 2KY, as would be the effect if your coils lacked sufficient inductance.

A Beginner (Maroubra).—Other things being equal, it is probable that the use of a power pack with a set using headphones will merely result in your suffering a headache from the hum which will be heard.

A.C.W. (Gyva).—The system of coupling is all right, but apparently there is some other trouble in your set. We feel sure that even if you fit a transformer the trouble will still persist. However, your best plan is to try the experiment and see for yourself whether the tuned anode is responsible or whether there are other faults.

Cousin Jack (Stanhope).—Would suggest you use the "Super-six" circuit, but with the Philips valves and coils suggested by them. Otherwise the coil specified by us will do equally well. Thanks for the good wishes. The gentleman in question is now definitely settled on the other side, and we doubt if he will ever return to his native country.

Corrigenda (Willoughby).—Probably a fixed condenser of 0.01 or so between one of the leads and earth at half-way between the speakers will cure the trouble. If not try one from each lead. Otherwise try the condenser between the leads at the far speaker. If all else fails run a third wire closely alongside the others and earth it.

M.U.G. (Richmond).—Yes, the tuned anode coupling is quite O.K. for the screen grid valves. The bias should be between 1 and 2 volts, and the present biasing arrangement should be O.K. You may still strike untold snags on changing the valves, but as you say, the 1½ amps is terrific.

W.A.C. (Broken Hill).—Instead of earthing the centre-tap you might try earthing it through a 100,000 ohm grid-leak. The trouble is hard to explain, and personally we have never encountered it, although we have handled quite a few of such sets. The blue glow in the pentodes is O.K., as detailed in a recent issue. The buffer condensers will only affect hum when the set is tuned to a station. Is the set quite silent between stations? If so, the buffers should help, but otherwise there is some other trouble.

S.K. (Rockhampton).—If the set was built exactly as detailed by us it should not suffer from hum, and it should give good results from interstate stations. Unfortunately, from your remarks we are quite unable to pick out a clue which will indicate to us where the trouble may be. Possibly the detector valve is a bit sick. Even valves which light up all right, have a nasty habit of spoiling results with hum and lack of volume generally. To fit a pick-up insert a double circuit jack in the lead between the bottom of the grid coil of the detector and earth.

W.H.S. (Lithgow).—Trust article has now appeared as requested. You will probably find that the 235 will replace the 224 in your set, but at the same time it may not give any improvement in performance. A new volume control is, however, a simple matter to fit and should be worth while.

E.T.S. (Surry Hills).—We regret that the information published was all that we have on the subject. Why not write to the agents direct? They cannot do worse than refuse the information.

J.D. (Bondi).—We would only suggest replacement of one or two of the screen grids with variable- μ valves. These can be fitted without any alteration, but if so desired a more effective volume control can be arranged by incorporating something on the lines of the type shown in the circuit of the "Improved 1930 Four". Similarly the fitting of an F43 should be carried out as shown in the "Improved 1930 Four", and on no account do we recommend you to attempt to load up the pentode with the 550 volts specified by the makers. The valve will stand the voltage doubtless, but all sorts of uncalculated overloads can occur in actual practice, making it a far better proposition to keep the voltage down to 400 or 450. Originally the 235 was rated to draw about 12 milli current in all, but the samples so far placed on this market do not draw more than half this current.

J.L.M. (Strathfield).—There are various transmitters at Pennant Hills working under the call sign of 2ME. One of these has a wave-length of about 193 metres and can often be heard calling the trawlers on Sunday evenings on this wave length. It appears to us that this station is the one you heard. When testing a station it is often a practice to read from a paper or book and then count up from one to ten and close down. Our only suggestion is that the station you heard would be 2ME testing.

G.A.R. (Warrimool).—If yours wasn't merely one of about 500 letters in the basket waiting to be answered we'd write you a decent answer of about a page. Your first question is, "Am I an optimist?" The answer is in the affirmative. Personally we've always had kind-hearted landlords, secondly we've never had to rely on other people's scrapped junk to "make do," and consequently we haven't the slightest knowledge of the subject in question. In a case like yours we'd feel inclined to go to the nearest electrical (not radio) expert and get his advice. The transformers can be used as shown in the circuit, but we'd point out that probably a high gain triode would make a better detector in every way and give better overall results. The friend's speaker is one thing you ought to pinch next time he is not looking. Sad to say the valves don't suit the climate or something of the sort, and neither traders nor home builders will tolerate them. As you may have noticed in the

Christmas issue we step on to 4 volts again, but we are not at all optimistic about the reception which will be afforded to them. For coils for the set would think you will not do better than the ordinary coils we specify. We fancy that by the time the article in question is completely finished you will find the English adopting lots of American practice and the American adopting lots of English practice. The proof of the pudding is in the eating thereof and we've been fortunate enough to hear new models from both countries, and although terribly roughly built, the Yanks can certainly pull the far distant stations in, with selectivity, ease of control, and pleasant tone, and, no hum, and what's more, they run for years without attention. However, as we said before, both countries are learning a lot from the others and in time the position may be reversed.

Baby Aster (Esmer).—Generally speaking, we find it better not to recommend readers to try to improve upon the commercially-made sets. If you let us know what type of valve you have at present in the last socket we can easily let you know what type of pentode will replace it or any dealer could let you have the information. In fitting the pentode the only alteration necessary will be an extra lead from B plus maximum to the terminal on the side of the pentode. The pentode should give you slightly greater volume with slightly greater battery consumption, but we doubt if it will give as much extra gain as an extra audio stage.

E.W.L. (Strathfield).—As originally described the Lake One-valver was not intended for mounting on an aluminium base, but there is no concrete reason why you should not build it up on an aluminium base if so desired. To reduce the capacity of the condenser you will need to remove nearly one-third of the fixed or the moving plates, whichever are the easier to remove. The actual proportion will be as 23 is to 35, so you see you need to remove two plates out of each seven fitted.

General.—Mr. E. W. Lee, of Roubais, Llandilo Avenue, Strathfield, is desirous of obtaining an issue of 13/2/31. Anyone able to help this reader is invited to write him direct at the address given.

R.H.B. (Parramatta).—You will need to remove some turns from the main coil winding in order to bring ZUW up further on the dial. With the tapped coil specified it should be an easy matter to get the desired effect by adjusting the clips nearer to the centre of the coil. Personally, we think you are getting excellent results when you can get all the local stations with so little interference.

Munda (Girilambone).—We regret that we are unable to put you in touch with any firm which has second-hand but serviceable carbonets on hand. Probably your best plan would be to communicate with the agents direct.

E.R.H. (Newcastle).—We regret not having any information about the use of the out-of-date valve with the reflex circuit. Can only suggest you experiment for yourself in the matter. Doubt if a C battery would be needed under the circumstances. The 00025 will be O.K. for reaction. On further thoughts, it seems most unlikely that the valve will be suitable.

E.A.P. (Brisbane).—Your results are quite normal, and we would imagine that your wave-trap is about as effective as possible. Selectivity is usually a problem with the earth on the aerial terminal, and we do not know of any easy way of retaining the additional pick-up without also retaining the interference trouble from the nearby transmitter.

SEEKERS OF INFORMATION

Readers are requested to limit the number of their questions and to be as concise as possible. Special circuits cannot be supplied in every case, nor can information be given over the telephone or by letter. Those readers desiring information on subjects beyond the scope of Information Service are invited to make suggestions for articles covering the particular phrase or technique or practice or which information is lacking.

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W.B. (Burwood).—Whilst we don't want to offend you or be rude or anything like that, we would like to point out that the question you ask has been answered many dozens of times in these columns, and also dealt with in the article that introduced the set in question, as well as at least six other articles. The current flowing through the pentode then flows through the speaker field in the superhet., so that 42 m.m. is the total drain. Adding more valves still means that the drain is not increased, as the current for the valves is taken from the high tension supply after it has passed through the pentode. If you look up the circuit you will find that the rectified current has only a couple of ways in which it can go, one being through the high resistance grid leaks, which can only pass a mill or two, and through the pentode valve, where the total screen and plate current cannot exceed 40 m.m. With the variable-mu job we put a voltage divider across the output, and this took some current.

H.S. (Adaminaby).—At first glance it looks as though we are clean bowled, but we think you are stretching things a trifle. From what we remember 90 volts is the maker's recommendation, but we doubt if they state that a voltage exceeding the maximum of 90 volts should not be used. Undoubtedly a technical error has been committed, but fortunately in actual practice the set still works perfectly, and we've never heard of a case of the valve objecting to the slight overload. The other effect is more or less normal, and is simply due to the extra resistance in the circuit.

S.H.L. (Wellstonecraft).—Your second last paragraph nearly broke our heart. The "1930 Four" is a Loftin-White circuit in so far as it employs an audio system known as "direct-coupled" and covered by patents held by Loftin and White. This has been explained many dozens of times. However, we're glad to hear that you are so proud of your set, and would suggest that your troubles are due to a faulty filter condenser. It would be a good plan for you to work out the fitting of a screen-grid r.f. stage. This would give you some interesting work, and would greatly improve results without much expense.

J.S. (Stammore).—The circuit you require is out of date, but we think you will be able to obtain one from a pamphlet issued by the Carborundum Company, which you should be able to procure direct from the agents, Messrs. Eliza Tinsley Co., of 484 Kent Street, Sydney.

G.R. (Paddington).—In the light of modern ideas the circuit is simply crazy, and we cannot recommend you to touch it. Have no idea of the coil winding data, and cannot trace them.

R.F.C. (Glebe).—Recent conditions are fair. Apparently the connections to the reaction coil are reversed. At any rate, try them the other way round. You don't stand a chance of getting strength or range until you get the reaction into correct operation.

New Era (Crow's Nest).—Can't make head or tail of your trouble with the set with hiccoughs. The usual thing to suspect would be the grid-leak, and perhaps the grid-condenser. Possibly you have got hold of a valve with some peculiar complaint. It must be most disappointing to you because of the excellent results with the first set you built from the same instructions. We've read right through the letter again, but still feel pretty helpless.

J.M.K. (Balmalm).—It appears to us that you have tried every conceivable way of fixing the set, and we can only suggest that you call in a reliable service man to help you. Are you sure that the trouble is not simply that the set is not operating correctly on the lower wavelengths, thereby making it necessary for you to use too much reaction in an attempt to bring up the strength?

A.G.T. (Bathurst).—(1) Yes, add the extra r.f. (2) If you are fitting a modern type dynamic speaker you will not need the centre tapped choke, as the speaker will be fitted with the push-pull input transformer. If you wanted to use a magnetic speaker or something like that you could feed the push-pull valves through the centre-tapped choke and take the speaker leads from each plate. The speaker fields draw from $\frac{1}{2}$ to 1 ampere. The speaker can be fairly easily altered.

J.J.S. (Richmond River).—The only really satisfactory method we know is to use the audio transformer as a choke as shown at the head of these queries a few weeks ago. The date of the issue was August 14. If you do not happen to have the issue on hand it can be obtained from this office at the usual price of 3d. plus 1d postage.

Morse (Petersham).—It is a difficult matter to find an easy way to fit a screen grid valve into a two-valve set to improve results. For best results the detector should be followed by resistance coupling as in the short-wave set published some few weeks ago. Short-wave adaptors are right enough for battery operated sets, but we do not recommend them for a.c. jobs. (3) For such a poor location it will be necessary to employ a stage of band-pass filter ahead of the first valve as employed in the "Hi-power 2" of some months ago. To obtain really satisfactory results a superhet is desirable. With the advent of 2SM and 2CH the selectivity problem may become acute.

New Era Five (East Matildon).—We cannot understand how the switch can fail to cut off all reception. If the switch makes definite contact with the lead running to the water pipe it should most certainly stop any chance of your set being damaged by lightning, but similarly it should cause instant cessation of radio reception.

H.L.L. (Campsie).—The "Forty Four" would make a suitable set for fitting in a car. Of course the running of the engine will interfere with reception unless you take several precautions to cut down the radiation of noise from the spark plugs and ignition system.

J.W.C. (Wellington).—We cannot possibly recommend you to use three element valves as r.f. amplifiers. The practice is now quite out of date. A very small condenser is required for the position you mention. About 0001 should serve.

A.H.D. (Childers).—The use of a rotary converter is by far the most satisfactory means of attacking the problem of running from d.c. mains, the cost being the chief objection to the idea. Results will depend to a great extent upon the quality of the converter. Prices of converters run about £20 to £30. Write O'Donnell and Griffin, 51 Druitt Street, Sydney, for price lists and full particulars.

R.D.B. (Strathfield).—We cannot see any trace of the article you mention, although we, too, have an idea it appeared some time ago. Have been right through our index without seeing any mention of it.

T.G.L. (Lithgow).—The circuit now appears O.K. A pentode should give you slightly greater volume and sensitivity, but it will also take far more current from both your A and B batteries.

General.—Mr. J. Smith, of 77 Morris Street, Summer Hill, is desirous of obtaining the issue with the full details of the "1930 Three." Anyone who can assist this reader is invited to get in touch with him direct at the address given.

J.B.K.S. (Summer Hill).—Notice has been inserted as desired. The "1930 Three" used the valves mentioned. For an aerial the right length of wire depends upon the set used, the distance from the nearest transmitting station and many such factors. There is nothing like a little experimenting in this direction. Too large an aerial means interference between stations. Would suggest 50 feet long at a height of about 30 feet.

L.W. (Rinwood).—You are wrong in saying that the maker's recommendation is 350 volts. The ratings shown in valve catalogues show the absolute maximum voltage at which the valve should be operated. Owing to the internal construction of high-powered pentodes they are not capable of withstanding a very great overload without damage. Since mains supply varies from about 190 to 230 volts, and you have a step up transformer of about 3 to 1 ratio, any variation in the line voltage is trebled. Why not carry out our recommendation? It was not given just for fun. We happen to know more than you might imagine about high voltage pentodes working at full voltage. With 400 odd volts on the plate the pentode is capable of giving greater power than can be handled by any normal speaker, or tolerated by any household. Again if you have the full 550 together with a couple of hundred on the centre tap you need a high tension of 750 volts, but where will you get filter condensers to stand up to this voltage? The answer to your question is "No."

L.A. (Dulwich Hill).—A series of articles dealing with the suppression of interference from electrical machines appeared about February last. Unfortunately in a case such as yours there is little you can do. An arcing switch is simply a small transmitter radiating signals on all wave-lengths. Sparking probably also occurs with the hairdressers' machinery, the flashing signs and the other machinery. The Radio Inspector, of 219 Castlereagh Street, is always keen to help listeners to get the best possible results, but in cases such as you mention there is not much that he can do to help. To attack the trouble you should work on the machines, not your own set. Condensers of 1 mfd. capacity can be fitted across the flashing signs, but all this class of work must be carried out by a licensed electrician.

W.J.S. (Randwick).—The trouble appears to be due to a faulty valve. Would suggest you take the valves to a reliable dealer and have him test them with meters. About 90 per cent. of radio troubles are due to faulty valves, as they are about the only parts affected by use. There is no need for the set to be tampered with if the valves are the trouble.

J.A. (Coogee).—Naturally when you say that several experts have examined your set and still failed to trace the trouble we feel rather helpless at this distance, without being able to see the set and without having the slightest clue to the trouble. We would suggest you obtain a small piece of wire and fit it across between the aerial and earth terminals, or leads. If the hum immediately stops you can take it that it is picked up from an outside source, but if not then it is in the set or the power supply. Would suspect that a wire has dropped off a connection inside the set if the hum continues. Possibly the filter condensers have become open-circuited, but this is unlikely. Would think your best plan is to call in a radio service expert who guarantees his work. We believe one of our advertisers carries out this class of work on a "no results, no pay" plan.

Searcher (New Zealand).—Sorry, but there seems little hope of getting a copy of the issue with the "Super-Six" description. How about having a go at the "Infinite Six," probably it would suit your requirements even better than the original job? Will, however, insert a notice to see if it will help you obtain the original.

General.—Mr. George Ferguson, of Box 23, Rawene Hokianga, New Zealand, would like to obtain the loan of the issue containing the constructional article on the "Super-Six" battery set. Anyone interested is invited to get in touch with this reader direct.

G.W.A. (Gileandra).—If you are going to use a large aerial with a ganged job you should cut a 00023 mfd. fixed condenser in the aerial lead-in. From your remarks it appears to be that probably your condenser plates are badly bent or the rotor is out of centre with the fixed plates. The coils and the condensers make up the tuning stages, and the trouble lies in either coils or condensers. Whichever circuit has too much inductance or capacity can be brought into line by the removal of turns from the coils, having the same effect as setting the rotors farther out from the stators. The matching of the coils has been described about ten times in the last three months. Have a look at any of the recent constructional articles, such as the improved "1930 Four."

D.L.T. (Canterbury).—Trust your reply has already appeared. It passed through our hands several weeks ago, but must be held up waiting space for publication. The pentode used as a detector has an undistorted output of only about 400 milliwatts, irrespective of the amount of r.f. stages ahead of it and is consequently too weak for decent loud speaker results. (2) In actual practice they are often very much inferior, contrary to expectations, and are also most unserviceable, usually giving out after a few hours' running, comparatively. (3) Jensen D8 first preference, D9 second choice. Get the special pentode input transformer, or use a push-pull job with the two halves of the primary in series. The little midgets are not capable of giving the very good tone you demand. The article on the variable-mu appeared in issue of July 31. Mu stands for amplification factor.

G.P. (Annandale).—The trouble is obviously in the grid leaks, and we feel sure that you have failed to carry out our recommendation by the brands of grid-leaks used and the tones. If you have carried out our instructions, then it looks as though they are wrongly rated or possibly they are rated with a color code which you have not properly understood. The indication is that the quarter meg resistors are only 25,000 ohms, or something like that. It is remotely possible that the detector valve is faulty, but we suspect the leaks. A complete replacement of them may be cheapest in the long run.

F.G. (Burrindbar).—We thank you for the letter, and endorse the opinion that it is up to the readers to let us have full details of the troubles they encounter together with a summary of the final results. The matter of mentioning the brands used, etc., is not so good, and is likely to be seized upon by unscrupulous dealers as a chance to give themselves free advertising in a deceptive way. Our hope of writing articles to suit the readers lies entirely with the readers themselves. At all times suggestions are carefully considered, and it is not necessary to have to ask questions in order to write to the Information Service. All queries are answered individually by the technical editor, and there is no surer way of reaching his ears than to write in the ordinary way. Again thanks for your letter.

R.M. (East Prahran).—Sorry to say that the subject is beyond us. In order to get an undistorted output of a couple of watts you will need about five or ten watts of power for the output valves alone, apart from the filaments. To provide such power from batteries is just about as hopeless as trying to run the filaments of power valves from a battery. Even the 245 tube valve takes 1½ amps for the filament, and this is a terrific drain for any form of accumulator. Candidly we'd like to entirely discourage you, and suggest a transportable a.c. job which can be plugged into the nearest power socket.

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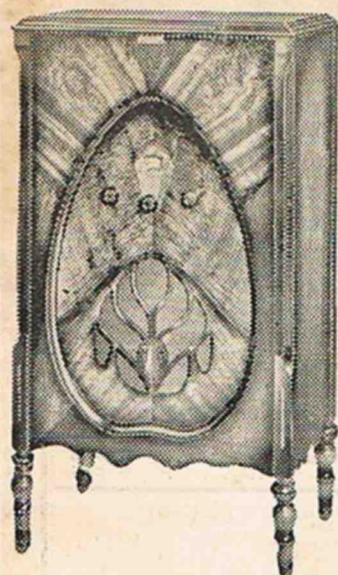
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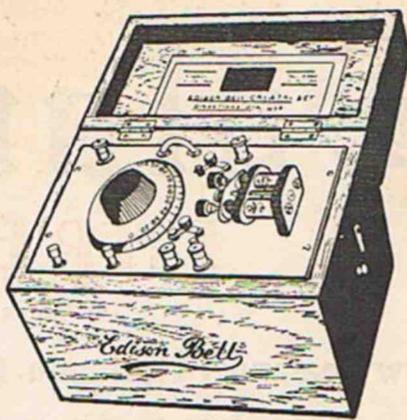
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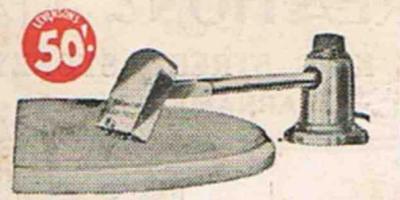
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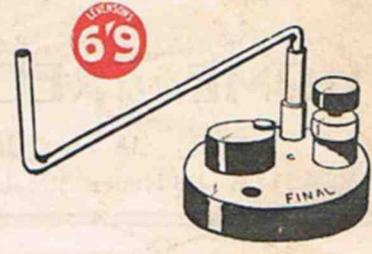


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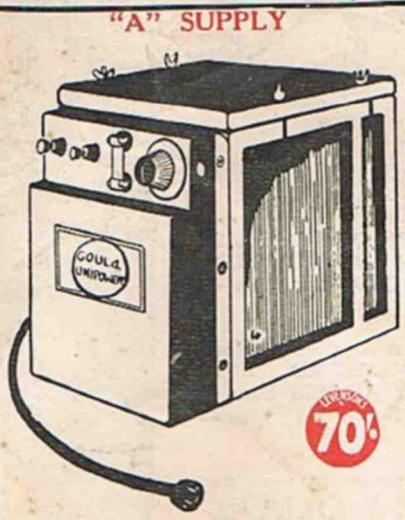
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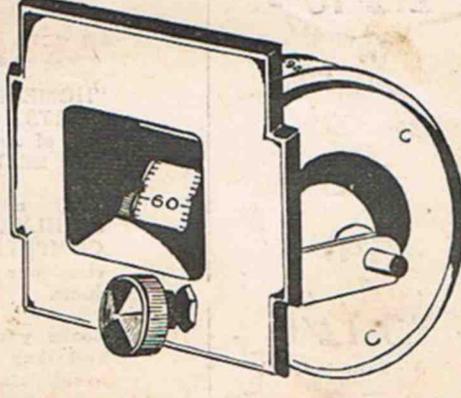
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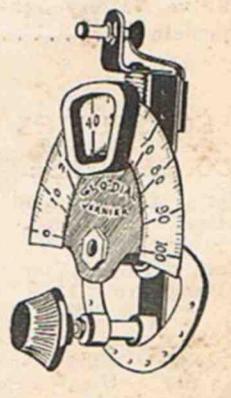
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