

# WIRELESS WEEKLY

Vol. 8, No. 25

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## RESCADIO

SETS

SPECIAL ANNOUNCEMENT.

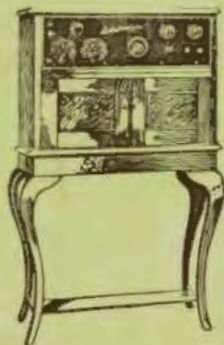
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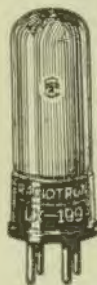
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# WIRELESS WEEKLY

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OCTOBER 15, 1926.

## *An Ageing System*

**A**RBITRATION litigation over the re-allocation of broadcast license fee revenue is taking place in Sydney. Whatever the outcome of the proceedings, they are only likely to increase the bitterness between the stations.

The division of the broadcasting revenue has been a bone of contention between the broadcasting companies for more than two years now. No party is likely to be satisfied so long as the system exists.

This state of dissatisfaction is just what listeners hoped would make broadcasting a lively business. But competition between the Melbourne stations has been negligible, and in Sydney, where there has been rivalry, it has been reflected in the programmes in the wrong direction. Both stations frequently broadcast similar programmes on the same night, each attempting to outdo the other in excellence. Not only has the talent been divided, but a listener turning from one station to the other for a change of programmes, finds himself listening to exactly the same type of music. Then there is the matter of zones.

Listeners in the Riverina district draw their broadcast service from 3LO, claims the Southern station, yet the N.S.W. stations

collect the revenue. Likewise, Tasmanian license fees are paid by 3LO listeners, yet are collected by the local station. Again the N.S.W. stations claim that a large percentage of Queensland listeners tune in them exclusively. The same argument has been advanced in the case of South Australia. Only an exhaustive census would reveal what truth is in these claims.

The whole trouble is that radio has outgrown the original scheme prepared for it. To-day every third or fourth listener can hear stations in other states. Broadcasting cannot be restricted to zones.

There are two remedies. First, that license fees be abolished, relying on advertising revenue for the upkeep of the station. In short, the American system.

Second, that all broadcast services come under a single control, be it Government or private enterprise. In short, the British system. This suggests a monopoly—repugnant thought! However, the advantages or disadvantages of this system would depend entirely on the terms on which such a monopoly was granted.

Probably broadcasting will soon have outgrown such a scheme and become so world-wide that even countries cannot confine it.

Miss Clarine Barry, 2FC's Radio Bride, to be married on October 22, is seen in our cover this week.

# Between You and Me and the Microphone

WIND INSTRUMENTS over three thousand years old are being used in Denmark. We had no idea that wireless uncles lived to such a ripe old age.

AN extremely important item in connection with wireless sets, says an advertisement, is the roost of upkeep. That explains why many listeners refer to their sets as "she."



WHAP, a new American station, will permit neither jazz nor advertising matter to be broadcast. It would be refreshing to hear such a station, but unfortunately the power is only 500 watts.

A BAGPIPE performance at a local station did not arouse much enthusiasm among a settlement of aborigines at Bourke who listened in recently. Which shows that in one respect they must be more civilized than we are.

MR. BRUCE will probably broadcast from 2LO this month. The B.B.C. states that during the Imperial Ministers' Conference, now sitting in London, it is expected that each of the Prime Ministers will take a turn before the microphone.

MR. AND MRS. DANDO (nee Thelma Crowther, the 3LO September Bride), have returned from their honeymoon in Tasmania to their home at Hampton. Chatting about the honeymoon trip, Mrs. Dando expressed amazement at everything that had taken place, the reception, surprise tours, and the great kindness and consideration shown them throughout the tour.

THE 3LO ORCHESTRA now numbers eight performers, and is likely to be still further augmented. Reginald Bradley is first violin, ably supported by Bessie Gausson (temporarily replaced at present by Bertha Jorgensen), with Dorothy Roxburgh at the viola, Tasma Tiernan at the cello, Walter Smith cornetist, Fred Stoneham clarinet, Richard Chugg flautist, and Agnes Fortune at the piano.

Conducted by  
R. E. CORDER

AMERICA'S Universal call sign should be H2O.

A NEW road in Los Angeles has been named after the local broadcasting station, and is known as "KNX Boulevard."

THERE ARE more than 530 broadcasting stations on the air in U.S.A., while 630 organisations are reported to have applied for broadcasting licenses. According to the latest statement issued by Secretary Hoover, a license will be granted in each case on the completion of the station, but not before.

## SUMMER RADIO.

A thread far up among the trees.  
A box upon the ground.  
The sighing of a gentle breeze.  
And shadows all around.

Far o'er the desert's sandy waste.  
Far o'er the moonlit sea.  
Soft sounds of music interlaced  
Bring happiness to me.

Used tidings of a homeland dear  
Come stealing through the night.  
How glad am I that I can hear  
That message of delight.

The moon in all her fat array  
Is sinking in the west.  
A voice so far—how far!—away  
Tells me 'tis time to rest.

A distant chime rings out and then  
Taint tells the midnight hour.  
I think me of my kith and kin  
And take me to my tower.

J. A. H.

A PRACTICAL application of radio-photography is the broadcasting of weather charts to both land and ship stations. Instead of receiving the weather data and plotting it on an outline map of the surrounding region, this new method, already employed by a German shipping company, brings in the map complete, provided, of course, the station or ship has a radio-photo receiver in operation.

IT IS estimated that there are 250,000 sets in Argentina, in Chile, 40,000 to 50,000; in Brazil, 60,000; in Peru, 12,000 sets which have been licensed at an annual fee of a Peruvian pound, and probably as many more which have not been licensed; in Uruguay, 10,000 to 15,000; in Ecuador, 5,000; in Paraguay, Bolivia, and Venezuela, very few receivers, due to restrictions. Only the best sets can be used on account of the damp atmosphere.

SOMEBODY has been suggesting that 2FG should give a lecture on the China question. If they want an expert on the subject, our housemaid is at their disposal.

OFFICIALLY recognised by the Government at last, Danish amateurs may now transmit on 15 metres, from 43 to 47 metres, 70 to 75 metres, and from 95 to 115 metres. Power is restricted to 100 watts.

THE CHAIN station idea will be so thoroughly developed in the United States during the next two years that any important event occurring in any city will be available for the ears of every listener in the country, according to a statement issued by the Commercial Broadcasting Corporation, New York.

A "RADIO PARISH" has been organised in the state of Maine, U.S.A. A local minister, whose sermons were regularly broadcast, resigned from his church to devote all his time to the "air ministry." He has the co-operation of nine denominations. A group of business men are organising to ensure that the church is supported financially.

THE FACE of Captain Hutchinson was transmitted in London recently. Listeners heard a droning sound on 200 metres. Captain Hutchinson is the business director of Television Ltd., which has been granted the first two licences for wireless television. At present living faces and scenes are being sent from London to Harrow, but a certain amount of interference is being experienced on the 200-metre wavelength.

ALL tastes are catered for in the American wireless programme, says a New Yorker who is over here. But he himself has had to come to Australia to satisfy his taste for a decent drink.



Uncle Jack Prentice Says:

## "Generally Speaking We Announcers Are Generally Speaking"

*And in this article explains why an announcer can continue to speak without becoming a bore to his listeners*

for the Editor has commanded me to write on the projection of personality through the ether per medium of the microphone. The first thought I collected was the obvious question: "What is personality?" It is not easy to define.

You have often gone into a theatre and seen someone who took your fancy more than the leading actor or actress. Perhaps he or she had no chance to show ability; but something drew you—not ability; not even beauty; perhaps just personality.

Again, you have sometimes liked a person who was not without faults. So that we see it is not even goodness that creates this strange outpouring of our innermost self.

"But," someone objects, "you say personality is not beauty?" No; though beauty, of course, intensifies the force of whatever personality we have.

And the greatest proof we have that personality is not beauty is radio. For we have discovered that personality can be transmitted over thousands of miles. People have become fascinated by the personality of one they have never seen, one hitherto unknown to them. Nor is there beauty in their speech, and I will not pretend to discover that successful personality lies in one's voice.

Although the whole science of radio is yet cradle-bound, there is a literature growing up, and everyone with experience is putting his ideas into words. Personality has come to play a big part in our life and we realise that possession of this quality is invaluable.

This realisation has brought a de-

sire to possess personality, raising a most important question: Can personality be trained, cultivated, acquired?

Undoubtedly, yes. Never was the training of the self more in vogue. People are cultivating themselves, mind and body. This culture may be called intensive.

Personality training is a subject too vast to lay down even general principles, but for the successful projecting of a personality over the air there may be a few thoughts here which will serve the needs of the budding aspirants to microphonic fame.

Be it remembered, from the start, that the radio lecturer or speaker is denied all the tricks of oratory—not for him the flashing eyes, the declamatory attitude, the clenched fist, and the knit brow. Rhetoric and dialectics serve him little, and he is compelled to fall back upon other things. If he is to project his personality so as to make it a lasting factor in wireless, he must use methods that are radically new.

Perhaps the important thing is to have something to say! The microphone must not be regarded as an easy means to publicity; moreover, it is much more difficult to hold an unseen audience than an assembly which is present in a hall or room and so cannot easily and unobtrusively escape. Force of merit and excellence count in wireless. The thing to be talked of must be of general interest, or, if severely technical, must be tied up to something of general interest. There must be an excuse for the technical subject, and the best one is to align it to something that the average person knows all about.



It is not individuality—that does but make one different from another. It is not to be confused with either wit or wisdom—it is not mental only. It is of the spirit. A savage breathes it forth, as well as Socrates.

We call it personality, an extraordinary emanation from each one of us—man, woman, or child. Personality is that very essence of ourselves that is often betrayed without speech or movement. It has been compared with the perfume of a flower. It may be termed the ultimate "I," beauty attracts the eye, but personality goes deeper.

A homely woman may make you feel her charm as well as a Helen of Troy. Indeed, legends tell us that some of the famed "beauties" of history were not beautiful. They held by something else all the men who lived for their smiles—they held by force of their personality.

For the past half-hour, I have been idly tapping the keys of the typewriter and collecting my thoughts,

It follows from this that it is necessary to know all about the subject, so that each aspect can be dealt with in due proportion. The speaker must not expect to cram his subject, for the occasion, and get away with it—the lack of knowledge, emphasised by the lack of oratorical assistance, becomes painfully obvious. The matter should be carefully prepared, but not laboured. Short crisp sentences couched in simple language—a speaker should never use six syllables where one or two will do—with due regard for grammar and syntax, carefully read over so that the speaker knows exactly what is coming next and can give proper emphasis, make the speech a delight to listen to.

#### Slang is Wireless Infamy.

Try to remember the desirability of using English that is cultured without pedantry. Avoid colloquial speech, and regard slang as the direct route to wireless infamy. Be friendly with the listeners, but retain a sense of dignity—don't try to come down to the supposed level of a commonplace audience.

Take time and pains—don't try and exhaust the subject in the short period available—it will be better for you to have the wireless audience wanting to hear more from you than to feel that both the subject and themselves are completely exhausted. Don't "lecture" the audience; try and insinuate yourself into their confidence. Invite them to share your knowledge, and without flattering them by assuming they know as much or more than you (in which case both their time and yours would be wasted), insist that they have sufficient knowledge of the subject to want to extend it. And never expect to hold the close attention of everyone for the whole period; men are so differently made up psychologically of likes and dislikes that no person or subject would ever interest and hold all of them.

Cheerfulness is essential—a lugubrious voice or manner will cause instant action in regard to tuning out the station whence such a voice emanates. Quiet but intent interest in the subject, and a clear understanding of the why and the where-

fore—not only of the subject, but also of the reason for broadcasting something about it—are essential.

Above all no hint of weariness or displeasure or dissatisfaction must ever enter. A tired voice is hopeless; even if the speaker is tired he must draw upon his subconscious reservoir of force for sufficient energy to cover up and disguise the fact that he is completely worn out. Tricks of voice, slips in pronunciation, use of unfamiliar words, all stand out hideously in radio work; but far, far worse is the suggestion of lack of interest. It is an insult to listeners-



"I myself have no intention of a ..."

in to offer anything but the very best.

All that I have so far written applies rather specifically to speaking—with very slight modifications, all of it will apply to artists who sing or play. Know your items, rehearse with a view to studio conditions, clearly visualise that you will not have the assistance of a seen and friendly audience—and give your very best. Don't slum or slur your work; don't sing unless in your best form; don't play anything but the very best you can offer. Cheerfulness and an earnest desire to do the best possible will win the reward of public appreciation.

Finally, for speakers, remember that an epigram or a terse illustration to drive home a point is essential. An epigram to a lecture is what a slogan is to a business—a constant reminder of what it has been all about. It is often this final idea or expression that will fix the subject in the listener's mind, and cause him to associate the subject with the lecturer, to the latter's advantage. Keep the very best for the very last—and success is certain.

#### Code of Ethics.

That is all I would say about radio speaking. But just in case you may be called to broadcast some time, I would add this list of microphone instructions, which every ethereal performer should know.

"Coughing, sneezing, clearing the throat, scraping the feet and other disturbances in the studios are annoying to listeners. The microphone is so sensitive that the slightest commotion may be transmitted to the unseen audience. Therefore, when the announcer calls; 'Quiet, everybody!' kindly comply.

"Do not begin singing or playing until the announcer gives the signal.

"Unless you have memorised your music, be prepared with an extra copy, as you do not stand near the piano when singing.

"Do not be perturbed if the announcer motions for you to move nearer the microphone or withdraw while singing.

"Very loud singing or playing is objectionable, as it detracts from successful broadcasting, often producing a shattered effect. The best choral effects are obtained when each person sings in a subdued manner.

"To pianists: Too much loud pedal spoils the rendition. The top of the piano should be left down, as the best broadcasting is accomplished when the instrument is closed."

#### NEW 3AR ANNOUNCER.

In addition to Uncle Rad, 3AR now employs Mr. Stephen MacDonald as announcer. Mr. MacDonald has played baritone parts in many musical performances in Melbourne. He is the author of a radio fox-trot, "Listen-in to Hawaii."



## Girdling the Globe with Relay Stations

*A vast Inter-Empire radio network planned to reach 400 million people has been formulated by the British Broadcasting Company. The system will cost £600,000 and stations and land lines will relay around the earth*

SWIFTLY upon the heels of the vast Marconi system of beam wireless, which will shortly link the British Empire together, follows an equally ambitious plan for linking up the broadcasting stations of the Empire in order that the various dominions and colonies may be able regularly to interchange educational, cultural and entertainment programmes.

A concise plan for such an undertaking has been formulated by the British Broadcasting Company, which has enlisted the interest of the Royal Colonial Institute. According to an official announcement just made in London, the British Broadcasting Company will next year be replaced by the British Government Broadcasting Commission, the Chairman of which will probably be Viscount Reading, formerly Viceroy of India. It is expected that the newly organised governmental body may conduct a technical survey of the problems involved in inter-Empire broadcasting. According to the plans of the British Broadcasting Company, the project would be quite independent of the short-wave Marconi System, although both would be governmentally affiliated undertakings.

The engineering problem involved is extremely difficult. The first factor is one of distances. To transmit the human voice and the sound of musical instruments to the British dominions, and

possessions, which cover the globe, involves the relay by radio over a mileage many times as great as the circumference of the earth. The British Broadcasting Company has chosen the following route:—

With Daventry, England, as a starting point, Moncton, New Brunswick, Canada, would be the first relay station—a distance of 2,440 miles. Moncton would radiate its programmes for Canada, with intermediate stations

in various parts of the Dominion participating in the local distribution. Land lines would be employed to carry the programmes to Vancouver, on the Pacific Coast, a distance of 2,300 miles.

At this point the undertaking would face its greatest distance barrier—the leap to Australia, covering approximately 5,000 miles. Past experience has demonstrated the practical difficulty of successful broadcasting from any part of the North American continent to Australia with the apparatus at the present state of perfection.

Major Gladstone Murray, of the British Broadcasting Company, indicated that by locating another relay station at Fanning Islands, 3,885 miles from Vancouver, to rebroadcast programmes to Sydney, another 3,710 miles, the difficulty might be overcome. Sydney would act as a distributing centre for Australia, sending the programmes on one branch land line to Perth, 1,765 miles, and then through the air to New Zealand, 1,240 miles. From Perth, in Western Australia, Asia and Africa would be penetrated by air to Colombo, Ceylon, 3,120 miles, and Cape Town, 4,630 miles. Major Murray did not state whether it would be necessary to introduce another relay, at Singapore, in the Perth-Colombo link.

The Perth to Cape Town relay, and the one thereafter, Cape Town to Malta, 4,220 miles, both face distance barriers.



*"What I just can't understand is why anybody could object to living in Tasmania for the term of their natural life." Eva Novak is saying to Sidney Lawes, General Manager of 7ZL.*

*"The scenery—Oh! so exquisite, and the fishing and the golf—"*

*But, just the same, we can't help thinking that the charming film star and her company were glad to leave for gay Sydney the following day, having finished filming the outdoor scenes in Marcus Clarke's classic.*

*While on location at Port Arthur, the Company broadcast a concert from 7ZL. Miss Novak, cast as Sylvia, told fans of her impressions of picture acting in Tasmania. Items were rendered by Miss Nancye Stewart, daughter of Miss Nellie Stewart (cast as Miss Jellicoe), Mr. Charlton Stewart (Burgess), Mr. T. Dunstan (Maurice Frere), Mr. Kay Souper (Major Vicars), Mr. Mayne Lynton, "the Original Bat" (playing the Rev. North), Mr. Arthur Touchart, the original "Sentimental Bloke" (Troke), Mr. Fred Twitnam (Doctor Pine), and Mr. Len Ross the cameraman, Mr. Norman Down, Director of the production. "For the Term of His Natural Life," also spoke on "The Production of Pictures and Their Importance in Australia."*

If these cannot be overcome by improvements in apparatus, it may be necessary to reach the two desired points through Europe, employing land lines in Africa for the purpose.

From Colombo, India by the way of Bombay would be reached on the land lines, 950 miles. India to broadcast its own programmes would work back through Ceylon or through Bombay to Malta, 3,230 miles, thence back to Keston, England, 1,420 miles.

Daventry and Keston would be the keystones of this inter-empire system of radio. These two in fact would be the key to the whole project. The Keston collecting and distributing station is at the present the world's greatest distributor of broadcast programmes. From the Continent and the dominions programmes would be collected, amplified and prepared for distribution and radiation to the United Kingdom. Moreover, speeches on Empire Day, speeches by statesmen, lectures and various other items originating in England would be sent to all parts of the dominions from these two points.

The entire project involves eight high-powered stations, eight special receiving stations and six regular stations, aside from such local stations within a country as may be necessary for broadcasting there. And it is here that another problem arises, particularly in countries of vast area such as Canada, Australia, and South Africa. While radio enthusiasm in these three dominions has grown phenomenally in the last few years, broadcasting stations have not in all cases been keeping pace with the demand—or the possible requirements of an inter-imperial broadcasting scheme.

The British Broadcasting Company estimates that the contemplated system would involve an outlay not exceeding £600,000, and this sum could easily be covered by inducing all the constituent parts of the Empire to subscribe and adopt the British system of paying for a receiving license. If the system is unified and brought under one general control, the company computes that there would be a sufficient surplus revenue to enable the capital expenditure to be covered

with ease. As an alternative to this method of underwriting the scheme the concern suggests a commercial arrangement, possibly with private interests participating.

This chain of broadcasting stations would reach the 400,000,000 inhabitants of the Empire, and at the same time more than 100,000,000 persons—all potential listeners-in—living adjacent to the British territories. It is in this reference that Major Murray stressed the really boundless significance of the scheme. He pointed

out that when broadcasting an Imperial programme from Bombay to Malta the messages would not only reach the whole of Northern India but the whole of Italy and part of the Balkans. Likewise, upon being distributed in Canada this programme would be heard by the Northern United States. Thus, not only would Empire unity be served but Empire culture and Empire aspirations would be made clear to many nations upon whose friendship Great Britain is dependent.

Major Murray suggested the regular broadcasting, possibly every two weeks, of an Australian, Canadian, Indian, or other dominion programme and once a month a "Round the Empire" programme, the latter being drawn from each of the chief stations. As broadcasting develops, Major Murray stated, the national programme of each section of the Empire more and more reflects the aspirations and collective consciousness of that particular section of the world or Empire, and it becomes increasingly desirable to encourage the conscious conception of imperial unity by linking up the various systems together.

When the people in England actually hear a programme of beautiful Hindu music time and time again, and actually hear India's leaders talk on subjects most intimate and close to the hearts of their country there is no question that this almost personal exchange of ideas will arouse an interest and sympathy which thus far could never have existed through the medium of the printed word and an intermediary's voice.

The British Empire in perpetuating itself will be witness to the fact that cultural diversity can exist, and perhaps best flourish, within a large, co-operative political unit. This can be done, however, only when there is a mutual understanding regarding the aims of the Empire. A system of radio which will bring the widespread peoples into closer contact, Major Murray concluded, will do more than any other conceivable medium for making a common understanding and sympathy between the mother country and the outlying dominions, and will defeat disruptive tendencies.



### "I Drempt of Fairies"

A fresh recruit to the rank of BLO entertainers specially engaged for the youngsters, is Miss Pat McLean, a vivacious little artist with all sorts of nice things to talk about over the wireless, and a particularly fresh and entertaining way of saying them. "Ever since I was a wee mite I have always wanted to go on the stage," said Miss Pat, "and used to dream about it for hours. I had a great volume of Grimms' Fairy Stories with some wonderful illustrations—fairies playing hop-scotch under giant mushrooms—and I could always picture myself on the stage playing wonderful parts—always the fairy queen, of course—with trains of attendants; At a very early age, I also found I could mimic any sound, being in the country I had great scope and ample opportunity to try my 'prentice hand on mimicking calls of various birds."

## Radio Telephones for Lonely Light-keepers

*If radio telephony experiments now being conducted with Clifly Island and Deal Island lighthouses by the Commonwealth Lighthouse Service prove successful, all lighthouses may be equipped with radio.*



*Testing the radio telephone apparatus to be used to connect Clifly Island Lighthouse to the mainland. The set has a transmitting power of 250 watts, and is simply operated.*

**I**F Robinson Crusoe had had a radio telephone set, Defoe's tale might never have been written, and the world would have been the loser by one good book.

To-day, the radio telephone is relieving the loneliness of hundreds of unnamed, unwritten, unsung Robinson Crusoes—men whose lives are dedicated to the safety of travellers and yet who are passed ignorantly by hundreds of thousands of them.

They are the men of the Lighthouse Service.

Suppose you were marooned on a tiny rocky island, on which there was not a single blade of grass. Suppose you had plenty of canned food, good shelter, but the society of only two other men. Occasionally you would see a passing ship, far off on the horizon, but only once in three months would a vessel come close enough for you to receive your mail.

Many men, often with families, are living under such conditions to-day, in lighthouses off the Australian coast. In the world, but not of it, they are virtually prisoners on tiny islets, confined for weeks and weeks at a time, cramped in their movements, not having

enough to do to keep them busy.

Many lighthouse keepers have their own sets, and letters are often received by broadcasting stations from lighthouse-keepers and their families. Without exception, they state radio has a great widening influence on their outlook. Those who have children state that it has been a valuable educative factor, as indicated by this letter to Mr. Walter Hunt, of 2FC, from Miss Evans, whose home is the lighthouse at Crookhaven Heads:

"Listening-in on a night, I heard you announce that you would be reciting any piece on request. Therefore, sir, being interested in elocution myself, and unfortunately unable to study, owing to the isolated position of our

home—a lighthouse by the sea—I would be very grateful to you if you will kindly recite the 'Poem of the Lifeboat,' from the Geo. R. Sims Dagonet Reciter, at your earliest convenience."

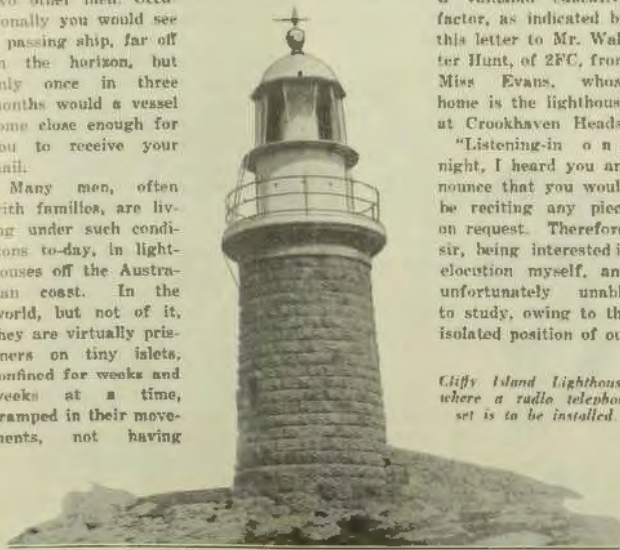
Dozens of lighthouse-keepers and their families are listening-in on the radio to-day. The world that passed them by no longer ignores them. One of the many acts of public charity unconsciously performed by radio has been the relieving of the tedium of the lights. Of course, many of the keepers are old seamen, who know no interest but the sea, and to a few broadcasting has no appeal.

But there is another side to the use of radio by lightkeepers. Entertainment and diversion is only one phase. Lighthouses built on dangerous points of the coast are often the scene of distressed vessels. Without radio the lightkeeper cannot call for help.

Although many lighthouses have their own sets, they are not used officially. The Commonwealth Lighthouse Service proposes shortly to connect all lighthouses to the mainland by wireless telephone.

Wherever practicable, the lighthouse service has provided some form of telephonic or telegraphic communication to all its manned posts. The

*Clifly Island Lighthouse, where a radio telephony set is to be installed.*



*(Continued on following page.)*

## The Three Musicians All for One, One for All

THIS is the story of three musicians. Each of whom entered a pledge in their insignificant youth—one for all and all for one, and who still honour the pledge though they now loom large in the public eye. And this is the tale.

Some years before the war, there was a young musician who had been touched with the romance of the moderns, and was a humble pupil of the school of music which had gone ahead of all accepted theories, and was blazing a trail which has now grown from the indistinct track of earlier days to the broad thoroughfare walked by thousands.



"The alert look and the long nervous hands."

It happened among his musical friends, two "unusual personages" whose music was to him more precious than gold. But people nudged each other, and laughed among themselves, and said: "These young men are fools—their music is like unto nothing." And one night there assembled in the home of this musician a goodly crowd of music makers, who made the rafters ring with song, and thought, "How clever we are—how wonderful is the music we make." Those were the days when "Thora" raged the land; when Tosti's "Good-bye" was heard within and without, and when "Alice, where art thou," had recently been interred.

And these "unusual personages" who were present heeded not where they were, but made in that home music so different, so unusual, that the noisy clacking of tongues was stilled. The young man who sat at the piano, with long nervous hands, and the alert look of a bird,

played a little song that he had made, the tall young man with the shock of black hair, and the mystic look of Ireland in his eyes, breathed out this plaintive song. Encouraged by their own desires, these

two were merged in an ecstatic blending of song and sound that made them oblivious to their surroundings. The startled look of the listeners changed to complaisant head shakes and nods, as they preened themselves in their satisfaction that this was not music—that there was no tune; it simply could not be. But the young musician with the fire of the new music in his soul went amongst them, crying that these two young men would some day be among the great men of the earth. And his friends laughed.

Now, this is nearly the end of this story. The long nervous hands, and the alert look of the bird belong to a Sydney boy



The humble young man who says: "I told you so."



"The mystic look of Ireland in his eyes."

Roy Agnew—Australia's most original music maker, who is now startling London with his flights of imagination, and is writing and having published compositions which will some day be properly understood and played everywhere.

The tall Irishman with the

### Radio for Light-keepers

(Continued from previous page.)

expense of laying cables, and the fact that the length of cable over which telephonic conversations may be conducted is limited, has prevented the provision of services to lighthouses, and the keepers of these posts have hitherto been entirely cut off from the remainder of the world.

Experiments will be made first by connecting the lighthouses at Clifty Island and Deal Island, in Bass Straits, with the mainland by wireless telephone. A wireless telephone transmitter and receiver will be installed in each of these lighthouses, and a third unit will be provided at the lighthouse at Wilson's Promontory, which also has a land line service. Thus, both the Clifty and Deal Island lighthouses will be able to communicate with the mainland through the Wilson's Promontory Lighthouse. The distances to Clifty Island and Deal Island from Wilson's Promontory are, respectively, about 17 and 49 miles.

The apparatus will be provided by Amalgamated Wireless, and most of it will be of Australian design and manufacture, and it will be similar to the wireless telephone equipment which has recently been used with success on trawlers operating from Sydney. Each transmitter will have a power of 250 watts, the current necessary to operate it being produced by a petrol driven generating set. The wave length to be used will probably be in the neighbourhood of 800 metres, though this is not definitely fixed. The transmitting equipment is now in Melbourne.

shock of black hair, and the plaintive lilt in his voice, was Alfred O'Shea, the finest tenor Australia has yet produced, who is delighting thousands of listeners in Australia with the magic art of his voice "on the air."

And the humble young man is Oswald Anderson, Manager of 2FC, who wears a smile of satisfaction for, can life hold any greater happiness for anyone, than to be able to say: "I told you so."

# Studio Notes and News

## MISSING FRIENDS.

**U**RGENT inquiries for missing relations has become such a feature of the broadcasting stations of late, that the Police Department has arranged with the broadcasting stations only to broadcast such inquiries as have first been verified by the local police. This fact should be widely known as delays might otherwise occur. For instance, the Radio Broadcast Bureau recently received a request from Bombo by letter to have broadcast the fact that an elderly woman was ill in hospital at Launceston, and calling upon the widely scattered members of her family to attend her bedside. The information had first to be substantiated by the police at Bombo, and it was not until the following Tuesday that the Sydney broadcasting stations were free to make the required announcement.

## TRAWLER FISHING AT SEA.

Station 2FC has arranged to carry out a re-broadcast from one of Messrs. Cann and Sons' trawlers at sea. The Goorangai will be equipped with a transmitting set, and members of the 2FC staff will proceed to sea with this trawler while it is working in the Botany fishing grounds. A

realistic description of trawling will be given by an announcer.

The broadcast will be done on a special wave length, re-broadcast on the usual wave length from the station at Pennant Hills.

## 2FC HOSPITAL CONCERT PARTY

Acting on the suggestion made to 2FC by Mr. Rus. Garling, whose ventriloquial talks with "Jerry" are featured in the children's session, 2FC have now arranged to form, under Mr. Garling's direction, a party of artists who will be at the disposal of hospitals and charitable institutions in Sydney. Listeners to 2FC will have this hospital programme broadcast to them every Saturday night, starting from October 16, when the party will visit Royal Prince Alfred Hospital. The children's session will be given there by the "Hello Man" and "Jerry," to the delight of the children, and at 8 o'clock the evening session will commence.

## BACK TO PENRITH.

The old historic township of Penrith will be a busy place on Wednesday, October 20, "Back to Penrith" Day. Penrithians have arranged an attractive programme, in which past and present residents of the town will get together to renew old memories. It is surprising to find so many well known artists have been born in Penrith. Arrangements have been made by 2FC to broadcast from 8 o'clock until the conclusion of the programme.

## SCOTT SANDERS—COMEDIAN.

Mr. Scott Sanders, Scotch comedian, who has for two years been entertaining audiences in Australia, returns to England at the end of October. Having completed an engagement with 3LO, is now being heard through 2FC, prior to his departure.

## NEW 3LO ARTISTS.

A new artist has joined the large staff of 3LO Studio performers. Miss Sylvia Silvestre, dramatic soprano, covers a wide field in vocalism. She has won unflinching successes throughout the Commonwealth and New Zealand in operatic



Antoine  
Konstant.

renderings, musical comedy parts, and as principal boy in pantomime; proclaiming this talented artiste to be wonderfully versatile as well as possessing a highly cultured voice of great dramatic power.

## ANTOINE KONSTANT

The brilliant young French pianist (Antoine Konstant), who made his Australian debut on Monday, October 11, and was heard from 2FC the following night, comes to this country with a wonderful series of encores from the press of Europe and the United States. At 10 years of age he was brought before the public as a prodigy, and at 12 was admitted to the superior classes of the Paris Conservatorium—a rare thing for one so young.

## ALFRED O'SHEA.

Mr. Alfred O'Shea, billed as the finest tenor on the air to-day in Australia, has been booked by 2FC for a further series of appearances. This artist is the highest paid radio singer in Australia, and at the opening of the new 2FC station, at Pennant Hills, some months ago, his was the first voice to be heard on the increased power. On the reduction of 2FC wave length to 442 metres, he was also heard on the first programme on the reduced wave length. Further appearances are announced during October.



Professor E. Wood, who has been engaged to broadcast a series of lectures from 2LB.



3LO Dance Orchestra.

## Amateurs Should be Encouraged

*Our 3LO Correspondent outlines 3LO's policy towards the amateur transmitter explaining why the company is conducting a competition to discover the best amateur station in Victoria*

THE competition arranged by 3LO, Melbourne, for amateurs is interesting in many respects. It indicates once again that the interests of listeners are again being considered, as there are apparently very many people who are not satisfied—are not satisfied—at 11.30 p.m. when the Class A stations close down. They want some more; and the grinding out of gramophone records by amateurs serves to supply the remainder of the night's wants in wireless entertainment.

It is not all just indifferent rendering or transmitting of "canned music." Some of the mechanical music is quite good, anyhow, and it is very often very creditably transmitted. Considering that an amateur generally cannot afford—nor does he want the luxury of a proper studio microphone and amplifier—one must admit that the "tests," as they call them, by amateurs in musical numbers, either mechanical items or personally rendered vocal or instrumental items, are often very well transmitted. Some few amateurs apparently are better off than their colleagues,

as regards equipment, and a nice modulation of the items is noticed; but, generally, it is to be assumed that the enterprising and hard-working amateurs are out for tests in distances rather than in perfection of transmission of musical items. Quite a number of them are more interested in testing or experimenting with their colleagues in other States by using telegraph transmission, rather than telephone or broadcasting of music.

One is tempted to speculate as to whether the amateurs serve any useful purpose in the broadcasting scheme of things. Does anyone want their programmes? Or are they appealing to an audience of technical people like themselves? As to the first question, there appears to be quite a large number of people who look for so and so on the air after 3LO has closed down. Not only amateurs and experimenting listeners, but many of us who are included in the large fold of holders of broadcast listeners' licenses. I have made some enquiries in this matter, and have

been very much surprised to learn what is happening.

The amateur broadcasters have a regular correspondence from listeners who ask to repeat some favourite item or to put on some special thing not previously done. The amateur broadcasting is well appreciated, and would be missed if it were to be abandoned.

We learn, too, that some of these amateurs provided a broadcasting service before the Class A stations came into existence. Certainly, I believe it was not a class of service that would be classed as high grade these advanced days, but it was as good as could be given then. These precursors of broadcasting companies received no return for their labours or expense; it was all given at the expense of the amateur, and mainly to satisfy his scientific leanings. Thus they were to be commended.

With the advent of the broadcasting companies the need for amateur broadcasting more or less disappeared. The amateurs had done the pioneering work, and could now sit back and watch the efforts of people

who were very much better qualified to look after the programmes. But the amateur still found something for his busy hands and restless scientific mind. He turned his attention to trying to speak to fellow amateurs in New Zealand, in America, and in Europe. And he did it very successfully in many instances. Communication by Morse has been established by Australian amateurs with amateurs in practically every country where the amateur is to be found, and in some cases extraordinary distances have been covered, even by the more difficult method of signalling by radio telephone—telephoning actual speech to England, for instance.

There certainly is a field for the amateur whether he be an amateur broadcaster or an amateur experimenter in long distance wireless communication. And while he can give some interesting musical programmes during his testing no one would wish that he should cease his operations.

But there is one aspect of the matter that should be kept constantly before the notice of amateurs. It is the fact that the regular, recognized services by the broadcasting companies should not be interfered with. The amateurs' activities should not make it difficult for any listener to hear the Class A stations' services. That interference can, of course, be caused by the listener having an inefficient receiver or through his not being properly competent to operate a tricky set. But there are some amateurs whose transmissions do interfere. It is up to the amateur in that case to carry on his testing or experimenting during hours when the regular services are not being given, so as to avoid any cause for complaint. That is why the amateurs generally—but, unfortunately, not all—do not send their programmes while listeners have the regular paid services to pick up.

We can safely conclude that the amateurs should be encouraged, and not hindered. Their researches and experiments may lead to improvements in broadcasting methods for the good of all, and while they so conduct their experiments as to cause a minimum of interference, we should welcome a continuance of their work.

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# This is what the Guide Book says about Java

THE island of Java is one of a group of large islands known collectively as the Netherlands East Indies, the most important of the others being Borneo, Sumatra, and the Celebes. They are all remarkably fertile, but Java is perhaps more highly developed and is more modern in its administration, transit facilities, etc. It lies to the west of Port Darwin, about three or four days' journey from the latter. It is about the most clearly defined volcanic island in the world. Through the centuries the volcanoes have continued alternately to desolate and to fertilise it. There are said to be over 100 volcanoes in Java, of which twelve or fourteen are still active. It is a long, narrow island, lying roughly east and west, about 650 miles in length, with an average width of 80 miles. On the north-west, it is separated from Sumatra by a narrow strait, while Singapore is roughly 500 miles in a north-westerly direction."

A country entirely different from Australia, presenting a field of absorbing interest for the tourist. What reader would not like to visit the country!

Wireless Newspapers will give a free, first-class return trip to Java and Singapore, on one of Messrs. Burns Philps' mail steamers, to the reader securing the greatest number of pre-paid subscriptions to "Wireless Weekly." This voyage costs us £100, and we will pay the winner £50 for incidental expenses.

In addition to this prize, by special arrangement with Amalgamated Wireless (A/sia) Ltd., we will present a full course through the Marconi School of Wireless to the youth between the age of 16 and 18 securing the greatest number of pre-paid subscriptions to "Wireless Weekly" over a period of three months, beginning on September 10.

An intensive Marconi course lasts approximately 12 months, according to the ability of the scholar. During that time he is not only following his hobby, but he is also preparing for the future. And it matters not whether he lives in the city or the country, since the course will be dealt with by post until the student is well advanced, and then several weeks' personal tuition will be given in the School in Sydney.

Having finished the course, the student will sit for examination conducted by the Postmaster General's Department, and, on passing, he receives a first-class Wireless Operator's Certificate from the Postmaster General. This qualifies him for the position of a ship's operator, and paves the way to the title of radio engineer.

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To the Director,  
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51 Castlereagh Street,  
Sydney.

Sir,—

In consideration of your allowing me to enter the "Wireless Weekly" Subscription Competition of Wireless Newspapers Limited, and supply me with a book of subscription forms, I undertake to remit to you within 24 hours after receiving same any signed subscription orders received and the amount of money received by me as represented on the order. I also undertake to account to you for all subscription order forms which you supply to me.

Signed .....  
Address .....

# Is Your Problem Here?

A.M.D. Mayfield). Perhaps were you to lower your plate voltage clearer music would result. Your reaction coil may be too big, or even reversed. Look to it.

G.R.T. (Stockton). Coasor Point One.

V.H.S. (Belmore). The Browning Drake.

W.W. (Queanbeyan). Evidently your A or B battery is run down or perhaps your valves are old.

L.S. (Rose Bay). Build the crystal receiver in last week's "W.W."

H.D. (Drummoyne). The Multi-former comprises the three intermediates and the filter.

W.H. (Ryde). You will not be likely to receive Interstate stations on any three valve set in daylight, but you should do so at night. Build the wave trap.

C. Le.S.T. (Wagga Wagga).

Q.1: Please tell me what coils to use to receive 2FC on the new wavelength.

A.1: Primary 50; secondary 50 or 75; reaction 75.

C.F.A. (Bexhill, R.R.).

Q.1: Where can I get information regarding the construction of a collapsible loop.

A.1: See "W.W." of 28/7/26.

F.L.A. (Hokianga, N.Z.).

Q.1: Please show me how to substitute a valve for the crystal in the one valve Reflex.

A.1: This is not practicable without altering the purpose of the receiver.

Q.2: Apart from ease of tuning and absence of howls, is the Neutrodyne more efficient than the P1 circuits?

A.2: Yes, much more efficient for obvious reasons.

R.P. (Sydney).

Q.1: Please supply me with a back of panel wiring diagram of the "Armstrong," Reinartz, Neutrodyne, and Hartley receivers.

A.1: Watch the columns of "W.W." for the next month or so. These will appear.

(Continued on Page 33.)

# Browning-Drake

*The Browning-Drake Four Valve Receiver  
is, without doubt, the best "4" we know. It is  
easy to build and easy to work. Build one now*

## LIST OF PARTS.

	£	s.	d.		£	s.	d.
1 Bakelite Panel, 24 x 7 x 1/8, polished	0	10	0	Vernier Dials, Emmo Bakelite . . . . .	0	9	6
2 .0005 Straight Line Frequency Condensers, 10/6 . . . . .	1	1	0	Blackmetal . . . . .	0	6	9
2 3" Black Engraved Dials, at 1/5 . . . . .	0	2	10	Univernier Dial, New Pattern No backlash . . . . .	0	9	6
4 30 ohm Rheostats, 2/6 . . . . .	0	10	0	Filkostats, The best Carbon Rheostat . . . . .	0	9	6
1 Browning-Drake Kit, with Blueprint	1	5	0	Atlas Straightline Frequency Condensers, .0005 . . . . .	0	10	6
1 Neutralizing Condenser . . . . .	0	3	6	By pass Condensers, 2M.F. . . . .	0	9	9
1 Double Circuit Jack . . . . .	0	2	4	Ediswan Transformers, High grade . . . . .	0	13	6
1 Single Circuit Jack . . . . .	0	1	9	Formo Audio Transformers, 5 to 1 or 3:1 to 1 . . . . .	0	15	6
2 Engraved Terminals . . . . .	0	3	0	Karas Harmonic Transformers, the best made . . . . .	1	19	6
1 Bakelite Strip, for Terminals . . . . .	0	0	6	Radex UX 199 Valves, .06 amps, the new base . . . . .	0	0	0
4 Black Bakelite Sockets, 2/7 . . . . .	0	10	4	Radex UX 201A Valves, .25 amps, the new base . . . . .	0	6	9
2 Audio Transformers (as used in "Wireless Weekly" Set), 13/6 . . . . .	1	7	0	Sockets, H & H Porcelain, Lowloss type . . . . .	0	4	0
1 .00025 Grid Condenser and Leak . . . . .	0	2	9	Rheostats, 30 ohm, 3/9 and . . . . .	0	2	6
1 .002 Fixed Condenser . . . . .	0	1	6	UX Sockets, Brown, good contacts . . . . .	0	2	9
1 Doz. Sq. Buswire . . . . .	0	0	10	Spring Aerials, 100 feet . . . . .	0	5	9
<b>TOTAL . . . . .</b>	<b>£6</b>	<b>2</b>	<b>10</b>	Phosphor Bronze Wire, 50 strands for loops or outside, 100 feet . . . . .	0	3	0
<b>See or write us about the "Interflex"</b>				Accumulators for Dull Emitter Valves, 4 volts . . . . .	0	17	0
	£	s.	d.	Accumulators for heavier duty, Type DFG, 4 volts, 32-; 6 volts . . . . .	2	8	0
Radiion Tube, highly polished, 3", per in.	0	0	10				
Microdenars, Our Midget Lowloss Condenser . . . . .	0	3	0				

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*Constructional details of Harkness Reflex Receiver are given below.*



*The Technical Editor makes a astounding claims for this Receiver.*

## *“The Sweetest and the Loudest Two Valve Receiver I have Ever Heard”*

**R**EFLEX receivers are not in any way a new idea. Shortly after the inception of the three-electrode valve, reflex or dual amplification receivers were produced. Many are their advantages, the main one being economy in cost of construction and upkeep. This economy is produced by the fact that one valve does the work of two, thereby saving the cost of a valve and the cost of keeping up battery power.

There are many reflex receivers, the more popular being the ST.100, the Grimes Inverse Duplex and the Harkness Reflex. The latter is the loudest and sweetest two-valve receiver I have heard. A most remarkable volume, combined with clarity of tone, places the Harkness Reflex in a category of its own. While being tested at Dulwich Hill, those present were pleasantly surprised to hear the comparisons between this two-valver and a four-valve receiver. The volume was comparable and the purity was superior. Now, who is going to build a receiver of this type?

Look at the illustrations and assure yourself that you are looking at a remarkable set. The front view is quite pleasing—no coils sticking out in front—just two condensers with a rheostat between these two, above which is the crystal detector. The battery switch, and the two jacks are seen at the bottom of the panel.

Simplicity of tuning is thereby gained—no coil coupling to consider; simply turn the condenser dials.

The back of panel view shows the coils, transformers, valve sockets, and terminal board. The aerial and earth terminals are on the same board as the battery terminals, thus keeping ugly stray wires from the front of the receiver.

Although this layout is neat, maximum efficiency is not sacrificed to gain good looks; rather does it yield itself to efficiency, as may be seen from the back of panel wiring diagram.

The ready-wound coils for this receiver were once available on the local market, but with the exception

of a spider-web type, the solenoid coils are all sold. But don't let this worry you, as they are easy to make, half an hour being all the time required.

An analysis of the circuit shows that the greatest drawback of most reflex receivers is absent in the Harkness. Usually in reflex receivers the crystal is in the plate circuit of one of the valves, and means that the plate current flows right through to the plate. This is a disadvantage, inasmuch as it is a constant wear on the crystal, which, sooner or later, gives trouble. In the Harkness, the crystal is entirely free from the plate potential, being included in the secondary circuit of radio frequency transformer (R.F.T.2).

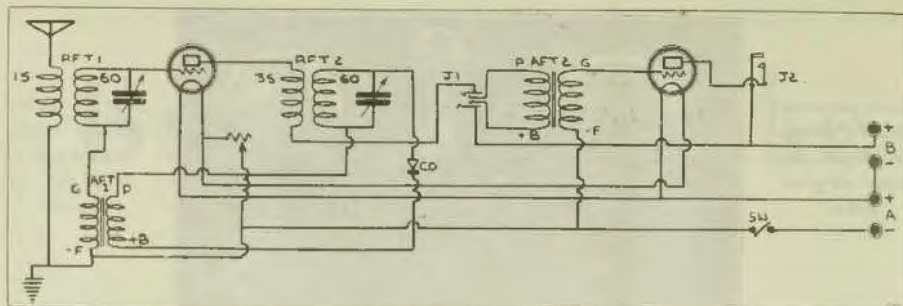
With one valve good speaker strength is obtainable, but the addition of a second valve means much greater volume without sacrificing purity.

### **Construction.**

The coils or radio frequency transformers, as they are known, are the first consideration in the construction of this two-valver. The two pieces of bakelite or composition tubing are required for this purpose. Half an inch from one end of the tubing drill two holes with a small drill, about one-sixteenth of an inch in diameter. Through these two holes, doubling back from one to the other,

### **List of Parts for Harkness Reflex.**

- 1 Panel, 14 x 7 x 3/16.
- 2 .00035 Variable Condensers.
- 1 Rheostat.
- 1 D.C. Jack.
- 1 S.C. Jack.
- 1 Battery Switch.
- 1 Crystal Detector.
- 2 Valve Sockets.
- 2 H.T. Transformers.
- 2 A.F. Transformers.
- 1 Terminal Board.
- 2 3in. x 3in. Bakelite or Composition Tubes.
- 8 ozs. No. 24 D.C.C. Wire.
- 1 Baseboard, 12 x 9 x 1.
- 12 Busbars, Screws, etc.



Compare this circuit diagram with the back of panel wiring diagram. Don't confuse the radio and audio transformers.

Thread the beginning of your No. 24 D.C.C. wire, leaving about 6" free for connections. Then wind on this tube, one turn close to the other, sixty turns of your wire, and finish off by drilling two more holes and threading through again to hold the wire securely and prevent any slipping which may take place. Procure a strip of good, strong paper, 12" long and 1" wide, and wrap this around this winding just completed, keeping it in the middle. Apply a little gum to hold this firm, and wind on your primary, which consists of 15 turns of the same gauge wire wound in the same direction. It may be a bit difficult to hold the beginning of this wire securely, but here's how to do it.

A piece of tape, 3" wide by 21" long, is pressed into service. Fold the tape in two, now giving a double piece, 1" wide and 14" long. Into the top of the fold, slip one turn of your wire, leaving about 6" hanging free, and lay this tape longways across the present winding and on top of the paper, and proceed to wind your primary turns over this tape until you have fifteen wound on. Cut your wire, holding your primary turns in

place with your finger, and make secure by applying a small portion of sealing-wax at that particular place where the last turn crosses the protruding tape at the bottom.

The second radio frequency transformer (R.F.T.2) is wound in a similar manner to the first, only instead of having a 15-turn primary this coil boasts of a 35-turn primary, which should be wound in a manner similar to the primary of the first transformer. Carefully place these transformers out of harm's way until you drill your panel.

#### Panel Layout.

The panel layout is indeed simple, as may be seen from the plan. Again I must advise that provision only is made for the centre spindle of the condensers, on account of the many different makes of condensers with different templates. As previously mentioned, the crystal detector is above the rheostat, but the position of this depends upon the type of detector used. I, myself, used the Harlie detector for this receiver, and found it to be satisfactory, but the Carborundum detector, frequently employed in our different circuits, would, no doubt, be quite satisfactory. Quite a lot depends upon the crystal, so, whatever type you use, be sure that it is a good brand, and of stable qualities. Again, you will find that one rheostat only controls the two valves, this being quite in order, as both valves are amplifying valves.

Beneath the rheostat is found the double circuit jack, the single circuit

being to the right and the battery switch situated to the left. Take care in drilling this panel, for, after all, it is the show window. When the drilling has been completed, mount your panel apparatus, screwing everything up tightly and securely, as there is nothing more annoying than a rattle in your receiver which is caused by an imperfect contact or loose screw.

#### Baseboard.

On the baseboard are mounted the coils, valve sockets, transformers, and terminal board. The layout adopted will be easily seen from the back view of the panel. I don't think you could do better than follow this out. The coils or radio frequency transformers are secured to the baseboard by means of two brackets in each case. Strips of thin brass will be found efficacious here, and the height of the coils should be 1" above the baseboard. The fashioning of these brackets calls for practically no engineering skill, a pair of pliers and a drill sufficing to make the bends and drill the holes. Attention must be paid to these coils, inasmuch as



Mark out your panel to this layout.



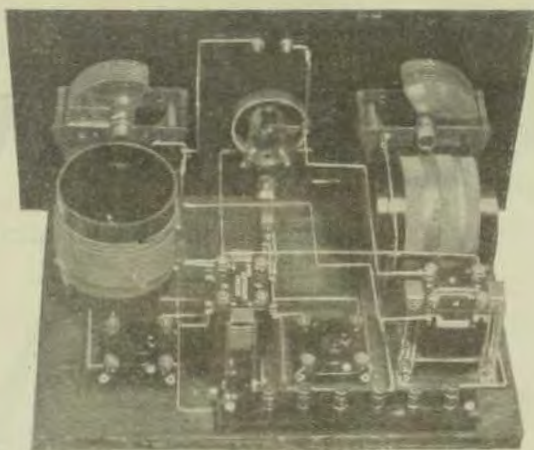
One of the coils, showing method of winding and holding the wire securely.

one must be mounted at right angles to the other. Perhaps, I should have advised you in the winding of these coils to begin and finish your primary windings on the opposite sides of the formers to the side on which you started and finished your secondary winding. Don't forget, of course, that your secondary winding is wound first, and your primary winding is wound on the top of this coil. Don't confuse these terms.

Note carefully from the back of panel wiring diagram just how your primaries and secondaries of your audio frequency transformers face. Short wiring is assured by following out this layout, and the shorter the wiring the better the reception. Place all your components on the baseboard, and screw them down, leaving sufficient room at the back for your terminal board, which should not be placed in position until all your wiring, with exception of your battery wiring and aerial and earth wiring, is completed.

#### Wiring.

Carefully proceed with your wir-

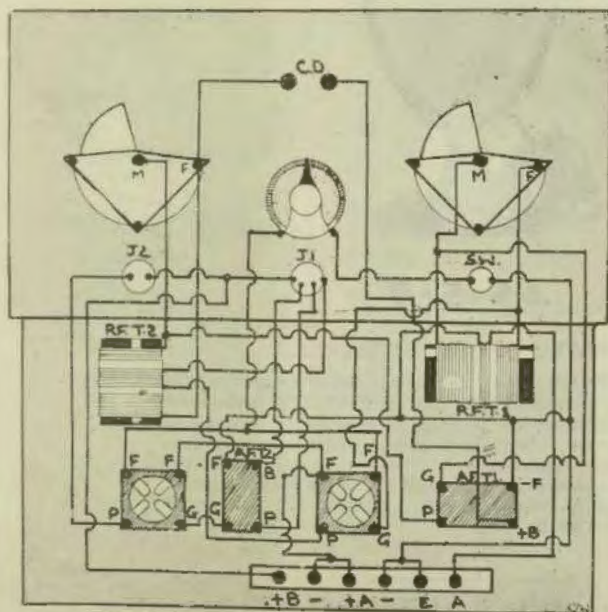


The back view. Attention is directed to the positions of the coils. Note sealing wax holding the wire in position on the right hand or aerial coil.

ing, consulting the back of panel wiring diagram and the circuit diagram to attain success in this. Before permanently attaching your panel, con-

nect one side of your battery switch to the nearest side of your rheostat, this wire being somewhat awkward to insert after the panel is permanently secured to the baseboard. Take this wiring in easy stages, making neat right angled bends in your bus-bar, and check off carefully with back of panel diagram and the circuit diagrams. A consultation with the back of panel view will assist you greatly, as quite a number of these connecting wires may be seen in the illustration. Properly solder every joint, where soldering is called for. A small piece of mica placed underneath two joints to be soldered, and held close to the bottom of these joints, will ensure the soldering running in properly, and not dropping on the baseboard or on any instruments which may be underneath. Always wipe off the residue of flux, or soldering fluid, after you have soldered the joints, as this will prevent any corrosion at a later date.

When everything is wired and checked off carefully the receiver is in a condition to be tested on the air. Connect up your "A" and "B" batteries, insert your valves in their sockets, hook on the aerial and earth, and plug in your phones on the first jack (J1). Being assured that your



This wiring diagram is clear and easily followed. Study it carefully.

(Continued on Page 39.)

# "SFERAVOX"

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SOCIETE FRANCAIS RADIO-ELECTRIQUE, PARIS

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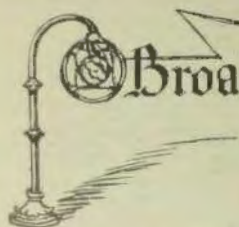
Both on account of the entirely new principles of design and the particularities of its construction, the "SFERAVOX" is the only Loud Speaker combining the qualities of sensitivity, power and purity of reproduction, which, up to the present, have been considered as mutually antagonistic. It reproduces the sound impulses in any desired degree of strength, as a very agreeable tone, and both human voices as well as music are reproduced with irreproachable truth.

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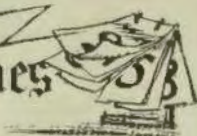
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**BROWN & DUREAU, Ltd.**

Broughton House  
Clarence St., SYDNEY



# Broadcasting Programmes for the Coming Week



Friday, Oct. 15

2 F C

**EARLY MORNING SESSION**

- 7.—The Chimes of "Big Ben."
- 7.5—Weather information, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
- 7.55—Investment Market, Mining Share Markets, Metal quotations.
- 7.55—Wool Sales, Breadstuffs Markets, Incentive Markets, Produce Markets.
- 7.55—"Sydney Morning Herald" News Service.
- 8.—Chimes of "Big Ben." A "Cherish" Talk by Mr. J. K. Powell.
- 8.15—Close down.

**MORNING SESSION**

- 9.15—The Chimes of 2FC and Announcements.
- 9.25—Music from the Studio.
- 10.—The Chimes of "Big Ben." Music from the Studio.
- 10.5—Late "Sydney Morning Herald" News Service.
- 10.55—Music from the Studio.
- 11.—The Chimes of "Big Ben." Australian Press Association and Kester's Cable service.
- 11.10—Music from the Studio.
- 11.15—Cooking talk and recipes, by Miss 1043 Ennet.
- 11.30—Close down.

**MIDDAY SESSION**

- 12.—The Chimes of "Big Ben."
- 12.5—Stock Exchange. First Call.
- 12.10—Music from the Studio.
- 12.30—Marching Music for the Children.
- 12.40—From Farmer's Tea Rooms: The Oak Hall Trio.
- 12.50—Rugby Wireless News.
- 12.55—From Farmer's Tea Rooms: Miss Alison Bear, mezzo.
- 1.—The Chimes of "Big Ben."
- 1.15—"Evening News" midday service. Producer's Distributives Society's Report.
- 1.20—Music from the Studio.
- 1.25—From Farmer's Tea Rooms: The Oak Hall Trio.
- 1.30—Stock Exchange—Second Call.
- 1.35—From Farmer's Tea Rooms: Miss Alison Bear, mezzo.
- 1.45—Music from the Studio.
- 1.50—From Farmer's Tea Rooms: The Oak Hall Trio.
- 1.55—Last Minute Sporting Information, by the 2FC Racing Commissioner.
- 2.10—Close down.

**AFTERNOON SESSION**

- 2.55—The Chimes of 2FC and Announcements.
- 2.55—Broadcast from the Haymarket Theatre, Orchestra under the baton of Mr. Stanley Porter.
- 3.5—From Farmer's Tea Rooms: The Oak Hall Trio will play (leader, Mr. Horace Keate).
- 3.10—From Farmer's Tea Rooms: Miss Dorothy Benbow, contralto.

- 3.15—From Farmer's Tea Rooms: The Oak Hall Trio.
- 3.55—Music from the Studio.
- 4.—From Farmer's Tea Rooms: Miss Joyce Gillespie, mezzo.
- 4.5—A Music Talk by Mr. F. Chapple.
- 4.15—Music from the Studio.
- 4.20—Miss Dorothy Benbow, contralto.
- 4.25—From Farmer's Tea Rooms: The Oak Hall Trio.
- 4.35—Music from the Studio.
- 4.40—Miss Joyce Gillespie mezzo.
- 4.45—Stock Exchange. Third Call.
- 4.45—Close down.

**EARLY EVENING SESSION**

- 5.15—The Chimes of "Big Ben."
- 5.25—"Hello Man" talks to the children.
- 6.30—A talk to the older children.
- 6.45—From Farmer's Dining Hall: The Oak Hall Trio. Mr. Austin Punch, baritone.

- 8.50—The Rev. F. H. Bayward in a Natural History talk, subject: "Great Snakes."
- 9.5—From the Studio: Miss Daisy Mangan, soprano.
- 9.5—Mr. Lindley Evans, pianist.
- 9.15—Miss B. Oxenbould, mezzo.
- 9.20—Mr. Joe Cahill, comedian.
- 9.25—Mr. Gladstone Bell, cellist.
- 9.30—Miss Dorothy Ewbank, soprano.
- 9.45—The Sydney Instrumental Trio.
- 9.55—Miss B. Oxenbould, mezzo.
- 10.5—From the Prince Edward: Items from the concert orchestra, conducted by Mr. William Prior, and organ solos on the orchestral organ by Mr. Leslie V. Harvey.
- 10.25—Mr. Joe Cahill, comedian.
- 10.45—Film talk.
- 11—Broadcast from the Wentworth Hotel: Items by the Wentworth Cafe Orchestra, conducted by Mr. Sydney Simpson.
- 12—Close down.

2 B I

**EARLY MORNING SESSION**

- 7.15—Physical Training and Health Exercises.
- 7.30—Broadcasters Special News Service.
- 7.45—Physical Training and Health Exercises.
- 8—G.P.O. Clock and Chimes. Close down.

**MORNING SESSION**

- 10—G.P.O. Clock and Chimes: Musical programme from the studio.
- 10.10—Special News Service from the Daily Telegraph.
- 10.25—Musical programme from the studio.
- 10.40—Special News Service from the Daily Telegraph.
- 11—G.P.O. Clock and Chimes: Market Reports and London Metal Quotations.
- 11.10—Musical programme from the studio.
- 11.25—Broadcasters' Information Service, including Mail, Shipping, Weather, Rainfall.
- 11.40—Women's Section: Social Notes by Mrs. Jordan.
- 12.25—Talk by Miss Helen Beagrie, on Rowing.
- 12.30—Sydney Stock Exchange Calls.
- 12.45—Hillier's instrumental Quartette, under the direction of Cyril Cantling.
- 1.30—Sydney Stock Exchange calls.
- 1.45—Latest sporting information from the "Sun."
- 2—G.P.O. Clock. Close down.

**AFTERNOON SESSION**

- Racing information broadcast by courtesy of
- 3—G.P.O. Clock and Chimes: Weather Report and Forecast by courtesy of Mr. C. J. Morris, Govt. Meteorologist.
- 3.15—Civil Service Restaurant Trio, under the direction of Miss De Curry Bremor.
- 3.30—A talk on English Literature and Poetry by Mr. J. M. Prentiss.
- 3.45—Music from the Studio.
- 4—G.P.O. Clock and Chimes: Civil Service Stores Trio.
- 4.15—Musical Programme from the Studio.
- 4.30—Serial story, entitled, "The Scarlet Cuckoo."
- 4.45—Music from the Studio.
- 5—G.P.O. Clock and Chimes. Producer's Distributives Society's Market Report.
- 5.5—Shipping information when available.
- 5.10—Resume of night's programme.
- 5.15—G.P.O. Clock and Chimes. Close down.

**EARLY EVENING SESSION**

- 6—G.P.O. Clock and Chimes. The pupils of Miss Moulton Scully will entertain the kiddies.

Farmer's service, Sydney, call sign 2FC, wave length 442 metres.

Broadcasters Ltd., Sydney, call sign 2BL, wave length 350 metres.

Trades Hall Broadcasting Station, call sign, BKV, wavelength, 280 metres.

Theosophical Broadcasting Service, call sign, 2GB, wavelength, 316 metres.

Burgh Electric Coy. Ltd., Sydney, call sign, 2BE, wavelength, 314 metres.

Broadcasting Co. of Australia, Melbourne, call sign 3LO, wave length 371 metres.

Associated Radio Co., Melbourne, call sign 3AR, wave length 484 metres.

Queensland Radio Service, Brisbane, call sign 1QG, wave length 385 metres.

Central Broadcasters Ltd., Adelaide, call sign 5CL, wave length 395 metres.

Radio Broadcasting Co. of N.Z., Auckland, call sign 1YA, wave length 420 metres.

Westralian Farmer's, Perth, call sign 6WT, wave length 1250 metres.

Tasmanian Broadcasting Pty. Ltd., Hobart, call sign 7ZL, wave length 550 metres.

- 7—Racing information, supplied by 2FC Racing Commissioner.
- 7.15—"Evening News" late news service.
- 7.30—"Bulginy" Market Reports (wool, wheat, stock) from the Vegetable Markets.
- 7.55—Announcements. Close down.

**NIGHT SESSION**

- 8—Broadcast from the Prince Edward Theatre, the musical prologue in connection with the film "College Days," featuring Harold Lloyd, and presenting a programme by the Hawaiian Tenors.
- 9.30—From the Studio: Miss Dorothy Ewbank, soprano.
- 9.34—Miss B. Oxenbould, mezzo.
- 9.35—The Sydney Instrumental Trio, consisting of Mr. Lionel Lawson violinist, Mr. Gladstone Bell cellist, and Mr. Lindley Evans pianist.

- 4.45—Pavilion Dinner Orchestra, under the direction of Mr. Cec. Morrison.  
 7—G.P.O. Clock and Chimes; Australian Mercantile, Land and Finance; Gaa Stock, Wool and Hite Report.  
 7.15—Weather Report and Forecast, by courtesy of Mr. C. J. Maroon, Government Meteorologist.  
 7.30—Stock Exchange Reports  
 7.45—Producers' Distributors Society's fruit and vegetable report.  
 7.50—Fruit and vegetable Report (Sun).  
 7.55—Grain and Golden Report (Sun).  
 7.55—Country News from the Sun.  
 7.45—Lecture.  
 8—G.P.O. Clock and Chimes; Close down.

## NIGHT SESSION.

- 8—Programme from the studio including Mr. Stanley Curlett (soprano); Miss Marjorie Skill (soprano); Mr. Roger Jones (baritone); Miss Amy Oatman (contralto); Concert solo by Mr. Roy Pymble; The amateur sporting aspect of the Sun will talk on The Prospects of tomorrow's races; Al Hammond and the Ambassadors Dance Band broadcast from the ballroom of the Ambassadors, during the interval between dances. News Reports by courtesy of the Sun Newspapers will be broadcast.  
 12—G.P.O. Clock and Chimes.  
 National Anthem.

## 2 KY

## LUNCHEON HOUR SESSION.

- 12.15—Popular Fox Trots, Musical Interlude, News Items, Hawaiian Steel Guitar Selections, Union News and Meetings, Vocal News.  
 1.45—Close down.

## CHILDREN'S HOUR.

- 6.40—The Storyman, Mr. Thompson.

## EVENING SESSION.

- 7—Sporting feature, Turf Topics, Review of Candidates and their Prospects for Tomorrow, Mr. G. Hopkins.  
 7.45—Lectures: Industrial History, Mr. J. Ryan (Director, Labor Research and Information Bureau).  
 8—A talk on Motor Cycling, by Mr. J. K. Hopkins.  
 8.10—Piano-forte solos, Miss Mary Dean.  
 8.15—Soprano solo, Miss Edith Walsh.  
 8.25—Monologue, Mr. David Edelman.  
 8.53—Musical interlude by Pathé Royal Calliopeans, Mr. Walter Booth, leader (by kind permission of J. C. Herdrott, Ltd.).  
 9—Sporting Feature, Will description of main contest from ringside of Mc-Hugh's Leichhardt Stadium.  
 9.15—Music from Studio.  
 10—Close down.

## 2 GB

## NIGHT SESSION.

- 8.45—Talks to Children, by "The Man from Dreamland."  
 7.15—Interim.  
 7.30—Music from Studio.  
 7.45—Announcements.  
 7.55—Instrumental Trio—Artists: Dan Sully, Muriel Lang, Ada Brook.  
 8.1—Address, by Rt. Rev. G. S. Arundale, M.A., LL.B., D.L.  
 8.17—Songs by Miss Gwylthe Evans.  
 8.24—Talks on McDowell's Tone Poem (with illustrations), by Helene Wurdahl.  
 8.45—Violin solos, by Miss Marjorie Herder.  
 8.55—Address by Professor Ernest Wood.  
 9.10—Piano solo, by Ada Brook.  
 9.12—Instrumental Trio—Artists: Lloyd Davies, Muriel Lang, Ada Brook.  
 9.25—Songs by Miss Gwylthe Evans.  
 9.40—Instrumental Quartette—Artists: Lloyd Davies, Dan Sully, Muriel Herder, Ada Brook.  
 9.53—God Save the King.

## 3 LO

## MIDDAY SESSION.

- 12—British Official Wireless News from Rugby; Reuters and the Australian Press Association cables.  
 12.45—Stock Exchange Information, Meteorological Information, Weather Forecast for Victoria, Tasmania, South Australia and New South Wales.  
 1.10—Fruit, Wool and Golden Report by permission of J. C. Williamson Ltd.  
 1.15—Agnes Fortune, piano.  
 1.22—Station Trio.  
 1.30—Fred Moore, baritone.  
 1.35—C. Richard (singer), Solo.  
 1.45—Studio Orchestra.  
 2—Close down.

## AFTERNOON SESSION.

- 2.30—First half of Tivoli programme, transmitted from the Tivoli Theatre by permission of J. C. Williamson Ltd.  
 3.45—Bruce Green, famous pantomime dame, in selections from his repertoire, by permission of J. C. Williamson Ltd.  
 3.55—"An Fall" of Meeers, Buckley & Nunn Ltd., Fashion Talk.  
 4.5—Walter Smith, cornet.  
 4.20—Bruce Green, in another ten minutes of humour.  
 4.40—Mrs. M. Callaway Mubrod, Interior Decoration, "Window Treatment."  
 4.45—"Herald" news service, Stock Exchange information.  
 5—Children's Competitions, Radio Voice Trials.

## EARLY EVENING SESSION.

- 5.45—Children's hour, Answers to letters and birthday greetings.  
 6—May Alberta will sing two little songs to the children, accompanied by Elsie Bradshaw.  
 6.7—"Billy Bunney's" story for the little ones.  
 6.17—"The Littlest Fairy Story."  
 6.17—May Alberta will entertain the children again.  
 6.24—"Billy Bunney, in "Black Beauty," "The Lost Princess."  
 6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association.  
 6.53—Weather synopsis, Shipping movements.  
 6.57—Stock Exchange information.  
 7.2—Fish Market Reports, by J. B. Borrett Ltd.  
 7.4—River Reports.  
 7.6—Market Reports, by the Victorian Producers' Co-operative Co. Ltd., Haymarket sheep sales, Poultry, Grain, Cattle, Swine, Late Dairy Produce, Potatoes, and Onions. Market prices of Oranges and Lemons, supplied by the Victorian Central Citrus Association Pty. Ltd.

## NIGHT SESSION.

- 7.20—Under the auspices of the Department of Agriculture, Mr. J. T. Ramsay, Potato Expert, "Planting the Potato Crop."  
 7.40—Mr. Cecil Kellaway, now playing the part of Count Orplich, in "Katia," will speak to you from his dressing-room, by permission of J. C. Williamson Ltd.  
 8—Edinburgh Citizens Band.  
 8.10—Mr. E. C. H. Taylor, Secretary Associated Public Schools, "School Life and School Sports."  
 8.45—Edinburgh Citizens Band.  
 8.48—Charles Pope, Coloured Komely Koon, in selections from his repertoire.  
 8.50—Len Gibson's Neapolitan Sextette, in a medley of melodies.  
 9—Elsie Davies, assisted by the Auburn Methodist choir, under the direction of Mr. J. Sutton Crow.  
 9.35—Mr. Lesie. Brecken, "What to plant for the summer flower garden."  
 9.40—Edinburgh Citizens Band.  
 9.40—British Official Wireless news from Rugby Announcements.  
 9.50—Gwen Barham, contralto.

- 8.57—Len Gibson's Neapolitan Sextette, in a few more numbers.  
 10.7—Elsie Davies, soprano.  
 10.15—Mr. W. H. Guldwiner, solo.  
 10.30—Gwen Barham, contralto.  
 10.37—"Argus" News Service, Meteorological information; results of South St. competitions, announcements.  
 10.50—W. Honey, cornet solo, accompanied by the Edinborough Citizens' Band.  
 11—Our great thought, "Great men are they who see that spiritual is stronger than any material force, that thoughts rule the world."—Eisenstein.  
 11.1—Hans Johnson, Monte Carlo Band.  
 11.40—God Save the King.

## 3 AR

## MORNING SESSION.

- 11.50—The British Official Wireless Press, received by IAR's operator from Rugby Wireless Station, England. Express train information, "Age" news bulletin.  
 12.10—Station Chime from the G.P.O. First Weather Forecast, Studio Barometer Readings.  
 12.5—Musical selections, relayed from Hoyt's De Luxe, Bourke Street, Mr. T. L. Campbell, at the organ.  
 12.30—Stock Exchange News.  
 12.40—Musical Selections.  
 12.55—Mail Notices, Shipping Movements.  
 1—Close down.

## AFTERNOON SESSION.

- 2.30—Hoyt's Premier Orchestra, under the direction of Miss Ella Brien special Birthday month programme.  
 4—Time Signal from G.P.O.  
 4.5—Hoyt's Premier Orchestra.  
 4.30—Gardening Chat to Children, by Mr. Stanley Haines.  
 4—Time Signal, Studio Barometer Readings.  
 4—Close down.

## EARLY EVENING SESSION.

- 6.45—The Children's Corner, by Uncle Red.  
 7.45—The British Official Wireless Press, Studio Barometer and Outdoor Thermometer Readings.  
 8—Time Signal from G.P.O.  
 8.2—The Harmony Instrumental Trio.  
 8.10—Miss Doris Cookson, soprano.  
 8.17—Mr. Jack Harris, humorous entertainer.  
 8.24—Miss Elizabeth Lester, cello.  
 8.31—Mr. R. Stanley Haines, talk, "Around the Vegetable Garden."  
 8.45—Mr. Will Jenkins, tenor.  
 8.53—The Harmony Trio.  
 9—Miss Marc Fraser, soprano.  
 9.12—Mr. Jack Harris, humorous entertainer.  
 9.10—Miss Doris Cookson, soprano.  
 9.26—Miss Mille Sutch, claviatist.  
 9.31—Mr. W. W. Fothergill, talk, "Figures, Business Extensions, and Wages Shows."  
 8.45—Miss Doris Cookson, soprano.  
 9.55—Mr. Will Jenkins, tenor.  
 10—Time Signal from G.P.O.; Studio Barometer readings, "Age" News Service, exclusive to IAR.  
 10.10—"Loggins" Bathroom Orchestra, under the leadership of Mr. Barry Nangle.  
 11—Close down.

## 5 CL

## MIDDAY SESSION.

- 11.30—G.P.O. Chimes.  
 11.21—Stock Duo Art.  
 11.35—"Argus" News Service.  
 11.55—Vocalion number.  
 12—G.P.O. Chimes.  
 12.1—"Advertiser" news service.  
 12.16—Stock Duo Art number.  
 12.30—McL. Studio Orchestra will be heard in a series of classical numbers.  
 1.55 (approx.)—Ward & Co's Stock Exchange Intelligence, Weekly Reports and Station Announcements.



2-4 P.O. Chimes.

AFTERNOON SESSION.

- 2-4 P.O. Chimes.
- 3.1-Relay from "Maple Leaf" Cafe—Orchestral numbers.
- 3.45-Stock Duo-Art numbers.
- 4-4 P.O. Chimes.
- 4.15-Relay from "Arcadia" Cafe—Orchestral numbers.
- 4.55-Stock Exchange Reports, General Information, and Station Announcements.
- 5-4 P.O. Chimes.

EVENING SESSION.

- 6.30-4 P.O. Chimes.
- 6.31-Bedtime Stories, by "Auntie Peggy."
- 7.30-Market Reports.
- 7.40-Sporting Talk, by "Old Timer."
- 8-4 P.O. Chimes.
- 8.1-The Mercury Orchestra, interspersed with vocal items.
- 8-4 P.O. Chimes.
- 9.1-Weather reports.
- 9.3-Studio concert, continued.
- 10.15-"Advertiser" News Service.
- 10.30-Studio concert, continued.
- 10.45-Station announcements.
- 11-4 P.O. Chimes, National Anthem, Close down.

7 ZL

MORNING SESSION.

- 11-"The Mercury" news, stock market, shipping, commercial intelligence, weather information, Records from the Studio.
- 12-Selections on the Balaneta, G.P.O. Clock and Chimes. Close down.

AFTERNOON SESSION.

- 3-4 P.O. Clock and Chimes.
- 3.30-Hobart Stock Exchange quotations.
- 3.45-Weather information.
- 4-4 P.O. Clock Chimes. Close down.

EARLY EVENING SESSION.

- 7-Children's Corner. "Big Brother" chats to his Pal.

EVENING SESSION.

- 8-4 P.O. Clock Chimes. "The Mercury" special Tasmanian news service. Railway auction produce sales. Weather information.
- 8.5-Hobart Stock Exchange quotations.
- 8.10-Weekly gardening chat, by Mr. George Nation, of the Glen Nurseries, Cascade.
- 8.20-"Sports Budget," supplied by Mr. T. W. Newton, of Hobart Sports Depot.
- 8.30-Concert from the Studio: Miss Bertha Marshall, soprano; Miss Jessie King, mezzo-soprano; Miss Dulecia Tait, alto; Mr. S. J. Hall, baritone; Mr. Hubert Larce, baritone; Mr. R. Williams, mouth-organ.
- 9.05-"The Mercury" special interstate news service. Weather synopsis. Station announcements. National Anthem.



Saturday, Oct. 16

2 FC

EARLY MORNING SESSION.

- 7-Chimes of "Big Ben" and Announcements.
- 7.5-Music from the Studio.
- 7.10-Official Weather Forecast, Rainfall, temperature; Astronomical Memoranda, Shipping Intelligence, Mail Services.
- 7.25-Investment Market, Mining Share Market, Metal Quotations.
- 7.55-Wool Sales, Breadstuffs Markets, Interstate Markets, Produce Markets.

- 7.45-"Sydney Morning Herald" News Service.
- 8-The Chimes of "Big Ben"; A Chorus Talk by Mr. J. K. Powell.
- 8.15-Close down.

MORNING SESSION.

- 9.15-The Chimes of "Big Ben" and Programme Announcements.
- 9.25-Music from the Studio.
- 9.45-A Talk by the 2FC Racing Commissioner.
- 10-Chimes of "Big Ben" and Announcements.
- 10.5-Late "Sydney Morning Herald" news service.
- 10.35-Music from the Studio.
- 11-The Chimes of "Big Ben" and Announcements.
- 11.15-A talk on Gardening by "Red Gum."
- 11.40-Close down.

MIDDAY SESSION.

- 12.55-The Chimes of 2FC and Announcements.
- 1-The Chimes of "Big Ben" and Announcements; "Evening News" Midday News Service; Weather Information.

AFTERNOON SESSION.

- 3-The Chimes of "Big Ben" and Announcements; During the afternoon a description of Yatt's Meeting, giving starters, riders, and positions at the Post and each race in running. From the Sydney Cricket Ground there will be broadcast a description and result of the G.P.S. Annual Athletic Meeting. Intervals will be filled with music from the Studio.
- 4.30-Resume of the afternoon's sporting events.
- 5-Close down.

EARLY EVENING SESSION.

- 5.45-The Chimes of 2FC and Announcements.
- 6.0-The "Hello Man" talks to the Children.
- 6.10-A Story for the older children.
- 6.45-Broadcast from the Hotel Australis, Orchestral Items.
- 7.15-"Evening News" News Service.
- 7.40-Motor Talk No. 7, by Mr. J. L. Austin "Old Pumping, What it is and how to avoid it."
- 7.52-A Talk on Rowing, by Captain Fred Arkroyd.

NIGHT SESSION.

- 8-The Chimes of "Big Ben" and Announcements.
- 8.2-Broadcast from the Prince Edward Theatre Beautiful (by courtesy of the Directors). 1. Introductory music "Klaxxon" featured by Will Frier's Concert Orchestra during which special lighting effects will be worked in the theatre atmosphere of Hawaii. 2. Leslie V. Harvey, at the organ, featuring (a) "Souvenir" (Dred), (b) "Always" (Felix Bellin), (c) "Dancing Around the World, accompanied by special music on the organ by Leslie V. Harvey. 3. Will Frier conducting the Prince Edward Theatre Concert Orchestra, presenting "Little Grey Home in the West—the performance of this musical number is an attempt to illustrate how this popular melody might have been written had it originated from the famous composer. First the melody is played as written and then in turn we have Strauss with the suggestion of "The Blue Danube Waltz." Liszt and the suggestion of a Hungarian Rhapsody, Wagner and the Wagner's Chorus, from Tannhauser, Sousa and "The Stars and Stripes Forever," followed by a Yiddish example and finally a jazz version. 4. Ernest Kasz Hawaiian Troubadours in "A Night in Honolulu." (a) Opening: "A'oha Oe" (Ilihuakani); "Beach at Waikiki" (Matimani); (b) Steel Guitar: "Alutau" (Kaui) Thelma Kauli; (c) Crooning: Selected song favourites, Queenie and David Kauli; (d) TR Bits: "Fair Hawaii" (Kurt), "College" (se); Tickle-ton: "Jockeying," Frances Lutz; (f) Diversion: "The Popular Hula Duo," Keeki and Weli Greig; (g) Show: "Hawaii

- Across the Sea" (Kaui); "Honolulu Hula Gips" (Gunga).
- 9-From the Studio: Miss Gertrude Mack will tell of a Japanese Dinner Party.
- 9.14-Miss Muriel Humphries, contralto.
- 9.18-Mr. Scott Sanders; Scotch comedy, by permission of the Tiwai Theatres Ltd.; (a) "There's somebody thinking of you, Mary" (Sanders); (b) "Sunshine Sam" (Sanders).
- 9.27-Mr. Lawrence Halbert, baritone.
- 9.30-Miss Muriel Humphries, contralto.
- 9.38-Mr. Scott Sanders, Scotch comedian; (a) "Work of Wistful" (Sanders); (b) "You must turn a wrinkle upside down" (Sanders).
- 9.48-Mr. Laurence Halbert, baritone.
- 9.56-2FC Dance Band, conductor: Mr. Eric Pearce.
- 9.58-Miss Muriel Humphries, contralto.
- 10.3-Broadcast from the Prince Edward Theatre Beautiful; incidental music to the film "College Days," featuring Harold Lloyd.
- 10.40-From the Studio: 2FC Dance Band.
- 10.55-Announcements.
- 11-2FC Dance Band.
- 11.36-Broadcast from the Westworth Hotel, Sydney; Westworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 12-National Anthem. Close down.

2 BL

EARLY MORNING SESSION.

- 7.15-Physical Training and Health Exercises.
- 7.25-Broadcasters Special News Service.
- 7.45-Physical Training and Health Exercises.
- 8-G.P.O. Clock and Chimes. Close down.

MORNING SESSION.

- 11-4 P.O. Clock and Chimes. Special news service from the "Daily Telegraph."
- 11.10-Musical programme from the Studio.
- 11.25-Special news from the "Daily Telegraph."
- 11.45-Musical programme from the Studio.
- 12-4 P.O. Clock and Chimes. Race results will be broadcast immediately after each race, by courtesy of "The Sun" Newspapers. Social notes and a talk on "Simple Cooking for Children," by Mrs. Jordan.
- 12.30-London Metal quotations.
- 12.35-Broadcasters' Information Service, including Mails, Shipping, Weather Rainfall.
- 12.55-News from "Sun" Cable Edition.

AFTERNOON SESSION.

- 1-4 P.O. Clock and Chimes. Music from the Studio.
- 1.10-Talk on Sporting and Athletic Fixtures for the day—Lacrosse, Hockey, Tennis, Rugby League all Fixtures, Rugby Union all Fixtures, Soccer, Australian Rules, Baseball, Racing, Trotting, Coursing, Bowls. During the afternoon sporting information will be broadcast by courtesy of "The Sun" Newspapers.
- 5.15-4 P.O. Clock. Close down.

NIGHT SESSION.

- 8-Programme from the Studio, including Miss Mary Neal (mezzo soprano), Mr. Norman Wright (tenor); A talk on The Aborigines, by Bruce; The Ambassadors Salon Quartette, under the direction of Mr. Claude McEwen.
- 10.15-Mrs. Lyons' Orpheus, broadcast from the Dungowan, Manly.
- 12-G.P.O. Clock and Chimes. National Anthem.

2 KY

EVENING SESSION.

- 7.15-Sporting Feature; Complete review of to-day's racing by Mr. T. G. Hopkins.
- 7.50-News items.
- 8-Contralto solos, by Miss Jean Walsh.
- 8.10-Recitation by Mr. Rob Corbett.
- 8.20-Tenor solos, by Mr. Ray Hamilton.

- 8.30—Musical Interlude: Palala Royal Californians. Mr. Walter Beaman, leader. By kind permission of J. C. Brendorf, Ltd., 9.
- 9.—Sketch by Mr. Bob Corben.
- 9.15—Latter Legislation Series, Mr. J. C. Eldridge.
- 9.30—Sporting Feature: From the track at the Speedway Royal. Results of early events and description of motor cycle racing.
- 9.40—Music from the Studio.
- 9.50—Description and results of semi-finals from Speedway Royal.
- 10.5—Vocal items from Studio.
- 10.15—Description and results of finals from Speedway Royal.
- 10.30—Music from Studio.
- 10.35—Closing Announcements.

## 3LO

## MORNING SESSION

- 9.—Children's Song Competition. Radio Voice Trials.
- 12.—Time Signal. British Official Wireless news from Rugby. Editor's and the Australian Press Association cables. "Argus" and "Herald" news services. Shipping intelligences.
- 12.40—Stock Exchange information.
- 12.50—Meteorological information. Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.
- 1.—Time signal.
- 1.1.—Studio Orchestra, selection.
- 1.10.—Bruce Green, famous Pantomime dame (by permission of J. C. Williamson Ltd.).
- 1.15.—Bertha Zimmerman, violin.
- 1.25.—Station Test.
- 1.30.—Result of Oby Hurdle, Caulfield races.
- 1.31.—Drugs Given, in a few more humorous moments.
- 1.35.—Franklin Stumham, clarinet.
- 1.45.—Studio Orchestra, selection.
- 1.—Close down.
- 2.30.—Result of Gwyn Nursery—Caulfield.

## AFTERNOON SESSION

- 2.—ALO Dance Orchestra.
- 2.5.—Description while race in progress of Wynn Steeple.
- 3.10.—ALO Dance Orchestra.
- 3.20.—Description while race in progress of Caulfield Cup.
- 3.25.—ALO Dance Orchestra.
- 3.30.—Result of Burwood Handicap—Caulfield Races.
- 3.41.—ALO Dance Orchestra.
- 4.15.—"Herald" News Service: Stock Exchange information.
- 5.—Close Down.
- 5.10.—Result of Windsor Handicap—Caulfield.

## EARLY EVENING SESSION

- 5.45.—Sporting Results.
- 6.—May Alberta, soprano, will sing to the children.
- 6.4.—"Merry Bonnies" Poems. Story for the Bulletin case. "The Three Billy Goats."
- 6.17.—May Alberta will sing two more little songs.
- 6.24.—"Betty Bononia" will play some of her own composition story for the boys and girls. "Panama Canal."
- 6.40.—"Argus" and "Herald" News Service: Sporting results. Reuters and Australian Press Association cables.
- 6.55.—Weather signals. Shipping announcements.
- 6.55.—Stock Exchange information.
- 7.—Fish Market Reports, by J. R. Barrett Ltd.
- 7.—River reports.
- 7.5.—Market Reports, by Victorian Producers' Co-operative Co. Ltd.: Grain, chaff, hay, straw, oats, dairy produce, potatoes and apples.

## NIGHT SESSION

- 7.20.—Mr. Frederick Chapman "How fossil fuel the ages of rocks."
- 7.40.—Mr. G. L. Mayman, M.A., LL.B., Barrister at Law. "The Amateur Spirit is Hokey."

- 8.—The Studio Orchestra.
- 8.10.—Paul L. Eaton, tenor.
- 8.17.—The Studio Orchestra.
- 8.56.—Mrs. Dando. "September's most beautiful Bride" will give a little talk on her trip to Launceston, Tasmania.
- 8.45.—Paul L. Eaton, tenor.
- 8.—The Studio Orchestra.
- 9.—A Special Programme has been arranged.
- 10.45.—British Official Wireless News from Rugby. "Argus" News Service: Sporting Results. Races, Football, Metropolitan Soccer League, Metropolitan Amateur Association Lacrosse. Announcements.
- 11.—Our Great Thought. "Music washes away from the soul the dust of everyday life."—Auerbach.
- 11.1.—The Studio Orchestra will play dance music till 11.40 p.m.
- 11.40.—God Save the King.

## 3AR

## MORNING SESSION

- 11.35.—The British Official Wireless News, received from Rugby Super Wireless Station, England, by 3AR's operator; the "Argus" News Bulletin. Express Train Intelligences.
- 12.—Time Signal from G.P.O.; Studio barometer and outdoor thermometer readings; (a) Weather Forecast; (b) events of the day. Sporting fixtures.
- 12.5.—Musical Selections, relayed from Hoyt's De-Luxe, Barka Street. Mr. T. L. Campbell at the Warlioff.
- 12.55.—Stock Exchange News. Foreign Exchanges of the World. Supplied by Reuters. Close Cables and News.
- 12.55.—Musical Selections.
- 1.—Close down.

## AFTERNOON SESSION

- 1.30.—Description of Oby Hurdle, 2m. ft. 65. Hoyt's Premier Orchestra, under direction of Mira Elio Erics.
- 2.30.—Result of Gwyn Nursery, 2F.
- 3.5.—Result of Wynn Steeplechase, about 5m. 3F.
- 4.—Description of Caulfield Cup Race, 12m. 4.—Time Signal Chime from G.P.O. Second Weather Forecast.
- 4.5.—Hoyt's Premier Orchestra.
- 4.50.—Result of Burwood Handicap, 1m. 1F.
- 5.—Time Signal Chime. Studio Barometer Readings.
- 5.10.—Result of Windsor Handicap, 6F.
- 6.12.—Close down.

## EARLY EVENING SESSION

- 6.45.—Children's Corner, by Brother Stern.

## NIGHT SESSION

- 8.—Time Signal from G.P.O.; Studio Barometer and Outdoor Thermometer Readings; The British Official Wireless Press: Sporting results. Local News.
- 8.15.—Dance Night. The Rhythmic Dance Orchestra, relayed from the Maison de Luxe, Edward. Latest popular dance music, under the leadership of Mr. George Lawle.
- 8.30.—Week-end Travellers. Information supplied by the Melbourne Metropolitan Tramways Board and Victorian Railways Department.
- 8.—The Maison de Luxe Rhythmic Dance Orchestra.
- 10.—Time signal from G.P.O.; Studio Barometer and Outdoor Thermometer Readings.
- 10.—The Maison de Luxe Rhythmic Dance Orchestra.
- 11.—Time signal from G.P.O. Close down.

## 5CL

## MORNING SESSION

- 10.30.—G.P.O. Chimes.
- 10.31.—5CL Studio Orchestra, Selections.
- 11.45.—"Advertiser" news service.
- 12.—G.P.O. Chimes.

## AFTERNOON SESSION

From the Studio—Sporting results interspersed with Stock Exchange and Vocalion numbers.

## EVENING SESSION

- 8.30.—G.P.O. Chimes.
- 8.31.—Baltimore reports.
- 7.30.—Time signal.
- 7.40.—Resume of the chief sporting results throughout the Commonwealth.
- 8.—G.P.O. Chimes.
- 8.1.—Programme of dance music, relayed from Palais Royal, interspersed with vocal items from the studio.
- 8.—G.P.O. Chimes.
- 8.1.—Weather reports.
- 8.3.—Studio concert, continued.
- 10.15.—"Advertiser" news service.
- 10.30.—Studio concert, continued.
- 10.35.—Station announcements.
- 11.—G.P.O. Chimes. National Anthem, and close down.

## 7ZL

## MORNING SESSION

- 11.—G.P.O. Clock Chimes. The "Mercury" stock market, shipping, commercial intelligence. Weather information and sporting anticipations.
- "Salonika" selections.
- 11.15.—Robart Stock Exchange quotations.
- 12.—G.P.O. Chimes. Close down.

## EVENING SESSION

7.—Children's Corner. "Big Brother" chats to his Pele.

## NIGHT SESSION

- 8.—G.P.O. Clock Chimes. The "Mercury" special Tasmanian news service. Railway auction produce sales. Weather information and sporting results.
- 8.—Hubert Stock Exchange quotations.
- 8.—"Come to Tasmania" Movement, by Mrs. E. A. Waterworth, subject "Tasmania from the Point of View of the Mother of the Family."
- 8.30.—Concert broadcasted by direct wire from the Lyceum Club, Manurewa, St. Hubert.
- 8.—British Official Wireless News, relayed direct from Rugby by our own operator. Weather signals. Station Announcements. National Anthem.

Sunday, Oct. 17

## 2FC

## MORNING SESSION

- 10.55.—The Chimes of 2FC and Announcements.
- 11.—The Chimes of "Big Ben."
- 11.5.—Broadcast from St. Mark's Church of England, Darling Point; Morning Service. Preacher, Rev. E. Howard Fox.
- 12.20.—From the Studio: News Session.
- 12.30.—Close down.

## AFTERNOON SESSION

- 2.55.—The Chimes of 2FC and Announcements. Broadcast from St. Clement's, Marrickville. An Organ and Vocal programme by Mr. Livingstone Mole.
- 3.1.—Broadcast from the Band Rotunda at Manly, the first broadcast performance by this station of the Manly Municipal Band-Conductor, Mr. Philpotts.
- 4.—From St. Clement's, Marrickville, continuation of programme arranged by Mr. Livingstone Mole.
- 5.—The Chimes of "Big Ben." Close down.

EVENING SESSION.

- 4.—The Chimes of "Big Ben" and Announcements.
- 6.5.—From the Studio: A combined Oukitono Lecture-Recital by Madame Evelyn Grieg in association with Madame Vera Tazema (Soprano-soprano) presenting an Old English programme.
- 8.05.—Broadcast from the Lyceum Hall, Opera: Scenes by Miss Adelaide Coleman.
- 8.—Evening Service arranged by the Central Methodist Mission. Preacher, Rev. Foreman.
- 8.30.—Broadcast from the Grand Opera House, Band Concert by the New South Wales State Military Band.
- 10.—National Anthem; Close down.

2 BL

MORNING SESSION.

- 11.—Special Children's Service, broadcast from Newtown Congregational Church.
- 11.30.—Bible Class, Conducted by Mr. W. "Cairo" Bradley.
- 4.—Concert from the Studio.
- 5.—Close down.

EVENING SESSION.

- 6.30.—Sacred Music from Newtown Congregational Church.
- 7.—Service broadcast from Newtown Congregational Church.
- 8.25.—Concert from the Studio, including Miss Madie Barnett (contralto); Broadcasters Trio; Miss Eulalie Blair (violinist); Mr. Lew Herford (baritone); Mr. Bryce Carter (cellist).

3 LO

MORNING SESSION.

- 10.55.—Express Train Information.
- 11.—Service from Wesley Church, Leveale Street, Melbourne. Conducted by Rev. J. H. Cain.
- 12.15.—British Official Wireless News from Rugby; Close down.

AFTERNOON SESSION

- 2.—Australia Church, Russell Street, Melbourne: Opening of New Organ Console. Organist and choirmaster, Mr. Charles Tackwell. Rev. Dr. Charles Strong will preside and give a brief introduction.
- 4.15.—Close down.

EVENING SESSION.

- 8.45.—Children's Hour: Answers to letters and Birthdays Greeting.
- 9.—Hymns by Billy Bunnay and his Door Babies.
- 8.10.—Stories by Billy Bunnay; Mimosa and Lovelock's Life.
- 8.45.—Close down.

NIGHT SESSION.

- 4.25.—Service from Collins Street Independent Church; Preacher, Rev. J. Ernest James, B.D.
- 8.15.—Brunswick City Band.
- 8.42.—Elsie Davies, soprano.
- 8.49.—Reginald Bradley, violin recital.
- 9.0.—Brunswick City Band.
- 9.17.—Elin Thomson, tenor.
- 9.34.—Rich, Niven and A. Tschair, concert band.
- 9.40.—Elsie Davies, soprano.
- 9.55.—Brunswick City Band.
- 9.59.—"Arise" News Service: Announcements.
- 10.—God Save the King.

3 AR

MORNING SESSION.

- 11.—Service from the Collins Street Independent Church. Rev. J. Ernest James, B.D.
- AFTERNOON SESSION.
- 3.—Studio Concert: Miss Freda Slavens, soprano.

- 3.7.—Mr. H. Halseman, violinist.
- 3.14.—Mr. Bert Donovan, baritone.
- 3.21.—Miss Margaret Groom, contralto.
- 3.28.—Mr. T. R. Noall, elocutionist.
- 3.35.—Miss Freda Stevens, soprano.
- 3.42.—H. Halseman, violinist.
- 3.49.—Mr. Bert Donovan, baritone.
- 3.56.—Miss Margaret Groom, contralto.
- 4.—Close down.

EVENING SESSION.

- 7.—Service from St. John's Church, Latrobe Street, Melbourne. Rev. A. E. F. Young, preacher.
- 8.30.—Studio Concert: Mr. H. Sutchiffe, baritone.
- 8.37.—Miss Eileen Packer, soprano.
- 8.44.—Mr. H. Shaw, flautist.
- 8.51.—Miss Fanny Lyndhurst, contralto.
- 8.58.—Mr. G. Whelan, tenor.
- 9.5.—Mr. M. J. Robinson, M.D., will talk on "Indian Curiosities."
- 9.20.—Mr. H. Sutchiffe, baritone.
- 9.27.—Mrs. Eileen Packer, soprano.
- 9.34.—Mr. David Shaw, flautist.
- 9.41.—Miss Fanny Lyndhurst, contralto.
- 9.50.—"Age" news service, exclusive to 3AR.
- 9.55.—Close down.

5 CL

MORNING SESSION.

- 11.—Relay from Black Forest Baptist Church, Divine service.

EVENING SERVICE.

- 6.50.—G.P.O. Chimes.
- 6.51.—Sunday stories for the children.
- 7.—G.P.O. Chimes.
- 7.15.—Relay from the St. Peter's Cathedral—Divine service.
- 8.15 (approx.).—Venetian Trio, interspersed with vocal items by Miss Linda Wahl and M. Jas. Riley.
- 8.45.—Mr. P. H. Nichols will talk on "Disobey."
- 9.—G.P.O. Chimes.
- 9.1.—Studio concert, continued.
- 10.—G.P.O. Chimes. National Anthem. Close down.

7 ZL

EVENING SESSION.

- 7.—Service from Chalmers Presbyterian Church, Bathurst Street; Preacher, Rev. H. T. Poultonville, of Lunenburg; subject, "Auld Lang Syne, in connection with the 75th Anniversary of Chalmers Church, Hokart."
- 8.45.—Concert from the Studio: Miss Amy Butterworth, pianist; Mr. Rolf Lyons, baritone; Mr. W. P. Harwood, soloist; Mr. J. Pihlari, song soloist.
- 9.45.—The "Money" special (robustate news service). Weather synopsis, Station announcements. National Anthem.



Monday, Oct. 18

2 FC

EARLY MORNING SESSION.

- 7.—The Chimes of "Big Ben" and Announcements.
- 7.5.—Music from the Studio.
- 7.40.—Weather, Intelligence, Rainfall; Temperatures; Astronomical Memoranda.
- 7.25.—Investment Market; Mining Share Market; Metal Quotations.
- 7.35.—Wool Sales, Breadstuffs Markets; Intermediate Markets; Produce Markets.
- 7.45.—"Sydney Morning Herald" News Service.

- 6.—The Chimes of "Big Ben"; A Chorus Talk by Mr. J. K. Powell.
- 8.15.—Close down.

MORNING SESSION.

- 9.15.—The Chimes of 2FC and Programme Announcements.
- 9.20.—Music from the Studio.
- 10.—The Chimes of "Big Ben"; Music from the Studio.
- 10.2.—Late "Sydney Morning Herald" News Service.
- 10.15.—Music from the Studio.
- 11.—The Chimes of "Big Ben."
- 11.5.—Australian Press Association and Reuters' Cable Services.
- 11.10.—Music from the Studio.
- 11.15.—Last Minute Sporting Information.
- 11.30.—Close down.

MIDDAY SESSION.

- 12.—The Chimes of "Big Ben."
- 12.5.—Stock Exchange, First Call.
- 12.10.—Music from the Studio.
- 12.30.—Marching Music from the Studio for School Children.
- 12.45.—From Farmer's Oak Hall: The Oak Hall Trio.
- 12.50.—Rauy Wireless News.
- 12.55.—Miss Joyce Gillette, mezzo.
- 1.—The Chimes of "Big Ben"; Weather Intelligence; Music from the Studio.
- 1.10.—"Evening News" Midday News Service; Producer's Distributing Society's Report.
- 1.20.—The Oak Hall Trio.
- 1.30.—Stock Exchange, Second Call.
- 1.35.—Miss Joyce Gillette, mezzo: "Good Morning" (Chorus).
- 1.38.—Music from the Studio.
- 1.50.—The Oak Hall Trio.
- 2.—The Chimes of "Big Ben"; Close Down.

AFTERNOON SESSION.

- 2.30.—The Chimes of 2FC and Announcements. Broadcast from Her Majesty's Theatre (by permission of Messrs. J. C. Williamson Ltd.) and organised by the Cancer Research Committee, the matinee items by leading theatrical artists who are appearing. During the afternoon items will be broadcast from Farmer's Oak Hall as follows: Miss Kathleen Horn, mezzo; (a) "Garden of Happiness" (Wood); (b) "Jenny" (Barry); Miss May Jackson, soprano; The Oak Hall Trio, Leader; Mr. Horace Keane.
- 4.4.—Stock Exchange; Third Call; Close down.

EARLY EVENING SESSION.

- 6.45.—The Chimes of 2FC.
- 6.50.—The Hello Man talks to the Children.
- 6.59.—A Serial Story for the Older Children.
- 8.45.—Broadcast from the Hotel Australia, Sydney: Orchestral Items.
- 7.15.—From the Studio, "Evening News" Late News Service and Weather Information.
- 7.30.—Delight's Market Reports (wool, wheat, stock), Fats and vegetable markets.
- 7.40.—Rev. F. H. Roward will continue his Natural History Talks dealing with "Great Snakes."

NIGHT SESSION

- 8.—The Chimes of "Big Ben" and Announcements.
- 8.2.—Broadcast from the Haymarket Theatre, Sydney: Operatic Orchestra under the baton of Mr. Stanley Parker.
- 8.35.—Miss Mabel Batchelor, soprano.
- 8.30.—Mr. Lionel Lawson, violin solo.
- 8.37.—Rayne and Powell, English Harmony Duo; (a) Solo; "Squ-God" (Waber); Miss Lila Rayne; (b) Duo; "I want to see my Tommorrow" (Ager); Rayne and Powell; (c) Solo; "Say, Mister" (Rowe); Mr. Arthur Powell.
- 8.4.—Miss Mabel Batchelor, soprano.
- 8.45.—Mr. Lionel Lawson, violin solo.
- 8.52.—Rayne and Powell, English Harmony Duo; (a) Duo; "What a wonderful world it would be" (Lohr); Rayne and Powell; (b) solo; "Down Sunnybrow Way" (Vanderpool).
- 9.—Mr. Lionel Lawson, violin solo.

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33

SYDNEY

- 9.10—Broadcast from the Haymarket Theatre, Sydney, Vocal act.
- 9.25—From the Studio: Miss Lila Rayne and Mr. Arthur Powell: (a) Duet: "How could Red Riding Hood (Hilosoph) Rayne and Powell; (b) solo: "When Bessie Skirre are Malling" (Mills), Mr. Arthur Powell; (c) Duet: "Somewhere a Voice is Calling" (Tate), Rayne and Powell.
- 9.40—2nd Travaux to be given by Major Sandford-Morgan, entitled "By the Waters of Babylon," in which Major Morgan will take listeners in imagination through the following scenes, phases of which will appear in the issue that day of the "Evening News," Sydney.
- Songs and zing on next. Ruins of Babylon; Herikayars' work of 4,999 years ago; Modern Babylonians; Sandfly Villa Interior of the Residence; By the Waters of Babylon; The Famous Arch of Euphrates; Miss Mabel Hatcher will sing songs of the epic "A Lover in Damascus).
- 11—Broadcast from the Wentworth Hotel, Sydney: Westend Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 12—National Anthem; Close down.

## 2 BL

### EARLY MORNING SESSION.

- 7.15—Physical Training and Health exercises.  
7.30—Broadcasters' Special News Service.  
7.45—Physical Training and Health Exercises.  
8—G.P.O. Clock and Chimes; Close down.

### MORNING SESSION.

- 10—G.P.O. Clock and Chimes; Musical programme from the Studio.  
10.15—Special News Service from the "Daily Telegraph."  
10.25—Musical Programme from the Studio.  
10.40—Special News Service from the "Daily Telegraph."  
11—G.P.O. Clock and Chimes; Market Reports.  
11.10—Musical programme from the Studio.  
11.45—Broadcasters' Information Service, including Mail, Bouts in call by wireless Shipping; Weather and Rainfall.  
11.45—Women's Session; Social Notes by Mrs. Jordan.  
12.55—Mrs. Jordan answering correspondence.  
12—G.P.O. Clock and Chimes; Mrs. Jordan will talk on "Home Remedies."  
12.25—A Talk by Miss Helen Jean Beffling.  
12.30—Sydney Stock Exchange Calls.  
12.45—Hillier's Instrumental Quartette, direct from Paris Casting.  
1.00—Sydney Stock Exchange Calls.  
1.45—Latest Sporting Information and News from the Sun.  
2—G.P.O. Clock and Chimes; Close down.

### AFTERNOON SESSION.

- Racing Information broadcast by courtesy of The Sun.  
3—G.P.O. Clock and Chimes; Weather Report and Forecast by courtesy of Mr. C. J. Maros, Govt. Meteorologist; Social Notes from the Sun.  
3.15—David Jones' Tea Room Trio.  
3.30—A Course in Philosophic Thought, by Mr. J. M. Prentice.  
3.45—Musical programme from the studio.  
4.10—Serial Story entitled, The Scarlet Chameleon (Sabbath).  
4.40—Musical Programme from the Studio.  
5—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.  
5.15—Shipping Information when available.  
5.18—Resume of night's programme.  
5.18—G.P.O. Clock and Close down.

### EARLY EVENING SESSION.

- 6—G.P.O. Clock and Chimes; Uncle George and the Kiddies.  
6.40—Pavilion Dinner Orchestra under the direction of Mr. Ure Morrison.  
Special Country Session.  
7—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co.'s Stock Wood and Hide Report.  
7.5—Weather Report and Forecast by courtesy of Mr. C. J. Maros, Govt. Meteorologist.

- 7.30—Stock Exchange Reports.
- 7.45—Producers' Distributing Society's Fruit and Vegetable Report.
- 7.50—Fruit and Vegetable Reports (Sun).
- 7.55—Grain and Fodder Reports (Sun).
- 7.57—Eggs and Poultry Reports (Sun).
- 7.59—Mr. Barrett will talk on The Future of Standardisation.
- 7.55—Miss Helen Jean Beegling will talk on Tasmania.

NIGHT SESSION.

- 8.—Concert from the Studio, including the Abad Duo (steel guitars), Miss Phyllis Athanas (soprano), Mr. Bobby Watson (comedian), Newtown Band from the Industrial Hall, Newtown, Mr. Herbert, Hinchcliffe (baritone), Miss Helena Stewart (soprano), Al. Hammett and the Ambassadors Dance Band, broadcast from the ballroom of the Ambassadors.
- 11—4 P.O. Clock and Chimes, National Anthem.

2 K Y

LUNCHEON HOUR SESSION:

- 12.15—Popular Fox Trot, Musical Interlude, News Items, Hawaiian Steel Guitar Solo, Union News and Meetings, Vocal Items. Closing down at 1.45 p.m.

CHILDREN'S HOUR:

- 4.30—The Storyman, Mr. Thompson.

EVENING SESSION.

- 7.30—Tune-in to the ticking of the clock.
- 7.35—Latest news items.
- 7.40—Industrial and political topics, by Mr. J. S. Garden.
- 7.45—Shipping Log.
- 8.—Banjo solos, by Mr. W. Thompson.
- 8.10—Messia soprano solos by Miss Nellie Graves.
- 8.20—Rhapsodie, by Miss Amy Rowald.
- 8.40—Musical Interlude: Palm Royal Californians, Mr. Walter Rechan, leader (by kind permission of J. C. Beadell Ltd.).
- 8.50—Announcements.
- 9.—Soprano solos, by Miss Ethel Mitchell.
- 9.10—Tenor solos, Mr. Tom O'Connor.
- 9.15—Musical Interlude.
- 9.30—Contralto solos, by Miss Amy Rowald.
- 9.40—Bass solos, by Mr. W. Ward.
- 9.50—Dance music.
- 10.—Closing Announcements.

2 G B

NIGHT SESSION

- 6.45—Talks to Children, by "The Man from Dreamland."
- 7.15—Interval.
- 7.30—Music from Studio.
- 7.45—Announcements.
- 7.55—Instrumental Trio—Artists: Dan Scully, Muriel Lunn, Ada Brock.
- 8.—Address by K. Rev. G. S. Arundale, M.A., L.I.B.
- 8.30—String Quartet: Lloyd Davies, Mona Horder, Muriel Lane, Chas. Boult.
- 8.40—Songs by Miss Gwladys Edwards.
- 8.50—"Talks on Wireless," by Mr. F. G. Board, Constructional Engineer 2GB.
- 9.10—Violin solos, by Lloyd Davies.
- 9.15—Unaccompanied Duet: Dan Scully, Mona Horder.
- 9.25—Instrumental: Dan Scully, Lloyd Davies, Mona Horder, Ada Brock.
- 9.45—Songs by Miss Gwladys Edwards.
- 9.50—God Save the King.

3 L O

MIDDAY SESSION.

- 12 noon—Time Signal; British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables; "Argus" and "Herald" News Services.
- 12.45—Stock Exchange Information; Shipping Intelligence.
- 12.50—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South

- Australia, and New South Wales; Ocean Forecast; River Reports.
- 1.—Time Signal.
- 1.1—Studio Orchestra.
- 1.15—Bruce Green, Pantomime Dame, in selections from his repertoire.
- 1.17—C. Richard Chuga, flaut.
- 1.24—Studio Quartette.
- 1.34—Bruce Green, will again entertain you.
- 1.43—Studio Orchestra.
- 2.—Close down.
- Results of the Ascot Pony £1,900 meeting will be given as they come to hand.

AFTERNOON SESSION

- 3.—Studio Orchestra.
- 3.10—Mrs. Dorothy Silk, Homographs.
- 3.25—Dorothy Roxburgh, viola.
- 3.30—Studio Orchestra.
- 3.40—Eddie Davies, soprano.
- 3.47—Studio Orchestra.
- 3.57—Miss Flora Pail, Supervisor of Domestic Arts, Education Department; Domestic Economy.
- 4.12—Agnes Fortune, pianoforte.
- 4.15—Eddie Davies, soprano.
- 4.25—Studio Orchestra.
- 4.35—Tasma Tereau, cello.
- 4.45—"Herald" News Service; Stock Exchange Information; Results of Ascot Pony £1,900 Meeting.
- 5.—Children's Song Competition; Radio Voice Trials.
- 5.45—Children's Hour: Answers to letters and Birthday Greetings.
- 6.—Keith Desmond, elocutionist, will recite to the Children.
- 6.7—Little Miss Kookaburra will say some favourite nursery rhymes for her tiny tot friends.
- 6.17—Keith Desmond will recite just one more poem for the bigger children.
- 6.25—Little Miss Kookaburra will tell to the boys and girls another instalment of The Girl who Played the Game in a serial story for boys will commence next week.
- 6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association Cables.
- 6.53—Weather Synopsis; Shipping Movements; General Shipping.
- 7.—Stock Exchange Information.
- 7.2—Fish Market Reports by J. R. Barrett Ltd.
- 7.5—River Reports; Aerial Mail Information by the Australian Aerial Services Ltd.
- 7.8—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep Sales; Poultry, grain, chaff, hay, straw, tallow, dairy produce, potatoes and onions; Market prices of oranges and lemons, by the Victorian Central Cattle Association Pty. Ltd.

NIGHT SESSION

- 7.29—Under the auspices of the New Settlers' League, Mr. R. E. Boardman; Plant Research.
- 7.40—Under the auspices of the Department of Agriculture, Mr. C. C. Brittlebank, biologist; Disease Control in the Flower Garden.
- 8.—German Night, Part 2, by students of the University Conservatorium. Lecturer, Mr. J. Sutton Crow.
- 9.—Mr. Jack Beatty, Captain of the Victorian Interstate Lacrosse Team; The Game of Lacrosse.
- 9.15—Studio Orchestra.
- 9.35—Colin Thomson, tenor.
- 9.50—Original sketch, written by Eardley Turner; Rehearsal and Performance.
- 9.52—H. F. Loft, in banjo selections.
- 10.—British Official Wireless News from Rugby; Announcements; Weather Forecast.
- 10.10—Bruce Green, Pantomime Dame, in selections from his repertoire.
- 10.20—H. F. Loft, in more melodious melodies.
- 10.28—Colin Thomson, tenor.
- 10.38—Studio Orchestra.
- 10.40—Bruce Green will again entertain you.
- 10.50—"Argus" News Service; Announcements; Results from Ballarat—South Street Competitions.
- 11.—Our Great Thought for to-night: "He is happy whose circumstances suit his temper;

but he is more excellent who can suit his temper to any circumstances."

11.—320 Dance Orchestra.

11.40—God Save the King.

3 A R

MORNING SESSION.

- 11.30—Delish Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's operator. Express Train information. Events of the day. "Age" news bulletin, exclusive to 3AR.
- 12—Time Signal Chime. Studio Barometer Readings. 1st Weather Forecast. Sporting Fixtures.
- 12.5—Musical selections, relayed from Hoyt's De-Luxe, Bourke Street. Mr. T. J. Campbell at the Wurbla.
- 12.50—Stock Exchange news. Market reports.
- 12.40—Musical selections.
- 12.55—Shipping Movements; Mail Notices.
- 1.—Close down.

AFTERNOON SESSION

- Ascot Ponies. Results immediately after each race, and at half-hourly intervals.
- 2.30—Hoyt's Premier Orchestra, under direction of Miss Ella Brian.
- 3.—The Melbourne Piano Trio.
- 3.18—Mr. Allan Bailey, baritone.
- 3.23—Mr. Ron Healey, cellist.
- 3.30—Mr. Allan Bailey, baritone.
- 3.37—Mr. Bert Pettifer, violinist.
- 3.44—The Melbourne Piano Trio.
- 4.—Time Signal Chime. 2nd Weather Forecast.
- 4.5—Hoyt's Premier Orchestra.
- 5.—Time Signal Chime from G.P.O. Studio Barometer and Thermometer Readings. Close down.

EARLY EVENING SESSION.

- 6.45—Children's corner, by Uncle Red.
- EVENING SESSION.
- 7.50—British Official Wireless Press, Studio Barometer Readings.
  - 8.—Time Signal Chime from G.P.O. Mr. Les Shanley, tenor.
  - 8.7—Miss Edna Snappers, soprano.
  - 8.14—Mr. Malcolm Darroch, Scotch entertainer.
  - 8.24—Mr. John Bay, bass.
  - 8.31—Miss Edna Snappers, soprano.
  - 8.38—Mr. Les, Shanley, tenor.
  - 8.45—Relayed from the Trades Hall Melbourne Social Evening and Presentation to Hon G. M. Prendergast, M.L.A. as a mark of esteem on his retirement from the Leadership of the Victorian Parliamentary Labor Party.
  - 8.45—Mr. John Bay, bass.
  - 8.52—Mr. Malcolm Darroch, Scotch entertainer.
  - 10—Time Signal Chime from G.P.O. "Age" news service, exclusive to 3AR
  - 10.10—Lepetit's Ballroom Orchestra, under the leadership of Mr. Harry Nangle.
  - 11.—Time Signal. Close down.

4 Q G

MIDDAY SESSION.

- 12.55—Tune-in.
- 12.58—Time Signal.
- 1.—Market Reports, supplied by the Council of Agriculture; Weather information, supplied by Commonwealth Weather Bureau. News, supplied by "The Daily Mail." News Service, supplied by "The Daily Standard."
- 1.20—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 2.—Close down.

AFTERNOON SESSION.

- 3.30—From Hotel Carlton: Afternoon Tea Music, played by Hotel Carlton Symphony Orchestra.
- 4.15—From the Studio: News Service, supplied

In "The Telegraph."  
4.50—Close down.

## EARLY EVENING SESSION.

- 6.25—Tune in.  
6.30—Children's Session: Stories by "The Sandman."  
7—From the Council of Agriculture Studio; The Farmer's Service, Market reports, supplied by the Council of Agriculture Lecturers; "Pigs for Profit," by Mr. E. J. Shilton, Instructor in Pig Raising.  
7.30—From the Studio of 4GG; News Service, supplied by "The Daily Standard," Stock Exchange information, supplied by the Committee of the Brisbane Stock Exchange. Metal quotations. Overseas shipping information.  
7.40—Announcements.

## NIGHT SESSION.

- 7.45—Lecture Session: Mr. Phillip O'Brien, House in his "Problem Poems and Stories."  
8—The Amalgamated Party.  
8.30—Halle Votiv Contest Items. Musical Items from Studio.  
9—From the Reception Hall at 4GG; A quarter of an hour at the organ, Mr. Arthur Sherman.  
9.15—Weather Information, officially supplied by the Commonwealth Weather Bureau, Announcements.  
9.25—Centralist solo, Miss Winifred Anderson, Solo solo, Mr. G. Deane, Solo, Mr. Stanley Tamlyn's soprano solo, Miss E. Dancy.  
9.45—From the Reception Hall, Ten minutes at the organ, by Mr. Arthur Sherman.  
10—From the Studio: "The Daily Mail" news service.  
Close down.

## 5CL

## MORNING SESSION.

- 11.00—G.P.O. Chimes.  
11.05—Featuring a Stock Duo Art number.  
11.10—"4.46" "Advertiser" news service.  
11.15—Vocalion number.  
11.20—G.P.O. Chimes.  
11.25—"Advertiser" news service.  
11.30—Featuring a Stock Duo Art number.  
11.35—S.C.L. Studio Orchestra in concerted numbers.  
11.40—Ward & Co's. Stock Exchange intelligence, official weather synopsis and station announcements.  
2—G.P.O. Chimes.  
AFTERNOON SESSION.  
3—G.P.O. Chimes.  
3.15—Play from "Merry Lea" Gate—Orchestral numbers.  
4.15—From the Proflex Stock Buy-Art and Vocalion numbers.  
4.45—G.P.O. Chimes.  
4.55—Play from "Anatida" Gate—Orchestral numbers.  
4.58—Stock Exchange report, general information and station announcements.  
5—G.P.O. Chimes.  
EVENING SESSION.  
6.00—G.P.O. Chimes.  
6.05—Headline stories.  
7.00—Market reports.  
8—G.P.O. Chimes.  
8.15—Play from S.A.R. Institute, S.A.R. Band.  
8—G.P.O. Chimes.  
8.45—Weather reports.  
8.50—Band concert, continued.  
9.15—"Advertiser" news service and ships without wireless news.  
10.50—Band concert, continued.  
10.55—Station announcements.  
11—G.P.O. Chimes, National Anthem, Close down.

## 7ZL

## MORNING SESSION.

- 11—G.P.G. Clock Chimes, The "Mercury"

news, Stock Market, Shipping, Commercial Intelligence, Weather information, "Salonola" selections.  
12—G.P.O. Clock Chimes, Close down.

## AFTERNOON SESSION.

- 3—G.P.O. Clock Chimes, Musical items from the Studio.  
3.30—Robert Stock Exchange quotations.  
3.35—Weather information.  
4—G.P.O. Clock Chimes, Close down.

## EVENING SESSION.

- 7—Children's Dinner, "Big Brother" chats to his pals.

## NIGHT SESSION.

- 8—G.P.O. Clock Chimes, The "Mercury" special Tasmanian news service, Railway auction produce sales, Weather information.  
8.15—Robert Stock Exchange quotations.  
8.18—Talk by Mr. George Limb, "Yolk Song."  
8.30—Selection on the Gallianean Registering Piano broadcasted by direct wire from Firm's Show Room, Elizabeth Street, Hobart.  
9.15—Tasmanian District Weather Reports.  
9.30—The "Mercury" special interstate news service, Weather synopsis, Station announcements, National Anthem.

Tuesday, Oct. 19

## 2FC

## EARLY MORNING SESSION.

- 7—The Chimes of His Ben; and Announcements.  
7.30—Music from the Radio.  
7.40—Weather Information: Commercial News; Shipping; Intelligence; Rainfall; Temperature; Astronomical Memoranda.  
7.45—Investment Market, Mining Share Market; Metal Quotations.  
7.55—Wool Sales, Broadbent's Market; Interstate Markets; Proflex Market.  
7.58—The Chimes of His Ben; A Cheerio talk by Mr. J. K. Dwyer.

## MORNING SESSION.

- 9.15—The Chimes of 2FC and Programme Announcements.  
9.20—Music from the Studio.  
9.25—Latest Minute Racing Information by the 2FC Racing Commissioner.  
10—The Chimes of His Ben.  
10.15—Late "Sydney Morning Herald" News Service.  
10.18—Music from the Studio.  
10.25—A Morning Reading.  
11—The Chimes of His Ben; Music from the Studio.  
11.5—Aggregating Press Association and Resellers' Cable Service.  
11.15—A Talk on Home Cookery and Recipes by Miss Ruth Furst.  
11.30—Close Down.

## MIDDAY SESSION.

- 12—The Chimes of His Ben; and Announcements.  
12.5—Stock Exchange, First Call.  
12.10—Music from the Studio.  
12.15—"Marche Morte" for the School Children.  
12.40—Music from the Studio.  
12.45—From Farmer's Oak Hall, The Oak Hall Trio.  
12.50—Brooks Wireless News.  
12.55—Miss Gladys Brings, contralto.  
1—The Chimes of His Ben; Weather Intelligence.  
1.10—"Events" News; Mid-day News Service; Producers' Distributing Society's Report.  
1.20—Oak Hall Trio.  
1.30—G.P.G. Clock Exchange, Second Call.

1.33—Miss Gladys Brings, contralto.  
1.38—Music from the Studio.  
1.50—The Oak Hall Trio.  
2—The Chimes of His Ben; Close Down.

## AFTERNOON SESSION.

- 2.00—The Chimes of 2FC; and Announcements.  
2.35—A Vocal Rivalry from the MacQueen School of Music.  
3.10—Music from the Studio.  
3.30—Marching Music for School Children.  
3.40—The Bevo's Vocal Trio.  
3.45—From Farmer's Tea Rooms, the Oak Hall Trio.  
3.55—Music from the Studio.  
4—Miss Nellie Judson.  
4.15—From Farmer's Tea Rooms, the Oak Hall Trio.  
4.18—Music from the Studio.  
4.20—From Farmer's Tea Rooms; The Deeds Trio.  
4.25—From Farmer's Tea Rooms, the Oak Hall Trio.  
4.35—Music from the Studio.  
4.40—Miss Nellie Judson.  
4.45—Stock Exchange, Third Call, Close Down.

## EARLY EVENING SESSION.

- 5.45—The Chimes of 2FC and Announcements.  
5.50—The "Hello Man" talks to the Children.  
6.30—A talk to the Older Children.  
6.45—Broadcast from the Hotel Australia—Orchestral Items.  
7.15—From the Studio, "Evening News" Service; and Weather Information.  
7.30—Dalney's Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).  
7.40—Close Down.

## NIGHT SESSION.

- 8—The Chimes of His Ben; and Announcements.  
8.2—Broadcast from the Lyric Winter Garden, Orchestral Items, Director Mr. A.H. Boulton.  
8.35—Miss Annie Hughes, "Two Cringles over the Tea Cups," written for 2FC by Annie Hughes; Mrs. O'Shanoney, Mrs. Beal Kappor, Mrs. Maroney, Miss Annie Hughes.  
8.37—Mr. Scott Sanderson, British Consul-General, by permission of Travel Theatres, Ltd.  
8.40—Miss A. Olsen, Australia's foremost tenor.  
8.45—Miss Annie Hughes.  
8.51—Mr. Scott Sanderson, Scotch Canadian.  
9.05—Mr. Alfred O'Shea tenor.  
9.15—Three and Solo Rivalry arranged by Mr. Christian Holmman.  
9.18—Broadcast from the Lyric Winter Garden.  
10.35—Broadcast from Baskin's Home, Items by 2FC Dance Band.  
10.51—Announcements.  
10.55—2FC Dance Band.  
11.30—Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.  
12—National Anthem, Close Down.

## 2BL

## EARLY MORNING SESSION.

- 7.15—Physical Training and Health exercises.  
7.30—Broadcasters' Special News Service.  
7.45—Physical Training and Health Exercises.  
8—G.P.O. Clock and Chimes; Close down.

## MORNING SESSION.

- 10—G.P.O. Clock and Chimes; Musical programme from the Studio.  
10.10—Special News Service from the "Daily Telegraph."  
10.15—Musical programme from the Studio.  
10.40—Special News Service from the "Daily Telegraph."  
11—G.P.O. Clock and Chimes; Market Reports.  
11.10—Musical programme from the Studio.  
11.25—Broadcasters' Information Service, including Mail, Music in call by wireless.  
11.30—Weather and Rainfall.  
11.40—Women's Session; Social Notes by Mrs. Jordan.  
11.55—Mrs. Jordan answering correspondence.

- 12. G.P.O. Clock and Chimes: "Care of Pot Plants" by Mrs. Jordan.
- 12.25—A Talk by Miss Helen Joan Bevilacqua.
- 12.30—Savoy Stock Exchange Calls.
- 12.45—Huller's Instrumental Quartets, direction, Caryl Castling.

**AFTERNOON SESSION**

- Having Information broadcast by courtesy of the Sun.
- 3—G.P.O. Clock and Chimes: Weather Report and Forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist; Social Notes from the Sun.
- 3.15—Civil Service Stores Trio, direction, Miss de Carey Bremer; Violin, Miss Teneba Marshall; Cello, Miss M. Bird.
- 3.16—A talk on "Modern Psychology," by Mr. J. M. Prentice.
- 3.45—Musical Programme from the Studio.
- 4—G.P.O. Clock and Chimes; Civil Service Stores' Trio.
- 4.15—Musical Programme from the Studio.
- 4.45—Serial Story, entitled "The Scarlet Cockerel," (Sabbatic).
- 4.45—Musical Programme from the Studio.
- 5—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.
- 5.5—Shipping Information when available.
- 6.10—Resume of Night's Programme.
- 6.15—G.P.O. Clock; Close Down.

**EARLY EVENING SESSION.**

- 6—G.P.O. Clock and Chimes; Uncle Jack and the Kuddies.
- 6.45—Pavilion Dinner Orchestra under the direction of Mr. Cee Morrison.
- Special Country Sessions.
- 7—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co's Stock, Wool and Hide Report.
- 7.5—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
- 7.10—Stock Exchange Reports.
- 7.15—Producers' Distributing Society's Fruit and Vegetable Reports.
- 7.20—Fruit and Vegetable Reports (Sun).
- 7.25—Pigs and Poultry Report (Sun).
- 7.30—Country News from the Sun.
- 7.45—Laurina.

**NIGHT SESSION.**

- 8—Broadcasters' Miniature Orchestra, under the direction of Mr. J. Knight Bennett; Mr. William Everard, tenor; Miss Gladys Verona, soprano; Mr. Victor McMalone, baritone; Mr. Clem. Williams, baritone.
- 11—Symphony Orchestra, under the direction of Mr. E. Bennett.
- 12—G.P.O. Clock and Chimes; National Anthem.

**2 KY**

**LUNCHEON HOUR SESSION.**

- 12.15—Poodle's Fox Trot; Musical Interlude; News Items; Pavilion Steel Guitar Selection; Union News and Meetings; Vocal Duets; Close down at 1.45 p.m.

**AFTERNOON SESSION.**

- 3.45—Tune in to the ticking of the clock.
- 3.18—Popular Fox Trot.
- 3.30—Street Story.
- 3.45—Musical Interludes.
- 4—Popular Science Talk.
- 4.15—Pavilion Steel Guitar Selections.
- 4.25—Musical and Vocal Items.
- 4.40—Where is go To-night.
- 4.45—Closing Announcements.

**CHILDREN'S HOUR.**

- 6.10—The Storyman, Mr. Thomson.

**EVENING SESSION.**

- 7.39—Tune in to the ticking of the clock.
- 7.40—News Items.
- 7.40—Lesson in Esperanto, Mr. F. T. Stinson, (President S.E.S.).
- 7.45—Shipping Log.
- 8—Pierote's Solos, Mr. Bryn Bedford.
- 8.10—Tenor Solos, Mr. A. Jamieson.

- 8.20—Mozart Soprano Solos, Miss Helen Cameron.
- 8.30—Musical Interlude, Palais Royal Californians, Mr. Walter Boehm, leader (by kind permission of J. C. Hendroft Ltd).
- 8.50—Special Announcements.
- 9—Soprano Solos, Miss Maud Carroll.
- 9.10—Items from Melbourn Leichhardt Stadium.
- 9.30—Request Lincoln Records.
- 9.50—Musical Interlude, Palais Royal Californians.
- 10—Closing Announcements.

**3 LO**

**MIDDAY SESSION.**

- 12 noon—Time Signal; British Official Wireless News from Rugby; Banters and the Australian Press Association Gables; "Argus" and "Herald" News Services.
- 12.45—Stock Exchange Information; Shipping Intelligence.
- 12.55—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South Australia, and New South Wales Ocean Territory; River Reports.
- 1—Time Signal.
- 1.1—Studio Orchestra.
- 1.10—Charles Pope, Colored Comedies Koon.
- 1.17—Walter Smith, humorist.
- 1.24—Station Trio.
- 1.34—Charles Pope, in a couple more comedy numbers.
- 1.42—Studio Orchestra.
- 2—Close down.

**AFTERNOON SESSION.**

- 3—Studio Orchestra.
- 3.10—Au Fait, of Messrs. Buckley & Nunn Ltd, will give a Fashion Talk.
- 3.25—Organ Recital, by Dr. A. E. Floyd, transmitted from St. Paul's Cathedral.
- 3.55—Gwen Barham, contralto.
- 4.2—Studio Orchestra.
- 4.10—Mevron Morland; Infant Welfare.
- 4.20—Gwen Barham, contralto.
- 4.35—Bertha Jorgenson, violin.
- 4.44—Studio Orchestra.
- 4.45—"Herald" News Service; Stock Exchange Information.
- 4.55—Children's Song Competition; Radio Voice Trios.
- 5.45—Children's Hour; Answers to letters and Birthday Greetings.
- 6—Keith Desmond will recite to the children.
- 6.17—Mary Gimrick poems; The Broken Doll; The Astrolabe; Story for the Blinded ones; A Wee mite in China.
- 6.25—Keith Desmond will again recite.
- 6.35—Mary Gimrick, story for the boys; Robinson Crusoe; and story for the girls; The Angel of the Birds.
- 6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association Gables.
- 6.55—Weather Reports; Shipping Movements; Overseas Shipping.
- 7—Stock Exchange Information.
- 7.2—Fish Market Reports to J. R. Dorrest Ltd.
- 7.5—River Reports; Aerial Mail Information by the Australian Aerial Services Ltd.
- 7.8—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep Sales; Poultry, grain, staff, hay, screw, lots, duty produce, potatoes and onions; Market prices of oranges and lemons; by the Victorian Central Citrus Association Pty. Ltd.

**NIGHT SESSION.**

- 7.25—Mr. R. H. Wilmut, Everyday Chemistry Talk.
- 7.40—Under the auspices of the University Extension Board, Miss Jessie S. Webb, M.A., Senior Lecturer in History at the University; Excavations and Excavators in Greece.
- 8—Under the auspices of Mornington Progress Association, Mr. Libley, will give a "Mystery" Moving Picture.
- 8.15—Brighton and District Scottish Society Concert, transmitted from Town Hall, Brighton. Part 1: Pipe Major Hugh Frazer, pipe solo.

- 8.20—Mr. Clifford C. Le Page, song.
- 8.25—Miss Mabel White and Mr. Hampson Taylor, Duet.
- 8.33—Miss Grace Laird, song.
- 8.40—Mr. Hampson Taylor, song.
- 8.45—Miss Mabel White, song.
- 8.55—Mr. Geo Harvey, Scotch comedian, Interlude.
- 9—Dr. Leticus Hills, Popular Science. Part 2.
- 9.15—Pipe Major Hugh Frazer, pipe solo.
- 9.20—Miss Grace Laird, solo.
- 9.25—Mr. Clifford C. Le Page, song.
- 9.32—Miss Mabel White.
- 9.40—Duet.
- 9.45—Mr. Hampson Taylor.
- 9.54—Geo. Harvey, Scottish comic.
- 10—British Official Wireless News from Rugby; Weather Forecast; Announcements.
- 10.10—Bruce Green, Pantomime Dame, will entertain you.
- 10.20—Agnes Fortune, piano solo.
- 10.30—"Argus" News Service; Announcements; Results of South Street Competitions, Ballroom.
- 10.40—Bruce Green, a little more entertainment.
- 10.50—3LO Dance Orchestra.
- 11—Our Great Thought for to-night; "The Tallest test of civilization is not the census, nor the size of the cities, but the crops; no, but the kind of man the country turns out." Emerson.
- 11.3—3LO Dance Orchestra.
- 11.40—God Save the King.

**3 AR**

**MORNING SESSION.**

- 11.30—British Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's operator. Express Train information. Events of the day. "Age" news bulletin, exclusive to 3AR.
- 12—Time Signal; Chime from G.P.O. Studio Barometer Reading; 1st Weather Forecast; Sporting Fixtures.
- 12.3—Musical Selections from Roy's De-Luxe, Bourke Street. Mr. T. L. Caspeth at the Wurlitzer.
- 12.45—Stock Exchange News, Market Reports.
- 12.48—Musical Selections.
- 12.55—Shipping Movements, Mail Notices.
- 1—Close down.

**AFTERNOON SESSION.**

- 2.30—Roy's Premier Orchestra, under direction of Miss Ella Brim.
- 3—The Trio Con Trio.
- 3.7—Miss Marguerite Chisholm, contralto.
- 3.14—Miss R. Stevenson, violinista.
- 3.21—Miss Marjorie Ford, mezzo.
- 3.28—The Trio Con Trio.
- 3.35—Miss Marguerite Chisholm, contralto.
- 3.42—Mr. Walter H. Quirk, pianist.
- 3.49—Miss Marjorie Ford, mezzo.
- 3.56—Mrs. A. Smith, violinista.
- 4—Time Forecast, Chime, 2nd Weather Forecast, Hoy's Forecast.
- 4.05—Evening Amusement Guide.
- 5—Time Signal Chime, Studio Barometer Readings. Close down.

**EARLY EVENING SESSION.**

- 6.45—The Children's Corner, by Brother Steve.

**EVENING SESSION.**

- 7.45—British Official Wireless Press Studio Barometer Reading, Fox Shown and Cetera Report supplied by courtesy of Messrs. John McNamee & Co. Pty. Ltd.
- 8—Time Signal Chime from G.P.O. Vocal Duets, Messrs. Harold Richmond (tenor), and Fred Nash (baritone).
- 8.7—Mr. Robert Marshall, violinist.
- 8.14—Mr. Wilfred Kane, tenor.
- 8.21—Mr. Trevor Wilton, Theosophical Talk.
- 8.35—Miss Angel Evans, entertainer.
- 8.42—Mr. W. Johnston, mandolinist.
- 8.49—Mr. Harold Richmond, tenor.
- 8.56—Miss Angel Evans, entertainer.
- 9.5—Mrs. Francis Drake, "The Alyssa."
- 9.17—Mr. Fred Nash, baritone.

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- 9.24—Mr. Robert Marshall, violinist.  
 9.31—Mr. Wilfrid Kane, tenor.  
 9.38—Miss May Simpson will play Australian compositions for the piano by Beryl Robertson.  
 9.45—Mr. W. T. Johnston, mandolinist.  
 9.52—Messrs. Harold Richmond and Fred Nash, vocal duets.  
 10—Time Signal Chime from G.P.O. Studio Baymead Reading. "Age" news service, exclusive to 3AR.  
 10.10—Lengott's Ballroom Orchestra, relayed from Prahran, under the leadership of Mr. Harry Samble.  
 11—Time Signal Chime. Close down.

### 1QG

#### MIDDAY SESSION.

- 12.55—Tune in.  
 12.58—Time Signal.  
 1—Market Reports. Weather information "The Daily Mail" and "The Daily Standard" news.  
 1.20—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.  
 2—Close down.  
 AFTERNOON SESSION.  
 1.25—A programme of Music from the Studio.  
 1.35—"The Telegraph" news.  
 4.30—Close down.

#### EARLY EVENING SESSION.

- 6.25—Tune in.  
 6.35—The Children's Session. Stories by "Uncle Ben" and "Uncle Jim."  
 7—From the Council of Agriculture, Studio The Farmers' Session. Market Reports. Lecture: "A Talk on Sugar Industry," by Mr. W. H. Roberts, Secretary Queensland Cane Growers' Council.  
 7.30—From the Studio of 1QG: "The Daily Standard" news. Stock Exchange Information.  
 7.45—Announcements.

#### NIGHT SESSION.

- 7.45—Lecture: "Photography," by Mr. F. L. South.  
 8—St. James' Choir.  
 8.20—Weather information officially supplied by the Commonwealth Weather Bureau. Announcements.  
 8.30—1QG Concert Orchestra. Miss Mabel Matloff, soprano. Mr. Robert Gaw, pianoforte solo. 1QG Concert Orchestra. Mr. Norman A. Cooling, bass solo. 1QG Concert Orchestra.  
 10—From the Studio: "The Daily Mail" news service. Close down.

### 5CL

#### MORNING SESSION.

- 11.30—G.P.O. Chime.  
 11.41—Featuring a Stek Duo Art number.  
 11.49—"Advertiser" news service.  
 11.55—Vocal number.  
 12—G.P.O. Chime.  
 12.1—"Advertiser" news service.  
 12.16—Featuring a Stek Duo Art number.  
 12.20—MCL Studio Orchestra.  
 12.35—Ward & Co's Stock Exchange intelligence, official weather synopsis, and station announcements.  
 2—G.P.O. Chime.

#### AFTERNOON SESSION.

- 3—G.P.O. Chime.  
 3.1—Relay from the "Maple Leaf" Cafe—Orchestral numbers.  
 3.45—From the Studio: Stek Duo-Art and Vocal numbers.  
 4—G.P.O. Chime.  
 4.1—Relay from the "Arcadia" Cafe—Orchestral numbers.  
 4.55—Stock Exchange reports, general information, and station announcements.  
 5—G.P.O. Chime.

#### EVENING SESSION.

- 6.30—G.P.O. Chime.  
 6.31—Bedtime stories.  
 7.40—Mining talk, by Mr. Jackott.  
 8—G.P.O. Chime.  
 8.1—Cadenza Quartets, interspersed with vocal items from Studio.  
 9—G.P.O. Chime.  
 9.1—Weather reports.  
 9.5—Studio concert continued.  
 10.15—"Advertiser" news service.  
 10.35—Studio concert continued.  
 10.55—Station announcements.  
 11—G.P.O. Chime. National Anthem.

### 7ZL

#### MORNING SESSION.

- 11—G.P.O. Clock Chime.  
 11.12—The "Mercury" News; Stock Market; Shipping; Commercial Intelligence; Weather Information; Solonok Selections.  
 12—G.P.O. Clock Chime; Close Down.

#### AFTERNOON SESSION.

- 2—G.P.O. Clock Chime.  
 2.4—Musical Items from the Studio.  
 2.30—Hobart Stock Exchange Quotations.  
 3.55—Weather Information.  
 4—G.P.O. Clock Chime; Close Down.

#### EVENING SESSION.

- 7—Children's Corner. "Big Brother" plays to his pals.  
 7.15—The Adventures of Geena, the Bookshelf Cat, by "Aunt Stella."

#### NIGHT SESSION.

- 8—G.P.O. Clock Chime; The "Mercury" Special Tasmanian News Service; Railway Auction Produce Sales; Weather Information.  
 8.5—Hobart Stock Exchange Quotations.  
 9.10—Literary Lapses and Literary Lists, by Mr. W. E. Fuller.  
 9.30—Musical Items from the Studio—special Request Numbers.  
 9.45—Tasmanian District Weather Reports.  
 9.50—"The Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements; National Anthem.



Wednesday, Oct. 20

### 2FC

#### EARLY MORNING SESSION.

- 7—The Chimes of Big Ben, and Announcements.  
 7.5—Music from the Studio.  
 7.10—Weather Information; Commercial News; Shipping Intelligence; Rainfall; Temperatures; Astronomical Memoranda.  
 7.25—Investment Market; Mining Share Market; Metal Quotations.  
 7.35—Wool Sales; Broadwuffs Market; Interstate Markets; Produce Markets.  
 7.45—"Sydney Morning Herald" News Service.  
 8—The Chimes of Big Ben; A Cheerful Call by Mr. J. K. Powell.

#### MORNING SESSION.

- 9.15—The Chimes of 2FC and Programme Announcements.  
 9.20—Music from the Studio.  
 9.5—The Chimes of Big Ben; Music from the Studio.  
 10.5—Late "Sydney Morning Herald" News Service.  
 10.15—Music from the Studio.  
 10.45—A Morning Reading.  
 11—The Chimes of Big Ben.  
 11.5—Australian Press Association and Reader's Cable Service.



11.15—A Talk on Home Cooking and Recipes by Miss Ruth Purst.  
11.30—Close Down.

MIDDAY SESSION.

12—The Chimes of Big Ben; and Announcements.  
12.5—Stock Exchange, First Call.  
12.15—Music from the Studio.  
12.30—Marching Music for the School Children.  
12.40—Music from the Studio.  
12.45—From Farmer's Oak Hall—The Oak Hall Trio.  
12.50—Rugby Wireless News.  
12.55—Miss Jeanette Boney, contralto.  
1—The Chimes of Big Ben; Weather Intelligence.  
1.2—“Evening News” Mid-day Service; Producers' Distributing Society's Report.  
1.30—Oak Hall Trio.  
1.40—Stock Exchange, Second Call.  
1.45—Miss Jeanette Boney, contralto.  
1.50—Music from the Studio.  
1.55—Broadcast from the Nepean Picture Theatre, Penrith, the speeches in connection with the “Back to Penrith” Movement.  
2—Close Down.

AFTERNOON SESSION.

2.30—The Chimes of 2FC; and Announcements.  
3.30—From Farmer's Oak Hall; the Oak Hall Trio.  
3.40—Miss Edna Hudson, soprano.  
3.45—From Farmer's Tea Rooms, the Oak Hall Trio.  
3.55—Music from the Studio.  
4—Miss Margaret Grimshaw, mezzo.  
4.5—From Farmer's Tea Rooms, the Oak Hall Trio.  
4.15—Music from the Studio.  
4.30—Miss Edna Hudson, soprano.  
4.35—From Farmer's Tea Rooms, the Oak Hall Trio.  
4.55—Music from the Studio.  
4.40—Miss Margaret Grimshaw, mezzo.  
4.45—Stock Exchange, Third Call; Close Down.

EARLY EVENING SESSION.

5.45—Chimes of Big Ben and Announcements.  
5.50—The “Hello Man” talks to the Children assisted by “Jerry.”  
5.55—A serial story for the older children.  
6—Broadcast from the Hotel Australia—orchestral items, directress, Miss A. J. Egan.  
7.15—From the Studio, “Evening News” Service; and Weather Information.  
7.30—Dialects' Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).  
7.40—Talk on Esperanto by Mr. Pfah, No. 4.  
7.50—The Chimes of 2FC; and Announcements.  
8—The Chimes of Big Ben.  
8.5—Broadcast from the Nepean Picture Theatre, Penrith, programmes in connection with the “Back to Penrith” Movement, in which all the items will be given by well-known artists, who were here in Penrith, and who have returned for this occasion. Penrith District Band in selections.  
9.12—Mrs. Dalrymple Hay, soprano.  
9.20—Mr. J. R. Tipping, tenor.  
9.35—Miss Nina Colless, contralto.  
9.50—Carnet Solo by Bandmaster Johnson.  
9.44—Mr. Don Hattersley, in humorous items.  
9.50—Mr. Stanley Rowe, baritone.  
9—Violin solos by Miss D. Hand.  
9.8—Miss Broadhurst, soprano.  
9.10—Interval; a few words by Mr. Price, secretary of the Country Party of N.S.W.  
9.20—Second part of the “Back to Penrith” Concert; Mr. Percy Herford, baritone.  
9.28—Piano-forte solos by Miss Hunter.  
9.36—Miss Nina Colless, contralto.  
9.44—Mrs. Dalrymple Hay, soprano.  
9.52—Monologue, by Miss Hunter.  
10—Mr. J. R. Tipping, tenor.  
10.8—Mr. Jack Herford, baritone.  
10.14—Mr. Don Hattersley, in humorous items.  
10.24—Mr. Stanley Rowe, baritone.  
10.30—Penrith District Choir.  
10.45—From the Studio, Announcements.  
10.50—Broadcast from the Wentworth Hotel.

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Our contributor, Captain Frank Hurley, who has just returned from Torres Straits and Thursday Island, where he filmed "The Hounds of the Deep." His travel talks have created a sensation at 2FC.

## "I Used Burgess"

Following the publication of our article, "Wire Music, Him Bolong God," last week dozens of letters have been received by Captain Hurley, asking for particulars of the set and batteries used on the expedition.

One listener, writing from Proserpine, Queensland, states that just such radio equipment is needed in tropical Australia. "Climatic conditions here are severe on sets, and particularly batteries," he says.

Captain Hurley replies: "The set used by myself in a standard super-heterodyne, manufactured by several dealers in Sydney, of "General Radio" parts. The batteries, however, were "Burgess." I cannot speak too highly of them."

"Despite their initial immersion in seawater, stood up to the severe test of tropical steamy heat marvellously; in fact, they appeared to be immune to climatic conditions, and whatever drain I made upon them. These batteries, after four months' continual service in the tropics, are still operating the set in my home."

Items by the Warrivorth Cafe Dance Orchestra.

12.—National Anthem; Close Down.

## 2BL

EARLY MORNING SESSION.

7.16.—Physical Training and Health Exercises.  
7.30.—Broadcaster Special News Service.  
7.45.—Physical Training and Health Exercises.  
8.—G.P.O. Clock and Chimes; Close down.

MORNING SESSION.

10.—G.P.O. Clock and Chimes; Musical programme from the Studio.  
10.16.—Special News Service from the "Daily Telegraph."  
10.35.—Musical programme from the Studio.  
10.48.—Special News Service from the "Daily Telegraph."  
11.—G.P.O. Clock and Chimes; Market Reports.  
11.11.—Musical programme from the Studio.  
11.25.—Broadcaster Information Service, including Mail, Boats in call by wireless (Shipping, Weather and Rainfall).  
11.40.—Women's Session; Social Notes by Mrs. Jordan.  
11.55.—Mrs. Jordan answering correspondence.  
12.—"Talk on Infant Welfare," Dr. Mirra.  
12.25.—A Talk by Miss Helen Joan Bevington.  
12.30.—Mid-day Music broadcast from Christ Church, George Street, Sydney, organist, Mr. J. E. Robinson; Violinist, Mr. Leonard Brewer; Vocalists, Miss Frances Terry, soprano, and Mr. Richard Raymond Beatty.  
1.30.—Sydney Stock Exchange Cables.  
1.45.—Latest Sporting Information and News from the Sun.  
2.—G.P.O. Clock and Chimes; Close Down.

AFTERNOON SESSION.

Raising Information broadcast by courtesy of the Sun.  
3.—G.P.O. Clock and Chimes; Weather Report and Forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist; Social Notes from the Sun.  
3.15.—Special Operatic Session, with explanation talk by Mr. J. M. Pringle, illustrated with specially selected musical items.  
3.45.—Musical programme from the Studio.  
4.—G.P.O. Clock and Chimes; Musical Programme from the Studio.  
4.20.—Serial Story, entitled "The Scarlet Cockle" (Serials).  
4.45.—Musical Programme from the Studio.  
5.—G.P.O. Clock and Chimes; "Producers" Distributing Society's Market and Fruit Report.  
5.8.—Shipping Information when available.  
5.10.—Resume of Night's Programme.  
5.15.—G.P.O. Clock; Close Down.

FAMILY EVENING SESSION.

6.—G.P.O. Clock and Chimes; Dada George and the Kiddies.  
6.40.—Drelling Dinner Orchestra under the direction of Mr. Chas. Morrison, Special Country Sessions.  
7.—G.P.O. Clock and Chimes; Australian Metropolitan Land and Finance Co's. Stock and Life Report.  
7.15.—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.  
7.3.—Stock Exchange Reports.  
7.45.—Producers' Distributing Society's Fruit and Vegetable Report.  
7.55.—Fruit and Vegetable Reports (Sun).  
7.58.—Fruit and Poultry Report (Sun).  
7.59.—Country News from the Sun.  
7.55.—Life News.

NIGHT SESSION.

8.—Spango Orpheus Society, under the direction of Mr. Penman; Mr. Cyril James, baritone; Sid and Molly Owen, musical novelties; Brass Quartet; Miss Heather Kennedy, contralto; "Me. The General," comedian; Miss Eva Rosenzweig, electrician; Al Hammett and the Ambassadors' Dance Band broadcast from the Ballroom of the Ambassadors.

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

## 2KY

LUNCHEON HOUR SESSION.

12.15.—Popular Fox Trot; Musical Interlude; News Items; Hawaiian Steel Guitar Selections; Union News and Meetings; Vocal Items; Closing down at 1.45 pm.

EVENING SESSION.

7.—Sporting Feature: Turf Topic—A complete review of to-day's racing, Mr. T. G. Hopkins.  
7.30.—News Items.  
7.40.—Lecturette, Miss Irwin.  
8.—Pianoforte Solo.  
8.16.—Whirling Solo, Miss Lily Wallace.  
8.45.—Results of Lawn Tennis Competition.  
8.50.—Baritone Solo, Mr. Alf James.  
8.55.—Musical Interlude, Patina Royal Club (Tasmania); Mr. Walter Heenan, leader (by kind permission of J. C. Bradford Ltd).  
8.55.—Announcements.  
9.—Selections, Hawaiian Steel Guitars.  
9.10.—Theatre Collages.  
9.15.—Musical Organ Selections, Mr. Wu Canb.  
9.25.—Halo Sketch, Herbert Beaver.  
9.30.—Tenor Solo, Mr. Ray Hamilton.  
9.40.—Dance Music.  
10.—Closing Announcements.

## 3LO

MID-DAY SESSION.

12 noon.—Time Signal; British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables; "Action" and "Herald" News Services.  
12.15.—Exchange Information; Shipping Intelligence.  
12.50.—Meteorological Information; Weather Forecast for Victoria, Tasmania, South Australia and New South Wales; Green Forecast; River Reports.  
1.—Time Signal.  
1.1.—Kapono's New Masonic Dance Band (winners Ballarat Competitions, 1925) will re-appear.  
1.10.—Charles Pope, Kolored Komedi Komi.  
1.15.—Emanu's New Masonic Dance Band.  
1.40.—Charles Pope.  
1.45.—Kapono's New Masonic Dance Band.  
2.—Close Down.  
2.30.—Result of Trial Handicap, Werribee.

AFTERNOON SESSION.

2.—Result of Junior's Flat Race, Werribee.  
2.10.—Studio Orchestra.  
2.15.—Second Act of "Radio," transmitted from Theatre Royal, by permission of J. C. Williamson Ltd.  
2.45.—Results of Sales: Handicaps, Descriptions.  
2.50.—Results of Cup, Werribee Races.  
3.—Studio Orchestra.  
3.10.—Thema Tinnah, solo solo.  
3.15.—"Star" Pop, "Machcraft."  
3.25.—Fruit and Poultry Reports.  
3.35.—Result of Werribee Plate, Werribee Races.  
3.40.—Studio Orchestra.  
3.45.—"Herald" News Service; Stock Exchange Information.  
3.—Result of Werribee Purse, Werribee Races.  
3.15.—Children's Song Competition; Radio Voice Trials.  
3.45.—Children's Song: Answers to letters and Birthday Greetings.  
4.—General Hour for Children, arranged by Mr. Fritz Hart; Lillian Crisp, soprano; Margaret McGibbon, violinist; Ida Scott, pianist; Accompanist, Ida Scott.  
4.45.—"Herald" and "Herald" News Services; Reuters and the Australian Press Association Cables.  
5.—Stock Exchange Information.  
5.4.—Fish Market Reports, by J. R. Barrett Ltd.  
5.5.—River Reports by the Victorian Producers' Cooperative Co. Ltd.; Haymarket Sheep Sales; Poultry, Grain, Duff, Tex.

straw, lute, dairy produce, potatoes and onions; Market prices of oranges and lemons; by the Victorian Central Citrus Association Pty. Ltd.

**NIGHT SESSION.**

- 7.30—Under the auspices of the Department of Agriculture, Mr. E. C. Bartels, Senior Irrigation Officer, "Irrigated Agriculture, Watering Lucerne."
- 7.40—Mr. P. W. Pearce will give a Physical Culture Talk.
- 8—Capt. Peters, "Books, wise and otherwise."
- 8.5—University Conservatorium Student's Concert, transmitted from the Assembly Hall.
- 10—Mrs. N. Richards, P.D., "The Art of Public Speaking."
- 10.15—British Official Wireless News from Rugby; Announcements; Results of South Street Competitions, Balharraz.
- 10.25—Third Act of "Katy," transmitted from Theatre Royal, by permission of J. C. Williamson Ltd.
- 10.35—"Aurora" News Service; Announcements; Weather Forecast.
- 11—Our Great Thought for Tonight: "The desire of knowledge like the thirst of riches, increases ever with the acquisition of it."
- 11.15—J.L.M. Dance Orchestra.
- 11.40—God Save the King.

**3AR**

**MORNING SESSION.**

- 11.30—British Official Wireless News, received from Rugby Super Wireless Station, England, by 3AR's Operator; Events of the Day; Express Trade Information; "Ace" News Bulletin.
- 12—Time Signal Chime from G.P.O. Radio Harometer and Outdoor Thermometer Readings; First Weather Forecast Sporting News.
- 12.15—Musical Selections relayed from Hoyt's De-Luxe, Bourke Street, Mr. T. L. Campbell at the Wurlitzer.
- 12.30—Stock Exchange News; Market Reports, 14.00—Musical Selections.
- 14.15—Shipping Movements; Mail Notices.
- 3—Close Down.

**AFTERNOON SESSION.**

- Written Meeting: Results immediately after each race and at half-hourly intervals.
- 2.30—Hoyt's Premier Orchestra, under direction of Miss Ella Brian.
- 3—These Shadyes Trio.
- 3.15—Miss Jean Elton (soprano).
- 3.23—Miss Elma Sutherland (soprano).
- 3.30—Miss Jean Elton (soprano).
- 3.37—Miss Alice Terrier (violinist).
- 3.44—The Three Shadyes Trio.
- 4—Time Signal Chimes; 2nd Weather Forecast; Hoyt's Orchestra.
- 4.35—Evening Amusements.
- 5—Time Signal Chimes; Studio Barometer Readings; Close Down.

**EARLY EVENING SESSION.**

- 8.45—Children's Corner, by Uncle Rad.

**EVENING SESSION.**

- 7.50—British Official Wireless News; Studio Barometer and Outdoor Thermometer Readings.
- 8—Time Signal Chime.
- 8.2—Mr. Wallie Pearl, male soprano.
- 8.4—Mr. Will Jealous, tenor.
- 8.15—Ken and Owen Jones, Hawaiian Instrumentalists.
- 8.25—Miss Olive Deavin, soprano.
- 8.30—Mr. Edgar Mayne, talk, "Cricket."
- 8.45—Miss Olive Deavin and Mr. Will Jealous vocal duet.
- 8.50—Mr. Les. MacKenzie, Dramatic Monologue.
- 8.55—Miss Olive Deavin, soprano.
- 9—Mr. Les. Edwards, baritone.
- 9.10—Mr. Wallie Pearl, male soprano.
- 9.15—Miss Olive Deavin and Mr. Will Jealous, vocal duet.
- 9.24—Ken and Owen Jones, Hawaiian Instrumentalists.

- 9.31—Miss Murie A. Houghney (hon. organiser of the Labor Guild of Youth), talk, "The Youth Movement in Russia."
- 9.40—Mr. Les. Edwards, baritone.
- 9.55—Mr. Les. MacKenzie, entertainer.
- 10—Time Signal Chime; Mr. Will Jealous, tenor.
- 10.7—"Ace" News Bulletin, exclusive to 3AR.
- 10.10—Hoyt's Premier Orchestra.
- 10.40—Close Down.

**4QG**

**MIDDAY SESSION.**

- 12.55—Time In.
- 12.57—Time Signal.
- 1—Market Reports; Weather Information, "The Daily Mail" and "The Daily Standard" news.
- 1.20—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 2—Close down.

**AFTERNOON SESSION.**

- 2.30—From Hotel Carlton: Afternoon Tea Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 4.15—"The Telegraph" news.
- 4.30—Close down.

**EARLY EVENING SESSION.**

- 6.25—Time In.
- 6.30—"The Children's Session: Staring by 'Little Miss Brisbane'."
- 7—From the Council of Agriculture Studio: The Farmers' Session; Market reports; Lecture: "Farmers' Sheep in Queensland—Feeding of Sheep," Mr. W. G. Brown, Instructor in Sheep and Wool.
- 7.30—From the Studio of 4QG: "The Daily Standard" news; Stock Exchange information.
- 7.45—Announcements.

**NIGHT SESSION.**

- 7.45—Lecture: Queensland Preference League.
- 8—An Irish Hour, by Sassy Orchestra, Miss Dorothy Brown, contralto, The Savoy Orchestra, Two Step, Radio Voice Contest Items, The Savoy Orchestra, March, Signor Corti, tenor, Miss Dorothy Stewart, soprano, Sassy Orchestra, Signor Corti, tenor, Miss Betty Henderson, soprano, The Savoy Orchestra, Inter-mezzo.
- 8.55—Announcements.
- 9—Students' Recital: Portion of the Recital by the students of Miss and Miss Middle Todd, will be relayed from the Albert Hall.
- 10—From the Studio: Weather information, officially supplied by the Commonwealth Weather Bureau, "The Daily Mail" news service. Close down.

**5CL**

**MORNING SESSION.**

- 11.30—G.P.O. Chimes.
- 11.31—Featuring a Stock Duo Art number.
- 11.45—"Advertiser" News Service.
- 11.55—Newsion Number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" News Service.
- 12.16—Featuring a Stock Duo Art number.
- 12.30—5CL Studio Orchestra.
- 1.55—Ward & Co.'s, Stock Exchange Intelligence; Official Weather Synopsis and Station Announcements.
- 2—G.P.O. Chimes.

**AFTERNOON SESSION.**

- 3—G.P.O. Chimes.
- 3.1—Relay from "Maple Leaf" Cafe—Orchestral Numbers.
- 3.45—From the Studio—Stock-Duo Art number.
- 4—G.P.O. Chimes.
- 4.1—Relay from Arcadia Cafe—Orchestral and vocal numbers.
- 4.55—Stock Exchange Reports; General Information, and Station Announcements.

6—G.P.O. Chimes.

**EVENING SESSION.**

- 8.30—G.P.O. Chimes.
- 8.31—Bedtime Stories.
- 7.30—Market Reports.
- 7.45—Boy's Song, Corner.
- 8—G.P.O. Chimes.
- 8.1—Programme of Dance Music relayed from the Palais Royal, interspersed with vocal items from the Studio.
- 8.20—Science Lecture by Messrs. F. H. Faulding and Co.
- 8.40—Concert continued.
- 9—G.P.O. Chimes.
- 9.1—Weather Reports.
- 9.25—Concert Continued.
- 10.15—"Advertiser" News Service.
- 10.30—Relay from Palais Royal.
- 10.55—Station Announcements.
- 11—G.P.O. Chimes; National Anthem.

**7ZL**

**MORNING SESSION.**

- 11—G.P.O. Clock and Chimes; the "Mercury" News; Stock Market; Shipping; Commercial Intelligence; Weather Information, and Sporting Anticipations; Salmola Selections
- 12—G.P.O. Clock Chimes; Close Down.

**AFTERNOON SESSION.**

- 3—G.P.O. Clock Chimes; Musical Items from the Studio; Story from Illustrated Tasmanian Mail.
- 3.30—Albert Stock Exchange Quotations.
- 3.55—Weather Information.
- 4—G.P.O. Clock Chimes; Close Down.

**EVENING SESSION.**

- 7—Children's Corner, "Big Brother" chats to his pals.
- 7.15—Story from Illustrated Tasmanian Mail.

**NIGHT SESSION.**

- 8—G.P.O. Clock Chimes; the "Mercury" Special Tasmanian News Service; Railway Auction Produce Sales; Weather Information and Sporting Results.
- 8.5—Robert Stock Exchange Quotations.
- 8.10—Abattoirs and Stock Market Reports from Roberts & Co. Ltd., Murray Street, Hobart.
- 8.15—Physical Culture Talk by Mr. George Collis; Hobart Orpheus Club; Hall arranged for male voices; The club, assisted by Miss Ruby G. Hargre, Tasmanian champion soprano; Mr. Allan Lamb and Mr. Arthur Lowe.
- 9.15—Tasmania District Weather Reports.
- 9.50—"The Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements; National Anthem.

Thursday, Oct. 21

**2FC**

**EARLY MORNING SESSION.**

- 7—The Chimes of Rig Ben; and Announcements.
- 7.4—Music from the Studio.
- 7.10—Weather Information; Commercial News; Shipping; Intelligence; Rainfall; Temperatures; Astronomical Memoranda.
- 7.25—Investment Market; Mining Share Market; Metal Quotations.
- 7.35—Wool Sales; Broadstuffs Market; Interstate Markets; Produce Markets.
- 7.45—"Sydney Morning Herald" News Service
- 8—"The Chimes of Rig Ben"; A Chorus talk by Mr. J. K. Powell.
- 8.15—Close down.

*Gives you more programmes*



*The REAL*  
**Long Distance Valve**

**D**ESIGNED specially for powerful long-distance radio reception. Gives you the means to pick up those weak elusive signals and amplify them to reality.

You can add the programmes of distant stations to your reception by securing the valves that are associated with all the great trans-world records.

**MULLARD**  
Double Red Ring  
**VALVES**

Type D.3 for 2-volt accumulator.

Type D.36 for 2 or 3 dry cells or 4-volt accumulator.

GET ONE FROM YOUR RADIO DEALER

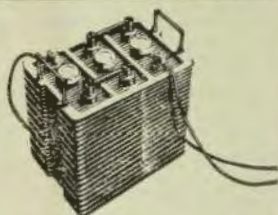
PRICE  
**13/6**  
EACH

**Mullard**  
*THE MASTER VALVE*

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

OBTAINABLE FROM EVERY RADIO DEALER IN AUSTRALIA

Advertisement of the Mullard Wireless Service Co. Ltd., "Mullard House," Denmark St., London, W.C.2, England.



**Omelettes and Optimism**

Quality, in an omelette, depends upon what comes out of the egg-shells. You get no more out of a battery than the maker puts inside it. Stuffing counts.

When you see "P. & R." outside a battery, you know that inside it's crammed full of *energy*. Get a P. & R. and you get capacity—real, valve-working capacity, not somebody's cheerful optimism in amp-hours; you get a battery which stands up to its work; you get the kind of battery which Rolls-Royce fits as standard equipment.

You get, too, a "Dagenite" case which is leak-, shock-, acid- and heat-proof: anti-splash and anti-spray vents; terminals protected from corrosion by petroleum glands; you get a BATTERY. And one which costs no more than the ordinary kind.

**P AND R**  
PETO & RADFORD  
**ACCUMULATORS**  
*The beginning and the end in*  
**POWER**

MORNING SESSION.

- 9.15—The Chimes of ZPC and Programs Announcements.
- 9.20—Music from the Studio.
- 10.—The Chimes of "Big Ben"; Music from the Studio.
- 10.5—Late "Sydney Morning Herald" News Service.
- 10.15—Music from the Studio.
- 10.45—A Morning Reading.
- 11.—Australian Press Association and Beuter's Cable Service: Chimes of Big Ben.
- 11.5—A Dickens's Reading, by Mr. A. S. Cochran.
- 11.15—Music from the Studio.
- 11.30—Close Down.

MIDDAY SESSION.

- 12.—The Chimes of Big Ben; and Announcements.
- 12.5—Stock Exchange, First Call.
- 12.10—Music from the Studio.
- 12.20—Marching Music for the School Children.
- 12.30—Music from the Studio.
- 12.45—From Farmer's Oak Hall—The Oak Hall Trio.
- 12.50—Ready Wireless News.
- 12.55—Miss Myrtle Holliday, contralto.
- 1.—The Chimes of Big Ben; Weather Intelligence.
- 1.30—"Evening News" mid-day News Service; Producers' Distributing Society's Report.
- 1.20—Oak Hall Trio.
- 1.25—Stock Exchange, Second Call.
- 1.30—Miss Myrtle Holliday, contralto.
- 1.35—Music from the Studio.
- 1.40—The Oak Hall Trio.
- 2.15—Close Down.

AFTERNOON SESSION.

- 2.30.—The Chimes of ZPC; and Announcements.
- 2.35.—A Pianoforte Recital by Mr. Telesven.
- 3.40.—Mr. Fred Harman, baritone.
- 3.45.—From Farmer's Tea Rooms, the Oak Hall Trio.
- 3.55.—Music from the Studio.
- 4.—Miss Annie Payne, mezzo.
- 4.5.—From Farmer's Tea Rooms, the Oak Hall Trio.
- 4.15.—Music from the Studio.
- 4.40.—Mr. Fred Harman, baritone.
- 4.25.—From Farmer's Tea Rooms, the Oak Hall Trio.
- 4.35.—Music from the Studio.
- 4.40.—Miss Annie Payne, mezzo.
- 4.45—Stock Exchange, Third Call; Close Down.

EARLY EVENING SESSION.

- 5.45—Chimes of "Big Ben" and Announcements.
- 6.30—The "Hello Man" talks to the Children.
- 6.40—A talk to the Older Children.
- 6.45—Broadcast from the Bond Australia—Orchestral Items.
- 7.15—From the Studio, "Evening News" Service; and Weather Information.
- 7.30—Daily's Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).
- 7.40—A talk by Miss Hilda Keith, Hon. Secretary of the Association of Australian Composers and Authors, dealing with the objects of the Association.
- 7.55—Announcements.
- 8.—Broadcast from the Royal Naval House, (Items by the N.S.W. State Military Band. An Address on Trafalgar Day).
- 8.30—Signor Alberto Marini, tenor.
- 8.55—Miss Nora Hill, Irish soprano.
- 9.—From Dalby's Concert Hall, Choral items by the Sydney Madrigal Society, consisting of 150 voices.
- 9.15—From the Studio, Signor Alberto Marini, tenor.
- 9.20—Miss Nora Hill, Irish soprano.
- 9.25—A talk by the Mechanical Club of "Wireless Weekly."
- 9.34—Signor Alberto Marini, tenor.
- 9.42—Miss Nora Hill.
- 10.—Comedian.
- 10.—Broadcast from the Lyceum Theatre, (Items by the orchestra, under the baton of Mr. Emmanuel Aaron).

- 10.35—From the Studio, comedian.
- 10.44—Announcements.
- 10.50—Broadcast from the Wentworth Hotel, (Items by the Wentworth Cafe Orchestra, under the baton of Mr. Sydney Simpson).
- 12.—National Anthem; Close Down.

2 BL

EARLY MORNING SESSION.

- 7.15—Physical Training and Health exercises.
- 7.30—Broadcasters Special News Service.
- 7.45—Physical Training and Health Exercises.
- 8.—G.P.O. Clock and Chimes; Close down.

MORNING SESSION.

- 10.—G.P.O. Clock and Chimes; Musical programme from the Studio.
- 10.10—Special News Service from the "Daily Telegraph."
- 10.25—Musical programme from the Studio.
- 10.40—Special News Service from the "Daily Telegraph."
- 11.—G.P.O. Clock and Chimes; Market Reports.
- 11.10—Musical programme from the Studio.
- 11.25—Broadcasters Information Service, including Mails, Boats in call by wireless Shipping; Weather and Rainfall.
- 11.40—Whisper's Session; Social Notes by Mrs. Jordan.
- 11.55—Mrs. Jordan answering correspondents.
- 12.25—A Talk by Miss Helen Jean Reagling.
- 12.30—Sydney Stock Exchange Calls.
- 12.45—Kilmer's Instrumental Quartette, direction Carl Cavlin.
- 1.30—Sydney Stock Exchange Calls.
- 1.45—Latest Sporting information and news from the Sun.
- 2.—G.P.O. Clock and Chimes; Close Down.

AFTERNOON SESSION.

- Racing information broadcast by courtesy of the Sun.
- 3.—G.P.O. Clock and Chimes; Weather Report and Forecast, by courtesy of Mr. C. J. Marx, Govt. Meteorologist; Social Notes from the Sun.
- 3.15—David Jones' Tea Room Trio; Pianist, Miss Caspers, violinist, Mr. Archeson, cellist, Mr. Cleaver.
- 3.30—A talk on the "Romances of Science and Invention," by Mr. J. M. Prentice.
- 3.45—Music from the Studio.
- 4.—G.P.O. Clock and Chimes; David Jones' Tea Room Trio.
- 4.15—Music from the Studio.
- 4.30—Serial Story, entitled "The Scarlet Cockerel" (Solubites).
- 4.45—Music from the Studio.
- 5.—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.
- 5.5—Shipping information when available.
- 5.15—Resume of Night's Programme.
- 5.15—G.P.O. Clock; Close Down.

EARLY EVENING SESSION.

- 6.—G.P.O. Clock and Chimes; Uncle Jack and the Kiddies.
- 6.40—Favillon Dinner Orchestra, under the direction of Mr. Cec. Morrison.
- Special Country Session.
- 7.—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co's. Stock, Wool and Hide Report.
- 7.5—Weather Report and Forecast by courtesy of Mr. C. J. Marx, Govt. Meteorologist.

WANTED.—All kinds secondhand Wireless Sets, Parts, Speakers, etc. Best prices given. JACK RAPKEN, 15 George Street West. MA 1193.

Complete Three Valve Receiver, 3-coil type with 3 AWA.39 valves, no batteries, £10. TAYLOR, Tulagi Flats, Milson's Point.

# Build Your Own Super - Heterodyne

## With the Branston SUPER · KIT



INTERSTATE STATIONS. AT LOUD SPEAKER STRENGTH. ON A LOOP.

7 Valves Reflexed, Giving Power of 10.

The only Set to receive Interstate Stations near Broadcasting Aerials. Blue Print supplied with each Kit.

### Users of Tungstelite Crystals

still recommend this remarkable Synthetic crystal. The crystal sold at English price, 1/6. At all good Radio Stores. Also the GOLD LABEL, at 2/-.



Every TUNGSTELITE CRYSTAL complete with new Catwhisker.

Try one and end your troubles.

## W. MALING & CO.,

(Successors to Radio Department of Parsons & Whittemore).

36 MARKET STREET — SYDNEY



COLMOVOK 4-VALVE SET

# Build it Yourself

**E**VEN if you have never built a RADIO SET before in your life, you can build one now.

The COLMOVOK Ready-to-wire Set with a fine, polished maple cabinet, equipment already mounted on a panel of pure bakelite, is accompanied by a detailed wiring diagram showing how to fit up the receiver, wire for wire.

### TWO VALVE SET.

	£ s. d.
With polished maple cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils . . . . .	4 10 0
Accessories required to fully equip this set are as follows:—	
2 Valves, Radiotron, Philips, Geco or De Forest . . . . .	1 7 0
5 Mounted coils, covering 200-1300 metres . . . . .	1 1 0
3 1.5 Columbia dry cells . . . . .	0 5 6
1 Pair Headphones . . . . .	0 15 0
1 60-volt high tension battery . . . . .	0 18 0
100 ft. Aerial wire . . . . .	0 2 6
15 ft. Lead-in wire and 4 insulators . . . . .	0 1 7

### THREE VALVE SET.

	£ s. d.
With polished maple cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils . . . . .	6 5 0
Accessories required to fully equip this set are as follows:—	
3 Valves, Radiotron, Philips, Geco or De Forest . . . . .	2 0 6
5 Mounted coils, covering 200-1300 metres . . . . .	1 1 0
3 1.5 Columbia dry cells . . . . .	0 8 3
1 Pair Headphones . . . . .	0 15 0
1 60-volt high tension battery . . . . .	0 18 0
100 ft. Aerial wire . . . . .	0 2 6
15 ft. Lead-in wire and 4 insulators . . . . .	0 1 7



THE RADIOLUX AMPLION, the latest addition to the famous Amplion range of loud speakers.

### FOUR VALVE SET.

	£ s. d.
With polished maple cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils . . . . .	8 0 0
Accessories required to fully equip this set are as follows:—	
4 Valves, Radiotron, Philips, Geco, or De Forest . . . . .	2 14 0
7 Mounted coils, covering 200-1300 metres . . . . .	1 9 8
3 1.5 Columbia dry cells . . . . .	0 8 3
1 Pair Headphones . . . . .	0 15 0
1 60-volt high tension battery . . . . .	0 18 0
100 ft. Aerial wire . . . . .	0 2 6
15 ft. Lead-in wire and 4 insulators . . . . .	0 1 7



THE RADIOLUX AMPLION, the latest addition to the famous Amplion range of loud speakers.

## COLVILLE MOORE WIRELESS SUPPLIES LIMITED

10 ROWE STREET . . . . . Near Hotel Australia . . . . . SYDNEY

# Colville Moore

## IT'S A NAME THAT COUNTS IN RADIO

*What you want to know is:—*

Where you can get dependable goods at competitive prices  
 Where you can get the most expert information  
 Where you can get an honest opinion regarding the most suitable parts to use

### WE ARE AT YOUR SERVICE

Below are a few lines taken from one of the most comprehensive stock of any house in Australia

#### VALVES.

	£	s.	d.
Radiotron 201A, 100	0	13	6
De Forest DV3, DV2, DV5	0	13	6
Geco DE2, DE3, DE5, DE5B	0	13	6
Radiotron 200A, (Detector)	1	13	6
Radiotron 112 (Power valve)	2	5	0
Radiotron 120 (Power)	0	17	6
Phillips B405, 109, 106, 509	0	13	6
Cossor, W1, W2	0	13	6
Cossor W3 (Power valve)	0	17	6

#### RHEOSTATS

H. & H., with dial, 6, 20, 30 ohms	0	5	9
Pilot Engraved Knob	0	4	0
Bradleystat	0	15	0
Fileostats	0	10	6

#### SOCKETS

Benjamin Cle-ra-tone UX	0	5	0
H. & H. Porcelain	0	4	0
H. & H. Bakelite	0	4	9
Pilot	0	2	9

#### CONDENSERS, VARIABLE

Igranic, .0005	1	15	0
Igranic, .00035	1	12	6
Kellog .0005 Low Loss Vernier	1	3	6
Kellog .00035 Low Loss Vernier	1	2	6
Precise Syncrodenser, .0005	1	10	0
Precise Syncrodenser, .00035	1	7	6
American Brand, S.L.B. .0005	0	14	0
American Brand, S.L.B. .00035	0	12	6
Quam, .0005	2	9	0
Quam, .00035	2	5	0

#### CONDENSERS, FIXED.

2 MFD, TCC	0	9	9
1 MFD, TCC	0	7	3
.5 MFD, TCC	0	6	6
.05 MFD, TCC	0	5	0
.01 MFD, TCC	0	5	0
.006 MFD, TCC	0	3	9
.002 MFD, TCC	0	3	9
Wetless, .00025, .001, .002, .0003, .0001	0	1	6
Electrad, .0001	0	2	0
Electrad, .00025, .0003	0	2	2
Electrad, .002	0	2	8

#### SPEAKERS.

	£	s.	d.
Amplion RS1, Oak	9	9	0
Amplion RS2, Oak	7	10	0
Amplion AR19, Dragon	6	10	0
Amplion AR14, Junior De Luxe	3	15	0
Amplion AR111 Junior	3	10	0
Brown H1	7	10	0
Brown H2	3	5	0
Brown H3	4	2	6
Brown H4	2	0	0
Geco	6	15	0

#### SUPERHETRODYNE KITS.

Igranic	23	10	0
All-American	10	5	0
Precise Multiformer	6	6	0

#### NEUTRODYNE KITS.

Col-mo Special	1	15	0
Radiokes	1	12	6
Airzone	1	12	6

#### BROWNING DRAKE KITS.

Airzone	1	8	6
Radiokes	2	2	0

#### CRYSTALS.

Carborundum, fixed	0	11	0
Carborundum, with stabilizer	1	7	6
N.H.M., No. 1	0	1	6
N.H.M., No. 2	0	1	0
Neutron	0	2	3
Harlie	0	7	6

#### LOOP AERIALS.

Igranic, Collapsible	3	15	0
B Battery Eliminator, Philips	9	15	0

#### TRANSFORMERS.

Jefferson, 41	1	5	0
Jefferson Star	0	18	6
Geco, 2-1	1	12	0
Geco, 4-1	1	14	0
Emmco, 2-1, 3-1, 5-1	1	1	0

#### TERMINAL BOARDS.

Eight Terminals, mounted on Bakelite Panel, engraved	0	2	9
--	---	---	---

#### BAKELITE TUBING.

Bakelite Composition Tubing, per inch	0	0	8
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# COLVILLE MOORE WIRELESS SUPPLIES LIMITED

10 ROWE STREET . . . Near Hotel Australia . . . SYDNEY

## PHILIPS VALVE -- C 509

PHILIPS Research Engineers, after years of patient toil and care, have evolved a general purpose valve, C509, which will give results to suit the most critical amateur.

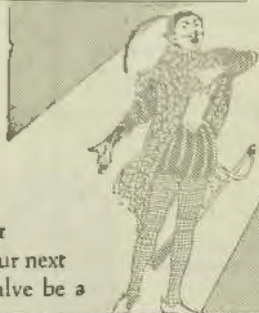
On account of its very large output it is specially suitable as a Power Amplifier for Loud Speaker work, yet its design makes it suitable for High Frequency stages. This Valve gives decidedly, a purity of tone with magnificent volume, while no trace of distortion is at any time apparent. Obtainable at all Radio Dealers. Sold with either Standard, English or American Caps, also the New UX Cap.

**Price 13/6**

Makers of the famous PHILIPS LAMPS.

### C509 Characteristics :

Filament Voltage	4.5 - 5.3 volts
Filament Current	0.25 amp.
Plate Voltage	20-120 volts
Plate Current	10 m.A.



Let  
your next  
Valve be a



# PHILIPS



### The Sweetest and the Loudest Two Valve Receiver

(Continued from Page 19.)

crystal is properly inserted, turn up your rheostat and slowly move your condensers and you will hear the station at most astounding volume, considering that only one valve and a crystal is in the circuit. Bring this station up to its maximum volume, and plug your speaker into the second jack (J2), and you will be surprised at the volume your speaker yields. Listen carefully to the excellence of tone quality. It is really wonderful! Turn your condensers until you find the next station; note again the volume and clarity. Of course, if you enmesh the moving plates of your second condenser too far into the fixed plates, a certain mushiness may result, which can be overcome generally by finding another setting on your crystal detector or re-tuning with your first condenser.

Buzzing is seldom present in this receiver, only the slightest sometimes registering itself, and is overcome either by lowering your rheostat current or readjusting your crystal detector.

Any standard make of valve will suit this receiver, which functions best with a "B" battery voltage of between 60 and 90 volts, the latter being preferable if maximum volume is desired. As beforementioned, quite good music may be obtained on the speaker with one valve only, and there is no particular care required in balancing or adjusting the Harkness. There are no howls or squeals to worry you nor your neighbours, so that this receiver comes under the class of non-radiating receivers, which will be the most popular of all very shortly.

#### BRIEF REPLIES.

H. W. S. (Waverley): See last week's W.W. for a selective crystal set.

C.V.M. (Hurstville):

Why not build the regenerative interflex. Note the B battery voltage.

## FARMER'S Reliable Radio Accessories

Best for Summer—for all Times

Summer, the season most unfavourable to the radio enthusiast, is at hand. To secure satisfactory results during this period, only the best accessories must be used—a set "good enough" for the winter, absolutely will not do for summer months. Secure your wireless accessories for the coming summer at Farmer's.



### "Atlas" Filament Controls with Micrometer Adjustment

The "Atlas" Filament Control, the rheostat with a micrometer adjustment, is absolutely unsurpassed as a detector control. Price ..... 2/0

### "Beede" Volt Meters

A "Beede" pocket Volt Meter is a necessity for the owner of every wireless set, for with it the state of the "B" batteries can at all times be determined. Price ..... 4/9



### "Merrick" Plugs

"Merrick" Plugs are equally efficient both for headphones and for loud speaker use. Price ..... 2/2

### "Benjamin" Sockets

Both UX and UV 201A valves may be used in Benjamin Sockets, which are obtainable at Farmer's, either assembled or unassembled. Prices, assembled ..... 5/-  
Unassembled. Price ..... 2/6



### "Atlas" Coils

25 Turns. Price ..... 5/-  
35 Turns. Price ..... 5/-  
49 Turns. Price ..... 5/6  
75 Turns. Price ..... 4/-

### Aerial Wire

"Phosphor" Bronze Aerial Wire, done up in coils of 100 feet, ideal for portable aerial or loop aerial. Price, per coil ..... 3/-

### "Craftsman" Reliable Condensers

Of finest workmanship throughout, "Craftsman" condensers may be relied upon, always, to give the best possible results—a product which really must be seen to be appreciated. Call in and inspect them in the Wireless Department, ground floor.

.....0005 M.P. Price ..... 18/- .....00025 M.P. Price ..... 18/-

## FARMER'S, SYDNEY

BOX 497 AA, G.P.O.

Carriage paid on Wireless Goods to 5 per cent. of cost.

## All Australian

Distributors for  
N.S.W.:

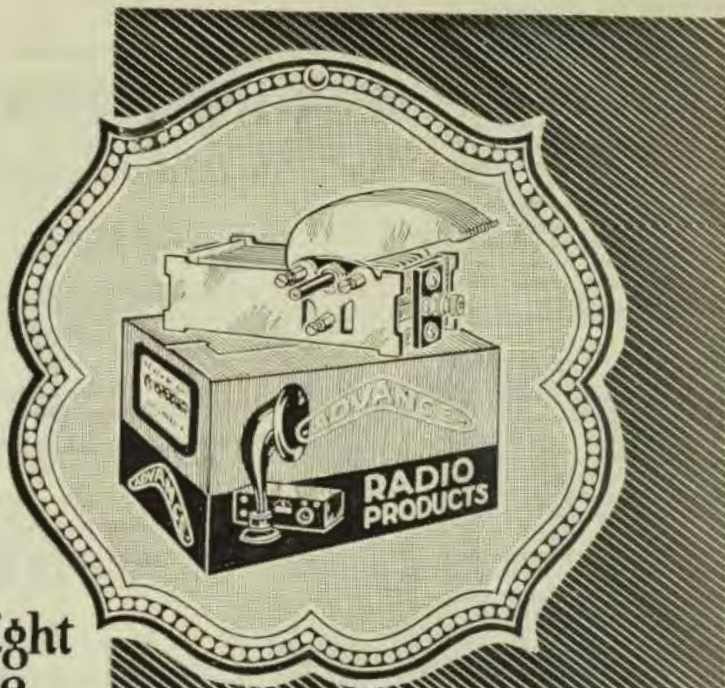
FOX & MAC-  
GILLYCUPPY  
LTD.,

Daily Telegraph  
Buildings,  
King Street,  
SYDNEY.

And

ATKINS  
McLEAN.

National  
Buildings,  
George Street,  
SYDNEY.



## Straight Line Frequency CONDENSER

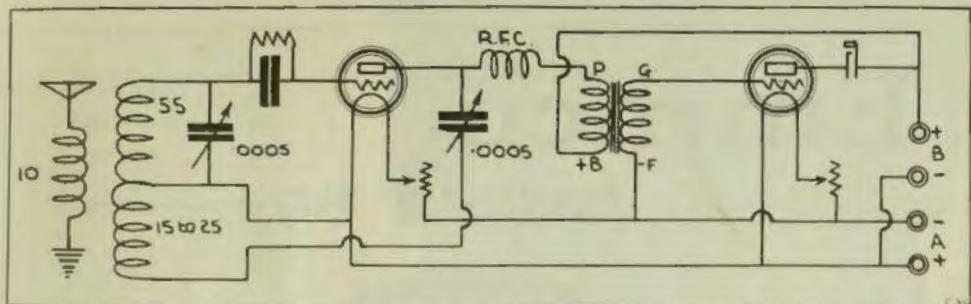
### NEW PRICES

- 00025 — 9/6
- 00035 — 10/—
- 0005 — 10/6

These condensers are scientifically correct in every detail, and spread Broadcasting stations evenly over the marking on the dial. Sharp tuning and the pulling in of these distant stations are characteristics of the "Advance."

**ADVANCE**

**RADIO  
PRODUCTS**



Here is the circuit diagram. The position of the R.F. Choke is to be kept in mind.

## A Reinartz Receiver that is Simple

Most variations of the Reinartz Receiver described in the past have been complicated. Simplicity of tuning and selectivity are obtained in this improved circuit.

TO quite a number of radioists the proximity of the wave lengths of different broadcasting stations renders it difficult to pick out one desired station apart from the others. This is not encouraging, as we all know that a medley of different sounds from different stations is not conducive to a pleasant radio evening. This need not be so if you make your receiver more selective.

The Reinartz receiver depicted above is a most selective receiver, and will necessarily appeal to many who are experiencing interference. There are certain laws of selectivity which is a subject of such vast importance that it calls for a special article at some future date. Suffice it to say that this Reinartz is quite free from interference, and the addition of one stage of audio frequency amplification will make it possible to produce soft loud speaker results anywhere within a distance of 25 miles from a broadcasting station.

### Reaction.

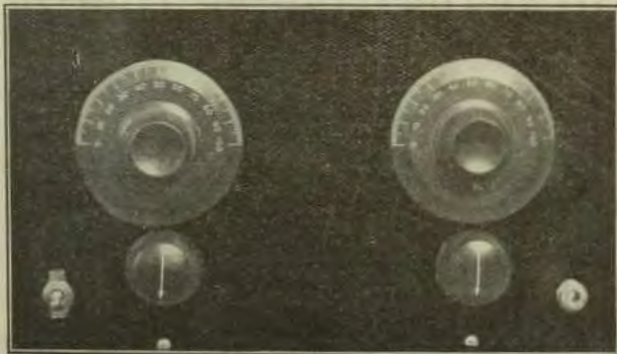
The circuit dia-

gram is worthy of a few moments' explanation. The primary coil, to which is connected the aerial and earth is in close proximity to, or as it is known, is loosely coupled to, the grid or secondary coil. This insures selectivity up to a certain extent. Reaction has not been overlooked, and it is for this same reason that the Reinartz is noted. Smoothness of reaction control is the outstanding feature of the Reinartz receiver, and it is in this respect that it differs from the standard 3-coil circuit, the reaction of which is generally somewhat fierce. Now, a fierce reaction is something to be avoided. The best way to avoid this is to em-

ploy the Reinartz smooth method. Compare the circuit diagram with a circuit of the standard 3-coil receiver, and note the relativity of reaction control.

### Appearance.

Looking at the front of panel view the absence of honeycomb coils will be noted, only the manipulation of two condensers being required to locate any desired station. These condensers are seen immediately above the rheostats, of which there is one to control each valve, as both valves this time perform different functions, inasmuch as the first valve acts as a detector and rectifies the incoming impulses, which are then passed on per medium of the audio frequency transformer to the second valve, which steps up the signals to a much louder degree. Only one jack is provided, which takes the output of both valves, and which, as previously mentioned should give reasonably good loud speak-



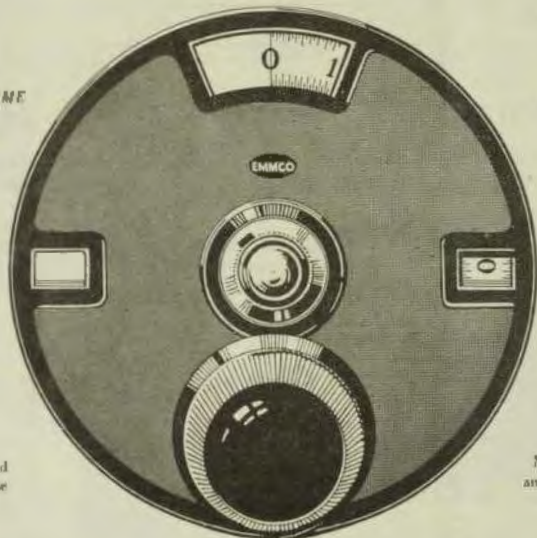
This front of panel view shows just how simple is this Reinartz Receiver

# Emmco

*points the way* —————

BAKELITE FRAME  
9/6

METAL FRAME  
6/9



Clockwise and  
Anti-Clockwise  
Movement

Made in Mahogany  
and Maroon Finish.

*to perfect tuning control*

EMMCO presents a precision VERNIER DIAL that puts accuracy and ease into the finest tuning. This instrument is not only endowed with an ultra degree of mechanical efficiency, but its handsome appearance lends a striking attractiveness to the appearance of any set. The advantages of hair-line adjustment can only be realised by actually USING EMMCO DIALS. And they provide a special LOGGING WINDOW which makes re-tuning easy and precise.

AT ALL DEALERS

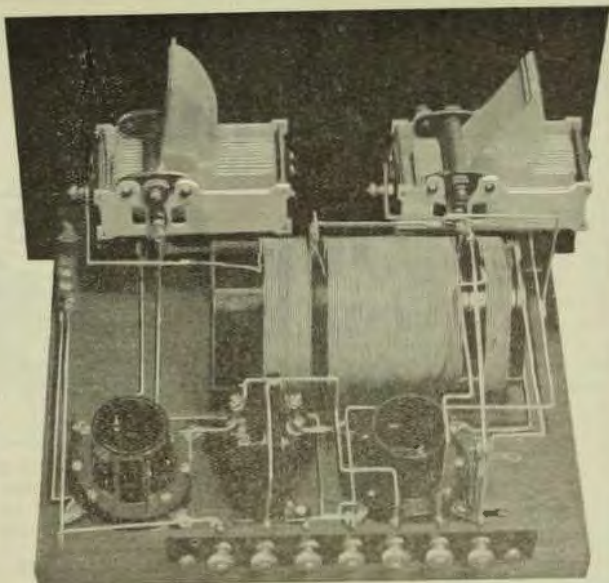
Manufactured by

Electricity Meter Manufacturing Company Ltd.  
SYDNEY, N.S.W.

or strength for average purposes. In order to switch off the filaments of both valves without interfering with your rheostat settings, a switch is provided on the left-hand bottom corner of the panel.

#### Plate Voltage Discussed.

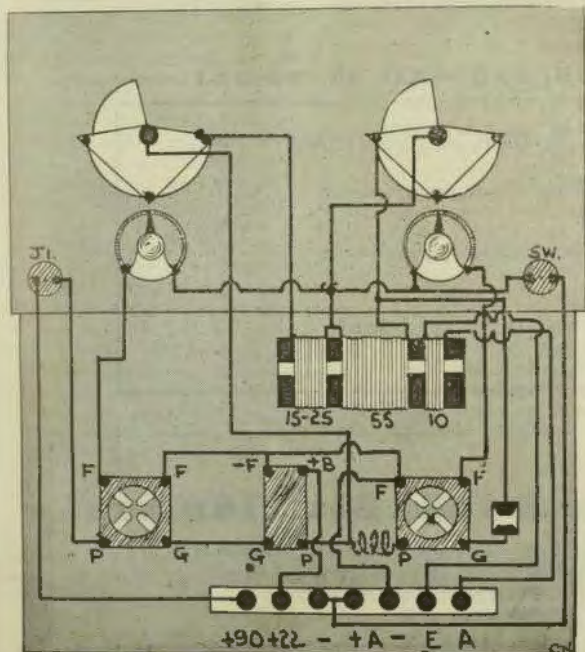
Take your attention to the back of panel view and there will you pick out the valve sockets, grid condenser, transformer, coils, jack, etc. In the foreground is the terminal board, on which, besides the battery terminals, are located the aerial and earth terminals. As it is not wise to place the same "B" battery voltage on the two different valves on account of their different purposes, a separate terminal is used to which is connected a lower voltage than is required by the audio frequency valve. This voltage may be 22½ volts for the detector and 80 to 90 for the amplifier, the greater the voltage in the latter instance the greater the volume produced. Bear in mind that you will not receive the same volume from any receiver on which you apply, say,



45 volts on the plate of your amplifiers, as you will were you to apply 90 volts.

#### Choke.

Incorporated in the circuit diagram is a radio frequency choke, and in the back of panel view this choke is dotted in. In the receiver itself the choke is not included, as it was found better results accrued when this choke was omitted. The purpose of the choke—which may consist of an ordinary 250 turn honeycomb coil, or even some three or four ounces of small gauge wire wound on a cotton reel—is to prevent the radio frequency energy from flowing through the primary of the transformer into the audio frequency portion of the receiver. It sometimes happens that the impedance of the primary of the transformer itself is of sufficient value for this purpose, and effectively counteracts the aforementioned possibility. We will discuss this a little later on.



*Top Illustration:* The back of panel view is of interest inasmuch as the coil connections are shown clearly.

*Bottom Illustration:* The wiring diagram will help those not familiar with the method of wiring from a circuit diagram.

# A Genuine Offer



**I**T is simply human nature to look for the catch in any proposition offering payment for easy spare-time work. So many wonderful schemes have been evolved, but they usually call for a lot of work you don't feel inclined to tackle after a hard day at your ordinary business.

## THERE IS NO CATCH IN OUR OFFER !

It represents a genuine, honest chance to earn more money without hard work or brain fag, and will appeal to any reader (old or young) of this paper anywhere.

## FILL THIS IN AND MAIL IT TO-DAY

RADIO DISTRIBUTORS, 29 ROYAL ARCADE, SYDNEY

*Kindly send me details of your proposition.*

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



## Radio Distributors

29 ROYAL ARCADE  
 SYDNEY

MA 1790  
 MA 1744

## Construction.

Winding the coil is the first job coming under this category. Required for this purpose is the Bakelite or composition tubing, and, of course, the wire. In the list of parts 6in. of tubing is given as the required measurement, but this depends greatly on the gauge of wire actually used. We, ourselves, wound this tubing with No. 20 gauge wire, thus taking up 6" to accommodate the windings. Should, of course, you prefer to use a smaller gauge wire, such as No. 22 or No. 24, 5" of tubing will be found ample, therefore, we will leave this choice to yourselves.

It has occurred to us that perhaps you prefer to use the standard cardboard former which is very much on the market to-day. Do so by all means, but be assured first of all that it is perfectly dry and shellac both inside and outside as a "safety first" precaution. Half an inch from one end of the coil pierce or drill two small holes, approximately half an inch apart, to take the beginning of your wire and hold it securely. Placing your reel of wire in such a position that the contents will run off freely, thread the beginning through the holes already drilled and proceed to wind, each turn close to the other, ten turns of wire, finishing off by threading the end through two holes drilled as previously. Half an inch apart drill two more holes in a similar manner, thread the wire through as before, and wind on this time 55 turns of wire, finishing up as previously. A quarter of an inch distant from this, providing holes as previously, wind on 25 turns of wire. It is essential that all these three coils or windings should run in the same direction, and also that the beginnings and ends of each winding are situate along one side of the coil. This latter factor assures simplicity of wiring which is a very big consideration.

The completed inductances should look like the sketch produced, and may be compared with the back of panel view of the receiver. It is not necessary to shellac or dope these windings in any way.

## Panel Layout.

Mark off and centre punch and drill



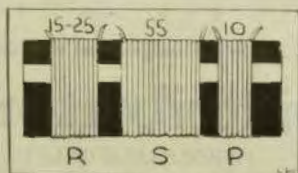
The panel layout.

your panel according to the panel layout diagram. It is always advisable to lay this panel on a flat surface, such as a table or a bench, before centre punching, otherwise if a heavy knock is given a broken panel is the result. The secret of drilling bakelite is to use a light pressure and a high speed. If you lean too heavily on your drill, the back of your panel will "scale," and, although it is the back and is not seen, it is nevertheless a sign of bad workmanship. Keep this in mind.

After drilling your panel, attach your apparatus and fit the panel temporarily against your baseboard in order to plot the best position for your baseboard components. We, ourselves, placed the coils immediately behind the condensers, raising the tubing off the baseboard about a quarter of an inch, using a thick condenser washer to do this. Behind the inductance again are situate the valve sockets with the audio frequency transformer in between. The actual components may be picked out in the back of panel view, and we feel sure that were you to follow this out you will be pleased with the results.

## Wiring.

Before permanently attaching your panel to your baseboard, connect one side of one of the rheostats to one side of the other rheostat, and from thence to one of the screws or terminals of your battery switch. Screw



Completed Coil.

your panel to your baseboard, and continue connecting up the various components therein, keeping in front of you while doing this the back of panel wiring diagram and the circuit diagram. If you are not familiar with the various symbols used in wireless circuits, here is an opportunity for you to understand them, for after all the best way of judging the value of a circuit is to be able to read a circuit diagram simply and quickly. However, that's by the way. Carry on with your wiring, checking off carefully as you proceed, and soldering neatly when this method of connecting is required. Soldering is called for in your coil connections, and this will be greatly simplified if you keep all your coil connections up on top of your former, which will allow simple access for your soldering iron.

When everything is wired up correctly, the set can be tested on the air. Insert your valves in their sockets, hook up your batteries, bearing in mind our previous remarks concerning the voltage to be applied to the plates of the detector and audio valves. Attach your aerial and earth wires, and plug in your earphones. When this plug is inserted you should hear a distinct "pop," which, if not present, proves that your "B" battery is not in order, either within itself, or, is not reaching the set in a proper manner.

Turn your condensers until you hear one or the other station. The main tuning condenser is that on the left-hand side of the panel, and which controls the secondary portion or 55-turn portion of your inductance. The reaction condenser assists you in selectivity to a great extent, but mainly controls your purity of tone and your volume. Move from one station to the other, familiarising yourself with your new receiver before you attempt any serious work on it. It may happen, of course, that immediately you plug your phones in a shrill whistle will result, which cannot be tuned out with either of your condensers. If this is so, it proves that a radio frequency choke is necessary in the receiver, and this is inserted as shown in the circuit diagram, and in dotted lines on the back of panel wiring

# Reasons for the Popularity of the Pilot Parts

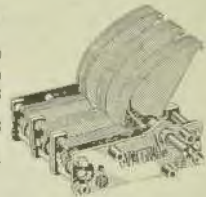
The Pilot Electric Manufacturing Coy. is the Largest Radio Parts Manufacturing Company in the World, and can produce all Standard Radio Set Parts of sturdy and reliable types at prices which no other manufacturers can compete with

The Pilot Kilogram vernier dial — calibrated both clockwise and anti-clockwise on the one dial — moulded in pure bakelite — with friction control — absolutely no backlash, and only . . . . . 7/6



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No. 8113, 13 plate . . . . .	£0 14 0
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No. 8117-2, 17 plate double Condenser . . . . .	1 14 6
No. 8117-3, 17 plate triple Condenser . . . . .	2 1 3



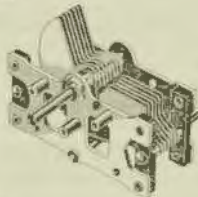
## PILOT CONDENSERS.

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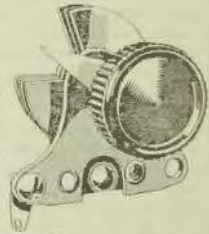
### Straight Line Frequency, Aluminium Plate.

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get  
condensers, 7 plate  
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condensers, 13 plate  
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No. 910, 10 ohm Rheostat . . . . .	0 3 9
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No. 930, 30 ohm Rheostat . . . . .	0 3 9
No. 290, 200 ohm Potentiometer . . . . .	0 5 6
No. 400, 400 ohm Potentiometer . . . . .	0 6 6

## PILOT ISOGRAD MOULDED CONDENSERS.

. . . . .	s. d.
.001 . . . . .	3 0
.002 . . . . .	3 0
.005 . . . . .	3 9
.0005 . . . . .	2 9
.00025 . . . . .	2 9
.00025 with clips . . . . .	2 9



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diagram. The actual position, if outlined here, will help you.

**Choke Insertion.**

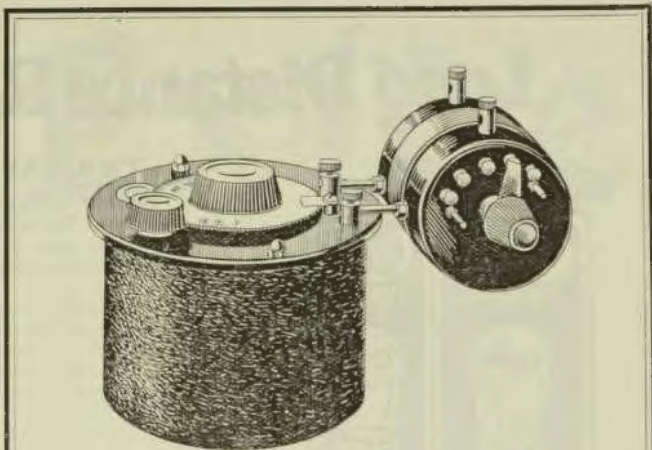
As it is you have in your receiver one busbar which is joined from the plate terminal of your valve socket to the P terminal of your transformer. Also the busbar joins the P terminal of your valve socket to the moving plates of your reaction condenser. The choke is inserted in such a manner that one side of it joins the P terminal of the transformer, and the other side joins the P terminal of your valve socket in such a manner that it is in the circuit between the transformer and the plate of the valve. Of course, if the choke is not used the connection should be as previously explained.

Perhaps you may find that the moving plates of the reaction condenser have to be all out before good reception takes place, and it may be quite likely that an excessive whistle may result which cannot be eliminated by the already mentioned method. Overcome this by taking off five or ten turns of your reaction coil, and better results will accrue.

In the matter of selectivity, it may be that you are so closely situated to a high-powered broadcasting station that complete elimination is almost impossible. By re-winding your primary turns in such a manner that the distance between the last turn of this coil and the first turn of the grid coil is increased to 1", greater selectivity will be gained. Up to certain limits, the greater the distance between the primary and secondary of any circuit, the greater the selectivity. Try this out for yourselves.

We feel certain that this Reinsartz receiver just described will find much praise and commendation for its excellent qualities. To those desirous of adding another audio valve, a panel, size 18" x 7", with a suitable baseboard, will prove a nice layout. Procure another transformer and valve socket and wire up in the standard manner, the result being a three-valve set, which will produce phenomenal volume and be as selective as can be desired.

Will advertisers kindly note the new telephone numbers for Wireless Newspapers Ltd.:—B7148 and B7149.



## General Radio Wave Trap and Meter £3 - 15 - 0

Although a Wave-trap is not necessary with our "D.J. Standard 4" Set there are those who are not fortunate enough to possess a set as this; and for these radio users we offer the General Radio Wave-trap.

General Radio High-grade Wave-traps, for making your set more selective and cutting out interference from other stations and enabling you to tune in the more distant stations with greater ease. Also for use as an accurate wave meter for setting your receiving set to any desired wavelength.

Price, complete ..... £3/15/-

# DAVID JONES'

## for Service

# Long Distance Records



See that you get your Valves in the Blue and Gold Box

## TWO-WAY COMMUNICATION

Two-way communication was first established between Tasmania and England and between England and Cape Town, South Africa, by experimenters using OSRAM Valves.

Radio experimenters striving for records place absolute reliance on the reputation of the name OSRAM. Wireless users seeking perfect radio reception are following the example of the experimenters. There is a type of OSRAM valve for each purpose and each position in the set, which can be relied upon to give long service. A set of OSRAM valves in your receiver will ensure the most faithful reproduction of broadcasted speech or music.

What the famous OSRAM lamp is to light, the OSRAM Valve is to wireless. It is the proved and universally trusted wireless valve. Ask for the OSRAM folder, giving useful valve information, and describing all types.

## There is a type for Every Purpose

	Current Consumption	Filament Volts	Bases Obtainable	s. d.
OSRAM DE2	H.F. 12	2	Eng. or Amer. UX	13 6
OSRAM DE2	L.F. 12	2	" " " "	13 6
OSRAM DE1	.06	3	" " " "	13 6
OSRAM DE3B	.06	3	" " " "	13 6
OSRAM DE4	.3	3-8	" " " "	15 6
OSRAM DE5	.25	5	" " " "	13 6
OSRAM DE5A	.25	5	" " " "	22 6
OSRAM DE5B	.25	5	" " " "	13 6
OSRAM DE6	.3	5	" " " "	15 6
OSRAM DE8	H.F. 12	5	" " " "	17 6
OSRAM DE8	L.F. 12	5	" " " "	17 6
OSRAM RAV	.65 Bright Emitter	5	English Only	7 6

(Obtainable from all Licensed Radio Dealers)

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Sole Agents: Queensland, N. Bell & Co. Ltd.

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# Osram Valves

## for Broadcasting

BRITISH MADE

"JERRY" BROADCASTS.

The children who listen to "Jerry" from Farmer's Broadcasting Station (2FC), seem to get tremendous amusement from the droll sayings of the funny little chap. Every day a score or more write letters to Jerry and very curious are their speculations as to whether he is a man, boy, or doll.

The children all realise that Jerry has nothing to say unless Mr. Rus. Garling is with him, but some of them do not quite understand that it is a ventriloquial turn with which they are being entertained. One boy wrote from Glen Innes: "I think Jerry must be a man, though he talks like a cheeky boy." A small boy living at Lane Cove expressed himself thus: "Dear Jerry, you are the funniest person I have heard. Everyone in our house shrieks with laughs when they are listening to you, and why don't you come more times than you do?"

A little girl living at Burwood sent in the following joke which Jerry has since put over the air: "Boy—I ain't got nuthin' to do, not even a loose tooth to waggle."

Three children writing from Katoomba say: "Dear Jerry, we enjoyed you very much over the wireless, we know you are not really a naughty boy; it is Mr. Garling's fault. Give our love to the Hello Man, we all think him wonderful."

"Dear Jerry," wrote a young lady from Eastwood, "you made mother and me laugh till the tears came streaming down our eyes. I think you are a lovely boy, and I hope you come many more times. You must be very cramped when your master puts you in your box."

"I think you were very rude to your master to-night," wrote another boy. "How do you like being in your box? Is it hot, or is it cold?"

We have been asked by Station KTHS to send along any reports of reception of their Station in Australia. If any of our readers hear this American Station will they kindly let us know.

# Exide

## WIRELESS BATTERIES

STANDARD EQUIPPED IN ALL THE MARCONI'S SYSTEMS THROUGHOUT THE WORLD

Made by the oldest and largest Battery Makers in the World  
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### Exide "A" Batteries in 2 Volt Units

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C.Z.3. . . . .	60 amp. Hours intermittent . . . . .	1 5 0
C.Z.4. . . . .	80 amp. Hours intermittent . . . . .	1 9 6
C.Z.5. . . . .	100 amp. Hours intermittent . . . . .	1 14 0
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All Batteries when discharged can be recharged.

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N.S.W. Distributors and Service Station:

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Dry Cells: 1½ volts, "Ever-Ready," each	3 0	C Batteries: Volton or Ever-Ready, 4½	2 0
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30 volts, 9/6; 42 volts, 12/6; 60 volts	18 0		

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BRITISH  
AND  
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# CLARKE'S ATLAS

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## Aperiodic Coupler

Cuts out local stations, when you can tune in others.  
Separates stations which are close together in wavelengths.

No alteration to wiring of your set.  
Suitable for all wavelengths.  
Not necessary to get any special coils.

Eliminates Interference.  
Separates Stations.

Universal Adaptability.  
Increases Selectivity.

Stations can be logged on condenser dial, and will be found in the same spot irrespective of size or type of aerial used at other times.

When using the Aperiodic Coupler it will in many cases, be found necessary to use a larger coil for the aerial tuning inductance. Printed instructions for use, giving method of fixing, are enclosed with each Aperiodic Coupler.

Say "ATLAS" and be "SAFE" PRICE ..... 12/6 each

Ask your Dealer—if he cannot supply, please communicate with—

## THE GENERAL TRADING COMPANY

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Telephones: BW 6938; B 4917.

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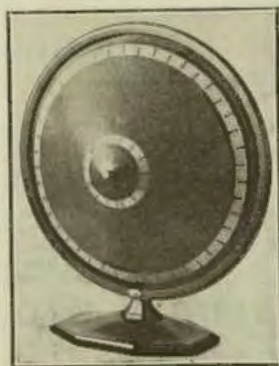
# The Crosley Musicone Leads

Out-distancing, out-performing—The Musicone sweeps ahead as the first choice of thousands. Such public preferment can mean but one thing—an infinitely finer quality of reproduction, an unequalled superiority in all those attributes most essential in a cone speaker. It will cost you nothing to see and hear this outstanding achievement in radio acoustics.

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THESE SPEAKERS  
ARE SOLD  
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The superiority of the *MUSICONE* is not due to the cone, but to Crosley's Patented Actuating Unit, and this and other exclusive features found only in the *MUSICONE*, have established its acknowledged prestige.

To-day it is the fastest moving item in radio—its quality of reproduction and its low price is inducing the rapidity by which it is replacing thousands of obsolete horn-type speakers. Remember you owe it to yourself to keep your set up-to-date.

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Insist on genuine *Radiokes* and *Gowradio* Products

# ELECTRON WIRE

## THE PERFECT AERIAL

### Made Broadcasting Popular in Great Britain

ELECTRON WIRE did more to popularise broadcasting in Great Britain than anything else. It brought wireless within the reach of everybody by its simplicity and inexpensiveness.

Everybody can fix up a crystal set in a few minutes and obtain perfect reception by simply hanging an ELECTRON AERIAL round the room, over the fence, over a tree or exactly as they like.



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| It Abolishes Insulators. | It Promotes Comfort. |

Fool-Proof—Storm-Proof—Trouble-Proof

#### IT'S SO EASY TO FIT, TOO

You can simply fling it over a tree, over the roof, round a chimney, run it along a fence, around the picture rail, across the room, hang it out of the window, or where and how you like, and the results are there. Connect one end to your set, let the other be free, use a short piece as an earth—and there you are! Perfect reception and immediate satisfaction.

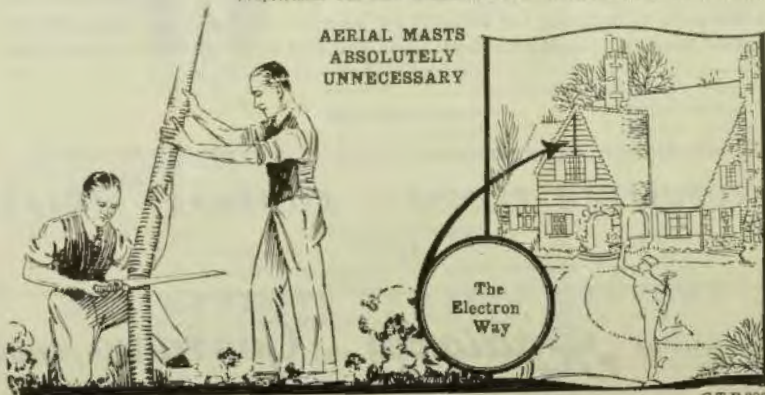
### KEMSLEY & CO., PTY., LIMITED,

WARWICK BUILDINGS,  
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100 DIXON STREET,  
WELLINGTON, N.Z.

Proprietors: The New London Electron Works, Ltd., LONDON, ENGLAND

AERIAL MASTS  
ABSOLUTELY  
UNNECESSARY



The  
Electron  
Way

**Is Your Problem Here?***(Continued from Page 15.)*

C.R.M. (Haberfeld).

Q.1.: Would the Browning Drake receiver work with three valves giving decent volume for two or three pairs of phones?

A.1.: Certainly, and it will provide loud speaker strength for the average sized room.

Q.2.: What size should the small neutralising condensers be, and when set need it be further adjusted?

A.2.: There are many neutralising condensers on the market to choose from. When set always set.

A.N. (Randwick).

Q.1.: Will the Browning Drake receiver recently described in "W.W." bring in 3LO and 4QG at Randwick?

A.1.: It is quite impossible to answer this with authority, as so many factors have to be considered. Still, we know of more than one working well in your locality.

C.S. (St. Peters), encloses a circuit diagram of a standard three valve three coil receiver and asks:

Q.1.: Why is it that 3 UV.199 valves won't work in this circuit?

A.1.: The UV.199 valves are quite suitable and will function in this circuit.

Q.2.: Will 100 feet aerial overall suit this circuit?

A.2.: Perfectly.

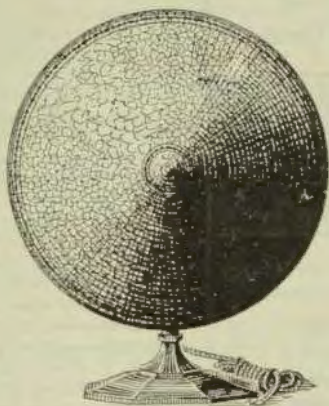
**TRACK WORK POPULAR.**

Sporting men seem to be deriving much satisfaction from the newly instituted practice of the Sydney radio station 2FC of broadcasting the training work of race horses direct from the tracks at Randwick in the early morning. Racing men, as a rule, do not like writing letters—they send telegrams of characteristic brevity.

"Heard this morning's gallops," wired a man from Gerogery. That's all he said. "Heard horses galloping, Randwick, this morning. Windbag 1.402," telegraphed a sport from Upper Horton.

"Randwick track work very good this morning"—message from Echuca (Vic.).

One man wrote a letter from Berriam—nearly as brief as the telegrams—"I heard your racing commissioner give the times at Randwick race-

**THE LOUD SPEAKER THAT WON "3LO'S" SOUND CONTEST!**

**E**MBODYING entirely new principles of acoustic reproduction the "Standard" (formerly Western Electric) "Kone" Speaker illustrated, reproduces speech and all instrumental music with such unusual excellence that Mrs. A. G. Atherstone, of East Kew, Victoria, listening-in to "3 LO's" recent sound contest, was able to recognise more of the puzzling sounds broadcast than any of the 12,000 other competitors, more than half of whom used crystal sets.

Not only does this new type speaker reproduce broadcasting with fidelity, but it does so in a non-directional manner, which dispenses with the necessity for listeners to group themselves directly in front of the instrument. The reproduction is faithful from all angles—even from the rear. Come in and hear this "Kone" speaker before buying any loud speaker.

**Standard Telephones and Cables  
(Australia) Limited**

FORMERLY

**Western Electric Company (Australia) Ltd.,**

192-4 CASTLEREAGH STREET, SYDNEY.

course on Tuesday morning; I heard Windbag's time for a mile on the tan—1.402, a record for the course."

The manager of the Gulf Cattle Company, Brunette Downs, Northern Territory, writes—"I heard the result of the races from Randwick perfectly.

Both the Sydney A-class stations broadcasting the results of all races as soon as they are received by tele-

phone and on the 35 principal days of the year 2FC special announcer describes the actual running giving the places as the horses pass the post.

The influence of the broadcasting of horse racing information is shown by the report that within the past month eight receiving sets have been installed in and around the one town of Coolah by sporting enthusiasts.

The New  
**RADIOKES**  
**COIL KIT**

For use in the Famous  
**Neutrodyne Circuit**



The Coils you will eventually buy  
At all leading Radio Dealers

**32 6 per set**

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**CLYDE SPARKS.**

The September issue of "Clyde Sparks," the bright little paper produced by the Clyde Engineering Co. Ltd., has a number of interesting features that will appeal to both radio and car users. An editorial, headed "National Pride," puts forward a strong claim for Australian-made batteries, while "The Monthly Letter of Battery Bill" is both humorous and instructive. An article, "The Repair of Storage Batteries," dealing with many phases of battery trouble and their adjustment proved to be one of the most instructive we have ever read. Two pages are allotted to a description of the premises of the Rhodes Motor Co. Pty., Ltd., Melbourne, Victorian, and Riverina distributors of Clyde batteries.

A number of short humorous paragraphs and some good advice for battery users complete this number, and Mr. A. R. Allen, who is responsible for the production of this interesting little paper, is to be congratulated on so successful a journal.

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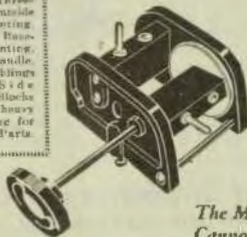
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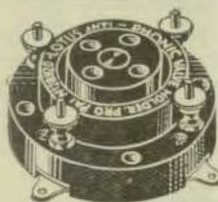
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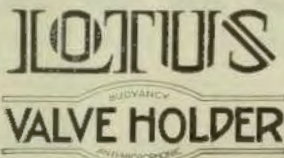


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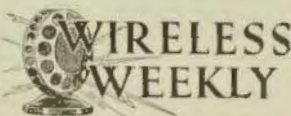
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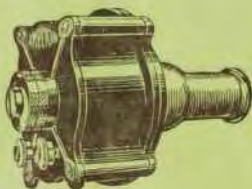
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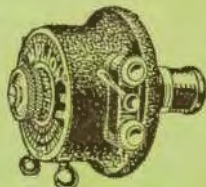
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