

# WIRELESS WEEKLY

Registered at the G.P.O., Sydney, for

transmission by post as a newspaper.

VOL. 7. No. 15.

FRIDAY, FEBRUARY 5, 1926.



ONE  
CONTROL

LONG  
DISTANCE  
STATIONS

SEE  
RESULTS OF  
TEST, PAGE  
29



STANDARD  
CALIBRATION

WAVE  
LENGTH

MAGNAVOX  
SETS ARE  
SO SIMPLE A  
CHILD CAN  
OPERATE  
THEM

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PARISON  
WITH YOUR  
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FEATURE:

A 3 Valve  
“Duplex”  
Receiver

INSIST ON

# Carter

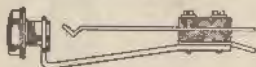
STANDARD

# Radio

## PRODUCTS

Your dealer will be glad to show you the new Carter Line. Every Jack, Rheostat, Potentiometer or Switch is of the finest quality and is not equalled anywhere at the price this line is offered.

### CARTER RECEPTACLE JACK



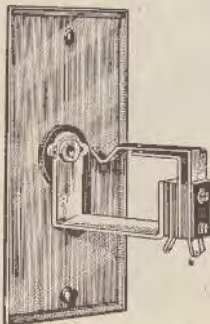
Carter Hold-Tite Jack, No. 101  
One Spring, open circuit.

Retail Price, 4/8.



Carter Hold-Tite Jack, No. 103.  
Three Springs, one local make contact. Single filament control.

Retail Price, 6/3.

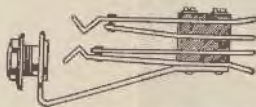


Compact radio outlet for buildings wired for radio service. Fits any standard radio plug.

Can be used on either series or parallel circuit. Provides effective way to ground the antenna when radio set is disconnected from antenna by removal of plug from this Jack.

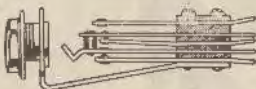
Mounted on insulated 2 1/2 in. x 4 1/2 in. brush brass standard escutcheon plate; complete with "Radio" name plate and screws.

Retail Price, 8/3.



Carter Hold-Tite Jack, No. 104.  
Four Springs; breaks two contact. Double circuit.

Retail Price 7/-.



Carter Hold-Tite Jack, No. 105.  
Five Springs; opens two and closes one contact. Double Filament control.

Retail Price, 7/9.

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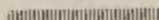


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De Forest Valves  
17/6 each  
Everywhere



Filament, 3 Volts .06 Amp.  
Detector, 16 to 45 Volts.  
Amplifier, 70 Volts to 150 Volts  
Fits Standard American Socket.

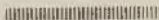


De Forest Valves  
were the first  
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Leg De Forest in-  
vented the valve,  
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the best.

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Prices quoted apply only in N.S.W.

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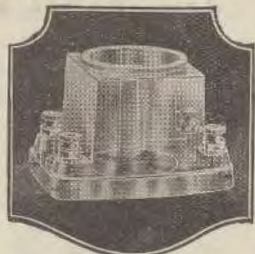
Has a guaranteed shelf and storage life.

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Practically no voltage loss when not in use for months.

**"OVER TWICE THE LIFE."**

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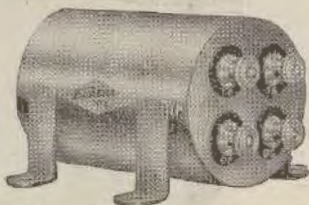


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100 per cent. Insulation.  
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There is no higher quality than Philco and the price is the same as other makes.

Philco "A" and "B" Batteries can be recharged at a minimum cost and installed in your set means happiness for everybody.

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# WIRELESS WEEKLY

Phones: Redfern 964 and 822.

Official Organ of the New South Wales Division of the Wireless Institute of Australia, with which are incorporated the Affiliated Radio Societies and the Australian Radio Relay League.

Editor: A. W. WATT

The Editor will be glad to consider Technical and Topical Articles of interest to Australian Experimenters. All Manuscripts and Illustrations are sent at the author's risk, and although the greatest care will be taken to return unsuitable matter (if accompanied by stamps), the Editor cannot accept responsibility for its safe return.

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## CONTENTS

	Page
A 3 Valve "Duplex" Receiver . . . . .	7
Should Regeneration be Barred . . . . .	13
Seasonings . . . . .	17
To the Kiddies . . . . .	27
Amateur Notes . . . . .	31
Wireless Institute . . . . .	33
Club Notes. . . . .	33
License Fees . . . . .	35
Broadcast Programmes	37

### PAY YOUR FEE.

In South Australia, the Postmaster-General's Department has been rounding up illegal listeners—that is to say, people who take all the advantages of broadcasting without paying for them. In some cases fines were levied, and a further batch of prosecutions is pending.

Now while every fair minded member of the community has little sympathy with the man who is penalised on this count, we are inclined to the opinion that many of those who get themselves into the courts over this unfortunate business do so out of sheer neglect and an improper realisation of what use the Listeners' Fee is put to.

In the cases that have come before our notice we have found that the offender, or the prospective offender, has the view that the Broadcasting companies are huge profit making concerns, giving back as little as they can for the return they get. Nothing is more erroneous.

Few people realise the organisation necessary to ensure a daily change of programme. In concert programmes, days and weeks of preparation are possible; in vaudeville and variety the programme runs for a week at least without any

change of artists. But in broadcasting a fresh range of artists and items is required every night. Thus there must be constant watchfulness and a long vision ahead to make certain that nothing is repeated too rapidly nor that artists of similar quality of voice and style follow. If Mr. Listener-in would think a little before he fulminates against the cost of his license he would realise that only organisation of the highest type, requiring remuneration commensurate with the ability displayed, will provide him with what he is getting for a minimum of effort and at price of a penny a day.

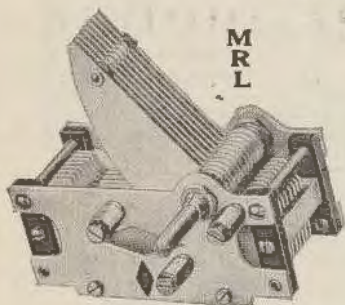
Nor does this touch upon the expenditure of running a broadcasting station. Copyright, payments of royalties on inventions, payment of artists, of staff and of clerical assistants have all to be met out of the revenue derived from the public. Consequently the duty devolves upon everyone to see that his own fees are paid promptly and cheerfully, and that all the thousand and one persons who seek consciously or unconsciously to evade payment are instructed in the ethics of fair dealing.

A. W. WATT.

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27/6

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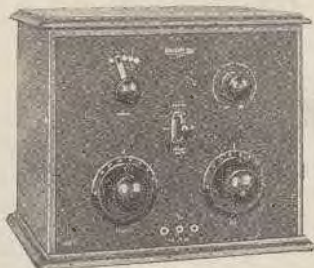
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## BURNDIPT

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# A Three Valve "Duplex" Receiver

By A. Alexander

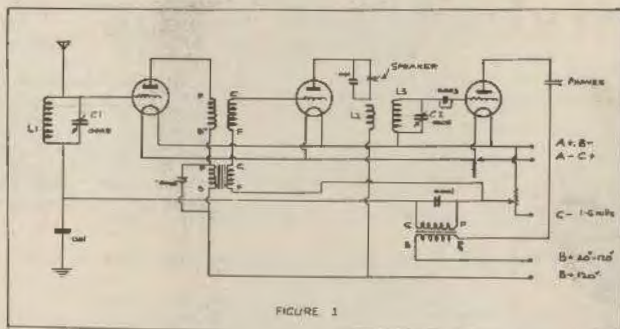
Now that radio materials are comparatively cheap, one seldom comes across a first-class receiver built on the reflex principle. No receivers of this type built in Australia are at present on the market, but nevertheless they are extremely efficient, and when properly designed and built are very easy to handle and maintain.

It does not seem so very long since the "Grimes" and "Markness" reflex circuits were popular amongst those experimenters who were able to get satisfactory results from them, but the designs were better suited to American conditions, and components which were necessary for the reception of Australian broadcasting stations were not available.

In this article is presented the circuit and design for the construction of a three valve receiver

or cutting out any portion of its windings. The coupling between the second radio frequency valve and the detector valve is made by means of two honeycomb coils, loosely coupled, and tuned by a variable condenser. If desired, any standard air-cored tuned transformer can be used in their stead, but losses will be introduced which are avoided when good honeycomb coils are used in a standard mounting.

After rectification the current is passed through the primary circuit of a  $3\frac{1}{2}$  to 1 audio transformer in the usual manner. The secondary of this transformer is connected in the grid return circuit of the first valve in the manner indicated. The secondary of this transformer will act as a "choke" to currents at radio frequencies, and so a small fixed con-



suitable for use under Australian conditions, and which, in capable hands, is sufficiently sensitive to pick up all of the higher powered stations on the loud speaker.

The circuit, which is shown in Fig. 1, makes use of two stages of radio frequency and two stages of audio frequency amplification, with a non-regenerative valve detector.

The aerial is direct coupled and a honeycomb coil and variable condenser being used for tuning. Where greater selectivity is desired it will be necessary to use a loose coupled circuit, the aerial coil being aperiodic. (See Fig. 4.) The radio frequency coupling between the two amplifying valves is made by means of an Australian-made radio frequency transformer, which efficiently covers the wavelengths between 250 and 1500 metres, without using switches

denser must be shunted across it. This is shown in the diagram, the condenser having a capacity of .0001 mfd.

The rectified current has now passed through one stage of amplification at audio frequency, and to transfer the amplified current to the next stage a  $3\frac{1}{2}$  to 1 audio transformer is included and wired up in the usual manner. The primary winding of this transformer is connected in series with the radio frequency transformer and the secondary of the audio transformer is connected in series with the secondary winding of the radio frequency transformer. This sounds rather complicated, but it is quite simple and can be easily followed from the diagram, the terminal marking on each of the two transformers being indicated so that even the veriest tyro can understand it.

# PHILIPS' VALVES

Philips Valves are manufactured in Holland by the Philips Glow Lamp Works—a firm whose name is a household word wherever electricity is used. Having such an excellent reputation it is not surprising that this firm has succeeded in producing valves which stand out because of their wonderful service and dependability.



**THE PHILIPS C507** is an improved 201a type and is designed for general use as either detector or amplifier. On account of its very large output it is specially suitable as a Power Amplifier for Loud speaker work.

Filament Voltage: 5 volts.  
Filament Current: 0.25 amp.  
Plate Voltage: 20—120 volts.

RETAIL PRICE . . . 17/6

**PHILIPS B406, "THE NEW WONDER VALVE."** This is a new 201a type. Filament volts 4, while the current consumption is .1 amp only, whereas all valves of 201a type take .25 amps, at 6 volts. This remarkable saving in current is effected without any loss in volume and indeed it may be said that the B406 reproduces music more faithfully than any valve yet manufactured.

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## PHILIPS A 110 "THE ONE-CELL VALVE," Detector and Amplifier.

This valve consumes less current than any other Valve yet produced and makes it possible to operate a set for many weeks on one dry cell. The filament is not coated with Thorium Oxide as in the ordinary Dull Emitter, but is made under a specially patented process, and as long as the marked voltage is not exceeded, the filament will keep the same characteristics throughout the life of the valve.

Filament Volts: 3.4—4.0 volts.  
Filament Current: 0.1 amps.  
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It should be noted that the primary winding of the audio transformer, being included in a high frequency circuit, must be shunted by a small fixed condenser, so that a free path is provided for high frequency currents. This condenser has a capacity of .0005 mfd. as shown. It is important that this value be not greatly exceeded, otherwise rectification in the second amplifying valve may take place; .001 mfd. would be the limiting maximum for the majority of transformers.

also of the double circuit variety, and enables the set to be used as a straight 2 R.F. and detector circuit when tuning-in with the phones, but at the same time the audio frequency transformers remain in the circuit. By this arrangement the tuning is not affected when changing over from phones to the loud speaker. As it is not necessary to withdraw the phones or loud speaker from the receiver, both instruments can be used simultaneously in different rooms, if desired.

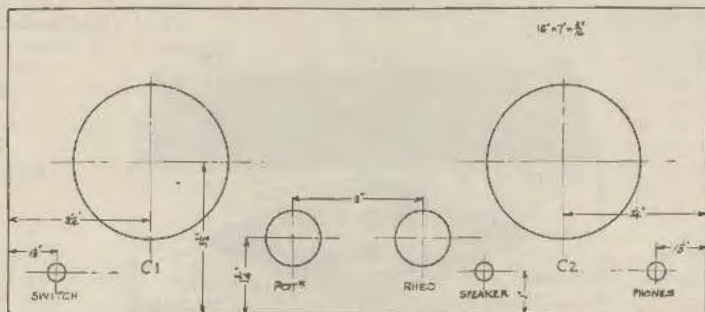


FIGURE 2

The loud speaker is operated from the plate circuit of the second amplifying valve, a double circuit jack being provided so that when the plug is withdrawn the circuit will be closed. Across the jack is shunted a fixed condenser of about .001 mfd. capacity to form a direct circuit for the high frequency currents.

The jack in the detector valve plate circuit is

This feature is rather a good one, as the receiver with accumulator and batteries can be housed in the back parts of the house, and the loud speaker placed in the music room, and for this reason alone the design may appeal to those people who, although favourable to wireless generally, object to having a collection of accumulators and batteries in the best room in the house, where, unless handled carefully, they might cause some damage.

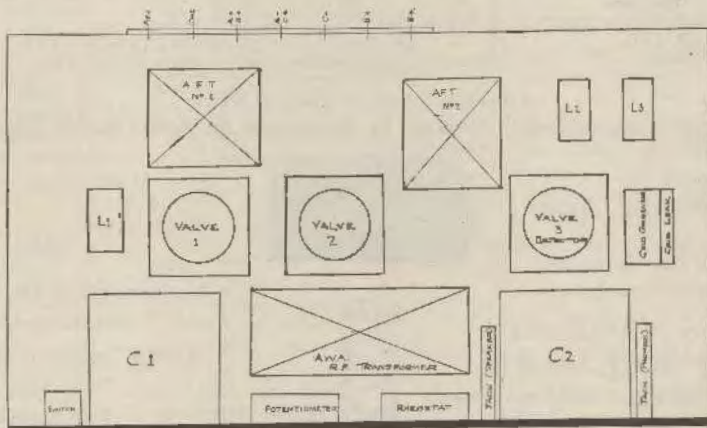


FIGURE 2

DRY CELLS FOR EVERY PURPOSE

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To  
Build."



"Cost  
Less  
To  
Operate."

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no better than its  
Battery."

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Sets Deter."

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Produced Expressly for Radio Transmission Reception

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	"Dominion" -	4/6
	"Navy Special" -	3/0
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	10 1/4 x 7	
	45 "Large Type" -	20/0
	10 1/4 x 7	
C	4.5 "Blossom" -	2/9
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	6.0 "Ignite" -	15/0

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Manufactured by

**WIDDIS DIAMOND DRY CELLS  
PTY. LTD.,**

West Melbourne, Vict.



In building the set the following parts will be required:—

- 1 Bakelite or Radion panel, 16in. x 7in. x 3/16in.
- 1 Bakelite or Radion panel, 7in. x 1in. x 1/8in.
- 1 Base (pine), 16in. x 9in. x 3/4in.
- 2 .0005 Variable condensers.
- 1 Rheostat to suit valves used.
- 1 Potentiometer.
- 1 Battery switch.
- 2 D.C. jacks, bakelite insulation.
- 2 Audio transformers. .
- 1 Radio transformer, A.W.A. type.
- 3 Valve sockets.
- 1 Grid condenser, .0003 mfd. capacity.

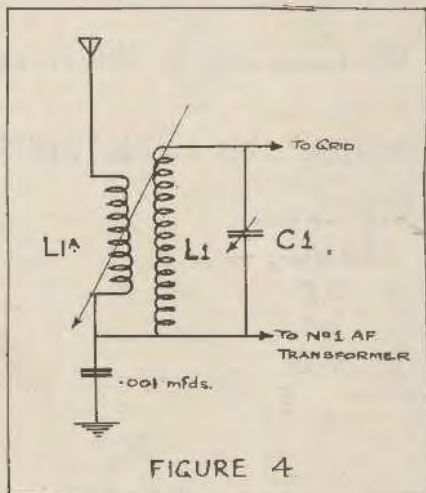


FIGURE 4

- 1 Fixed Condenser, .0001 mfd. capacity.
- 1 Fixed Condenser, .0005 mfd. capacity.
- 2 Fixed condensers, .001 mfd. capacity.
- 3 Base mounting coil plugs or 1 3-coil holder.
- 1 Grid leak.
- 7 Terminals.

The smaller panel is drilled for the terminals, of which there are seven in all, and screwed to the baseboard at the back of the set. The main panel may be drilled in accordance with the dimensions shown in the drawing, and if a standard 3-coil holder is used it may be mounted on the panel in a central position. Some people may prefer to use the standard Australian made coil mounts; these may be mounted externally or internally as desired, without affecting the design in any way.

The disposition of the parts on the baseboard is shown in Fig. 3, and for best results this should

not be departed from except in minor details, as it has been found to be correct.

A separate terminal is provided for the B battery supply to the plate of the detector valve. This could have been omitted, but it will sometimes be found advantageous to use different potentials on the plate of this valve, particularly if the valve itself has aged.

Incidentally, it is essential that hard valves be used in the amplifying stages, as a high plate voltage gives the best results. Note that the positive side of the C battery is connected to the negative side of the filament battery as usual, but that the potentiometer is connected right across the two batteries from C- to A+. When the C battery is not in use the C-terminal should be connected to the A-terminal with a short length of buswire.

A small fixed condenser of any suitable capacity (.001 mfd. has been found suitable, but it is not critical) is placed in the earth circuit, in order to prevent interference from low frequency parasitic currents flowing from the earth into the receiver, and, furthermore, the grid end of the secondary winding of the first audio transformer is not held at earth potential.

If this design is followed carefully and the usual precautions are taken when "wiring up," builders will have no difficulty in obtaining satisfaction from the operation of the most powerful and sensitive three valve receiver yet designed.

## Sale of Surplus Stock

MORE GENUINE BARGAINS FOR THE HOME CONSTRUCTOR

.0005 and .001 variable, plain and vernier condensers, slightly defective.

Single and double earpiece telephones and headbands.

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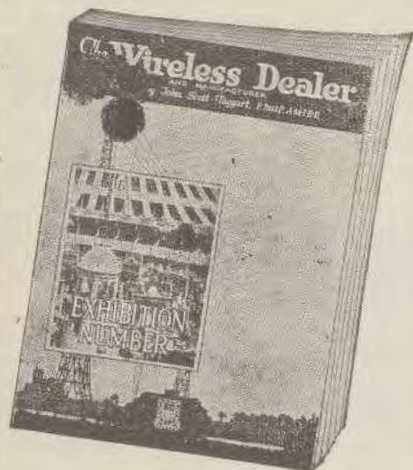
ON VIEW

## BASEMENT

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**"CABLE" SETS & COMPONENTS**

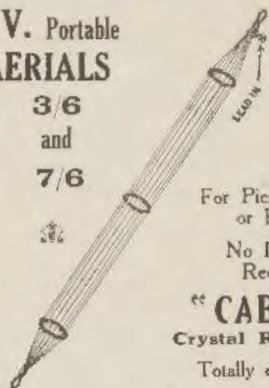
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 AERIALS**

**3/6**

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# Should Regeneration be Barred

## *A Debatable Point*

By "WIRELESS WEEKLY."

Whenever several broadcast listeners or experimenters get together, their conversation drifts aimlessly from one topic to another, until finally some one brings up the subject of regeneration. One man will state positively that regeneration in the present state of radio broadcast development is an abominable evil, that it is responsible for distorted reception by its user, and owing to its radiating properties spoils D.X. reception for hundreds of other listeners-in. Another who has probably never used any other circuit than the P one circuit, emphatically declares that regeneration is the most valuable phenomenon of all radio reception, and that its use should be freely encouraged. If one analyses the situation from a cool and unbiased stand point, he will be forced to voice the conclusion that the contentions of both men are very worthy of support, although neither debater is fully justified in demanding a complete capitulation to his ideas.

### Arguments for Regeneration.

Supporters of regeneration base their arguments along the following lines. They show rather convincingly that regeneration has been the outstanding feature in some form or other of practically every receiver produced since Armstrong discovered it some twelve years ago. They take particular delight in pointing out the economy per tube of the regenerative set, and will quote instance after instance in which simple home construction sets of one, two, or three valves have outranked in performance formidable commercially made outfits using twice the number of valves. They declare that simplicity, economy and unflinching effectiveness of circuits similar to the P one have done more to popularise radio broadcasting than any other factor.

### Against Regeneration.

The opponents of regeneration cheerfully and disarmingly admit the truth of these assertions. They probably then commence the defence of their own position by accusing their friends of failing to observe a proper perspective of the radio broadcast situation as it exists to-day. They state, whereas the radio experimenter has little more than code to listen to, the average modern set owner is wholly interested in speech or music. They proceed by demonstrating that the entire theoretical and practical function of regeneration

is absolutely and unequivocally opposed to the best interests of radio telephony, and that while regeneration in all cases assists the code signal, it invariably tends to distort and destroy the characteristics of the telephonic one. They wind up with a grand flourish to the effect that the radiating properties alone constitute sufficient reason for the banishment of regeneration from all broadcast receivers.

### Analysing the Position.

Statements of both sides bear up very well indeed under close scrutiny; perhaps the one most likely to be questioned is that concerning the tone-destroying conduct of regeneration. But this is undeniably true. If you doubt this statement, short circuit your tickler coil altogether for one



### OLD SOW RADIATOR.

*I know an old pest who be-clutters the air,  
She has many children—she has 'em for fair;  
She gives squealing lessons to all her young brats—  
(For sharp oscillations, they have it on cats.)  
A selfish old hag—with the sharpest of voices,  
In spoiling our concerts she gaily rejoices;  
Sing ho!—for a law to put her on the "skids"—  
And listen, dear fan—don't raise one of her kids!*

—Drawing and verse by W. R. Bradford.

(The cartoon and verse shown above are reproduced by courtesy of "Radio Broadcast," U.S.A.)

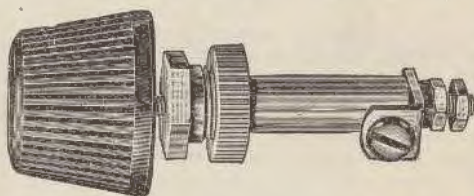
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AND WE WILL SHOW YOU HOW!

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SOLDER, Belden Rosin Core Solder, per 18-inch length . . . . . 3d.  
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ELECTRIC SOLDERING IRONS, Plug-in at any 240 volt power point, saves time . . . . . 24/6

VALVE SOCKETS, American Standard, 2/- to 3/9  
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RHEOSTATS, Ams. 30 or 6 ohms. . . . . 2/3  
RHEOSTATS, Kilbourne and Clark, 20 ohms. . . . . 4/6  
MARSHALLSTATS, ideal for the Martri Kay or any circuit requiring delicate filament control . . . . . 10/6  
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AUDIO TRANSFORMERS, Crescent (guaranteed), 8 to 1 or 2 $\frac{1}{2}$  to 1 . . . . . 13/6  
AUDIO TRANSFORMERS, Kilbourne and Clark 8 to 1 . . . . . 18/6  
SUPER AUDIO TRANSFORMERS the "Karas Harmonic," the best Audio Transformer in the world . . . . . 30/-  
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VARIABLE CONDENSERS, Improved Ormond, .0005 . . . . . 8/9  
Do. .001 . . . . . 10/6

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LOW LOSS CONDENSERS, Ormond Straight Line, .0005 . . . . . 12/6  
ENGRAVED BINDING POSTS, Setz on Cards. . . . . 1/9  
Do. Separate Engraved Posts, each . . . . . 4d.  
TERMINAL BOARDS, with Seven Engraved Posts 2/9  
TWO COIL FITTINGS, well made, Plain . . . . . 5/-  
THREE COIL FITTINGS, Vernier Adjustment 11/6

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28 Royal Arcade SYDNEY  
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Phone B 5891

Phone, Newcastle 1622



or two items, and note the difference in tone and quality.

The feedback action, the supplying of additional energy to the weak signals picked up by the aerial, builds up the irregular impulses that make up radio telephone speech or music and changes their characteristic shape. The signals are increased in volume, yes, but at the same time they are robbed of their tone qualities, and are reproduced as distorted sounds. Exponents of regeneration will probably answer this objection by saying that the extent of the damage to the quality of tone depends on the limits to which the feedback is pushed. They suggest that the set owner reduce the coupling or use a smaller tickler coil. Their opponents usually have the last word in the matter by stating that if the coupling or tickler is reduced the operator will lose amplification so rapidly that he probably will not be satisfied with the volume of response.

#### Conclusions.

This phase of the question is obviously debatable for ever, but without a doubt it is exactly what is happening in the cities and the suburbs every night. So many listeners-in are endeavouring to receive the Inter-State stations as satisfactory volume (with impossible sets), that the results all round are far from satisfactory. The problem of radiation caused by regenerative sets has been dealt with many times in "Wireless Weekly," and it is not necessary to repeat here the many descriptions of the weird squeals and whistles every radio set owner has heard. Those however, who admire regeneration and who are not content to sit back and see a valuable radio asset outlawed should experiment with circuits similar to the Browning Drake circuit, or the Neutrodyne with the plate circuit of the detector valve tuned. In both these circuits, means are provided for the neutralisation of the internal capacity effect of the H.F. amplifier valve or valves. In the case of the Browning Drake circuit the tickler coil in the plate circuit of the detector valve is arranged in the ordinary electrical and mechanical manner, but it is made purposely small to keep the entire set stable and free of oscillation.

This method of regeneration furnishes enough protection from radiation and sufficient increase in selectivity and sensitiveness to make it well worth while experimenting with. Both the Browning Drake and Neutrodyne receiver (with regenerative detector valve) have recently been described in "Wireless Weekly," so that further space will not be taken up now, claiming their wonderful advantages over the ordinary regenerative type of receiver. There is no doubt however, that these types of receivers afford a favourable balance between

the unadorned straight regenerative hook ups and the multi stage R.F. outfits that should content both the exponents and opponents of regeneration. The exponents should be satisfied because they will be able to see the tickler coils flapping against the secondary, the opponents can concede that radiation and distortion will exist in quantities too small to make themselves manifest.

(Editors Note: We again suggest to city readers who are at present using full regenerative sets to experiment along the lines described in "Wireless Weekly's" article of Nov. 20, 1925, "H.F. Amplification with correct Neutralisation." Remember that one evening's dial-twisting with a regenerative receiver will indirectly cause poorer programmes not only from your local station but from the Inter-State station also.)

## The Highest Mast in the World

### KOENIGSWUSTERHAUSEN CALLING!

The highest mast in the world used exclusively for wireless purposes has recently been completed at Koenigswusterhausen, now the leading German station for the transmission of business and press communications.

The main tower is 765 ft. in height, while there is a small machine house with a 30 ft. tower. It is proposed to incorporate the transmitter in a 150 ft. extension to the main tower.

An interesting point lies in the fact that only 700 tons of iron were used in the construction of the German tower as compared with 7,000 tons used for the Eiffel Tower.

### SHORT-WAVE BROADCASTING FROM WGY.

As a wireless research centre, the experimental laboratories of the General Electric Company at Schenectady, New York, probably rank among the largest in the world. At the present time no fewer than nine transmitters, some of them broadcasting, are operating from this spot. Each has its own antenna system and individual wavelength for its special task. The stations transmitting programmes from the WGY studio are 2XAG on 379.5 metres, 2XK on 109 metres, and 2XAF on 41.88 metres. C.W. transmissions are conducted from 2XAZ on 214 metres, 2XAC on 80 metres, 2XAD on 21 metres, and 2XAW on 15 metres. 2XAH, which works on 1,560 metres, is undergoing changes in design at the moment, but will resume transmissions in the near future. From 11 p.m. (G.M.T.) onwards on Mondays, Tuesdays, Thursdays, and Fridays, 2XK and 2XAF transmit WGY's programmes on 109 and 41.88 metres respectively.

# 1926 RADIO New Lines Just Landed

## CLEARTON VALVES.

Backed by an Ironclad Guarantee. Ask for booklet showing the remarkable characteristics of these Valves.

OT-201A	} 17/6 each.
OT-189	

## THOROLA AUDIO TRANSFORMERS.

Model 350. Black	21/- ea.
Model 351. Black	30/- ea.
Model 321. Gold and Black	27/6 ea.

## "PRECISE" LINE.

### SUPER MULTIFORMER.

For SUPER HEAD SETS . . . . . £6/6/-

### SYNOBODENSEE.

An ideal STRAIGHT LINE CONDENSER, for separating close stations . . . . . 32/6

## LOUD SPEAKER & BATTERY CORDS.

Phone Cords, 5 ft.	2/9 and 3/6
Loud Speaker Cords, 5 ft.	2/9
Loud Speaker Cords, 10ft.	5/3
Loud Speaker Cords, 20 ft.	9/-
A and B. Battery Cords.	8/6

## VALVE SOCKETS.

Porcelain, 201A	4/-
Genuine Bakelite, 201A	3/-
Gilfillan Brown Bakelite, 201A	5/6

## MAR-CO RADIO PRODUCTS.

Mar-Co Vernier Dials	16/6 ea.
Perfection Stataup Phone Plug	3/9 ea.
Neutralising Condensers	8/9 ea.
Mar-Co Variable Gridleak	7/- ea.
Mar-Co Battery Switches	2/3 ea.

## NEW "B" BATTERIES.

Burgess, 22½ volt	15/-
Burgess, 45 volt	30/-
Winchester, 22½ volt	13/6
Winchester, 45 volt	26/-
Eveready, 30 volt	9/6
Eveready, 42 volt	12/6
Eveready, 60 volt	18/-

## PHILIPS PRODUCTS.

Philips Battery Chargers, £8/-/- and £8/10/-, Simple, most efficient, no troublesome adjustments.

Philips Valves from 7/- each.  
Ask about the Wonderful New B496 Valve, 17/6.

## CRYSTAL DETECTOR.

HARLIE, the Wonderful New Variable Detector	7/6
GILFILLAN Fixed Detector	7/-
NEUTRON Crystals	ea. 2/3

## BRADLEY PRODUCTS.

Bradleystat	15/-
Bradleyleak	15/-
Bradleyswitch	4/6
Bradleyohm	16/-
Bradleyometer	32/-
Bradleyunits	10/-

## SPECIAL NOTICE—MAR-CO VERNIER DIALS.

We apologise for not being able to meet the tremendous demand for these Vernier Dials, but another shipment is due to arrive in a few weeks, and orders will be executed strictly in rotation. ACCEPT NO IMITATIONS. There is only one genuine Mar-Co Vernier Dial.

Obtainable from Leading Radio Dealers, or

# Harringtons LTD

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Adelaide . . . . . 19 Rundle Street  
Wellington, N.Z. . . . . 42 Willis St.  
Auckland, N.Z. . . . . 149 Queen St.





# SEASONINGS WITH A TOUCH OF MIXED MUSTARD.

## On With the Jazz.

Miss Lyl Hine, the jazz pianiste, continues to set many feet dancing with her syncopated rhythms transmitted by Station 2BL. Those prophets whose voices were heard throughout the land prophesying the early cessation of the public demand in this regard are steadily proving themselves to be unworthy of their self-chosen vocation inasmuch as the demand steadily increases. Miss Hine is one of those fortunate persons whose natural ability to play strongly marked and rhythmical music is assisted by a fine technical training.

## Celebrated 'Celloist.

The 'cello solos of Mr. Bryce Carter continue to delight the listeners-in, and many expressions of appreciation are constantly being received. Mr. Carter's mastery of his instrument is specially marked by the luscious and exquisitely even tone that marks every item which he plays. It is generally admitted that the 'cello produces a tone closest to that of the human voice, and consequently there is a speaking quality about 'cello music which has a very marked appeal. Mr. Carter has had a wide experience as 'cello soloist, travelling with distinguished artists, including Madame Melba, and was also the 'cellist in the orchestra of the Melba-Williamson grand opera season.

## A Popular Songster.

Madame Iva Clarke, whose contralto voice was at one time a regular feature of 2BL's programmes, has returned to Sydney after a lengthy absence and will be taking up her work again almost immediately. As Madame Clarke is a favourite artist with the public generally as well as with the listeners-in, the fact of her return to Sydney will be the cause for general rejoicing amongst the musical public.

## A Coloratura Soprano.

Miss Daisy Mangan, the coloratura soprano who is an exclusive 2BL artiste, will be heard again on programmes during the month of February. Miss Mangan excels in operatic arias, wherein the coloratura quality of voice is specially heard to advantage. Items such as "The Bell Song" from "Lakme" are sung by Miss Mangan with consummate ease.

## A 2BL Favourite.

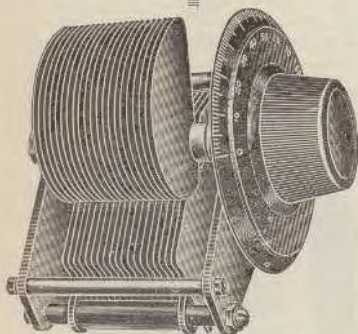
Mr. Alfred Cunningham, the distinguished baritone, whose vocal work from Station 2BL has caused so profound an impression, is regarded by many people as the possessor of one of the very finest broadcasting voices at present being transmitted. Not only is he the possessor of a voice of exquisite



quality, but his powers of interpretation and his wide selection of songs make him a very desirable addition to the radio forces. Any programme upon which Mr. Cunningham's name appears is given an added distinction.

## Listen for Lotys.

Miss Lotys Lescaut, a French soprano of distinction who is heard on programmes transmitted by 2BL, is fortunate in being able to use two languages with equal facility. Born in France and receiving her early education there, Miss Lescaut naturally speaks flawless French; at the same time she was sufficiently young at the time of her arrival in Australia to master the use of English without any perceptible trace of accent whatsoever. The result of



*An IGRANIC quality production.*

*The Square Law Variable Condenser, an exceptionally high-class instrument, fitted with ball bearings, low-loss characteristics and very small end capacity. Obtainable from 29/6 up.*

## QUALITY!

The world-wide sales of famous IGRANIC Radio Devices literally run into millions annually. What finer tribute could be paid to their sterling quality and all round general efficiency?

A satisfied user in Sydney tells us that the superb IGRANIC honeycomb coils, for instance, mean all the difference between his getting, and not getting, far distant stations.

Similarly with broadcast reception; if you will have the purest reception with the fullest volume you must use quality apparatus—and the IGRANIC trade mark on any article symbolises the highest quality.

Are you disappointed with, and perhaps a little weary of your present Radio activities? Then why not scrap those cheap and nasty parts—and build a better set with IGRANIC Radio Devices.

### **Refuse Substitutes—**

**—Insist on IGRANIC**

All dealers stock them.

Write for booklet No. 3.

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HOBART . . 145 Macquarie St.

W. R. Gardam, Perth.



this can be seen in all Miss Leseaut's transmissions, as her enunciation in both languages is all that can be desired, every syllable being clearly heard. Miss Leseaut possesses a wide repertoire of French and English songs, operatic arias and numbers by the most modern composers.

### 3LO PRESENTS:

Miss Effie Armstrong, contralto, whose voice is one that the ether finds very much to its liking, has had the experience of singing from both sides of Australia to the other side. While on a visit to Perth she was introduced to the manager of 6WFF, who invited her to sing at that station, and the experience there gained at that station stood her in good stead when on her return she visited 3LO and was at once asked to sing there also. It is not every contralto voice, rich and flexible though it may be, that is suited to broadcast transmission. There are in some voices certain tones or some method of voice production that cause a microphone to "shiver" its timbers and create a jar that produces a manish quality in the transmitted tone and spoils the full, round, resonant and thrilling heights and depths of the real womanly contralto. Whether it be the voice itself or her delivery of it, or some innate gift of facing the microphone in just the right way, Miss Effie Armstrong's voice certainly suits broadcasting. Those who have heard her sing will be interested to know that Miss Effie Armstrong is a pupil of the Albert Street Conservatorium, E. Melbourne, where she won the Mary Campbell Scholarship, and has taken a prominent part in the various students' concerts held there annually, one of her latest successes

by a newspaper critic as "an arresting figure," meaning, doubtless, that Miss Armstrong is good to look upon, and certainly her success in broadcasting is not at all likely to be lessened when at some not very distant date the appearance as well as the voice of the singer is transmitted by 3LO or other up-to-date stations. Listeners-in will be glad to hear that Miss Effie Armstrong is to be heard in the forthcoming Gilbert and Sullivan opera season.



being as the Goddess of Youth in that mystical production, "Chilia" by Rubindranath Togora. In that part Miss Effie Armstrong was rather whimsically described



### A STAR IN THE 3LO FIRMAMENT.

Miss Violet Jackson, soprano, has a fairy godmother who on her first birthday presented her with a voice, and on her twenty-first provided her with the substantial wherewithal of getting it well trained. But even at school she took prizes for singing, although, in spite of being a Ballarat girl, she never for some reason entered the competitions held in her native town. By the advice and with the training of Madame Elsie Davis, Miss Violet Jackson entered for and won the Ormond Exhibition of the Melba Conservatorium in 1922, and has retained it each year, under the tuition of Madame Agnes Jansen. Miss Violet Jackson has an operatic soprano well suited to broadcasting, being of that quality usually called strong, although it is very flexible and what a musician

(Continued on Page 21, bot. Col 1.)



## BANISH ISOLATION!

Have you yet realised what a tremendous difference RADIO can make to your social life?

How it can bring the music of the theatre and the concert hall right into your home?

Have you realised the difference between reception from an ordinary valve and one which is made by

## PHILIPS?

We specially recommend the following two Valves:—

**A110. The One Cell Valve.** Filament, 1.0 to 1.3; volts, .06 amp. The most remarkable valve yet produced, as it enables you to run each valve for weeks on one Dry Cell, while the volume and tone are exceedingly good.

Price, 17/6 each.

**B406. The New Wonder Valve.** The B406 is in a class by itself, as it is the first Low Frequency Amplifier which attains a saturation current of 30 milliamps with a filament consumption of only 0.1 amp. at 2½ to 4 volts. Only a Two Cell Accumulator or Three Dry Cells should be used, thus showing a further remarkable saving.

Price, 17/6 each.

Obtainable from all Radio Dealers.

Ask your Dealer for illustrated folder describing these wonderful Valves.

# PHILIPS



## What They Write

### CONCERNING REGENAFORMERS.

To the Editor,

Dear Sir,—I am writing you in connection with the Browning Drake Regenaformer. I have made and used one in my set, and find that it gives excellent results. Moreover, it is extremely simple to make.

I am using the Hillard circuit of "Wireless Weekly," 18th September; .001 and .0005 condensers and 3½ audio, omitting T condenser as in circuit, but putting a .001 over the phones. The one I made was as follows:—

The tube is a piece of cardboard bent round, 2½ in. x 6 in., with 55 turns No. 18 gauge wire on it for primary. Cut two washers of cardboard to fit in the end and three ½ in. smaller; put the latter between the other two and back together, then wind as much 20 gauge wire as will groove. My reaction coil is of 30 gauge wire wound on a bit of cardboard tube, and a piece of stick through it and the larger one. The first turn or inside one goes to the gauge terminal, and the last turn or outside one goes to the aerial; the first turn of secondary goes to gauge terminal of the condenser, and the last turn to gauge terminal of condenser. I have it set on a piece of bakelite, 6 in. x 4 in., with three phone terminals at end, to put the ends of the wires into. I work it

(Continued from Page 19.)

would call full of colour. Under the very good system of the Conservatorium, several advanced students are each year given the opportunity of making a singing tour of Victoria, whereby they gain exceptional experiences in platform work, and Miss Violet Jackson has in this way already become known to many country listeners in first-hand, as it were. Educated at "Firbank," Brighton, under Miss Cameron, whose insistence on clear and refined enunciation and choice of words is well known, Miss Violet Jackson is noted for the rather unusual distinctness of her articulation when singing to the microphone, and also for her nice choice of songs. She sang before 3LO first about February of last year, and so may be said to be quite an "old hand" at broadcasting. At the University Concerts that have been a feature of broadcasting even before 3LO (dating from the time of that pioneering amateur, "3 Don Pip"), Miss Violet Jackson has appeared as Elsa in "Lohengrin," Santuzza in "Cavalleria Rusticana," and Leonora in "Il Trovatore." Her future appearances on a more extended stage will be eagerly watched for by a wide circle of appreciative listeners-in.

on a shelf two feet above the set, and it is the best tuner I have tried. I have experimented with a lot of home-made devices as well as bought ones. I can get more out of this tuner than I can out of a three valve set I bought some time ago.—Yours faithfully,

W. M. SANFORD.

Leeton.

(Continued on Page 29)

### STANDARD FREQUENCY TRANSMISSIONS.

Amateurs should not overlook the fact that 2WI is still carrying out standard frequency transmissions every Tuesday night.

The following is the schedule adhered to, and the code signals designating the various wavelengths upon which signals are transmitted. Buzzer, phone, and C.W. are used—the two former are approximately accurate, but the C.W. may be regarded as exact:

Wavelength in metres.	Frequency in kilo cycles	Code Signal
250 metres	1,200	— — — —
200 metres	1,364	— — — —
200 metres	1,500	— — — —
170 metres	1,765	— . . . —
150 metres	2,000	— — — —
130 metres	2,308	. . . .
100 metres	3,000	. . . . .
86 metres	3,488	. . . . .
75 metres	4,000	. . . . .
60 metres	5,000	. . . . .

It should be noted also that special transmissions are conducted from 2WI commencing at 9.30 p.m. every Tuesday on 100 metres. These include technical and semi-technical information and general news of value to amateurs.

### FOR THE CRYSTAL USER.

One of the new and unique ideas of modern crystal reception is the shock-proof Harlic Detector, obtainable at Harringtons Ltd.

It is complete and ready for panel mounting, supported on two detachable screw lugs, the whole of the detector being neatly covered with a nickel cap.

The catwhisker is arranged to make perfect and continuous contact on the whole surface of the crystal with the utmost ease.

It is such perfected details as this that are increasing rapidly the popularity of the crystal receiver.

# RADIO PANELS

To those who are about to build their own Radio Set, we submit the following. These prices of Bakelite we would mention are the lowest prevailing in Australia.

## BAKELITE

Cut to any desired size

1/8in. . . . .  $\frac{1}{2}$ d. per square inch

3/16in. . . . .  $\frac{3}{4}$ d. per square inch

Diaphragms for Manhattan Junior Speakers, each . . . . . 2/0

Filko-Stats. Your set deserves one, each . . . . . 12/6

Vernier Attachments. 100 to 1 ratio, each . . . . . 3/0

Accuratune Ultra- Vernier Dials each . . . . . 25/0

Bakelite Valve Sockets (special line) American, each . . . . . 3/0

Argus Lightning Arrestors, porcelain covers (approved by Fire Underwriters), each .. 7/6

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Your inspection of the big display of everything that is new in the world of Wireless, is invited.

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Box 2712 G.P.O.



## AMATEUR ON HIGH WAVES.

It is some months since an amateur has been heard on broadcasting bands around Brisbane. On 5th and 6th December the ether was disturbed a little by 4HW (H. Walsh), who is on the staff of G. O. Wills in Elizabeth Street. Using an output of 3 watts he was clearly heard when 4QG was on the air, but the modulation was bad. It is hoped that he will come on a little more frequently with gramophone records.

4CW is expected to be back on the broadcast wave, transmitting records. When he starts it will remind us of the days before 4QG started, when amateurs constantly supplied gramophone programmes.

## AUSTRALIAN PRODUCTS.

## An Appreciation.

"I have pleasure in advising that the Super Radio Frequency Transformer you recently supplied to me has proved an unqualified success," says R. R. Higginson, Wyong Road, Mosman, in a letter to Amalgamated Wireless.

"I would unhesitatingly recommend anyone desirous of adding a stage of radio to use the "Super"—it does not make the set any more difficult to handle, but the volume and quality of reception is considerably improved, being all that could be possibly desired.

It is all the more pleasing to me to obtain such wonderful results with an Australian article, and I anxiously look forward to the further development of A.W.A. products."

WANTED.—All kinds Secondhand Wireless Sets  
Parts, Speakers, etc. Best prices given. JACK  
RAPKEN, 16 George Street West. MW 1201.

## JAZZ UNPOPULAR.

King Jazz is slipping! Classical music, via loud speakers and earphones, is favoured by the masses!

This trend, said to be completely contrary to all expectations, was indicated by a widely heralded poll conducted by KOA. Voting was heavily stimulated by a spectacular musical competition between jazz and the classical school, staged as a programme novelty by the station. Leading artists and representative composition of both factions were featured.

Broadcast listeners, representing all walks of life and sitting virtually as an international musical jury, voted three to two that jazz is falling behind in popular favour, and therefore will never replace the works of conventional composers.

As judges of this studio clash, listeners were invited to vote jazz, classical, or for a combination of both types of music. On the face of virtually complete returns from listeners, the classical camp won three to every five cast in the race with jazz. Of the total votes cast more than 50 per cent. favoured the classical school, the remainder being split between proponents of jazz and those who lean to a combination of both racy tempos and conventional numbers.

All but five Western States swung to the classical column. Arizona, Wyoming, and North Dakota gave an overwhelming choice to rapid fire syncopation. South Dakota, it was noted, gave its majority to classical. A further check of ballots received indicates that Arizona and Idaho are on the fence with a tied vote between the opposing musical camps. Voting in Colorado was close.

The contest was arranged to test the relative popularity of the opposing musical schools, and was believed by its sponsors to be one of the first national polls ever undertaken by a leading broadcasting institution.

Women, according to KOA's records, cast approximately half the total ballot, whereas less than ten months ago barely one-fifth of all mail addressed to KOA was written by women, it was said. What say the women of Australia?

# RADIO SET ON TIME PAYMENT

COMPLETE READY FOR USE

at Prices and Terms to suit every  
pocket

Simple, Selective & Efficient.		12 Months' Guarantee
	£ s. d.	
2 Valve Sets..	15 12 6	TERMS: 10 p.c. Deposit; balance in twelve months.
3 Valve Sets..	21 10 0	
4 Valve Sets..	27 10 0	
5 Valve Sets..	32 10 0	
"Udisco" Super		
Six .. .. .	110 0 0	
De Forest D17 ..	75 0 0	

## KEOGH RADIO SUPPLIES

503 GEORGE STREET, opposite Crystal Palace.  
TELEPHONE CITY 870

## Special Features of Wondertone 4 Home Construction Receiver

SENSITIVE, SELECTIVE, CLEAR RECEPTION, SIMPLE TO CONSTRUCT, SIMPLY TO OPERATE, DEPENDABLE, SENSITIVE, LONG DISTANCE, GREAT VOLUME.

No technical knowledge required to build it. Specifications require use of superior material and also that it be made by one method but the kit supplied within a few hours with the use of a screw-driver, soldering iron, and a job of filing.



Illustration of a beautiful "Wondertone" 4 Home Construction Receiver.

- |                                  |        |                                 |        |
|----------------------------------|--------|---------------------------------|--------|
| 1 Valve kit, using D.Y. Dry Cell | 7 5 0  | 4 Valve kit, using Mullinix 204 | 14 5 0 |
| 2 Valve kit, using D.Y. Dry Cell | 10 5 0 | Valves and Co. 41 super-flow    | 11 5 0 |
| 3 Valve kit, using D.Y. Dry Cell | 12 5 0 | 4 Valve kit, using Mullinix 204 | 15 5 0 |
| 4 Valve kit, using D.Y. Dry Cell | 15 5 0 | Valves and Co. 41 super-flow    | 16 5 0 |
| 5 Valve kit, using D.Y. Dry Cell | 18 5 0 | 4 Valve kit, using Mullinix 204 | 18 5 0 |
| 6 Valve kit, using D.Y. Dry Cell | 21 5 0 | Valves and Co. 41 super-flow    | 22 5 0 |
| 7 Valve kit, using Mullinix 204  | 24 5 0 | 4 Valve kit, using Mullinix 204 | 26 5 0 |
| Valves and Co. 41 super-flow     | 25 5 0 | Valves and Co. 41 super-flow    | 27 5 0 |

### New Shipments:

**Marco Velvet Vernier Dials 16/6 each**

We pay postage throughout N.E.W. on all items goods other than Appliances, Gramophones, Receiving Sets, Radios, Loud Speakers, Books and Publications, Valves, Aerial and Winding Wire, and goods sent by V.T. Express Post.

## Astounding Results

See Index obtained in Australia with the following

### "Lion Micro" Permanent Detector

We have received many letters stating the praise of this Detector, which started the Radio world. The "Lion Micro" Permanent mineral contains the Lion King Combination, employing the great South American Bone Phosphorus Rare Permanent Mineral Crystal (Bilbohm) and the other Silver Crystal (Phosphorus) discovered in 1924.

Small Size as  
Illustrated,  
0/0 each  
Large Size,  
1/6 each



Small Size, as  
Illustrated,  
0/0 each  
Large Size,  
1/6 each

Illustration of Lion Micro Detector (actual size)

Dust and Foul-Proof :: No Catwhisker

No More Lost Concerts :: No Adjustments

### New Shipments:

**Tiffany O to 50 Volts "B" Battery. Portable Voltmeters 12/6**

OUR GUARANTEE: We guarantee every article you buy from us to be satisfactory in every detail. If for any reason whatever you are dissatisfied with any article purchased from us, return same with all transportation charges you have paid, we will then exchange for exactly what you want, or will refund your money.

# WILES' WONDERFUL WIRELESS and ELECTRICAL STORES

Branch:  
384 Pitt Street,  
(near Goulburn Street.)

Head Office and Shop,  
56-60 Goulburn Street,  
(1 door from Pitt Street),  
SYDNEY.

Branch,  
23 Pitt Street,  
(near Circular Quay).



## THE WONDERFUL TRUE BLUES



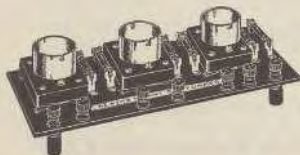
### THE WORLD'S BEST.

The only Valve free from microphonic noises. Lower Battery consumption—2 to 3 times longer life. Cheapest in the long run. The Power Plus True Blue fits small sockets, and gives double the signal strength of dry cell Valves. Price same as Standard size. Get True Blues and hear music—not noise.

21/-

## Heath Three-Stage Resistance Coupled Amplifier

Produces a purer tone and saves the cost of Transformers.



As above, completely wired and assembled, including Sockets, Terminals, etc., ready to attach to plate of Detector Valve,

79/-

Instructions with every Set.

## TUNGSTALITE

is the Best Crystal

NOT A DEAD SPOT IN IT.  
A NEW CATSWHISKER IN EVERY BOX.

Sole Agents:  
**PARSONS & WHITTEMORE LIMITED,**  
80 MARKET STREET, SYDNEY.



## A FURTHER REPORT from KOSCIUSKO

The Wireless Set supplied by David Jones' to the Hotel Kosciusko continues to give excellent results. It has now been in operation several months. Its continued reliability is most gratifying to David Jones' Radio Department and also to Mr. Charles Maclurcan who designed this instrument for the Government Tourist Bureau.

Sets similar to this, and all other radio sets and accessories can be immediately supplied by our Radio Department.

Let our Experts solve your wireless problems. If your set is not giving the best possible results 'phone City 6336 or B6971 and a qualified engineer will call and effect a repair or alteration at the lowest possible cost. Advice is given freely.

# DAVID JONES

# TO THE KIDDIES

## One Guinea Prize

FOR SUCCESSFUL COMPETITOR.

Limited to Children.

Everybody knows Uncle George and his G-O-O-D-N-I-G-H-T is familiar to every little one who listens in to 2BL.

Now this little competition is to enable every little listener to put down on paper his or her impressions of him.

It can be done in a short verse of six or seven lines and so that you may get the idea, we are showing you a sample of what we mean.

Here it is:

"Uncle George is short and thin,  
But he has a voice of gold,—  
Every Kiddy's love he wins,  
And he's not so very old—  
All the Kiddies wait to hear  
The way he calls out loud and clear  
G-o-o-d N-i-g-h-t!"

Now it doesn't matter if you have never seen Uncle George. You have HEARD him hundreds of times—you know the funny things he says, the quaint songs he sings and the jokes he tells. It is very easy to write a little verse describing your impressions of him.

Is he tall? Is he thin? Is he short? Is he fat? Do you love him? Do you like his voice? Does he make you laugh? Do you look forward to his stories?

Tell it in a little verse—and try to win the guinea prize which "Wireless Weekly" is awarding for the best verse sent in.

Here are the conditions. Read them carefully.

The competition is only open to girls and boys under the age of 12 years of age

Verse must not exceed seven lines or have less than five.

Entries must reach us not later than Friday, February 5th.

Enclose your verse in an envelope, mark the envelope in the left hand corner "Uncle George," and mail it to "Wireless Weekly," 12/16 Regent Street, Sydney.

No more than two attempts are allowed to each competitor.

THE JUDGES FOR THIS COMPETITION ARE MR. C. C. FAULKNER, (DIRECTOR RADIO BROADCAST BUREAU), UNCLE JACK (2BL), AND THE EDITOR OF "WIRELESS WEEKLY."

A cheque for one guinea will be forwarded to the winner whose name will be announced in due course in "Wireless Weekly."

## HELLO! HELLO! UNCLE GEORGE SPEAKING.

Well, children, how are you all this week? Uncle George is very pleased to continue his weekly chats per medium of "Wireless Weekly," and you will not be surprised when I tell you that I am receiving many letters from little ones in all parts of Australia, telling me that they have seen my photograph in "Wireless Weekly," and also how pleased they are with my little weekly chats.

Now to get down to business. This week I just want to talk to you about limericks. Now, a limerick, sweethearts, in other words, is a small poem cleverly written, with not too many words, and must rhyme. For instance—

"When Uncle George is on the air,  
I love to listen-in;  
And I don't really care a bit  
If he is fat or thin.  
Every night I love to hear  
Him calling to me loud and clear—  
G-o-o-d N-i-g-h-t!"

Do you know that "Wireless Weekly" is offering a prize of a guinea for the best limerick written by a boy or a girl under the age of twelve about Uncle George? Now, I want to see what you can do. When you have made up your limerick and are quite satisfied with it, post it to "Wireless Weekly," 12 Regent Street, Sydney.

Now, GEORGE HOWELL, of Chatswood, wants to know why, since 2KY started, he cannot hear Uncle George as well as before.

This depends what kind of receiver George is using. If he uses a crystal receiver, it is quite possible that he is getting interference from 2KY, as the tuning of some crystal receivers is rather broad. The trouble, more than likely, could be got over by using a wave-trap, which, by the way, has been described a number of times in "Wireless Weekly." If he is using a valve set, however, there should be no interference, provided, of course, the circuit of his set is a good one. If George will send some more particulars of it to me, I could probably be able to help him further.

Len Bassor, who, by the way, is Uncle Jack's nephew, is asking what is the average wavelength of the stations in America, and how many actual broadcasting stations are there in existence in America. Well, there are about 586 broadcasting stations in the United States, the wavelengths of which

(Continued on Page 31, bot. Col. 2.)

**BURGESS—"THEY'RE USED ON THE UNITED STATES AIRCRAFT"—BATTERIES**



## "Why All-Glass Sockets Mean Better Reception"

Many sets fail to operate efficiently, authorities claim, as a result of 2 Socket factors (1) poor insulation, (2) poor contact.

Any current leakage due to either of the above conditions has a very noticeable effect on the character and volume of current delivered to your loud speaker.

The most effective and reliable insulation known to Radio Science is glass. The Duray Radio Corporation have developed a new All-glass Socket with practical advantages never before found in a Radio Socket.

This Socket is now quite the rage in America, as the Manufacturers make exceptional claims for it, especially for low loss work on short waves.

### RUN YOUR RADIO FROM YOUR HOUSE CURRENT.

Thousands of Radio owners have been asking: "Why can't we use our house current for Radio power? Why can't we operate our Radios as easily as we operate our electric lights?"

According to the latest advertisements of the Phillon Battery Company in the "Saturday Evening Post," this can now be done, and they are telling the Radio owners to do this, as shown in the above heading.

Phillon "Socket Powers," as they are called, eliminate both Dry and Storage "B" Batteries in any set having one to nine valves. Just fancy, the cost of operation is less than 1/4 a day.

Of course, these Socket Powers are costly. It will be some time before they can be bought in Australia, so in the meantime buy the best Dry Batteries there are or, better still, the best rechargeable batteries that are on the market.

### "B" BATTERY SERVICE HOURS.

We have often been asked as to how long a "B" battery should last. This, according to the Engineer of the Burgess Battery Company, depends on the conditions of use, together with the number of valves. Of course, also the larger the battery the longer its life.

### ELECTRICAL RATING.

The United States Government, in rating "B" batteries gauges them according to the length of time they will be in service on a continuous discharge to an end voltage of 77 volts.

Some Manufacturers rate their batteries by the number of hours the batteries service at a definite current. These ratings, Burgess considers, however, are inadequate for a grading of batteries under high current conditions, and they show the "Service Hours" of their batteries under various conditions. They also give information on valve current drains at various plate voltages, and grid bias voltages are also presented.

The characteristics of a "B" battery which are of most importance in a broadcast listener are:—

(1) Shelf or Storage Life.

(2) Service Hours.

(3) Noiselessness.

(4) Uniformity.

The shelf or "storage life" of a battery is its ability to retain its service-hour capacity while standing idle either before use or between periods when not in use.

Burgess batteries of the large type, by the way, have a guaranteed shelf life of twelve months.

A good shelf life such as this is, of course, desirable to enable the broadcast listener to receive the maximum service from the batteries he purchases, and to extend the hours of service when he is not using his set regularly.

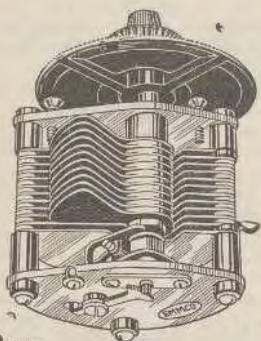
Service Hours is the total time that a battery will deliver the necessary current before it must be discarded from the set as being no longer useful. High service hours are, therefore, necessary for economical operation.

Noiselessness is a quality closely connected with the nature of the chemical mix. Obviously a noiseless battery is to be desired.

Uniformity is a quality of no small importance. This can only be secured in the better class batteries.

The Burgess Company compile an interesting chart which shows under certain conditions, which are affected by the number and class of valve used, the Service Hours that they guarantee with their various batteries.

None of us mind paying more for a battery when we know we have guaranteed at least fair use, as in most Radio lines "Quality" and "Long life" are what we want in Dry Batteries.—[Adv.]



Buy

**Emmco**  
RADIO PRODUCTS

## Emmco Radio Products

Manufactured by Electricity Meter Mfg. Co., Sydney  
AUSTRALIAN MADE GUARANTEED LOW LOSS  
CONDENSER.

All Capacities with Direct Vernier.

Built like a Watch.

Most Minute Adjustment.

Absolute Insulation.

Grounded Rotor Metal End Plates.

Straight Line Wave Length. Square Law.

Most up-to-date Low Loss Condenser Made.

Emmco Jacks, Single . . . . .	at 2/6
Emmco Jacks, Double . . . . .	at 3/-
Emmco Jacks, Switch . . . . .	at 4/6

SEE THEM AT YOUR DEALERS

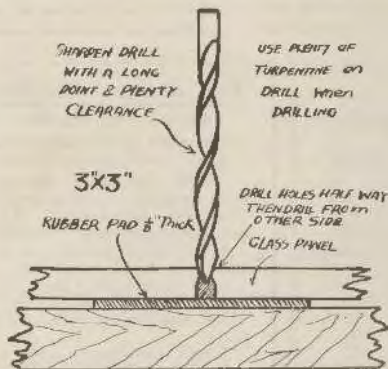
## WHAT THEY WRITE

Continued from page 21

### STILL MORE ABOUT GLASS PANELS.

To the Editor.

Dear Sir,—I read with interest Mr. Geo. H. Peterson's letter, "Wireless Weekly," 13/11/25, re glass panels for radio sets. Here is my method of drilling the set illustrated. This panel is for a four valve set, and is 24in. x 10in. x 5/16in. plate glass, and has in all 52 holes varying in size from 3/16in. to 21/32in. in diameter. I drilled this panel, 52 holes, in six hours, using an ordinary breast drill and carbon steel twist drills. I found the best drill was from a set of Cleveland wood bits. This drill was 5/32in. and sharpened as shown on the sketch with a long point and plenty of clearance. The holes were all marked on the glass with a small file (sharpened to a point), and the centre of each hole marked with a +. The glass is then placed on a small rubber pad about 3in. square and 1/8in. thick, so that the pressure of the drill on the glass is only close to the hole to be drilled, the pad being under the hole to be drilled. An ordinary breast drill is used, and plenty of turpentine used on the glass when



drilling. The drill must not be turned too fast, as this heats the cutting edge. If the drill does not centre, it can easily be brought into the correct place by tilting the top of the breast drill in the opposite direction to which the hole is off centre. Use plenty of turpentine, patience, and drill all holes about 3/16in. first, and open out to the larger sizes afterwards, and when drilling and finishing all holes go half way through panel, and then drill from the other side.—Yours, etc.,

FLINT W. BARKER.

Pumping Station, Red Cliffs, Victoria.

## Results of American and Australian Tests

As advertised in last week's issue the Australian Representative of the Magnavox Coy., sends us the following letter for publication, as received from his principals pointing out the selectivity of the Magnavox 5 Valve receiving Set recently manufactured.

The letter reads as follows:—

"It may interest you to know that some few evenings ago our Mr. H. K. Metcalf, one of our Radio engineers (and incidentally the developer of our vacuum tube), made a rather interesting test with a stock model MAGNAVOX Receiving Set. The result of this test was as follows:—He received Pacific Coast Stations—that is to say, from Vancouver, B.C. to Los Angeles—with no difficulty whatsoever. The most gratifying results of his test, however, were the receipt of the following Eastern Stations, all of which came in with loud speaker volume:—

#### DISTANT STATIONS HEARD.

KDKA—Pittsburg Pa., 309 metres.  
WJAW—Cincinnati, Ohio, 422 metres.  
WBAP—Ft. Worth, Texas, 476 metres.  
WOAW—Omaha, Nebr., 526 metres.  
KYR—Chicago, Ill., 530 metres.  
KSD—St. Louis, Mo., 545 metres.

It may interest you to know that KDKA, operating on 309 metres easily separated from KTCL, which is a Pacific Coast Station, operating on 306 metres, and was as loud and consistent for one hour as any of the Los Angeles Stations, which, incidentally, are readily heard in this locality any time during the winter season.

While the test was being made, Station KPO, but 4 miles distant, operating on 422 metres, with 1000 to 2000 watts output, was easily cut out, and WLW of Cincinnati, 422 metres, Ohio, was clearly heard and understood, and did not at any time fade.

Kindly remember, the test was conducted with nothing but Standard apparatus, embracing the MAGNAVOX Receiving Set and 5 MAGNAVOX Tubes. No trick tuning was necessary, and there were ten witnesses present, who corroborated the claim of these good results."

Yours very truly,

THE MAGNAVOX COMPANY.

(Signed) R. A. O'CONNOR.

A Sample Junior Magnavox 5 Valve Receiving Set has been tested in Sydney by experts connected with three of the largest Radio Houses in Sydney, and the following results were obtained:—

Received the following stations:—

3AR, Melbourne . . . . .	484 Metres
3LO, Melbourne . . . . .	371 "
2BL, Sydney . . . . .	353 "
2KY, Sydney . . . . .	280 "
5CL, Adelaide . . . . .	395 "

Now all these stations were received with considerable loud speaker volume and without interference, and did not at any time fade. When it is remembered that the Set is operated with only one control, the simplicity of operation must appeal to the present owners of Sets, and prospective Users. Compare these results with your own Sets or any other Set offering on the market today.

Loud Speakers Repaired, Batteries Recharged, Sets Remodelled, Aerials Erected. Good parts and sound advice. E. NOBLE & CO., 256 Anzac Parade, South Kensington. Rand. 3884.

**BURGESS—"THEY'RE ON THE SPEEJACK'S"—BATTERIES**



## RADIO on Easy Terms.

NO INTEREST.

All sets complete with De Forest valves, phones, A and B battery and Aerial.

Single Valve . . . . .	£9 10 0
Deposit . . . . .	0 18 6
Weekly . . . . .	0 8 3
Two Valves . . . . .	£13 15 6
Deposit . . . . .	1 7 6
Weekly . . . . .	0 4 9
Three Valves . . . . .	£21 0 0
Deposit . . . . .	2 0 0
Weekly . . . . .	0 7 4
Four Valves . . . . .	£25 0 0
Deposit . . . . .	2 10 0
Weekly . . . . .	0 8 8
Five Valves . . . . .	£29 10 0
Deposit . . . . .	3 0 0
Weekly . . . . .	0 10 0

OPEN ON FRIDAY NIGHT.

## Radio W'less Mfg. Co.

259 George Street,  
Opposite Hunter Street.  
B5747.

# HOWELL'S SALE & EXCHANGE

Large Variety Loud Speakers from 35/- to £8.  
Hear them on music.

JEFFERSON STAR TRANSFORMERS . . . . .	£ s. d.
7 Bakelite Engraved Terminals on Bakelite Base . . . . .	0 17 6
ADJUSTABLE SWITCH ARMS . . . . . each	0 3 3
.0005 VERNIER CONDENSER . . . . .	0 11 6
.0005 Square Law Brass Plates, with Pigtail and Dial . . . . .	0 0 6
.001 Condenser, with Dial . . . . .	0 9 0
.0003 Condenser, Square Law Brass Plates, Pigtail & Dial . . . . .	0 8 0
Ormond, .001 Vernier, Square Law Bakelite Ends . . . . .	0 17 6
Ormond, .0005 Vernier, Square Law Bakelite Ends . . . . .	0 15 6
Ormond, .001 Vernier, Square Law Low Loss . . . . .	0 17 6
Ormond, .001 Square Law Low Loss . . . . .	0 14 9
Ormond, .0005 Square Law Low Loss, Vernier . . . . .	0 15 6
Ormond, .0005 Square Law Low Loss, Plain . . . . .	0 12 6
Egg Insulators . . . . . dozen	0 0 6
Columbia No. 6 Cells . . . . .	0 2 6

HOW TO MAKE THE HOWELL REINARTZ STILL MORE SELECTIVE.

YOU CAN'T IMAGINE HOW GOOD IT REALLY IS.  
IF INTERESTED, CALL IN AND SEE US.

19 BARLOW STREET, SYDNEY  
Open till 9.30 Friday Night

Phone MA 1133

## "WETLESS" Fixed Mica Condensers

IN the new improved "WETLESS" high quality mica condensers are included several new and important features. They are now encased in the best of amber BAKELITE, and are rigidly clamped at ends by means of specially designed metal sheeting with double cyclot xing. The highest grade of best quality mica is used throughout in conjunction with a good, sturdy gauge of specially selected foil. A newly developed impregnation is employed to exclude moisture, and the capacity is accurate and unvarying. Owing to the incorporation of both soldering tags and eyelets for screws, they can be readily placed in circuit in even the most inconvenient positions or may be used in the latest type Condenser Clip which has been evolved by the maker for such purpose.

A TYPE.	B TYPE.	B TYPE.
.0001	.0001	.008 . . . . . 3/-
.00015	.00015	.004 . . . . . 3/6
.00025	.00025	.005 . . . . . 4/-
.0003	.0003	.006 . . . . . 5/-
.0005	.0005	.0075 . . . . . 6/-
.001	.001	.01 . . . . . 7/6
.002	.002	.00025 with clip 3/-
1/9 each.	2/6 each.	

"WETLESS" Condenser Clip, 2/- each.

No need to solder condenser when using this condenser clip: capacities can be changed in a few seconds.

Invaluable to the Experimenter

Remember, the "WETLESS" Fixed Condenser has the highest grade Ruby Mica Dielectric, not paper. So SPECIFY "WETLESS."

AUSTRALIAN MADE.

Manufacturer:

Phone: Kog. 1155.

J. WETLESS, Bexley, N. S. W.

## Wm. Lambert Hamilton

### Radio Specialist

Bring your troubles to me.  
What I will do for you.

I will remodel or re-wire your receiver, making every valve give of its best. Let me modernise your receiver.

I will build you a set to suit your local conditions.

I will answer any enquiries immediately.

My charges will be moderate.

I will buy your components for you at ruling city prices and despatch them to you within 24 hours of receipt of order. I will advise you as to the quality of the goods. This service is free.

I am at your service in any radio wants.

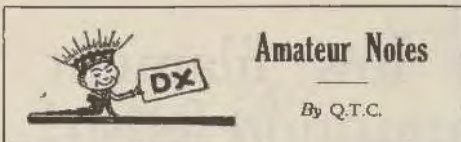
City address:

VICKERY'S CHAMBERS,  
82 Pitt Street,  
SYDNEY.

Phone: B4543.

Private address:

16a Ness Avenue,  
Dulwich Hill.



## Amateur Notes

By Q.T.C.

Up till recently the A6 district held the prize for inactivity. These days, however, I think we can safely give the gumdrop to our friends of No. 4—Queensland. What's the matter up north? Of course, we all realise that static has been playing Old Harry with work of late, but still, fairs, you can't blame that entirely. Even in the perfect winter months your reputation was in the hands of one or two lone hams. A4AN upheld your prestige well; he turned out the most consistently good, readable sigs. that I have heard for a long time. 4CM upheld him well—good q.s.b. you had, Doctor, and those two are your lone international DX-ers! There were a couple of fine low power stations in 4AZ and 4RB. 4CK sometimes came out with a big kick—and there you are! Do better in 1926, o.m.'s. You have quality; now add quantity.

Phil Nolan, at A2YT, has been turning out the best sigs. from the second district of late. Phil is the most enthusiastic of hams, and never lets up for man or QRN. 2YI has QSO'd the whole world, and still hopes to go farther.

Z2AC, our friend, Mr. O'Meara, still carries on. Very consistent gentleman, Ivan, has worked about every station in the world, and is considering tackling the broadcasting stations!

Some Frenchmen break through the QRN occasionally. Their low notes are very difficult to clear up from the breaking waves of static on the "roaring forties."

Lionel Swain, A2CS, has been perking solidly from the Coal City. His punch reminds one of friend Harry Collins, who also hails from Newcastle. QSB good, o.m.; QSS nil, QRN —! Better luck next time, hi!

German amateurs are now getting on the air with real results. Most of their ham calls commence with the letters KY followed by a numeral. They are Q.S.O. U.S.A. but to the best of our knowledge, have not yet hooked up with any of the A stations.

The following little known calls have been QSA in Australia of late: NCGI the U.S. Coast Guard Radio Repair Base, Navy Yard, Philadelphia, on the 40 metre band. NOSN, U.S. Submarine base, Coco Solo, Panama. WIK, Radio Corporation of America, situated in New Brunswick—QRH, 22 metres.

G2NM's fone is reported as being audible

round about Anstralia and New Zealand. Here's hoping that we shall soon be able to report him as "very QSA, o.m."

According to our log of some months ago U5ZAI was one of the loudest stations in the world. The aforementioned log, however, does not mention very complimentary things about his QSB. Seeing that pretty well every DX merchant in Australia has logged this bird, we think some particulars may be of interest. The aerial of 5ZAI is of the inverted "L" type, 60 feet long and is a two foot six wire cage. On 80 metres (where we noted him) the antenna operates on its 1st harmonic, on 40 metres its 3rd, while on 20 metres the 5th is used. Counterpoise is a copy of the aerial. Plate supply is obtained from a 1½ k.w. 2000 volt Esco Motor Generator. UV204A's are used in all the transmitters. The transmitting hook-ups are slight variations of the Hartley circuit. 5ZAI is QSO the following ham lands: A, BZ, CH, G, S, HU, I, J, M, O, E, and Z—quite a bunch, hi!

Judging from various foreign DX lists which we have given the once over, the following Aussie stations are well in the limelight, elsewhere, and have reason to feel happy: 2CM, 2BB, 2BK, 2DS, 2JW, 2IO, 2RJ, 2SW, 2YH, 2YI, 2CS, 2YG, 2GW, 2ZN, 2LO, 2BD, 2BQ, 3AD, 3AK, 3AP, 3EF, 3KB, 3LM, 3YX, 3JX, 3SR, 3SL, 4GD, 5AH, 5BG, 5LM, 6AG, 7JB, 2WS. F.B. the whole gang!! Keep going, o.m.

(Continued from Page 27.)

vary from 250 metres to 500 metres. One or two stations, however, such as KDKA, broadcast on very short waves.

JOHN CRAWFORD, who never misses a Saturday afternoon in coming up to Broadcasters', and who, incidentally, is a recent arrival from the Old Country, is asking which is better for daylight transmission—short waves or long waves. This is an excellent question, John. According to experience in Australia, the daylight transmission on long waves has proved to be far more efficient than on the short waves. But the reverse of this is the case at night.

Now, there are many of these questions, and Uncle George welcomes every one of them. It shows that you are interested—not only in the listening in side of wireless, but also the technical side, and Uncle George will answer any questions which you little ones or grown-ups care to ask in his weekly chats in this paper.

Now, don't forget the limerick. Make up the cleverest limerick you can think of and send it in right away, as this competition will close very soon.

Well, I must say cheerio, sweethearts, until next time. Be good.

All my love, UNCLE GEORGE.





### WUNCCELL DULL EMITTER.

TYPES W.1. & W.2.

Type W.1. is for use as a Deflector or Low Frequency Amplifier. Type W.2. (identified by its red top) has been specially developed for use as a High Frequency Amplifier. Owing to their construction, and also to the fact that the filament glows only at a very dull red heat—almost invisible in daylight—Wuncell valves possess an exceptionally long life.

#### Technical Data.

Filament voltage, 1.8 volts.  
Filament consumption, 3 amps.  
Plate voltage, 25-80 volts.

### WUNCCELL DULL EMITTERS. TYPES

W.1. & W.2.

In characteristics these Valves are identical with W.1. and W.2., but are fitted with an additional resistance to enable them being used with either a 2, 4, or 6-volt accumulator without alteration to Set. Specially suitable for use with bright emitter valves working from a 6-volt accumulator. When required for use with a 3-volt accumulator the internal resistance can be thrown out of action by means of a short-circuiting screw.  
Technical Data as above.



### COSSOR LOUD SPEAKER VALVE.

TYPE W.3.

When used with a good Low Frequency Transformer this new W.3. Valve gives an immense volume of pure and undistorted sound. Its use renders a second stage of L.F. amplification practically superfluous. The design embodies all the well-known Cossor principles, and the Valve is, therefore, quite free from microphonic noises. Filament voltage 1.8 volts, filament consumption .5 amps, plate voltage 80-120 volts.

# That low filament consumption fetish!

**T**WELVE months' experience with Dull Emitter Valves working from Dry Batteries has proved to most wireless enthusiasts two things; first, that the low current consumption necessary for a Dry Battery means a whittling down of the filament to the point of fragility. Secondly, that if a multi-valve Set is used, large and expensive dry cells must be purchased to cope with the heavy current demands. It is not surprising, therefore, to find that prominent wireless engineers and experts attached to the various wireless magazines are wondering whether the price they are paying for the convenience of Dry Batteries is not out of all proportion to their advantages.

Obviously there are three distinct factors to be considered when choosing a Dull Emitter. They are (a) first cost, (b) upkeep cost, and (c) length of life.

No sensible man ever spent ninepence to save sixpence, yet that is exactly what you are doing if you choose your Dull Emitter on filament consumption alone. Current consumption, generally speaking, is influenced by the diameter of the wire used in the filament. The thinner the wire the less current it will consume. But obviously there is a very decided safety-limit, and a Valve that will give a tolerably long life in the hands of a careful laboratory worker would certainly not last long in the rough-and-tumble of everyday Broadcast reception.

The Cossor Wuncell Valve has been designed with a true realisation of the part it has to play in the hands of the average wireless enthusiast. In view of the immense popularity of the Cossor Bright Emitter we should not be doing our duty if the Wuncell carried the risk of fragility or lack of efficiency in the hands of the expert.

The Wuncell Valve is a long-life valve for two reasons—(a) because its filament glows only at 800 degrees (a dull red heat almost invisible in daylight), and (b) because its filament is essentially as robust and as stout as in any standard bright Valve.

That the Cossor policy of placing long life before current consumption is right is proved by the wave of popularity the Wuncell is enjoying. Everywhere there is unmistakable evidence of public appreciation of its sterling qualities of greater sensitiveness, absolute reliability, and exceptional purity of tone coupled with an entire absence of microphonic noises. You'll end your search for an ideal Dull Emitter when you try the Wuncell.

*A Complete Stock of all Cossor Valves is held by—*

Cossor Valves are stocked by all the principal Wireless Dealers. In case of special difficulty, apply to

**JOHN ARNOLD, Factory Representative,**  
Box 802, DE GRAVES BUILDINGS, DE GRAVES STREET,  
MELBOURNE.

# Cossor Wuncell Valves

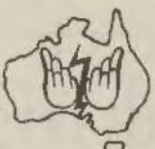
THE BRITISH DULL-EMITTER WITH THE LONGEST LIFE

HEADQUARTERS  
Royal Society's House  
5 Elizabeth St  
SYDNEY, N.S.W.

# Wireless Institute of Australia

NS.W. Div. Inc.

Incorporating the Affiliated Societies and The Australian Radio Relay League



W.L. Carter, Hon. Sec.  
Box 3120 G.P.O. Sydney  
Phone 82235  
A.H. Perrett Publicity Officer.

## Traffic Bureau.

The work of the Traffic Bureau was actively commenced on February 1, 1926, and those taking part in the activities of the Bureau should now be heard conducting traffic on their respective schedule times. Log books and regulations are now available at headquarters, and those who have not already collected their books should do so as early as possible, as it is essential that these be in use with the commencement of the operations.

## General Meeting.

The general meeting for February, which will take place on Thursday, February 18, 1926, will be an "All Clubs' Night." On this occasion it has been decided to stage a debate in which the Institute and the affiliated clubs will take part. The subject chosen is "Low v. High Loss Apparatus." A very interesting evening is promised, and members should make an effort to be present.

## DX Work.

The following list of stations logged by Mr. C. Hilling of Semarang, Java, has just come to hand: 2DS, 5BG 3BD, 2YI, 8AB, 6KN, 2JW, 3YX, 3AD, 3HL, 2UI, 3B3E, 6AG, VFM, 5BG, 6IN, 2OS, 2CG, and 2ZAE ZZAC, and 24AV. Mr. Hilling states that 2YI and ZZAC come in quite regularly and very QSA.

Mr. Hilling particularly requests that any of the above-mentioned amateurs who will communicate with him will receive one of his cards giving full particulars concerning

atmospheric conditions, strength of signals, etc. He also states that if any of the experimenters here wish to co-operate with the amateurs in Java in carrying out tests, if they will communicate with him he will make the arrangements with the local amateurs.

## Macleuran Cup Competition.

The returns for the third quarter of the Macleuran Cup Competition will be examined by the judges within the next few days, and the results will be published next week. Considerable interest will attach to these results, as it will be a very fair indication of the winner of the cup for the first year. There is only one remaining quarter, which has already commenced and that will decide the competition and the holders of the cup for the next twelve months.

## General.

Matters in experimental radio have been rather quiet of late. Many of our enthusiasts are on holidays just now, and the conditions also have not been ideal for this work. Mid-summer, however, is now past, and with the coming of cooler weather and the improvement of conditions generally a renewed activity of experimental radio can be looked forward to.

During the interval in which work cannot be carried out, care should be made for the coming winter. Every point should be carefully thought out, and when the time comes should be put into operation without hesitation.

## Round the Clubs

The asterisk denotes clubs affiliated with the Wireless Institute of Australia (N.S.W. Division).

### THE LEICHHABDT AND DISTRICT RADIO SOCIETY.\*

(Licensed Experimental Station A-2LIL)

The 161st general meeting of the above society was held on January 27 at the club rooms 178 Johnston Street, Annandale.

Owing to Anniversary Day falling on the regular meeting night, the meeting was held on 27th instead, and was probably the cause of the poor attendance. The Secretary announced that he had received from the Wireless Institute the schedule of operators prepared to handle traffic for the Bureau, and that 2LIL had been allotted the period from 10 to 11 p.m. Sunday nights on a wavelength of 90 metres.

The business of the evening was a paper read by the Secretary, entitled "Aerial and Earth Systems," and being a lecture delivered some years ago by Mr. F. Thompson, one of the members. The paper dealt with the various types of aerials, such as L.T. and Cage, and showed the difference in natural wavelengths of a few types employing single and double wire with varying heights.

In reviewing the earth systems the lecturer stressed the absolute necessity of obtaining perfect contact with the earth, and also using an earth system offering low resistance. Being a little different to the general run of wireless lectures, it was very agreeably received.

General business then ensued, and the meeting closed at 10 p.m. The lecture for Feb. 9 is on the "Amateur Operator's Certificate of Proficiency" by Mr. Craig, of Croydon Club, and members can look forward to a most instructive evening.

Inquiries relative to the activities of the above society are cordially welcomed, and should be addressed to the Hon. Sec., J. G. Arkell, 148 Hereford St., Forest Lodge.

### STRATHFIELD AND DISTRICT RADIO CLUB.\*

The ordinary weekly meeting of this club was held at the club rooms, corner Albert Road and Duke Street, Strathfield on January 27, 1926, at 8 p.m. The attendance was very good, and our President (Mr. A. F. Jacob) occupied the chair. Two members of the Concord Club were present and were heartily welcomed.

After disposing of a few business matters, Mr. W. H. Barker, of Concord Club, gave us an interesting lecture on "Power Transformers," giving full details of construction, etc. At the conclusion of his lecture a hearty vote of thanks was carried by acclamation and was responded to.

There followed an enthusiastic discussion on the subject of the club's transmitter, which will be an accomplished fact within the next few months. Messrs. Burman and Lawry were kindly offered their assistance in the assembling of the transmitter.

With the early advent of the transmitter much more interest will naturally be centred on this club, and more enrolments to the club's membership are expected in the near future. Morse practice will be indulged in from 7.45 p.m. to 8.15 every ordinary meeting night. The Secretary will be pleased to answer all inquiries and enrol intending members upon application. Write to the Hon. Secretary, Mr. R. Moore, "Brentwood," Cameron Street, South Strathfield, Kentfield.

### SOUTH HANDWICK AND DISTRICT RADIO CLUB.\*

On Monday, January 25, the members of the South Handwick and District Radio Club gathered for their 23rd general meeting, and to hear the third lecture of the syllabus delivered by Mr. W. A. Stewart. The attendance was well up to the usual excellent standard, and, as has been the case at meetings for some time past, the roll of membership was further added to.

Mr. Stewart, as member of the sub-committee of the Delegates' Council, was called upon to explain the nature and method of working of the traffic scheme of the Experimental Research and Traffic Bureau. The schedules, working regulations and a book of message-forms were on view,



Our Annual \_\_\_\_\_

# Stocktaking Sale

Extended to 14th FEBRUARY

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Variable Grid Leaks, from .. . . .	4	6		
Atlas Speaker .. . . . .	£3	0 0		

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and a number of comments were made on the neat and efficient way in which they had been compiled and prepared.

The business of the night included consideration of plans and specifications for a workshop to house a workbench, tools, and machinery, as well as the club apparatus and a club transmitter. (Anyone with a workshop for disposal please speak up.) After its completion it will be available to members for the construction of apparatus, or those who so desire may forego that to work the club receiver or other radio gear. Later, when our list of available operators has been somewhat augmented, a club transmitter is also to be installed.

Mr. Stewart selected for his subject "Wavometers— their Construction, Use, and Calibration," and members were introduced to and soon made with familiar with the absorption, heterodyne, and buzzer types of wavometers. The lecturer found no difficulty in keeping his listeners well interested, and a number of members were observed taking notes and particulars for constructional purposes. The lecture was well demonstrated with an absorption type meter, constructed and calibrated by Mr. Hardy at 2RD.

An inter-club visit to the Waverley Club has been arranged for February 23rd and an inter-club debate is to take place that evening. The subject that has been chosen is "A Radio Club should not include and encourage B.C.L.'s as Members." Waverley Club is going to affirm, and it is rumored that they already have the team in training and are bringing them up to condition with crystals and spaghetti served on the baseboard of a P.1.

2RD is at present busy shifting his location, and it is said that a moon ascended high when the main mast had to be cut for transportation.

The Morse classes commence Monday, 25th, prior to the general meeting, and arrangements have now been made for them to meet Monday, Wednesday and Friday evenings, and on Sunday mornings. There is a very good enrolment and plenty of enthusiasm is in evidence, so it is safe to forecast an increase in the ham stations before long. The A.O.C. class is to commence on Monday, February 1, at 7.30 p.m., and promises to be even more popular than the Morse classes. Arrangements are being made for these classes to meet occasionally at 2RD for demonstration purposes, and a very thorough course of tuition has been drawn up. It is not yet too late for anyone to join up with these classes and those interested or anyone interested in the club should at once get into touch with the Hon. Secretary.

Other clubs are requested to note change of the Hon. Secretary's address, which is now Mr. W. R. Hardy, 197 Maroubra Bay Road, South Kensington.

#### THE CROYDON RADIO CLUB, EYE.\*

On Saturday, Jan. 30, the Croydon Radio Club held the usual weekly meeting at the club room "Rockleigh," Lang Street, Croydon.

An ovation was given to 2JT, who had been absent for several meetings through business. Mr. Luckman was very warmly congratulated upon receiving official confirmation of reception of his recent loop transmission in America.

2JT was QRL'd by 2ZB, the Grebe Corporation, New York, and 7WL, Portland, Oregon.

After seeing the loops that did the trick, one realises that the word wonderful has hardly any meaning at all. Considering the way that all insulation was very carefully neglected, it is a marvel that the signal ever got outside the transmitting room.

Mr. Crisp gave a very interesting lecture on the electrolytic rectifier, and mentioned several new points in connection with these type of apparatus.

Mr. Thirn gave a lecture, the subject being "Elementary Magnetism."

These two gentlemen were thanked for their efforts and the President, Mr. C. W. Slade, added his personal congratulations to them, as they are both junior members.

Mr. Mead is to give a lecture at our next meeting.

All applications for membership, etc., should be addressed to the Hon. Sec., Croydon Radio Club, Lang Street, Croydon.

#### LICENSE FEES.

For some reason even loyal British subjects seem unable to spell the noun Licence correctly. They insist on putting an s where no s should be. In addition to this error of letters, moreover, there is a universal or what one might almost call a broadcast error, namely, of omitting to pay the fee. It is not only the dweller in the humble attic or the swaggie who makes an aerial out of a barbed-wire fence who thus transgresses. Some perfectly well-known amateurs may be heard almost nightly over the CG 115 announcing call-signs for which they haven't paid, and more than rumour indicates other names of high official standing that are in the same gallery.

The long-suffering Postal Department reluctantly deletes the call-sign long before it wipes out the station or duns the licensee. Even the Dog Act is more sternly administered. Acting strictly in the interests of the G.P.O. and its licensee-holders, 3LO recently broadcast a pathetic reminder to those whose licences were up, but those who haven't yet paid will agree that the paying of such a fee is a confounded nuisance. It ought to be added to your income tax, or the gas bill, or left in the milk-can overnight. Even if one's favourite wireless dealer were empowered to add it on to his bill it would get paid more rapidly than it is now. That brainy idea of making the Customs pay it is really rather too socialistic for a law-abiding community, which naturally asks why those who encourage local industry by buying imported goods should pay the fees of the fellow who uses home-made parts.

Anyway, who wants to see a grateful public boosting up our imports so as to return to a grasping Government and a deserving group of broadcasters more or less than their dues? Wouldn't it be fun, though, if other fees were paid in the same way? Lawyers' fees, for instance, by a tax on imported State Governors. Motorists' licences out of the tax on motor parts. Marriage fees by a tax on Australia's second best immigrants. The maternity bonus out of the death duties. Then the more the less desirable business grows the better off the Government would be, and the better the service for which it was paid, and the Law of Compensation would score again. We would then be able to quote Shakespeare with a difference and say: "The laws are just, and of our own pleasant vices make fees to entertain us with."



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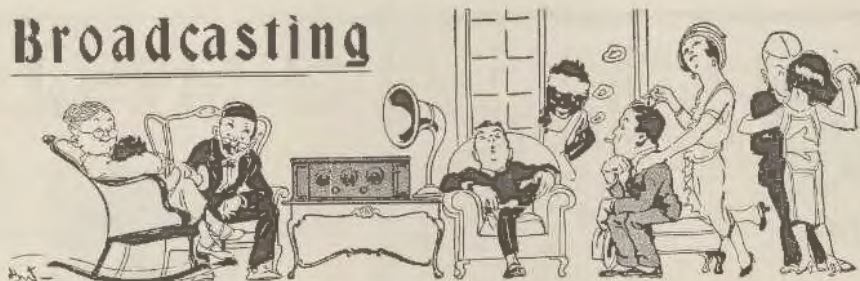
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## 4QC

QUEENSLAND RADIO SERVICE.

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FRIDAY, FEBRUARY 5.

Midday Session.

12.55—Tune-in signal.

1—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily" Standard news service. Close down.

Night Session.

To-night's programme will be provided in the Studio of 4QC by the Paramount Sextette—Miss V. Bowman, piano; Miss C. Browne, violin; Mr. R. Parker, cornet; Mr. W. Williamson, saxophone; Mr. W. G. McGrath, banjo; and Mr. K. Mahony, baritone; supported by Mrs. H. Parker, soprano.

8—Tune-in to the Tivoli Theatre.

8.5—From the Studio. (a) march, "Home Town Band" (Weidly), (b) one step, "O Katharina" (Fall), the Paramount Orchestra; baritone solo, "Roses of Picardy" (Weatherley and Wood), Mr. K. Mahony; pianoforte solo, "Tribute, O Sharp Minor" (Rachmaninoff), Miss V. Bowman; cornet solo, "Sole Mio" (Teschemacher and Di Capua), Mr. H. Parker; fox trots (a) "Yentling" (Davis and Burke), (b) "New Kind of Man" (Clare and Flatow), the Paramount Orchestra; soprano solo, "Because" (Teschemacher and D'Hardent), Mrs. H. Parker; banjo solo, "Possum's Picnic" (Caldwell), Mr. W. G. McGrath; violin solo, "Cavatina" (Raff), Miss C. Browne; waltzes, (a) "Colorado" (Hirsch and Dellan), (b) "Luisiana" (Wallace and Freed), the Paramount Orchestra.

8.55—Weather information officially supplied by the Commonwealth Weather Bureau.

9—Announcements.

9.5—March, "True Blue" (Konneth), the Paramount Orchestra; baritone solo, "Until" (Teschemacher and Sanderson), Mr. K. Mahony; pianoforte solo, "Two Dances from Henry VIII" (German), Miss V. Bowman; fox trots, (a) "Jesious" (Little, Mills and Finch), (b) "Go Long, Mule" (Creamer and King), the Paramount Orchestra; soprano solo, "Love's Own Kiss" (Hueberach and Prinkl), Mrs. H. Parker; banjo solo, "My Old Kentucky Home" (S. Foster), Mr. W. G. McGrath; fox trots,

(a) "Titta" (Danidoff and Uhl), (b) "Show me the Way to go Home," the Paramount Orchestra; baritone solo, "Friend of Mine" (Weatherley and Sanderson), Mr. K. Mahony; cornet solo, Tosti's "Parted," Mr. H. Parker; fox trots, (a) "Hard Hearted Hannah" (Yellow, Bigelow and Bates), (b) "Don't Bring Lulu" (Brown and Henderson), (c) "Moonlight and Roses" (Lamare, Black and Moret), the Paramount Orchestra.

9.55—The "Daily Mail" news service. Close down.

SATURDAY FEBRUARY 6.

No midday transmission.

The Children's Hour.

A children's bedtime story session is held each Monday, Wednesday, and Saturday evening. At a later date this session will be made a nightly feature, but in the immediate present, while transmission is being effected under temporary conditions, it is held three times weekly.

6.25—Tune-in signal.

6.30—The Children's Hour. Nursery rhymes and music; bedtime stories by "The Sandman."

7.15—Close down.

Night Session.

8—Tune-in to the Tivoli Theatre.

8.5—From the Studio: Baritone solo, "The Road that Brought You to Me" (Hambler), Mr. D. K. Syme; Mr. W. Ranch and his mouth organ; cornet solo, "Singing-Oldie" (Rimsky-Korsakoff), Madame Bolhova; pianoforte solo, "Hungarian Dance" (Brahms) Madame Rimsky Korsakoff; baritone solo, "A Bachelor Gay" (J. W. Tate), Mr. D. K. Syme; Mr. W. Ranch and his mouth organ; soprano solo, "Freischütz" (Weber), Madame Bolhova; aedlin selection, tenor solos, (a) "Haunting Melody" (Schloss), (b) "By the Lake" (Lange), sung by Mr. Sidney Hamilton; pianoforte solo, "Zampa" (Herold), Madame Rimsky Korsakoff; aedlin selection, band number, "Papa in the Parent" (Michaelis), played by the St. James' Military Band.

8.50—Weather information officially supplied by the Commonwealth Weather Bureau.

8.55—Announcements.

9—From Lennon's Hotel: By courtesy of the proprietors of Lennon's Hotel, an hour and a half's dance music played by Miss May Dobbyn's Vice-Regal Orchestra, will be relayed from Lennon's Ballroom.

10.30—From the Studio: The "Sunday Mail" news service. Close down.

SUNDAY, FEBRUARY 7.

Morning Session.

The complete morning service from the City Tabernacle (Baptist) will be relayed.

10.55—Tune-in signal.

11—Morning service. Preacher, Rev. W. G. Pope.

12.15—Close down.

Afternoon Session.

The band concert given in the Brisbane Botanical Gardens by the Federal Band will be relayed.

3.16—Tune-in signal.

3.15—Band concert by Federal Band. 4.30—Close down.

Night Session.

The complete evening service from the City Tabernacle (Baptist) will be relayed.

6.55—Tune-in signal.

7—Evening service. Preacher, Rev. W. G. Pope.

8.30— Benediction.

Band Concert.

At the conclusion of the church service the band concert by the Greater Brisbane Micklam Park will be relayed from Wickham Park. The band will play Overture, "Zampa" (Herold); xylophone solo, "Zarattelle" (Greenwood), Mr. Herb Callaghan; song, "Moonlight and Rose" (Lamare), Miss Winifred Anderson; suite from "Peer Gynt" (Grieg), (1) "Morning" (2) "Ase's Death," (3) "Anitra's Dance," (4) "In the Hall of the Mountain King"; popular numbers selected: song, "Havana" (Schubert), Miss Winifred Anderson; selection from "Fanny" (Gounod).

9.30—Close down.

MONDAY, FEBRUARY 8.

Midday Session.

12.55—Tune-in signal.

1—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

The Children's Session.

A children's bedtime story session is held each Monday, Wednesday, and Saturday evening. At a later date this session will be made a nightly feature, but in the immediate present, while transmission is being effected under temporary conditions, it is held three times weekly.

6.25—Tune-in signal.

6.30—The Children's Hour. Nursery rhymes and music; bedtime stories by "The Sandman."

7.15—Close down.





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Each receiver is fitted with cord 6ft. long. Total resistance, 4000 ohms.

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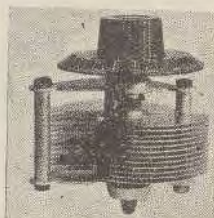
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Night Session.

- 8.—Tune-in to the Tivoli Theatre.
- 8.5.—From the Studio: Soprano solo, "Boat Song" (Harriet Ware), Miss Millicent Baker; motorists' talk by Mr. W. J. Donohoe; Hawaiian instrumentalists; "Hilo March" (Will Pale), the Pacific Trio; baritone solo, "The Old Rustic Bridge," Mr. P. G. Lloyd; Hawaiian instrumentalists, "One, Two, Three Four" (Jack Alau), the Pacific Trio; aolian selection, contralto solo, "Here am I in Beauty's Room" (Thomas), sung by Miss Constance Williams; violin solo, "Humoreske" (Dvorak), Mr. E. Scott MacCallum; baritone solo, "Sally Horner," Mr. Gerald Cashman; soprano solo, "Songs of Springtime" (Ronald), Miss Millicent Baker; Hawaiian instrumentalists, "Golden Haha Medley" (Kaikani) the Pacific Trio.

- 9.50.—Weather information officially supplied by the Commonwealth Weather Bureau.
- 8.55.—Announcements.

- 9.—Baritone solo, "Comrade of Mine" (The Gerald Cashman Duo Act selection, by request, "Barcarolle" (Offenbach); baritone solo, "Life's Lullaby" (Lane), Mr. P. G. Lloyd.

- 9.15.—From the Tivoli Theatre: By courtesy of the directors of Haymarket Theatre Ltd., three-quarters of an hour's music played by the Tivoli Operatic Orchestra, under the baton of Mr. C. Groves, will be relayed.

- 9.55.—From the Studio: The "Daily Mail" news service.
- 10.—Close down.

TUESDAY, FEBRUARY 9.

Midday Session.

- 12.55.—Tune-in signal.
- 1.—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

Night Session.

- 8.—Tune-in to the Tivoli Theatre.
- 8.5.—From the Studio: Baritone solo, "La Paloma" (Erard), Mr. J. B. Cloirec; lecturette "Photography," by Mr. F. L. South, manager Kodak Ltd.; soprano solo, "The Wood Pigeon" (Lehmann), Miss Lilian Baxter; aolian selection, instrumental, "No. No. Nanelle," Paris J. & IL, played by the Revue Orchestra; tenor solo, "I Dream that I Hear You Singing" (Marshall), Mr. Geo. Williamson; instrumental number, "The Lily" (Entr'acte (Bouix)); the Studio Quartette; musical monologue, "His Piral Lot" (Prouzet), (Guest), Miss Neta Cross; flute solo, Fantasia on "La Sonnambula" (Bellini), Mr. B. Kelly.
- 8.50.—Weather information officially supplied by the Commonwealth Weather Bureau.
- 8.55.—Announcements.
- 9.—Baritone solo, "Beyond the Dawn" (Weatherley), Mr. J. B. Cloirec; musical monologue, "Klases" (Turner), Miss Neta Cross; soprano solo, "Out of the Darkness" (D'Hardielot), Miss Lilian Brown; vocal duet, "So Mine the Delight" (Sullivan), Messrs. J. B. Cloirec and G. Winstone; pianoforte solo, "Etude in D Flat" (Liszt), Mr. Arthur Sharman; tenor solo, "Sorensen" (Schubert), Mr. Geo. Williamson.

- 9.30.—From the Centennial Hall: By

- courtesy of the lessee, half an hour's dance music played by the Centennial Hall Orchestra will be relayed.
- 9.55.—From the Studio: The "Daily Mail" news service.
- 10.—Close down.

WEDNESDAY, FEBRUARY 10.

Midday Session.

- 12.55.—Tune-in signal.
- 1.—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

The Children's Story.

- A children's bedtime story session is held each Monday, Wednesday, and Saturday evening. At a later date this session will be made a nightly feature, but in the immediate present, while transmission is being affected under temporary conditions, it is held three times weekly.
- 6.30.—Tune-in signal.
- 6.30.—The Children's Hour. Nursery rhymes and music; bedtime stories by "Little Miss Brisbane."
- 7.15.—Close down.

Night Session.

- 8.—Tune-in to the Tivoli Theatre.
- 8.5.—From the Studio: Bass solo, "Friend" (Davies), Mr. J. P. Curwell; pianoforte solo selected, Mdma. Rimsky Korsakoff; coloratura soprano, "Demon" (Rubenstein), Mdma. Bolhova; instrumental number, "Vendition Gondolier" (Voulker), the Studio Quartette; tenor solo, "Parted" (Poind), Mr. J. Lord; aolian selections, Hawaiian selections, (a) "Honolulu Bay" (Ferrara), (b) "Hawaiian Twilight" (Sherwood); lecturette to farmers by Mr. R. Wight; mouth organ solos for grown-ups by "The Banding" soprano solo, "Lale D'Amour" (Edwards), Miss Eileen McLennan; ten minutes of music and mirth by Signor Corti.
- 8.50.—Weather information officially supplied by the Commonwealth Weather Bureau.
- 8.55.—Announcements.
- 9.—Bass solo, "When Song is Sweet" (Del Riego), Mr. J. P. Curwell; pianoforte solo, selected, Madame Rimsky Korsakoff; coloratura soprano, "Sakko" (Rimsky Korsakoff), Mdma. Bolhova; instrumental number, Air de Ballet, "Le Torello" (Losey), the Studio Quartette; aolian selection, contralto solo, "Durdy and Joan" (Molloy), sung by Miss Ethel Hook; cello solo "Lullaby" (Ernest Claude), Miss Petropoulos; tenor solo, "I Seek for Thee in Every Flower" (Gaut), Mr. J. Lord; mouth organ selections for grown-ups by "The Sandman"; soprano solo, "Love's Own Kiss" (R. Fennil), Miss Eileen McLennan; instrumental number, fox trot "My Sweetie Went Away" (Roy, Turk and L. Handman), the Studio Quartette.
- 9.55.—The "Daily Mail" news service.
- 10.—Close down.

THURSDAY, FEBRUARY 11.

Midday Session.

- 12.55.—Tune-in signal.
- 1.—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

FRIDAY, FEBRUARY 12.

Midday Session.

- 12.55.—Tune-in signal.
- 1.—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

Night Session.

- 8.—Tune-in to the Tivoli Theatre.
- 8.5.—From the Studio: Baritone solo, "Old-fashioned Lady" (Nicholls) Mr. Gerald Cashman; Bookman's Riddle, a talk on latest literature by Mr. W. A. Brisdon (McLeod's Bookstore); cornet solo, "Somewhere a Voice is Calling" (A. F. Tate), Mr. F. Pforr; aolian selection, bass solo, "From Oberon in Fairyland" (Slater), sung by Mr. Malcolm McEachern; instrumental number, "Spring Flowers" (T. Gernan); the Studio Quartette; baritone solo, "The Land where the Shamrock Grows" (Von Tilzer) Mr. Gerald Cashman; cornet solo, "Killarney" (Balle), Mr. E. Pforr; aolian selection, bass solo, "The Highly Deep" (Jude), sung by Mr. Malcolm McEachern; instrumental number, "La Sauterelle" — "The Grasshopper" (G. L. Tracy), the Studio Quartette.

- 8.50.—Weather information officially supplied by the Commonwealth Weather Bureau.
- 8.55.—Announcements.

- 9.—The Lyric Glee Party.
- 9.—An hour's entertainment by the Lyric Glee Party. Glee, "Now is my Chloris fresh as May" (Idle), the Glee Party; tenor solo, selected, Mr. Dick Robinson; duet soprano and contralto, selected, Mrs. A. F. Stoddart and Miss D. McDowell; male quartette, "Gone where the Woodbine Twines", the Lyric Male Party; baritone solo, selected, Mr. E. G. Bellgrove; part song, "In this Hour of Softened Splendor" (Pinsuti), the Glee Party; contralto solo, selected, Mrs. Stoddart; tenor solo, selected, "Pro Plunio Basso" — Mixed Party; duet, tenor and baritone, "Down the Vale," Messrs. E. G. Bellgrove and T. Molvillo; bass solo, "Trumpeter" (Arlis Dix), Mr. J. P. Curwell; male quartette, "The Catastrophe," the Lyric Male Party; part song, "Goodnight, Beloved" (Pinsuti), the Glee Party.
- 10.—The "Daily Mail" news service. Close down.

2KY

WEEKLY BROADCAST PROGRAMME.  
TRADES HALL.

Call Sign, 2KY. Wavelength, 280 metres.

FRIDAY, FEBRUARY 5.

- Afternoon Session.
- 2.30.—A varied vocal and musical programme will be transmitted, closing down at 4.45.
- Children's Hour.
- 6.30.—"The Man in the Moon."
- Evening Session.
- 7.45.—Latest news items; Ryan's Viola Dance Orchestra; Miss Eams Dick, G.L.C.M.; Miss Maizie Carroll, soprano; Mr. J. James, baritone; Mr. Beard, technical designer of 2KY, wireless lecturette; and others to be announced.

SATURDAY, FEBRUARY 6.

- Evening Session.
- 7.45.—Latest news items and sporting results; Mr. Fahy, tenor; Miss O'Neill, contralto; Herbert Beaver, humorous odds and ends; and others to be announced.



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**MONDAY, FEBRUARY 5.**

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted, closing down at 4.45.

Children's Hour.

6.30—"The Man in the Moon" and Uncle Val.

Evening Session.

7.45—Latest news items; Miss Amy Ruwald, entertainer; Miss D. Johnstone, soprano; Miss Wood, soprano; Mr. J. Gray, baritone; Mr. W. Strain, tenor; Mr. Walter Faulkner, musical burlesque; lecturette, local topics, industrial and political, Mr. J. S. Garden; Free-land's Dance Orchestra; wireless lecturette, Mr. Beard, technical designer of 2KY; 3rd chapter of the Universal Chapter Play, "Perils of the Wild"; serial story, will be broadcast from 2KY to-night.

**TUESDAY, FEBRUARY 9.**

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted, closing down at 4.45.

Children's Hour.

6.30—"The Man in the Moon."

Evening Session.

7.45—Latest news items; Mr. McKillop, showway comedian; Miss Dorrington, soprano; Cox, Morris and his Bluebirds' Jazz Band; and others to be announced.

**WEDNESDAY, FEBRUARY 10.**

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted, closing down at 4.45.

Children's Hour.

6.30—"The Man in the Moon."

Evening Session.

7.45—Latest news items; radio lecturette, Mr. B. Whitaker, Mr. David Bond, baritone; Miss Dean, pianiste; Mr. Don Ellis, harmonica; lecturette, international topics, industrial and political, Mr. J. S. Garden; and others to be announced.

**THURSDAY, FEBRUARY 11.**

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted, closing down at 4.45.

Children's Hour.

6.30—"The Man in the Moon" and Uncle Val.

Evening Session.

7.45—Latest news items; Messrs. Haydon and Price, cornet duet; Miss Tibbie Smith, monologue; Miss Beckie Jones, contralto; 4th chapter of the Universal Chapter Play, "Perils of the Wild"; and others to be announced.

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**FRIDAY FEBRUARY 5.**

Afternoon Session.

3—G.P.O. clock and chimes; weather report and social notes from the "Sun."

3.15—Music from the Studio.

4.10—G.P.O. clock and chimes; a talk on "Modern Psychology" 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 "The Treasure of Ho."

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.

7.45—Late stock, hides and market reports by courtesy of Pitt, Son and Badgery.

7.50—Close down.

Evening Session.

Variety programme from Studio; Professor Dolot's Embassy Jazz Band, under the direction of Mr. S. Bennett broadcast from Embassy Palais. At 9 p.m. Mr. H. C. Morgan will speak on "Motoring," and at 10 p.m. a round the world travelogue will be given by Mr. J. M. Prentice.

**SATURDAY, FEBRUARY 6.**

Afternoon Session.

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 George and the Kiddies.

7—A talk to the kiddies by "Bring-a."

7.45—A talk on "Roads."

Evening Session.

Hoyt's Imperial Orchestra, under the direction of Mr. Lionel Hart broadcast from Hoyt's Theatre. Popular concert from the Studio, including the Alabi Duo in steel guitar selections; Mr. Billy Dick in songs on the piano; vocal quartet and Mr. Norman Wright, tenor. Dance music until midnight supplied by Dungwon Modern Dance Band, Manly, under the direction of Mr. Chas. Thacker. During the evening Mr. W. Fitzpatrick will speak on "Life at Sea," and Mr. Maurice Sumner, ex-President of the Hobart Chamber of Commerce, will speak from the Studio.

**SUNDAY, FEBRUARY 7.**

11—Service broadcast from First Church of Christ, Scientist, Gully.

3.30—Concert from the Studio.

4—Organ Recital and Sacred Concert broadcast from Petersham Baptist Church.

7.15—Service broadcast from Chalmers Street Baptist Church.

8.30—From the Studio; Alfred Cunningham, baritone; Broadcasters' Trio.

**MONDAY, FEBRUARY 8.**

Afternoon Session.

3—G.P.O. clock and chimes; weather report and social notes from the "Sun."

3.15—David Jones' Tea Room Trio.

3.30—G.P.O. clock and chimes; a talk on "A Course in English Literature" 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 "The Treasure of Ho."

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 Jack 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 Pitt Son and Badgery.

7.50—Close down.

Evening Session.

From the Studio: The Smart Set Diggers; dramatic and comedy sketches; Roger Jones, baritone. During the evening Mr. Eraser Anderson will continue his lectures on "Astrological Aids to Character." Dance music until midnight, supplied by Ambassadors' Dance Band, under the direction of Al. Flammett.

**TUESDAY, FEBRUARY 9.**

Afternoon Session.

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; special musical session.

4.30—G.P.O. clock and chimes; serial story entitled "The Treasure of Ho."

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.

7.45—Late stock, hides and market reports by courtesy of Pitt, Son and Badgery.

7.50—Close down.

Evening Session.

Variety programme from the Studio, featuring Myra Gillon contralto; Norman Wright, tenor. During the evening Mr. J. M. Prentice will speak on "Foreign Affairs" and reply to any telephone question on the subject. Miss Helen Beegling will also speak from the Studio.

**WEDNESDAY, FEBRUARY 10.**

Afternoon Session.

3—G.P.O. clock and chimes; weather report and social notes from the "Sun."

3.15—Broadcasters' Trio.

3.30—A talk on "The Musical Outlook" by Mr. J. M. Prentice.

3.45—Broadcasters' Trio.

4—G.P.O. clock and chimes; Broadcasters' Trio.

4.30—G.P.O. clock and chimes; serial story entitled "The Treasure of Ho."

4.45—Broadcasters' Trio.

4.55—Late market reports from the "Sun."

5—G.P.O. clock and chimes; "Sun" news service.

**Burgess—"They're used throughout the United States Navy"—Batteries**



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 Uncle Jack with the kiddies.

7.45—Late stock, hides and market reports by courtesy of Pitt, Sun and Badger.

7.50—Close down.

Evening Session.

Hoyt's Imperial Orchestra, under the direction of Mr. Lionel Hart, broadcast from Hoyt's Theatre. From the Studio: Vocal Quartet; Sid Owen in musical novelties. Dance music supplied by Professor Bolot's Embassy Jazz Band, under the direction of Mr. S. Bennett, broadcast from Embassy Palais. During the evening Mr. G. C. Barnes will speak on "The Romance of Buried Treasure."

**THURSDAY, FEBRUARY 11.**

Afternoon Session.

3—G.P.O. clock and chimes; weather report and social notes from the "Sun."

3.15—David Jones' Tea Room Trio.

3.30—G.P.O. clock and chimes; 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 "The Treasure of Ho."

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 Jack and the kiddies.

7.45—Late stock, hides and market reports by courtesy of Pitt, Sun and Badger.

7.50—Close down.

7.55—Madame Henri in French readings.

Evening Session.

Variety programme from the Studio, including comedy and dramatic sketches; Daisy Mangan, colouratura soprano;

Stanley Callett, tenor. At 9.30 Mr. Dally Watkins will speak on "Acquaintance—Credits and Collections."

**5CL**

**CENTRAL BROADCASTERS LTD.**

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**FRIDAY, FEBRUARY 5.**

Morning Session, 11.30 to 2.

11.30—G.P.O. chimes.

11.31—Steek Duo Art and Aeolian Vocalion records.

12—G.P.O. chimes.

12.1—News and cable service.

12.30—The 5CL Studio Orchestra will play: Selection, "No, No, Nanette" (Vincent Youmans); cornet solo, "Sincerity" (Clarke); fox trot, "Let Me Linger"; suite Love Sonnets (Zemczuk); violin solo, "Canzoneh" (D'Ambrosio); waltz, "Mississippi Bubbles" (Earl); Dance Tansweise (Meyer Helmsud); Venetian Reverie (Frederick Ball); finale, overture "Caliph of Bagdad."

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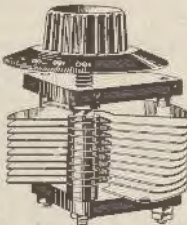
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1.55—S. C. Ward and Co.'s Stock Exchange intelligence and official weather synopsis.

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 and general information.

5—G.P.O. chimes.

Evening Session, 8.30 to 10.30.

6.30—G.P.O. chimes.

6.31—Bedtime stories for the children.

7.30—Stock Exchange and market reports.

7.40—Sporting talk by "Old Timer."

8—G.P.O. chimes.

8.1—Studio concert of popular vocal & instrumental numbers arranged by Mr. Broadland Rook.

9—G.P.O. chimes.

9.1—Weather reports.

9.3—Studio concert, continued.

10—G.P.O. chimes.

10.1—Studio concert, continued.

10.15—"Advertiser" news service.

10.30—Station announcements, To-morrow's programme, National Anthem.

Good-night.

#### SATURDAY, FEBRUARY 6.

Morning Session, 10.30 to 12.

10.30—G.P.O. chimes.

10.31—The 5CL Studio Orchestra will play: Overture, "On the Riviera" (Grünevald); cello solo, "Intermezzo" (Toura); fox trot, "Lullaby" (Schonberg); suite, "Miniatures" (Czaky-Budge); instrumental trio, "Bacchante" (Offenbach); selection, "Lilac Time" (Schubert); waltz, "Little Pal of Long Ago" (Dixon); Solvay's Song (from suite) (Grieg); finale, "The Last Waltz" (Strauss).

11.45—S. C. Ward and Co.'s Stock Exchange intelligence and official weather synopsis.

12—G.P.O. chimes.

Afternoon Session.

Sporting results.

Evening Session, 8.30 to 10.30.

8.30—G.P.O. chimes.

8.31—Bedtime stories for the children.

7.30—Market reports.

7.40—A review of the day's sporting.

8—G.P.O. chimes.

8.1—Studio concert arranged by Miss Sylvia Thomas.

9—G.P.O. chimes.

9.1—Weather reports.

9.3—Studio concert, continued.

10—G.P.O. chimes.

10.1—Studio concert, continued.

10.15—"Advertiser" news service.

10.30—Station announcements, To-morrow's programme, National Anthem.

Good-night.

#### SUNDAY, FEBRUARY 7.

Morning Session.

11—Broadcast from Parkside Baptist Church, Divine Service.

Evening Session, 8.30 to 10.30.

8.30—Bedtime stories for the children.

8.45—Broadcast from Maughan Church, Divine Service.

8.25—Science talk by Mr. P. H. Nickalls.

8.45—Band concert from Elder Park Rounda. Station announcements.

To-morrow's programme, National Anthem, Good-night.

#### MONDAY, FEBRUARY 8.

Morning Session, 11.30 to 2.

11.30—G.P.O. chimes.

11.31—Stock Duo Art and Aeolian Vocalion recitals.

12—G.P.O. chimes.

12.1—News and cable service.

12.30—The 5CL Studio Orchestra will play: Selection, "Aida" (Verdi); cornet solo, "Adieu" (Schubert); fox trot, "Mighty Blue" (Whiting); instrumental trio, "Humoresque" (Dvorak); Oriental, "Japandata" (Weidt); waltz, "Close Your Eyes" (Vincent); Scarle Dance (Chaminade); selection, "The Rebel Maid" (Monckton); cello solo, "Matinee Printemps" (Paul Wacks); finale, "March of the Heroes" (Zamcenik).

1.55—S. C. Ward and Co.'s Stock Exchange intelligence and official weather synopsis.

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—From Studio, serial story.

4—G.P.O. chimes.

4.1—Broadcast from Arcadia Cafe, orchestral numbers.

4.55—Stock Exchange reports and general information.

5—G.P.O. chimes.

Evening Session, 8.30 to 10.30.

6.30—G.P.O. chimes.

6.31—Bedtime stories for the children.

7.30—Market reports.

7.40—Swimming talk by Mr. Boatwright.

8—G.P.O. chimes.

8.1—Studio concert arranged by Miss Linda Wadd.

9—G.P.O. chimes.

9.1—Weather reports.

9.3—Studio concert, continued.

10—G.P.O. chimes.

10.1—Studio concert, continued.

10.15—"Advertiser" news service.

10.30—Station announcements, To-morrow's programme, National Anthem.

Good-night.

#### TUESDAY, FEBRUARY 9.

Morning Session, 11.30 to 2.

11.30—G.P.O. chimes.

11.31—Stock Duo Art and Aeolian Vocalion recitals.

12—G.P.O. chimes.

12.1—News and cable service.

12.30—The 5CL Studio Orchestra will play: Selection, "Decameron Nights" (Finck); cornet solo, "White Moon" (Matto); instrumental trio, "Hungarian Dance" (Brahm); fox trot, "Dreury Weather" (Katsman); Barcarolle, "Dream Lagoon" (Elliot); Novallette, "Cupid's Frolle" (Miles); waltz, "Wonderful World" (Alexander); cello solo, "Souvenir D'Amour" (Montagu); finale, "King Mydas" (Elsenberg).

1.55—S. C. Ward and Co.'s Stock Exchange intelligence and official weather synopsis.

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 and general information.

5—G.P.O. chimes.

Evening Session, 8.30 to 10.30.

6.30—G.P.O. chimes.

6.31—Bedtime stories for the children.

7.30—Market reports.

7.40—Physical culture talk by Mr. Noel H. Hubble.

8—G.P.O. chimes.

8.1—From Salvation Army Citadel, band items, with vocal numbers.

8.30—From the Studio, a cookery talk.

8.50—From Citadel, continued.

9—G.P.O. chimes.

9.1—Weather reports.

9.3—From Citadel, continued.

10—G.P.O. chimes.

10.1—Radio talk by Mr. E. J. W. Gunner.

10.15—"Advertiser" news service.

10.30—Station announcements, To-morrow's programme, National Anthem.

Good-night.

#### WEDNESDAY, FEBRUARY 10.

Morning Session, 11.30 to 2.

11.30—G.P.O. chimes.

11.31—Stock Duo Art and Aeolian Vocalion recitals.

12—G.P.O. chimes.

12.1—News and cable service.

12.30—The 5CL Studio Orchestra will play: Selection, "Rigolotto" (Verdi); violin solo, "Thais" (Massenet); fox trot, "Ukulele Lady" (Whiting); serenade, "Humoresque" (Collins); waltz, "Sweetest Little Rose" (Devall); selection, "Gipsy Princess" (Lehar); caprice, "Queen of the Roses" (Elliot); instrumental trio, "Prelude G Minor" (Fuchselt); finale, "March of the Heroes" (Zamcenik).

1.55—S. C. Ward and Co.'s Stock Exchange intelligence and official weather synopsis.

2—G.P.O. chimes.

Afternoon Session, 3 to 5.

3—G.P.O. chimes.

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BURGESS—"THEY'RE ON THE 'LEVIATHAN'"—BATTERIES



## 3AR

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## FRIDAY, FEBRUARY 5.

## Morning Session.

- 12—Time signal.  
12.1—First weather forecast.  
12.3—Events of the day.  
12.5—The "Age" news bulletin.  
12.15—Musical selections from the Studio.  
12.30—Stock Exchange news.  
12.35—Market reports.  
12.40—Musical selections.  
12.55—Mail reports, shipping movements.  
1—Musical selections from Hoyt's De Luxe Theatre, Bourke Street.  
2—Close down.

## Afternoon Session.

- 3.50—Musical items by Hoyt's Premier Orchestra.  
4.5—"Graphic" news.  
4—Time signal.  
4.1—Second weather forecast: Hoyt's Premier Orchestra.  
4.30—Mr. R. Standley Haines, of Brunings Pty. Ltd., will give his weekly gardening talk to the children, "Interesting Botany."  
4.45—Musical selections from Hoyt's De Luxe, Bourke Street.  
5—Close down.

## Evening Session.

- 6.45 to 7.30—The Children's Corner by Uncle Rad. (1) The Bedtime Story. (2) Talk on "Hobbies." (3) The Children's Big Saw Painting Competition.  
8—Time signal.  
8.1—Mr. Fred Mitty, special reading commissioner to 3AR, will give his "rambling anticipations."  
8.15—Mr. R. Standley Haines, gardening talk, "Artificial Manures and Their Uses" (3rd series).  
8.25—Mr. Don. Cussen, tenor.  
8.50—Madam Rayer-Easton, French talk, "Remarque pour aider a comprendre le francais par une Différence maniere d'c'orer le son en—Le Petit Chaperon Rouge."  
8.43—Miss Phyllis Shattock solo pianiste. (A) Study in E Major, Op. 10, No. 3 (Chopin); (B) Study in E Minor, Op. 25, No. 5 (Chopin).  
8.51—Miss Edna Johnson, elocutionist.  
8.56—Miss Phyllis Hall, mezzo-soprano.  
9.5—Instrumental items.  
9.15—Mr. Don. Cussen, tenor.  
9.20—Miss Chrissie Spring, contralto.  
9.27—Miss Phyllis Shattock, solo pianiste, Largo in E Major, Op. 10, No. 3 (Beehoven).  
9.35—Miss Edna Johnson elocutionist.  
9.41—Miss Phyllis Hall, mezzo-soprano.  
9.49—Instrumental items.  
9.56—Miss Chrissie Spring, contralto.  
10—Time signal.  
10.1—The "Age" news bulletin, exclusive to 3AR.  
10.15—Musical selections from Hoyt's De Luxe Theatre, Bourke Street, until closing down. National Anthem.

## SATURDAY, FEBRUARY 6.

## Morning Session.

- 12 noon—Time Signal.  
12.1—1st Weather Forecast.  
12.3—Events of the Day.  
12.5—The Age News Bulletin.  
12.15—British Government official press received by 3AR's operator from Rugby super station (England).  
12.20—Musical Selections.  
12.30—Stock Exchange News.  
12.35—Market Reports.  
12.40—Musical Selections.  
12.55—Mail Notices; Shipping Movements.  
1—Musical Selections relayed from Hoyt's De Luxe.  
2—Close down.

## Afternoon Session.

- 3.50—Musical Selections relayed from Hoyt's De Luxe Theatre, Bourke Street.  
4—Time signal.  
4.1—Second weather forecast: Hoyt's Premier Orchestra.  
4.30—Mr. R. Standley Haines, of Brunings Pty. Ltd., will give his weekly gardening talk to the children, "Interesting Botany."  
4.45—Musical selections from Hoyt's De Luxe, Bourke Street.  
5—Close down.  
5.45 to 6.30—The Children's Corner by Uncle Rad. (1) The Bedtime Story. (2) Talk on "Hobbies." (3) The Children's Big Saw Painting Competition.  
6—Time signal.  
6.1—Mr. Fred Mitty, special reading commissioner to 3AR, will give his "rambling anticipations."  
6.15—Mr. R. Standley Haines, gardening talk, "Artificial Manures and Their Uses" (3rd series).  
6.25—Mr. Don. Cussen, tenor.  
6.50—Madam Rayer-Easton, French talk, "Remarque pour aider a comprendre le francais par une Différence maniere d'c'orer le son en—Le Petit Chaperon Rouge."  
6.43—Miss Phyllis Shattock solo pianiste. (A) Study in E Major, Op. 10, No. 3 (Chopin); (B) Study in E Minor, Op. 25, No. 5 (Chopin).  
6.51—Miss Edna Johnson, elocutionist.  
6.56—Miss Phyllis Hall, mezzo-soprano.  
7.5—Instrumental items.  
7.15—Mr. Don. Cussen, tenor.  
7.20—Miss Chrissie Spring, contralto.  
7.27—Miss Phyllis Shattock, solo pianiste, Largo in E Major, Op. 10, No. 3 (Beehoven).  
7.35—Miss Edna Johnson elocutionist.  
7.41—Miss Phyllis Hall, mezzo-soprano.  
7.49—Instrumental items.  
7.56—Miss Chrissie Spring, contralto.  
8—Time signal.  
8.1—The "Age" news bulletin, exclusive to 3AR.  
8.15—Musical selections from Hoyt's De Luxe Theatre, Bourke Street, until closing down. National Anthem.

## EVENING SESSION.

- 8.45 to 9.30—The Children's Corner by Uncle Rad. (1) The Bedtime Story. (2) Talk on "Hobbies." (3) The Children's Big Saw Painting Competition.  
9—Time signal.  
9.1—Mr. Fred Mitty, special reading commissioner to 3AR, will give his "rambling anticipations."  
9.15—Mr. R. Standley Haines, gardening talk, "Artificial Manures and Their Uses" (3rd series).  
9.25—Mr. Don. Cussen, tenor.  
9.50—Madam Rayer-Easton, French talk, "Remarque pour aider a comprendre le francais par une Différence maniere d'c'orer le son en—Le Petit Chaperon Rouge."  
9.43—Miss Phyllis Shattock solo pianiste. (A) Study in E Major, Op. 10, No. 3 (Chopin); (B) Study in E Minor, Op. 25, No. 5 (Chopin).  
9.51—Miss Edna Johnson, elocutionist.  
9.56—Miss Phyllis Hall, mezzo-soprano.  
10.5—Instrumental items.  
10.15—Mr. Don. Cussen, tenor.  
10.20—Miss Chrissie Spring, contralto.  
10.27—Miss Phyllis Shattock, solo pianiste, Largo in E Major, Op. 10, No. 3 (Beehoven).  
10.35—Miss Edna Johnson elocutionist.  
10.41—Miss Phyllis Hall, mezzo-soprano.  
10.49—Instrumental items.  
10.56—Miss Chrissie Spring, contralto.  
11—Time signal.  
11.1—The "Age" news bulletin, exclusive to 3AR.  
11.15—Musical selections from Hoyt's De Luxe Theatre, Bourke Street, until closing down. National Anthem.

- 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.  
4.5—Stock Exchange reports and general information.  
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.  
7.15—Market reports.  
7.20—Coppe lecture by Mrs. W. Klok, B.A., B.D.  
7.40—Scouts' corner.  
8—G.P.O. chimes.  
8.1—Studio concert arranged by Mr. H. Bauerbroche, a night of popular and humorous items.  
9—G.P.O. chimes.  
9.1—Weather reports.  
9.3—Studio concert, continued.  
9.5—G.P.O. chimes.  
10.1—Studio concert, continued.  
10.15—"Advertiser" news service.  
10.30—Station announcements. Tomorrow's programme. National Anthem. Good-night.

## THURSDAY, FEBRUARY 11.

- 11.30—G.P.O. chimes.  
11.31—Stock Duo Art and Aeolian Vocal recitals.  
12—G.P.O. chimes.  
12.1—News and cable service.  
12.30—The 5CL Studio Orchestra will play: Selection, "The Count of Luxembourg" (Lohrer); cornet solo, "Poe Ever and Ever" (Post); instrumental trio, "Norma" (Bellini); fox trot, "Havana" (Schronberger); intermezzo, "La Ballerina" (Elliot); waltz, "Hawaiian Love Nest" (Van der Pool); chime solo, "Berceuse" (Squire); suite, "Dream Pictures" (Lemont); tsaie, "Lady of the Rose" (Gilbert).  
1.55—S. C. Ward and Co.'s Stock Exchange intelligence and official weather synopsis.  
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.  
4.5—Stock Exchange reports and general information.  
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.  
7.15—Health talk arranged by Mr. A. M. Whittenbury.  
7.30—Market reports.  
7.40—A talk on poultry by Mr. A. M. Whittenbury.  
8—G.P.O. chimes.  
8.1—Classical music composed by Puccini and rendered by Studio Orchestra, assisted by leading artists.  
8.30—Cookery talk.  
8.35—Puccini numbers, continued.  
9—G.P.O. chimes.  
9.1—Weather reports.  
9.3—Puccini numbers, continued.  
9.45—Popular instrumental and vocal numbers.  
10—G.P.O. chimes.  
10.1—Popular numbers, continued.  
10.15—"Advertiser" news service.  
10.30—Station announcements. Tomorrow's programme. National Anthem. Good-night.

- 12.55—Mail Notices; Shipping Movements.  
1—Close down.  
1.15—The Torrens Session, Williamstown Races.  
2—Description while racing of Summer Handicaps.  
2.55—Result of C. F. Orr Stakes.  
3.30—Selections from Hoyt's Premier Orchestra.  
3.50—Result of Wyndham Handicap.  
4—Time Signal.  
4.1—Selections from Hoyt's Premier Orchestra.  
4.25—Result of Marine Handicap.  
4.30—Musical selections.  
4.50—Result of February Handicap.  
5—Close down.  
5.45 to 6.30—The Children's Corner by Uncle Rad. (1) The Bedtime Story; (2) Talk on "Hobbies"; (3) The Children's Big Saw Painting Competition.  
6—Time Signal.  
6.15—Dance Night. The Rhythmic Dance Orchestra under the direction of Mr. George Lewis, relayed from the Maison De Luxe, Broadway St.  
6.30—W. E. A. Travellers' Information. Railway information supplied by the Victorian Railways Dept.; Tramway information supplied by the Tramways Board; Road information supplied by the Royal Automobile Club.  
6.50—The Maison De Luxe Orchestra.  
11—National Anthem and Close down.

## SUNDAY, FEBRUARY 7.

- Morning Session.  
10.30—The Bells from St. James' Old Cathedral.  
11—Service from the Independent Church, California St., Melbourne. Preacher, Rev. J. Ernest James, B.D. Hymns: "We Praise, we Worship Thee, O God"; Prayer of Invocation; "The Lord's Prayer" (abridged); Hymn: "The Lord's my Shepherd, I'll not want"; Scripture Lesson; Notices; Anthem: "Jesu Word of God Incarnate" (Mozart); Offerings; Prayer; Hymn: "Now what these hands have done"; Sermon; Hymn: "In the Cross Christ's Glory's Benediction."  
11.45—Close down.  
11.55—Afternoon Session.  
3—Time Signal. Organ and Vocal Recital from St. James' Old Cathedral. Rev. A. E. F. Young. Talk: "The Story of Melbourne's Oldest Cathedral."  
4—Close down.  
Evening Session.  
6.30—Organ Recital by Mr. Herbert N. Davies.  
6.35—Choir Vestry Service.  
7—Hymn: Day is Dying in the West; Prayer of Invocation; Lord's Prayer repeated; Hymn: Ols in Sorrow, oft in Wee; Scripture Lesson; Hymn: My Godless Lord I own Thy Right; Prayer; Anthem: Here by Babylon's Wave; Offerings; Notices; Hymn: Give me the wings of Faith; Sermon: Battered to Flight Breathe; Hymn: Soldiers of Christ Arise; Benediction.  
8.30—Captain H. J. Larkin will speak on Aeronautics.  
9—The Eclipse Grand Orchestra, under the direction of Mr. George Henry, relayed from the Eclipse Theatre, Port Melbourne.  
9.50—The Age News Bulletin, exclusive to 3AR.  
9.55—National Anthem and close down.

## MONDAY, FEBRUARY 8.

- Morning Session.  
12 noon—Time Signal.  
12.1—1st Weather Forecast.  
12.3—Events of the Day.  
12.5—The Age News Bulletin.  
12.15—British Government official press received by 3AR's operator from Rugby super station (England).  
12.20—Musical Selections.  
12.30—Stock Exchange News.  
12.35—Market Reports.  
12.40—Musical Selections.  
12.55—Mail Notices; Shipping Movements.  
1—Musical Selections relayed from Hoyt's De Luxe.  
2—Close down.  
Afternoon Session.  
3.30—Hoyt's Premier Orchestra.

- 3.45—Graphic News.
- 4—Time Signal.
- 4.1—2nd Weather Forecast.
- 4.5—Hoyle's Premier Orchestra.
- 5—Close down.
- 6.15 to 7.30—The Children's Corner by Uncle Rad. 1, The Bedtime Story; 2, Talk on Hobbies; 3, The Children's Jig Saw Painting Competition.
- 8—Time Signal. Happy Thought Competition. Prize: Free Trip to Hay and Return. The Night's Happy Thought will be broadcast some time during the evening between 9 and 10 o'clock.
- 8.1—Miss Marion Daniels (mezzo-soprano).
- 8.10—The High Jinks Royalty Jazz Orchestra, will play selections of popular dance music.
- 8.25—Miss Freda Stevens (soprano).
- 8.32—Mr. Fred Sazyk (baritone).
- 8.39—Miss Anne Jefferey (soprano).
- 8.45—The High Jinks Royalty Jazz Orchestra.
- 9—Miss Marion Daniels (mezzo-soprano).
- 9.7—Miss Freda Stevens (soprano).
- 9.23—The High Jinks Royalty Jazz Orchestra.
- 9.30—Mr. Steven McDonald, Talk, Voice Production (with songs).
- 9.45—Miss Anne Jefferey (soprano).
- 10—Time Signal.
- 10.1—The Age News Bulletin, exclusive to 3AR.
- 10.15—Hoyle's Premier Orchestra, relayed from De Luxe until closing down. National Anthem.

TUESDAY, FEBRUARY 9.

- Morning Session.
- 12 noon—Time Signal.
- 12.1—1st Weather Forecast.
- 12.5—Events of the Day.
- 12.5—The Age News Bulletin.
- 12.15—British Government official press received by 3AR's operator from Rigby super station (England).
- 12.20—Musical Selections.
- 12.30—Stock Exchange News.
- 12.35—Market Reports.
- 12.40—Musical Selections.
- 12.55—Mail Notices; Shipping Movements.
- 1—Selections from Hoyle's De Luxe.
- 2—Close down.
- Afternoon Session.
- 3.30—Selections by Hoyle's Premier Orchestra.
- 3.45—Graphic News.
- 4—Time Signal.
- 4.1—2nd Weather Forecast.
- 4.5—Hoyle's Premier Orchestra relayed from De Luxe.
- 4.55—The Evening's Amusement Guide.
- 5—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; 3, The Children's Jig Saw Painting Competition.
- 8—Time Signal. The Happy Thought Competition. Prize: Free trip to Hay and Return. The Night's Happy Thought will be broadcast some time between 8 and 10 o'clock.
- 8.1—Mr. Ernest Bond (Astrologist), talk on The Presignificance of the New Moon.
- 8.16—Wilfred Kane (tenor).
- 8.23—Mr. Alfred Gleasons (violinist).
- 8.29—Miss Jean Jamieson (soprano).
- 8.36—Mr. Fred Nash (baritone).
- 8.43—Miss Elsie Mitchell (soprano).
- 8.50—Mr. Kenneth Sutherland (baritone).
- 8.57—Miss Margaret Croom (pianist).
- 9.4—Mrs. John Brennan (soprano).
- 9.11—Mr. Wilfred Kane (tenor).
- 9.16—Mr. Alfred Gleasons (violinist).
- 9.25—Miss Jean Jamieson (soprano).
- 9.32—Mr. Fred Nash (baritone).
- 9.39—Miss Elsie Mitchell (soprano).
- 9.46—Mr. Kenneth Sutherland (baritone).
- 9.53—Mrs. John Brennan (soprano).
- 10—Time Signal.
- 10.1—The Age News Bulletin, exclusive to 3AR.
- 10.15—Hoyle's Premier Orchestra, until closing down. National Anthem.

WEDNESDAY, FEBRUARY 10.

- Morning Session.
- 12 noon—Time Signal.

- 12.1—1st Weather Forecast.
- 12.5—Events of the Day.
- 12.5—The Age News Bulletin.
- 12.15—British Government official press received by 3AR's operator from Rigby super station (England).
- 12.20—Musical Selections.
- 12.30—Stock Exchange News.
- 12.35—Market Reports.
- 12.40—Musical Selections.
- 12.55—Mail Notices; Shipping Movements.
- 1—Hoyle's Theatre De Luxe, Musical Selections.

Afternoon Session.

- Bendigo Races, 1st Day.
- 2—Result of Hurdle.
- 2.40—Result of Bendigo Plate.
- 3.15—Result of Hospital Handicap.
- 3.30—Selections by Hoyle's Premier Orchestra.
- 3.45—Result of Novice Handicap.
- 4—Time Signal.
- 4.1—2nd Weather Forecast.
- 4.15—Result of Distance Handicap Trot.
- 4.45—Result of Jumpers Flat Race.
- 5—Close down.
- Early Evening Session.
- 6.45 to 7.30—The Children's Hour by Uncle Rad. 1, The Bedtime Story; 2, Talk on Hobbies; 3, The Children's Jig Saw Painting Competition.
- 8—Time Signal; The Happy Thought Competition. Prize: Free trip to Hay and Return. The Night's Happy Thought will be broadcast some time during 8 and 10 o'clock.
- 8.1—Concert transmitted from the Queen's Hall, Collins St. Programme arranged by Miss Edith Bernard and Miss Edith Fennell. Overture: Miss Edith Bernard; humorous recitation: Miss Edith Fennell; humorous song: Madame I. Savelle and Mr. J. G. Croft; humorous recitation: Mr. Eric Kirke; monologue: Miss Edith G. Fennell; humorous song: Mr. J. G. Croft; song: Miss Edith Bernard; recitation: Mr. Eric Kirke; gesture scene: "Nipped in the Bud" written and produced by Miss Edith Fennell. Interval: During the interval, musical selections will be relayed from Hoyle's De Luxe, Bourke St. Continuation from Queen's Hall: humorous recitation: Mr. Eric Kirke; song: Miss Edith Bernard; humorous monologue: Miss Edith Fennell; recital: Mr. Eric Kirke; piano-forte song: Miss Edith Bernard; recitation: Miss Edith Fennell; song: Miss Edith Bernard; humorous recitation: Miss Edith Fennell.

The Age News Bulletin will be given at approximately 10 o'clock. National Anthem.

THURSDAY, FEBRUARY 11.

- Morning Session.
- 12 noon—Time Signal.
- 12.1—1st Weather Forecast.
- 12.5—Events of the Day.
- 12.5—The Age News Bulletin.
- 12.15—British Government official press received by 3AR's operator from Rigby super station (England).
- 12.20—Musical selections.
- 12.30—Stock Exchange News.
- 12.35—Market Reports.
- 12.40—Musical Selections.
- 12.55—Mail Notices; Shipping Movements.
- 1—Hoyle's Theatre De Luxe, Musical Selections.
- Afternoon Session.
- Bendigo Races, 2nd Day.
- 2—Result of Hurdle.
- 2.40—Result of Trial Handicap.
- 3.15—Result of Asylum Handicap.
- 3.30—Hoyle's Premier Orchestra.
- 3.45—Result of Distance Trot.
- 4—Time Signal; 2nd Weather Forecast.
- 4.15—Result of Flying Handicap.
- 4.30—Misses Roubandis of Paris, will give his weekly Fashion Talk.
- 4.45—Result of Welter Handicap.
- 4.50—Special Jig and Gull Report, supplied by Messrs. McPhail & Co.
- 4.55—The Evening Amusement Guide.
- 5—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; 3, The Children's Jig Saw Painting Competition.
- 8—Time Signal. Last night of the Happy Thought Competition.
- 8.1—Lecturer: The case of Infants.
- 8.15—Musical Selections from the Studio.
- 8.30—Mr. Len Bain, Weekly Radio Chat; under the auspices of the Popular Radio Weekly. "What's On" (Mr. Len Bain), will speak on "What Happens in the Phonics."
- 9—Dance Night. The Rhythmic Dance Orchestra, relayed from the Maison De Luxe, Broadway, St. Kilda.
- 9.40—Hoyle's Premier Orchestra.
- 10—Time Signal.
- 10.1—The Age News Bulletin, exclusive to 3AR.
- 10.15—The Maison De Luxe Orchestra.
- 11—National Anthem and Close down.

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FRIDAY, FEBRUARY 5.

- Middny Session, 12 to 2 p.m.
- 12—Time signal, "Herald" and "Argus" news services; Reuter's and the Australian Press Association cables; weather forecast; river reports; shipping intelligence; Stock Exchange information; market reports.
- 1—Time signal.
- 1.1—The Studio Orchestra; musical director, Miss Bessie Gaunson. Overture, "Der Freischutz" (Waber).
- 1.10—Suite, "Suite Aboriginal" (Wheeler).
- 1.20—Violin solo, Miss Bessie Gaunson, "Liebesfreud" (Fritz Kreisler).
- 1.25—Orchestra, fox trot, "Just Wanting You" (Zamiatoff).
- 1.35—"Noel" (Technikowsky).
- 1.40—"Noel" solo, Miss Thelma Tierman, "By the River" (Morse).
- 1.40—Orchestra, selection, "Quaker Girl" (Monckton).
- 2—Close down.
- Afternoon Session, 2 to 5 p.m.
- 2—Time signal.
- 2.1—The Studio Orchestra; musical director, Miss Bessie Gaunson. Suite, "In Sunny Spain" (Elliott).
- 2.12—Piano solo, Miss Agnes Fortuna, "Romance" (Rubinstein).
- 2.18—Orchestra, fox trot, "Sleepy Time Girl" (Gill).
- 2.23—"Musetta" (Beethoven).
- 2.30—Miss Rene Pollard, soprano, "She is Far from the Land" ("Eileen Alannah").
- 2.37—"An Fair," of Buckley & Nunn Ltd., "Fashion Talk."
- 2.45—Orchestra, selection, "Emerald Isle" (Langry).
- 2.57—Cornet solo, Mr. Walter Smith, "Come, sing to me" (Thompson).
- 3.4—Miss Rene Pollard, soprano, "Day Dreaming," "The Greatest Wish in the World."
- 3.4—Orchestra, "Legend" (Friml).
- 3.45—"Geltie Damsel" (Billard).
- 3.51—Fox trot, "Blue Jeans" (Traveler).
- 3.56—"Serenata" (Toselli).
- 3.51—Instrumental trio, "Let the Sage" (Egan), "Gondol" (orchestra), "Fantasia Besugo" (Flower).
- 4.45—"Herald" & "Argus" news services; Reuter's and the Australian Press Association cables.
- 5—Close down.
- Evening Session, 6 to 7.15.
- 6—Children's Hour, "Billy Bunny" stories, "Let's Pretend," "The Ma-

BURGESS—"ASK ANY RAD IO ENGINEER"—BATTERIES.



- gical Trip," "Houses of the Eagle," 6.45—"Herald" and "Argus" news services; Reuter's and the Australian Press Association cables; market reports; closing Stock Exchange information; weather synopsis; shipping movements. Market reports by the Victorian Producers' Co-operative Co. Ltd.; Dairy cattle, sheep, carcass meat, grain, chaff, hay, straw, juice, dairy produce, potatoes and onions. Night Session, 7.20 to 11.
- Thumblin' Sketches of Other Lands.** Speakers: Mr. H. J. Paveatt, Miss Renee Kelly of "Polly with a Past," Mr. R. A. Broinowski, The Studio Orchestra; musical director, Miss Bessie Gausson. Mr. Allan Mitchell, tenor; Miss Sylvia Van Asche, soprano; Mr. Bobby Pearce, baritone; Miss Agnes Fortune, accompanist.
- 7.20—Under the auspices of Develop Australia League, Mr. H. J. Paveatt, "Hands off our industries."
- 7.40—Miss Renee Kelly, leading lady in "Polly with a Past," will speak from her dressing room at the King's Theatre, by permission of J. C. Williamson Ltd.
- Italy.**
- 8—"The Studio Orchestra," "Songs from Italy" (Langey).
- 8.10—Mr. Allan Mitchell, tenor, "Queste o Quella," "Rigoletto" (Verdi).
- 8.15—Mr. Walter Smith, cornet solo, "Carnival of Venice."
- 8.25—Miss Sylvia Van Asche, soprano, "Mimi's Song," "La Boheme," "Vissi d'Arte," "La Tosca."
- Spain.**
- 8.25—"The Studio Orchestra," "In Sunny Spain" (Elliot).
- 8.40—Mr. Bobby Pearce, baritone, "La Saggiola," (Di Capua), "In Old Madrid" (Trotter).
- 8.45—"The Station Trio," "Spanish Dances" (Moszkowski).
- Talk.**
- 9—Mr. R. A. Broinowski, "Famous Men of the Ages—Sir Isaac Newton," India.
- 9.15—"The Studio Orchestra, suite," "From India" (Poppy).
- 9.20—Miss Sylvia Van Asche, soprano, "Aren," "From the Land of the Sky Blue Water" (Cadmus).
- 9.25—Miss Tamara Tierman, cello solo, "Chanson Indoue" (Blusky Korsak).
- France.**
- 9.45—Mr. Allan Mitchell, tenor, "Au Pays" (Holmes), "Elegie" (Massenet).
- 9.55—"The Studio Orchestra, suite," "Coppelia" (Dobbes).
- News.**
- 10.4—"Argus" and "Herald" news services. Mesoplamia.
- 10.10—Miss Sylvia Van Asche, soprano, "A Nona's Serenade."
- 10.14—Mr. Allan Mitchell, tenor, "Drinking Song"—"Rose of Persia."
- 10.18—"The Studio Orchestra," "In a Persian Market" (Ketelby).
- 10.25—Mr. Bobby Pearce, baritone, "Bedouin Love Song" (Pisnot), "Less Than the Dust" (Flindin).
- 10.40—"The Studio Orchestra," "Egyptian March."
- 11—"God Save the King."
- SATURDAY, FEBRUARY 6.**
- Middy Session, 11 to 2.
- 12—Time signal; "Herald" and "Argus" news services; Reuter's and the Australian Press Association cables; weather forecast; river reports; shipping intelligence; Stock Exchange information; market reports.
- 1—Time signal.
- 1.1—"The Studio Orchestra; musical director, Miss B. Gausson, Symphony,
- "G Minor" (Mozart).
- 1.25—Cornet solo, Mr. Walter Smith, "Atlantic Zephyra" (Simons).
- 1.31—"Orchestra, selection "Lilac Time"
- 1.45—Eux Prot, "Show me the Way to go Home" (King).
- 1.49—Viola solo, Miss D. Roxburgh, "Chanson de nuit" (Rigor).
- 1.54—"Orchestra, waltz, "Sweet Luana" (Zakari).
- 2—Result of the Summer Hurdle from the Williamstown Race Club Meeting.
- 2.6—Time signal. Close down.
- 2.35—Result of the G. F. Orr Stakes from the Williamstown Race Club Meeting.
- Afternoon Session, 3 to 5,
- 3—Time signal.
- 3.1—"The Studio Orchestra; musical director, Miss B. Gausson, "Valse des Fleurs" (Tschalkowsky).
- 3.11—Result of the Electric Handicap from the Williamstown Race Club Meeting.
- 3.15—"Orchestra, selection, "Merrie England" (German).
- 3.20—Piano solo, Miss Agnes Fortune, "Repos d'Amour" (Henselt).
- 3.35—"Orchestra, selection, "The Last Waltz" (Strauss).
- 3.45—Waltz, "Hawaiian" Farewell Song (Lake).
- 3.50—Result of the Wyndham Handicap from the Williamstown Race Club Meeting.
- 3.58—Instrumental trio, "Love Song" (Flegler), "Minuet in G Flat" (Bach-hovv).
- 4.3—"Orchestra, "Titiana" (Dandorff).
- 4.6—"Invitation to the Waltz" (Weyber).
- 4.17—Violin solo, Miss B. Gausson, "Legende" (Wieniawski).
- 4.27—Result of the Morine Handicap from the Williamstown Race Club Meeting.
- 4.30—Quartet, "Quart for Piano & Strings" (Schumann).
- 4.40—Waltz, "When I Dream of the Last Waltz with You."
- 4.5—"Ender's and the Australian Press Association cables; sporting results.
- 5—Close down.
- Evening Session, 5.45 to 7.15.
- 5.45—All sporting results.
- 6—Children's Hour. Stories by Mary Gumbel—for the little ones, "The Wind," "The Sunset Garden," "The Secret," girls, "Japanese Fairy"; boys, "Jake's Adventure."
- 6.43—"Herald" and "Argus" news services; Reuter's and the Australian Press Association cables; market reports; closing Stock Exchange information; shipping movements; weather synopsis; Market reports by the Victorian Producers' Co-operative Co. Ltd.; Grain, chaff, hay, straw, juice, dairy produce, potatoes and onions. Night Session, 7.20 to 11.
- A mixed programme. Speakers: Mr. R. Rawson, Dr. J. A. Leach, Brighton Glee Party; Mr. Frank Davies, bass; Miss Phyllis Thomas, soprano; Mr. Norman Pill, humorist, The Studio Orchestra, musical director, Miss B. Gausson, Miss Agnes Fortune, accompanist.
- 7.20—Mr. R. Rawson, "The Simplicity of Esperanto."
- 7.40—Dr. J. A. Leach, "Summary First Survey Australian Birds."
- Orchestra.**
- 8—"Studio Orchestra, selection, "High Jinks" (Priml).
- Glee.**
- 8.15—"The Brighton Glee Party, "Sweet and Low" (Barby), "Tom, Tom, the Piper's Son" (Allen).
- Instrumental.**
- 8.23—Mr. Walter Smith, cornet, "Eva-line" (Brewer).
- Ballads.**
- 8.30—Mr. Frank Davies, bass, "A Border Ballad" (Cowley), "Yeoman of England" (German).
- Orchestra.**
- 8.37—"Studio Orchestra, "Valse Triste" (Sibelius), "Ox Mometti" and "Finale 5th Symphony" (Haydn).
- Humour.**
- 8.52—Mr. Norman Pill, humorist, "The Digger's Fancy Ball," "Bill's Joke."
- Instrumental.**
- 9—Miss Bessie Gausson, violin, "Romance" (Svensson).
- Ballads.**
- 9.10—Miss Phyllis Thomas, soprano, "Songs my Mother taught me" (Dvorak), "Jamie, come, try me" (Orchestra).
- 9.17—"Studio Orchestra, "San Toy" (Jones).
- Glee.**
- 9.32—"The Brighton Glee Party, "Boat Song" (Cowley), "Soldiers' Fare well" (Kinkaid).
- Instrumental Trio.**
- 9.40—"The Station Trio, "Nina" (Pergolisi), "Vorspiel—Prelude II Lohengrin" (Wagner).
- Spirituals.**
- 9.50—Mr. Frank Davies, bass, "I've got a Burp" (Barleigh), "Deep River" (Barleigh).
- News.**
- 9.57—"Argus" and "Herald" news services.
- Orchestra.**
- 10—"Studio Orchestra, suite, "In Holland" (Kriens).
- Humour.**
- 10.15—Mr. Norman Pill, humorist, "Don't spoil the ship for a ha'orth of tar," "Gentle Home."
- Instrumental.**
- 10.25—Miss Tamara Tierman, cello solo, "Chants Russes" (Lalo).
- Two French Songs.**
- 10.32—Miss Phyllis Thomas, soprano, "Aubade," "Carnaval."
- Orchestra.**
- 10.39—"Studio Orchestra, "A Little Dutch Girl" (Kalmus).
- 11—"God Save the King."

## SUNDAY, FEBRUARY 7.

Morning Session, 11 to 12.15.

Morning Service from Collins Street Baptist Church; preacher, Rev. S. J. Hoban, of Wesley Church.

11—Sanctus; call to worship; invocation and Lord's Prayer; hymn 14, "Let us with a gladsome mind"; lesson, Psalm 23; chant; lesson, Matthew 6; hymn 703, "Sunrise, suns are glowing"; notices; offertory; of festory prayer; anthem; prayer; hymn 375, "We bless Thee for Thy peace"; sermon, Rev. S. J. Hoban, "Why Weep"; hymn 487, "In heavenly love abiding"; Benediction.

Afternoon Session, 3 to 4.30.

Service from the Wesley Church Central Mission; Pleasant Sunday Afternoon Service. Chairman, Rev. S. J. Hoban.

3—Orchestral selection, conductor—Mr. G. M. Williams; hymn, "Nearer, my God, to Thee"; prayer, Rev. J. H. Cain; hymn, "Lead, Kindly Light"; solo, Mr. W. J. Cadzow; orchestral selection; solo, Mr. W. J. Cadzow; notices and offering; orchestral selection; address: National Anthem; Benediction.

Evening Session, 8 to 6.45.

8—Children's Hour. Stories by Billy Bunny; "Bible Battles" and other stories.

6.45—Close down.

- Night Session, 7 to 10 p.m.  
 Evening Service from Scots' Church, conducted by Rev. W. Borland, M.A., B.D.; organist and musical director, Mr. Mansley Greer.
- 7.—Hymn 193, "Jesus, Lover of my Soul"; prayer; Psalm 124 (2nd Metrical Version) "Now, Israel, may say"; Old Testament lesson; Psalm (Prose Version) 23, "The Lord is my Shepherd"; prayer; New Testament lesson; anthem; the Lord's Prayer; sermon; hymn 247, "Jesus, Master, Whose I Am"; invocations and offering; hymn 303, "Abide with me"; Benediction. From the Studio: Mr. Stanley Adams, violinist; Miss Marie Bremner, soprano; Mr. Herbert Browne; Mr. Harold Rodgers, pianist and accompanist.
- 8.30.—Mr. Harold Rodgers, piano, "Impromptu" (Schubert).
- 9.45.—Mr. Herbert Browne, by permission of J. C. Williamson Ltd., "Il mio Tesoro" (Mozart), "Knight-hood".
- 8.47.—Mr. Stanley Adams, violinist, "Romanza Andalus", "Tambourina Chinoise", "Prælude and Allegro".
- 9.2.—Miss Marie Bremner, by permission of J. C. Williamson Ltd., "The Dove" (Ronald), "Moon Dear" (Moret).
- 9.9.—Mr. Harold Rodgers, piano, "Moonlight Sonata" (Beethoven).
- 9.11.—Mr. Herbert Browne, "Serenade", "Love".
- 9.21.—Mr. Stanley Adams, violinist, "Indian Snake Dance", "Chant sans Paroles", "Legende".
- 9.30.—Miss Marie Bremner, soprano, "The Little Brown Owl", "If my Song were only Winged".
- 9.43.—Mr. Harold Rodgers, "Invitation to the Dance" (Weber).
- 9.53.—"Argus" news services.
- 10.—"God Save the King."

### MONDAY, FEBRUARY 5.

- Midday Session, 12 to 3.
- 12.—Time signal; "Herald" and "Argus" news; Reuter's and the Australian Press Association cables; weather forecast; river reports; shipping intelligence; Stock Exchange information; market reports.
- 1.—Time signal.
- 1.1.—The Studio Orchestra; musical director, Miss Beattie Gausson. Overture, "Precious" (Weber).
- 1.10.—"Valse Triste" (Sibelius).
- 1.16.—Viola solo, Miss D. Roxburgh, "Romance in G" (Beethoven).
- 1.22.—Orchestra, "Gelsia Selection" (Jones).
- 1.3.—Cornet solo, Mr. Walter Smith, "Pyramids Polka" (Liberati).
- 1.43.—Orchestra, fox trot, "I Want to be Kissed".
- 1.50.—"The Cuckoo" (Arensky), "Prelude" (Glazounov).
- 2.—Time signal. Close down.
- 3.—Time signal. Close down.
- 3.1.—The Studio Orchestra; musical director, Miss B. Gausson. Selection, "Tom Jones" (German).
- 3.16.—Cello solo, Miss T. Tiernan, "Romance" (Schumann).
- 3.23.—Orchestra, "The Kick Off" (Kear).
- 3.28.—Miss Belle Pollard, "Elegie," "Ouvre tes yeux bleus".
- 3.35.—Miss Agnes Fortune, piano solo, "2nd Mazurka" (Godard).
- 3.40.—Miss Flora Pell, Supervisor of Domestic Arts, Education Department, in a talk on domestic economy.
- 3.55.—Miss Belle Pollard, "Still as the Night", "Absent".
- 4.2.—Orchestra, "In a Chinese Temple Garden" (Ketelby).

- 4.10.—Quartet for Pianoforte & Strings, Op. 16 (Beethoven).
- 4.30.—Orchestra, selection, "From Italy" (Langoy).
- 4.45.—"Herald" news service; Reuter's and the Australian Press Association cables.
- 5.—Time signal. Close down.
- Evening Session, 6 to 9.15.
- 6.—Children's Hour. Stories by Billy Bunny: "The Chinese Stealers," "Much Better than Gold," "The Magical Trip," "Houses of the Eagles".
- 6.45.—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables; market reports; weather synopsis; closing Stock Exchange information; shipping movements. Market reports by the Victorian Producers' Co-operative Co. Ltd. Haymarket sales, poultry, grain, chaff, hay, straw, jute, dairy produce, potatoes and onions.
- Night Session, 7.30 to 11.
- Speakers: Mr. H. E. Prior, Mr. J. O. Boyce, Nigger Minstrel Show, Mr. Darvall Thomas, Mr. Tom Broderick, Mr. H. Al Williams. The Studio Orchestra; musical director, Miss Beattie Gausson. Miss Mollie Tyrell, contralto; Miss Allie Fleming, soprano; Mr. Kenneth Impett, baritone; Mr. H. Rodgers, organist.
- 7.30.—Mr. H. E. Prior, "Town Planning and Health".
- 7.45.—Mr. J. C. Boyce, Government Tourist Officer, "Victoria's Western Watering Places".
- 8.—The Studio Orchestra, "Dance Orientale" (Lubomirsky), "Humoreske" (Dvořak), "Rosemary" (Elgar).
- 8.15.—Miss Mollie Tyrell, contralto, "Romance"—"La Gioconda" (Ponchielli), "Soul of Mine" (Barnes).
- 8.22.—Miss Dorothy Roxburgh, viola solo, "Canzone" (Borch).
- 8.30.—Mr. Kenneth Impett, baritone, "Waltz" (Hardtelt), "Oswawy, Awake, Beloved" (Gowen).
- 8.35.—Miss Tsama Tiernan, cello solo, "Broken Melody" (Van Biens).
- 8.44.—Miss Allie Fleming, soprano, "I'm aingin' for you" (Hutaway), "Cuckoo" (Shaw).
- 8.51.—Grand Nigger Minstrel Show, produced by Mr. Darvall Thomas, late of the Tyrol Minstrels, which will include the following soloists:—Mr. Darvall Thomas, who will render "When you and I were young, Maggie"; Mr. Tom Broderick, "Silver Threads among the Gold"; Mr. Bob Broderick, "The Deathless Army"; & Mr. H. Al Williams, "The Yeoman's Wedding", interspersed with topical gags and melodious ensembles.
- 9.36.—Miss Beattie Gausson, violin solo, "Second Romance" (Tour).
- 9.42.—Miss Mollie Tyrell, contralto, "My Ships" (Barrett), "Morning" (Speaks).
- 9.49.—Mr. Harold Rodgers, organist, "Impromptu in A Major" (Schubert), "Adagio" (Beethoven), "Dreaming and Slumber Song" (Schubert), "The Coronation March" (Meyerbeer).
- 10.2.—Mr. Kenneth Impett, baritone, "To Anthem" (Hatonno), "The Moon Drops Low" (Caldan).
- 10.16.—The Studio Orchestra, "Magic Flute" (Mozart).
- 10.20.—Miss Allie Fleming, soprano, "Pleading" (Elgar), "Mah Lindy Lou" (Strickland).
- 10.33.—Mr. Walter Smith, cornet solo, "At Sunset" (Ode).
- 10.40.—"Argus" and "Herald" news service.
- 10.45.—The Studio Orchestra, "Jupiter

Symphony, 1st Movement" (Mozart).

11.—"God Save the King."

### TUESDAY, FEBRUARY 5.

- Midday Session, 12 to 2.
- 12.—Time signal; "Herald" and "Argus" news; Reuter's and the Australian Press Association cables; weather forecast; river reports; shipping intelligence; Stock Exchange information; market reports.
- 1.—Time signal.
- 1.1.—The Studio Orchestra; musical director, Miss Beattie Gausson. Overture, "Beautiful Galahie" (Suppe).
- 1.9.—Fox trot, "Yes, Sir, That's my Baby" (Kahn and Donald).
- 1.16.—"Arabian Dance" (Rehfeld).
- 1.22.—Violin solo, Miss B. Gausson, "Polonaise" (Hannum).
- 1.28.—Orchestra, selection, "Miss Hook of Holland" (Rubens).
- 1.49.—"Marche alla Turca" (Mozart), "Alla Polacca de la Serenade" (Reethoven).
- 1.53.—Cornet solo, Mr. Walter Smith, "Al and Pal" (Chert).
- 2.—Close down.
- Afternoon Session, 3 to 5.
- 3.—Time signal.
- 3.1.—The Studio Orchestra; musical director, Miss Beattie Gausson. Selection, "Mozz Kowakiana" (Langoy).
- 3.10.—Instrumental Trio, "A Dream" (Bartlett), "Syncope" (Kreisler).
- 3.23.—Viola solo, Miss D. Roxburgh, "Andante Cantabile" (Haydn).
- 3.30.—Miss Isobel Eckersall, "Good Morning, Brother Sunshine" (Lehmann), "My Ships" (Barrett).
- 3.37.—Milton Mercand, "Infant Welfare".
- 3.47.—Orchestra, selection, "Wildflower" (Yousama and Bruchart).
- 3.59.—Miss Isobel Eckersall, "The Slave Song" (del Negro), "Heming" (del Riego).
- 4.—Orchestra, fox trot, "Ukulele Lady" (Kahn and Whittier).
- 4.12.—Selection, "Mitsummer Night's Dream" (Mendelssohn).
- 4.24.—Piano solo, Miss Agnes Fortune, "Imperfection in F Major" (Grieg).
- 4.35.—Orchestra, march, "Egyptian March" (Strauss).
- 4.40.—"Sanctuary of the Heart" (Ketelby).
- 4.45.—"Herald" and "Argus" news services; Reuter's and the Australian Press Association cables.
- 5.—Time signal. Close down.
- Evening Session, 6 to 9.15.
- 6.—Children's Hour. Stories by Mary Gamble: "Little Dame Grump," "Hoppy," "Finding a Pin," "Russian Herald," "The Enchanted Ring".
- 6.45.—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cable news; market reports; weather synopsis; closing Stock Exchange information; shipping movements. Market reports by the Victorian Producers' Co-operative Co. Ltd. Haymarket sales, poultry, grain, chaff, hay, straw, jute, dairy produce, potatoes and onions.
- Night Session, 7.30 to 11.
- Speakers: Mr. D. H. P. Mitchell, Hon. S. Mauger, Dr. Lefcus Hills. One-act play, "The Stepmother." Miss Thelma Nell, "The Stepmother." Mr. Edgar Fortescue, tenor; Mr. G. H. Mauger, baritone. The Brunswick City Band.
- 7.39.—Under the auspices of the New Settlers League, Mr. D. H. P. Mitchell, "Ehuen, the Gateway to the Kiverian".
- 7.45.—University Extension Lecture, Hon. S. Mauger, "Social Service".
- 8.—The Brunswick City Band, march, "Namur" (Richards), "Light Cavalry" (Suppe).



- 8.15—Mr. G. H. Mauger, baritone, "Invictus," "The Smuggler's Song" (Mulliner).
- 8.20—Two-act play, "The Stepmother," Christine Fordeham (Mrs. Freut's secretary, aged 20), Miss Beatrice Tarnan; Cora Freut (a popular novelist and a widow, aged 30), Miss E. M. Penning; Thomas Gardner (a doctor), Alfred Andrew; Adrian Freut (Mrs. Freut's stepson), Mr. Horace Book.
- 8.42—Miss Thelma Neill, soprano, "Songs my Mother taught me" (Dvorak), "Danny Boy" (Weatherly).
- 8.49—"Carnet solo, Mr. F. Ferris, "The Cornet King" (Greenwood).
- 8.55—Mr. Edgar Porteuscu, tenor, "I hear you calling me" (Marshall), "Sally Fanner."
- 9.2—Dr. Lefrus Hills, "Temperance Drinks."
- 9.17—"The Brunswick City Band, "Songs of Scotland" (Round).
- 9.30—Mr. Mauger, baritone, "The Lute Player," "From Oueren in Fairland" (Slater).
- 9.39—"The Brunswick City Band, "Three Blind Mice" (Douglas), "White Lies" (Home).
- 9.54—Miss Thelma Neill, soprano, "Sweet Lady Moll" (Phillips), "When" (Donham).
- 10.1—"The Brunswick City Band, "D'ye ken, John Peel" (Greenwood).
- 10.9—"The Pacific Queen" (Greenwood).
- 10.17—"Argus" news service.
- 10.25—Mr. Porteuscu, tenor, "Summer in the Country" (Lohr), "I Know a Little Fairy" (Heuter).
- 10.29—"The Brunswick City Band, "Command" (Bladwood), "The Auld Folk" (Maddock).
- 11—"God Save the King."

### WEDNESDAY, FEBRUARY 10.

- MIDDAY Session, 12 to 2.
- 1—"Time signal." "Herald" and "Argus" news; Reuter's and the Australian Press Association cables; weather forecast; river reports; shipping intelligence; Stock Exchange information; market reports.
- 1—"Time signal."
- 1.1—"The Studio Orchestra; musical director, Miss Bessie Gannson, Overture, "La Gazza Ladra" (Rossini).
- 1.5—"Fox trot, "Skip, I'm beginning to tan" (Williams).
- 1.14—"Cello solo, Miss T. Tiznan, "The Last Rose of Summer" (Moore).
- 1.20—"Orchestra, selection, "Florodora" (Kaufert).
- 1.35—Waltz, "While we Danced All Dawn" (Santley).
- 1.40—Suite, "Indian Summer" (Lake).
- 1.50—Miss Agnes Forbes, piano solo, "Carprie in A Minor" (Mendelssohn).
- 1.55—"Orchestra, fox trot, "Say, who is that Baby Doll" (Lange).
- 2—"Result of the Hurdle Race from the Bendigo Jockey Club Meeting.
- 2.5—"Time signal, "Close down."
- 2.40—"Result of the Bendigo Plate from the Bendigo Jockey Club Meeting."
- 3—"Afternoon Session, 3 to 5."
- 3—"Time signal."
- 3.1—"The Studio Orchestra; musical director, Miss Bessie Gannson, Selection, "Behemian Girl" (Bluff).
- 3.14—"Result of the Hospital Handicap.
- 3.20—"Instrumental Trio, "Minuet in E Flat" (Beethoven), "Nina" (Pergolesi).
- 3.30—"Sister Purcell will speak on "Miserere."
- 2.40—Miss Belle Pollard, soprano, "Vale," "The Lilac Tree."

- 3.47—"Result of the Novice Handicap.
- 3.50—"Orchestra, fox trot, "Tangle-trees" (Rose).
- 3.55—"Carnet solo, Mr. Walter Smith, "The Holy City" (Adams).
- 4.1—"Miss Belle Pollard, soprano, "Alb be with us," "Far Across the Desert Sands."
- 4.4—"Result of the Distances Handicap trot."
- 4.10—"Orchestra, selection, "Lilac Time, 2nd Selection" (Schubert).
- 4.25—"March, "Fatinitsa" (Suppe).
- 4.30—"Viola solo, Miss D. Roxburgh, "Air for G String" (Bach).
- 4.37—"Orchestra, "Tender and True" (Tobani).
- 4.45—"Choral Evensong from St. Paul's Cathedral.
- 5.30—"Herald" and "Argus" news service; Reuter's and the Australian Press Association cables; sporting results.
- 5.45—"Time signal, "Close down. Evening Session, 6 to 7.15."
- 6—"Children's Hour, Stories by Wallaby Bill, "New Tales of the Magic Ring," "The One-eyed Witch's Revenge."
- 6.45—"Herald" and "Argus" news service; sporting results; Reuter's and the Australian Press Association cable news; market reports; weather synopsis; closing Stock Exchange information; shipping movements. Market reports by the Victorian Producers' Co-operative Co. Ltd.: Newmarket sales, cattle, pigs, carcass meat, hay, grain, straw.
- 7—"Night Session, 7.15 to 11."
- 7.15—"Mr. R. McLelland, Transportation Staff Officer of the Victorian Railways, "More Impressions of a Railwayman Gathered Abroad."
- 7.40—"Mr. S. W. Hedger, Superintendent and Secretary, "The Royal Victorian Institute for the Blind."
- 8.5—"Song, Mr. George Aiton, "Vale"
- 8.9—"John solo, Mr. A. Harris, "Tambourin Chinois" (Kreisler).
- 8.16—"Song, Mr. Fred Sutcliffe, "I hear a Thrush at Eve" (Caldron).
- 9.10—"Quartette by the Blind Institute Quartette Party, "Little Tommy went a-Singing" (Macy), "The Bosary" (Nevin).
- 8.29—"Song, Miss Ethel Hall, "Rose Petals" (St. Leger).
- 8.30—"Orchestra, "Don't Bring Lulu," "Show me the Way to go Home," "Moonlight and Roses."
- 8.41—"Song, Mr. Jack Byrne, "Harlequin" (Sanderson).
- 8.44—"Song, Mr. W. W. Rule, "Till" (St. Leger).
- 8.47—"Orchestra, Grand March from "Carmen" (Bizet).
- 8.52—"Argus" news service.
- 9.6—"The second act of "Lilac Time," transmitted from the Theatre Royal by the Australian J. G. Williamson Ltd. Solo "Serenade," Claude Flemming; dance, children and ballet solo, "Light out of Heaven," John Ralston sextette, "When Skies are Blue," Harriet Bennett, Mascotte Ralston, Mabel Gibson, Claude Flemming, Edmund Sherran, William Perryman; solo, "Cupid and I," Harriet Bennett; duet, "Flower Dust," Harriet Bennett and J. Ralston; duet, "Yodel Singing," Harriet Bennett and Arthur Ralston; finale, Harriet Bennett, John Ralston and Claude Flemming, Director of the Interval at the Theatre Royal Captain C. H. Peters will speak from the Studio on "Books, Wise and Otherwise."
- 11.10—"God Save the King."

### THURSDAY, FEBRUARY 11.

- MIDDAY Session, 12 to 2.
- 7.12—"Time signal," "Herald" and "Argus" news service; Reuter's and the Australian Press Association cables; weather forecast; river reports; shipping intelligence; Stock Exchange information; market reports.
- 1—"Time signal."
- 1.1—"The Studio Orchestra; musical director, Miss B. Gannson, Overture, "Fingal's Cave" (Mendelssohn).
- 1.11—"Fox trot, "Amorita" (Zamcenik).
- 1.22—"Orchestra, "Trailing Arbutus" (Garhart).
- 1.29—"Instrumental Trio, "Menuet" (Bach).
- 1.35—"Orchestra, "Hungarian Dance No. 1" (Brahms).
- 1.42—"Miss Bessie Gannson, violin, "La Deluge" (Saint-Saens).
- 1.48—"Orchestra, fox trots, "Seminole" (King), "You Forget to Remember" (Berlin).
- 2—"Result of the Hurdle Race from the Bendigo J.C. Meeting."
- 2.5—"Close down."
- 2.40—"Result of the Trial Handicap. Afternoon Session, 3 to 5."
- 3—"Time signal."
- 3.15—"Result of the Asylum Handicap.
- 3.17—"Orchestra, fox trot, "Chu Chu Sau" (Samuels).
- 3.30—"Miss Peggy Lette, contralto, "Little Brown Brother" (Batten), "Myola" (Hall).
- 3.37—"Orchestra, "In a Monastery Garden" (Kieley).
- 3.45—"Result of the Distance Trot.
- 3.48—"Orchestra, "A Ballad Salad" (Ashton).
- 3.54—"Miss Peggy Lette, contralto, "Green Skies, (Lohr), "Cupid laughing came with Surin" (Bras).
- 4.5—"Result of the Flying Handicap.
- 4.12—"Miss Agnes Porteuscu, piano, "Waltz" (Chopin).
- 4.20—"Orchestra, selection, "Betty" (Ruben).
- 4.40—"Instrumental Trio, "No. 5 for Piano, Violin and Cello" (Mozart).
- 5—"Time signal, "Close down. Evening Session, 6 to 7.15."
- 6—"Children's Hour, Stories by Mary Gumleaf, "The Fat Puddy," "Little Fairy Goodfellow," Japanese Fairy Story, "The Beautiful Bamboo," "Aladdin."
- 7—"Night Session, 7.20 to 11."
- 7.30—"Madame S. E. Soward, "Mon Oeile, Part 2."
- 8.20—"Studio Dance Orchestra, one step, "Savoy American Medley."
- 8.40—"Miss Gladys MacDowell, contralto, "My Old Kentucky Home," "Garry me Back to My Virginia."
- 8.40—"Studio Dance Orchestra, waltz, "Beautiful Ohio," "Kentucky Babe."
- 9—"Mr. Lauris Burnett, humorist, "I want to go to Morrow," "Bye, Bye, my Little Caroline."
- 9.12—"Studio Dance Orchestra, fox trots, "Swanee Smiles," "An Orange Grove in California."
- 9.25—"Miss Billie Jones, soprano, "Loneville Low," "You're in Kentucky, as sure as you're born."
- 9.48—"Studio Dance Orchestra, one step, "Dutty Dimples," "Fluffy Ruffles."
- 9.58—"Argus" news.
- 10.25—"Studio Dance Orchestra, waltzes, "Sweetest Little Rose in Tennessee," "Dreamy Carolina Moon."
- 10.35—"Miss Billie Jones, soprano, "Carolina in the Morning," "Way Down in New Orleans."
- 10.45—"Studio Dance Orchestra, fox trots, "California here I come," "I've got the old Virginia Piccadilly Blues."
- 11—"God Save the King."

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