

Dick

WIRELESS WEEKLY

Broadcast Programmes a Week in advance

VOLUME 9

Registered at the G.P.O., Sydney, for
transmission by post as a Newspaper.

NUMBER 24



Friday, April 8, 1927.

Price Threepence

Are You Building a Good Set at the Lowest Possible Cost?

NOT unless you are making use of the following:—

PILOT VERNIER DIALS—

Pilot Kilograd Dial, 10-1 vernier	£0	6	9
Pilot 4 inch Bakelite Dials	3	3	0



PILOT CONDENSERS—

Straight Line Broadcast,			
No. 9108, 8 plate 20 10	8		
No. 9113, 13 plate 0 11	3		
No. 9117, 17 plate 0 12	6		
No. 9123, 23 plate 0 14	6		

Straight Line Frequency aluminium plate, from	£0	10	0
Straight Line Brads, from	0	10	6
Pilot Universal Fitall Socket	0	2	0
Pilot Bakelite Standard 201A Socket	9	2	6

PILOT RHEOSTATS—

No. 906, 6 ohms rheostat	£0	3	6
No. 910, 10 ohm rheostat	0	3	6
No. 920, 20 ohm rheostat	0	3	6
No. 930, 30 ohm rheostat	0	3	6



Pilot Jacks, from	£0	2	3
-------------------------	----	---	---

PILOT ISOGRAD MOULDED CONDENSERS—

.001	0	2	8
.002	0	2	9
.006	0	3	8
.0005	0	2	6
.00025	0	2	6
.00025 with clips	0	2	9
Hoosick Bakelite Rheostat, with White Arrow knobs, 6 ohm	0	3	3
Hoosick Standard Rheostat, with White Arrow knobs, 30 ohm	0	3	6
Hoosick Standard Bakelite sockets of all types; round base and standard panel type	0	2	6
Hoosick Universal sockets for UV or UX type valves	0	2	3
Hoosick 4 inch Bakelite Dials	0	2	0
Hoosick 4 inch Composition Dials	0	2	0

MUTER FIXED RESISTANCES.

CONDENSERS, All Capacities from:			
No. 600, capacity, .00015	£0	2	3
No. 601, capacity, .0001	0	2	3
No. 605, capacity, .00025	0	2	3
No. 608, capacity, .00025, with mounting, up to	0	2	5
No. 650, capacity, .01, at	0	5	6
Muter Leaks, all capacities	0	2	0



Muter Fixed Rheostats, all types	£0	3	3
--	----	---	---

MUTER TRANSFORMERS—

Transformers, 5-1 and 38-1	£0	15	0
Shock-proof Phone Plugs, with spring grip	0	3	0



MACK MOULDING BAKELITE SOCKETS—

Standard 201A Sockets	£0	2	3
UX Type Socket	0	2	3
Universal Socket	0	1	9



When you have completed the set, give your customers the best results by fitting them out with—

Ray-O-Vac Batteries and Continental Valves.

Sole Agents :

United Distributors Limited

72 CLARENCE STREET, SYDNEY

109 Collins St., Hobart.

Cr. Jervois Quay and Harris.

664 Bourke St., Melbourne

27 Chesser St.,

343 Queen St., Brisbane.

Sts., Wellington, N.Z.

26 Queen St., Perth.

Adelaide.

66 Charles St., Launceston, Tas.



PRICE REDUCTION



The A.W.A. Audio Frequency Transformer

*Known throughout Australia for its
Amplification and Lack of Distortion*

**Now Reduced to
18/-**

*The Keenest Transformer Value in
Australia to-day.*

A.W.A. have spared no effort to produce a thoroughly efficient audio Transformer. Each Transformer is subject to 1,000 volts insulation test between windings and casings, and between the windings themselves.

Low self-capacity and the special arrangement of primary, and secondary coils give uniform amplification over the whole band of useful frequencies. Made in two standard ratios 5-1 and $3\frac{1}{2}$ -1.

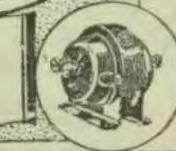


AT ALL RADIO DEALERS OR AT

Amalgamated Wireless
Australasia Ltd.

47 York St.,
Sydney

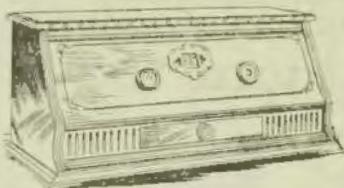
167-9 Queen St., King & King Chambers
Melbourne
Bower's Buildings, Charles St., Adelaide



A.W.A. Audio Transformer

The Realism of Perfect Rendition

Listening to this Gilfillan radio you find it hard to believe the broadcasters are not actually in your home! You will hear all the subtle overtones and shadings of voice or instrument that give music its truest charm.



HARRINGTONS GILFILLAN 1927 NEUTRODYNE

Simplicity of operation, selectivity, fidelity to tone, every-day dependability for perfect results —these are reasons why you should investigate the Gilfillan 1927 Neutrodyne. If you cannot call for a demonstration, write for full particulars to

Harringtons LTD

Goodwill Built on Public Confidence since 1889.

386 George Street, Sydney

Also at Newcastle, Katoomba, Melbourne,
Brisbane, Adelaide, Wellington, (N.Z.),
Auckland (N.Z.).

—and it's so
easy to own
this finer
radio!

If you now own a receiving set you may trade it in with Harrington's, as part payment on a Gilfillan, the balance being paid by small weekly amounts.

Or you may pay a deposit and the balance the easy Harrington way. In either case you secure immediate ownership. Act to-day!

£10 DEPOSIT
—balance
in small weekly sums

WIRELESS WEEKLY

VOL. 9, No. 24.

FRIDAY, APRIL 9, 1927.

The Selfish Listener

"**A**S a licensed listener, who has paid his fees," said an indignant voice over the telephone at 3LO recently, "I demand that you cut out certain parts in the programmes and substitute others to my liking."

Fortunately for the owner of the voice, this was only said per medium of the telephone; it is seldom, if ever, that such a self-centred listener invades the highest heights of a broadcasting company, but the spirit at least is willing, and it is astonishing how many forget that there are two hundred and forty-nine thousand, nine hundred and ninety-nine other listeners whose tastes differ some way or other from his or her own.

Just imagine this big crowd if it were confined to one or even four cities, instead of as it is scattered over half Australia. Not all the different places of entertainment in Sydney could possibly hold that vast multitude, and if on any given night you could distribute them amongst the available halls according to their own pleasures, you would find some at the Conservatorium, enjoying a classical concert; some at the Tivoli, revelling in a variety show; others at the Theatre Royal; yet others at the Stadium, and quite a surprising number at some serious lecture or other, while still further crowds would be gathered at the motion picture theatres and jazz palaces.

Yet, when into all these homes wireless makes its unobtrusive entry, and we have informed listeners be-

forhand what the programmes are to be, it is well that selfish folk should pause and consider what happens. The great majority of listeners-in are reasonable folk, who realise that the programmes are as good as can be got together by very busy and efficient staffs at the main broadcasting stations, who work day and night on material that it would be difficult for any other organisation to get together or to handle better.

Wireless is a boon that we require to make use of with understanding and unselfishness. It is not the same as a concert or variety show or any other entertainment for a section of the people. It is for ALL the people, and if among ALL there are some that find it at a certain time uninteresting to themselves, they must merely reflect amiably, to themselves and others: "Oh, well, let us hope others are enjoying this item, or, at any rate, if others aren't, the broadcasting company will soon find out and alter it."

If you only consider to yourself for a moment that it takes all sorts to make a wireless world, that the so-called programmes are really more like a varied repertoire, or a menu, from which you must pick out some items and leave others, according to your taste; and that the broadcasting company by your leave knows quite a lot more about the varied tastes of its big public audience, than you alone can possibly know, then, indeed, you will not be a selfish listener and yet may materially assist the broadcasters with kindly suggestions.



Between You And Me And The Microphone

Conducted by Jack Plugge



WHEN 3LO was forced to go off the air last Thursday hundreds of listeners tried for 2FC. Among the reports received by that station are 14 from crystal set owners in Melbourne.

ON A RECENT Sunday night 3LO abruptly cut short a most interesting programme promptly at 10 o'clock, in deference to amateur transmitters who regard after 10 p.m. Sundays as sacred to their own activities. owing to a prolongation of the service broadcast on that evening from St. Paul's Cathedral, the studio programme from 3LO on that date was delayed, and several important items as advertised would have occupied a full half hour extra.

THE CONTENDING PARTIES in the U.S. Senate have reached a compromise on the vexed question of the control of radio. It is understood that an independent commission will exercise control for a year, after which the commission will deal only with matters of appeal or controversy, the administration passing into the hands of the Chamber of Commerce.

IN MELBOURNE SPORTS CIRCLES great interest attaches to the feat of Ivan Stedman, who recently established a new swimming record in connection with the 220 yards breast stroke, accomplishing it in two and two-fifths seconds less than the previous holder of the record. This achievement entitled Stedman to the possession of a Silver Cup awarded by 3LO, which was duly presented to him. It may not be generally known that 3LO has agreed to donate a Silver Cup valued at £5 5/- to the competitor who establishes a new record in any form of sport—running, jumping, swimming, etc., during the year 1927. The idea is to foster and maintain a love of competitive sport amongst young athletic Australians.

PASSING OUT of the Queensland Insurance building one night recently the Director of 4QG met an excited crowd on the opposite side of the street hot on the trail of murder, so they told him. They had heard several revolver shots and were endeavouring to locate from what direction they had come. Another shot was heard and enlightenment dawned on the 4QG man. He reminded the crowd that 4QG was situated on the roof of the building opposite, also that this was the night when Uncle Ben and Uncle Jim were racing for the much coveted prize, the Green Trousers, and that the reports they heard were from the starter's gun. Uncle Ben won, by the way, but only after an exciting finish.

THE NEW HOBART STATION, 7ZL, will shortly be on the air with a power of 3 kw., according to advices from the Associated Radio Co., Melbourne. 7ZL is modelled on the same lines as 3AR.

THE LATEST ADDITION to the stations operated by the Radio Broadcasting Company of N.Z., Ltd., is winning golden opinions in the Dominion. The writer of the wireless comment in one evening paper in Christchurch, speaking of 2YA, said three times in the last fortnight that the local station was so good that he listened to the entire programme and apologised for not being able to comment on other stations.



EVERY MAN HIS OWN JAZZ BAND.

Above we glimpse into the home of the conservative Smith-Jones of Point Piper, whose quiet life has been absolutely revolutionised by the individual receiving set. Now, chaste Priscilla may dance as she pleases with her playfoue boy-friend, while Aunt Elsie's sedate solace in her organ, and lovesick Louis turns her thoughts to higher things.

The cult is spreading, too. If passing at the door of the local dance hall soon, you are amazed to see couples waltzing around the room in complete silence; don't go and put your head under the tap. In a Berkhamsted (England) hotel 24 couples danced recently to radio music, unknown to the amazed spectators. One dancer says he or she heard the phantom strains from the distant orchestra.

WHAT IS BELIEVED to be the world's smallest wireless transmitter has been tested with success by the United States Marine Corps aviators. The transmitter, which embodies quartz control, weighs 5½ lb., is 9-inches high, and 10-inches from front to rear. Operated in an aeroplane, it has been heard at distances up to 250 miles.

MR. J. A. BOYD of "Malo," Thatbeiryn, Ruby Mines District, Upper Burma, writes to 2FC as follows:—"On Saturday evening, February 19, I received on my wireless set on 442 metres, a number of dance band items interspersed with poetry and items by an entertainer. I shall be more than glad if you will kindly let me know if this was your station. My set is situated in Upper Burma, 100 miles north of Mandalay and the reception of which I have just mentioned, came through clear and strong, though plus S were bad that night, and spoilt the reception of speech to some extent." On reference to the Station's logs, the management of 2FC find that on February 19 the 2FC Dance Band played a number of items, and between these entertainments Mr. Robert Turner interpolated a number of short renditions on the lines of Milton Bayes.



Have you ever looked upon Maroubra from this angle? The speedway can be seen on the right, and the beach on the left. A picture taken by Mr. Van de Velde.

I Go In the Air and On the Air

WELL. I have been up again and, if I could have my way, it would become a habit. For a first-class all-round dyed-in-the-wool ding-dong A.I. pastime, this flying has got everything I know beat to a frazzle. I have tried most things, from broadcasting to courting grass widows, and from using public telephones to making wireless sets, and they all leave me cold, but flying. Can you remember in the early days when you first brought in KGO? Remember the thrill you got when on those special nights you faintly heard: "Hello, Australia! Hello, Hello, KGO speaking?" Well, it's like that only flying is real—it is the only thing I have ever tackled that you do not have to lie about to make it interesting, and I suppose that is because it is new and so far only the truthful ones have flown.

When it becomes cheaper and we can buy planes for a few pounds, no doubt we will hear of a pal from Bink who will say: "Excuse me for ten minutes, old man, I am just going to take this bucket of water up 25,000 ft for the ice chest"; just as our more enthusiastic radio friends these days say: "Pop in to-night, E.J., and I'll let you listen to 3LO on three valves."

By E. J. Van de Velde
As a result of touring Australia by aeroplane in search of material for novel travel talks, Mr. Van de Velde has become an enthusiastic aviator as can be seen by this article

Some of you might remember last year I flew to Melbourne in a big D.H.50—well, this time I went up in a Curtis Comet. The wireless comparison is the Super-Het, and the Harkness Reflex. I wanted to have a look at Sydney from above, so I called on Mr. S. L. Tyler, one of Sydney's best all-round sports. He has one of everything a gentleman should have—a car, a yacht, an aeroplane, etc. I explained how my style was cramped by having to describe Sydney as seen from tram cars, from 2FC. I also pointed out how utterly impossible it was for one gentleman to ask another for a fly. Well, S.L.T. is a sport, for, to save me any embarrassment, he immediately said: "I'll give you a fly first fine day, Van." He did, too. Some flight, 85 miles in 51 minutes, and all over Sydney and suburbs. You heard all about it from 2FC on April 4.

These Curtis Comets are nifty see buses alright, and 5000 feet up is

only a question of a few moments with them. How different it all looks from up above. I could not even recognise any of the well-known pubs; and you can't see Sydney any more for buildings—why, there are buildings everywhere. Population spoils most towns; fortunately, you can't see them from 5000 feet, neither can you hear nor smell them.

Away up in heaven with only a few clouds and wireless waves around you is the place for peace and happiness—no telephones, no dust, no creditors, or policemen—go where you like, up or down or sideways. If you do meet another plane you have four sides to pass him on—in fact, you can go right around him and get on the other side without passing him at all, not like earthly motorists who have two sides to pass on, one unlawful and the other under repair.

But, there, coming to the serious aspect, there is a message for you in this. You who delve in the mysteries of wireless have a fair knowledge of how very rapidly the world is moving these days—you have seen extraordinary things happen in the wireless world within the last five years. As it is in wireless so it is in aviation, and the nation which becomes air-minded first will have an enormous poll over all others. "Rule Britannia" must go farther than the ocean—it must include the wireless waves and the air; it is up to us.

NOTE: Reproduced on our cover this week is a photograph of the city as seen from an aeroplane, 1000 feet above Circular Quay, taken by Mr. Van de Velde. Enlargements of this will be sent to all readers guessing correctly the location of a section of Sydney photographed from the air and reproduced in our last issue.

Thousands write to 2FC about Duke

No single broadcast transmission in the history of radio in Australia has aroused so much enthusiasm among listeners-in as that made by 2FC describing the arrival of the Duke of York at Sydney.

MORE than two thousand congratulatory letters had been received by 2FC as a result of the description of the arrival of the Duke of York.

Letters and telegrams are still pouring in to 2FC, congratulating that Station on the wonderful service rendered to listeners in all parts of the Commonwealth, in connection with the subsequent festivities. The letters all breathe the same spirit—"How wonderful was the whole transmission! How great a boon to those unable to see it themselves, and finally, How did you do it?"

Ask the tired staff of 2FC how they did it, and if they can summon enough energy they will stagger you with the wealth of detail. Suffice it to say that the whole transmission during the past few days was carried on without one break. Five announcers, all working from different points, five engineers and seven operators were required. These were all posted to different vantage points, so that a continuous description could be given. This does not include the staff operating at Penman Hills and also at La Perouse, where the relay from s.s. "Huntar" was picked up and sent on to the Studio. It involved also the use of five separate amplifiers for outside work, and necessitated the use of telephone lines covering in all sixty miles, all of which were linked up through the various exchanges to the central receiving point—the Studio—and then sent on by land line to Penman Hills and broadcast.

Here is a typical letter:

"Dear Sirs.—Just a short note to let you know that we thoroughly enjoyed the broadcasting of the arrival of the Duke and Duchess of York. Your announcers were as distinct and entertaining that we almost imagined that we were actually standing there enjoying it all with you. Band music and choir also came through beautifully. We received it through 3LO as we have only a 2-valve set and cannot reach you direct. So once again thanking you for the pleasant 11 hours we spent this morning, and

wishing your Station every success it deserves." Yours faithfully, Mrs. Ethel Donald, "Closeburn," Sunbury Hills, Victoria."

Looking on the other side of the picture, one realises more clearly the keen pleasure experienced by listeners who were confined to their beds through illness, inmates of the various hospitals and institutions, and those who are blind. The opportunity is taken of reprinting a letter from a blind listener who gives us all an idea of what a wonderful boon radio is to those who have been deprived of their sight:

"Sir.—As a blind listener I wish to thank you for the excellent transmission of all the proceedings of the arrival of the Duke and Duchess of York last Saturday. It was truly excellent and could not be surpassed. Also for yesterday's transmission from St. Andrew's Cathedral, for which I give you my warmest thanks and hope that you may long be spared to give such splendid transmissions.—J. H. Gain."

The various ceremonies attended by the Duke of York were all covered extensively by 2FC. Not an opportunity was missed of placing the microphone where a crowd had collected. It was expected that on Sunday morning, March 26, when His Royal Highness visited Prince of Wales Hospital, Randwick, he would be heard on the air for the first time when he replied to the address tendered to him, but these plans went awry. In the excitement the aldermen were duly presented to the Duke, who then proceeded to enter the Hospital, walking away from the faithful microphone. The 2FC announcer was not able to hurry after the Royal party, but the gentleman to whom the presentation of the address was entrusted suddenly realised he had not fulfilled his mission, hurried after the Duke, and was able to make the presentation before the Hospital was entered. All this was, of course, unfortunately lost to listeners. However, an opportunity came on Tuesday, March 29, when the Duke made his first air speech, replying to his toast at the luncheon given to him by the Returned Sailors' and Soldiers' League.

The broadcasting of the gala performance from Her Majesty's Theatre was a memorable occasion. A description of the crowds outside the theatre, the arrival of the Royal party, and the fanfare of trumpets was carried to listeners with wonderful realism.

Our Melbourne correspondent gives his impressions of the transmission as relayed in Victoria by 3LO from 2FC together with a note on 3LO's preparations to broadcast the Duke of York on his arrival in Melbourne.

SOME concern was expressed recently at the Wireless Commission as to the possibility of successful relaying of messages from long distances by means of land lines, but the highly satisfactory work done in sending from Sydney to Melbourne the full account of the arrival of the "Renown" must lay all doubts on that score for ever at rest. No such strain as was imposed by the 600 miles of telephone line is ever likely to be experienced on the everyday work of a relay station, or, as the accurate prefer nowadays to call it, a regional station for the daily service of a country centre.

The actual work of the Sydney-Melbourne relay was excellently described in the following message broadcast from 3LO, Melbourne, at the conclusion of the feat: "That concludes the transmission relayed from Sydney of the arrival of the Duke and Duchess of York."

It is generally acknowledged that the broadcasting of the description of the arrival of their Royal Highnesses was the most successful radio feat ever accomplished in Australia.

The first part of the description was made from the bridge of the s.s. "Hunter" in the Sydney Harbor. This was relayed by wireless to a receiving set on shore and then impressed upon a landline to station 2FC. There it was divided, part being broadcast direct by 2FC and the other half being sent by the new carrier wave system over a telephone line to 3LO, and thence broadcast at Braybrook.

The second part of the description was made from Man-o'-War steps, Farm Cove, and the concluding part from the Strong Post of 2FC, in Macquarie Street, Sydney.

Great credit is due to the staff of 2FC and the P.M.G.'s Department for the manner in which the whole of the relay was accomplished.

At the hour when 3LO took up the description of the arrival of the Duke and Duchess of York in Sydney, there probably was a majority of women listening-in, and the announcer in Sydney provided much amusement when he attempted the description of

Continued on page 13.

IT'S ALL IN THE AIR

Coming Features in the Broadcasting Programs

GARDENING TALKS: The talk on gardening by "Redgum" (Mr. J. G. Lockley) will be placed at 12.30 on Saturday morning instead of 11.15.

COOKING TALKS: Owing to the operation of the new schedule of sessions from 2FC which began Monday, April 4, cooking talks will be given on Tuesday, Wednesday and Friday at 11.45 p.m.

CLASSIC MUSIC: Lovers of good music will appreciate the recital which Madame Evelyn Gleg and M. Henri Staelin have arranged, to be broadcast from 2FC on Sunday evening, April 17.

3LO TO BE RELAYED BY 2FC: The evening of Tuesday, April 12, at 2FC will be given up to the relaying of a 3LO programme, so that listeners in N.S.W. who have not sets suitable for interstate reception will have an opportunity of hearing programmes of which "The Garden City of the South" boasts.

2FC HOSPITAL PARTY: This indefatigable body have found yet another institution to entertain. On Wednesday, April 13, the Girls' Industrial Home, Parramatta, will be the brighter for an hour's merrymaking, in which Miss Peggy Dunbar (contralto), Miss Heather Harding (soprano), Miss Kathleen Stollery (mezzo), Mr. Rue Garling (Director and general entertainer), Laurence Halbert (baritone), Brunton Gibb (eloquentary items), and Mr. Horace Keats at the piano, will participate. The mysterious "Smith Family," who have so many acts of kindness to their credit, will be responsible for the transport of the party.



JULES VAN DER KLER, the famous cellist, who broadcasts from 2FC as a member of the new Instrumental Trio. His partners are Alexander Sverjensky, pianist, and Miss Daisy Richards, violinist. The trio will be 2FC's chief medium for classical music and has been brought into existence through the temporary abandonment of the Sydney Instrumental Trio.—Lionel Lauzon, violinist; Lindley Evans, pianist, and Gladstone Bell, cellist—while Lindley Evans tours Australia as accompanist to Dame Nellie Melba.

RANDWICK AUTUMN MEETING: 2FC staff, consisting of five, will be at Randwick for the four big days of the "Sport of Kings" at Easter, and a special racing session will be given from 7.30 until 8 dealing with attendance, and the dresses. The 2FC Racing Commissioner will, of course, describe in running the races in the afternoon.

TOWARDS THE CLOSE of last year 4QG included in many of its programmes popular song numbers played by the Studio Orchestra, the refrain being sung by a baritone to the accompaniment of the orchestral music. These popular items were appreciated by listeners, and in response to numerous requests, they will be included in future programmes as a weekly feature. Each Wednesday night, two of the latest popular song publications will be played by the Studio Orchestra with vocal refrain.

UNIVERSITY CELEBRATIONS: "Commencement" will be celebrated by the Melbourne University students with the same vigor, originality and ceremony as usual, and 3LO, with memories of the popularity of last year's functions, will broadcast the main items in the celebrations of 1927. Debates, Conservatorium concerts and the inevitable frivolities will all have the attention of 3LO.

"THE MAID OF JAPAN": Miss Vinia de Loitte, the well-known soprano, has written a little operetta—"The Maid of Japan," which will be produced at 2FC on Thursday, April 13. Miss de Loitte will take the soprano part, Mr. Fred Harman the baritone part, and Mr. Robert Turner will appear in character work. An orchestra is being specially trained, under the able direction of Miss de Loitte.

THE NEW ANTHEM: The new Australian National Anthem which SLO, Melbourne, introduced to the public, seems to have met with general approbation. Commenting on the anthem, one of Melbourne's foremost musical critics states: "You cannot impose a National Anthem on a free people if it is not willing. But something that sounded very much like the sort of thing that Australia has been waiting for was broadcast from SLO last night, and it tuned itself irresistably into the brains of hundreds of thousands before soloist, chorus and band were done. Many there must have been that wanted to rise and sing the vigorous and dignified measure which William G. James has woven on the foundation of some bold and not over assertive patriotic verses by C. J. Dennis, under the title of "Australia, O thou Favoured Isle." One thousand copies of the anthem are to be made available to the public by SLO, each state in the Commonwealth being allotted a certain number, the applications being granted on the first come first served policy.

AD. CREE'S MERRY COMICS: Following the success of the Radio Revels, directed by Laurence Halbert, which are held at 2FC from time to time, Ad. Cree, the Scotch comedian, has got together a band of merry-makers who will make their first appearance on Monday night, April 11. For an hour these artists will disport themselves in song and story, and when it is known the party consists of Miss Mabel Batchelor (soprano), Mr. R. A. Bartleman (baritone), Miss Jenny Crue (soprano), Mr. Rus Garling (ventriloquist), Norman Leslie (comedian). listeners will look forward to a highly diversified programme. By the way, Rus Garling has introduced two new personalities on the air—"Mr. and Mrs. Gink." This ventriloquial couple will occupy a know much, and "air" their domestic troubles for the benefit of listeners.

MR. JACK KEARNS: Still another name to the list of fun makers at Studio SLO is that of Mr. Jack Kearns, who is about to broadcast a series of humorous items. Mr. Kearn is the type of comedian to whom a joke is a very serious matter—he doesn't believe in all this very up-to-date (and a little ahead of the minute) subtlety—especially when broadcasting. He likes to bring the point of the joke well to the fore, and likes his audience to get busy and laugh right away. These elusive jokes that dawn on you the next morning are no good to Mr. Kearn, and, therefore, they have no place in his repertoire.

Easter Programmes

GOOD FRIDAY: In the morning, the Church Service will be taken from St. Andrew's Cathedral, and 2FC listeners will appreciate a further opportunity of hearing Miss Lillian Frost at the organ, in the afternoon.

GOOD FRIDAY NIGHT CONCERT: Following the arrangement made at Christmas time, whereby 2FC was responsible for an excellent programme from the Lyceum Theatre, the proceeds of which went to the new building, the Sydney Night Refuge, which is under the control of the Central Methodist Mission, on Good Friday night, it is proposed to arrange a similar concert. The following artists have been engaged, and an excellent programme is anticipated: Miss Virginia Bassetti (contralto), Norman Janson (baritone), Miss Joyce Hadley (soprano), the Sydney Harmonic Choir, under the baton of Mr. W. Bourne, Brunton Gibb (eloquent), Charles Stephens (tenor) and the Austral Trio (Alexander Sverjensky (pianist), Miss Daisy Richards (violinist), and Jules Van der Kiel (cellist). Mr. Ewart Chapple will be at the piano.

EASTER TIDE: During Easter tide arrangements have been made by SLO to broadcast the well-known Easter cantata, "Olivet to Calvary," in which the following prominent soloists will take part—Mr. J. Alexander Brown, bass; Mr. Percy Blundell, (tenor), and Mrs. Strickland, soprano. They will have the assistance of the Nicholson Street Methodist Choir, which will sing under the capable

baton of Mr. Hillier. On Good Friday Steiner's "Crucifixion" will be broadcasted from St. Paul's, and, for the Studio programme, Mr. James has arranged a series of musical selections suitable to the day. There will be excerpts from "Elijah," in which the principal solo parts will be taken by Madame Elsie Davies and Mr. J. Alexander Brown.

MR. FRITZ HART: Another old friend to make his re-appearance at the Studio is Mr. Fritz Hart, who has just completed another of his delightful series of "talks" which he intends to broadcast from SLO for the benefit of music lovers of all ages. With this object in view, he has prepared some very attractive "lectures" especially for the Children's Hour—in which he will combine the theoretical and practical side of music in most interesting manner. As is usual on these occasions, he will have the assistance of the Conservatorium students, to illustrate his remarks with both song and instrumental solos.

THE FOOTBALL SEASON: Now that the football season is upon us, enthusiasts of this game (Australian Rules) will be glad to know that arrangements are being completed to transmit graphic descriptions of the principal games held round and about Melbourne. It is to be hoped that Mr. Tod Collins will be available to fill the post of announcer for SLO, for what Mr. Collins does not know about this "gentle sport" is not worth knowing, and listeners may rest assured that matches described by this devotee of the game will be true to detail, and that nothing will be lost in the telling.

IF THERE IS one thing the English nation can and should be proud of from a musical point of view, it is the support and encouragement the British peoples gave to Handel. To the present day, any work of his is assured of an appreciative audience and listeners to 4QG will be glad to learn of the forthcoming broadcasting of excerpts from the "Messiah" (one of his best known works) at the hands of the City Tabernacle Choir, during its special Easter Festival, on April 13.

WITHOUT THE MARTIAL STRAINS of band music even great State occasions would lose something of the stirring effect one associates with them, so listeners to 4QG will enjoy a wealth of band music during the forthcoming visit of their Royal Highnesses, the Duke and Duchess of York; and those not fortunate enough to be attending the various functions connected with the visit, need not despair, as 4QG has spared no effort to cater for their needs.



MISS NELLIE RAVENS, 2GB Speaker.

Can You READ a CIRCUIT Diagram?

To the newcomer to radio a circuit diagram is the mystery of mysteries. Its symbols resemble a picture puzzle. This article explains how that puzzle may be solved revealing a new science of fascinating interest.

FROM the correspondence we receive it is certain that many radioists are not familiar with the symbols employed to denote certain parts of apparatus which are put together to make a wireless receiver. This is certainly regrettable as the circuit diagram is perhaps the most interesting of all, and when properly understood the prospective constructor is able to judge the value of a circuit for himself. He is able to tell if a circuit is selective—he is able to judge a layout, and as time proceeds the constructor is enabled to gauge the number of turns required under given circumstances in a circuit to cover the wavelengths of the stations desired.

To acquire a good working knowledge of symbols is only a matter of an hour's concentration or careful thought. Once mastered the average person will not at all be worried or concerned with a back of panel wiring diagram. Most advanced enthusiasts will not consider a back of panel wiring diagram—the circuit conveys more to them even from the point of view of wiring. It is so simple to wire up a receiver from the circuit diagram when one knows how.

Again from the point of view of giving more information to readers it suits our purpose to publish a circuit diagram where it is sometimes not possible to draw out a back of panel wiring diagram. Experimental circuits are always full of interest and were the circuit of one or two experimental receivers published each

1	CONDUCTOR	13	S.C JACK
2	WIRES CROSS BUT DO NOT TOUCH	14	D.C JACK
3	WIRES TOUCH	15	A.F TRANSFORMER
4	FIXED CONDENSER	16	TERMINAL
5	VAR. CONDENSER	17	VALVE
6	VAR. CONDENSER	18	VAR RESISTANCE
7	AERIAL	19	RESISTANCE
8	EARTH.	20	GRID LEAK & CONDENSER
9	INDUCTANCE OR COIL	21	SCREENED COIL
10	COUPLED COILS	22	SINGLE IMPEDANCE
11	CRYSTAL DETECTOR	23	DOUBLE IMPEDANCE
12	PHONES	24	BATTERY SWITCH

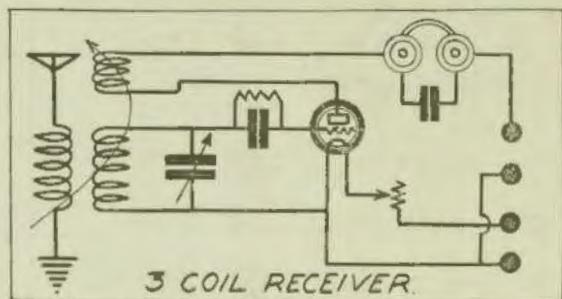
week many constructors would appreciate them and thereby gain further knowledge. This article, it is hoped, will pave the way for a better understanding, and readers are advised to study it carefully.

Firstly look at and carefully study the symbols drawn on this page. Let us discuss them as we go along. Take No. 1, which is simply a straight line and known as a conductor. A conductor can be many things, but for the purposes of this article a conductor is best described as a piece or length of busbar or spaghetti covered wire, or any wire for that matter. It is known that busbar or wiring wire is used to join two or more parts together, and that there is quite a quantity of connections in the average set depending on the magnitude of the set in question.

Now it is understood again that some of these busbars join and some

cross without touching or joining. This effect is drawn and shown in Nos. 2 and 3 with the description alongside. No. 4 is a fixed condenser, quite a common commodity and is symbolic of the plates and also the dielectric. The dielectric is that material which separates the two or more plates of a fixed or a variable condenser. In a fixed condenser this dielectric usually takes the form of mica or waxed paper—sometimes it is air, but very seldom in this country are air dielectric fixed condensers available. The condenser plates themselves usually consist of tin foil or brass foil, and fixed condensers are used in many parts of a radio receiver. They are always drawn as shown in No. 4.

A variable condenser is very similar to a fixed condenser in the symbol as may be seen in No. 5. Here we have the same two lines, but this time



Can you follow this circuit? It reveals the theory of a simple three-coil receiver.

there is an arrow drawn through indicating that the condenser is variable in its properties. No. 6 is another form of drawing a variable condenser, the arrow pointing out the moving plates. It is well worth repeating here that a golden rule when connecting up variable condensers is to join the fixed plates or vanes to the grid of the valve or the grid circuit. This overcomes body capacity to a marked extent. Body capacity is that effect which is produced when a hand is brought near to a dial to tune a condenser. As the dial is approached a mushiness or whistling or oscillating effect arises, thus making accurate tuning difficult. So remember to connect fixed plates to grid and moving plates to earth.

The aerial and earth (Nos. 7 and 8) are well known to everyone, it is hoped. Sometimes the aerial is shown as a drawing of a single wire aerial and the earth as a connection to a water pipe.

Now No. 9 may cause a little thought, but really it shouldn't. This is a coil or, as it is frequently referred to, an inductance. A coil as we know, takes many forms—it may be a honeycomb coil, toroidal coil, or it may be a solenoid coil—a solenoid coil is the description given to a coil wound one turn next to the other and alongside. A practical example is the old slider crystal coil or loose coupled crystal coils, or Neutrodine coils, or Harkness Reflex coil, or transformer coils—in fact, any wire wound in coil form is denoted in a circuit like the drawing shown in No. 9. Many variations are available as will be shown later on, but understand now that this inductance or coil seems to be the stumbling block in reading a circuit. Stop right now and get to know it. It is important! No. 9 is a coil—and is always drawn as a spiral.

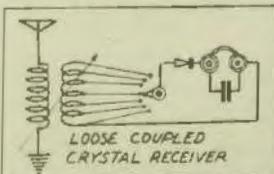
The next example—No. 10—denotes two coils, and close to the other. Coupled coils is the designation, and coupled coils are common in a wireless set. Think of the old loose coupler again, where one coil slides inside another coil. The outside coil is usually known as the primary coil and the inside one as a secondary coil. Again the Harkness Reflex—I mention this because it is a popular receiver—we have coupled coils—a primary and a secondary, the primary in this instance being wound over the secondary. Think again of the well-known P circuit where we have two coils in front of the panel, one coil being fixed in position and the other variable in relation to the fixed one—that is to say, one coil swings to or from the other. This is coupling, and when one coil is kept close to the other it is known as tight coupling; when away it is known as loose coupling. In coupling when one coil is near to another coil and the winding running in the same direction, if one coil is charged with an alternating or pulsating current the adjacent coil, although not conductively coupled or joined to the first coil in which the energy is flowing, the second coil picks up some of the energy from the first coil, and this energy will flow around a circuit connected to the second coil. This is known as inductive coupling as has been explained before. Coupling of coils is usually introduced into radio receivers to provide selectivity and also feed back. More could be said about this, but it merits an article on its own. Still realize that when two coils are drawn close to one another and both coils running alongside each other coupling is introduced and we have coupled coils as shown in No. 10.

The crystal detector so well known is usually drawn as shown in No. 11. The crystal detector comprises a

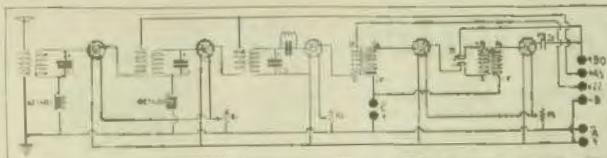
crystal and a catwhisker resting on the crystal, such as the usual type known as the Herle, which has a variable cat whisker, or the Carborundum, which has a fixed steel catwhisker. The Perikon detector or the Lion Micro or Lion Maxton consists of two crystals, one resting on the other. All crystal detectors are drawn in the fashion depicted by No. 11.

No. 12, phones, cannot be mistaken for anything else, so may be dismissed quickly as they are so easily recognizable. The single circuit jack of No. 13 may not be so easily recognizable, but is simple nevertheless. Compare it with the double circuit jack of No. 14. There are four connections for the double circuit jack, the two inside ones being usually connected directly to the primary of the transformer. The top outside contact is invariably connected to the plate of the valve and the top inside one to the plate of the transformer. The bottom inside on the other hand is joined to the B-plus of the audio transformer, whereas the outside bottom contact is connected to the B-plus of the battery, or to some conductor which finally reaches there.

Speaking of audio frequency transformers brings us to No. 15, the symbol describing one of the popular adjuncts. Here again we have two coils coupled or inductively coupled to one another. One coil is the primary and one is the secondary. The secondary is invariably connected across the grid and filament of the emitting valve, the primary being linked up as described in the previous paragraph, or without the D.C. jack from the plate of the preceding valve to the B-plus of the battery. The lines drawn between the coils denote the iron core on which the coils are wound, and by these lines do you know an audio from a radio transformer. The radio transformer is drawn as No. 16. Coupled coils as a radio transformer rarely have an iron core. This iron core serves a useful purpose, as it keeps the energy within the coils themselves, thereby preventing it from going out into space and consequently going to waste. The core consists of laminations of soft Swedish or charcoal iron.



The type of circuit most fans and hums first learnt to understand—the old loose-coupled crystal receiver.



A modern circuit—the Kuras Equamatic showing audio frequency transformers and R.F. chokes.

No. 16 is easily recognisable as a terminal at the end of a conductor. Terminals we know are invariably mounted on a terminal board arranged at the back of a set.

Now we come to the valve—No. 17. In all "W.W." drawings the valves are drawn in a circle. On the top there is the plate or anode of the valve with the grid immediately below it. The grid is that "corrugated" line, similarly drawn to a resistance, and the filament below again is represented with the arc. Looking at the bottom of a valve we find there are four pins, two for the filament, one for the grid, and one for the plate. Now do you recognise them in the symbol drawn? Not too difficult, is it now? Look at your set, pull out a valve and examine the valve socket. There you see four connections marked G (grid), P (plate), F (filament) and F (filament) again. Look now at the pins on the bottom of your valve base, carefully place the valve back in the socket and note the contact. Compare in your thoughts the connections for the valve socket with the symbol 17. Simple, after all, isn't it?

Let us take No. 19 before No. 18. This represents a resistance. A grid leak is a resistance and a rheostat is a variable resistance (No. 18). A potentiometer is a resistance variable, of course, such as No. 18, but here three connections are required, one at the top of the resistance, one at the bottom, and one variable such as the arrow head. The rheostat, of course, only has two connections, one to the filament of a valve and one to the A battery, or to a conductor, which finally reaches the A battery, perhaps through a battery switch but nevertheless reaching the A battery in the end. A fixed resistance is frequently connected across the secondary of a transformer to stop mushiness, and again as in No. 20 a grid leak is drawn as a resistance. The arrow head indicates if a resistance is variable. Sometimes a grid leak is taken from the grid of a valve to the positive of the A battery, or occasionally to the negative of the A battery. Turn up page 17 of last week of "W.W." and consult the circuit diagram of the Cockaday. Here is an instance when R2, the grid leak, is connected from the grid of the valve to

F negative or A negative, for we know that the A battery is concerned with the filament (F) heating.

No. 20 has already been discussed from the point of view of the grid leak. The fixed condenser is seen in .00025 m.f.d or .0003 m.f.d. It is always found preceding the detector valve, rarely elsewhere excepting in the Mewflex receiver described in "W.W." 21/1/27 where one of the radio frequency valves had a grid condenser and grid leak to stabilise it. This incidence is very rare.

Screened coils are becoming popular nowadays, and we have in No. 21 the usual method of drawing a screened coil or screened coils in the circuit diagram. The dotted lines around the coils denote the screen. Sometimes the coils—coupled coils that is to say—are shown one above the other and not alongside. This makes no difference and invariably indicates that both coils are wound on the same tube. Sometimes this is used for convenience of drawing. Remember that now.

Now we come to two symbols seldom seen—No. 22 and No. 23. No. 22 as marked is a single impedance unit invariably consisting of the secondary of an audio transformer, although there are some specially constructed units of this type on the market to-day. Again is the iron core to be seen as is the case in No. 23, this being a double impedance unit. Here again we have the coupled coils,

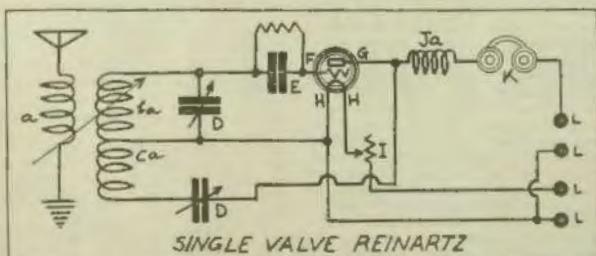
core and fixed or bypass condenser. Look closely and then turn to the constructional article in this issue and see just how they are used. See the relation to the other parts of the circuit—note the similarity to the audio frequency transformer.

Last on the list is the battery switch No. 24. This is self explanatory and is sometimes drawn merely as a cross in one of the A battery leads. It is easily known.

Now that comprises most of the popular symbols used in receiving circuit diagrams. One or two of the lesser used symbols are not shown, such as a variometer, buzzer, etc. Seldom are they used in our pages, so they are omitted. Still this lesson is worth while, so let us take a few examples.

The ordinary loose coupled crystal, so popular some years ago, is to be seen. Think of the symbols now. Look at the aerial and the earth with a coil or inductance between them. Visualise this coil in your mind. Now the secondary coil with all the taps operated on by a switch. Can you pick out the crystal detector and the phones. Note how they are joined together with conductors. Simple, after all.

Now the standard three coil regenerative receiver. Pick out the aerial and the aerial or primary coil which is joined to the earth. So far, so good. Next the secondary or grid coil with the arrow running through it from the primary to the reaction or tickler or regenerative coil. Do you see how the secondary coil, coupled to the primary coil, is tuned by a variable condenser which is connected directly across, or in parallel with the coil. The grid condenser and grid leak is quite conspicuous—look at it. See the valve, the rheostat and the phones. Note the terminals. Run back over the symbols and number each coil, condenser, etc., with the numbers alongside the symbols. This will help you. Study it carefully; it is well worth while.



One of the most popular circuits of recent years—the single valve Reinartz. The accompanying article explains how the novice can follow its symbols.

The Safety Valve

A department in which readers are invited to relieve their feelings by commendation or condemnation of broadcasting stations and their programmes. All letters must be addressed to "The Safety Valve," Wireless Weekly, 51 Castlereagh St., Sydney.

CALLED TO ORDER.

Dear Sir.—Attention, Mr. Jennings and Mr. T. J. Swain. Our broadcasting stations are doing their best, and we get a fair issue of all classes of music—heavy, middle, light and featherweight. You must admit that you have never heard two programmes alike from 4QG, 3LO, 2FC and 2BL, have you? Isn't that variety?—just what we want? I think you get a fair issue of your beloved classes split up between soprano, bassos, contraltos, trios, quartetts, and bands.

Yours, etc.,
"BANJO PATT."

Forest Lodge, Sydney.

TIN SETS AND JAZZ.

Dear Sir.—The cry against classical items and playlets all spring from those who possess "ordinary" receiving sets, using valve detectors; these people do not get true reception of classical items, and can hardly hear one word clearly when a playlet is on, hence the squeals. Naturally jazz stuff and anything that happens to suit these tiny sets, is appreciated by the owner.

It is up to the broadcast stations whether they will pamper the unfortunate majority, by giving them jazz and other such rubbish, or put on respectable programmes that can be enjoyed by true music lovers, and while tending to enhance the general public's appreciation of good music, give broadcasting another impetus, upholding progress against deterioration. While it is admitted that 2FU commands the best talent, that station cannot hold a candle to 2BL for consistency and never varying quality of transmission, from a technical standpoint. Some of the best programmes from 2FC are considerably spoilt, in my opinion, by badly controlled modulation, while the engineers and operators of 2BL deserve very great credit for the quality of their output.

Yours, etc.,

"TRUE RECEPTION."

Abbotsford Point.

IN DEFENCE OF 2FC.

Dear Sir.—The 2FC announcer could not be improved on, and I don't care who says otherwise. His voice is clear and his manner of address most pleasing. The 2FC Dance Band and Mr. Len Maurer don't come on often enough. Much has been said as to the 3LO "superiority." I question this, and, personally, have found that 3LO is not nearly so clear as either 2FC or 2BL, although I expect this, since 3LO is much farther away.

The plays that 2FC broadcast are enjoyed by country listeners, and they come over the air well. No one should expect the voices of the actors to sound as clearly as those of the studio actors, since they are playing to a house and cannot stay near the microphone all the time.

The Speedway programme appeals to me as it does to many country listeners—we like the Stadium, too. I sincerely hope that 2FC and 2BL will take no notice of the letters regarding their wavelength. They might please a few, but they would certainly lose a lot of their popularity in far outback districts. Satisfied people refrain from writing, and thus are deemed to be in the minority.

Yours, etc.,
J. H. Mc.
Byron Bay.

APPRECIATES SPEEDWAY ITEMS

Dear Sir.—I find it hard to understand J.G.P.'s ("W.W." 18/3/27) view of Speedway items. Recently I tuned in 4QG just as the motor bike racing started. My parents were about to go for a walk, but when they heard 4QG's announced they stopped throughout the evening, and we all thoroughly enjoyed it. When 4QG finished, I tuned in the motordrome from 3LO and we had another exciting item.

I have some wireless friends and they all appreciate the Speedway items.

Yours, etc.,
W.E.G.

Rockhampton.



REBUKED!

Dear Sir.—Re "J.G.P." ("W.W." March 18), not 2 per cent, but 28 per cent, of country listeners-in are interested in Speedway doings on Saturday nights. We being farmers ourselves and working among farmers know the feeling of the average farmer towards Speedway doings.

Imagine our disappointment when some young friends of ours, after coming ten miles for the purpose of being entertained at Maroubra and other Speedways, were informed that a person, possibly a banana grower from Murwillumbah, thought Speedway results uninteresting. Could there be anything more real to a possible buyer of a wireless set than the roar of motor cycles and cars racing at 90 and 95 miles per hour round Maroubra, or to hear the description of a crash on the Speedway Royal?

Yours, etc.,

THE TWELVE DISAPPOINTED SPEEDWAY ENTHUSIASTS

Lake Albert.

DOWN AMONG THE SOPRANOS.

Dear Sir.—The alternation of male and female voices for a whole evening is tiring to listen to. There is, in my opinion, far too little instrumental solos and band music, on week evenings, especially at 2BL. One rarely hears a true classical instrumental solo for violin or piano. I believe they would be more appreciated than many correspondents would lead one to believe.

I would suggest that the best way to decide as to most suitable programmes for all concerned would be to make a person fill up a preference card when applying for his licence. The stations would then know definitely, from all those having licences, the order of their preferences for jazz, band, orchestra, solo work, lectures, etc., and so could cater accordingly. Why do most stations run on the same lines? Why not a different station for a different class of programme?

Yours, etc.,

W.G.S.

Cardiff.

3LO Prepares for Royal Visit

the Duchess's dress. For any man to attempt such a feat at any time is an heroic deed, but he handled the subject with confidence and unconventional style. "Pink all over" was his first observation, and then he added that the Duchess was wearing a pink feather-bon "or some fluffy affair" around her neck. However, in his own style he made an excellent description of her costume. From start to finish the story of the arrival was a triumphant delight. Much credit is due to the engineering staff which supervised the land line relay. Reception in Melbourne was remarkably clear.

When the "Renown" enters The Heads at the entrance to Port Phillip on April 21 the event will be broadcast in the first place from a steamer carrying with it the portable transmitter some time ago designed by the Studio Manager of 3LO. This efficient little set made its debut in tests from an aeroplane during the Cobham visit and gave a good account of itself under trying conditions, although circumstances precluded it from being heard on any regular transmission at that time. It will, however, make its bow to the public under auspicious conditions when their Royal Highnesses arrive. Its messages will be picked up on shore and relayed by land line to the studio of 3LO, and there amplified and sent on to the broadcasting station at Braybrook. The whole procedure will be similar to that carried out with such success on the arrival at Sydney.

YOU CAN'T BEAT a youngster for throwing out a hint diplomatically, according to a nurse at the Brisbane Children's Hospital, who tells the following story: "You can imagine how the smiles leave the faces of our youthful listening patients when the market reports come sparkling through the air," she says. "I was surprised a day or two ago when one young boy failed to discard the 'phones when 'Markets' was announced.

"Now, old man, off with the headphones," I ordered, "you have no interest in market prices."

"Please, nurse," he said, "I want to listen to the price of onions!"

"But why do you want to know the price of onions?" I exclaimed, surprised.

"Because I am very fond of onions, nurse, and I haven't had any since coming to hospital. I was wondering whether they were too dear!"

*Get Anything
"on the air" in seconds
Perfectly —
with certainty*



TERMS :
£4/10/-
deposit.
12/9 per week.

— with —

at the
amazing
price of
£34
Cash
complete.

The
MINGAY
(UNIQUE)
SUPER-FIVE

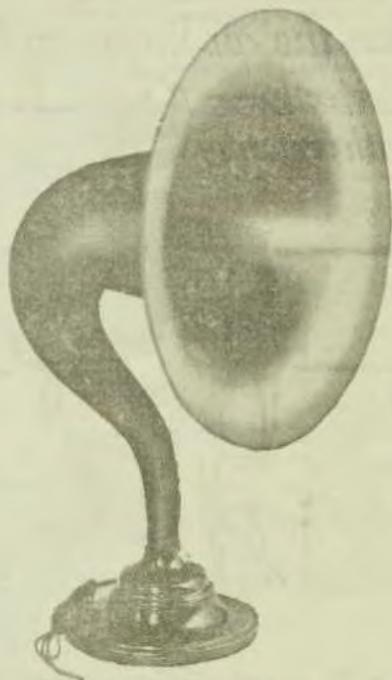
You are cordially invited to the pleasure of seeing, hearing, operating, knowing the wonder of the wonderful MINGAY SUPER FIVE. Any child could tune in and immediately get results equal to an expert. If you cannot call, send for free particulars.

SYDNEY RADIO CO. LTD.

60 CASTLEREAGH STREET - - SYDNEY

Next door to the Carlton Hotel. Phones, B6651, B6652.

BALDWIN SPEAKERS



BALDWIN SPEAKERS

£3/3/-

Height 17in; Diameter
of Flare 10in.; Weight
6-lb., including 5-ft.
cord.

Concert Size, Gold or
Silver finish,
£5 5/-

TONE, VOLUME AND PRICE.

IN the new BALDWIN SPEAKER, product of the famous Nathaniel Baldwin, whose Telephones and Loud Speakers have long been recognised as the Best in Radio. The Baldwin Speaker answers the demand for a scientifically correct instrument, that gives fine tone and handles the volume, that pleases in appearance and satisfies the critical with its performance.

All the low notes of the organ - the high, sweet notes of the violin, are reproduced without distortion on volume and power amplification. The price is right.

FOR SALE AT ALL DEALERS.

(COUNTRY AND INTERSTATE DISTRIBUTORS WANTED.)

MANUFACTURERS PRODUCTS PTY. LTD.
SPECIALISTS IN ALL STYLES LOUD SPEAKERS.

Sole Distributors for Nathaniel Baldwin Products for Australasia:

CHALLIS HOUSE, SYDNEY

Comparing B.B.C. (Eng.) and the B.C.A. (Aust.)

I WAS interested to learn from the cables a short time ago that the British Broadcasting Company had determined to try duplicated programmes from the one station.

This innovation, necessitating two distinct wavelengths, will be watched with interest. Its possibilities are enormous. Two irreconcilable parties exist among listeners. They may be divided for the sake of convenience into highbrows and lowbrows, with the proviso that those phrases are not mutually exclusive. A highbrow at 7 may be a lowbrow at 8. His tastes differ. Similarly a man who thinks a broadcast fight is the chief item on a programme may well delight in a Beethoven symphony by way of contrast.

Still, broadly speaking, people of cultured taste have definite likes and dislikes, while the average man or woman will feel bored at having to listen to high-class entertainment.

3LO, as I remember, discussed some time ago the possibility of putting out two simultaneous programmes. Technical difficulties there were, but nothing insurmountable. It is very likely that if the English experiment results in satisfying the grumblers, who are the same in all parts of the world, 3LO will follow suit.

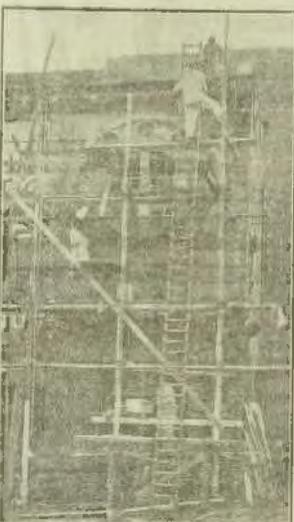
One way of utilising two wavelengths would be to put all speakers on the one length, so that the large army of subscribers who cannot bring themselves to listen to lectures may tune in to musical programmes only. The defect, however, of this arrangement would be that high-class and ordinary music would be shot out to the same audience. A better way would be the preparation of two distinct programmes, mixed in their items as at present. The one would be similar to a chamber concert and a lecture-room as to its speakers; the other would be a frankly popular entertainment. Both would make provision for church services, which all classes seem to enjoy and require.

GOOD MUSIC.

Speaking of good music, 3LO has made a start in giving fine concerts, lasting half an hour. The first has already been held, when Louis Hattenbach, one of our best cellists, gave a recital with the help of a fine singer. These musical half-hours are to be continued.

Arrangements have been made as well with the University Symphony Orchestra to give a good concert once in about two months. Professor Bernard Heinze is to conduct. The re-

Commenting on the new British Broadcasting Corporation our 3LO correspondent compares the methods of that organisation with those of the Broadcasting Company of Australia.



The new studios and offices of 3LO are almost complete. Workmen are seen here putting the finishing touches to the doorway, the upper portion of which will appear as a gigantic microphone.

preach that some musicians make of being starved for the best music will soon have no foundation. Every programme, it is hoped, will soon carry a proportion of this class of music.

BRITISH COMPLAINTS.

It is singular to hear from England complaints that broadcasting is hurting the business of the theatres and music-halls, which are antagonistic to them.

Quite the opposite effect has been heard here. I should dearly like to test the bona-fides of the English theatre managers. It could easily be done. Let the B.B.C. write to objectors telling them that it proposed to confine broadcasting of plays and music-hall numbers to half a dozen

theatres. The attitude of objectors would change. They would weigh the advertisement to be given to rivals against the imaginary loss sustained by themselves owing to broadcast performances.

The truth is that before broadcasting became common, business in London theatres had become very "rocky." After the war there was a reaction, and theatres that had been run by actor-managers who knew a good play and how to present it were driven out of business by commercial men, who knew nothing of the theatre but that it had made fortunes for others during the war. It was a frank speculation on their part, and many made money by securing leases of theatres and "spec'ing" them to third, fourth and fifth parties at increasing rents.

Add to this that they frequently put on wretched shows, because they wanted to oblige beautiful but poor actresses, that they knew nothing of plays, and thought that expensive display would excuse bad pieces, and you have a far truer explanation of empty houses than broadcasting.

It is piquant, now that the B.B.C. is run by the Government to hear loud squealing by the artists that they are underpaid. Government control has been loudly advocated here by some artists who think that under it they can demand big fees. Perhaps they may change their tune when they read that English artists are thinking of going on strike for better pay.

On the other hand, some artists are honest enough to admit that they are getting through broadcasting fees for ten minutes a night equal to those they formerly got in a music hall or a theatre for a full night's work. It has helped to keep a roof over the heads of some artists for whom little work was offering otherwise.

GREAT EVENTS AHEAD.

Apart from the big broadcasting feats to be tried out over the visit of the Duke and Duchess, I bear that 3LO has already in hand arrangements for broadcasting a full description of the classic river event of the year, the Public Schools Boat Race in May.

This year the event takes place at Geelong on the Barwon, and from the first crack of the starter's pistol to the end of the great contest, an expert will describe the progress and the shifting fortunes of the day.

Thousands of people are attracted to see this race. A hundred thousand more cannot be there, and will listen with beating hearts to hear a description and a result they once would have had to wait a day or more to learn.

It's Hard To Believe

A Really High Grade Loudspeaker for

"THE TRuemusic JUNIOR" stands 12 inches high, the horn is of copper, finished art brown, the unit is adjustable, and is wound to 4000 ohms. The tonal quality is equal to many Speakers at 6 times the price, and the volume is amazing. (Old Price, 60/-.)

19/9

PLUS
CARRIAGE



BUILD THE 3 VALVE HARKNESS REFLEX

This set is described in this issue of Wireless Weekly. It dispenses with the crystal and reproduces with wonderful tonal quality.

PARTS REQUIRED

	x	=	d.
1 Bakelite Panel, 18 x 7 x 3-16. Price	0	10	6
2 S.L.F. Advance Condensers, .0005, each	1	1	0
10/-			
2 Lined Black Engraved Dials, each 2/3	0	4	6
1 Advance Midget Condenser, .00005	0	6	6
1 Black Base Standard Valve Sockets, each	0	5	3
1/9			
1 Midget Single Circuit Jack	0	1	0
1 H. and B. Battery Switch	0	2	9
2 Edison Transformers, each, 13 d	1	7	0
2 5in. Lengths of 3in. Diameter Radion			

Voltmeters for "B" Batteries, read 0 to 50 Volts

Voltmeters for "A," "B" and "C" Batteries, 0 to 100 and 0 to 10

Hydrometers, for Battery Testing, Testrite, 3/6; Utility

B. Batteries: Fresh Eveready, WP40, 12/-; WP60

Heavy Duty "B" Batteries: Eveready XP60, 31/-; XP40

Volton Heavy Duty "B" Batteries: 45 Volts

Burriss Heavy Duty "B" Batteries: Type, 45 Volts

"A" Batteries: 12 Volts, Eveready, in one unit, each

Dry Cells: 11 Volts, Columbia, 2/9; Eveready

"C" Batteries: Eveready, Tapped, 1.5, 3, and 4.5 Volts

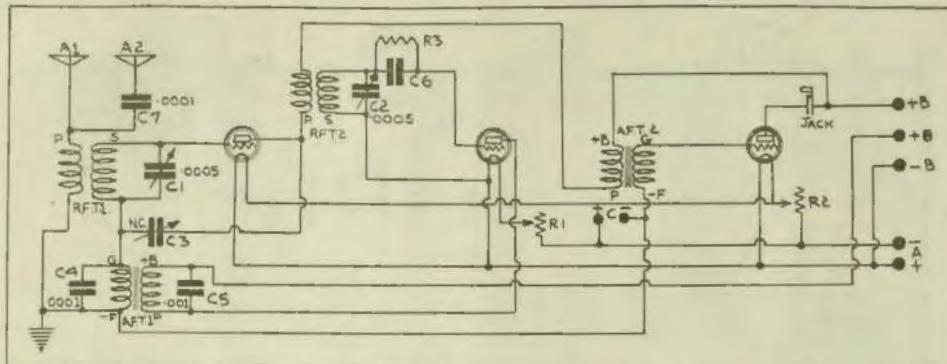
COUNTRY CLIENTS.—We Pay Carriage on all orders of 10/- and over, except Batteries, Loudspeakers, Cabinets and Value Payable Post Parcels.

ALL GOODS CARRY A GUARANTEE OF SATISFACTION, OTHERWISE MONEY RETURNED.
"YOURS FOR LOWER PRICES."

The Economic Radio Stores
25 New Royal Arcade, Sydney.

Phone M 3049

Branches:— PARRAMATTA: Corner Church and Macquarie Streets. Phone UW.9661.
NEWCASTLE: 569 Hunter Street West. Phone: New.1622.



The Circuit

How to Make

A Three Valve Harkness Reflex

Distance — Volume — Economy

IN "Wireless Weekly" for October 15 there was described the constructional details of the Harkness Reflex receiver. This receiver—"The Sweetest and Loudest I have ever heard!"—proved so popular that we sold out of that issue. Stacks of congratulatory letters have been received from many readers who constructed the set.

A few met with slight trouble with the crystal detector, brought about mainly through not having sufficient B battery on the plates of the valve or through the injudicious use of the rheostat. In most instances this has been overcome.

Some radioists have a decided dislike for a crystal detector, and this is hard to understand provided, of course, the crystal detector used is a good one of the variable type. The crystal detector plays a most important part in the selectivity of the receiver—some spots on the crystal being of little use for reception of long distance stations, and some being ideal for this purpose. The crystal detector is the main spring of the whole receiver.

The receiver being described to-day is really the latest Harkness Reflex, but this time employs a valve as the detector. This provides a very flexible arrangement which will be extremely popular all round.

Many there are who do not understand just what a reflex set is. Reflex sets are popular the world over for

many reasons. Firstly, one valve does the work of two, and, secondly, as a corollary the cost of upkeep is much less. A and B batteries last much longer, and the cost of renewals of valves, etc., is lessened. Thus appealing to the pocket, the reason for their popularity is thus evident.

The Harkness Three is no exception to the rule. Come along and follow out the circuit diagram—this will be good practice following on the symbol article of this week, and will also show just how with three valves a four valve output is obtained. Four valves we know will give wonderful loud speaker volume.

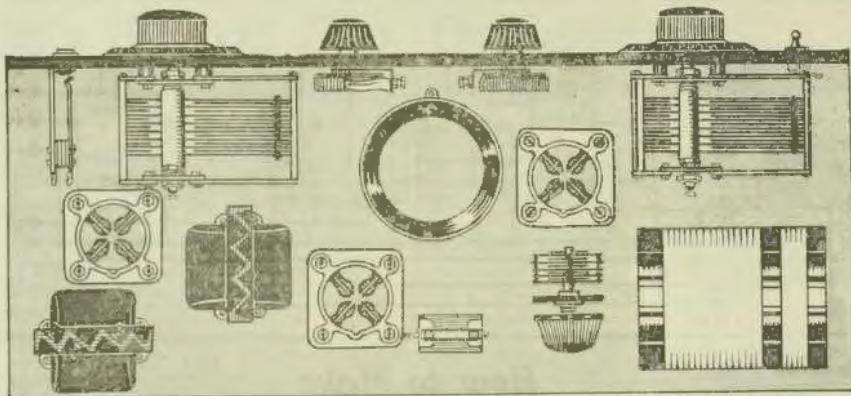
The aerial energy flowing through the primary (P.) of Radio Frequency Transformer 1 (R.F.T.1) is conveyed inductively to the secondary of R.F.T.1, tuned ant is then impressed on the grid of the radio frequency valve V1. This valve in its functioning transfers this amplified energy to the primary (P.) of R.F.T.2, coupled to the secondary and impressed on the grid of the detector valve V2 where it is detected. After this we have audio frequency—that is, sounds can be heard if the earphones were connected in the circuit at this stage.

As this is not loud enough for a loud speaker the energy is next fed back from the plate of detector valve V2 to the primary of the audio frequency transformer A.F.T.1 where the volume is increased by being fed from the secondary of this A.F.T.1

back through the secondary of R.F.T.1, and from thence to the grid of the first valve V1. Here it is passed to the plate of this valve, and being at audio frequency will not actually actuate the secondary of R.F.T.2 but simply flows through the primary, then along to the primary of A.F.T.2. The secondary of this A.F.T.2 picks up the energy and carries it to the valve V3, through it, to the loud speaker jack. Hence we have one stage of radio, a detector and two stages of audio, the first valve being the reflex valve, doing double work.

Although this valve does double work it does not necessarily follow that it will wear out before either of the other valves. Some folk think so, but it is a fallacy; forget about it. Reflexing is the American term for this principal, and in Britain it is known as Dual Amplification.

Still keeping the circuit diagram in front of you notice that one rheostat is provided specially for the detector valve, whereas one controls the reflexing valve and the audio valve together. If valves such as UX201a—consuming .25 of an amp each are used then rheostat R2 should be either 6, 8, or 10 ohms as this rheostat must carry $\frac{1}{2}$ an amp, $\frac{1}{2}$ for each valve, so that if the usual 30 ohms rheostat is used it will generally heat up. The 30 ohms Cutler Hammer rheostat used by ourselves will conveniently carry this $\frac{1}{2}$ amp without any trouble, but



Plan view showing positions of components. The wiring has been omitted. It is shown elsewhere.

there are some other makes which won't do this. Remember this now! Of course, if desired a Brachotat of 3 an amp. capacity may be substituted for R2, this being a matter of choice.

From the point of view of selectivity this receiver is splendid. Instantiating this we have the aerial loosely coupled to the grid coil and the output of V1 loosely coupled to the grid coil of V2. Loose coupling is a means to selectivity, and this is

available in this receiver as may be seen. An additional means of obtaining selectivity is by including a .0001 fixed condenser in series with the aerial lead or occasionally the earth lead. This applies to all sets.

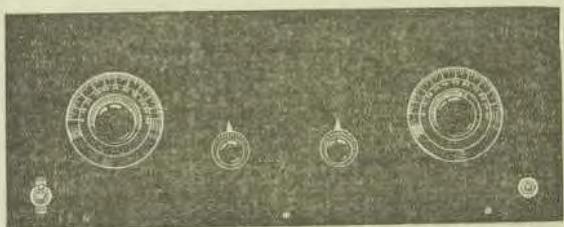
The shopping list for the parts for the Harkness Three reads as follows:

- 1-Dilecto or Radion Parzel, 18x7x3 .48th
- 2-.0005 m.f.d. Advance S.L.F. Condensers.

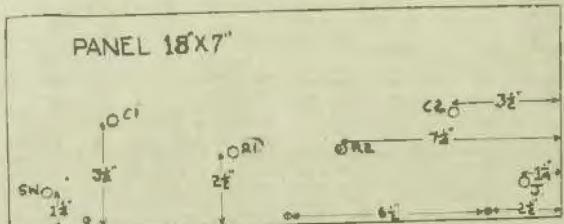
- 2-2-inch or 4-inch Dial.
- 1-Advance Midget Condenser .000005.
- 3-H. and H. Valve Sockets.
- 1-H. and H. S.C. Jack.
- 2-Igranic A.F. Transformers, 1-5 to 1 and 1-3 to 1.
- 2-5-inch lengths of 3-inch Dilecto or Radian Tubing.
- 4-ozs. No. 24 D.C.C. Wire.
- 1-Terminal Board with 10 terminals.
- 2-.0001 Igranic Fixed Condensers.
- 2-30 ohms C. H. Rheostats.
- 1-Duhdier .00025 Grid Condenser.
- 1-2 meg. Grid Leak.
- 1-H. and H. Battery Switch.
- 1-Baseboard 17x9x1.

Wiring wire, screws, etc.
Remember that the efficiency of any receiver depends on the quality of the components. The parts enumerated above have been selected specially for this receiver and will assuredly produce excellent results, but while at the same time it is not absolutely necessary to adhere strictly to the brands of materials used, the valves specified should not be departed from in any way. Don't write asking for information on the number of turns of wire necessary to work in conjunction with a .001 or a .00025 m.f.d. variable condenser as we only build one set, and to satisfactorily supply this information a separate receiver would have to be built and tried. If it is desired to employ different sized variable condensers to those specified then try out for yourself—experiment a bit—the results are often interesting.

This week instead of photographs we have resorted to perspective drawings which will show the layout of the different components. Adhere to this



PANEL 18"X7"



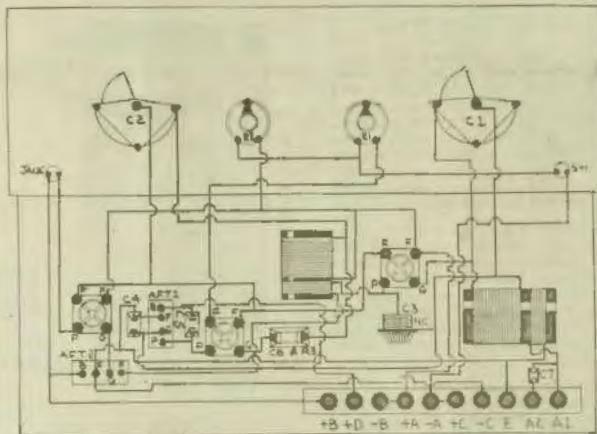
Top.—Front view of panel.
Bottom.—Drilling template of panel.

layout as far as is practicable and an excellent receiver will be the result.

Once again coil winding is required. To most people this appeals, first it is a pleasant occupation and secondly the cost is much lower than when the coils are purchased ready-made. It so happens this time that ready-made coils are not available, so commence winding now. At a distance of $\frac{1}{2}$ an inch from one end of the tube drill a hole large enough to allow a contact stud to fit through. Push this stud through the hole from the inside so that the head of the stud is inside the tube. Bare about one inch of the ends of the 24 D.C.C. wire and clamp it under the nut of the contact stud, then wind on 50 turns of wire, each turn close to its neighbour. Finish off by clamping the bared end underneath the nut of a contact stud fitted in the already prescribed manner. The beginning and the end of this coil should be level on one side of the tubing.

On the opposite side of the tube and a $\frac{1}{4}$ of an inch from the end of the last winding provide another contact stud, and from this stud wind 15 turns of the same gauge wire, finishing off under a contact stud as before. Thus we have a tube with two coils wound in the same direction, one of 50 turns and one of 15 turns, with a $\frac{1}{4}$ of an inch space between the two windings. Two of these units are required so when one is finished build another of exactly the same dimensions. On the end of one former—the 15 turns end fit a small bracket such as a grid leak clip in order that this unit may be screwed to the baseboard. The other former is secured to the baseboard by means of two small pillars $\frac{1}{4}$ of an

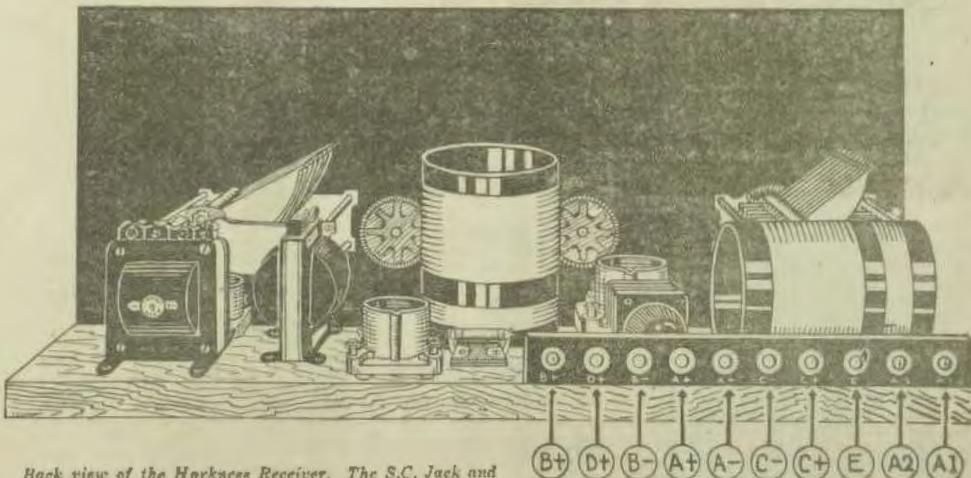
inch high. These pillars may conveniently be the tops of the wadern-plugs supplied with Eveready B batteries. A hole should be drilled right through the length of the pillar, and also a hole should be provided at each end of the former in such a position that when the former is screwed down to the baseboard the connections for the 50 turns or secondary portion of the coil is facing the variable condenser. The primary connections, of course, will face the buck, just where the aerial and earth terminals are on



The back of panel wiring diagram check off with circuit.

the terminal board. This manner of mounting will save much wiring.

Next mark out the panel. This is quite a simple matter. The Cutler Hammer rheostats are of the one hole mounting type, which is a blessing. The Advance condensers on the other hand require fixing screws and, unfortunately, no drilling template is provided. However, make a template from a portion of the cardboard box in which the condenser comes to you. Use one whole side of the box and in the centre, using a lead pencil, pierce



Back view of the Harkness Receiver. The S.C. Jack and Switch are hidden by the other apparatus.

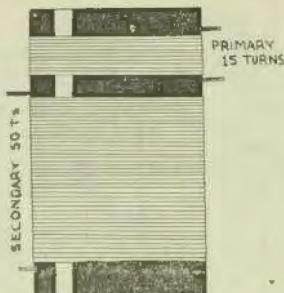
a hole just big enough to allow the spindle of the condenser to slip through tightly. Remove the three fixing screws and press this end-board tightly over the spindle and right back to the condenser. Press against the pillars of the fixing screws and with a sharp pencil make a neat little hole right in the centre of the pillars. Now you have a template which may be placed in position on the panel and centre punched.

Drill the panel, remembering the golden rule that a high speed and light pressure accomplishes much. The holes for the fixing screws for the condensers are to be countersunk, so failing a rabbit use a larger sized drill, but don't be absent-minded and drill right through. Only go about half way.

Assemble the components on the panel, firstly the switch, then the jack, the two rheostats with the terminals of each facing each other, and then the variable condensers. Fix the panel temporarily to the baseboard and plate the positions for the components. Note the previous description of mounting the coils, also the fact that the valve sockets are not in line but are staggered. Study the back of panel wiring diagram carefully and follow out as suggested. Remember that R.F.T.1—that one with the bracket on the bottom—is fitted very close to the rheostats with the secondary connections facing condenser C2. The neutralising condenser is alongside R.F.T.1. This layout is a very good one.

Remove the panel and commence the wiring. Busbar, Fort or Celastite wire may be used, or 20 D.C.C. wire run through varnished cambric spaghetti. Busbar is a little more difficult to run than the others. The back of panel wiring diagram will clearly show the wiring, and, taken in conjunction with the circuit diagram as a check, this pleasant job may be proceeded with. Mark off each wire as it is entered into the set and remember when soldering to solder neatly. Wire as far as is possible before screwing the panel to the baseboard, and then finalise when this is done.

When the wiring has been completed check over very carefully and then insert the valves in their sockets. On actual test Mullard F.M.A. valves were used to advantage, although almost any other make of valve may be used. Hook up the aerial to terminal A1 and the earth to the E terminal. Link up the A battery to its respective terminals and the B battery also. Twenty-two to 30 volts will prove an ample for the detector and 90 for the audios, but if a higher voltage is required for the amplifier valves a suitable C battery must be used. Be



How the R.F. Transformer should look when finished.

guided in the choice of C battery by the information contained in the pamphlet supplied with the valves used. Plug in the speaker and pressing the battery switch to the ON position, gradually turn up the rheostats.

Slowly rotate both dials until a station is heard. Most probably a low howl will be heard when both condensers tune their respective circuits to the same wave length. Don't be worried over this as it only indicates that the neutralising condenser needs to be adjusted. Using a pencil, adjust this neutralising condenser until the howl disappears. Again, if the reception is raucous a variable grid leak connected across the secondary of one or both audio transformers will rectify this immediately. One side of this resistance is joined to L8, and the other side to O.S. of the transformer transformer. If the receiver is not sufficiently selective transfer the aerial from A1 to A2 and retune slightly. This often has the desired effect.

The volume of this receiver is sufficient for all purposes. Careful tuning will resolve 4QG and 5CL, and also 3LO, but careful tuning is must be. These three stations were heard nicely on the speaker at Marrickville on the standard aerial of 78 feet length overall. Further test results will be given in next week's issue.

For three valves this receiver is a wonder. We have every faith in it, and we know that in time it will rival its confrere, the Barkness Two, in popularity. Don't hesitate to build it—go right ahead, and then learn that you have the maximum output that is possible for three valves.

Can You Read a Circuit Diagram?

Continued from page 21

Come along now to the popular Reinartz single valve receiver. Once again the primary coil (a) is seen connected to the aerial and earth. Coupled to this is the secondary or grid coil (ba), tuned with a variable condenser B (No. 5 on the chart). Reaction coil (ca) is joined to the bottom of secondary coil (bs). The other end of this reaction coil is connected through another variable condenser (D) to the plate of the valve (g). The grid of the valve is marked F and the grid condenser and leak—No. 20 on the chart—is marked (e). A and H denote the filament of the valve—turn to No. 17 now and read the accompanying paragraph. Can you clearly understand it? Look at the choke coil (ja) and the phones K and the terminals L. The rest are conductors; see how some join and others cross. Consult the chart again and pick each out. Study it carefully.

On the Karns Equamatic Receiver, pick out the valves, the condensers, the coils, the D.C. jack, the transformers, the S.C. jack, the single impedance or retard coils, the aerial, and the rheostats. Note the relation of one part to the other. Mark off in numbers with the chart. Familiarise yourself thoroughly with all the signs, turn back to the Cockaday receiver in last week's issue. Compare each symbol with the photographs, and also the back of panel wiring diagram. Turn back other copies, get a good understanding and then don't forget them. Keep this issue by you at all times for reference, and infinite pleasure is in store for you once a gain. It is worth it—see for good knowledge of a circuit diagram yourselves.

RADIO has, it is reported, accomplished the formerly impossible feat of stopping a parliamentary orator in full swing. The speeches in the Diet of Finland are broadcast for the popular benefit; and one long-winded orator who was "talking for Buncombe" reached his mark. He was suddenly interrupted by a long-distance telephone call from indignant constituents with a warning that he was wearing out his popularity by his lack of terminal facilities. The astonished statesman at once yielded the floor.



ROUBLE SHOOT-

ING in your receiver is likely to reveal a dozen little faults which when remedied improve reception considerably. Try for external faults—battery, earth and aerial connections—first, then the valves and transformers. Nine out of ten listeners leave it at that omitting to examine the valve sockets, rheostats, and even their headphones. They are careless, for in these three parts are to be found many small faults. The best thing to do is to throw them out and replace with EMMCO. Good reception is then ensured and there is no need for trouble shooting.

EMMCO RHEOSTAT.

Constructed with the new style metal frame and with a bakelite knob. The double inside grip of the sliding arm ensures continuous contact and a firm grip, making its adjustment even and sure the whole way round. PRICE, 5/-.



Emmco
Rheostat,
5/-.

EMMCO HEADPHONES.

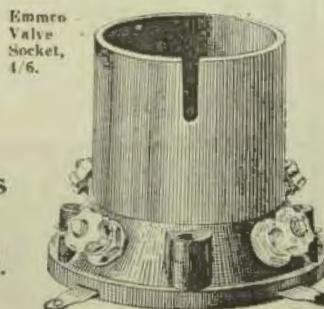
Every detail is manufactured to the highest standard of efficiency. A light spring head-band, with sliding adjustment on each earpiece, enables them to be worn with the utmost comfort. PRICE, 21/-.



Emmco
Headphones,
21/-.

EMMCO VALVE SOCKET.

Made of moulded bakelite, the EMMCO valve socket is adaptable for all standard valves, UX or UY type. Springs make positive contact and cannot become displaced by long usage. PRICE, 4/-.



Emmco
Valve
Socket,
4/-.

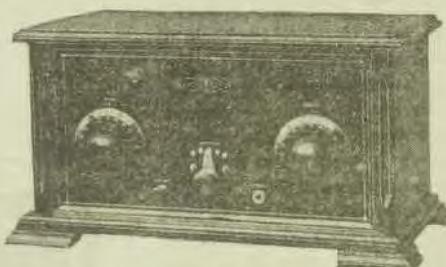
EMMCO

PARTS AT ALL RADIO DEALERS

Made in Sydney by the
Electricity Meter Manufacturing Co. Ltd.
Sydney, N.S.W.

The Royalty of Radio

New Additions to



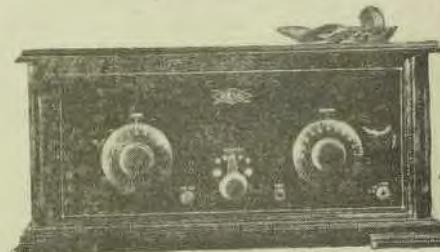
TWO-VALVE.

COLMOVOX THREE-VALVE RECEIVER.

This Receiver is very similar to the above Two-valve Colmoxox, but in addition has one extra stage of Audio Frequency Amplification, which enables it to give highly satisfactory broadcast loud speaker reception over distances of 500 miles. Finished in a nicely-finished Maple Cabinet 21 inch x 10 by 10 inch deep and complete with Three Valves, 3-volt 40 amp. Accumulator, Brandes Table Talker Speaker, 84-volt High Tension "B" Battery, Aerial and Earth Wire, Battery connections, Lightning Arrester, and Insulators.

CASH PRICE: DEPOSIT: WEEKLY:

£20/10/- £5/-/- 6/9.



THREE-VALVE.

COLVILLE-MOORE WIRELESS SUPPLIES

COLMOVOX

The Royalty of Radio

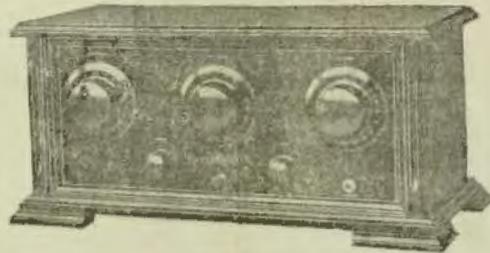
Colmox Lines

COLMOVOX FOUR-VALVE RECEIVER.

A highly efficient long distance Receiver. The four valves provide two stages of Radio Frequency Amplification, Detector Valve and one stage of Audio Frequency Amplification. A Receiver of exceptional merit and so priced that it is within the reach of the pockets of every one. The 21 x 10 x 10 inch deep cabinet is of nicely polished Maple and complete with Four Valves, 6-volt 60 amp. Accumulator, 84-volt High Tension Battery, Amplion Loud Speaker, Aerial and Earth Wire, Battery connections, Lightning Arrester, and Insulators.

CASH PRICE: DEPOSIT: WEEKLY:

£27. £6. 9/-.



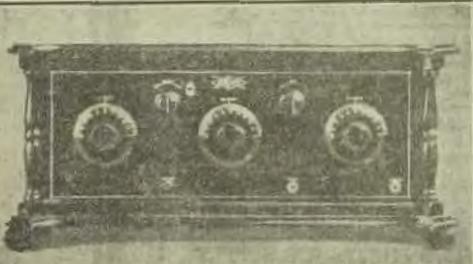
FOUR-VALVE

COLMOVOX FIVE-VALVE RECEIVER.

A Neutrodyne Receiver of wonderful sensitivity designed to give maximum volume over great distances. The five valves provide two stages of Radio Frequency Amplification, Detector Valve, and two stages of Audio Frequency Amplification. The receiver is housed in a polished Maple Cabinet of 23 x 13 x 12 inches deep and complete with Five Valves, 6v. 60 amp. Accumulator, 2 Large Capacity 45-volt High Tension Batteries, Amplion Junior De Luxe Speaker, Aerial and Earth Wire, Battery Connections, Lightning Arrester and Insulators.

CASH PRICE: DEPOSIT: WEEKLY:

£33. 10/-, £7. 7/-, 11/4.



FIVE-VALVE.

Complete instructions for erection and operation together with calibrated tuning chart supplied places the novice on the same footing as the experienced listener-in, enabling him to tune in immediately and without any previous knowledge, to all Australian "A" class stations.

GUARANTEED TWELVE MONTHS.

LTD., 10 Rowe Street, Sydney. B 2261

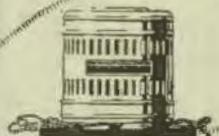
COLMOVOX

A 609

.06 amp.
Superb Detector
and
General Purpose
Valve

B 605

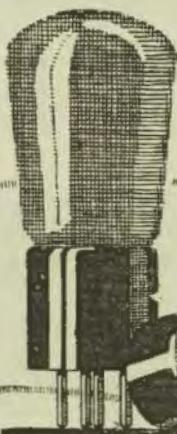
.1 amp.
Power Valve
and
Low Impedance
R.F. Amplifier.



No. 450
Price £6-0-0



No. 372
Price £9-15-0



NEW 6 VOLT VALVES

MIGHTY "MINIWATTS"!

COMPANIONS IN ECONOMY.

Each with the new power-plus filament—
there is none stronger

These new Six Volt "Miniwatts" slip right into the Sockets where there are now perhaps wasted old types—and your batteries last four times longer. You'll marvel at the greater distance, volume and sweet clear tone.

UNFAILING "A & B" POWER

FOR EVERY RADIO.

No. 450. FAMOUS PHILIPS "Full-wave"
1.3 amp. 6-volt Charger—which keeps your "A" battery always at "peak."
It is automatic, silent, and fool-proof.

No. 372. FAMOUS PHILIPS H.T. SUPPLY
UNIT which eliminates "B" Batteries and supplies steady smooth plate current direct from the A.C. mains *without hum!*

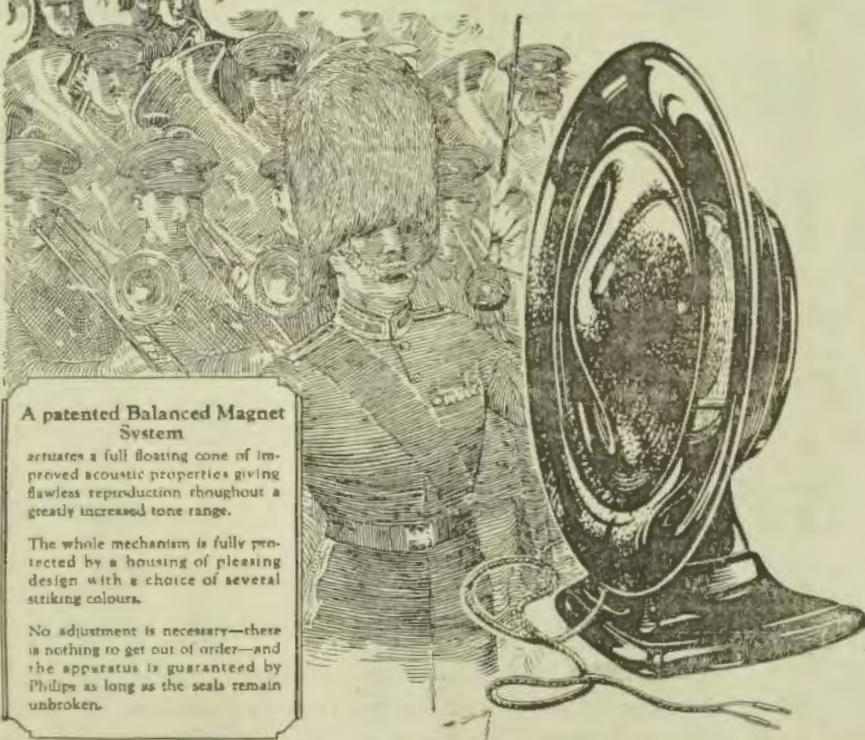
Proven reliable in the hands of thousands of satisfied users.
FROM ALL DEALERS.

PHILIPS

You hear the *whole Band*

Brilliant and beautiful—every instrument clear—like a silver bell. As though the whole band comes marching right into your home—that's how natural your Radio reception can be to-day.

Famous Philips scientists have now perfected a new natural tone Loud Speaker—giving realism to Radio beyond belief! It is already a world-wide success.



A patented Balanced Magnet System

features a full floating cone of improved acoustic properties giving flawless reproduction throughout a greatly increased tone range.

The whole mechanism is fully protected by a housing of pleasing design with a choice of several striking colours.

No adjustment is necessary—there is nothing to get out of order—and the apparatus is guaranteed by Philips as long as the seals remain unbroken.

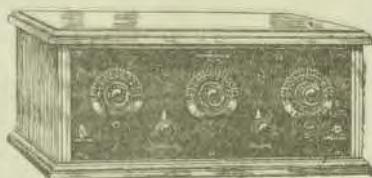
A co-product of Famous Philips Valves, "B" Eliminators and Battery Chargers.

**PHILIPS NATURAL TONE
LOUDSPEAKER**

THE NEW AND IMPROVED WONDERTONE IV. HOME CONSTRUCTION RECEIVER

is the result of exhaustive experiments to place before the Australian public a Receiver that does not require any technical knowledge whatever to build. With our new and simple building instructions, a boy of 7 can build it. Furthermore, the circuit employed is especially designed for the combination of simplicity of Control—Distance—Volume—Clarity—and Selectivity. No jamming of Stations with the new and wonderful "Wondertone" H.C. IV., and no special tools are required, only a screw-driver and pliers. The connecting wires are all cut and prepared to the required lengths, and by following the instructions it is impossible to make a mistake.

Easy to Build



Easy to Use

Illustration of a completed "Wondertone" H.C.IV. Receiver.

	Complete parts ready to build.	Assembled, Wired and Tested ready for use.
"Wondertone" H.C. IV., parts ready to assemble, with 60 Ampere Hour Accumulator	£19 17 6	£21 17 6
"Wondertone" H.C. IV., parts ready to assemble, with Dry Cell "A" Battery	£17 12 6	£19 12 6
"Manhattan" Loud Speaker, suitable for "Wondertone" IV.		£1 3 6

The Components include everything necessary for a complete Receiver such as Stained Maple Cabinet, Bakelite Panel, drilled and engraved, heavy duty "B" Battery, Accumulator or Dry "A" Battery, "C" Battery, "D" Battery, Voltmeter, Hydrometer (for Accumulator), Headphones, Battery Connecting Cable and Aerial Equipment, Blue Print Diagram and Building Instructions.

SEND FOR ILLUSTRATED LEAFLET.

Your Own Set Re-wired by Experts—Prices on Application.

Wiles Wonderful Wireless and Electrical Stores

Pitt and Goulburn Streets, Sydney.

Branch: 23 Pitt St., Near Circular Quay.

Branch: 384 Pitt St., near Goulburn St.
Mail Order Dept.: 60 Goulburn Street.

BROADCASTING PROGRAMMES

for the COMING WEEK



Friday, April 8 2FC, SYDNEY

Farmer's Broadcasting Service.

Wave Length, 442 Metres.

MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.
12.35 p.m.—Stock Exchange: First Call.
12.45 p.m.—Official Weather Forecast, Rainfall, Temperature, Astronomical Memoranda, Shipping Intelligence, Mail Services.
12.55 p.m.—Studio Music.
12.55 p.m.—Summary of "Sydney Morning Herald" News Service and Cables.
12.55 p.m.—Studio Music.
12.45 p.m.—A talk on home cooking and recipes by Miss Anne Luciano, soprano—
12.55 p.m.—Miss Anne Luciano, soprano—
"Tired Hands" (Sanderson).
1.05 p.m.—"Big Ben": Weather Intelligence.
1.15 p.m.—"Evening News" Midday News Service; Producers' Distributing Society's Report.
1.20 p.m.—Studio Music.
1.25 p.m.—Stock Exchange, second call.
1.30 p.m.—Marching Music for School Children, service.
1.40 p.m.—Studio Music.
1.45 p.m.—Miss Anne Luciano, soprano, "I Love the Moon" (Ribbons).
1.50 p.m.—Studio Music.
2.00 p.m.—"Big Ben": Close Down.

AFTERNOON SESSION.

- 2.0 p.m.—"Big Ben" and Programme Announcements.
2.5 p.m.—Music from the Studio.
2.45 p.m.—Mr. S. H. Bowden will give a talk, Subject: "The Theatre—the dream of pleasure."
2.55 p.m.—Mr. Cliff Harvey, violin solo, "Indian Lament" (Dvorak-Kreisler).
2.55 p.m.—Marching Music for School Children.
3.10 p.m.—From Farmer's Tea Rooms: Miss Eileen Moreau, mezzo, "Fair Moon" (Locesi).
3.15 p.m.—From the Studio: Mr. Cliff Harvey, violin solo, "Midnight Bells" (Heidegger-Kessler).
3.20 p.m.—Miss Katherine Beverley, soprano, "If We Called Away" (Phillips).
3.25 p.m.—"Big Ben": From Farmer's Tea Rooms: Miss Ethel Muller, contralto, "The Dawn" (D'Hardelot).
4.05 p.m.—A Music Talk by Mr. Ernest Chapple.
4.15 p.m.—From Farmer's Tea Rooms: Miss Eileen Moreau, mezzo, "At Dawning" (Carmen).
4.25 p.m.—Studio Music.
4.30 p.m.—Miss Katherine Beverley, soprano, "Ye San" (Pineo).
4.35 p.m.—Studio Music.
4.40 p.m.—From Farmer's Tea Rooms: Miss Ethel Muller, contralto, "Vivaldi's" (Roma).
4.45 p.m.—Stock Exchange, third call; Studio Music.
5.00 p.m.—"Big Ben": Close Down.

EARLY EVENING SESSION.

- 5.45 p.m.—The Chimes of 2FC.
5.50 p.m.—The "Hello Man" Talks to the Children.

- 5.55 p.m.—A Serial Story for the Older Ones.
6.10 p.m.—From Farmer's Oak Dining Hall: Vocal and Instrumental Items.
7.00 p.m.—"Big Ben": Last Minutes Sporting Information from the 2FC Racing Committee.
7.10 p.m.—Dalgety's Market Reports (wool, wheat and stocks).
7.15 p.m.—Fruit and Vegetable Markets.
7.20 p.m.—Weather and Shipping Intelligence.
7.30 p.m.—Late Evening News: News Service.

NIGHT SESSION.

- 7.40 p.m.—The Programme Announcements.
7.45 p.m.—A Talk by Mr. E. J. Van de Velde, Subject: "How to Photograph Animals."
8.00 p.m.—"Big Ben": From the Lyceum Theatre, Pitt Street, Sydney: Orchestral Entertainment.
8.10 p.m.—From the Studio: Miss Mabel Bachelor, soprano.
(a) "O Heart of Mine" (Galloway).
(b) "One Spring Morning" (Nevin).
8.25 p.m.—A Talk by Mr. W. F. Kay (the third of the series), Subject: "Immortals of the Sydney Stage—Great Comedians."
8.35 p.m.—"Big Ben": From the Lyceum Theatre, Pitt Street, Sydney: Orchestral Entertainment.
8.45 p.m.—Mr. Harold Tolleman, Baritone, "Those Who Greatest Inspiration" (Verdi).
8.45 p.m.—Miss Edna Davis, Xylophone solo, "March Bonfires" (Henri Kowalski).
8.55 p.m.—Mr. Les Coney, Comedian, "The Willow" (Characteristics).
8.55 p.m.—"Big Ben": From the Lyceum Theatre, Pitt Street, Sydney: Orchestral Entertainment.
9.00 p.m.—From the Studio: Miss Mabel Bachelor, soprano.
9.10 p.m.—Mr. Harold Tolleman, Baritone, "I Am the Man" (Sanderson).
9.15 p.m.—Mr. Cliff Harvey, violin solo.
9.20 p.m.—Mr. E. W. Gerrie, flute solo.
9.25 p.m.—An Act from the Tivoli Theatre, Castlereagh Street, Sydney. (By permission of Tivoli Theatre, Ltd.).
9.35 p.m.—From the Studio: Miss Mabel Bachelor, soprano, "Abduction" (Cowan).
9.40 p.m.—Mr. Harold Tolleman, Xylophone solo, "Where Did You Get That Eyes" (Stephenson).
9.45 p.m.—"Big Ben": Mr. Harold Tolleman, baritone, "Melody of Home" (Stephenson).
10.04 p.m.—From the Lyceum Theatre, Pitt Street, Sydney: Orchestral Items.
10.15 p.m.—From the Studio: Mr. Les Coney, Comedian, "The Ditty" (Bert Lee).
10.15 p.m.—Miss Edna Davis, Xylophone solo.
(a) "To-night's My Night With Baby."
(b) "That's Why I Love You."
10.30 p.m.—From the Wentworth Cafe, Church Hill, Sydney: The New Wentworth Symphony Dance Orchestra, under the baton of Mr. Frederick Layton.
10.35 p.m.—From the Studio: Mr. Les Coney, Comedian, "Married Man Blues" (Weston and Lee).
10.40 p.m.—From the Wentworth Cafe, Church Hill, Sydney: The Wentworth Symphony Dance Orchestra in popular numbers.
10.55 p.m.—From the Studio: Celebrity Readers; Late News, and Announcements.
11.00 p.m.—"Big Ben": Close Down. National Anthem.

2BL, SYDNEY

Broadcaster's Ltd.
Wave Length, 363 Metres.

Friday

EARLY MORNING SESSION.

- 7.15 a.m.—G.P.O. Clock and Chimes.
7.30 a.m.—Metropolitan weather forecast.
7.37 a.m.—Musical programme from the Studio.
7.38 a.m.—Physical training and health exercises.
7.45 a.m.—G.P.O. Clock and Chimes.
7.50 a.m.—Hints on health.
7.55 a.m.—Physical training and health exercises.
7.55 a.m.—G.P.O. Clock and Chimes.
7.56 a.m.—Weather report.
7.47 a.m.—Broadcaster's special news service.
8.00 a.m.—G.P.O. Clock and Chimes; close down.

MORNING SESSION.

- 10.00 a.m.—G.P.O. Clock and Chimes.
10.15 a.m.—Weather report.
10.20 a.m.—Musical programme from the Studio.
10.25 a.m.—News service from the "Daily Telegraph."
10.30 a.m.—Musical programme from the Studio.
11.00 a.m.—G.P.O. Clock and Chimes.
11.30 a.m.—News from the "Daily Telegraph."
11.35 a.m.—Rabbit Market report.
11.45 a.m.—Flish Market report.
11.50 a.m.—Vegetable Market report.
12.00 a.m.—London Stock, Farm, and Rice and Potitory Market report.
12.25 a.m.—London metal quotations.
12.28 a.m.—Ships in call by wireless.
12.31 a.m.—Information re Interstate and Overseas Mail.
12.35 a.m.—Shipping information—arrivals and departures.
12.45 a.m.—Women's Session: Talk by Miss Gwen Varley, Broadcaster's Women's Sports Authority on "Cricket".
12.55 a.m.—Special notes by Mrs. Jordahl.
12.55 a.m.—Mrs. Jordahl's reply in correspondence.
12.55 p.m.—Talk on "Feeding the Family" by Mrs. Jordahl.
12.55 p.m.—G.P.O. Clock and Chimes.
12.55 p.m.—Sydney Stock Exchange sale.
12.55 p.m.—"Sun" Newspapers news service.
12.45 p.m.—Hilliers' Instrumental Quartet; direction, Caryl Cawling.
12.55 p.m.—G.P.O. Clock and Chimes.
12.55 p.m.—Weather report.
12.55 p.m.—Sydney Stock Exchange sale.
12.55 p.m.—News from the "Sun."
12.45 p.m.—Musical programme from the Studio.
2.00 p.m.—G.P.O. Clock and Chimes; close down.

AFTERNOON SESSION.

- Racing information broadcast by courtesy of the "Sun".
- 1.00 p.m.—G.P.O. Clock and Chimes.
1.15 p.m.—Weather report and forecast.
2.00 p.m.—Social notes from the "Sun."
2.30 p.m.—News from the "Sun."
2.15 p.m.—Civil Service Stump Trio; direction, Miss de Courtney Bremer.
2.00 p.m.—G.P.O. Clock and Chimes.

2.31 p.m.—News from the "Sun."
 2.35 p.m.—Musical programme from the Studio.
 4 p.m.—G.P.O. Clock and Chimes.
 4.1 p.m.—CIVIL Service Stage Trial.
 4.15 p.m.—"The Studio Orchestra".
 4.30 p.m.—G.P.O. Clock and Chimes.
 4.35 p.m.—Musical programme from the Studio.
 4.45 p.m.—Printers' Distributing Society's
 Fruit and Vegetable Market report.
 4.50 p.m.—Shipping information when available.
 4.52 p.m.—Day racing results on race days.
 4.55 p.m.—News from the "Sun."
 4.58 p.m.—Review of night's programme.
 5 p.m.—G.P.O. Clock and Chimes close down.
EARLY EVENING SESSION.
 5.45 p.m.—G.P.O. Clock and Chimes.
 5.48 p.m.—Little Willie and Duddy Longlegs will entertain the children.
 5.50 p.m.—The piano of Miss Monica Seally will entertain the children.
 5.40 p.m.—Musical programme from the Studio.
SPECIAL COUNTRY SESSION.
 5 p.m.—G.P.O. Clock and Chimes.
 Australian Mercantile Land and Finance Co., report.
 Weather report and forecast.
 Stock Exchange reports.
 Producers' Distributing Society's Fruit and Vegetable Market report.
 Grain and Fodder report ("Sun").
 Dairy Products report ("Sun").
 5.15 p.m.—Country news from the "Sun."
 5.30 p.m.—Talk of "Inchington Science" by Mr. Cooper, Park Superintendent, City Council.
 5.35 p.m.—G.P.O. Clock and Chimes.
 Broadcasters' Topical Chorus.
 5.40 p.m.—Madame Phyllis Howe (soprano).
 5.45 p.m.—Mr. Albert Carlile (tenor).
 5.47 p.m.—Broadcasters' Trio.
 5.47 p.m.—Miss Ethelene Rogers (contralto).
 5.48 p.m.—Miss Dorothy Braaten (contralto).
 5.49 p.m.—Mr. Walter Chappell (tenor).
 5.50 p.m.—Miss Selli M. Ferguson.
 5.55 p.m.—Review of following day's programme.
 Weather report and forecast by courtesy of Mr. G. J. Morris, Govt. Met.
 5 p.m.—G.P.O. Clock and Chimes.
 Broadcasters' Trio.
 5.15 p.m.—The Sporting Editor of the "Sun" will talk on the prospects of Saturday's racing.
 5.31 p.m.—Madame Phyllis Howe.
 5.35 p.m.—Mr. Albert Carlile.
 5.40 p.m.—Gillie and Company.
 5.47 p.m.—Broadcasters' Trio.
 5.48 p.m.—Miss Thelma Houston.
 5.49 p.m.—Miss Nellie Ferguson.
 5.50 p.m.—The Ambassadors Dancers, band broadcast from the Ballroom of the Ambassador. During the intervals between dance news reports by courtesy of the "Sun" will be broadcast.
 5.55 p.m.—G.P.O. Clock and Chimes.
 National Anthem.

3LO MELBOURNE

Broadcasting Co. of Aust.
 Wave Length, 371 Metres.

Friday,

MIDDAY SESSION.

FROTH AND BROTH.
 THE STUDIO ORCHESTRA.
 HUXTAMS SERENADES.
 "CHECK" HAYES, the Talkative Chap.
 C. RICHARD CHUNG, date.
 TAYLOR AND SUMMERS, comedians.
 Accompanist—MAURICE BUDLEY.
 Accomp.—ALFRED ANDREW, ALICE FORTUNE.
 12 noon—Tribute to the British official wireless news from Rugby, Reuters' and the Associated Press Association cables.
 "Argus" and "Herald" news services.
 12.30 p.m.—CARTHY BROS., in
 "Songs and impressions."

12.40 p.m.—Stock Exchange Information.
 12.50 p.m.—HUXTAMS SERENADES:
 Quartet, "I want a garden for daddy," Edith Buxham, Dolly Burdett, Reba Miller and Hugh Buxham.
 Solo, "If winter comes," Reba Miller.
 Studio Orchestra, "Allegretto" from Piano Sonata" (Schubert).
 Duo, "Four old songs," Hugh and Edith Buxham.
 Agnes Fortune, piano, "Romantic Prelude" (Chopin).
 Studio Quartet, "Carmena," Beranger.
 1.15 p.m.—Weather report.
 1.20 p.m.—THE STUDIO ORCHESTRA:
 Overture, "The Lyre of Gold" (Herman).
 1.30 p.m.—"CHECK" HAYES, the Talkative Chap.
 "Check and matches."
 1.35 p.m.—THE STUDIO ORCHESTRA:
 "Peach Melba" (Armenia).
 1.45 p.m.—C. RICHARD CHUNG, date.
 "Unscripted" (Bachman).
 1.52 p.m.—TAYLOR AND SUMMERS, English comedians.
 Radio Kite.
 1.55 p.m.—Close down.
 2.00 p.m.—AUTUMN GARDEN WEEK Lecture,
 Mr. E. J. Baldwin, "Palms for house
 and garden decoration."

AFTERNOON SESSION.

Speaker—AU FAIT.
 MRS. MAHODA.
 THE STUDIO ORCHESTRA.
 MARIE LA VARRE, comedienne.
 ARTHUR DOUGLAS, comedian.
 WALTER SMITH, comedian.
 FREDA NORTHCOLE, soprano.
 Accomp.—MAURICE BUDLEY.
 Accomp.—ALICE FORTUNE.
 2.10 p.m.—STUDIO ORCHESTRA:
 "Piano" (Wedding). (Mozart).
 2.15 p.m.—"AU FAIT" will give a "Fashion Talk."
 2.20 p.m.—MARIE LA VARRE, comedienne:
 "Smile with life."
 "Anne Gately."
 2.22 p.m.—STUDIO ORCHESTRA:
 "String from Violin Concerto" (Beethoven).
 2.25 p.m.—ARTHUR DOUGLAS, comedian:
 "She's the bass for me" (Lander).
 2.30 p.m.—STUDIO ORCHESTRA:
 Selection, "La Boheme" (Puccini).
 2.45 p.m.—AUTUMN GARDEN WEEK Lecture,
 Mr. E. J. Baldwin.
 3.00 p.m.—FREDA NORTHCOLE, soprano:
 "Snowdrops" (Cowden).
 "Spanish Odal" (Brahms).
 3.17 p.m.—WALTER SMITH, comedian:
 "The Hardlyண" (Round).
 3.33 p.m.—FREDA NORTHCOLE, soprano:
 "Reve d'Amour" (Faure).
 "The Angelus" (Gounod).
 3.40 p.m.—MRS. M. CALLAWAY MAHOOD:
 "Art in Modern Life."
 3.45 p.m.—"Herald" news service.
 Stock Exchange Information.
 4 p.m.—Close down.

EVENING SESSION.

5.40 p.m.—CHILDREN'S HOUR—Answers to letters and birthday greetings.
 5.50 p.m.—HUXTAMS SERENADES:
 Humorous Quartet, "We wonder why," Edith Buxham, Dolly Burdett, Reba Miller, and Hugh Buxham.
 All about a rabbit. The Serenaders.
 6.05 p.m.—"BILLY BUNNY" has a new story for the little ones.
 6.15 p.m.—CAPT. DONALD MACLEAN will tell you about "Braks and the Treasure of the World."
 6.25 p.m.—"BILLY BUNNY"—Story for the bigger children, "Tanglewood Tales."
 6.35 p.m.—"Argus" and "Herald" news service.
 Weather synopses. Shipping movements.

6.52 p.m.—Fruit market reports, by J. R. Barnett, Ltd.
 6.55 p.m.—Market reports.
 6.58 p.m.—Market reports of fruit, by the Victorian Fruiterers' Association, compiled by the "Fruit World," exclusive to 3LO. Market prices of Oranges and Lemons by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

POPULARITIES.
 Humorist MR. W. C. BUGG.
 MR. W. A. EDWARD.
 MR. H. K. LOVE.
 THE STUDIO ORCHESTRA:
 COLLINGWOOD CITIZENS' BAND.
 GRACE JACKSON, contralto.
 WALTER SMITH, comedian.
 "CHECK" HAYES, the Talkative Chap.
 ELSIE DAVIDE, soprano.
 MOANA LUO DUO, Hawaiian instruments.

THE CELEBRITY HOUR.

CARTHY BROS., comedians.
 Announcer—ALFRED ANDREW.
 Accompanist—ALICE FORTUNE.
 7.00 p.m.—Under the auspices of the Department of Agriculture, Mr. W. C. RUGG—
 "Fruit Expert."
 Selections, including Fischer."

3LO STUDIO ORCHESTRA:

selection, "No Na Nanets" (Cooman).
 7.00 p.m.—GRACE JACKSON, contralto;
 Anna MacDonald (Rueckel).
 "Keep on Hopin'" (Maxwell).
 7.15 p.m.—WALTER SMITH, comedian.
 "Carnival of Venice" (Levy).
 7.30 p.m.—"CHECK" HAYES, the Talkative Chap.

1.15 p.m.—Friedrich Wood.

8.30 p.m.—AUTUMN GARDEN WEEK Lecture,
 Mr. E. J. Baldwin, "Edmonds: The Value of Garden Week to the Community."

8.32 p.m.—COLLINGWOOD CITIZENS' BAND:

Selection—"Rose Marie."
 8.35 p.m.—ELSIE DAVIDE, soprano;
 Arja La Gicciola (Ponchelli).
 8.39 p.m.—MOANA LUO DUO:
 "Island Melodies."
 "Beneath Thy Window."

8.40 p.m.—COLLINGWOOD CITIZENS' BAND:
 Novelty, "A Day on a Farm."
 8.45 p.m.—THE CELEBRITY HOUR, under direction of Mr. W. G. JAMES.
 Finale, Act I, "La Boheme" (Puccini).
 Song, "Villa"—"Merry Widow" (Lahar).
 8.55 p.m.—Duet, "True Love and Thorn" (Veronica).

8.58 p.m.—STUDIO ORCHESTRA:
 "A Russian Patrol" (Otto Lanney).
 9.00 p.m.—MR. H. K. LOVE will give a Technical Talk.

8.15 p.m.—COLLINGWOOD CITIZENS' BAND:

"Prelude and Manzurka" from Capriccio.
 Concert solo, "Easter Hymn" (Schubert).
 8.25 p.m.—GRACE JACKSON, contralto.
 "Song of the Thresher" (Allison).
 "I Love You Truly" (Baldi).

8.30 p.m.—MOANA LUO DUO:
 "Hello, Aloha."
 "Havana."

8.42 p.m.—CARTHY BROS.:
 "Songs and Impersonations."
 8.45 p.m.—"CARIBBEAN" (Mr. H. A. Wolfe).
 Sporting Editor of the "Argus" and "Australian" will speak on Saturday's races.

8.52 p.m.—COLLINGWOOD CITIZENS' BAND:
 Trombones solo, "Lead Me Your Aid;" Schubert; A. Thurin.
 "In Cellar Cool."

10.00 p.m.—"Argus" news service, British news from Rugby. Associated Press news from New York. Associated Press news from London.

10.32 p.m.—STUDIO ORCHESTRA:
 Selection, "Maid of the Mountains" (Fraser-Simons).

10.30 p.m.—ELSIE DAVIES, soprano: "Oh, did you dutes aodor" (Hillock). "Crown Song" (Schubert).
 10.45 p.m.—COLLINGWOOD CITIZENS' BAND: March, "Rapturous Bass Player." Intermezzo, "Dramatic Bell."
 10.45 p.m.—Road notes, supplied by the Royal Automobile Club of Victoria. Meteorological information. Announcements.
 11 p.m.—OUR GREAT THOUGHT: "Discretion is the salt; and fancy the sugar of life; the one preserves, the other sweetens it." Bayes.
 11.15 p.m.—JOE ARONSON AND HIS SYNCOPATING-SYMPHONISTS: "Angry" (Brunius). "I wish I had my old gal back" (Yellen). "Bye, Bye Blackbird" (Dixon). "Teachin' my night with baby" (Meyer). "Hollidays" (West). "In the Middle of Town" (Wayne). "Burgundy" (Malin). "Ho-Ho-Ha-Ha" (Woods). "Ho, Ho, the Merriv" (Brown). "Aloha Oe" (arr. Berger). "That's Why I Love You" (Donaldson). "The Village Blacksmith" (Moore). "Am I Dreaming my Time" (Billo). "Rose Colored Glasses" (Stinger). "You've Got to Black Shuffle" (Sparks). "Let's talk about my sweetie" (Kahn). "I wish you were jealous of me" (Rowell). "That Samson and Delilah Melody" (Grey).
 11.45 p.m.—GOD SAVE THE KING.

4QG. BRISBANE

Queensland Radio Service.
 Wave Length, 385 Metres.

Friday.

MIDDAY SESSION.

12.00 p.m.—Market Reports; Weather Information. "The Daily Mail" and "The Daily Standard" News.
 12.15 p.m.—From Hotel Carlton: Lunch Hour Music played by Hotel Carlton Symphony Orchestra.
 1.05 p.m.—From the Observatory: Standard Time Signal.
 2.00 p.m.—Close Down.

AFTERNOON SESSION.

DUKE OF YORK'S VISIT.
 SCHOOL CHILDREN'S CARNIVAL.
 A full description of the School Children's Sports, which will be attended by their Royal Highnesses the Duke and Duchess of York, will be relayed from the Exhibition Grounds.
 2.00 p.m.—From the Exhibition Grounds: School Children's Sports.
 3.00 p.m.—Description of the arrival of the Duke and Duchess.
 NATIONAL COUNCIL OF WOMEN.
 4.00 p.m.—From the Exhibition Hall: The reception to the Duchess of York by the National Council of Women, will be relayed.
 5.00 p.m.—Close Down.

EARLY EVENING SESSION.

6.00 p.m.—"Daily Standard" News; Weather Information; Announcements.
 6.30 p.m.—Bedtime Stories by "The Sandman."
 7.00 p.m.—Market Reports; Stock Reports; Lectures, "From Brisbane to Perth; Some Glimpses of Rural Australia," Mr. J. F. F. Reid (Editor, "Queensland Agricultural Journal").
 7.30 p.m.—Weather News; Announcements.
 7.45 p.m.—Standard Time Signal.

NIGHT SESSION.

7.45 p.m.—Lecture Session: "Civic Economy and Town Planning" by Mr. R. A. Melville (Chairman of the Executive Committee of the Town Planning Association of Queensland).

DUKE OF YORK'S VISIT.

GRAND STATE RECEPTION.
 The State Reception to their Royal Highnesses the Duke and Duchess of York, which will be held at Parliament House, will be relayed.

8.0 p.m.—From Parliament House: State Reception to the Duke and Duchess (Band Music from the lawn); description or presentation of guests to their Royal Highnesses; Musical programme arranged by AGS, including the following: Selection, "The Merry Widow" (Liszt); selection, "The Ballad of York" (Kemp); selection, "A Ballad Salad" (Anthoni); popular numbers: (a) "Always" (Berlin); (b) "In Your Green Hat" (Teffen); the AGG Studio Orchestra selection, "Maid of the Mountains" (Morgan); (c) AGG Studio Orchestra selection, "The British Lion" (Bonham); the AGG Studio Orchestra; soprano solo, "The Indian Love-Cry" (Kathleen Finlay); (d) "Invitation" (Owen); Miss Jill Manners; bass solo, (a) "There's a Land" (Allison); (b) "By From Somerset" (Sanderson); Mr. Stanley Tambyln; 21.00 p.m. (approximately).—From the Studio: "The Daily Mail" News; Weather News; Close Down.

5CL, ADELAIDE

Central Broadcasters, Ltd.
 Wave Length, 395 Metres.

Friday.

MORNING SESSION

12.15 p.m.—G.P.O. chimes.
 12.21 p.m.—Selections on Autotone Reproducer and New Reproduce Schors.
 12.30 p.m.—"Advertiser" news service.
 12.50 p.m.—Market reports.
 1.00 p.m.—Musical programme continued.
 2.00 p.m.—G.P.O. Chimes and close down.

AFTERNOON SESSION.

3.00 p.m.—G.P.O. chimes.
 3.15 p.m.—From Maple Leaf Cafè—Orchestral selections.
 3.45 p.m.—Selections from the Studio.
 4.00 p.m.—G.P.O. chimes.
 4.15 p.m.—Radio from the Arcadia Cafè—Orchestral numbers.
 4.45 p.m.—Station announcements.
 5.00 p.m.—G.P.O. chimes. Close down.

EVENING SESSION.

6.00 p.m.—G.P.O. chimes.
 6.15 p.m.—School music by Covent Garden Orchestra.
 7.00 p.m.—G.P.O. chimes.
 7.15 p.m.—Sports talk by "Metropolitan."
 7.15 p.m.—Bellmores stories; Pinocchio playing competition (own selection) for radio children under 14 years, from Radio Exhibition.
 8.00 p.m.—From the Radio Exhibition: 5CL Twinkler Boys' Club evenin'. Address by Mr. H. Wallman, president of the club.
 8.10 p.m.—"Zanith" 5CL Merrymakers Orchestra.
 8.15 p.m.—Opening chorus, 5CL Merrymakers Costume Company Company.
 8.21 p.m.—Tenor solo, Mr. Gerald Heale.
 8.28 p.m.—Comedy sketch, "The Calligraphers." Miss Gwen Hone, Mr. Stephen Dunn.
 8.46 p.m.—Song, Mr. Eric Wileman.
 8.50 p.m.—"Smile a little bit" 5CL Merrymakers Orchestra.
 9.00 p.m.—Quartette, "Old Mother Hubbard," Four Merrymakers.
 9.45 p.m.—Community song, "The 5CL Twinkler Boys" ay, assisted by Merrymakers.
 9.55 p.m.—"Syncopate" Miss Liane Scheffler.
 10.12 p.m.—Humorous talk by "Twinkler."
 10.30 p.m.—"Baby face," the Merrymakers.
 10.40 p.m.—Concerted number, the company.
 10.46 p.m.—Song, Mr. Mostyn Skinner.
 10.50 p.m.—Chorus, the company.
 10.55 p.m.—G.P.O. chimes.
 11.00 p.m.—"Advertiser" news service.
 11.15 p.m.—Concert continued by 5CL Community Comedy Entertainers.
 11.30 p.m.—G.P.O. chimes and close down.

6WF, PERTH

Westralian Farmer's.
 Wave Length, 1250 Metres.

Friday

12.30 p.m.—Time in.
 12.35 p.m.—First Local News Bulletin. Market reports. Cables.
 1.00 p.m.—Time signal from Perth Observatory.
 1.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
 1.20 p.m.—STUDIO QUINTETTE.
 2 p.m.—Close down.
 2.30 p.m.—Time in.
 2.35 p.m.—Musical programme.
 3.00 p.m.—Close down.
 3.15 p.m.—Time in.
 3.30 p.m.—Musical evening for the Kiddies by Aunt Kate and Uncle Harry, Leslie, Perry and Duffy.
 3.45 p.m.—Stuck and share intelligence. Market reports. Cables. News supplied by courtesy of "The West Australian" Newspaper Co.
 4.00 p.m.—Time signal from Perth Observatory.
 4.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
 4.30 p.m.—Talk "Books of the month" by Mr. J. P. Rathbone.
 4.45 p.m.—A RELAY.
 Lecture No. 4, "The Sonata and its Development" by MISS FLORENCE HODD, L.R.A.M., and assisting Artists.
 5.00 p.m.—FROM THE STUDIO.
 Talk: "Gardening Notes" by MR. E. A. HUGHES, Representing Meers, Dawson & Harrison.
 Items by Meers, Sutton and Foley, Inaugural Dinner of the S.S. Narrawa.
 10.00 p.m.—Second Local News Bulletin, supplied by courtesy of "The Daily News" Newspaper Co.
 10.30 p.m.—Close down.

Saturday, April 6

2FC, SYDNEY

MIDDAY SESSION.

12.00 p.m.—The chimes of 2FC and programme announcement.
 12.35 p.m.—Music from the studio.
 12.45 p.m.—A talk on Gardening by Mr. C. J. Lester (Rugby).
 1.00 p.m.—"Big Ben" Weather intelligence. Stock Exchange information.
 1.30 p.m.—"Evening News" midday news service. Commercial news.
 1.45 p.m.—Studio music.
 2.00 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3.00 p.m.—"Big Ben." Studio music.
 NOTE. During the afternoon results of the Warwick Farm race will be given.
 FROM THE WENTWORTH CAFE, CHURCH HILL, SYDNEY.
 Items by the Wentworth Symphonic Dance Orchestra, under the baton of Mr. Frederick Leighton. Interspersed by musical items from the studio.
 4.30 p.m.—Complete resume of the afternoon's sporting events, including cricket, tennis, golf, swimming, racing, etc.
 5.00 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

5.45 p.m.—The chimes of 2FC.
 5.50 p.m.—The "Hello Ma" talk to the children.
 6.30 p.m.—A serial story for the older ones.
 6.45 p.m.—Dinner music.

7 p.m.—"Big Ben." Complete resume of the day's sporting events.
8.30 p.m.—"Evening News" late news service.
8.55 p.m.—Weather Intelligence. Studio music.

NIGHT SESSION.

9.10 p.m.—Programme announcements.
9.15 p.m.—A talk by Miss Mabel Webb about "Sweet Nell."

9.30 p.m.—"Big Ben." FROM THE CRYSTAL PALACE THEATRE, GEORGE STREET, SYDNEY:

Run by the Orchestra, under the baton of Mr. Harry Stone.
9.35 p.m.—FROM THE STUDIO, Mr. Oliver King, bass.

"New Phoenix Strike in the West" (Arres).
9.38 p.m.—Mr. Cliff Arnold, novelty pianist.
9.42 p.m.—Miss Virginia Bassett, contralto.
9.47 p.m.—Mr. Wally Barnes, comedian.
9.52 p.m.—"Never Say Again" (Lyndon).

9.55 p.m.—Mr. George Thompson, solo on piano and banjo.
(a) "Pandoreus" (Tunel).
(b) "Piff, Paff" (Meyerbeer).

10.00 p.m.—FROM THE CRYSTAL PALACE, GEORGE STREET, SYDNEY:

Orchestra items. Conductor, Mr. Harry Stone.

10.05 p.m.—FROM THE STUDIO:
Mr. Oliver King, bass.

"I'm Gonna Get a Man a Horse he can ride" (Head).

(a) "You along o' me" (Sanderson).
9.58 p.m.—Miss Virginia Bassett, contralto.

9.59 p.m.—Mr. Cliff Arnold, novelty pianist.
(a) "Gladly I'll Go" (Elliot).

9.54 p.m.—Mr. Oliver King, bass.
Young and Lewis.

10.00 p.m.—Mr. Wally Barnes, comedian.
"The lady in the bag" (Weston and Lewis).

10.05 p.m.—Mr. George Thompson, solo on piano.
(a) "Heckled in the middle of the deep" (Hume).

(b) "On Heaven's last cause rearing" (Meyerbeer).

10.10 p.m.—The ZPC Studio Dance Band, with the popular baritone, Mr. Len Maurice (Conductor, Mr. Eric Pearcey).
10.15 p.m.—Miss Virginia Bassett, contralto.

10.18 p.m.—Mr. Wally Barnes, comedian.
10.20 p.m.—Mr. Cliff Arnold, novelty pianist.

10.22 p.m.—Miss Margaret Grimshaw, mezzo-soprano.
"Little love note just for two" (Lewis).

10.26 p.m.—Mr. Wally Barnes, comedian.
"Don't you bananas with the skins on?" (Darwin).

10.30 p.m.—"Big Ben." FROM THE CRYSTAL PALACE THEATRE, GEORGE STREET, CITY:

Orchestra items. Conductor, Mr. Harry Stone.

10.35 p.m.—The ZPC Studio Dance Band, with the popular baritone, Mr. Len Maurice.

10.40 p.m.—FROM THE STUDIO: THE CRYSTAL PALACE THEATRE. Orchestral items.

10.45 p.m.—FROM THE STUDIO: THE CRYSTAL PALACE THEATRE. Orchestral items.

11.00 p.m.—"Big Ben." National Anthem.

Close down.

ZBL, SYDNEY

Saturday.

EARLY MORNING SESSION.

7.15 a.m.—G.P.O. Clock and Chimes.
7.16 a.m.—Metropolitan weather forecast.
7.17 a.m.—Musical programme from the Studio.
7.18 a.m.—Physical training and health exercises.

7.26 a.m.—G.P.O. Clock and Chimes.
7.31 a.m.—Hints on health.
7.36 a.m.—Physical training and health exercises.

8.45 a.m.—G.P.O. Clock and Chimes.

7.46 a.m.—Weather report.
7.47 a.m.—Broadcaster's special news service.
7.48 a.m.—G.P.O. Clock and Chimes; close down.

MORNING SESSION.

8.15 a.m.—G.P.O. Clock and Chimes.
8.16 a.m.—Weather report and forecast by courtesy of the Govt. Met.

8.18 a.m.—"Sydney Daily Telegraph" news service.

8.19 a.m.—Women's Session conducted by Mrs. Jensen—social notes.

8.20 a.m.—Mr. Jensen replies to correspondence.

8.21 a.m.—Talk on "Simple Cooking for Children" by Mrs. Janion.

8.25 p.m.—Musical programme from the Studio.

8.26 p.m.—News from the "Sun" Cable Edition.

8.28 a.m.—G.P.O. Clock and Chimes.

8.31 a.m.—Musical programme.

8.32 a.m.—Boats in case of wireless.

8.35 a.m.—Weather report and forecast.

8.37 a.m.—Shipping information—arrivals and departures.

8.40 a.m.—Information re Interests and Overseas Mail.

8.42 a.m.—News from the "Sun."

8.43 a.m.—G.P.O. Clock and Chimes.

8.45 a.m.—Musical programme from the Studio.

8.46 a.m.—Talk on sporting and athletic fixtures for the day. Weston, Hockey, Golf, Tennis, Tennis.

During the afternoon sporting information will be broadcast by courtesy of the "Sun" newspaper, interspersed with musical programmes from the Studio.

8.48 a.m.—Resume of night's programme.

8.51 a.m.—G.P.O. Clock and Chimes.

8.52 a.m.—Resume of day's racing.

8.54 a.m.—Close down.

EARLY EVENING SESSION.

8.55 a.m.—G.P.O. Clock and Chimes.

8.58 a.m.—Uncle George and the babies.

Bright will talk to the kiddies.

8.40 p.m.—Musical programme from the Studio.

8.45 p.m.—Result of all sporting information, including Hastings, Tennis, Cricket, Sailing, Sailing, Badminton, by courtesy of the "Sun".

8.46 p.m.—Country news from the "Sun".

7.00 p.m.—G.P.O. Clock and Chimes.

Studio concert, including the following artists:

King's Mandolin Orchestra.

Miss Phyllis Atkinson (sozio soprano),

Mr. Roger Jones (baritone).

During the evening the main events at Macarthur Speedway will be broadcast.

10.15 p.m.—The Ambassadors Dance Band broadcast from the Ballroom of the Ambassadors. During the intervals between dances news reports by courtesy of the "Sun" will be broadcast.

10.30 p.m.—G.P.O. Clock and Chimes.

National Anthems.

3LO MELBOURNE

Saturday.

MORNING SESSION.

MUSIC MATH CHAINS, THE STUDIO ORCHESTRA,

MARY CLAXTON, Soprano, DOROTHY ROXBURGH, Viola,

ARTHUR DOUGLAS, Comedian,

TRELEMA READY, Banjo,

HUXHAM'S SERENADES,

CARTHY BROS., ANDREWS..... MAURICE DUDLEY,

Accompanist..... AGNES FORTUNE,

11.00 a.m.—STUDIO ORCHESTRA

Overture, "Lindau" (Cox).

11.16 a.m.—MARY CLAXTON, soprano;

"The Rainbow Child" (Gardiner-Taylor).

"To Danise" (Roger Quilter).

*

11.17 a.m.—DOROTHY ROXBURGH, Viola; "Romance" (Paul Jarni); "Romance" (Paul Jarni).

11.34 a.m.—STUDIO ORCHESTRA: Pastoral (Pezemotis); "Waltz" (Horn).

11.34 a.m.—ARTHUR DOUGLAS, Comedian; "The Wedding" of John McLennan" (Douglas).

11.41 a.m.—TRELEMA READY, Banjo; "Relaxed" (Relaxed).

11.49 a.m.—STUDIO ORCHESTRA: "Smoke Charmer" (Spiegel).

11.56 a.m.—News items, including British official statements, news from Africa, Rhodesia, and the Australian Press Association, "Golden Arrow" and "Herald" news services.

12.20 p.m.—STUDIO ORCHESTRA: "Andante" from C Major Symphonie" (Oberhauser).

12.30 p.m.—TRELEMA READY, Banjo; "Ragtime" (Ragtime).

12.37 a.m.—Stock Exchange information.

12.47 p.m.—HUXHAM'S SERENADES: Quartette; "The Sixty Degree" (Edith Huxham, Dolly Surtees, Reni Miller, Hugh Huxham); Bass solo, "Case 51, Vagabond" (Henry Miller).

12.55 p.m.—TRELEMA READY, Banjo; "The Serenade Quartet"; "Serenade" (Frank Bridges).

12.56 p.m.—Humorous Quartet; "The tale of a Flea" (The Serenade Quartet).

Soprano solo, "A walk in the wood" (Edith Huxham).

12.57 p.m.—"The Silver Beauty" (Brough).

Operatic Quartet, "Il Bacin" (The Serenade Quartet).

12.58 p.m.—STUDIO ORCHESTRA: "Chinese Recollections" (Zimmermann).

12.59 a.m.—Weather report.

1.00 p.m.—MARGARET CAMPION, Soprano; "With You Both" (Doris Day) (Landon Ronald); "Rock-a-Bye Baby" (O'Connor).

1.27 p.m.—CARTHY BROS.: "Songs and Impressions".

1.37 p.m.—TRELEMA READY, Banjo; "Popular Choruses".

1.46 p.m.—STUDIO ORCHESTRA: Selection, "Barber of Seville" (Rossini).

2.00 p.m.—Close down.

Results of Races held at Yea, Null and Traralgon will be given as they come to hand.

2.30 p.m.—Description of Hardie's Race, Sandown Park by "Musket" of the "Sporting Globe".

AFTERNOON SESSION.

JOE ARONSON AND HIS SYNCOPED SYMPHONISTS

2 p.m.—Description of Two Year Old Handicapped, Sandown Park, by "Musket" of the "Sporting Globe".

2.30 p.m.—JOE ARONSON AND HIS SYNCOPATED SYMPHONISTS:

"Thinking of you" (Ash); "Just a little old wive" (Donaldson).

"I've got more love" (Owen).

"I'm off to Chester, a sandwich and you" (Meeks).

"Something's Coming" (Davis).

"Baby Face" (Arlen).

"Tito a long Wait of the Bells" (Britt).

"Mary Lou" (Lynn).

2.50 p.m.—Description of the Sandown Plate by "Musket" of the "Sporting Globe".

2.56 p.m.—JOE ARONSON AND HIS SYNCOPATED SYMPHONISTS:

"The more we are together" (Campbell).

"Ruffles and Folds" (Barry).

"Consultation" (Gumsky).

"Let's all Hunt Ford" (Leslie).

"Hello Aloha" (Hale).

"I'm a Little Bit Blue" (Henderson).

3.00 p.m.—Description of Sandown Park Handicaps, by "Musket" of the "Sporting Globe".

3.30 p.m.—AUTUMN GARDEN WEEK Lecture, Mr. T. H. Bruns;

"Dahila Culture".

MAGNAVOX

"The Enduring Name in Radio"



If you do not possess one of the wonderful MAGNAVOX Receivers----get the utmost results out of your set by using the wonderful MAGNAVOX Accessories

A VALVE that will not only give more power to your Set, but permits the greater volume without distortion. That means you also reach more stations. At all times it makes reception sharp-cut, clear, distinct. In long-life, in quality of performance and manufacture, MAGNAVOX VALVES give you full satisfaction.

201-A Type Valve

10/6

171-Type Power Valve

25/-

The New Magnavox Cone Speakers

Made under exclusive Magnavox patents, the new Magnavox Cone Speaker is a history-making achievement quite as marvellous as the original radio loud-speaker, which was also a MAGNAVOX.

The New Cone reproduces the entire tonal scale—and does it with realistic fidelity. It reproduces every instrument, every note, every intonation with magical realism.

The "Cornell" Model £3/15/- (As Illustrated)

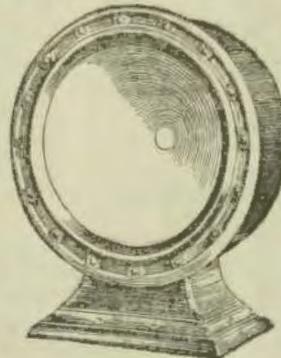
The "Cornell" stands pre-eminent as the highest grade yet the most reasonably-priced Speaker on the market to-day.

Artistic non-resonant metal finish, 11in. high, 9½-in. wide and 4½-deep.

The "Stanford" Model £5/10/-

Finished in two-toned Mahogany Cabinet, 10½in. high, 15 3-8in. wide, and 6½in. deep.

The Superlative MAGNAVOX Sets, Loud Speakers and Accessories, represent the "ne plus ultra" in Radio.



See and hear them demonstrated in Our
Special Audition Rooms.
Profusely Illustrated Booklets free on request

Mick Simmons Ltd.

"The World's Greatest Sports Store"

Headquarters: HAYMARKET, SYDNEY
And at BRISBANE

WIRELESS WEEKLY

Friday, 8th April, 1927.

4.35 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS.
"Hello Little Girl of My Dreams" (Berlin).
"By the Sign of a Rose" (Fields).
"Sunday" (Miller).

4.35 p.m.—Description of Sandown Purse, by "Musker" of the "Sporting Globe."

4.35 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS.

"I Wish I had my old red back" (Tellen).
"See You Blackbird" (Dunn).

4.45 p.m.—"Herald," news service Stock Exchange information.

5 p.m.—Description of Trial Welter, Sandown Park, by "Musker" of the "Sporting Globe." Close down.

Evening Session.

5.35 p.m.—Sporting results.

5.45 p.m.—HULDRAINE HOUR. Answers to letters and birthday greetings.

5.55 p.m.—GRACE JACKSON, contralto: "Come back to Erin" (Claribel). "Salam" (Lane).

6 p.m.—"LITTLE MISS KOOKABURRA" is wondering whether her little friends remember the story "Rags" (Lane), a poem because she has been telling you about these pictures and he wants her to tell you now "Rags" was the bush giant who changed his coat to another color."

6.10 p.m.—GRACE JACKSON, contralto, has two more little songs to sing for the children.

6.15 p.m.—"LITTLE MISS KOOKABURRA" will tell her bigger Kookaburra visitors and themselves the next instalment of "Carn's of Hollywood School" (Where is Carol?).

6.30 p.m.—"Argus" and "Herald" news service. Weather information. Actual Mail information by the Australian Aerial Services Ltd.

6.45 p.m.—Stock Exchange information. Overseas shipping reports.

6.55 p.m.—Fish market reports by J. R. Borrelli Ltd.

6.55 p.m.—Markets reports by the Victorian Producers Co-operative Co. Ltd, Haymarket sheet sales, Potatoes and Onions. Market prices of Oranges and Lemons. Victorian Central Oil & Aviation Pty. Ltd. Victorian market reports by the Victorian Wholesale Fruiterers' Association, compiled by "The Fruit World," exclusive to SLO.

NIGHT SESSION.

Speakers: MR. ED. SIMMS. MR. E. F. TESOTT.

DR. LEACH. MR. A. W. JACKSON.

MR. R. H. POULTER.

MALVERN TRAMWAYS BAND.

Conductor, H. Shire.

ELsie DAVIES, soprano.

TAYLOR AND SUMMERS, English Comedians.

GRACE JACKSON, contralto.

MOANA LUA DUO.

ARTHUR DOUGLAS, comedian.

ONE ACT PLAY.

Announcer: ALFRED ANDREW.

Accompanist: AGNES FORTUNE.

7.15 p.m.—MR. ED. SIMMS, Secretary Commonwealth Railways.

"Traveling on the Trans-Australian Railways."

7.30 p.m.—MR. E. F. TESOTT.

"Fathers and Ungrate Birds."

MUSIC IN THE POETRY OF THE AIR."

8 p.m.—AUTUMN GAUDIEN WEEK Lecture,

MR. R. H. POULTER.

"How to grow Carnations."

8.20 p.m.—MALVERN TRAMWAYS BAND.

Soloists: Mr. Dudley, "Lieder's Song" (by Schubert). (Humor.)

8.30 p.m.—ELSIE DAVIES, soprano:

"Refractive and Arise from Faust" (Gounod).

8.30 p.m.—ONE ACT PLAY.

Mrs. Maurice Dudley and Mr. Chas. Dyson.

8.30 p.m.—MALVERN TRAMWAYS BAND: Descriptive Sketch, "Down the Mississippi"; "The Moonlight Serenade"; "Cornelia"; "Put Yourself in My Place".

8.45 p.m.—GRACE JACKSON, contralto: "In the Cathedral"; "Jewels"; "Jewels".

8.55 p.m.—MOANA LUA DUO: "La Paloma"; "Alway"; "Aloha".

9.21 p.m.—MR. A. W. JACKSON will speak on the Semifinals of the Australian Foursome Championships, Shipton Gold Medal Match, Quarter Final, (Home).

9.30 p.m.—MALVERN TRAMWAYS BAND: Waltz, "Chant d'Automne" (Dorcey).

9.45 p.m.—ARTHUR DOUGLAS, comedian: "The Wrigg of the Kite" (Lander).

9.50 p.m.—"Argus" news service: British Official telegrams received from Rugby. Meteorological information.

10.45 p.m.—MALVERN TRAMWAYS BAND: Indian Intermezzo, "Flying Arrow" (Horowitz).

March, "Independence" (Hall).

10.15 p.m.—ELSIE DAVIES, soprano: "The Moonlight Serenade"; "The Swan" (Great).

10.25 p.m.—MOANA LUA DUO: "Kanchana March"; "Rose of Walkiki"; "Song of Waikiki".

10.30 p.m.—GRACE JACKSON, contralto: "The Land of the Free" (Hardesty).

"The Land of the Free" (Wines).

10.57 p.m.—MALVERN TRAMWAYS BAND: March, "Garde du Corps" (Hall).

10.45 p.m.—ARTHUR DOUGLAS, comedian: "They're as we like 'em" (White) (Dingley).

10.50 p.m.—All Sporting Results. Announcements.

11 p.m.—OUR GREAT THOUGHT: "Right reason is stronger than force." —JAMES A. GARFIELD.

11.15 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS: "The Land of the Free" (Hardesty).

11.30 p.m.—"LITTLE MISS KOOKABURRA" (Lane).

11.45 p.m.—"LITTLE MISS KOOKABURRA" (Lane).

11.55 p.m.—"LITTLE MISS KOOKABURRA" (Lane).

12.10 p.m.—"LITTLE MISS KOOKABURRA" (Lane).

12.25 p.m.—GOD SAVE THE KING.

NIGHT SESSION.

7.30 p.m.—Singing Notes by "Tiller."

7.45 p.m.—Advertisement.

7.55 p.m.—From the Observatory: Standard Time signal.

7.45 p.m.—Lecture Session. A gardening talk, "Sweet Peas," by Tecoma.

NATIONAL SPEEDWAY—LENNON'S BALLETROOM.

8 p.m.—From the National Speedway—Motor Cycle Races.

9 p.m.—From Lennon's Ballroom: Dance Pictures.

10.0 p.m.—From the Studio: "The Sunday Mail" News Service; Weather News; Cloud Down.

5CL, ADELAIDE

Saturday

MORNING SESSION.

8.45 a.m.—G.P.O. chimes.

9.15 a.m.—Speeches on Representations Senate.

9.30 a.m.—Advertiser: news service.

10.45 a.m.—Sonora and Automa postal comedy.

12 noon—G.P.O. chimes and close down.

AFTERNOON SESSION.

12.45 p.m.—Running description of Victoria Park races, interspersed by interesting sporting results and details on the new reproducing Summex and Automatic representations.

2 p.m.—Close down.

EVENING SESSION.

6 p.m.—G.P.O. chimes.

6.15 p.m.—Musical broadcast by Coast Garden Club.

6.45 p.m.—Market reports.

6.55 p.m.—Singing results.

7 p.m.—Races from the Radio Exhibition. Broadcast by the names and numbers of all entries. Results of racing, steeplechase and point-to-point competitions.

7.15 p.m.—Overture by Mr. Holmes Smith Band; song, Miss Mabel Wallace; solo, Mr. H. Taylor; Miss Marion Collett; Mr. G. C. Morrison Clark; selection, Miss Smith's Band; romances with Mr. At. Neblett; song, Miss Gwen Collett; song, Mr. Don Wildsmith; selection, Holmes Smith Band; song, Mr. L. L. Ladd.

7.30 p.m.—Sports news. The audience will be invited to the exhibition of the Radio Dealers' Associated Management of Central Broadcasters Ltd., to conclude the exhibitions with dancing.

11 p.m.—G.P.O. chimes and close down.

6WF, PERTH

Saturday.

12 noon—Time in.

12.15 p.m.—Musical programme, including selections by Mr. Leslie Johnson.

12.45 p.m.—First local news bulletin.

Market reports.

Cables.

1 p.m.—Time signal from Perth Observatory.

1.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.

1.30 p.m.—Close down.

1.45 p.m.—Sports news.

1.55 p.m.—Children's Party: "Real Australia," introducing "Professor Kokakutte," told by Austin Norr.

2 p.m.—Sports results supplied by courtesy of "The Mirror" Newspaper Co.

2.15 p.m.—Market reports.

Cables. News supplied by courtesy of "The West Australian" Newspaper Co.

2.45 p.m.—Talk.

3 p.m.—Time signal from Perth Observatory.

3.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.

Reasons why you should USE

VOLTON BATTERIES

**22/6
each**

1. Practical tests have shown the Volton Batteries to be the most economical.
2. Volton Batteries are guaranteed by your local Dealer as being the true Triple Capacity 45 Volts. Your Dealer will test every Battery before you purchase.
3. Volton Batteries are fitted with spring clips at each reading—there are no terminals to lose.
4. Volton Batteries, due to their sturdy construction, long life, and dependability, eliminate all battery trouble.
5. Volton 45 Volt, triple capacity, standard size, as illustrated—cost you only 22/6 each—Why pay more?
6. Because the following Practical Radio Experts of Sydney stock and recommend their use—Ask their advice.



PRICE 12/6 EACH

Volton Sub Panel Brackets at 3/6 per pair.

SOLE DISTRIBUTORS FOR AUSTRALASIA

Weldon Electric Supply Co. Ltd.

352 KENT STREET - - - SYDNEY

Phone City 6361-2



**3/-
each**

Australian Wireless (Radar)
Butler Bros., Ltd. (Brisbane)
Colville Moore Wireless Supplies,
Cullen, E. R.
David Jones, Ltd.
Economic Radio Stores,
Guthridge & Day Pty., Ltd.
(Melbourne).
Hamilton & Baker.
Howell's Radio.

Keogh Radio.
Maling, W., and Son.
Mick Simmons, Ltd.
Radio & Electric Company.
Radio House.
Swains, Ltd.
Slingsby & Coles.
Wallace, Miss F. V.
Wiles, W. Harry.
Farmer & Co., Ltd.

VOLTON VOLTMETERS

Double Range Wireless Volt Meters—English Make

It is quite impossible to check the Voltage of the Accumulators on a Voltmeter having a range suitable for testing a Dry Battery, and in the ordinary course two instruments are required. We have designed the above instrument to obviate the necessity of having two instruments.

MUSICAL EVENING.
6.30 p.m.—Musical programme, including
artists.
10 p.m.—Second local news bulletin supplied
by courtesy of "The Daily News" New-
spaper Co.
Special results supplied by courtesy of "The
Advertiser," November 10.
Sights within range announcement.
10.30 p.m.—Close down.

Sunday, April 10

2FC, SYDNEY

MORNING SESSION.
10.55 a.m.—The chimes of 2FC and pro-
gramme announcements.
11.55 a.m.—From St. Mary's Church of England,
Clarke's Point. The morning service.
Preacher, The Rev. E. Howard Lass.
12.15 p.m.—From the Studio—News Items.
12.30 p.m.—Close down.

AFTERNOON SESSION.
2.55 p.m.—Programme announcements.
3 p.m.—From the Congregational Church,
Croydon Street, Petersham. Gounod's
Choral Masterpiece, "Mors et Vita." Part
One.
Principals—
Miss Ethel Hughes, soprano.
Miss Marion Humphries, contralto.
Mr. Melvyn Phillips, tenor.
Mr. Oliver King, basso.
Organist and musical director, Mr. Christian
Hedrenmo.
4.45 p.m.—From the Studio—Miss Millie Meyer
will continue her talk on Palestine, taking
as her subject, "Damascus."
4 p.m.—"Big Ben." Close down.

EVENING SESSION.
6 p.m.—"Big Ben" and programme announce-
ments.

6.30 p.m.—Mr. Lionel Lawson, violinist.
6.45 p.m.—Miss Margaret James, soprano:
(a) "Ave Maria" (Bach-Gounod).
7.20 p.m.—Captain Fred Aronson—A talk on
the Drama of Home.

6.45 p.m.—Mr. Louis Layton, violinist.
6.45 p.m.—Miss Margaret James, soprano
"Home Song" (Ware).
5.50 p.m.—From the Congregational Church,
Pitt Street, Sydney. Organ solo by Miss
Lillian Frost.

7 p.m.—Evening service, conducted by the
Rev. T. E. Roth.

8.30 p.m.—From the Band Rotunda, Manly
Beach—

A concert programme arranged by the
Manly Municipal Band, under the baton
of Mr. J. Philcox.

8.30 p.m.—From the Studio:
Miss Alice Prowse, contralto:

(a) "Swing low sweet Chariot" (Brackish).
(b) "O, my love from the fields" (Brackish).

8.30 p.m.—Captain Fred Hurley will give
his second adventure talk, "The Cross and
the Savage."

Note.—Captain Hurley has visited practically
every Mission Station in Papua and
Dutch New Guinea. He will speak of the
work done by the various missions, and give
a glimpse of mission life to the more remote
and lonely outposts.

During his adventure talk, opportunities
will be found to include suitable musical
items arranged by Mr. Horace Keats, in
conjunction with Captain Hurley.

10.22 p.m.—Miss Alice Prowse, contralto:

(a) "Fairy Lovin'ing" (Kenndy-Vasser).
(b) "Flower-fetters" (Willis).

10.30 p.m.—Close down.

At the Piano (Sunday night only), Mr.

Horace Keats.

2BL, SYDNEY

Sunday.

10.45 a.m.—Special news service.
11 a.m.—Service broadcast from St. John's
Church of England, Randwick.
2.30 p.m.—Radio concert.
3 p.m.—Organ recital.
4.30 p.m.—BBC Club, conducted by Mr. W.
"Cairo" Bradley.
5.15 p.m.—G.P.O. Clock and Chimes.
Close down.
5.45 p.m.—Children's Service.
7 p.m.—Service Broadcast from Ushers Pre-
paratory School.
8.30 p.m.—From the Studio:
Miss Winifred Jenner (mezzo soprano).
8.45 p.m.—Duets by Morris and Charlton.
8.52 p.m.—Miss Grace Jackson (contralto).
9 p.m.—G.P.O. Clock and Chimes.
Reserve for following day's programme.
Weather report and forecast by courtesy of
Mr. W. H. M. Smith, Meteorologist.
9.55 p.m.—Broadway Trio.
10.15 p.m.—Mr. Frank Ryan (tenor).
10.22 p.m.—Miss Leslie Bedford (soprano).
10.29 p.m.—Miss Winifred Jenner.
9.30 p.m.—Broadway Trio.
9.46 p.m.—Miss Grace Jackson.
9.53 p.m.—Mr. Frank Ryan.
10 p.m.—G.P.O. Clock and Chimes.
10.1 p.m.—Mr. Leslie Bedford.
10.11 p.m.—National Anthem.

3LO, MELBOURNE

Sunday.

MORNING SESSION.

10.55 a.m.—Express Train Information.
10.58 a.m.—Bells from St. PAUL'S CATH-
EDRAL.
10.45 a.m.—SERVING FROM ST. PAUL'S
CATHEDRAL.
Services:
Exhortation.
General Confession.
Absolution.
The Lord's Prayer.
Versicles and Responses.
The Vesper.
Psalm.
First Lesson.
Te Deum and Benedictus.
Second Lesson.
The Apostles' Creed.
The Collect.
Aria—"Surely He Hath borne Our
Griefs" (Handel).
Prayers.
Hymn.
PSALMON—THE ARCHBISHOP.
Hymn.
The Benediction.
12.15 p.m.—British Official Wireless News from
Byrd.
12.35 p.m.—Close down.

AFTERNOON SESSION.

3 p.m.—MUSIC AND FUNERAL AFTERNOON
WESTERN CATHOLIC MISSION
Chairman: Rev. J. H. CAIN
Conductor: Mr. G. M. WILLIAMS.
Orchestral Selection.
Hymn: "All Peoples that on Earth do dwell."
Prayer: Rev. C. Irving Benson.
Song: "The Lamb of God" (Allison).
Solo—MISS GRACE JACKSON: "Song of Thanksgiving" (Allison).
Solo—MISS GRACE JACKSON: "Land of Hope and Glory" (Elgar).
Nonesuch.
Offering.
Orchestral Selection.
ADDRESS—REV. ALFRED MADSEN:
"Why be a Feminist?"
National Anthem.
Benediction.
4.30 p.m.—Close down.

EVENING SESSION.

5.45 p.m.—CHILDREN'S HOUR Special
Service for Easter, taken from
Steiner's "Crucifixion".
Hymn: "Come of Jesus."
Hymn: "The Love of Jesus."
5.45 p.m.—"BILLY BUNNY":
"Parade for Little People."
A joint Musical Programme by THE CHILD
PIPERISTS.

Querette: "God as Loved the World."
Tenor Solo: "King ever glorious."
Organ Solo.
Hymn: "Holy,洁圣!"
Duet: "How Thou Blest us."
Piano Solo.
Solo: "The radiant morn."
Chorus: "Saviour, The Children Keen."
6.25 p.m.—Answers to Letters and Birthday
greetings.
6.35 p.m.—"BILLY BUNNY":
"The Life of London."
6.45 p.m.—Close down.

NIGHT SESSION

8.30 p.m.—BELLS FROM ST. PAUL'S
CATHEDRAL.
7 p.m.—SERVICE FROM WESLEY CENTRAL
MISSION, conducted by REV. C. IRVING
BENSON.
Hymn: "The Lord is in His Holy Temple."
Prayer: "The Outer Gate."
Hymn: "Let God be Here, Let us Ansire."
Prayer: "The Inner Court."
Lesson: "St. Luke, Ch. 23."
Intimations and Offering.
Hymn: "Man of Sorrows."
Short Sermon.

THE CRUCIFIXION (Singing).

And they came to a place called Geth-
semane (Tenor Solo).
The Agony (Baritone and Chorus).
Presentation (Alto and Chorus).
And When They Were Done (Bass Recit).
The Mystery of the Divine Humiliation
(Hymn).

He Made Himself of no Reputation (Recit).
The Majesty of the Divine Humiliation
(Tenor Solo).

And as Moses Lifted up the Serpent
(Bass, Bass).
"God so Loved the World" (Chorus).
Litany of the Passion (Hymn).

Jesus said, "Father, forgive them" (Tenor
Solo).
So That Liftest Up The Divine Petition (Duet).

The Mystery of Intercession (Hymn).
And one of the Malefactors (Bass and
Bass).

The Adoration of the Crucified (Hymn).
When Jesus therefore saw His Mother
there, he said, "Behold thy Son" (Bass).

Is it nothing to you? (Bass).
The Appeal of the Crucified (Chorus).

After this Jesus knowing that all things
should be accomplished (Tenor Solo).

"For the Love of Jesus" (Hymn).
Paschal Chorus.

Sevenfold Amen.

FROM THE STUDIO—

3.30 p.m.—BRUNSWICK CITY BAND: Overture, "Chanson de Noël" (Vanner).
4.40 p.m.—GEORGE FINDLAY, Pianoforte Recital (Winner of 3LO Exhibition): "Etude in E Major" (Chopin).
4.45 p.m.—BERTIE ALEXANDER (Chopin).
4.47 p.m.—MONA NUGENT, Soprano (Win-
ner of 3LO Exhibition): "J'ai phous en vous" (Bizu).
"Tes Yeux" (Baby).
4.51 p.m.—ALFRED ACKLAND, Violin (Win-
ner Movement of Sonata) (Grieg).
4.58 p.m.—MISS STEPHANIE DESTE, "Wanda"
of the "Rose Marie" Company (by per-
mission of J. C. Williamson Ltd.); French, "L'Andalousie" (Alfred de Musset).
French, "Blawithwaite" (Longfellow).
First Movement of the Second Suite of
Satie).

5.10 p.m.—BRUNSWICK CITY BAND: Bohemian Suite;
"The Appeal";
"The Caravan";
"The Tarantella" (Hume).

The Best Sets Deserve The Best Parts

STAND 37
EXHIBITIONSTAND 37
EXHIBITION

-ADVANCE-

ALL AUSTRALIAN

"Advance" Radio Parts Lead in Quality and Prices.

Since the inception of our business it has been our policy to give better parts for less money, and to increase our markets and outlet in order to reduce our selling cost to the buying public. This has been done now in numerous cases. The popular demand for our goods has forced us to make a big increase in our plant, and also employ more hands. You get the best at lowest prices, and are supporting an ever-growing Australian industry.



Rear Panel Mounting
Vernier Dial
Price, 7/6

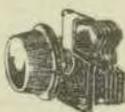


The New
"Advance"
CENTRALIGN
CONDENSER
.00025-12 / .00035-
(2) / .0005-12/8



The new Advance "Centralign" Condenser has been introduced so that no crowding of spacing comes on any portion of the dial reading, and retains maximum separation on the middle of the scale. It is mounted in a complete insulation frame being a single insulating base plate with a minimum of die-electric hollow shaft designed for multiple mounting and turns either to left or right, insuring the same Centralign timing. The above features make the Advance "Centralign" one name, advanced ahead of the time.

The Advance Rear Panel Mounting Vernier Dial has been designed to eliminate that clumsy dial that has ruined the appearance of good sets of the past. Now a neat high finished bezel with only a black knob gives the set a professional appearance. Bring your old set up to date, and install this Rear Panel Dial. Supplied with neat bezel finished in gold, silver or bronze. Drilling template supplied—you can't go wrong. In ordering, specify bezel finish required.



MIDGET and NEUTRALIZING CONDENSERS

The Advance Midget Condenser has all the characteristics of the Advance Condensers so famous. The Midget has soldered non-corroding brass plates supported by minimum of die-electric, and finished with a nicely rounded bakelite knob.

The Neutralizing Condenser of the same construction as above, complete with base, base, mounting and balance knobs. Correct capacity for neutralizing and balancing condensers.

Midget II Plate—6/6; Neutralizer 3 plate 4/0

Rheostats
6, 10, 20 and
30 ohms—
2/6.



Potentiometers
200 and
400 ohms.
2/6



UX or UV Porcelain Tube Sockets

The Advance Low Loss Porcelain Tube Socket has been designed for its perfect insulation, and for use with either UX or UV type of tubes. Spring contacts of phosphor bronze with side wire and bottom contact, thus insuring the perfection of contacts. The porcelain base insures that perfect insulation that is ideal for radio purposes.

Price 2/6



Improved Straight Line FREQUENCY CONDENSER

This condenser is an improved Straight Line Frequency, having solid spacing bars with an entirely new means of perfect insulation. Receives all broadcasting stations evenly over the sweep of the dial in exact ratio with the transmitting frequency. Eliminates hunting of stations and increases sensitivity.



PRICES:
.00025. 9/9
.00035. 10/
.0005. 10/6



Knife Switch with Arrester
A necessary adjunct to all receivers,
being tested by the Melbourne University,
and passed by the Fire Underwriters'
Association. It embodies serial
and earthling switch, with lightning arrester.
Price—2/2

Lightning Arrestor. 2/6

A separate unit when switch with
arrester is not required; also passed by
the Melbourne University and Fire Underwriters' Association.

FOX & MACGILLYCUDDY, SYDNEY

HARRINGTONS, SYDNEY

8.30 p.m.—**GEORGE FINDLAY**, Pianist: "Humoresque" (Rachmaninoff).

"Valse A Major" (Levitsky).

9.27 p.m.—**MONA NUGENT**, Soprano: "The Princess" (Grieg).

"The Green Hat" (Schumann).

9.34 p.m.—**ALFRED ACKLAND**, Violin: "Scherzo Capriccioso" (Brahms).

"Rondino" (Beethoven-Kreisler).

9.40 p.m.—**BRUNSWICK CITY BAND**: Trombone Solo: "The Firefly" (Moss).

March: "Europe United" (Zehle).

9.49 p.m.—"Argus" news service. British Official Wireless news. Meteorological information. Announcements.

9.59 p.m.—**OUR GREAT THOUGHT**:

"If doing what ought to be done be made the first business, and success a secondary consideration, is not this the way to exalt virtue?"—Confucius.

11 p.m.—**GOD SAVE THE KING**.

4QG, BRISBANE

Sunday.

MORNING SESSION.

CHURCH SERVICE.

The complete Morning Service will be relayed from the Albert Street, Methodist Church.

11 a.m.—Church Service.

11.15 p.m.—Close down.

AFTERNOON SESSION.

BAND CONCERT.

The Concert provided by the Brisbane City Band (conductor, Mr. G. Holmes) will be relayed from the Botanic Gardens.

11.15 p.m.—March: "Hawthorn Hill" (Brimmer); overture: "The Wizard" (Walence); concert solo: "Zoids" (Conrad); Mr. G. Holmes (Australian Champion), tone poem, "Londo" (Newstead). INTERVAL.

Tone-poem: "Unfinished Symphony" (Schubert); descriptive fantasia: "Smithy in the Woods" (Michaelis)—epoxyptic; (illustrating a smithy's workshop in the forest); (1) "Night Time," (2) "Early Morn" with the eacock and lark call, and sun rising; (3) "A Day in the Woods" (Schubert); (4) "Water, water, water"; (5) "Morning Bell" strikes three and the smithy has his morning prayer; (6) "Smithy at Work"—avril accompaniment, etc. Hymn selected: march, "Australian" (Brimmer).

11.30 p.m.—Close down.

NIGHT SESSION.

CHURCH SERVICE.

The complete Evening Service will be relayed from the Albert Street Methodist Church.

11.20 p.m.—Church Service.

11.30 p.m.—Benediction.

BAND CONCERT.

At the conclusion of the Church Service the Concert provided by the Brisbane Municipal Concert Band (conductor Mr. E. Jackson) will be relayed from Wickham Park. The programme will include: Overture to "Rienzi" (Wagner); selection from "I Due Foscari" (Verdi); "Peer Gynt Suite" (Grieg).

11.30 p.m.—Close down.

5CL, ADELAIDE

Sunday.

MORNING SESSION.

11 a.m.—G.P.O. chimes.

11.1 a.m.—Relay from Black Forest Baptist Church.

11.15 p.m.—Close down.

EVENING SESSION.

6.30 p.m.—G.P.O. chimes.

6.31 p.m.—Sunday stories for children.

7 p.m.—G.P.O. chimes.

7.15 p.m.—Radio from St. Bartholomew's Church.

8 p.m.—Instrumental and vocal concert by Venetian Trio and following artists: Miss Katie Tooger (violinist), Mr. Ted Jenkins (bassoon), Miss Lucy Foglia.

9 p.m.—G.P.O. chimes.

9.15 p.m.—Mr. H. Nichols will talk on "Victor Hugo."

10 p.m.—G.P.O. chimes and close down.

6WF, PERTH

Sunday.

10.45 a.m.—Tune in.

11 a.m.—Morning service, relayed from the Salvation Army Citadel, Pier Street, Perth.

11.15 p.m.—Tune in.

11.30 p.m.—Lieut.-Col. Le Roux, will give a short talk on reptiles of the Zoo.

11.45 p.m.—R.S.L. Band and Vocal Concert, relayed from Zoological Gardens, South Perth. Conductor, Mr. G. S. Mellor.

11.55 p.m.—Close down.

12 a.m.—Children's bedtime stories.

1.30 p.m.—Evening service, relayed from the Wesley Church, Perth. Preacher, Rev. J. W. Grove, M.A., LL.D.

2.45 p.m.—Perth City Band and Vocal Concert, relayed from the Government Gardens, Perth. Conductor, Mr. W. A. Halverson.

Monday, April 11

2FC, SYDNEY

MIDDAY SESSION.

11.30 a.m.—From the Royal Agricultural Showgrounds, Sydney—Results of the judging will be given of the various entries, direct from the grounds.

12 noon—"Big Ben." From the Studio. Programmes announcements.

12.30 p.m.—Stock Exchange, first call.

12.38 p.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.

12.45 p.m.—Studio music.

12.55 p.m.—Relay from "Sydney Morning Herald." New service and cables.

1.25 p.m.—Studio music.

1.30 p.m.—Miss Thelma Mitchell, mezzo.

1 p.m.—"Big Ben." Weather intelligence.

1.30 p.m.—"Evening News" midday news service.

Producers' Distributing Society's report.

1.35 p.m.—Studio music.

1.45 p.m.—Stock Exchange, second call.

1.45 p.m.—Marching music for school children.

1.46 p.m.—Miss Thelma Mitchell, mezzo.

1.45 p.m.—Studio Music.

2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.

3.30 p.m.—Studio music.

3.30 p.m.—Description of the first day of the Royal Agricultural Show, with results of the various entries, direct from the grounds.

4.30 p.m.—Marching music for school children.

4.40 p.m.—From Farmer's Tea Rooms—Miss Persie Rutter, soprano: "The Jay Bird" (Barrett).

4.45 p.m.—Studio music.

4 p.m.—From Farmer's Tea Rooms—Miss May Craven, mezzo: "The Swallows" (Cowan).

4.45 p.m.—Studio music.

4.45 p.m.—From Farmer's Tea Rooms—Miss Persie Rutter, soprano: "One Way Street" (Thorpe).

4.50 p.m.—Studio music.

4.50 p.m.—From Farmer's Tea Rooms—Miss May Craven, mezzo: "When Celia Sleeps" (Mar).

4.55 p.m.—Studio music.

4.55 p.m.—Stock Exchange, third call.

4.55 p.m.—Miss May Jackson, soprano: "The Splendor of the Moon" (Sanderson).

5 p.m.—"Big Ben." Close down.

EVENING SESSION.

6.55 p.m.—Studio music.

6.55 p.m.—Miss May Jackson, soprano: "The Big Ben Bell."

7.20 p.m.—From Farmer's Tea Rooms—Miss Persie Rutter, soprano: "One Way Street" (Thorpe).

7.25 p.m.—Studio music.

7.30 p.m.—Stock Exchange, third call.

7.30 p.m.—Miss May Jackson, soprano: "The Splendor of the Moon" (Sanderson).

7.35 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

8.45 p.m.—The chimes of ETC.

8.45 p.m.—The "Bell-Man" talks to the children.

8.50 p.m.—A story for the older ones.

8.50 p.m.—Dinner music.

8.55 p.m.—"Big Ben." Late sports news.

8.55 p.m.—Dalgety's market reports (wool, wheat, and stock).

8.55 p.m.—Fruit and vegetable markets.

8.55 p.m.—Weather and shipping intelligence.

8.55 p.m.—Stock Exchange.

8.55 p.m.—Late "Evening News" news service.

EVENING SESSION.

9.45 p.m.—Programme announcements.

9.45 p.m.—The ETC Studio Dance Band, conducted by Mr. Eric Pearce.

9.45 p.m.—"Smile a little bit" (Schmitz).

Waltz, "A message from Missouri" (Chester).

9.45 p.m.—"Big Ben." From the Haymarket Theatre, George Street, Sydney. Items by the Orchestra under the baton of Mr. Stanley Porter.

9.52 p.m.—From the Studio—Miss Mabel Batchelor, soprano: "Rockwell" (Askill).

9.55 p.m.—Mr. Arthur Ash, flute solo.

9.55 p.m.—Mr. Eric Langford, well-known artist, will give a talk on some humorous incidents in connection with sketching trips.

9.55 p.m.—The ETC Dance Band, under the baton of Mr. Eric Pearce. Fox Trot, "Temperamental Baby" (Friend).

9.55 p.m.—Mr. Ad. Cree and his Merry Makers, make their initial bow at the Studio:

Opening Chorus, "A Merry Little Party" (Cree).

9.55 p.m.—Mr. H. A. Bartleman, baritone: the song of the bushman "bound" (Cree).

9.55 p.m.—Miss Jessie Cree and Mr. A. Cree: Humorous Duet, "Kodak."

9.55 p.m.—Miss Mabel Batchelor, soprano: "Carmena" (Wilson).

9.55 p.m.—Mr. Norman Leslie, entomologist: "Too many girls" (Weston).

9.55 p.m.—Miss Mabel Batchelor, soprano: Miss Jessie Cree, and Mr. R. A. Bartleman: "Eric's Country Melodies."

9.55 p.m.—"Scotland versus England," Misses Cree and Leslie.

9.55 p.m.—Miss Jessie Cree, humor at the piano, "Poppy."

9.55 p.m.—Miss Mabel Batchelor, soprano, and Mr. R. A. Bartleman, baritone: "True here, red there" (Messenger).

9.55 p.m.—Mr. Ad. Cree: Scotch humorous song, "Where will you when?" (Cameron).

9.55 p.m.—Mr. A. Bartleman, baritone: "The Fighting Chance" (Lombardi).

9.55 p.m.—Musical sketch, "Our Debating Society," The Company.

9.55 p.m.—Mr. Rus Garling and his new friends, Mr. and Mrs. Glik.

9.55 p.m.—Concerted number, "The Old Top Hat" (Young), The Company.

9.55 p.m.—The Manager's Speech (with a few interruptions), Mr. Ad. Cree.

9.55 p.m.—Finale—"Goodbye," The Company.

The WONDERFUL P.M. FILAMENT

**The unbreakable
Filament which
defies the roughest
handling.**

The mechanical strength of the Mullard P.M. Filament can be gauged by the fact that whereas the ordinary filament will barely support one valve the P.M. Filament will support four.

This difference is due to the special metal core in the P.M. Filament which is so tough that it can be tied in knots after 1000 hours' life. The P.M. Filament is set around 5 strong resilient hooks and is free from tension, sag or danger of displacement during the long life of the valve.

Every feature of the wonderful P.M. Filament has a superiority of its own, and no feature is denied at the expense of another. You have the low current consumption of one-tenth ampere with the consequent low accumulator charging upkeep cost. Many times greater emission surface than that of an ordinary filament, giving a wide range of power free from microphonic disturbance.

There will be something lacking in your radio reception until you get the valves with the MULLARD WONDERFUL P.M. FILAMENT.

Mullard
THE · MASTER · VALVE

ARKS. 6.

All Mullard Valves are manufactured at Mullard Works, London, England.

OBtainable from every radio dealer in Australia.

*Advertisement of the MULLARD WIRELESS SERVICE CO. LTD., "MULLARD HOUSE,"
Denmark Street, London S.W. 2 England.*



10 a.m.—"Big Ben." From the Haymarket Theatre, George Street, Sydney. Items by local firms, under the baton of Mr. Stanley Pearce.

10.15 a.m.—From the Studio—The E.P.C. Dance Band, conductor, Mr. Eric Pearce. *See Test, "Milestone Jinx."*

10.20 p.m.—Items by the Haymarket Operatic Orchestra of 30 members. Conductor, Mr. Stanley Pearce.

10.30 p.m.—The E.P.C. Studio Dance Band. (a) Fox Trot, "You should see my Tomato" (Peanut). (b)

(b) One Step, "Schubert is back again" (Peanut).

(c) Fox Trot, "My Persian Peasant" (Stark).

(d) Fox Trot, "Freedom" (Fischermark).

(e) Fox Trot, "Calling me home" (Moussen).

11 p.m.—"Big Ben."

National Anthem.

Closes down.

2BL, SYDNEY

Monday.

12 noon—G.P.O. Clock and Chimes. 12.15 p.m.—Special Ocean Forecast for Shipping.

12.25 p.m.—Weather forecast.

12.30 p.m.—Bullock Market report.

12.35 p.m.—Fruit Market report.

12.40 p.m.—Dairy Farm Produce Market report.

12.45 p.m.—Fowlers Market report.

12.50 p.m.—Farm Produce Market report.

12.55 p.m.—Ships to call by wireless.

12.59 p.m.—Telegraphic and Overseas news and movements of important ships and departures and arrivals of important ships.

12.55 p.m.—Sydney Stock Exchange calls.

12.59 p.m.—Sun Newspapers news service.

12.59 p.m.—G.P.O. Clock and Chimes.

12.59 p.m.—Hillcrest Instrumental Quartet.

12.59 p.m.—C. G. C. Clock and Chimes.

12.59 p.m.—Weather report (Metropolitan).

12.59 p.m.—Ocean forecast.

12.59 p.m.—State Weather forecast.

12.59 p.m.—Stock Exchange calls.

12.59 p.m.—Sun Newspapers News service.

12.59 p.m.—Musical programme from Studio.

12.59 p.m.—Social notes from the "Sun."

12.59 p.m.—News from the "Sun."

12.59 p.m.—Musical programme from the Studio.

12.59 p.m.—Information service: mails, shipping, exchange and social notices.

12.59 p.m.—Information from the Studio.

12.59 p.m.—G.P.O. Clock and Chimes.

12.59 p.m.—News from the "Sun."

12.59 p.m.—Serial Story.

12.59 p.m.—WOMEN'S SESSION Talk on "Sports" by Miss G. Parker, Broadcasts Women's Sports Authority.

12.59 p.m.—Serial notes by Mrs. Jordan.

12.59 p.m.—Mrs. Jordan replies to correspondence.

12.59 p.m.—Talk on "Easter Fair" by Mrs. Jordan.

12.59 p.m.—Musical programme from the Studio.

12.59 p.m.—Shipping information.

12.59 p.m.—Racing results.

12.59 p.m.—G.P.O. Clock and Chimes.

12.59 p.m.—Producers' Distributing Society's Fruit Market report.

12.59 p.m.—Producers' Distributing Society's Vegetable Market report.

12.59 p.m.—Racing results.

12.59 p.m.—Summaries of night's programmes.

12.59 p.m.—National Anthem.

6 p.m.—G.P.O. Clock and Chimes; close down.

EARLY EVENING SESSION.

6.45 p.m.—G.P.O. Clock and Chimes.

6.45 p.m.—Uncle George and the kids.

6.45 p.m.—Musical programme from the Studio.

SPECIAL COUNTRY SESSION

7 p.m.—G.P.O. Clock and Chimes. Australian Mercantile, Land and Finance.

7.15 p.m.—Report.

Producer's Distributing Society's Prod. and Vegetable Market report.

Stock Exchanges reports.

Grain and Pudding report ("Sun").

Dairy Produce report ("Sun").

Producers' Producers' newspaper report on London Market.

12.15 a.m.—Country news from the "Sun". Books to read.

7.30 p.m.—Cecil Williams will speak on his reminiscences as "The Autograph King."

EVENING SESSION.

8 p.m.—G.P.O. Clock and Chimes. Broadcasts—Tropical Chimes.

8.15 p.m.—NEWTON BAND broadcast from Industrial Hall, Newtown.

8.20 p.m.—Mr. Reg. Harrison (comedian).

8.25 p.m.—Miss Winifred Jenner (soprano).

8.37 p.m.—Mc. H. Ginchliffe (baritone).

8.44 p.m.—Miss Mary Neal (mezzo soprano).

8.51 p.m.—Miss Mabel Fotheringham (soprano).

8.58 p.m.—Resume of following day's programme.

Weather report and forecast by courtesy of Mr. C. J. Morris, Govt. Meteorologist.

8.59 p.m.—G.P.O. Clock and Chimes.

9.04 p.m.—Stan Hyacinth and A. J. Lawrence in Musical and Comedy turns.

9.04 p.m.—Miss Winifred Jenner.

9.05 p.m.—Mr. H. Hibberds.

9.05 p.m.—Miss Barbara.

9.05 p.m.—Miss Mary Neal.

9.10 p.m.—The Ambrosia Dance Band broadcast from the Ballroom of the Ambassodors. During the intervals between dances news reports by courtesy of the "Sun" will be broadcast.

12 midnight—G.P.O. Clock and Chimes. National Anthem.

3LO, MELBOURNE

Monday.

MIDDAY SESSION.

Accompanists AGNES FORTUNE. Announcer ALFRED ANDREW. "A DASH OF SCOTCH."

12 noon—Time Signal. British Official Wireless News from Rugby, Reuters and The Australian Press. Broadcasts—Cables. Argus and Herald news service—see 12.30 p.m.

12.30 p.m.—JEAN E. GRIFFITHS, Soprano: "Oh! Love Is Like This Power" (Samson et Delilah). "Sleepy Gels" (Brahms).

12.30 p.m.—STUDIO ORCHESTRA: "Italian in Algeria."

12.30 p.m.—Information. —ARTHUR DOUGLAS, Comedian: "The Helen Postman" (Douglas).

12.37 p.m.—STUDIO ORCHESTRA: Ballet Music from "La Reine du Saba."

12.45 p.m.—HUXHAM SEVENADEERS: Quartette. "Rose" (Lambeau).

EDITH HUXHAM, DOLLY BURDETT, RENN MILLAR, HUGH HUXHAM, Contralto Solo, "Summer Bain"; DOLLY BURDETT.

STUDIO ORCHESTRA: "Romance" (Bellini).

Soprano Solo: "I'm Gone Alright"; EDITH HUXHAM.

Quartette, "Rose."

THE SERENADER QUARTETTE.

AGNES FORTUNE, Piano: "A Legend" (Lehar).

Quartette, "Rose Curved."

THE SILENT DIXIE QUARTETTE.

12.55 p.m.—Metronome information. Shipping intelligence. Weather forecast for Victoria, Tasmania, South Australia, and N. South Wales. Ocean forecast. River reports.

1.37 p.m.—STUDIO ORCHESTRA: "The Broadside Petition" (Fox). 1.47 p.m.—HERSIE GAUNNOR, Soprano: "Hehers" (Van Gogh).

1.53 p.m.—STUDIO ORCHESTRA: "Wedgewood Blue."

2 p.m.—Close down.

AFTERNOON SESSION.

Accompanists AGNES FORTUNE. Announcer ALFRED ANDREW. "ART AND CRAFT."

2 p.m.—STUDIO ORCHESTRA:

"Sweet Music" (Gounod).

3.15 p.m.—Mrs. DOROTHY SILK: Homecrafts.

3.25 p.m.—JEAN E. GRIFFITHS, Soprano: "I love the moon" (Balea); "The Owl" (Wells).

3.35 p.m.—ORGAN RECITAL BY DR. FLOYD. Translated from St. Paul's Cathedral.

3.45 p.m.—Bridal March (Loehning) (Wagner).

3.50 p.m.—"The Quaker" (Wolstencroft). "The Answer" (Wolstencroft).

4 p.m.—Olive CHAMBERS, Illustrating special varietal zones.

3.55 p.m.—STUDIO ORCHESTRA: "First Corinthian" (Lindberg).

4 p.m.—ELIZIE DAVIES, Soprano: "Aria" (Lohengrin).

4.15 p.m.—"Helen" (White) (Purcell). "Doctor's Advice" (Purcell).

4.30 p.m.—ELIZIE DAVIES, Soprano: "Song: 'Fair Wind'" (Demand).

4.35 p.m.—STUDIO ORCHESTRA: "White Horses" (Purcell).

4.45 p.m.—FRANCIS FELL, Inspector of Schools, Education Department: "Domestic Economy."

4.50 p.m.—"Herald" news service. Stock Exchange information.

4.55 p.m.—Close down.

EVENING SESSION.

5.45 p.m.—CHILDREN'S HOUR. Answers to children's questions. Birthday greetings.

5.55 p.m.—MAISIE BELL, Soprano, will sing to the children.

6.20 p.m.—ELISIE BRAIDAWHAW, Accompanist, is going to tell her dear little Kokaburra how "Hugs" tried to give Dolly a birthday present.

6.30 p.m.—ARTHUR DOUGLAS, is a very funny mate—if you don't laugh at him.

6.30 p.m.—Little Miss Kokaburra will tell her bigger sisters and brothers some more about "Carol of Hollywood School" (The gypsies threaten Camil). Look out for a big Easter Story next Sunday.

6.35 p.m.—"Arena" news service. "Herald" news. Weather synopsis. Skipping menu-mix.

6.45 p.m.—Stock Exchange information.

6.55 p.m.—Fish Market reports by J. R. Berry.

7 p.m.—River reports.

7.05 p.m.—Market reports by the Victorian Producers' Cooperative Co., Ltd. Hamper sheep sales. Poultry, Grain, Hay, Chaff, Straw, Int'l. Dairy Produce, Potatoes and Onions.

7.05 p.m.—Market prices of Oranges and Lemons. Price for 100 lbs. Apples. Citrus Association Pct. Ltd. Fresh Market reports by the Victorian Wholesale Fruiterers' Association, compiled by the "Fruit World," exclusive to 3LO.

NIGHT SESSION.

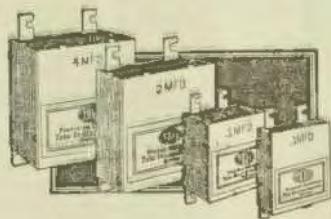
Accompanists AGNES FORTUNE. Announcer MAURICE DUDLEY.

7.15 p.m.—Under the auspices of the Develop. Australia League, MR. THOMAS RUST, former Chief President of the A.N.A.: "What Is Our Duty?"

7.30 p.m.—MR. T. G. H. TAYLOR: School Life and Sport.

Silence, Please!

*Put a stop now and for ever
to those "B" battery noises*



Tobes do it for you

TOBE BI-PASS CONDENSERS are an ABSOLUTE ESSENTIAL for all Bi-pass work. In addition, they are used in the construction of almost every type of "B" Battery eliminator manufactured in the United States.

In this capacity, TOBE Filter Condensers and the TOBE B BLOCKS have come to represent a definite standard of high quality. TOBE MEANS good condensers. If YOU build a B-Eliminator, use the TOBE B BLOCK. It saves you much time and wiring, and saves you money, too.

It is possible to get something resembling speech and music from a Radio set not equipped with good condensers—but TRUTHFUL reproduction is impossible without them. Therefore, ask your dealer for TOBE.

IF YOUR DEALER DOES NOT YET STOCK THESE PARTS, WRITE TO US DIRECT

United Distributors Limited

WHOLESALE ONLY

72 Clarence Street, SYDNEY

843 Queen St., BRISBANE.	27 Chesser St., ADELAIDE.	26 Queen St., Cr. Jervois Quay & Harris St., PERTH.	WELLINGTON, N.Z.	66 Charles St., LAUNCESTON, Tas.
			664 Bourke St., MELBOURNE	S.B.



New Columbia Layerbilt “B” Battery

A radio "B" Battery of entirely new construction, made of flat layers of elements compressed one against the other so that every cubic inch inside the battery is completely filled with electricity producing materials. This means 30% more power than that of any other battery of the same size made of round cells. It means greater power, longer life and far greater economy than it is possible to obtain from any other battery.

Columbia Radio Batteries

—they last longer

Factory Representatives:
ELLIS & COMPANY, (Aust.) Ltd.
516 Kent Street, Sydney, N.S.W.

585

7.45 p.m.—Under the auspices of the Department of Agriculture MR. J. H. WARD, Superintendent of Horticulture: "Propagation and Selection of Fruit Trees"; "MUSIC WASHES AWAY FROM THE SOUL THE DUST OF EVERY-DAY LIFE."

8 p.m.—THE STUDIO ORCHESTRA: Selection, "Elegie Time" (Schubert).

8.10 p.m.—ELSIE DAVIES, Soprano: Aria, "La Bohème" (Mimi) (Puccini).

8.15 p.m.—TAMASIE TIERNAH, Céleste: "The Broken Melody" (Brene).

8.24 p.m.—JACK KEARNS will introduce himself as "The Cricketer," and "One of the Boys."

8.31 p.m.—ELSA LEWIS, Gipsy Violiniste: "Oriental" (Cesar Cui); "Un sac à poche."

8.38 p.m.—STUDIO ORCHESTRA: Selection, "Fantz."

8.45 p.m.—BILLIE LOCKWOOD, Soubrette: "I Will Cry No More"; "Who Wants a Bad Little Boy?"

8.55 p.m.—STUDIO ORCHESTRA: "The Kingdom of Flowers."

9 p.m.—UNIVERSITY CONSERVATORIUM CONCERT, arranged by PROFESSOR BERNARD HEINZE

Pianist EDWARD GOELL

Pianoforte, "Moonlight Sonata" (4th movement) (Beethoven).

Vocal, "The Rose enlivens the Nightingale" (Dietrich-Kaufmann).

CARRIE CAIRNDUFF, Pianoforte: "Liebestraum" (Liszt).

"Water Wagtail" (Coral Scott).

"Danse Negre" (Cori Scott).

9.10 p.m.—MAXWELL CAREY will entertain you with "The Merry-go-round" (Yodel Song), "Long Skirts."

10 p.m.—British Official Wireless News from Rugby, Spouting Personalities: MR. W. PAWCETT, Sec. Victorian Swimming Association.

"His remarkable career."

10.10 p.m.—ELSIE DAVIES, Soprano: Song, "Er! King" (Schubert).

10.17 p.m.—ELSA LEWIS, Gipsy Violiniste: "Ave Maria" (Schubert-Wilhelmy).

"Hungarian Dance" (Brahms).

10.24 p.m.—STUDIO ORCHESTRA: "Quintette, Clarines and Strings" (Mes. Hegyi).

10.30 p.m.—BILLIE LOCKWOOD, Soubrette: "Wee McGregor."

"Why Couldn't it be Poor Little Me?"

10.37 p.m.—STUDIO ORCHESTRA:

"Symphonette" (Berger).

"How much easier do we find it to command a good action than to imitate it!"—Amen.

11 p.m.—OUR GREAT THOUGHT.

10.47 p.m.—"Argus" news service, Announcements, "With the Weather."

11.15 p.m.—JOHN ARONSON AND HIS SYNCOPATING SYMPHONISTS:

"That Samson and Delilah Melody."

"You've got to Black Shuffle."

"Rose-Colored Glasses."

"Am I Waiting My Time?"

"The Little Village Blacksmith Owns the Village Now."

"That's Why I Love You."

"Aloha Oe."

"Hi Ho, the Merry."

"Me Too Ho-Ho Ha-Ha!"

"Burundandy."

"In a Little Spanish Town."

"The Moonlight with Baby."

"Bye Bye, Blackbird."

"I Wish I Had My Old Gal Back."

"Angry."

11.49 p.m.—God Save the King.

4QG, BRISBANE

Monday.

MIDDAY SESSION.

1.0 p.m.—Market Reports; Weather information supplied by the Commonwealth Weather Bureau; News Service supplied by "The Daily Mail" and "The Bulletin".

1.20 p.m.—From Hotel Carlton: Lunch Music played by Hotel Carlton Symphony Orchestra.

1.30 p.m.—From the Observatory; Standard Time Signals.

2.00 p.m.—Close Down.

AFTERNOON SESSION.

3.30 p.m.—From Hotel Carlton: Afternoon Tea Music played by Hotel Carlton Symphony Orchestra.

4.15 p.m.—From the Studio: News Service supplied by "The Telegraph."

4.30 p.m.—Close Down.

EARLY EVENING SESSION.

5.00 p.m.—News Service supplied by the "Daily Standard".

5.50 p.m.—The Children's Session—Story by "The Sandman".

7.00 p.m.—Market Reports; Stock Reports; Louvre's "Park Delicacies" by Mr. E. J. Sheldon (Instructor in Pig Raising).

7.30 p.m.—Weather News; Announcements.

NIGHT SESSION.

7.45 p.m.—Last Session: "Roads and Town Planning," by Mr. R. A. McInnes (Chairman—Executive Committee, Town Planning Association of Queensland).

DUKE OF YORK'S VISIT.
MAYORAL RECEPTION AT NEW FARM PARK.

The Mayoral Reception to their Royal Highnesses the Duke and Duchess of York will be held at New Farm Park.

8.00 p.m.—From the Studio: "The Daily Mail" News; Standard Time Signals.

5CL, ADELAIDE

Monday.

MORNING SESSION.

12 noon—G.P.O. chimes.

12.15 p.m.—Recitals on the Autophone Reproducing and the New Reproducing Sonatas.

12.30 p.m.—"Advertiser" news service.

12.45 p.m.—Market reports.

1.00 p.m.—Programme.

1.15 p.m.—Musical programme continued.

2 p.m.—G.P.O. chimes and close down.

AFTERNOON SESSION.

3 p.m.—G.P.O. chimes.

3.15 p.m.—Orchestral selections from Maple Leaf Cafe.

3.45 p.m.—From the Studio: New Reproducing Sonatas and Autophone Reproducing recitals.

4.15 p.m.—G.P.O. chimes.

4.30 p.m.—Relay from the Arcoa Cafe—Orchestral numbers.

4.45 p.m.—Station announcements.

5 p.m.—G.P.O. chimes and close down.

EVENING SESSION.

5 p.m.—G.P.O. chimes.

6.1 p.m.—Dinner music broadcast by Covent Garden Orchestra.

7.00 p.m.—G.P.O. chimes.

7.30 p.m.—Market reports.

7.45 p.m.—Physical culture talk by Mr. Noel Hubbin.

8 p.m.—G.P.O. chimes. Programme supplied by Messrs. S. & J. French, Ltd.

8.15 p.m.—Song by Mr. Harry Ward.

8.30 p.m.—Selection, S.A.R.B. Band.

8.45 p.m.—"Twinklers'" original humorous talk.

8.40 p.m.—Song, Miss Ethel Lampe.
8.55 p.m.—Selection, S.A.R. Band.
8.55 p.m.—Recitation, Mr. Charles Carter.
9 p.m.—G.P.O. chimes.
9.1 p.m.—Weather report.
9.5 p.m.—Davies' wheat report.
9.4 p.m.—A.R. Band.
9.20 p.m.—Song, Mr. Harry Wordin.
9.24 p.m.—Banjo solo, Mr. Seth Smith.
9.28 p.m.—S.A.R. Band.
9.40 p.m.—Song, Miss Ethel Lampe.
9.44 p.m.—Recitation, Mr. Charles Carter.
9.50 p.m.—S.A.R. Band selection.
9.55 p.m.—Close down.
10.15 p.m.—"Advertiser" news service.
10.15 p.m.—S.A.R. Band.
10.30 p.m.—Song, Mr. Harold Wordin.
10.34 p.m.—Banjo solo, Mr. Seth Smith.
10.38 p.m.—Song, Miss Ethel Lampe.
10.45 p.m.—Paincourt solo, Miss Langley Nelson.
10.46 p.m.—Recitation, Mr. Charles Carter.
10.50 p.m.—Song, Mr. Harry Wordin.
10.55 p.m.—Banjo solo, Mr. Seth Smith.
11 p.m.—G.P.O. chimes and close down.

6WF, PERTH

Monday.

12.30 p.m.—Tune in.
12.35 p.m.—First local news bulletin.
Market reports.
Cables.
1 p.m.—Time signal from Perth Observatory.
2.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
2.2 p.m.—Studio Quintette.
2 p.m.—Close down.
3.30 p.m.—Tune in.
3.35 p.m.—Musical programme.
4 p.m.—Studio Triad.
4.30 p.m.—Close down.
4.45 p.m.—Tune in.
5.30 p.m.—Children's bedtime stories by Undine Hafford and Buffy.
7.20 p.m.—Stock and Share intelligence.
Market reports.
Cables. News supplied by courtesy of "The West Australian" Newspaper Co.
7.45 p.m.—Talk, "Bee Keeping," by Mr. C. Walshaw, under auspices of the Bee Keepers' Association.
8 p.m.—Time signal from Perth Observatory.
8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
8.2 p.m.—From the Studio.
Musical programme, including waltzes.
9.30 p.m.—Health talk by Mr. H. S. Hutton, of the Hutton School of Physical Culture.
10 p.m.—Second local news bulletin, supplied by courtesy of "The Daily News" Newspaper Co.
10.30 p.m.—Close down.

Tuesday, April 12
2FC, SYDNEY

MIDDAY SESSION.

11.30 a.m.—From the Royal Agricultural Showground, Sydney. Results of the judging will be given of the various entries, direct from the Grounds.
12 noon—"Big Ben" and announcements.
12.30 p.m.—Stock Exchange, first call.
12.8 p.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
12.15 p.m.—Studio music.
12.25 p.m.—Summary of "Sydney Morning Herald" news service and cables.
12.35 p.m.—Studio music.
12.55 p.m.—Miss Margaret Lessau, soprano ("Heart's Desire" Simpson).
1 p.m.—"Big Ben." Weather intelligence.
1.30 p.m.—"Evening News" midday news service.
Producers' Distributing Society's report.

"ALL AMERICAN"

Toroids & Transformers

Lead the Way at the Radio Exhibition
Win First, Second and Special Prize
in Multivalve Receiver Class.

LOG THE WORLD
Build your SUPER with
ALL-AMERICAN

SUPER-FINE
PARTS

LONG WAVE TRANSFORMER
(Intermediate Frequency)
For Amplification at 4,000 to 20,000 meters (75 to 15 Kilocycles)

R-110 . . Each £2/2/6

10,000 METER TRANSFORMER
(Filter or Input)
High selectivity and no side band distortion.

R-120 . . Each £2/2/-

RADIO FREQUENCY COUPLER
(Oscillator Coupler)
A uniform output at 150 to 650 meters.

R-130 . . Each £1/15/6

SUPER-FINE PARTS:
3 R-110
1 R-120
1 R-130 Price £9/5/-

RADIO KEY BOOK.
So great has been the demand for this excellent little publication that every copy has been sold.

It is intended to renew stocks within the next few weeks.

Watch our advertisements for further particulars.

LARGEST SELLING TRANSFORMERS IN THE WORLD.

ALL-AMERICAN

ALL-AMERICAN SET OF SUPERFINE PARTS. Now, £9/5/-
Sole Agent:
O. H. O'BRIEN, (LATE O'BRIEN AND NICHOLL)
37-39 PITT ST., SYDNEY 516 COLLINS ST., MELBOURNE
W. E. PETERMAN, 160 Edward St., BRISBANE

Become a

Wireless Officer

— and —

Travel the World

Well-paid positions await
YOU at sea and on
shore.

Over 600 of our students
have already become
wireless officers.

20 secured situations in
the last three months.

By our Home Study method
you can be taught in your
own home.

We guarantee to instruct
you until you are
proficient.

Write, Phone or Call

**Marconi School
of Wireless**
99 Clarence Street
SYDNEY

- 1.20 p.m.—Studio music.
1.25 p.m.—Stuck El�ham, second call.
1.30 p.m.—Marching music for school children.
1.45 p.m.—Miss Margaret Leesdon, soprano: "Jane Austen" (El�ham).
1.55 p.m.—"Big Ben." Close down.

AFTERNOON SESSION

- 2 p.m.—"Big Ben." From the Royal Agricultural Showground. Descriptions of the Show and judging results will be given direct from the Grounds.
3.30 p.m.—Marching music for school children.
3.45 p.m.—From Farmer's Tea Rooms—Miss Muriel Humphries, contralto: "Gone you leave me" (Brahms).
3.55 p.m.—A talk on tea cooking and recipes by Miss Ruth Farnie.
4 p.m.—From Farmer's Tea Rooms—Mr. Frank Botham, baritone: "Hills of Donegal" (Sanderson).
4.15 p.m.—From the R.A.S. Grounds—Further descriptions of the Show.
4.30 p.m.—From the Studio—Miss Nellie Judson, soprano: "She'll drop a song into my heart" (Foster).
4.45 p.m.—From the R.A.S. Grounds—Descriptions of the Easter Show.
4.55 p.m.—From El�mer's Tea Rooms—Miss Muriel Humphries, contralto: "The Amber Cross" (Tait).
4.55 p.m.—Descriptions of the Show, direct from the R.A.S. Grounds, Sydney.
4.55 p.m.—Miss Nellie Judson, soprano, will sing from the studio: "Hustle" (Puccini).
5 p.m.—From Farmer's Tea Rooms—Mr. Frank Botham, baritone: "Cartload o' Hay" (Adams).
5.15 p.m.—Stock Exchange, third call.
5.45 p.m.—Descriptions of the Show, direct from the R.A.S. Grounds.
5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION

- 5.45 p.m.—The Chimes of 2 P.M.
5.55 p.m.—The Hello Girl's talk to the children.
6.10 p.m.—A serial story for the older ones.
6.15 p.m.—Dinner music.
6.30 p.m.—"Big Ben."
Late sporting information.
7.10 p.m.—Dalgety's market reports (wheat, wheat and stock).
7.15 p.m.—Fruit and vegetable markets.
7.20 p.m.—Weather and shipping intelligence.
Stock Exchange.
7.30 p.m.—Late "Evening News" news review.

NIGHT SESSION

- 7.35 p.m.—Announcing a change of a complete programme over a band line of 899 miles from SLO, Melbourne, by arrangement with the Broadcasting Company of Australia Pty. Ltd.
Note.—This will be the first occasion in which a complete programme has been relayed from two States and will give listeners in N.S.W. an opportunity to hear SLO if they do not possess a receiving set of sufficient strength to receive the transmission direct.
8 p.m.—Malvern Tramways Band. March, "The Black Knight" (Hummel). Overture.
8.10 p.m.—Ebie Davies, soprano: "Prayer—La Tene" (Puccini).
8.15 p.m.—Maw M Carew, comedian: "How do you do?"
Pastor.
Parody: "I passed by your window." Parody—Malvern Tramways Band: Waltz, "Will o' the Wisp" (Barber).
8.30 p.m.—Hilsea Lockwood, soprano: "Ain't you Jim?"

Impression of "Low White," "We've got a servant."

- 8.40 p.m.—University Dramatic Society: "Paxton, Polson and Vlafastoff" (Shaw).
8.45 p.m.—Malvern Tramways band.
Selection, "La Traviata" (Verdi).
8.52 p.m.—Jack Keerna, Es. Snacks of Irish: "The Man in the Moon," "Parade," "Kilkenny," Parody, "Warning of the Green."

- 8.55 p.m.—Hughan's Remakers: Humorous Quartet: "The time we are together" (Campbell). Edith Husman, Dolly Burdett, Roni Miller, and Hugh Husman, bass solo: "The Open Road."

Bernie Hillier.

Kris Lester, Gilly violinist: "Japanese Cherry Dance."

Topical Quartet:

- "In 1926" New York.
Doris, "A perfect fit" (Glenda Bond).
Edith and Hugh Husman.
Eric Lewis, guitar violinist: "Narrator" (Niven). Operatic Quartet:
"The Oxford in William Tell" (Rossini).
The Sevenfold Quartet.

8.55 p.m.—News service.

- 10.12 p.m.—Malvern Tramways Band: Selection, "The Mikado," No. 2 (Sullivan).

10.32 p.m.—Hilsea Lockwood, soprano: "Walking around in circles."

- "Happy and easy" (Kreisler).
10.35 p.m.—Elsie Lewis, guitar violinist: "Antoinette" (Kreisler).
"Drink to me only with thine eyes" (arc. Quilter).

- 10.35 p.m.—Malvern Tramways Band: Two step, "Pay in America" (Eden).
March, "The Victor's Return" (Kimmety).
10.40 p.m.—Ebie Davies, soprano: Song, "Miss Piggy" (Gomes).
"Song of the Mountains—Love will find a way."

10.53 p.m.—News service.

Sporting notes by "Olympus."

11 p.m.—Our Great Thought.

- 11.1 p.m.—Joe Arnone and his Syncopating Symphonists.

11.40 p.m.—God Save the King.

2BL, SYDNEY

Tuesday.

DAY SESSION

- 12 noon—G.P.O. Clock and Chimes.
12.15 p.m.—Special ocean forecast for shipping.
12.25 p.m.—Weather forecast.
12.45 p.m.—Radio traffic report.
12.55 p.m.—Fruit market report.
12.58 p.m.—Vegetable market report.
12.59 p.m.—Fruit market report.
12.55 p.m.—Dairy farm produce market report.
12.58 p.m.—Poultry market report.
12.55 p.m.—Farm produce market report.
12.57 p.m.—Ships in call by wireless.
12.59 p.m.—Intercable traffic and overseas.
12.55 p.m.—Shipping arrivals and departures and movement of important ships.
12.55 p.m.—Sydney Stock Exchange calls.
12.56 p.m.—"Sun" Newspapers news service.
12.58 p.m.—G.P.O.—Clock and chimes.
12.59 p.m.—News from the "Sun."
12.45 p.m.—Hillier's Instrumental Quartet. Direction, Carol Cedding.
1.00 p.m.—G.P.O. Clock and Chimes.
1.05 p.m.—Metropolitan weather report.
1.12 p.m.—Ocean forecast.
1.33 p.m.—State weather forecast.
1.34 p.m.—Sydney Stock Exchange calls.
1.37 p.m.—News from the "Sun."
1.45 p.m.—Musical programme from the Studio.
2 p.m.—G.P.O. Clock and Chimes.

2.1 p.m.—Musical programme from the Studio.
 2.11 p.m.—Social notes from the "Sun."
 2.15 p.m.—News from the "Sun."
 2.16 p.m.—Musical programme from the Studio.
 2.32 p.m.—Information service. Mail, shipping, amusement and social features.
 2.44 p.m.—Musical programme from the Studio.
 3 p.m.—G.P.O. Clock and chimes.
 3.1 p.m.—News from the "Sun."
 3.15 p.m.—Civil Service Stores Trio. Direction, Miss de Courcy Brehier.
 3.18 p.m.—Women's Session. Social notes by Mrs. Jordan.
 3.26 p.m.—Mrs. Jordan replies to correspondents.
 3.46 p.m.—Talk on "Toilet Talk," by Mrs. Jordan.
 4 p.m.—G.P.O. Clock and Chimes.
 4.15 p.m.—Civil Service Stores Trio.
 4.18 p.m.—Sport stories.
 4.30 p.m.—G.P.O. Clock and Chimes.
 4.31 p.m.—News from the "Sun."
 4.46 p.m.—Producers' Distributing Society's fruit market report.
 4.47 p.m.—Producers' Distributing Society's fruit market report.
 4.49 p.m.—Racing results.
 4.52 p.m.—Resume of night's programme.
 4.55 p.m.—Announcements.
 5 p.m.—G.P.O. Clock and Chimes. Close down.

EARLY EVENING SESSION.

5.45 p.m.—G.P.O. Clock and Chimes.
 5.48 p.m.—Uncle George and the kiddies.
 6 p.m.—The pupils of Miss Monica Scully will entertain the kiddies.
 6.40 p.m.—Musical programme from the Studio.
 7 p.m.—G.P.O. Clock and Chimes.

SPECIAL COUNTRY SESSION.

Australian Mercantile, Land, and Finance Co.'s report.
 Weather report and forecast.
 Stock Exchange reports.
 Producers' Distributing Society's fruit and vegetable market report.
 Dairy produce report ("Sun").
 Grain and fodder report ("Sun").
 7.18 p.m.—Country news from the "Sun."
 7.30 p.m.—Talk on "The Motor Car," by Mr. Martin.
 8 p.m.—G.P.O. Clock and Chimes.
 Broadcasters' Topic Chorus.
 8.30 p.m.—Broadcasters' Miniature Orchestra, under the direction of Mr. J. Knight Barnett.
 8.38 p.m.—Miss Heather Kinnaird, contralto.
 8.40 p.m.—Mr. Raymond Beatty, basson.
 8.42 p.m.—Mr. Stan Castell, comedian.
 8.44 p.m.—Miss Millie Hughes, soprano.
 8.46 p.m.—Mr. David Smith, baritone.
 8.48 p.m.—Mr. Henry Penn, pianist.
 8.50 p.m.—Resume of following day's programme.
 Weather report and forecast by courtesy of Mr. Marx, Government Meteorologist.
 9 p.m.—G.P.O. Clock and Chimes.
 9.30 p.m.—Broadcasters' Miniature Orchestra.
 9.32 p.m.—Duet (Miss Millie Hughes and Mr. Raymond Beatty).
 9.37 p.m.—Miss Heather Kinnaird.
 9.41 p.m.—Mr. Raymond Beatty.
 9.43 p.m.—Broadcasters' Miniature Orchestra.
 9.44 p.m.—Miss Millie Hughes.
 9.48 p.m.—Mr. Stan Castell.
 10.00 p.m.—Mr. David Smith.
 10.12 p.m.—The Ambassadore's Dance Band broadcast from the ballroom of the Ambassadore. During the intervals between dances, news reports by courtesy of the "Sun" will be broadcast.
 12 midnight—G.P.O. Clock and Chimes. National Anthem.

Special Prices ON RADIO PARTS

FROM

The Australian Wireless Co. Ltd.

140 CASTLEREAGH STREET, SYDNEY.

Potentiometers.	s.	d.	s.	d.
Igranic, 30000 ohms	7	3	Filkoleaks	7 9
Magnus, 200 ohms	3	6	Filkostats	7 9
Frost, 200 ohms	4	6	Crystal Parts.	
Shop soiled	2	6	Detector Outfits ...	0 3
			Azax " "	0 4
			Misc. " "	0 3
			Detector Arms ...	0 3
			Spring Detector	
			Arms 0 3	
			Sliders (metal)	0 3
			(Bakelite)	0 3
			Crystal Cups	0 1
			Insulators.	
Resistance Amplifiers	1	0	Pyrex (Glass) ...	2 8
Muter Single	7	8	Jacks.	
Muter 3-Valve ... £2	6	0	Saturn, S.C.	2 8
Shop soiled	0	4	Marco, D.C.	2 0
			Lightning Arrestors.	
			Filko	5 6
			Switches.	
Frost, 3 gang	11	6	Frost Push-Pull ...	1 11
Crossley (Pore.)	1	2	Framingham Series ...	1 6
Crossley (Bak.)	1	2	Fada Rotary Switch	
Shop soiled	0	9	Arms 0 6	
			Soldering Outfits.	
Dials.			Clinton Wonder 1 0	
Magnus, Sin.	0	11		
Accuratune	17	3		
K.K., Sin.	3	6		
K.K., 4in.	5	0		
Shop soiled	6			

The Australian Wireless Company Limited

140 Castlereagh Street, SYDNEY,

Manufacturers of the Famous **RADIAIR** RECEIVING SETS

Loewe

Multiple Valves

a marvellous advance in radio art

are meeting with an exceptional success everywhere. Because of their high sensitivity and simplicity they permit of the construction of extremely powerful yet inexpensive local and long range sets, the ideal instruments for music lovers.



Sole agencies open for various territories. Radio factors of good financial standing please apply.

Loewe Radio G.m.b.H.
BERLIN - STEGLITZ
WIESENWEG 10

3LO, MELBOURNE

Tuesday.

MIDDAY SESSION

Accompanists AGNES FORTUNE
Announcer ALFRED ANDREW
"TO A YOUNG HEART EVERYTHING IS FUN" (Dickens).

12 noon.—Time Signal, British Official Wireless from Rugby, Reuters and The Australian Press Association, Calyx, "Argus" and "Herald" news services.

12.30 p.m.—JACK KEARNS, comedian, will regale, amuse, and ruminate on "Poor and Nine" and "Till Come Back" "Magic Music" (Mozart).

12.45 p.m.—Stock Exchange information.

12.50 p.m.—MAISIE BILLI, soprano; "My Tank" (Axford); "The Sleepy Canoe" (Hubert); "The Happy Tramp" (Kerr).

12.55 p.m.—STUDIO ORCHESTRA: "Hobson's Choice" (Kerr); "They Caught 'em Young"; "Hesitant Around".

1.15 p.m.—CHAS. SHERMAN: "Hesitant Around" and "Song".

1.30 p.m.—Metereological information, Shipping forecasts, sailing forecasts for Victoria, Tasmania, South Australia and New South Wales, Ocean forecasts, River reports.

1.35 p.m.—STUDIO ORCHESTRA: "Cobweb Castle" (Lehman).

1.45 p.m.—HILLIE LOCKWOOD, Soubrete: "Pretty Little Baby"; "New Baby at Our House".

1.55 p.m.—C. RICHARD CHUGG and FRANK LIN STONHAM: "Duo for Flute and Clarinet" (Tarnstelle); "Sailor Song" (Stonham).

1.59 p.m.—MR. CHAS. W. JOYCE, State Secretary, Returned Sailors and Soldiers Imperial League of Australia (Victorian), will speak on:

"Why this Year's Anzac Appeal should be Supported?"
2 p.m.—Clock down.
Results of Sports Races will be given as they come to hand.

Accompanist AGNES FORTUNE
Announcer ALFRED ANDREW
"DANCE AND BE MERRY".

3 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS: "Sunday".

"By the Sign of a Rose,"

"Hello, Little Girl of My Dreams."

3.5 p.m.—AU FAIT! will give a Fashion Talk.

3.55 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS: "The Organ Black Bottom,"

"Hello, Alone,"

"Let's All Henry Ford,"

"Consolation" (Wall).

3.55 p.m.—JOHN J. SARGENT: "Highway" (Japanese Zendo); "Blackbird's Song" (Cyril Scott).

4.15 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS: "Huffnuddsy" (Piano Solo); "The More We are Together,"

"Madeline,"

3.51 p.m.—ELSA LEWIS, Gipsy Violinist: Selection "La Traviata".

4 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS: "Tie a Long Wall of the Bois" (Parody); "Baby" (Parody); "Everybody's Lonely".

4 p.m.—ARTHUR DOUGLAS, Comedian: She is me "Rosie" (Lander).

4.17 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:

"A Very Special Sandwich and You,"

"Just One More Kiss,"

"Just a Bird's Eye View,"

4.27 p.m.—MATRON MORELAND: "Infant Welfare."

4.37 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS: "Thinking of You," "Hi, Diddle Diddle," (Parody).

4.45 p.m.—"Herald" news service. Stock Exchange information. 1 p.m.—Clock down.

EVENING SESSION

4.45 p.m.—CHILDREN'S HOUR: Answers to Letters and Birthday Greetings.

4.55 p.m.—STUDIO ORCHESTRA: "Children's Overture".

5.2 p.m.—"MARY GUMLEAF": Poems "The Grey Owl," "The Piano Fairies," Story for the Young ones, "The Story of the Clock."

6.10 p.m.—CAPT. DONALD MCLEAN will tell children about "Drake's Attack on the Treasure Trail at Panama."

6.35 p.m.—"Argus" and "Herald" news service, Weather synopsis. Shipping movements.

6.45 p.m.—Stock Exchange information.

6.55 p.m.—Fish Market reports by J. R. Herrell, Ltd.

6.55 p.m.—River reports.

6.55 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Dairy Products, Potatoes and Onions. Butcher Shop sales, Poultry, Grain, Baraw, Hay and Jute.

7 p.m.—Market prices of Oranges and Lemons by the Victorian Central Citrus Association. Fruit Market reports by the Victorian Wholemeal Producers' Association, compiled by the "Fruit Word," exclusive to 3LO.

NIGHT SESSION

Accompanist AGNES FORTUNE
Announcer MAURICE DUDLEY

7.15 p.m.—REV. R. C. NICHOLLS: "Wom's Amazing Boys," Selections from "The University Extension Board," MR. W. KERRY, M.A., Senior Lecturer in Classics at the University;

"The Democracy of Ancient Athens,"

7.45 p.m.—MR. E. HORSBURGH, Coach Visitor, Interstate Eight;

"Preparation of an Interstate Crew for King's Cup."

THIS PROGRAMME IS TO BE RELATED BY ERIC SYDNEY.

"TO OUR FRIENDS ACROSS THE BORDER—WE EXTEND YOU HAND OF FRIENDSHIP!"

8 p.m.—MALVERN TRAMWAYS BAND: March, "The Black Knight" (Blumer); Overture: "The Bohemian Girl" (Blaffer).

8.16 p.m.—ELsie DAVIES, soprano: "I'm a Dancer" (Lamont); (Piccini).

8.17 p.m.—MAXWELL CAREW, Comedian: "How do you do?" (Parter).

I Passed by Your Window" (Parody).

8.25 p.m.—MALVERN TRAMWAYS BAND: Waltz, "With the Wind" (Bunce).

8.30 p.m.—HILLIE LOCKWOOD, Soubrete:

"Ain't you Jolly,"

Impressions of Lee White in "We've got a Secret."

8.30 p.m.—UNIVERSITY DRAMATIC SOCIETY: "The Peacock and Fratricide,"

By RICHARD SHAW.

8.30 p.m.—MALVERN TRAMWAYS BAND: Selection "La Traviata" (Verdi).

8.30 p.m.—JACK KEARNS, in Sketches of Irish:

"McCarthy," "Killdeer" (Parody).

"Wearing of the Green" (Parody).

8.30 p.m.—HUGH BUXHAM'S SERENADES: Humorous Quartet: "The More we are Together" (Campbell).

EDITH BUXHAM, DOLLY BURDETT,

REBECCA MILLER, HUGH BUXHAM: "Rebel Song," "The Open Road."

REBECCA MILLER.

ELSA LEWIS, Gipsy Violinist:

"Japanese Cherry Blossoms."

Topical Quartette. "In H.A.W." (new version) (Duet, EDITH AND HUGH DUXHAM; "A" (Duo, (Jacobs-Bond).

ELSA LEWIS, Violinist...
"Norekta" (Novelties).

Operatic Quartette:

"The Overture to William Tell" (Romani) (Set to Words).

THE SERENADE QUARTETTE.

10.2 p.m.—British Official Wireless News from Rugby. Announcements.

10.12 p.m.—MALVERN TRAMWAYS BAND Selection: "The Mikado," No. 2 (Sullivan).

10.22 p.m.—BILIEE LOCKWOOD, Soprano: "When You're a Girl"; "Circles"; "Dances and Graces".

10.29 p.m.—ELSA LEWIS, Gipsy Violinist: "Andante" (Kreisler); "Drink to me only with thine eyes" (Are by Quilter).

10.35 p.m.—MALVERN TRAMWAYS BAND: Two Step, "Pais in America" (Eden); March, "The Victor's Return" (Hammer).

10.44 p.m.—ELSIE DAVIES, Soprano: "Mis Favella" (Gomes); "Maid of the Mountains—Love will Find a Way".

10.53 p.m.—"Arms" News service. Weather forecasts, announcements. Sporting Notes by Olympia.

11.15 p.m.—OUR GREAT THOUGHT:

"Joy in man's work is the communists' goal" (Philippe Brooke).

11.15 p.m.—JOE ALGONIAN AND HIS SYN-COPATING SYMPHONISTS:

"Baby Face";

"At peace with the world";

"Hi diddle diddle";

"Neapolitan Nights";

"Precious";

"Ragtime";

"Ties, Ties, Tie turn the hook on me";

"Princess Betty's Lullaby";

"Any one today lady";

"Gimme a Little Kiss Will Ya?"

"Rose Marie";

"Indian Love Call";

"No Frogin'";

"Blowing Off Steam";

"Hi, Ho the Merry";

11.49 p.m.—Gentleman: "The Kiss".

4QG, BRISBANE

Tuesday.

MIDDAY SESSION.

1.0 p.m.—Market Reports; Weather Information; News Service supplied by "The Daily Mail" and "The Daily Standard".

1.20 p.m.—From Hotel Carlton's Lunch Music from the Lounge, played by Hotel Carlton Symphony Orchestra.

1.25 p.m.—From the Observatory: Standard Time signals.

2.0 p.m.—Close Down.

AFTERNOON SESSION.

3.30 p.m.—A PROGRAMME OF MUSIC FROM THE STUDIO: Duo Art selection: "Street of Roses" (Clarke); Aeolian Vocalion selections (at various solo); "Saltaire" (German); Miss Peggy Collier, (b) solo; "At Peace With the World" (Berlin); Mr. Harry Dulce, Duo Art selection: "Autumn Leaves" (Champlin); Aeolian Vocalion selections: (a) fox-trot, "Whommes" (Steg); Royal Troubadours, (b) jazz solo, "But on the Dear" (Loeb); Mr. Malvyn McEachern, Duo Art selection: "Comquette Macarons" (Margolin); Aeolian Vocalion selection: (a) fox-trot, "I Want to Be a Soldier"; (b) march, "Duke's Lavender" (Purcell); Miss Olga Haber, Duo Art selection: "Merrymakers' Dance" (German).

4.15 p.m.—The Telegraphic News.

4.50 p.m.—Close Down.

SPECIAL TRANSMISSION
DUKE OF YORK'S VISIT.

The ceremonies arranged by the Returned Sailors and Soldiers' Imperial League of Australia in connection with the visit to Brisbane of their Royal Highnesses the Duke and Duchess of York will be relayed from Toowong Cemetery.

Ever-Ready Radio Batteries are Always Ready

The New Ever-Ready
No. 126 or A, B, or C Battery

Price 2/-

One of a group of radio batteries.

Useful in wireless, lighting, and

amplification. Size, 3½ x 4 x 1½.

Most useful for bells, telephones,

burglar alarms, medical cells, etc.

With three brass terminals. Volt-

ages 1.5, 3 or 4.5 volts. Useful

for all wireless purposes as well as general utility.



The "Standard" "A"
Radio Battery.

Price 9/-

The Ever-Ready "Standard" "A" Battery (No. 126), 4.5 volt, specially designed for economical operation of 1.5, or 3 valves, taking .06 amperes at 3 volt. For sets with four or more valves, the most economical service is obtained by using two "Standard" "A" Batteries connected in parallel.



If unobtainable locally, write for address of nearest source of supply to

The Ever-Ready Co. (Gt. Britain) Ltd.

163 Pitt Street :: Sydney

Important Notice

BY THE MAKERS
OF THE

P.M. VALVES With the Wonderful P.M. Filament

Radio Dealers require no license for the sale of Mullard Valves, which may be sold separately, with or without valve holders, and in any quantities, and the Manufacturers indemnify Traders against proceedings in relation to the sale of Mullard Valves, provided the Manufacturers' usual terms and conditions are complied with.

The Mullard Wireless
Service Co., Ltd.,
"Mullard House,"
Denmark Street, London,
S.W. 2, England.

Mullard
THE · MASTER · VALVE

The ceremony will take the form of a service in memory of the sailors and soldiers killed during the war, and will be held at the Stone of Remembrance.
8.30 p.m.—From the Toowong Cemetery: Returned Sailors and Soldiers' Ceremony.
8.30 p.m.—Conclusion.

EARLY EVENING SESSION,
6.15 p.m.—"Daily Standard" News; Announcements.
6.30 p.m.—The Children's Session—Stories by Eddie Bell and Uncle Jim.
7.00 p.m.—Market Reports; Stock Reports; Lecturer, "The Propagation of Plants"; Mr. G. Williams (Acting Director in Fruit Culture).
7.30 p.m.—Weather News; Announcements.
7.45 p.m.—Standard Time Signal.

NIGHT SESSION.

7.45 p.m.—Lecture Session: "Correct Lateralisation Talk," No. 1, by "Garnerville." STAINES' CHAMPIONSHIP.

The first portion of the musical programme will comprise the singing of Stainer's Great-Saint from St. Andrew's Church of England, South Brisbane.

8.00 p.m.—From St. Andrew's: Choral Selections; Choristers, St. Andrew's Choral Society; Mr. J. P. Peel (organist); Mrs. F. W. Calle (soprano); Miss K. Long (soprano); Mr. W. G. Ashton (tenor); Mr. P. G. Taylor (bass); organist and choir.

8.20 p.m.—From the Studio: Metropolitan Weather Forecast; From the Studio: Metropolitan Weather Forecast.

8.30 p.m.—Pianoforte solo, selected, Mr. A. Sharman; vocal duet selected, Signor Corti and Signorina Sartori; "The Man in the Water"; Miss Eileen McLean; organ solo, selected, Mr. A. Sharman; Tenor solo, "There Are Holes Tell Me So"; (Hardy); Signor Corti—soprano solo, "Amarillo"; Miss Ethel May—soprano solo, pianoforte solo, selected, Mr. Arthur Sharman.

8.30 p.m.—From the Studio: The Daily Mail News; Weather News; Close Down.

5CL, ADELAIDE

Tuesday.

MORNING SESSION.

12 noon—G.P.O. chimes.
12.30 p.m.—Autotone Reproducer and New Reproducing Sonatas recital.
12.45 p.m.—"Morning Star" news service.
12.50 p.m.—Market reports.
1.00 p.m.—G.P.O. chimes.
1.15 p.m.—Musical programme continued.
2.00 p.m.—G.P.O. chimes and close down.

AFTERNOON SESSION.

3.00 p.m.—G.P.O. chimes.
3.15 p.m.—Relay from Maple Leaf Cafe—Orchestral selections.
3.45 p.m.—Musical selections from the studio.
4.00 p.m.—G.P.O. chimes.
4.15 p.m.—Relay from the Arcadia Cafe—Orchestral numbers.
4.45 p.m.—Station announcements.
5.00 p.m.—G.P.O. chimes and close down.

EVENING SESSION.

6.00 p.m.—G.P.O. chimes.
6.15 p.m.—Dinner music broadcast by Convent Garden Orchestra.
7.00 p.m.—G.P.O. chimes.
7.15 p.m.—Bedtime stories.
7.30 p.m.—Market reports.
7.40 p.m.—Home beautiful talk by "Domus."
8.00 p.m.—G.P.O. chimes.
8.10 p.m.—Overture 5CL Orchestra.
8.15 p.m.—Song, Miss Dulcie Walter.
8.15 p.m.—Recitation, Mr. W. L. Rowett.
8.25 p.m.—Selection, 5CL Orchestra.
8.35 p.m.—Song, Mr. Roy Pierse.
8.45 p.m.—Song, Eddie Bell.
8.50 p.m.—Song, Mr. McNeil.
8.55 p.m.—Song, Miss Eddie Evans.
8.55 p.m.—Song, Eddie Bell.
9.00 p.m.—Dalgety's wheat report.
9.05 p.m.—Song, Mr. Roy Pierse.
9.05 p.m.—Selection, 5CL Orchestra.
9.15 p.m.—Song, Miss M. McNeil.
9.25 p.m.—Recital, Mr. W. L. Rowett.

9.30 p.m.—Selection, 5CL Orchestra.
9.45 p.m.—Song, Miss Dulcie Walter.
9.45 p.m.—Song, Eddie Bell.
9.45 p.m.—Song, Mr. Ted Williams.
9.45 p.m.—Song, Mr. Roy Pierse.
9.45 p.m.—Song, Eddie Bell.
9.51 p.m.—Recital, Mr. W. L. Rowett.
10.40 p.m.—Song, Miss M. McNeil.
10.45 p.m.—Cabinet solo, Mr. Vern Rogers.
10.45 p.m.—Song, Miss Eddie Evans.
10.45 p.m.—Selection, 5CL Orchestra.
11 p.m.—G.P.O. chimes and close down.

6WF, PERTH

Tuesday.

12.00 p.m.—Tune in.
12.30 p.m.—First local news bulletin.
Market reports.
Cables.
1.00 p.m.—Time signal from Perth Observatory.
2.15 p.m.—Weather not supplied by the Meteorological Bureau of Western Australia.
3.00 p.m.—Close Down.
4.20 p.m.—Time in.
4.30 p.m.—Musical programme, including piano forte selections by Mr. Leslie Jenkins.
4.45 p.m.—Studio trio.
4.50 p.m.—Close down.
4.55 p.m.—Time in.
4.55 p.m.—Stories for Tiny Tots, by Ann Kates.
5.15 p.m.—Gwen Leslie will talk to the boys.
5.20 p.m.—Stock and Share intelligence.
Market reports.
Cables. News supplied by courtesy of "The West Australian" Newspaper Co.
5.30 p.m.—Time signal from Perth Observatory.
5.45 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
5.50 p.m.—Band Night.
Concert by the Perth City Band. Conductor, Mr. W. A. Hall, M.A.
10 p.m.—Second local news bulletin, supplied by courtesy of "The Daily News" Newspaper Co.
10.00 p.m.—Close down.

Wednes., April 13

2FC, SYDNEY

MIDDAY SESSION.

12 noon—"Big Ben" and programmes announcement.

12.30 p.m.—Stock Exchange, first call.

12.45 p.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, time signals, and general services.

12.45 p.m.—Studio music.

12.55 p.m.—Summary of "Sydney Morning Herald" news service and cables.

12.55 p.m.—Studio music.

12.55 p.m.—Miss Annie Payne, memo:

(a) "The Swan bent low to the lily" (MacDowell).

(b) "Good Evening" (Grieg).

1.00 p.m.—"Big Ben" and weather information.

1.00 p.m.—"Evening News" midday news service.

Producers Distributing Society's report.

1.20 p.m.—Stock music. Also the speeches of the official luncheon at the R.A.B. Grounds, Sydney.

1.20 p.m.—Stock Exchange, second call.

1.30 p.m.—Marching music in school children.

1.45 p.m.—Miss Annie Payne, memo:

"The ships of Arezzo" (Read).

1.45 p.m.—Studio music.

2 p.m.—"Big Ben."

Close down.

Note.—The speeches at the official opening of the Easter Show will be transmitted direct from the Royal Agricultural Show-grounds, Sydney.

AFTERNOON SESSION.

3 p.m.—"Hip, Hip," and programme announcements.

3.30 p.m.—A vocal and pianoforte recital arranged by Mr. Rex de Cairo-Rege:

Songs: (a) "Bush night song" (James).

(b) "The Garden Wind" (Fenster).

Miss Clarice West.

3.45 p.m.—Pianoforte:

Hungarian Dances, No. 4 (Brahms).

Miss Nedra Parkerton.

3.55 p.m.—Song:

(a) "Silvia" (Spanish).

(b) "Tally Ho" (Leon).

Mr. Stanley Clarkson.

4.22 p.m.—Pianoforte:

Waltzes Nos. 1, 2, 3, and 10 (Brahms).

Miss Lydia Dunn.

4.37 p.m.—Song:

"Caro mio Ben" (Giocondi).

Miss Marion Wheeler.

4.30 p.m.—Marching music for school children.

4.46 p.m.—From Farmer's Tea Rooms—Miss Florence Grant, soprano:

"The Melody of Life" (Leigh) (with violin obbligato by Mr. Herbert Wardley).

4.48 p.m.—From the Studio—Pianoforte solo:

"Sonata Appassionata" (Beethoven). Miss Ida Teur.

4.48 p.m.—A talk on house cooking and recipes by Miss Ruth Furst.

4 p.m.—"Big Ben." From Farmer's Tea Rooms—Miss Peggy Dunbar, contralto:

"Home isn't home without you" (Lohr).

4.5 p.m.—From the Studio—Song:

"Elas' Vlaim" from "Loehengrin" (Wagner).

Miss Dorothy Morgan.

4.10 p.m.—Studio music.

4.20 p.m.—From Farmer's Tea Rooms—Miss Florence Grant, soprano:

"Sing, sweet bird" (Ganz).

4.40 p.m.—From Farmer's Tea Rooms—Miss Peggy Dunbar, contralto:

"Country Fair" (Brahm).

4.45 p.m.—Stock Exchange, third call.

4.48 p.m.—Studio music.

5 p.m.—Close down.

EARLY EVENING SESSION.

5.46 p.m.—The Chorus of FFC.

5.56 p.m.—The "Hello Man" talks to the children.

6.15 p.m.—From the Girls' Industrial Home—Paramatta.

Uncle Bill and "Jerry" will entertain the children.

6.40 p.m.—Dinner music.

7 p.m.—"Big Ben."

Late sporting information.

7.10 p.m.—Dalgety's market reports (wool, wheat, and stock).

7.15 p.m.—From the vegetable markets.

7.20 p.m.—Weather and shipping intelligence.

Stock Exchange information.

7.26 p.m.—Late "Evening News" news service.

NIGHT SESSION.

7.40 p.m.—Programme announcements.

7.45 p.m.—Mr. R. E. Bliley will deliver his second talk on "The screen as a career for a girl."

8 p.m.—"Big Ben."

From the Lyceum Theatre, Pitt Street, Sydney. Orchestral items.

8.10 p.m.—From the Concert Hall of the Girls' Industrial Home, Paramatta. A programme by FFC artists.

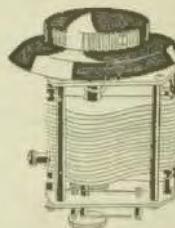
Rus Garling introduces the company.

Community singing.

8.14 p.m.—Miss Heather Harding, soprano:

"Indian Love Call" (Print).

FARMER'S

High-Grade Accessories
Guaranteed to give Lasting Service.BRANDES'
Variable Condensers
Special Vernier Adjustment.

Brandles' S.L. Frequency Condenser, .0005 M.F., with special vernier adjustment. A most efficient and reliable apparatus. Price 30/-

British-made Voltmeters

Double-Reading.

Voltmeters of finest English make; double reading, 0 to 10, and 0 to 100 volts. Price, each 12/6

Much more accurate, yet quite as keenly priced as other makes.

"Radiokes" Kit
Complete with Diagram.

"Radiokes" Kit, specially made for use with the Browning Drake Circuit; complete with explanatory diagram. Price 42/-

"Rayton"
Headphones.

"Rayton" Headphones, with special adjustable diaphragm; 4,000 ohms. Per pair 15/9

"All-American"
Transformers.

When adding that extra stage of Audio Frequency, use "All-American" Transformers, and note the clarity of the reproduction. Price 30/-

"Belling Lee"
Bakelite
Terminals.

"Belling Lee" bakelite Terminals; negative and positive A, B, and C, clearly engraved; British-made. Price 10d. ea.

Wireless Department,
Ground Floor.

FARMER'S, SYDNEY

Box 487 AA, G.P.O.

Farmer's do not Pay Carriage on Wireless Goods.

4

**ways to
better your
set**

De FOREST

DL3 . . . 13/-

Dull Emitter

DL4 . . . 13/6

RF

DL5 . . . 11/-

Def. Audit

DL7 . . . 24/-

Power Audio

AUDIONS.

International Radio Co. Ltd.
200 Castlereagh Street,
SYDNEY
91-93 Courtenay Place, Wellington, N.Z.

- 12 noon—G.P.O. Clock and chimes.
- 12.15 p.m.—Special ocean forecast for shipping.
- 12.30 p.m.—Weather forecast.
- 12.37 p.m.—Talk by Dr. Morris.
- 12.40 p.m.—G.P.O. Clock and chimes
- 12.45 p.m.—Mail—Shipping—Cable—Telephone calls.
- 12.50 p.m.—Rabbit market report.
- 12.54 p.m.—Fish market report.
- 12.56 p.m.—Vegetable market report.
- 12.58 p.m.—Fruit market report.
- 12.59 p.m.—Dairy Farm Produce market report.
- 12.45 p.m.—Ships in call by wireless.
- 12.45 p.m.—Mail—Shipping.
- 12.48 p.m.—News from the "Sun."
- 1 p.m.—Anthony Henderson's Philharmonic Recital.
- 1.30 p.m.—G.P.O. Clock and chimes.
- 1.31 p.m.—Sydney Stock Exchange calls.
- 1.32 p.m.—Australian forecast.
- 1.37 p.m.—State weather forecast.
- 1.37 p.m.—News from the "Sun."
- 1.45 p.m.—Musical programme from Studio.
- 2.15 p.m.—Social notes from the "Sun."
- 2.30 p.m.—Musical programme from the Studio.
- 2.35 p.m.—Information service (Mail—Shipping—Amusement—Social Fixtures).

- 2.45 p.m.—Musical programmes from the Studio.
- 3 p.m.—G.P.O. Clock and chimes.
- 3.1 p.m.—News from the "Sun."
- 3.25 p.m.—Australian forecast.
- 3.30 p.m.—WOMEN'S SECTION. Talk on "Crickets" by Miss G. Varley, Broadcaster's Women's Sports Authority.
- 3.45 p.m.—Social notes by Mrs. Jordan.
- 3.45 p.m.—Mrs. Jordan replies to correspondence.
- 3.55 p.m.—Musical programmes from the Studio.
- 4.10 p.m.—News from the "Sun."
- 4.15 p.m.—Musical programme from the Studio.
- 4.27 p.m.—Racing resume.
- 4.30 p.m.—G.P.O. Clock and chimes.
- 4.31 p.m.—News from the "Sun."
- 4.35 p.m.—Producers Distributing Society's Fruit market report.
- 4.47 p.m.—Producers Distributing Society's Vegetable market report.
- 4.50 p.m.—Racing resume.
- 4.52 p.m.—Review of night's programme.
- 4.55 p.m.—Announcements.
- 5 p.m.—G.P.O. Clock and chimes. Close down.

- EARLY EVENING SESSION.**
- 5.45 p.m.—G.P.O. Clock and chimes.
 - 5.48 p.m.—Little Willie and Daddy Long Legs will entertain the kiddies.
 - 6.40 p.m.—Musical programme from the Studio.

SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. Clock and chimes.
- 7.15 p.m.—Mercurial Land and Finance Co.'s Report.
- 7.20 p.m.—Weather report by courtesy of Government Meteorologist.
- 7.25 p.m.—Producers Distributing Society's fruit and vegetable market report.
- 7.30 p.m.—Stock Exchange reports.
- 7.35 p.m.—Grain and fodder report.
- 7.40 p.m.—Dairy Products report "Sun."
- 7.45 p.m.—Country news from the "Sun."
- 7.50 p.m.—Talk by the members of the St. John's Ambulance Brigade.
- 8 p.m.—G.P.O. Clock and chimes.
- 8.15 p.m.—Broadcaster's Topical Shows.
- 8.20 p.m.—Mr. Norman Wright (Tenor).
- 8.25 p.m.—Miss Anne Ostinga (Contralto).
- 8.47 p.m.—Broadcaster's Trio.
- 8.51 p.m.—Duet (Miss Ward and Mr. Lewis).
- 8.53 p.m.—Miss Dorrie Ward (Soprano).
- 8.40 p.m.—Mr. Bert Warne (Comedian).
- 8.54 p.m.—Resumption of following day's programme.
- Weather report by courtesy of Government Meteorologist.
- 9 p.m.—G.P.O. Clock and chimes.
- 9.15 p.m.—Mr. Peter Sutherland (Bass).
- 9.30 p.m.—Broadcaster's Trio.
- 9.45 p.m.—Mr. W. E. Lewis (Baritone).
- 9.51 p.m.—Duet (Miss Ostinga and Mr. Sutherland).
- 9.58 p.m.—Mr. Norman Wright.
- 9.53 p.m.—Broadcaster's Trio.
- 9.48 p.m.—Dances are Best Wishes.
- 9.55 p.m.—Miss Anne Ostinga.
- 9.56 p.m.—Mr. Peter Sutherland.
- 10.06 p.m.—Miss Dorrie Ward.
- 10.17 p.m.—Mr. W. E. Lewis.
- 10.30 p.m.—The Australian Dance Band broadcast from the Ballroom of the Ambassador. During the intervals between dances, news reports by courtesy of the "Sun" will be broadcast.
- 12 midnight—G.P.O. Clock and chimes. National Anthem.

3LO, MELBOURNE

Wednesday.

LENTEN SERVICE.

- | | |
|--|--------------------------|
| Announcer | ARTHUR ANDREW |
| Accompaniste | AGNES FORTUNE |
| 12 noon—Time Signal. | British Official Weather |
| 12 noon—News from Rugby, Reuters' and The Australian Press Association Cables, Stock Exchange information. "Argus" and "Herald" news services. | Australian |

10.25 p.m.—SPECIAL LENTEN MID-DAY SERVICE, transmitted from St. Paul's CATHEDRAL.
 11.55 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:
 "On the Riviera" (Bach).
 "By the Waters of Minnetonka" (Lieurance).
 "That's My Girl!" (Davia).
 1.30 p.m.—ARNOLD ASHWORTH, Baritone:
 "Ludgate Hill" (Webby).
 "Old Folks at Home" (Mead) (Somerset).
 1.32 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:
 "I Want a Pardon for Daddy" (Boat).
 "St. Louis Blues" (Handy).
 "Hi, Ho, the Merry" (Brown).
 1.32 p.m.—WEATHER REPORT.
 1.37 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:
 "You Need Someone in Love" (Ulan).
 "How Many Times" (Berlin).
 "Roses" (Britz).
 1.37 p.m.—ARTHUR DOUGLAS, Comedian:
 "There's Maggie and There's Jeannie" (Froelich).
 1.44 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:
 "Coxin' the Piano" (Confray).
 "Speech" (Friend).
 "It Made You Happy" (Donaldson).
 1.51 p.m.—CHARLES SHERMAN, Entertainer:
 "Stop that Bow."
 Humorous Talk on "Marriage,"
 Song, "Mabel."
 2 p.m.—Description of Horse Race, Moonee Valley, by "Musket" of the "Sporting Globe."
 Close down.
 2.30 p.m.—Description of Two-Year-Old Handicap, Moonee Valley, by "Musket," of the "Sporting Globe."

AFTERNOON SESSION.

Announcer ALFRED ANDREW
 Accompanists AGNES FORTUNE
 2 p.m.—Description of Weller Plate, Moonee Valley, by "Musket," of the "Sporting Globe."
 3 p.m.—STUDIO ORCHESTRA:
 "Poppy Selection" (Samuels).
 3.15 p.m.—HUXHAM'S SERENADERS:
 Quartet, "Hi Diddle, Diddle."
 EDITH HUXHAM, DOLLY PURDETT,
 RENN MILLAR, H. HUXHAM:
 Bass Solo, "Reuben Rango";
 RENN MILLAR.
 Studio Orchestra:
 "Nuit d'Amour" (Niobel).
 Quartette, "The Bandit".
 THE SERENADER QUARTETTE:
 Contralto Solo, "The Lost Chord,"
 DOLLY BURDETT.
 Studio Orchestra:
 "Bygone Days" (Carr).
 Quartette, "The Bandit".
 THE SERENADER QUARTETTE:
 3.40 p.m.—Description of Victorian Club Handicap, Moonee Valley, by "Musket" of the "Sporting Globe."
 3.45 p.m.—BILLEE LOCKWOOD, Sourette:
 "Cecilia".
 "Dutch Lullaby".
 3.52 p.m.—STUDIO ORCHESTRA:
 "Musical Sketch" (Axford).
 4 p.m.—ELSA LEWIS, Gipsy Violinist:
 "Meninette" (Beethoven).
 4.5 p.m.—MAXWELL CAREW, Comedians:
 "Granny, what big eyes you've got."
 Parter:
 "Silver Threads among the Gold."
 4.12 p.m.—STUDIO ORCHESTRA:
 "Holiday Sketches" (Lucas).
 4.20 p.m.—Description of April Trial Handicap, Moonee Valley, by "Musket" of the "Sporting Globe".
 4.25 p.m.—BILLEE LOCKWOOD, Sourette:
 "I ain't got nobody".
 "We're Doin' in Daies".
 4.32 p.m.—ALBA ZACUTTI, Elocutionist:
 "Billie Boy".
 "The First Love Trouser".
 4.40 p.m.—"Herald" news service. Stock Exchange Information.

RADION

The
 SUPREME
 INSULATION

RADION comes cut accurately to any size you require by grinding machines, which give it a finished edge unobtainable on any other panel. The Airzone 500, the 3-Stage Purity Amplifier, The Atlas and many others too numerous to mention, 1d. to 1d. per square inch.

RADION TUBING, 2in., 2½in., 3in., 3½in. or 4in. in diameter, any length up to 30 inches, in prices of 8d., 9d., 10d., 11d. and 1/- per inch.

RADION No. 2 SOCKET. A universal socket, fits either UV or UX Valves, 3/6.

International Radio Co. Ltd.

200 Castlereagh Street, Sydney

91.93 Courtenay Place, Wellington, N.Z.

Superiority lies in Reproduction

Brandes

Speakers

The Matched Tone Phones.	
Price	22/-
The Table Talker	45/-
The Table Cone	80/-
The Brandola	110/-
The Ellipticone	160/-

are

Outstanding

International Radio
CO. LTD.

200 Castlereagh Street, Sydney

91-93 Courtenay Place, Wellington, N.Z.

- 4.30 p.m.—Description of Water Power, Moonee Valley, by "Moorish" of the Sports, Glebe.
 5.30 p.m.—Close down.
- EVENING SESSION**
- 5.30 p.m.—CHILDREN'S HOUR. Answers to letters and reader's questions.
- 6.35 p.m.—MARY MARY QUITE CONTRARIO—Story for the little ones.
 "The Boy and the Shoemaker."
- 6.40 p.m.—ELSA (GWB), Violinist.
 "Morning Songs" (Metropolitans).
- 6.45 p.m.—JEREMY SMITH. Contralto has two little songs to sing, and one is a very special one.
- 6.55 p.m.—MARY, MARY QUITE CONTRARIO—Story for the bigger children.
 "The Winder Tale of Person."
- 6.55 p.m.—AIRCRAFT INFORMATION. News service. Weather and Aerial Mail Information by the Australian Aerial Services Ltd.
- 6.47 p.m.—Stock Exchange Information. Overseas shipping.
- 6.50 p.m.—Fish Market reports by J. R. Burns, Ltd.
- 6.55 p.m.—Market Reports by the Victorian Pioneers' Co-operative Co. Ltd., Hawthorn. Sheep sales, Poultry, Grain, Hay, Straw, Wool, Cloth, Dairy Products, Potatoes and Onions.
- 6.55 p.m.—Market prices of Oranges and Lemons by the Victoria Central Citrus Association. Fresh Markets reports by the Wholesale Fruiterers' Association, compiled by "The Fruit Web," exclusive to ELO.
- NIGHT SESSION**
- "FROM OLIVET TO CALVARY." *(Antiphonal)*
- "MAURICE DUDLEY AND THE MUSIC OF THE AIR." *(Antiphonal)*
- 5.30 p.m.—Under the aegis of the Department of Agriculture, MR. H. CROWE—Exports Superintendent.
- "Motoring Methods."
- 5.40 p.m.—GARDENING.
- A Talk on the correct method of draining the sinkholes of a waterway, and a warning against flushing with chemicals.
- 7.00 p.m.—CAPT. FEIER.
- "Books Wise and Otherwise."
- 7.05 p.m.—ALFRED, the Victorian poet for the "Bairns," will speak for just a few minutes.
- "FROM OLIVET TO CALVARY." *(Antiphonal)*
- "FROM OLIVET TO CALVARY." *(Antiphonal)*
- A Sacred Cantata revealing some of the incidents in the last days of the Saviour's Life, composed by Ernesto Simeoni, and Music by J. H. Manders, Soloists.
- Soprano: Mrs. Stickland.
 Tenor: Percy Blundell.
 Bass: Alexander Birrell.
 Alto: Miss St. Michael Church Choir.
 Conductor: Mr. H. E. MILLER. ALUM.
 Organists: MR. STICKLAND.
- 6.00 p.m.—LEN GIBSON'S NEAPOLITAN RECITAL:
- "Tetrazzini" (Schumann).
 "Singing in Italy" (Purcell).
- 7.15 p.m.—MR. C. L. WILLIAMS will speak on the coming Wrestling Season.
- 8.02 p.m.—ELSIE DALE, soprano.
- Aria: "Un bel dì" (Madame Butterfly).
- 8.07 p.m.—LEN GIBSON and CHAS. BACKSTROM, Guitars and Mandolin.
- "Lullaby" (Arr. Gibson).
 "La Paloma".
- 8.14 p.m.—CHAR. SHERMAN, Entertainer. Jewish Political Speech and Song.
- 8.40 p.m.—ELSA LEWIS, Violinist.
 "Intermezzo"—Laudelina Ryallman.
- "Erlkönig".
- 9.00 p.m.—CAPT. DONALD MACLEAN will speak about "Drake and The Treasure of the World."
- 10.30 p.m.—LEN GIBSON'S NEAPOLITAN RECITAL:
- "The Silent Prayer" (Marie Looza).
- "Mignonne" (Nitschke).
- 10.45 p.m.—ALEXANDER BROWNE. Baritone.
- "Brian of Glenea" (Graham).
 "Eleanore" (Colbridge-Taylor).
- 11.15 p.m.—Argus news service. British Official Wireless news.
- 10.30 p.m.—MAXWELL CAREW, Comedian. "Illustrated" (Yodel Song—Original).
 "On the Shoulders by the Sea" (Original).
- 10.45 p.m.—LEN GIBSON'S NEAPOLITAN RECITAL:
- "Medley of Oldtime Memories." "Moon River."
- 10.50 p.m.—KLESIE DAVIES, Soprano.
 "La Maja" (Garcia).
 "Home Sweet Home" (Shubert).
 "Blame it on the Wind" (Gale).
 "Dance in the Piano" (Shupart).
- "Te Me in Your Arms String" (Chayf).
 "My Yea Ha-Ha" (Ho-Ho).
 "April in the Moon" (Gentry).
- "Mr. Honky Tonk" (Deppach).
- "Lulu Bound" (Bishop).
 "That's Why I Love You" (Donaldson).
 "There's a Bowman on the Voigt" (Egan).
 "Hold You in Your Arms" (O'Hearn).
 "Holdin'" (Wells).
- 11.45 p.m.—God Save the King.

4QG, BRISBANE

Wednesday.

EARLY MORNING SESSION.

6.00 a.m.—Physical Culture Session.

7.00 a.m.—Close Down.

MORNING SESSION. *(Antiphonal)*

10.00 a.m.—MURRAY REED, Weather Information supplied by the Commonwealth Weather Bureau. News Service supplied by "The Daily Mail" and "The Daily Standard."

11.00 a.m.—From the G.P.O. Lunch Hour Music provided by the Postal Institute Orchestra.

12.00 p.m.—From the Observatory. Standard Time Signals.

2.00 p.m.—AFTERNOON SESSION.

3.00 p.m.—From Hotel Carlton. Afternoon Tea Music from the Lounge, played by Hotel Carlton Symphonies' Orchestra.

4.15 p.m.—From the Student News Service. Broadcasts by "The Telegraph."

4.30 p.m.—Close Down.

EARLY EVENING SESSION.

5.00 p.m.—"Daily Standard" News, Announcements.

6.00 p.m.—The Children's Hour Stories by "Little Miss Brisbane."

7.00 p.m.—Market Reports. Stock Reports.

Lecture by a representative of the Queensland Agricultural High School and Colleges.

8.00 p.m.—Weather News Announcements.

8.45 p.m.—Time Signal.

NIGHT SESSION.

7.45 p.m.—Lecture Session. "X-Ray for the Eye" the second of a series by Mr. E. H. Sagar.

EASTER CHORAL FESTIVAL.

The first portion of tonight's programme will comprise a Choral Festival of Special Easter Music by the City Tabernacle Chorus and orchestra, Mr. Sydney May, and will be relayed from the City Tabernacle.

8.00 p.m.—From the City Tabernacle—

FROM HANDEL'S "MESSIAH."

Chorus: "Behold the Lamb of God," etc.

"He Was Desposed"; chorus: "Surely Now Hath Come Our Grizel"; chorus: "All We Like These Have Gone Astray"; recit.: "Behold and See If There Be Any Sorrow";

recit.: "He Was Cut Off"; etc.

"But Thou Didst Not Leave His Smil"; chorus: "Up On Your Heads"; etc.

"The Art Came Up On High"; etc.

"How Beautiful Are The Feet"; etc.

"The Voice of the Nations" "So far as I rage together"; etc.

"He That Dwelleth in Heaven"; etc.

"Then Shall Break Them"; chorus: "Hallelujah."

MISCELLANEOUS.

Song, "The Lord is My Light" (Allison); duet, "Crusader" (Faure); chorus, "Blest Are the Departed" (Spohr); song, "There Is a Green Hill" (Saunders); song, "Christians Triumphant" (Kontz); chorus, "Great and Wondrous are all Thy Works" (Spohr).

STUDIO CONCERT.

8.30 p.m.—From the Studio: Metropolitan Weather Forecast; Overture, "The Golden Wand" (Lauridsen), The Studio Orchestra (conductor, Mr. A. R. Featherstone); reading, "The Fox Hunt" (A. Conan Doyle); Mr. J. C. Denney, soprano solo, "Little Brown Owl" (Sanderson); Miss Gill (Hannigan's) solo, "I'm Sorry"; Mr. Will H. Lister, "For Each Other"; interlude, "Clementine" (Tunbridge), the Studio Orchestra; contralto solo, "Tonight" (Zardé), Miss Dorothy Brown; monologue, "Little Tattler" (Ambient), Miss Fox Todd; soprano solo, "Narcissus," Miss Irene McLean; valve, "Dream Life" (Tucker); the Studio Orchestra; soprano solo, "Romance" (Neil Diamond); Miss Bennett; Miss Jill Mannion; intermission, "That Flying Hour," the Studio Orchestra.

10.15 p.m.—The "Daily Mail" News; Weather News; Close Down.

SCL, ADELAIDE

Wednesday.

MORNING SESSION.

22 noon—G.P.O. chimes.
12.1 p.m.—Recitals on the New Reproducing Sonsor and the Autostere Reproducer.
12.30 p.m.—"Advertiser" news service.
12.45 p.m.—Market reports.
1 p.m.—Musical programme continued.
2 p.m.—G.P.O. chimes and close down.

AFTERNOON SESSION.

3 p.m.—G.P.O. chimes.
3.2 p.m.—Relay from the Maple Leaf Cafe—Orchestral selections.
3.45 p.m.—From the Studio—Autostere Reproducer and New Reproducing Sonsor recitals.
4 p.m.—G.P.O. chimes.
4.1 p.m.—Relay from the Arendia Cafe—Orchestral selections.
4.45 p.m.—Station announcements.
5 p.m.—G.P.O. chimes and close down.

EVENING SESSION.

6 p.m.—G.P.O. chimes.
6.1 p.m.—Dinner music by the Covent Garden Restaurant.
6.45 p.m.—Bedtime stories.
7.20 p.m.—Market reports.
7.35 p.m.—Boy scouts corner.
7.50 p.m.—Faulding's scientific talk.
8 p.m.—G.P.O. chimes.
8.1 p.m.—Broadcast from All Souls' Church, St. Peters, "Olive in Calvary," J. H. Monnier; Mr. H. Prince (host); Mr. F. W. Smith (chair); Mr. F. Gill (tenor); Miss E. Tippett (soprano); Miss Jean Taylor, A.M.U.A. (pianist).
9.10 p.m.—Concerts from the Studio by Miss Hilda Wheeler's concert party.
10 p.m.—G.P.O. chimes.
10.1 p.m.—"Advertiser" news service.
10.15 p.m.—G.P.O. chimes and close down.

6WF, PERTH

Wednesday.

12.30 p.m.—Tune in.
12.45 p.m.—First local news bulletin.
Market reports.
Cables.
1 p.m.—Time signal from Perth Observatory.
1.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
1.2 p.m.—Studio Spots.
8 p.m.—Close down.
10.30 p.m.—Tune in.

STOP!

YOU'VE WAITED A
LONG TIME FOR THIS

THE
"SUPERBAT"

Can be charged AT HOME in a few minutes.
No charging apparatus needed.
POSITIVELY no leakage between cells.
POSITIVELY NO "B" Battery noises.

A revolution and a revelation
in "B" Batteries. Ask your
Dealer, or write direct to

E. WILBER-BEER

Sales Representative

Wembley House, Railway Sq., SYDNEY

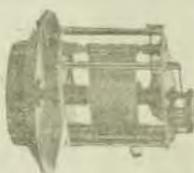
Manufactured by

PERMANENT "B" BATTERY CO. LTD.

Now!

Brandes “Aristocrat” Condenser

501 Verner Bell Complete



Brandes As Usual Leads

.0005 S.L.F. .0003

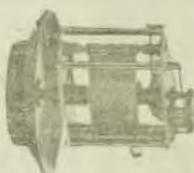
30/-

International Radio Co. Ltd.
200 Castlereagh Street,
SYDNEY
91-93 Courtenay Place, Wellington, N.Z.

Now!

Brandes “Aristocrat” Condenser

501 Verner Bell Complete



Brandes As Usual Leads

.0005 S.L.F. .0003

30/-

International Radio Co. Ltd.
200 Castlereagh Street,
SYDNEY
91-93 Courtenay Place, Wellington, N.Z.

- 3.35 p.m.—Musical programme.
4 p.m.—Studio Trip.
4.45 p.m.—Close Down.
4.45 p.m.—Tele Cast.
6.00 p.m.—Children's picture, "Uncle Tom's Cabin," by Uncle Duffy.
7.20 p.m.—Stock and Share intelligence.
Market reports.
Tables—News supplied by courtesy of "The West Australian" Newspaper Co.
7.45 p.m.—Close Down.
8 p.m.—Tele Cast from Perth Observatory.
8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
8.2 p.m.—Variety.
Musical programme, including artists.
10 p.m.—Second local news bulletin supplied by courtesy of "The Other News" News paper Co.
Within these announcements.
10.30 p.m.—Close down.

Thursday, April 14 2FC, SYDNEY

MIDDAY SESSION

- 12 noon—"Big Ben" and Announcements.
12.15 p.m.—Stock Exchange, third call.
12.20 p.m.—Official Weather Forecast, Rainfall, Temperature, Astronomical Normals, Shipping Intelligence, Mail Services.
12.35 p.m.—Studio Music.
12.45 p.m.—Summary of "Sydney Morning Herald" News Service and Cables.
12.50 p.m.—Studio Music.
12.45 p.m.—Last minute sporting information by the 2FC Racing Commissioner.
12.55 p.m.—Miss Diana Booth, soprano, "Wainui Falls" (Alfred Hill).
1.00 p.m.—Tele Cast from Weather Intelligence.
1.30 p.m.—"Evening News," Midday News Service; Professors' Distributing Society's Report.
1.20 p.m.—Studio Music.
1.25 p.m.—Stock Exchange, second call.
1.30 p.m.—Marching Music for School Children.
1.40 p.m.—Miss Diana Booth, soprano, "The Dancing Lesson" (Glover).
1.45 p.m.—Studio Music.
2.00 p.m.—"Big Ben."

NOTE.—A description will be given of the regiments of the Royal Navvies, or Royal H.M.S. "Renown," bound for Hobart. The "Renown" is due to leave shortly after 1 p.m. today. Close Down.

AFTERNOON SESSION

- 3.00 p.m.—"Big Ben," and Programme Announcements.
3.5 p.m.—A serial by the pupils of Miss Grace Stafford.
3.15 p.m.—Mrs. Buntly Stuart, contralto, "At Dawnings" (Clementi).
3.30 p.m.—Items by Miss Grace Stafford's Pupils.
3.30 p.m.—Marching Music for School Children.
3.40 p.m.—FROM FARMER'S TEA ROOMS, "Miss Jeannette Roemer," contralto, "The Fairies Tree" (Gulliver).
3.45 p.m.—Items by Miss Grace Stafford's Pupils.
4.00 p.m.—"Big Ben," FROM FARMER'S TEA ROOMS, Miss Dorothy Rose, soprano, "You're a Gondola" (Clarke).
4.15 p.m.—Items by Miss Grace Stafford's Pupils.
4.15 p.m.—Studio Music.
4.20 p.m.—FROM FARMER'S TEA ROOMS, "Miss Jeannette Roemer," contralto, "Sunday" (Habane).
4.25 p.m.—Studio Music.
4.30 p.m.—Mrs. Buntly Stuart, contralto, "Fallin' Rose" (Lambert).

- 4.45 p.m.—FROM FARMER'S TEA ROOMS, Miss Dorothy Rose, soprano, "My Dreamland" (Purcell).
4.45 p.m.—Stock Exchange, third call.
4.47 p.m.—Studio Music.
5.00 p.m.—"Big Ben"; Close Down.

EARLY EVENING SESSION

- 5.45 p.m.—The Chimes of 2FC.
5.55 p.m.—"Hello Man" Talk to the Children.
6.00 p.m.—Serial Story for the Older Ones.
6.00 p.m.—"Big Ben"; Late Sporting Information.
6.10 p.m.—Dalyton's Market Reports (Wool, Wheat and Stock).
6.15 p.m.—Fruit and Vegetable Markets.
6.20 p.m.—Weather and Shipping Intelligence.
6.20 p.m.—Late "Evening News" News Service.

NIGHT SESSION

- 7.10 p.m.—The Chimes of 2FC and Programme Announcements.
7.45 p.m.—A Talk by the Technical Editor of "Wireless World".
8.00 p.m.—FROM THE STUDIO AND BROADCAST FOR THE FIRST TIME, A MUSICAL PLAYLET, "MAID OF JAPAN," Lyrics and Music by Miss Vina de Lutte.

DRAMATIC PERSONAE

- Sir Preston Venn—Robert Turner
Harry Venn (his nephew)—Fred Harmon
Maria Saxe (as Japanese) Vina de Lutte
SCENE—A garden near Tokyo.
Overture and Musical Numbers by Miss de Lutte, Mr. Courtney Brewster, Trix.

MUSICAL NUMBERS

- Overture.
Song—"In Old Japan," Miss Vina de Lutte
Song—"My Cherry Blossom Girl," Mr. Fred Harmon, Baritone.
Duet—"Your Tiny Hand is Cold," Mr. Fred Harmon and Miss Vina de Lutte.
Prelude—"Come Away With Me," Miss Vina de Lutte and Mr. Fred Harmon.
8.30 p.m.—Mr. Harry Judd in a series of radio extempore and comic drawings.
8.40 p.m.—Mr. Eric Pearce—Fox-Trot, "My Cutie's Due" (Rabbit).
8.45 p.m.—Captain Frank Hurley in his third adventure talk, "As Waiting We Will Go," being a description of what happened to Captain Hurley during his exciting experiences when he harpooned his first whale (Effects by Mr. Lawrence Haller).
8.55 p.m.—Miss Eileen Boyd, contralto, "The Rock" (Bobby).
8.42 p.m.—The 2FC Dance Band, with the popular harmonic, Mr. Len Maurice.
(a) Fox-Trot, "Hello Blasted" (Fried).
(b) Fox-Trot, "Mandy" (Donald).
8.52 p.m.—Bob Turner, Entertainer.
8.55 p.m.—Mr. Frank Smythe Banjo, "When You Get Those Eyes" (Donaldson).
10.00 p.m.—"Big Ben," Miss Eileen Boyd, contralto.
(a) "Just a Cottage Smell" (Stanley).
(b) "The Mellow Miser Moon" (Stoneham).
10.20 p.m.—The 2FC Dance Band, conducted by Mr. Eric Pearce—Fox-Trot, "My Girl Has Got a Tremble" (Kirkie).
10.30 p.m.—Miss Eileen Boyd, harmonic.
10.35 p.m.—The 2FC Dance Band—Fox-Trot, "How Could Red-Haired-Head" (Hammond).
10.35 p.m.—Miss Eileen Boyd, contralto.
(a) "Respect" (Flunder).
10.45 p.m.—"Big Ben" and Announcements.
10.55 p.m.—The 2FC Studio Dance Band, with the popular harmonic, Mr. Len Maurice in the following numbers:
(a) Fox-Trot, "Hey, You Blackbird" (Dixie).
(b) Fox-Trot, "Twelfth (Hammond).
(c) Fox-Trot, "Thinking of You" (Donaldson).
(d) Fox-Trot, "There All the World Is Mine" (Cassidy).
11.00 p.m.—"Big Ben"; National Anthem Close Down.

2BL, SYDNEY

Thursday,

DAY SESSION

- 10.30 a.m.—G.P.O. Clock and chimes.
 10.31 a.m.—The reception of Their Royal Highnesses the Duke and Duchess of York, at the Royal Agricultural Show, will be described.
 11 a.m.—G.P.O. Clock and chimes.
 Close down.
 12 noon.—G.P.O. Clock and chimes.
 12.1 p.m.—Special ocean forecast for shipping.
 12.15 p.m.—Weather forecast.
 12.17 p.m.—Rabbit market report.
 12.19 p.m.—Fish market report.
 12.20 p.m.—Vegetable market report.
 12.21 p.m.—Fruit market report.
 12.22 p.m.—Dairy farm produce market report.

- 12.23 p.m.—Poultry market report.
 12.24 p.m.—Pork product market report.
 12.25 p.m.—Shin in call by wholesale.
 12.26 p.m.—Mail—Inter-State and Overseas.
 12.27 p.m.—Shipping—Arrivals and departures.

- 12.28 p.m.—Sydney Stock Exchange calls.
 12.29 p.m.—G.P.O. Clock and chimes.
 12.30 p.m.—Call from the "Sun."
 12.31 p.m.—Hillman Instrumental Quartet—
 Direction, Carol Casting.

- 1.00 p.m.—G.P.O. Clock and chimes.
 1.01 p.m.—Sydney Stock Exchange calls.

- 1.32 p.m.—Weather report.

- 1.36 p.m.—Description of the Departure of Their Royal Highnesses, The Duke and Duchess of York.

- 2.00 p.m.—G.P.O. Clock and chimes.
 2.11 p.m.—Musical programme from the Studio.

- 2.11 p.m.—Social notes from the "Sun."
 2.16 p.m.—News from the "Sun."

- 2.26 p.m.—Musical programme from the Studio.

- 2.36 p.m.—Information service. Mails, Shipping, Announcements and Social Fixtures.

- 2.46 p.m.—Musical programme from the Studio.

- 3.00 p.m.—G.P.O. Clock and chimes.
 3.11 p.m.—News from the "Sun."

- 3.19 p.m.—Serial Story.

- 3.30 p.m.—WOMEN'S SESSION. Social notes by Mrs. Jordan.

- 3.45 p.m.—Mrs. Jordan replies to correspondence.

- 3.55 p.m.—Talk on "Easter Parties," by Mrs. Jordan.

- 4.15 p.m.—Musical programme from the Studio.

- 4.25 p.m.—Shipping information.

- 4.35 p.m.—Racing resume.

- 4.36 p.m.—G.P.O. Clock and Chimes.

- 4.31 p.m.—News from the "Sun."

- 4.46 p.m.—Producers' Distributing Society's fruit market report.

- 4.47 p.m.—Producers' Distributing Society's vegetable market report.

- 4.48 p.m.—Racing resume.

- 4.52 p.m.—Beginning of night's programme.

- 4.54 p.m.—Announcements.

- 5.00 p.m.—G.P.O. Clock and Chimes.

- Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. Clock and Chimes.
 5.46 p.m.—Little Willie and Daddy Long Legs will entertain the kiddies.
 6.00 p.m.—Musical programme from the Studio.

SPECIAL COUNTRY SESSION.

- 7.00 p.m.—G.P.O. Clock and Chimes.
 Australian Mercantile, Land and Finance Co.'s report.

- Weather report, by courtesy of Government Meteorologist.

- Producers' Distributing Society's fruit and vegetable market report.

- Stock Exchange reports.

- (Grain and fodder report ("Sun").)

- Dairy produce report ("Sun").

- 7.15 p.m.—Country news from the "Sun."

- 8 p.m.—G.P.O. Clock and Chimes.

- Broadcasters' Topical Chorus.

"There's just this about it—

I'm through experimenting with Batteries."

If you want to stop worrying about your radio set Now and Forever, just buy yourself a "Philco"—

Of course everyone knows that more than half the trouble with radio sets lies in the batteries. Cheap dry batteries are always distinguishable by the buzz, roar and crackle—sometimes mistaken for "static." Using a Philco battery these noises are conspicuous by their absence.

Moreover, besides giving superior performance, the Philco Re-chargeable Battery is far cheaper to own. Given an average usage of two hours each night and a re-charge at home every three to five months it lasts indefinitely. Get your "Philco" now!

From any high-class radio dealer.

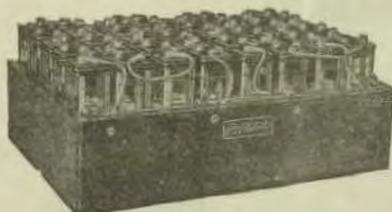
Wholesale:

New System Telephones Pty. Ltd.

280 Castlereagh Street, Sydney

25 Queen's Bridge Street,
Melbourne

Charles Street,
Adelaide



PHILCO
 DYNAMIC RADIO
BATTERIES

Hiler and Higher Amplification



Reception
as it
should be

£2 each.

International Radio Co. Ltd.
200 CASTLEREAGH STREET,
SYDNEY.

91-93 Courtney Plaza, Wellington, N.Z.

8.30 p.m.—"The Crucifixion," by Sir John Stainer, to be sung by the Many-voiced Choirs at St. Matthew's Church. (No organ or piano accompaniment.)
Close of over eight weeks.
10.15 p.m.—The Dances Band from the Argonauts' Ballroom. During the intervals between dances, news reports by courtesy of the "Sun" will be broadcast.
12 midnight.—National Anthem.

3LO, MELBOURNE

Thursday.

MID-DAY SESSION.

Announcer ALFRED ANDREW
Accompanists AGNES FORTUNE
12 noon—Time Signal. British Official Weather News from Rugby, Reuter's and The Australian Press Association Cables. "Argus" and "Herald" news service.
12.15 p.m.—THE SERENADES:
Quartette, "I'm a Little Moonlighter";
EDITH HUXHAM, DOLLY BURDETT,
RENN MILLAR and HUGH HUXHAM.
Bass Solo, "Go to Sleep";
RENN MILLAR.

Studio Orchestra:
"Yester Eve" (Zarzuela);
Quartette, "Sweet and Low";
THE SERENADES QUARTETTE
Cox Quartette, "Dare's a Weddin' to-night";
THE SERENADES QUARTETTE,
"Bridal Wishes";
"Jolly Bubbers" (Gospel);
Quartette, "Establishing".

THE SERENADES QUARTETTE,
12.45 p.m.—Stock Exchange information.
1.00 p.m.—STUDIO ORCHESTRA:

"The Circus" (Barnet);
1 p.m.—MISS A. PIKE, Soprano:

"The Valley of Laughter" (Handel);
"A Dream" (Bummers).

1.30 p.m.—ARTHUR DOUGLASS, Comedian:

"Weather Report";
1.45 p.m.—STUDIO ORCHESTRA:

"Vine House" (Dixie);
2.00 p.m.—BILLIE LOCKWOOD, Southerner:

"She was a Good Little Baby";
"You just got to Know How";

2.15 p.m.—CHARLES SHERMAN, Entertainer:

"Piano Whims";
2.45 p.m.—STUDIO ORCHESTRA:

"We're in Love" (Fink);
1.30 p.m.—MISS A. PIKE, Soprano:

"Love and Marriage" (Krenek);
"The Old Stone House" (Brake);
2.30 p.m.—Close down.

AFTERNOON SESSION.

Announcer ALFRED ANDREW
Accompanists AGNES FORTUNE

2 p.m.—STUDIO ORCHESTRA:

"One Fan Tutti" (Mimari);
2.10 p.m.—JACKIE KEARNES, Comedian:

"British Scandal (about the Sods);
"Benny Mary of Argyle";
"Comin' thro' the Rye";

2.15 p.m.—ELSIE DAVIES, Soprano:

"Loveless" (Lloyd);
"The Picnic" (Gomer);

2.24 p.m.—STUDIO ORCHESTRA:

"Bushes and Rose" (Borch);
2.30 p.m.—ELSA LEWIS, Violiniste:

"Berceuse" (Godard);
"The Lost Chord";

2.37 p.m.—TOMMY DOUGLAS, Comedian:

"Mary of Argyle";
2.45 p.m.—STUDIO ORCHESTRA:

"The Crusader" (Rollowson);
3.04 p.m.—AGNES FORTUNE, Piano:

3 p.m.—ELSIE DAVIES, Soprano:

"New" (Terry);
Selected.

4.30 p.m.—STUDIO ORCHESTRA:

"Parade of Tin Soldiers";
4.10 p.m.—MISS FRANCES FRASER:

"Portia—Merchant of Venice" (Shakespeare).

4.30 p.m.—HILTON'S news service; Stock Exchange information. Auctioneers for Epsom Races, Saturday, 14th April.
4.45 p.m.—EVENING NEWS transmitted from ST. PAUL'S CATHEDRAL.
5.00 p.m.—Close down.

EVENING SESSION.

5.45 p.m.—CHILDREN'S HOUR. Answers to letters and general greetings.

5.55 p.m.—MAX GUMBLEAF, Poems:

"The Fairies' Picnic";
"The Honey Bee";
"Story for the Littlest ones";

"The Ducks' Tea Party";
6.35 p.m.—50-50 CLUB, Melbourne, with some 100 little songs to the children.

6.10 p.m.—CAPT. DONALD MACLEAN will tell you about

"How Drake captured the Treasure at San Juan de Diu";

6.27 p.m.—MARY CLAXTON will sing just once again.

6.35 p.m.—"Argus" and "Herald" news services. Weather synopses. Shipping movements.

6.45 p.m.—Stock Exchange information.

6.50 p.m.—Fish Market Reports by J. K. Rothwell, Ltd.

6.55 p.m.—River reports.

6.58 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Haymarket, by the Victorian Fruitgrowers' Union, Hay, Straw, Date, Dried Fruits, Volatiles and Spices.

7.00 p.m.—Market reports of Fruit by the Victorian Fruiteers' Association, compiled by "The Fruit World," exclusive in 3LO. Market prices of Oranges and Lemons by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

"COME, KNIT HANDS, AND BEAT THE GROUND."

Announcer MAURICE DUDLEY
Accompanists AGNES FORTUNE

7.15 p.m.—MR. C. H. SLOCOME will talk on "Hints on obtaining photographic records of the Royal Visit";

7.30 p.m.—MR. A. W. JACKSON; "Our...";

7.45 p.m.—MISS YVONNE BANVARD, now appearing as Lady Jane in "Hotspur," will speak to you from her dressing-room (by permission of J. C. Williamson, Ltd.);
8 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:

"The Royal Ambassadors" (Station);
"In a Little Garden" (Jals);
"There ain't no maybe in my baby's eyes" (Kahn);

8.15 p.m.—HUXHAM'S SERENADES:

Quartette: "Diddle Diddle Do";
EDITH HUXHAM, DOLLY BURDETT,
RENN MILLAR, HUGH HUXHAM;

8.14 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:

"Perfume of the Past" (Maynon);
"We Don't Want to get Married" (Stern);

8.24 p.m.—BILLIE LOCKWOOD, Southerner, Impression of "Wee Georgie Wood";

8.32 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:

"Bye Bye Blackbird" (Dixon);
"Laughing at the Ivorys" (Wendahl);
"Dandabird" (Walker);

8.48 p.m.—ALEXANDER BROWNE, Baritone:

"Free Lance" (Dix);

8.42 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:

"I Can't Forget" (Morton);
"While the Years go Drifting By" (Kahn);

8.52 p.m.—MAXWELL CAREW, Comedian:

"Caisis in Dover" (Original);

8.58 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:

"Where did you get those Eyes" (Donaldson);

"Sing, Katie, but leave the Piano alone" (Tracy);

"Whisper Sh!" (Myers);

9.05 p.m.—HUXHAM'S SERENADES:

Quartette: "I Don't Like being Tickled by a Fly".

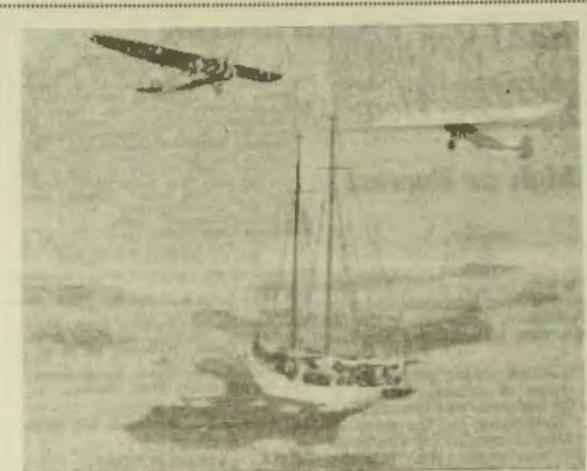
THE SERENADE QUARTETTE
 9.10 p.m.—JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "No Foolin'—Who do You Love?" (Buch).
 "Charlie, I Love You" (Goodman).
 "The Savvy Medley of Melodies" (Somerset).
 9.30 p.m.—BILLIE LOCKWOOD, Soubrette:
 "Are You Sorry?"
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "Tonight's My Night with Baby" (Meyer).
 "Lonesome and Sorry" (Davis).
 "Say That You Love Me" (Nichols).
J. ALEXANDER BROWNE, Baritone:
 "To-morrow" (Kell).
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "I'm in Back Again" (Davis).
 "I'd Climb the Highest Mountain" (Brown).
 "She's Everybody's Sweetheart" (Ross).
ELSA LEWIS, Violinist:
 "Ave Maria" (Gounod).
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "I Made You Happy" (Donaldson).
 "While We Danced Till Dawn" (Schuster).
 "Let's Go 'Round Old Together" (Nelson).
 10.2 p.m.—"Argus" news service, British Official Wireless news from Rushy. Meteorological Information. Sporting notes by "Sportsman". Announcements.
BILLIE LOCKWOOD, Soubrette:
 10.15 p.m.—JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "Talkin' to the Moon" (Baskette).
 "The Animal Fair" (La Forza).
 "At Peace with the World" (Berlin).
HUXHAMS SERENADERS,
 Operatic Quartette from "The Bohemian Girl".
THE SERENADER QUARTETTE.
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "Treasure" (Green).
 "Say It Again" (Richman).
 "Save Your Sorrow" (De Spiva).
BILLIE LOCKWOOD, Soubrette:
 "Mamma, Let Rose Alone".
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "Ruffenerdy" (Bare).
 "In a Little Spanish Town" (Young).
 "Somebody's Lonely" (Davis).
ALEXANDER BROWNE:
 "I'm Alongin' for You" (Hathaway).
OTR GREAT THOUGHTS:
 "If we had no defects ourselves, we should not take so much pleasure in noting those of others."—La Rochefoucauld.
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "How Could Red Riding Hood" (Randolph).
 "My Pal, Jerry" (Ross).
 "My Dreams of the Big Parade" (Dobkin).
ELSA LEWIS, Violinist:
 "Sugared" (Dobkin).
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "It's a Wonderful World After All" (Davis).
 "Rose Colored Glasses" (Steiner).
 "Am I Wasting My Time" (Bible).
BILLIE LOCKWOOD, Soubrette:
 "Dirty Face".
JOE ARONSON AND HIS SYN-COPATING SYMPHONISTS:
 "Dreams of Love and You" (Taylor).
 "People of Mankind" (Nichols).
 "Just a Bird's Eye View" (Kahn).
 "Avalanche" (Ford).
 "Alabama Stomp" (Craemer).
 11.45 p.m.—God Save the King.

4QG, BRISBANE

Thursday.

MIDDAY SESSION.

1.0 p.m.—Market Reports. Weather Information. News Service supplied "The Daily Mail" and "The Daily Standard".
 1.20 p.m.—From Hotel Carlton: Lunch Hour Music played by Hotel Carlton Symphony Orchestra.



The Crowning Adventure of Burgess Radio Batteries— Over the North Pole with Byrd

WORLD history was gloriously written by Commander Byrd in his daring 1500-mile flight across the North Pole. He was the first man to drive a plane across the frozen top of the Globe, and the first man to describe a polar flight hour by hour to a wide-eyed world of listeners-in. Only his magnificent Burgess Batteries made possible this triumph of modern wireless. No other Battery could have endured unflinchingly the terrible cold of the North, at the same time giving such powerful performance.

These same Batteries are on sale in Australia from any high-class radio dealers. They are the finest dry cell Batteries made.



S-B. NS 43.

Wholesale:
New System
Telephones Pty. Ltd.
 280 Castlereagh St., Sydney.
 25 Queen's Bridge Street,
 Melbourne.

Charles St., Adelaide.
 Canada Cycle and Motor
 Agency (Q.), Ltd.,
 Creek and Adelaide Sta.,
 Brisbane.



As high as Everest

Only a man with a sty in his eye could see anything humorous about a pig! Personally, I always prefer a bird's-eye view of anything pigish.

Yet the American pig packer has a distinct sense of humor. It was a canner, for instance, who invented the slogan, "Everything but the squeal!" and an alleged member of the same fraternity who wrote the precious "Letters of a self-made merchant to his son."

The latest—and this time unconscious—humorist hails from Chicago. He boasts that his meat tins, piled up, would reach as high as Mount Everest.

Imagine a glorious snow-crested mount of meat-tins with a pig rampant on the top layer, and you have a spectacle which could bring tears to the eyes of any pig!

Now as a matter of comparison, I can remind the Chicago boaster that until the peerless Philco rechargeable battery took the crackles out of Radio, the discarded dry batteries would have made his meat-in mountain look like something reached with a step ladder.

Of course the old days when a long-suffering world bought "cheap" dry batteries, used them up and tossed them away, have almost vanished. It is merely a case of a proportion sum:

Dry battery—crackle, hum, roar, buzz, short life and sudden death.

Philco battery—pure, perfect reception, years of life, and home-charging at the cost of a few pence.

Naturally you must pay more for a superb 83X Philco, but it will save you pounds in a year and can be bought on easy terms from the Australian distributors, New System Telephones Pty. Ltd., 280 Castlereagh Street, Sydney.*

1.55 p.m.—From the Observatory: Standard Time Signal. 2.00 p.m.—Close Down.

AFTERNOON SESSION.

A Programme of Music by the Studio Orchestra (conductor, Mr. G. H. Featherstone). The programme will include:
3.30 p.m.—Descriptive Fantasy, "Gipsy Life" (Le Thiers); Violin solo, "Serenade" (Heinen); Flute solo, "The Little Shepherd"; Selection, "Only a Year Ago" (Albert); Clarinet solo, "Elves at Play" (Gruenwald); Mr. C. Hanson entrance, "The Ballet Girl" (Bendix); Suite, "In the Sun" (Clark); march, "On the Air" (Golding).
4.00 p.m.—"Telegraph" News.
4.00 p.m.—Close Down.

EARLY EVENING SESSION.

4.30 p.m.—"Daily Standard" News; Announcements.
4.30 p.m.—Bedtime Stories by "The Sunman."
5.00 p.m.—Market Reports: Stock Raisings; Lectures, "Talk on Sheep Breeding"; Mrs. J. C. Cawie (Instruction in Sheep and Wool).
5.30 p.m.—Weather News; Announcements.
5.45 p.m.—Standard Time Signal.

NIGHT SESSION.

6.15 p.m.—Lecture Session: A talk on books by Mr. W. A. Bradson.

STUDIO CONCERT.

6.30 p.m.—Overture, "Diana" (Boetgier), the Clarion Orchestra (conductor, Mr. Henry Henry); soprano solo, "How Lovely Are The Dwellings" (Laddie); Miss Ivy Plane harp solo, Irish melody, "Believe Me If I'm Wrong"; Mrs. E. M. Corrigan (monologue); "My Country" (Burton MacKellar); Miss Agnes Finney (voice); Mr. John Goddard, Miss Ivy Plane (duo); "baritone solo, "At Dawning" (Caldman); Signor Corti (charming solo, "In Revo" (Delibes)), Mr. P. P. Parker accompanied by the Clarion Orchestra; the minstrel song, "The Mahoney Duo"; baritone solo, "When the Sergeant Major's on Parade" (Steffel); Mr. J. S. Atkinson, a thought for to-night; Mr. L. J. T. Williams, "My Sweetheart"; "The Bohemian Girl" (Hausig); the Clarion Orchestra; contralto solo, "What You Is Is Best" (Loeb); Miss Vera Parker.
6.45 p.m.—Metropolitan Weather Forecast.
6.50 p.m.—Irish melody, "The Dear Little Lassie"; Mr. J. S. Atkinson, a thought for to-night; soprano solo, "Sing Joyous Bird" (Phillips); Miss Ivy Plane, monologue, "Twenty Gallons of Steam"; Stone); Miss Agnes Finney (contralto solo); "The Pearl Cruise" (Marshall); Mr. N. Thompson (baritone solo, "Serenade" (Schubert); Miss G. Fury, tenor, "Merriment" (Clarke); Signor Corti (various items selected); the Clarion Orchestra; "baritone solo, "My Friend" (Lamont); Mr. J. S. Atkinson, a thought for to-night; "Friend o' Mine" (Sanderson); Miss Vera Parker, intermission, "Antarcticity" (Shure); the Clarion Orchestra.
7.00 p.m.—From the Studio, "The Daily Mail" News; Weather News; Close Down.

6 WF, PERTH

Thursday.

12.30 p.m.—Tune-In.
12.45 p.m.—First Local News Bulletin; Market Reports: Cables.
1.00 p.m.—Time Signal from Perth Observatory.
1.15 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
1.30 p.m.—STUDIO QUINTETTE.
1.30 p.m.—Close Down.
1.30 p.m.—Tune-In.
1.35 p.m.—Musical Programme, including feature selections by MR. LESLIE JUDISON.
1.40 p.m.—STUDIO TRIO.
1.45 p.m.—Close Down.
1.45 p.m.—Tune-In.

6.00 p.m.—Stories for Tiny Tots by Auntie Rosalie.
7.15 p.m.—Uncle Duffy will talk to the Kiddies.

7.20 p.m.—Stock and Share Intelligence; Market Reports: Cables. News supplied by courtesy of "The West Australian" Newspaper Co., Ltd.

7.30 p.m.—"Sun, Snow and Their Effects" (No. 2), by MR. K. D. THOMSON, M.A., M.Sc.
8.00 p.m.—Time Signal from Perth Observatory.

8.15 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.

8.30 p.m.—ORCHESTRAL CONCERT (WPA'S Studio Orchestra, Conductor, MR. R. E. MOYLE).

9.00 p.m.—Travel Talk by JOHN COWIE Esq., Representing Cook's Tourist Agency, Fremantle.

9.15 p.m.—Second Local News Bulletin supplied by courtesy of "The Daily News" Newspaper Co.

10.30 p.m.—Close Down.

Good Friday, April 15

2FC, SYDNEY

MORNING SESSION.

10.30 a.m.—Programme Announcements.
11.0 a.m.—"Big Ben" and Programmes.
CATHERINE GLENDY STREET, SYDNEY—The Morning Service.
12.15 p.m.—FROM THE STUDIO: News Items.
12.30 p.m.—Close Down.

AFTERNOON SESSION.

1.0 p.m.—"Big Ben" and Programme Announcements.
1.30 p.m.—FROM THE CONGREGATIONAL CHURCH, PITTS STREET, SYDNEY—A Choral Service and Vocal Recital arranged by Mr. Julian Frost.
4.30 p.m.—Close Down.

NIGHT SESSION.

5.00 p.m.—Programme Announcements.
5.30 p.m.—Miss Millie Meyer will continue her Matinee talks—No. 4, "Across the Lebanon Mountain".
5.45 p.m.—FROM THE LYCEUM THEATRE, PITTS STREET, SYDNEY—A Good Friday Night concert organised by Station 2FC in aid of the appeal for funds for the building of the new Good Friday Refuge. The Sydney Harmonic Choir, conducted by Mr. William Bourne.

At the Piano Mrs. Bourne
At the Grand Organ Mr. Ewart Chapelle
Mr. George Williams Solo
Mr. John Anderson Solo
O Turn Ye (from "Hymns Ancient and Modern") Miss Maude Griffin, soprano, and the choir.
(b) "O Glorious Light" (Matthew's Golden Legend) (unaccompanied).

5.45 p.m.—The Royal Trio—
Miss Edith Richards Violin
Mr. Van der Kiel Cello
Mr. Alexander Svensky Piano
(First Movement of the Trio) (Alfred Hill)
5.45 p.m.—Mr. George Williams, contralto—
(a) "Easter Hymn" (Burgess).
(b) "The Dove" (Molly Carew).

6.15 p.m.—Mr. Charles Stephens, tenor.
6.25 p.m.—Mr. Ernest Gibbs, entertainer—
The Voice Presentation (Gibbs).

6.30 p.m.—The Austral Trio (Instrumental)—
(a) "The Woodswife" (Lied).
(b) "Boscombe Turin" (Mozart).

6.30 p.m.—Mr. Ernest Gibbs, tenor; Joyce Hadley, soprano; Mr. Charles Stephens, tenor; Mr. Norman Johnson, baritone.

6.30 p.m.—Interval—Owyan solo by Mr. Ewart Chapelle.

6.45 p.m.—The Sydney Harmonic Choir, conducted by Mr. William Bourne.
At the Piano Mrs. W. Bourne
At the Grand Organ Mr. Ewart Chapelle
Ladies' Chorus "The Lord is My Shepherd" (Schubert).

9.10 p.m.—Miss Virginia Brauer, contralto
 (a) "Home" (Davis),
 (b) "Silver Ring" (Champlain). (By Request)
 9.15 p.m.—The Austral Trio (Instrumental)—
 (a) "Four-Four" (Coleridge-Taylor),
 (b) "Polish Dance" (Schurwerts).
 9.20 p.m.—The Milano Trio—
 Miss Joyce Hadley, soprano.
 Mr. Charles Stephen, tenor.
 Mr. Norman Janson, baritone.
 9.30 p.m.—Mr. Bruson Gibb, Entertainer—
 "The Denominational Games" (Rice),
 9.40 p.m.—Miss Helen Hulme, soprano.
 9.45 p.m.—The Spring Harmonic Choir, con-
 ducted by Mr. William Bourne—Part Song,
 "Hymn to Music" (Dudley Buck). (Unac-
 companied).
 9.50 p.m.—Studio Announcements.
 10.00 p.m.—"Big Ben"; National Anthem;
 Close Down.

3LO, MELBOURNE

Good Friday.

MORNING SESSION.

11 a.m.—SPECIAL SERVICE transmitted
 from ST. PAUL'S CATHEDRAL
 12.15 p.m.—Close down.

AFTERNOON SESSION.

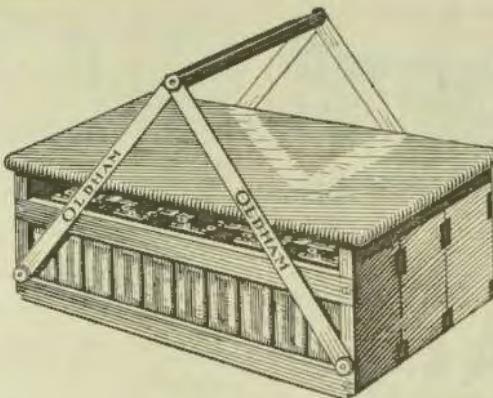
Announcer ALFRED ANDREW
 Accompanists NOYES FORTUNE
 3 p.m.—STUDIO ORCHESTRA:
 Mendelssohn Melodies;
 3.10 p.m.—ELSIE DAVIES, Soprano:
 "From Mighty Kings," Judas Maccabaeus
 (Handel);
 3.15 p.m.—TASMA TIERNAN, Cello:
 "Romance" (Pepper);
 3.24 p.m.—STATION QUINTETTE:
 "Quintette for Clarinet and Strings in A"
 (Mozart);
 3.34 p.m.—J. ALEXANDER BROWNE, Har-
 monium:
 "The Living God" (O'Hara);
 "There is no death" (Oliver);
 3.42 p.m.—AGNES FORTUNE AND BESSIE
 GAUNSON, Piano and Violin:
 "Sonata" (Handel);
 3.52 p.m.—ELSIE DAVIES, Soprano:
 "How beautiful are the feet" (Handel);
 "Ave Maria" (Gounod);
 Violin Obligato, Bessie Gaunson.
 4 p.m.—STUDIO QUARTETTE:
 "Air for G String" (Bach);
 4.10 p.m.—C. RICHARD CHUGG, Flute:
 "Second Sonata" (Plaist);
 Performed for the first time in Australia.
 4.15 p.m.—J. ALEXANDER BROWN, Bar-
 itone:
 "The Lord is my Light";
 4.24 p.m.—STUDIO ORCHESTRA:
 "Movement from Symphony" (Beethoven),
 4.30 p.m.—Close down.

EVENING SESSION.

6.40 p.m.—CHILDREN'S HOUR. Answers to
 letters and birthday greetings.
 6.55 p.m.—"BILLY BUNNY" will tell the
 Children a special story for Good Friday.

NIGHT SESSION.

Announcer MAURICE DUDLEY
 Accompanists AGNES FORTUNE
 7.30 p.m.—STAINER'S "CRUCIFIXION,"
 Transmitted from St. Paul's Cathedral,
 And they came to a place called Gethse-
 manee" (Tenor Solo);
 The Agony (Bass Solo and Chorus),
 Professional to Calvary (Chorus),
 And When They Were Come (Bass Recit.),
 The Mystery of the Divine Humiliation
 (Hymn),
 He Made Himself of no Reputation (Recit.),
 The Mystery of the Divine Humiliation
 (Tenor Solo);
 And as Moses Lifted up the Serpent
 (Recit., Bass),
 God so Loved the World (Chorus),
 Litany of the Passion (Hymn),
 Jesus said, "Father, forgive Them"
 (Tenor Solo).



The only portable H.T. Accumulator

NOW comes the latest Oldham product—a really portable High-Tension Accumulator. Always to the fore in any important development in Accumulator design, Oldham once more leads the way. The advantages of an H.T. which is really portable need not be unduly stressed—they will commend themselves to you. No more troublesome, and perhaps painful, struggles with inconvenient, ugly carriers; the minimum of trouble in transferring your accumulator from place to place.

Tapped at every two volts.

In all-volt units, each cell can be tapped. For critical long-distance reception this is essential. Grid bias also available from the same accumulator.

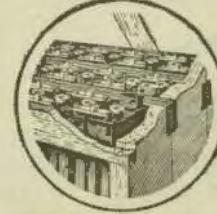
Long Life Special Activation Process.

Standard Oldham S.A.P. plates are used to ensure long life. Plates will not bubble or distort. Plates can be left idle over long periods without recharging.

Sole Agents, NOYES BROS. (Sydney) LTD., 115 Clarence Street,
 And at Melbourne, Brisbane, Newcastle, Adelaide, Perth and Hobart

Special Activation Process

OLDHAM
ACCUMULATORS.



View showing stout glass cells arranged
 in rows, tapped at each 2 volts.

Compact and Portable.

Fitted with stout carrying
 handle. Each volt unit
 supplied with polished wooden
 lid to prevent accumulation
 of dust.

1/6 per volt

60 volts	£4 10 0
30 volts	£2 0 0
100 volts	£7 10 0
120 volts	£9 0 0

Pep up your set for
the coming season
by installing FIRST
GRADE accessories.
IT PAYS.

A Few Suggestions LOUD SPEAKERS

Brown, H4 40/-; H3 82 6/-
H1 £7/10/-; HQ £8/10/-
Sterling Baby 65/-
Melovox 65/-
New Phillips Loud Speaker,
£6 10/-

"B" BATTERIES

Ever-ready, in all sizes:
Volton, 45-volt 22 6/-
Columbia, 45-volt ... 25/-
Burges, 45-volt 28/-
Mullard Valves, with the
P.M. filament, in all
types, 13.6.

Phillips Valves—All Types
in Stock.

CALL AND HEAR
THE LATEST

R.C.A. RECEIVERS
at Our Showroom—they
are years ahead in design
and performance.

Write for Our Latest
Accessory Price List.

SWAIN'S
119-123 PITT STREET
SYDNEY.

Bo Thos Little's "The Divine Petition" (Gospel).
The Mystery of Intercession (Hymn).
And one of the Hallelujahs (Psalms and
Songs).

The Adoration of the Crucified (Isaiah).
When Jesus Therefore saw His Mother
(Tenor and Chorus).
Is it Nothing to You (Bass).
The Appeal of the Crucified (Chorus).
Please remember that all things
should be done modestly (Tenor Solo).
For the Love of Jesus (Hymn).

FROM THE STUDIO—
P.M.—COLLINGWOOD CITIZENS' BAND:
"Sing, Sing, The Children are Telling."
Hymn. "Aide de War March".

SELECTIONS FROM "ELIJAH," arranged
by WILLIAM C. JAMES.
Soprano:

J. ALEXANDER BROWNE, Bassoon
INA LULLYCRAP, Bassoon

TOM SEMPLE, Tenor
MELBOURNE CHORAL UNION, under
direction of WM. G. JAMES.

Chorus: "Be not afraid!"
MELBOURNE CHORAL UNION

Tenor: "Sing, Ye Servant Peoples,"
Air: "I'll sing with all your hosts."

TOM SEMPLE
COLLINGWOOD CITIZENS' BAND:
Hymn. "Ev'rytime I See a Star."
Baritone: "Man of God."
Air: "I'm a Pilgrim."

J. ALEXANDER BROWNE,
Chorus: "He wammin' over Israe'l!"
MELBOURNE CHORAL UNION

Soprano Solo: "Ah, 'Hebe me Israel!"
Baritone Solo: "Lord God of Abraham";
J. ALEXANDER BROWNE,

COLLINGWOOD CITIZENS' BAND:
"Hymn to Music."

Contralto Solo: "E'en as I am."
Male: "O Come to the Lord."

INA LULLYCRAP,
Chorus: "Wanderer, lo, God!"
COLLINGWOOD CITIZENS' BAND:
Hymns:

"I am praying for you."
Air: "I'm a Pilgrim."

10.15 p.m.—"Argus" news service. AN-
nouncements.

10.20 p.m.—OUR GREAT THOUGHT:
"The cross was two pieces of dead wood
and a broken instrument which nailed
me to the cross, but now I have triumphed
and triumphed, and will ever triumph over
it."—Hare.

10.35 p.m.—"God Save the King."

4QG, BRISBANE

Good Friday.

NO MIDDAY TRANSMISSION.

NO AFTERNOON TRANSMISSION.

NO EARLY EVENING TRANSMISSION.

NIGHT SESSION.

The combined Presbyterian Service will
be relayed from St. Andrew's Presbyterian
Church. The service will be conducted by
the Rev. Jas. Cook, Dr. Wm. H. D. Cook and the
Rev. Jas. Walker, M.A., Organist. Mr.
R. Bailey-Stewart, Mus.Bac., F.T.C.L.,
7.30 p.m.—Antiphon: "There So Loweth the
World" (stanzas); Prayer: Hymn: Lenten
Song: "He Was a Man" (stanzas);
Kindest Prayer and Lord's Prayer; James
Hymn: "Calvary" (Rodney); Mr. James
Hunter: Hymn: Intimations and Offertory;
Anthem: "Praise His Holy Name" (Spaul);
Sermon: "There So Loweth the World";
"There So Green Hill" (Gowrie);
Mrs. N. S. Miller, B.A., Hymn, Devo-
tion; 9.0 p.m.—Close Town.

6WF, PERTH

Good Friday.

- 11.45 a.m.—Tunels.
- 12 noon—Service relay "from St. George's
Cathedral, Cathedral Avenue, Perth.
- 1.00 p.m.—Close Down.
- 1.30 p.m.—Tune-in.
- 2.00 p.m.—"St. Andrew's Acoustics" by St
Andrew's Chor. relayed from St. Andrew's
Presbyterian Church, St. George's Terrace,
Perth.

Saturday, April 16

2FC, SYDNEY

MIDDAY AND AFTERNOON SESSION

EASTER SATURDAY

12 noon—Big Ben, and Programme An-
nouncements.

12.30 p.m.—Sydney Morning Herald News
Service and Weather Information.

12.30 p.m.—A talk on today's receipts by
the EFC Racing Commissioners.

12.30 p.m.—FROM RANDWICK RACE-
COURSE.—The first race described in the
running.

NOTE.—Each event at the Randwick
Meeting today will be fully described by
the EFC Racing Commissioners.

12.45 p.m.—A series of six new musical items
will be relayed from the New South Wales
Symphony Orchestra, from the Wentworth Cafe,
Sydney, played by the new Wentworth
Symphony Orchestra, under the
direction of Mr. Frederick Leighton.

1.00 p.m.—"Evening News" Late News Ser-
vice. During the afternoon, from the
Studio—My Fair Uncle Troubadour—

(a) "Hello, Blushin'" (Friend);
(b) "Last Sunday in Love" (Silver);
(c) "Last Saturday in Love" (Lilac).

1.15 p.m.—"Get the Girl" (Donaldson);
1.30 p.m.—A Complete Summary of the Day's
Sporting and Racing Events.

1.30 p.m.—"Big Ben"; Close Down.

EARLY EVENING SESSION

2.15 p.m.—The Chorus of 1FC.

2.30 p.m.—"Hello Man" Talks to the
Children.

2.45 p.m.—A Serial Story for the Older Ones.

2.45 p.m.—Dinner Music.

2.45 p.m.—"Big Ben"; "Evening News" Late
News Service; Weather Intelligence.

NEW SOUTH WALES "A" AND "B"
CLASS BROADCASTING STATIONS.

2FC—Farmer's Broadcasting Station,
Ltd., Sydney, wavelength 442 metres,
power 5000 watts.

2H—Broadcaster's Ltd., Sydney, wave-
length 553 metres, power 5000 watts.

2G—Theosophical Broadcasting
Station, Ltd., Sydney, wavelength
316 metres, power 500 watts.

2KY—Trade and Labor Council, Syd-
ney, wavelength 280 metres, power
1000 watts.

2UW—Ottie Sandal, Sydney, wavelength
316 metres, power 500 watts.

2UX—Ottie Sandal, Wagga, wavelength
316 metres, power 500 watts.

2MK—Master Builders, Bathurst, wave-
length 275 metres, power 250 watts.

2SC—State Electricity Supplies Com-
pany, Sydney, wavelength 292 metres,
power 1000 watts.

2RE—Burton Electric Co., Sydney,
wavelength 216 metres, 100 watts.

2HD—H. A. Douglas, Newcastle, wave-
length 258 metres, 100 watts.

7.15 p.m.—A complete description of to-day's Easter Meeting at Randwick.
7.45 p.m.—The crowds—and the *dreams*.

NIGHT SESSION.

8.00 p.m.—"Big Ben"; Programme Announcement.

8.15 p.m.—FROM THE CRYSTAL PALACE THEATRE, GEORGE STREET, SYDNEY—Orchestra, Hems, under the baton of Mr. Harry Stone.

8.15 p.m.—FROM THE STUDIO; Miss Alice Prowse, contralto.

8.15 p.m.—Mr. Joe Cahill, Entertainer.

8.30 p.m.—Miss Gwendy Finister, soprano.

8.35 p.m.—FROM THE CRYSTAL PALACE THEATRE, GEORGE STREET, SYDNEY—The vocal soloists in the film "THE BETTER 'OLE," sung by the Big Four.

8.45 p.m.—FROM THE STUDIO; The IFC Studio Dance Band, conducted by Mr. Eric Pearce, assisted by the popular baritones, Mr. Len Maurice, "When Bananas Sins are Falling" (Frannie).

8.45 p.m.—Miss Alice Prowse, contralto.

8.55 p.m.—FROM THE CRYSTAL PALACE THEATRE, GEORGE STREET, SYDNEY—Directed by the Orchestra, under the baton of Mr. Harry Stone.

9.05 p.m.—The Radio Revellers, directed by Mr. Laurence Halbert, will sing their anthem, "The More We Are Together."

9.10 p.m.—Miss Gwendy Finister, in an appealing number.

9.15 p.m.—A Comedy Sketch; Mr. Montgomery Stuart and Miss Myra Laird.

9.20 p.m.—Miss Peter Jeat, soprano.

9.25 p.m.—A Radio Burlesque.

9.30 p.m.—Mr. Wally Barnes, the well known IFC Reveller, in new comedy songs.

9.35 p.m.—The IFC Studio Dance Band in popular numbers. Conductor, Mr. Eric Pearce. Vocal solos by Mr. Len Maurice.

(a) "Hello, Aloha" (Abel); Fox-Trot.

(b) "Looking at the World" (Malle); Fox-Trot.

9.45 p.m.—Miss Gwendy Finister, soprano.

9.54 p.m.—Some Radio Comedy Sketches by Mr. Montgomery Stuart and Miss Myra Laird.

10.00 p.m.—"Big Ben"; The IFC Dance Band and the popular baritones, Mr. Len Maurice. Fox-Trot, "Lonesome and Sorry."

10.05 p.m.—Mr. Joe Cahill, Entertainer.

10.10 p.m.—Miss Peggy Paul, soprano.

10.15 p.m.—The IFC Studio Band and Mr. Len Maurice; Fox-Trot, "Stay It, I Love It" (Owens).

10.20 p.m.—Mr. Montgomery Stuart and Miss Myra Laird, Comedy Sketch.

10.25 p.m.—Mr. Laurence Halbert, baritone.

"Cherio, I Love You" (Goodman).

10.28 p.m.—The IFC Dance Band and the Popular Baritones, Mr. Len Maurice; Fox-Trot, "Stay It, I Love It" (Owens).

10.35 p.m.—Finale by the Revellers, Chorus and Mr. Len Maurice, popular baritone.

(a) Fox-Trot, "My Pal Jerry" (Bose).

(b) Waltz.

(c) Fox-Trot, "Off to Buffalo" (Candolla).

(d) One Step, "Moving Picture Actors on Parade" (Rox).

11.00 p.m.—"Big Ben"; Late News and Announcements; Racing Information.

11.10 p.m.—FROM THE WENTWORTH CAPE, CHURCH HILL, SYDNEY. The New Wentworth Symphonic Dance Orchestra under the baton of Mr. Frederick Leighton. National Anthem.

11.45 p.m.—Close Down.

3LO, MELBOURNE

Saturday.

MORNING SESSION.

VARIETY IS THE SPICE OF LIFE.
Announcer ALFRED ANDREW
Accompanist ERIC FORTUNE

11.00 a.m.—STUDIO ORCHESTRA

"Orpheus in the Underworld" (Offenbach).

11.10 a.m.—JACK KEARNS, Comedian, will sing.

"The Pilgrims."

"I Took It."

A Radio Bargain

3 Valve Set in handsome cabinet, complete in every detail, including—

Loud Speaker

Exide Accumulator

84 Volt B Battery

4½ Volt C Battery

Large Valves (the best)

Aerial Gear

A guarantee with every Set

Two Prices:

Price - £16 17 6 Price - £19 17 6

Deposit - 1 14 6 Deposit - 1 18 6

Weekly - 5 9 Weekly - 6 9

We charge no interest for these easy terms

The easy terms also apply to country customers.

Take one home to-night!

Radio-W'Less Mfg. Co. Ltd.

317 George Street :: SYDNEY

Telephone: B 5747

**Manufacturers
Products Pty. Ltd.
(M.P.)**

(H. J. HAPGOOD)

Challis House, Martin Place,

SYDNEY

Tel.: BW 1328

Agents for all Styles of Radio Products,
including Clyde Batteries.

Rise, Meter Mfg. Co., "Emerson"

Bassano Condensers, Leads and
Fixed Resistors.Airmar Blimps, Pots, Special Coils
and Loops.Neutron Crystals, Brass Mounts,
Prism Shims from Sydney.We represent 24 Foreign Radio
Manufacturers.

Write for Indent List.

Surplus Stocks sold Interstate.

SLINGSBY and COLES

LimitedUnder Central Station,
482 Pitt Street

Cabinets all Sizes in Seamed Oak
1-Valve size £1/7/6
2-Valve size £1/15/-
3 or 4 Valve sizes £2/12/-
5 Valve size £3/12/-
Call and See Our Special 5-Valve
Superiorized at £3/11/6/- complete.
The Famous "BLUE SPOT" PHONES,
the lightest ever made, 25/- pair.
Special Accented 1000 m.Amps Actual
25/- per Rotor coil, 10 Amps Actual
25/- per Rotor coil.
Lead-in Wire, 2d. yard,
2ft. Speaker Cord, 4/- each.
Sets rewired to any circuit.

**How****do you****SOLDER?**

With Solder! Spineless! Safe! Of
Save Oil
Satin! Convenient! Durable! No
Painfulness!

With any other flux that doesn't
some of the things a person does
should do!

With "Wunderflux". That little
packet of soldering cement
that makes most woods in a minute!
Non-inflammable! Non-palatable! It is
a wonder flux!

Wunderflux
Home Soldering Outfit

If you should happen on a shop without
stocks yet, write direct to Byrne & Rose,
Broughton House, Clarence Street,
Sydney.

Warneford & Son

RADIO ENGINEER

Bring your Radio troubles
to us.

Is your receiver selective?

If it isn't, let us know. We
will remodel your receiver
along modern lines to pro-
duce maximum efficiency.

Local conditions play a big
part in good reception.

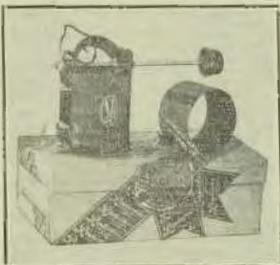
We will design and build a
receiver to suit.

Rewiring faithfully carried
out at reasonable rates.

Write Box 967, G.G., G.P.O.,
Sydney.

Phone: Pet. 1045 & X 3149.

**Radiokes acknowledged
as the World's Best**



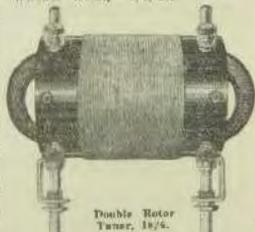
£2/2/- at all Dealers.

The Browning-Drake is holding most
of the world's records—Radiokes is
the only genuine Browning-Drake
coil kit on the market.

Metropolitan Electric Co. Ltd
27-29 King Street, SYDNEY.

Groden Radio Appliances

Read what a satisfied customer says about
Groden Double Rotor Tuners.
"This tuner is well constructed, easily
mounted, and simple to handle, giving a
fine result. The volume is very good for
speaker volume, even on two valves.
The set is very selective, and I have no
trouble in separating the stations from
each other. Two sets are now in my
house, and expect building some more to
avoid interference from other than the
Broadcasting Stations required. Not so
new, and very traps are for 'Sale'. Vide
'Wireless Weekly' 1/1/27."



Best on the Market.
Double Rotor Tuners 15/8
Single Rotor Tuners 12/6
All Dealers.

Manufactured by
GROSE & DANIELL
HOLDEN ST. (Off Evelyn St.) REDFERN
Phone: Red. 573, SYDNEY

- 11.17 a.m.—TASMA TIERNAN, "Cello, "By the River" (Morse).
"Nocturne" (Chopin).
- 12.24 p.m.—BILLYE LOCKWOOD, Soubrette, "Foolish Questions," "Satin Around."
- 11 a.m.—NELL CRANE, Soprano, "There's a Girl in Mauritius," "Somewhere Somebody's Waiting."
- 12.27 a.m.—ELSA LEWIS, Violin, "Barcarolle" (Hoffmann).
- 12.44 m.—STUDIO ORCHESTRA, "Musical Jokes" (Harmon).
- 12.51 p.m.—MAXWELL CAREW, Comedian, "Dad," "Dad," "Patricia," "Good Girl Now."
- 12 noon—Time Signs: British Official Wireless News from Rugby; Reuters' and the Australian Press Association Cables: "Argus" and "Herald" News Services.
- 12.58 p.m.—STUDIO ORCHESTRA, "Petite Suite des Fleurs" (Cordier).
- 12.59 p.m.—BILLYE LOCKWOOD, Soubrette, will accompany herself on her Ukulele.
- 12.57 p.m.—STOCK EXCHANGE INFORMATION.
- 12.47 p.m.—STUDIO ORCHESTRA, "The Last Lullaby" (Baron).
- 12.57 p.m.—HUXHAM'S SERENADERS, Quartette, "Tender Solo, High Hushan," "Studio Orchestra, "Serenade" (Bridge), "Quartette, Contralto Solo, Dolly Burdett, Operatic Quartette.
- 1.23 p.m.—WEATHER REPORT.
- 1.30 p.m.—STUDIO ORCHESTRA, "Light Cavalry."
- 1.40 p.m.—ELSA LEWIS, Violin, "Melody of Peace."
- 1.45 p.m.—Description of Autumn Stakes, RANDWICK RACECOURSE, SYDNEY, relayed from 2EC, Sydney.
- 2.00 p.m.—Close Down.
- 2.15 p.m.—Description of Two-Year-Old Handicap, Epsom Races, by "Musket" of the "Sporting Globe"; Close Down.
- 2.30 p.m.—Description of Doncaster Handicap, RANDWICK RACECOURSE, SYDNEY, relayed from 2EC, Sydney.
- 2.40 p.m.—Close Down.
- 2.45 p.m.—Description of Epsom Plate, by "Musket" of the Sporting Globe.
- 2.50 p.m.—Close Down.
- Progress results will be given as they come to hand of Final Pennant Cricket.

INTERSTATE "A" AND "B" CLASS BROADCASTING STATIONS.

- 2LO.—Broadcasting Company of Australia, Ltd., Melbourne, wavelength 371 metres, power 5000 watts.
- 4QD.—Queensland Radio Service, Brisbane, wavelength 325 metres, power 600 watts.
- 2CL—Central Broadcasters' Ltd., Adelaide, wavelength 385 metres, power 5000 watts.
- 4WF.—Western Australian Farmers, Ltd., Perth, wavelength 1250 metres, power 3000 watts.
- 7ZL—Tasmanian Broadcasters, Ltd., Hobart, wavelength 553 metres, 3000 watts.
- 2AR—Associated Radio Co., Ltd., Melbourne, wavelength 484 metres, power 1600 watts.
- 2BB—British Business and Technical College, Melbourne, wavelength 255 metres, power 500 watts.
- 3UZ—O. J. Nielsen & Co., Melbourne, wavelength 319 metres, power 100 watts.
- 4GR—Gold Radio Electric Service, Toowoomba, Queensland, wavelength 294 metres, power 100 watts.
- 3KA—Sparta Radio Broadcasting Station, Adelaide, wavelength 250 metres, power 1000 watts.
- 4DN—EDN Pte., Ltd., Adelaide, wavelength 313 metres, 500 watts.

AFTERNOON SESSION.

- JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS.
- 2.00 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS, "Thinking of You" (Ash), "Just Bird's Eye View" (Donaldson), "Just One More Kiss" (Owens), "Top of Coffee, Sandwich, and You," "Smashingly Lovely" (Davis), "Baby Face" (Akai), "Time a Ling Waits of the Bells," "Mary Lee" (Loyalty).
- 2.15 p.m.—Description of Brash Steeple, Epsom Races, by "Musket" of the "Sporting Globe."
- 2.20 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS, "The More We Are Together" (Campbell), "Hoffmeyer" (Hargy), "Glorious," "Let's All Be Happy," "Hello Aloha" (Barr), "Hello Bottom" (Henderson), "Hello, Little Girl of my Dreams" (Berk), By the Sign of a Rose" (Fields), "Sunday" (Miller).
- 2.45 p.m.—Description of Epsom Handicap, by "Musket" of the "Sporting Globe."
- 2.50 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS, "Angry" (Brunius), "With I Had an Old Cal Back" (Yellen), "Bye Bye Blackbird" (Dixon), "Whistling in the Night With Baby" (Meyer), "Iolizing" (West), "In a Little Spanish Town" (Warne), "Burgundy" (Malie), "Ma Too, Ho-Ho, Ha-Ha" (Woods), "Hi, Ho, the Merri" (Brown), "Ohoh Oh" (Aar, Berger).
- 3.15 p.m.—Description of Epsom Purse, by "Musket" of the "Sporting Globe."
- 3.20 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS, "The Village Blacksmith," "Am I Wasting My Time" (Hibbs), "Rose Colored Glasses" (Steiger), "You've Got to Be Black Shuffle" (Sparks), "That Samson and Delilah Melody" (Grey), Selected.
- 3.45 p.m.—Description Maiden Plate, Epsom Races, by "Musket" of the "Sporting Globe."
- 3.50 p.m.—"Herald" News Service, Stock Exchange Information.
- 3.55 p.m.—Close Down.

EVENING SESSION.

- 5.30 p.m.—Sporing Results.
- 5.40 p.m.—CHILDREN'S HOUR, Answers to Letters and Birthday Greetings.
- 5.55 p.m.—HUXHAM'S SERENADERS, Humorous Quartette, "We Wonder Why," EDNA HUXHAM, DOLLY BURDETT, RENN MILLARD, and R. HUXHAM, "All About a Rabbit."
- 6.20 p.m.—LITTLE MISS KOOKABURRA will tell her little "Kookaburra" a lovely Fairy Easter Story, written by Bushwoman.
- 6.25 p.m.—HUXHAM'S SERENADERS, "Coon Melody."
- 6.20 p.m.—LITTLE MISS KOOKABURRA will tell some more about, "Carol of Holydene School" (The Chums paint the Sexton Green).
- 6.35 p.m.—"Argus" and "Herald" News Services, Weather Information, Aerial Mail information by the Australian Aerial Services, Ltd.
- 6.47 p.m.—Stock Exchange Information: Overseas Shipping.
- 6.52 p.m.—Fish Market Reports by J. R. Horrett, Ltd.
- 6.55 p.m.—Market Reports by the Victorian Produce Co-operative Co., Ltd.: Meat Market, Sheepskins, Fostanes and Oysters; Market Prices of Oranges and Lemons, by the Victorian Central Citrus Association, Pty., Ltd.; Fruit Market Reports by the Victorian Wholesale Fruiturers' Association, compiled by "The Fruit World," exclusive to 2LO.

NIGHT SESSION.

- TO SUIT ALL TASTES
Announced MAURICE DUDLEY
Accompanied by MARY FORTUNE
- 7.15 p.m.—MISS MEREDITH SUTTON, Captain Victorian Women's Hockey Team, will speak on the visit of the English Women's Hockey Team to Australia.
- 7.30 p.m.—MR. F. CHAPMAN: "A Marvellous Fish."
- 7.45 p.m.—MR. C. R. LONG: "A week with the Governor, unveiling Memorials to the Pioneers."
- 8.00 p.m.—COLLINGWOOD CITIZENS' BAND: Waltz, "Love and Life in Vienna."
- 8.10 p.m.—ELSIE DAVIES, soprano: Arias, "Casta Diva"—Norma (Bellini).
- 8.15 p.m.—ELSA LEWIS, Glass violinist: "In the Forest" (Robertson), "Thais" (Massenet).
- 8.24 p.m.—COLLINGWOOD CITIZENS' BAND: Selection, "La Sonambula."
- 8.34 p.m.—CELEBRITY FOUR: Under direction, Mr. Wm. G. James.
- 8.45 p.m.—COLLINGWOOD CITIZENS' BAND: March, "III Abanico," Gavotte, "Priscilla."
- 8.55 p.m.—MR. WM. G. JAMES, pianoforte solo: "Polonaise A Major" (Chopin), "Valse D Flat" (Chopin), "Danse" (Debussy).
- 9.11 p.m.—BILLYE LOCKWOOD, soubrette: "Pretty Little Baby," "Happy and Crazy."
- 9.18 p.m.—COLLINGWOOD CITIZENS' Band, concert solo: "Silver Threads Among the Gold," Soloist, F. Crawley.
- Part Song, "Sweet and Low."
- 9.25 p.m.—ELSIE DAVIES, soprano: "Melodie" (Teuli), "Vilanelle."
- 9.35 p.m.—ELSA LEWIS, violin: Novelty, "Whistling with Violin," "Where my Caravan has Rested."
- 9.42 p.m.—ONE ACT PLAY, "Reservoir" Colonel St. Clair Chas. Dyson
Mrs. Neville Mrs. Maurice Dudley.

NEW ZEALAND STATIONS:

- 1YA, Auckland, The Radio Broadcasting Co. of New Zealand, Ltd.
Power 500 Watts; Wavelength, 420 Metres. Silent Night, Monday.
- 2YK, Wellington, The Radio Broadcasting Co. of New Zealand, Ltd.
Power 120 Watts; Wavelength, 295 Metres.
- 3YA, Christchurch, The Radio Broadcasting Co. of New Zealand, Ltd.
Power 500 Watts; Wavelength, 400 Metres. Silent Night, Thursday.
- 4YA, Dunedin, The Radio Broadcasting Co. of New Zealand, Ltd.
Power 750 Watts; Wavelength, 380 Metres.
- 2YM, The Gisborne Radio Co., Gisborne.
Power 50 Watts; Wavelength, 200 Metres.

10 p.m.—COLLINGWOOD CITIZENS' BAND—*"Belation au Nostre Dittes."*

10.15 p.m.—"Anglo" news service, British official wireless news from Bagley.

10.20 p.m.—CHARLIE SHERMAN, comedian: "Dish in your heart."

Dish stories.

"Her gown."

"My Eyes Blinded as a musical box."

10.20 p.m.—Mr. W. E. MORRISON: "Police Bell."

"Ring the Bell, Watsonian."

"The Bell of Scotland."

10.25 p.m.—COLLINGWOOD CITIZENS' BAND—"In a Little Spanish Town."

Susanna.

10.30 p.m.—Meteorological information, operating results.

11 p.m.—ONE GREAT THOUGHT.

"He who is not in it is not of us."

Thoughts all ages express.

What Christ our Lord's birth means to God,

And high o'er heaven was thrown.

—Portuguese.

11.15 p.m.—JOE ARONSON AND HIS SYMPATHETIC SYMPHONISTS.

"Big Fiddle" (Croat).

"Indian Love Call" (Irish).

"Rose Marie" (French).

"Crosses a little kiss will ya hold?" (Turkish).

"Any Day Today, Lady" (Bielorussian).

"Crosses Baby's Laundry" (Scandinavian).

"Crosses, Crosses" (Irish).

11.45 p.m.—Close Down.

4QG, BRISBANE

Saturday.

NO MIDDAY TRANSMISSION.

AFTERNOON SESSION.

1.15 p.m.—A Musical for Little Listeners by "Miss Warwick."

4.30 p.m.—Close Down.

NIGHT EVENING SESSION.

4.30 p.m.—Children's Stories, Bedtime Stories by "Uncle Bert" and "Uncle Jim."

5.15 p.m.—Sporting News.

NIGHT SESSION.

7.30 p.m.—Sailing Notes by "Tiller."

7.45 p.m.—Leisure Session: a garden talk, "Mosses and Ferns"—by "Tessie."

7.45 p.m.—Announcements.

7.45 p.m.—From the Observatory: Standard Time Signal.

VIOLIN RECITAL.

A Violin Recital Arranged by Mr. Luis Andrade Paredes will be relayed from the Hall of the Muses, Little Bourke Street, Brisbane.

TRANSFORMERS

Built up to specification and sound, insulation test set to any size from stock. Prices and estimates will be supplied.

ODONNELL, CHIFIN & CO., LTD.,
48 Bourke Street, SYDNEY.

Phone: G481 and G54.

8.0 p.m.—From the Hall of the Muses: Violin solo, "Die Zauberflöte" (Mozart). Miss Mary Wilson, Mr. Scott and Mr. Luis Andrade Paredes (violin, viola, cello) and Anna (piano) violin duet, "La Cucaracha" (Paras). Miss Hopkins and Mr. Luis Andrade Paredes (clarinet, solo). "Fitchie Ann Yaxie" (Gondoliers). Miss Eva Gruenwald with soprano solo, "Thieving Magpie" (Bullfinch) (Offenbach). Master Eddie (Unison), Miss G. Ware, piano solo, "Moonlight Sonata" (first movement)—Beethoven. Miss Gertrude Anderson: violin solo, "Allegro Molto Vivace" (Fr. Muzio). Miss Dorothy, Mr. Marko Williams, violin solo, Mr. Paul O'Brien: basso: tenor solo, selected Mr. Hugo Herold, violin and flute duet, "Serenade" (Gounod). Mrs. W. P. A. Gray and Mr. Luis Andrade Paredes solo, selected Mr. Tim, violin solo, "The Moonlight" (Arie) "Una Avanguardia" (Barcarolle). Miss Luis Andrade Paredes, contralto solo selected Miss B. Ware, basso solo, "Three For Jack" (Mr. Jack, English violin solo)—"Minuet" (Paganini's "Capriccio"). Sonatas: "Catalan" (Anon.). Miss Luis Andrade Paredes.

10.0 p.m.—From the Studio: "The Sunday Mail" News Service; Weather News; Close Down.

NOTE.—During the evening the main motor cycle race at the Speedway will be described.

GWF, PERTH

Saturday.

11.30 a.m.—Tune-in.

11.45 a.m.—Musical Programme.

12.45 p.m.—First Local News Bulletin; Market Report; Cable.

1.0 p.m.—Time Signal from Perth Observatory.

1.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.

1.2 p.m.—Close Down.

1.45 p.m.—Tune-in.

2.0 p.m.—Detailed Description of Races reported from the Ascot Race Course, Belmont Gates down after last race.

2.30 p.m.—"Gillian Perry and Reg with the Radio Bird."

2.45 p.m.—"Children's Story," "Read Australia," introducing "Professor Kookaburra," told in Australian Accents.

3.0 p.m.—Sports Results supplied by newspaper of "The Mirror" Newspaper Co.,

3.0 p.m.—Markets, News and Cable.

3.0 p.m.—Time Signal from Perth Observatory.

3.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.

4.00 p.m.—FROM THE STUDIO: Musical Programmes, including Articles.

4.30 p.m.—Second Local News Bulletin, supplied by courtesy of "The Daily News" Newspaper Co., Sports Results supplied by courtesy of "The Mirror" Newspaper Co., Ships within range; announcements.

4.45 p.m.—Close Down.

WHAT GRID LEAK VALUE SHALL I USE?

A good deal of latitude is permissible in the value of the grid leak used in resistance coupled amplifiers, particularly in the initial stages, where moderately small signal amplitudes are being dealt with. The function of this resistance is to allow charges on the grid condenser to leak away rapidly, to allow the grid to assume its normal working potential in the intervals between the arrivals of successive impulses, to be dependent on that of the grid condenser; if this is large, the leak must have a low resistance, and vice versa.

With a coupling condenser of .01 mfd, the smallest usually recommended for use in conventional circuits, a leak of as high as 1 megohm will prove satisfactory. For condensers of .06 to 1 mfd, the resistance usually specified is about .5 megohm, while for considerably higher capacities .25 megohm will not be too low.

It should be realized that the choice of a leak should also be governed to a certain extent by the value of the plate resistance in the circuit. The former should be high in comparison with the latter, or amplification will be reduced. In a resistance coupled circuit both resistances are really connected in parallel, and the leak, if of a comparatively low value, will act, in effect, as a partial short circuit across the plate resistance, reducing the voltages applied to the grid.

NO RESPECTOR OF PERSONS indeed is the S.O.S. call, that bearer of fearful tidings from the sea. While President Coolidge was broadcasting an important speech recently the proceedings were suddenly stopped by a signal of distress from a ship out in the Atlantic.

BROADCASTING, now a monopoly in Ecuador, is making but slow progress, largely owing to the unfavorable climate. There are probably not more than a hundred sets in use in the Republic, while very few instruments are stocked by the trade.

THE first national school of radiotelegraphy in Europe has been established by the Belgian government for the purpose of training technicians and operators for the civil service, both in Europe and in the Congo, as well as officers and non-commissioned officers of the army, and aviators. It was authorized by a law recently passed; and is to be administered under the joint control of all the ministries whose work is affected; railroads, marine, post and telegraphs, aviation, and national defense.

Radio Panel Engraving and Drilling.

PLAIN BLOCK LETTERS, at 3/- per 100 letters.

Special Quotes for Dealers and Manufacturers.

Quality Work Guaranteed.

Special Prompt Deliveries.

CLIFTON L. STORM, Engraver.

No. 19, 2nd Floor.

St. Castlereagh St., SYDNEY.

All Readers' Queries Answered Here

R.E.N. (HURLSTONE PARK) — Q : Having once availed myself of your kind assistance, I wish to ask you a few questions re the "Marvel" three-valver Receiver," published in "Radio," 1st August, 1926. I have followed the instructions with the exception of the 10,000 ohms resistance which I have cut out in account of the drop in 2K's wavelength. The set works very well on all the locals, but is a very indifferent performer on interstates. It is practically impossible to get them without distorting the output. What is it with the Detector Rethroat, and if I lower the A battery power too much I lose the station all together. In fact, it needs a very critical adjustment, even then it is unsatisfactory, being only phone strength.

(2) I can get better reception on 3 valves than on the 4, when I switch on the first valve the tuning broadens out and I can not separate the different stations (that is the local from the interstate)?

(3) Can that set be neutralised, if so how do you go about it?

(4) Where would you connect a C battery in this circuit. I am using a 40-ft perpendicular half aerial with this set. I would be pleased if you would write me on the solution of these difficulties.

A : To my mind it seems that you are suffering from interference, which you can only get to by layout. Follow the layout in detail and this trouble will disappear. It is strange to know that the original Burress Neutrodyne was constructed and used within 100 yards of your own home, and so good was it, that no receiver whatever was required to bring in all the inter-State stations. I know of an advanced experimenter who succeeds by this excellent receiver. Go over your layout again and if you read the article carefully, you will find the neutralising arrangement. Connect your C battery as follows—Remove the connections from the F. terminals of the two

QUERIES.

Readers are asked to note the following conditions with regard to the answering of queries—

No more than 4 questions can be answered.

All queries are answered through the columns of "Wireless Weekly"—therefore, do not enclose stamp for direct reply.

Blueprints cannot be supplied. Do not ask us to specify any particular brand of parts.

Address your letter to the Editor, "Wireless Weekly," 51 Castlereagh St., Sydney, and mark the envelope "Query."

audio transformers which lie in the Burgess, go to the A minus. Get a separate piece of busbar and join the two F. terminals of the audio transformers together and then connect this busbar to the C. battery minus. The C. battery positive is now joined to the A. battery minus. This applies to all transformer coupled audio circuits. I am sorry I can't write individual letters—I would be up all night.

R.W.S. (KURRI KURRI) — Q : I have just completed the "Marvel" Radio Receiver, described in your columns recently. I find this quite a good little set, but unable to carry a speaker at this distance (roughly 100 miles).

The tuning also, is somewhat tricky. I would like you to advise me of a circuit embodying the following characteristics: Selectivity, Long Range, W.H. Output, Wavelength, Good Tons Quality, Compactness, 3 to 5 valves. The four first mentioned are, of course, of major importance. I would prefer a set which has previously been published in "Wireless Weekly," as your instructions are so easy to follow, and this Marvel is my first venture in radio construction.

A : The three-valver in "Wireless Weekly" 11/3/26, has these specifications. The wavelength range is 200 to 550 meters, which covers all Australian stations excepting SWF (Perth). For a four-valver, the Brown-Drake, Bayer or Marvo are all good, whereas, I don't think you can better a Neutrodyne for a 5-valver. The Brown-Drake is described in "Radio" 2/5/27, and the Neutrodyne in "Radio" 5/1/27. "Radio" is our companion paper, and I may mention there are no more copies of "Wireless Weekly" in which these sets were described.

C.W.C. (TOOWOOMBA) — Q : I have a 5-valve 3-roll set which needs very careful tuning. I wish to convert into a 3-valve set to get all Australian stations on a Loud Speaker, except, of course, Perth. I note in this week's "Wireless Weekly" a reader at Rockhampton mentions an "All-Australian 3-valve set" which has a 1000 ohm 3RL 500 m.a.c. coil, all at Loud Speaker strength. Is this the best circuit I could construct? If so, could you let me have particulars and diagram, etc., of set. I have no back issues of "Wireless Weekly," as I could not afford to pay postage for same if it is not possible for you to answer in your columns. Thanking you in anticipation of your kind assistance.

A : See "Wireless Weekly" 11/3/27, for a splendid three-valver. I can recommend it.

YOU CAN HAVE "Wireless Weekly"

Delivered POST FREE for One Year for

13/-

Avoid delay or disappointment
by forwarding the following

SUBSCRIPTION FORM

To the Editor, "Wireless Weekly," 51, Castlereagh Street,
Sydney.

Please forward "Wireless Weekly" for a period of

..... for which I enclose
..... FOR
(Add exchange to Counter Charges.)

Name

Address

Subscription Rates: 12 months (52 issues), 13/- post free; 6 months (26 issues), 6/6 post free.



Registered Trade Mark.

Published by Arthur William Watt, of "Folkstone," Lavender Street, Lavender Bay, for the Proprietors, Wireless Newspapers Limited, 51 Castlereagh Street, Sydney; and printed by Marchant & Co. Ltd., via Goulburn Street, Sydney.

The Editor will be glad to consider Technical and Topical Articles of interest to Australian Experimenters. All Manuscripts and Illustrations are sent at the author's risk, and although the greatest care will be taken to return unsuitable matter (if accompanied by stamp), the Editor cannot accept responsibility for its safe return.

Subscription rates—Twelve months (52 issues), 13/- post free. Six months, (26 issues), 6/6 post free. Single copies 3d. each, or post free. 4d. Subscriptions should be addressed to Wireless Newspapers Ltd., 51 Castlereagh Street, Sydney.

Advertising.—Our advertising representative keeps in close touch with advertisers, and he is ready at all times to supply information concerning advertising.

Agents in Great Britain.—The Colonial Technical Press Ltd, Dudley House, Southampton Street Strand, W.C.2.

"Wireless Weekly" is fully protected by copyright, and nothing that appears in it may be reprinted, wholly or in part, without express permission. The use of our articles or quotations from them for any purpose whatsoever is never permitted without our written authority.



Transform Your Wireless Set...

By Fitting the WORLD'S BEST INTERVALVE TRANSFORMER.

NEW BRITISH MADE



TRANSFORMERS

The "FERRANTI" Transformer, designed to improve loud speaker results, is constructed with full realization of this fundamental—that it is necessary to simplify all work in accurate reproduction in order to get satisfaction from wireless connoisseurs which many transformers seem to ignore.

OBtainable From All Radio Dealers in Australia.

Dealers please communicate with:

A. BEAL PRITCHETT (Aust.) LTD., Sydney and Melbourne.
WEDMA, LTD., Adelaide — — — EDGAR V. HUDSON, Brisbane.

TYPE AF3 - 42/6

Impedance:

at 100 periods, 30,000 Ohms.

at 300 periods, 410,000 Ohms.

No better Transformer is available at any price.

TYPE AF4 - 32/6

Impedance:

at 100 periods, 17,500 Ohms.

at 500 periods, 90,000 Ohms.

The best Transformer at the price.



No Noises!

WITH A
MACLURCAN
TONE PURIFIER

21/-

At all Dealers

The MacLurcan Tone Purifier is the result of months and months of research work by Australia's leading amateur experimenter. It has been designed expressly to meet Australian climatic and atmospheric conditions.

A neat device which will absorb the mushy background of noise spoiling reception on many sets. Every owner is assured of pure, undistorted reception. In this static season, too, static noises may be considerably lessened with its aid.

Manufactured by ELECTRICITY METER MFG. CO. LTD., Sydney, N.S.W.

**FOR
GREATER RANGE
AND
BETTER TONE**

Use the New  *Valves*

In announcing a new range of A.W.A. Valves, we can state with every confidence that these general purpose valves, the result of extensive research on the part of A.W.A. valve engineers, are in every way equal if not better than imported valves.

More electrons are now emitted with less heat—therefore less current. Lower filament temperature also enhances the quality of reception.

A.W.A. 33	Filament Volts 3.0,	Price 13/-
A.W.A. 99	Filament Amps .06.	13/-
A.W.A. 99X		13/-
A.W.A. 55	Filament Volts 5.0,	11/-
A.W.A. 101X	Filament Amps .25.	11/-
Base.—A.W.A. 33 English, 4 pin.		
A.W.A. 99X Amer. UX199.		
A.W.A. 101X Amer. UX201a.		
A.W.A. 99 Amer. UV199.		
A.W.A. 55 English, 4 pin.		

At All Radio Dealers.

Amalgamated Wireless
(Australasia Ltd.)
97 CLARENCE STREET, SYDNEY.
167-9 QUEEN STREET, MELBOURNE.

**THE NEW
AWA VALVES**



The
AMPLION
RANGE



Type AR 65 - £4.15-0



Type AR 58 - £4

The AMPLION Range comprises the most extensive range of Loud Speakers in existence. The supremacy of AMPLION has long been acknowledged by all those who have a true appreciation of all that is fine in Loud Speaker construction.

The two models shown here—the A.R. 65, with its lustrous chocolate crystalline finish, and the beautiful Swan-neck model A.R. 58, are fitting members of the family of AMPLION—universally recognised as "The World's Standard Wireless Loud Speakers."

They are obtainable from all Radio Manufacturers and Dealers throughout Australasia.

Better Radio Reproduction



Adv't. of AMPLION
(A'pon.) LTD.
Sydney and
Melbourne.