

WIRELESS  
WEEKLY

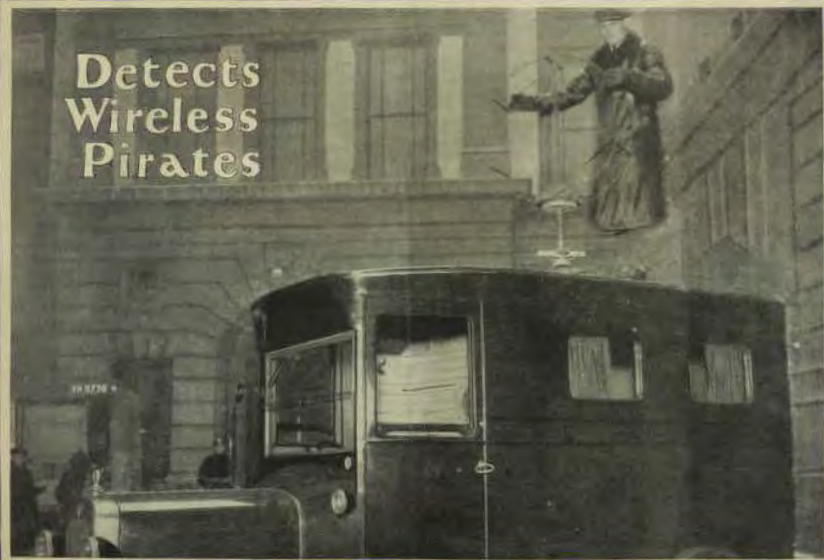
Broadcast Programmes a Week in Advance

VOLUME 11

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NUMBER 3

Detects  
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Friday, November 11, 1927.

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# WIRELESS WEEKLY

VOL. 11 No. 2.

FRIDAY, 4th NOVEMBER, 1927.

## *Washington Conference and Australia.*

THE leading stations in Australia may well preen themselves on the encomiums paid to them by English wireless experts. It has been said that it was the persistency of Australian engineers in declaring their belief in direct broadcasting, instead of in relay, that has shown the Empire the real road to Empire broadcasting.

To have been the last nation to take up wireless broadcasting, and to have taken such a prominent place in its practice, is no mean achievement.

That this conclusion is not due to our own conceit, or to the partiality England may perhaps be expected to show one of its own daughters, so to speak, is proved by the influence Mr. H. P. Brown has exerted at the Wireless Conference at Washington. Single handed, he was able to resist an effort to place our broadcasting under the possible influence of foreign countries, putting up such a vigorous fight that the objectionable proposal was referred back to the committee that made it. Again, this would not have been possible, had not Australia won its right to a voice in the councils of the nations on radio.

The reason for this prominence is not far to seek. A nation's radio position is absolutely conditioned by the number and interest of its listeners. Where these are few and bored, radio will make no progress. To enchain the interest of listeners, to ensure a continuously increasing number of them is the duty of the big stations. If they fail, everything fails. They have, in the three years

since this great new method of entertainment first began here, built up wonderful organisations, capably adapted for the purpose for which they came into being. They have weathered a searching inquiry into their methods, their capacity, their possibilities, and, unlike the British Broadcasting Company under similar conditions, they have convinced the Commission that Government interference would do no good, but would run the risk of spoiling a good work. It is pleasant to have acknowledged in Europe, in America and in our own country, almost simultaneously the sterling work that 3LO and 2FC, notable among Australian stations, are doing.

Following on this, it is disquieting for these stations to be threatened with a penalty for their own excellent showing. The recent Wireless Commission proposes that it might be necessary to take some of the revenue from the big, successful stations, and with it bolster up the broadcasting organisations in the more backward States.

This is palpably unjust. Success in broadcasting is conditioned by excellence of organisation. This is due to no money predominance whatever. It is, chiefly, if not solely, management.

The Commission may have been misled into thinking that, with the gift of money taken from 3LO and 2FC weak stations in the other States will be enabled to hire better talent and thereby attract more listeners. It is a fallacy.

# Catching Up with the Wireless World.

By R. E. CORDER.



**WE WONDER:** The girl friend wants to know if "plugging the loud-speaker in the jack" is the modern way of saying "beating up one's wife." It would be to-the-point, eh, what?

A LONDON amateur has invented an adjustment for converting a piano into a loud speaker. It is claimed that its tones are so distinct that voices and instruments can be easily separated, while speech is much more natural than that of an ordinary loud speaker.

UNCLE GEORGE was reading a letter from a little girl in which she stated that the hymn "The Day Thou Gavest," was her favourite of all the hymns sung during the Children's Service from the Studio on Sunday evenings. Little Willie, with his thoughts centred on times when things go wrong in the Studio, remarked that it was his favourite hymn, also. A few seconds passed before Uncle George realised what he meant. Then it dawned upon Uncle George that the aforesaid hymn always closes the Children's Session each Sunday evening.

WITHIN the past week four new overseas broadcasting stations have been picked up and re-broadcast by station 2BL, Sydney. They are RFM, Moscow; IMI, Milan, Italy; Radio Services, Java; and PCLL, Holland. Mr. Ray Allsop, 2BL, engineer, has been in touch with three other foreigners, but has not yet been able to identify them, as they have continued with their programme without announcing who they are. Most listeners are always interested when told that they are to hear a station from somewhere on the other side of the world, but speaking generally it is recognised that these broadcasts are far from perfect. The transmissions, however, are fast improving, and the Milan station, which plays operatic music (including Gilbert and Sullivan), is splendid.

**THE "EVERYBODY FIVE":** "What the world needs is not so much a good five-cent cigar as a five-tube radio set on which Ma can get the Women's Hour on one tube, while Dad gets the



political speeches on the second tube, and Sis gets the jazz on the third, Brother the sport news on the fourth, and the Kid gets the bedtime stories on the remaining."—"American Radio Journal."

MR. PEARSON, a bank manager, of forty years' residence on Norfolk Island, called in at the Studio of 2BL the other day, and presented a cheque for £8/5/. The cheque represented the proceeds of a dance held on the Island on the occasion of the Limbless Soldiers' Radio Dance night of last Friday week. Mr. Pearson stated that static was very bad on that particular evening; but nevertheless, it did not prevent the dance from being both a financial and a social success.

**THE GOULBURN "PENNY POST,"** which sponsored an appeal for subscriptions in order to equip with radio receiving apparatus the Goulburn District and St. John of God's Hospitals, reports that a contract has been made with Messrs. Noyes Bros., of Sydney, for the installation at a cost of £285. The "Post" reports that it is hoped to have the installations complete before Christmas. The response to the "Post's" appeal now amounts to £214/17/3, and an amount of £50 has been promised by an anonymous donor, so that only another £20 or thereabouts is required.

**THIRD EMPIRE BROADCAST:** To quote the Sydney press: "Radio engineers admit that Sydney has led the world in the matter of successful distant broadcasting."

**THE BRITISH ISLES** were thrilled by the magnificent programme. Unquestionably, it was the finest long-distance broadcast ever received, definitely marking a new wireless epoch.

A CABLE MESSAGE was received from the British Broadcasting Corporation stating that the whole programme transmitted from Sydney early on Monday morning, 11st October, was relayed throughout the British Isles, and that with the exception of fading for 15 minutes, the reception was excellent. Congratulations were sent by the BEC.

**THE ARTISTS** who contributed to the programme were Mr. Raymond Ellis, who sang two numbers and conveyed a special message to the artists of 2LO, London, with whom he was previously associated in British broadcasting; Madame Betis Vincent, Madame Lillian Gibson, Miss Gwen Sleva, Mr. Leslie MacCallum, Mr. Jules Van der Klei, Mr. Ewart Chapple, and the 2FC orchestra, conducted by Mr. Horace Keats.

**TIME, LAMPE, TIME:** This was the whispered warning of Maurice Dudley the other evening, when Mr. H. E. F. Lampe was inclined to exceed his time limit with one of his talks at 2LO, Melbourne, on time-pieces. These talks of Mr. Lampe's are proving just as interesting as his famous talks on Diamonds. "Sundials" was the subject selected by him a few days ago, and he brought into a short discourse all the romance of lavender and old lace of a poetical age long past, when sundials were set in terraced gardens graced by peacocks and beautiful, though elaborately frocked, maidens.

## German Radio Exhibition Reflects Development on the Continent

THE position which the Melbourne Wireless Exhibition holds as being the largest gathering of its kind in the continent is in Europe taken by the GROSSE-DEUTSCHE FUNKAUSSTELLUNG in Berlin. The Berlin show was held this year from September 2nd to 11th, the total number of stands entirely devoted to wireless being about 350, and the number of exhibitors 300. There were certain points of resemblance which would strike the Australian visitor, more particularly the large number of sets sent in to compete for the prizes offered for home-constructed instruments. As in Australia, multivalve sets of 5 valves upwards are growing in popularity, and "kits" of parts are equally numerous.

The actual building which housed this amount of wireless material is worthy of note, as though it is a hall of considerable size, with some 80,000 square feet of floor area, it has been built without the steel framework or the steel-framed roof which is usual in modern buildings of this size. The reason for the ban upon steelwork could be used for the demonstration of wireless instruments, which, of course, is not possible in exhibition buildings of the usual construction. In addition, with the object of ensuring that any exhibition held there shall always benefit from large attendances, great attention has been paid to the attractions of the place, amongst which may be mentioned a lofty steel tower similar to the Eiffel Tower in construction, which in addition to serving to support the transmitting aerial of the Berlin broadcasting station, also contains a well-appointed restaurant half-way up and an express lift to the summit. The exhibition hall itself is provided with a small theatre, and both building and tower are surrounded by pleasure gardens, which are becoming a popular resort of the capital.

During the opening days of the exhibition, demonstrations were given of communication by wireless between the broadcasting station situated in the exhibition building and an aeroplane encircling the city at a distance of a few miles, but in full view of the building. The speech both from the broadcasting station and from the pilot in reply was amplified and broadcast throughout the grounds by a loud speaker system.

*The advance of Germany  
in the radio manufacturing  
field has attracted the  
attention of the world.*

By A.J.S.

Inside the building, there was demonstrated daily the working of the new Telefunken system of wireless phototelegraphy, which is a system with revolutionary possibilities. This has been developed in collaboration with Dr. Karolus, of Leipzig, and the well-known firm of Siemens and Halske, and has been the subject of some very extended tests in Germany of late. During the period of the exhibition, it was possible for any member of the public to have a small specimen such as a signature or a similar slip sent from the sending side of the installation, and to receive in a very short time the photographic reproduction of the message from the receiving instrument installed upon another stand in the building. The system is mainly remarkable for its speed, and some recent experiments have shown that pictures or documents with a superficial area of about 16 square inches can be transmitted in 20 seconds, a speed which it is confidently hoped will be surpassed shortly. The practical side of this invention is very evident. At an early date, we may expect by means of the Karolus system to be able to read reproductions of entire pages of newspapers in the original characters immediately after they have been published in another country. It may be 1000 miles away. It can be readily imagined that such a revolutionary development would have a profound effect upon all existing systems of telegraphic or wireless transmission by Morse code, as if the new system is allowed to be developed freely, it should be possible for a sender to type a number of messages upon a small slip of paper and transmit the whole document in a few seconds as it stands, without the necessity for the words to be laboriously split up into separate letters, transmitted by the dot-and-dash Morse system, and then de-coded at the receiving end.

Another interesting feature to be seen at the Berlin exhibition was one of the new wireless demonstration vans, built to the order of the post office department, provided with a powerful multi-valve receiving set, with two loud speakers at the rear, and furnishing inside saloon accommodation for about a dozen listeners, with the necessary table, seats, and telephones. The Reichspost authorities recognise the value of the revenue derived from wireless licenses and the educational and cultural advantages which broadcasting bestows upon the user. What is more to the point, the authorities also recognise that the State has duties towards an industry from which it exacts such a heavy tribute as from wireless, and it is in fulfilment of one of these duties—that of development—that it is intended to send out such demonstration vans to any country district where the official statistics show that the number of wireless licenses is not in adequate proportion to the population.

As far as the exhibits of German makers are concerned, it is only possible to sum up such a large gathering in general phrases. There are no unexpected developments in sets or components, but everywhere a steady concentration upon detail. In the majority of the receiving sets, there is to be noticed a tendency towards the employment of simplified drum type control at right angles to the panel and calibrated directly in wavelengths, in place of the former multiplicity of knobs and 0-180-degree dials. The multiple valves, invented by Dr. Loewe and placed upon the market just about twelve months ago, have now been followed by three or four other makes of these "Melnicachrophen," as the valves are termed in German, including even a 4-in-1 valve. Taking one of the Loewe valves as an example, it may be briefly described as one which embodies the essential elements of three normal valves within a single bulb, as well as sundry grid leaks, coupling resistance, and condensers; and the use of such a valve enables German makers to produce a receiving set for loud-speaker reception from local stations, giving results claimed to be equal to an ordinary 3-valve set for under £2 retail. As further examples of the exceptional price position in certain of the wireless accessories, it might be mentioned that standard telephones (not a toy variety) are

being sold retail at 3/ per pair or even under, and loud speakers of the cone type from 18/ upwards. Loud speakers were, in fact, in considerable evidence, and there are now over 70 makers concentrating upon these, of whom all but three or four were represented at the exhibition.

German makers of dry batteries, whose exports to Great Britain amount to about £350,000 per annum, are becoming alarmed at the increasing use of battery eliminators and the popularity of sets designed to take current direct from the mains, and with the object of checking this development and consequent loss of trade to them, they are publishing figures designed to show how much more economical is the use of the regular H.T. battery for various small and normal size receivers, and showing the money saving per week at varying numbers of hours' use.

Special effort were made to attract overseas visitors this year, especially from England, in view of the fact that during 1936 for the first time since broadcasting started German wireless exports to Great Britain showed a decline.

#### 4QG INCREASES PUNCH.

THE recent alterations to the sited in many very gratifying transmitter at 4QG have reports being received at the office of the Queensland Radio Service.

One listener outside Cairns says: "Your efforts to increase your usefulness to far-away listeners appears to be successful. To-night the other stations are completely blotted out by atmospherics, but your market reports are quite intelligible, although atmospherics are very strong."

Another listener from Kingston, E.A., writes: "All present considered the change after nine o'clock much more satisfactory and worthy of high praise."

A Townsville fan says: "Undoubted increase in strength and improvement in modulation."

Perhaps the best indication of the punch 4QG now has is contained in a letter from a gentleman living only three-quarters of a mile from the Victorian station at Footscray. He says: "After the change you came in more than twice as loud as before. I live about three-quarters of a mile from S.L.O. and up to the present have always been interfered with by him when listening to your station. Now I am able to loosen the aerial coupling to such an extent that I can cut him out altogether and bring you in at much better strength than before. The excellence of your modulation has not been in the least impaired by the increase in power."

## Improving the Tone of Loud Speakers.

THE loud speaker, like the mirror, can do no more than to reflect that which is delivered to it. Poor radio programmes cannot be made into good ones; flaws of faulty transmission cannot be overcome; the distortion of amplifier or receiver cannot be corrected—by the loud speaker itself. Under ideal conditions of operation there are certain cone speakers which will provide a most realistic and pleasing rendition, because of full and impartial reproduction of the low frequencies for the bass notes and the higher frequencies for the overtones and harmonics, with everything in between. However, with most radio receivers and loud speakers, the tone quality can be materially improved upon by several simple expedients herewith described.

To begin with, the average loud speaker generally does not cover the entire range of frequencies necessary for good music and speech. If the higher frequencies are well handled, so as to provide detailed *zzzz* and crisp speech, the low frequencies are sadly neglected, resulting in shallow rendition and falsetto-effects. If, on the other hand, the loud speaker caters to the low frequencies and slight the higher frequencies, the rich bass notes are included, but there is booming and hollowness disagreeable to the extreme, while speech is muffled, blurred and indistinct, as though the speaker were doing his part in a tunnel. To obtain crisp speech on the one hand and realistic instrumental music on the other is the compromise that must be struck in loud speaker rendition. Of course, the amplifier should contribute its share if possible by way of passing all frequencies evenly and fully to the loud speaker, but even with an amplifier that leaves much to be desired the tone quality can be improved at the loud speaker end.

The radio music lover, striving for the best possible rendition of radio programmes, has three factors at his disposal so far as the loud speaker and is concerned:—(1) a choice of loud speakers, with suitable combinations of two or more loud speakers for the desired blend or tone; (2) fixed condensers, which serve to lower the pitch and especially the sharpness of a loud speaker; and (3) variable high resistances, which offer a precise control of volume from any loud speaker, as an aid to securing the desired tonal blend when two or more loud speakers are employed.

With the vast majority of radio receivers the best results are obtained by employing two loud speakers, one with a high pitched rendition and the other with a low pitched rendition. An ideal combination is to employ a

cone that is particularly partial to the low notes, together with a high pitched cone or even an old type horn loud speaker of exceptionally sharp rendition. Many an old time horn loud speaker can now be taken down from the attic, brushed up a bit and restored into favor as the soprano partner for the bass cone.

Occasionally the correct combination of loud speakers will be struck right the very first time through mere coincidence. More often, however, the combination will not balance, since one loud speaker will be too loud for the other, destroying the desired tonal blend. In this connection it is well to remember that fixed condensers and variable high resistors are handy devices for controlling the tonal qualities of loud speakers.

The shunting of a small fixed condenser of say .001 to .01 mfd. across the usual loud speaker serves to bypass the higher frequencies and therefore, takes away from the excessive sharpness of pitch. The apparent effect is also a lowering of the tone, although, as a matter of fact, the result is more a muting or softening of the music or the voice, which is highly desirable at all times. Since different capacity values are required for different degrees of muting or softening of pitch with various types of loud speakers, it will be well to experiment with values of from .001 to .01 if a critical musical ear is being catered to.

For reducing the volume of any loud speaker, without altering the tone quality, a variable high resistance should be employed, with a resistance range of almost zero to several million ohms. The universal range charcoal (practically zero to 5,000,000 ohms) gives the necessary resistance range in a single unit together with a silent and constant resistance setting. The variable high resistor may be placed in series with one lead to the loud speaker or shunted across its terminals, according to which arrangement works best. When two loud speakers are connected in series, then the shunted arrangement is preferable, but when the loud speakers are in parallel the series arrangement is preferable.

The combination of condensers and variable resistors not only permits of adjusting any loud speaker for the desired tone and volume, but also of balancing two loud speakers for a remarkable tonal blend. It goes without saying that this technique should be employed in addition to other well known aids, such as a good amplifier, a speaker filter between output tube and loud speaker, a power tube and plenty of plate potential.



# Latest News from 3LO

By H. ELLO



Fred Walker, the popular entertainer, who is broadcasting a series of novel turns from 3LO.

## Tasmanian Trip Altered.

HEAR that the Tasmanian Holiday trip to the lucky wight whose name is first drawn from the thousands of applications for a free holiday in Tasmania, has been altered in its dates.

The winner will now leave Melbourne on the 27th December, provided the annual seamen's strike is not scheduled for a date prior to that. He (or she) will return on the 11th January. This will be an improvement on the former arrangement, as it is right in the middle of the jolly holiday season in the Apple Isle.

## Coming Events.

The racing season over, with its wealth of descriptive matter almost every day, the programmes ahead seem shorn of their highlights. The engagement of Wards Morgan proved immensely popular, one of the most satisfactory 3LO Melbourne has made for a long time. Mr. Morgan has a radio personality, which is so say that he belongs to the select few who can project their pleasant nature beyond the microphone. Every listener feels that he or she would like to meet the singer of such sweet songs. That is the secret of radio success.

Professor Bernard Heintze's Trio, which has proved very successful, is to be heard again on Sunday, November 20th. The trio has been to West Australia, but is returning in time for its new engagement. On the following day another of the very popular revivals of past successes is to be given. The Essendon Operatic Society, which has made quite a name for itself in Victoria, is to give the entire performance of "The Arcadians." Few programmes are so looked-for as these.

Scots who have wi' whiskey fed at the great Highland Gathering on Saturday, November 29th, will have their wild rejoicing, together with the skirl of the kilt and the waving of the sporrans broadcast by 3LO Melbourne. Scots throughout Australia are hereby warned to listen in. They tune in to a haggis' wavelength.

## "OUR 3LO."

In connection with the suggestion of the Wireless Royal Commission that 3LO Melbourne should subsidize unsuccessful wireless broadcasting companies in other states, it is interesting to note that Victorian listeners are "up in arms" against the proposal and many letters of protest are received by 3LO every day. One correspondent states:—

"As a Victorian I would strongly protest against the proposals that would hamper our broadcasting station for the benefit of other states. We have not, unfortunately, the best harbour in the world, but we have a broadcasting station that we have grown to look upon as OURS. I hear frequently that people in other States take full benefit of our 3LO, and receive it into their homes as the honored guest of cultured and refined personality."

## Wreckers at 3LO Melbourne.

How would you like to arrive at your office and unexpectedly find it a shambles? This is what happened at the new studio of 3LO Melbourne recently when the Managing Director entered the building. Imagine his consternation and chagrin when he found wreckers in charge and his peaceful sanctum in a state of pandemonium. It appears that remodeling had been suggested by the Studio Architect, as a means of providing additional accommodation at some future date, but the scheme had not been seriously considered by the management. At the same time a new faultline was required in the Studio and this had been ordered off a builder. Some delay occurred in putting it in and one of the Studio Assistants rang up the Architect's office and urged him to have "the work proceeded with at once" (meaning the faultline). The Architect thought he meant the remodeling of the office accommodation, and at once instructed a builder to do the job. When the staff arrived a few mornings later they found the happy home "all broke-up," and then recriminations and explanations began to fill the air—and the telephone line. Anyhow, the upshot of the mixup is that the staff at 3LO Melbourne will have improved accommodation, and the administrative quarters will appear even more dignified and imposing than they were before.

Dorothea Macmaster, the Melbourne pianist, recently returned from the Continent, who has been engaged by 3LO for a number of performances.



The World's Flyers carried Burgess.



## The Safety Valve

Readers are urged to express their opinion on matters pertaining to broadcasting. If you have some grievance, if you have some constructive criticism to offer, here is your chance for expression—your safety valve. The editor assumes no responsibility for statements made by readers and published on this page, as opinions of correspondents do not represent our editorial policies or beliefs. Anonymous letters are not considered.

### MYSTERY STATION.

Dear Sir,—At 9.45 p.m. last night (Sunday, October 16), I heard a foreign station on my short wave receiver between 28 and 22 metres. The broadcasting sounded to be from a theatre, and at 9.55 p.m. the announcer spoke in broken English from the studio. The speech was very clear and I could understand words here and there, but did not catch anything resembling call letters or location. Would it be possible for you to give me some idea of the location of this station, which closed down at 10.5 p.m.

Yours, etc.,

Casino.

R. L. CRADICK.

### ROMA RECEPTION.

Dear Sir,—In fairness to myself I must correct several of the statements made regarding reception at Roma, Queensland, by Masters V. Swanson ("W.W." 21/10/27).

In the first place his letter is a belated answer to a complaint by myself made late last summer stating daylight reception was impossible. Unfortunately, for some reason unknown, a considerable period elapsed between the time it was written and its publication during which the facts had altered, and the new type of receiver was giving excellent daylight results.

Thomas W. Swanson has slipped into two errors in his report. First, unknown to him my letter spoke of summer reception, whilst his were obtained in mid-winter, when signal strength is here fully twice summer volume.

Secondly his audibility table is hardly consistent with that generally used by professional dealers, of whom I am one. I do not consider phone strength as good reception, but say no result if the signals cannot be heard across the room from the speaker. This is necessary, as sets are sold with a full guarantee—no satisfaction means money back.

Yours, etc.,

F. E. SMITH.

Roma.

### ILL!

Dear Sir,—I would be pleased if any reader could let me know what short wave station has ILL in their call sign. I think it is a New Zealand short wave experimental station. I tuned them in about 8.30 p.m. on Sunday night, the 30th of October, on the phones first, and then got them at good signal strength on the loud speaker, but every time he announced a Morse station would chup in and make it very awkward to catch his number.

We heard a song ("Coming through the rye"), sung by a lady, very clearly. They closed down about 8.45 p.m. I would be pleased if you could enlighten me on this station, as I wish to write to him and ask him for further details. I would also be pleased to know where I could find data for a short and long wave receiver, 20 to 45 and 45 to 80 metres and also covering the broadcast band.

Yours, etc.,

E. DENNISON.

Illington, N.S.W.

[We have sold all copies of "Wireless Weekly" 15/7/27. We regret we cannot forward one. Tech. Ed.]

### THREE QUESTIONS.

Dear Sir,—I have a three valve set operating a loud speaker and I am able to get Local Stations good on same. My present set seems to me to be a little obsolete, front panel contains 3 coil holder (honey comb coil), 2 dials, working 2 condensers, I think, 23 plate, old-style (not new straight line, etc., type, nor vernier dial), one rheostat, which appears to regulate the three valves, phone plug and loud speaker plug.

What I would like to know is:—

1. Could I add another stage of Audio Frequency amplification on the principle as set out in "Wireless Weekly" of 28/10/27?
2. If such is possible, would I be able to pick up inter-State stations, say, Melbourne, Brisbane or Adelaide.
3. If same is possible, would it be necessary to add a C. battery. The present set is worked on a B Eliminator, and a 6 volt A battery, and

would it be necessary to change the condensers to a later model?

Yours, etc.,

N. C. McLEAN.

104 Hay Street, Leichhardt.

Answers:—(1) No. Add radio frequency amplification. See next week's "Wireless Weekly"; (2) Cannot guarantee any results, but inter-State should be heard; (3) Old fashioned apparatus should be scrapped. Yes, a C. battery will help.—Tech. Ed.

### HARKNESS REFLEX.

Dear Sir,—I have built a two valve Harkness Reflex set as described in "Wireless Weekly," and would like to take this opportunity of stating I am more than satisfied with the results as regards local stations, as I receive 2FC, 2BL, 2GB, and 2KY perfectly, and 2UW with some interference from 2KY.

Now, can anyone help me with the following matter? Every night I can receive 3LO (Melbourne) without difficulty on speaker strength, provided that 2BL is not loud, but as soon as a loud item is sent out from 2BL, it drowns 3LO. Is there any method within reasonable cost of eliminating 2BL to enable me to get 3LO satisfactorily?

A .0001 fixed condenser in series with the aerial is not of much use. How about a wave trap, and if one is used would it reduce the volume of all stations? Perhaps I am expecting too much of this set to get 3LO satisfactorily, but as they are there in good strength it seems a pity not to get them without interference. I am using a 60 volt "B" battery.

If you recommend a wave trap will you explain how to make and fit one?

Thanking you in anticipation.

I am,

Yours, etc.,

E. A. K. DURHAM.

Greenwich.

[It is very hard to say just what you should get in your area. But it appears that a wave trap would be an advantage and particulars will be published shortly. A slight drop in volume does occur, but this is compensated for by the selectivity.—Tech. Ed.]

Ask any Radio Engineer about Burgess.

# It's All in the Air

Coming Features in the  
Broadcasting Programs

**CANTERBURY PARK** will be described in running by M. A. Ferry, the 2FC racing commissioner, on Saturday afternoon, 12th November.

**"THE SPARKLERS,"** under Rus Garling's capable direction, will be at 2FC studio on Saturday night, 12th November. All the old favorites will be there—Wilfred Thomas, Peggy Dunbar, Harrison White, Dorothy Dewar, Ernest Archer and Brunton Gibb.

**ERNA LIVING** has been giving some very clever character sketches from 2FC studio. Listeners enjoyed her study, "The Callahans and the Murphys," and will have another opportunity of hearing her on 14th November, in droll quips and jests resplendent with the peat smoke of "Ould Ireland."

**W. F. KAY** has returned to studio 2FC, and readers will be glad to know he has recovered from a tedious illness. His sidelights on the footlights are a never-ending source of interest, particularly to the older generation, who can remember with him. On Wednesday, 16th November, he will speak on "Famous Bygone Plays."

**WRESTLING** has come to stay in Sydney, and realising this, 2BL has completed arrangements for descriptions of all the principal wrestling bouts to be broadcast from the Stadium. Mr. Walter E. Withrow will describe each bout, and guarantee to give many thrills to his listeners-in.

**FOR THE FUTURE,** Friday will be the "big night" of the week for Mr. Basil Kirke. Each Friday evening, he will describe round for round, and blow for blow, the big boxing contest at the Stadium. A special platform has been erected at one of the corner-posts overlooking the ring, from which an uninterrupted view of the ring may be obtained. It is from this position that the descriptions will be given. Mr. Kirke is an able exponent of the "Noble Art," and when he becomes excited over the contest in progress, it is a genuine love of the art of self-defence, together with good showmanship, which enables him to give such a graphic description of the contest in progress.

**RAILWAY AND TRAMWAY EISTEDDFOD:** 2FC have arranged to broadcast the finalists in chorus and solo, on the evening of 12th November. The eisteddfod has been in progress all the week—from 6th to 12th November, at the Tramway Institute.

**ARMISTICE DAY:** The service to be held in Martin Place prior to the two minutes' silence at 11 o'clock will be broadcast by 2FC, and from the studio at 11.5. Brunton Gibb will give "The Eleventh Hour," a recitation of great beauty, and delivered as it will be by an old soldier, will find response in the hearts of the many thousands of listeners to whom Armistice Day is at once a day of sorrow and rejoicing.

**SUMMER, SUNSHINE AND SWIMMING:** Now that all three are here, it is just as well to seek authorities on the subjects. Mr. Mares can tell us all about the first, and health experts about the second, so Miss Matheson, connected with the Department of Education in the capacity of supervisor of girls' swimming, has kindly consented to give a talk from 2FC studio on Saturday night, 12th November, on "Swimming for Girls." Perhaps it will not hurt the men to listen too.

**TWO CLEVER INSTRUMENTALISTS,** in the persons of Stanley Colman and Len Harris, will be at 2FC studio on 9th November. Theirs is a frankly popular act, which should appeal to the listening majority.

**GWEN SELVA,** Australian soprano, has just returned from a very successful season in London, and 2FC have been fortunate in securing her for a series of studio appearances. She will sing on Thursday night, 10th November.

**MADAME LILIAN GIBSON,** who was heard with such wonderful clarity during the recent Empire broadcast, is to appear regularly at 2FC studio, and will open the series on Thursday, 10th November. Her work was commented on by Sir Henry Wood, the well-known English conductor, with whom she studied interpretation, while in London.

Roy Russell,  
baritone, now appearing with  
"Castles in the Air" company,  
who sang to London  
listeners from 2FC on  
October 17.



There is no "just-as-good" as Burgess.

**GARDENERS, ATTENTION:** For the next twelve months a permanent feature of the "Before Eight O'Clock" Talks at 5CL will be an instructing talk arranged by Lasecock's Nurseries.

**THE RADIO UNCLÉS** are constantly advising the little folk who listen in to keep smiling, and thereby keep good-tempered. For the grown-ups, it is rather difficult at times to put the advice in practice. However, there is a good time coming. A lady has written to 2BI, stating that her sister has procured one of Mr. Adams' Diet Sheets, and by following out the instructions therein, "has reduced her weight considerably, her bad temper has disappeared, and she now has the disposition of an angel." We all remember the old adage—Laugh and grow fat. With the advent of radio, the old order changeth, and it soon will be, "Grow thin, laugh, and be happy."

**"LISTEN, CHILDREN!"** Who do you think is coming back to 2FC studio on Wednesday night? Guess! And you're right, too—"Uncle Rus and Jerry." Uncle Rus has had a lovely holiday at Jenolan Caves, so Jerry tells me. I had a chat with him in the studio on Tuesday night, and he told me Uncle Rus was coming home "to-morrow." That meant Wednesday, 9th November. He had been a very lonely boy since Uncle has been away, and has been making numberless good resolutions, but I'm afraid he will be up to his old tricks again. I really think Uncle Rus spoils him a little, don't you?

The Photograph below, reading from left to right, is of Miss Nora Windle and Mr. Jack Win, of 2FC, and Miss Olga Winesley Lynn, in a scene from the play in which they recently appeared, and in which Miss Windle particularly made a big success. Mr. Win has just thrown a fit in order to secure from an awkward position in which his splintering has landed him. Miss Olga Winesley Lynn is Jack Win's youngest daughter, and is visiting Australia with her father. She has two other girls, Peggy and Maude. Peggy has won several beauty competitions, including those of "Daily Mirror" and "Daily Telegraph" newspapers in England. Mr. Win's real name is Wesley, of Wesley, his branch of the family being descended from Charles, brother of John, in his young days, changed the name to Wesley. Mr. Win's father was the famous Dr. Lynn, founder of the old Egyptian Hall, Piccadilly, England's House of Mystery, later known as Mackintosh and Cochrane; his mother was Agnes Lever, daughter of Charles Lever, the novelist. Wesley being a name that in those old-fashioned days it was not considered by the family advisable to display in connection with public entertainments, Letters Patent were applied for to change it to Winesley Lynn; these being granted, the first part of the name was omitted on public notice, and Dr. Lynn, dropping his practice, made the name of Lynn a household word, and famous all over the world. Mr. Jack Win, following in his father's footsteps after an adventurous career at home and abroad, during which he served in several campaigns, became well-known as a society entertainer. One day he received a tempting offer to appear in the music halls in some of his sketches, which he accepted. On his agent's advice he changed his name for the halls to Win, owing to the prejudice existing in those days against music halls which were not what they are at the present time. Miss Windle became his partner and they became so successful that they played one sketch alone for nearly ten years twice nightly. Except for Charity, and one or two private engagements, Mr. Win and Miss Windle have not appeared in Spelcey, but he hopes shortly to present his own entertainment of "Mirth, Music and Mystery," as he feels convinced there is an opening for a first-class family entertainment such as is given by Mackintosh and Devant in the old country. It was Major Conner, of HLO, who gave Win and Windle their first opportunity to broadcast, and it was he who recommended them to 2FC last May, where they have been ever since, their success being phenomenal.

**POPULAR SCIENCE TALK:** The series of Science Talks at present being given out from 5CL are becoming more popular than ever. The first Popular Science Talk was given by Doctor J. E. Howley and was re-broadcast by 4QG, Brisbane. The next one was also given by Doctor J. E. Howley, and was re-broadcast from 2FC, Sydney. The lecturer from 5CL on Thursday, November 10th, will be Mr. J. W. White, and his subject is to be "Wind."

**CHOSTIAKOFF:** The audiences of Studio 3LO, Melbourne, both in the Studio and "over the air," are so accustomed to a very high standard of programme that it takes a little more than an ordinary item to cause anything in the nature of a sensation. However, the singing of Senia Chostiakoff—the late tenor of the celebrated Don Cossack Choir—roused everyone to a pitch of enthusiasm, and it is good to know that he is to be included in the programme for a series of concerts. The possessor of a perfect tenor voice—exquisitely modulated—this young Russian sings his own native folksongs, emphasising the pathos which is the keynote of the national music of Russia.



Nora Windle, Jack Win, and Miss Olga Lynn as they appeared in a recent play (see paragraph above).

## The Repertory Movement

By Gregan McMahon.

(Being a Talk by him from 3L0, Melbourne.)

IT has been suggested that during the run of the plays being given at the King's Theatre by the Melbourne Repertory Theatre Society, it would be well to say a few informative words on the meaning and activities of the Repertory Society. In the first place—why Repertory? If I were asked to state in one word the difference between a repertory play and a non-repertory play, the word I should choose would be "ideas."

The commercial play is written, as its name implies, first, last and always, to make money. It may be intrinsically a good play, or it may be a bad play, it may make you laugh, it may make you weep, it may give you mental, moral, or even physical pain, but if it makes money it remains a good play according to commercial standards. A repertory play on the other hand is not primarily written to make money. It is written to illustrate in dramatic form an idea, social, moral, poetic, fantastic, or even utilitarian. The commercial play to make money must cause amusement, or create a thrill by any means whatsoever, the principal characters must be constructed to fit the capacities of the popular actors and actresses, and the plot manipulated to give adequate opportunity to the scenic artist and stage carpenter. The repertory play, written with a different object, provides characters which are true to life instead of merely true to the idiosyncrasies of individual actors. The commercial play may be—though it is not necessarily—the more effective; the repertory play is certainly the more sincere, the more purposeful and the more elevating. It must not be assumed, however, that the repertory play, because it makes you think, is necessarily dull. Its scope is universal. We find in the Repertory Theatre not only plays that are transcriptions from plain, everyday life, like Elizabeth Baker's "Chains," not only plays depressing in spirit, like Tchekhov's "The Seagull"—not only harrowing plays like Galsworthy's "Justice," plays grim and brutal like Ibsen's "Ghost," plays of character like Galsworthy's "Old English," mental exercises like Pirandello's "Six Characters in Search of an Author," but we also find plays so eminently worth-provoking as Shaw's "Pygmalion" or "The Doctor's Dilemma," so fantastically beautiful as Molnar's "Liliom," or so fanciful as the whole repertoire of Barrie.

In no other country is there such a fair field for the activities of the

Repertory Theatre Movement as in Australia.

Our tastes, our institutions are in the making. There is, therefore, the opportunity to make something of them—in mould them to a better understanding, a truer appreciation of the art of the theatre and those who write for it. The public are ready to be led, to be taught that there are many and varied phases of the theatre, full of beauty and charm and interest, which, in the hurried commercialism of the modern playhouse, are lost sight of. The Repertory Theatre can supply what the commercial theatre cannot undertake.

## Dunlop Grand Prix

THE Dunlop Grand Prix is possibly the most richly endowed cycling event in the world. It is to be run over a total distance of 685 miles, commencing on November 14th and ending on November 19th. The map appearing below shows the route which will be followed by the cyclists, together with the approximate times of arrival at the various centres. A powerful racing car will convey representatives of 3L0, Melbourne, along the whole route with the competitors, and reports or descriptions of the progress of the race will be relayed to Melbourne from the places underlined on the map, and broadcast by 3L0, Melbourne.



Distance, 685 Miles.

Section 1. Monday, Nov. 14th: Melbourne to Wangaratta	182 miles.
Section 2. Wednesday, Nov. 16: Wangaratta to Bendigo	149 miles.
Section 3. Thursday, Nov. 17th: Bendigo to Warramboul	189 miles.
Section 4. Saturday, Nov. 19th: Warramboul to Melbourne	165 miles.
Total distance	685 miles.

## "Green Maria"

Detects Wireless Pirates.

This Week's Cover Picture.

WE reproduce on our front cover this week a photograph of the British G.P.O. Wireless Oscillating Finder or Testing Van, generally known as the "Green Maria." The aerial on the roof of the van which is being adjusted by an engineer is used for the detection of oscillating receivers and the location of unlicensed receivers.

It is interesting to note that this particular van has covered a distance of over 6,000 miles in making similar reception tests in different parts of the country.

The apparatus carried consists of a seven-valve superheterodyne and a frame aerial. In the plate circuit of the detector valve is a microammeter which gives a reading depending upon the strength of the received signal. The method is to adjust the sensitivity of the receiver so as to obtain a suitable reading on the ammeter. The frame aerial is then turned through 90 degrees until the signals from the station which it is desired to measure are no longer received. The operator then employs a local signal from a carefully screened oscillator of variable output, inducing an E.M.F. in the frame aerial to give the same reading in the ammeter as that obtained from the distant station. Direct measurement by means of an A.C. milliammeter then gives, by a simple calculation, the amount of E.M.F. which is induced in the aerial. This is, of course, equal to the E.M.F. induced in the aerial by the signal from the distant station.

**WELL-KNOWN PLAYS:** Old favorites, such as "The Light that Failed," "Scarlet Fingert," "The Christian," and "Monsieur Beaucaire," have been produced at EFC studio recently by H. W. Varna and his clever company, with such success that a further series have been arranged, in which the Scott Alexander Company will also participate. Scott Alexander, who played the Portuguese Captain in "White Cargo," so successfully for twelve months, has been associated with EFC for nearly a year in regular appearances. His long experience in England and the Continent has enabled him to train his students in dramatic art with remarkable results; even the humblest applicant is quick to respond to his capable direction, as his well-balanced company goes to prove. On Wednesday, 9th November, he will produce "The Lady of Lyons" at EFC studio.

# What would you do?

IF YOU WERE OFFERED A REALLY HIGH-GRADE VERNIER ACTION, VARIABLE LOW LOSS CONDENSER, AT A PRICE ONE-THIRD OF THAT USUALLY PAID FOR SIMILAR CONDENSERS?

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Flat Copper Ribbon Pigtail,  
Best Hard Rubber Insulation,  
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Kurz Kasch 3" Bakelite Dials for above 2/3

AN EXCELLENT CONDENSER FOR ONE VALVE SET, Reinartz, Reflex, Three Coil, Neutrodyne, Browning-Drake, Super Het., or Marco—SEND FOR ONE NOW BEFORE STOCKS ARE EXHAUSTED.

## Build the

### FILADYNE ONE VALVER

Described in This Issue of "Wireless Weekly."

1 Polished Hard Rubber Panel, 14 x 8 x 3-16	6	0
1 Red Seal Vernier Lowloss Condenser, .0005	5	6
1 Wetless Mica Condenser, .00025, plain	1	6
1 Wetless Mica Condenser, .0005, plain	1	6
1 Philmore Certified 30 ohm Rheostat, one hole fixing	2	0
1 Philmore 400 Potentiometer	2	6
1 Kelford Anti-Microphonic UX Valve Socket	3	0
5in. length of 3in. Diameter Best Radion Tube	3	3
4in. length of 3in. Diameter Best Radion Tube	3	0
4-lb. 22-Gauge Green D.C. Wire	2	5
10 Engraved Bakelite Terminals	3	4
1 Best Quality Kurz Kasch 3in Dial	2	3
1 Doz. Sq. Tinned Buswires	0	10

(NOTE.—The Red Seal Condenser does not require a Vernier Dial.)

TOTAL, £1/17/7.

## THE NEW

### ECO WONDER CRYSTAL SET

is both efficient and selective

#### BUY ONE COMPLETE —

	£	s.	d.
Eco Wonder Crystal Set	1	7	6
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100 feet Electron Aerial Wire	0	2	6
2 Egg Insulators	0	0	2
1 Earth Clip	0	0	4
1 Lead in Tube	0	0	3
1 Parkson Arrestor	0	1	4

£2 4 7

#### OR BUILD ONE YOURSELF

1 Bakelite Panel, 9 x 5 x 1-8	0	2	0
1 R.C.C. .0005 Variable Condenser	0	6	6
1 "Black Gadget" Coupler	0	3	6
1 Philmore Glass Covered Detector	0	2	8
1 Kurz Kasch 3in. Bakelite Dial	0	2	3
4 Terminals, at 3d.	0	1	0
3 lengths Square Buswire	0	0	3

£0 18 0

A NEW AND WONDERFUL CRYSTAL DETECTOR. For all Crystal and Reflex Sets. Fits to panel with only adjusting knob showing.

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For QUICK SERVICE address Mail Orders to ECONOMIC RADIO STORES, 492 George Street, Sydney

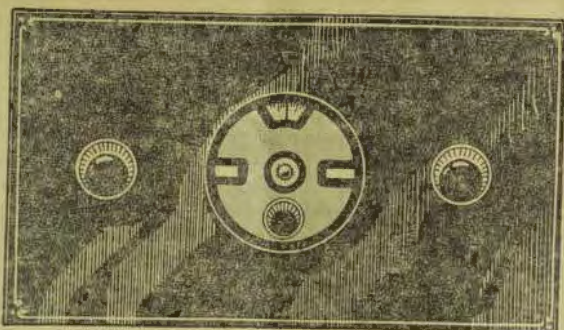
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## The Filadyne One-Valver.

**T**HERE is a scarcity of really efficient all-round one-valve receivers as it is so difficult to get any variations from the standard. The *Minerva*, Extraordinary, and Cockaday are all well known to readers of "Wireless Weekly" and all have proved how good they are.

Here is one which is a departure from the ordinary and which is very popular in Great Britain. It is known as the Filadyne, and is a variation of the product of the fertile brain of that splendid Englishman, Mr. G. V. Dowding. It appealed to the writer as a receiver with many possibilities, and it certainly has.

The volume is surprisingly good and clear, and also the range is extremely interesting. Many readers may laugh to scorn at the suggestion of mild loud speaker results from this set, but it is nevertheless a fact. The Amplion could be heard all over the wireless room very nicely on both 2BL and 2FC. Yet, please understand, that it is not the intention to claim this as a loud speaker receiver; it is really not, but still at Marrickville, three and a half miles airline from 2BL and seventeen miles from 2FC, such were the results. The aerial on which it was tested was 70 feet overall in length and of the average height of 30 feet. Suffice it to say, that the volume was surprisingly good for one valve, and the fact that 1QG, Brisbane, could be heard at night will cause the Filadyne to appeal more.

### Neatness of Appearance.

In appearance the completed receiver is very neat, and in actual control it is very simple. Looking at

the front view there will be seen the vernier dial for tuning, the only variable condenser in the receiver. To the left is the potentiometer, and on the right is mounted the rheostat. A vernier dial is advisable, for the Filadyne is quite sharp in tuning. It doesn't lose any sensitivity by this fact, really the sensitivity is surprising.

The back and plan view indicate that the baseboard components are as simple in the layout as is the panel. Right in the centre is the valve socket with two coils, one on each

side. There is also a .00025 fixed condenser. These coils are home wound, a very simple factor, for, besides being easily made, the saving is worthy of note.

### The Peculiar Circuit.

The theoretical circuit is quite orthodox. There are two coils of a given number of turns in the filament leads, both coils being tuned by the variable condenser. One coil is tapped for the aerial connection, thus giving an auto-coupled effect to produce selectivity. The reason of the position of these coils is to give radio frequency isolation of the filament. Besides serving other purposes they thus act as chokes, and as they are tuned to the frequency of the incoming signals, complete isolation is effected. Thus stability is assured. The original Filadyne of Mr. Dowding's made use of two two-hundred turn honeycomb coils as chokes, but this variation of Mr. J. English is a vast improvement, as it is not nearly so cumbersome, producing the neat layout already discussed.

### Reaction Control.

Reaction is present in the receiver and the coil in the plate circuit accomplishes this. This reaction coil is coupled to one of the tuning coils, the coupling being fixed. The potentiometer provides the means of control of this reaction, and it is seen that this potentiometer is connected across a few cells of the B battery. The slider of this potentiometer is connected to the plate of the valve so that the potential of the plate is continuously and evenly varied from zero to a few volts positive, thus producing a smooth reaction which does not alter the tuning in any way.

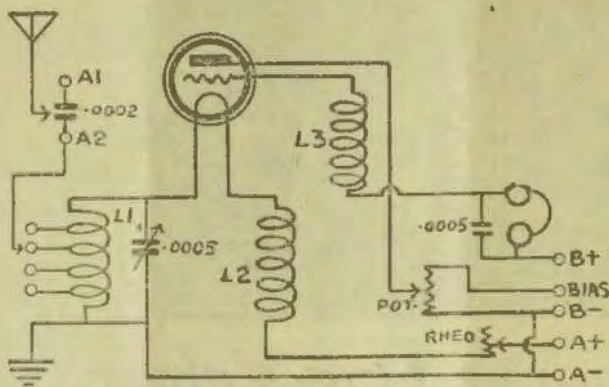
### PARTS FOR FILADYNE.

*Although the parts listed below and mentioned throughout the article were those actually used by me in the receiver described, it must be pointed out that it is not absolutely essential that they be rigidly adhered to.*

*Other parts of similar quality and technical values should function quite satisfactorily.*

- 1-Dilecto, Radion, or Hard Rubber Panel 14 x 8 x 3-16.
- 1-.0005 Advance Little Centra-ign Condenser.
- 1-Emrico Vernier Dial.
- 1-400 ohms Potentiometer.
- 1-6 or 30 ohms Rheostat.
- 1-.00025 Wetless Fixed Condenser.
- 1-.0005 Wetless Fixed Condenser.
- 1-Benjamin or Pilot Valve Socket.
- 2-Dilecto or Radion Tubes 3 inches in diameter, 1 of 8 inches in length and 1 of 4 inches in length.
- 10-Terminals, Terminal Strips, Busbar, etc.

Four or more Valve Sets demand Phileos.



Mr. English states: "... as the potential is made more positive, signals first decrease in strength and then come back to normal again, the working points for maximum signals being on the upper and lower bends of the grid current-plate volts curve.

"When the plate potential is adjusted to fall within these points, the circuit oscillates easily, especially with a close coupled reaction coil. But as the potentiometer is turned towards the two settings for maximum signals oscillation decreases in intensity, and then finally ceases. With suitable values of B battery voltage and A battery current this novel method of control gives a delightfully smooth adjustment of reaction, the circuit sliding imperceptibly in and out of oscillation. The sensitive state just prior to oscillation is obtainable with two settings of the potentiometer, corresponding to the upper and lower bends. On either setting you can hold on to a weak station just as easily as with the most sensitive capacity controlled reaction circuit."

#### Coil Construction.

The coil construction calls for very little thought. Two pieces of 3-inch diameter Dilecto or Radion tubing, one 5 inches long and one 4 inches long, are required as formers. Card-board formers of these dimensions, well shellaced, will also serve the purpose. Half-a-pound of 22 gauge D.C.C. wire, and a few turns of No. 30 gauge D.C.C. wire are used as the winding wire.

Begin by winding the five-inch long former. About three-quarters of an inch from one end drill or pierce two holes half an inch away from each other. Through these holes thread

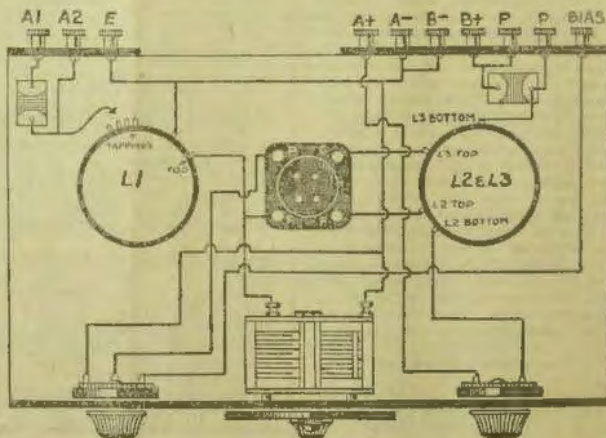
the beginning of the wire in such a way that it is thoroughly secured. Then wind on, each turn close to its neighbour, 70 turns of the 22 gauge wire. Finish off by securing through two more holes. There are approximately 25 turns of this gauge wire to the inch, so approximately three inches will be taken up with this winding. At a distance of 1/8th of an inch from the completion of this winding drill two more small holes and thread the beginning of the 30 D.C.C. wire through this, winding on 30 turns of this wire in the SAME DIRECTION as the previous winding.

The aerial coil consists of 60 turns of the 22 D.C.C. wire wound on the four-inch former. In this instance

tappings are taken at the fifth, tenth, twenty-fifth and forty-fifth turns, counting from the bottom or earth end. These tappings are taken by means of the old fashioned yet expedient method of gripping the wire tightly and making a loop. If the reel of the wire is held by someone else with a pencil through the centre hole, the winding of the coils will be rendered very easy, and no kinks will develop to mar the appearance of the completed coils. To keep out moisture and to prevent slipping a coat of shellac may be given both formers. With a three-cornered file the cotton insulation should be scraped off the tappings to allow for connection later on. Don't apply shellac to these bare connections, as shellac is a good insulator, thus precluding any signals from being heard.

#### Panel Layout.

The panel should now be prepared. Nowadays it is seldom necessary to tell the constructor to square up the edges of the panel, as most dealers in Dilecto or Radion cut the panels with smooth edges. This should be laid on a flat surface and marked out in accordance with the dimensions given in the diagram herewith. Centre punch first, then drill carefully, it often being found preferable to use a smaller sized drill as a pilot drill. Then put through the larger drills, counter-sinking those holes for the fixing screws of the condenser. Mount the panel parts and then look to the base-board.





## Baseboard Layout.

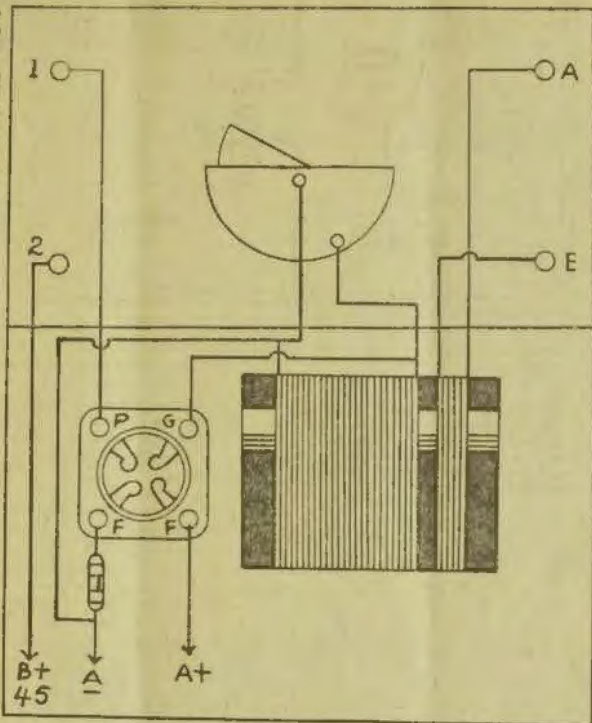
Square off the edges and sandpaper and shellac it. Fix the coils to the baseboard, small angle brackets, grid leak clips, in fact, being quite suitable for the purpose. Note just where each coil fits and arrange the aerial coil so that the tappings are accessible for the clip. The Wetless .00025 condenser can be fixed to the baseboard near to the aerial coil, two round-head wood screws serving this purpose. Remember if you haven't shellaced the baseboard to mount this condenser on a small piece of Dilecta, as this condenser is necessarily at the high potential.

The .0005 Wetless condenser across the 'phone must be used, and the same remarks may apply to this as to the .00025 condenser. When mounting the baseboard components it is just as well to fix the panel in position. When all have been placed in position the wiring may be commenced.

## Wiring.

The back of panel wiring diagram is sufficiently clear for wiring purposes, but to overcome any doubt the following description will be helpful. Join A1 to one side of the .00025 constant aerial tuning condenser, joining the other side of this to A2, and also to a short length of flex to the other end, of which is connected a battery clip for making connection with the tappings on the aerial coil. Now connect the earth terminal to one side of the potentiometer and then to the moving plates of the variable condenser, and to the bottom of the aerial coil, also to the A negative and B negative terminals on the terminal board.

The fixed plates of the variable condenser take direct to the top of the aerial coil and to one F terminal of the valve socket. The remaining F terminal take to the top of the 70 turn parallel coil, the bottom of which join to one side of the rheostat. Connect the other side of the rheostat to the A positive terminal on the terminal board. The remaining outside connection on the potentiometer join to the plate or anode bias terminal, on the terminal board, and link the centre or slider connection, of the potentiometer to the P terminal of the valve socket. The G terminal of the valve socket join to the top of the 30 turn reaction coil, connecting the bottom turn of this coil to one side of the .0005 Wetless condenser and to one of the 'phone terminals. The remaining 'phone terminal join to the B positive terminal just alongside and to the remaining side of the .0005 fixed condenser. This completes the wiring.



## Testing.

Check over the wiring with the circuit diagram, then prepare for the test. The valve to be recommended is one in which the plate impedance should be of the order of 20,000 ohms. Most makes of valves boast of a valve of this impedance, but actually a Gosser Point One red hand was used in the actual test. If your aerial is a long one, connect it to A1, which brings the .00025 condenser in series, or if a short aerial is yours, join to A2. The earth, of course, connects with E. The clip at the end of the flexible lead grip to one of the intermediate tappings on the aerial coil, say the twenty-fifth. Connect up the A battery next.

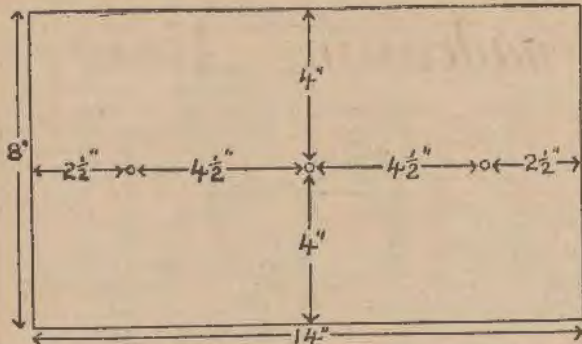
## Battery Connections.

Now comes the B battery. This should be about 60 volts, and a Hellison 80 volt was actually used on test.

Between 4½ and 6 volts of the beginning of this battery has to be tapped off for the plate or anode bias. With a Hellison this is real easy, but not so some of the other makes. To provide for this bias on the other makes, connect the positive of a 4½ volt ordinary grid bias battery to the negative of the B battery, and the tapping is thus catered for. Perhaps two of these C batteries in series would be better. This depends on the valve. Now connect up the earphones.

## Tuning.

Set the potentiometer at about a quarter of the way round from the negative end, and with the dial tune in the nearest station. It should be heard without much difficulty. Tune with the vernier dial in the right hand and the potentiometer in the left. It will be found that the potentiometer gives very smooth control of



the reaction. At the positive end will be found another position where the signals are loudest and clearest. Now raise the aerial tap to the next highest tapping. An increase in signal strength will be noticed after returning. The lower down the clip is set the greater will be the selectivity, the fifth turn—the first tap—from the bottom providing the greatest degree of selectivity.

If the set refuses to oscillate increase the filament current of the valve by turning the rheostat a little higher. Sometimes it will be found that if the rheostat is turned full on, signals disappear altogether. Don't worry over this, as this is quite usual. If oscillation still doesn't occur, then try adding a few more turns to the reaction coil, although this will very rarely be necessary. The B battery adjustment is worth attending to. Some valves work best with less B battery than do other valves, so don't forget to try different values of battery.

#### Alternate Plate Bias.

Again with some valves it will be found that sufficient plate bias is got by simply connecting the terminal for this purpose to the A positive terminal and forget the tapping of the B battery. Try both ways, but remember that this tapping should be disconnected when the set is not in use. Incidentally, too, don't use a potentiometer having a lower resistance than 400 ohms.

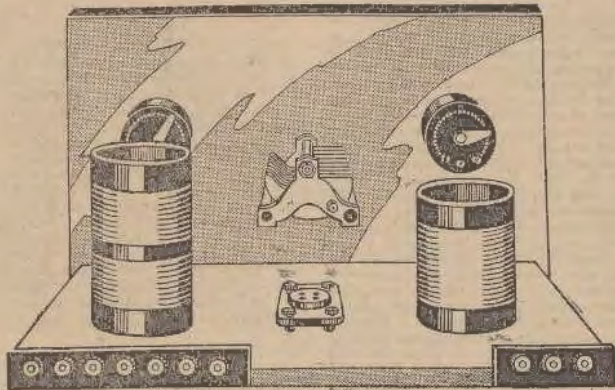
Sometimes it will be found that the reaction instead of being smooth is a bit "floppy." Lower the filament current and this will be overcome. The unusual method of controlling reaction will be soon mastered, and the owner will be surprised at the results

obtainable with one valve. The inter-State stations should be heard on the 'phones, provided the instructions are followed out and the method of control is understood. When this happens the potentiometer may be set in one position, all that is necessary to tune is the vernier dial, thus reducing the controls to one.

A stage of audio frequency may be added if desired, and a high ratio transformer, such as an A.W.A. Super audio transformer of 9 to 1 ratio, in conjunction with a good power valve, will give more volume than is really required on a loud speaker without any of the distortion usually attendant with the use of such a high ratio transformer.

**CAVALLERIA RUSTICANA:** Lovers of opera will welcome the news that there is to be another studio presentation of "Cavalleria Rusticana" (Leoncavallo) broadcast from station 3LO, Melbourne, on November 13th, under the direction of Mr. William James, who has now returned to Melbourne, after having adjudicated on many examination boards at various country centres. The excellence of these studio performances is now so well known, that there is little need for comment, but we would mention that the soprano will again be Mlle. Saffo Arnav, who will have the support of well-known principals and an excellent chorus. It is an interesting fact that whilst Mr. James was in London, he had the pleasure of being present at a performance of "Cavalleria Rusticana" at the London Coliseum, when the baton was wielded by no less a person than the distinguished composer.

**HEALTH WEEK AT 3LO, MELBOURNE:** In connection with "Health Week" final arrangements have been completed by Studio 3LO, Melbourne, to have a special speaker at each session, dealing with a particular phase of the health campaign, which actively concerns every listener. Everything has been done to make the children's hours especially attractive, and no effort will be spared to inculcate in the young mind the fundamental principles of health. It is never too early to commence to train children in the elementary rules of robust well-being—especially with regard to the teeth—and a well-known authority on this subject has been engaged to broadcast lectures for the special benefit of juvenile listeners.



Ask for the New 83X Philco Battery.

# We're Broadcasting About

## POPULAR INSTRUMENTALIST:

A welcome return visit to Studio 3LO, Melbourne, is being paid by Marion Lightfoot, who during her absence from Melbourne has been meeting with great success on the concert platform in both Sydney and Adelaide. It is not generally known that Miss Lightfoot is a member of a well-known musical family—who gained considerable reputation a few years ago, both in England and Australia—her father being known as the "Australian Tenor." For her second visit to Studio 3LO, Melbourne, Miss Lightfoot will contribute selections upon the English concertina, banjo and steel guitar, and, in addition, will render vocal items to her own instrumental accompaniments.

**THE MOUTH ORGAN:** Speaking about competitions, the recent Mouth Organ Competition, organised by Studio 3LO, Melbourne, unearthed a tremendous amount of latent talent, and also actively demonstrated the immense resourcefulness of the somewhat despised maker of melody—the mouth organ. In the hands of a clever performer, the mouth organ may be practically made to do anything—it can represent the rich resonant tones of a pipe organ—and the brisk melody of the pipes. Every competitor in this competition had a speciality of his own, and not a few of them attempted operatic selection with marked success. The mouth organ is an instrument which broadcasts particularly well, and listeners may look forward to hearing the prize-winner over the air in the near future.

## DESCRIber FOR LADY LISTEN.

**ERS:** Quite a new innovation was struck by Studio 3LO, Melbourne, an engaging the services of Miss Dorothy Dunckley to broadcast descriptions of the frocking at Henley, Cop Day, and the Oaks. That the venture was a distinct success has been proved by the amount of correspondence that has reached the Studio in connection with these events—especially from country folk, who maintain that they were given an additional interest in the functions, by the breezy—and often very witty—descriptions of the various toilettes. Possessing a very artistic "dress" sense, a rich fund of humor, a well-modulated voice few people in Melbourne are more suitable for this particular work. It is interesting to note, that in the recent "One Act Play" Competition, she secured fourth place, and has, on several occasions, produced her own plays (and acted in them) over the air from Studio 3LO, Melbourne.

## CHILDREN'S COMPETITION:

The Annual Radio Song Competition for Children, promoted by Studio 3LO, Melbourne, is meeting with greater success than ever this year, and entries have been pouring into the Studio from budding Carouses and Tetrazinis. By the time this gets into print, the voice trials will have commenced, and if past years are anything to go upon—the cheerful adjudicator, Mr. Alfred B. Lane, will have a difficult task in selecting the winner. The girls all seem to favor a particular song last year, almost every competitor selected "The Lilac Tree"—and this year "Little Town in the Old County Down" seems to run it very closely in point of favor.

**S. H. BOWDEN** has arranged a rather unusual series of talks from 2FC studio. He will offer listeners some valuable advice on how to do things—"How to See a Picture," "How to Read a Book," "How to Listen In," etc., etc. Most of us pride ourselves we are conversant already with the latter noble art, but readers would do well to listen to Mr. Bowden, who has a happy knack of finding out the best way to handle anything—even a wireless set. He will speak from the studio on Nov. 12th.

**FREE TRIP TO TASMANIA:** It is generally round about this time of the year that most of us begin to consider the possibility of our annual holiday—where we shall go, and last, but not least, how shall we be able to afford it! However, to every listener comes an equal opportunity of spending a fortnight's holiday in Tasmania—the Sister State whose beauties of sea and country furnish a never-ending source of delight to holiday makers. Final arrangements have now been completed by Studio 3LO, Melbourne, for the transport and accommodation of the fortunate listener selected—and all that remains for listeners to do, is to write their name and address, together with their license number on a sheet of note paper, place it in an envelope and address to Studio 3LO, Melbourne-place, Melbourne, marking the envelope "Spend Christmas in Tasmania"—and patiently await the result. The envelopes received will all be placed in a large receptacle from which one will be drawn and the sender of which will be awarded the prize.



The Marine Distress Signal Receiver of New York. Always tuned to 800 metres, the standard wave length for the transmission of distress signals, this receiver acts as a watchdog for SOS signals. Immediately a call is heard a switch closes the entire broadcasting circuits of New York.

# A Section for the Trade

## THE NEW PHILIPS' "FOUR-FIFTEEN."

### Super-Detector.

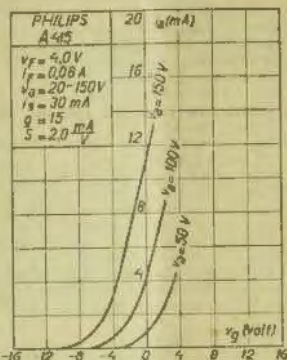
Since every Valve Receiving Set of necessity employs a Detector Valve, the advent of a particularly sensitive tube specially designed for detection is of interest to all. Philips Radio are the manufacturers, and the valve is named the "Four-Fifteen"—although under the ordinary Philips notation system its correct designation is—the A 415. It is a 4-Volt Valve consuming only .08 of an ampere on the filament, which is of the usual Thoriated Dull Emitter type.

Perhaps, the most remarkable characteristic of this new valve is its steep slope—2 mA/V., which indicates the variations of plate current relative to variations of grid potential. The "Four-Fifteen," therefore, is capable of giving a very high energy transfer without distortion—a most desirable feature. The suitability of a valve as Detector cannot be fully ascertained from an examination of the Characteristic Curve on account of the degree of exhaustion and state of the medium in which the elements are working, having a material influence upon the sensitivity of the tube to impress currents of extremely low magnitude.

In many cases, when evolving an extremely sensitive Detector, undesirable internal noises are manifest when the valve is worked at its most critical point, but this is definitely not the case with the new Philips "Four-Fifteen." Owing to the minute precision necessary in the placement of the electrodes relative to each other, unless extreme care is taken and exhaustive tests made, it is impossible to be certain that every Super-Detector possesses the same degree of required sensitivity—but after trying several of the new "Four-Fifteens" taken straight from the cartons, practically no variation whatever was apparent.

The Amplification Factor is 15, and in outward appearance this valve differs in no manner from the other well-known "A" types of Philips Valves—such as the A 409 and A 608. On account of the exceedingly low internal resistance of the "Four-Fifteen," it is excellent as a 1st stage Low-Frequency Amplifier used in conjunction with transformer coupling, and the transfer of the bass notes is particularly pure and faithful.

The value of the grid condenser should be about .0002 microfarad, and the grid return should be connected to



- $v_f$  = filament voltage
- $i_f$  = filament current
- $v_a$  = anode voltage
- $v_g$  = grid voltage
- $i_g$  = total emission
- $g$  = amplification factor
- $S$  = slope

### The Curve of 415

the "positive" side of the filament through a grid-leak of from 3 to 3 megohms. The use of a potentiometer is recommended where critical adjustment is desired.

The plate voltage should be from 20 to 100 volts, according to the type of circuit employed. When used as a L.F. amplifying valve the following negative grid-bias should be applied:

- 1.5 to 3 volts at a plate voltage of 100 volts.
- 3 to 4.5 volts at a plate voltage of 150 volts.

It is fitted with both English and American bases.

D.X. listeners are particularly enthusiastic about the new "Four-fifteen" for short wave detection, and Mr. Ray Allsop (well-known throughout Australia for his valuable work in connection with International broadcast relays) says of the "Four-Fifteen"—"It is the finest Detector I have ever used."

### A.W.A. SUPERAUDIO CHOKE COIL

We have received a sample of the new A.W.A. Superaudio Choke Coil, which are now being produced by Amalgamated Wireless (A'sia) Ltd.

The following technical data has been supplied by the A.W.A. Research Laboratories. In designing a choke for impedance coupled amplifiers three very important factors must be taken into careful consideration. These are as follows:—A. The impedance must be high with respect to the valve so that all frequencies will be amplified to the same extent. B. The D.C. direct current resistance must be relatively low so that the ampere turns value will not cause saturation of the core and thus give rise to distortion. C. The size and the cost of the unit.

Usually the detector valve has a relatively high resistance and a comparatively low plate current. It is possible then to wind a choke with many turns of fine wire without danger of the core being liable to saturation. These factors have been provided for in the Loo Henry A.W.A. Superaudio Choke.

Generally the valves used in the amplifier stages of a receiver are supplied with large values of "B" battery and the current is consequently high. The choke must, therefore, be wound with large size wire to carry this current, and consequently the number of turns must be reduced. This in its turn reduces the value of the choke. However, as the value used in these stages has a low impedance the 50 Henry A.W.A. Superaudio Choke is a suitable unit for use in these stages of impedance coupled circuits.

The plate current of the power valves, which have become so popular, is greater than can be safely handled by the usual type of loud speaker. To prevent overload of the windings it is necessary to prevent the steady D.C. of the plate current flowing through them. This may be conveniently arranged by the use of the 25 Henry A.W.A. Superaudio Choke which is especially designed for this purpose.

In appearance these are identical with the well-known A.W.A. Superaudio Transformers, in attractive black crystalline finish, but having, of course, two terminals instead of four.

### RADIOES 180 DEG. THREE CIRCUIT TUNER.

This new Radiokes 180 coupler has been submitted by the manufacturers, The Metropolitan Electric Co., Ltd., of this city.

This is the first of this type tuner to appear on this market, and is a precision instrument of considerable merit and numerous uses; the most popular uses, however, being the standard regenerative three circuit

receiver, reflexes and various Reinartz circuits.

The most striking feature in appearance is its excellent finish and diminutive size. The windings are of brilliant green silk covered wire on a highly polished black composition support, the rotor being polished black bakelite, and all metal parts highly polished nickel.

The tuner being quite small, does not "hog" panel space, does not create excessive "stray field," and does not appreciably pick up energy from outside fields and near-by transmitters.

The most important feature of this tuner is the smoothness of control of regeneration secured by the rotor movement. This great improvement over all other couplers is accomplished by having the rotor set at an angle of 45° to the shaft, so that a variation from minimum to maximum regeneration demands a movement of 180° of tuning dial, giving indistinctly finer variation than the old pattern which turns through only 90° of arc.

For ease of assembly this coupler is designed for single pole mounting, and all connections are easily accessible and plainly marked, being fitted with terminals in addition to the now famous Radiokes "solder all the way" soldering lugs.

The sample arrived well packed and boxed in the well-known orange and black carton, and is very reasonably priced at 14/6.

#### TRADERS' DINNER.

On Wednesday, October 26th, a dinner to Mr. Louis Abrahams, of the firm of Louis Com Wireless Pty. Ltd., Melbourne, was given at the Ritz by the Radio Traders of Melbourne. Mr. Abrahams, who has been one of the most prominent figures in the Radio industry in Australia, sailed by the "Ventura" on November 8th, and will spend the next five months in the United States.

Those were present at the dinner representatives from all sections of the Radio industry in Melbourne, including several visitors from other States, amongst whom was Mr. H. J. Haggood, of Manufacturers' Products Pty. Ltd., Sydney. We wish Mr. Abrahams a pleasant journey and a safe return.

"We are advised by New System Telephones Pty. Ltd., of 280 Castlereagh-street, Sydney, that they will send post free, on request, the "Burgess Book of Adventures" which contains twelve graphic real life stories in which Burgess Radio Batteries played their part. The preface is written by Captain Frank Hurley, who is well known to the radio public. The stories tell of "Byrd's amazing flight to the North Pole," "The Gallantry of Captain Wilkins," "With Dr. Rice into unknown Brazil," and many other equally thrilling stories.

#### GET ONE OF THESE.

The Burgess Battery Company recently produced a book of 20 pages devoted to full constructional details for the building of a most modern type of short wave receiver. In the past, the short wave receiver has been designed primarily for the reception of Morse signals, but the particular receiver described in the Burgess book is especially constructed for the reception of long distance short wave broadcasting, and embodies quite a few features which have not so far been put forward by writers on articles of this nature. The book is known as "High Frequency Radio Receiver No. VI, of 9XH-DEK."

New System Telephones Pty. Ltd. (Burgess Battery Department), 280 Castlereagh-street, Sydney, are able to supply copies of this engineering circular free, on request.

LIVING UP at Condobolin is a very old sailor and radio enthusiast whose one ambition is to hear "The Death of Nelson" sung over the wireless. He writes to 2FC: "I am an old naval man who served in the wooden walls of England and full square rigged masts. In my younger days the most popular songs at concerts was 'The Death of Nelson.' I have not heard it sung for very many years and I wish you could persuade Mr. Lawrence Macandlay to sing it. My old friend, Captain Hurley, who is a patriot to the backbone, would help in the composition, which I know would be appreciated by everybody. I would give everything I have to hear that grand old song once more. A composer could make a hit with a composition of the Victory going into action, remarks passed by Nelson and Captain Hardy before the battle commenced, songs by the crew, cheers, the boatwain's whistle, the bugle call, the roar and noise of battle, the song itself, the fatal wound, Nelson's request to attend the other man first. 'Will no one bring Hardy to me? Surely he must be killed.' Hardy in cockpit congratulating Nelson, etc., etc."

The old salt leaves the working out of his ideas to Station 2FC. Evidently he has in his mind the broadcast of a full battle scene like "Old Ironsides," which was recently done by 2FC. His scheme will probably be carried out in the near future, but in the meanwhile, on Trafalgar Day (Oct. 21), his admired Lawrence Macandlay will sing "The Death of Nelson." There will be a happy man in Condobolin that night.



#### NEW DIRECTOR FOR A. BEAL PRITCHETT (AUST.), LTD.

An interesting little ceremony took place recently on the occasion of a visit to Sydney of Mr. A. S. Duke, the manager of the Victorian office of A. Beal Pritchett (Aust.), Ltd., the factory representatives for the Mullard Wireless Service Co., Ltd., manufacturers of the Mullard Master Valve, famous for its special P.M. Filament

and Ferranti, Limited, manufacturers of the Ferranti Audio Frequency and Output Transformers. Mr. Duke was appointed to the board of directors of the company. Melbourne radio fans and aesthetes eagerly look forward to Mr. Duke's periodical lectures on "The Thermionic Valve," and other kindred subjects. A photograph of Mr. Duke, with his managing director, Mr. A. Beal Pritchett, is shown on this page.

Buy a Burgess and Cut Battery Cost.

# The Action of the Detector

**I**N spite of the fact that a great deal has been written at various times about detection or demodulation, the average experimenter is just a little bit hazy as to just what action takes place. There are two general methods in use, one dependent upon the rectifying properties of the tube, and the other the grid leak and condenser method. The two methods will be outlined, and the reason for, and the advantage of using them in different cases.

The method which uses the rectifying property of the valve is sometimes called the C battery method of detection. The radio waves as they are picked up by the antenna are, of course, of such high frequency that they are above the audible range and we are interested more in the audio frequencies which are superimposed on the carrier wave at the broadcasting station. In order that these variations in amplitude of the carrier wave may effect the telephone or loud speaker we must rectify them. Perhaps the best way to get an idea of the action is to study the plate current—grid voltage curve, as shown in Figure 1. The curve has a decided bend near the lower end, is comparatively straight for a space and then curves off again. The various grid voltages are plotted on the horizontal line and the corresponding plate current values on the vertical lines. Now if we place the grid battery voltages at some value, say, A, on the curve, which may vary according to the valve from minus 3 to as much as 7, we are operating at a point where when the grid voltage increases the change in current in the plate will be fairly large, while if it decreases, the plate current cannot go any lower and no very great change will take place. Figure 2 B represents the incoming wave, V the rectified wave and D the form of the current in the 'phones. Total rectification is shown in the curves, a state which is never met with in actual practice.

## Action of the Grid.

The grid as it is made alternately positive and negative in relation to the C battery voltage is rectified, thus producing the effect desired. The value of this method of detection lies chiefly in that the tube operating in this way will take considerably more variation in current without introducing distortion than the grid leak condenser combination. This scheme is, however, less sensitive

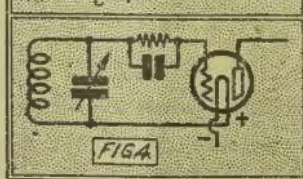
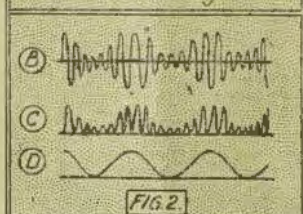
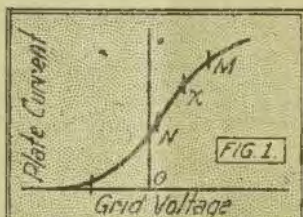
## A General Discussion of Rectifying Property of Valves.

By K. B. HUMPHREY

than the other. Where large quantities of power, or rather voltage changes, are supplied to the detector by means of several stages of radio frequency amplification, this method is the best. It may be seen easily that the upper portion of the curve could be used in much the same manner. There are several objections to this because the grid will be positive at all times and distortion will be in-

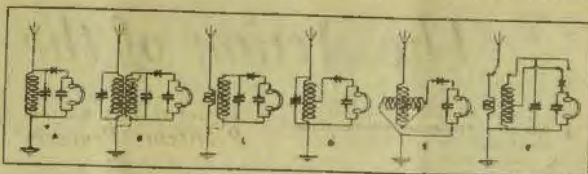
troduced. The grid will also draw a certain amount of current which interferes with the natural operation of the valve. The amount of current taken by the valve will be considerably greater than that taken by the valve with a full negative bias. As valves vary to some extent, the C battery can best be adjusted by means of a milliammeter in the plate circuit as shown. The C battery is increased in value until the plate current is brought down to about 0.1 of a milliamperes in value. By shifting the C battery voltage it will be easy to determine when the valve is operating on the knee or lower bend of the curve.

The action of the valve as a detector when using the grid leak and condenser, as shown in Figure 4, is entirely different than the method just outlined. In this case the grid is made positive and a small current flows through it the same as the plate circuit. Now, when the radio frequency wave is impressed on the circuit as before, it passes through the unidirectional properties of the valve. That is, one-half of the wave only will flow through the circuit. There are two ways of looking at this action. Suppose in the first case we consider that the grid leak is left out entirely. When a radio wave comes in the positive half of the cycle will easily flow through while the negative half cannot get by the grid. The consequence is that a negative charge builds up on the grid which, in turn, affects the tube in the normal manner as an amplifier and the plate current is reduced. If no grid leak were present this charge might accumulate to an extent where the plate current would be entirely stopped and what is known as choking would result. The leak, however, allows the charge to leak off and consequently the variations of the grid potential follow more or less regularly the variation in amplitude of the incoming signals. Another way of looking at it is to consider a small current flowing through the grid leak and thence through the tube at all times. This means that there is a certain potential impressed on the grid due to the drop across the leak. The piling up of the negative charge as outlined before, reduces the current flow through the grid leak, as it is opposite in potential to the grid voltage and thus reduces the voltage on the grid. The plate current correspondingly decreases.



**More Sensitive.**

This method is more sensitive than the C battery method as the rectification takes place in the grid circuit of the valve and is then amplified in the usual way. The rectifying value of the plate characteristic is not taken into consideration, as the tube is working on the straight portion of the curve. This point is indicated at X on the curve given in Figure 1. In the first method outlined the amount of grid swing without the distortion can take place between A and M and travel along the straight portion of the curve, while in the grid leak method the swing can only travel from X to M and from X to N, a distance of only about half as much as the other without running off the straight portion of the curve.



Some alternative crystal circuits.

## The Fourteen Points of President Wireless.

The new detector valve such as the 200A are a gas filled type and may be used with either method of detection, as seemingly there is very little difference in the observed results, outside of those outlined as being characteristic of the two methods. The gas filled type of detector is somewhat more sensitive than the regular hard valve. Not so much difference will be noted on the strong local signals, but when the DX stations are on considerable increase in volume will be noticed. These valves can usually be substituted in the regular circuits without any change, though some recommend that a negative bias be used. Personally, I have not noticed enough difference to make it worth the trouble of changing over the detection method when placing this valve in a standard set using the grid leak method of detection. The output curve of this type of valve is considerably above that of the ordinary hard valve for weak signals.

Rule 1. Should your friend, while visiting you, remark (as some uncouth persons will) that his receiver is much superior to yours, agree without dispute or reservation; explain modestly that your own receiver is merely "a tolerably good job."

Rule 2. Never offer suggestions regarding the operation of the friend's receiver or evince the slightest desire to operate it. On the other hand, should a friend who visits you manifest a wish to operate your receiver, surrender the dials to him immediately.

Rule 3. If a friend states that his receiver brings in stations at greater distances than your own, accept the assertions with complete credulity, not offering in rebuttal any facts regarding the performance of your receiver.

Rule 4. Should a friend's wife, while visiting you, inadvertently continue talking while you attempt to tune in a distant station, thereby causing the call letters to be indistinguishable, do not request her to cease speaking; on the contrary, extend your courtesy to the point of encouraging her to continue her discourse.

Rule 5. If a friend's child ruins your new cone speaker in a youthful spirit of play, remark nonchalantly that, "That is nothing—nothing at all!"

Rule 6. In the event that you are favored above your fellows in receiving China, say nothing about it the next day at your office or club; remark merely that you found the reception tolerably good last evening.

Rule 7. Should your friend indicate that he wishes advice in the selection of a receiver, or assistance

in correcting defects, hesitate before tendering aid.

Rule 8. As women express the explicable idiosyncrasy of preferring mere programmes above the accepted practice of ascertaining how many stations can be logged during a given evening, you should yield to this peculiarity.

Rule 9. If your wife, while wearing the head 'phones, inadvertently shouts, do not comment on the fact; while wearing the head 'phones yourself, keep your voice modulated to refined quietness—particularly when announcing the reception of a distant station.

Rule 10. If your wife betrays displeasure when you spill battery acid on the living room rug, maintain a gentlemanly silence.

Rule 11. A refined radio enthusiast will always tune in programmes that please other members of his family, completely disregarding his own wishes.

Rule 12. If your maid or a member of your household thoughtlessly causes your valves to become burned out by crossing battery wires or otherwise disturbing your receiver while cleaning it, never mention the fact.

Rule 13. Should a service man or other trades person whom you summon to correct defects state that you need new valves or batteries, immediately order the accessories mentioned, without question; at the same time refrain from keeping any check on the time used by the fellow in remedying the trouble.

Rule 14. When static, the squeal of a neighbor's receiver, or the noise of his heating pal blots out the call letters of a station to which you are listening, the correct expression is: "How exceedingly unfortunate," spoken in a tone of mild humor.

A RECENT OFFICIAL announcement informs us that the returns from 41 establishments in the Canadian radio manufacturing business show that the production of radio sets, parts and batteries in the Dominion during 1926 was valued at 6,277,544 dollars, as compared with the total of 7,110,628 dollars during 1925. The exports to Canada of radio sets and parts during 1926 amounted in value to 2,872,991 dollars, and included the following items:—32,768 receiving sets, worth 1,238,680 dollars; 96,059 valves valued at 113,837 dollars; and parts and accessories valued at 1,526,474 dollars. No statistics were given of imports from Great Britain and other countries.

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## Build Your Own 8-Valve Superheterodyne

With the REMLER SUPER KIT, and  
Enjoy All-the-Year-Round Reception

*With the REMLER the Music or Speech is Filtered before being Amplified, therefore ensuring True Reproduction and Wonderful Selectivity. Simple to operate, most economical on Battery Current, consumes less current than the average 4-valve set. Local, Interstate, and New Zealand Stations with Loop Aerials and absolutely free from interference.*

KIT

£7/10/-

Complete Parts with  
all Accessories  
£27/8/9



KIT

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Complete Parts with  
all Accessories  
£27/8/9

**NO OUTSIDE AERIAL.**

*The Remler Kit consists of 1 Oscillating Coil, 3 Intermediate Transformers, and 1 Filter Transformer.*

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384 PITT STREET  
Opposite Anthony Harders & Sons



# BROADCASTING PROGRAMMES

for the COMING WEEK

**Friday, Nov. 11**  
**2FC, SYDNEY.**

**Farmer's Broadcasting Service.**  
Wave Length, 442 Metres.

**EARLY MORNING SESSION—7 to 8 a.m.**

**MORNING SESSION.**

- 10 a.m.—"Big Ben" and programme announcements.
- 10.5 a.m.—Studio music.
- 11.10 a.m.—Last minute sporting information by the 2FC Racing Commissioner.
- 11.15 a.m.—"Sydney Morning Herald" news service.
- 11.20 a.m.—From the Cenotaph, Martin Place, Sydney.

The Annual Commemoration of Armistice Day.  
A description of the arrival of representatives of the Army, Navy and Air Forces. Reception of His Excellency, the Governor, Speeches by His Excellency, the Governor, and the Hon. the Premier of New South Wales.

- Description of the Crosses.
- Two minutes' silence.
- The Last Post.
- Placing of the wreaths on the Cenotaph.
- "God Save the King."
- 11.25 a.m.—From the Studio.
- A.P.A. and Reuter's Cable Services.
- 11.29 a.m.—Studio music, appropriate to the day.
- 11.35 a.m.—A talk on Home Cooking and Recipes by Miss Ruth Furst.
- 11.50 a.m.—Close down.

**MIDDAY SESSION.**

- 12 noon—"Big Ben." Announcements.
- 12.5 p.m.—Stock Exchange first call.
- 1.5 p.m.—Official weather forecast, rainfall.
- 12.40 p.m.—Studio music.
- 1.45 p.m.—Summary of "Sydney Morning Herald" news service.
- Bugly wireless news.
- 12.55 p.m.—Studio music.
- 12.50 p.m.—Marching music for school children.
- 12.40 p.m.—Genevieve Engel, soprano: "Killarney" (Ballad).
- 12.45 p.m.—The Oak Hall Instrumental Trio.
- 12.25 p.m.—Studio music.
- 1.30 p.m.—"Big Ben." Weather Intelligence.
- 1.35 p.m.—"Evening News" midday news service.

- Producers' Distributing Society's Report.
- 1.25 p.m.—The Oak Hall Instrumental Trio.
- 1.20 p.m.—Stock Exchange second call.
- 1.20 p.m.—Marching music for school children.
- 1.15 p.m.—Genevieve Engel, soprano: "Sing my Mother Taught Me" (Dvorak).
- 1.10 p.m.—Studio music.
- 1.05 p.m.—The Oak Hall Instrumental Trio.
- 2 p.m.—"Big Ben." Close down.

**AFTERNOON SESSION.**

- 3 p.m.—"Big Ben" and announcements.
- 3.30 p.m.—A Recital by the pupils of Mr. Walter Thorman.
- 3.45 p.m.—Marching music for school children.
- 3.40 p.m.—From Farmer's Tea Rooms.
- Flourish Great, soprano.

- 3.40 p.m.—The Oak Hall Instrumental Trio.
- 3.35 p.m.—From the Studio.
- An Item from the Recital by Mr. Walter Thorman's pupils.
- 4 p.m.—From Farmer's Tea Rooms.
- New Hallett, mezzo.
- 4.5 p.m.—The Oak Hall Instrumental Trio.
- 4.15 p.m.—From the Studio.
- Lewis Harris, baritone: "Punch" ("Tagliando") (Lorenzovelli).
- 4.05 p.m.—From Farmer's Tea Rooms.
- Flourish Great, soprano.
- 4.25 p.m.—The Oak Hall Instrumental Trio.
- C. McNeilly, tenor.
- 4.05 p.m.—From Farmer's Tea Rooms: New Hallett, mezzo.
- 4.45 p.m.—From the Studio.
- Stock Exchange, third call.
- 3.45 p.m.—Lewis Harris, baritone: "For You Alone" (Gabi).
- 4.50 p.m.—Studio music.
- 4.25 p.m.—G. McNeilly, tenor.
- 4.07 p.m.—Studio music.
- 3 p.m.—"Big Ben." Close down.

**EARLY EVENING SESSION.**

- 5.40 p.m.—The Chimes of 2FC.
- 5.45 p.m.—The "Hello Man" talks to the Child.
- 6.15 p.m.—Jewie Smith, contralto: Songs for the Bible folk: (a) "In the Sweetheart."
- (b) "Baby, Don't Sleep-night."
- 6.22 p.m.—Singing time for the young folk.
- 6.40 p.m.—Studio music.
- 6.50 p.m.—Late sporting information by the 2FC Racing Commissioner.
- 7 p.m.—"Big Ben."
- Dalery's market reports (wheat, wheat and sheep).
- 7.4 p.m.—Fruit and vegetable markets.
- 7.10 p.m.—Weather and shipping news.
- 7.10 p.m.—"Evening News" late news service.

**NIGHT SESSION.**

- 7.30 a.m.—Programme announcements.
- 7.25 p.m.—From the Studio:
- Louise Humphrey, lady baritone:

- (a) "That Just gets me out on the Day" (Lullaby).
- (b) "Wonderful Eyes" (Bostons).
- 7.40 p.m.—A talk on Sport.
- 8 p.m.—"Big Ben."
- Creda Wood, soprano.
- (c) "Brush Me" (ZHU).
- (d) "Spanish Dance No. 6" (Garaate).
- 8.5 p.m.—James Smith, ELO contralto: (a) "Songs my Mother Taught Me" (Dvorak).
- (b) "The Early Morning" (Graham Fowl).
- 8.15 p.m.—Win and Windie, English entertainer.
- 8.20 p.m.—Louise Humphrey, lady baritone: (a) "Glad to Brown-Steak" (Gaily).
- (b) "I'll See You West Away" (Newell).
- 8.45 p.m.—Alfred O'Shea, Australia's Greatest Tenor.
- 8.30 p.m.—Win and Windie, English entertainer.
- 8.47 p.m.—Frank McEachern, baritone: (a) "Lauda" (Bunnett).
- (b) "Rolling down to the" (German).
- 8.55 p.m.—Gill Mack, violinist.
- (c) "Blow of the North" (Chomlaine).
- (d) "John Bonarrie" (Kyslate).
- 9.2 p.m.—Late weather forecast.
- 9.2 p.m.—A Theatre Transmission (by permission of Messrs. J. G. Williamson, Ltd.).
- 9.55 a.m.—From the Studio.
- Jewie Smith, ELO contralto: (a) "None but the Weary Heart" (Tschakovsky).
- (b) "The Owl" (Wells).
- 10.3 p.m.—Cec. Morrison and his Dance Orchestra.
- 10.40 p.m.—Alfred O'Shea, Australia's foremost tenor.
- 10.45 p.m.—Cec. Morrison and his Dance Orchestra.
- 10.50 p.m.—Frank McEachern, baritone: (a) "Diana goes West" (Soderman).
- (b) "Demolish Cream and Cider" (Sanderson).
- 10.55 p.m.—Late weather forecast.
- 10.50 p.m.—Cec. Morrison and his Dance Orchestra.
- 10.50 p.m.—Len Madrie, popular baritone.
- 10.57 p.m.—Late news and announcements.
- 11 p.m.—"Big Ben."
- Cec. Morrison and his Dance Orchestra.
- 11.10 p.m.—Len Madrie, baritone.
- 11.15 p.m.—Cec. Morrison and his Dance Orchestra.
- 11.20 p.m.—National Anthem.
- Close down.

**NEW SOUTH WALES "A" AND "B" CLASS BROADCASTING STATIONS.**

**2FC**—Farmer's Broadcasting Station, Ltd., Sydney, wavelength 442 metres, power 5000 watts.

**2BL**—Broadcasters' Ltd., Sydney, wavelength 213 metres, power 5000 watts.

**2BH**—Theosophical Broadcasting Station, Ltd., Sydney, wavelength 216 metres, power 5000 watts.

**2BK**—Trades and Labor Council, Sydney, wavelength 280 metres, power 1500 watts.

**2BW**—Otto Handel, Sydney, wavelength 267 metres, power 100 watts.

**2BN**—Mackler Bros., Bathurst, wavelength 274 metres, power 250 watts.

**2BE**—Electrical Utilities Supply Co., Sydney, wavelength 393 metres, power 250 watts.

**2BS**—Beylie Electric Co., Sydney, wavelength 314 metres, 100 watts.

**2BD**—H. A. Douglas, Newcastle, wavelength 228 metres, 100 watts.

**2BL, SYDNEY.**  
Broadcaster's Ltd.  
Wave Length, 353 Metres.

Friday

**EARLY MORNING SESSION.**

- 7 a.m. to 8 a.m.
- MORNING SESSION.**
- 10.30 a.m.—R.P.O. Clock and chimes.
- Musical programme from the Studio.
- 10.40 a.m.—News from the "Daily Telegraph" District.
- 10.50 p.m.—Musical programme from the studio.
- 11 a.m.—O.P.O. Clock and chimes Announcements.

Burgess Went over the Pole with Byrd.

11.5 a.m.—Musical programme from the studio  
11.5 a.m.—Talk on "Cresquet" by Miss Gwen Varley.  
Social Notes—Replies to correspondents by Mrs. Gordon. Talk on "Sweet Making" by Principia.  
12 noon—G.P.O. Clock and chimes.  
Special Ocean Forecast and weather reports  
12.3 p.m.—Musical programme from the studio  
12.5 p.m.—Information—Mail, Shipping and Port Directory.  
12.55 p.m.—Hour in call by wireless.  
12.13 p.m.—Fruit Market reports.  
12.15 p.m.—Vegetable Market report.  
12.17 p.m.—London Metal Market report.  
12.19 p.m.—Dairy and Farm Produce Market report.  
12.22 p.m.—Farage Market report.  
12.24 p.m.—Fish Market report.  
12.26 p.m.—Bobby's Market report.  
12.28 p.m.—Stock Exchange report.  
12.30 p.m.—H.M.V. Gramophone Recital from the Studio.  
1.27 p.m.—Stock Exchange report.  
1.30 p.m.—G.P.O. Clock and chimes.  
Talk to children and special entertainment for Children in Hospital.  
2 p.m.—G.P.O. Clock and chimes. Close down.

## AFTERNOON SESSION.

3 p.m.—Garden Party broadcast from the War Memorial Hospital, Burrell Street, Waverley.  
Items by the Metropolitan Band.  
4.30 p.m.—G.P.O. Clock and chimes. Social Story.  
4.45 p.m.—Musical programme from the Studio  
4.50 p.m.—News from "Sun."  
4.55 p.m.—Resume of night's programme.  
4.57 p.m.—Reading Resume.  
4.59 p.m.—Special Ocean Forecast.  
5 p.m.—G.P.O. Clock and chimes.  
Close down.  
5.15 p.m.—G.P.O. Clock and chimes. Children's Session.  
6.30 p.m.—Musical programme from the studio

## SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. Clock and chimes.  
Australian Mercantile Land and Finance Co's Report.  
Weather Report and forecast by courtesy of Govt. 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."  
7.20 p.m.—Talk by Mr. Gregory of the N.R.M.A.  
7.30 p.m.—Talk on "Gardening Science" by Mr. Cooper, Park superintendent City Council.  
8 p.m.—G.P.O. Clock and chimes.  
Special programme in commemoration of Armistice Day.  
Broadcasters' Typical Chimes.  
8.3 p.m.—"Rite Britannia."  
8.4 p.m.—Community Singing:  
"Tiptopery."  
"There's a long long trail."  
"Pack up your troubles in your old kit bag."  
"Australia will be there."  
8.11 p.m.—Mr. Frank Ryan:  
"The Flag of England" (Kieling).  
8.15 p.m.—Broadcasters' Instrumental Trio:  
"Three British Dances" (Roger Gillies).  
8.22 p.m.—Miss Amy Ovington, contralto.  
"Land of Hope and Glory" (Elsie).  
8.25 p.m.—Mr. Peter Sutherland, bass:  
"The Women of England" (German).  
8.28 p.m.—Broadcasters' Instrumental Trio:  
Selection of Scottish Melodies.  
8.36 p.m.—Mr. Douglas Graham, comedian:  
Scottish Humor.  
8.42 p.m.—Vocal Quartette:  
"Ye Banks and Braes."  
"Annie Laurie."  
8.48 p.m.—Broadcasters' Instrumental Trio:  
Selection of Irish Melodies.  
8.50 p.m.—Mr. Frank Ryan, entertainer:  
A few Irish Stories.  
9.1 p.m.—Vocal Quartette:  
"The Dear Little Sla-rook"  
"Eileen A'Dara."  
9.7 p.m.—Interlude.  
Dance music by the Westworth Symphonic Orchestra broadcast from the Ballrooms of the Westworth.

9.17 p.m.—Broadcasters' Instrumental Trio:  
"The Merry Leaf."  
9.24 p.m.—Mr. Lance Jeffrey, tenor.  
"Pala Moon."  
9.24 p.m.—Miss Helene Stewart, soprano.  
"Chanson Indoue" (Rimsky Kotsakoff).  
9.34 p.m.—Mr. Frank Ryan, entertainer:  
"Gunga Din" (Kieling).  
9.35 p.m.—Broadcasters' Instrumental Trio:  
"Advance Australia Fair."  
9.40 p.m.—Weather report and forecast by courtesy of Mr. C. J. Harris, Govt. Meteorologist.  
9.44 p.m.—Broadcasters' all sports expert will talk on "Cricket."  
9.48 p.m.—Mr. Peter Sutherland, bass:  
"Heroes of the Dardanelles."  
9.49 p.m.—The Sporting editor of the "Sun" will talk on the prospects of Saturday's racing.  
10.0 p.m.—Miss Amy Ovington, contralto.  
"Waltz" (Alfred Hill).  
10.12 p.m.—Broadcasters' instrumental trio will play a selection by Alfred Hill.  
10.15 p.m.—Dance Music by the Westworth Symphonic Orchestra broadcast from the Ballrooms of the Westworth. During intervals between dances "Sun" news service.  
11 p.m.—G.P.O. Clock and chimes.  
National Anthem.

## 2GB, SYDNEY

Theosophical Broadcasting Service.  
Wave Length, 316 Metres.

## Friday.

## MORNING SESSION.

8 a.m.—Music.  
8.5 a.m.—"Usher's" Talk.  
9.15 a.m.—Music.  
9.25 a.m.—Psychological Class.  
9.40 a.m.—Music.  
9.45 a.m.—Health and Diet.  
10 a.m.—Close down.

## AFTERNOON SESSION.

3.30 p.m.—Music.  
3.35 p.m.—Address by Professor E. Wood.  
3.45 p.m.—Music.  
4 p.m.—Address.  
4.22 p.m.—Music.  
4.30 p.m.—Close down.

## INTERSTATE "A" AND "B" CLASS BROADCASTING STATIONS.

1L0.—Broadcasting Company of Australia, Ltd., Melbourne, wavelength 311 metres, power 5000 wats.  
1AK.—Associated Radio Co. Ltd., Melbourne, wavelength 384 metres, power 5000 wats.  
1QU.—Queensland Radio Service, Brisbane, wavelength 325 metres, power 5000 wats.  
1GL.—Central Broadcasters' Ltd., Adelaide, wavelength 395 metres, power 5000 wats.  
1WE.—Western Farmers, Ltd., Perth, wavelength 1250 metres, power 5000 wats.  
1ZL.—Tasmanian Broadcasters, Ltd., Hobart, wavelength 215 metres, 4000 wats.  
1DB.—The DBB Broadcasting Co. Pty., Ltd., Capital Hill, Melbourne, wavelength 355 metres, power 500 wats.  
1UJ.—O. J. Nilsen & Co., Melbourne, wavelength 315 metres, power 100 wats.  
1GR.—Cold Radio Electric Service, Two Mile, Queensland, wavelength 326 metres, power 100 wats.  
1KA.—Sport Radio Broadcasting Station, Adelaide, wavelength 340 metres, power 1000 wats.  
1DN.—3DN Pty., Ltd., Adelaide, wavelength 315 metres, 500 wats.

## EVENING SESSION.

7 p.m.—Music.  
7.15 p.m.—Benediction Service.  
7.40 p.m.—Address.  
7.55 p.m.—Instrumental Trio:  
DAN SCULLY, MURIELLE LANG, ADA BROOK.  
8.5 p.m.—Address by Professor E. Wood.  
9.20 p.m.—Songs by Miss Kathleen Ryan.  
9.23 p.m.—Violin Solo.  
9.35 p.m.—Songs by Rupert Marshall:  
1. "The Bird Ponghman" (Clarke).  
2. "If I Might Come to You" (Squire).  
9.43 p.m.—Instrumental Quartette:  
DAN SCULLY, MURIELLE LANG, ADA BROOK.  
9.50 p.m.—Address by Mr. J. W. Powell.  
9.15 p.m.—Piano Solo: Emily Burke.  
9.25 p.m.—Songs by Miss Kathleen Ryan.  
9.32 p.m.—Cello Solo: MURIELLE LANG.  
1. "Spring Brunes" (Davidoff).  
9.50 p.m.—Songs by Rupert Marshall:  
1. "Because" (D'Hardock).  
2. "In An Old Fashion Town" (Squire).  
9.50 p.m.—Talk.  
10 p.m.—Close down.

## 2 UW, SYDNEY

Sandel Radio, Ltd.

Wave Length, 297 Metres.

## Friday.

## MORNING SESSION.

9 a.m.—News, Shipping, Mail, Studio Items.  
9.45 a.m.—Women's Session.  
9.50 p.m.—Resume of forward programme.  
10 a.m.—Close down.  
12.15 p.m.—Special Employes' Luncheon Session.  
11.45 p.m.—Close down.

## AFTERNOON SESSION.

2 p.m.—Studio Items.  
2.50 p.m.—Resume of forward programme.  
3 p.m.—Close down.  
EVENING SESSION.  
6 p.m.—Studio Items.  
6.30 p.m.—Resume of forward Items.  
9 p.m.—Close down.

## NIGHT SESSION.

7 p.m.—Sonora Selection.  
7.4 p.m.—Where to Go.  
7.10 p.m.—Studio Selections.  
7.30 p.m.—Miss Evelyn Davison, electrotonist:  
"A Hindoo's Paradise."  
7.37 p.m.—Miss Ailene O'Connor, Songs at the Piano:  
"Baby Face."  
7.41 p.m.—Studio Selection.  
7.51 p.m.—Miss Cecily Ellis, mezzo-soprano:  
"I Love the Moon" (Rubens).  
7.54 p.m.—Miss Ailene O'Connor, Songs at the Piano:  
Selected.  
7.59 p.m.—George F. Manuel, tenor:  
"On Wings of Song."  
8.4 p.m.—E. E. Salmon, "Commercial Art."  
8.19 p.m.—Miss Jeanet Pattinson:  
Pianoforte selection.  
8.24 p.m.—Miss Cecily Ellis, mezzo-soprano:  
"The Rosary" (Nevin).  
8.29 p.m.—Studio Selections.  
8.38 p.m.—Miss Evelyn Davison, electrotonist:  
"Banana Peel."  
8.45 p.m.—Miss Jeanet Pattinson:  
Pianoforte selection.  
8.51 p.m.—Miss Cecily Ellis, mezzo-soprano:  
Selected.  
8.58 p.m.—George F. Manuel, tenor:  
"At Dawning."  
9.1 p.m.—Miss Ailene O'Connor, Songs at the Piano:  
Selected.  
9.9 p.m.—Weather forecast and news.  
9.12 p.m.—George F. Manuel, tenor:  
"I Know of Two Bright Eyes."  
9.20 p.m.—Studio Selections.  
9.25 p.m.—Resume of forward programmes.  
9.30 p.m.—Close down.

## 3LO, MELBOURNE

Broadcasting Co. of Aust.

Wave Length, 371 Metres.

## Friday.

## MORNING SESSION.

10.30 a.m.—Inscription of Armistice Day Celebrations at the site of the National War Memorial, The Domain, St. Kilda road, Melbourne, by Mr. Norman McCarne.

11 a.m.—Two minutes silence.

11.4 a.m.—Laying the Foundation Stone of National War Memorial by His Excellency the State Governor, Lord Southey.

11.50 a.m.—Close down.

12.15 p.m.—Melbourne Observatory Time Signal.

12.20 p.m.—Metal prices received by the Australian Mines and Metals Association from the London Stock Exchange this day.

12.30 p.m.—British official wireless news from Buhr, Reuters and the Australian Press Association Cable. News service.

12.40 p.m.—REGENT GRAND CONCERT ORCHESTRA: ARMISTICE DAY AT THE CENOPIAH, LONDON.

Incidental Music arranged by ERNEST G. MITCHELL.

10.45 p.m.—Chorus.

Approach of Bands.

11 a.m.—Big Ben Chimes.

Two Minutes Silence.

Maroon Signal.

Beyville.

Hymn.

"Pomp and Circumstance."

J. ALEXANDER BROWN, Soloist: "Land of Hope and Glory."

BAND.

"Sassy Melody"

Guard Marches Army.

12.40 p.m.—Stock Exchange Information.

12.50 p.m.—ERNEST CHOSTAKOFF, Tenor: "Beautiful Eyes" (A Greek romance).

"Come Back to Saragosa" (Seyvade from Romeo and Juliet) by E. Curjel.

12.55 p.m.—REGENT GRAND CONCERT ORCHESTRA: "May Day Suite" (Travels).

1 p.m.—Melbourne Observatory Time Signal.

11 a.m.—J. ALEXANDER BROWN; "Bird."

"Finest Job of All."

## MIDDAY SESSION.

1.4 p.m.—Meteorological information.

Weather synopsis for Victoria, South Australia, Tasmania and New South Wales. Omega forecast. River reports for Victoria, Tasmania, South Australia and New South Wales.

1.45 p.m.—REGENT GRAND CONCERT ORCHESTRA: Patrol, "We McGregor" (America).

Patrol, "Blue Skies" (Berlin).

1.52 p.m.—SINIA CHOSTAKOFF, Tenor: "The Red Starlet" (a Russian Folk Song).

"Autumn Asters" (Berlin).

1.59 p.m.—REGENT GRAND CONCERT ORCHESTRA: Solo by Kitty Anderson, "The Swan" (Saint Saens).

1.57 p.m.—J. ALEXANDER BROWN; "The Flag."

"Australia, Oh, Thou Favored Isle."

1.44 p.m.—REGENT GRAND CONCERT ORCHESTRA: Selection: "Merry England" (German).

2 p.m.—Close down.

2.30 p.m.—Laying of Foundation Stone of the Old Melbourne's War Memorial Hall at Melbourne Church of England Grammar School, Melbourne.

A full description of this ceremony will be given by Mr. Norman McCarne.

During the afternoon results will be given at intervals of the Public Schools Cricket Club, Melbourne Grammar School v. Geelong College at Melbourne Grammar School, also Xavier College v. Geelong Grammar School, and Scotch College v. Wesley College.

## AFTERNOON SESSION.

3 p.m.—STUDIO QUARTETTE: Nautical Overture, "Britannia" (Machuel).

3.10 p.m.—MISS FRANCES FRASER: "Wellington Abbey."

3.20 p.m.—ANITA SEAWAY, Soprano: "Chorus."

"It's a Long Way to Tipperary."

3.30 p.m.—TASMA BIRKMAN, Cello: "One Wings of Song" (Mendelssohn).

3.40 p.m.—Marie Magan, soprano: "The Devon Maid."

"The Infinite Shining Heavens."

3.47 p.m.—STUDIO QUARTETTE: "Glimpses of London" (Lovers).

3.53 p.m.—HAMILTON BATEMAN, Violin: "Bezzie Kall" (Homes).

"Moment Musical" (Schubert-Kreisler).

4.4 p.m.—MARIE MAGAN, soprano: "The Island."

"Painter and Painter to my Shames"

4.12 p.m.—STUDIO QUARTETTE: "Whops of Tipperary" (America).

"Jolly Sailor's Afloat."

4.20 p.m.—JUDY BIRKMAN: "The Bell Gates of Songora."

4.30 p.m.—MRS. H. CALLAWAY MADDOCK—Personalities in Art.

"Hogan Hunt."

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

5 p.m.—Close down.

## EARLY EVENING SESSION.

5.30 p.m.—Answers to Letters and British Questions by "BILLY BUNNY."

6 p.m.—STUDIO QUARTETTE: Selection: "Mans Ains" (Wood).

6.10 p.m.—"BILLY HUNNY": "Armistice Day."

6.20 p.m.—STUDIO ORCHESTRA: "National Air."

6.25 p.m.—CAPTAIN DONALD MACLEAN: "Wings of Song."

6.35 p.m.—Herald news service. Weather forecasts. Shipping movements.

6.47 p.m.—Stock Exchange information.

6.52 p.m.—Fish Market reports by J. R. Borrett, Ltd. Baltic prices.

6.55 p.m.—River reports.

6.58 p.m.—Newmarket Sheep sales by the Associated Stock and Station Agents, Bourke street, Melbourne. Market reports by the Victorian Producers' Co-operative Co. Ltd., Poultry, Grain, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions.

7.15 p.m.—Market reports of Fruit by the Victorian Producers' Association. Retail prices. Fruit Market reports—Wholesale.

## NEW ZEALAND STATIONS:

(Corrected List)

1YA, Auckland, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 500 Watts; Wave-length, 323 Metres. Silent Night, Monday.

2YA, Wellington, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 3000 Watts; Wave-length, 420 Metres.

3YA, Christchurch, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 500 Watts; Wave-length, 306 Metres. Silent Night, Thursday.

4YA, Dunedin, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 750 Watts; Wave-length, 483 Metres.

prices by Wholesale Fruit Merchants' Association, Bullard's Pig market reports by the Bullard's Stock and Station Agents.

## EVENING SESSION.

7.15 p.m.—Under the auspices of the DEPARTMENT OF AGRICULTURE: Mr. S. G. HARRIS, Senior Potato Inspector, will speak on "Spraying Potatoes."

7.30 p.m.—COLLINGWOOD CITIZENS' BAND: "Semiramide."

March: "The National Emblem."

7.40 p.m.—MR. H. K. LOVE: "Technician."

Mr. Love will be glad to attend to your Wireless difficulties, and we ask you to write to him for any advice that you may require.

7.50 p.m.—THE ROYAL SCOTS: "Hail Scotland" (Ogilvie).

"The Scottish Blue Bell" (Fisher).

8 p.m.—Melbourne Observatory Time Signal.

8.1 p.m.—Sir Philip Gillin's DESCRIPTION OF THE OPENING OF THE MEMORIAL ARCH AT MENIN GATE, by Maurice Dudley—incidental music by the Collingwood Citizens' Band.

8.10 p.m.—SINIA CHOSTAKOFF, tenor: "Song of the Volga Boatmen" (St. Chelidze).

Arioso from Faust (Liszt).

8.25 p.m.—COLLINGWOOD CITIZENS' BAND: Intermezzo: "White Lilies."

8.30 p.m.—MR. F. LIPP MEYER will speak a 154 words on the Million 50iling Fund.

8.34 p.m.—COMMUNITY SINGING FROM BALLARAT.

President, C. W. Kiewit.

Conductor, Mr. Bert Houshopper.

Active Secretaries, Mr. Frank Braden, March: "Bassano" (Rimsky).

Selection: "Musical Review" by Bullard's Soldiers and Sailors' Memorial Band.

Bandmaster, Mr. B. Bassano.

Opening Remarks His Worship the Mayor, C. A. McKenna, chairman.

Chorus: "Drink to Me Ours."

"The Music Makers."

"Soldiers' Farewell."

## 4QG, BRISBANE

Queensland Radio Service

Wave Length, 385 Metres.

## Friday.

## MORNING SESSION.

10.30 a.m.—From the Daily Post Office, after Armistice Day Celebrations. Speeches by the Premier, The Mayor and others.

11.30 a.m.—Close down.

## MIDDAY SESSION.

1 p.m.—Market reports; Weather information; "The Daily Mail" and "The Daily Standard" news.

1.20 p.m.—Lunch hour music.

1.30 p.m.—Standard Time signal.

2 p.m.—Close down.

## AFTERNOON SESSION.

2.30 p.m.—A programme of music from the Studio.

4.15 p.m.—"The Telegraph" news.

4.30 p.m.—Close down.

## EARLY EVENING SESSION.

6 p.m.—"Daily Standard" news; weather information; announcements.

6.15 p.m.—Landscape, "A Walk on Law"—Local Authority Walling Powers" by Mr. C. E. Stoddart (Illustrated by Law).

6.30 p.m.—Bedtime stories by "The Sandman."

9 a.m.—Market reports; Stock reports.  
 7.40 p.m.—Weather news; announcements.  
 "Daily Standard" news.  
 7.45 p.m.—Standard time signal.  
 7.45 p.m.—Lecture: "The Cyclone came to Brisbane," by Mr. E. J. Chidson.

## NIGHT SESSION.

The final concert session of the Wynnum Elitistiff will be relayed from the Star Theatre, Wynnum.

8 p.m.—FROM THE STAR THEATRE:

Final Session—Wynnum Elitistiff.

10 p.m.—FROM THE STUDIO:

The Daily Mail" news.

Weather news.

Close down.

## 5CL, ADELAIDE

Central Broadcasters, Ltd.

Wave Length, 395 Metres.

Friday.

MORNING SESSION.—12 noon to 2 p.m.

## AFTERNOON SESSION.

3 p.m.—G.P.O. Chimes.

3.1 p.m.—Orchestral selections from the Maple Leaf Cafe:

Selection, "The Rebel Maid" (Phillips).

Intermezzo, "Broadened Petticoat" (Phillips).

Fox Trot, "What are We Waiting For?" (Little).

Waltz, "Falling in Love with You" (Myers).

Cello solo, "Menuetto No. 21" (Pouper).

3.45 p.m.—Musical selections on the Studio Repetitor.

4 p.m.—G.P.O. Chimes.

4.1 p.m.—Orchestral selections from the Arcadia Cafe:

Overture, "Zampa" (Harold).

Fox Trot, "Sweetie O'Mine" (O'Hagan).

Melodie, "Chanson" (Fritz).

Pianoforte solo, "Valsecette" (King).

Selection, "Mercenary Mary" (Higgs).

"Lindensyde Air" (Volhurst).

"Minuetto" (Baccherini).

4.57 p.m.—Market reports.

5 p.m.—G.P.O. Chimes, and close down.

## EVENING SESSION.

8 p.m.—G.P.O. Chimes.

8.1 p.m.—Dinner Music by the Covent Garden Orchestra:

Selection, "The Gipsy Princess" (Kelmus).

Fox Trot, "Take in the Sun" (Wood).

"Rhapsodie No. 6" (Liszt).

Melodie, "Love's Awakening" (Fletcher).

"Dance Fantastique" (Beynard).

7.50 p.m.—Bedtime Stories.

7.55 p.m.—Market Reports.

7.55 p.m.—Sporting talk by "Windbag."

7.50 p.m.—"Willow" will talk on Cricket.

8 p.m.—G.P.O. Chimes.

8.1 p.m.—Overture, Studio Orchestra.

8.10 p.m.—Contra-tenor solo, Mrs. Marion Dayce.

8.15 p.m.—Humorous recitation, Frances Her- ring.

8.20 p.m.—Selection, Studio Orchestra.

8.20 p.m.—Contra-tenor solo, Mrs. Marion Dayce.

8.25 p.m.—Cello solo, Mr. Geoff Goldsworthy.

8.40 p.m.—Humorous recitation, Frances Her- ring.

8.46 p.m.—Selection, Studio Orchestra.

8.55 p.m.—Baritone solo, Mrs. Murrell.

9 p.m.—G.P.O. Chimes.

9.1 p.m.—Weather report.

9.2 p.m.—Dale's's whist report.

9.3 p.m.—Selection, Studio Orchestra.

9.4 p.m.—Baritone solo, Syd. Murrell.

9.55 p.m.—Selection, Studio Orchestra.

9.40 p.m.—Mr. A. H. Robin (Vet. Surgeon)

will talk on "Common Painstakers of Farm Stock."

9.42 p.m.—Bass solo, Cyril Headley.

9.46 p.m.—Humorous recitation, Frances Her- ring.

9.50 p.m.—Selection, Studio Orchestra.

10 p.m.—G.P.O. Chimes.

10.1 p.m.—"Advertiser" News Service.

10.15 p.m.—Bass solo, Cyril Headley.

10.20 p.m.—Selection, Studio Orchestra.

10.30 p.m.—Relay Station De Danes Orchestra.

11.10 p.m.—Saturday's programme and weather report.

11.45 p.m.—National Anthem, and close down.

## 6WF, PERTH

Westralian Farmer's.

Wave Length, 1280 Metres.

Friday.

10.40 a.m.—Tune in.

10.45 a.m.—Armistice Day Service, relayed from St. George's Cathedral, Cathedral Avenue, Perth.

12.30 a.m.—Tune in.

12.35 p.m.—Market, News, and 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 Quintette, conducted by Mr. Val Smith.

2 p.m.—Close down.

3.30 p.m.—Tune in.

3.40 p.m.—Organ music, relayed from the Grand Theatre, Murray Street.

Vocal interludes from the Studio.

4.40 p.m.—Close down.

6.45 p.m.—Tune in.

6.50 p.m.—Musical evening for the kiddies, by Uncle Henry and Daffy.

7.20 p.m.—Stocks, Markets, News.

7.45 a.m.—Racing talk by Sporting Editor of "Truth" Newspaper Coy.

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

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

## POPULAR NIGHT.

8.5 p.m.—Musical programme, from the Studio, including vocal and instrumental artists.

Orchestral music, played by the Grand Symphony Orchestra, conducted by Mr. Val Smith, relayed from the Grand Theatre, Murray Street.

Description of the Boxing Match, given by the Sporting Editor of "Truth" Newspaper Coy., relayed from the Perth Stadium.

## FOREIGN BROADCASTERS.

JOCK—Nagoya Radio Broadcasting Co.,

Nagoya, JAPAN, 169 metres, 1900

watts. (Announcement in English and Japanese).

JOBK—Osaka Central Broadcasting Co.,

Osaka, JAPAN, 385 metres, 1800

watts. (Announcement in English and Japanese).

JOAR—Tokyo Broadcasting Co., Tokyo,

JAPAN, 375 metres, 1800 watts.

(Announcement in English and Japanese).

JFC—Batavische Radio Vereeniging,

BATAVIA, 220 metres, 40 watts.

(Announcement in English and

Philippine).

KZRM—Manila, PHILIPPINE IS-

LANDS: 413 metres, 1800 watts.

(Announcement in English and

Philippine).

KGU—Honolulu Advertiser," Honolulu,

HAWAII, 270 metres, 500 watts.

RG0—Oakland, CALIFORNIA: 301.2

metres, 5000 watts.

KPI—Los Angeles, CALIFORNIA, 457

metres, 5000 watts.

KOA—Denver, COLORADO: 322.4

metres, 5000 watts.

9 a.m.—Talk "Gardening Notes," by Mr. E. A. Hughes, representing Messrs. Davison and Harrison, Ltd.

10 p.m.—Late news items, by courtesy of "The Daily News" Newspaper Coy.

Ship arrival and departure announcements.

Weather Report and Forecast.

10.30 p.m.—Close down.

100 METRE TRANSMISSION.

Simultaneous Broadcast on 100 Metres of Mutual programme given on 1840 Metres, commencing at 8 p.m.

## 7ZL, HOBART

Tasmanian Broadcasters, Ltd.

Wave Length, 516 Metres.

Friday.

ARMISTICE DAY.

MORNING SESSION.

11 a.m. to 12 noon.

AFTERNOON SESSION.

3 p.m.—G.P.O. Clock chimes.

3.1 p.m.—Tune in selection.

3.2 p.m.—Hobart Stock Exchange Quotations.

Weather information.

Items of interest—announcements.

3.15 p.m.—Orchestral selections by 7ZL Studio Trio.

4.15 p.m.—Educational Talk.

4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Children's Corner with the Radio Lady.

7.15 p.m.—Young Folks gardening chat by Mr. G. Nagdon.

NIGHT SESSION.

7.30 p.m.—Fruit Poultry and produce reports through the courtesy of Roberts and Co. Ltd., Hobart.

7.35 p.m.—Gardening talk Mr. George Naylor.

Ulen Roberts, Cascades.

7.50 p.m.—"Mercury" special Tasmanian news service. Railway action produce sales.

Weather forecasts. Hobart Stock Exchange quotations.

8 p.m.—G.P.O. Clock chimes.

8.1 p.m.—Sports Budget supplied by Mr. R. W. Newton of Sports Depot.

8.3 p.m.—Studio Concert:

Miss Mona McGuire (soprano), Miss Helen Tate (soprano), Miss Ruby Paine (pianist), Miss Nora Frenzy (soprano), Mr. P. Pezang (baritone), Mr. Victor Pharoah, (tenor) solo, Mr. George Hook (comedian), Mr. Harry Bates (tenor).

8.30 p.m.—Sporting chat by "Mid-off."

8.40 p.m.—British Official Wireless News.

8.50 p.m.—"Mercury" special International news service. Ships within wireless range. Tas-

manian District Weather report. 9 p.m. Weather forecasts. Travellers week-end information. National Anthem.

## Saturday, Nov. 12

## 2FC, SYDNEY.

EARLY MORNING SESSION.—7 to 8 a.m.

MORNING SESSION.

10 a.m.—"Big Ben" and programme announcements.

10.5 a.m.—Studio music.

10.15 a.m.—"Sydney Morning Herald" news service.

10.30 a.m.—Studio music.

10.35 a.m.—A talk by the 2FC Racing Commis- sioner.

10.45 a.m.—Studio music.

11 a.m.—"Big Ben." Studio music.

11.5 a.m.—A.P.A. and Reuters's Cable Services.  
11.40 a.m.—Studio music.  
11.45 a.m.—A talk on Gardening, by Mr. G. J. Ketchey ("Rodman").  
11.55 a.m.—Close down.

## MIDDAY SESSION

12 noon—"Big Ben" and telegrams announcements.  
12.15 noon—Stock Exchange, first call.  
12.30 noon—Studio music.  
12.35 noon—"Sunday Morning Herald" (first version).  
12.45 noon—Radio wireless news.  
12.55 noon—Studio music.  
1.00 p.m.—Dinner from the Casino; The Canterbury Park Racing Events will be discussed in the running by the JPC Racing Correspondent.

1.10 p.m.—"Big Ben." Weather intelligence.  
1.15 p.m.—"Evening News" (late news service).

1.30 noon—Studio music.  
1.35 p.m.—During winter intervals the following musical items will be given:  
From the Crystal Palace Chorus, George Street, Sydney:  
The Glorious Jazz Band, with the Grand Organ.  
Clara the Studio.  
Cliff Arnold, novelty artist.  
Dorothy Dewar, songs at the piano.  
1.40 p.m.—Complete resume of today's sports results.  
1.45 p.m.—"Big Ben." Close down.

## EARLY EVENING SESSION

1.55 p.m.—The Chimes of St. Paul.  
2.00 p.m.—"Hello-Man" talks to the children.  
2.10 p.m.—Story time for the young folk.  
2.20 p.m.—Studio music.  
2.30 p.m.—"Big Ben." Weather intelligence.  
2.35 p.m.—"Evening News" (late news service).

## NIGHT SESSION

7.30 p.m.—Programme announcements.  
7.35 p.m.—Hints by Mr. N. H. Dowden on How to See a Picture.  
7.45 p.m.—10.15 Montigue, skitole.  
7.55 p.m.—From the Railway and Tramway Institute, Sydney:  
Dance from the Third Annual Entertainment. This is the final night an opportunity will be given of hearing finalists in the Grand Session, which will include: Main Chorus, Mixed Chorus, Male, Mixed and Humorous Quartets.  
Finalists in the Vocal Section, including songs by Australian composers: Sacred Solo Male, Mixed and Ladies' Duets.  
Finalists in the Chappell "Song Competition".

Finalists in the Piano/Forte Section.  
Finalists in the Elocution Section.  
Wind instrument finalists will be heard in the following:  
Cornet.  
Euphonium.  
Tenor Horn.  
Trumpets.  
Brass Quartets.

Finalists in the "Bonneting" Mouth Organ Competition.  
8.10 p.m.—From the Studio:  
Rue Gurling and his "Sparklers" in their monthly programme:  
Introduction, "How do you do?" The Contender.  
Mr. Rupert Gibb seeks "revenge".  
Ernest Archer, tenor:  
"Beneath Thy Window."  
Ed Montague, skitole.  
Dorothy Dewar, sousrette;  
"The Bird on Nellie's Hat."

The "Sparklers" invite listeners to fox trot. Willie Thomas, tenor:  
"Rolling down to Rio" (German).  
Charles Lawrence, entertainer:  
"Sparkling Humor."  
Felix Dunbar, contralto:  
"Sunny Night" (French).  
Dorothy Dewar, sousrette, and Mr. Rue Gurling in a sketch:

## "Behind the Scenes"

Time for another dance.  
Brunton Gibb, occasionalist:  
"Please, Hilda!"  
Ernest Archer, tenor:  
"Little Green Babyhood."  
"Jerry" joins the Ladies.  
Dorothy Dewar, sousrette:  
"Partnering Along."

A dance number.  
Willie Thomas, tenor:  
"The Floral Dance" (Waltz).  
Songs under "Parade" by Charles Lawrence.  
Felix Dunbar, contralto:  
"At Dawning" (Gothic).  
The "Sparklers":  
"A-kaiting we will go" and that's all.

8.20 p.m.—From the Ambassadors.  
The Ambassadors Dance Orchestra, conducted by Mr. A. Hammond, will play until 11.45 p.m., interspersed with musical items from the Studio.

10.45 p.m.—Late news.

11.45 p.m.—National Anthem.  
Close down.  
Mrs. E. Morrison, occasionalist selected:  
Chorus: "God Bless Australia!"

"Glennie!"  
"I Want to be Happy."  
Mr. A. Palmer:

Soloists on Musical Saw.  
Chorus by Girls and Boys' Choir, of Ballarat:  
"How do you do?"

"Old Pops at Home"  
Chorus: "Beautiful Ohio."  
"Land of Hope and Glory."  
"Glorious Song!"

Miss Marie Sweetman, contralto:  
"The Corral Falls" (Guy D'Arriault).  
"The Leaves and the Wind" (Francis Leach).

Chorus:  
"Let the Best of the World Go By."  
"Home Father Day."

"Lost We Forget."  
Ballad: "Believe and Sorrow Memorial Band."  
Selection, "Diamond Cross" (Greenwood).

Chorus:  
"Topsy Lou!"  
"Oh in the Sunny Night!"

The German: "Back to Dixie."  
Mr. Jack Hayman, Violin Solo:  
"Berensse de Jendou" (Holland).  
"Maurika" (Whiteland).

Chorus by Girls and Boys' Choir of Ballarat, Grybner:  
"On the Road to Anywhere."  
"I'm Going!"

Chorus:  
"By the Old Red Mill" (Davy).  
"In On My Way Home" (Bartie).  
"Looking for a Boy" (Gershwin).  
"I Would Go Home Tonight" (Gilbert).  
"Fleeting" (James).  
"Chinese Men" (Maurham).  
"She Don't Wanna" (Allen).  
"Because I Love You" (Buzin).  
"For My Sweetheart" (Brown).  
"Barbara" (Silver).  
"One Night of Love in Spain" (Hayes).  
"Brown Eyes in Our Dreams" (Tanner).  
"Hello, Hilda!" (Fried).  
"We Got Somebody Now" (Williams).  
"You Know I Love You" (Gosse).  
11.40 p.m.—GOD SAVE THE KING.

## Chorus:

"More We are Together."  
"Mary Lou."  
"Pack Up Your Troubles."  
"When the Great Red Dawn."  
"Just a Wax Deed and Durie."  
AULD LANG SYNE.

## 10 p.m.—COLLINGWOOD CITIZENS' BAND:

Waltz, "The Maid of the Mountains".

10.7 p.m.—Mr. C. J. WILLIAMS will commence organ—"To-morrow's Student Event."

10.5 p.m.—SENIA GHOSTIAKOFF, tenor:  
"Monotonously Rings the Bell" (Garoff).  
"Down the Petersky" (Russian Folk Song).

10.24 p.m.—COLLINGWOOD CITIZENS' BAND:  
Novelty, "The Earline Bass Player."  
Hymn: "Nearer, My God to Thee" (By request).

10.30 p.m.—"CARDIGAN," Mr. A. A. Wolfe, speaking Editor of the "Argus" and Australasia, will speak on—  
To-morrow's Race.

10.40 p.m.—JOE ARONSON AND HIS SYMPHONIZING SYMPHONISTS:  
"I Wonder Where With You" (Dixon).  
"This is Jazz" (Leonard).

10.45 p.m.—"Argus" news service. Miscellaneous information. Road Notes, compiled by the Royal Automobile Club of Victoria.

ROYAL AUTOMOBILE CLUB'S SAFETY MESSAGE for Today is:  
"Go out the safe way—Make Obedience a habit, not a mere safety feat."

Under the auspices of the Health Association of Australia, the HEALTH MESSAGE for Today is:  
"The secret of good health is really an secret of all, being only the observance of a few simple rules."

11 p.m.—OUR GREAT THOUGHT:  
"Made is what looks are not a matter, mainly of public performance, which is turn a matter of education."  
—Ernest Newman.

11.10 p.m.—JOE ARONSON AND HIS SYMPHONIZING SYMPHONISTS:  
"What Does it Matter?" (Berg).  
"The Princess's Bride" (Mathias).  
"Everything is Done for Love" (Johnson).  
"I Didn't Know" (Swiss).  
"Dreight and Grand"—Piano Solo (Blom).  
"Muddy Water" (De Ross).  
"Where the Love Bird Leaves the Nest" (Waltz).

"By the Old Red Mill" (Davy).  
"In On My Way Home" (Bartie).  
"Looking for a Boy" (Gershwin).  
"I Would Go Home Tonight" (Gilbert).  
"Fleeting" (James).  
"Chinese Men" (Maurham).  
"She Don't Wanna" (Allen).  
"Because I Love You" (Buzin).  
"For My Sweetheart" (Brown).  
"Barbara" (Silver).  
"One Night of Love in Spain" (Hayes).  
"Brown Eyes in Our Dreams" (Tanner).  
"Hello, Hilda!" (Fried).  
"We Got Somebody Now" (Williams).  
"You Know I Love You" (Gosse).  
11.40 p.m.—GOD SAVE THE KING.

## Short Wave Broadcasters

Schedules and Wavelengths Subject to Change.

EG-2NH, Gerald Mercedes, Caterham, England, 23 and 25 metres (I.B.C. Programme).

EN-PGJ, Philips' Experimental Station, Eindhoven, Holland, 16.2 metres (I.B.C. Programme).

NU-2XAF, General Electric Co., Schenectady, New York State, U.S.A., 22.7 metres (W.G.Y. Programme).

NU-2KAL, General Electric Co., Schenectady, New York State, U.S.A., 14 and 52 metres (W.G.Y. Programme).

NU-KDEA, Westinghouse Electric Co., Pittsburgh, Penn., U.S.A., 8.2 and 14 metres.

NU-2EW, Crestley Radio Corporation, Cincinnati, Ohio, U.S.A., 52 metres.

NU-2XAL, "Radio News," New York City, U.S.A., 30.31 metres (WRNY Programme).

FO-3R, Johannesburg Broadcasting Company, South Africa, 10 and 23 metres.

## 2BL, SYDNEY

Saturday.

EARLY MORNING SESSION.

7.0 a.m. to 8.0 a.m.

MORNING SESSION.

11.0 a.m.—G.P.O. Clock and Chimes: Mutual Programme from the Studio.  
11.15 a.m.—Social News by Mrs. Jordan. Talk on "Simple Cooking for Children" by Mrs. Jordan.

Why Blame Static? Buy a Philco!

## AFTERNOON SESSION.

- 12.50 noon.—G.P.O. Clock and Chimes; Special Ocean Forecast and Weather Report.
- 12.55 p.m.—Musical Programme from the Studio.
- 12.55 p.m.—News from the "Sun."
- 12.55 p.m.—Sporting and Athletic Pictures.
- 12.57 p.m.—What's on at the Pictures and Theatres.
- 12.58 p.m.—Musical Programme from the Studio.
- 12.58 p.m.—News from the "Sun."
- 12.59 p.m.—Musical Programme from the Studio.
- 1.0 p.m.—G.P.O. Clock and Chimes; Musical Programme from the Studio.
- 1.10 p.m.—Sporting Talk and Athletic Pictures for the Day.
- 1.20 p.m.—Musical Programme from the Studio.
- 1.26 p.m.—G.P.O. Clock and Chimes; Talk to Children and Special Entertainment for Children in Hospital.
- 2.6 p.m.—G.P.O. Clock and Chimes; Serial Story.
- 2.15 p.m.—Musical Programme from the Studio.
- 2.25 p.m.—Racing Resume.
- 2.30 p.m.—G.P.O. Clock and Chimes; News from the "Sun."
- During the Afternoon Sporting Information interspersed with Musical Items, by courtesy of the "Sun."
- 4.55 p.m.—Racing Resume.
- 4.55 p.m.—G.P.O. Clock and Chimes; Close Down.

## EARLY EVENING SESSION.

- 6.45 p.m.—G.P.O. Clock and Chimes; Children's Session.
- 6.50 p.m.—Musical Programme from the Studio.
- 7.15 p.m.—Result of Day's Sporting.
- 7.30 p.m.—Country News from the "Sun."
- 8.0 p.m.—G.P.O. Clock and Chimes; Broadcasters' Topical Chorus.
- 8.5 p.m.—Broadcasters' Instrumental Trio: Miss Dulcie Blair, Violin, Mr. Bryce Carter, Cello, Mr. G. Vern Barrett, Piano.
- 9.15 p.m.—A Group of Russian Songs by Madame Beresniakoff.
- 9.20 p.m.—First Appearance of Deal and Miller, presenting an Instrumental Act.
- 9.30 p.m.—Dance Music by the Wentworth Symphonic Orchestra, broadcast from the Ballroom of the Wentworth.
- 9.40 p.m.—Broadcasters' Musical Comedy Show. One Happy Hour of Harmony and Humor.
- 9.49 p.m.—A Selection by Broadcasters' Instrumental Trio.
- 9.50 p.m.—Russian Songs by Madame Beresniakoff.
- 9.57 p.m.—Resume of Following Day's Programme.
- 10.0 p.m.—G.P.O. Clock and Chimes.
- 10.1 p.m.—Deal and Miller present another Instrumental Act.
- 10.15 p.m.—Selection by Broadcasters' Instrumental Trio.
- 10.15 p.m.—Dance Music by the Wentworth Symphonic Dance Orchestra, broadcast from the Ballroom of the Wentworth.
- 10.5 midnight.—G.P.O. Clock and Chimes; National Anthem.

## 2 UW, SYDNEY

Saturday.

## EVENING SESSION.

- 7 p.m.—"Sonata" Selection.
- 7.1 p.m.—Where to Go.
- 7.10 p.m.—Dance Items from the Studio.
- 9 p.m.—Weather Forecast and News.
- 9.4 p.m.—Musical selections from Studio.
- 9.25 p.m.—Resume of forward programme.
- 9.30 p.m.—God Save the King.

## 3LO, MELBOURNE.

Saturday.

## MORNINGS SESSION

- 11 a.m.—JOHNSON'S STUDIO BOYS: Selection, "The Emma of the Guard."
- 11.10 a.m.—ANITA CHAWA, Canadiane: "Some Day You'll Say G.R." "Cantation."
- 11.15 a.m.—JOHNSTONE'S STUDIO BOYS: "Copies" Duet, "From Warsaw." Solist, W. Honey, L. Barrett. Fox Trio, "A Lane in Spain."
- 11.27 a.m.—HAMILTON BATEMAN, viola. "Labyrinth" (Airsong).
- "Ave Maria" (Schubert).
- 11.34 a.m.—THE ROYAL SCOTS: "We all go home the same way" (Lauder). "Gleanings" (Walker).
- 11.45 p.m.—JOHNSON'S STUDIO BOYS: Selection, "H. Traverser."

## MIDDAY SESSION

- 12 noon.—Melbourne Observatory Time signal. Metal prices received by The Australian Mines and Metals Association, from the London Stock Exchange the day. British official Wireless news from Rugby. Reuters and The Australian Press Association cables.
- 12.30 p.m.—STUDIO QUARTETTE: Selection from "The Beggar's Opera."
- 12.36 p.m.—SENIA CHOSTIAKOFF, soprano: "A Dream" (Bartlett). "A Beautiful Night" (Russian Folk Song).
- 12.37 p.m.—Stock Exchange information.
- 12.40 p.m.—JOHNSON'S STUDIO BOYS: Overture, "Solennelle." March, "Handel Wakes."
- 12.43 p.m.—JOE BRENNAN AND IDA NEW. TON: "In Comedy Vein."
- 1 p.m.—Melbourne Observatory Time Signal.
- 1.1 p.m.—STUDIO QUARTETTE: "Dance Song."
- 1.5 p.m.—Meteorological information. Shipping information. Weather forecast for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports for Victoria, Tasmania, South Australia and New South Wales.
- 1.15 p.m.—BOBBY PEARCE, baritone: "The Skipper" (Jude). "Harlequin" (Sanderson).
- 1.21 p.m.—JOHNSON'S STUDIO BOYS: Waltz, "Loppana."
- 1.30 p.m.—Description of Kasaula Hurdle, 2 miles 65 yards, V.A.T.C. CAULFIELD, by "Newbury" of the "Argus."
- 1.35 p.m.—JOE BRENNAN AND IDA NEW. TON: "Mrs. Clark."
- 1.42 p.m.—STUDIO ORCHESTRA: Waltz, "Mercedis."
- 1.45 p.m.—BOBBY PEARCE, baritone: "The Englishman John" (Coates).
- 1.52 p.m.—JOHNSON'S STUDIO BOYS, Novelty, "Slidin' thro' the Rye."
- 2 p.m.—Description of Cricket Match—Carlton v. St. Kilda, at Carlton, by Mr. Rod McGregor.
- 2.10 p.m.—Close down.
- 2.20 p.m.—Description of Stamerow Two Year Old, 3 furlongs, V.A.T.C. CAULFIELD, by "Newbury" of the "Argus."
- 2.25 p.m.—Close down.

## AFTERNOON SESSION.

- 3 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS: "The Toy Town Parade" (Morille). "The Armada" (Description of the Armada Handicap, 1 mile 3 furlongs, V.A.T.C. CAULFIELD, by "Newbury" of the "Argus.")
- 3.10 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS: "Just Once Again" (A&L). "Rustling Down the Rio" (King). "When Lights are Low in Ohio" (Morille).
- 3.26 p.m.—Description of Cricket Match, Carlton v. St. Kilda, at Carlton, by Mr. Rod McGregor.

- 3.40 p.m.—Description of Tara Stakes, about 2 miles, V.A.T.C. CAULFIELD, by "Newbury" of the "Argus."
- 3.46 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS: "Goodbye, Sweetest Kiss" (Leitch). "Lak to na Be Home Tonight" (Campion). "I'm Pella" (The Irish Teller Joe Dea) (Horsman). "The Spot of the Moon" (Kahn). "The Girl in the Valley" (Horsman). "The Evening of the Babylon" (Carlo). "Gullible" (A&L). "Hundred Mile" (Edwinelle). "Rhythm is the Thing" (Harris). "Gullible Girl" (Leitch). "Zoo Zoo" (Piano Solo) (Blum). 3.57 p.m.—Description of Oporto, 1 mile, V.A.T.C. CAULFIELD, by "Newbury" of the "Argus."
- 4.0 p.m.—Description of Cricket Match—Carlton v. St. Kilda, at Carlton, by Mr. Rod McGregor.
- 4.10 p.m.—"Herald" news service. Stock Exchange information.
- 4.50 p.m.—Description of Rasmussen Plate, 4 furlongs, V.A.T.C. CAULFIELD, by "Newbury" of the "Argus."
- 5 p.m.—Close down.
- During the afternoon the results of the Morning Races will be given at intervals.

## EARLY EVENING SESSION.

- 5.30 p.m.—Sporting results.
- 5.40 p.m.—Answers to letters and further greetings by "LITTLE MISS KOOKA-KOOKA."
- 6.10 p.m.—STUDIO QUARTETTE: Three Scottish symphonic dances (Wentworth). 6.20 p.m.—CAPT. DONALD MACLEAN: Pirates and more Pirates.
- 6.40 p.m.—Herald news service. Weather report and a Shipping forecast.
- 6.52 p.m.—Stock Exchange information.
- 6.57 p.m.—Market reports.
- 6.58 p.m.—River reports.
- 7 p.m.—Newmarket sheep sales by the Associated Stock and Station Agents, Bourke street, Melbourne. Market reports by the Victorian Poultry Co. Ltd. Poultry, grain, rubber, lute, dairy produce, potatoes and onions.
- 7.10 p.m.—Market reports of fruit by the Victorian Fruitgrowers' Association. Retail prices. Wholesale prices of fruit by the Wholesale Fruit Merchants' Association.

## EVENING SESSION.

- 7.15 p.m.—Mr. H. E. F. LAMPE, The history of Timekeepers.
- "Gullible Penitence."
- "The First Hair-Setting."
- 7.30 p.m.—Mr. F. CHAPMAN, National Museum: "From the Races to the Sea."
- 7.40 p.m.—Mr. CLARINE WEEPER: "Heads Up!"
- 8 p.m.—HAWTHORN CITY BAND: Selection, "Christie's Waltz" (Phebe).
- 8.10 p.m.—HARMONIST MALE QUARTET: "Dance to me only with thine eyes." "My Bonnie lam she smileth" (Morley).
- 8.17 p.m.—HAWTHORN CITY BAND: Selection, "La Coquette" (Lament).
- 8.27 p.m.—JAMES FRASER: "When the Sergeant-Major's on Parade" (Langstaffe). TOM MASTERS AND HORACE WHITE: "Who is Sylvia" (Schubert).
- 8.36 p.m.—HAWTHORN CITY BAND: Fantasia, "Bohemian Girl" (Galle).
- 8.48 p.m.—A special programme has been arranged.
- 10.15 p.m.—HAWTHORN CITY BAND: "Mozart" (Fennell) (Kestley).
- 10.25 p.m.—TOM MASTERS: "Little Town in the Old County Down." JAMES SOOTT: "Sweetest When Young" (Lehmann).
- 10.30 p.m.—HAWTHORN CITY BAND: "Idyll" (Strick Maid) (Rimmer). "March, 'Black Fury'" (Rimmer).
- 10.40 p.m.—HARMONISTS MALE QUARTET: "Swing along ale" (Krautz). "Honey I want yer now" (Coe).

10.47 p.m.—JOE BRENNAN AND IDA NEWTON, comedians:  
"The Fireman."

10.45 p.m.—Late sporting news.  
The Royal Automobile Club of Victoria's Safety Message for today is for EVERYBODY: "He who laughs last must believe in Safety First."  
Under the auspices of the Health Association of Australasia, the Health Message for today is: "Do not die your grave with your knife and fork."

11 p.m.—OUR GREAT THOUGHT (see today list)

"Painting in the eye of Passion. Poetry is the voice of Passion. Music is the throbbing of her heart."—Francis Thompson.  
Make Victoria more Musical, subscribe to the Million Shilling Fund.

11.1 p.m.—Joe ARONSON and HIS SYNOPATING SYMPHONISTS

11.40 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE.

Saturday.

NO MIDDAY TRANSMISSION.

AFTERNOON SESSION.

3.20 p.m.—A Matinee for Little Listeners by "Miss Wuratah."

4.30 p.m.—Close down.

EARLY EVENING SESSION.

8.25 p.m.—Bedtime stories by "Uncle Ben."  
7.15 p.m.—Racing Results.  
7.00 p.m.—To-day's Sporting news described.  
7.30 p.m.—Selling Notes by Mr. Fred Smith.

NIGHT SESSION.

STATE RECEPTION.

The State Reception to the Colonial Secretary, Mr. L. S. Amesey, will be relayed from Parliament House.

The musical programme which will be arranged by station 4QG will include music by the Studio Orchestra and vocal numbers by leading Brisbane singers.

8 p.m.—FROM PARLIAMENT HOUSE: State Reception.

10 p.m.—FROM THE STUDIO: "The Daily Mail" news.  
Weather news.  
Close down.

## 5CL, ADELAIDE.

Saturday.

MORNING SESSION.

11 a.m.—G.P.O. Chimes.  
11.1 a.m.—General information.  
"Advertises" general news service.  
11.20 a.m.—Musical selections on the Studio Reproducer.  
12 noon.—G.P.O. Chimes, and close down.

AFTERNOON SESSION.

1 p.m.—Relay from the Victoria Park Race Course, where a running description of the Tattersalls Club Race Meeting will be given by Mr. Arnold Treloar, interspersed with Interstate sporting results and musical items from the Studio.  
5.15 p.m.—Close down.

EVENING SESSION.

8 p.m.—G.P.O. Chimes.  
8.1 p.m.—Dinner music from the Covent Garden Restaurant Orchestra:  
Overture, "Call of Bagdad" (Boulton).  
Waltz, "West of the Great Divide" (Ball).  
Fox Trot, "Hiding Son" (Williams).  
"Dance Tawzwise" (Helmsund).  
"Japanese Banquet" (Deppen).

8.30 p.m.—Bedtime Stories.

7.30 p.m.—Market reports.

7.15 p.m.—Sporting results.

6.50 p.m.—P.O. Chimes.

8.1 p.m.—Brittania solo, Stanley Gere.

8.5 p.m.—Relay from Hensley Beach Rotunda: March, Holden's Band.

8.15 p.m.—Comes, Don Pappeil.

8.10 p.m.—Overture, Holden's Band.

8.35 p.m.—Brittania solo, Stanley Gere.

8.55 p.m.—Selection, Holden's Band.

8.25 p.m.—Comes, Don Pappeil.

8.45 p.m.—Selection, Holden's Band.

8.50 p.m.—Viola solo, Fred Groth.

8.55 p.m.—Selection, Holden's Band.

9 p.m.—G.P.O. Chimes.

9.1 p.m.—Delaney's wheat report.

9.2 p.m.—Comedy, Don Pappeil.

9.10 p.m.—Viola solo, Fred Groth.

9.20 p.m.—Selection, Holden's Band.

9.25 p.m.—Comes, Don Pappeil.

9.30 p.m.—Selection, Holden's Band.

9.35 p.m.—Viola solo, Fred Groth.

9.40 p.m.—Selection, Holden's Band.

9.50 p.m.—Comes, Don Pappeil.

9.55 p.m.—March, Holden's Band.

10 p.m.—G.P.O. Chimes.

10.1 p.m.—Sporting results.

9.15 p.m.—Viola solo, Fred Groth.

10.20 p.m.—Maison de Danse Orchestra.

11.10 p.m.—Sunday's programme, National Anthem, and close down.

## 6WF, PERTH.

Saturday.

12 noon.—Tune in.

12.1 p.m.—Musical programme, including Pianoforte Selections by Miss Evelyn Willis, A.R.C.M.

12.47 p.m.—Market, News, and Cable.

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.—Close down.

1.55 p.m.—Tune in.

SPORTING SESSION.

Detailed description of the following Race events held at Ascot Racecourse, Belmont:  
2 p.m.—Sandringham Hurdles.  
2.40 p.m.—Juvenile Handicap.  
3.20 p.m.—Grove Handicap.

3.30 p.m.—Vocal and instrumental interludes from the Studio.  
4 p.m.—Belcarra Plate.  
4.40 p.m.—November Handicap.  
4.20 p.m.—Stewards Handicap (Weight).

6.30 p.m.—Close down.  
6.45 p.m.—Tune in.  
6.50 p.m.—Birthday greetings for the Kiddees, by Uncle Rag.

7.15 p.m.—Sports results.  
7.50 p.m.—Market, News, and Cable.  
7.45 p.m.—Talk.

8 p.m.—Time signal from Perth Observatory.  
8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.

MUSIC AND SONG.

8.8 p.m.—Musical programme from the Studio, including vocal and instrumental entries.  
Orchestral music played by Hoyt's Orchestra, conducted by Mr. Harold Partington, relayed from Hoyt's Regent Theatre, Williams Street.

Old-time dance music, relayed from the Unity Hall, Beaufort Street.

10 p.m.—Late news items, by courtesy of "The Daily News" Newspaper Coy.  
Ship's within range announcement.

Weather Report and Forecast.  
Sports results.  
10.30 p.m.—Close down.

## 7ZL, HOBART

Saturday

MORNING SESSION.

11 a.m. to 12 noon.

AFTERNOON SESSION.

1 p.m.—Broadcast by direct wire from the North Hobart Oval, description of Cricket match Sandy Bay v North Hobart, by "Mid-off."  
Close down.

EARLY EVENING SESSION.

6.30 p.m.—"Uncle Hector" talks to the children.  
7 p.m.—"Uncle Peter" hall hour.

NIGHT SESSION.

1.30 p.m.—Musical selection.  
7.30 p.m.—Talk by Mr. G. E. Davis, Secretary of the Hobart Development League.

7.50 p.m.—"Mercury" social, Tasmanian news service, Railway auction, produce news, Hobart Stock Exchange quotations, Weather information.

8 p.m.—G.P.O. Clock chimes.  
8.1 p.m.—Dance numbers by Mrs. Shepherd's dance trio broadcast from Imperial Hotel, Hobart.

8 p.m.—Nature Lesson Book opened by Mr. F. G. Roberts, Tasmania's Naturalist.

10.20 p.m.—British Official Wireless News.  
Ships within wireless range, Weather information, Station announcements, National Anthem.

## Sunday, Nov. 13

## 2FC, SYDNEY

MORNING SESSION.

10.45 a.m.—Programme announcements.  
11 a.m.—"Big Ben."  
From St. Stephen's Church, Phillip Street, Sydney.

A Special Announcements Service, conducted by the Rev. Hugh Paton.  
12.15 p.m.—From the Studio: News Service.  
12.30 p.m.—Close down.

AFTERNOON SESSION.

2 p.m.—"Big Ben" and programme announcements.  
2.1 p.m.—Murray Gilbert, baritone:  
Songs at the piano:  
(a) "Irish Emigrant."  
(b) "Mother Saviour" (Ball).

2.10 p.m.—W. F. Jackson will deliver a talk on "The Education of an Australian."

2.25 p.m.—Murray Gilbert, baritone:  
Songs at the piano:  
(a) "Boe of Memory" (Gilbert).  
(b) "Just Remember" (Gilbert).

2.45 p.m.—From the Grand Rotunda, Manly Beach.  
A programme in which the singing Choir from the Dalby and Training Institute, Queensland will combine with the Manly Massed Band in Church at 1. Royal Marine.

3 p.m.—"Big Ben" Close down.

EVENING SESSION.

8 p.m.—"Big Ben" and programme announcements.  
8.5 p.m.—Irish Patriotic songs:  
(a) "Never Surrendered" (Harfield).  
(b) "The Irish Rover" (Ball).

8.50 p.m.—Dr. J. E. O'Connell, a distinguished writer to Sydney, who has had a world-wide experience, will deliver a talk on the "Adventure of a Doctor in Central Africa."

6.45 p.m.—Gilda Pabini, soprano.  
(a) "Addio del Passato" (Traviata).  
(Vocal).

8.30 p.m.—From the Congregational Church,  
51st Street, Sydney.  
Organ solo.

7 p.m.—"Big Ben."  
The Evening Service from the Congrega-  
tional Church.  
Preacher, Rev. T. E. Ruth.

8.20 p.m.—From the Band Rotunda, Manly  
Beach.  
A Concert by the Manly Municipal Band,  
conducted by James Proulx.

9.30 p.m.—From the Studio;  
Eden Starr, soprano (by permission of J.  
C. Williamson, Limited).

8.47 p.m.—Lionel Lawson, violinist.

9.48 p.m.—Peter Gawthorne, English artist,  
now appearing in "The Broken Wing" at  
the Palace Theatre, and who has been associ-  
ated with the British Broadcasting Com-  
pany, London, will give a song recital.

9.55 p.m.—Lionel Lawson, violinist.

10 p.m.—"Big Ben."  
Eileen Starr, soprano.

10.7 p.m.—Peter Gawthorne, English artist, in  
concluding numbers of his Song Recital.

10.19 p.m.—Lionel Lawson, violinist.  
National Anthem.

10.35 p.m.—Close down.

## 2BL, SYDNEY

Sunday.

### MORNING SESSION.

10.45 a.m.—Special News Service.

11.0 a.m.—Service Broadcast from St. Jude's  
Church of England, Randwick.

### AFTERNOON SESSION.

12.30 p.m.—Close Down.

2.0 p.m.—G.P.O. Clock and Chimes.

2.1 p.m.—Session for Children in Hospitals.

2.15 p.m.—Recital by H.M.V. Gramophone  
Company.

2.45 p.m.—Information Service.

3.0 p.m.—G.P.O. Clock and Chimes; Close  
Down.

4.0 p.m.—Pleasant Sunday Afternoon from  
the Central Methodist Mission, Leichhardt.

4.45 p.m.—Close Down.

5.15 p.m.—Children's Service from the Studio.

### NIGHT SESSION.

7.0 p.m.—Service Broadcast from Chalmers  
Presbyterian Church, Clergyman, Rev. D.  
Brandt.

8.30 p.m.—Band Recital by the North Sydney  
Tramway Band, transmitting from the  
Municipal Hall, North Sydney.

9.15 p.m.—Weather Report and Forecast by  
authority of Mr. C. J. Mares, Government  
Meteorologist.

9.16 p.m.—Songs by Miss Mary Neal (Mezzo  
Contralto).

9.25 p.m.—Broadcasters' Instrumental Trio.  
Miss Dulcie Blair, Violin.  
Mr. Bruce Carter, Cello.  
Mr. G. Vera Barnett, Piano.

9.45 p.m.—Dramatic Recital by Mr. Frank  
Hatherley.

9.50 p.m.—Selection by Broadcasters' Instru-  
mental Trio.

9.50 p.m.—Miss Mary Neal (Mezzo Con-  
tralto).

9.55 p.m.—Rehearsal of Following Day's Pro-  
gramme.

10.0 p.m.—G.P.O. Clock and Chimes.

10.7 p.m.—Mr. Frank Hatherley (Dramatic  
Artist).

10.8 p.m.—Broadcasters' Instrumental Trio.

10.15 p.m.—G.P.O. Clock and Chimes;  
National Anthem.

## 2GB, SYDNEY

Sunday.

10 a.m.—Service from St. Alban's Liberal  
Catholic Church, Belmore.

12 noon.—Close down.

6.45 p.m.—Music from Studio.

7 p.m.—Lecture from Ayer Hall by Professor  
W. Wed.

8 p.m.—Songs by Miss Marie Memory.

8.5 p.m.—Drama for two violins with piano  
accompaniment.

8.50 p.m.—Songs by Miss Marie Memory.

8.55 p.m.—Drama for two violins with piano  
accompaniment, Dan Scully, Mrs. E. Fred-  
man.

9.40 p.m.—Talk.

9 p.m.—Close down.

## 2UW, SYDNEY

Sunday

### MORNING SESSION.

10.30 a.m.—Xylophone solo, "Mighty Lak's  
Rose" (Nevill).

10.34 a.m.—Orchestral Selection, "Colonel  
Poppy March" (Allford).

10.38 a.m.—Soprano solo, "O, Whistle and I'll  
Come to You, My Lad!"

10.42 a.m.—Studio selection.

10.45 p.m.—Harmonie solo.  
"The Floral Dance" (Moss).

10.48 a.m.—Organ solo, "Cherie, I Love You"  
(Rondeau) (Goodman).

10.50 a.m.—Tenor solo, "A request"  
(Woodford-Pluden).

11.0 a.m.—Studio Selections.

11.05 a.m.—Soprano solo, "Gather Harvest"  
(Traditional).

11.14 a.m.—Orchestral selection, "The Blue  
Händler" (Waltz) (Strauss).

11.18 a.m.—Soprano solo, "The Lull Player."  
11.22 a.m.—Xylophone solo, "Al Friece"  
(Hirshert).

11.25 a.m.—Studio Dance Selections.

11.37 a.m.—Tenor solo, "I Know of Two  
Bright Eyes" (Gustman).

11.41 a.m.—Studio selection.

11.49 a.m.—Orchestral Selection, "Youth and  
Vigour March" (Lautenbacher).

11.54 a.m.—Organ solo, "Ding-a-ling" (Brit  
Lille).

12 noon.—Dance selections.

12.15 p.m.—Orchestral Selection, "Tales of the  
Vienna Woods" (Waltz) (Strauss).

12.20 p.m.—Selections from Studio.

12.25 p.m.—Rehearsal of forward programme.

12.30 p.m.—Close down.

### EVENING SESSION.

7 p.m.—Musical Selections from the Studio.

7.10 p.m.—Miss Cecily Ellis, soprano;  
Selected.

7.15 p.m.—Studio Selections.

7.22 p.m.—Miss Cecily Ellis, soprano;  
Selected.

7.26 p.m.—Mr. Reg. Ellis, pianoforte solo;  
Selected.

7.34 p.m.—Studio Selections.

8 p.m.—Golden Duo, Steel Guitars.  
(a) "Hilo March."  
(b) "Aloha O'."

8.10 p.m.—Len Moran and His Blackbirds.  
Jazz Selections.

8.16 p.m.—Miss Cecily Ellis, soprano;  
Selected.

8.22 p.m.—Len Moran and His Blackbirds;  
Selected.

8.29 p.m.—Golden Duo, Steel Guitars.  
(a) "Aloha Land."  
(b) "Tribal" (Medley).

8.35 p.m.—Dance Selections from the Studio.

8.48 p.m.—Len Moran and His Blackbirds;  
Jazz Selections.

8.58 p.m.—Selections from the Studio.

9.04 p.m.—Golden Duo, Steel Guitars.  
(a) "Palakilo Blues."  
(b) "Isle of Golden Dreams."

9.11 p.m.—Len Moran and His Blackbirds.

9.21 p.m.—"Sonora" Selection.

9.25 p.m.—Rehearsal of forward programme.

9.30 p.m.—God Save the King.

## 3LO, MELBOURNE.

Sunday.

### MORNING SESSION.

10.00 a.m.—Bell from St. Paul's Cathedral.

10.45 a.m.—Express train information, British  
Official Wireless News from Rugby, News  
from yesterday's papers.

MORNING SERVICE FROM THE MEL-  
BURN STREET INDEPENDENT CHURCH  
Minister, Rev. J. ERNEST JAMES, B.D.  
Organist, Mr. HERBERT DAVIS.

11 a.m.—Hymn "O Worship the King."  
Prayer of Invocation and Lord's Prayer  
(chanted).

Hymn 497, "Come, Thou Fount of Every  
Blessing."

Scripture Lesson.

Hymn 508, "Buck of Ages."  
Prayer.

Duet, "Now We Are Ambassadors."  
Chorus, "How Lovely Are the Mountains"  
(from "St. Paul" Handel).

Offerings, and notice.

Hymn 493, "Zest Thou Weary?"  
SERMON, REV. J. ERNEST JAMES, B.D.  
Hymn 390, "Bacon, Babel."  
Benediction.

12.15 p.m.—Close down.

### AFTERNOON SESSION.

4th ANNUAL MEMORIAL CHURCH SER-  
VICE—SCOTS CHURCH, COLLING  
STREET.

THE STATE MODERATOR OF THE  
PRESBYTERIAN CHURCH OF VICTORIA,  
the REV. DAVID MILLAR, will preside.

Speakers, LIEUT.-COLONEL T. WHITE  
3 p.m.—National Anthem, "God Save Our  
Gracious King."

Prayer of Invocation.

Reading, 2nd Samuel, 12th Chapter, verses  
26 to 31.

Old Testament Reading,  
Hymn, "O God Our Help in Ages Past."  
Prayer.

The Singers, Footscray Choral Society  
(unaccompanied).

Hymn, "Onward, Christian Soldiers."  
Anthem, "Australia, O Thou Favored Isle."  
Footscray Choral Society.

Lord's Prayer.

Collection in aid of proposed memorial.  
Prayer.

Hymn, "Abide with Me."  
Lament, "Flowers of the Forest," Pipe-  
Major MacLennan.

"The Last Post," Bugler E. P. Taylor, 1st  
Battalion.

Benediction.

4.30 p.m.—Under the auspices of the Health  
Association of Australia, SIR GEORGE  
CUNNINGHAM, president of the Association  
will speak on  
"Health Work and Its Aims."

4.45 p.m.—Close down.

### EARLY EVENING SESSION.

5.30 p.m.—Answers to letters and birthday  
greetings by "BILLY BUNNY."

6 p.m.—THE FIED PIPERS will give a selec-  
tion of Hymns and Songs.

6.25 p.m.—"BROTHER BILL;  
"Stop, Look and Listen."

6.45 p.m.—Bells from St. Paul's Cathedral.  
SERVICE FROM CENTRAL MISSION,  
WESLEY CHURCH.

Conducted by DR. S. J. HOBAN.

7 p.m.—Introit, "The Lord is in His Holy  
Temple."  
Prayer, "The Outer Gate."

Hymn, "O God Our Help in Ages Past"  
Prayer, "The Inner Court."  
Anthem.

Scripture Reading.  
Invitations and Offerings.

Anthem.

Hymn, "Peace, Perfect Peace."  
SERMON: DR. S. J. HOBAN.  
"THE MESSAGE OF A FACE."

Canada Chose Burgess for her Outposts.



# Monday, Nov. 14

## 2FC, SYDNEY.

EARLY MORNING SESSION—7 to 9 a.m.

## MORNING SESSION.

- 10 a.m.—"Big Ben," and programme announcements.  
10.15 a.m.—Studio music.  
10.30 a.m.—"Sydney Morning Herald" news service.  
10.30 a.m.—Studio music.  
10.35 a.m.—Last minute Racing Information, by the 2FC Commissionaire.  
10.45 a.m.—Studio music.  
11 a.m.—"Big Ben."  
Making music for school children.  
11.15 a.m.—A.P.A. and Reuter's Cable services.  
11.15 a.m.—A Reading.  
11.30 a.m.—Close down.

## MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.  
12.2 p.m.—Stock Exchange, first call.  
12.3 p.m.—Weather forecast, rainfall.  
12.35 p.m.—Studio music.  
12.40 p.m.—Summary of "Sydney Morning Herald" news service.  
12.45 a.m.—Daily wireless news.  
12.50 p.m.—Marching music for school children.  
12.55 p.m.—Kathleen Stollery, mezzo:  
"Bells of Brittany."  
12.55 p.m.—"Big Ben" and Reuter's Cable services.  
1.00 p.m.—Studio music.  
1.05 p.m.—"Who Was in the Hall?"  
1.10 p.m.—"Evening News" wireless news service.  
1.15 p.m.—The Oak Hall Instrumental Trio.  
1.20 p.m.—Stock Exchange, second call.  
1.25 p.m.—Marching music for school children.  
1.30 p.m.—Kathleen Stollery, mezzo:  
"Who Was in the Hall?"  
1.35 p.m.—Studio music.  
1.40 p.m.—The Oak Hall Instrumental Trio.  
2 p.m.—"Big Ben" Close down.

## AFTERNOON SESSION.

- 2 p.m.—"Big Ben" and announcements.  
2.05 p.m.—A Plumber's Hospital by pupils of Mr. Ramsay Pennington.  
2.20 p.m.—Marching music for school children.  
2.25 p.m.—Evel King, contralto:  
"Fear, by the Clock" (Majumdar).  
2.30 p.m.—From Farmer's Tea Rooms:  
Irene Duncan, soprano:  
"April is a Lady" (Phillips).  
2.35 p.m.—The Oak Hall Instrumental Trio.  
(Leader, Mr. Horace Hoate).  
2.40 p.m.—From the Studio:  
Sue Hewitt, mezzo:  
"Sweetheart, Myra" (McDowall).  
2.45 p.m.—From Farmer's Tea Rooms:  
Janet Ross, contralto:  
"Tatters" (Lynn).  
2.50 p.m.—The Oak Hall Instrumental Trio.  
2.55 p.m.—Evel King, contralto:  
"Dance" (Gossett). From the Studio.  
3 p.m.—Piano-forte solo by pupil of Mr. Ramsay Pennington.  
3.05 p.m.—From Farmer's Tea Rooms:  
Irene Duncan, soprano:  
"Yan" (Edith Harbury).  
3.10 p.m.—The Oak Hall Instrumental Trio.  
3.15 p.m.—From the Studio:  
Ann Lillian, mezzo.  
3.20 p.m.—From Farmer's Tea Rooms:  
Jeanette Ross, contralto:  
"Mighty Lak a Rose" (Novis).  
3.25 p.m.—Stock Exchange, third call.  
3.30 p.m.—Sue Hewitt, mezzo:  
"Like is Par from the Land" (Lambert).  
3.35 p.m.—Studio music.  
3.40 p.m.—Ann Lillian, mezzo.  
3.45 p.m.—Studio music.  
3.50 p.m.—"Big Ben." Close down.

TYNE. "The Day They Gave"  
Remediation.  
Severfold Amen.

FROM THE STUDIO:

1.10 p.m.—MR. J. S. MACDONALD will speak on "The Million Selling Fund."

1.40 p.m.—SELECTIONS FROM "BILJAH,"

arranged by William G. James, with appropriate items by the COLLINGWOOD GITS-

TERS' BAND. Conductor, F. E. Johnston.

MELBOURNE CHORAL UNION:

Chorus, "Be Not Afraid."

FRANCE WHITE, tenor:

"Each and All," "Ye People Bred Your

Hearts."

"If with all Your Hearts"

COLLINGWOOD CITIZENS' BAND:

selection, "The Cream" (Hayes).

MILLS SAFFY ARKAY, soprano:

Air, "Dear Ye Israel."

W. TOWNSEND, solo:

Air, "It is Enough."

MELBOURNE CHORAL UNION:

"Ye, Working Over Israel."

MILLS SAFFY ARKAY, soprano:

Air, "Dear Ye Israel."

W. TOWNSEND, solo:

Air, "Lord God of Abraham"

COLLINGWOOD CITIZENS' BAND:

Items, "Lead, Kindly Light."

B. HORSBURGH, contralto:

Recit. and Air, "Aria, Ethel."

"O Rest in the Lord."

MELBOURNE CHORAL UNION:

Chorus, "Thanks be to God."

9.25 a.m.—News.

The Royal Automobile Club of Victoria's

Scenic Manager for 16-day E for

PEDRETHIANI) "Don't" fall a trap when

encountering a throughfare—you may wake up

at the hospital."

Under the auspices of the Health Associa-

tion of Australia:

HEALTH MESSAGE for today is:

"When your head begins to reel and your

eyes to blink you believe that you are

asleep. But if you are in a warm, stuffy

room, it may be that you need 15m fresh

air."

OUR GREAT THOUGHT. "We believe the

music we hear is from the heart of the

Universe for all, and not only for the specially

attuned and schooled."—(W. J. G.)

Make Victoria More Musical. 33 records to

the Million Selling Fund.

10 p.m.—GOD SAVE THE KING.

3.15 p.m.—FROM THE BOTANIC GARDENS:

Band Concert.

4.30 p.m.—Close down.

## NIGHT SESSION.

## ST. JOHN'S CATHEDRAL.

The Complete Evening Service will be re-

layed from St. John's Anglican Cathedral.

7 p.m.—FRIDAY ST. JOHN'S:

Children's Service.

7.30 p.m.—Evening Service.

## BAND CONCERT.

At the invitation of the Church Services

the Concert by the Brisbane Municipal Band

will be relayed from William Para.

8.30 p.m.—Band Concert.

9.30 p.m.—Close down.

## 6WF, PERTH.

Sunday.

10.55 a.m.—Time in.

11 a.m.—Mirroring Service relayed from Lake

Street Church of Christ, Perth.

12.15 p.m.—Close down.

1.30 p.m.—Time in.

## FROM THE STUDIO.

2.25 p.m.—Musical programme, including vocal

and assisting artists.

4.30 p.m.—Close down.

7 p.m.—Time in.

7.15 p.m.—Children's bedtime stories.

7.30 p.m.—Evening Service, relayed from

Leventh Day Adventist Church, Hag Street,

Subiaco.

## AFTER CHURCH SERVICE.

8.45 p.m.—Armatist Service, including vocal

numbers and items by the R.Y.L. Band, con-

ducted by Mr. W. A. Halverson, relayed from

Queen's Hall, William Street.

10.3 p.m.—Close down.

## 7ZL, HOBART

Sunday.

## MORNING SESSION.

11 a.m.—Church Service from Memorial Con-

gregational, Hobart. Preacher, Rev. Arthur

C. Nelson.

Close down.

## AFTERNOON SESSION.

2.45 p.m.—

Broadcast by direct wire from Anglican

Barracks, Governor of Consecration and

Presentation of the 14th Battalion Regiment-

tal Color. The Color will be presented

by His Excellency the Governor, Sir James

O'Grady, K.T.M.D., on behalf of Ex-members

of the 14th Battalion A.I.F., after the Col-

or will be handed over to the Mayor and

Aldermen of the City of Hobart for safe

custody.

4.30 p.m.—Close down.

## EARLY EVENING SESSION.

6.30 p.m.—Children's Game with the "Sunday

Lady."

## NIGHT SESSION.

7 p.m.—Church service from Melville Street

Methodist Church, Hobart. Preacher, Rev.

Robert Williams.

At invitation of Church Service concert

from the studio of Band Concert from St.

Davies Park, Hobart.

9.40 p.m.—"Mercury" special Interstate news

service. British Official Wireless News

Ship within wireless zone. 9 a.m. Weather

forecasts. Station announcements.

National Anthem.

## 4QG, BRISBANE.

Sunday.

## EARLY MORNING SESSION.

## ST. BARNABAS CHURCH.

The early morning service will be relayed

from St. Barnabas Church of England,

Illana.

7.30 a.m.—FROM ST. BARNABAS:

Holy Eucharist.

Intra—Psalm 23.

Epistle—Philippians, Chap. 1, Verses 8

to 11.

Holy Gospel—St. Matthew Chap. 14, Verse

21.

Hymns 104, 112, 224.

8.40 a.m.—Close down.

## MORNING SESSION.

The complete Morning Service will be re-

layed from St. Barnabas Church, Illana.

11 a.m.—FROM ST. BARNABAS:

Epistle and Gospel as above.

Hymns 102, 140, 258, 302.

Holy Eucharist, sung by Congregation to

Merton's music.

Services from The Book of Common Prayer.

Hymns Ancient and Modern.

Preacher: Rev. Canon Gustaf.

## AFTERNOON SESSION.

## BAND CONCERT.

The Band Concert will be relayed from the

Deafies Gardens.

You can Recharge a Philco for a few pence.

## EARLY EVENING SESSION.

- 8.40 p.m.—The Chimes of UFG.  
 8.46 p.m.—The "Hello Man" talks to the children.  
 8.50 p.m.—Story time for the young folk.  
 8.50 p.m.—Studio music.  
 9.50 p.m.—Late sporting news.  
 7 p.m.—Dalgety's market reports (wool, wheat and stock).  
 7.6 p.m.—Fruit and vegetable markets.  
 7.10 p.m.—Weather and shipping news.  
 7.15 p.m.—"Evening News" late news service.

## NIGHT SESSION.

- 7.30 p.m.—Programme announcements.  
 7.35 p.m.—A Talk by Captain Fred Arnone: Outstanding Women in History: No. 2, "Mary, Queen of Scots."  
 7.47 p.m.—Margaret James, soprano:  
 (a) "Where the Bee Sucks" (Arago).  
 (b) "Serenade" (Casta).  
 7.54 p.m.—Erna Living in a character sketch.  
 8 p.m.—"Big Ben."  
 From the Haymarket Theatre, George Street, Sydney.  
 Items by the Haymarket Operatic Orchestra, under the baton of Stanley Porter.  
 8.20 p.m.—From the Studio:  
 Norman McLennan, bass.  
 8.25 p.m.—H. W. Varna (the permission of J. C. Williamson, Limited) will present a Studio Performance of  
 "THE SILVER KING,"  
 broadcast for the first time.

## CAST:

- Wilfrid Denver, H. W. Varna.  
 Captain Skinner ("Soldier"), William Home.  
 Father Christmas, William Paulsler.  
 Griggs, William Philip.  
 Henry Griblett, Noel Waterworth.  
 Nellie Denver, Max Service.  
 Olive Skinner, Felix Clark.  
 Klay Denver, Miss Glover.  
 Faithful, Gwen Penningly.  
 8.47 p.m.—Margaret James, soprano.  
 8.51 p.m.—Part Two of "The Silver King," played by H. W. Varna and his Company.  
 9.20 p.m.—Late weather forecast.  
 9.26 p.m.—Norman McLennan, bass.  
 9.30 p.m.—Part Three of "The Silver King," played by H. W. Varna and Company.  
 9.35 p.m.—From the Haymarket Theatre, George Street, Sydney:  
 The Haymarket Operatic Orchestra, under the baton of Stanley Porter.  
 10.3 p.m.—From the Studio:  
 Erna Living in a character sketch.  
 10.15 p.m.—Cyril Coy and his Dance Orchestra:  
 (a) "Tallied in Love with You" (Meyer).  
 (b) "He's the Last Word" (Donnaudon).  
 10.25 p.m.—From the Haymarket Theatre, Sydney:  
 The Haymarket Operatic Orchestra, conductor, Stanley Porter.  
 10.55 p.m.—From the Studio:  
 Cyril Coy and his Dance Orchestra:  
 (a) "When Wages are Low in Cairo" (Meyer).  
 (b) "Ain't She Sweet" (Ager).  
 (c) "If all Dreams are You" (Henderson).  
 (d) "Song of the Wanderer" (Bertin).  
 10.57 p.m.—Late news and announcements.  
 11 p.m.—"Big Ben."  
 Cyril Coy and his Dance Orchestra in the following numbers:  
 (a) "One More Kiss" (Jones).  
 (b) "In a Little Garden" (Lila).  
 (c) "Honey Kisses My Way" (Gilligan-Hall).  
 (d) "O Sole Mio" (Faraco) (di Capone).  
 (e) "Camille" (Sherman).  
 (f) "Blue Skies" (Bertin).  
 11.10 p.m.—National Anthem. Close down.

## 2LB, SYDNEY

## Monday.

## EARLY MORNING SESSION.

7 a.m. to 8 a.m.

## MORNING SESSION.

- 10.30 a.m.—G.P.O. clock and chimes.  
 Musical items from the Studio.  
 10.40 a.m.—News from the "Daily Telegraph Pleasantry."  
 10.45 (a.m.)—Musical programme from the Studio.  
 11 a.m.—G.P.O. clock and chimes.  
 Announcements.  
 11.5 a.m.—Musical programme from the Studio.  
 11.15 a.m.—Talk on "Tennis" by Miss Varley. Broadcasters' women's sports authority. Social notes. Replies to correspondents by Mrs. Jordan.  
 Talk on "Summer Drinks" by Mrs. Jordan.  
 12 noon.—G.P.O. clock and chimes.  
 Special ocean forecast and weather report.  
 12.10 p.m.—Musical programme from the Studio.  
 12.5 p.m.—Information: Main shipping and port activity.  
 12.22 p.m.—Bulls in call by wireless.  
 12.14 p.m.—Fruit and vegetable report.  
 12.30 p.m.—Vegetable market report.  
 12.18 p.m.—Dairy farm and produce market report.  
 12.22 p.m.—Furage market report.  
 12.24 p.m.—Fish market report.  
 12.26 p.m.—Bullion market report.  
 12.28 p.m.—Stock Exchange report.  
 12.30 p.m.—H.M.V. gramophone results.  
 1.27 p.m.—Stock Exchange report.  
 1.50 p.m.—G.P.O. clock and chimes.  
 Talk to children and special entertainment for children in hospital.  
 2 p.m.—G.P.O. clock and chimes.  
 Close down.  
 Evening information broadcast immediately after each race by courtesy of the "Sun."  
 3 p.m.—G.P.O. clock and chimes.  
 Musical programme from the Studio.  
 3.10 p.m.—News from the "Sun."  
 3.20 p.m.—Musical programme from the Studio.  
 3.30 p.m.—News from the "Sun."  
 3.40 p.m.—Dunzmann Dance Band, broadcast from the Danzowan Cabaret.  
 4 p.m.—G.P.O. clock and chimes.  
 News from the "Sun."  
 4.8 p.m.—Musical programme from the Studio.  
 4.15 p.m.—Serial story.  
 4.19 p.m.—Dunzmann Dance Band.  
 4.50 p.m.—News from the "Sun."  
 4.53 p.m.—Resume of night's programme.  
 4.57 p.m.—Racing results.  
 4.59 p.m.—Special ocean forecast.  
 5 p.m.—G.P.O. clock and chimes.  
 Close down.

## EARLY EVENING SESSION.

- 6.45 p.m.—G.P.O. clock and chimes.  
 Children's session.  
 6.50 p.m.—Musical programme from the Studio.

## SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. clock and chimes.  
 Australian Mercantile, Land and Finance Co.'s report.  
 Weather report and forecast by courtesy of Government Meteorological Producers' Distributing Society's fruit and vegetable market report.  
 Stock Exchange reports.  
 Grain and fodder report ("Sun").  
 Dairy produce report ("Sun").  
 7.45 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' Topical Chorus.  
 An hour's programme presented by London's winners.  
 8.3 p.m.—Mr. Henri de Lienc, violin solos.  
 8.10 p.m.—Mr. Stanley H. Callett, tenor.  
 8.17 p.m.—Mr. F. Couchman, cornet solo.  
 8.24 p.m.—Graham and Wattle present some humor and some songs.  
 8.30 p.m.—The Newtown Band broadcast from Industrial Hall, Newcastle.  
 8.58 p.m.—Mr. Stanley H. Callett.  
 9.6 p.m.—Weather report and forecast by courtesy of Mr. G. J. Marex, Government Meteorologist.  
 9.7 p.m.—Dance music by Cyril Kaye and the Wentworth Cafe Orchestra.  
 9.17 p.m.—Broadcasters' all sports expert will talk on general sporting.  
 9.32 p.m.—The Newtown Band.  
 9.42 p.m.—Mr. Henri de Lienc.  
 10 p.m.—G.P.O. clock and chimes.  
 10.1 p.m.—Resume of following days' programme.  
 10.4 p.m.—A humorous sketch presented by Miss Molly Barnor and Mr. Jack Beattie.  
 10.22 p.m.—Dance music by Cyril Kaye and the Wentworth Cafe Orchestra. During the intervals between the dances, news items by courtesy of the "Sun" Newspapers will be read from the Studio.  
 11.10 p.m.—G.P.O. clock and chimes.  
 National Anthem.

## 2GB, SYDNEY

## Monday.

## MORNING SESSION

- 9 a.m.—Music.  
 9.5 p.m.—Liberio, Talk.  
 9.15 a.m.—Music.  
 9.25 a.m.—Psychological Class.  
 9.40 a.m.—Music.  
 9.45 a.m.—Health and Diet.  
 10 p.m.—Close down.

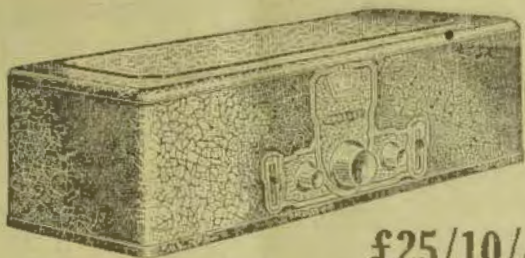
## AFTERNOON SESSION.

- 3.30 p.m.—Music.  
 3.37 p.m.—Address by Professor Ernest Wood.  
 3.52 p.m.—Music.  
 4 p.m.—Address.  
 4.22 p.m.—Music.  
 4.30 p.m.—Close down.

## NIGHT SESSION.

- 7 p.m.—Music.  
 7.5 p.m.—Address by Mr. E. Warner.  
 7.15 p.m.—Music.  
 7.20 p.m.—Mr. J. K. Powell.  
 7.30 p.m.—Music.  
 7.35 p.m.—Recital by Mr. Heath Burdock.  
 7.55 p.m.—Songs by Mr. W. J. Steiner.  
 8.35 p.m.—Address by Professor Ernest Wood.  
 8.20 p.m.—Instrumental Trio: Dan Scully, Murielle Lang, Ada Brook.  
 8.30 p.m.—Songs by Miss Ethel Jones.  
 1. "Cosilian Lament" (Del Risgo).  
 2. "Tipico" (Carves).  
 8.38 p.m.—Cello Solo, Murielle Lang.  
 1. "Kod Young" (Max Bruch).  
 8.50 p.m.—Instrumental Trio: Marielle Lang, Ada Brook.  
 9 p.m.—Address by the Rev. R. B. S. Hammond: "Mending Broken Men."  
 9.15 p.m.—Songs by Mr. W. J. Steiner.  
 9.25 Instrumental Quartet, Dan Scully, Murielle Lang, Ada Brook.  
 9.40 p.m.—Songs by Miss Ethel Jones.  
 1. "WIM Rose" (Schubert).  
 2. "My Day at Ilington" (O'Jiver).  
 9.50 p.m.—Talk.  
 10 p.m.—Close down.

# You're there with a Crosley



£25/10/-

## "THE BANDBOX"

A Phenomenal Crosley Radio Receiver for the Complete Enjoyment of the 1927-28 Radio Season.

Here are the seven big things which represent Radio's greatest advancement, brought together by Crosley and combined with the experience, mass production method and leadership of the Crosley organization. No wonder a waiting radio world proclaims the "Bandbox" at the unprecedented price of £25/10/-, Crosley's paramount achievement.

### THE BANDBOX IS SHIELDED.

Radio coils are surrounded by magnetic fields similar in every respect to the magnetic field around the earth that moves the needle of a compass, but around radio coils these fields make millions of "loose" feet, feeding back on each other. Heretofore, it has been customary to make inefficient coils with inefficient fields to prevent such feeding back. The Crosley Bandbox incorporates copper shields around each coil to prevent such feeding back. The coils consequently can be made, and are very much more efficient. The amplification of the receiver is, therefore, much higher—the sensitivity is greatly increased. Condensers are also completely shielded from each other in separate metal compartments. Hitherto only very high-priced sets have enjoyed this super-radio advantage.

### THERE IS NO OSCILLATION.

The Bandbox employs completely balanced or neutralized stages to prevent oscillation, instead of the common form of loose method. Costly to be sure, but extremely necessary in achieving such results as are obtained by this marvel of radio reception, THE BANDBOX.

### FOR SHARPNESS—THE ACUMINATORS.

"Bandbox" acuminators enable "Fishers" for distant stations to bring them in loud and clear. As powerful telescopes magnify distant scenes, acuminators increase the volume of far-away signals so they seem like local programmes.

### VOLUME CONTROL.

This is another big "Bandbox" feature, which permits loud brass band power for those who want their dance music strong and loud. For when it gets volume down to a soft and gentle murmur, without distortion.

### ILLUMINATED DIAL.

A Master Station Selector has an illuminated dial for easy reading in shadowy corners. A single knob permits full tuning for ordinary reception of local, nearby and super-powered stations.

### INSTALLATIONS SIMPLIFIED.

A woven cable, enclosing vari-colored, rubber-covered leads, makes installation and hookup easy for the veriest novice. No waiting for the radio service man should the batteries be changed.

### EASILY ADAPTED TO CONSOLES.

Simply remove screws in brightness and in base of set. Lift off metal case. Chassis now stands ready for installation in Console Cabinet. Operating in Console Cabinet permits control shafts to protrude. Bandbox screws in place, and, presto! the console radio is complete.

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## 2 UW, SYDNEY

## 3LO, MELBOURNE.

Monday.

## MORNING SESSION.

- 9 a.m.—News, shipping, music, studio items.  
 9.45 a.m.—Women's Session.  
 10.00 a.m.—Resume of forward programme.  
 10 a.m.—Close down.  
 12.15 p.m.—Special Employers' Luncheon Session.  
 12.45 p.m.—Close down.

## AFTERNOON SESSION.

- 2 p.m.—Studio items.  
 2.40 p.m.—Resume of forward programme.  
 3 p.m.—Close down.

## EVENING SESSION.

- 5.30 p.m.—Studio items.  
 6.45 p.m.—Resume of forward programme.  
 8 p.m.—Close down.

## NIGHT SESSION.

- 7.4 p.m.—"Samara" Selection.  
 7.45 p.m.—"Where to Go."  
 7.50 p.m.—Miss Ruth Harden, contralto:  
 "My Ain Folk" (Lynsay Tennant).  
 7.55 p.m.—Miss Alline O'Connor, songs at the Piano: Selected.  
 7.55 p.m.—Miss Doris Fitzmaurice, elocutionist: Selected.  
 7.55 p.m.—George H. Hooper, tenor: Selected.  
 7.55 p.m.—Miss Jean Edwards, soprano:  
 "Who is Sylvia?" (Zemster).  
 7.55 p.m.—Gordon James McDonald, tenor:  
 "Sweetest of Mine" (O'Hagan).  
 7.55 p.m.—Miss Esther McAlpin, contralto:  
 "Lament of Ith" (Hastings).  
 7.55 p.m.—Robert Matthews, Euphonium solo:  
 "Friend of Mine" (Sanderson).  
 7.55 p.m.—Madame Lillian May, soprano:  
 "Here's to Love" (Gibson).  
 7.55 p.m.—Gordon James McDonald, tenor:  
 "The Land of Much Love Best."  
 7.55 p.m.—"Photographic Chat":  
 Messrs. Harringtons.  
 8 p.m.—Miss Phyllis Facher, mezzo-soprano:  
 Selected.  
 8.1 p.m.—Harry Afflick, Jazz Pianist:  
 Selected.  
 8.14 p.m.—Miss Alline O'Connor, songs at the Piano: Selected.  
 8.20 p.m.—Miss Doris Fitzmaurice, elocutionist: Selected.  
 8.27 p.m.—Miss Ruth Harden, contralto:  
 (a) "The Dawn" (O'Hastings).  
 (b) "In My Garden" (Liddle).  
 8.35 p.m.—Miss Dorothy Wannan, Violin solo:  
 Selected.  
 8.35 p.m.—Miss Jean Edwards, soprano:  
 "L'Anceau D'Argent" (Hake).  
 8.4 p.m.—Gordon James McDonald, tenor:  
 Selected.  
 8.45 p.m.—George H. Hooper, tenor:  
 Selected.  
 8.51 p.m.—Esther McAlpin, contralto:  
 "My Jewels" (Sanderson).  
 8.55 p.m.—Madame Lillian May, soprano:  
 "Come Sing to Me" (Thompson).  
 9 p.m.—Robert Matthews, Euphonium solo:  
 "Thru' the Night" (Lange).  
 9.4 p.m.—Phyllis Facher, mezzo-soprano:  
 Selected.  
 9.8 p.m.—Weather forecast and news bulletin.  
 9.15 p.m.—Harry Afflick:  
 Jazz interlude.  
 9.20 p.m.—Resume of forward programme.  
 9.30 p.m.—God Save the King.  
 Official Accompanist, Madam Alline Seizer.

Monday

## MIDDAY SESSION.

- 4.50 p.m.—Description of the site of the Dunlop Grand Prix, transmitted from the Exhibition Building, Melbourne.  
 5.15 p.m.—Melbourne Observatory Time Signal.  
 British Official Wireless News from King's Rover's Australian Press Association Cable, "Argus" news service.  
 5.20 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "No Wonder I'm Happy" (Aker).  
 "When I Look at You" (Gosse).  
 "Love the Ladies" (Lombardson).  
 5.30 p.m.—MARIE LAWTON, soprano:  
 "I'm Alone" (Hesselt).  
 "Jewel Song" (from "Faust" (Gosse).  
 5.35 p.m.—Stock Exchange information.  
 5.40 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "I Won't Kiss You Good-night" (Tucker).  
 "On Watch an Elephant if you Wanna do Something Big" (Tucker).  
 "Are You Listening-in To-night, Mother Dear?" (Williams).  
 5.50 p.m.—MADOLINE KNIGHT, contralto:  
 We are glad to have the opportunity of presenting to you again this popular singer of Irish, Scotch and Old Time Melodies.  
 "Hard Times come again no More" (Negro Melody).  
 "Gone with My Love lies Decaying" (Negro Melody).  
 5.57 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "The Birth of the Blues" (Henderson).  
 6 p.m.—Melbourne Observatory Time Signal. Don't be discouraged. Things will take a turn.

- 5.57 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "The Wind Blew through his Whiskers just the Same" (Conrad).  
 "Sweetest of Mine" (O'Hagan).  
 We now have pleasure in presenting to you:  
 5.7 p.m.—YETTA LANDAU, elocutionist:  
 "Oh, Don't I wish I were a Man!"  
 "The Land of Much Love Best."

- 5.14 p.m.—Meteorological information. Weather forecast for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports for Victoria, South Australia, Tasmania and New South Wales.

- 5.20 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "Oh, What a Fun was Whoozie" (Rahn).  
 "Lo Down" (Easer).  
 "Cherie Berrie Bee from Sunny Dale" (Lewin).

- 5.20 p.m.—Under the auspices of the Health Association of Australasia, Sir James Barrie will speak on:  
 "The Prevention of Disease."

- 5.40 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "Nina" (Neenan) (Bernis).  
 "Take in the Sun" (Woods).

- 5.47 p.m.—MADOLINE KNIGHT, contralto:  
 "Oh, What a Fun was Whoozie" (Rahn).  
 "The Meeting of the Waters" (Irish).

- 5.54 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
 "Whipped Cream"—Piano Solo (Lange).  
 "Wattie you linnie with Me" (Miles).

- 6 p.m.—Close down.  
 During the afternoon progress reports of the Dunlop Grand Prix will be broadcast. No. 1 Section, Melbourne to Wanganaratta.

## AFTERNOON SESSION.

- 4 p.m.—Melbourne Observatory Time Signal.  
 4.1 p.m.—HOYT'S GARDINER REGENT ORCHESTRA:  
 "The Cigarette" (Munkton).  
 4.15 p.m.—MRS. DOROTHY SILK:  
 "Humberatta."

- 4.17 p.m.—HOYT'S GARDINER REGENT ORCHESTRA:  
 "Rumorskie" (Dvorak).  
 4.22 p.m.—MARION LIGHTFOOT, steel guitar:  
 "Gone With Me"  
 "Alone."

- 4.30 p.m.—SENIA GHOSHIAKOFF, tenor:  
 "I'm Beside and Street" (Ed. Sobolev) (Aker).  
 "Overland a Night of Love" (Aker).

- 4.40 p.m.—DR. HELEA BULL, under the auspices of the Health Association of Australasia, will speak on:  
 "The Schick Test for Diphtheria."

- 4.57 p.m.—MARIE LAWTON, soprano:  
 "Gone with my Love"  
 "Elizabeth" from Tannhauser.

- 4.4 p.m.—HOYT'S GARDINER REGENT ORCHESTRA:  
 Selection, "Madame Butterfly" (Puccini).

- 4.18 p.m.—SENIA GHOSHIAKOFF, tenor:  
 "A Dream" (Bartlett).  
 "Oh, beautiful Night," a Russian folk song.

- 4.25 p.m.—MARION LIGHTFOOT, steel guitar:  
 "Kissin' Baby."  
 "Dorkies' Jubilee."

- 4.32 p.m.—MISS FLOORA HILL, Inspector of Schools:  
 "Domestic Science."

- 4.40 p.m.—"Herald" News service. Stock Exchange information.

- 5 p.m.—Progress of Dunlop Grand Prix. No. 1 Section, Melbourne to Wanganaratta. Results of the Racestart Trials will be given at intervals during the afternoon as they come to hand.

## EARLY EVENING SESSION.

- 5.30 p.m.—Answers to letters and birthday greetings by:  
 5.35 p.m.—MISS KOOKABURRA.

- 5.40 p.m.—Play for children in connection with Health Week, by the North Brunswick State School:  
 "Who Says Six-Year Molars?"

- 5.45 p.m.—STENO CLARTEYE, Eddy:  
 "English Folk Songs" (Vaughan-Williams).

- 5.55 p.m.—"LITTLE MISS KOOKABURRA". This is Health Week, and Little Miss Kookaburra is going to tell you a story about a little boy and girl who didn't like cleaning their teeth. I wonder what the other children thought of them?

- 6.00 p.m.—Official report of Newmarket Stock Sales by the Associated Stock and Station Agents, Stock Street, Melbourne. Results of every and entire drawn for week's sale.

- 6.10 p.m.—"Herald" News Service. Weather synopsis. Shipping Movements.

- 6.15 p.m.—Stock Exchange information.  
 6.37 p.m.—River Reports.

- 6.50 p.m.—Folk Songs, Records by J. E. Barrett Ltd. Market Prices.

- 6.55 p.m.—Ballet Reports by the Victorian Producers' Cooperative Co. Ltd.: Paddy O'Leary, Hain, Gray, Snow, Jule, Daisy Padua, Pauline and Gaius. Market reports of cuts by the Victorian Fruit Growers' Association. Retail prices. Wholesale prices by the Wholesale Fruit Merchants' Association.

## EVENING SESSION.

- 7.15 p.m.—Under the auspices of the Boy Scouts' Association, COMMISSENER DR. C. GORDON MCADAM:  
 "Swearing."

- 7.20 p.m.—MR. E. C. H. TAYLOR:  
 "School Life and School Sports."

- 7.25 p.m.—Under the auspices of the Department of Agriculture, Mr. W. C. BULLO, "Foultry" Expert, will speak on:  
 "Foultry."

- 8 p.m.—MR. H. J. FAY, International Sprinter:  
 "Half-Mile Preparation."

- 8.15 p.m.—DR. OSCAR REPPERT will speak under the auspices of the Health Association of Australasia on:  
 "The Care of Children's Teeth."

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Battery-Cost  
per hour of  
Enjoyment!**

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Remember, you pay no more  
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91-93 COURTENAY PLACE, WELLINGTON, N.Z.

- 8.31 p.m.—STUDIO ORCHESTRA:  
Waltz, "The Devil's Prospect."  
8.33 p.m.—YETTY LANDAU, cello-contralto:  
"Break! Break!" (Tennyson).  
"No Underfoot" (Bracken).  
8.40 p.m.—STUDIO ORCHESTRA:  
"Highland Schottische" (Old Scotch).  
8.47 p.m.—SYD. L. EXTON, tenor:  
"Off in the Shilly Night" (Irish Air).  
"Anchor's Weibsch".  
8.54 p.m.—STUDIO ORCHESTRA:  
Dance, "Old Kestutchy" (Warwick Moore).

9 p.m.—HER EXCELLENCY LADY SOMERS  
will speak on:  
"Girl Guide Movement."

9.10 p.m.—STUDIO ORCHESTRA:  
"Royal Alberta" (arr. Moffatt).

9.25 p.m.—MADOLINE KNIGHT, contralto:  
"The Valley by the Sea."  
"In the Gloaming."

9.32 p.m.—STUDIO ORCHESTRA:  
Waltz, "Palace of Palma."

9.49 p.m.—MARIE LAWTON, soprano:  
Selected.

9.47 p.m.—STUDIO ORCHESTRA:  
Lancers, "Imperial Lancers."

10 p.m.—SYD. L. EXTON, tenor:  
"Sally in Our Alley."  
"Two Eyes of Gray."

10.7 p.m.—STUDIO ORCHESTRA:  
Valse, "Silver Lake."

10.15 p.m.—MADOLINE KNIGHT, contralto:  
"The Flight of Ages."  
"Coming Thru the Key."

10.22 p.m.—STUDIO ORCHESTRA:  
Waltz, "Blue Paradise."

10.30 p.m.—"Agony" News Service. Meteorological information, British Official Wireless News from Rugby, Girl Guide News, THE ROYAL AUTOMOBILE CLUB OF VICTORIA'S SAFETY MESSAGE FOR TODAY is for: MOTORISTS! Don't forget how easy it is for non-motorists to designate motorists "road hogs." It is up to you to remove this impression. Safety First.

10.45 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
"I Wonder Who's With You" (Dixon).  
"This is June" (Leonard).  
"What Does It Matter" (Berlin).  
"The Prisoner's Bride" (Mathien).

11 p.m.—OUR GREAT THOUGHT:  
"There is Music wherever there is harmony, order or proportion" (Sir Thomas Browne). Make Village More Musical. Subscribe to the Million Singing Fund.

11.1 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS.  
BY SPECIAL REQUEST, our Programme will be continued till 1 a.m.

11.46 p.m.—SENIA CHOSTAKOFF, tenor:  
"By the Fireside" (Strak).  
"Dolcinea Mikidish" A legend arranged by S. Jacoff.

11.47 p.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
"That Certain Feeling" (Gershwin).  
"I Won't Go Home To-night" (Gilbert).  
"Pleading" (Jones).

11.57 p.m.—MARIE LAWTON, soprano:  
Selected.

11 midnight—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
"Chinese Moon" (Nangbaum).  
"She Don't Wanna" (Yellen).  
"Iscoutin I Love You" (Berlin).

11.10 a.m.—E. MASON WOOD, baritone:  
"My Little Bando."  
"Sea Fever."

12.1 a.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
"For My Sweetheart" (Brown).  
"Barlarka" (Silver).  
"One Night of Love in Spain" (Hayes).

12.7 a.m.—SENIA CHOSTAKOFF, tenor:  
"The Northern Star" (Ghilis).  
Selected.

12.31 a.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
"Brown Eyes in Your Dreams" (Tannent).  
"Kulu, Braebird" (Frisson).  
"I've Got Somebody Now" (Williams).

12.44 a.m.—E. MASON WOOD, baritone:  
"Speed the Plough" (Martin).  
"Sands of Dee" (Clay).

12.51 a.m.—JOE ARONSON AND HIS SYNGO-SYMPHONISTS:  
"You Know I Love You" (Moray).

1 a.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 Daily Standard."

1.20 p.m.—Lunch Hour Music.  
1.35 p.m.—Standard Time Signal.  
2.0 p.m.—Close Down.

## AFTERNOON SESSION.

3.30 p.m.—Afternoon Tea Music.  
4.15 p.m.—News Service Supplied by "The Telegraph."  
4.30 p.m.—Close Down.

## EARLY EVENING SESSION.

6.0 p.m.—News Service Supplied by "The Daily Standard."

6.15 p.m.—Lectures: A World Call Talk, "Islam" by Captain Stevenson.

6.30 p.m.—The Children's Session—Stories by "The Sandman."

7.0 p.m.—Market Reports; Stock Reports.  
7.20 p.m.—Weather News; "Daily Standard" News.

7.45 p.m.—Standard Time Signal.  
7.45 p.m.—Lectures: Breeds of Pigs for Queensland Conditions. Mr. E. J. Shelton, Instructor in Pig Raising.

## NIGHT SESSION.

## PIANOFORTE RECITAL.

The first portion of the programme will comprise a pianoforte recital from the Studio of Mr. Erich John.

8.0 p.m.—From Mr. Erich John's Studio.  
Pianoforte Solo:  
(a) "Little Windmill."  
(b) "La Habouline" (Rounds).  
(c) "The Joels of Cytherea."

Mr. Erich John.  
Contralto Solo, "Down Here" (Brahe).

Pianoforte Solo, "Sonata Pathétique" Opus 13 (Bach).

Mr. Erich John.  
Contralto Solo, "The Sweetest Flower that Blows" (Hawley).

Miss Ivy Rogers.  
Pianoforte Solo:  
"Two Mazurkas in B Flat Major" (Chopin).

"Funeral March" in F Major Opus 36 (Chopin).  
"Waltz" Opus 6 in A Flat Major (Chopin).

Mr. Erich John.  
9.0 p.m.—From the Studio:  
Metropolitan Weather Forecast.

ST. AUGUSTINE'S MALE PARTY.  
The second portion of the programme to-night has been arranged by Mr. Leo Clewley and will comprise a recital by St. Augustine's Male Party.

Overture, "Crescendo" (Per Lesami).  
Mr. Leo Clewley.  
Choral, "Ave Verum" (Gounod).

The Party.  
Tenor Solo, Selected.  
Mr. Jack Quinslan.

Choral, "Bobbie Shaftoe" (Whitaker).  
The Party.

Baritone Solo, "King's Minstrel" (Piment).  
Mr. R. Teubach.

Choral, "Annie Laurie" (Cantor).  
The Party.

Baritone Solo, "La Paloma" (S. Yradier).  
Mr. Dave Pelham.

Duet, "Nocturne" (Dennis).  
Messrs. Smith and Teubach.

Baritone Solo, "Eleven Braved Heart" ("Faint"—Gounod).  
Mr. Ted Baynes, Jr.

Choral, "Robin Adair".  
The Party.

Tenor Solo, "My Dream" (Tosti).  
Mr. Arthur Smith.

Choral, "Drink in Me Only With This" (Larr. Robertoni).  
The Party.

Bass, "Father O'Flynn" (Stanford).  
Mr. Tom Lynn.

Choral, "Alto On".  
The Party.

10.0 p.m.—"The Daily Mail" News; Weather News; Close Down.

## 6WF, PERTH.

Monday.

12.00 p.m.—Tune in.

12.35 p.m.—Market, News, and 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 Quintette, conducted by Mr. Val Smith.

2 p.m.—Close down.  
3.00 p.m.—"Time in."

3.35 p.m.—Afternoon Tea Concert, relayed from the Carlton Cafe, Hay Street.  
Vocal interludes from the Studio.

4.00 p.m.—Close down.  
4.15 p.m.—Tune in.

6.30 p.m.—Stories for the Kiddies, by Uncle Henry and Duffy.

7.00 p.m.—Stocks, Markets, News.  
7.45 p.m.—Talk by Lieut.-Col. Le Souef, Director of the Zoological Gardens, South Perth.

8 p.m.—Time signal from Perth Observatory.  
8.3 p.m.—Weather notes, supplied by the Meteorological Bureau of Western Australia.

## BAND NIGHT.

8.3 p.m.—Concert by the R.S.L. Band, conducted by Mr. W. A. Halvorsen.

10 p.m.—Late news items, by courtesy of "The Daily News" Newspaper Coy.  
Weather Report and Forecast.

Ships within range announcement.  
10.30 p.m.—Close down.

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## 7ZL, HOBART

Monday.

## MORNING SESSION.

11 a.m. to 12 noon.

## AFTERNOON SESSION.

3 p.m.—G.P.O. Clock chimes.  
3.1 p.m.—Time in selection.

3.5 p.m.—Richard Stock Exchange Quotations.  
Weather information.

Items of interest—announcements.  
3.15 p.m.—Musical selections by 7ZL Studio Band.

4.15 p.m.—Fashion talk by "Aunt Edna" of Brownells.  
4.30 p.m.—Close down.



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## EARLY EVENING SESSION.

8.30 p.m.—Children's Corner "Uncle Hector" talks to the children.  
 9 p.m.—"Uncle Peters" half hour.

## NIGHT SESSION.

7.50 p.m.—Musical selection.  
 7.55 p.m.—Physical Culture talk by Lieutenant Reinhard McKinnock.  
 7.59 p.m.—"Mercury" special Tasmanian news service. Half-hour question period asks. Weather forecast. Robert Stock Exchange quotations.  
 8 p.m.—G.P.O. Clock chimes.  
 8.1 p.m.—Vocal and instrumental numbers from Findlay Music showrooms Elizabeth Street, Hobart.  
 9 p.m.—Talk on Tasmanian Beauty Spots by Mr. E. T. Bennett, "National Park."  
 9.40 p.m.—British Official Wireless News.  
 9.50 p.m.—"Mercury" special Interstate news service. Tasmanian District Weather report. 9 p.m. Weather forecasts. Station announcements. National Anthem.

## Tuesday, Nov. 15

### 2FC, SYDNEY.

## EARLY MORNING SESSION.—7 to 8 a.m.

## MORNING SESSION.

10 a.m.—"Big Ben" and programme announcements.  
 10.5 a.m.—Studio music.  
 10.15 a.m.—Sydney Morning Herald news service.  
 10.30 a.m.—Studio music.  
 10.35 a.m.—Late sporting information by the 2FC Racing Commentator.  
 10.45 a.m.—Studio music.  
 11 a.m.—"Big Ben"  
 Marching music for school children.  
 11.3 a.m.—A.P.A. and Hoyer's Cable Services.  
 11.10 a.m.—Studio music.  
 11.15 a.m.—A talk on Home Cooking and Recipes by Miss Ruth Furst.  
 11.30 a.m.—Close down.

## MIDDAY SESSION.

12 noon—"Big Ben" and announcements.  
 12.3 p.m.—Stock Exchange first call.  
 12.3 p.m.—Official weather forecast, rainfall.  
 12.5 p.m.—Studio music.  
 12.10 p.m.—Summary of "Sydney Morning Herald" news service.  
 12.25 p.m.—Studio music.  
 12.30 p.m.—Marching music for school children.  
 12.40 p.m.—Persia Rutter, soprano: "A Night Idyll" (Loughborough).  
 12.45 p.m.—The Oak Hall Instrumental Trio.  
 12.55 p.m.—Studio music.  
 1 p.m.—"Big Ben." Weather intelligence.  
 1.3 p.m.—"Evening News" midday news service. Producers' Distributing Society's Report.  
 1.20 p.m.—The Oak Hall Instrumental Trio.  
 1.25 p.m.—Stock Exchange, second call.  
 1.30 p.m.—Marching music for school children.  
 1.40 p.m.—Persia Rutter, soprano: "Let Me Sit in Your Garden" (Kennedy Maxwell).  
 1.45 p.m.—Studio music.  
 1.50 p.m.—The Oak Hall Instrumental Trio.  
 2 p.m.—"Big Ben" Close down.

## AFTERNOON SESSION.

3 p.m.—"Big Ben" and programme announcements.  
 3.3 p.m.—Doris Orr, soprano: "How to Build a Ditch" (Grove).  
 3.7 p.m.—Studio music.  
 3.12 p.m.—Margaret Hoot, mezzo: "The Minstrel" (Easthope Martin).  
 3.15 p.m.—A talk by Mr. S. H. Bowdler: "How to Build a Ditch."  
 3.20 p.m.—Oliver Cameron, soprano: "Oh, Lovely Nick!" (Ronald).  
 3.30 p.m.—Marching music for school children.  
 3.40 p.m.—From Farmer's Tea Rooms: Muriel Watt, contralto: "Kashmir Song" (Woodford-Finder).  
 3.45 p.m.—The Oak Hall Instrumental Trio.  
 3.55 p.m.—From the Studio: Doris Orr, soprano: "Christmas" (Fenn).  
 4 p.m.—"Big Ben."  
 From Farmer's Tea Rooms: Eileen Moran, soprano: "Pale Moon" (Loren).  
 4.5 p.m.—The Oak Hall Instrumental Trio.  
 4.15 p.m.—From the Studio: Margaret Hoot, mezzo: "Big Merry Toodle" (Phillips).  
 4.20 p.m.—From Farmer's Tea Rooms: Muriel Watt, contralto: "A Fat Little Fellow" (Gordon).  
 4.25 p.m.—The Oak Hall Instrumental Trio.  
 4.35 p.m.—From the Studio: Olive Cameron, soprano: "Go from My Window" (Somerville).  
 4.40 p.m.—From Farmer's Tea Rooms: Eileen Moran, soprano: "Thank God for a Garden" (del Riego).  
 4.45 p.m.—Stock Exchange, third call.  
 4.47 p.m.—Studio music.  
 5 p.m.—"Big Ben" Close down.

## EARLY EVENING SESSION.

6.48 p.m.—The Chimes of 2FC.  
 6.45 p.m.—The "Hicks Man" talks to the children.  
 6.50 p.m.—Story time for the young folk.  
 6.40 p.m.—Studio music.  
 Margie Burket, blind pianist: (a) "Valse Tricolore" (Bouture). (b) "Romance in E Flat" (c) "Rhapsody in G Minor."  
 6.59 p.m.—Late sporting news.  
 7 p.m.—"Big Ben."  
 Dalety's market reports (wool, wheat and stock).  
 7.8 p.m.—Fruit and vegetable markets.  
 7.10 p.m.—Wreath and shipping news.  
 7.15 p.m.—Late "Evening News" news service.

## NIGHT SESSION.

7.30 p.m.—Programme announcements.  
 7.35 p.m.—Jules Van Der Klef, cellist solo.  
 7.44 p.m.—Ella Price, entertainer: "Mrs. Duggan's Discovery" (Hudley) (request).  
 7.50 p.m.—Fraser Coen, baritone.  
 8 p.m.—"Big Ben."  
 From the Royal Naval House, Sydney: The N.S.W. State Military Band: (a) March, "Fidelous" (Dorery). (b) Overture, "Morning, Noon and Night" (Stupp).  
 8.15 p.m.—Rene Maxwell, soprano: (a) "Solberg Songs" (Grieg). (b) Request number.  
 8.24 p.m.—From the Royal Naval House, Sydney: The N.S.W. State Military Band: (a) Cornet solo, "Love's Old Secret Song" (Melloy). Mr. W. Nott.  
 8.37 p.m.—From the Studio: Selwyn Seymour will repeat, by request, his sketch dealing with the Sensations of a Floating Icon on Australia. He will have the assistance of Mr. Laurence Hallert and other members of the staff.

8.51 p.m.—Ella Price, entertainer: "A Few Sharp Tall Yarns" (Aston).  
 9 p.m.—"Big Ben." Latest weather forecast.  
 9.1 p.m.—From the Royal Naval House, Sydney: The N.S.W. State Military Band: Selection, "The March" (Stupp).  
 9.15 p.m.—From the Studio: "Win and Winkle, English entertainers.  
 9.22 p.m.—Rene Maxwell, soprano: (a) "Finger his hand in his Hair" (b) Request number.  
 9.30 p.m.—From the Royal Naval House, Sydney: The N.S.W. State Military Band: (a) Faislaid, "A Hunting Sealie" (Goss). (b) March, "Blaze of Glory" (Hollibaugh).  
 9.41 p.m.—From the Studio: Fraser Coen, baritone.  
 9.52 p.m.—Ella Price, entertainer: "The Official Thermometer" or a "Little Knowledge is Dangerous" (Aston).  
 10 p.m.—"Big Ben."  
 From the Ambassadors: The Ambassadors Dance Band, under the baton of Mr. A. Hammett.  
 10.10 p.m.—From the Studio: Selwyn Seymour, elocutionist: Humorous Rem.  
 10.15 p.m.—Jules Van Der Klef, cellist solo.  
 10.24 p.m.—Win and Winkle, entertainers.  
 10.30 p.m.—The Ambassadors Dance Orchestra, conducted by A. Hammett.  
 10.37 p.m.—Late news and announcements from the Studio.  
 11 p.m.—"Big Ben."  
 The Ambassadors Dance Orchestra will play until 11.30 p.m.  
 11.30 p.m.—National Anthem.  
 Close down.

## 2BL, SYDNEY.

Tuesday.

## EARLY MORNING SESSION.

7.0 a.m. to 8.0 a.m.

## MORNING SESSION.

10.30 a.m.—G.P.O. Clock and Chimes; Musical Programme from the Studio.  
 10.40 a.m.—News from the "Daily Telegraph Fictorial."  
 10.50 a.m.—Musical Programme from the Studio.  
 11.0 a.m.—G.P.O. Clock and Chimes; Announcements.  
 11.5 a.m.—Musical Programme from the Studio.  
 11.15 a.m.—Social Notes; Replies to Correspondents by Mrs. Jordan. Talk on "Your Diet and Health" by Mrs. Jordan.  
 12.0 noon—G.P.O. Clock and Chimes; Special Ocean Forecast and Weather Reports.  
 12.3 p.m.—Musical Programme from the Studio.  
 12.3 p.m.—Information; Mails, Shipping, and Port Directory.  
 12.11 p.m.—Honey in Call by Wireless.  
 12.13 p.m.—Fruit Market Report.  
 12.15 p.m.—Vegetable Market Report.  
 12.17 p.m.—London Meat Market Report.  
 12.19 p.m.—Dairy and Farm Produce Market Report.  
 12.22 p.m.—Foreign Market.  
 12.24 p.m.—Fish Market Report.  
 12.26 p.m.—Bull Market Report.  
 12.28 p.m.—Stock Exchange Report.  
 12.30 n.m.—H.M.V. Gramophone Recital.  
 1.27 p.m.—Stock Exchange Report.  
 1.30 p.m.—G.P.O. Clock and Chimes. Talk to Children and Special Entertainment for Children in Hospital.  
 2.0 p.m.—G.P.O. Clock and Chimes; Close Down.

## AFTERNOON SESSION.

Racing Information Broadcast Immediately after Each Race by courtesy of the "Sun."  
 3.0 p.m.—G.P.O. Clock and Chimes; News from the "Sun."  
 3.15 p.m.—Civil Service Stores Trio. Direc-

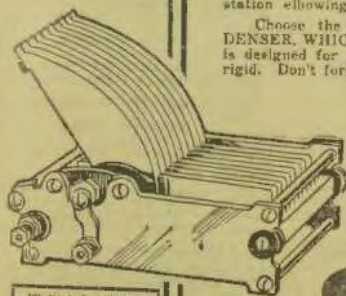




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- 4.00 p.m.—Miss de Courcy Bremer.  
 4.30 p.m.—G.P.O. Clock and Chimes; News from the "Sun."  
 5.00 p.m.—Musical Programme from the Studio.  
 5.30 p.m.—News from the "Sun."  
 5.40 p.m.—G.P.O. Clock and Chimes.  
 Civil Service Stores Trial.  
 6.15 p.m.—Serial Story.  
 6.30 p.m.—Musical Programme from the Studio.  
 6.40 p.m.—News from the "Sun."  
 6.55 p.m.—Resume of Night's Programme.  
 7.00 p.m.—Racine Revue.  
 7.30 p.m.—Special Ocean Forecast.  
 8.0 p.m.—G.P.O. Clock and Chimes; Close Down.

## EARLY EVENING SESSION.

- 8.45 p.m.—G.P.O. Clock and Chimes; Children's Session.  
 9.30 p.m.—Musical Programme from the Studio.

## SPECIAL COUNTRY SESSION.

- 7.0 p.m.—G.P.O. Clock and Chimes; Australia Mercantile Land and Finance Co.'s Report; Weather Report and Forecast by courtesy of Government Meteorologist; Producers' Distributing Society's Fruit and Vegetable Market Report; Stock Exchange Reports; Grain and Fodder Report ("Sun"); Daily Produce Report ("Sun").  
 7.15 p.m.—Country News from the "Sun."  
 7.30 p.m.—Talk by a Member of the Listeners' League.  
 7.50 p.m.—Talk by a Member of the St. John Ambulance Association.  
 8.0 p.m.—G.P.O. Clock and Chimes; Broadcasters' Topical Chorus.  
 8.3 p.m.—Special Programme Arranged by Mr. Roland Foster, F.R.S.M. (London), introducing New Music brought from Abroad and Selections from the Latest Grand Operas.  
 Part I.: Music of Scandinavia.  
 Part II.: The Rhine in Song and Story.  
 Part III.: Operatic Gems.  
 Artists will include Miss Daisy Mangan, Miss Eleanor Stanton, Miss Merle Miller, Mr. Frank Forrest, Mr. Alfred Stiel and Mr. Roland Foster, in Solo, Duets, Quartets and Choruses.  
 10.0 p.m.—G.P.O. Clock and Chimes.  
 10.15 p.m.—2HL Dance Orchestra.  
 12.0 midnight.—G.P.O. Clock and Chimes; National Anthem.

## 2 UW, SYDNEY

## Tuesday.

## MORNING SESSION.

- 8 a.m.—News, shipping, mails, studio items.  
 9.45 a.m.—Women's session.  
 10.30 a.m.—Resume of forward programme.  
 11 a.m.—Close down.  
 11.15 p.m.—Special employees Luncheon session.  
 11.45 p.m.—Close down.

## AFTERNOON SESSION.

- 2 p.m.—Studio item.  
 2.30 p.m.—Resume of forward programme.  
 3 p.m.—Close down.

## EVENING SESSION.

- 8 p.m.—Studio items.  
 8.50 p.m.—Resume of forward programme.  
 9 p.m.—Close down.

## NIGHT SESSION.

- 7 p.m.—"Sonora" selection.  
 7.4 p.m.—"Where to Go."  
 7.10 p.m.—Studio selection.  
 7.15 p.m.—Organ solo, Professor C. Sauer, Selected.  
 7.21 p.m.—Miss May Croft, soprano, Selected.

- 7.28 p.m.—Vocal duet, Misses Eva and Flo (Jones).  
 "Tell Her I Love Her So."  
 7.31 p.m.—Robert Meadows, euphonium solo:  
 "Love Time (Guedfey)."  
 7.35 p.m.—Gordon James McDonald, tenor, Selected.  
 7.40 p.m.—Miss Flo Jones, contralto:  
 "May Day Morn" (Slater).  
 7.44 p.m.—Bruce Hudson, violin solo, Selected.  
 7.48 p.m.—Vocal duet, Misses Eva and Flo (Jones).  
 "Ave Marie" (Mascagni).  
 7.53 p.m.—Miss May Croft, soprano, Selected.  
 7.58 p.m.—Robert Meadows, euphonium solo:  
 "Shin-Little Moonflower" (Guedfey).  
 8.4 p.m.—Miss Eva Jones, soprano:  
 "My Prayer" (Sandström).  
 8.8 p.m.—Gordon James McDonald, tenor, Selected.  
 8.12 p.m.—Miss Flo Jones, contralto:  
 "Whatever is the best" (Loeb).  
 8.16 p.m.—Bruce Hudson, violin solo:  
 Selected.  
 8.20 p.m.—Alma Sainsburg, soprano:  
 "A Little love test for two" (Loeb).  
 8.25 p.m.—The Junior Blue and Gold Percussion.  
 8.40 p.m.—Gems of the Opera No. 11 by G. F. Mantel:  
 "Nonnesseute" (Bellet).  
 9.15 p.m.—Weather forecast and news bulletin.  
 9.28 p.m.—Resume of programme.  
 9.50 p.m.—God Save the King.

## 3LO, MELBOURNE.

## Tuesday.

## MIDDAY SESSION.

- 12 noon.—Melbourne Observatory Time Signal. Metal prices received by the Australian Mines and Metals Association from the London Stock Exchange this day. British Official Wireless News from Rugby. Reader's and the Australian Press Association Cables. "Argus" news service.  
 12.20 p.m.—GRACE JACKSON, contralto:  
 "So Little Time" (Bermann Lehr).  
 "In a Monastery Garden" (Ketyby).  
 12.27 p.m.—METROPOLITAN FIRE BRIGADE BAND:  
 March, "Clavily of the Clouds."  
 Foxtrot, "Drifting and Dreaming."  
 12.37 p.m.—Stock Exchange information.  
 12.40 p.m.—YETTY LAUDAU, recitation:  
 "Our Kiddy."  
 "Mister Bear" (Child impersonation).  
 12.47 p.m.—METROPOLITAN FIRE BRIGADE BAND:  
 Selection, "Highland Memories."  
 1 p.m.—Melbourne Observers' Time Signal. What was that good resolution you made? Are you keeping it up? "Screw your courage to the sticking place and you'll not fall."  
 1.1 p.m.—THELMA READY, banjo:  
 "The Old Log Cabin in the Bell" (White).  
 "Don't You Hear Jeanna Mourning" (Stewart).  
 1.3 p.m.—Meteorological information. Weather forecast for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports for Victoria, Tasmania, South Australia and New South Wales.  
 1.15 p.m.—METROPOLITAN FIRE BRIGADE BAND:  
 Playful Horn solo, Schubert's "Serenade." Soloist, J. Bramwell.  
 March, "Amphion."  
 1.22 p.m.—GRACE JACKSON, contralto:  
 "The Silver Ring" (Chamberland).  
 "Bless You" (Novello).

- 1.30 p.m.—Under the auspices of the Health Association of Australia, Mr. E. Y. BRISANE will speak on:  
 "The Relation of Engineering to Health."  
 1.40 p.m.—METROPOLITAN FIRE BRIGADE BAND:  
 Novelly, "Jumbo's Parade."  
 1.45 p.m.—THELMA READY, banjo:  
 "Huckle Song" (Hoff).  
 "Moon Deer" (Horse Hair).  
 1.54 p.m.—METROPOLITAN FIRE BRIGADE BAND:  
 Novelly, "Lagtime Bass Player."  
 Foxtrot, "At Sundown."  
 2 p.m.—Description of Handicap Hurdle Race.  
 2 Miles, Charity Race Meeting at MOONKEE VALLEY, by "Musket," of the "Sporting Globe."  
 2.1 p.m.—Close down.  
 2.30 p.m.—Description of Two-Year-Old Handicap, 5 furlongs, Charity Race Meeting at MOONKEE VALLEY, by "Musket," of the "Sporting Globe."  
 2.55 p.m.—Close down.

## AFTERNOON SESSION.

- 3 p.m.—Melbourne Observatory Time Signal. Description of Highweight Hurdle Race, 1 furlong, Charity Race Meeting, at MOONKEE VALLEY, by "Musket," of the Sporting Globe.  
 3.3 p.m.—JOE ARONSON AND HIS SYNCPATING-SYMPHONISTS:  
 "The Top-Down Parade" (Marcell).  
 "Jan Once Again" (Ash).  
 "Rolling Down the Rio" (Bing).  
 3.45 p.m.—AU FAIT:  
 "Fashion Talk."  
 3.50 p.m.—JOE ARONSON AND HIS SYNCPATING-SYMPHONISTS:  
 "Wine, Lights and Love in Cadiz" (Marcell).  
 "Nenech Venetian Skies" (Lewis).  
 "Yah Gonna Be Home Tonight" (Dubinin).  
 3.40 p.m.—Description of Handicap Handicap, 1 1/2 miles, Charity Race Meeting at MOONKEE VALLEY, by "Musket," of the Sporting Globe.  
 3.45 p.m.—MARY LAWTON, Soprano:  
 "Bian-Bian"—Aria from Don Giovanni (Mozart).  
 "Selection from Faust" (Gounod).  
 3.52 p.m.—JOE ARONSON AND HIS SYNCPATING-SYMPHONISTS:  
 "I'm Telling the Birds, Telling the Bees" (Brown).  
 "The Spell of the Moon" (Kahn).  
 "Sa-Lu-Ta" (Kahn).  
 4.2 p.m.—SENIA CHOSTIAKOFF, Tenor:  
 "Eubria Nkitch," a libretto arranged by S. Jaroff.  
 "La Donna e Mobile," from "Rigoletto" (Verdi).  
 4.3 p.m.—JOE ARONSON AND HIS SYNCPATING-SYMPHONISTS:  
 "The Hanging Gardens of Babylon" (Carlo).  
 "College" (Kahn).  
 "Hercules Moon" (Lawrence).  
 4.20 p.m.—Description of Trial Mile Charity Race Meeting at MOONKEE VALLEY, by "Musket," of the Sporting Globe.  
 4.25 p.m.—MADOLINE KNIGHT, contralto:  
 "Terry" (Ibb).  
 "Come Back to Erin" (Irish).  
 4.32 p.m.—Under the auspices of the Health Association of Australia, SISTER PECK will speak on:  
 "Infant Welfare."  
 4.42 p.m.—JOE ARONSON AND HIS SYNCPATING-SYMPHONISTS:  
 "Rhythm in the Thine" (Rial).  
 "Golden Gate" (Leslie).  
 "Zig-Zag"—Piano Solo (Doom).  
 4.50 p.m.—Description of Jumpers' Handicap, of five furlongs, Charity Race Meeting at Moonkee Valley, by "Musket," of the "Sporting Globe."  
 4.55 p.m.—"Herald" news service. Stock Exchange information.  
 5.5 p.m.—Close down.



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## EARLY EVENING SESSION.

- 8.30 p.m.—Answer to Letters and Birthday Greetings by "MARY GUMLEAF."
- 9 p.m.—STUDIO QUARTETTE:  
"Dances of the Hours" (Rochdale).
- 9.10 p.m.—MADOLINE KNIGHT, contralto:  
Songs for the Children.
- 9.17 p.m.—Mr. W. E. BUTCHER will talk to boys and girls about "Stamp Collecting."
- 9.32 p.m.—STUDIO QUARTETTE:  
"The House and the Clock."
- 9.40 p.m.—Official report of Newmarket Stock sales of the Associated Stock and Station Agents, Bourke street, Melbourne. Number of Sheep drawn for week's sale.
- 9.45 p.m.—"Herald" news service. Weather synopsis. Shipping movements.
- 9.53 p.m.—Stock Exchange information.
- 9.57 p.m.—River reports.
- 9.59 p.m.—Fish Market reports by J. R. Barrett, Ltd. Rabbit prices.
- 7.3 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd., Poultry, Grain, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions.
- Market reports by the Victorian Fruitgrowers' Association. Retail prices. Fruit market reports, wholesale prices by the Wholesale Fruit Merchants' Association of Victoria. Bullarat Sheep market reports.

## EVENING SESSION.

- 7.15 p.m.—Under the auspices of the Town Planning Association, MR. F. E. DIXON, P.I.C.A.:  
"Sky Scraping."
- 7.30 p.m.—Under the auspices of the University Extension Board, MR. O. de R. FORD, ANDER, LL.M., Lecturer in Political Economy and History to the University of Melbourne:  
"The Washington Disarmament Conference."
- 7.45 p.m.—MR. E. M. PASCOE:  
"Bows."
- 8 p.m.—MR. J. SUTTON CROW will speak on the Million Shilling Fund  
Under the auspices of the Health Association of Australasia, the HEALTH MESSAGE for today is:  
"A clean mouth is a good investment."
- 8.5 p.m.—Progress of Develop Grand Prix, relayed from Warrigalra.
- 8.15 p.m.—MARIE LAWTON, Soprano:  
"For You Alone" (Gibson),  
"Charmaine" (Eapey).  
Association of Australasia, MR. AARON BEATTIE will speak on—  
"The importance of a flexible spinal column to health."
- 8.30 p.m.—MALVERN TRAMWAYS BAND:  
Selected.
- 8.40 p.m.—SENIA GHOSTAROFF, tenor:  
"By the Fireplace" (Stok),  
"Swinging Bells" (S. Jaroff).
- 8.47 p.m.—MALVERN TRAMWAYS BAND:  
Selection, "L'Arlecchino" (Biver).
- 9 p.m.—The Institute of Engineers' Annual Dinner: Speeches will be transmitted from Scott's Hotel.
- 9.20 p.m.—MALVERN TRAMWAYS BAND:  
Waltz, "Queen of Dreams" (Lithgow).
- 9.35 p.m.—MADOLINE KNIGHT, contralto:  
"The Dear Little Hancock,"  
"Molly Bawn" (Irish).
- 9.42 p.m.—ONE-ACT PLAY: Winner of Third Prize in One-Act Play Competition:  
"ERMINIE, DIAMONDS, AND CHAM-PAGNE," by Jack Curlett.
- 9.57 p.m.—MALVERN TRAMWAYS BAND:  
Minuet, "1st Symphony" (Beethoven).
- 10.4 p.m.—"Arms" news service. Meteorological information. Announcements. The Royal Automobile Club of Victoria's SAFETY MESSAGE for today is for:  
MOTORISTS: "Don't forget to slow down and shut at street or road intersections. It may save a human life—possibly your own."

- 10.10 p.m.—SENIA GHOSTAROFF, tenor:  
"Snowflake" (Varlamov),  
"When the Stars Were Brightly Shining," from "Tosca" (Puccini).
- 10.19 p.m.—JOE ARONSON AND HIS SYM-PHONIC SYMPHONISTS:  
"Moonlit Waters" (Fried),  
"Ewerich's Poetries" (Squire),  
"Mamma's Gone Young, Papa's Gone Old" (Lew).
- 10.29 p.m.—MADOLINE KNIGHT, contralto:  
"My Love is like a Bell, Red Rose" (Scott),  
"The Ark House" (Scott).
- 10.34 p.m.—MALVERN TRAMWAYS BAND:  
March, "Arzardah" (Thompson),  
March, "Chanson Indoue" (Korshaw).
- 10.45 p.m.—Sporting Notes by "Olympus," British official Wireless news from Rugby, Island stadium movements.
- 10.52 p.m.—JOE ARONSON AND HIS SYM-PHONIC SYMPHONISTS:  
"Flapperie," piano solo (Greer),  
"At Sundown" (Donahall).
- 11 p.m.—OUR GREAT THOUGHT:  
"The reason why Beethoven, Bach's, and Mozart's music is great is not because they are necessarily better musicians than they follow, but because their music, which had expression in music, were great, noble and brave."—Smith.  
Make Victoria More Musical—Subscribe to the Million Shilling Fund.
- 11.1 p.m.—JOE ARONSON AND HIS SYM-PHONIC SYMPHONISTS:  
11.40 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE.

## Tuesday.

- MIDDAY SESSION.
- 1.0 p.m.—Market Reports: Weather Information, "The Daily Mail" and "The Daily Standard" News.
- 1.20 p.m.—Lunch Music.
- 1.58 p.m.—Standard Time Signal.
- 2.0 p.m.—Close Down.
- AFTERNOON SESSION.
- 2.30 p.m.—A Programme of Music by the Studio Orchestra, including:—  
Overture, "Glorious Nation" (Bergenholtz),  
Valse, "Soudan" (Frimpe) (Waldteufel),  
Cornet Solo, "Rece o'Amor" (Muller),  
Mr. H. Jackson,  
"Baccarolle" from "Tales of Hoffman" (Offenbach),  
F. G. G. "I've Never Seen a Straight Banana" (Waltz),  
Intermezzo, "Woodland Visions" (Smith),  
March, "Good Luck" (Ches),  
4.45 p.m.—"The Telegraph" News.
- 4.30 p.m.—Close Down.

## EARLY EVENING SESSION.

- 5.8 p.m.—"Daily Standard" News; Announcements.
- 6.15 p.m.—Astronomy, "Some Glints of the Sky," Mr. A. K. Chapman.
- 6.30 p.m.—The Children's Session: Stories by "Uncle Jim."
- 7.0 p.m.—Special News Service; Market Reports; Stock Reports.
- 7.30 p.m.—Weather News; Announcements.
- 7.45 p.m.—Standard Time Signal.
- 7.55 p.m.—Lecturette: A Talk on Photography by Mr. F. L. South (Manager Kodak Ltd.).
- NIGHT SESSION.
- 8.0 p.m.—From the Studio:  
Orchestra: "Blue Bumble Waltz" (Strama)  
Mrs. Matthews' Cadonia Plectral Club.  
A Thought for Tonight, "As a Man Thinketh" (Will H. Lister),  
Violin Solo, Selected.

- Mrs. Clara Matthews' Solo, "Out of Mine" (Barnes).  
Mrs. Winnie Hailam.  
Mandate Quartette, "Indian Love Call,"  
Miss Ida Hackenberg and Party.  
Male Quartette, "Out in the Silly Night" (Young).
- The Lyric Male Quartette.  
Runners, "A Vesperal Night" (Larson).  
The Cadonia Plectral Club.  
Soprano Solo, "Dear Little Toy" (Smith).  
Mr. E. Hunter (accompanied by Cadonia Club).  
Tenor Solo, "Stepping Out" (Wells).  
Mr. J. Matthews.  
Soprano Solo, "Let's Jam" (Young).  
Miss Helen McLennan.  
March, "Here They Come" (Weidt).  
The Cadonia Plectral Club.
- 8.0 p.m.—Meteorological Weather Forecast.
- 9.0 p.m.—Studio Programme:  
Overture, "Doriana" (Waldt).  
The Studio Instrumental Quartette.  
(Conductor, Mr. Fred C. Smith).  
Contralto Solo, "A Dream of Child Days" (Sanderson).  
Mrs. Winnie Hailam.  
Hawaiian Instrumentals in Selected Numbers.  
The Myona Quartette.  
Ten Minutes with Henry Lawson, "The Canterbury Stag" (Wells).  
Mr. Claude Walker.  
Waltz, "Queen of the Roses" (Weidt).  
The Studio Instrumental Quartette.  
Bar Solo, "Mountain o' Mourne" (Collinson).  
Mr. Stanley Tambo.  
Flaneforte Solo:  
(a) "Nocturne" (Reagan).  
(b) "Water Wraith" (Scott).  
Miss Ida Phillips.  
Soprano Solo, "Pretty Mocking Bird"  
Miss Helen McLennan.
- Hawaiian Instrumentals.  
The Myona Quartette.  
Male Quartette, "Old Man Moses" (Hunt).  
The Lyric Male Quartette.  
March, "Normal" (Bennett).  
The Studio Instrumental Quartette.  
Male Quartette, "Kentucky Babe" (Ebbeson).  
The Lyric Male Quartette.  
Hawaiian Instrumentals.  
The Myona Quartette.  
Overture, "Larch" (Hels-Beis).  
The Studio Instrumental Quartette.
- 10.0 p.m.—"The Daily Mail" News; Weather News; Close Down.

## 6WF, PERTH.

## Tuesday.

- 12.30 p.m.—Market News.
- 12.45 p.m.—Tune in.
- 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 Instrumental Trio.
- 1.30 p.m.—Close down.
- 1.35 p.m.—Tune In.
- 3.35 p.m.—Ocean news, relayed from the Great Western Murray River.
- Vocal and instrumental interludes from the Studio.
- 4.30 p.m.—Close down.
- 6.45 p.m.—Tune in.
- 6.55 p.m.—Stories for the Tiny Tots, by Under, Henry and Duff.
- 7.20 p.m.—Stocks, Markets, News.
- 7.45 p.m.—Talk: "Boots of the South," by Mr. J. P. Hutchins.
- 8 p.m.—Time signal from Perth Observatory.
- 8.1 p.m.—Weather notes, supplied by the Meteorological Bureau of Western Australia.

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2GO, 2QB.

VIC.:—3LO, 3AR, 3DB, 3BY, 3SW, 3RS, 3KR, 3LG, 3PF, 3FA, 3BU,  
3CH, 3UZ, 3AM.

Q'LAND:—4QG.

S. AUST.:—5CL, 5DN, 5KA.

TAS.:—7ZL, 7UX, 7LA.

N.Z.:—1YA, 2YA, 3YA, 4YA.

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## CONCERT NIGHT.

8.5 p.m.—Musical programme from the Studio, including vocal and instrumental artists.  
10 p.m.—Late news items, by courtesy of "The Daily News" Newspaper Coy.  
Ships within range announcement.  
Weather Report and Forecast.  
10.30 p.m.—Close down.

## 100 METRE TRANSMISSION.

Simultaneous Broadcast on 100 Metres of Musical programme given on 1230 Metres, commencing at 8 p.m.

## 7ZL, HOBART

Tuesday.

## MORNING SESSION.

11 a.m. to 12 noon.

## AFTERNOON SESSION.

8 p.m.—G.P.O. Clock chimes.  
8.1 p.m.—Tune in selection.  
8.5 p.m.—Hobart Stock Exchange Quotations, Weather Information, Items of Interest—announcements.  
9.15 p.m.—Orchestral selections by 7ZL Studio Trio.  
4.15 p.m.—Cooking talk by ("Revue")  
4.30 p.m.—Close down.

## EARLY EVENING SESSION.

6.30 p.m.—"Uncle Hector" talks to the children  
7 p.m.—"Uncle Peter's" half hour.

## NIGHT SESSION.

7.30 p.m.—Musical selections.  
7.35 p.m.—Literary Lapses and Library Lists by Mr. W. E. Fulger.  
7.50 p.m.—"Mercury" special Tasmanian news service. Railway auction produce sales. Weather forecasts. Hobart Stock Exchange Quotations.  
8 p.m.—G.P.O. Clock chimes.  
8.1 p.m.—Broadcast by direct wire from Imperial Hotel, Hobart. Dance numbers by Mrs. Sheppard's Dance Trio interspersed with songs from the following:—Miss Olive Tedman (soprano), Miss Ruby Wallace (soprano), Miss Ruby Pease (pianist), Mr. Reg. Cooper (Bass-baritone) Mr. Fred Herard (baritone).  
9 p.m.—Radio Question Corner by "Annie"  
9.45 p.m.—British Official Wireless News.  
10 p.m.—"Mercury" special interstate news service. Ships within wireless range. Weather reports. 9 a.m. Weather forecasts. National Anthem.

## Wednes., Nov. 16

### 2FC, SYDNEY

EARLY MORNING SESSION—7 to 8 a.m.

## MORNING SESSION.

10 a.m.—"Big Ben" and programme announcements.  
10.5 a.m.—Studio music.  
10.15 a.m.—"Sydney Morning Herald" news service.  
10.30 a.m.—Studio music.  
10.35 a.m.—A reading.  
10.45 a.m.—Studio music.  
11 a.m.—"Big Ben"  
Marching music for school children.  
11.5 a.m.—A.P.A. and Muter's Cubes.  
12.10 a.m.—Studio music.  
11.5 a.m.—A talk on Home Cooking and Recipes by Miss Ruth Fleet.  
11.30 a.m.—Close down.

## MIDDAY SESSION.

12 noon—"Big Ben" and programme announcements.  
12.1 p.m.—Stock Exchange, first call.  
12.2 p.m.—Official weather forecast, rainfall.  
12.5 p.m.—Studio music.  
12.10 p.m.—Summary of "Sydney Morning Herald" news service.  
Rushy wireless news.  
12.25 p.m.—Studio music.  
12.30 p.m.—Marching music for school children.  
12.35 p.m.—Arnie Selzer organ.  
12.40 p.m.—("Hummus" Lohr).  
12.45 p.m.—The Oak Hall Instrumental Trio.  
12.55 p.m.—Studio music.  
1 p.m.—"Big Ben" Weather Intelligence.  
1.1 p.m.—"Evening News" midday news service.  
Professors' Distributing Society's Report.  
1.70 p.m.—The Oak Hall Instrumental Trio.  
1.55 p.m.—Stock Exchange, second call.  
1.50 p.m.—Marching music for school children.  
1.55 p.m.—Arnie Selzer, organ.  
"Mr. Henry" vs. "Sair" (Harley).  
1.47 p.m.—Studio music.  
1.50 p.m.—The Oak Hall Instrumental Trio.  
1.55 p.m.—"Big Ben" Close down.

## AFTERNOON SESSION.

3 p.m.—"Big Ben" and programme announcements.  
3.5 p.m.—A Pianoforte Recital by Miss Iris de Cairns Rego.  
3.15 p.m.—A talk by Madame Evelyn Grigg "The Soul of Song."  
3.30 p.m.—Further items from the Pianoforte Recital by pupils of Miss de Cairns Rego.  
3.30 p.m.—Marching music for school children.  
3.40 p.m.—From Farmer's Tea Rooms: Angela Clancy, contralto.  
3.45 p.m.—The Oak Hall Instrumental Trio.  
3.50 p.m.—Further items from the Pianoforte Recital arranged by Miss Iris de Cairns Rego.  
4 p.m.—"Big Ben"  
From Farmer's Tea Rooms: Ethel Muller, contralto: "Had I but Known" (Nichols).  
4.5 p.m.—The Oak Hall Instrumental Trio.  
4.10 p.m.—From the Studio: Elsie Sempie, contralto: "Come close to me" (Carne).  
4.15 p.m.—An item from the Pianoforte Recital by Miss Iris de Cairns Rego's pupils.  
4.20 p.m.—From Farmer's Tea Rooms: Angela Clancy, contralto.  
4.25 p.m.—The Oak Hall Instrumental Trio.  
4.35 p.m.—Cliff Hanney, violist: "Oriental" (Cesar-Cul).  
4.40 p.m.—From Farmer's Tea Rooms: Ethel Muller, contralto: "Calling Me Back to You" (Blanche Severn).  
4.45 p.m.—Stock Exchange third call.  
4.47 p.m.—Cliff Hanney, violinist: "Maurin" (Meyer-Sitt).  
4.50 p.m.—Elsie Sempie, contralto: "Some Quiet Day" (Hope).  
4.55 p.m.—Cliff Hanney, violist: (a) "Serenade" (Drigo-Ause). (b) "Wunderland" (Kilian).  
5 p.m.—"Big Ben" Close down.

EARLY EVENING SESSION.

6.40 p.m.—The Chimes of 2FC.  
6.45 p.m.—"The Hello Man" talks to the children, assisted by Uncle Rex and "Jerry."  
6.50 p.m.—Story time for the young folk.  
6.55 p.m.—Studio music.  
6.50 p.m.—Late sporting news.  
7 p.m.—"Big Ben."  
Dagely's market reports (wool, wheat and stock).  
7.5 p.m.—Fruit and vegetable markets.  
7.10 p.m.—Weather and shipping news.  
7.15 p.m.—Late "Evening News" news service.

## NIGHT SESSION.

7.30 p.m.—Programme announcements.  
7.35 p.m.—A talk on Performa by Mr. W. E. Jones.  
7.40 p.m.—J. Carlton Fay, novelty pianist.  
7.45 p.m.—W. E. Fay returns to the Studio with a new series of talks dealing with "Statistical Reminiscences." His subject tonight will be on Famous Bygone Plays.  
8 p.m.—"Big Ben" A Surprise Programme. Latest weather forecast.  
10.30 p.m.—Doc Morrison and his "Gloom" chimes.  
10.45 p.m.—Len Maurice popular ballads.  
10.45 p.m.—Doc Morrison and his "Gloom" chimes.  
10.57 p.m.—Late news and announcements.  
11 p.m.—"Big Ben."  
Doc Morrison and his "Gloomchimes" will play until 11.30, interspersed with vocal items by Len Maurice.  
11.30 p.m.—National Anthem.  
Close down.

## 2BL, SYDNEY.

Wednesday.

## EARLY MORNING SESSION.

7 a.m. to 8 a.m.

## MORNING SESSION.

11 a.m.—G.P.O. clock and chimes.  
Musical programme from the Studio.  
11.15 a.m.—Talk on "Swimming" by Miss Varley, Broadcaster's women's sports author. Social notes. Epitaphs to correspondents by Mrs. Jordan.  
Talk on "Dental Hygiene" by a member of the Dental Board.

## AFTERNOON SESSION.

Racing information broadcast immediately after each race by courtesy of the "Sun."  
12 noon—G.P.O. clock and chimes.  
Special ocean forecast and weather report.  
12.1 p.m.—Musical programme from the Studio.  
12.5 p.m.—Information. Mail, shipping, and port directory.  
12.11 p.m.—Boats in call by wireless.  
12.12 p.m.—Fruit market report.  
12.15 p.m.—Vegetable market report.  
12.17 p.m.—London metal market report.  
12.19 p.m.—Dairy and farm produce market report.  
12.22 p.m.—Forage market report.  
12.24 p.m.—Fish market report.  
12.26 p.m.—Rabbit market report.  
12.28 p.m.—Stock Exchange report.  
12.30 p.m.—H.M.V. gramophone recital.  
1.1 p.m.—Stock Exchange report.  
1.30 p.m.—G.P.O. clock and chimes.  
Talk to children and special entertainment for children in hospital.  
3 p.m.—G.P.O. clock and chimes.  
Musical programme from the Studio.  
2.10 p.m.—Racing resume.  
2.15 p.m.—News from the "Sun."  
2.25 p.m.—Operatic talk, "The Great Composers" by Mr. G. A. Saunders.  
3 p.m.—G.P.O. clock and chimes.  
News from the "Sun."  
3.10 p.m.—Musical programme from the Studio.  
3.20 p.m.—News from the "Sun."  
3.30 p.m.—Musical programme from the Studio.  
4 p.m.—G.P.O. clock and chimes.  
News from the "Sun."  
4.10 p.m.—Musical programme from the Studio.  
4.15 p.m.—Dungowan Dance Band broadcast from the Dungowan Calaret.  
4 p.m.—G.P.O. clock and chimes.  
News from the "Sun."  
4.10 p.m.—Musical programme from the Studio.

A ZBL Feature - The famous Ambassadors Dance Band



"Amazed at its Fidelity"  
—says A. Hammett!

Mr. Philip Lamb, 1, Hamilton Road,  
Sydney.

Dear Sirs:—Amazed at its fidelity—perhaps how I can best express my feelings when I was given the opportunity of hearing my mind re-created by one of your "PCJJ" Mutual Loud Speakers.

Credit must also be given to the engineers of ZBL who regularly put us "on the air," but I never conceived it possible that modern radio had developed to such perfection as demonstrated to me on the occasion in question.

Naturally, we of the Ambassadors Dance Band are gratified to know that the most subtle changes in tone or color, right down to the deep throbs of the big Saxophones, can be faithfully reproduced in perfect balance by the genius of wireless, by means of any good radio set and a Philips Loud Speaker.

Many thanks for the opportunity which you afforded me of listening to "ourselves" so in speech.

Yours truly,

*A. Hammett*

It will be pleasing to send you an extremely interesting two colour booklet "A talk on Modern Radio reproduction." Well illustrated with diagrams. It will be of the greatest interest to anyone conversant with the actual tone quality of their music. Write to—

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**PHILIPS**  
"PCJJ" LOUDSPEAKER

Price: £6/10/-

Model 3711

4.15 p.m.—Serial Story.  
4.20 p.m.—Dungowan Dance Band.  
4.50 p.m.—News from the "Sun."  
4.55 p.m.—Resume of night's programme.  
4.57 p.m.—Baring Bourne.  
4.50 p.m.—Special ocean forecast.  
8 p.m.—G.P.O. clock and chimes.  
Close down.

## EARLY EVENING SESSION.

5.45 p.m.—G.P.O. clock and chimes.  
Children's session.  
6.30 p.m.—Musical programme from the Studio.

## SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. clock and chimes.  
Australian Mercantile, Land and Finance Co's report.  
Weather report and forecast by courtesy of Government Meteorologist.  
Producer's Distributing Society's fruit and vegetable market report.  
Stock Exchange reports.  
Grain and fodder report ("Sun").  
Dairy produce report ("Sun").  
N.M.A. talk.

7.15 p.m.—Country news from the "Sun."  
7.30 p.m.—Talk on "Fennia" by Dr. McElhone.  
8 p.m.—G.P.O. clock and chimes.

Broadcasters' Typical Chorus.  
8.3 p.m.—The Loose Vocal Trio.  
8.10 p.m.—Selections by the Canterbury District Band (bandmaster, Mr. Stan Nicholls).  
8.20 p.m.—Dance music by 2BL Dance Band.  
8.40 p.m.—Mr. Claude Holland, light comedian.  
8.45 p.m.—Dance music by 2BL Dance Band.  
8.57 p.m.—Weather report and forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.  
8.58 p.m.—Resume of following day's programme.

9 p.m.—G.P.O. clock and chimes.  
9.1 p.m.—Dance music by 2BL Dance Band.  
9.11 p.m.—The Loose Vocal Trio.  
9.18 p.m.—Dance Music by 2BL Dance Band.  
9.23 p.m.—Selections by the Canterbury District Band.

9.28 p.m.—Dance music by 2BL Dance Band.  
9.33 p.m.—Claude Holland, light comedian.  
10.5 p.m.—Broadcasters' all sports expert will talk on "Boxing, Golf, and General Sporting News."

10.20 p.m.—Dance music by 2BL Dance Band.  
10.30 p.m.—Dance music broadcast from the ballroom of the Bondi Casino. Dances interspersed between dances. "Sun" news will be broadcast.

11 p.m.—G.P.O. clock and chimes.  
National Anthem.

## 2GB, SYDNEY

Wednesday.

## MORNING SESSION.

6 a.m.—Music.  
6.5 a.m.—Cherico Talk.  
9.15 a.m.—Music.  
9.25 a.m.—Physiological Class.  
10.40 a.m.—Music.  
9.41 a.m.—Health and Diet.  
10 a.m.—Close down.

## AFTERNOON SESSION.

3.30 p.m.—Music.  
3.37 p.m.—Address by Professor Ernest Wood.  
3.53 p.m.—Music.  
4 p.m.—Address.  
4.22 p.m.—Music.  
4.30 p.m.—Close down.

## NIGHT SESSION.

7 p.m.—Music.  
7.6 p.m.—Address Mr. S. Dobbyna.  
7.15 p.m.—Music.  
7.20 p.m.—Address by Mr. J. K. Powell.  
7.30 p.m.—Music.  
7.40 p.m.—Professor Ernest Wood.  
7.55 p.m.—Songs by Miss Eva Croft.  
8.5 p.m.—Address by Mr. Harold Morton.  
8.20 p.m.—Instrumental Trio, Marietta Lang, Ada Brook.  
8.30 p.m.—303 Vocal Quartet:  
Eibel Jones, Eva Croft, Thomas Hall, Clement Hosking.  
8.40 p.m.—Violin solos, Dan Scully.  
8.45 p.m.—Songs by Clement Hosking.  
8.55 p.m.—Music solos.  
9 p.m.—Humorous Sketch by Mr. Heath Burdock.  
9.15 p.m.—Instrumental Trios, Dan Scully, Marietta Lang, Ada Brook.  
9.25 p.m.—312 Vocal Quartet:  
Eibel Jones, Eva Croft, Thomas Hall, Clement Hosking.  
9.35 p.m.—Piano solos, Ada Brook.  
9.45 p.m.—Songs by Miss Eibel Jones.  
9.50 p.m.—Cherico Talk.  
10 p.m.—Close down.

## 2 UW, SYDNEY

Wednesday.

## MONDAY SESSION.

8 a.m.—News, shipping, mails, studio items.  
9.40 a.m.—Women's session.  
9.50 p.m.—Resume of forward programme.  
10 p.m.—Close down.  
10.15 p.m.—Social clubhouse Luncheon session.  
12.45 p.m.—Close down.

## AFTERNOON SESSION.

2 p.m.—Studio items.  
2.50 p.m.—Resume of forward programme.  
3 p.m.—Close down.

## EVENING SESSION.

5 a.m.—Studio items.  
5.50 p.m.—Resume of forward items.  
6 p.m.—Close down.

## NIGHT SESSION.

7 p.m.—Sonata selection.  
7.4 p.m.—Where to Go.  
7.10 p.m.—Studio selections.  
7.30 p.m.—Douglas Rae, tenor:  
"The March of the Cameron Men."  
7.34 p.m.—Miss Cecily Ellis, mezzo soprano, Selected.  
7.40 p.m.—Studio selection.  
7.48 p.m.—Gordon James McDonald, Jazz pianist.  
8 p.m.—Miss Cecily Ellis, mezzo soprano, Selected.  
8.4 p.m.—Miss Doris Fitzmaurice, electrician, Selected.  
8.11 p.m.—Douglas Rae, tenor:  
(a) "Less than the Dust" (Woodford-Finden).  
(b) "I'll Wake" (Woodford-Finden).  
8.18 p.m.—Miss Cecily Ellis, mezzo soprano, Selected.  
8.25 p.m.—Mr. Madge, Whistler, Selected.  
8.27 p.m.—Studio selections.  
8.37 p.m.—Miss Doris Fitzmaurice, electrician, Selected.  
8.40 p.m.—Douglas Rae, tenor:  
"Where'er you Walk" (Handel).  
8.41 p.m.—Studio selections.  
9 p.m.—Weather forecast and news.  
9.5 p.m.—Dance selection from Studio.  
9.23 p.m.—Resume of forward programme.  
9.30 p.m.—God Save the King.

## 3LO, MELBOURNE.

Wednesday.

## MIDDAY SESSION.

12 noon.—Melbourne Observatory time signal.  
Metal plates received by the Australian Mines and Metals Association from the London Stock Exchange this day. British official wireless news from Rugby, Reuters and the Australian Press Association cables. Argus news service.  
12.30 p.m.—STUDIO QUARTET.  
Mendelssohn Melodies—Part 1.  
12.30 p.m.—YETTY LANDAU, recitation.  
"I Ain't Afraid of a Lucky Youngster."  
"By the Yukon Trail."  
12.35 p.m.—Stock Exchange information.  
12.40 p.m.—STUDIO QUARTET.  
Mendelssohn Melodies—Part 2.  
12.50 p.m.—MARIE LAWTON, soprano.  
"Oh that We Two Were Maypole" (Gounod).  
"Glimmering Star."  
1 p.m.—Melbourne Observatory time signal.  
What was that good resolution you made so recently to give a helping hand to that friend in trouble—to assist that youngster to become a decent citizen—DO IT NOW.

1.1 p.m.—DOROTHY ROXBURGH, viola.  
"Spring Song" (Mendelssohn).  
1.5 p.m.—Meteorological information. Weather forecast and rainfall for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecasts. River reports.  
1.15 p.m.—Puffer the spokesman of the Health Association in Australia.  
MR. W. W. WOODLAND will speak on "What the World is Doing for Better Health."  
1.25 p.m.—MADOLINE KNIGHT, contralto.  
"We'll Better Bide a Wee" (Scottish).  
"Bonnie Char" (Scottish).  
1.28 p.m.—STUDIO QUARTET.  
"Carmenetta" (Mendelssohn).  
1.45 p.m.—CAPTAIN DONALD MacLEAN, "Fishes and More Fishes."  
2 p.m.—Close down.  
2.40 p.m.—Description of Maiden Plate, 5 Forlings, WOODBEND RACES, by "Musket" of The Sporting Globe.  
2.55 p.m.—Close down.  
During the afternoon program results will be given of the Dunlop Grand Prix, No 2 Section, Wangaratta to Bendigo.

## AFTERNOON SESSION.

3 p.m.—Melbourne Observatory time signal.  
Description of 1.6 Pony Race, 5 Forlings, WOODBEND RACES, by "Musket" of The Sporting Globe.  
3.5 p.m.—STUDIO QUARTET.  
"Schumann" (String Quartette) (Andante).  
3.15 p.m.—SENIA CHOSTIAKOFF, tenor:  
"Song of the Yalta Boatman," arr. T. Chailoff.  
"Arioso" from Faubourg.  
3.24 p.m.—REGINALD BRADLEY, unaccompanied by himself.  
"Tramway" (Schumann).  
"The Walnut Tree" (Schumann).  
3.30 p.m.—Description of Novine Handicap, 4 Forlings, WOODBEND RACES, by "Musket" of The Sporting Globe.  
3.35 p.m.—YETTY LANDAU, recitations.  
"They'll Be Sorry When I'm Dead" (Character Study).  
3.42 p.m.—STATION TRIO:  
Selections from Schumann.  
3.45 p.m.—Special Superbionic-Seniors Festival of Schumann's Works.  
4 p.m.—Description of Spring Handicap, 4 Forlings, WOODBEND RACES, by "Musket" of The Sporting Globe.  
4.5 p.m.—AGNES FORTUNE, piano.  
Selections from Schumann.  
4.15 p.m.—SENIA CHOSTIAKOFF, tenor:  
"Monotonously Rings the Bell" (arr. B. Jaroff).  
"Down the Pityshik" (Russian folk song).  
4.19 p.m.—STUDIO QUARTET:  
"Schumann Quartette" (Allegro).

Over-size Burgess for Heavy Current Drains.



# RADIOKES— SOLODYNE

## Once More to the Fore.



Read the article in Radio for this month describing the construction of the New and Improved RADIOKES-SOLODYNE in its De Luxe form.

Radiokes engineers have been continually improving this now famous product, and among other advances this kit now includes: Bakelite winding forms, improved design of windings, no dope used in construction, new rigid internal mounting, permanent solder lugs with additional screw terminals and more accurate matching.

This kit was once more specified because it is considered **The World's Best Coil Kit.**

Same price ... .. 75/-

Specified for use in this Master Receiver also :



The use of Amperite is imperative in this circuit, which uses a minimum of controls. If you value the life and performance of your tubes, and simplicity of operation, you cannot afford to omit Amperite from your receiver. Price ... .. 6/9 each



Radiokes new and improved R.F. Choke is the only one that can be satisfactorily used in the Solodyne.

Its characteristics are particularly suited to this circuit, and its small design and high efficiency make it ideal for use in all receivers calling for use of R.F. Chokes.

WHOLESALE:

Metropolitan Electric Co. Ltd., 27-29 King St., Sydney  
And at Melbourne, Brisbane, Auckland, Hobart and Launceston.

**Buy only from Dealers who display Radiokes Products.**



## Surfing in the Office

A day like the inside of an oil-burning boiler, with thick heat haze and a wind blowing in from "Hay, Ball and Bootleg." Enter a corpulent canvasser, oily and persuasive, trying to sell a book on "Our glorious sunshine, clear skies and smiling warmth."

What happened? The fat man reached the footpath a bare leg ahead!

The only canvasser I want to see to-day is a living skeleton who is selling ice-cream freezers, home refrigerators, bathing suits and open-work pyjamas.

Anyhow the corpulent one interrupted me while I was enjoying a surf bath in the office. Here's the recipe:

Shut your eyes, get into a mental salt-water costume, rush down a visionary beach and plunge joyfully into great curling imaginary breakers. Dive under and pop up, wallow loudly in the cool surf, splutter, splash and spray.

Man alive, it's grand!  
But don't take a radio battery in with you. Salt water doesn't agree with batteries, although the good old Burgess has stood many a salt-water test and come safely out.

When Captain Hurley landed through the New Guinea surf, his Burgess Batteries were literally drenched. Yet they gave wonderful service for months afterwards.

America's little iceberg patrol craft are swept by big waves several times a day and the only dry thing on board one of them is the Captain's humor. Yet they all carry Burgess batteries.

When Byrd flew over the Pole, the cold would have cracked steel plate, but it didn't put Burgess out of action. Hot stuff, I'll say!

Later on, when Byrd crossed the Atlantic in dense moist fog, the batteries which saved his life were again Burgess.

That's one reason why they call Burgess the world's finest dry batteries—you can't wet 'em! The New System Telephone people, of 280 Castlereagh Street, will tell you that rival companies shed tears over Burgess Batteries and the salt water oily fizzes!

4.30 p.m.—Description of Flying Handicap 5 furlongs. WOODEND RACES, by "Musket" of The Sporting Globe.

4.45 p.m.—Under the Auspices of the Health Association of Australasia DR. KATE MACLEAN will speak on "The Health of the Women in Industry."

4.45 p.m.—Herald news service. Stock Exchange in formation.

5 p.m.—Description of Eromanga Mile. WOODEND RACES, by "Musket" of The Sporting Globe. Progress of the Durio Grand Prix will be given at intervals. No. 2 section, Wanganassa to Bendigo.

### EARLY EVENING SESSION.

8.30 p.m.—Answers to letters and birthday greetings, by "MARY MARY."

6 p.m.—ELSIE BRADSHAW:  
"Songs at the Piano."  
The Royal Automobile Club of Victoria's Safety Message for today is for CHILDREN: "Never hold on to a motor or other vehicle when you are riding a bicycle."

6.7 p.m.—CAPTAIN DONALD MACLEAN:  
"Pirates and More Pirates."

6.25 p.m.—ELSIE BRADSHAW:  
"More Songs at the Piano."

6.30 p.m.—"MARY MARY" will speak to the children on the importance of being healthy.

6.40 p.m.—Herald news service. Weather synopsis. Shipping movements.

6.42 p.m.—Stock Exchange reports.

6.47 p.m.—Fish market reports from J. E. Borrett Ltd. Rabbit prices.

6.53 p.m.—Market reports. Official reports of Newmarket Sheep sales, by the Associated Stock and Station Agents, Beakie street, Melbourne. Poultry, grain, hay, straw, lute, dairy produce, potatoes and onions. Fruit market reports by the Wholesale Fruit Merchants' Association. Wholesale prices.

### EVENING SESSION.

7.15 p.m.—Under the Auspices of the DEPARTMENT OF AGRICULTURE, Mr. L. C. BARTELS, Senior Irrigation Officer, will speak on:  
"Irrigated Agriculture, Watering Lucerne."

7.30 p.m.—Mr. CLARENCE WEBBER, under the Auspices of the Health Association of Australasia:  
"Health Talk."

7.45 p.m.—CAPTAIN C. H. PETERS:  
"Boha, Wite and Oherahia."

8 p.m.—LADY MASSON will speak on the Million Shilling Fund.

8.5 p.m.—NEWPORT WORKSHOP BAND:  
March, "Funchinella" (Rivmeyer).

8.10 p.m.—Mr. HAROLD ELMVINS, piano recital:  
"Prelude and Choral" (C. Frank).  
"Sonatina" (M. Ravel).  
Mozart—Mendel—Anne.

8.30 p.m.—Presentation to Mr. James Bramble, at Farewell Banquet, to be held at Northcote Central School Hall.

Mr. Sturman, Secretary of School Committee. Introduction of His Worship the Mayor.

Address: His Worship the Mayor.  
Presentation by the School Staff.

Address by Mr. Crooke.  
Presentation by School Committee and Citizens.

Response by Mr. J. Bramble.  
Solo: Mr. Bennet.

Director of Education.

9 p.m.—NEWPORT WORKSHOPS BAND:  
Sketch, "In a Persian Market" (Ketchum).

6.5 p.m.—PROGRESS OF DUNLOP GRAND PRIZE—Description relayed from Bendigo.

6.15 p.m.—GRACE JACKSON, contralto.  
"The Kerry Dance" (Malloy).  
"The Enchantress" (J.L. Hatton).

9.22 p.m.—NEWPORT WORKSHOPS BAND:  
Selection, "Lady of the Rose" (Gilbert).

9.32 p.m.—SENIA GHOSTIAKOFF, voice.  
"Sterka Razzen"—Russian Folk Song.  
"E Ueevaa le Stella"—from Tosca (Puccini).

9.40 p.m.—NEWPORT WORKSHOPS BAND:  
Valse, "Golden Grain" (Tansel).

9.47 p.m.—MARIE LAWTON, soprano.  
"On Breton" (Foss).

Waltz solo from "Tom Jones" (Garman).

9.54 p.m.—Argus News Service. Meteorological information. British Official Wireless News.

THE HEALTH MESSAGE for today is:  
"Drink from four to six glasses of water every day."

10.2 p.m.—GRACE JACKSON, contralto.  
"That's All" (Ibrahim).

"When the Dream is There" (D'Arland).  
10.10 p.m.—NEWPORT WORKSHOPS BAND,  
Prelude and Mazurka, "Copelia" (Dmitri).

10.17 p.m.—SENIA GHOSTIAKOFF, voice.  
"The Red Sarafan"—A Russian Folk Song.  
"Autumn Airs" (Hardy).

10.24 p.m.—YETTY LADAU, elocutionist.  
"Only a Shadow."

10.31 p.m.—NEWPORT WORKSHOPS BAND,  
"Reminiscence of the Plantations" (Chamber).

10.45 p.m.—Announcements. Island steamer movement.

The Royal Automobile Club of Victoria's Safety Message for today is for CHILDREN:  
"Never hold on to a motor or other vehicle when you are riding a bicycle."

10.50 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS:  
"Society Boy" (Stamper).

"Swinging Along" (Hay).  
"The Love Waltz" (Jacquet).

11 p.m.—OUR GREAT THOUGHT:  
"The man that hath no music in himself,  
And is not moved with concern of sweet sounds,  
Is fit for treasons, stratagems and spoils.  
Let no such man be trusted!"

—Shakespeare.  
Make Melbourne More Musical.  
Subscribe to the Million Shilling Fund.

11.1 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS:  
11.45 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE.

Wednesday.

### EARLY MORNING SESSION.

6.30 a.m.—Physical culture session.

7 a.m.—Close down.

### MIDDAY SESSION.

1 p.m.—Market reports; weather information; "The Daily Mail" and "The Daily Standard" news.

1.30 p.m.—Lunch hour music.

1.50 p.m.—Standard time signal.

2 p.m.—Close down.

### AFTERNOON SESSION.

3.50 p.m.—Afternoon tea music.

4.15 p.m.—"Telegraph" news.

4.30 p.m.—Close down.

### EARLY EVENING SESSION.

6 p.m.—"Daily Standard" news; announcements.

6.15 p.m.—Lecturette: Nil.

6.30 p.m.—The children's hour—stories by "Little Miss Brisbane."

7 p.m.—Special news service; market reports; stock reports.

7.30 p.m.—Weather news announcement.

7.45 p.m.—Standard time signal.

7.45 p.m.—Lecturette: "Should a Tractor be Bought?"—Professor J. K. Murray (Queensland Agricultural High School and College).

## NIGHT SESSION.

## A CLASSICAL PROGRAMME.

The first portion of the programme will comprise three-quarters of an hour's music by the Hamilton Quartette.

## 8 p.m.—FROM THE STUDIO:

Instrumental, trio—"Turkish March" (Beethoven).

Mr. Jack Ellis, Miss E. Bennett, Mr. Max Aronstein.

Mezzo-soprano solo—"The Lass With the Delicate Air."

Mrs. W. F. Hamilton (Dr. Arrie).  
Violin solo—"Meditation" from "Thaïs" (Massenet).

Mr. Max Aronstein.  
Vocal duet—"Violeta" (Cowen).

Mrs. Hamilton and Miss Bennett.  
Baritone solo—"Lolita" (Busticecchi).

Mr. Max Aronstein.  
Pianoforte solo—"Scherzo in C-Sharp Minor" (Chopin).

Mr. Jack Ellis.  
Vocal duet—"The Garden of Your Heart" (Dowry).

Mrs. W. F. Hamilton and Mr. Max Aronstein.

Mezzo-soprano solo—"Oh, Dear, What Can the Matter Be"—18th century air, arr. by Lisa Lehman.

Mrs. W. F. Hamilton.  
Violin solo—"Andante from Concerto in E Minor."

Miss H. Bennett (Mendelssohn).

Vocal duet—"Night of Stars and Night of Love" (Offenbach).

Mrs. W. F. Hamilton and Mr. Max Aronstein.

Baritone solo—"Far Across the Desert Sands" (Woodforde Finden).

Mr. Max Aronstein.

Mezzo-soprano solo—"Roberts O in the Sahara" (from "Roberts the Devil"), Meyerbeer.

Mrs. W. F. Hamilton.  
Instrumental trio—"The Marchioness" (Gurlitt).

Mr. Jack Ellis, Miss E. Bennett and Mr. Max Aronstein.

8.45 p.m.—A thought for tonight—"Votum of the Unseen."

Will R. Lister.  
Metropolitan weather forecast.

## 9 p.m.—FROM THE STUDIO OF MRS. CROFT, Valley:

Mandolin solo—"The Swan" (Bain Saenz).

Mr. Keating.  
Contralto solo—"A Harp of Rome Lovers" (Tschernscher).

Miss E. Baxter.  
Violin solo—"Adoration" (Borowski).

Miss Irene Eade.  
Tenor solo—"Macushia" (Metcalfe).

Mandolin duet—"Serenade" (Widor).

Miss Kurth and Miss Simonds.  
Vocal duet—"Gipsy Coquette" (Glover).

Mr. and Miss Bell.  
Violin solo—"Dance of the Dragon Flies" (Reedling).

Mr. Vic. Ains.  
Mezzo-soprano solo—"Come, for It's June" (Dorothy Foster).

Miss Crispo.  
Mandolin solo—"March Victorious" (Paull).

Mr. Allen Henry.  
Tenor solo—"Pae You Alone" (Geehl).

Violin duet—"Cradle Song" (Schubert).

Misses Phyllis Hansen and Vera Simmonds.  
Vocal duet—"When Song is Sweet" (Saxe Soell).

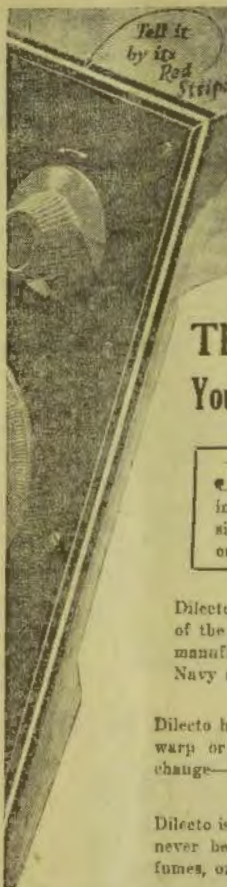
Mr. and Mrs. Croft.  
Mandolin solo—"Minuet" (Beethoven).

Mrs. Foley.  
Contralto solo—"My Land of Beautiful Dreams."

Miss E. Elms.  
Concert number—"Good Night" (Scott Gatty).

## FROM THE STUDIO—

10 p.m.—"The Daily Mail" News; Weather news. Close down.



# Dilecto

(distinguished by its Red Strips)

Cut to any size and Engraved to Order.

## This Red Stripe tells You it's the Perfect Panel

**J**UST what qualities must a radio receiver panel possess to be lastingly good? It deserves your consideration—if buying a ready-made set or if hitching up your own hook-up.

Dilecto has met with every strict requirement of the most exacting experts of leading radio manufacturers. It has been used by the U.S. Navy and Signal Corps for over nine years.

Dilecto has high dielectric resistance. It cannot warp or crack, check or chip. It will never change—even its sleek, black finish is permanent.

Dilecto is heat-proof up to 220 degrees F. It will never be affected by cold, water, oil, gasoline, fumes, ozone, solvents, and most chemicals.

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(Late O'Brien and Nicholl),

37-39 Pitt St. Sydney—654 Bourke St. Melbourne

W. E. Peterman, 160 Edward St., Brisbane.

## GWF, PERTH.

## Wednesday.

- 12.30 p.m.—Type In.  
 12.35 p.m.—Markets, News, and Cables.  
 1 p.m.—Time signal from Perth Observatory.  
 1.1 p.m.—Weather notes, supplied by the Meteorological Bureau of Western Australia.

## A RELAYED CONCERT.

- 1.45 p.m.—Lunch-hour Concert, arranged by Messrs. Masgrove's Limited, relayed from Lyric House, Murray Street.  
 1.50 p.m.—Studio Quartette, conducted by Mr. Val Smith.

- 2 p.m.—Close down.  
 2.30 p.m.—Type In.  
 2.35 p.m.—Orchestral music, played by Herli's Orchestra, conducted by Mr. Harold Farrington, relayed from Herli's Regent Theatre, William Street.  
 Vocal interludes from the Studio.

- 4.30 p.m.—Close down.  
 6.45 p.m.—Type In.  
 6.55 p.m.—Stories for the kiddies, by Aunde June and Claude Duffy.

- 7.20 p.m.—Stocks, Markets, News.  
 7.45 p.m.—Talk by Mr. H. R. Graydon.  
 8 p.m.—Time signal from Perth Observatory.

- 8.1 p.m.—Weather notes, supplied by the Meteorological Bureau of Western Australia.

## A RELAYED CONCERT.

- 8.3 p.m.—Vocal and instrumental concert, relayed from Messrs. Spenser's Music Warehouse, Hay Street.

- 10 p.m.—Late news items, by courtesy of "The Daily News," Newsprint Coy.  
 Ships within range announcement.  
 Weather Report and Forecast.  
 10.50 p.m.—Close down.

## 100 METRE TRANSMISSION.

Simultaneous Broadcast on 100 Metres of Musical Programme given on 1250 Metres, commencing at 8 p.m.

## 7ZL, HOBART

## Wednesday.

## MORNING SESSION.

11 a.m. to 12 noon.

## AFTERNOON SESSION.

- 3 p.m.—C.P.O. Clock chimes.  
 3.1 p.m.—Type in selection.  
 3.6 p.m.—Hobart Stock Exchange Quotations, Weather information, Items of interest—announcements.  
 3.15 p.m.—Radio Auction Bridge Game No. 19.  
 4 p.m.—Social and Educational Calendar from Illustrated Tasmanian Mail.  
 4.15 p.m.—Story from Illustrated Tasmanian Mail.  
 4.30 p.m.—Close down.

## EARLY EVENING SESSION.

- 6.30 p.m.—"Uncle Peter's" Half-hour.  
 7 p.m.—Story from "Illustrated Tasmanian Mail"; birthday Greetings.

## NIGHT SESSION.

- 7.30 p.m.—Musical selection.  
 7.36 p.m.—Weekly Scouting Corner.

- 7.50 p.m.—"Mercury" special Tasmanian news service, Railway station, produce sales, Weather forecasts, Hobart Stock Exchange Quotations.

- 8 p.m.—C.P.O. Clock Chimes.  
 8.1 p.m.—Abstracts and stock market reports, through the courtesy of Roberts and Co., Hobart.

- 8.5 p.m.—Musical selection by TFL Studio Trio interspersed with items from the studio by Miss Jean Hillard (soprano—organ), Mrs. B. Saunders (accompanist), Mr. George Muir (tenor), Mr. Hugh Taylor (celebrationist).

- 9.05 p.m.—British Official Wireless News.  
 9.50 p.m.—"Mercury" special interstate news service, Ships within wireless range, Tasmanian District Weather reports, Station announcements.  
 National Anthem.

## Thurs., Nov. 17

### 2FC, SYDNEY

## EARLY MORNING SESSION.

7 a.m. to 8 a.m.

## MORNING SESSION.

- 10 a.m.—"Big Ben" and announcements.  
 10.6 a.m.—Studio music.  
 10.15 a.m.—"Sydney Morning Herald" news service.  
 10.30 a.m.—Studio music.  
 10.35 p.m.—Last minute racing information by the 2FC Commissioner.  
 10.45 a.m.—Studio music.  
 11 a.m.—"Big Ben"; Marching music for school children.  
 11.5 a.m.—A.P.A. and Reuter's Cables.  
 11.10 a.m.—Studio music.  
 11.15 p.m.—A reading.  
 11.30 a.m.—Close down.

## MIDDAY SESSION.

- 12 noon—"Big Ben" and programme announcements.  
 12.3 p.m.—Official weather forecast, rainfall.  
 12.5 p.m.—Studio music.  
 12.10 p.m.—Summary of "Sydney Morning Herald" news service, Rugby wireless news.  
 12.25 p.m.—Studio music.  
 12.30 p.m.—Marching music for school children.  
 12.40 p.m.—MARGARET BUTTERWORTH, contralto.  
 12.45 p.m.—THE OAK HALL INSTRUMENTAL TRIO.  
 12.55 p.m.—Studio music.  
 1 p.m.—"Big Ben"; Weather intelligence.  
 1.3 p.m.—"Evening News" midday news service, Producers' Distributing Society's report.  
 1.40 p.m.—THE OAK HALL INSTRUMENTAL TRIO.  
 1.25 p.m.—Stock Exchange, second call.  
 1.30 p.m.—Marching music for school children.  
 1.40 p.m.—MARGARET BUTTERWORTH, contralto.  
 1.45 p.m.—Studio music.  
 1.50 p.m.—THE OAK HALL INSTRUMENTAL TRIO.  
 1.55 p.m.—Last minute racing information by the 2FC Commissioner.  
 2 a.m.—"Big Ben"; Close down.  
 3 p.m.—"Big Ben" and programme announcements.  
 2.5 p.m.—From The Christ Church, St. Laurence, Sydney, An Organ recital by Mr. Christian Hellemann.  
 "Occasional Overture" (Bundel).  
 "Largo" (Händel).  
 "Minuet" (Händel).  
 "Grand Offertoire in G" (Weyl).

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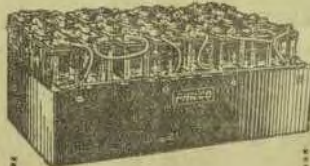
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- 8.40 p.m.—From Farmer's Tea Rooms, May Craven, mezzo:  
 "Man in the Moon" (Holmes).  
 8.45 p.m.—From The Christ Church, St. Lawrence, Sydney. An Organ Recital by Mr. Christian Heilemann.  
 "Benedus" (Baird).  
 "Serenata" (Moszkowski).  
 "Frenchie in C Sharp Minor" (Rachmaninoff).  
 9 p.m.—From Farmer's Tea Rooms, Muriel Hussey, soprano:  
 "Valse Sola" from "Borneo and Juliet" (Hosford).  
 9.05 p.m.—From The Christ Church, St. Lawrence, Sydney. Continuation of the Organ recital by Mr. Christian Heilemann.  
 "Frenchie in C Minor" (Chopin).  
 "Melody in F" (Rubinstein).  
 "Wedding Procession" (Rubinstein).  
 9.20 p.m.—From Farmer's Tea Room, May Craven, mezzo:  
 "O Flower Davine" (Hayden) (Wood).  
 9.25 p.m.—From The Studio, Lewis H. Berwick, baritone:  
 "I did not know" (Trotter).  
 9.30 p.m.—Belle Simmons, mezzo:  
 "Provence" (Carle).  
 9.35 p.m.—Studio music.  
 9.40 p.m.—From Farmer's Tea Rooms, Muriel Hussey, soprano:  
 "Summer" (Herman Lohy).  
 9.45 p.m.—Stella Fuchsman, third solo.  
 9.47 p.m.—Lewis H. Berwick, baritone:  
 "Oh thank me not" (Hallinan).  
 9.50 p.m.—Belle Simmons, mezzo:  
 "Carmena" (Wilson).  
 9.55 p.m.—Studio music.  
 10 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

- 6.40 p.m.—The chimes of 8 P.M.  
 6.45 p.m.—The "Radio Man" talks to his school-boys.  
 6.50 p.m.—Story time for the young folk.  
 6.55 p.m.—Studio music.  
 6.59 p.m.—Late sporting news.  
 7 p.m.—"Big Ben." Telegraphic market reports, (wheat, wheat and stock).  
 7.05 p.m.—Fruit and vegetable markets.  
 7.10 p.m.—Weather and shipping news.  
 7.15 p.m.—"Evening News" late news service.

NIGHT SESSION.

- 7.50 p.m.—Programme announcements.  
 7.55 p.m.—Studio items.  
 7.58 p.m.—"Patience" and "Johann."  
 8 p.m.—From the Studio: The New South Wales Tramway Band:  
 (a) March: "Fransonia" (Greenwood).  
 (b) Waltz: "Destiny" (Greenwood) (by request).  
 8.15 p.m.—Alfred Cunningham, baritone:  
 (a) "The Jolly Baker" (Rouse).  
 (b) "The Day of Misery" (Old English Song).  
 8.20 p.m.—From The Studio: The N.S.W. Tramway Band:  
 Selection: "The Old Folks at Home" (Hartman).  
 8.25 p.m.—Gwendra Pimister, soprano.  
 8.30 p.m.—Lindley Evans, pianoforte solo.  
 8.35 p.m.—Ernest Gibb and Ethel Lang in a sketch:  
 "The Gal and the Star" (Chevener).  
 8.37 p.m.—Latest weather forecast.  
 8.38 p.m.—The N.S.W. Tramway Band:  
 Selection: "Echoes of the Empire" (Greenwood).  
 8.41 p.m.—Alfred Cunningham, baritone:  
 (a) "The Sailor's Song" (Sullivan).  
 (b) "Tom Rowley" (Diddley).  
 8.45 p.m.—Ernest Gibb and Ethel Lang.  
 Musical Sketches:  
 (a) "Baby Nipper One" (Hastings).  
 (b) "Mummy's Smile" (Rutherford).  
 (c) "Times have changed" (Barber).  
 8.50 p.m.—Lindley Evans, pianoforte solo.  
 8.55 p.m.—Gwendra Pimister, soprano.  
 9.00 p.m.—The N.S.W. Tramway Band:  
 (a) Waltz: "The Greenyards" (Rymer).  
 (b) March: "The Virtuoso" (Alman).  
 9.05 p.m.—Studio music.

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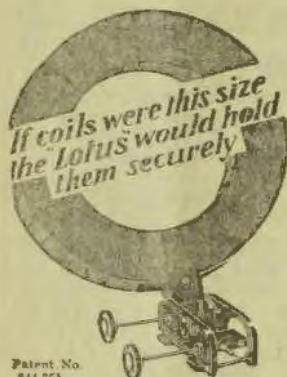
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Degraeve Buildings, Degraeve  
Street, Melbourne.

8.57 p.m.—Brunton Gibb and Ethel Lang, sketch.  
"Another Pair of Spectacles" (Bridges).  
18.10 p.m.—Mr. Fokola, Novelty Pianist.  
18.17 p.m.—Gwladys Plimster, soprano.  
19.12 p.m.—The Ambassadors Dance Orchestra conducted by Mr. Al Hammett.  
19.30 p.m.—From the Studio, Mr. Fokola, Novelty pianist.  
19.37 p.m.—The Ambassadors Dance Orchestra.  
19.57 p.m.—From the Studio. Late news and announcements.  
11 p.m.—"Die Ben."  
The Ambassadors Dance Orchestra conducted by Mr. Al Hammett.  
11.30 p.m.—National Anthem.  
Close down.

## 2BL, SYDNEY.

Thursday.

EARLY MORNING SESSION.

7 a.m. to 8 a.m.

MORNING SESSION.

10.10 a.m.—G.P.O. Clock and chimes.  
Musical programme from the studio.  
10.40 a.m.—News from the "Daily Telegraph" Pictorial.  
10.50 a.m.—Musical programme from the studio.  
11 a.m.—G.P.O. Clock and chimes. Announcement.  
11.5 a.m.—Musical programme from the studio.  
11.15 a.m.—Social Notes—Replies to correspondents by Mrs. Jordan. Talk on "Saving and Spending" by Mr. Bryan. Talk on "Domestic Craft" by Miss Bayles.  
12 noon.—G.P.O. Clock and chimes.  
Special Ocean Forecast and weather report.  
12.3 p.m.—Musical programme from the studio.  
12.8 p.m.—Information—Mails, Shipping, and port directory.  
12.11 p.m.—Boats in call by wireless.  
12.13 p.m.—Fruit Market report.  
12.15 p.m.—Vegetable Market report.  
12.21 p.m.—London Metal Market report.  
12.19 p.m.—Dairy and Farm Produce Market report.  
12.22 p.m.—FORAGE Market report.  
12.24 p.m.—Fish Market report.  
12.26 p.m.—Rabbit Market report.  
12.28 p.m.—Stock Exchange report.  
12.30 p.m.—H.M.V. Gramophone Recital.  
1.27 p.m.—Stock Exchange report.  
1.30 p.m.—G.P.O. Clock and chimes.  
Talk to children and special entertainment for Children in Hospital.  
2 p.m.—G.P.O. Clock and chimes.  
Close down.

AFTERNOON SESSION.

Racing information broadcast immediately after each race by courtesy of the "Sun."  
2 p.m.—G.P.O. Clock and chimes.  
Musical programme from the studio.  
2.10 p.m.—Talk on "Among Tropic Isles" by Mr. Basil Kirke.  
2.46 p.m.—Dungowan Danes Band, broadcast from the Dunstan Cabaret.  
4 p.m.—G.P.O. Clock and chimes.  
News from the "Sun."  
4.8 p.m.—Musical programme from the studio.  
4.15 p.m.—Serial Story.  
4.30 p.m.—Dungowan Dance Band.  
4.50 p.m.—News from the "Sun."  
4.55 p.m.—Resume of night's programme.  
4.57 p.m.—Racing Resume.  
4.59 p.m.—Special Ocean Forecast.  
5 p.m.—G.P.O. Clock and chimes. Close down.

EARLY EVENING SESSION.

5.45 p.m.—G.P.O. Clock and chimes.  
Children's Session.  
6 p.m.—The pupils of Miss Monica Reilly will entertain the Children.  
6.30 p.m.—Musical programme from the studio.

SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. Clock and chimes.  
Australia Mercantile Land and Finance Co's report.  
Musical report and forecast by courtesy of Govt. Meteorologist.  
Producers Distributing Society's Fruit and Vegetable Market report. Talk about Books, Stock Exchange reports.  
Dairy Produce report ("Sun.")  
Grain and Fodder report.  
Weekly Traffic Bulletin.  
7.15 p.m.—Country News from the "Sun."  
7.30 p.m.—Helpful Hints to Listeners by Mr. Alan Burgess.  
7.50 p.m.—Talk on Activities of the Australian Mathematicians Society. Maritime Centre by Mr. Rupert Maclean B.E.  
7.45 p.m.—Talk on "The Care of the Eyes" by Mr. Patterson.  
8 p.m.—G.P.O. clock and chimes.  
Broadcasters' Topical Chorus.  
8.3 p.m.—An hour's programme presented by Home Recreations, Limited.  
Dance music by the Salonola Dance Orchestra.  
8.33 p.m.—Mr. Clement Williams, baritone.  
8.39 p.m.—The Salonola Dance Orchestra.  
8.50 p.m.—Dorothy Manning and Harry Graham in humor and harmony.  
8.45 p.m.—The Salonola Dance Orchestra.  
8.55 p.m.—Mr. Robert Turner, humorous and dramatic recital.  
9.2 p.m.—The Salonola Dance Orchestra.  
9.12 p.m.—Weather report and forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.  
9.13 p.m.—The Murrumbidgee Salvation Army Band (bandmaster, Mr. N. H. Knight), broadcast from Wentworth Street, Murrumbidgee.  
9.31 p.m.—Mr. Clement Williams, baritone songs.  
9.40 p.m.—Murrumbidgee Salvation Army Band.  
10 p.m.—G.P.O. clock and chimes.  
10.1 p.m.—Mr. Robert Turner, humorous recitations.  
10.8 p.m.—Resume of following day's programme.  
Announcements.  
10.12 p.m.—"Sun" news service.  
10.15 p.m.—Dance music by Cyril Kaye and the Wentworth Cafe Orchestra. Between dances, news items from the "Sun's" news service will be read from the Studio.  
11.30 p.m.—G.P.O. clock and chimes.  
National Anthem.

## 3LO, MELBOURNE

Thursday.

MIDDAY SESSION.

12 noon.—Melbourne Observatory time signal. Metal prices received by the Australian Mines and Metals Associations from the London Stock Exchange this day. Reuters's and the Australian Press Association cables. British official wireless news from Rugby. "Argus" news service.  
MADOLINE KNIGHT, contralto:  
"Bonnie Chari."  
"My Wild Irish Rose."  
SENNA CHOSTIAKOFF, tenor:  
"The Star of the North" (Glinka).  
"Athena Balsanz"—Russian Folk Song.  
1 p.m.—TIME SIGNAL—Melbourne Observatory time signal.  
1.1 p.m.—Official opening of Berwick Show by Mr. WALTER, M.L.A., for the district.  
1.28 p.m.—COMMUNITY SINGING continued.  
1.40 p.m.—Meteorological information. Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports. Rainfall for Victoria, South Australia, Tasmania and New South Wales. Stock Exchange information.

- 1.10 p.m.—MISS E. CADWALLADER:  
"Physical Culture for Girls." Handle, two miles, Geelong Racing Club, GEELONG, by "Musket," of the "Sporting Globe."  
1.15 p.m.—Progress of "DUNLOP" GRAND PRIX, No. 4 Section, Bar-His in Warrambool.  
1.18 p.m.—Close down.  
1.20 p.m.—Description of Handicap Maiden Plate, five furlongs, Geelong Racing Club, GEELONG, by "Musket," of the "Sporting Globe."  
1.23 p.m.—Close down.

## AFTERNOON SESSION.

- 1.30 p.m.—Melbourne Observatory, Time Signal, Description of Crowdsale, Handle, one mile, Geelong Racing Club, GEELONG, by "Musket," of the "Sporting Globe."  
1.35 p.m.—REV. KENNETH HENDERSON:  
"Toning of the neck."  
1.40 p.m.—MR. FRITZ HART:  
Will speak to the students of music.  
1.52 p.m.—Result of Trial Jumpers' Flat, 1½ miles, Geelong Racing Club, at GEELONG by "Musket," of the "Sporting Globe."  
1.55 p.m.—MISS G. PLOS GREIG, B.A., LL.B.:  
"New California, our nearest French Neighbor."  
1.58 p.m.—STUDIO QUARTET:  
"Prairie Sketches"—Part 1 (Cadmans).  
1.2 p.m.—Under the auspices of the Health Association of Australia, DR. H. FRATON, M.D., will speak on "Vaccination."  
4.12 p.m.—STUDIO QUARTET:  
"Prairie Sketches"—Part 2 (Cadmans).  
4.20 p.m.—Description of Trial Handicap, five furlongs, Geelong Racing Club, GEELONG, by "Musket," of the "Sporting Globe."  
4.25 p.m.—BERTHA JORGENSEN, violin:  
"Melodie" (Gluck-Kreisler).  
4.30 p.m.—"Herald" news service. Stock Exchange information.  
4.43 p.m.—EVENSONG, transmitted from St. Paul's Cathedral.  
5.35 p.m.—Acceptances for Saturday's races at Epsom. Results of Welter Handicap, seven furlongs, Geelong Racing Club, GEELONG. Program reports of DUNLOP GRAND PRIX will be given.

## EARLY EVENING SESSION.

- 5.55 p.m.—Answers to letters and birthday greeting by "MARY GUMLEAF."  
6.5 p.m.—YETTY LANDAU eloquentist:  
"I don't want to be washed Daddy," a dog story.  
7.12 p.m.—MISS M. SHEPHERD:  
Has more strange stories for the children.  
7.27 p.m.—ELNIE BRADSHAW:  
"Songs at the piano."  
7.32 p.m.—"MARY GUMLEAF," "The Three P's":  
1.—Fresh Air.  
2.—Fresh Food.  
3.—Feed Fit.  
7.40 p.m.—"Herald" news service. Weather reports. Shipping movements.  
7.47 p.m.—Stock Exchange reports.  
7.52 p.m.—Fish market reports by J. R. Durrett, Ltd. Rabbit prices.  
7.55 p.m.—River reports.  
8.08 p.m.—Market reports. Official reports of Newmarket sheep sales, by the Associated Stock and Station Agents, Borooh-street, Melbourne. Poultry, grain, hay, straw, jets, dairy produce, potatoes and onions. Market reports of fruit, by the Victoria Fruitgrowers' Association. Retail prices. Fruit market reports, wholesale prices, by the Wholesale Fruit Merchants' Association. Ballarat pig market report, by the Ballarat Stock and Station Agents.

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Yours on Easy Terms

New System  
Telephones Pty. Ltd.

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### EVENING SESSION.

- 5.15 p.m.—Mr. H. A. BROWN will have a chat to home gardeners.
- 7.30 p.m.—Under the auspices of the Royal Automobile Club of Victoria, Mr. C. J. P. HODGKES, secretary of the Royal Automobile Club, will speak on—"Organized Motoring as a Factor in Progress."
- 7.45 p.m.—Mr. WALTER LEITCH will speak a few words on the Mullin Shilling Fund.
- 7.50 p.m.—Under the auspices of the Health Association of Australasia, Mr. FRANK BYRNE will speak on:  
"Oral Hygiene."
- 8 p.m.—Programme of DUNLOP GRAND PRIX relayed from WAREHAMBOOL.
- 8.15 p.m.—PROGRAMME FOR TO-NIGHT WILL BE TRANSMITTED FROM THE R.A.A.P. FLYING SCHOOL AT LAVERTON.
- JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Chalky Clear" (Howard).  
"Underneath the Stars with You" (Steph).  
"A Japanese Sunset" (Doppen).  
2.25 p.m.—SAFFO ARNAV, soprano:  
"A Heart That's Free" (Rohde).  
8.35 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Sweetie of Mine" (O'Hagan).  
"Oh, What a Pal Was Whoosis" (Kahn).  
"At Sandown" (Donaldson).  
8.45 p.m.—MARION LIGHTFOOT, banjo:  
"Camptown Carnival."
- 8.45 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Dripping and Dripping" (Gray).  
"Hi-Dee, Hi-Dee, Good-bye Thursday, Hello Friday" (Brown).  
"Slippery Elm" (Senter).  
8.55 p.m.—NORMAN PILL, comedian:  
"Mindie the Hole."
- 8.57 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"I Wonder how I Look when I'm Asleep" (Henderson).  
"A Lane in Spain" (Lewis).  
"Forgotten" (O'Hagan).  
9.7 p.m.—J. HOWARD KING, bass-baritone:  
"The Horn."
- 9.11 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"If you see Sally" (Kahn).  
"Pop's Make Believe" (Harr).  
"Blowin' Off Steam" (Dole).  
9.21 p.m.—SAFFO ARNAV, soprano:  
"The Sweetest Flower" (Bawley).  
9.25 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Why should I say I'm Sorry" (Conley).  
"Salute" (Kahn).  
"Oh, Miss Hanna" (Doppen).  
9.25 p.m.—MARION LIGHTFOOT, steel guitar:  
"Lilka Waha."
- 9.35 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"In My Gondola" (Warren).  
"Fanny Tang"—Piano Solo (Elmer).  
"Forgive Me" (Yellen).  
9.45 p.m.—NORMAN PILL, comedian:  
"The 11.59 Express."
- 9.50 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Where do you work, John" (Masks).  
"Baby Mine" (Bupp).  
"Ain't that a Grand and Glorious Feeling" (Harker).  
10.5 p.m.—FROM THE STUDIO. "Aren't" news service. Meteorological information. British official wireless news. Sporting notes by "Olympus." Island steamer movements. ROYAL AUTOMOBILE CLUB OF VICTORIA'S SAFETY MESSAGE FOR TO-DAY is:  
"Don't swear at a motorist who 'looks' at

you—he is only complying with the law, no wantonly annoying you."  
Under the auspices of the Health Association of Australasia, the Health Message for To-day is:  
"Salt is the best food known to science. There is no substitute."

- 10.15 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"I always knew I'd find you" (Moran).  
"Chinese Patrol" (Perry).  
"There's a trick in plakin', a chick other chicken" (Tobina).  
10.15 p.m.—J. HOWARD KING, bass-baritone:  
"Tom Brown."
- 10.32 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Days of Hearts and Flowers" (Tobina).  
"Eve have went, her have come, her have let I all alone" (Smith).  
"Nay, nay, neighbor" (Coulson).  
10.42 p.m.—SAFFO ARNAV, soprano:  
"John the Dance" (William G. James).  
10.45 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Sweet and Low Desert" (Gershwin).  
"When do we Dance" (Gershwin).  
"Is a Japanese Garden" (Samsheim).  
10.55 p.m.—MARION LIGHTFOOT, banjo:  
"To the front."
- 11 p.m.—OUR GREAT THOUGHT:  
"When the ideal is realized, it is robbed of its wonder and its mystery and becomes simply a new starting point for an idea that is other than itself. This is the reason why music is the perfect type of art."  
—White.  
Make Victoria More Musical. Subscribe to the Mullin Shilling Fund.
- 11.3 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
11.40 p.m.—God Save the King.
- ## 4QG, BRISBANE
- ### Thursday
- #### MIDDAY SESSION.
- 1 p.m.—Market reports; weather information; "The Daily Mail" and "The Daily Standard" news.
- 1.25 p.m.—A lunch hour address.
- 1.55 p.m.—Standard time signal.
- 2 p.m.—Close down.
- #### AFTERNOON SESSION.
- 2.20 p.m.—A programme of music by the Studio Orchestra, including:  
Fantasia: "In Cooland" (Burgood).  
Serenade: "Sleeping Beauty" (Berthom).  
Turkish Intermezzo: "On the Bosphorus" (Lincke).  
Valse: "Mere des Pierres" (Leders).  
Entracte: "In Dreamy Delta" (Kollf).  
Scene de Ballet: "The Divertissement" (Bendli).  
Pas-trot: "Me and My Shadow" (Jolson).  
Selection: "The Desert Song" (Kneiberg).  
4 p.m.—A Cookery Talk by "Betty Simpson."  
4.15 p.m.—"The Telegraph" news.  
4.35 p.m.—Close down.
- #### LATELY EVENING SESSION.
- 6 p.m.—"Daily Standard" news; announcements.
- 6.30 p.m.—The Children's Session—stories by "The Goodman."
- 7 p.m.—Market reports; stock reports.
- 7.30 p.m.—Weather news; announcements; "Daily Standard" news.



7.15 p.m.—Lecturers: "Talk on Sheep and Wool." By J. J. Ross (Assistant Instructor in Sheep and Wool).

## NIGHT SESSION.

The whole of to-night's programme will be picked from the Acacia Garden (Australia House), Queen Street.

8 p.m.—Overture: "Sunshine and Showers" (F. Bass Field).

Acacia Garden Instrumental Quartette.  
Horn solo: "Adonis" (Bostand).

Mr. J. P. Cornwall.

Soprano solo: "Fronce" (Carne).

Mrs. M. Spauler.

Tenor solo: "Dear Clinging Hands" (Drummond).

Mr. E. P. Bacon.

Selection: "Maid of the East" (William Boyd).

Acacia Garden Instrumental Quartette.

Contralto solo: "Morning" (Oley Minkley).

Miss Bursky Heath.

Tenor solo: "Marchetta" (Schetzinger).

Mr. Gerald Cushman.

Pianoforte solo, Selected:

Mr. Fred Smith.

Baritone solo: "The Hermit" (Adams).

Mr. R. Higginbottom.

Meso-soprano solo: "Noble Signor" from "Les Huguenot" (Meyerbeer).

Mrs. R. G. Allen.

Cornet solo, Selected:

Mr. P. Valley.

Bass solo: "The Lower Hills" (Drummond).

Mr. J. P. Cornwall.

8 p.m.—Metropolitan Weather forecast.

Features:

(a) "Shepherd of the Hills" (Nicholas).

(b) "Beulah Moon" (Ray Sherwood).

Acacia Garden Instrumental Quartette.

Contralto solo: "If I Might Come to You" (Schubert).

Miss Dorothy Brown.

Tenor solo: "At Evening" (Cannons).

Mr. E. P. Bacon.

Violin solo, Selected.

Miss G. Frazz.

Baritone solo: "Beyond the Deers" (Sanderson).

Mr. E. Higginbottom.

Selection: "Hans of the Clouds" (Ges. Triebhorn).

Acacia Garden Instrumental Quartette.

Soprano solo: "Out on the Rocks" (Sullivan).

Mrs. M. Spauler.

Tenor solo: "Don't Mind the Rain" (Miller).

Mr. Gerald Cushman.

Selection: "Hikara" (Hiroshi Nichols).

Acacia Garden Instrumental Quartette.

Meso-soprano solo: "The Leaves and the Wind" (Lenné).

Mrs. K. G. Allen.

Selection: "Down on the Blinded Day" (Gen. L. Cobb).

Acacia Garden Instrumental Quartette.

FROM THE STUDIO:

10 am.—"The Daily Mail" news; weather news.

Close down.

## 7ZL, HOBART

Thursday.

MORNING SESSION—11 a.m. to 12 noon

## AFTERNOON SESSION.

1 p.m.—G.P.O. Clock Chimes.

3.1 p.m.—Tune in selection.

3.5 p.m.—Hobart Stock Exchange quotations.

Weather information.

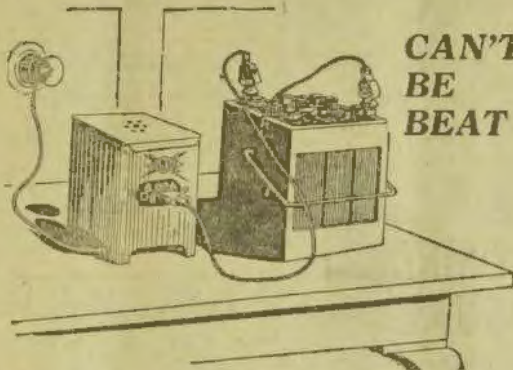
Items of interest; Announcements.

5.15 p.m.—Musical selections by 7ZL Studio Trio.

4.15 p.m.—Chat by Child Welfare Nurse.

4.30 p.m.—Close down.

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1 400 ohm. Potentiometer	2	6	3 ins. Cardboard Tubing	1	0
1 Rheostat, 30 ohms.	2	3	8ozs. 22 D.E.C. Wire	2	4
1 00025 Wetless Condenser	1	6	1 UX Socket	1	3
1 piece Bakelite, 10 x 1 x 3-16	0	9	1 Battery Clip	0	4
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EARLY EVENING SESSION.

- 6.30 p.m.—Children's Corner by "Uncle Peter."
- 7 p.m.—"Uncle Peter's" half-hour.

NIGHT SESSION.

- 7.50 p.m.—Musical selection.
- 7.55 p.m.—The Photographic Corner. "The Story Picture," by Mr. G. H. Sims, manager, Kodak Ltd., Hobart.
- 7.50 p.m.—"Mercury" special Tasmanian news service. Railway section, produce sales. Weather forecasts. Station announcements.
- 8 p.m.—G.P.O. Clock Chimes.
- 8.1 p.m.—Band selections by Jones L.L. Band (Conductor, Mr. Chas. Goddard).
- 8.40 p.m.—British Official Wireless News.
- 8.50 p.m.—"Mercury" special Interstate news service. Tasmanian District Weather reports. 9 a.m. Weather forecasts. Station announcements. National Anthem.

- 1.40 p.m.—Clara Fothergill, dramatic soprano: "My little banjo" (Dickman).
- 1.48 p.m.—Studio music.
- 1.50 p.m.—THE OAK HALL INSTRUMENTAL TRIO.
- 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 3 p.m.—"Big Ben" and announcements.
- 3.5 p.m.—A record recital.
- 4.15 p.m.—From The Studio, Enid King, contralto: "Song of Florian" (Gardner).
- 3.15 p.m.—Continuation of the Record recital.
- 3.25 p.m.—Genevieve Eppel soprano: "Angels Guard Thee" (Gardner).
- 3.30 p.m.—Marching music for school children.
- 3.40 p.m.—From Farmer's Tea Rooms, Florence Grant, soprano: "Moonlight Eves" (Temple)
- 3.45 p.m.—THE OAK HALL INSTRUMENTAL TRIO.
- 3.55 p.m.—From The Studio, Jack Brown, baritone: "Sleazy Bulw Tuna" (Roanta).
- 4 p.m.—"Big Ben." From Farmer's Tea Rooms. New Hallist, mezzo.
- 4.5 p.m.—THE OAK HALL INSTRUMENTAL TRIO.
- 4.10 p.m.—Enid King, contralto: From The Studio: "Requiem" (Hornet).
- 4.20 p.m.—From The Farmer's Tea Rooms, Florence Grant, soprano: "The Moonlit road" (Squire).
- 4.25 p.m.—THE OAK HALL INSTRUMENTAL TRIO.
- 4.35 p.m.—From The Studio, Genevieve Eppel soprano: "Down in the Forest" (Ronald).
- 4.40 p.m.—Farmer's Tea Rooms, New Hallist, mezzo.
- 4.45 p.m.—From The Studio, Stock Exchange, third call.
- 4.47 p.m.—Jack Dunne, baritone: "Falling in Love" (Maxey).
- 4.50 p.m.—From The Studio, Musical Items.
- 5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

- 5.40 p.m.—The chimes of 2FC.
- 5.45 p.m.—The "Hello Man" talks to the children.
- 6.00 p.m.—Story time for the young folk.
- 6.40 p.m.—Studio music.
- 6.50 p.m.—Late sporting news, by the 2FC Racing Commentator.
- 7 p.m.—"Big Ben." Dalgety's market reports, (wheat, wheat and stock).
- 7.10 p.m.—Fruit and vegetable markets.
- 7.10 p.m.—Weather and shipping news.
- 7.10 p.m.—"Evening News" late news service.

NIGHT SESSION.

- 7.05 p.m.—Programme announcements.
- 7.35 p.m.—Cricketing reminiscences. A talk prepared by Mr. Frederick Harper.
- 7.47 p.m.—Malaine Vera Tasma, soprano: "I was not among of birds" (Hull).
- 7.51 p.m.—Ad Croe, Scottish Comedian.
- 8 p.m.—"Big Ben." Frank McEathern, bass: (a) "Leah's" (Donetti). (b) "Rolling down to Rio" (German).
- 8.4 p.m.—Win and Windle, English entertainers.

Friday, Nov. 18  
2FC, SYDNEY.

EARLY MORNING SESSION.

7 a.m. to 8 a.m.

MORNING SESSION.

- 10 a.m.—"Big Ben" and programme announcements.
- 10.5 a.m.—Studio music.
- 10.10 a.m.—Last minute sporting information by the 2FC Racing Commissioners.
- 10.15 a.m.—"Sydney Morning Herald" summary.
- 10.30 a.m.—Studio music.
- 10.35 p.m.—A reading.
- 10.45 a.m.—Studio music.
- 11 a.m.—"Big Ben." Marching music for school children.
- 11.5 a.m.—A.P.A. and Roeter's Cable Services.
- 11.10 a.m.—Studio music.
- 11.15 a.m.—A talk on home cooking and recipes by Miss Ruth Furst.
- 11.30 a.m.—Close down.

MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.
- 12.5 p.m.—Stock Exchange, first call.
- 12.8 p.m.—Official weather forecast, rainfall.
- 1.5 p.m.—Studio music.
- 12.10 p.m.—Summary of "Sydney Morning Herald" news service. Rugby wireless news.
- 12.25 p.m.—Studio music.
- 12.30 p.m.—Marching music for school children.
- 12.40 p.m.—Clara Fothergill, Dramatic soprano: "The Valley of Laughter" (Howles).
- 12.45 p.m.—THE OAK HALL INSTRUMENTAL TRIO.
- 12.55 p.m.—Studio music.
- 1 p.m.—"Big Ben." Weather intelligence.
- 1.2 p.m.—"Evening News" midday news service. Products Distributing Society's report.
- 1.30 p.m.—THE OAK HALL INSTRUMENTAL TRIO.
- 1.38 p.m.—Stock Exchange, second call.
- 1.40 p.m.—Marching music for school children.

- 8.15 p.m.—Jack Lumsdaine, songs at the piano.  
 8.22 p.m.—Madame Vera Tasma, soprano: "La Serenade" (Conti).  
 8.29 p.m.—Stent Alexander will present an old-world Irish Comedy adapted for Radio by Cudrington Ball, entitled: "The Boy from over the Hill"  
 Mr. Alexander as the old General, Master Billy Freeman as Danny the boy. Scene: The General's Study.  
 8.44 p.m.—Frank McKachern, basso: "Drals goes West" (Sanderson).  
 8.47 p.m.—Win and Winda, English entertainers.  
 8.53 p.m.—Madame Vera Tasma soprano:  
 (a) "Little Shepherd" (Donald Ford).  
 (b) "Lack Lomond" (by request).  
 9 p.m.—"Big Ben." Latest weather forecast.  
 9.1 p.m.—Ad Cree, Scotch comedian.  
 9.7 p.m.—Jack Lumsdaine, songs at the piano.  
 9.16 p.m.—Frank McKachern, basso: "Devonshire Cream and Cider" (Sanderson).  
 9.22 p.m.—From Her Majesty's Theatre (by permission of J. C. Williamson, Limited): Act Two of

## "CASTLES IN THE AIR"

- Music by Percy Wenrick.  
 Musical numbers:  
 Opening, The Chorus.  
 Latvian Dances, Leo Franklyn, Chorus and Ballet.  
 Song, "Baby," Gus Bhuett and Chorus.  
 Song, "My Latvia," Roy Russell and Full Chorus.  
 Song, "Land of Romance," Rowena Ronald.  
 Duet, "What a Wonderful Day," Rowena Ronald and Roy Russell.  
 The Latvian Chant, Full Chorus.  
 Dance, Flute Arias.  
 Finale, Principals and Ensemble.  
 10.28 p.m.—From the Studio:  
 Ad Cree, Scotch comedian.  
 10.36 p.m.—From Her Majesty's Theatre:  
 The Third Act of

## "CASTLES IN THE AIR" .....

- Musical numbers:  
 Opening Ensemble, Chorus.  
 Song, "The Gramies," Gus Bhuett.  
 Song, "Home Again," Cecil Kellaway.  
 Finale, Principals and Ensemble.  
 10.57 p.m.—Late news and announcements, from the Studio.  
 11 p.m.—"Big Ben." Dance items.  
 11.10 p.m.—"Len Maurice, popular baritone.  
 11.16 p.m.—Dance Music, interspersed with vocal numbers by Len Maurice, until 11.30 p.m.  
 11.30 p.m.—National Anthem.  
 Close down.

## 3LO, MELBOURNE

Friday

## MIDDAY SESSION

- 12.30 noon—Melbourne Observatory Time Signal: Metal prices received by the Australian Mines and Metals Association from the London Stock Exchange this day; British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables; "Herald" News Service.  
 12.20 p.m.—REGENT GRAND CONCERT ORCHESTRA:  
 March, "Gallant" (Souss).  
 12.57 p.m.—REGENT GRAND CONCERT ORCHESTRA:  
 Extrate, "Incidental Music—Faust" (Col. Tarter).

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SYDNEY

Tel.: DW 1328

- 12.30 p.m.—YETTY LANDAU, Recitations:  
"The Last Me Durg" (Kiddie Study).  
"The Flagger at Gruballs and Goo."
- 12.37 p.m.—Stock Exchange Information.  
12.40 p.m.—REGENT GRAND CONCERT  
ORCHESTRA:  
Overture, "Sesenth Allodia" (Rollinson).
- 12.50 p.m.—MADOLINE KNIGHT, Contralto:  
"Cockles and Mussels" (Irish).  
"The Irish Emigrant" (Irish).
- 1.0 p.m.—Melbourne Observatory Time Signal.
- 1.5 p.m.—Meteorological Information: Weather  
Forecast for Victoria, Tasmania, South  
Australia and New South Wales; Ocean  
Forecast; River Reports for Victoria, Tas-  
mania, South Australia and New South  
Wales.
- 1.15 p.m.—MARIE LAWTON, Soprano:  
"Oh Lovely Nite" (Lanon Ronald).  
"The Hills of Denmark."
- 1.22 p.m.—REGENT GRAND CONCERT  
ORCHESTRA:  
Selection, "Rose Marie" (Friml).
- 1.30 p.m.—MRS. ERNEST LEVINSON will  
speak under the auspices of the Health  
Association of Australasia on:  
"Children's Fears in Relation to Health."
- 1.40 p.m.—SENIA CHUSTIAKOFF, Tenor:  
"Dobrinia Nalich" (a legend, arr. by  
J. Jeroff).
- 1.47 p.m.—REGENT GRAND CONCERT  
ORCHESTRA:  
"The Rose Wedding" (Waldteufel).  
"The Skaters."
- 2.0 p.m.—Close Down.

#### AFTERNOON SESSION.

- 2.0 p.m.—Melbourne Observatory Time Sig-  
nal. STUDIO QUARTETTE:  
Selection, "Kiss Boots."
- 2.10 p.m.—MISS FRANCES PRATER:  
"Heroes in Fiction—King Arthur."
- 2.25 p.m.—DOEATHEA MACMASTER,  
Piano:  
Sonata, Allegretto—1st movement (Bor-  
tolevi).  
Valse in D Flat (Chopin).  
Ballade in A Flat (Chopin).
- 2.35 p.m.—MARIE LAWTON, Soprano:  
"Oh Sweden" (Friml).  
"Bedley of Foulair Successes."
- 2.52 p.m.—STUDIO QUARTETTE:  
New Sullivan Selection.
- 4.2 p.m.—Under the auspices of the Health  
Association of Australasia, MR. E. E.  
PIERCEOTT will speak on "The value of  
Vegetables in the Daily Diet."
- 4.10 p.m.—STUDIO QUARTETTE:  
New Sullivan Selection.
- 4.22 p.m.—MARIE LAWTON, Soprano:  
"By the Waters of Minnetonka" (Ulster-  
ness).  
"Fat his feller wid his Mummy's Eyes"  
(Clutzman).
- 4.30 p.m.—MRS. M. CALLAWAY MAHDOO,  
Personalities in Art:  
"Dante Gabriel Rossetti."
- 4.45 p.m.—"Herald" News Service.
- 5.0 p.m.—Results of the Associated Public  
Schools of Victoria Cricket Matches.
- 6.10 p.m.—Close Down.

#### EARLY EVENING SESSION.

#### CHILDREN'S HOUR

- 5.30 p.m.—Answers to Letters and Birthday  
Greetings by "BILLY BUNNY."
- 6.0 p.m.—STUDIO QUARTETTE:  
Music Pictures—At the Theatre (Foulds).
- 6.10 p.m.—Under the auspices of the Health  
Association of Australasia, CHILDREN'S  
HEALTH PLAY, by North Brunswick  
State School:  
"From Danger Valley to Safety Hill"

- 6.35 p.m.—STUDIO QUARTETTE:  
Music Pictures—Evening in the Forest  
(Dobos).
- 6.40 p.m.—"Herald" News Service: Weather  
Service: Shipping Movements.
- 6.47 p.m.—Stock Exchange Information.
- 6.52 p.m.—Fish Market Reports by J. E.  
Barrett, L.S.J.; Rabbit Prices.
- 6.55 p.m.—Hifer Reports.
- 6.58 p.m.—Newmarket Sheep Sales by the  
Associated Stock and Station Agents,  
Riverside Street, Melbourne; Market Reports  
by the Victorian Producers' Co-operative  
Co., Ltd.; Poultry, Groves Hay, Straw,  
Jute, Dairy Produce, Potatoes and Onions.
- 7.12 p.m.—Market Reports of Fruit by the  
Victorian Fruitgrowers' Association; Retail  
Fruit Market, Reports; Wholesale  
Prices by Wholesale Fruit Merchants' As-  
sociation; Ballarat Pig Market Reports by  
the Ballarat Stock and Station Agents.

#### EVENING SESSION.

- 7.15 p.m.—Under the auspices of the Depart-  
ment of Agriculture:  
MR. A. B. BAEKWELL, Science Field  
Officer, will speak on:  
"Conservation and Use of Stable Manure."
- 7.30 p.m.—COLLINGWOOD CITIZENS'  
BAND:  
March, "Jane Foyel."  
Overture, "Barge de Nair."
- 7.40 p.m.—YETTY LANDAU, Recitations:  
"Waiting for Something to Happen."  
"Cracking the Egg" (Tengstrom).
- 7.47 p.m.—COLLINGWOOD CITIZENS'  
BAND:  
Current Solo, "Your Eyes Have Told Me  
So."  
"Memories."
- 7.54 p.m.—MR. H. K. LOVE:  
"Toshoo-Bias."  
"Mr. Love will be glad to attend in your  
writing offices. And we ask you to  
write to him for any advice that you may  
require."
- 8.4 p.m.—MOANA LUO DUO:  
"Hawaiian Melodies."
- 8.11 p.m.—E. MASON WOOD, Baritone:  
"Even Bravest Heart."  
"Old Harp."
- 8.18 p.m.—MISS MARY CAMPBELL will  
speak on the Million Shilling Fund.
- 8.22 p.m.—COLLINGWOOD CITIZENS'  
BAND:  
Waltz, "Angelo, Mio."
- 8.33 p.m.—SENIA CHUSTIAKOFF, Tenor:  
"Beautiful Eyes"—A story romance.  
"Come Back to Sorrento"—Serenade from  
"Romeo and Juliet" (E. de Curtis).
- 8.40 p.m.—MR. C. J. WILLIAMS will speak  
on:  
"Tomorrow's Stadium Event."
- 8.50 p.m.—COLLINGWOOD CITIZENS'  
BAND:  
"Salut D'Amour."  
"Homing Chimes from Madras Battery."
- 9.0 p.m.—Description of Progress of Dun-  
lop Grand Prix— relayed from Warrnam-  
bool.
- Under the Auspices of the Health As-  
sociation of Australasia, the HEALTH MES-  
SAGE for today is:  
"The prime duty of a statesman is the  
care of the Public Health. Public Health  
is purchasable."
- 9.10 p.m.—E. MASON WOOD, Baritone:  
"I Hear a Shepherd's Pipe at Eve" (Wid-  
lans).  
"Memories."
- 9.17 p.m.—MOANA LUO DUO:  
"Hawaiian Melodies."
- 9.25 p.m.—MADOLINE KNIGHT, Contralto:  
"Kilaree."  
"Believe Me if All Those."
- 9.32 p.m.—COLLINGWOOD CITIZENS'  
BAND:  
Grand Selection, "Memories of Ireland."

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which the battery is needed.

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- 9.45 p.m.—MR. P. W. FERRICE:  
Under the auspices of the Health Association of Australia:  
"Exercise and Hygiene."
- 9.52 p.m.—SHEILA THROSTAROFF, Tenor:  
"A Dream" (Hartlett).  
"O Beautiful Night"—A Human Folk Song.
- 9.59 p.m.—"Argus" News Service, Road Notes: Meteorological Information.  
The Royal Automobile Club of Victoria's Safety Message for to-day is for MOTORISTS:  
"Don't forget to look to the right and left before passing a motorist, because you and your passengers will probably not remember much about the collision."
- 10.10 p.m.—MOANA LEO DUO:  
"Hawaiian Melodies."
- 10.17 p.m.—"CARDIGAN," Mr. H. A. Wolfe, sporting editor of "The Argus" and "Australian" will speak on to-morrow's races.
- 10.27 p.m.—COLLINGWOOD CITIZENS' BAND:  
"Lionsderry Air"—by request.  
"Gloria Allamah."
- 10.31 p.m.—MADOLINE KNIGHT, Contralto:  
"The Harp that Once."  
"The Minstrel Boy."
- 10.44 p.m.—Announcements: British Wireless News from Rugby; Island Steamer Movements.
- 10.49 p.m.—JOE ARONSON'S SYMOPATIZING SYMPHONISTS:  
Selected.
- 11.0 p.m.—OUR GREAT THOUGHT:  
"Oh, music! Thou who bringest the receding waves of Eternity nearer to the weary heart of man as he stands upon the shore and longs to cross over, art thou the morning breeze of life or the morning air of the future?"  
Make Victrola More Musical.  
Subscribe to the Million Selling Fund.
- 11.1 p.m.—JOE ARONSON AND HIS SYMOPATIZING SYMPHONISTS.
- 11.40 p.m.—GOD SAVE THE KING.

## Saturday, Nov. 19

### 2FC, SYDNEY

EARLY MORNING SESSION.—7 to 8 a.m.

#### MORNING SESSION.

- 10 a.m.—"Big Ben" and programme announcements.
- 10.3 a.m.—Studio music.
- 10.18 a.m.—"Sydney Morning Herald" news service.
- 10.30 a.m.—Studio music.
- 10.35 a.m.—A talk by the 2FC Racing Commissioner.
- 10.48 a.m.—Studio music.
- 11 a.m.—"Big Ben." Studio music.
- 11.5 a.m.—A.P.A. and Reuter's Cable Services.
- 11.10 a.m.—Studio music.
- 11.15 a.m.—A Talk on Gardening, by Mr. C. J. Luckley ("Rodgum").
- 11.30 a.m.—Close down.

#### MIDDAY SESSION.

- 12 noon—"Big Ben" and programme announcements.
- 12.3 p.m.—Stock Exchange, first call.
- 12.4 p.m.—Studio music.
- 12.50 p.m.—"Sydney Morning Herald" news service.



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P.M.1 L.F.	0.1 amp. 13/6
P.M.1 A. (Resist. Cap.)	0.1 amp. 13/6
P.M.2 (Power)	0.1 amp. 12/6
For 4-volt accumulator or 2 dry cells.	
P.M.3 (General Purpose)	0.1 amp. 13/6
P.M.3 A. (Resist. Cap.)	0.1 amp. 13/6
P.M.4 (Power)	0.1 amp. 13/6
For 6-volt accumulator or 4 dry cells.	
P.M.5 (General Purpose)	0.1 amp. 13/6
P.M.5 B. (Resist. Cap.)	0.1 amp. 13/6
P.M.6 (Power)	0.1 amp. 13/6

Super power valves for test L.F. stage.  
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From the deep bass notes of the organ to the piping shrill of the high soprano, Brown reproduction gives every note in perfect purity.

By such faultless reproduction and simplicity of working Brown Loud Speakers have created for themselves entirely new standards in Radio reproduction.

- 12.32 p.m.—Rugby wireless news.  
12.55 p.m.—Studio music.  
NOTE: Events of the A.J.C. Meeting at Randwick will be described in the following by the 2PC Racing Commentator.  
1 p.m.—"Big Ben." Weather intelligence.  
1.3 p.m.—"Evening News" middle news service.  
1.58 p.m.—Studio music.  
NOTE: During evening intervals the following musical items will be given:  
From the Crystal Palace Theatre, George Street, Sydney;  
Orchestral items.  
From the Studio;  
Syl Montrose, ukulele numbers, and other musical numbers.  
4.38 p.m.—Complete routine of the day's sporting events.  
5 p.m.—"Big Ben." Close down.

### EARLY EVENING SESSION.

- 6.40 p.m.—The Crimes of 2PC.  
7.15 p.m.—The "Hello Nub" (talks to the children).  
8.30 p.m.—Stereo time for the young folk.  
8.40 p.m.—Studio music.  
9 p.m.—"Big Ben." Weather intelligence.  
9.8 p.m.—"Evening News" late news service.

### NIGHT SESSION.

- 7.30 p.m.—Programme announcements.  
7.35 p.m.—A Pianoforte Recital by Mr. Ewart Chapple.  
7.50 p.m.—From the Moorman Town Hall (by arrangement with J. C. Williamson, Limited):  
The Comic Opera

### "PRINCESS CAMPRICK"

Produced by the Moorman Musical Society and broadcast for the first time.  
Late weather forecast.

- 8.10 p.m.—From the Studio:  
Re-appearance of "Ye Idlers' Minstrel Troupe" whose previous performance created so much enthusiasm.  
Musical numbers:  
1. "Ye Idlers Gay are We." The Company.  
2. "Here comes the Chocolate Majnt," Syd Shipway and Company.  
3. "Alma's in the Cuck, Cold Ground," The Company.  
4. Song, "What's Mouth," Sgt Sergeant.  
5. "Old Kentucky Home," The Company.  
6. Recitation, "Jimnie's Boots," Ted Wright.  
7. Song, "Jolly Good Fellow," Wally Baynes.  
8. "De Old Bawdy," J. Cook and Co.  
9. Song, "Swing Low," Tom Dugmore.  
10. Quartette, The Four Waifs.  
11. Song, "Don't You Cry," Sam Lyons and Company.  
12. "My Dusky Rose," Doc Ross and Company.  
13. "Asleep in the Deep," H. Marshall and Company.  
14. Song, Ronald Potter.  
15. "Pennsylvania," The Company.  
16. Song, "Mary," J. Meyland and Co.  
17. "Shine, Shine, Man," The Company.  
18. Chorus, "Idlers all Are We," The Company.

10.50 p.m.—From the Ambassadors:  
The Ambassadors Orchestra in popular dance music; conductor, Mr. Al Housmer.

10.57 p.m.—From the Studio:  
Late news and announcements.

11 p.m.—"Big Ben."  
The Ambassadors Dance Orchestra, interspersed with musical items from the Studio, until 11.45 p.m.

11.45 p.m.—National Anthem.  
Close down.

## 3LO, MELBOURNE.

Saturday.

## MORNING SESSION.

- 11.30 a.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"In an Oriental Garden" (Glasgow).  
"Meet Me in the Moonlight" (Davis).  
"So Blue" (De Saba).
- 11.35 a.m.—YETTA LANDAU. Recitations:  
"We Ain't 'Av' Proud of Dad"—Character Study.  
"Ain't 'e Jim?"—Character Study.
- 11.40 a.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"Blue Skies" (Berlin).  
"Dawn of Tomorrow" (Green).  
"Rosa Lee" (Ash).
- 11.50 a.m.—MARIE LAWTON, soprano:  
"Michael's Song from Carmen."  
"Love is Just a Little Bit of Heaven" (Bass).
- 11.55 a.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"Ain't 'e Sweet" (Yellen).  
"Crash Words, Crash Tune" (Yellen).  
"There's a Trick in Picking a Chick, Chick, Chicken" (Tubias).
- 11.57 a.m.—Under the auspices of the Health Association of Australasia, MR. J. H. LORD will speak on:  
"Tons and Hiss."
- 11.58 a.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"Love is Just a Little Bit of Heaven" (Bryan).

## MIDDAY SESSION.

- 12 noon.—MELBOURNE OBSERVATORY TIME SIGNAL.
- 12.1 p.m.—Metal prices received by The Australian Mines and Metals Association from the London Stock Exchange this day. British official Wireless news from Rugby. Reuter's and The Australian Press Association cables. "Argus" news service. Description of the Progress of the Dunlop Grand Prix.
- 12.15 p.m.—STUDIO QUARTETTE:  
Selection, "Our Miss Gible."
- 12.20 p.m.—MADOLINE KNIGHT, contralto:  
"Jeannette and Jeanot."  
"Love's Old Sweet Song."
- 12.25 p.m.—Stock Exchange Information.
- 12.30 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"She's Got It" (Davis).  
"Stepping in Society" (Ains).  
"Whom? You-oo, That's Who" (Olger).
- 12.35 p.m.—DOROTHY ROXBURGH, Viola:  
"Selections" (Hing).
- 1 p.m.—MELBOURNE OBSERVATORY TIME SIGNAL.
- 1.1 p.m.—SENIA CROSTIAKOFF, tenor:  
"The Star of the North" (Glinka).  
"Senka Rakosa"—Russian Folk Song.
- 1.15 p.m.—Meteorological information. Shipping information. Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports for Victoria, Tasmania, South Australia and New South Wales.
- 1.15 p.m.—STUDIO QUARTETTE:  
Selection, "Wildflower."
- 1.25 p.m.—MADOLINE KNIGHT, contralto:  
"Will He Come?"  
"Thinking of Thee."
- 1.30 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"Zig Zag"—Piano Solo (Bloem).  
"Golden Gate" (Lemist).  
"Rhythm is the Thing" (Raitz).
- 1.40 p.m.—SENIA CROSTIAKOFF, tenor:  
"It is Peaceful and Serene" (Gr. Sublet, Akala).  
Serenade, "A Night of Love" (Alba).
- 1.47 p.m.—JOE ARONSON AND HIS SYM-COPATING SYMPHONISTS:  
"Bonnie Mae" (Lawrence).  
"Coffee" (Rahn).  
"The Hanging Gardens of Babylon" (Carlo).  
"Su-to-to" (Eaku).

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Brisbane

- 2 p.m.—Description of Cricket Match, Richmond v. Fitzroy, at Richmond, by Mr. ROO MCGREGOR.
- 3.15 p.m.—Description of Post-Yield-Old Handicap, 1 1/2 miles, EPSON RACES, by "Market," of "The Sporting Globe."
- 3.30 p.m.—Close down.
- 2.45 p.m.—Description of Open Handicap, 4 furlongs, EPSON RACES, by "Market," of "The Sporting Globe."
- 2.45 p.m.—Description of Open Handicap, 6 furlongs, EPSON RACES, by "Market," of "The Sporting Globe."
- 2.50 p.m.—Close down.
- During the afternoon, Progress Reports of the Dunlop Grand Prix, No. 1 Section, Warrnambool to Melbourne, will be given during the afternoon, and actual finish, transmitted from the Melbourne Show Grounds.
- 2 p.m.—MELBOURNE OBSERVATORY TIME SIGNAL.
- STUDIO QUARTETTE:  
Selection, "Madame Pompadour."
- 2.15 p.m.—Description of Hush Steeplechase, 2 miles, EPSON RACES, by "Market," of "The Sporting Globe."
- 2.30 p.m.—Description of Cricket Match, Richmond v. Fitzroy, at Richmond, by Mr. ROO MCGREGOR.
- 2.30 p.m.—STUDIO QUARTETTE:  
Selection, "The Chocolate Soldier."  
"The Belle of New York."
- 2.45 p.m.—Description of Known Handicap, EPSON RACES, 1 1/2 miles, by "Market," of "The Sporting Globe."
- 2.50 p.m.—STUDIO QUARTETTE:  
Selection, "The Street Singer."  
"Our Miss Gibbs."
- 2.5 p.m.—Description of Cricketers Match, Richmond v. Fitzroy, at Richmond, by Mr. ROO MCGREGOR.
- 3.15 p.m.—Description of Walter Handicap, 1 mile, EPSON RACES, by "Market," of "The Sporting Globe."
- 3.20 p.m.—STUDIO QUARTETTE:  
Selection, "Dollar Princess."
- 3.45 p.m.—Index the supplies of the Health Association of Australasia, MRS. HERBERT BROTHERS will speak on:  
"The Value of Playgrounds."
- 3.45 p.m.—Description of Jumpers' Flat Race, 1 1/2 miles, EPSON RACES, by "Market," of "The Sporting Globe."
- 3.45 p.m.—"Herald" news service. Stock Exchange information.
- 3.55 p.m.—Description of Cricket Match, Richmond v. Fitzroy, at Richmond, by Mr. ROO MCGREGOR.
- 2.25 p.m.—Close down.
- During the afternoon the finish of the Dunlop Grand Prix will be transmitted from the Melbourne Show Grounds.
- EARLY EVENING SESSION.
- 5.30 p.m.—Sporting results.
- 5.40 p.m.—Answers to letters and birthday greetings by "LITTLE MISS EODRA-BURRA."
- 6.10 p.m.—CAPTAIN DONALD MACLEAN:  
"Hirates and More Hirates."
- 6.20 p.m.—ELLEN BRADSHAW:  
"Songs at the Piano."
- 6.40 p.m.—"Herald" news service. Weather reports. Shipping movements.
- 6.52 p.m.—Stock Exchange information.
- 6.57 p.m.—Market reports.
- 6.59 p.m.—River reports.
- 6.52 p.m.—Newmarket sheep sales by the Associated Stock and Station Agents, Buxton-street, Melbourne. Market reports by the Victorian Producers' Co., Ltd. Poultry, grain, straw, fats, dairy produce, potatoes and onions.
- 7.10 p.m.—Market reports of fruit by the Victorian Fruitgrowers' Association. Retail prices. Wholesale prices of fruit by the Wholesale Fruit Merchants' Association.

### EVENING SESSION.

7.15 p.m.—Under the auspices of the Royal Life Saving Society of Victoria, Broad Centre, MR. A. F. NEWBY will speak on "Life Saving Methods."



- 7.55 p.m.—"CAPTIVATING CAMPERDOWN," by Mr. A. J. Thomas, President of Camperdown Traders' Association, transmitted from Camperdown.
- 7.45 p.m.—MR. J. J. FLECKITT.  
"Australian Native Plants 1861 late become Woods."
- 7.35 p.m.—The winner of the £1000 Dunlop Grand Prix will speak on his experiences.
- 8 p.m.—CARNIVAL CONCERT from Showgrounds, Camperdown—Introductory remarks by Mr. H. A. Armstrong, secretary Traders' Carnival.
- 8.5 p.m.—Orchestral Selection by Carnival Orchestra.  
"When the One You Love Loves You."
- 8.7 p.m.—MISSES WILSON and FULLARTON.  
"Dance in the Springtime."
- 8.11 p.m.—MR. HARRY TAYLOR, baritone:  
"Doreen."
- 8.15 p.m.—SYD FANE, comedian:  
"Risky Ann."  
"O'Reilly."
- 8.27 p.m.—TRADESS' MALE QUARTETTE:  
"Oh in the Silly Night."  
"Little Tommy."
- 8.27 p.m.—MISS WILSON, soprano:  
"Pal of My Dreams."
- 8.31 p.m.—MR. GEORGE HORSBURGH, baritone:  
"Come Tom of Devon."
- 8.35 p.m.—CAMPERDOWN QUARTETTE:  
"Buffy Fills the Shades of Evening."
- 8.39 p.m.—CAMPERDOWN CARNIVAL ORCHESTRA:  
"Tell 'em Girls."  
"Lander."
- 8.45 p.m.—A special programme has been arranged.
- 10.15 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"When will we meet again" (Florida).  
"Jack in the Box" (Nichtel).  
"Hollmar" (Hibbel).
- 10.25 p.m.—The Royal Automobile Club of Victoria's Safety Message for to-day is for PEDESTRIANS:  
"Don't hold conversations or read newspapers in the middle of a thoroughfare—It is more steady and less dangerous on the pavement.  
The HEALTH MESSAGE for to-day is:  
"The greatest asset of a nation is the child, and the greatest asset of the child is sound health."  
Announcements, Island shipping movements.
- 10.29 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:  
"Marie, Marie" (Drows).  
"Just a Kiss in Old Killarney" (Swan).  
"Pulley—You Wonderful Boy" (Meyer).
- 10.42 p.m.—SENA CHOSTIAKOFF, tenor:  
"Songs of the Volga Boatmen," arr. T. Challapin.  
"Arlosia" from "Pagliani" (Lescavallo).
- 11 p.m.—OUR GREAT THOUGHTS:  
"Music is the outflow of a noble soul, careless whether it arises in the presence of hundreds or for itself in solitude; but always the expression of an elevated mind."—Robert Schumann.  
Make Victoria More Musical. Subscribe to the Million Shilling Fund.
- 11.1 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONISTS:
- 11.10 p.m.—GOD SAVE THE KING.

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# All Readers' Queries Answered Here.

**AERIAL (WEE WAA).—Q.** Once again I am seeking your valued advice, this time in reference to a portable four valve set, I would like to construct one of the above and would like you to supply or recommend a suitable circuit diagram?

**A.** There is a three valve portable receiver being described in "Radio" for November.

**S.M. (BUNGENDORE).—Q.** Thank you for advice re 8 v. Super-Het. Flad I'm doing better now. Getting very fair daylight reception, with a prospect of doing better when I get a larger loud speaker. At present am using a Junior Dragon De Luxe, which I do not think satisfactory for a set of this size. Have now found something else unusual. Have a Philips B665 in last audio the glass of which gets very warm after a few minutes use. The fault is not in the valve, as the same occurs to a Radiotron 201A. What is the trouble, please?

**A.** You are evidently overloading your last valve with too much plate current and without suitable grid bias. Heroin this your trouble.

**B.H.H. (STRATHFIELD).—Q.** As I am thinking of making the crystal set which appeared in "Radio" for September, (1) would an "Eco" 6000 variable condenser do? (2) I would a three-prong crystal do instead of the Diectra?

**A.** Yes to both.  
**J.F.D.W. (NORTH SYDNEY).—Q.** I have constructed the Electrotherm as described in "W.W." of 11/7/25. I have a B406 valve which I am thinking of using for the second audio valve. Could you inform me which of the Philips 4 volt valves would be most satisfactory for the reflexed valve? Also

*Will readers kindly note that all technical queries are answered through the columns of Wireless Weekly. There is no occasion to send either stamps or addressed envelopes. The only condition is that the number of questions be limited to four. We unfortunately cannot deal with technical queries by telephone or by personal callers.*

*Readers sending in queries are asked to understand that it is necessary to sign their letters and to give their addresses. Only the initials and the town will be published. In future queries arriving at this office signed, say, "Constant Reader," Tambalgunn, will not be answered.*

could you suggest a suitable valve for the C battery for the first valve?

**A.** A Crookes B406 will do with from 41/2 to 5 volts grid bias, according to the value of B battery used.  
**G.M.C. (KIPPIN), H.S.C. (CASINO), and F.W.C. (WARRMAN).—Q.** The Saturday and Sunday, the 14th and 15th inst., while listening in on the short wave receiver described in "W.W." 18/7/25, I picked up a foreign station. The announcements were all made in a foreign language. At about 5.30

p.m. on Saturday I first picked them up. The first item was a lecture in this particular language. Later on, from 8.15 p.m. till 10 p.m., an opera was heard. On Sunday the item heard was instrumental music, during which there were intervals in which short speeches were delivered. This station again finished with an opera, the same as the previous night. They closed down about 10 p.m. I was using a 30-40 metre coil in the secondary. The dial reading was 97 deg. Could you possibly inform me what station this is?

**A.** Probably one of the Russian stations.  
**ANXIOUS (LAKEEMBA).—Q.** Would you please answer the following in your Queries column: (1) I am anxious to build a valve set which would be best as regards selectivity and capability to receive intermediate stations, the Broadcasting Drake or the Universal 4 Repeater, published lately in "Wireless Weekly"?

(2) If I decide on Universal 4, would B battery eliminator, published in "Wireless Weekly" 11/10/25, be suitable for this set, as I notice some voltage quibbles for radio and audio? If eliminator not suitable, would 50 volt sec. B battery Ohmian or eside be sufficient to work set?

While writing you I might say I appreciate your construction articles very much, and would be pleased to see a five valve Neutrodyne circuit wiring diagram published, as well as a B eliminator suitable to work on multi valve sets?

**A.** The 5 valve set in this issue. The small eliminator might do at a pinch, but I won't guarantee it for more than three valves. At least have 60 volts for the audio stages. Your last paragraph will be attended to shortly.



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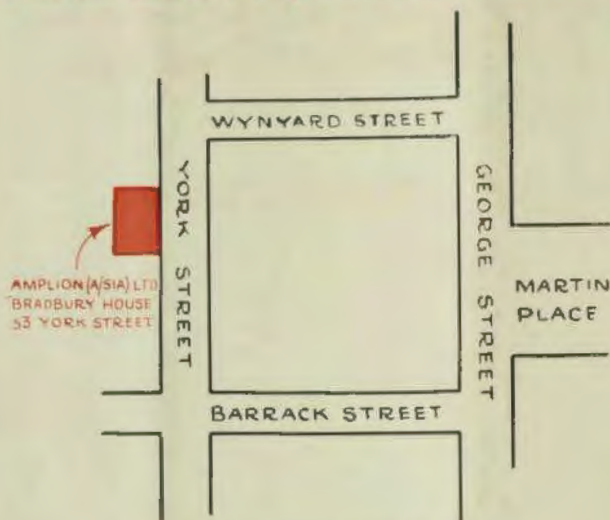
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