

WIRELESS WEEKLY

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transmission by post as a newspaper.

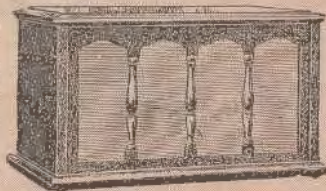
VOL. 8. No. 7.

FRIDAY, JUNE 11, 1926.

3D

THE NEW **MAGNAVOX**

Obtainable from:
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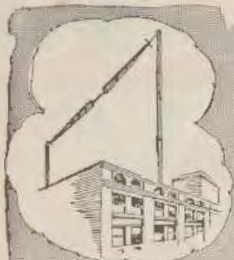
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TYPE M20 LOUD SPEAKER

"But if you'd only heard it come through the Magnavox"—don't let them tell you that, don't let them pity you; Get the Loud Speaker with the world famous clearness and power. The effectiveness of this Loud Speaker is a revelation—judge for yourself, come and hear it to-day.

"In Harmony with the Home and Air—Magnavox"

A Wavemeter Crystal Set



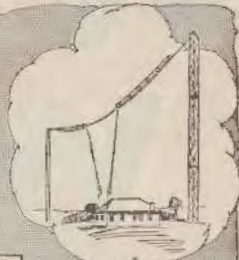
3.A.R. MELBOURNE



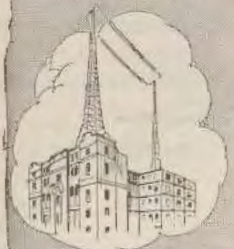
2.K.Y. SYDNEY



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3.L.O. MELBOURNE



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2.B.L. SYDNEY



6.W.F. PERTH



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5.C.L. ADELAIDE

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UDISCO
RADIO RECEIVERS
Lay Australia at your finger-tips.

Matthew Flinders in his frail craft could never have dreamed that his feat of sea manship in circumnavigating Australia would be duplicated nightly but a short century later.

Yet this is so. Nightly, owners of "UDISCO" Radio Receivers—without stirring from comfortable homes—are accomplishing what to Flinders entailed many weary days of hunger and privation.

All "UDISCO" Sets, whether "Eights," "Sixes," "Fives," or "Threes," are built to a standard of excellence in efficiency and design never before equalled in the world. Only the best components—assembled with scientific precision by a specially trained corps of radio Engineers—are incorporated.

The "Capacidyne" circuit employed ensures reception of Stations operating on any wavelength between 20 and 2000 metres. This circuit—a purely Australian invention—gives selectivity, volume without distortion, superlative tone quality and ease of control.

Tuning dials synchronise—wavelengths are controlled with one switch—volume by another.

Housed in full polished cabinets of pleasing design, "UDISCO" Receivers are masterpieces of craftsmanship.

"UDISCO" Eight on Stand with Quam Loud Speaker, Clyde United Wet Accumulator, Ray-O-Vac B Batteries, Valves, and Aerial Equipment . . . 110 gns.

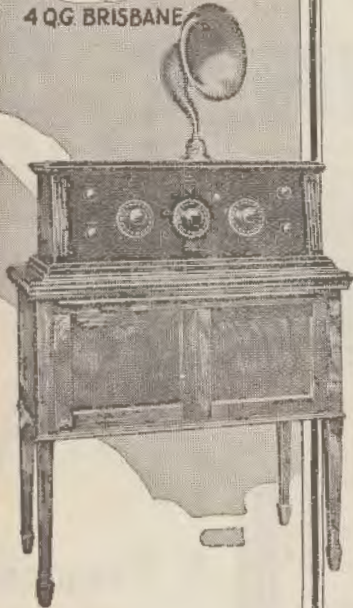
"UDISCO" Five, with Hawley Speaker, and requisite Batteries. No Stand. . . . £45

"UDISCO" Six on Stand with Quam Loud Speaker, Clyde United Wet Accumulator, Ray-O-Vac B Batteries, Valves, and Aerial Equipment . . . 75 gns.

"UDISCO" Three, with similar equipment to Five, but with Hawley Junior Speaker . . . £29/10/-

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The Amborola is a large, powerful, six tube radio receiver with an unapproached tonal quality, having in its exterior appearance and in its interior construction all the evidences of quality, workmanship, and design which have always been associated with the products of the American Bosch Magneto Corporation.

The Ambotone with its wood conoid, is mellow in tone and accurate in reproduction over the full range of music or voice. It reproduces all the bass notes so often lost in radio reproduction. **The Ambotone** will help you get the most out of your radio set.

The Receiving Set and Loud Speaker are now on display at our offices, and we would be pleased to demonstrate the above qualities to those interested.

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The One Valve Loud Speaker Set described in "Wireless Weekly" of May 28th.

Due to the enormous popularity of this article, many Radio "Fans" were unable to buy their usual copy of "Wireless Weekly."

We reprint, therefore, a complete list of parts.

	£	s.	d.		£	s.	d.
1 Bakelite Panel, 12 x 7 x 1/2	0	5	3	2 Non-Removable Binding Posts, 2 1/2" each	0	0	5
1 51-Plate K. & C. Variable Condenser	0	13	6	1 Carbtorundum Special Fixed Detector	0	11	0
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1 Columbia 3-Coil Holder (inside mounting)	0	11	0	1 Wetless .002 Condenser (Fixed)	0	1	6
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1 Valve Socket, "Ajax"	0	1	11	6 Lengths of Sq. Bus Wire	0	0	6
1 Audio Transformer, 5 to 1	0	14	3	2 Double Phone Terminals, 5d. each	0	0	10
1 30-ohm Rheostat, "Ajax"	0	2	1				
3 4-inch "Ajax" Dials, at 2/4	0	4	8				
					55	18	6

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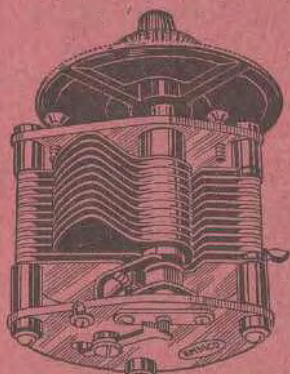
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This Set completely wired and tested, with all Accessories as shown .. . £13 0 0
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Many owners of crystal sets are now operating loud speakers with NEUTRON CRYSTALS. Next month 2BL promises to increase their volume. This will enable the owner of a crystal set to operate a loud speaker with sufficient volume to fill the house, provided he uses a NEUTRON. THE CRYSTAL IN THE BLACK AND GOLD BOX WITH THE SILVER CATS WHISKER.

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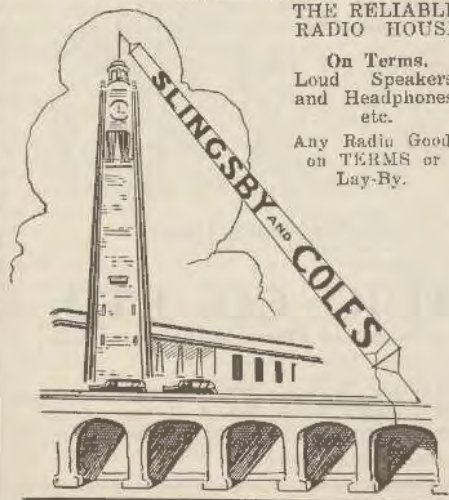
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The Name to Know in Radio

BRANDES Table Talker



NOW
45/-
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THE TABLE TALKER

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WEST AUSTRALIA: A. C. McCallum Ltd., 96 Murray Street, Perth.



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GARAGES AND RADIO BATTERIES.

Unless dull emitter valves are used, the problem of the country wireless enthusiast is the re-charging of his accumulator, and it is in this respect, quite probable that, due to unsatisfactory service, in certain instances, broadcast listeners' licenses are cancelled.

The country town garage is in the majority of cases the centre at which radio batteries are charged, but except in rare cases, it is unfortunate that the garage owner looks upon radio-battery charging as a nuisance, instead of realising that there is a big potential business in this battery charging, if only a good service is given. Once it becomes known that special provision is made for radio batteries, there is added confidence and naturally a general desire to take advantage of the service. For instance, a suburban garage recently installed a special plant for charging radio accumulators, and has now a steady following which keeps the plant going day and night.

In very many instances, country garage owners place car and radio batteries on charge at the same time. The high charging rate suitable for the car batteries is passed through the radio batteries which of course, is far from satisfactory, as buckling of the plates is inevitable, and the battery, instead of lasting ten years, becomes defunct in less than ten months.

Another cause for complaint lies in the fact that some battery service stations will not charge during the night and will not allow rectifiers to operate unless someone is actually in attendance. This usually means that the battery is taken away not fully charged, or it is charged at a rate much too high in order to get it "up." This, of course, is very bad practise, leading inevitably to the uninitiated losing confidence in accumulators as a means of supplying filament lighting, and so a certain extent in broadcasting.

Now it is far better to raise the cost of radio battery charging slightly and give a satisfactory service than to stick to old fashioned, inefficient methods which although less costly, simply cause trouble.

Whatever difficulties there are at present in the way may quite easily be overcome. The Service Station must realise that radio batteries need special attention. They must be charged at their correct charging rate, preferably at a slow rate during the night, using a rectifier which is fool-proof. The density of the battery should be quoted when it is handed over to the owner.

Attention to these details must inevitably lead to better business and greater satisfaction all round.

A. W. WATT.

Branston American Super Heterodyne

IS THE "ROLLS ROYCE" OF RADIO

THERE IS NO EXPERIMENT ABOUT THE
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It is the tried and proved Super-Het. 7 valves reflexed
give the power of 10.

Interstate reception on the loop at full loud speaker
strength.

Build your own—we will show you how, and give free
service until working satisfactorily. If you cannot build
your own, see us—we will advise you.

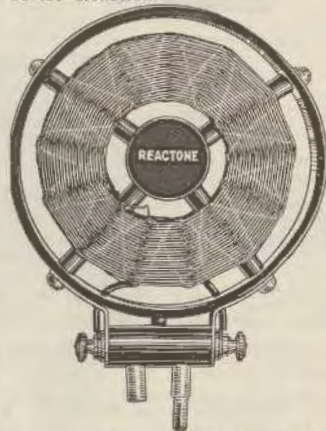
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FOR LONG DISTANCE
Being air spaced, tension wound,
and free from shellac. Means
lowest loss, sharper tuning, and
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Sole Agents: Parsons & Whittemore Ltd.

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brands of Radio apparatus at ruling trade prices and discounts
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Our despatch department is an efficient organisation capable
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If you want reliable goods and quick despatch, communicate with

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Box 734, G.P.O. Telegrams, "Burgineco," Sydney.
'Phones: City 141; City 9886; M 3069.

A Wavemeter Crystal Set

This cheap little instrument has been so designed that it may be of use not only to the newcomer to radio as a simple crystal receiver, but it should also be of the utmost value to the advanced valve or crystal receiver when used as a wavemeter or wave-trap.

It incorporates in a very simple manner these very useful applications. Readers who desire to build it up as a crystal receiver only will have no necessity to incorporate the buzzer, battery, or switch. If desired, these can be added at any time later on if the sized panel recommended is used.

Construction.

It is advisable to first make the box, the actual constructional details of which can be left to the builder. The length and width, however, should be 9 in. x 5 in., the depth, of course, depending upon the depth of the plates of the variable condenser. Having built the box, the next work is to square up the panel. The panel edges should be planed or filed till they are flush with the edges of the box, after which they may be levelled with a smooth file to give a neat appearance.

Next mount up the components as shown in the drawing, Fig. 1. The actual dimensions for the drilling cannot be given, as they will vary with the components used. No difficulty should be found, however, in arranging them as shown, and with the help of the back of panel view the wiring of each part is comparatively simple.

The variable condenser should be .0005 mfd., of reasonably good quality, and fitted with a slow motion dial. This gives a much more sensitive con-

trol to the condenser when the instrument is being used as a wavemeter.

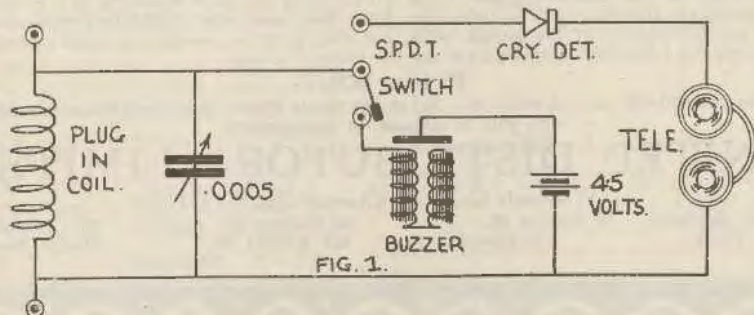
Care is necessary to see that the dial is fitted securely, so that once the instrument has been calibrated there will be no chance of the dial shifting, or otherwise the calibrations will be useless. The plug-in coil used to vary the wavelength range should be also substantially built (honeycomb coils preferred), as once they have been calibrated in the wavemeter their inductive value must not alter. If, however, the instrument is only to be used for crystal reception, the coils are not so important, and the ordinary basket or spiderweb plug-in type will be quite O.K.

The crystal detector needs no detailed description, although the new type of fixed carborundum, which requires no adjustment, is certainly less troublesome than the catswhisker type. The switch is a simple one, and the type used here takes up very little room.

Use as a Wavemeter.

In order to use the instrument as a wavemeter it is necessary to have the buzzer and switch incorporated, its object being to supply a means of obtaining the generations of oscillations in the circuit, which, in fact, converts the instrument into a small low-power transmitter. By means of the variable condenser we are thus able to tune these oscillations to any wavelength we desire, and pick them up on another valve or crystal receiver.

Let us pause for a moment and see what advantage this gives us. The B.C.L., tuning-in on the ordinary broadcast wavelength band, often comes





The
QUAM
 Radio's Best Speaker

Invented and manufactured by James P. Quam, of the Quam Radio Corpn., Chicago, U.S.A.,—the manufacturers of Quam Condensers, the only Condensers in the World with Pyrex end-plates—Quam Transformers, and numerous other of the very highest grade Radio products.

Mr. James P. Quam, who is recognised throughout the whole of the United States as one of the leading Engineers in all Radio production, visited Australia last year to consult with the United Distributors Ltd. on the production of Radio Sets that would be entirely satisfactory for all Broadcast reception purposes throughout Australia, and the result of his work, combined with that of the Engineers of the United Distributors, has resulted in their superlative "UDISCO" type Sets.

Mr. Quam, however, was not satisfied that any of the Loud Speakers available in Australia were giving satisfactory reproduction, and bent his inventive mind and whole energies towards producing something absolutely superior to the others, and satisfactory in all respects. The QUAM SPEAKER is the result.

One of the essential differences of the QUAM from all other Speakers is a Silver Drumhead Diaphragm of 3/1000 inch thick that not only faithfully reproduces every articulation of the human voice, but also gives a musical tone that cannot be equalled by any other Speaker on the market to-day.

Price, £9/-/-

See the QUAM on our Stall, No. 14, at the Radio Show; or at your nearest dealer
 —he will be pleased to demonstrate.

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Cr. Jervois Quay and
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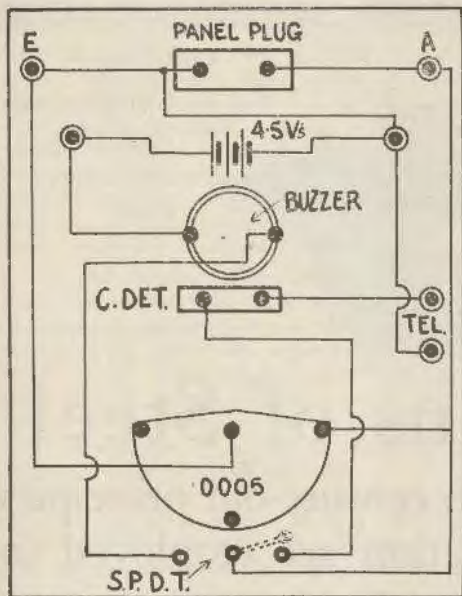


FIG 2.

across the item of some distant station. He contentedly listens to the items, hoping at the conclusion that he will be able to hear the call sign of the station given by the announcer. Quite often the signals will fade badly just when this announcement takes place, and invariably the call sign or distinguishing letters of the station will be missed. By having at hand this simple little calibrated instrument, he can immediately adjust the dial setting until the buzzer signals and the broadcasting music correspond.

Let us assume for a moment that the meter has already been calibrated and a calibration curve plotted. First tune-in the station until maximum volume is obtained; then place the meter somewhere near to the receiver; switch on the buzzer by placing the switch arm to the right-hand side. A high pitched buzz will be heard as the meter sends out low power oscillations on some wavelengths. Next carefully rotate the dial of the wavemeter (not receiver) until the buzzer signals are at a maximum, after which by carefully reading the dial setting together with curve the wavelength of the broadcasting station can readily be found. A glance through the programme portion of "Wireless Weekly" will then immediately tell you what station works on that wavelength.

It will be found that the buzz of the meter can be heard over a few degrees on the dial, but the

loudest portion should be the one that is noted. If it is difficult to distinguish which is the loudest setting you may be sure you have the meter too close to the receiver.

Another method of tuning with the aid of the meter is as follows: Turn the meter dial to the requirement wavelength of the distant station by the help of the curve, then switch on the buzzer and tune the receiver until the buzz is again heard at its loudest. On switching off the buzzer the required station, if within range, should be heard.

The latter method is the only one we shall deal with, as it is the most practicable for the majority of readers. The useful range of wavelengths for H.C. listeners is from 200 to 500 metres, and in order to be sure that each coil overlaps the other the following size coils are recommended: 35, 50, and 75. If a check on the higher broadcasting stations is desired a 200 turn coil will also be required. A piece of squared graph paper should be used for obtaining the curve.

The wavelength scale from 200 to 500 metres should first be marked off at the bottom edge of the paper, and the degrees of the condenser dial on the left-hand edge, starting at the bottom left-hand corner and working upwards. Next tune-in all the stations within range, being particularly careful to hear the announcer give his distinguishing call letters. The next operation is to adjust the wavemeter by

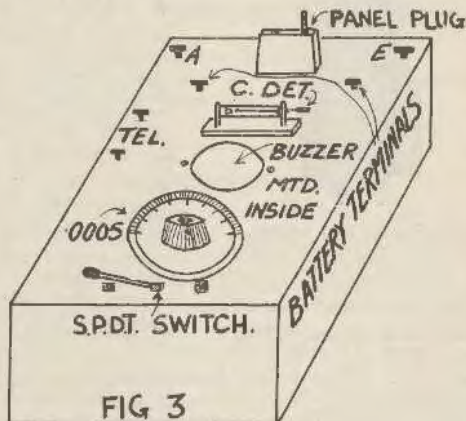
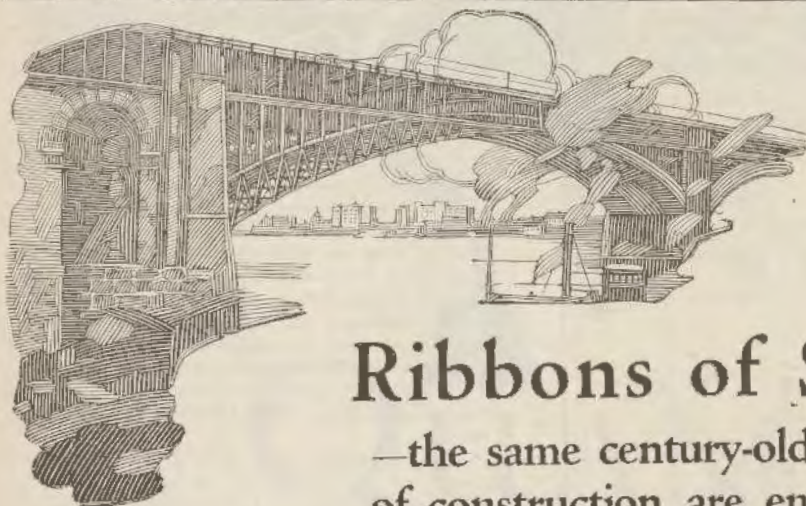


FIG 3

varying the position of the condenser dial until the wavemeter signals are at maximum volume.

You may now be perfectly sure that the wavemeter signals correspond with the wavelength of the station you have previously tuned-in, and a dot on the chart should be made which corresponds with the official wavelength of the station and the degrees of the dial. Repeat the operation with all other sta-



The Standard
BRITISH
Dull-Emitter
Valve

Ribbons of Steel

—the same century-old principles of construction are employed in every Cossor Grid



The Wuncell Dull Emitter.

Voltage, 1.8 volts. Consumption, .3 amp.

*W1 for Detector and L.F., 13/6 each.

*W2 for H.F. Amplification, 13/6 each.

Cossor Loud Speaker Valves.

W3. Voltage, 1.8 volts. Consumption, .5 amp. Price, 17/6 each.

P3. Voltage, 4.5 volts. Consumption, .175 amp. Price, 24/- each.

*Also in WR Series, with special switch and resistance in base to enable valve being used with 2-, 4-, 6-volt Accumulator.

WR1 for Detector and L.F., 18/- each.

WR2 for H.F. Amplification, 18/- each.

W1, W2, W3, and P3 Standard American or English Bases.

FROM bank to bank across a girder bridge a train speeds on its way. A hundred tons or more of living freight suspended in mid-air on a few ribbons of steel. Such is the skill of man. Rigidity is the Alpha and Omega of bridge construction. Without rigidity no bridge can withstand the devastating forces of Nature.

Rigidity, too, is the very essence of successful Valve construction. Without rigidity there must be distortion and microphonic noises. Compare the Cossor Grid with the ordinary spiral Grid, and you'll instantly appreciate why the Cossor Valve has won such a unique reputation for purity of tone.

The Cossor Grid is a wonderful piece of miniature engineering. It is built up on a stout metal Grid band, and each turn of the wire is secured in three positions—35 places in all. Was there ever such rigidity?

Combine that with the Cossor electron-retaining system of design, and you'll readily recognise why the Cossor is by far the most popular BRITISH Valve.

Everywhere it is earning golden laurels for a mellowness of tone hitherto considered impossible. Before choosing your next Valve ask your Dealer to show you the Wuncell—the Cossor Dull Emitter. Functioning at a dull red glow (almost invisible in daytime), it is, indeed, a super-economy valve with an abnormally long life. For the first time it is possible to obtain a low temperature valve in every way as sensitive as the best bright emitter. The secret of Wuncell success is to be found in its wonderful filament. Instead of a wire, whittled down to the point of fragility, the filament used in the Wuncell is built up layer upon layer under the Cossor patent process. Instead of weakness there is strength and LONG LIFE.

Cossor Valves

COSSOR VALVES CAN BE OBTAINED FROM ALL RADIO AND ELECTRICAL DEALERS.

tions slightly higher in wavelength, and obtain as many other points as possible, where the dial of the wavemeter and official wavelengths of stations correspond to each other. These dots will then be found to approximately be on either a curve or straight line, depending upon the type of variable condenser used in the meter. A fair curve should now be drawn through these points, and we have our complete calibration curve. If a check on 2FC or 6WF is required a 200 turn coil will be needed, and the same proceeding adopted, or if we wish a series of calibration curves for various coils to cover different ranges can be obtained.

In order to make doubly sure that readers understand how to plot these curves we will go through the procedure again, quoting an example. With the headphones on, tune-in 2BL, whose official wavelength is 353 metres. Next switch on the wavemeter and rotate the dial until the buzzer is at its maximum volume. This reading and the wavelength of the station should then be referred to the graph paper, and we have one point of the curve.

For example, the wavemeter dial shows 85 degrees, and the wavelength we know is 353. We run up vertically from the 353 mark on the bottom scale until we are opposite the 85 degree on the vertical scale, and there we mark a point. Repeating this operation with 3LO, 4QG, and 5CL will give us similar points higher up the vertical scale.

To use this instrument as a wavetrapp it is necessary to connect the aerial lead to the top left-hand terminal of the instrument and the right-hand one to the earth connection. Then with a suitable coil in position by varying the condenser reading the instrument can be used as an efficient series rejector type of wavetrapp, which in operation is first tuned to the wavelength of the interfering station, and then the receiver is tuned to that of the station required. A 35 or 50 turn coil will be found the most efficient size to tune the wavetrapp to all the lower wave interfering stations.

The Crystal Receiver.

To use the instrument as a crystal receiver, the aerial and earth leads should be connected to their respective terminals as shown, and the following coils used for tuning:—

Station.	Coil.
2BL	35
3LO	35
4QG	35
5CL	50
2FC	130
6WF	150

The following materials are necessary to build this receiver:—

- 1 Wood box, 9 in. x 5 in. x 3½ in.
- 1 Radion panel, 9 in. x 5 in. x 3/16 in.
- 1 .0005 Condenser.
- 1 Dial fitted with slow movement.
- 1 Crystal detector.
- 1 Buzzer, good type.
- 1 Single-pole double-throw switch.
- 6 Terminals.
- 1 4½ Volt dry battery.

Coils as required for wavelengths to be covered.
3 Lengths of busbar wire and 4 screws.

(Editor's Note: No matter how efficient your broadcast receiver is, this cheap little instrument herewith described is well worth its small expense of money, time, and labour.)

WOTTA LIFE!

Mr. A. R. Allen, Manager of The Clyde Battery Service tells a good one.

A fan at Penrith ordered by post a Clyde radio battery and was insistent that the positive and negative terminals should be clearly marked. So anxious was he on this point that he put through a trunk line call to Mr. Allen and asked him to personally see that the terminals were plainly shown. This was done.

Within an hour after the arrival of the train at Penrith, a telephone call came through for Mr. Allen, and a wild voice yelled, "Say, I thought you said those terminals were plainly marked positive and negative."

"So they are," was the reply.

"Be blowed; all I can see there is a cross at one end and a figure one at the other!"

Next please.

AND THEN SOME.

The tremendous strides made by radio in the United States may be gauged from the following: 300 United States Government Morse radio stations; 600 radio broadcasting stations sending out daily news and entertainment; 5,000,000 homes equipped with radio receivers; 350,000 radio receiving sets on farms; 3,732 U.S. vessels equipped for radio transmission and reception; 2,100 radio manufacturing establishments, 2,000 wholesalers, and 15,999 retailers; 250,000,000 dollars (£50,000,000) turnover in radio products during the past year.

WANTED.—All kinds Secondhand Wireless Sets, Parts, Speakers, etc. Best prices given. JACK RAPKEN, 16 George Street West. MA 1198.

PHILCO—"Have you got one yet?"—BATTERIES

RADIO
IGRANIC
 DEVICES

FAMED THE WORLD OVER

FOR QUALITY, TONE AND DEPENDABILITY.

IGRANIC.

We have recently landed a complete range of additions to the famous Igranic components, and the Micro Condenser is a typical specimen.

The most interesting, however, are the Igranic Supersonic Heterodyne Outfits, which have created a tremendous impression. The first shipment was instantly sold, and orders for the next, shortly to arrive, will be executed in rotation. * * *

BROWN.

There are now EIGHT models from which to choose, and one of the new types, the Cabinet, is illustrated. Prices range from two pounds to twenty guineas, and there is a model to suit every pocket.

At the back of this name stands an organisation rich in the experience resulting from many years devoted to the production of Headphones and Loud Speakers. They are unexcelled for tonal purity and volume. * * *

OLDHAM.

We have been appointed sole agents (Special Activation Process) Battery, and you should investigate its unique merits before investing in an accumulator.

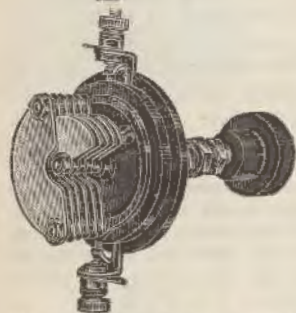
Due to the patented method of construction, the plates are rendered active right through, and not merely on the surface as in most batteries. The charge is obviously held much longer, with consequent large saving in charging costs. * * *

NOYES BROS.

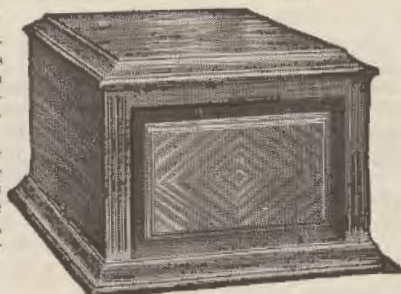
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 And at LAUNCESTON; also from J. E. W. Gardam, PERTH.

Write for Booklet No. 19, post free.



The IGRANIC Micro Condenser is a miniature variable condenser and is particularly valuable for extremely fine tuning. Maximum capacity: .00004 m.f. Single hole fixing 2/3



The BROWN Cabinet Loud Speaker. A beautifully proportioned Cabinet Type which will readily harmonise with any furniture. Unsurpassed in tone as in appearance.

BRITISH

Brown

THROUGHOUT

Queries Met By Every Beginner

(1) I have an ——— loud speaker which used to give excellent results with my old receiver, but since I have rewired it, using the same components, but with a more selective hook-up, I am very dissatisfied with the quality of tone. Can you advise me where to look for the fault? I may mention that I have tried the speaker on a friend's receiver, which uses the same hook-up as I do, and it works perfectly.

A.: Many loud speakers, we fear, are not giving their owners complete satisfaction; the volume is weak and the tone quality poor, due to the fact that the speaker leads are fitted to the plug the wrong way round. Very often a change that requires about ten seconds to make will increase the volume from 20 to 30 per cent. and improve the tone quality 100 per cent.

Invariably, one of the leads from the loud speaker is striped or is a red coloured wire, while the other is plain. There is a reason for this. The striped or red coloured wire must always be connected to the positive B, while the plain lead goes to the plate connection of the last valve.

Check up your connections and make perfectly sure which of the terminals or contacts of the jack go to the positive B and plate connections respectively. Then connect your loud speaker to the plug or terminal which corresponds with these connections.

If you are in doubt, simply reverse the connections and listen to the difference in tone and volume; invariably a considerable improvement will be obtained when connected correctly. If the speaker is used with the leads connected the wrong way round for any length of time it will demagnetise the magnets and eventually ruin it. The diaphragms of some loud speakers rattle badly when delivering the volume required by many broadcast listeners. A good method of overcoming this is to place a .006 mfd. condenser right across the loud speaker. Readers will probably find that this also improves the tone a good deal.

(2) Why do some circuits show large capacity condensers joined across the H.T. batteries?

A.: (Read carefully.) There are a number of reasons why condensers placed across various portions of a receiver improve the all-round results, the main one being without a doubt due to the fact that the condensers act as a by-pass or blocking condenser (as the case may be), and so keeps the radio frequency currents in the part of the circuit where they belong. Many owners of broadcast receivers are of the opinion that their sets are firing on all cylinders, so to speak, but we say without fear of contradic-

tion that if they will experiment along the lines mentioned below they will considerably increase their present efficiency.

If the radio frequency currents are allowed to stray into the low frequency circuits, howls, noises, and general instability will result. By-pass condensers should be used across every part of the receiver that has a high resistance or impedance, to provide an easy path for the radio frequency current. When B batteries are new the resistance is not extremely high, but after they have been in use for some time the internal resistance rises rapidly and some means must be provided to counteract this effect.

A fairly large capacity should be used for this duty from .5 mfd. to 2 mfd. The writer has found that a wonderful improvement is obtained by bypassing every positive H.T. tapping with a 1 or 2 mfd. condenser. One terminal or side of each condenser should be connected to the positive B tapings of radio frequency, detector and audio valves, and the other side of the condenser should go to the negative, which in turn is connected to the positive or negative A battery.

An experienced engineer has only to listen to a multi-valve receiver in operation to know whether it is correctly by-passed or not. If your receiver is noisy you may also be sure that you can improve matters. Even with new "B" batteries, these condensers will considerably improve reception, but their effect is particularly noticeable with batteries that have been used a short time. Good quality large capacity condensers are now reasonably cheap. In most "Wireless Weekly" circuits published a .001 fixed condenser is shown across the primary of first transformer. It should be distinctly understood that a .001 is invariably the most suitable size to use with the average transformer, but as no hard and fast rule can definitely be laid down for every make of transformer, home constructors will be very wise to experiment with various sizes until they find the value most suitable for the transformer they use. Some of the later types of transformers have the correct size by-pass condenser connected across the primary windings by the makers themselves. These, of course, need no extra external capacities joined across their terminals.

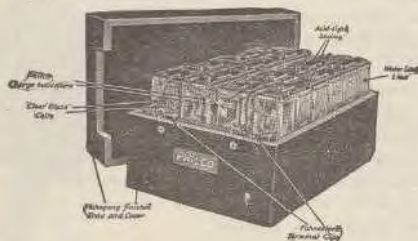
(Editor's Note: We wish to again thank our readers for sending along their queries met. Each and every query received is answered by post, but only those of a general nature can be published in these pages. Send yours along to-day.)

The World's Finest "B" Battery

and its "Six Points of Excellence"

Efficiency:—Static cannot be blamed for all those crackles. Your dry "B" Battery with its imperfect continuity causes a lot of them.

Radio experimenters and Listeners-in who use Philco Rechargeable "B" Batteries know what it is to get pure music always.



Type	Voltage	Capacity	Price
248 DXO	48	3,000 Ma. Hours	£8 4 0
83 X	(Replaces 90 Volt Dry Battery)	3,000 " "	£8 15 0
22 DX	2	3,000 " "	5 0
248 DHO	48	6,000 " "	£8 5 0
86 H	(Replaces 90 Volt Dry Battery)	6,000 " "	£10 10 0

Economy:—These batteries will give trouble free service for years with only a minimum of attention. (See point 4 opposite).

When dry batteries run down they are **useless** and are **thrown away**. The average Listener-in spends £5 per annum in Dry

Batteries. Philco Rechargeable "B" Batteries can be recharged for a few pence. The initial cost plus a few pence a year for charging is the only cost.

1. GLASS CELLS

With acid tight sealed covers. Safe for use anywhere in your home.

2. MAHOGANY FINISHED CABINET

Beautiful and Decorative.

3. CHARGE INDICATORS

Exclusive Philco Feature that tells all conditions of charge and discharge. No more bothering with old-fashioned hydrometer or guesswork charging.

4. TREMENDOUS CAPACITY

Double that of ordinary "B" Battery. Needs recharging only every 2 or 3 months and filling with water only once every season.

5. EASILY RECHARGED

With New Noiseless Charger—just a throw of a switch—a plug in the socket. No noise—impossible to overcharge. Recharging costs only from 2½d. to 5d.

6. DYNAMIC FEATURE

Insures your getting a fresh new battery. The life of a Philco Radio Battery does not start until you or the Dealer pours in the electrolyte.

SPECIAL NOTE.

For those interested in the construction of their own "B" Batteries, the 22DX type single cell offers an undoubted advantage.

Priced at 5/-, it is exactly the same cell as is mounted in the famous Philco Types 248DXO, and 83X.

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PHILCO
DYNAMIC RADIO
BATTERIES

The Wavelength Question

Last week an article under the heading of "The Wavelength Tangle" appeared in this paper, and, making allowances for time, the mail we have received on this particular subject constitutes a record. That this important matter needs early attention we have not the slightest doubt, and that our opinions are shared by many listeners is assured.

As was pointed out, it is not our desire to open up a controversy, but simply to endeavour to persuade the Administration to take action in a matter that not only affects thousands of listeners, but in certain cases is proving a check to industry.

Aside from listeners' opinions, those of other responsible parties have been sought, and we are publishing a few of these below:—

Mr. Chas. R. Benjamin, Director of Journals Pty. Ltd. (publishers of the well-known Melbourne paper, "Popular Radio Weekly"), writes:—

"We have pleasure in giving below the opinion of the editorial staff of 'Popular Radio Weekly.'

"In the main, we are in favour of a revision which would separate the stations 3LO, 4QG, 5CL, and 2BL. If this is carried out, the separation should be made on a definite kilocycle basis, on the lines carried out in the United States; in this respect we are far more favourably situated than the country mentioned, being able to allow a much wider margin. To our mind there is just one possible objection to the proposed change, and we feel it is only fair to mention this aspect of the situation. At the present time quite a number of listeners are able, by means of very selective receivers or wavetraps, to obtain satisfactory reception of interstate stations.

"In the event of a revision of wavelengths which would make the reception of interstate stations comparatively easy, we venture to think that the howling valve nuisance would be so bad that few would dare to turn on their loud speakers in the home.

"In effect, those who have spent a fair amount of money either in buying or building sensitive, selective, multi-valve receivers will find reception completely marred by a few with a single valve regenerative set continually searching for distant stations.

"Last Sunday our editor was receiving station 5CL Adelaide at good loud speaker strength while 3LO was on the air, and the transmission was enjoyed by the entire household, the loud speaker results being very good on four valves. This state of affairs, however, only lasted until 10 p.m., for as soon as 3LO shut down, heterodyning by persons

trying to tune-in 5CL became so bad that there was nothing to be done but to switch off the receiver.

"The objectionable feature is the fact that the persons who cause the trouble do not themselves obtain any enjoyment out of it, but will persist in their search for the elusive station with a perseverance worthy of a better cause."

Mr. A. T. Bartlett, editor "Queensland Radio News," offers the following opinion:—

"We in Queensland are vitally interested in any move that may be made to bring about a revision of the wavelengths of Stations 3LO, 4QG, 5CL, and 2BL.

"In the April issue of our journal we published an open letter to Mr. Malone, Chief Inspector of Wireless for the Commonwealth, on this matter, deprecating the huddling of four high-power stations in such a narrow waveband, and explaining the position in which the listening public living within 30 miles radius of 4QG found themselves.

"To this we received a very courteous reply, in which Mr. Malone inferred that the matter was then under consideration by the authorities in Melbourne.

"Two months have rolled by and still there is no sign of any official activity. The matter is one which calls for immediate attention if radio in Queensland is to receive the impetus it deserves, and this journal is eager to co-operate in any way necessary to bring about a speedy and efficient solution to this great problem."

Mr. J. C. Price, Managing Director, Wireless House Ltd., the oldest established wireless concern of Brisbane, writes:—

"I heartily concur in the agitation that is existent, and has been existent for some time, regarding the further separation of wavelengths of 3LO, 4QG, 5CL, and 2BL.

"It is my own opinion that these stations should be separated by at least 50 metres, but, in any case, not less than 35, and the wavelengths should be allotted in such a way that the stations nearest one another should have the biggest separation.

"The fact that these stations are at present so close to one another means a good deal of interference owing to the difficulty experienced in tuning-out one station and bringing in the other. Many people are causing their sets to oscillate, which would not be the case if a suitable separation existed."

A letter from Mr. L. C. Jones, Manager, Adelaide Radio Co. Ltd., reads:—

"I heartily agree that a revision is necessary

Putting
QUALITY
into
RADIO



JEFFERSON
Super - Sensitive
Amplifying
TRANSFORMERS



Fox & MacGillycuddy Limited

Daily Telegraph Buildings, Sydney;

Brisbane Agents: Wireless House, Adelaide Street, Brisbane

of the present wavelengths of 3LO, 4QG, 5CL, and 2BL. There should, however, be no difficulty in allotting these wavelengths so that none of them will exceed, say, 500 metres. As they are arranged at present it is very difficult for those listeners situated within a few miles of the above stations to pick up all interstate stations without interference. I consider it is a desirable thing that most of the stations should be kept below 600 metres, as this enables the listener to purchase an efficient receiver at a reasonable price, all of which tends to popularise radio. I have no sympathy with the idea of keeping the wavelengths below 600 metres, to enable the market to be flooded with cheap foreign sets, and have no objections to the duty on imported receivers being increased to 100 per cent. if necessary. It is absolutely essential that there should be at least one powerful station operating on a long wavelength in order to give the people outback a good daylight service.

"If one were looking for the ideal wavelengths for use in Australia without considering any other point, it would undoubtedly be for each of the 'A' stations to have two different wavelengths, a long one for use during the day, and a shorter one for the night, and there does not seem to be any technical difficulty in the way of this arrangement. If it were possible for this to be done, there is little doubt that the advantages would more than outweigh the increased cost of receivers. However, for this to operate successfully it would be necessary for these stations to be at least 25 miles outside of the capital cities."

This from Mr. A. Alexander, a well known contributor to "Wireless Weekly" and "Radio":—

"Your article, 'The Wavelength Tangle,' in the last issue of 'Wireless Weekly' will meet with the approval and support of practically everyone who finds his enjoyment from radio in listening to the broadcast programmes. I trust that eventually the administrative authorities will take some notice of the agitation and re-allocate the wavelengths of 2BL, 3LO, 4QG and 5CL. Personally, I think their wavelengths should be approximately as follows:—2BL, 353; 3LO, 280; 4QG, 410; and 5CL, 440 metres. This would allow non-skilled operators to tune-out the local stations.

"Of course, even under the existing conditions these stations can be separated, but one needs to have a fair amount of skill, which I find the average listener does not possess. There are commercial receivers which are sufficiently selective to eliminate local interference, but I found that in the back country, about 340 miles from Sydney, they were very difficult to operate, and that the non-selective type of receiver was preferred, although it did bring in



During the past few months, so many expeditions have made excursions to the North Polar Regions that one may be excused for imagining that ere long telephones will be installed there, and traffic cops will be necessary to prevent folk from getting killed in the rush.

Personally, I have always puzzled over this, and wondered what it really is that induces men to face greater discomforts and hardships than those of the war, and no small amount of dangers. Great men like Franklin, Scott, and Shackleton all laid down their lives in the snow wastes, and we are always hearing of this or that expedition, which is days or perhaps months overdue, while all the world watches and waits for news, expecting to hear that another batch of men have met death in those great unknown regions.

To-day, however, the explorers who go out upon these missions go far better equipped in every way than did those a few years back. Aeroplanes and airships, while strangely enough being, in the ordinary sense, dangerous things in which to ride, make those lonely journeys much less hazardous than the dog sleigh dash of other days. Wireless, too, plays a magnificent part in the Polar Expeditions.

With a radio equipment there is never any doubt as to the safety or otherwise of the expedition, and it is a fact that all the men who have gone out during the past few years have paid tremendous care and attention to the selection of the component parts for their wireless installation.

Everybody knows how MacMillan, using Burgess Batteries, kept up communication with all the world; and the story has been told in these columns of the special apparatus designed for Captain Wilkins by the Engineers of the Burgess Battery Company.

Now a cable has been received in Sydney from the Burgess Battery Company which reads as follows: "Byrd used Burgess."

Commander Byrd, of course, is the airman who last week flew over the North Pole, and who talks of flying over the South Pole in 1927. He also considered that Burgess Batteries were good enough for him, and they have not let him down.

About six months ago a friend of mine went down into the Burrigorang Valley on a camping trip and took along his radio set. Unfortunately his friend left the metal strap of his wrist watch right across the terminals of the 45 volt "B" battery, and it was shorted all night. Next day, much to the surprise of the party, the battery still functioned, and although that is six months back, it still reads 35 volts. It was a Burgess, too, one of the breed that went to the North Pole with all those brave men.*

BURGESS—"They're on the Leviathan"—BATTERIES

Harringtons

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New Lines Just to Hand.

- "Hercules" de Luxe Rheostats, 6 ohms
10 ohms and 30 ohms, each 7/6
- 2 ohms power rheostat, each 8/6
- 400 ohms Potentiometer, each 8/6
- "Hercules" Type H Rheostats:
6 ohms, 10 ohms, and 30 ohms, each 4/-
- 400 ohms Potentiometer, each 5/6
- "Hercules" Fixed Condensers:
.002 mfd. 2/4 each; .004 mfd., each . . 2/9
- .006 mfd. 4/6 each; .0001 mfd., each . . 1/9
- .00025 mfd. with grid leak mounting 2/6
- "Hercules" Glass Enclosed Grid Leaks:
1/2, 1, 2, 3 and 5 megohms, each 1/6

MAR-CO (Vernier) DIALS

Only a limited stock available



Marco Vernier Dial, each 16/6
Warning! (Be sure you get the genuine
Mar-co Dial)

SUPER-HETERODYNE PARTS

- "Precise" Super-Multiformer £6/6/-
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"M A R S."

The New Wonder Aerial. 50 per cent. more
Volume. 84 Strands of Interwoven, non-tar-
nishing Wire, in 100 ft. Reels 12/6

"AEROVOX" PRODUCTS.

Another new quality line of remarkable Value.

"Aerovox" Fixed Mica de Luxe Condensers
(With Binding Post Terminals)

- .002 mfd.003 mfd.0005 mfd.
- 3/- 3/6 2/6
- .0025 mfd.0001 mfd.0075 mfd.
- 3/- 2/6 6/-

Economy Grade Fixed Condensers:

- .0001 mfd. 2/-; .00025 mfd. 2/-
- .00025 with grid leak clips 2/-
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RESISTANCE-COUPLED AMPLIFICATION.

See this new line of real good products

- Aerovox Resisto-formers for Resist-
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- Wonderful Value! ——— Quality Products.
- .00035 S.L.F. Condenser 12/6
- .0005 S.L.F. Condenser 15/-



"A Pipe Organ of
Loud Speakers."

Thorola LOUD SPEAKER

£4/10/-

The greatest musical
instrument of
Radio. Pure polished
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gold Thread Band.

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- Brisbane 93 Queen Street
- Adelaide 10 Rundle Street
- Wellington, N.Z. 43 Willis St.
- Auckland, N.Z. 140 Queen St.

two stations at the same time (3LO and 4QG being the offenders, while 2BL was 'blanketed' out).

"I am sure that every Australian radio manufacturer would be delighted, notwithstanding the fact that their apparatus may now eliminate interference, if the stations 2BL, 3LO, 4QG, and 5CL were separated by a wide frequency band. Such an alteration would result in an immediate decrease in the cost of receivers, and would be in the best interests of radio broadcasting. I sincerely hope that you will continue to back up the general broadcast listening public in their agitation to have the present situation amended, and that the Administration will eventually take action in this direction."

These few letters have been selected from many that have come in, and it is noteworthy that only one expressing disagreement has been received. Our correspondent, however, resides at Bulli, and is, of course, well outside the interference area. His letter is signed "Bushie." Here it is:—

"I read your article on those wavelengths, also 'Fairplay's' letter. Well, what is to be done? Let us see what Mr. Malone says.

"On the same subject being put to him in Queensland last year he said within five years there would be stations in Rockhampton, Toowoomba and Townsville, and it would mean sharp tuning for both transmitters and receivers, and if the listener then could not tune-in other States he would have to be content with the local station.

"But what gets me is this: Why want to alter the present band? They wanted short wave. Where are you going to put them? In my opinion the trouble lies in the receivers, both gear and operator.

"I am using the dreadfully broad P.I circuit, yet I suffer no interference.

"In conclusion, I hope the P.M.G. will not make any alteration in the present waveband, when you find 20 degrees difference between stations on the condenser. I ask this question: How much further apart do you want them, when we find that any one of them can be tuned-out at 5 degrees?"

(Perhaps a brief comment upon the remarks of Mr. Benjamin would not be out of place. While respecting this gentleman's opinion, we hold the view that the howling valve menace would be considerably reduced if the re-allocation of wavelengths were put into effect. The "howling" trouble could certainly not be worse than it is at the present time—at any rate, so far as Sydney is concerned, where hundreds are engaged in a continuous pursuit of 3LO. Interference with 4QG and 5CL is not so noticeable, owing, no doubt, to the fact that their wavelengths are reasonably separated from 2BL.—Editor.)

QUERIES MET BY EVERY BEGINNER.

Sir,—Your current issue gives advice to a reader as to the method of conversion of a Tungar Rectifier for Philco "B" battery charging; and you say that by using a 16 C.P., 240 volt, carbon filament lamp, a steady current of from 200 to 300 milliamps is obtained.

Our Principals, the Philadelphia Storage Battery Co. however, are quite definite that the charging rate of this type of battery must never exceed 200 milliamps, any heavier current being certain to be detrimental to the plates.

With best wishes for the future of "Wireless Weekly." We are,

Yours faithfully,

NEW SYSTEM TELEPHONES PTY. LTD.,

Edwin Atkinson,
Publicity Manager.

CHANGES AT 2KY.

The Trades Hall broadcasting station, 2KY, has been in operation about nine months, during which time its standard and recognition have been steadily increasing under the directorship of Mr. Herbert Beaver. It has now been decided to embark on an extensive scheme of expansion.

The first step has been taken by the doubling of the power output, making it 1500 watts, and consideration is being given to provide further increased power up to 3000 watts. The station has been running now for some weeks on the 1500 watts, and most laudatory reports are coming in from all over Australia and New Zealand. Even on the old power station's American reports were numerous and satisfactory without exception. Reports on the 1500 watt reception in America are eagerly being awaited.

A very comprehensive scheme of expansion along the lines of news service, entertainment, and education has been drawn up by Mr. C. G. C. Christie, who has just been appointed Director of the station for a long term to enable him to carry out the plans drawn up by him. Mr. H. Beaver will still be associated with the station.

Every possible avenue open to wireless is to be entered and it is hoped that 2KY will become a paramount station.

Mr. Christie was educated at Melbourne and Sydney Grammar Schools, passed through the Schools of Arts, Philosophy and Law at the Sydney University, graduating LL.B. in 1920, in which year he was also admitted a solicitor of the Supreme Court of N.S.W. His age is 34 years, and he is a son of Mr. Geo. Christie, the well-known public accountant of Sydney.



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PHILIPS

ON THE AIR

FOOTBALL BY BROADCAST.

On Saturday, 12th June, for the first time in the State, the Australian game of Football will be broadcast by 2FC, from the Erskineville Oval. Description will be given by an official of the Australian Football League. He will completely describe the Match, New South Wales v. Victoria. Racing Information will be given from Randwick, and in the evening, by arrangement with Messrs. Chappell & Co. Limited, the Chappell popular Con-



Harry Thomas, whose elocutionary items from 2FC are very much appreciated by listeners-in.

cert will be broadcast from the N.S.W. Conservatorium Hall. Artists will include Mr. Arthur Jordan, the well-known English Tenor, Miss Jill Manners, Soprano, Mr. Russell Rix, Basso, Miss Heather Kinniard, Contralto, Harry Thomas, Elocutionist, Mr. E. Moore McMahon, Violinist, and Mr. Vern Barnett, accompanist.

"ROSE MARIE."

On Friday, 11th June, from Her Majesty's Theatre, by arrangement with Messrs. J. C. Williamson Limited, 2FC will broadcast for the first time in Australia, the first Act of the Musical Comedy, "Rose Marie." This Act will take from 9 till 9.45 p.m., and will include the remarkable Totem Dance Music. For the latter part of the programme, 2FC Dance Band and Mr. Lawrence Halbert, Baritone, will appear. In the Children's Session, Madame Ada Baker's Juvenile pupils will

be heard, and Mr. J. G. Wiburd, Superintendent of the Jenolan Caves will talk at 7.45, on Cave and Lime Stone formation. He is one of the greatest authorities on this subject.

SALVATION ARMY SERVICE.

On Sunday, 13th June, from the Hippodrome, 2FC will broadcast for the first time, a Salvation Army Service. Commissioner Whatmore will Speak. In the afternoon the first Winter Band Concert, by the Metropolitan Band, will broadcast from the Sydney Town Hall. In the evening, the Rev. W. P. Nicholson, who is conducting mission Meetings throughout the world, will take the service at St. Barnabas' Church, George Street, Sydney. At the conclusion of the service, the Leichhardt Band Concert will be transmitted from the Strand Theatre, Leichhardt. At 6.15 till 7 o'clock, two popular London Broadcast Artists will give a recital at the Studio. Their first appearance in Australia. These artists are Madame Phyllis Howe, Soprano, and Mr. William Howe, Pianist.

BAPTIST CHURCH.

Sunday, June 13, will find Station 2BL broadcasting the Baptist Church, Petersham, in the morning. In the afternoon Mr. "Cairo" Bradley's Bible Class, appreciation of which is extending in every direction, and in the evening St. Barnabas' Presbyterian Church, Ashfield. This will be the first sermon of the Rev. W. P. Nicholson, the distinguished cleric



Miss Daisy Richards, a distinguished violinist, who frequently broadcasts from 2BL.

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who is visiting Australia in the course of a world tour. At 8.30 the Manly Band will be broadcast from the Bialto Theatre, Manly, and the remainder of the programme will be taken up by 'cello solos played by Mr. Bryce Carter, and a vocal offering by Mr. Robert Harper, Sydney's brilliant tenor.

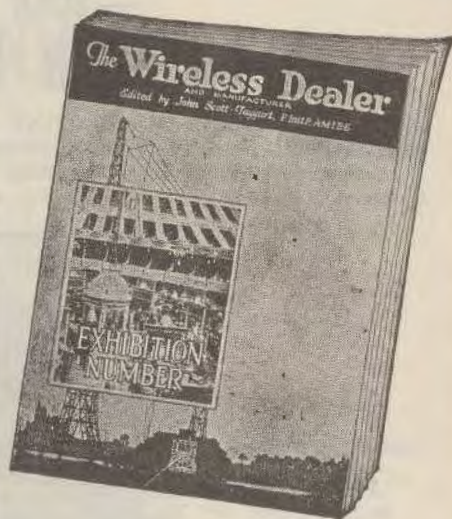
NEWTOWN BAND.

On Monday, June 14, during the afternoon session, the Tea Room Trio playing at David Jones' in George Street will broadcast twice, and Mr. Prentice will continue his talks on "A Course in Philosophic Thought." During the evening programme the Newtown Band will be heard in specially selected numbers. Miss Thelma Houston, contralto, will sing, and a lecture will be delivered by Mr. D. Raymond on "Ancient Coin Finds and Their History." The Ambassadors' Dance Band, under the direction of Mr. A. Hammett, will also be broadcast, and during the



Miss Lila Royne and Mr. Arthur Powell, the English Harmony Duo, whose songs from 2FC are a feature of the programme.

intervals between the dances there will be social notes and a description of the frocks by Mrs. Potts. Mr. C. F. Laseron, who has recently been very much in the public eye in connection with his magnificent donation of art pottery to the proposed National Technological Museum, will deliver the first of a series of talks on the "Art of the Old Chinese Pottery." As Mr. Laseron is not only one of the foremost authorities in Australia, but will also be dealing with actual objects from his own collection, the lecture promises to be intensely interesting. A. Hammett's Dance Band, playing from the Ambassadors', will provide a special dance programme from 10.30 until midnight.



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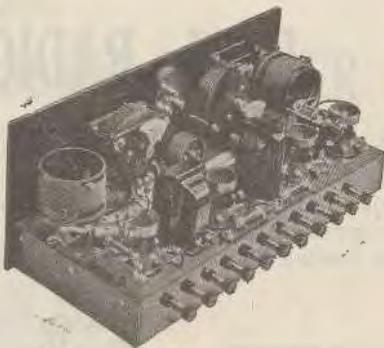
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DAVID JONES'

AMBASSADORS' QUARTET.

On Tuesday afternoon, Hillier's Orchestra, playing from Hillier's Cafe in George Street, will be broadcast, and during the evening session the Ambassadors' Salon Quartet, under the direction of Mr. Claude McGlynn, will provide chamber and operatic selections. An eye talk by the President of the Institute of Optometrists will also be delivered, and Mr. C. G. Barnes will present the fifth of his series



Tod Collins, whose services have been acquired by 3LO for broadcast for the forthcoming football season.

of Real Ghost Stories. Mr. Norman Janson and Miss Gladys Evans will be heard in duet and solo numbers, and as both of these are favourite artists a particularly pleasing offering is anticipated. Miss May Nancarrow, elocutionist, will also figure on the programme, and Mr. Crosby Browne will play clarinet solos. Miss Daisy Richards, the distinguished violinist, will play solo numbers, and Broadcasters' Trio will complete a particularly pleasing and acceptable programme.

TURBULENT CANTON.

On Wednesday, June 16, from the basement of the Town Hall, the United Intercessory Service will be broadcast, together with an address by the Rev. W. P. Nicholson. Hillier's Orchestra will also be transmitted at intervals during the afternoon. For the evening programme the artists engaged include the Sydney Orpheus Society, under the direction of Mr. Penmann, in choral numbers, and the City of Sydney Band in selected items from their repertoire. The lecturer for the evening will be Dr. Donald Luker, dealing with "Canton—the Turbulent." Dr. Luker has delighted the listeners-in with his brilliant series of talks on the East, and there are many of

the listeners-in who will regret the conclusion of the series. During the same evening the usual Foreign Affairs Talk by Mr. J. M. Prentice will be broadcast, and telephone questions will be put on the air and answered simultaneously. Recent prognostications by Mr. Prentice have been fulfilled in a quite surprising way, and more and more of the thinking portion of the community are interested in these illuminative talks.

SAXOPHONE SOLOS.

On Thursday, June 17, during the afternoon session from Station 2BL, David Jones' Tea Room Trio will entertain, and during the evening session, commencing at 8 o'clock, Hoyt's Imperial Orchestra, playing from Hoyt's Theatre de Luxe, will also be broadcast. The lecturers for the evening will be Mr. Fraser Anderson on "Astrological Aids to Character," and Mr. Frank Marshall, B.Sc., who starts a new series of talks on "X-Radiation and the Treatment of Cancer." Mr. Marshall is regarded as possessing one of the finest radio speaking voices at present being broadcast, and in addition to handling a technical subject in a manner which is intelligible to all classes of listeners-in, delights everyone with his beautifully modulated voice. Miss Leonore Gatsch, the distinguished soprano, will be heard in selected items from her repertoire. It will be remembered that Miss Gatsch was trained in Europe, and possesses a European reputation. A characteristic of this lady's singing is the fact that she is able to present numbers in various European languages that relatively few artists are able to satisfactorily broadcast. Mr. J. C. Little, a new artist, will present saxophone solos, and will probably be able to cause

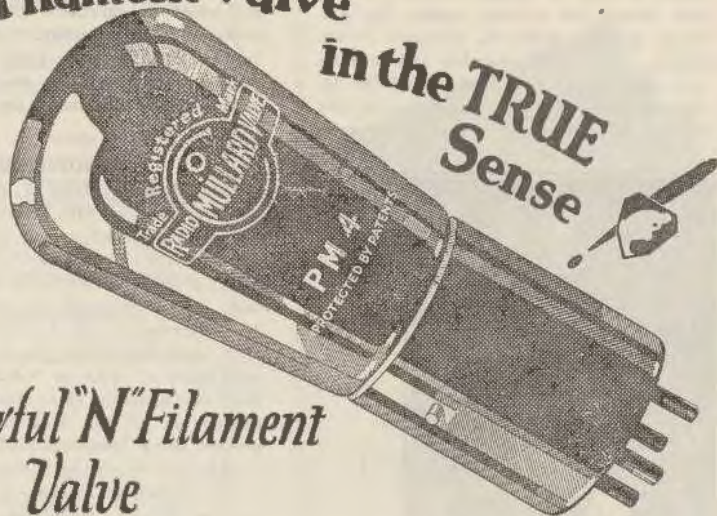


Keith Desmond, a popular and well-known monologist, who is broadcasting from 3LO, Melbourne.

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those members of the community who are inclined to fear this instrument to regard it as being thoroughly musical in the hands of a capable performer. Al Hammett's Dance Orchestra will perform from 10.30 until midnight, providing a special dance programme.

SPORTING PROGRAMME.

On Saturday, June 19, Station 2BL will specialise during the afternoon in the transmission of a sporting programme, and at night the Enmore Picture Theatre Orchestra will be broadcast. This is one of the many orchestras that 2BL are able to transmit with great success. Brings, the authority on the Australian Aborigines, will be heard during the evening, and the first of a series of Forestry Talks, entitled "Natural Distribution of Free Life in Australia," will be presented by Mr. D. G. Stead. Miss Grace Saville, contralto, will be heard in songs, and Mr. Fred R. Gooch, the versatile entertainer, will be heard in humorous numbers at the piano. In addition to being an artist of particular ability, Mr. Gooch is also the composer of most of his own offerings, and these are invariably well received. The Abad Duo bring hints and suggestions of Hawaii and the Pacific Islands by means of their steel guitars, and Miss Marjorie Skill, soprano, will sing solos. The Ambassadors' Dance Orchestra, under the direction of Mr. Al Hammett, are providing a special dance programme.

3LO Notes

SATURDAY MORNING CONCERTS.

The institution of Saturday morning sessions by 3LO Melbourne was primarily intended as a convenience to radio dealers, who were thus able to demonstrate sets to week-end customers. Now these programmes are just as elaborate as the afternoon or evening sessions, and providing just as enjoyable entertainment. The programme for Saturday, June 12, is a typical example. In addition to the news services there are items by the popular Four Sheiks, a quartette which has been most successful on the Tivoli circuit of theatres. Mr. Harold Rodgers provides one of his splendid organ recitals, and the well-selected Sonora items are alone well worthy of interest.

PICKING THE PERFECT PROGRAMME— LISTENERS-IN SUPPLY HUNDREDS OF ATTEMPTS.

So far over 1500 listeners-in from all over Australia have attempted the difficult task of selecting a perfect broadcasting programme, and such is the interest in the competition conducted by 3LO Melbourne and the Melbourne "Sun Pictorial" that the closing date was extended from May 29 to May

31. On June 14 3LO will begin broadcasting the six programmes to be chosen from the entries, and after the final programme is broadcasted on June 19 listeners-in will be asked to vote for the one they liked best. The competitor whose programme receives the largest number of votes will be awarded £50, the second £25, and the third £10, with consolation prizes of £5 for the remaining programmes broadcasted. Competitors select items only, as 3LO reserves the right of selection of artists. So far entries have been received from places so far distant as Perth, Kalgoorlie, Queensland, and Northern New South Wales. The amount of concentration, originality, and variety required for one programme should inspire in listeners-in a certain amount of respect and sympathy for the frequently abused selectors of regular studio programmes.

BACK TO BALLARAT.

Whenever Ballarat is mentioned, listeners-in are filled with happy expectation, as the programmes from the country centre have always been most enjoyable. Now 3LO Melbourne is again to occupy the trunk lines with the transmission of Ballarat's entertainments, a community singing and glee party concert being scheduled for Friday, June 11, at 8.30 p.m. The programme is not confined to community singing, the concert opening with an orchestral selection, and including items by brass band quartettes, cornet solos, and many vocal solos. His Worship the Mayor of Ballarat, Cr. A. E. Nicholson, will give a short address on "Ballarat—where is it?" in which he will take the opportunity of pointing out the outstanding features of his progressive city.

SEEING VICTORIA FIRST.

Behind the desk of the studio manager of 3LO there will soon be a large man of Victoria studded with small flags. In fact, these flags will just about obliterate the outlines of the map. It will represent the travels of Mr. Bearup to various country towns in order to arrange for the broadcasting of the country concerts which have been such a popular feature in 3LO's programmes. Usually each concert necessitates two or three trips to the one town. First of all, preliminary arrangements and tests have to be made, and Mr. Bearup usually attends at the concert itself to supervise the long transmission to the city studio. Considering the casual habits of country trains, and the prevailing chilly weather, the job is anything but a secure. But Mr. Bearup is hardy.

BROADCASTING FROM SCHOOL.

With the growth of wireless, broadcasting has been conducted from many queer places. 3LO, Melbourne, has sent messages from cathedral towers, the bottom of the river, from stadiums, football grounds, shows, streets, and trains. It is



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claimed that the first transmission from a public school was carried out by 3LO on Empire Day, when the Children's Celebrations at the Footscray State School were included in the programmes. The enthusiasm of the children almost resulted in the failure of the proceedings, as there were too many willing helpers when the apparatus arrived in a taxi. Dozens of eager boys swept down on the Studio representatives, and proceeded to assist in the transport of the apparatus. The possession of various pieces was disputed, and timely intervention saved bits from ruin. The proud helpers rushed in different directions with their burdens, and it was assembled in the right position in time for the ceremony. All the open air speeches and addresses were transmitted perfectly, and the singing of the school children was also a great success. Bugle calls and items by the school bugle band gave a touch of variety to the proceedings.

THE LIFE OF THE PARTY.

The habit of ruminating on how much luckier our juniors are than ourselves is well developed in everybody, but there is certainly one joy available to the children of to-day which did not present itself in our youth. 3LO's parties for children are eagerly awaited by the younger members of every family that possesses a wireless set, and the fact that 4,000 arrived at the children's party at the Wireless Exhibition, at Wirth's Olympia, is sufficient indication of their popularity. The huge crowd seemed to completely fill the big building, and Billy Bunny and Mary Gumleaf experienced the same injury as befell the Prince of Wales on his Australasian tour—they got the cramp from shaking hands so much. In their eagerness to meet their popular entertainers, the children swarmed the 3LO miniature studio with unfortunate results to some of the fittings, and both the favourites were for a time in danger of being swept off their feet. However, they managed to meet almost every child who attended.

HILLIER'S ORCHESTRA.

On Friday, June 18, Hillier's Orchestra will be broadcast during the afternoon, and Mr. J. M. Prentice will continue his series of talks on Studies in English Poetry. During the evening session a special concert will be broadcast from the King's Hall, and from 10 o'clock until midnight a dance programme provided by Cec Morrison and his Gloomchasers.

Photos of the Amateur Exhibits at the recent Radio Exhibition can be obtained on application to "Wireless Weekly," price 3/6, mounted.

A WIRELESS PERSONALITY.

Mr. G. Harry Brown, Manager of the Wireless Department of Electricity Meter Manufacturing Company Limited, the big Sydney concern which manufactures Emmeo radio products, is a familiar figure in wireless circles in this city, and is well known to many who were associated with commercial wireless in the early days.

Born at Middleton, Northamptonshire, in 1890, and educated at Worksop College, Nottinghamshire, he came to Australia and joined the Commonwealth



Wireless Service (then under the control of the late Mr. Balsillie) as assistant engineer at Penant Hills Wireless Station in 1912. Major C. W. C. Marr, Secretary to the Federal Cabinet, was at that time chief engineer at Penant Hills. Mr. Brown was present at the first daytime test from VIS to New Zealand, which really marked the establishment on a working basis of commercial wireless stations in Australia. At the test was also present Mr. Hirsch, representative of the German Telefunken Company, who erected the station. After eight months at Penant Hills, Mr. Brown was transferred to the newly-erected station at Thursday Island, where trouble was being experienced with the Gardner engines. All traffic for Papua in those days passed through Thursday Island. Four and a half years later Mr. Brown was transferred as engineer to Townsville Radio, where he remained for three years, after which he was transferred back to Sydney Radio.

In 1924 he severed connection with the Coastal Radio and joined the staff of Electricity Manufacturing Company Ltd., and in his capacity as Manager of the Wireless Department has contributed in no small measure to the efficiency of the Emmeo products.



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No. 6A each 3/6

1½ volts. Supreme in quality and service for all Standard Dry Cell Requirements.

Cat. No.	Gtd. Shelf Life.	Diameter	Height	Weight
6A	12 Mos.	2½ in.	6½ in.	2 lbs.



No. 15-90 each 13/6

22½ volts. Five positive brass screw terminals arranged to give 16½, 18, 19½, 21 and 22½ volts from the negative. This battery is specially designed for use with soft detector tubes.

Cat. No.	List Price Each	Gtd. Shelf Life	Length, Width, Height	Weight
15-90	13/6	9 months	6¾ x 4¾/16 x 3¼	5 lbs.



No. 30-05 each 26/-

45 volts. 30 cells. Standard square type. Gives most economical service on 3 and 4 tube sets. Six positive brass screw terminals give 16½, 18, 19½, 22½, and 45 volts from the negative. Designed for sets using 45 or 90 volts. Taps make it suitable for use with soft detector tubes.

Cat. No.	List Price Each	Gtd. Shelf Life	Length, Width, Height	Weight
30-05	26/-	9 Months.	6¾ x 8 x 3	9½ lbs.

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A NEW DEVICE.

The Dulce-Tone, quite new on this market, is a device with which it is claimed it is possible to dispense with a loud speaker. Attached to a gramophone, it gives fine and clear reproduction of music and speech, and has been developed after 25 years' research and experiment. A feature of the Dulce-Tone is that it is not necessary to remove any part of the gramophone in order to use it.



RADIOTRON—UX.120.

This is a new dry cell Radiotron designed for exclusive use in the last stage of audio amplification. This valve is designed to have greater loud speaker volume and clarity without distortion. In appearance and overall dimensions it is very similar to the UV and UX.199, except that it is fitted with the UX base. Unlike the UX.201A it will not fit into a UV socket, being designed for the UX socket only. For sets already fitted with UV.199 sockets there is a special adaptor called the UR.556, which permits the use of this valve without any alterations to existing circuits.

The characteristics are as follow:—Filament battery voltage, 4.5; filament terminal voltage, 3; fila-



ment consumption, .125 amps.; B battery volts, 135; C battery volts, 22.5; plate current milliamps, 6.5; output resistance, 6600 ohms.

FRENCH WIRELESS FROM WITHIN.

The French postal administration, it appears, is the butt of some unpleasant allegations which are being made by the "Echo de Paris." This journal complains that the postal authorities have secretly devoted large sums of money for wireless construction without the consent of Parliament.

"The French nation," says the "Echo de Paris," "has been presented with a chain of wireless stations that are the laughing stock of wireless enthusiasts and a discredit to French science and industry."

Some interesting details may come to light when the question is referred to the Government.



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Low Loss Vernier, .0005	23/6
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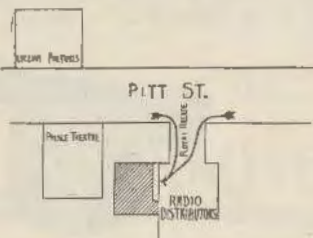
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BROADCASTING INFLATES ENTERTAINING EGO.

"Human nature is the same the world over, except in broadcasting stations, where it's more so," says Anne Tenna, the radio flapper of KFI, who at times acts as unofficial spokesman for the Los Angeles station.

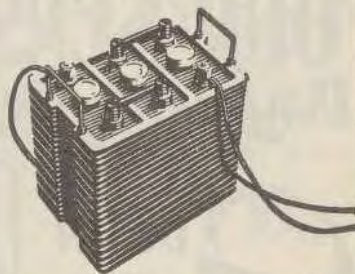
"The term 'a balloon tire' describes some entertainers," she continues, "giving, as it does, the idea of being heavily inflated without very much reason to be so. The stage and motion picture temperament pales into insignificance beside the real radio temperament, which at one time or another attacks everyone connected with a broadcasting station except the janitor, whose hours are such that there is no one around to play straight for him. Put a person behind the footlights or in front of a camera and it will be some months before his ego blossoms. Put the village barber before the microphone to talk on 'Hair I Have Cut,' and he immediately opens a cut-flower shop—with himself as the sole customer. If a fan thrilled with the cosmic urge drops an applause card to the effect that he heard 'Ireland Must be Heaven, at 8.45 Salt Lake time, on a Blotz two-tube Complex,' the recipient of the card has to be tied to keep him from bursting a blood vessel on all the remaining Irish songs in the world.

"Hardened actors, musicians and authors, eternal sniffers at the folly of fan mail, talk once over the air and buy a new scrap book. Many people do not hesitate to try to fool such innocent broadcasters as KFI by having all friends mail in form letters of glowing praise, or call the studio by phone to insist upon Minnie McSnort singing that dear old song, 'The Robin's Return,' before she leaves the studio, and when will the dear child sing again!

"Since watching the effect of broadcasting on a number of my friends," Miss Tenna concludes, "I wouldn't guarantee anyone's character, not even a deaf and dumb hermit unless I had seen him open one fan letter. If he didn't read it nonchalantly, pass it idly to a bystander, modestly laughing it off with an 'Can you imagine me being pleased with a letter' attitude, I would suggest a monument for him.

SHORT WAVES FOR INDIAN AMATEURS.

Seventy-nine private individuals at present hold transmitting licenses in India, according to a statement made in the Legislative Assembly at Delhi by Sir B. N. Mitra. Eight of these licenses entitle the holders to transmit musical programmes. Holders of non-commercial licenses are now allowed to transmit on 45 metres and below.



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The shell looked all right; big, brown, inviting. In fact, you picked it out on size. It *looked* good. But when you cracked it—nothing.

There are batteries like that. To look at 'em, you'd think they housed a power station. But give them a clock-and-ammeter discharge test. That is—crack them . . . nothing.

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Do you realize that for **£4** down and **£1** a week we will deliver to your home a Super Cabinet Tonophone a Valve Wireless Set, a Pathé Home Cinema and one of Heiron & Smith's Lift-on Billiard Tables!



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Noted for its remarkable reproduction, its tonal value and exclusive Non-Scratch features. A gem of workmanship in a handsome highly polished cabinet. **£1** down secures immediate delivery balance 5/- weekly.



OFFER NO. 2 VALVE WIRELESS

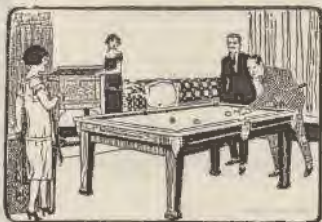
SET on an exclusive unit system. This set is built in a handsome foundation cabinet and has a valve set with headphones and a loud speaker permanently built in. Applicable to all classes of reception. Extra valves can be added to a full strength 4 valve set without reconstruction.

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OFFER NO. 3

Pathé Home Cinema at **£18-18-0** or a Perfect Pathé Cinema Camera at **£12-12-0**, enabling you to photograph your friends in living pictures that become permanent records. Show these with a programme of Pathé Educational, Dramatic and Comic films in your own home. Thousands of films to select from which can be screened up to **8 1/2** feet. **£1** down secures immediate delivery balance 5/- weekly.



OFFER NO. 4

Heiron & Smith's Lift-on Billiard Table. Complete for the game of Billiards with cues, balls and masting board. **£1** down secures immediate delivery balance 5/- weekly.

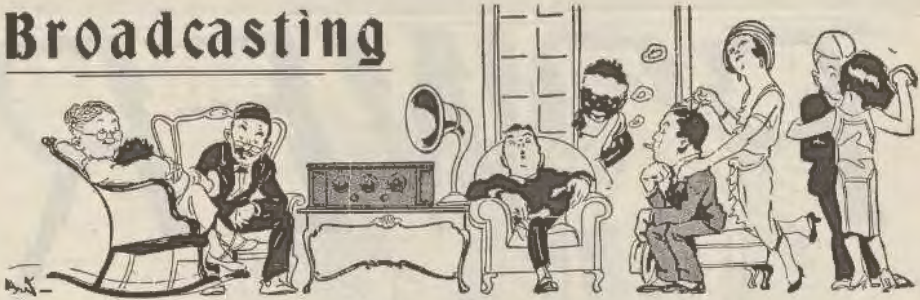
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Power: 5 Kilowatts.

FRIDAY, JUNE 11.

Morning Session.

- 10.—The Chimes of 2FC and Announcements—Time Signals.
- 10.15.—Weather Information, Commercial News, Shipping Intelligence, Market and News Session.
- 11.—Cables.
- 11.5.—Cricket Talk.
- 11.15.—Musical Items. Cooking Talk and Recipes by Miss Ruth Furst.
- 11.30.—Close down.

Midday Session.

- 12.30.—The Chimes of 2FC and Announcements.
- 12.35.—Morning Call Stock Exchange.
- 12.40.—Musical Items from the Studio.
- 1.—Time Signals.
- 1.1.—"Evening News" News Service, Weather Information, Commercial News, Musical Items.
- 1.30.—Noon Call Stock Exchange, Musical Items.
- 2.—Close down.

Afternoon Session.

- 3.—The Chimes of 2FC and Announcements—Time Signals.
- 3.5.—A Recital, by the pupils of Signor Poastri.
- 3.30.—From the Tea Rooms, Oak Hall Trio.
- 3.50.—Miss Avice Garth, mezzo, "Orpheus with His Lute" (Sullivan).
- 3.45.—Oak Hall Trio.
- 3.55.—Musical Items from the Studio.
- 4.—From the Tea Rooms, Miss Eileen Crowley, soprano.
- 4.24.—Oak Hall Trio.
- 4.15.—Musical Items from the Studio.
- 4.30.—From the Tea Rooms, Miss Avice Garth, mezzo, "Break O' Day" (Sanderson).
- 3.24.—Oak Hall Trio.
- 4.35.—Musical Items from the Studio.
- 4.40.—From the Tea Rooms, Miss Eileen Crowley, soprano.
- 4.44.—From the Studio—Afternoon Call Stock Exchange.
- 4.45.—Close down.

Early Evening Session.

- 6.—The Chimes of 2FC and Announcements.
- 6.5.—The "Hello Man" talks to the Children.
- 6.45.—Broadcast from the Hotel Australia—Orchestral Items.
- 7.15.—"Evening News" News Service, and Sporting Information.
- 7.30.—Balgate's Market Reports (wool, wheat, stock), fruit and vegetable markets.
- 7.45.—A Talk by Mr. J. C. Whbird—"Superintendent of Jenolan Caves"—"Lime Stone Formation."

Night Session.

- 7.55.—The Chimes of 2FC and Announcements.
- 8.—Broadcast from Her Majesty's Theatre (by permission of J. C. Williamson Ltd. and the artists) the 1st Act of the new musical Comedy "Rose Marie." The company will

- be headed by Miss Harriet Beuret and Mr. Frederick Beutley, as Hard-boiled Herman.
- 9.30.—From the Studio—Talk on the First Test Match.
- 9.45.—Miss Barbara Briscoe, contralto.
- 9.53.—Mayo Hunter—Steel Guitar solos.
- 10.—2FC Dance Band.
- 10.12.—Miss Barbara Briscoe—contralto.
- 10.20.—2FC Dance Band.
- 10.33.—Mayo Hunter—Steel Guitar Items.
- 10.45.—2FC Dance Band.
- 11.—National Anthem—Close down.

SATURDAY, JUNE 12.

Morning Session.

- 8.—The Chimes of 2FC and Announcements. Time Signals. Cricket Session—stumps drawn, Australia v. Durham, played at Sunderland. These scores will be repeated at 9 and 10 a.m.
- 10.—Time Signals.
- 10.10.—Weather Information, Commercial News, Shipping Intelligence, Market and News Session.
- 11.—Cables.
- 11.5.—Details of the Cricket Scores.
- 11.30.—Close down.

Midday Session.

- 12.55.—The Chimes of 2FC and Announcements.
- 1.—Time Signals. "Evening News" News Service, Weather Information, Commercial News, Musical Items. Close down.

Afternoon Session.

- 3.—The Chimes of 2FC. During the interval between racing results, musical items will be given from the Studio.
- 4.30.—Complete resume of the afternoon's sporting events. Broadcast from the Erakineville Oval, and described for the first time, the Interstate Australian Rules Football Match, N.S.W. v. Victoria.
- 4.35.—Musical Items.
- 5.—Close down.

Early Evening Session.

- 6.—The Chimes of 2FC and Announcements.
- 6.5.—The "Hello Man" talks to the Children.
- 6.45.—Broadcast from the Hotel Australia, Musical Items.
- 7.15.—"Evening News" news service, and sporting Information.
- 7.40.—Mr. H. K. Palmer, late secretary of the Essex County Cricket Club, will give a brief forecast of the first Test Match. Close down.

Night Session.

- 7.55.—The Chimes of 2FC and Announcements.
- 8.—Broadcast from the N.S.W. Conservatorium Hall, the first Chappell Popular Ballad Concert to be broadcast, by special arrangement with Messrs. Chappell and Co. Ltd. The following artists will appear—Mr.

- Arthur Jordan, tenor; Miss Jill Manners, soprano; Miss Heather Kinnaird, contralto; Mr. Moore-McMalmon, violinist; Mr. Russell Rix, baritone; Mr. Harry Thomas, elocutionist; Mr. G. Vern Barnett, at the piano. Note.—During the interval and at the conclusion of the concert, approx. at 10.15 p.m., items will be taken from the Wentworth Cafe Dance Orchestras.
- 11.—National Anthem. Close down.

SUNDAY, JUNE 13.

Morning Session.

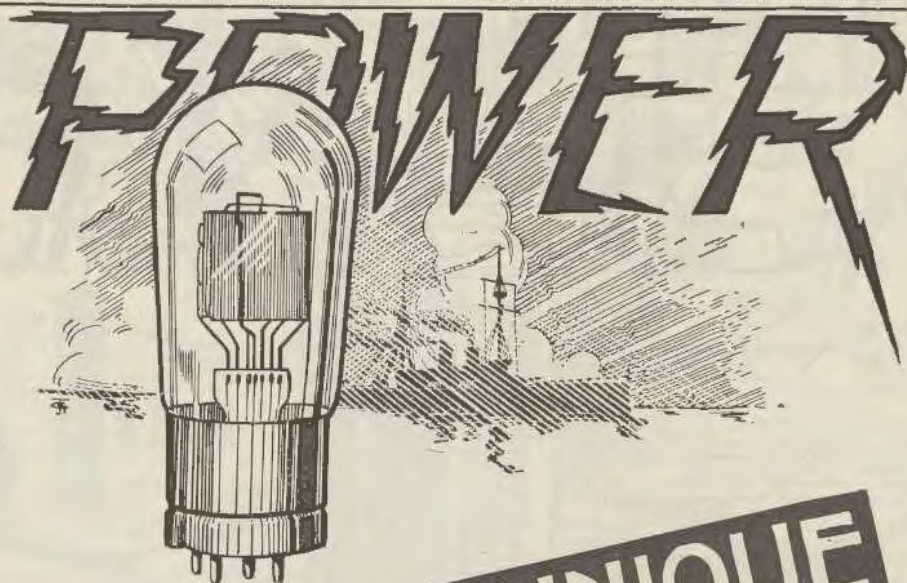
- 7.—The Chimes of 2FC. Scores of the first Test Match will be repeated with fuller details at 8 a.m., 9 a.m., and 10 a.m.
- 10.55.—The Chimes of 2FC and Announcements.
- 11.—Broadcast from the Hippodrome, Sydney, and transmitted for the first time, a special Salvation Army Service conducted by Commissioner Whatmore.
- 12.15.—From the Studio—News Session.
- 12.30.—Close down.

Afternoon Session.

- 2.55.—The Chimes of 2FC and Announcements.
- 3.—Broadcast from the Sydney Town Hall, the first of the Winter Sunday Afternoon Band Concerts by the Metropolitan Band, conducted by Mr. John Palmer. Ceremonial march, Entry of the Gladiators (Facis), Metropolitan Band; song, Friend (Davis), Mr. Alex Whitson; cornet solo, Australia (Lithgow), Mr. L. Martin; soprano solo, Recit. and Aria (Mirella), (Gounod), Miss Elsie Peerless; overture, Poet and Peasant (Suppe), Metropolitan Band; violin solo, Hullozino (Haydn), Miss Joyce Collins. Part Two: Grand selection, Beauties of Wagner (arr. Newton), Metropolitan Band; baritone solo, Young Tom o' Devon (Russell), Mr. Alex Whitson; violin solo, Romance (Svedsen), Miss Joyce Collins; national fantasia, Recollections of Scotland (Godfrey), Metropolitan Band; soprano solo, Air and Variations (Prock), Miss Elsie Peerless; quickstep, Queen of the West (Kandt), Metropolitan Band.
- 5.—National Anthem. Close down.

Evening Session.

- 6.25.—The Chimes of 2FC and Announcements.
- 6.30.—From the Studio, and heard for the first time in Australia: Two English broadcasting artists, Madame Phyllis Howe, English soprano, and Mr. William Howe, pianist, who will present a joint Vocal and Piano Recital.
- 7.—Broadcast from St. Barnabas' Church, George Street West, the first trans-



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mission from the church of the evening service, conducted by the well-known Evangelist, Rev. W. P. Nicholson, who arrives in Sydney this day.

8.30—Broadcast from the New Strand Theatre, Leichhardt (by courtesy of Messrs. Madella Ltd.), items by the Leichhardt District Band, under the baton of Mr. E. P. Kerry.

10—National Anthem. Close down.

MONDAY, JUNE 14.

Morning Session.

10—The Chimes of 2FC and Announcements—Time Signals.

10.10—Weather Information, Commercial News, Shipping Intelligence, Market and News Session.

11—Cables.

11.5—Details of Cricket Scores.

11.15—Musical Items.

11.30—Close down.

Midday Session.

12.38—The Chimes of 2FC and Announcements.

12.35—Morning Call Stock Exchange.

12.40—Musical Items from the Studio.

1—Time Signals.

1.5—"Evening News" News Service, Weather Information, Commercial News, Musical Items.

1.30—Noon Call Stock Exchange. Musical Items.

2—Close Down.

Afternoon Session.

3—The Chimes of 2FC and Announcements. A Recital by the Pupils of Mr. Christian Helleman.

3.40—From the Tea Rooms: Miss Gwladys Eimister, soprano.

3.45—Oak Hall Trio.

4—Miss Aviee Garth, contralto.

4.5—Oak Hall Trio.

4.15—Music from the Studio.

4.20—From the Tea Rooms: Miss Gwladys Eimister, soprano.

4.25—Oak Hall Trio.

4.35—Musical Items from the Studio.

4.40—Miss Aviee Garth, contralto.

4.44—Afternoon Call Stock Exchange.

4.45—Close down.

Early Evening Session.

6—The Chimes of 2FC and Announcements.

6.5—The "Hello Man" talks to the children.

6.45—Broadcast from the Hotel Australia: Orchestral Items.

7.15—"Evening News" News Service and Sporting Information.

7.30—Dalgety's Market Reports (wool, wheat, stock), Fruit and Vegetable Markets. Close down.

Night Session.

7.55—The Chimes of 2FC.

8—Broadcast from the Haymarket Theatre, Sydney: Operatic Orchestra, under the baton of Mr. Stanley Porter.

8.30—From the Studio: The Alwyns Harmony Duo, Act 1—Duet, Rose of My Heart (Lohr); solo, Marcheta (Schertzing); solo, Dirty Hands—Dirty Face (Monaco); duet, Ten Little Fingers (Schuster).

8.45—Mr. Cyril Arundale, English entertainer from ELO London, makes his first appearance in Australia.

9—Broadcast from the Haymarket Theatre, Sydney: Vocal Act.

9.30—Broadcast from the Baptist School Hall: Items by the Sydney Harmonic Society's Choir, under the conductorship of Mr. W. Bourne.

10—Broadcast from the Haymarket Theatre: Orchestral Items.

10.15—From the Studio: 2FC Dance Band.

10.30—Announcements.

10.33—2FC Dance Band.

11—National Anthem. Close down.

TUESDAY, JUNE 15.

Morning Session.

7—The Chimes of 2FC and Announcements. Stumps drawn, First Test Match. Scores to be repeated at 8 a.m., 9 a.m., and 10 a.m.

10—The Chimes of 2FC.

10.10—Weather Information, Commercial News, Shipping Intelligence, Market and News Session.

11—Cables.

11.5—Details of Cricket Scores.

11.15—Cooking Talk and Recipes by Miss Ruth Furst.

11.30—Close down.

Midday Session.

12.30—The Chimes of 2FC and Announcements.

12.35—Morning Call Stock Exchange.

12.40—Musical Items from the Studio.

1—Time Signals.

1.5—"Evening News" News Service, Weather Information, Commercial News, Musical Items.

1.30—Noon Call Stock Exchange. Musical Items.

2—Close down.

Afternoon Session.

3—The Chimes of 2FC and Announcements. A Piano Recital by Students of Mr. St. Quinton Downer.

3.40—From the Tea Rooms: Miss Joan Shorter, soprano.

3.45—Oak Hall Trio.

3.55—Musical Items from the Studio.

4—Miss Muriel Humphries, contralto.

4.5—Oak Hall Trio.

4.15—Music from the Studio.

4.20—From the Tea Rooms: Miss Joan Shorter, soprano.

4.25—Oak Hall Trio.

4.35—Musical Items from the Studio.

4.40—Miss Muriel Humphries, contralto.

4.44—Afternoon Call Stock Exchange.

4.45—Close down.

Early Evening Session.

6—The Chimes of 2FC and Announcements.

6.5—The "Hello Man" talks to the children.

6.45—Broadcast from the Hotel Australia: Orchestral Items.

7.15—"Evening News" News Service and Sporting Information.

7.30—Dalgety's Market Reports (wool, wheat, stock), Fruit and Vegetable Markets. Close down.

Night Session.

7.55—The Chimes of 2FC and Announcements.

8—Broadcast from the Darlington Town Hall: Items by the Metropolitan Band under the conductorship of Mr. John Palmer. (a) March, New Colonial (Hall), (b) overture, Symphonica (Boot), (c) two-step, Forever and Forever (Lincoln).

8.20—From the Studio: Vocal Quartettes.

8.30—Mr. Lionel Lawson, violin solos.

8.38—From the Darlington Town Hall: Metropolitan Band. (a) Cornet solo, In the Garden of Tomorrow (Finlay), (b) selection, The Mikado (Sullivan).

9—From the Studio: Tilton and West, The Joy Boys.

9.12—Mr. Lionel Lawson, violin solos.

9.20—Bass solo.

9.28—Mayo Hunter in steel guitar items.

9.36—From the Darlington Town Hall: Metropolitan Band. (a) Jazz waltz, Dreamy Carolina Moon (Schmidt); (b) Fox trot, Cecilia (Dreyer); (c) Death or Glory (Hall).

9.50—Vocal Quartettes.

10—Tilton and West.

10.8—Soprano solos.

10.10—Mayo Hunter and his steel guitar.

10.25—Wentworth Cafe Dance Orchestra.

11—National Anthem. Close down.

WEDNESDAY, JUNE 16.

Morning Session.

8—The Chimes of 2FC and Announcements. Stumps drawn, first Test Match. Scores to be repeated at 8 a.m., 9 a.m., and 10 a.m.

10—The Chimes of 2FC and Announcements.

10.10—Weather Information, Commercial News, Shipping Intelligence, Market and News Session.

11—Cables.

11.5—Details of Cricket Scores.

11.15—Cooking Talk and Recipes by Miss Ruth Furst.

11.30—Close down.

Midday Session.

12.30—The Chimes of 2FC and Announcements.

12.35—Morning Call Stock Exchange.

12.40—Musical Items from the Studio.

1—Time Signals.

1.5—"Evening News" News Service, Weather Information, Commercial News, Musical Items.

1.30—Noon Call Stock Exchange. Musical Items.

2—Close down.

Afternoon Session.

3—The Chimes of 2FC and Announcements. A Vocal Recital by the Pupils of Miss Mabel Batchelor.

3.40—From the Tea Rooms: Miss Alice Pomroy, soprano.

3.45—Oak Hall Trio.

3.55—Musical Items from the Studio.

4—Miss Gladys Briggs, contralto, Thought Have Wings (Lehmann).

4.5—Oak Hall Trio.

4.15—Music from the Studio.

4.20—From the Tea Rooms: Miss Alice Pomroy, soprano.

4.25—Oak Hall Trio.

4.35—Musical Items from the Studio.

4.40—Miss Gladys Briggs, contralto, Homing (Del Rio).

4.44—Afternoon Call Stock Exchange.

4.45—Close down.

Early Evening Session.

6—The Chimes of 2FC and Announcements.

6.5—The "Hello Man" talks to the children.

6.45—Broadcast from the Hotel Australia: Orchestral Items.

7.15—"Evening News" News Service and Sporting Information.

7.30—Dalgety's Market Reports (wool, wheat, stock), Fruit and Vegetable Markets.

7.40—Radio Photographic Competition, described by Mr. E. J. Van-de-Velde, and inquiries by listeners answered on the air.

Night Session.

7.55—The Chimes of 2FC and Announcements.

8—Broadcast from the Lyceum Theatre: Orchestra under the baton of Mr. Emmanuel Arons.

8.30—From the Studio: Colin Crane, the well-known Australian baritone; Mr. Walter Hunt and Miss Eve Warburton in a one-act play; Miss Vera Tasson, soprano.

9.8—Australians Abroad—a talk by Mr. S. H. Bowden on English Cathedrals.

9.22—Miss Freda Gilder, contralto.

9.50—2FC Dance Band.

9.42—Mr. Colin Crane, baritone.

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- 9.50—Mr. Walter Hunt and Miss Eve Warhurst in a one-act play.
10.2—Miss Vera Tasma, soprano.
10.10—2FC Dance Band.
10.22—Miss Freda Gilder, contralto.
10.30—2FC Dance Band.
11—Close down.

THURSDAY, JUNE 17.

Morning Session.

- 8—Cricket Scores, Australia v. Yorkshire, at Sheffield. To be repeated at 9 and 10 a.m.
10—The Chimes of 2FC and Announcements.
10.10—Weather Information, Commercial News, Shipping Intelligence, Market and News Session.
11—Cables.
11.15—Details of Cricket Scores.
11.20—Musical Items.
11.30—Close down.

Midday Session.

- 12.30—The Chimes of 2FC and Announcements.
12.35—Morning Call Stock Exchange.
12.40—Musical Items from the Studio.
1—Time Signals.
1.3—'Evening News' News Service, Weather Information, Commercial News, Musical Items.
1.30—Noon Call Stock Exchange. Musical Items.
2—Close down.

Afternoon Session.

- 3—The Chimes of 2FC and Announcements. Pianoforte Recital by the Pupils of Henry Penn.
3.40—From the Tea Rooms: Miss Ilka Knight, soprano.
3.45—Oak Hall Trio.
3.55—Musical Items from the Studio.
4—From the Tea Rooms: Miss Jeanette Rooney, contralto.
4.5—Oak Hall Trio.
4.15—Musical Items.
4.20—From the Tea Rooms: Miss Ilka Knight, soprano.
4.35—Music from the Studio.
4.40—From the Tea Rooms: Miss Jeanette Rooney, contralto.
4.44—Afternoon Call Stock Exchange.
4.45—Close down.

Early Evening Session.

- 6—The Chimes of 2FC and Announcements.
6.5—The 'Hello Man' talks to the children.
6.45—Broadcast from the Hotel Australia: Orchestral Items.
7.15—'Evening News' News Service and Sporting Information.
7.30—Dalgely's Market Reports (wool, wheat, stock), Fruit and Vegetable Markets.
7.5—A talk on Richard II. by Walter Hunt, one of the Shakespearean subjects set down by the Department of Education.

Night Session.

- 7.55—The Chimes of 2FC and Announcements.
8—From the Studio: Items by the Leichhardt District Band, under the conductorship of Mr. E. P. Kerry.
8.20—Miss Elsie Farless, soprano.
8.28—Mr. Jack Lumsdaine, song and story at the piano.
8.36—Leichhardt District Band.
8.56—Mr. Lawrence Halbert, baritone.
9.5—Sydney Instrumental Trio: Mr. Lionel Lawson, violinist; Mr. Gladstone Bell, cellist; and Mr. Lindley Evans, pianist.
9.20—Leichhardt District Band.
9.43—Piano solo, Mr. Lindley Evans.

- 9.55—Mr. Jack Lumsdaine, song and story at the piano.
10.5—Leichhardt District Band.
10.12—Cello solos, Mr. Gladstone Bell.
10.22—Mr. Lawrence Halbert, baritone.
10.30—Sydney Instrumental Trio.
10.40—Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
11—National Anthem. Close down.

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FRIDAY, JUNE 11.

Afternoon Session.

- 10.55—Special Cricket Session, with music from the Studio.
3—G.P.O. Clock and Chimes; Weather Report and Social Notes from the 'Sun'.
8.15—Music from the Studio.
3.30—G.P.O. Clock and Chimes; a talk on English Poetry, by Mr. J. M. Prentice.
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes; Music from the Studio.
4.30—G.P.O. Clock and Chimes; Serial Story entitled Mr. Ramos.
4.45—Music from the Studio.
5—G.P.O. Clock and Chimes; the 'Sun' News Service.
5.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes; Sporting Resume from the 'Sun' Newspapers; the pupils of Miss Monica Scully will entertain the kiddies.
6.45—Broadcasters' Dinner Orchestra.
7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land and Finance Co.
7.50—Close down.
8—Cec. Morrison and his Gloomchasers; Miss Grace Saville (contralto); Resume of following day's programme; Weather Report and Forecast by courtesy of Mr. C. J. Marcus, Govt. Meteorologist; The Senior Sporting Expert of the Sun will speak on The Prospects of to-morrow's Races; Interval; Cec. Morrison—Radio Question Hour; Round the World Travelogue by Mr. J. M. Prentice; News Reports by courtesy of The Sun Newspapers Ltd.; National Anthem.

SATURDAY, JUNE 12.

Afternoon Session.

- 10.55—Special 20-minute Cricket Session, with music from the Studio.
2—G.P.O. Clock and Chimes; Special Sporting Information broadcast direct from 'Sun' Office.
5.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes. Pavilion Dinner Orchestra, under the direction of Mr. Cec. Morrison.
6.30—Sporting Resume from 'Sun' Newspapers; Uncle Jack and the Kiddies.
7—A Talk to the Kiddies by Brings.
7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land and Finance Co.
8—Enmore Theatre Symphony Orchestra under the direction of Mr. F. Watkins; Brings will talk about the Aborigines; Broadcasters' Minstrel Troupe; Mr. David G. Stead will talk

on 'Tree Planting and Science of Forestry'; Miss Claire Goolley (soprano); Mr. Bobby Watson (comedian); Resume of the following day's programme; Weather Report and Forecast, by courtesy of Mr. C. J. Marcus; The Ambassadors Dance Orchestra broadcast until midnight, during the intervals between dances, Sun News will be broadcast; National Anthem.

SUNDAY, JUNE 13.

Afternoon Session.

- 11—Service broadcast from Baptist Church, Peterham.
3.30—Mr. Cairo Bradley's Bible Class.
7.15—Service broadcast from St. Barnabas Presbyterian Church, Ashfield (Rev. Nicholson).
8.30—The Manly Band, broadcast from Rialto Theatre, Manly. Interval.
9.32—Mr. Bryce Carter (cello solos) Mr. Robert Harper (tenor); Resume of following day's programme; Weather Report and Forecast by courtesy of Mr. C. J. Marcus, Govt. Meteorologist; National Anthem.

MONDAY, JUNE 14.

- 10.55—Special Cricket Session with Music from the Studio.
3—G.P.O. Clock and Chimes; Rugby League Football Match, N.S.W. v. Queensland, broadcast direct from the ground. Weather Report and Social Notes from The Sun.
3.15—David Jones' Tea Room Trio.
3.30—G.P.O. Clock and Chimes; Philosophic Talk, 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—G.P.O. Clock and Chimes; Serial Story entitled Mr. Ramos.
4.45—Music from the Studio.
4.55—Late Market Reports from The Sun.
5—G.P.O. Clock and Chimes; Sun News Service.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.
6.30—Sporting Resume from Sun Newspapers; Uncle George and the Kiddies.
7.30—'What's On,' a guide to the visitors and citizens of Sydney.
7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.
7.50—Close down.

Evening Session.

- 8—The Newtown Band, broadcast from the Industrial Hall, Newtown; Miss Thelma Houston (contralto); Mr. D. Raymond will talk on Ancient Coin Finds and their History; Al. Hammatt's Dance Band, broadcast from The Ambassadors, during the intervals between dances there will be social notes and a description of frocks by Mrs. Potts; Resume of following day's programme; Weather Report and Forecast by courtesy of Mr. C. J. Marcus; Mr. C. F. Luson will talk on The Art of the Old Chinese Potter; News Reports by courtesy of The Sun Newspapers; National Anthem.

TUESDAY, JUNE 15.

Afternoon Session.

- 10.55—Special 20 minute Cricket Session with Music from the Studio.
3—G.P.O. Clock and Chimes; Weather Report and Social Notes from The Sun.
3.15—Music from the Studio.
3.30—G.P.O. Clock and Chimes.
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes; Music from the Studio.
4.30—G.P.O. Clock and Chimes; Serial Story

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entitled Mr. Rumoi.
4.45—Music from the Studio.
4.55—Late Market Reports from The Sun.
5—G.P.O. Clock and Chimes; Sun News Service.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes; Sporting Resume from "Sun" Newspapers; Uncle Jack and the Kiddies.
6.45—Broadcasters Dinner Orchestra.
7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.
7.59—Close down.

8—The Ambassadors Instrumental Salon Quartette under the direction of Mr. Claude McGlynn; An Eye Talk by the President of the Institute of Optometrists; Resumé of following day's programme; Weather Report and Forecast by courtesy of Mr. C. J. Mares; Miss May Nancarrow (cloctonist); Miss Gladys Evans (soprano); Mr. Crosby Browne (clarinet solo); Mr. Norman Lawson (baritone); Miss Daisy Richards (violinist); Interval. Mr. C. G. Barua will tell real Ghost Stories; Broadcasters Instrumental Trio; News Reports by courtesy of The Sun Newspapers; Close down.

WEDNESDAY, JUNE 16.

10.55—Special 20 minute Cricket Session with Music from the Studio.

Afternoon Session.

3—G.P.O. Clock and Chimes; Weather Report and Social Notes from The Sun.
3.15—Broadcasters' Trio.
3.30—G.P.O. Clock and Chimes; Special Operatic Talk by Mr. J. M. Prentice.

4—G.P.O. Clock and Chimes; Broadcasters' Trio.
4.30—G.P.O. Clock and Chimes; Serial Story entitled Mr. Rumoi.

4.45—Broadcasters' Trio.
4.55—Late Market Reports from The Sun.
5—G.P.O. Clock and Chimes; Sun News Service.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

5—G.P.O. Clock and Chimes; Aviation Dinner Orchestra under the direction of Mr. Geo. Morrison.

6.30—Sporting Resume from Sun Newspapers; Uncle George and Uncle Jack with the Kiddies.

7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land and Finance Company.
7.59—Close down.

8—Sydney Orpheus Society, under the direction of Mr. Pennam; City of Sydney Band. Broadcast from Barlow Chambers; Dr. Donald Luker will talk on "Cauton—The Turbulent"; Resumé of following day's programme; Weather Report and Forecast by courtesy of Mr. C. J. Mares; Gust. Meteorologist; Mr. J. M. Prentice will talk on Foreign Affairs; News Reports by courtesy of The Sun Newspapers; National Anthem.

11.31—Featuring a Stock Duo Art number.

11.40—"Advertiser" News Service.
12—G.P.O. Chimes.
12.1—News and Café Service.
12.16—Featuring a "Stock Duo Art number"; The 5CL Studio Orchestra Overture; sunset solo; fox trot; barcarolle; "Merrymaker's Dance"; waltz; selection; cello solo; finale.
1.25—S. C. Ward & Co.'s Stock Exchange Intelligence and Official Weather Synopsis and Station Announcement.
2—G.P.O. Chimes.

Afternoon Session (2 to 5).

3—G.P.O. Chimes.
3.1—Relay from Maple Leaf Cafe; Orchestral numbers.
3.45—Broadcast from Studio; Serial Story.
4—G.P.O. Chimes.
4.1—Broadcast from Arcadia Cafe; Orchestral numbers.
4.55—Stock Exchange Reports, General Information and Station Announcements.
5—G.P.O. Chimes.

Evening Session (5.30 to 10.30).

6.30—G.P.O. Chimes.
6.31—Bedtime Stories for the Children.
7.30—Stock Exchange, Market Reports and Station Announcements.
7.49—Sporting Talk by "Old Timer."
8—G.P.O. Chimes.
8.1—Concert from the Studio.
9—G.P.O. Chimes.
9.1—Weather Reports.
9.3—Studio Concert, continued.
10.15 approx.—Advertiser News Service.
10.30—Station Announcements; National Anthem.

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FRIDAY, JUNE 11.

Morning Session (11.30 a.m. to 2 p.m.)
11.30—G.P.O. Chimes.

BURGESS—"They're on the Leviathan"—BATTERIES

SATURDAY, JUNE 12.

Morning Session.

- 10.30—G.P.O. Chimes.
- 10.31—The 5CL Studio Orchestra will play: Overture; cornet solo; suite; petite caprice; instrumental trio; one step; violin solo; finale.

Afternoon Session.

- Sporting Results when available.
- Steak Duo Art and Vocalion Numbers.

Evening Session.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories for the Children.
- 7.30—Market reports and station announcements.
- 7.40—A review of the world's chief sporting events.
- 8—G.P.O. Chimes.
- 8.1—Relay from the Adelaide Town Hall, a programme of instrumental and vocal numbers by leading Adelaide artists.
- 9—G.P.O. Chimes.
- 9.3—Concert continued.
- 9.1—Weather Report.
- 10.1—Concert Continued.
- 10.15—From the Studio—A programme of dance music.
- 10.30—Station Announcements; National Anthem.

SUNDAY, JUNE 13.

Morning Session:

- 11—Relay from Rose Park Congregational Church—Divine Service.
- 3 to 4:30—A programme of organ, vocal and orchestral numbers by leading artists, assisted by the Studio Orchestra.

Evening Session:

- 6.30—G.P.O. Chimes.
- 6.31—Sunday story for the children by Uncle Radio. Relay from Picnic Street Methodist Church.
- 8:30—Programme of vocal and instrumental numbers.
- 9.1—Weather Report.
- 10—G.P.O. Chimes; Station Announcements; Close Down.

MONDAY, JUNE 14.

Morning Session (11.30 a.m. to 2 p.m.)

- 11.30—G.P.O. Chimes.
- 11.31—Featuring a Steak Duo Art number.
- 12—G.P.O. Chimes.
- 12.1—News and Cable Service.
- 12.16—Featuring a Steak Duo Art number; 5CL Studio Orchestra will play: Selection; cornet solo; fox trot; waltz; "Pas des Echarpes"; suite; novelette; 'cello solo; finale.
- 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence and Official Weather Synopsis and Station Announcements.
- 2—G.P.O. Chimes.

Afternoon Session. (3 to 5).

- 3—G.P.O. Chimes.
- 3.1—Relay from Maple Leaf Cafe; Orchestral numbers.
- 3.45—Broadcast from Studio; Serial Story.
- 4—G.P.O. Chimes.
- 4.1—Broadcast from Arcadia Cafe; Orchestral numbers.
- 4.55—Stock Exchange Reports, General Information and Station Announcements.
- 5—G.P.O. Chimes.

Evening Session (6.30 to 10.30).

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories for the Children.
- 7.50—The History of Leather, given by Mr. J. Alexander.
- 9.1—Mr. Fred Cavenett's Jazz Band, interspersed with vocal numbers.
- 9.20—Twinkler's Original Humorous Talk (Mr. F. J. Mills).
- 9.40—Jazz Band, continued.

9.1—Weather Reports.

10.30—Jazz Band, continued.

10.45—Station Announcements; To-morrow's Programme; National Anthem.

TUESDAY, JUNE 15.

Morning Session (11.30 a.m. to 2 p.m.)

- 11.30—G.P.O. Chimes.
- 11.31—Featuring a Steak Duo Art number.
- 12—G.P.O. Chimes.
- 12.1—News and Cable Service.
- 12.16—Featuring a Steak Duo Art number; 5CL Studio Orchestra will play: Overture; cornet solo; fox trot; "The Phantom Melody"; waltz; Mazurka Russe; instrumental trio; selection; finale.
- 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis and Station Announcements.
- 2—G.P.O. Chimes.

Afternoon Session. (3 to 5).

- 3—G.P.O. Chimes.
- 3.1—Relay from Maple Leaf Cafe; Orchestral Numbers.
- 3.45—Broadcast from Studio; Serial Story.
- 4—G.P.O. Chimes.
- 4.1—Broadcast from Arcadia Cafe; Orchestral Numbers.
- 4.55—Stock Exchange Reports, General Information and Station Announcements.
- 5—G.P.O. Chimes.

Evening Session (6.30 to 10.30).

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories. Children's Concert, arranged by Miss Sylvia Thomas, L.A.B., A.M.E.A., L.Mus.A. (Auntie Ethel).
- 7.30—Stock Exchange, Market Reports and Station Announcements.
- 8—G.P.O. Chimes.
- 8.1—From the Studio—An evening with Gonrod.
- 8.30—Cookery Talk arranged by S.A. Gee Co.
- 8.40—Gonrod Concert, continued.
- 9.30—A programme of vocal and instrumental items by Studio Orchestra.
- 10.30—"Advertiser" News Service.
- 10.50—Station Announcements; National Anthem.

WEDNESDAY, JUNE 16.

Morning Session (11.30 a.m. to 2 p.m.)

- 11.30—G.P.O. Chimes.
- 11.31—Steak Duo Art and Aeolian Vocalion
- 12—G.P.O. Chimes.
- 12.1—News and Cable Service.
- 12.16—Featuring a Steak Duo Art number; 5CL Studio Orchestra will play: Selection; cornet solo; fox trot; reverie; novelette; selection; gavotte; "I love a little cottage"; finale.
- 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis, and Station Announcements.
- 2—G.P.O. Chimes.

Afternoon Session. (3 to 5).

- 3—G.P.O. Chimes.
- 3.1—Broadcast from Maple Leaf Cafe; Orchestral Numbers.
- 3.45—Serial Story from the Studio.
- 4—G.P.O. Chimes.
- 4.1—Relay from Arcadia Cafe; Orchestral numbers.
- 4.55—Stock Exchange Reports, General Information and Station Announcements.
- 5—G.P.O. Chimes.

Evening Session (6.30 to 10.30).

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories for the Children.
- 7.30—Lecture Lecture, Mrs. C. F. Fryer, B.Sc.
- 8—G.P.O. Chimes.
- 8.1—Relay from the South Australian Railways

Institute Hall, a programme of choros, glee, and solos by members of the Railways Institute Glee Club.

- 8.30—Science lecture arranged by Messrs. F. H. Faulding & Co.
- 8.40—Glee Club Concert, continued.
- 9.1—Weather Reports.
- 9.3—Glee Club Concert, continued.
- 10.55—Station Announcements.
- Midnight—G.P.O. Chimes; National Anthem.

THURSDAY, JUNE 17.

Morning Session.

- 11.30—G.P.O. Chimes.
- 11.31—Featuring a Steak Duo Art number.
- 11.40—"Advertiser" News Service.
- 11.55—Vocalion Number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" News Service.
- 12.16—Featuring a Steak Duo Art number; 5CL Studio Orchestra will play: Overture; cornet solo; fox trot; melody; instrumental trio; novelette; waltz; violin solo; finale.
- 1.55—Ward & Co.'s Stock Exchange Intelligence, Official weather synopsis, and station announcements.
- 3—G.P.O. Chimes.

Afternoon Session.

- 3—G.P.O. Chimes.
- 3.1—Relay from Maple Leaf Cafe, orchestral numbers.
- 3.45—Broadcast from Studio, Serial Story.
- 4—G.P.O. Chimes.
- 4.1—Broadcast from Arcadia Cafe, orchestral numbers.
- 4.55—Stock Exchange Reports, general information, and station announcements.
- 5—G.P.O. Chimes.

Evening Session.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories.
- 7.15—Health Talk, given by School for Mothers, arranged by Mr. A. M. Whittenbury.
- 7.30—Market Reports.
- 7.40—Poultry Talk by Mr. A. M. Whittenbury.
- 8—G.P.O. Chimes.
- 8.1—The Cadenzas Instrumental Quartette in a programme of popular numbers, interspersed with vocal numbers.
- 9.3—Studio Orchestra, continued.
- 10.2—"Advertiser" News Service.
- 10.30—Jazz Orchestra, continued.
- 10.30—Cadenza Quartette, continued.

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FRIDAY, JUNE 11.

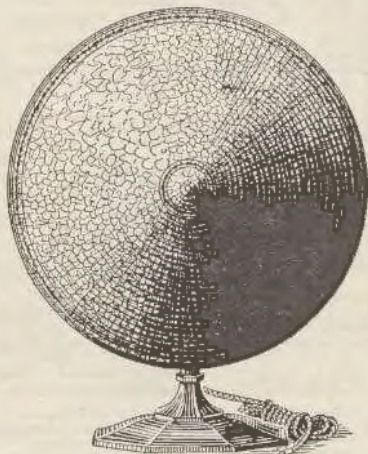
Midday Session.

- 12.45—Tune-in.
- 12.50—Time Signal.
- 1—Market Reports, Stock Exchange, Weather, "The Daily Mail" News, The "Daily Standard" News.
- 1.20—Close down.

Afternoon Session.

- 3.30—Contralto Solo, Mrs. D. Cabell; pianoforte duet, Miss Doris Valentine and Miss Fao Todd; soprano solo, Miss Mayo Hughes; Aeolian Vocalion selection; contralto solo, Mrs. D. Cabell; Aeolian Vocalion Selection; soprano solo, Miss Mayo Hughes; pianoforte duet, Miss Doris Valentine and Miss Fao Todd; Aeolian Vocalion Selection.

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4.15—"The Telegraph" News.
4.30—Close Down.
Early Evening Session.
6.25—Tune-in.
6.30—The Children's Session. Stories by "The Sandman."
7—The Farmers' Session; Market Reports; Paper—"What the Sun Is," by Mr. Inigo Jones (Meteorologist).
7.20—"The Telegraph" News.
7.30—Close Down.

Night Session.
7.45—Lecture Session—A Talk arranged by the Workers' Educational Association.
8—A Semi-Classical Night from the Studio.
8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.
8.55—Announcements.
9—Semi-Classical Night from the Studio, continued.
10—"The Daily Mail" News Service; Close Down.

SATURDAY, JUNE 12.

No Midday Transmission.
Afternoon Session.

3.25—Tune-in.
3.30—Sporting News, interspersed with Musical Selections.
4.30—Close down.
Early Evening Session.
6.25—Tune-in.
6.30—The Children's Session; Badtime Stories by "Uncle Ben," assisted by "Mabel Sunshine."
7.15—Sporting News.
7.30—Close Down.

Night Session.

7.45—Lecture Session—A Sporting Talk, by Rugby League Officials.
8—From the Studio: "The Young Idea," a Comedy in One Act; baritone solo, Mr. Alex Campbell; monologue, Miss Ruby Massey; soprano solo, Mrs. Con. Thomas; A short address by His Worship the Mayor of Greater Brisbane (Alderman W. A. Jolly); The Phillips Sisters in a Musical Comedy Act; bass solo, Mr. Stanley Tamblin; vocal duet, Miss Blanche Richardson and Miss Doris Keys; monologue, Miss Ruby Massey; baritone solo, Mr. Lex Campbell.
8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.
8.55—Announcements.
9—From Lennon's Ballroom—by courtesy of the Proprietors of Lennon's Hotel, dance music played by Miss May Dobbyn's Vice-Royal Orchestra will be relayed from Lennon's Ballroom.
From the Studio.
Bass solo, Mr. Stanley Tamblin; soprano solo, Mrs. Con. Thomas.
From Lennon's Ballroom—Dance Music.
From the Studio: Soprano solo, Miss Blanche Richardson; contralto solo, Miss Doris Keys. From Lennon's Ballroom—Dance Music.
From the Studio, Soprano solo, Miss Blanche Richardson; contralto solo, Miss Doris Keys.
10—From the Studio—"The Sunday Mail" News Service. Close down.

SUNDAY, JUNE 13.

Morning Session.

The complete Morning Service from the Ann Street Presbyterian Church will be relayed.
10.55—Morning Service. Address, Rev. Jas. Cooh, B.A., B.D.

Afternoon Session.

The concert provided in the Brisbane Botanical Gardens by the Metropolitan Band will be relayed.

3.10—Tune-in.
3.15—Band Concert.
4.30—Close down.

Night Session.

The complete Evening Service from the Wharf Street Congregational Church will be relayed.

6.35—Tune-in.
Church Service—Benediction.
At the conclusion of the Service the Band Concert provided by the Greater Brisbane Municipal Concert Band (under the leadership of Mr. E. Jackson) will be relayed from the Wickham Park Bandstand.
10—Close down.

MONDAY, JUNE 14.

Midday Session.

12.55—"Tune-in" Signal.
1—Market Reports supplied by the Council of Agriculture; Stock Exchange Information supplied by the Committees of the Brisbane Stock Exchange; Weather Information supplied by the Commonwealth Weather Bureau; "Daily Standard" News Service; Close down.

1.15—From the Alberi Street Church—The Midday Service by "Gipsy" Smith will be relayed.
2—Close down.

Afternoon Session.

3.30—A programme of Music from the Studio, including—Cornet solos, Mr. S. Henry; soprano solos, Mrs. Robert Bell.

4.15—News service supplied by The Telegraph.
4.30—Close down.

PHILCO—"Tremendous Capacity"—BATTERIES

Early Evening Session.
 6.25—Tune-in.
 6.30—The Children's Session—Stories by The Sandman.
 7—The Farmers' Session—Market Reports supplied by the Council of Agriculture. Lecture—What the Queensland Department of Agriculture and Stock is doing for Pig Farmers, by Mr. E. J. Shelton (Instructor in Pig Raising).
 7.20—News Service supplied by The Standard.
 7.30—Close down.
 Night Session.
 7.45—Lecture Session—Motorists—Correct Lubrication. Talk No. 9, by "Gargoyle."
 The first portion of to-night's programme will be provided by the Brisbane Austral Choir (under the conductorship of Mr. E. R. B. Jordan) in the Ann Street Presbyterian Church, will be relayed.
 8.30—Weather Information officially supplied by the Commonwealth Weather Bureau.
 9.55—Announcements.
 From the Band Room—a programme of music by the South Brisbane City Orchestra under the leadership of Mr. J. W. Ferguson.
 10—From the Studio The Daily Mail News Service. Close down.

TUESDAY, JUNE 15.

12.55—Tune-in Signal.
 12.58—Time Signal.
 1—Market Reports, Stock Exchange, Weather, The Daily Mail News, The Daily Standard News.
 3.25—Tune-in.

3.30—Programme from the Studio.
 4.15—The Telegraph News.
 4.30—Close down.
 Early Evening Session.
 6.25—Tune-in.
 6.30—The Children's Session—Stories by The Sandman.
 7—The Farmers' Session. Lecture—A Queensland's Tour through Rural England, by Mr. J. P. F. Reid (Editor, Queensland Agricultural Journal).
 7.20—News Service supplied by The Standard.
 7.30—Close down.
 Night Session.
 7.45—Lecture Session—Photography, by Mr. F. L. South (Manager, Kodak Ltd.)
 8—Concert From the Studio.
 8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.
 8.55—Announcements.
 9—Soprano solo, Mrs. R. G. Allen; musical novelty, The White Rose Trio; soprano solo, Miss Winnie Dannon; musical novelty, The White Rose Trio; tenor solo, Mr. Gerald Cashman.
 9.15—From the Centennial Hall—By courtesy of the Lessee, a programme of dance music by the Centennial Hall Dance Orchestra, will be relayed from the Hall.
 10—From the Studio The Daily Mail News Service. Close down.

WEDNESDAY, JUNE 16.

Midday Session.
 12.55—Tune-in.
 12.58—Time Signal.

1—Market Reports, Stock Exchange, Weather, The Daily Mail News, The Daily Standard News.
 1.20—Close down.
 Afternoon Session.
 3.30—A musical programme from the Studio.
 4.15—News service supplied by The Telegraph.
 4.30—Close down.
 Early Evening Session:
 6.25—Tune-in.
 6.30—The Children's Session—Stories by Little Miss Brisbane.
 7—The Farmers' Session; Market Reports; Lecture—Green Manuring, by Mr. P. Ryan (Queensland Agricultural High School and College).
 7.20—"The Standard" News.
 7.30—Close down.
 Night Session.
 7.45—Lecture Session—Scouting for Boys. Talk No. 3, by the Chief Commissioner for Queensland Boy Scouts' Association (Mr. C. S. Snow).
 8—A Welsh Entertainment. To-night's programme will comprise Welsh Music.
 8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.
 8.55—Announcements.
 9—Welsh Musical programme continued.
 10—The Daily Mail News Service; Close down.

THURSDAY, JUNE 17.

Midday Session.
 12.55—Tune-in signal.
 12.58—Time Signal.

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1—Market Reports, Stock Exchange information, weather information, "The Daily Mail" News, the "Daily Standard" News.
1.20—Close down.

Afternoon Session.

8.25—Tune-in.
3.30—A programme of Music from the Studio.
4.15—"The Telegraph" News.
4.30—Close down

Early Evening Session:

6.25—Tune-in.
6.30—The Children's Session—Stories by "The Sandman"
7—The Farmers Session: Market Reports; Lectures—Building New Industries, by Mr. L. R. McGregor (Director Local Producers' Association).
7.20—"The Standard" News.
7.30—Close down.

Night Session.

7.45—Lecture Session. A talk on Books, by Mr. W. A. Braiden (Melbourn Book Store).
8—Studio Programme, including the Lyric Male Quartette Party.
8.50—Weather Information officially supplied by The Commonwealth Weather Bureau.
8.55—Announcements.
9—From the Band Room—An impromptu programme of Music by the Greater Brisbane Municipal Concert Band (under the leadership of Mr. E. Jackson).
10—"The Daily Mail" News Service. Close down.

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FRIDAY, JUNE 11.

Morning Session.

11.30—The British Official Wireless Press, received from Rugby Super Wireless Station, England; Express Train Information; the "Age" News Bulletin.
12—Time Signal Chime from the G.P.O., Elizabeth St., Melbourne, Studio barometer, and thermometer readings; 1st Weather Forecast; Events of the Day.
12.5—Musical Selections from Hoyt's De Luxe, Bourke Street.
12.30—Stock Exchange News.
12.35—Market Reports.
12.40—Musical Selections.
12.55—Mail Notices; Shipping Movements.
1—Time Signal.

Afternoon Session

2.30—Hoyt's Premier Orchestra, under the direction of Miss Ella Brien, relayed from the Hoyt's De Luxe, Bourke Street.
4—Time Signal Chime from the G.P.O., Elizabeth St., Melbourne, Studio barometer and thermometer readings; 2nd Weather Forecast.
4.5—Hoyt's Premier Orchestra.
4.30—Mr. R. Standley Haines (of Brunning's Pty. Ltd.), will speak to the Children on Botanical Wonders.
4.55—The Evening Amusement Guide.
5—Time Signal Chime from the G.P.O., Elizabeth St., Melbourne; Studio barometer and thermometer readings. Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Rad.
8—Time Signal from the G.P.O., Elizabeth St., Melbourne; Studio barometer and thermometer readings, The Wireless Press.
8.8—Racing Anticipations by "Field Glasses".
8.18—Mr. R. Standley Haines will give a weekly Gardening Talk.
8.35—Miss Phyllis Hall, mezzo-soprano.
8.42—Miss Phyllis Shattock, solo pianist.
8.49—Miss Claire Miles, L.L.C.M., musical monologues.

8.56—Mr. Sydney Falk, flute solos.
9.3—Mr. Austin Peters, in selections by Milton Hayes.
9.10—Miss Zenie Irvine, soprano.
9.17—Mr. Tommy Norman, singing his own compositions.
9.24—Miss P. Shattock, solo pianist.
9.31—Miss Phyllis Hall, mezzo-soprano.
9.35—Mr. Austin D. Peters, Dickens recital.
9.42—Mr. Sydney Falk, flute solos.
9.53—Miss Claire Miles, songs at the piano.
10—Time Signal Chime from the G.P.O., Elizabeth St., Melbourne; Studio Barometer and thermometer readings.
10.1—The Age News Bulletin, exclusive to 3AR.
10.5—Miss Zenie Irvine, soprano.
10.12—Hoyt's Premier Orchestra.
10.40 approx.—National Anthem and Close down.

SATURDAY, JUNE 12.

Morning Session.

11.30—The British Official Government Press, received by 3AR's operator from Rugby Super Wireless Station, England; The Age News Bulletin.
12—Time Signal, Chimes from the tower of the General Post Office, Melbourne; 1st Weather Forecast; Events of the Day.
12.5—Musical Selections, relayed from Hoyt's De Luxe, Bourke Street.
12.30—Stock Exchange News; Foreign Exchange, supplied by Messrs. Thos. Cook & Son.
12.35—Market Reports.
12.40—Selections from Hoyt's De Luxe, Bourke Street.
12.55—Mail Notices; Shipping Movements.
1—Close down.

Afternoon Session.

Moonee Valley Races.

2—Description white racing of the Windarra Steeple, 2 miles.
2.30—Result of the Chandor Handicap, 6 fur.
2.45—Hoyt's Premier Orchestra.
3—Description white racing of the Travancore Steeple, 2 miles, 6 chains.
3.5—Hoyt's Premier Orchestra.
3.40—Result of Deep Creek Handicap, 1½ m.
4—Time Signal Chimes from the tower of the G.P.O., Elizabeth St., Studio barometer and thermometer readings.
4.18—Result of Marze Jumpers Flat Race.
4.15—Hoyt's Premier Orchestra.
4.55—The Evening Amusement Guide.
5—Time Signal Chime from the G.P.O., Elizabeth St., Studio barometer and thermometer readings; Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Peter. (1) The Bedtime Story. (2) Talk on Hobbies.

Evening Session:

8—Time Signal Chime from the G.P.O., Elizabeth Street. Studio barometer and thermometer readings; the British Official Wireless Press, received by 3AR's operator from Rugby Super Wireless Station, England; Sport News; Local News.
8.15—Dance Night. The Rhythmic Dance Orchestra under the direction of Mr. George Lewis, relayed from the Maison De Luxe, Broadway, St. Kilda.
9.30—Week-End Traveler's Information: Supplied by the Victorian Railway's Department and Transways Board.
9.50—The Maison De Luxe Dance Orchestra.
10—Time Signal Chime from the G.P.O., Elizabeth St., Studio barometer and thermometer readings.
10.5—The Maison De Luxe Rhythmic Dance Orchestra.
11—National Anthem and Close down.

SUNDAY, JUNE 13.

Morning Session.

10.30—The Bells from St James' Old Cathedral.

11—Service from St. James' Old Cathedral, Preacher, Rev. Robinson.

Afternoon Session.

3—Transmission from the South Melbourne, St. Vincent De Paul's Orphanage, Selections by the St. Vincent De Paul's Boys Brass Band.
4—Close down.

Evening Session.

7—Service from St. James' Old Cathedral. Preacher, Archdeacon Hayman. From the Studio:
8.30—Mrs. J. E. Ballantine (contralto).
8.37—Mr. David Shaw (flute solos).
8.42—Mr. Fred Stork (baritone).
8.48—Mr. Edward Brine, B.A. (cornet solo).
8.55—Miss Alma Yanger (piano solo).
9—Mr. G. Yorko Ray, Literary Talk.
9.10—Mrs. J. E. Ballantine (contralto).
9.17—Mr. David Shaw (flautist).
9.23—Mr. Fred Stork (baritone).
9.27—Mr. Edward Brine, B.A. (cornet solo).
9.30—The Eclipse Grand Orchestra, relayed from the Eriptide Theatre, Port Melbourne.
9.50—The "Age" News Bulletin, exclusive to 3AR.
9.55—National Anthem and close down.

MONDAY, JUNE 14.

Morning Session.

11.30—The British Government Wireless Press, received by 3AR's operator from Rugby Super Station, England; The Age News Bulletin.
12—Time Signal, Chimes from the tower of the General Post Office, Melbourne; 1st Weather Forecast; Events of the Day.
12.5—Musical Selections from Hoyt's De Luxe, relayed from Bourke Street.
12.30—Stock Exchange News.
12.35—Market Reports.
12.40—Musical Selections.
12.55—Mail Notices; Shipping News.
1—Close down.

Afternoon Session.

Fibroy Poles. Results immediately after each Race and at half-hourly intervals.
2.30—Hoyt's Premier Orchestra, under the direction of Miss Ella Brien, relayed from Hoyt's De Luxe, Bourke Street.
3—Mr. Claude Kette, will give Piano-Player Interpretations.
3.15—Hoyt's Premier Orchestra.
4—Time Signal chimes from the tower of the G.P.O., 2nd Weather Forecast.
4.5—Hoyt's Premier Orchestra, relayed from the De Luxe, Bourke Street.
4.55—The Evening Amusement Guide.
5—Time Signal Chime from the G.P.O., Elizabeth St., Studio barometer and thermometer readings. Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Rad. 1, The Bedtime Story; 2, Talk on Hobbies.
8—Time Signal chimes from the tower of the G.P.O., Elizabeth St., Studio Barometer and thermometer readings.
8.8—Mr. Walter Lindham, will continue his talk on "Billiards".
8.15—Mr. Eddie Graham, undefeated Light Weight Champion of Australia, will talk on "Self Defence".
8.40—Piano Solo, played on the "Concord" Player-Piano.
8.46—Mr. John Hobbs (baritone).
8.53—Miss Hazel Guest (violinist).
8.55—Miss Mary Lilly (contralto).
9.5—Mr. Hugh Sherlock (tenor).
9.10—Melogram Photograph.
9.15—Piano solo, played on the "Concord" Player-Piano.
9.25—Mr. John Hobbs (baritone).
9.30—Miss Hazel Guest (violinist).
9.40—Miss Mary Lilly (contralto).
9.47—Mr. Hugh Sherlock (tenor).

9.53—Hologram Phonograph.

10—Time Signal, chimes from the tower of the General Post Office.

10.55—Piano Solo, played on the "Concord" Player-Piano.

10.10—Hoyt's Premier Orchestra, relayed from Hoyt's De Luxe, Bourke Street.

10.40 Approx.—National Anthem.

4.10—Keith Desmond, monologues.

4.20—Dorothy Richardson, viola.

4.25—Marie Leithbridge, soprano.

4.32—Studio Orchestra.

4.45—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Herald" News Service. Stock Exchange information.

5—Close down.

5.45—Children's Hour. Stories by Billy Bunny: Littlest's Fairy Story, The Lost Princess, and Black Beauty.

6.40—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Argus" and "Herald" News Service. Reuters and the Australian Press Association Cables.

6.53—Weather Synopsis. Shipping Movements.

6.57—Stock Exchange information.

7.2—Fish Market Reports by J. R. Barrett Ltd.

7.4—Market Reports by the Victorian Producers' Co-operative Co. Ltd. Hay-market Sales. Poultry, grain, chaff, hay, straw, fute, dairy produce, potatoes and onions.

7.20—Under the auspices of the Agricultural Department—Mr. J. M. Kerr, Chief Dairy Supervisor, "Dairying—Winter Care and Shelter."

7.40—Miss Margery Hicklin, of the "Leave it to June" Company, Theatre Royal, will speak from her dressing room, by permission of J. C. Williamson Ltd.

8—Harold Rodgers, organ recital.

8.10—"The Captain"—"School Life and School Sport."

8.50—Ballarat Community Singing, Ballarat. President, W. R. Ellsworth, Conductor, Mr. Bert Humphries.

His Worship the Mayor will give a short address—Ballarat: Where it is. What are its outstanding features. The South Street Competition. Ballarat Clerical Party.

10.30—Leslie Brunning, Talk—"Lilies for the Home Garden."

10.40—Latest Australian Cricket Eleven

scores, by courtesy of Reuters Ltd. "Argus" News Service. British Official Wireless News from Rugby. Meteorological information.

11—God Save the King.

SATURDAY, JUNE 12.

11—Harold Rodgers, organ recital.

11.3—The Four Shicks.

11.15—Sonora Recital.

11.22—Harold Rodgers, organ recital.

11.32—The Four Shicks.

11.40—Sonora Recital.

11.57—Harold Rodgers, organ recital.

12—Pine Signal. Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. British Official Wireless News from Rugby. Reuters and the Australian Press Association Cables. "Argus" and "Herald" News Services. Shipping Intelligence.

12.45—Stock Exchange information.

12.50—Meteorological information. Weather Forecast for Victoria, Tasmania, South Australia, and N.S.W. Ocean Forecast. River Reports.

1—Time Signal.

1.1—Studio Orchestra.

1.11—Keith Desmond, monologues.

1.20—Walter Smith, cornet solo.

1.25—Studio Orchestra.

1.35—Keith Desmond, monologues.

1.45—Studio Orchestra.

2—Result of Wimmera Handicap—Mooney Valley Races. Close down.

2.30—Result of Chandel Handicap, Mooney Valley Races.

3—Result of Travancore Steeplechase—Mooney Valley Races.

3.1—"The Vega Players."

3.40—Result of Big Creek Handicap—Mooney Valley Races.

3.41—"The Vega Players."

4.20—Result of Marne Handicap Junps—Mooney Valley Races.

4.22—"The Vega Players."

4.45—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd.

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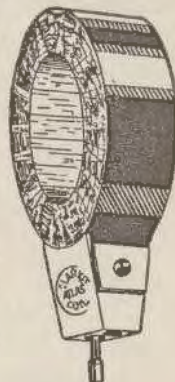
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5—Result of Green Vale Welter Handicap. Moonee Valley Races. Close down.

Evening Session.

5.43—Sporting Results.
6—Children's Hour. Stories by Mary Gumleaf: Poems. The Baby Elephant and A Curious Boy; story for the littler ones, The Littlest Girl in the School; for the bigger ones, Mary Gumleaf has a Day at the Zoo.

6.40—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Argus" and "Herald" News Services. Sporting Results. Reuters and the Australian Press Association Cables.

6.53—Weather Synopsis; Shipping Movements.

6.57—Stock Exchange Information.
7.2—Fish Market Reports by J. R. Bortlett Ltd.

7.4—Market Reports by the Victorian Producers' Co-operative Co. Ltd.: Grain, chaff, hay, straw, jute, dairy produce, potatoes and onions.

7.20—Mr. R. Rawson, "Extracts from an Esperanto's Diary."

7.40—Dr. J. A. Leach—"Scenes of Birds."

6—Collingwood Citizens' Band.

8.13—Eileen Starr, soprano.

8.20—One Act Play, Mr. and Mrs. Maurice Dudley: "Our Play."

8.40—Collingwood Citizens' Band.

8.47—Mortimer J. Pettigrove, tenor.

8.54—Collingwood Citizens' Band.

8.58—Yetti Landau, selected.

9.8—Talk, Mr. H. L. Dwyer—"The Delights of Daylesford"—the Spa Centre of Australia.

9.23—Collingwood Citizens' Band.

9.28—Oliver Peacock, baritone.

9.35—Collingwood Citizens' Band.

9.43—Eileen Starr, soprano.

9.50—Collingwood Citizens' Band.

10—Mortimer J. Pettigrove.

10.17—Yetti Landau, selected.

10.27—Oliver Peacock, baritone.

10.34—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Argus" News Service. Meteorological information. British Official Wireless News from Rugby. Sporting Results—Races. Football. Metropolitan Soccer League. Metropolitan Amateur Association. A short resume of the wrestling bout at the Stadium, by Mr. Norman McEneaney.

11—God Save the King.

SUNDAY, JUNE 13.

Morning Session.

10.40—Express Train Information.

10.45—St. Paul's Cathedral—Matins (choral). Sermon: Rev. F. A. Bay.

12.15—British Official Wireless News.

Afternoon Session.

3—Pleasant Sunday Afternoon Service—Wesley Mission. Conducted by Rev. J. H. Cain. Address, Dr. George H. DeKay, of Hawaii.

4.30—Close down.

Evening Session.

6—Children's Hour. Bobby Bluegum; Poem: My Sunday, by Robert Louis Stevenson; A Bible Story and A Legend of Old Japan—Kiko.

6.45—Close down.

Night Session.

7—Service from Welsh Church, Lonsdale St. Sermon, Rev. Dr. D. Egryn Jones.

8.30—Grand Choral and Orchestral Concert, transmitted from St. Mary's Hall, Geelong.

"Argus" News Service and announcements from the Studio.
10—God Save The King.

MONDAY, JUNE 14.

Afternoon Session.

Latest Australian Eleven scores, by courtesy of Reuters Ltd.

3—Studio Orchestra.

3.10—J. R. Locke, Travel and Adventure during sojourn in Persia.

3.25—Jack O'Hagan, baritone.

3.32—Studio Orchestra.

3.37—Yetti Landau, elocutionist.

3.44—Stanley Adams, violin solo.

3.51—Miss Flora Pell, Supervisor of Domestic Aids, Education Dept.—Domestic Economy.

4.6—Studio Orchestra.

4.16—Jack O'Hagan, baritone.

4.23—Stanley Adams, violin solo.

4.30—Yetti Landau, elocutionist.

4.38—Studio Orchestra.

4.45—"Herald" news service. Stock Exchange information. Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd.

5.1—Result of Races. Ascot Ponies.

5.5—Close down.

Evening Session.

5.45—Children's Hour. Answers to Letters and Birthday Greetings. Little Miss Kookaburra will tell, by special request, the story of Snowdrop and the Seven Little Men, and another episode of The Doings of Nat and Lia Chums at School.

6.40—Latest Australian Eleven Scores, by courtesy of Reuters Ltd. "Argus" and "Herald" News Service. Reuters and the Australian Press Association Cables.

6.53—Weather Synopsis; Shipping Movements.

6.57—Stock Exchange Information.

7.2—Fish Market Report by J. R. Bortlett Ltd.

7.4—Market reports by the Victorian Producers Co-operative Co. Ltd.: Haymarket Sales: Poultry, Grain, Chaff, Straw, Jute, Dairy Produce, Potatoes and Onions.

7.40—Night Session.

7.20—Under the auspices of the New Settlers' League—Lady Omer Masson, C.B.E., New Settlers' League and its Problems.

7.40—Under the auspices of the Department of Agriculture, Mr. W. C. Hoeg, Poultry Expert—Review of the Poultry Industry.

8—Coburg City Band, Conductor, Mr. T. B. Davison.

8.7—Chorus, under the direction of Madame E. Ashton—Band accompaniment.

8.13—Sylv. Exton, tenor.

8.23—Reginald Bradley, violin solo.

8.34—Mary Mack, contralto.

8.44—A. Borthwick, xylophone.

8.50—Kenneth Impett, baritone.

9—Coburg City Band.

9.24—Mr. Charles Nuttall, Travelogue—London.

9.34—T. B. Davison, concert solo.

9.41—May Abette, soprano.

9.54—Reginald Bradley, violin solo.

10.5—Coburg City Band.

10.15—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Argus" News Service. Stock Exchange Information. Meteorological information.

10.25—Kenneth Impett, baritone.

10.39—May Alberta, soprano and Joe Delaney, tenor and chorus.

10.52—Coburg City Band.

11—God Save the King.

TUESDAY, JUNE 15.

Midday Session.

12 noon—Time Signal. Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd.

British Official Wireless News from Rugby. Reuters and the Australian Press Association cables "Argus" and "Herald" News Services. Shipping Intelligence.

12.45—Stock Exchange information.

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.

1.10—Stanley Adams, violin solo.

1.17—Jack O'Hagan, baritone.

1.24—Studio Orchestra.

1.34—Thelma Tennant, 'cello solo.

1.40—Jack O'Hagan, baritone.

1.47—Stanley Adams, violin solo.

1.53—Studio Orchestra.

2—Close down.

Afternoon Session.

3—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd.; Time Signal.

3.1—Studio Orchestra.

3.10—Keith Desmond, entertainer.

3.20—Reginald Bradley, violin solo.

3.28—Franco Lea, soprano.

3.35—Mairon Morland, Infant Welfare.

3.50—Studio Orchestra.

4—Keith Desmond, entertainer.

4.10—Agnès Fortune, pianoforte solo.

4.15—An Fab, of Messrs. Buckley & Nunn Ltd.—Fashion Talk.

4.30—Franco Lea, Soprano.

4.37—Studio Orchestra.

4.45—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Herald" News Service. Stock Exchange Information.

5—Close down.

Evening Session.

5.45—Children's Hour. Answers to Letters and Birthday Greetings.

6—Mary Gumleaf, Poems, A Sunbeam's errands and How the Leaf Came Down. Story for the littler ones, How Kitty climbed the Church Tower; boys, The Pilot Major; Girls, St. Genevieve.

6.40—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association Cables.

6.53—Weather Synopsis; Shipping Movements.

6.58—Stock Exchange Information.

7.2—Fish Market Reports by J. R. Bortlett Ltd.

7.4—Market reports by the Victorian Producers Co-operative Co. Ltd.; Haymarket Sheep Sales, Poultry, Grain, Chaff, Hay Straw, Jute, Dairy Produce, Potatoes and Onions.

7.40—Night Session.

7.20—Under the Auspices of the Town Planning Association, Colonel C. E. Marzull, Town Planning Commissioner: A Better Melbourne.

7.40—University Extension Lecture, Mr. J. T. Sutcliffe: Trades Unions in Politics.

8—The Brunswick City Band.

8.10—Mortimer J. Pettigrove, Tenor.

8.17—Beesie Gannon, violin solo.

8.27—Keith Desmond, monologues.

8.37—The Brunswick City Band.

8.50—Mary C. Lilley, contralto.

9—The Station Instrumental Trio, piano, violin, and 'cello.

9.12—Isabel Ekorsall, soprano.

9.20—Dr. Loftus Hills, D.Sc., Popular Science Talks—The Aurora borealis (Northern Lights).

9.40—Agnès Fortune, pianoforte solo.

9.50—Howard King, baritone.

9.50—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd. "Argus" News Service. British Official Wireless News from Rugby. Meteorological Information.

10.10—The Brunswick City Band.

10.26—Norman Hill, humorist.

10.29—The Station Instrumental Trio, piano, violin, and 'cello.

10.37—Mortimer J. Pettigrove, and Howard King, duets.

10.46—Announcements, etc.

10.50—The Brunswick City Band.

11—God Save the King.



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NEW REDUCED PRICES

TRIMM HEADSETS

As used by McMillan Expedition in the Frozen North.

Dependable, Price 29/6



Dependable Headsets are the best tested, tested headsets on the market, regardless of price. Gold resistance is 2400 ohms. The Dependable is a high quality headset at a price far below higher than the cheap inefficient headsets on the market. A "GOOD" headset will get damaged and put down the return rate problem to a minimum. GOOD means TRIMM.

Professional, Price 39/6



The Professional Headset is the choice of amateur and professional alike when they want to get distance. Used in McMillan expeditions for two successive years. Gold are found in resistance of 5000 ohms. Absolute case against corrosion, insulation, and low losses. All Trimm Headsets are guaranteed to give a lifetime of perfect results and satisfaction, and will be repaired or replaced as required at any time.



A Quality Speaker at a Lower Price

The Trimm Entertainer will appeal to every radio lover. This speaker gives the performance and tones of speakers costing at much higher prices, yet its price is within everyone's reach. The Entertainer stands 19 1/2 inches high, has a 12-inch bell. Volume is born and tone is finished in the attractive Vokes block. Slide adjustment lever gives instant control of tone and volume. Large diaphragm gives pure, sweet, musical tones over the entire range equal to radio broadcasting.

Price £4/9/-

TRIMM CONCERT

The Trimm Concert is the speaker with the "Natural" tone. Large Volume horn stands 23 inches high. Opening of wood chamber is 1-inch, increasing gradually to 1 1/2 inches at the bell. Extra large diaphragm gives beautiful tones over the entire range, from high treble to low octaves. The Concert is the only speaker that reproduces the tone of orchestral or instrumental selections in their true final value. Too expensive, tone, results and volume on D.N. as well as loud, the Concert cannot be rivalled. Standard Vokes block. Volume is controlled by easily accessible adjustment.

Price £6



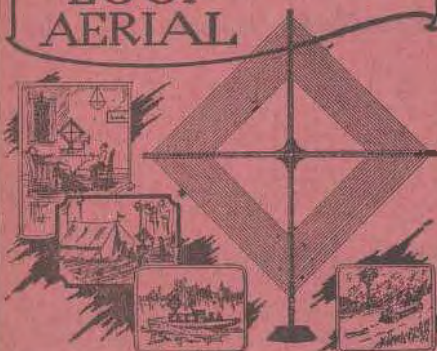
OBTAINABLE ALL DEALERS

SOLE AGENT

O. H. O'BRIEN (Late O'Brien and Nicholl)

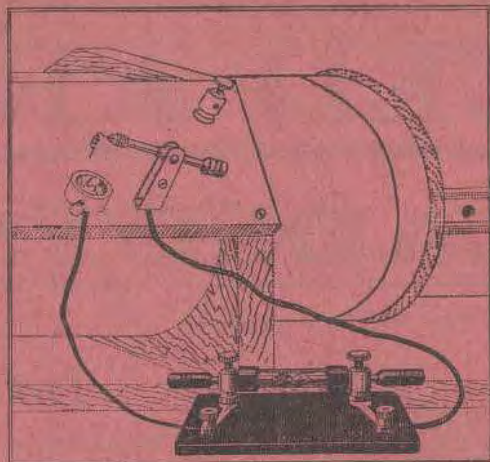
37-39 PITT STREET, SYDNEY 516 COLLINS ST., MELBOURNE

The Grodan Folding
LOOP AERIAL



Constructed of 60 strands of best Beldin Wire. Folds like an umbrella into a tube 20 inches by 8 inches. When open, the Grodan Loop stands 35 inches high.

PRICE—39/6



Install a Grodan Perfection Detector and note the difference.

PRICE, COMPLETE—3/6

Grose & Daniell

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THE
“UTILITY”
VARIABLE CONDENSER

Patent No. 267391



A balanced precision instrument scientifically designed, having extreme accuracy, combined with mechanical strength. Supplied with or without Vernier adjustment.

Made by the makers of “UTILITY”
No-capacity Change-over Switches.

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The
RAPINET
Batteryless Fault-Finder



THIS indispensable scientific instrument indicates instantaneously, without the aid of a Battery, whether your connections on the circuit are good or defective; whether you have a short or a break. Its uses for Electrical purposes are innumerable. Price, 3/6 each. Unmistakably praised by leading Wireless Authorities.

The **RAPINET** #34
CONDENSER



This Masterpiece Square Law Self-Vernier Condenser can be used for all capacitance by increasing or decreasing the Airgap by the rotating centre spindle. When dial is turned the moving plates not only move in and out the fixed plates, but also form a micro-adjustment by the action of the axle moving up and down the centre spindle.

Insist on having “Rapinet” Specialities. From most dealers everywhere, or direct from us. Post free.

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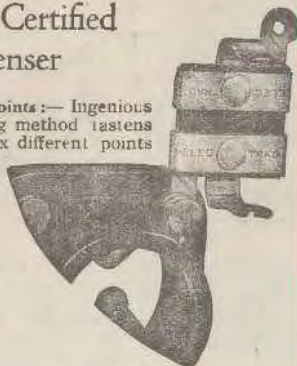
ELECTRAD

Certified Radio Products

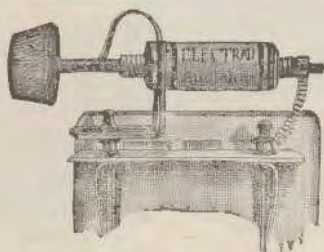
Electrad Certified Condenser

The Six Pressure Points.— Ingenious riveting and binding method fastens parts securely at six different points and exerts EVEN PRESSURE upon the largest possible surface.

Thin sheet copper is used in place of tin-foil. A slip of the soldering iron cannot damage the copper and thereby ruin this condenser.

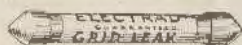


.001 - - - Price 2/6
 .00025 - - - " 3/-



Electrad Audiohm

Converts noisy distorted volume into clear true tones by a simple twist of adjusting knob. Mount across secondary of your audio transformer as illustrated. Price 9/-



Electrad Glass Grid Leaks

Electrad Grid Leaks are made by a new and controlled process. Each Grid Leak is individually tested before it leaves the Electrad factory. They are non-microphonic and moisture proof, while the resistance is constant.

Sizes 1/2 to 5 megohms, plain. Price 2/3
 Sizes 1/2 to 5 megohms, de luxe. Price 3/9



Electrad Lightning Arrester

Consists of an air gap between two copper conductors, arranged in an improved manner, so that it is impossible for the spacing of the gap to vary. It is then hermetically sealed and the gap is therefore absolutely watertight. The housing protecting the air gap is moulded in glazed porcelain with a highly ornamental finish. These arresters comply with Fire Underwriters regulations. Price 4/-

OBTAINABLE AT ALL RADIO DEALERS

Amalgamated Wireless
(Australasia) Ltd.

167-9 Queen St., Melbourne

97 Clarence St., Sydney

King and King Chambers, Queen St., Brisbane



Type RS1, Wooden Case.

AMPLION

Radiolux Amplion

The Natural Tone Loud Speaker

PURE, smooth, natural tone and realistic reproduction in great volume, combined with artistic appearance and compact form are qualities which render this unique amongst contemporary instruments. Totally different in design, in appearance and in results, the Radiolux Amplion is a **REVELATION IN LOUD SPEAKER QUALITY.**

The Radiolux Loud Speaker, although of the enclosed type, possesses the same strength of tone as the ordinary horn type. It is the only hornless Loud Speaker in which the volume has not been decreased.

British Made Radiolux are now available for immediate delivery, but Australian made cabinets are shortly being produced, and will be finished to match any style of furniture or radio set—practically to suit customers' requirements. Place orders now, as delivery will be made in strict rotation.

Radiolux Amplions are finished in both wood and metal cases.

OBTAINABLE FROM ALL RADIO MANUFACTURERS AND DEALERS



Type RS2, Metal Case.

Sole Distributors for Australasia:

Amalgamated Wireless
Australasia Ltd.

Sydney - Melbourne - Adelaide - Brisbane - Perth - Wellington (N.Z.)

British Factory Representative: William Blogg, 9 Loftus Street, Sydney