

# WIRELESS WEEKLY

Registered at the G.P.O., Sydney, N.S.W.

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VOL. 7. No. 25.

FRIDAY, APRIL 16, 1926.



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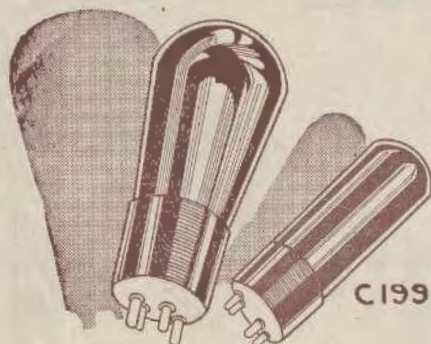
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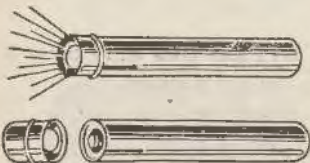


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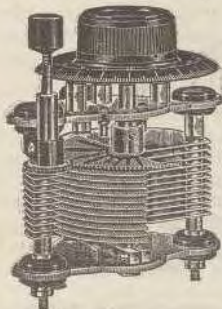
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### SEND IN YOUR ENTRY.

The closing date for the entries for the Amateur Exhibit to be shown at the Radio-Electrical Exhibition at the Town Hall is rapidly drawing nearer. So that we may be given ample opportunity of examining the competitors' apparatus and of awarding the prizes, all the sets should be in our hands not later than Monday, April 26th. Good support is being given from various quarters, and we have every confidence that the Exhibit will be an unqualified success. A gentleman who desires to remain anonymous has voluntarily offered to allot a further prize to the winner of one particular item, the nomination of which he has left to our discretion.

Among other items to be shown are a Collapsible Loop, a High Tension Transformer, the All Australian Receiver (described in "Wireless Weekly," February 19th), Crystal Receivers, and a variety of transmitters, including one complete amateur station built by the Waverley Radio Club. This station

will be seen under actual operating conditions, and without question will constitute one of the most interesting and attractive features of the Exhibition. Besides these items, apparatus constructed by the members of various clubs is to be shown.

Now, it must be obvious that this Amateur Exhibit offers a golden opportunity for amateurs to show the public just what they are capable of in the way of constructing apparatus. For months readers of this and other technical papers have been following with the greatest interest the remarkable feats performed by amateurs—both in transmitting and receiving—so here, then, is a splendid chance of giving the public a close-up view of the kind of sets used in obtaining the results which have quite truthfully been referred to as wonderful.

For the broadcast listeners, many of whom come under the true heading of amateurs, there is a wide scope in the items 3, 4, 5 and 6 as published on this page last week. To all those, therefore, who have not yet done so, we extend a cordial invitation to enter for the Amateur Competition. There is yet a clear week. Send us your entry notification to-day.

A. W. WATT.

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Coil Plugs, each . . . . . 9



# THE PROGRESSIVE SYSTEM OF CONSTRUCTION

PART IV.

*By Wireless Weekly*

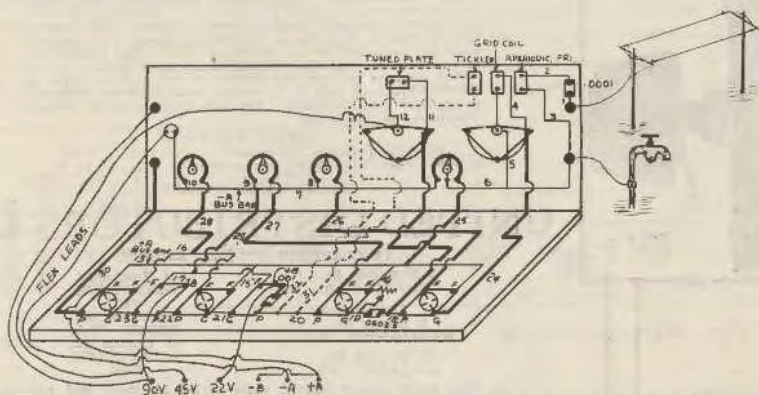
This is the fourth step of the Progressive System of Construction. Although only a fortnight has elapsed since the two-valve reflex receiver was described, some very excellent reports have already been received from both city and country readers. In this issue we are dealing with the popular tuned plate receiver, employing four valves. We would like to point out that any reader, no matter how small a knowledge of radio he may have, will, if he copies wire for wire and connection for connection, be in possession of a first class long range receiver which will operate immediately he pulls a switch. Those readers who have been following the previous series of articles will have most of the panel parts already mounted in position, the only addition necessary being one 400 ohm potentiometer, one rheostat and one panel plug. The back view shows clearly the position of these extra panel parts, and if you have carried out previous instructions there will be plenty of room for them as shown.

Be very careful to mount the extra panel plug at least  $4\frac{1}{2}$  inches from the tickler coil and stagger it with relation to the other coil holders. When the panel components have all been secured you

may wire up connections Nos. 1 to 12. Panel Connections.

No. 1 links the aerial terminal with the .0001 fixed condenser, and No. 2 connects the other terminal of fixed condenser with the top connection of primary coil holder. No. 3 links the lower terminal of coil holder with the earth terminal. No. 4 links top terminal of secondary or grid coil with fixed plates of .001 variable condenser. No. 5 links lower terminal of second coil holder with the moving plates of the condenser and continues on down to the earth terminal. No. 6 is a link taken from No. 5 to the moving arm of the potentiometer. No. 7 connects the filament switch to the left hand terminal of the potentiometer. The 8th, 9th and 10th connections are short links which are soldered to No. 7 and link the left hand terminals of the three rheostats to it. Nos. 11 and 12 connections link the fixed and moving plates respectively of the .0005 variable condenser with the tuned plate coil holder.

This completed, lay out the remaining parts on the baseboard. A glance at the diagram will readily show you the relative positions of valve holders and transformers. You will notice that the



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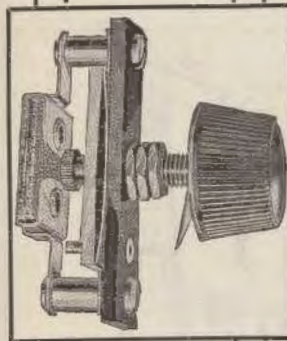
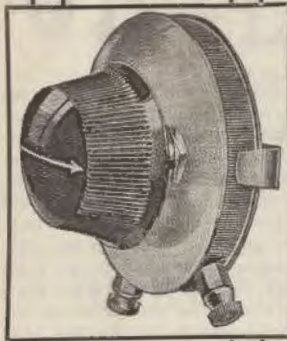
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valve holders are marked F, F, G, and P, and the transformers P, +B, G and -F. The circuit diagram and back view clearly show that G of the transformer goes to G of valve holder in each case, and that P of valve holder goes to P of transformer. From P of the second valve (which is the detector) the connection must go through the reaction or tickler coil if the ordinary feedback method of regeneration is required, but for ordinary purposes, however, where a reasonably good aerial is used for ranges up to 500 miles, we do not advise using a regenerative detector valve. Sufficient regeneration is obtained for all ordinary purposes by tuning the plate and grid of the first or radio frequency valve, so that readers will be wise to couple the P of second valve holder direct to P of first audio transformer, not forgetting to place the fixed .001 across the primary of this transformer.

For the beginners we will continue to describe where each numerical connections goes on the base board components.

#### Base Board Connections.

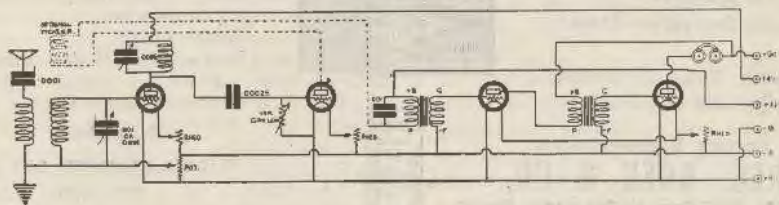
No. 13 is the +A busbar and connects the left hand F terminal of the fourth valve holder with the right hand F terminal of the first valve holder. Don't let the + and - markings misguide you; follow our instructions in every detail. No. 14 and 15 connections are links soldered to the +A busbar and go to the right hand F terminals of the second and third valveholders respectively. No. 16 links the left hand F terminal of the third valve holder with the right hand F terminal of the fourth valve holder. No. 17 links together the two -F terminals of the two audio transformers. Nos. 18, 19, 20, 21, 22 and 23 are self explanatory. Don't forget the blocking condenser between the 18th and 19th connections. If feedback regeneration is required from the detector valve connections shown as 31 and 32 must take the place of the No. 20 connection.

Connections numbered from 24 to 32 are shown in heavy type and indicate that these are added after the panel and base board have been secured together. No. 24 links the G terminal of the first valve holder with the fixed plates of the first variable condenser. No. 25 connects the +A busbar to the right hand terminal of the potentiometer. Nos. 26, 27 and 28 connect the rheostats with the radio frequency valve, detector and audio valves respectively, the two stages of audio being controlled by the one control. No. 29 links the -F of both transformers to the -A busbar.

If a "C" battery is desired, the negative of the battery goes to the common F terminal connection shown as No. 17, and the + of the C battery goes to the -A busbar shown as No. 7. No. 30 is the last connection, and links the P of last valve to lower phone terminal, unless, as previously explained, a regenerative detector valve is required, when Nos. 31 and 32 take the place of the No. 20 connection. The battery connections should be made by good flexible leads. You will notice no terminal board is shown, the leads going direct to their respective connections.

It is necessary to carefully experiment with various plate voltages on the first and second valves. Generally speaking, however, the best voltages will be found to be 45 and 22½ volts respectively. If a regenerative detector valve is used, only a small tickler coil is necessary; for the lower broadcast wavelengths a 25 turn coil and for the higher wavelength of 2FC and 6WF a 100 turn coil is suggested.

Remember the warning that has already been given in this series of articles, viz., that where double regeneration is obtained by tuning plate and grid circuits, and feeding back energy to the grid circuit, it is very easy to have one form of regeneration opposing the other. (Read carefully



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	1.5	"Navy Special" 3/9
B	80	"Large Type" 25/0
	45	"Large Type" 20/0
C	4.5	"Bison" 8 x 7 2/9
	4.5	"1/2g Special" 12/0
	6.0	"Ignite" 15/0

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the queries met with by every beginner in this issue.)

The following coil table should act as a guide to would-be constructors of this receiver:—

Station	Aperiodic		Tickler Tuned	
	Primary	Secondary (if used)	Plate.	
2UE	12	35	20	35
2KY				
2WW				
2BL	25	50	25	50
3LO				
4QG				
2FG	100	150	100	150
6WF	150	200	150	200

The .0001 connection shown in series with the primary coil affords the increased pick up advantages of a big aerial, together with the advantages of selectivity which a small aerial gives.

A few words of warning concerning coils. If you mount your own, be sure that they are all mounted the same way, viz., either all of them with the outside layer end going to the pin and inside end to the hole connections of the holder, or else all of them vice versa. Don't get the two ends crossed over one another, but take them direct to the pin or hole connection in each case. It is a golden rule to always mount coils the same way, then no difficulty will ever be experienced with reversed re-action by using various combinations of coils in different hook-ups of coils. In this particular receiver, however, if the tickler coil is not used, reversed reaction is impossible.

#### Method of Tuning.

There are three main tuning controls which need careful adjustment for long range reception; they are the two tuning condensers and the potentiometer. The rheostats of the radio and detector valves need a certain amount of care, but are not so critical in adjustment as the potentiometer (or stabiliser, as it is sometimes called). At certain positions of the two condenser dials a plucking sound will be heard in the phones. This noise is caused by the plate and grid circuits coming into resonance. It is in this position that the receiver is most sensitive. By advancing both condensers together the right amount, this resonance click can be obtained on all broadcast wavelengths by plugging in the correct sized coil (see table).

Those readers who have advanced with these articles, however, must remember that their grid coil tuning condenser is a .001 and that the tuned plate condenser is only a .0005, so that the actual number of degrees shown by dial where resonance

is obtained will be considerably higher with the tuned plate condenser than with the grid condenser. There is absolutely no disadvantage in using the large size variable in the grid circuit as long as the above fact is borne in mind when tuning.

#### The Grid Leak.

Be very careful with your selection of a variable grid leak. Such a lot of distortion and poor tone is due to faulty or poor grid leaks that we cannot emphasise this fact too much. If, when tuning, the high shrill carrier wave of a broadcast station is heard, or the music or speech is distorted, careful adjustment of the detector rheostat together with the potentiometer will entirely cut this out, with the result that the speech or music is received clearly and distinctly.

Some very excellent results are possible with this receiver by using a loop in lieu of an outside aerial. The two connections from the loop should be attached to an ordinary honeycomb coil plug and inserted in the second or grid coil holder of the three coil mount. For the lower broadcast wavelengths 100 feet of loop wire is required, and for 2FC or 6WF a further 100 feet should be added with a Clix or Ecks to cut the extra wire in or out of the circuit at will. A full detailed construction of a collapsible loop will be described in next week's Wireless Weekly, together with the last of the series of the Progressive Articles.

Readers will undoubtedly notice that we have not described a three-valve receiver. Those interested in three valves are requested to look up the issue of February 19th, which describes very fully an excellent three-valve receiver to suit Australian conditions. Wireless Weekly welcomes criticism and commendation on this series of articles. If you have any favourite or popular hook-up that has not been dealt with, or that you think would interest other readers, please write and let us know. We would like to definitely point out that we have tried to cater for all types of readers, not forgetting the small important details so very necessary for the beginner, and the country reader who in some cases is situated at considerable distances from any radio authority whatever.

Each and every component shown throughout this series of articles is placed in the best working position possible, so that readers who have followed our instructions should be reasonably confident that the results they are obtaining are the best that can be had with the particular hook-up and materials he or she has chosen to use.



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# Queries which Puzzle Every Beginner

By Wireless Weekly

(Editor's Note: A few more general queries met with by broadcast listeners. Readers are requested to send along any queries not dealt with in these columns.)

Why is it that the tickler coil connections must be reversed in order to obtain correct feed back regeneration with a two or three coil tuner, when a stage of radio frequency, tuned plate method, is added?

This query has undoubtedly been met by every reader who has added this form of H.F. amplifier to his old P-1 or three coil circuit. The more advanced have probably discovered that the above fact is correct, within a very few minutes after adding the amplifier, but beyond making the necessary alterations to overcome this phenomenon they have invariably not given a moment's thought as to why the alteration of connections is essential. If readers will take the trouble to compare the back of panel view of the receiver described in this issue with the three-valve receiver described in "Wireless Weekly," dated February 19th, they will notice that the connections from the P of detecting valve and P of first transformer have been reversed on the tickler coil terminals. This is to overcome this reversed reaction effect caused by adding the tuned plate H.F. amplifier.

Now just what causes this phenomenon is very simple if one will reason things out a little. With all tuned plate circuits a blocking condenser of .00025 mfd. is placed between the plate of radio frequency valve and grid of detecting valve. It is this blocking condenser which causes the reversed reaction, as, when the plate side of the condenser is charged positively, the grid side must be negatively charged, so that the energy fed back from the plate or tickler coil of the detector valve will be out of step, so to speak, with the incoming impulses received by the grid of radio frequency valve. By reversing the direction of flow of tickler energy, however, the incoming impulses are again assisted by the feed back regeneration as well as the amplification of the H.F. valve.

Should phone condensers be used?

We recently received a letter from a Tasmanian reader who has been obtaining some excellent long-distance reception with the "All Australian" receiver published in "Wireless Weekly," dated 19th February. In this letter he explains that he in-

creased the volume and tone by placing a .001 fixed condenser across the phone jack.

This short explanation of the functioning of this piece of apparatus should explain just why some circuits need them, while others work no better or worse without them. Many experimenters have, we feel sure, found that the addition of a fixed condenser, placed across the primary of an audio frequency transformer in the output circuit of the detector, has made no difference in the operation of their set. On the other hand, a few have probably found that the detector valve will not oscillate satisfactorily without the shunt condenser.

The answer to this query is found in considering the particular transformer or phone set used. If these have been constructed without due regard to reduction of coil capacity, the addition of a phone condenser will probably offer no improvement, as the internal capacity of the apparatus will be sufficient to by-pass the high frequency oscillations. This is what happens in the case of a poorly designed transformer or phones.

If these, however, have been properly designed, so that the internal capacity is kept at low value, the high impedance existing in the output circuit of the detector will materially impair the detector action of the valve, unless a condenser of suitable value is placed in shunt across the phones or the primary of the audio transformers. Wise readers who are out for maximum efficiency will, therefore, be wise to well consider this and experiment with various sized fixed condensers with a view of obtaining the correct sized one to suit the particular apparatus they use.

## THE MORSE CODE COMPETITION.

Congratulations to Ken Cottle, 13 Beresford House, Belgrave St., Manly on being the winner of the Morse Code Competition from SWW on Tuesday, March 30th.

The word transmitted was:  
S X Z D K B N U R L.

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

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# MATTERS AMERICAN

## GERMAN VIEW OF AMERICAN RADIO

(In this article, translated from "Der Sachsische Funk," by Dr. W. G. Woolnough, a comparison is drawn between American and German wireless conditions.)

In these post-war years it is both interesting and instructive for a European to follow up the American developments, not only in wireless, but those of a general nature as well. This is so because our own development follows a generally similar, if more moderate course, and one free from the inevitable American blateny.

The triumphal march of broadcasting had already commenced in America in 1921, and then swept across the ocean to us. It would therefore be ungracious not to recognise the service done by America. We may easily make this acknowledgment without in any way detracting from the renown of our own German experts. At the present time too, the U.S.A., unhampered by the lack of funds, is taking a foremost place in the advancement of radio, though quite in a material sense.

Hence it is profitable, from time to time, to cast a glance over the big pond to keep oneself informed as to the position of affairs.

If we examine first the modern American reception apparatus for broadcasting, the most noticeable fact is the abandonment of the high aerial. This is particularly the case with town dwellers. Frame aeriels predominate nowadays, in combination with multi-valve outfits with high frequency amplification. For a long time the neutrodyne receiver was dominant. Thanks to its wide advertisement the public became much interested in this arrangement; then they went in for superhet, ultra, and other dyne apparatus. Nowadays it has come to pass that what is most widely made and sold are multi-valve outfits with anything from five tubes upwards, which permit of reception of even distant stations at loud speaker strength with the frame. The loud speaker itself is particularly notable. No broadcast receiver thinks of using head-telephones, although the amateur still uses them occasionally. The grade of performance is easily attained by the better class of German apparatus, since, in general, a listener in New York does not hear California. When such a claim is made in a prospectus it refers to results obtained occasionally, and under specially favourable conditions. In their advertisements they

"blow" harder than we do, and 1000 miles more or less is a mere trifle.

Much more than with us the outward appearance of the outfit is taken into consideration, and much of it would grace any salon as an object of art. Also we may say that a standard form for radio apparatus has been arrived at. This is a long flat cabinet, one of whose vertical sides carries only a very few tuning dials. The means of tuning, switches, etc., have to be cut down to the absolute minimum in the modern apparatus, and are regarded as a necessary evil. No longer does one want, as is still usually the case with us, a separate rheostat for each valve, in circuit with which a measuring instrument can be inserted. The tubes are entirely hidden within the interior of the apparatus, and only rarely are visible through inspection windows. Thus, for instance, in an eight valve outfit from the Pries Radio Corporation there are three handles only on the front panel, and these control the entire apparatus. Amongst these controls is one tuner which indicates the wavelength, in metres, of the incoming wave. Often space is provided in the inside for batteries, and the loop is a fixed component of the set. In this way a set is so completely self-contained that it can be carried from room to room, into the garden, or even in the motor car.

The American builds crystal sets and smaller valve outfits himself. The most advanced type of enthusiast who has his outfit inside his straw hat, or in his waistcoat pocket, is called a "radio fan." Their eccentricities are often grotesque, and have an interest less technical than sporting. The "radio fan" does not correspond with the German "Bastler," since, apart from the generally

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good all-round technical education of the American youth, he usually has no theoretical knowledge of radio at all. He constructs, with more or less skill and success, strictly according to the directions given in one of the countless papers, magazines or prospectuses. This is quite characteristic. With us, we know very well that with one set high frequency audio circuit is used, and reflex circuit with another, but if details of circuit are not otherwise definitely given over there on the appearance of a new type he is first who publishes the full details of the circuit employed. Indeed for the most part any patent in it prevents straight-out construction afterwards. It is noteworthy, too, that most American apparatus is adapted only for wavelength about 700 metres, so that it is quite unsuitable for most people in Germany at the present time.

With regard to transmitters, it may be noted that many which sprang up like mushrooms in 1923-4 have either closed down, or operate only spasmodically. There are still, however, a considerable number in operation, of which some are purely advertisement concerns. In addition to the great electricity, the big hotels and warehouses have broadcast stations in operation, which do not confine themselves to advertisements as do the purely private concerns, but send out in their regular daily programmes news, market reports, sporting information, as well as good concerts and lots of jazz music. Not in the least can these programmes rival those of well conducted German stations, in that they indicate and cater for the American taste. Also, some public bodies like the University of Pittsburg, the State Administration of New York, and some of the churches, have their own transmitters, which they naturally use for their own particular interests. Broadcasting is employed over there to an extent vastly different from that with us. There it serves generally to allow the public to keep in touch with political speeches, or discourses on other subjects, or to participate in gatherings or sporting fixtures. The microphone is never wanting at any such function. Simultaneous transmission of programmes will be maintained in future, as far as we know; as will be the case also in Germany. Washington, New York and Boston regularly interchange programmes, and on particular occasions, the network is extended and the whole enormous territory of the States hears simultaneously the matter presented by one station. The transfer from station to station is carried out as far as possible, by cable or land line, but is also done by means of wireless. The amateurs participate in this of their own accord; they receive any given transmission and relay it

on by means of their short wave apparatus, even far over the ocean!

The status of the amateur is very different there from that of our "Bastler" in Germany. Since transmission on short wavelength is free over there, only transmitters can be termed amateurs. All others belong to the category of "radio fans." The short wave service, although uncontrolled by the State (and perhaps all the more because of this freedom) has already repeatedly rendered service by no means despicable. For farms and settlements lying off the beaten track, this service is of value for the distribution of news. Also, in cases of breakdown of the land lines, the amateurs have rallied to the assistance of the telegraphs. The amateurs in towns, and particularly those on the coast, have as their highest ambition oversea reception; and there are apparently quite a number of amateurs on the east coast who hold regular conversations with their French and English friends. The extension of amateur transmission has strongly favored the development of transmitting tubes of lower power, so that, over there, one can pass by small gradations from tubes of 5 watts to those of 1000 watts—and, moreover, it is possible to buy them!

One must admit that, in this direction, they are a long way ahead of us. So far, the transmission prohibition holds with us. This means that we must be satisfied with reception, and those who look upon American reception as their crowning feat, will have good opportunity, now that the winter has brought with it good radio weather, from the fact that, at the same time, transmitters of 50 kilowatts have been established, both in New York and in Schenectady.

In conclusion, a word about the American Radio Industry, which is to-day one of the most important in the country, and in which hundreds of millions of dollars are invested. The output of apparatus is enormous, even in the case of large outfits. Outputs of 10,000 sets of 8-valve outfits are by no means confined to the largest works. In 1922 the sales of outfits were about 100,000; in 1923 they rose to about two million, and for this year were about five million. These numbers refer only to those used in the U.S.A., and not to exported apparatus, which was considerable. For instance, the South American market is a very good one. Even with five million sets in the U.S.A., the market is far from being glutted, although several million home-made sets were in use. One has only to compare the fact that at the present time there are about 15 million motor cars running over there. If we compare these figures with those for Germany, home industries have by no means a rosy outlook.

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# ON THE AIR

## BOXING BROADCAST

On Monday, April 12th, Mr. Stanley Crittendon, a well known amateur exhibitor in the photography world, will commence a series of talks on winter photography from the Studio of 2BL, dealing particularly with the use of the camera during the season when it is usually packed out of sight. Mr. Crittendon is a capable exponent of the use of the lens, and will probably describe the circumstances under which some of his own best pictures have been reproduced. On the same ev-



Miss Helmrich, a favourite from 2BL.

ening Mr. Frank D. Marshall, B.Sc., will continue his intensely interesting expositions on X-Radiation dealing on this occasion specifically on the radio active substances, concerning which he will have much of interest to describe. A full account of the boxing tournament at Szarka's Stadium will be broadcast, the actual rounds being broadcast from the ringside. The previous items of this nature were splendidly received by the sporting public and a very interesting account was received from Samoa of the reception there, when owing to the change of day necessitated by crossing from East to West latitude, a day is lost, the description of the fight followed directly after a church service which was received from America. On the same programme Miss Thelma Houston and Miss Nora Hill will be heard, while during the afternoon Miss Myrtle Hobbs will entertain the listeners-in with songs from the Studio.

## THE MINIATURE ORCHESTRA.

On Tuesday, April 13th, Miss Hilda Boyle will sing items from her repertoire and on the same programme Mr. Stanley Catlett, whose beautiful tenor voice is heard to such great advantage by radio, will also be heard singing in English, French and Italian. Broadcasters' Miniature Orchestra, which has now reached a very high point of perfection, under the capable direction of Mr. Horace Keats, will also figure in that evening's entertainment. Mr. H. E. Crabb commences a new series of lectures under the general heading of "The Story of Civilisation," the sub-title of the first lecture being "The Selling of the Stage." Mr. Crabb will be remembered as a lecturer of ability, who recently delivered an interesting and enjoyable series of lectures on Evolution. Miss Helen Jean Beegling is another lecturer on the same evening, who will describe in her inimitable fashion, "A Visit to an Alligator Farm."

## EVER INTERESTING FOREIGN AFFAIRS

Wednesday, 14th April, brings Mr. J. M. Prentice and his talk on Foreign Affairs once more before the notice of the radio audience. It will interest many of the listeners-in who do not possess telephones, and who are consequently barred from asking questions direct, to know that Mr. Prentice has undertaken to devote one Wednesday in each month to the answering of written



Arthur Stigent, sometimes referred to as Stephen Luscock's rival, whose humorous talks from 3LO are vastly popular with the radio audience. Mr. Stigent, whose wonderful acting in the "Maid of the Mountains" will long be remembered, is at present showing in "Lilac Time" in Melbourne.

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



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

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Price, 13/6 each.

Ask your Dealer for illustrated folder describing these wonderful Valves.

Obtainable from all Radio Dealers.

# PHILIPS



Mr. H. T. Egan who will broadcast for 3LO, Melbourne, will certainly open the eyes of many people who are of the opinion that the game of draughts is for babes or bald heads. The game is said to date from before the time of Christ and though Mr. Egan has been playing and studying the game all his life and possesses an extensive library of 300 volumes on the subject, he says that not a day passes without the discovery of something new.

Mr. Egan is fully qualified to conduct a series of lectures on the game as he is admitted to be one of the strongest draught players in the world, and has been chosen to represent Britain in a match against America where the game is immensely popular. His talks from 3LO are looked forward to with a great deal of interest.

questions. These should be directed in care of the Studio. Mr. Norman Jansson will be heard singing from the Studio of 2BL. This favourite baritone increases the range of his popularity with every wireless appearance. Miss Leah Freedman and partner present a dramatic sketch which will be in the nature of a complete novelty.

#### HOYT'S ORCHESTRA.

Hoyt's Imperial Orchestra, under the capable direction of Mr. Lionel Hart, will be heard in two intervals of 15 minutes from the Studio of 2BL on Thursday, April 15th. Much appreciation has been expressed for the music that is produced by this orchestra, under Mr. Hart, and many people have stated their ability to almost visualise the picture that is being screened by following closely the music that is being played as its accompaniment. Miss Millie Hughes and Mr. Raymond Beatty, both favourite artists as soloists and in duets, will be heard on the same programme, and Mr. Reg Harrison will produce the usual shrieks of laughter amongst the listeners-in by presenting his delightful humorous items. The Waikiki Troubadors, a new combination of artists armed with

*Continued on page 23, bottom of col. 1*



#### Overheard in a Radio Store.

What shall I name the Pup?

Well, why not call him Philco? He's well bred, has a diamond shaped head, ripped separators to keep his sides apart and good capacity, so why not call him Philco.

Truly a hand of Liberty.

In Denver, U.S.A., the City Council has taken legal steps to regulate the use of high frequency electrical apparatus. Advice to hand indicate that pressure was brought to bear on the Councilors by the citizens who complain that the enjoyment they expect from their radio sets is seriously effected, and specific complaint was made concerning a local doctor whose electrical machine completely jammed all programmes from reaching the sets in his neighbourhood.

#### Fire.

English "listeners-in" living at Reading were seriously inconvenienced when a fire broke out on Friar Street. The premises were those of a radio dealer, and he had no less than 250 wireless accumulators on charge for his customers. Being of celluloid, they were all completely destroyed, and it is understood that serious dislocation of his business and his clients' pleasure was the result.

#### Get what you ask for.

The radio trade, like all others, has often seen the marketing of the cheap substitute for a good article—"and it is just as good"—is an excuse heard in our radio shops. My advice is "don't be put off." If you want a certain article or make, INSIST on GETTING IT. If the first dealer does not stock what you want, go somewhere else.

#### Big Business.

"The Philco Retainer," issued by the Philadelphia Storage Battery Company contains the following information which is interesting to all radio enthusiasts.

"In 1920 the total volume of wireless business done in U.S.A. amounted to about \$400,000 while in 1925 it had increased to nearly \$100,000,000. In 1922 there were about 60,000 receiving sets with one or more valves, while by January 1st, 1925, this figure had increased to 3,700,000. (\*)

# ! VALVES !

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RADIOTRON: Standard UV201A and UV199 .....	13	6
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#### AN ITALIAN VIOLINIST.

According to Signor Pietro Sarcoli, one of the most popular artists at 3LO, Australia is a wonderfully musical country and compares very favourably with Italy in this respect. "The Australians," he says, "have the same strength of feeling and the same enthusiasm for good music as the Italians."

Signor Sarcoli, who was born in Foggia, in Italy, developed his wonderful mastery of the violin at the famous St. Cecilia Conservatorium at Rome, and after a concert tour of Italy during which he performed before Queen Helen, he arrived in Melbourne where he became an instantaneous success.

*Continued from page 21*

ukeles and steel guitars, will be presented on this occasion for the first time.

#### TRAVELOGUE ENTERTAINMENT . . .

Friday, April 16th, introduces Miss Nora Mack, and on the same evening the travelogue entertainment will be continued, and the mythical party will be conducted on a visit to Bordighera in Italy.

#### INTERESTING LECTURES.

On Saturday, April 17th, Deal and Maynard present a sketch, and the Ahad Duo will also entertain with steel guitars. Bringa, the noted authority on the Australian Aborigines, will continue his series of talks. It is interesting to note that as a result of his work on the wireless, Bringa has been inundated with requests to lecture before various public bodies, and has done so with considerable success, particularly in the case of the Sunday night lectures, delivered from the King's Hall, under the auspices of the Independent Theosophical Society.

#### 2BL IN U.S.A.

The popularity of 2BL in the United States is being increasingly displayed as is shown by the number of letters being received each American mail. One enthusiast writing from Milford, Conn., in a letter of high appreciation requests 2BL to be good enough to confirm the fact that he had succeeded in logging the station correctly "in American." It would appear that the gentleman in question is under the impression that there must be some Australian language which is entirely different to his own. A reply is being forwarded which will probably enlighten him on the point. From Terminal Island, Cal., comes a report of fierce static, but reception otherwise clear and strong. All the lectures and musical numbers were received with great clarity although the night was cold and snow many inches deep covered the landscape. Another report has been received from La Grange, in the State of Texas, where reception was clear and sharp. The writer of this letter points out that the distance is approximately 9,600 miles. Yet another enthusiast in a long letter from Lockport, N.Y., discusses the programme in great detail, thus showing how clearly and consistently the programme was received. It is anticipated that before long the possibilities of transmission and reception of special programmes from U.S.A. and vice versa will be a recognised feature of broadcasting in this State.

#### SOME APPRECIATIONS.

Station 2BL has been inundated with visitors during the period of the Easter holidays and the Show, and its popularity amongst the country people has been very amply demonstrated. In addition to this, interstate visitors are now mak-



*The smile, and the person, of Miss Mabel Gibson, of "The Lilac Time" Company. She has won laurels for herself from 3LO.*

## IT IS EASY TUNING WITH A MENOMINEE S.L.F. CONDENSER

It distributes the wavelength evenly over the 360° of the dial. Stations come in clearly without interference. These condensers are built for perfect control of high frequency wavelengths.

Results are uniform at all points of the dial due to the action of the scientific cam. There is absolutely no back-lash and a balanced condition of the plate assemblies permits a smooth velvety action that makes tuning a pleasure.



### PRICES:

0005 mfd.  
00025 mfd.  
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### PRICES:

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00025 mfd.  
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360° dial suitable for the above condensers ..... 5/6 each

### OTHER IMPORTANT FEATURES OF THE MENOMINEE S.L.F. CONDENSERS

- (1) Concentration of electro-static field within small area.
  - (2) Dead dial shaft is not connected to either set of plates.
  - (3) Die cast throughout, giving a uniformity in production.
  - (4) Cam-mechanism, being no larger than the old semi-circular job.
  - (5) Digital connections.
  - (6) One price for any capacity, 00025, 00035, 0005.
  - (7) Design which permits mounting air core transformers directly on the condenser.
  - (8) Unusually low minimum capacity in all three sizes, giving high tuning ratio.
- THE ONLY VARIABLE CONDENSER WITH ALL DESIRABLE FEATURES.

## Astounding Results

have been obtained in Australia with the famous

### "Lion Micro" Permanent Detector

Another shipment to hand of this famous Detector. There has been such a phenomenal demand for the Lion Micro that previous shipments were sold within a few weeks after arrival. We have received many letters singing the praises of this wonderful detector which startled the Radio world. The Lion Micro Permanent Mineral contains the Lion King combination, employing the great South American Semi Transparent Rare Permanent mineral crystal (Gallenham) and the other silver crystal (Tellerutina), discovered in 1923.



PRICE:

8/5

PRICE:

8/5

Illustration of Lion Micro Detector (actual size).

DUST AND FOUL PROOF

NO MORE LOST CONCERTS

NO CATSWISKER

NO ADJUSTMENTS

### IMPORTANT ANNOUNCEMENT

Genuine Radiotropic Valves:

U.V. 201A 6 volts, .25 amp. . . . . NOW 15/6

U.V. 199 8.5 volts, .06 amp. . . . . NOW 11/6

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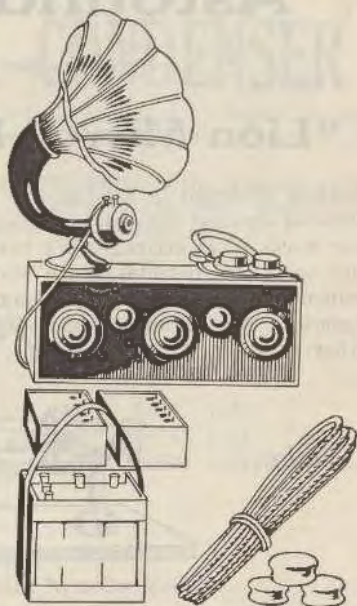
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2,000 ohms  
Resistance.  
Complete with 6  
ft. of flexible  
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Black Finish 50/-  
Black and  
Gold. . . 52/6  
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Call and Hear  
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Leading Dealers  
— Sell Them —  
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And at Mel-  
bourne, Brisbane,  
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### "King Quality" 5-Valve Neutrodyne

The most popular Receiving  
Set of all. Will receive broad-  
casting from Adelaide, Bris-  
bane or any station in Aus-  
tralia, with full loud speaker  
strength. Wave length range  
200 to 550 metres. Complete  
with all accessories, including  
Valves, Batteries "A" and "B",  
Loud Speaker, etc. £55  
Ready to instal Set

**DAVID JONES'**

ing a special feature of calling at the Studio, and during the last week, Melbourne, Hobart, and Brisbane have all been represented. One enthusiastic Tasmanian from the interior of the Island State, expressed his appreciation for 2BL's programmes which are received by him with great clearness and strength.

#### FORTHCOMING NOVELTIES.

Plans for further novelties in connection with 2BL are rapidly maturing, and these include a Sunday afternoon Bible Class conducted by an undenominational representative of high standing, and a number of novelties which will be introduced in the week night programmes. In addition a whisper has reached us that an event of considerable importance which is likely to come off at the end of the present month is a debate on the subject of Prohibition—its effects and enforcement. The debaters will be a representative of the N.S.W. Alliance who will speak in favour of prohibition, and Mr. Prentice, whose reference to the apparent failure of its enforcement in the course of a Foreign Affairs Talk has brought about the present engagement. Listeners-in who are interested on either side will be keen to hear two well-known public characters debating a subject of such moment.

#### THEATRICAL TRANSMISSIONS

2FC have a lot of interesting theatrical transmissions for listeners. On Monday next the first act of the new comic opera, "The Radio Girl," from the Conservatorium. Next Tuesday the second act from "The Radio Girl." Wednesday, the last night of "Katja" from Her Majesty's Theatre. Lyric Theatre on Friday, 19th. Saturday, 17th, the first act of "The Count of Luxembourg," by the Mosman Musical Society. This will be followed by the second act of the same play on Tuesday night, 20th. A new programme from the Crystal Palace Theatre on Wednesday, 21st will complete an interesting run of theatrical transmissions.

#### NEW ARTISTS AT 2FC

Within the next few days the following artists who are new to listeners will be heard from 2FC. Miss Kitty Elliott, comedienne; Signor Marini, Italian tenor Robert Molyneaux, entertainer from 3LO, and Celia Maria Duo, in harmony numbers.

#### BAND MUSIC.

Leichhardt Band, the champion of New South Wales, will be heard from 2FC on Saturday night, 24th.

#### JENOLAN CAVES.

Details have been completed for the transmission by 2FC to broadcast from Jenolan Caves on

Saturday, 1st, and Sunday, 2nd May. 2FC proposes to take a party of eighteen to the caves, including artists and mechanical staff, to put over one of the most unique transmissions ever attempted.

#### MR. ALFRED O'SHEA TO BROADCAST

2FC have received so many letters from listeners who desire to hear Mr. Alfred O'Shea again, that they are pleased to announce his next appearance on Friday, 23rd April, which, by the way, is Shakespeare's Tercentenary. In this connection the speeches at the Shakespeare Memorial will be broadcast at Midday on Friday, 23rd.

#### MORSE INTERFERENCE.

The only people who do not seem to be happy over the change of 2FC station to Pennant Hills are residents in the Northern Suburbs who have non-selective crystal sets. 2FC advises that one of their mechanics visited a house in Northbridge near the aerial at Willoughby at which Morse emanates, and successfully tuned them out. A diagram of the circuit employed has been prepared, and a copy of this is obtainable from 2FC. The Studio reports that so many letters have been received commenting on the new transmissions, that it is impossible to deal with them individually.

#### ACCOMPLISHMENTS OF 2FC.

Those who remember the epoch of wireless in Australia will appreciate the foresight and initiative of the first station to enter the field of wireless with no precedent as a guide to determining popular taste and public approval.

Commencing with two daily sessions covering five hours, 2FC is now entering largely for the public with five sessions each day covering a period of about ten hours, the transmissions including every phase of entertainment known. This station is connected with five theatres of the J. C. Williamson circuit and in addition five moving picture theatre orchestras. For those who listen in to church service transmissions, 2FC offers a variety of 15 pieces of public worship, covering practically every denomination.

In addition to the splendid orchestral items, 400 artists contribute to 2FC programmes every month and those who are interested in sporting news are generously entered for in this respect.

---

FOR SALE: Motor generator, 3,500 r.p.m., direct coupled  $\frac{1}{2}$  h.p., 32 volt Wagner four pole motor, English Aero Type generator, will give 800 volts, 100 mics. Signals from this set reported R4, pure D.C. in England, Price £25. L. M. WILSON, Corran, via Marsden.

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# The SUPREME Detector

For  
Perfect  
Rectification



DESIGNED specially for master detection. Gives you strong signals and helps weak long distance reception.

MULLARD Double White Ring VALVES

Type D.3 for 2-volt accumulator EACH 15/-    Type D.06 for 2 or 3 dry cells or 4-volt accumulator EACH 15/-  
GET ONE FROM YOUR RADIO DEALER

# Mullard

## THE MASTER VALVE

(ARKS 3)

MULLARD VALVES CAN BE OBTAINED FROM ALL RADIO AND ELECTRICAL DEALERS.  
Advertisement of the Mullard Wireless Service Co. Ltd., Balha, London, S.W.12, ENGLAND.

# FROM HERE AND THERE

## DAME MELBA'S FAREWELL.

(The following letter, written by Melba to the Editor of "The Broadcaster and Wireless Retailer, (Eng.) is of particular interest.)

Sir—Amid the sadness of bidding good-bye to so many friends of mine up and down the country it has been a pleasure to note almost everywhere a quickening in musical appreciation. To-day there are gratifying signs that the British audience begins to hear as well as listen; and if the result is to be a musical revival the credit for it will be due in no small degree to men like Halle, Henry Wood, Eugene Gossens, Landon Ronald, Albert Coates, Hamilton Harty and a number of other pioneers in London and certain provincial centres.

Yet mainly, so it seems to me, the secret of this new interest is to be found in the astonishing enlargement of the audience for music accomplished by the gramophone and broadcasting. Although I believe I was the first prima donna to make a gramophone record and the first to broadcast, I have not, whilst recognising the possibilities of these devices, ever accepted either of them uncritically, and I am well aware of the flaws in wireless as that science is practised to-day. But, just as I have followed the gradual perfecting of the gramophone, so I think one may look forward to like improvement in wireless.

Broadcasting and the gramophone are certainly the two most eloquent missionaries to the musical heathen in our midst.

NELLIE MELBA.

London, S.W.1.

## REVISION OF WAVELENGTHS.

The Editor of the "Queensland Radio News," publishes in the April 1st Edition of that journal an open letter to Mr. J. Malone, Chief Manager of Telegraphs and Wireless, claiming that a revision of the allocation of the "A" class broadcasting stations is absolutely imperative to ensure reception of all stations from any one point in the Commonwealth.

The letter states that it seems incredible that three of the 5 k.w. stations should be operating within 24 metres of each other, and that unless action is taken, the position in Queensland is likely to develop ugly proportions. It is claimed that on account of the power of 4QG it is impossible to tune him out without special devices.

## SWISS LEGISLATION THREATENS POWER LIMITATION.

In Switzerland the radio clubs are watching with interest and some nervousness the Government ruling that all amateur transmitters are forbidden to use more than 50 watts power — the wavelength regulations are the same as in many other countries, from 189 to 200 metres. This ordinance would also call for special licenses for anyone working above or below the named wavelengths and over the power limit. However, this will be practically the first step in the regulation, or in the freeing, rather, of the Swiss amateurs, and the various sectopms of the Swiss Radio Club are already laying plans to encourage the building of amateur stations and the furtherance of radio in their country.

## 3LO IN QUEENSLAND.

According to E. Dare, "Roslyn," Churchill St., Maryborough, Queensland, he receives 3LO and 2BL in the daylight. Quoting from a letter sent by him to International Radio Co. Ltd, he says:—

"I have much pleasure in reporting you the excellent results I have obtained on the De Forest D-17 set, with the built-in loud speaker. On the loop: No aerial in sight; 3LO come in perfect, can be heard on the loud speaker 200 yards away. 2BL come in at exactly the same. 4QG on full power has to be tuned down as the volume is too great. On the aerial, in the daytime: 4QG good; 2BL and 3LO good; using aerial 12ft. by 80ft. long. The reproduction is wonderful." Matters American.

## A BIG DROP.

The Radio Corporation of America has had to report a large drop in revenue for 1925, as compared with that of the previous year. The net earnings for 1925 amounted to 5,737,206 dollars, whereas in 1924, the corresponding figure was 9,503,442 dollars.

## "MAKING WAR IMPOSSIBLE"

Quite lately the "Vossische Zeitung" credited Senatore Marconi with the arresting statement that in two years' time war would be impossible owing to television. The famous inventor has issued an emphatic denial that he ever made such an assertion.

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



Read  
the details of  
the Amateur  
Exhibit at the  
Town Hall, on  
May 3-8

They appear  
on the opposite  
page.



## HOWELL'S SALE & EXCHANGE

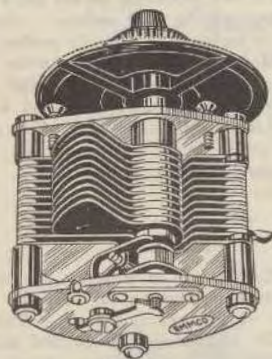
Large Variety Loud Speakers from 35/- to £8.  
Hear them on music.

	s.	d.
Jefferson Star Transformers . . . . .	17	6
30 ohm Rheostats . . . . .	2	9
Egg Insulators, per doz. . . . .		6
Bull Nose Insulators, per doz. . . . .	3	0
12 Point Inductance Switches . . . . .	2	6
Single Jack . . . . .	1	9
Double Jack . . . . .	2	0
Tunatron 201A Valve . . . . .	9	9
7-22 Aerial Wire, per 100 feet . . . . .	3	0
3 inch dials, each . . . . .		9
Standard 201A Sockets . . . . .	1	6
3 Coil Holder . . . . .	7	6
.0005 Condensers . . . . .	7	6

HAVE YOU TRIED THE HOWELL REINARTZ?  
THERE'S NOTHING BETTER.  
LET US REWIRE YOUR SET.  
WE GUARANTEE RESULTS.

**19 BARLOW STREET, SYDNEY**  
Open till 9.30 Friday Night

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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

### THE DEAF MAY HEAR.

There has been lately some comment made upon the commendable relief work being so successfully accomplished by Wireless Telephony, in bringing the outside world within touch of those unable to take any active part in life.

An interesting letter which has reached us from Mrs. G. H. Adcock, of Gosford, touches upon this phase of wireless, as follows: "The world now realises the wonders of wireless, but there is one advantage that seems to be overlooked, and that is the important part it plays for those afflicted with deafness. For over twenty years I was quite unable to hear anything from a public platform but now I am kept in touch with all that is sent out over the air, with my four valve set, which I can tune in to almost any station, including New Zealand and Rugby, England. I write this," says Mrs. Adcock, "in the hope that somewhere, someone else may be cheered by it."

### NEWSPAPERS AND RADIO.

#### COMMENT FROM ENGLAND.

The London "Broadcaster" publishes the following in the issue to hand by last mail:

"In many of the small towns in Australia the local papers publish once, twice, or three times a week. They are prohibited using the news communicated by the broadcasting stations from Sydney, but the local barber or tobacconist takes the news items and posts up the information in the window.

"The Country Press Co-operative Association has applied to the Federal Government for the right to have its own broadcasting station in Sydney. The application was refused, but is being renewed with a proposal to satisfy the revenue requirements."

Commenting on this paragraph, Mr. T. M. Shakespeare, Manager of the Country Press Association, remarked:

"It is surely reasonable that country newspaper proprietors should be allowed to use radio to enable them to keep at least as up-to-date as other business men to whom news is a mere side line and not their sole selling commodity. The Country Press will continue to urge upon the Government the importance of the newspapers being allowed to use radio to keep them up-to-date."

### PLAY A HARP.

#### REQUEST FOR RADIO SOLO

The mail received daily by broadcasting stations contains letters of a most amusing character. Telephone calls too require a very tactful person to answer them.

"Please play a harp, I want to hear one now," was the singular request made by a listener to Station 2BL, one day last week. Practically every instrument known in music is played at 2BL, sometime or other, but at the moment no harp was available so the request could not be granted. Usually the broadcasting stations do their utmost to comply with the wishes of listeners provided they are reasonable.

Mr. Kinsley Wells, writing up the September Radio Broadcast magazine, tells us:

"Broadcasting stations receive some curious letters, ranging from those which request aid in finding lost dogs to those pleading for another playing of whatever the current version of Red Hot Mama happens to be. But the request which made the most serious problem to one broadcast station secretary was this: 'I live on a farm a long distance from an electrical store. Will you please write me an address of a place which will sell me a cold storage battery?'"

### SOME COMPARISONS.

"Aerial," in the "Dominion," Wellington, N.Z., says: "The Sydney station, 2BL, is retaining its strength, and while slightly less mellow in tone than 3LO, Melbourne, it certainly has been more powerful than the Victorian station during the past week. Yet there is little between them, the ratio for strength being about ten points to Sydney, and 9 points to Melbourne. The programmes from both stations have been veritable banquets of melody. Band, orchestral, grand organ, and instrumental trio and solo items have been interspersed between most artistic choral, duet and solo vocalisations. Instructive lectures have been heard word for word, night after night, from each station with unflinching clarity from the loud speaker. The Dungenong Orchestra, playing at Manly is just about the best combination heard on the radio in Wellington. This orchestra was heard loudly on Saturday night from 2BL.

The Brisbane station, 4QG, is now about a point louder than 2BL, Sydney, and the tone of the Queensland has slightly improved, but is still far below that of the other Australian stations. Listening to a scientific reading on the phenomenon of lightning by one of the Amalgamated Wireless experts late on Saturday night, "Aerial" noticed intermittent periods of blurring which rendered the words incoherent. If the tuning of the set were untouched the blurring passed away and the voice rang clearly and loud again. The dance music from the Centennial Hall, Brisbane, is not of pleasing tone, but as 4QG is only in its testing stage the defect in tone may be remedied soon.





No. 6  
3/8 each

# BRIGHT STAR Batteries

## Awarded America's Highest Tests

No. 6A . . . . . each 3/6

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

Cat. No.	Gtd. Shelf Life.	Diameter	Height	Weight
6A	12 Mos.	2½in.	6¼in.	2lbs.



Cat. No.  
15-90

List Price Each  
13/6

Gtd. Shelf Life  
9 months

Length, Width,  
Height  
6¾ x 4 3/16 x 3¼

Weight  
5lbs.

No. 15-90 . . . . . each 13/6

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



Cat. No.  
30-05

List Price Each  
26/-

Gtd. Shelf Life  
9 Months.

Length, Width,  
Height  
6¾ x 8 x 3

Weight  
9½lbs.

No. 30-05 . . . . . each 26/-

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

# INTERNATIONAL RADIO CO. LIMITED

200 Castlereagh St., Sydney—91-93 Courtenay Place, Wellington, N.Z.

# Around the Traders

## MAKING AND MAINTAINING THE "B" BATTERY

A unique idea is introduced in the form of the Multicell-Connector by means of which a powerful and efficient B battery can be assembled in a very short space of time without any soldering. This attachment uses the universal 4½ volt pocket torchlight battery as a replaceable unit and the units slide into the Multicell-Connector which firm-



ly and automatically connects them in series, giving a battery a variable voltage up to 63 volts. The battery may then be maintained at its highest voltage by replacing exhaustive cells, the operation taking only a few minutes' time. The Multicell-Connector which is sold in two different types, is obtainable from Murdoch's, in Park St. Limited.

## EMMCO LIGHTNING ARRESTER.

In the operation of a radio receiving set, every possible precaution should be taken against the danger of lightning, which, upon striking the aerial, is liable to cause severe damage to both receiver and the operator.



The diagram shows the method of installing a lightning arrester in series with the aerial-earth system of a radio receiver. By means of this useful attachment lightning currents, striking the aerial, are intercepted on their way to the receiver, and conveyed to earth.

The Emmco Radio Lightning Arrester is manufactured and issued by the Electricity Meter Manufacturing Company Limited, together with a written guarantee to the extent of £25, covering any damage done by lightning to a radio set, through the faulty operation of the arrester. This insurance guarantee applies only in cases where the arrester is installed according to instructions.

## THE MARCH OF RADIO.

Summing up the radio future in the United States, Mr. Joseph D. R. Freed, of the Freed-Eisemann Radio Corporation, one of the largest concerns in the world, recently said:—

"The stabilization movement in radio is well under way. Weaker companies are passing out to give supremacy to a limited number of large concerns, which through public recognition of the superiority of their products, judicious and constructive management, sound merchandising policies, and strong financial position, have jumped to the top. Big names on radio merchandise are now being demanded by the public; that is why the leadership will be held by a very small group of companies.

Among these companies there is to-day a desire and determination, as well as rivalry, to provide the finest products in radio at a fair price, and the executives and engineers are struggling industriously to "bring out something new." In the laboratories as in the offices, therefore, for the next few months, there will be little or no thought of trips to the mountains and seashore—in order that every possible improvement and refinement in radio receivers may be discovered and incorporated in the new sets."

## COLOMBO CALLING.

Ceylon has a population of 4½ millions, of whom 250,000 are at the capital—Colombo. The new 1 kw. broadcasting station, which began operations last December, has been received 1,000 miles away—at Calcutta.

## CHILI ACTIVE.

Latest returns indicate that there are now about 25,000 receiving sets in use in Chili, or about 14,000 more than in September last. Two re-transmitting stations are to be erected, one at Concepcion, about 220 miles south of Santiago. These will be in operation in June.

USED BY THE NAVY DEPARTMENT—BURGESS DRY BATTERIES

## COLORED STATIC.

Mrs. Johnsing: "Ah thought you-all said you was gwine to name your new baby Vietrola, but ah hears you-all done make a change."

Mrs. Moses: "Yes. Ah expected it would a girl, and Ah had decided to name her Vietrola, but she done turned out to be a boy, so Ah done name him Radio."—Christian Advocate.



"SPOT."

*The youngest member of the staff of "Wireless Weekly"—but by no means the least loyal. All day long he sits on the seat of the Publicity Press Ltd. motor delivery wagon beside his master. His particular job is to guard the portals during his master's absence and he carries it out truly and well. He cannot be bribed or bullied into leaving his post, while on duty, but when off duty is the most friendly little fellow imaginable.*

## CHANGE OF ADDRESS.

It should be noted that all future correspondence intended for the Secretary of the South Australian Division of the Wireless Institute of Australia, should be directed to the following address: 124 Barham Street, Allenby Gardens, S.A.

## LONG DISTANCE.

Wireless experiments conducted by the Royal Air Force in the Delhi district have resulted in the establishment of communication with Perth (Western Australia) and Johannesburg.



## The Crystal with Valve Power

ELCO Radio Engineers of W. Brunswick, write:

We have tried various other crystals, but could not get satisfactory results. When we tried your Neutron Crystal we found it too loud for the phones, so we connected a small Bull Phone Speaker, with splendid results from 3AR, and, on a lesser degree, 3LO.

The material used was a 50 turn honey-comb coil, .001 condenser in series with the aerial, and the length of aerial 130 ft.

We wish you every success with this crystal, and you may use this letter as you think fit.

This is why we call it the Crystal with Valve Power

Have you tried Neutron yet?

"Neutron" gets 2 FC Sydney every night

E.G.W., of Gardenville, Victoria, writes:

know that since commencing to use "Neutron" crystal, I have been successful in picking up Farmers' (2FC) every night.

My set is an ordinary home-made 2-slider set, and I can clearly hear the various items transmitted, as well as the call sign by the announcer.

The Crystal in the Yellow and Black Tin with a Silver Catswhisker, 2/3

The World's Best Crystal

Louis Coen Wireless Pty., Ltd.

63 Swauston Street, Melbourne

**Manufacturers' Products Sales Co.**

Distributors for N.S.W., Challis House

4 Martin Place, Sydney.

Phone: BW 6763.

## Radio Car to Tour European Frontiers

Under construction for the League of Nations is a radio equipped Pullman car of latest design, to be run with the express trains of Europe or as a "special" in the event of emergency. This car will carry representatives of the League to war-threatened or disease-stricken borders.

The League is hopeful of receiving messages direct from their representatives through the transmitting apparatus on the car and to send orders, suggestions and news to be handled through its receiving equipment.

The building of the car and its subsequent operation, writes Eric Palmer to the Freed-Wisemann Radio Corporation, New York, are in charge of Col. Thomas Lyons, chief of the Transportation Section of the League of Nations.

It is predicted by officials of the League that this car will figure very largely in the history of the next decade or two.

In the past, the League's exports have had to rely on inadequate sleeping car service in hurried trips and their communications with headquarters have been hampered and attended, generally, by delays and premature publicity.

### A NOTE OF OPTIMISM.

A note of optimism has been struck by Mr. David Sarnoff, general manager of the Radio Corporation of America, who recently cheerfully declared that the problem of economic support of broadcasting in America is solving itself. The two main sources of economic support, he believed, would come from the radio industry and from commercial broadcasting, although it was apparent that help would also be forthcoming from educational and social interests.

On the question of broadcast talent and the supply of suitable programmes, Mr. Sarnoff propounded an interesting possibility. Up to the present, broadcasting has had to seek programme features from the opera, the concert hall, the orchestra, and the stage. "The day may come," he said, "when the relationship may be reversed—when the broadcasting station will comb the field of original talent; when broadcasting will create new reputations instead of capitalising old ones; when broadcasters will compete with music publishers for original compositions, and not only buy, but sell, music publishing rights."

Mr. Sarnoff reminded his audience that broadcasting, although it must be essentially popular in its appeal, was not to be limited to the sphere of entertainment. Service was its true mission, of which entertainment was but a part.



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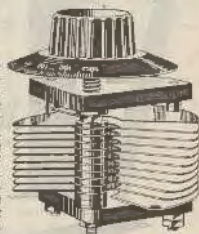
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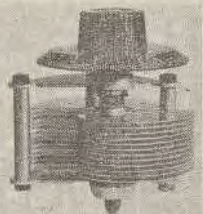


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# Broadcasting



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FRIDAY, APRIL 16.

#### Midday Session.

- 12.55—"Tune-in" Signal.  
1—Market Report 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.

- 5—"Tune-in to the Tivoli Theatre."  
6—From the Studio: March; Southsiders (A. Lightner), The Elite Orchestra (leader, Mr. T. F. Kendall); tenor solo: Earl Calladonia (A. Stroud), Mr. Ernest Bayton; waltz: Love Sparks (A. Holman), The Elite Orchestra; soprano solo: My World (E. H. B. Jordan), Miss Jean Jarrett; covey solo: Spring Song (Jenkins), Mr. S. Henry; Ten Minutes of Harmony by "The Sparklers"; brass solo: The Friend for Me (McCall), Mr. P. J. Cornwall; selection: Poppy (Jones and Samuels), The Elite Orchestra; soprano solo: Break O' Day (Sanderson), Miss Mary Mcneil; Group of Banjo Numbers by Mr. G. Deans; (a) March: Down Street (Weidt), Mr. Fox (a), Yearning (Davis and Burke), Suite: Songs of Italy (Lahr), The Elite Orchestra; soprano solo: Mc Windmill (Nelson), Mr. E. Bayton.

- 8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.

#### 8.55—Announcements.

- 9—Instrumental: (a) Intermezzo, In a Monastery Garden (Ketelby), (b) Mornexa Golelets—Cornelli (Leo), The Elite Orchestra; Soprano solo: June Music (Trout), Miss M. McNeils; Group of Banjo Numbers by Mr. G. Deans; Fox Trot, Sweet Dixie Babe (Weidt), (b) March, Let Her Go (Wood); Bass solo: The Carrow (Gould), Mr. J. F. Cornwall; Rag: Good Gray (Allen), The Elite Orchestra; soprano solo: Invitation (Barry), Miss Jean Jarrett; covey solo: Give me back my Boat (arr. Hartmann), Mr. S. Henry; instrumental: (a) Intermezzo, Valse Bluette (Rigo), (b) Serenade, Serenade d'Amour (Drazen), The Elite Orchestra.

- 9.55—"The Daily Mail" News Service.

#### 10—Close down.

SATURDAY, APRIL 17.

No Midday Transmission.

#### The Children's Hour.

A Children's Undefine 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: Tenor solo: Bounce Mary of Argle (Newson), Mr. John Steel; covey solo: Mother Macbrree (Ball), Mr. Frank Pierce; soprano solo: Youth of the May (Farr), Miss Lucinda Colclough. A programme Novelti by the Musical Shirveys; tenor solo: Songs my Mother Taught Me (Dvorak), Mr. John Steel; Instrumental duo: Perle Brillante (Monti), Miss Jefferies (piano), Mr. B. Jefferies (mandolin); soprano solo: Down in the Forest (Bozelli), Miss Lucinda Colclough.

- 8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.

#### 8.55—Announcements.

- 9—Covey solo: Ora Pro Nobis (Piccolomini), Mr. Frank Pierce; A quarter of an hour's music and mirth by Ship and Adlan; Instrumental duo: Alice Where Art Thou (Ascher), Miss Jefferies (piano), Mr. R. Jefferies (mandolin).  
9.30—From Lennon's Ballroom: By courtesy of the proprietors of Lennon's Hotel, half an hour's dance music by Miss May Dobbyn's Vice-Regal Orchestra will be relayed from Lennon's Ballroom.

- 10.50—From the Studio: The Sunday Mail News Service; Close down.

### SUNDAY, APRIL 18.

#### Morning Session.

The complete morning service from the Seventh Day Adventist Church at Buranda will be broadcast.

- 10.55—"Tune-in."

- 11—Morning Service.

- 12.15—Close down.

#### Afternoon Session.

"A pleasant Sunday Afternoon," provided by The Young People's Department, Newmarket Baptist Church will be provided in the Studio of 40G.

Hymns: Oh for a Thousand Tongues (arr. Alessandro), Latin Prayer; tenor solo: Ego Haemans (J. Lauro), Mr. J. Lord; Bible readings: 1 Kings, chap. 6, verses 1-9; Psalm 100; Instrumental Number: Give Thanks (Janoussens), Miss Davidson, Messrs A. Auld, B. Ebe, and A. E. Durant; Eloquence: number: The Woman of the West (Geo. Leez Evans), Miss A. Clogg; Baritone solo: A Dream of Paradise (Gray), Mr. A. E. Durant; violin obligato by Mr. A. Auld; Quartette: He Lifted Me (Gabriel), Quartette Party; Brief Address: Building the Temple,

Mr. R. Y. Pike (leader, Bible Class); Duett: Nailed to the Cross (Tullar), Miss L. Davidson and Mr. E. R. Bosley; Instrumental Number: Two Antheas (a) The Lord in Graciosa (Colbach), (b) Include Thine Ear (Town); tenor solo: Open the Gates (Knaap), Mr. J. Lord; Ecclesiastical Numbers: A Lamb that was Lost (Zeit), Miss A. Clogg; Bass solo: Selected; Mr. C. Tuney; Hymn: Hark, Hark, My Soul (Adam Gabriel); Benediction, Chairman, Mr. R. Y. Pike; Planning, Miss A. Tramp.

#### Night Session.

The complete evening service from the Seventh Day Adventist Church will be relayed.

#### 6.25—"Tune-in."

7—Opening Hymn: Marching to Zion (Lowsy); Prayer; Scripture Reading: Matthew xxiv; Hymn: Jesus is Coming Again (Lee); solo: The King of Love my Shepherd is (C. H. Gounod), sung by Mrs. E. Martin; Offertory and Organ solo: Hymn: Face to Face (Grant C. Tullar); Sermon: Three Great Signs showing the Lord's Second Coming to be Near, Pastor A. C. Chaston; Quartette: We'll Never Say Good Bye (J. H. Tenney); Hymn: Sweet By and By (J. F. Webster); Benediction.

#### Dance Concert.

At the conclusion of the Church Service, the Band Concert provided in Wickham Park by the Greater Brisbane Municipal Concert Band (under the leadership of Mr. E. Jackson) will be broadcast.

### MONDAY, APRIL 19

#### Market Reports.

- 1.30—Close down.

#### 3.25—"Tune-in."

3.30—By courtesy of the Directors of Haymarket Theatres Limited, three quarters of an hour's music by the Tivoli Operatic Orchestra (under the baton of Mr. C. Groves) will be relayed from the Tivoli Theatre.  
4.15—News Service supplied by "The Telegraph."  
4.30—Close down

#### Early Evening Session:

#### 6.25—"Tune-in."

6.30—The Children's Session—Stories by "The Sandman."  
7—The Farmers' Session—Market Reports supplied by the Council of Agriculture, Lectures by the "Man on the Land."  
7.20—News Service supplied by "The Telegraph."  
7.30—Close down.

#### Night Session.

7.45—Lecture Session—Motors—Correct Lubrication Talk No. 1, by "Gargoyles."  
Ithaca Orchestral Society.  
8—Devotee: Morning, Noon, and Night (Sappo), The Ithaca Orchestral Society (Conductors

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Mr. A. Knezer, Leader Mr. H. Wolstein-horne). (The composer, Franz Von Suppe, was born in 1819, and died in 1895. He was a famous composer of operettas, was trained by Cigala and Ferrari, and wrote about 230 stage works.) Soprano solo: Vilja (Hebra, Mrs. Hubert Bell); Clarinet: Miss St. Michael's Tower (Steeles); The Lyric (Clee Parry); bass solo: From Othello in Fairyland (D. Slater), Mr. Norman A. Coaling; Orchestral numbers: Slavonic Rhapsody (Friedmann). The Hanson Orchestral Society. (Friedmann is one of America's most popular composers and is also a pianist of note at the present time.) Contralto solo: Annie Laurie, Miss Nancy Smith; violin solo: Midnight Belle (Horsinger, arr. Klein); Mr. R. Scott MacCallum; male quartet: The Two Roses (Werners), The Lyric Party.

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

8.55—Announcements.

9—Suite: Merchant of Venice (Rossi)—(a) Prelude, (b) Intermezzo Portia, (c) Overture March, (d) Prelude II. The Bianca Orchestral Society. Frederick Russo was the composer of the incidental suite to Shakespeare's Merchant of Venice for Arthur Burd Theatre, London. Soprano solo: Home Sweet Home (Bishop), Miss Ruth Forrester; concert solo: Gaily Polka (Morrison), Mr. W. H. Davies; Party Song: Sleep Gentle Lady (Bishop), The Lyric Clee Party, Orchestral: Grand March, (from Tannhauser) (Wagner), Bianca Orchestral Society. (Wagner, born at Leipzig in 1813, died at Venice in 1883. He visited Vienna and Prague in 1832, and met Mendelssohn, Dorn and Liszt. In 1836 Wagner was subject to much criticism and not a little jealousy. He was a nationalist and a patriot, his greatness is demonstrated by his conquest of this hostile criticism.) Soprano: Lo, Here the Gentle Lark (Bishop), Miss Lettie Richter (with piano accompaniment); Mr. Kelly, Group of Banjo Numbers by Mr. N. Gould; male quartet: Rest, Dearrest, Rest (Ruchen), The Lyric Party; Hawaiian Instrumentalists: (a) Flower of Hawaii, (b) Aloha Oe, (c) Kaha, (d) Tilo, (e) Past Song, (f) Goodnight Beloved (Pinsult), The Lyric Clee Party.

10—"The Daily Mail" News Service: National Anthem by 40G Artists. Close down.

TUESDAY, APRIL 29

Midday Session.

12.55—Tune-in signal.

1—Market Reports and News Service supplied by the "Daily Standard"; No Stock Exchange.

1.30—Close down.

8.25—Tune-in.

8.30—From the Studio: Occasion: Wedding Ring (Bernard), The Savoy Orchestra (under the leadership of Mr. R. Frankenstein); Aeolian Vocalion selection: baritone solo, (Schubert), Mr. A. Roy Henderson; (a) I want My Mammy (Brant), (b) Would you Cry (Spencer), The Savoy Orchestra; Selection: Petite Rhapsodie Rose (Olson), The Savoy Orchestra; Aeolian Vocalion selection: soprano solo: Lo, Here the Gentle Lark, Evelyn Seaton; waltz: Il Fiore a Italia (Stefani), The Savoy Orchestra; selection: The Newly Doves (arr. D' harr), The Savoy Orchestra; march: N.C.4 (Bishop), The Savoy Orchestra.

4.15—"The Telegraph" News.

4.30—Close down.

Early Evening Session:

6.25—Tune-in.

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

7—"The Farmers Session: Market Reports and Lectures."

7.20—"The Telegraph" News.

7.30—Close down.

Night Session.

7.45—Lecture Session: Photography, A Talk by

Mr. F. L. Smith (manager, Kodak Ltd.)

Band Concert—Dance Orchestra.

The first portion of to-night's programme will comprise a band concert by the Federal Band in the studio at 40G. The second portion will consist of dance music by the Continental Hall Orchestra.

8—Band Concert.

9—Weather Information officially supplied by the Commonwealth Weather Bureau.

9.5—Announcements.

9.10—Continental Hall Orchestra.

9.35—"The Daily Mail" News Service.

10—Close down.

WEDNESDAY, APRIL 21.

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.

1.30—Close down.

8.25—Tune-in.

8.30—Duo Act selection: Halo March (Pohl), soprano solo: Springs a Lovely Lady (Glinert), Mrs. Robert Bell; Aeolian Vocalion selection: In a Monastery Garden (Kettley), baritone solo: The Lads in Red (Molloy), Mr. P. C. Lloyd; Duo Act Selection: Look for the Silver Lining (Kern), tenor solo: The Dean Major (Newton), Signor Corti; Aeolian Vocalion selection: Waltz of Love (Scherwood), soprano solo: A Little Crown's Prayer (Honey), Mrs. Robert Bell; Duo Act Selection: In the Garden of Tomorrow (Deppen); baritone solo: Up from Somerset, Mr. P. C. Lloyd; Aeolian Vocalion Selection: Alabama Bound (de Sola), tenor solo: Till Death I Live (Mascheroni), Signor Corti.

4.15—"The Telegraph" News.

4.30—Close down.

Early Evening Session:

6.25—Tune-in.

6.30—"The Children's Session"—Stories by "The Sandman" First," By Mr. Reid (Brisbane Tourist Company).

7—"The Farmers Session: Market Reports and Lectures."

7.20—"The Telegraph" News.

7.30—Close down.

Night Session.

7.45—Lecture Session: Tourist Talk, "See Brisbane First," By Mr. Reid (Brisbane Tourist Company).

"Queensland Radio News" Concert. To-night's programme has been organised and arranged by the editor of the "Queensland Radio News," and directed by Mr. Edwin John. It will be held in the Studio of 40G. Announcer: Mr. Harry Bernadine.

8—"Queensland Radio News" Concert, Part 1.

9—Weather Information officially supplied by the Commonwealth Weather Bureau.

9.55—Announcements.

10—"Queensland Radio News" Concert, Part 2.

10—"The Daily Mail" News Service: Close down.

THURSDAY, APRIL 22.

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.

1.30—Close down.

OFFICIAL OPENING OF STATION 40G.

8.25—Tune-in.

8.30—Overture: Hava Nagila (Subsepalet), The Savoy Orchestra.

Official Opening Speech by the Hon. Wm. McLaruek, M.L.A. (Premier). One Step: (a) Just for tonight (Gold); (b) My Sweet Adair (Gilbert) The Savoy Orchestra (under the leadership of Mr. A. P. Featherstone), soprano solo: I Had My Love (Bardolot), Miss Lettie Richter, Group of Banjo Numbers by Mr. N. Gould; selection: Looking Backward (Finck), The Savoy Orchestra; contralto solo: Christina's Lament (Dvorak), Miss Irene Elphinstone; waltz: Grand Opera Favorites (Hansacker), The Savoy Orchestra; contralto solo: Ave Maria (Mascheroni), with violin obligato, Mr. Scott MacCallum; Group of Banjo Numbers by Mr. N. Gould; soprano solo: Carissima (Arthur A. Penn), Miss Lettie Richter; selection: Echoes of Naples (Ascher), The Savoy Orchestra; contralto solo: Lullaby (Brahms), Mrs. Chas. Willey; march: His Excellency (Hayes), The Savoy Orchestra.

4.15—"The Telegraph" News.

4.30—Close down.

Early Evening Session:

6.25—Tune-in.

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

7—"The Farmers' Session: Market reports; Address by the Hon. W. Ferguson Smith, M.L.A. (Minister for Agriculture).

7.20—"The Telegraph" News.

7.30—Close down.

Night Session.

7.45—Lecture Session—A Talk on Literature by Mr. W. Braden (McLeod's Bookstore).

8—Studio Concert—Municipal Band.

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

8.55—Announcements.

9—From the Band Room: An impromptu programme of music by the Greater Brisbane Municipal Concert Band, under the leadership of Mr. E. Jackson.

10—"The Daily Mail" News Service. Close down.

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FRIDAY, APRIL 16.

Afternoon Session.

9—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; A talk on English Poetry by Mr. L. M. Prentice.

3.45—Music from the Studio.

4—G.P.O. Clock and Chimes; Music from the Studio.

3.30—G.P.O. Clock and Chimes; Serial Story entitled "The Road of Ours."

4.45—Music from the Studio.

5—G.P.O. Clock and Chimes; The Sun-News Service.

5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes; Sporting Resume from the Sun Newspaper; The pupils of Mrs. Monica Seely will entertain the kiddies.

6.45—Broadcasters' Dinner Orchestra.

7.45—Late Stock, Bides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.

7.50—Close down.

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Evening Session.  
8—Dance Night by Cec. Morrison and His  
Gloomchasers, Nora Mack, soprano.

SATURDAY, APRIL 17.

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.
- 5—G.L.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.
- 6.30—Sporting Resumes from Sun Newspapers; Uncle Jack and the Kiddies.
- 7—A Talk to the Kiddies by "Brio-ga."
- 7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.

Evening Session.

8—Empire Theatre Symphony Orchestra. Conductor: Mr. F. Watkins. From the Studio: Deal and Maynard, Variety Tunes; Ahad Duo with their Sweet Quartet. Jimmy Elliot's Jazz Band broadcast from the Cabaret, The Dugongwan, Manly.

SUNDAY, APRIL 18.

- 11—Church Services.
- 1.30—Choral Service broadcast from Crofton Park Methodist Church.
- 7.15—Chimner Street Presbyterian Church; Minister; Rev. D. F. Brandt.
- 8.30—Many's Municipal Military Band broadcast from Bandstand, Ocean Beach, Manly.

MONDAY, APRIL 19

Afternoon Session.

- 3—G.P.O. Clock and Chimes; Weather Report and Social Notes from the Sun.
- 3.15—David Jones' Tea Room Trio.
- 3.40—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.G. 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 This World of Ours.
- 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 Resumes from Sun Newspapers; Uncle George and the Kiddies.
- 7.30—"What's De?" a guide to the visitors and citizens of Sydney.
- 7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.
- 7.50—Close down.

Evening Session.

8—Ambassadors Instrumental Salon Quartet, under the direction of Mr. Claude Mc-Glynn. Newtown Band, broadcast from Industrial Hall, Newtown. Nora Hill, Irish Soprano. Lecture by Mr. Stanley Gifford on "Mr. Frank D. Marshall will speak on X-Bars, what they are and how they are generated."

TUESDAY, APRIL 20.

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.

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 This World of Ours.
- 4.45—Music from the Studio.
- 4.55—Late Market Reports from the Sun.
- 5—G.P.O. Clock and Chimes; Sun News Service.
- 5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

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

Evening Session.

From the Studio: Broadcasters Miniature Orchestra under the direction of Mr. Horace Keats, Millie Hughes, soprano; and Raymond Beatty, basso cantante. Mr. H. E. Crabb will speak on "The Story of Civilization, No. 2, Stone Age Man. Miss Helen Jean Beeging will speak on, A Day in Honolulu."

WEDNESDAY, APRIL 21.

Afternoon Session.

- 3—G.P.O. Clock and Chimes; Weather Report and Social Notes from the Sun.
- 3.15—Broadcasters' Trio.
- 3.30—G.P.O. Clock and Chimes; Special Operatic Talk by Mr. J. M. Prentice.
- 4—G.P.O. Clock and Chimes; Broadcasters' Trio.
- 4.30—G.P.O. Clock and Chimes; Serial Story entitled This World of Ours.
- 4.45—Broadcasters' Trio.
- 4.55—Late Market Reports from the Sun.
- 5—G.P.O. Clock and Chimes; Sun News Service.
- 5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

- 5—G.P.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.
- 6.30—Sporting Resumes from Sun Newspapers; Uncle George and Uncle Jack with the Kiddies.
- 7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.
- 7.50—Close down.

Evening Session.

8—City of Sydney Band, broadcast from Darling Chambers, City. Broadcasters Minstrel Troupe. Embassy Dance Orchestra under the direction of Mr. S. Bennett.

THURSDAY, APRIL 22.

Afternoon Session.

- 3—G.P.O. Clock and Chimes; Weather Reports and Social Notes from the Sun.
- 3.15—David Jones' Tea Room Trio.
- 3.30—G.P.O. Clock and Chimes.
- 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 This World of Ours.
- 4.45—Music from the Studio.
- 4.55—Late Market Reports from the Sun.
- 5—G.P.O. Clock and Chimes; Sun News Service.
- 5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes; Sporting Resumes from "Sun" Newspapers; Uncle Jack and the Kiddies.
- 6.45—Broadcasters Dinner Orchestra.
- 7.45—Late Stock, Hides and Market Reports

by courtesy of Australian Mercantile Land & Finance Company.  
7.50—Close down.

Evening Session.

8—Hoyt's Imperial Orchestra under the direction of Mr. Lionel Hart. Alfred Cannigbaum, baritone; Mr. Lance Jeffrey, tenor. The Ambassadors Jazz Orchestra, under the direction of Al Hammett.

2KY

WEEKLY BROADCASTING PROGRAMME.

TRADES HALL.

Call Sign, 2KY. Wavelength, 280 metres.

FRIDAY, APRIL 19.

Afternoon Session.

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

Children's Hour.

Evening Session.

- 6.30—The Man in the Moon.
- 7.45—Latest News Items; Miss Esmé Diehl, L.L.C.M.; Miss Maisie Carroll, soprano; Mr. Alf. James, baritone; Mr. Board, Technical Designer of 2KY, Wireless Lecturette; Miss Ivy O'Hall, contralto; Miss Kathleen Stenz, soprano; Mr. L. Falch, tenor; Mr. David Edelston, Monologue; Andre Addison's String Orchestra.

SATURDAY, APRIL 17.

Evening Session.

- 7.45—Latest News Items and Sporting Results; Mr. J. O. Sullivan, baritone; Lecturette, Hints on Motors, Mr. W. H. Burgess; Mr. Frank Reiman, Monologue; Lecturette, Labor Legislation, Mr. J. C. Eldridge; Mr. Robertson, baritone; Nellie O'Sullivan (Dramatic Scenes), and others to be announced.

MONDAY, APRIL 19

Afternoon Session.

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

Children's Hour.

Evening Session.

- 6.30—The Man in the Moon.
- 7.45—Latest News Items; Miss Amy Rawald, contralto; Miss D. Johnston, soprano; Mr. W. Strain, tenor; Lecturette, Local Topics, Industrial and Political, Mr. J. S. Garden; Mr. Board, Technical Designer of 2KY, Wireless Lecturette; Miss Jessie Browning, contralto; Mr. Geoffrey Stendman, stonationalist.

TUESDAY, APRIL 20.

Afternoon Session.

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

Children's Hour.

Evening Session.

- 7.45—Latest News Items; Miss Dorrington, soprano; Cec. Morris and his Bluebirds' Jazz Band; Lecturette, Organic Evolution, Mr. Geo. F. Mansel; Miss Zona Nelson, soprano; Lecturette, Mr. R. V. Mackham; (late solos, Mr. Les. Sproule; Mr. McDougal, Hawaiian Steel Guitar; Mr. David Lloyd, pianist; Mr. A. Jamieson, tenor.



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## WEDNESDAY, APRIL 21.

## Afternoon Session.

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

## Children's Hour.

6.30—The Man in the Moon.

## Evening Session.

7.45—Latest News Items Mrs. Eileen Charters, soprano; Miss Dean, pianist; Lectures, International Topics, Industrial and Political, Mr. J. S. Garden; Mr. R. Webster, baritone; Mr. Percy Brown, monologues; Mr. Sullivan, tenor; Miss Thompson, soprano; Miss Lily Wallace, whistler; Lectures, subject to be announced, Rt. Rev. G. A. Arundale.

## THURSDAY, APRIL 22.

## Afternoon Session.

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

## Children's Hour.

6.30—The Man in the Moon.

## Evening Session.

7.45—Latest News Items: Mrs. Hayden and Price, cornet duet; Miss Tibbie Smith, monologues; Mr. Eric Goldrick, Hawaiian Steel Guitar; Lectures, subject to be announced, Miss E. L. Parrick; Andre Adillon's Novelty String Orchestra; Lectures, Mr. J. C. Eldridge, Social Science.

## 5CL

**CENTRAL BROADCASTERS LTD.**  
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## FRIDAY, APRIL 16.

Morning Session (11.30 a.m. to 2 p.m.)  
11.30—G.P.O. Chimes.  
11.31—Featuring a Steek Duo Art number.  
11.40—"Advertiser" News Service.  
12—G.P.O. Chimes.  
12.1—News and Cable Service.  
12.16—Featuring a Steek Duo Art number; 5CL Studio Orchestra Selection; cornet solo; fox trot; minicome; oriental; waltz; suite; three dances; finale.  
1.55—S. C. Ward & Co.'s Stock Exchange Intelligence and Official Weather Synopsis and Station Announcement.  
2—G.P.O. Chimes.

## Afternoon Session (3 to 5).

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

## Evening Session (6.30 to 10.30).

6.30—G.P.O. Chimes.  
6.31—Bedtime Stories for the Children.  
7.30—Stock Exchange, Market Reports and Station Announcements.  
7.40—Sporting Talk by "Old Timer."  
8—G.P.O. Chimes.  
8.1—Studio Concert arranged by Mrs. L. Matthews, L.A.B. and Miss Olive Lyons, F.T.C.L., L.A.B.

9—G.P.O. Chimes.  
9.1—Weather Reports.  
9.5—Studio Concert—continued.  
10.15—Studio Concert—continued.  
10.15 approx.—Advertiser News Service.  
10.30—Station Announcements; National Anthem.

## SATURDAY, APRIL 17.

10.31—The 5CL Studio Orchestra will play; Selection; violin solo; fox trot; reverie; suite; venetian love; selection; waltz; finale.

## Evening Session.

6.30—G.P.O. Chimes.  
6.31—Bedtime Stories for the Children.  
7.30—Market reports and station announcements.  
7.40—A review of the world's chief sporting events.  
8—G.P.O. Chimes.  
8.1—Studio Concert arranged by Mrs. Hubert James.  
9—G.P.O. Chimes.  
9.1—Weather Reports.  
9.3—Studio Concert—Continued.  
10.15—Studio Concert—Continued.  
10.21—"Advertiser" News Service.  
10.30—Station Announcements; National Anthem.

## SUNDAY, APRIL 18.

## Morning Session:

11—Broadcast from the Pirie Street Methodist Church; Divine Service.

## Evening Session:

6.30—G.P.O. Chimes.  
6.31—Bedtime Stories for the Children.  
6.55—Broadcast from Rose Park Congregational Church; Divine Service.  
8.15—From Studio; Lecture, Mental Healing, Mr. P. H. Nicholls.  
8.40—Vocal and Instrumental Items by members of the Midnight Frolics by kind permission of the management. Station Announcement; To-morrow's programme; National Anthem; Good-Night.

## MONDAY, APRIL 19

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

11.30—G.P.O. Chimes.  
11.31—Featuring a Steek Duo Art number.  
12—G.P.O. Chimes.  
12.1—News and Cable Service.  
12.16—Featuring a Steek Duo Art number; 5CL Studio Orchestra will play; Selection; cornet solo; fox trot; novelty; waltz; Broadway night; selection; reverie; finale.  
1.55—S. C. Ward & Co.'s Stock Exchange Intelligence and Official Weather Synopsis and Station Announcements.  
2—G.P.O. Chimes.

## Afternoon Session. (3 to 5).

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

## Evening Session (6.30 to 10.30).

6.30—G.P.O. Chimes.  
6.31—Bedtime Stories for the Children.  
7.30—Stock Exchange, Market Reports and Station Announcements.  
7.40—Sporting Talk by "Old Timer."  
8—G.P.O. Chimes.  
8.1—Studio Concert arranged by Miss Sylvia Thomas.  
8.20—Original humorous talk by Mr. F. J. Mills.

8.40—Studio Concert—continued.  
9—G.P.O. Chimes.  
9.1—Weather Reports.  
9.3—Studio Concert—continued.  
9.16—Talk on Photography, arranged by Harringtons, Timbuck.  
9.20—Studio Concert—continued.  
10—G.P.O. Chimes.  
10.1—Studio Concert—continued.  
10.45—Station Announcements; To-morrow's Programme; National Anthem.

## TUESDAY, APRIL 20.

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

11.30—G.P.O. Chimes.  
11.31—Featuring a Steek Duo Art number.  
12—G.P.O. Chimes.  
12.1—News and Cable Service.  
12.16—Featuring a Steek Duo Art number; 5CL Studio Orchestra will play; Selection; fox trot; cornet solo; waltz; serenade; novelty; instrumental trio; Hurdy-Gurdy Blues; finale.  
1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis and Station Announcements.  
2—G.P.O. Chimes.

## Afternoon Session. (3 to 5).

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

## Evening Session (6.30 to 10.30).

6.30—G.P.O. Chimes.  
6.31—Bedtime Stories for the Children.  
7.30—Stock Exchange, Market Reports and Station Announcements.  
7.40—Physical Culture Talk by Mr. Noel H. Hulbelle.  
8—G.P.O. Chimes.  
8.1—Relay from Adelaide Town Hall, by arrangement with Capt. Hugh King (conductor) and Mr. Alhoi Lykke (manager), concert given by Adelaide Metropolitan Choral Society.  
8.30—Cookery Talk arranged by S.A. Gas Co.  
8.40—Relay from Town Hall, continued.  
9—G.P.O. Chimes.  
9.1—Weather Reports.  
9.3—Relay from Adelaide Town Hall, continued.  
10—G.P.O. Chimes.  
10.1—Relay from Adelaide Town Hall, continued.  
10.35—"Advertiser" News Service.  
10.50—Station Announcements; National Anthem.

## WEDNESDAY, APRIL 21.

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

11.30—G.P.O. Chimes.  
11.31—Steek Duo Art and Aeolian Voocoon Recital.  
12—G.P.O. Chimes.  
12.1—News and Cable Service.  
12.16—Featuring a Steek Duo Art number; 5CL Studio Orchestra will play; Selection; cornet solo; fox trot; caprice; waltz; selection; finale; solo; finale.  
1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis, and Station Announcements.  
2—G.P.O. Chimes.

## Afternoon Session. (3 to 5).

3—G.P.O. Chimes.  
3.1—Broadcast from Maple Leaf Cafe; Orchestral Numbers.  
3.45—Serial Story from the Studio.  
4—G.P.O. Chimes.

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- 4.1—Relay from Arcadia Cafe; Orchestral numbers.  
4.35—Stock Exchange Reports, General Information and Station Announcements.  
5—G.P.O. Chimes.

Evening Session (6.30 to 10.30).

- 6.30—G.P.O. Chimes.  
6.31—Bedtime Stories for the Children.  
7.20—Copee Lecture, Rev. Harold Gies.  
8—G.P.O. Chimes.  
8.1—Concert of vocal and instrumental numbers, arranged by Madame Ouselet.  
8.30—Science lecture arranged by Messrs. F. H. Faulding & Co.  
8.40—Studio Concert—continued.  
9—G.P.O. Chimes.  
9.1—Weather Report.  
9.3—Studio Concert—continued.  
10.1—Studio Concert—continued.  
10.25—"Advertiser" News Service.  
10.40—Station Announcements; National Anthem.

THURSDAY, APRIL 22.

- 11.30—G.P.O. Chimes.  
11.31—Featuring a Stock Duo Art number.  
11.40—"Advertiser" News Service.  
11.55—Vocalian Number.  
12—G.P.O. Chimes.  
12.1—"Advertiser" News Service.  
12.15—Featuring a Stock Duo Art number: 5CL Studio Orchestra will play: Overture; waltz; suite; fox trot; barcarolle; cornet solo; The Dancer of Navarre; selection; finale.  
1.55—Ward & Co.'s Stock Exchange Intelligence, Official weather synopsis, and station announcements.  
2—G.P.O. Chimes.  
Afternoon Session.  
3—G.P.O. Chimes.  
3.1—Relay from Maple Leaf Cafe, orchestral numbers.  
3.45—Broadcast from Studio, Serial Story.

- 4—G.P.O. Chimes.  
4.1—Broadcast from Arcadia Cafe, orchestral numbers.  
4.55—Stock Exchange Reports, general information, and station announcements.  
5—G.P.O. Chimes.

Evening Session.

- 6.30—G.P.O. Chimes.  
6.31—Bedtime Stories.  
7.15—Health Talk by Mr. A. M. Whittebury.  
7.30—Market Reports.  
7.40—Poultry Talk by Mr. A. M. Whittebury.  
8—G.P.O. Chimes.  
8.1 to 10.30—Studio Orchestra, interspersed with vocal numbers.  
Approx.  
10.15—"Advertiser" News Service.  
10.30—Station Announcements; National Anthem.

### BLOOD WANTED, APPEAL BY RADIO.

A call for volunteers to submit for transfusion of blood was made by a clergyman through the Melbourne broadcasting station 3LO early one afternoon recently. Within ten minutes there were seven young men on the doorstep of St. Vincent's Hospital. They were all eager to give their blood to save the life of a little boy who was injured in a street accident in Collingwood. Blood tests were

taken, and two were found to be satisfactory of these, one was chosen by the doctors, and the operation took place.

We regret that through unavoidable circumstances, the programmes of 3LO and 3AR have had to be omitted from this week's issue of "Wireless Weekly."

**BURGESS—"THEY'RE WITH THE McMILLAN EXPEDITION"—BATTERIES**

## The Programmes

ARE THEY SATISFACTORY?

(To the Editor.)

Sir,—In the Radio Section of the "Sun" recently, there appeared an article, which stated that there had been an enormous cancellation of licenses for the month of January. Surely this should not come as any great surprise to anybody, when you take into consideration the programmes which are being broadcasted, especially from 2BL.

Although this station a short time ago was without doubt the best, they have fallen considerably in the estimation of the majority of listeners-in. Dozens of times in travelling round the city, have I heard uncomplimentary remarks passed regarding Broadcasters incessant "talks." For instance, they often broadcast two or three in one evening, consequently the majority of listeners get "fed-up." Who wants to hear conversations in insects, vitamins, dietics, travel-talks, or love stories, people the speaker has met, arguments on world affairs, or things of this description. Everybody reads the papers, or can obtain books on these subjects from any bookstall. Then again there is that Trio which is continually drumming into the air heavy music of great composers. Does the average business man, or employee, after a hard day's work wish to sit down and listen to "sob music?" I think that if a census were taken, it would be found that the above would be the basis of the unsatisfactory condition of the radio business to-day.

A great lesson can be learned by the increase of licenses in Victoria, the reason for this being that the management of 3LO have made a very close study of human nature in making up their programmes. At least, that appears to be the case, and our local stations could very well take a tip from their methods. It is very apparent, the difference between theirs and ours; for instance, any talks from their station are more often than otherwise rendered before eight o'clock at night, thus leaving the rest of the evening for BRIGHT entertainment. Those who care for arguments, or talks on matters which do not concern the average listener, can have their hour to themselves. Under these conditions, why burden the majority for the benefit of the very few. No doubt letters of appreciation are received by 2FC and 2BL for certain lectures or talks, but what about the hundreds that do not write. Are they to be unconsidered? Surely the management of these stations have enough common sense to realise that out of the thousands listening they only receive letters from roughly 1 per cent. Therefore are the 1 per cent. to be entertained to their liking, and the

99 per cent. to be disgusted. This disgust is the root of all the trouble, for if they get disgusted they will not trouble to write, naturally.

What I would suggest is that the management of these stations study very closely human nature to the extent at least of finding out, through comparison of the different plays at various theatres, and see which are more fully appreciated and which class of entertainment pleases most. I personally think that they would find light operas, or plays, suit best, something with a "go" in it. Therefore why not make radio entertaining to the large majority, for after all these are the ones who spend the most money on radio parts, etc. Good old time songs, light music, comic operas from the theatres and such like, not forgetting band music, are what the people require to-day; not heavy stuff such as sonatas, which sound like so much funeral music to a great many. Cut out the talks for the early evening programme, or for afternoons. By this means I consider that it would increase the number of licenses instead of decreasing them. Take for instance, records from the gramophone shops. What do they sell the most of? Light or heavy music records. This should act as a very good thermometer for the Broadcasting stations. Nobody can object to songs, for instance, rendered by some of the well known artists around, be they either operatic, or otherwise, but operatic music from an orchestra is quite another thing. There are without doubt some very beautiful singers in this city. Why not make more use of them, and do away with the continual sonatas in various flats or minors?

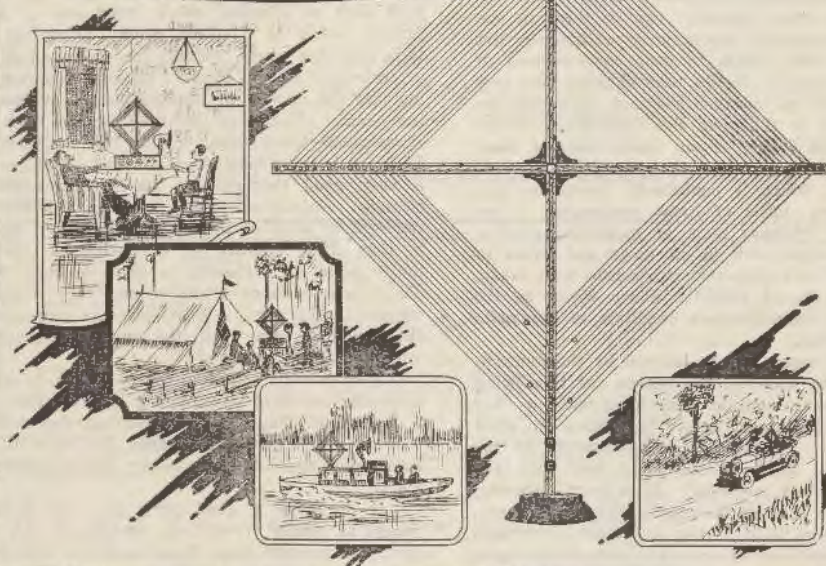
I do not for one instant say that I am an authority on the broadcasting programmes, but I do certainly say that I am voicing the views of thousands of listeners in Sydney and suburbs, who have taken up radio as a hobby and an entertainment.

It might be a good thing for your valuable paper, to obtain views from readers on this subject, and publish them from week to week. The controversy might lead to the general betterment of the programmes and consequent increase of licenses and the popularity of radio.

Wishing you continued success,—Yours truly,  
"PROGRAMME."

The South American Republic of Columbia has a population of six millions, of whom about 150,000 are at the capital—Bogota. There are several radio clubs and a moderate trade in apparatus. There is no broadcasting station and the future is mainly dependent on the complete and satisfactory operation of the systems of Venezuela, Peru, and Costa Rica.

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## The Truth About 3LO

By ARTHUR STIGANT

(Stephen Leacock's Rival).

I say! Have you read those letters to the newspapers lately all about the programme of 3LO? They were very good! Oh, very pungent! Don't you think so? Oh, positively! I agree with every word. The mistake was made at the beginning when they called it 3LO. "O-L" should have been there—anyway, I don't think the license is worth the money some people pay for it. I say, "Some" people. The inspector out our way is very short-sighted. He seemed perfectly satisfied when we showed him the dog license.

I agree entirely with Mr. Edgar and others who complain because 3LO broadcasts the fights from the Stadium on Saturday nights. It isn't fair. I'm told the descriptions are wonderfully realistic—really an education in the noble art—in fact, anyone would know how to deliver an uppercut or a kidney punch correctly, half a dozen lessons. I mean "listens"; but, of course, I'm acting in "Lilac Time" every Saturday night and miss it all. But the wife listens in at home, and one of these days a poor bruised and mangled fern, with 'Stigant' on the collar, will be found in the corner of our kitchen—and then 3LO will be sorry.

You know I had a birthday last week and mother made me a cake. It had 39 candles round it. When I say mother made the cake, I mean "the wife." We always call her mother at home. Well, it's a good thing we've only got one set of headphones to our crystal set, because directly after tea, when I want to listen-in, the first thing I heard was, "And so it is you birthday, Arthur. How kind of mother to make you such a nice birthday cake. Write me a nice long letter again, Arthur. A thousand kisses, darling." Really, whoever she is, that woman should be more careful. A divorce has been decreed on less evidence than that!

Talking about divorcees, the wife said to me one day last week, "Listen-in to the news service and see if they've got the result of the divorce case."

I said, "What time is the news service on?"

She replied, "At 4.45. Watch the dining-room clock, and when the hands are at 2.30, and it strikes 6, it's exactly 4.45."

The moment I put the headphones on, I heard the operator say, "4½ per cent. bonds, 1927, £161½. £10 bonds, 1928, £10 1s. 6d. 6 per cent. bonds, 1930,

1931. 10 per cent. bonds—nothing about any matrimonial bonds at all. Then he followed up with—"Wheat options, Chicago, July, 118½ cents; August, 120½ cents; September, 114½ cents; old 16 cents; mildewed 8 cents; rotten . . . Well, there's no sense in that. Actors don't want to hear anything about wheat options.

Mind you, I don't agree with people who complain about the church services on Sunday. Personally, I like them. I love to hear a silver-throated boy chorister uplifting his soul in song. A beautifully sung anthem positively thrills me. But unfortunately I have to help the wife on Sunday mornings, and by the time I've washed the dog, cleaned the fowl pens, and polished the knives, the sermons are on. Of course, that's like carrying coals to Newcastle, because when a fellow has a wife he seems to do nothing but listen to—anyway, I like the lady who broadcasts "Baby Welfare." The other day she said, "Never chastise a child on an empty stomach." She's quite right. I never do. I always turn mine the other side up.

I went to the phone the other day to hear the result of the last race at Flemington. The operator, who evidently has a grass lawn at home and wants to water it with a fixed hose, was bashed with the river reports. He declaimed melodiously, "The Murray at Seymour drop 1 in.; Albany, drop 2 in.; Murrumbidgee, at Wagga Wagga, drop 3 in.; I didn't want to know how much the Murrumbidgee had dropped at Wagga Wagga; I wanted to know how much I'd dropped at Flemington.

There's one thing we find invaluable about 3LO. It's those little lectrettes. My wife loves to listen to Mr. Brunning's talks on the flower and vegetable gardens, and there's always tangible proof of her interest popping up. A few weeks ago she got in a sack of bonedust. She had it deposited in the garage. It's the only shed we've got—outside. You can't put a sack of bonedust in the pantry. It would only start a discussion with the gorgonzola cheese, and they'd have to be forcibly parted—so into the garage it had to go.

After the next lecture I found the garage getting congested. A sack of blood manure and a couple of sacks of lime had arrived. Mr. Brunning told her the following week about the aphids and how to disperse it by spraying. There are different kinds of aphids. There's the green aphid, the black aphid, and the black and tan aphid, and they all require different treatment. Of course, it's cheaper to make a spraying mixture or a muck in large quantities. You can dip a kerosene tin into a can,



go out, and spray it all over the plants in less than no time. So we've got huge casks full of red oil and green oil and sulphate of soda and sulphate of ammonia and all sorts of mixtures in the garage now.

I've hired a garage at the end of the road for the car!

3LO certainly should not broadcast plays. That cannot possibly be successful. A listener-in cannot visualise what is happening on the stage sufficiently unless he has already seen the piece at the theatre, and he is very liable to get an altogether wrong impression. A friend of mine listened in the other night to a drama, and when the heroine cried in an agonised tone, "It would be better if I were dead," there was a terrific round of applause from the audience. Naturally, he thought the audience was expressing its private opinion of her. How was he to know the hero had made his entrance at that moment, and that the audience was extending to him a warm welcome?

#### BRITISH CRITIC'S VIEWS.

That Beethoven was born only recently for many listeners, with the first acquisition of their radio sets, is the interesting angle from which the uplift in musical taste and appreciation is viewed by Mr. Percy A. Scholes, widely known musical critic of the British Broadcasting Company. While in America recently, Mr. Scholes stated that he looked upon the introduction of broadcasting as the greatest event in the history of the art of music. Less than 18 months ago, he said, the English radio enthusiasts were protesting that Beethoven, Bach and Wagner were acceptable only to "highbrows who like to swank about their superior tastes," but these attacks have given way to admiration for the works of classical composers, music that has artistic impulse. "Give listeners plenty of fine music," he added, and they will learn to like it."

#### DULL EMITTER VALVES.

For dull emitter valves of the .06 filament amp type the medium sized dry cells may be used, each of which have a voltage pressure of 1.5 volts. In order to obtain the necessary voltage one or more should be placed in series, according to the voltage required by the type of valve in use. Wherever the filaments of dull emitter valves require more than .1 to 2 amps, small sized accumulators should be used.

The actual upkeep and initial cost, valve for valve, using dry cell valves, compares very favourably with the bright emitter valve with its necessary charging expenses.

When everything is carefully considered, however, it will be found that a valve set (especially a multi-valve set) employing valves whose filaments only need .25 amps are rather less expensive to run than a similar set employing dull emitter valves. The advantage of the latter set is, of course, that it does not require the continual bother of having to take the battery away to be charged, and also that the dry battery type are rather more portable and certainly less messy than the accumulator type.

Thus it will be seen that, in the question of costs, in the use of the two types of valves, there is not very much to choose from. On the whole, a valve set employing bright emitter valves is cheaper to run, but just whether the advantages of one outweigh the other will entirely depend upon the circumstances with which our different readers are placed.

#### 3LO MELBOURNE'S PRECISE TIME. HOW IT IS OBTAINED.

While much has been said lately of the methods adopted by various studios in broadcasting the correct time, 3LO Melbourne maintain that the time signal broadcasted from the Collins Street studio is faultlessly accurate. The Amalgamated Wireless Station in the Melbourne Domain is situated next to the Government Observatory, where the official time is calculated. The station has a line to the Observatory, and the Morse key is directly controlled by the time-reading apparatus. A few minutes before 12 the operator commences to Morse time signals. First of all a minute of X's terminating in three dashes, the final dash being at 11.58 a.m. Then follow five N's for the second minute, terminating in three dashes at 11.59 a.m. Then come five G's, terminating in three dashes, the last dash being precise noon.

At 3LO Melbourne one of the staff is tuned into the Domain station, and simultaneously with the last dash switches a red light in the studio, at which signal the announcer strikes the first gong of the noon signal. The greatest difference which has ever been detected between the gong and the Domain signal is one hundredth of a second, whereas the Post Office clock often has to be adjusted to a few seconds difference.

These Domain signals are relied upon by ships at sea for checking their chronometers, and have often been received by operators over 3000 miles away from Melbourne.

Watts: "Why does he always speak of his wife as Old High Tension?"

Mike O. Henry: "Because she has a high frequency for charging everything."—(Radio News).

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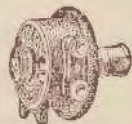


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2/3/26.

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Dear Sirs,

I am so pleased with your Special Four which I only tried out last night that I must write to you at once to let you know how this beautiful receiver is working. After coupling the set up at about 8.15 p.m. last night I turned the dials and the first station I heard was 5CL, Adelaide, then came SLO, 3AR, 2BL, 2KY, 7ZL. I think that is something worth writing about.

You may use this letter as you wish and hope you will sell many of them as I think it is the best set I have had out of my seven sets I have owned so far. It beats my five valver.

Wishing you every success, I remain,

Yours truly,

Signed. R. SLOAN,  
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