

The Queensland Radio News

"Your Own Wireless Journal"

6^d



Vol. III.

Thursday, 1st DECEMBER, 1927

No. 11

Registered at the G.P.O., Brisbane for transmission by Post as a Newspaper.

A filter circuit is necessary

Size—

4in. x 2½in. x 2½in.

Weight, 1½ lbs.



In Polished Bakelite
Casing,

New Reduced Price

27/6

In all cases where a cone type loud speaker is used, makers recommend the use of a filter circuit, whilst the use of such a device is absolutely imperative if the anode current exceeds 10 milliamps, i.e., when a super-power valve is incorporated in the circuit. The AMPLION SIFTRON is correctly designed, is compact and can be used without any alteration to the existing circuit and with any loud speaker.

Obtainable from all Radio Dealers

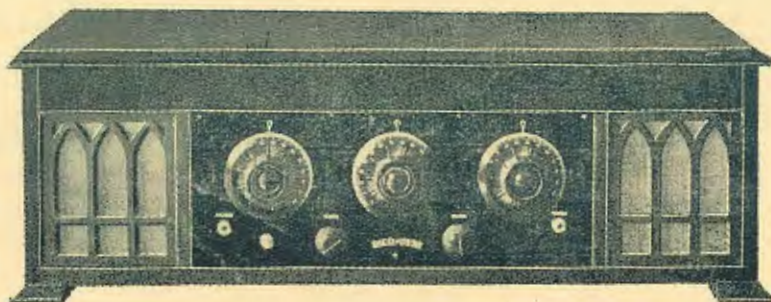
— Use an Amplion Siftron

Advt. Amplion (Australasia) Limited, Sydney and Melbourne.

RADIO PRODUCTS

LIMITED

1st Floor Ewing House Adelaide Street BRISBANE

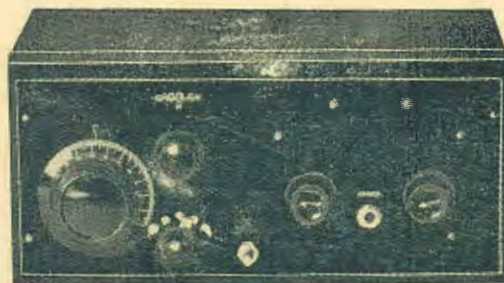


Special Announcement

Famous Ricodyne Neutrodyne Five Valve Set complete with First Class Accessories Guaranteed

NEW
PRICE **£25**

CROSLEY
THREE
VALVE
SET



New Price
£9-5-0
Complete with
Spitfire Loud
Speaker and Guar-
anteed Accessories

Note the Address

RADIO PRODUCTS Ltd.

1st Floor Ewing House Adelaide Street BRISBANE

Phone **6143** Central

"SFERAVOX"

Pronounced "SERRAVOX"

The Masterpiece of Cone Speakers

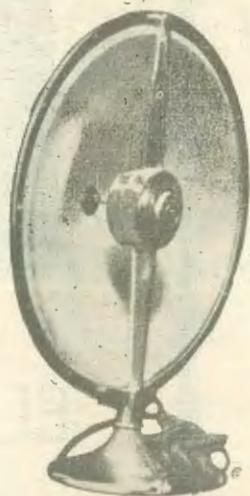
SENSITIVITY
PURITY OF TONE
POWERFUL



Produced by Societe
Francaise Radio
Electrique, Paris



£ 4 / 4 / 0



Sferavox Cone.

DISTORTIONLESS
TONED IN SILVER
ECONOMIC



Insist on hearing one
before buying your
Speaker



£ 4 / 4 / 0

INSTRUCTIONS FOR USE:

The adjusting knob should be screwed clockwise until the housing of the magnetic system offers a resistance to its progress. The Speaker: when on circuit the knob will then be screwed in the reverse till the hearing of either a slight crackling noise or a pure and powerful reproduction.

The best position is obtained by adjusting the knob slightly around the position so obtained.

Obtainable wholesale from EDGAR V. HUDSON and TRACKSON BROS., Brisbane; and from all Reliable Dealers. In case of difficulty communicate with

Factory Representatives:

BROWN & DUREAU LTD.

Ryan House,
Charlotte Street,
BRISBANE.

And at Melbourne, Sydney, Perth, Auckland and Wellington, N.Z.

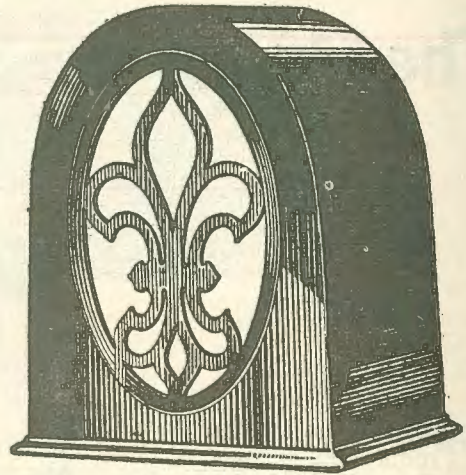
Tone Reproduction

*That no one
even thought
possible---*

Brandes have a new repro-
ducer which is not just an-
other speaker, but is some-
thing in a distinct class by
itself.

No harsh notes—no grat-
ing—no slurring at the
bottom of the scale.

The marvellous tone qual-
ity is finer than any one
thought possible, and it
works on any set, even one
valve.



THE BRANDES
ELLIPTICON

£6/10/0

Post Free

BRANDES PHONES 22/6

TABLE TALKER 45/-

TABLE CONE 59/6

Dealers this is something out of the box--Write us

Our catalogue is Free to Everybody.

FACTORY REPRESENTATIVES

INTERNATIONAL RADIO CO.

229 Castlereagh Street, Sydney

Make it a Radio Christmas

If father or brother has a radio set, you could give him no better gift this Xmas than something for his beloved receiver. Below are featured a few suggestious all of which are keenly priced.

Give a Loud Speaker

Manhattan Speakers	23/6
Magnavox "Cornell" Cone	75/-
R.C.A. Model 100	£10/10/
Power Musicsinger	£4/4/

Valves are Grand Gifts

Philips B.406	13/6
Philips A.609	13/6
Philips A.310	13/6
Philips C.509	13/6
Condor P.R.48	13/6
Condor P.R.41	13/6
Condor P.R.51	13/6
Condor P.R.52	13/6
Radio Technique R.T.56	13/6

Phones are Useful

Spitfire (2000 ohms)	15/-
Manhattan (3000 ohms)	18/6
Brandes (2000 ohms)	22/6
Trimm (2400 ohms)	22/6

Batteries as Gifts

Red Seal (1.5 volt)	2/9
Ever-Ready (W.P. 40-volt)	12/6
Ever-Ready (W.P. 60-volt)	18/6
Winchester (45-volt Heavy Duty) ..	25/-
Winchester (22½-volt Heavy Duty) ..	13/-
Ever Ready "C" Battery (4½-volt) ..	3/3
E.T.C. "C" Battery (4½-volt)	1/3

A Crystal Set for the Boy

Complete with Phones, Aerial and Earth Wire.	
B.M.S. (Set only 17/6)	37/6
Slider Type (set only 12/6)	30/-

Valve Sets are Ideal

1-VALVE SETS.

Complete with Aerial and Earth, Batteries, Valve and Phones.	
Audiotone	£3/15/6

2-VALVE Simolian complete (best of everything)	£13
---	-----

3-VALVE—

Crosley	£9/15/
"Simolian" complete	£17/10/

Special Value—5-Valve "OCEANIC", complete	£25
--	-----

RECORDS.

Huge selection of New Records, comprising Dance, Popular and Classical numbers—3/6 and 4/- each.

COUNTRY CLIENTS.

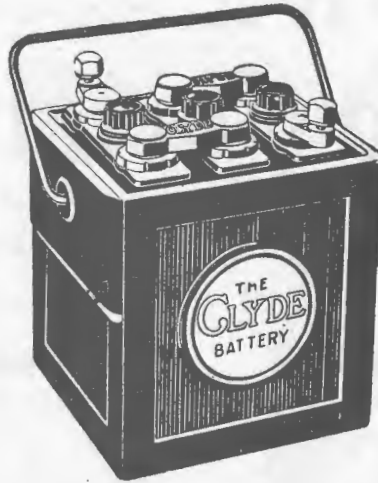
We give special service to country clients. All goods are well packed and forwarded promptly.

Mick Simmons Ltd.

"The Home of Sport"

Queen Street (Opp. Town Hall.) BRISBANE

WHY NOT A CLYDE ?



Clyde 6 C.R.9
Radio Battery
6 volts.

Why not a CLYDE for that Christmas Present? Just as there's a Clyde for every make or model of car, there a Special Clyde Battery for any kind of radio set, no matter what type of valves are used.

MAKE YOUR XMAS PRESENT A CLYDE.

C.R. TYPE RADIO BATTERIES

Type	Volts	Actual Capacity	Price £ s. d.
6CR7	6	60 amps.	4 10 0
6CR9	6	75 "	5 10 0
6CR11	6	90 "	6 15 0
6CR13	6	105 "	7 10 0
4CR7	4	60 "	3 10 0
4CR9	4	75 "	4 10 0

S.R. TYPE RADIO BATTERIES

Type	Volts	Actual Capacity	Price £ s. d.
4SR5	4	25 amps.	2 10 0
6SR5	6	25 "	3 15 0
4SR7	4	40 "	3 0 0
6SR7	6	40 "	4 4 0

HEAVY DUTY TWO VOLT CELLS.

Type	Volts	Actual Capacity	Price £ s. d.
S5	2	25 amps.	1 1 0
S7	2	40 "	1 5 0
S9	2	50 "	1 10 0

AT ALL DEALERS

Made by the CLYDE ENGINEERING CO LTD



Why 4QG. Did Not Broadcast "Rose Marie"

THERE has been a deal of comment lately among listeners and dealers concerning the alleged apathy on the part of Station 4QG in allowing the world-famous musical comedy, "Rose Marie," to visit Brisbane without arranging for the broadcasting of any of the performances.

Listeners and dealers certainly were disappointed. Southern States enjoyed the many "Rose Marie" broadcasts to the full, and those of us in Queensland whose sets were powerful and selective enough, tuned in to 2FC and 3LO, looking forward to the time when "Rose Marie" would visit Brisbane and 4QG would have the opportunity to broadcast excerpts from this delightful play.

A little light thrown upon the reason for the absence of 4QG's microphone before the footlights of His Majesty's Theatre may be of interest.

When the first notice of "Rose Marie's" visit to Brisbane appeared, the Director of 4QG wired The Broadcasting Co., of Aust. Pty. Ltd., which is controlled by J. C. Williamson Ltd. and others, stating that 4QG was anxious to broadcast excerpts from "Rose Marie" and enquired the company's terms.

To his wire he received a reply to the effect that the sum required by J. C. Williamson Ltd., to broadcast one performance of "Rose Marie" would be £500!!

It will now be apparent to readers why 4QG did not broadcast this musical comedy. There is not a broadcasting station in the world that would have paid the fabulous figure asked by J. C. Williamson Limited.

This theatrical company, by their reply, showed a very poor spirit of co-operation. It would seem that they made their terms so preposterous to ensure their rejection—not because they are adverse to the microphone—but because they do not hold the big interest in 4QG

that they hold in 2FC and 3LO, who were given permission to broadcast the play on very reasonable terms.

Through the greed of one of the biggest and most prosperous of Australian companies, Queensland listeners were made to suffer, and the attitude taken by the directors in their reply to the Director of 4QG does not by any means do them credit.

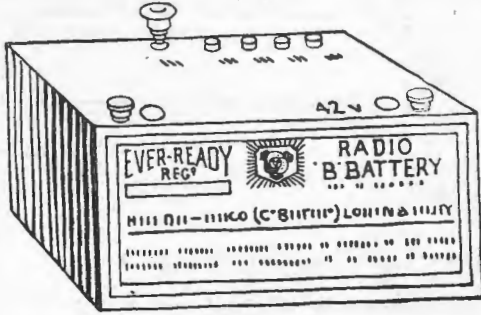
Surely this is a matter that calls for the investigation of a wireless Commission.



The Editor & Staff of 'The Queensland Radio News' extend to every reader Cordial Xmas Greetings.

*Here's a wish to all of you
Who burn the midnight oil
Chasing distant stations
Or winding tricky coils.*

*May the Xmas Season
Bring you endless joy,
And may the wireless hobby
Ever be your toy.*



Why do the Great Majority buy EVER-READYS?

PRICES

STANDARD:

W.P. 40-volt 12/6
 W.P. 60-volt 18/9

HEAVY SERVICE.

X.P. 40-volt 23/-

EXTRA HEAVY SERVICE.

Super 40-volt 30/-

There's a very real reason why so many thousands of Australian radio fans pin their faith to "EVER-READY" "B" Batteries.

It isn't altogether because they are CHEAPER, although their splendid values does win many supporters. The reason why "EVER-READYS" are the most popular "B" Batteries on the market to-day is because of their super quality and the full measure of honest service they render.



The IDEAL Christmas Gift—

If you are wondering what to give to make somebody's Xmas happy, you could not choose a more useful or welcome gift than an Ever-Ready "B" Battery.

Let your good judgment reveal itself in your Xmas gift to father, son, brother or friend.

Give Him an "EVER-READY" "B" Battery for Xmas.

"Ever-Ready" Batteries are made in Australia in the same excellent manner and by the same excellent process that has made the name of "EVER-READY" famous overseas.

Because they have no heavy Customs Tariff to face they sell at a lower price than any other make of radio battery, although the quality is quite as high and in many cases higher, due to the freshness of stocks which arrive regularly from the factory in Sydney.

*Ask your Dealer for
 "EVER - READYS"
 and see that you get
 them!*

Wholesale Distributors

EDISON SWAN ELECTRIC CO. Ltd.

156 Creek Street, BRISBANE

EVERYBODY'S THREE

By The Technical Editor

*A Simple and
Reliable Three
Valver that
Does the Job*



It would be difficult to say definitely as to which is the best three-valve receiver. It would be quite safe to state, however, that one of the most successful receivers to date is the well-known P.1 circuit with two stages of audio frequency amplification.

There are many different reasons which help to account for the success of this receiver, chief among these being its simplicity of operation and sensitivity.

It is not uncommon for experienced experimenters to log as many as 30 stations on a receiver of this type. Most of these stations being brought in at speaker strength.

There is nothing fancy or freakish about the receiver described in this article. It is just a straight circuit that does the job, and does it consistently.

General Layout.

As will be seen from the diagrams the layout is not cramped, as it is essential in a receiver of this type to have the correct spacing of the components if maximum results are required.

A three coil tuner is used for tuning purposes. This gives greater selectivity and smoother reaction control than the usual honeycomb coils.

Furthermore, the small aperiodic aerial coil allows one to use a wave-trap successfully, which is rather an important point if the receiver is being used near a high-powered broadcasting station.

This tuner may be purchased from one of the many radio houses, or if the constructor wishes he may wind it himself.

Following are the dimensions and number of turns required:—

- Primary Coil 14 turns 22 gauge enamel wire
- Secondary Coil 45 turns 22 gauge enamel wire
- Reaction Coil 25 turns 34 gauge D.S.C. wire

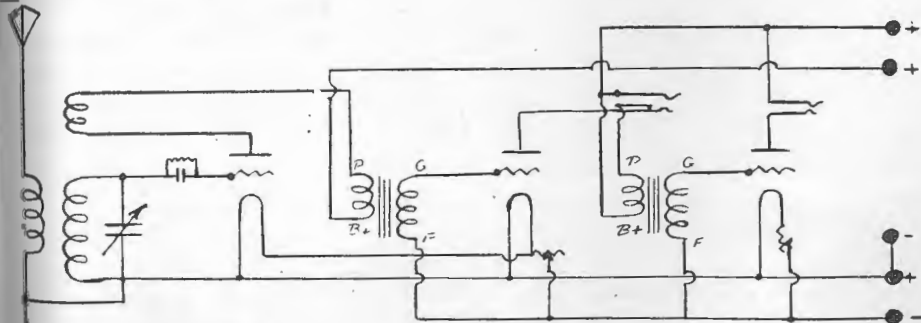
The Primary and Secondary Coils are spaced wound on a 2½ in. diameter bakelite tube, while the Reaction Coil is wound on a 2 in. diameter

former. Small brackets are fitted to the tube to allow it to be mounted in a horizontal position, as is clearly shown in the illustrations.

Wiring.

With regard to the construction of the set, the easiest method is to mount the components on the baseboard and wire them

up according to the wiring diagram, then mount the components on the panel—that is, before the panel is screwed to the baseboard—and wire them up also. Next, screw the panel to the baseboard and join up the panel and baseboard wiring.



The Circuit Design.

The constructor will find that the soldering in this receiver is not difficult, as there is plenty of room between the components.

Care should be exercised, however, when soldering the leads near the baseboard; make sure that the solder runs into the joint properly, otherwise there may be trouble.

Bare wire has been used for the wiring with a little spaghetti covering wherever there was a chance of the wires touching. Of course glazite or similar wire could be used without any ill-effects. This is a matter for the constructor to decide for himself, as each method has its advantages and disadvantages.

When the wiring is complete, it should be checked in the usual way, making sure that all the joints are firmly soldered.

Having reassured yourself that everything is in order, place the valves in their respective sockets and connect up the "A" batteries; the valves should now light up when the battery switch is placed in the "On" position, provided

of course that the filament rheostats are not in the "Off" position.

Controls.

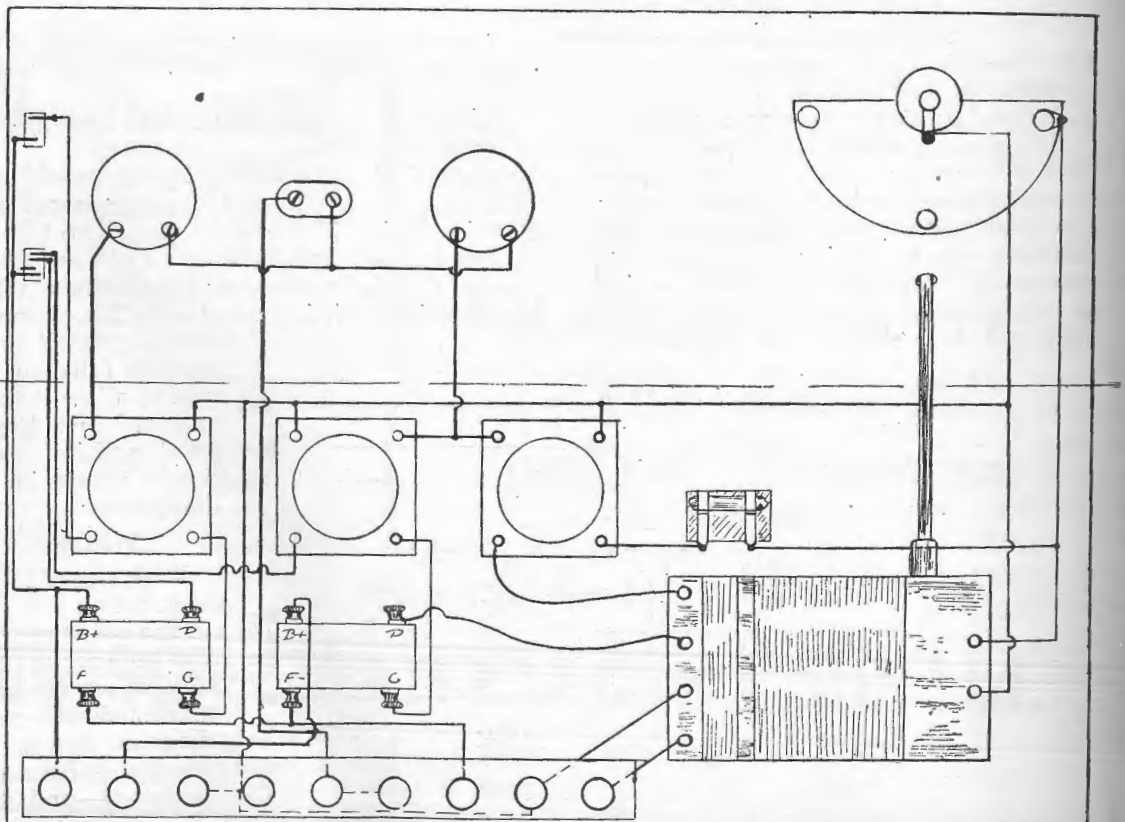
Of the controls mounted on the panel the left hand top dial is the aerial tuning condenser while the left hand lower dial is the reaction control.

The two remaining dials serve to control the filament circuits of the valves; the left hand rheostat controls the detector and first audio valve, while the right hand one takes care of the second audio or speaker valve.

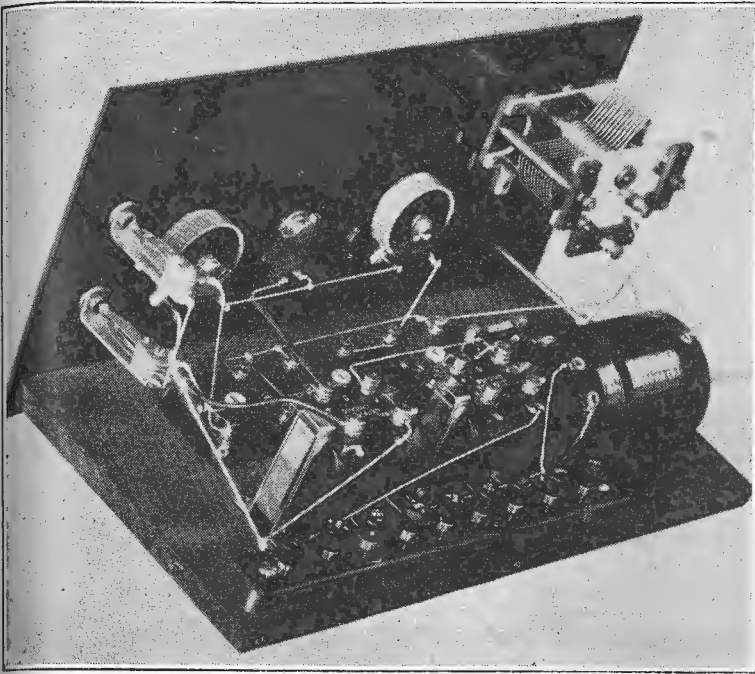
Valves.

Valves of the 3-volt .06 type work very well in this receiver though a small power valve is recommended for the last stage.

On test the following valves proved to be excellent detectors: De Forest D.V.3, Osram D.E.3 and Radiotron 199. These valves also worked well in the first audio stage, whilst a Mullard P.M.4 or Philips B.406 was found to give best results in the last stage on account of their higher electron emission.



Semi-Pictorial Diagram.



LIST OF PARTS REQUIRED.

- 1 K.I.N 3-Coil Tuner
- 1 Engraved Panel, 15 x 7½ x 1/8th.
- 1 Baseboard, 14½ x 7 x ½.
- 1 .0005 Variable Condenser.
- 2 H. & H. (30 & 15 ohm) Rheostats.
- 1 Yaxley Battery Switch.
- 1 2in. Dial.
- 1 .00025 Grid Condenser.
- 1 2-Meg. Grid Leak.
- 2 Jefferson 41 Type Transformers.
- 1 B.M.S. D.C. Jack.
- 1 B.M.S. S.C. Jack.
- 3 Buffalo U.X. Sockets.
- 1 Box Engraved Terminals.
- 1 Bakelite Term.'l. Strip, 10 x 1 x 1/8
- 2 Terminal Strip Supports.
- 1 Dozen Lengths Bus Bar Wire.
- 2 Lengths Spaghetti.
- 1 Box Assorted Screws.

Batteries.

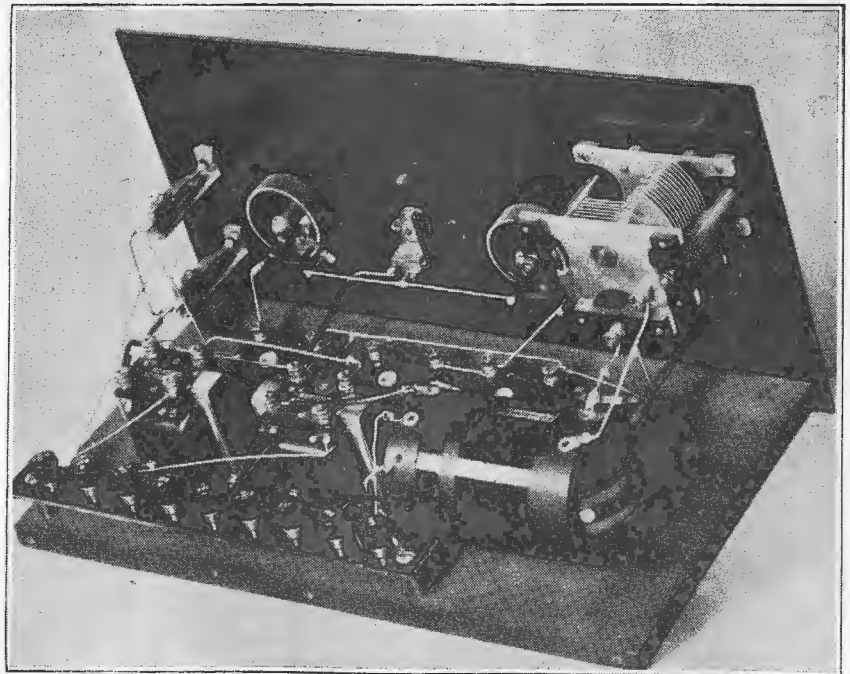
If low consumption valves are used, three of the standard 1.5 volt dry cells will be suitable for filament lighting; these batteries should last from six to eight weeks under normal conditions.

The "B" battery may consist of standard 60 volt block. If, however, greater volume is required, then the voltage should be increased to 90 volts.

A "C" battery of 4½ volts will reduce the "B" battery consumption, and will at the same time improve the amplification and tone.

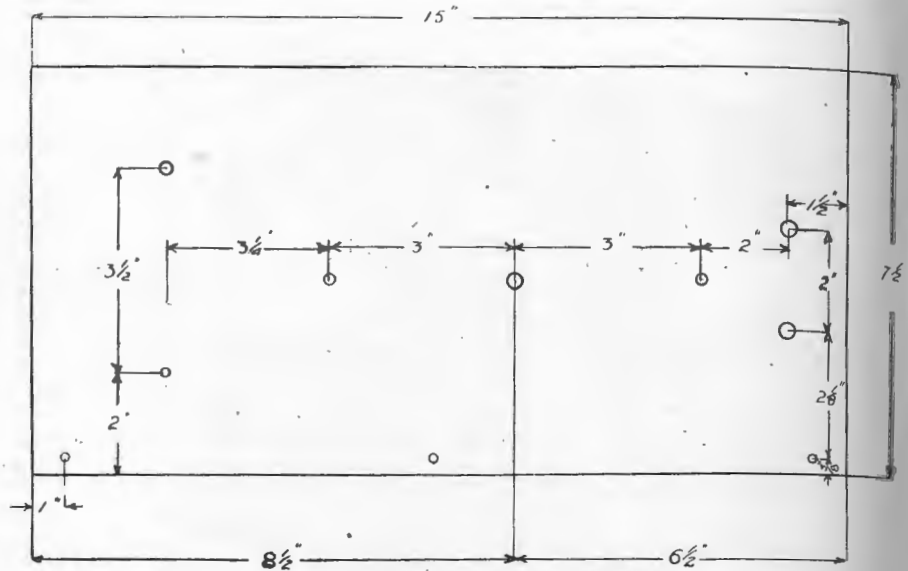
Operation.

Tuning is a very simple matter with this receiver,



as once the valves have been switched on and the reaction adjusted, it is only necessary to turn the aerial tuning condenser in order bring in the various stations.

Once the stations have been found the numbers should be put down on a piece of paper so that the stations may be tuned in again without wasting time by searching.



Front Panel Drilling Diagram.

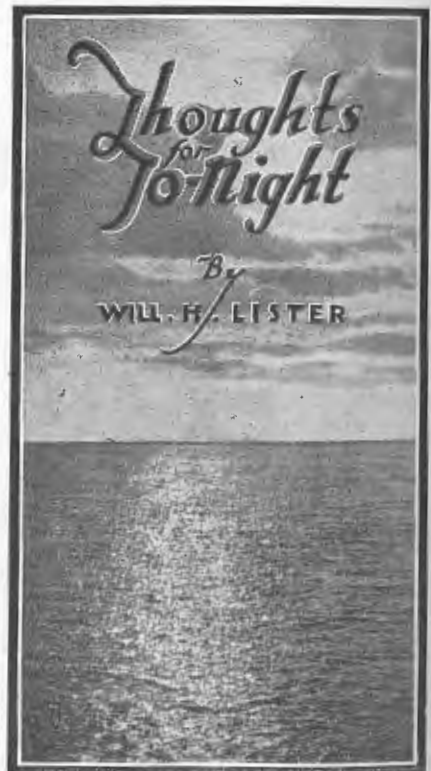
GATHERED TOGETHER!

Quite a number of those popular "Thoughts for To-night" from the Notebook of Will. H. Lister, broadcast from 4QG, are now to be had at your bookseller. These "Thoughts" are tabloids of philosophy and are such that one feels the better for having read them. Included in the booklet are several of W. Lister's seasonal verses.

The Price is--
TWO SHILLINGS

Just a suggestion—post one away to a friend for a Christmas Gift, and it will be appreciated.

If your Bookseller hasn't got it send a 2/- postal note to THE READ PRESS LTD., Adelaide Street, Brisbane, and one will be posted to your address.



LOOK FOR THIS COVER DESIGN.

Tracing the Trouble

A Source of Interference Removed

An example of how a broadcasting station may be wrongly blamed for bad transmission was instanced recently in one portion of Brisbane.

For some weeks past, listeners residing in the Kedron, Lutwyche, Woolloowin, Eagle Junction and nearby districts have experienced a form of interference varying in its intensity, but always of a strength sufficient to mar interstate reception and to spoil to a certain extent, reception from 4QG.

Doubtless most listeners have either put the trouble down to the approaching static season, or have laid the blame on the "poor transmission" of the local station.

A member of the staff of this paper who lives at Eagle Junction noticed the interference some few weeks ago. To him it sounded like a leaking transformer in a lighting main. He immediately got in touch with the Electricity Supply Department of the Brisbane Council and due to the courtesy of the manager and the painstaking personal efforts of Mr. W. Harris (overhead foreman) the cause of the trouble was eventually traced and remedied.

Mr. Harris visited the residence of our representative and there heard for himself the interference as it was affecting this particular receiver.

By the intensity, Mr. Harris surmised that if the interference was emanating from one of the Council's transformers, it must be located in the immediate vicinity.

Accordingly, watches were set and Mr. Harris and our man carried out several after-midnight tests in an effort to locate the trouble. As there was a transformer on the Toombul line in close proximity to the receiver, this likely source was first tackled. A few minutes after midnight, Mr. Harris shut off the power on this line, while our man was stationed at his receiver to note whether or not the induction was still present.

The loud hum continued to make its presence heard, however, and so on the following night at the same hour, transformers on the Hamilton, Kedron and Windsor lines were switched off for a brief period while tests were made with the receiver at Eagle Junction.

Still the mystery remained unsolved. It now looked as though the trouble lay in some outside source. It was finally decided to try another transformer on the Enoggera line, but on account of its remote locate (about two miles air-line from the receiver) much hopes were not held out for success in this direction.

Strange to say, this most unlikely source proved to be the cause of the interference. As the Enoggera line was switched off, the loud induction roar entirely disappeared, and peace and quietness reigned.

The trouble was located not actually in the transformer, but in a faulty lightning arrestor. Mr. Harris states that the hum could be detected by the naked ear some twenty feet away from the pole.

Naturally, people in the district who knew of these tests were very pleased that the trouble had been traced, and much credit is due to Mr. Harris for his untiring efforts which, by the way, were carried out quite unofficially and simply with the welfare of his fellow-listeners at heart.

The manager of the department (Mr. A. Faulkner) expressed his pleasure at the success of the tests, "for," he stated, "had the leakage continued much longer, serious damage would have resulted to the whole transformer."

We suggested that it would not be a bad idea if a receiving set were driven through the suburbs after broadcasting hours, at regular intervals, when such leakages could be quickly detected and traced. Such a scheme would save the department considerable expense in repairing burnt-out transformers, while the scheme would benefit metropolitan listeners greatly, obviating as it will, risk of interference from leaking mains.

HENLEY Winding Wires

SCC, DCC, SSC, DSC.
Enamelled, Enamelled SCC.

WHITE & GREEN.

In 4oz., 8oz., 1lb., and larger reels. No. 6 to No. 47

Special Flexible For Radio Work

HENLY WIRING SYSTEM FOR HOUSE
WIRING.

THE HENLEY
Wiring System

W. T. Henley's Telegraphic
Works Co. Ltd.

Central: 7044.

59 ELIZABETH ST.

XMAS DISCOUNT 20%

You can buy from us at Wholesale Rates—thus saving Dealer's profit

The very Latest in Wireless



Our extensive experience in Wireless has enabled us to keep ahead with all improvements. The every latest is the

"Astor" 5-Valve Neutrodyne Set

for which we have been appointed Sole Agents for Queensland. The operation of the Astor Set is simplicity itself. Turn the dials to the corresponding numbers on the log card and adjust small knob at extreme right for volume.



So simple the whole family can operate it without fear of disturbing the adjustments. An Astor Log Card is supplied with every Astor Receiver. It clearly shows the positions of "A" class stations.

It will completely shut out 4QG or any other station at will, and bring in any other Australian station as desired.

PRICE: £26—less 20%

Accessories: £11/17/10—less 20%

Large Ethovox Speaker: £5/15/—less 20%

"BURNDEPT" 2-Valve Duplex Set, £7 complete except loud speaker. (Less 20%).

"AMERICAN" 3-Valve Set, £13/10/ complete including loud speaker. (Less 20%).

"BURNDEPT" 7-Valve Set—no earth or outside aerial required, £125 complete with everything. (Less 20%).

Also 1 only of the same—a showroom sample—£62/10/ complete nett. .Would make a magnificent gift.

Our name is a guarantee of quality

Every Set carries our written guarantee—this means pounds to you.

Queensland Pastoral Supplies Ltd.

BOWEN STREET (off Ann Street, between Fire Brigade and Ambulance), BRISBANE

Phones (4 lines): 5410.

Important Announcement

4QG Programmes for the New Year to be Entirely Revised

Some very far reaching arrangements are at present being made at Station 4QG in connection with the presentation of radio programmes during the first half of the coming year. It is understood that an enlarged service will be given and that an endeavour will be made to attempt to present programmes the nightly features of which vary considerably.

Commencing from Monday, 2nd January, there will be a morning session from 10.30 a.m. to 11.30 a.m.—Mondays to Fridays. This session will be specially arranged for womenfolk and will be composed of matters of interest to them. A news service will be given, a certain amount of music will be included, and each day there will be a short lecture upon some matter of feminine interest.

In the past quite a number of talks of interest to the ladies have been given during the early evening sessions but unfortunately these have been broadcast at a time when most women are busily engaged in attending to the duties of the home. In future it is hoped to give the housekeeper some items of considerable interest.

In the selection of the night programmes an attempt is to be made to have something different each night. This does not mean that during the six months there will be no two programmes alike, but that no two similar types of programmes will be broadcast on consecutive nights.

The Director of the station in reviewing the matter with a representative of this paper a few days ago said that it was the aim of the station to persuade listeners to make a rational choice of the programmes to which they desired to listen. This aim would be furthered by providing quite definite and distinctive types. For instance during the first week in January there will be a popular night, a classical night, a radio stunt, a choral night, and a dance night. This arrangement will give a good variety to the whole week's programmes and will probably result in all types of listeners being catered for during the course of seven days.

Quite a number of requests have been made to the station Mr. Robinson added for the broadcasting of more jazz music. These are being given close attention and it has been decided to make each Wednesday night a jazz night. The Studio orchestra has built up and a jazz combination has been formed. This new syncopated orchestra will provide jazz numbers during each Wednesday night. During the first part of the evening vocal solos will be interspersed between the dance items but during the latter portion of the night there will be dance music purely and simply. There will of course be certain Wednesday nights when a change will have to be made. If for instance Anzac Day falls upon a Wednesday and a big public Anzac Meeting is being held the jazz will have to stand over. Another night will however be selected for the dance music during the week and the listeners will receive due notice through the columns of the "Broadcast Bulletin".

A very very careful selection of artists has been made. The whole list of already engaged and prospective artists has been combed very carefully and a selection of those whose work is quite up to standard has been made. There is quite a long list of performers of various types and the work during the period will be allocated between these artists. Thus a good deal of variety of appearance is guaranteed. During the six months a number of the most popular features of past programmes will be revised. Many programmes which have drawn forth comment will be repeated. For instance the three Digger plays which were transmitted some time ago will be broadcast during January, February and March. Some of the "Stunt" transmissions which the station carried out during the early part of the present year and which (according to the letters received at the station) proved very popular will be repeated.

Altogether the programmes which have been roughly arranged for the period are such as to please even the most critical listener.

The Udisco Eight

"Udisco" can always be relied upon to produce something better and entirely different, and in the production of the new Udisco Eight, the engineers of United Distributors have lived up to their reputation. The following letter speaks volumes for this new and powerful receiver:—

Brooklands,

Nanango,

7th October, 1927.

The Manager,
United Distributors Ltd.,
Brisbane.

Dear Sir,

The following is a report of the reception on the Model L8 recently purchased from you.

All the main Australian stations came in at full speaker strength, as also do 1YA, 2YA, and 3YA; while 7ZL is very good speaker strength.

JOAK, JOCK, KZRM, and a Spanish station have been received quite clearly on the speaker.

Between 1 and 2 o'clock (midday) 2BL gives wonderful volume on the speaker, and has to be cut down in an ordinary sized room, while 3LO and 2FC gives good speaker strength.

At 5 p.m. the New Zealand Stations come in on the speaker, also 5CL and a number of Victorian Amateurs.

I think the best example of the enormous amplification of the radio frequency valves is that 2BL, 2FC, and 3LO give full loud speaker strength when the speaker is connected to the detector terminals.

There is no need to use an outside aerial for the main stations, two feet of wire is all that is necessary, and the earth can be disconnected without altering the result.

Trusting that this report will be of some interest.

Yours faithfully,

(Sgnd.) F. S. Lord.



Slight Extra Cost but
Big Extra Value

Even if you paid more you could **not** get a better panel than RADION. There's a "whale of a difference" in insulating compounds. The makers of RADION developed this material exclusively for radio and never use it for any other purpose. The radio current is slippery. It travels at tremendous speed and only the best insulation can hold it within the circuit.

There is everything in favor of RADION PANELS—not only their famous insulating values but their easy working qualities and beautiful surface finish. A highly polished surface has a direct advantage in discouraging surface leakage besides being better looking.

Your Dealer has RADION PANELS or can get them for you. But **don't** buy an ordinary panel and afterwards wish you had insisted on RADION.

free!

Our latest catalogue contains sets, speakers, everything of interest to radio listener-in home builders.

INTERNATIONAL RADIO COMPANY, LTD.
200 Castlereagh Street 91-92 Courtney Place
Sydney, N. S. W., Australia Wellington, New Zealand

"It Was The Night Before Xmas"

(By Mrs. Christine Frederick in the "Wireless Age").

To me, radio has a kinship with Christmas. At first I felt rather than understood it, but I realise now what it is. The myth and mysticism of Christmas and the Santa Claus legend have this much in common with radio—they make magic and cheer from something which is only dimly understood. Radio, despite the column upon column of technical description; despite the hundreds of text books which have been written, is still, to the average mind, little short of a miracle; an authentic piece of sheer magic.

And the curious thing is that one doesn't lose this sense of magic after several years of familiarity with radio. This fact came over me in a rather peculiar way a Christmas Eve or two ago. We had laboured all Christmas Eve, until the midnight hour, decorating the tree, and then had rested for ten minutes before retiring. Out of curiosity, I suppose, my husband had fiddled in the radio set, but had come upstairs, leaving the switch on. Only by chance did I come on the landing upstairs and hear sounds from the speaker and realised that the switch had not been thrown.

So, in a kimono, in the dead of Christmas night, I descended the stairs in the dark. There was a moon and a snowfall, and from the big bay window came an eerie, reflected snowlight, which made the newly decorated Christmas tree glitter in all its yet undiscovered glory.

And there, in the middle of the room, was the faint glow of the radio bulbs, with the loud-speaker emitting indistinct sounds, which, to my heightened imagination, were sounds from no human source, but from the Wise Men of the East, or from Joseph and Mary, or from Santa Claus. It was a "spooky" experience, but a perfectly logical impression and feeling, under the circumstances. It fixed in my mind a certain attitude to radio, which, call it womanish superstition, if you like, nevertheless probably reaches down to that mystical self, which even the most irreligious of us sometimes discover in ourselves.

Children, who are closer to myth and magic, feel it very definitely. The wonderful things which "come out of the air" are decidedly akin to Santa Claus, who emerges out of the far North over house-tops, riding also on the air, in a reindeer sleigh, and comes down into the house through the chimney. To the child, self, and to a certain primitive part of adult-self, the Santa Claus myth is no more magical, if not less, than radio. We adults accept it, quite in the same faith in a concrete proved reality, as does the child, who is told Santa Claus came down the chimney. Seeing or hearing is believing; and we adults who have no technical knowledge, accept the voices coming out of radio as uncritically as the child who sees a Christmass tree and toys arrived overnight, believes that Santa was here.

A Wonderful Idea for a Christmas Party.

A "Radio Christmas" is a perfectly harmonious combination; twin makers of joy in the home, in fact.

How delightfully they go together is illustrated by a little Christmas radio stunt which we pulled off last Christmas. At the very tip of the tree, we placed a large coloured chromo of Santa Claus and just beside it a small loud speaker horn. Then we ran concealed wires down from this horn to the radio set, placed in another room. I won't give the technical directions here, because I'm no radio expert, but any radio handy man can tell how to do it. Connect your telephone so that you can amplify your own voice through the loud speaker of your own radio set. The speaker is in another room and can make his voice come out, amplified, from the loud speaker on the top of the Christmas tree.

You can imagine what wild excitement there was among the children, when on Christmas morning, Santa Claus appeared to be speaking to the children from the top of the tree. The things he knew about the children as he called them all by name, left them aghast. That loud speaker became the most vivid part of our Christmas, for we not only used it to beguile the children, but to mystify our guests, and to add fun to our annual Christmas party.

I recommend to everyone with a three-tube or larger set who have children in the home, that they add this to their Christmas bag of tricks, for it is certainly a thriller, and it can be made to provide no end of surprises. I know of one family who made up an image of Santa Claus and put the loud speaker in its mouth; another dressed and fitted up a Santa Claus dummy, life size. This might be a good idea for a Sunday School Christmas party.

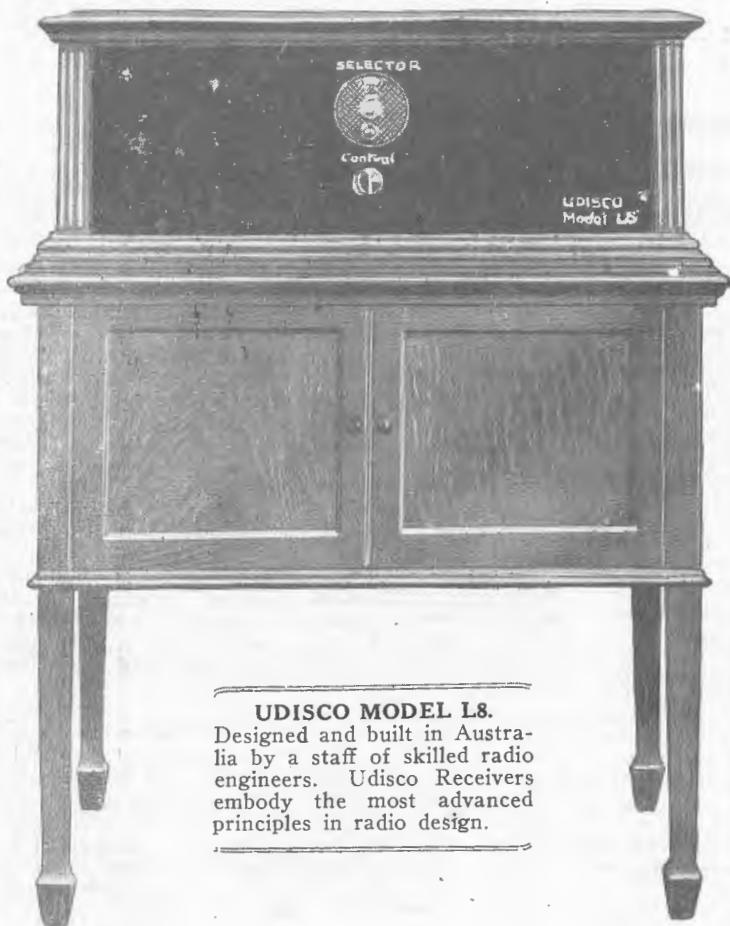
If you agree with me that radio is enchantingly intertwined with the Christmas spirit, you can carry this out to a slight extent even on your Christmas table.

If you are a rabid radio fan you might, to carry out the idea of a radio Christmas, seat at the table with you a life-sized stuffed dummy of Santa, rigged up with the loud-speaker scheme above mentioned, and have him conduct a conversation; someone in another room doing the "broadcasting."

There is an infinite variety of opportunity to have fun with radio, and at Christmas time there is more than ever.

3LO BALLARAT.

3L Melbourne has been on the air from Ballarat so much lately that the folk of the City Beautiful appear to think that they have a special claim to Australia's big station. In fact the popular conductor of the Ballarat community sining (Mr. Bert Humphries) recently announced "3LO Ballarat broadcasting from the City Hall, etc." This resulted in many anxious enquiries at the studio of 3LO as to whether it was moved permanently to Ballarat.



UDISCO MODEL L8.
Designed and built in Australia by a staff of skilled radio engineers. Udisco Receivers embody the most advanced principles in radio design.

— And Now —
**THE
UDISCO
EIGHT**

"The Rolls-Royce of Radio."

Udisco has startled the radio fraternity of Australia with the introduction of the new Model L8—"The Straight Eight of Radiodom."

Eight valves are here employed to yield hitherto unheard of results in tone, selectivity and volume.

One-dial tuning makes tuning exceedingly simple. Special circuit design and arrangement gives results that baffle the imagination.

To those who seek the Perfect Receiver this set makes a powerful appeal.

IT'S A UDISCO! Need more be said?

**TUNES IN EVERYTHING
ANYWHERE—ANY TIME.**

All Australian Stations at Full Loud Speaker Strength on Two Feet of Aerial!

The UDISCO EIGHT embodies four stages of tuned radio, neutralised and stabilised. This means terrific volume from distant stations on outdoor aerials, and conversely, good volume from very short indoor aerials. Including the Detector Circuit, there are five tuned circuits under one tuning control, yielding great selectivity with no loss of simplicity. Three stages of Bremer Tully Audio gives very pure tone. Radio and audio stages are arranged so that maximum distance separates the stages carrying the same type of current.

Set complete with Walnut Stained Cabinet and all equipment **£84**

Although a power valve is employed in the last stage, the total battery consumption for all 8 valves is only .5 amp.—or less than that consumed by most **three valve receivers!!** Current can be supplied either by dry cells or 6-volt accumulator without change of equipment or loss of efficiency.

No Receiver Could Be Simpler to Handle. No other Receiver can Deliver Such Astounding Results.

Set and Valves only **£57/10/**

UNITED DISTRIBUTORS LIMITED

343 QUEEN STREET, BRISBANE.

And at all States and New Zealand.



It Has Come At Last

TAB

THE RE-CHARGEABLE DRY CELL.

For many years science has endeavoured to evolve a Dry Cell Battery which could be re-charged from time to time instead of the hitherto wasteful method of discarding after the first charge.

The Rechargeable Dry Cell has now been perfected and is being used all over the world with marked success.

A little higher in first cost, but the huge saving represented in longer life makes TAB Batteries a wonderful proposition. Read the following laboratory reports:—

Can be Recharged up to Eight Times!

LABORATORY REPORT "A" TYPE

This TAB Battery was put on discharge at a rate of one ampere and discharged until the voltage showed .75 volts. It was then re-charged repeatedly with the following results:—

1st Discharge	.....	16.5 hours
2nd Discharge	.....	20 hours
3rd Discharge	.....	18 hours
4th Discharge	.....	19.5 hours
5th Discharge	.....	17.5 hours
6th Discharge	.....	15.5 hours
7th Discharge	.....	14 hours
8th Discharge	.....	12 hours
9th Discharge	.....	Erratic

Total discharge at 1 ampere rate, 133 hours.

The rate of discharge was four times as great as that which could be reasonably expected from a dry cell, and further, the discharges were continuous, no time being allowed for the battery to recover, as is the case in actual practice. The TAB Battery should function for from 400 to 500 hours in actual use, which is equivalent to approximately three months' running. Each discharge is about equivalent to that obtained from the usual dry cell of similar size, and yet this discharge was repeated eight times.

LABORATORY REPORT "B" TYPE

Two TAB Batteries were placed on continuous discharge at rate of 10 and 20 milliamperes respectively and were recharged according to the instructions when the voltage of the Batteries fell to 32 volts. The following table shows the length of each discharge before the batteries became unserviceable.

Discharge	Hours at 10 M.A.	Hours at 20 M.A.
1st	76.5	51.5
2nd	71	44
3rd	66	56.5
4th	79.5	79.5
5th	73	63
6th	49	24
7th	56	18
8th	43	15
9th	Erratic	Erratic

Total hours' discharge 514 351.5

It should be observed that no rest periods were allowed for the battery to recover naturally. Each of the first five discharges were approximately similar to those obtained from ordinary dry cell batteries of similar size.

Eighteen Months to Two Years' Service

Under average conditions TAB Batteries will give at least eighteen months of useful service. As the average dry cell lasts only three or four months, the ultimate cost of TAB Batteries is only ONE THIRD the cost of other batteries.

TAB Re-chargeable Batteries are not an experiment. They are an achievement, and wise Radio Fans everywhere are saving pounds every year by using them. Decide NOW to quit buying dry cells of the old, wasteful type. Use TAB's and save your money.

**TAB 1½ Volt
"A" DRY CELL 5/4**

**TAB 45 Volt
"B" DRY CELL 35/4**

Recharges 2/6 Each

Distributors for Queensland:

UNITED DISTRIBUTORS LIMITED

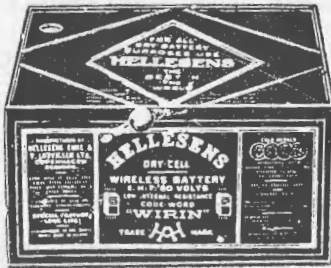
343 QUEEN STREET, BRISBANE.

And at all States and New-Zealand.

HELLESENS

The Super

DRY CELL



The Battery that RECUPERATES when idle!

The world's oldest battery company introduces the century's latest dry cell improvement—the wonderful

No. 7 Recuperating Agent

This exclusive feature is to be found in no other dry cell. It ensures longer life and full value for every penny spent.

See for yourself how superior the New HELLESENS are. Connect one up to your set and take regular voltmeter readings. You'll be surprised.

PRICES

Standard Capacity—	
45V.	14/-
60V.	18/6
Triple Capacity—	
45V.	21/-
60V.	27/6

At All Good Radio Dealers

or 'Direct from—

BRISBANE ELECTRICAL CO.

(T. Tonks)

ELIZABETH STREET (Next to 4QG),
BRISBANE.

A NEW VALVE

NEW DETECTOR AND VOLTAGE AMPLIFIER RADIOTRON.

Because of the widespread interest of amateurs in resistance coupling, a high mu tube, especially designed with a view of providing high amplification and suitable as a detector as well as an amplifier, now announced by the Radio Corporation of America. This is the UX-240 Radiotron, which in general appearance and physical dimensions is similar to the well known UX-201A Radiotron.

The UX-240 Radiotron is a storage battery tube, with a one-quarter ampere, long-life filament of the thoriated tungsten type. A standard UX base is provided. This tube is intended to provide the highest practicable voltage amplification so essential in resistance-coupled amplifiers. This method of amplification, in contrast with the transformer-coupled method, depends entirely upon the tube for the step-up effect. In transformer coupling, on the other hand, the step-up effect is brought about by the transformer ratio as well as the tube. Therefore Radiotron UX-240 has been designed to provide an amplification factor of 30.

The overall amplification of one stage of resistance coupling, employing the UX-240, is substantially equivalent to the average stage of transformer coupling employing the UX-201A. This is contrary to general belief, which holds the resistance-coupled circuits give such poor amplification that an additional stage or two are necessary to produce satisfactory volume. When a general purpose tube of moderate amplification is employed, this is admittedly the case. It may be the case when tubes of a lower mu than 30 are employed. But with Radiotron UX-240 in the detector stage as in the first stage, there is adequate output to operate a power amplifier at full volume.

With the exceptional amplification factor (high mu) of the UX-240, it becomes possible for amateurs to reduce resistance-coupled amplification to two stages, namely, the first stage with this tube following the detector employing the same type tube; and the second stage with a power amplifier Radiotron. The cost of the condenser plate coupling resistor and the grid leak employed in each resistance-coupled stage is only a fraction of the cost of the usual transformer.

Resistance-coupled circuits have heretofore been limited in popularity because of the high "B" battery drain. This was true when the general purposes type tube was misapplied to resistance-coupled circuits which call for a high mu tube. The "B" or plate current drawn by the UX-240, however, is about one-tenth that drawn by the average general purpose tube employed for the same purpose, even when operating at "B" voltages of 135 to 180, which are essential for proper results with resistance-coupling.

The characteristics of the UX-240 Radiotron are as follows:—

Filament Voltage	5.0 volts
Filament Current .....	.25 amps.
Maximum Plate Voltage	180
Recommended "B" Voltage	135-180 volts
Plate Resistance	150,000 ohms.
Voltage Amplification Factor (mu) ..	30
Plate Current at Rated Voltages ....	.2 milliamps.

Data supplied by the agents: Amalgamated Wireless (Australasia) Ltd., King House, Queen Street, Brisbane.

Caught by Capacity

(By "Flexmore.")

"Sh'! Now, you come right on up under me, and 'ang on tight while I rest on yer shoulder and open the winder. Then slide down and stay right 'ere and listen fer trouble, while I collar the Oscar. If you 'ear anything, come right up and tell me. We'll get away round that back road and pick 'Bluey' about a mile further down. 'E's to be there with 'is car in about 'arf-an-'our. Now, give us a leg up."

Bill grabbed the white aerial pole that towered up into the sky and, assisted by 'Arry, began to shin up the pole, followed by the younger man, who, as soon as they reached the level of the upper window, clung tightly to the pole, while the older man, with one foot on the lower man's shoulder, leant across to the window, and inserted a short steel jemmy under the window and gave a short, sharp jerk.

"Struth!—not even locked."

The window quietly lifted an inch or so, to be easily pushed further open on its silent counter weights.

Grasping the frame firmly, the older man swung across and, clinging like a limpet, pulled himself up, and disappeared inside. He appeared to have some difficulty with the blind before he got through, but the nervous 'Arry had slid to earth, again to rub his sore shoulder and look out for trouble.

Then followed a period of uncanny quiet, the dark night lending an extra brilliance to the twinkling street lights of the city as the watcher traced the various suburbs he looked down upon, giving particular attention to the last few lights that marked the edge of the settlement upon the further rise, as if expecting some gigantic searchlight to suddenly burst out from that quarter and expose his nefarious doings. The burgling of the wealthy Sharton's home was more in the line of the experienced Bill than 'Arry, whose methods leaned more to card-sharpping.

The night breeze had a tinge of cold in it that did not add to the craven's comfort, and he shivered half in fear and half with cold as a gust blew round the corner and nearly whipped his hat off.

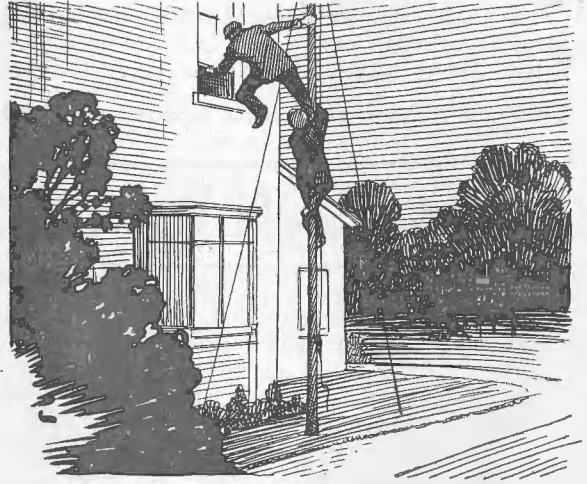
That safe must have been tougher than Bill thought—what a time he was—playing cards was more comfortable than this—how much longer was he going to be—no more of this business; too cold and miserable. God! what was that? Darn those lizards scuttling about in the night. He'd call him. No, better not—

And then a sound. 'Arry shot up on his feet as if suddenly stung, his heart quaking, his gun shaking nervously in his trembling hand. Then, from above came a soft voice.

"Everything orlright?"

'Arry gave a gasp of delight. "Right-o, Bill."

"Loosen that rope end, so I can pull it up 'ere and let down me bag."



'Arry sprang to the cleat on the pole, and loosened out the aerial halyard which his partner pulled up, and again lowered, tied to the end of which was his brief bag, weighty and promising.

A moment later and at command 'Arry again shinned up the pole to assist Bill to descend, a manoeuvre they quickly and successfully carried out.

"Any good?" 'Arry's cupidity, now that the dangerous part of the task seemed over, was rapidly replacing his fear.

Bill smiled quietly to himself as he replied: "'Ardly worth the trouble. I got fifty quid out of the safe and a little string of pearls that might fetch a few bob, but I took 'arf-a-dozen bottles o' 'is best whisky just to get square. Yore cut'll be about thirty quid, 'Arry."

The young fellow's eyes blazed unseen in the dark as he cried:

"Thirty quid! You come acrost with 'arf wot yer got, like yer promised to. If I 'adn't got 'Snowy' to put yer wise to this you'd a been starving in another couple o' weeks. Think I'm goin' to let yet get away with that?"

"So 'elp me, 'Arry, that's all I got. Any'ow, let's get out of 'ere," and away he went towards the back road at the far end of the property, the young man following him in a vicious mood, ready to demand a reckoning at the earliest convenient moment.

They walked swiftly and quietly, the faint crunching of the leaves and the cracking of an occasional twig underfoot marking their progress through the knee-high undergrowth that was springing up again since the property was first cleared.

They had covered half the distance to the fence, when, from the direction they were taking, came the cries of men, the barking of dogs, and faint sounds of some big body moving on the roads.

Revolutionised Broadcasting in Great Britain

WITH the introduction of ELECTRON WIRE into Great Britain broadcasting entered into a new era. It brought wireless within the reach of everybody. Its simplicity and inexpensiveness enabled everybody, young and old, rich and poor, to erect an aerial in a few minutes. ELECTRON WIRE can be used without masts, insulators, and separate lead-in wires.

That is why wireless in Great Britain has gained such immense popularity and ranks amongst the best.



ELECTRON WIRE is the quality aerial—the highest possible quality. It brings envied results, and is the best and cheapest aerial in the world. Multitudes of wireless enthusiasts use it in every corner of the globe. **TRY IT**—then you will know why it is so popular.



Price
2/6
Coil of 100 feet



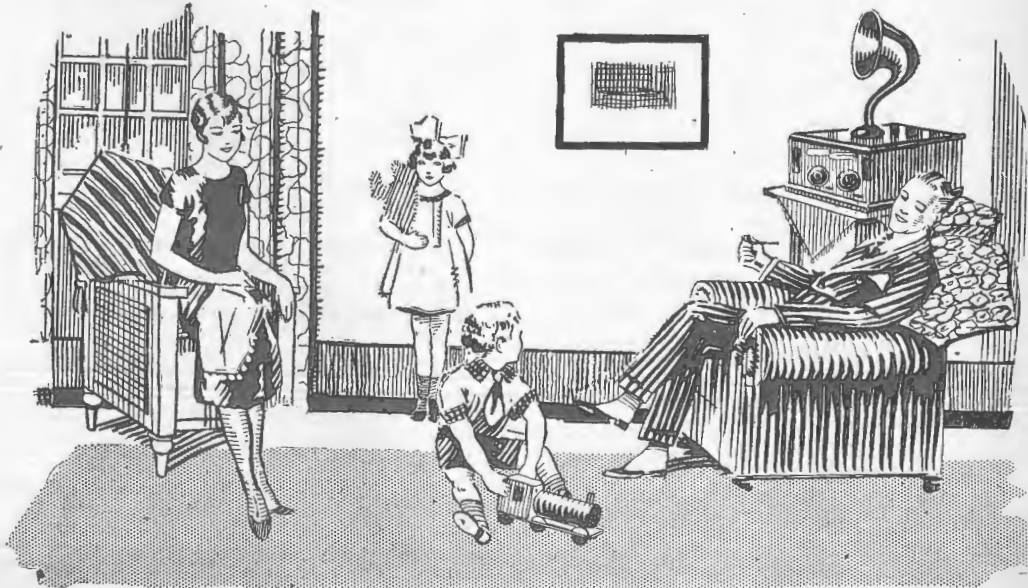
SUPERIAL—the King of Aerials—is an enormous advance on any aerials previously offered. The extra-heavy vulcanised rubbered insulation is a perfect protection against leakage. For long-distance reception we definitely claim that



SUPERIAL is absolutely superior to all. **SUPERIAL** is trouble proof, inexpensive, and can be erected by anyone, anywhere.

Sole Distributors for Queensland:

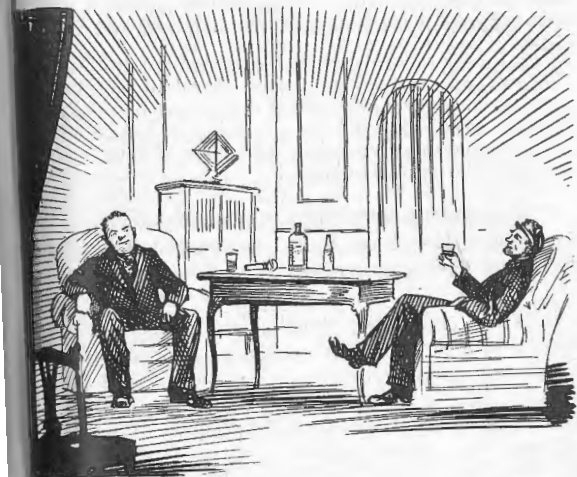
CANADA CYCLE & MOTOR AGENCY, LTD.
CORNER CREEK and ADELAIDE STREETS, BRISBANE.



"Blast it! They're bringing in sheep to the sale-yards. Quick, 'Arry! Back to the 'ouse and we'll doggo till they're gone. Wot a nuisance."

Like hares the two men doubled back, and were soon under the window again, there to await the slow passing of the sheep and their shepherds. The wind was colder than ever, and after a period of silence Bill proposed: "Let's go inside and wait in comfort. The 'board's full of whisky, and we'll be better there for 'arf-an-'our than out 'ere. Come on, up after me!" And after planting the bag in a bush, he shinned up the pole again, followed by the now thoroughly frightened 'Arry.

The interior of the Shaxston home betrayed every comfort that money could buy, and the carefully held light from Bill's torch disclosed a little den off the drawing-room that was the acme of comfort and rest.



Soon the pair were ensconced in easy chairs at each end of a small table, a bottle of the best occupying the pride of place, flanked by two exquisite cut glass gobblers and busily gassing sodawater bottles.

Now that the successful ending of their adventure seemed near, Bill was less keyed up to the possibilities of danger and was ready and willing to enjoy himself.

The two began to converse in quiet tones of the serious pals they knew, 'Arry reserving his arguments until he was in a safer position to lend weight to his opinions, and as the mellowing effect of the whisky began to tell, the older man began to carefully search the room with well-guarded light for anything else that might safely be stolen.

Some beautiful paintings caught 'Arry's eye, but the trouble of getting rid of them precluded their theft. They searched about Bill came upon a beautiful mahogany cabinet on top of which was a small loop of wire.

"One o' them bloomin' wirelesses!" he exclaimed. "Would yer like a little Madam Melba or some grand

His tones were distinctly facetious as he swung back the doors, exposing beautifully grained dials and a switch marked "on" and "off." Carelessly Bill pressed the switch to "on" and immediately a clear voice announced: "Mr. Harold Moulten will now sing 'The Prisoner's Song.'"

Bill snapped back the switch, his face grey as he turned to 'Arry: "Strike me! I don't like that, 'Arry. Let's get out o' 'ere. 'Ow's them sheep now?"

'Arry, again in abject fear at the uncanny happening, made across to the window, and after carefully listening came back with the information.

"They're right down past the front. If we circle back of the 'ouse and come round to where 'Blue' is, from the other way, we ought to get clear of them orlright."

Quickly the men removed traces of the raid on the refreshments they had made, and were soon again in the open, skirting wide towards the corner of the grounds farthest from the unwelcome shepherds. They walked swiftly as soon as they got on to the scrub-fringed road that led to the spot where "Blue"—the car driver partner in many such an undertaking—was waiting, and before long, there came in sight one small light that betokened the waiting automobile.

As they came upon it Bill flashed his torch, surprised that no greeting came from the trusty "Blue," but to their surprise the car was empty, although examination proved that it was without doubt "Blue's" car.

"Must 'ave gone along the road to look for us," surmised Bill to the again thoroughly alarmed 'Arry. "'E'll be back soon. We're about an hour late, yer know, over them darned sheep. Just sit quiet and you'll be orlright."

The whisky was working now, and they settled themselves back in the comfortable cushions of the back seat to rest, the bag at Bill's feet, and as they waited Bill heard sounds as of some movement in the bush, but there were so many noises made by the natural inhabitants of the place that he took no especial notice.

Suddenly, without warning, he felt something cold and hard pressed into the back of his ear, and a quiet voice with an Irish burr say: "Don't move or I'll have to wing you. Hop in, Pat, and get their guns."

A great oath escaped the trapped burglar, and his involuntary leap was checked as a firm hand on his collar pulled him abruptly back into the seat again. Before further action could be taken a burly detective had leapt into the car, and had Bill's revolver from his pocket almost before the surprise of the attack had left him.

Out of the bush came two more police, and at a whistle from one of them the sounds of a car engine preceded the arrival of another car, in which was seated the unfortunate "Blue" under police escort.

"What's in the bag, Mullen?" queried the sergeant.

By the headlights of the car the bag was opened, and as the articles were disclosed, Mullen enumerated them.

"Little string of pearls, diamond ring, cigarette case set in diamonds, jewelled bracelet, pocket book with—whew!—four one-hunder pound notes in it, another diamond ring, a gold chain, and six bottles of whisky. A nice night's work alright."

'Arry, handcuffed in the back of "Blue's" car, spat out at his partner:—

"Thirty quid! Thirty quid!! Wait till I get you later on!"

"The prompt work of the police deserves special praise in so speedily going to the protection of Mr. Shaxston's property," said His Honour, as the court proceedings came to a close, Bill having been declared an habitual criminal, and 'Arry fetching three years. "But we would be interested to know just how this alarm works, that made it possible for Marshall (Mr. Shaxston's caretaker, living over a mile away from the premises) to ring up the police apparently at the very time that this man was robbing the safe of its contents, although, we are informed, no usual burglar alarm is to be found, and the only direct communication between the two houses is by telephone."

"Certainly, your Honour. Mr. Shaxston is here and will no doubt clear all our minds on the matter."

As the learned counsel sat down, Shaxston, middle-aged, prosperous, and evidently a man of considerable culture, rose from his seat at the Bar table and, addressing the Judge, explained:

"Your Honour may be aware that I have, for some years, taken a very keen interest in the progress of wireless telegraphy and telephony and, besides the usual appurtenances of broadcast reception I have a very well equipped laboratory where I pursue my studies and experiments into the various new phenomena that are from time to time cropping up. Probably your Honour is aware (I believe your son is also keenly interested, your Honour?)—the Judge nodded and smiled—that if a circuit used for tuning a wireless transmitter or receiver contains, as it must, inductance and capacity, the slightest alteration of value in either inductance or capacity will result in the detuning of that circuit. Inductance, your Honour, is the main property of the tuning coils we employ in a wireless set, and capacity is provided by condensers." The Judge again nodded. "With these facts in view, it appealed to me that I could better protect my property with some form of wireless alarm, than the usual electric burglar alarm that thieves understand, and can usually find that put out of action before any warning is given, thus leaving them to their work in peace.

"It is fairly obvious that the first place a thief will make for is the safe—if there is one in a house—and I have been at considerable trouble to make the presence of one in my house—known to all and sundry—with the very idea that if at any time I was unlucky enough to be visited by robbers, the first place they would make for would be the safe, and this would permit me to instal an alarm that would give immediate warning of their depredations early enough to help capture them.

"In my laboratory I have a very sensitive low-powered transmitting set which operate entirely from the house lighting main through transformers, which light the filaments of the valves and supply high ten-

sion plate current should a relay switch could them close.

"Included in the tuning system is a coil of wire wound round the outside of the safe and built into the wall out of sight. I have so arranged it that the transmitter valves are always lit in my absence, as are the valves in a small regenerative receiving set connected to a similar coil. Should any person come within a foot of the safe door, the capacity of their body detunes the receiver, throwing it into oscillation; this closes the relay which supplies the plate power to the transmitter, and by means of what is known as wired wireless, impulses are directed to Marshall's house by means of the telephone wires, which ring an alarm bell.

"Should any unforeseen accident set the receiver into oscillation when nobody is at the safe and start the transmitter operating, the alarm system is so sharply tuned that the lack of body capacity will cause the transmitter to oscillate at a slightly lower frequency than Marshall's alarm, and the bell will not ring.

"As soon as this robber approached my safe, the devices worked perfectly, and Marshall, acting under instructions, promptly called the police. While these fellows were delayed by the passing of a mob of sheep the house was surrounded, and after finding the waiting car, the rest was easy."

"Remarkably interesting, and a compliment to your ingenuity, Mr. Shaxston," commented His Honour. "We will have a better and a safer community year by year as experiments such as these lead to perfected protective and utility devices, and there is no doubt that, but for your wireless talent, you would be the loser now, and these dangerous men would have escaped with the results of their plundering. Thank you, Mr. Shaxston, for your explanation. Please, now, declare the court closed."

And 'Arry, whose good conduct saved him six months of his term in gaol, now sports a crystal set, and to his ignorant but inquisitive friends of the underworld, he invariably explains, waving one hand grandly in the air: "Science versus Science! You've got ter keep hup with the times, yer know!"



A CROSS in this square denotes that your subscription expires with this issue

Subscription 6/6 Year

A Portable Awheel

(By Leo J. Feenaghty, oa-4LJ.)

As it is nearing Christmas, and as many readers will probably be making the momentous decision "where to go for the holidays," this article may be of assistance. My recommendation for the radio enthusiast is to take the car, the set, and himself to the South of Queensland, and the North of New South Wales.

This is a trip I did recently, and I took with me a portable oa-4LJ "complete with all unnecessary." The gear consisted of a transmitter in a petrol case, a receiver above it, and the necessary rectifier and filtering unit.

Leaving Brisbane about 8.30 a.m. an easy stage of 70 miles brought us to Palm Beach, between Burleigh and Currumbin, where the first night was spent. There was no power here, so listening only was possible. The road to the border is so well known by most that comment upon it is almost unnecessary. It is in very good order, with the exception of a few miles and the trip to Coolangatta (one of Queensland's premier watering places) can be done comfortably in 24 hours.

The next morning we set out for Byron Bay, a further 70 miles, and en route witnessed some of the finest scenery it has been our privilege to see. After leaving the twin towns of Coolangatta and Tweed Heads, the Tweed River is crossed twice by power-driven ferries, whose principal attraction to visitors is the fact that they are free. The first ferry, just outside Tweed, is named Boyd's, while to proceed to the next, at Chinderah, about four miles beyond, a small spur is crossed, from the top of which a splendid panoramic view of the Lakes and the Tweed Valley is obtained. There is an alternate route which climbs higher and leads out to a ferry much further along the Murwillumbah road. This road is very steep in places and has many hairpin bends, but from the top a most magnificent view of the lakes, river, ocean and countryside is obtained. This route was not taken on this occasion owing to its being badly cut up.

The roads from the Chinderah ferry to Murwillumbah, with the exception of the first few miles, is perfect, being a flat grade of bituminous macadam, well maintained. This road skirts the beautiful Tweed River and the palms on Palm Island are indeed well worth viewing. Murwillumbah is reached and finishes the good road. The town is built on both sides of the river and possesses a fine bridge. The closing down of the mills after the crushing caused the streets to be crowded and the town appeared a very busy one.

Almost as soon as Murwillumbah is left astern we are confronted with the question—are the creeks flooded? If they are, go left and up. If not, go right and down. However, deciding to go right was right, and only one shallow ford had to be negotiated. The twenty-five odd miles from Murwillumbah to Mullumbimby is 90 per cent climb, and the grades over the Burringbar Range are steep and narrow. A little care and vigorous application of the finger to

the horn button at each corner, however, brought us to the top in safety. The views on the way are typically Australian mountain views and numerous small hamlets nestling snugly among the hills are passed. The down grade into Mullum (to which the larger word Mullumbimby is contracted) is steeper and straighter than the one on the Tweed side.

Mullum, on the Brunswick River, is a prettily situated township, but petrol cost 2/4½ a gallon, so let's away!

Byron Bay!—What a glorious sight when approached from the mountains to its north. The huge bay; the dazzling white, lofty, lighthouse; the town—everything. Later we made a trip to the Lighthouse up a precipitous narrow mountain track. This can be negotiated in top gear however, until one reaches the gate. This means stopping and "finish top gear." The sight which bursts on one as the last steep pinch is topped is beyond description, but if one tries to realise that this is Australia's most easterly point and that the whole coastline for miles north and south stretches before one's gaze, some slight idea of the grandeur of the place may be gained. It is a suitable haven for poets for truly from the scenery they could not help but gain inspiration.

It had been our intention to stop over in the Bay but a trip to Bangalow 10 miles away was taken to see 2RG who lives there. After a long and interesting chat with Reading (the owner) it was too late to return so we decided to stay in Bangalow. A very pretty town, handy to Lismore and the Coast, it gave us shelter for 3 days during which trips were made to Brunswick Heads where river and ocean scenery blend with that of the hills; to Ballina, through Newrybar and Tintenbar—pretty little hill townships. The roads into Ballina were only exceeded in their "bumpiness" by those out of it on the Lismore road. A most remarkable fact was noticed and that was that in Townships and on the plains the roads in general were poor, loose and ravelled, but on the mountains and the villages they were without doubt fine highways.

On the road to Lismore from Ballina, Alstonville was passed, and the first and only stretch of concrete road. Alas, it was only a chain or two long. Lismore was in the throes of Show Week. It is a large place but being situated in the valley it is very close and sultry. It apparently is noted for Heat, Indians, Bad Roads, and Dodge Cars! Everywhere one goes in the Northern Rivers one meets coloured people—Aborigines, Indians, Papuans etc., and the Hindoos adopt the most gaudily coloured turbans. Above a strictly western pattern sac suit the effect is bizarre in the extreme.

Taking an unwilling departure from Bangalow, we returned by a different route to Mullum, and thence and more over the Burringbar. The southerly grades are much steeper than those on the other side and recourse was had to second gear in one or two pinches.

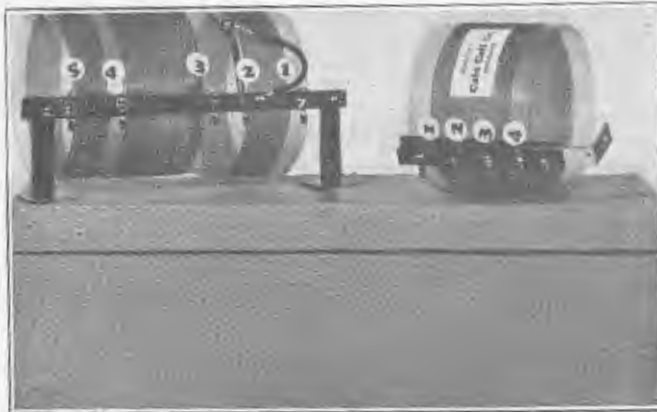
Radio is a FAILURE!

- IF -

The Radio Frequency impulses are maltreated

Many Radio Sets are no good because the radio frequency components are inefficient.

Safeguard the minute impulses by using **COLO COIL KITS.**



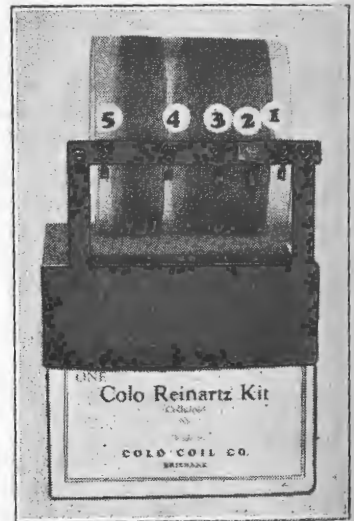
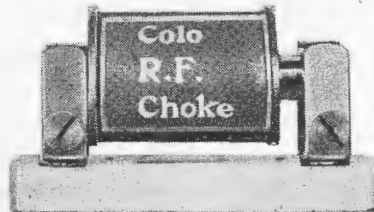
These goods are obtainable from the following leading stockists.

- Radio Supplies Limited
- Thomas Radio Co.
- McWhirters Ltd
- Melton & Co.
- Overells
- Wireless House Ltd.

"COLO" MARCODYNE COIL KIT



COLO Coil Kits



These Kits are so designed so as to give maximum Sensitivity without Loss of Selectivity.

SPECIAL COILS and KITS Made to Order

Once more along the Tweed, this time in a sharp rain storm. A peculiar effect was noticed here. From the top of a hill between Chinderah and Boyd's Ferries the road ahead appeared most precipitous—almost vertical in fact. Upon reaching the foot of the hill however it was found to be perfectly flat!

A trip to Cudgen Headlands and Fingal Caves and Lighthouse together with short tours using Coolangatta as Headquarters completed a most instructive, enjoyable and healthy fortnight.

So those contemplating the trip I would say travel light. Don't do like 99 per cent of New South Wales motorists do—forget you have a horn in your car; travel slowly over the Burringbar, and finally, bring a portable receiver. You can rest assured that the trip will be well worth while. We had intended going further—to Maclean, Ulmarra, Grafton, Coraki and Casino, but circumstances (mostly an attack of "ascen-tophobia" by one of the female passengers) rendered it necessary to curtail the tour. The trip to Casino from Lismore was attempted but the state of the roads (?) was such as to make it anything but enjoyable so we returned.

AMPLION PUBLIC SPEAKER AND BAND REPEATER EQUIPMENT.

Recent installations of the Amplion Public Speech and Band Repeater Equipment include:—Movie Ball, Wattle Park, Melbourne; Luna Park, Melbourne; Palace de Danse, St. Kilda, Melbourne; Palais Royal, Moore Park, Sydney; Red Cross Appeal Ball, s.s. "Kanonna," Sydney; dinner to Mr. Amery, Wentworth Hotel, Sydney; Royal Agricultural Show, Adelaide; Speedway Motor Cycle Races, Brisbane; Speedway Royal Motor Races, Show Grounds, Sydney; Motor Cycle Races, Sports Ground, Sydney; Grand Prix Cycle Races, Show Grounds, Melbourne; Royal Agricultural Show, Melbourne.

In the last four cases mentioned above, Amplion "Senior" Systems, each of which controls 16 power type loud speakers, are used, and so clear are the announcements that they can be heard by everybody on the ground, including competitors and officials in the centre of the ring.

SUSSCRIPTION FORM

"QUEENSLAND RADIO NEWS."

Box 1095N, G.P.O., Brisbane.

Please send me the "Queensland Radio News" for 12 months. I enclose cheque or P.N. for 6/6.

Name

Address



Why not Books ?

You cannot give better or more valued presents than books at Christmas time. Here are a few selections from our vast stock which we cordially invite you to inspect.

The Ancient Mariner, beautifully illustrated in colour by Willy Pogamy, 16/-.

The Forsyte Saga by John Galsworthy, limp leather bound, 15/-; antique leather, 19/-.

Caravan, by John Galsworthy, limp leather bound, 15/-; antique leather, 19/-.

The Complete Opera Book, by Gustave Kobbe, antique leather, 19/-.

Omar Khayyam. We have several editions of this famous book—all are tastefully bound in leather, and are illustrated. Prices from 4/6 to 18/6.

Westward Ho, by Chas. Kingsley, illustrated in colour by E. A. Cox, 14/-.

Howard Pyle's Book of Pirates, a thrilling pageant of buccaneers, 10/-.

These are just a few suitable gift books selected at random. Be sure to make your present a book and you can be sure of our ability to supply it.

A. McLEOD

"Brisbane's Best Bookstore"

107 Elizabeth Street,

BRISBANE.

Phone: Central 7122.



The Mullard Master-Valve with the Wonderful P.M. Filament with English or U.X. Base Remains the Same Price - - - - 13/6

BUT WHILE THE STOCKS LAST

the following previous types will be sold at reduced prices

- HF and LF Bright Filament 2/- each
- D SERIES 6/- each
- DFA SERIES 7/6 each

with English or U.V. Base

CHARACTERISTICS AS PER THIS TABLE.

	2/-	2/-	6/-	6/-	6/-	6/-	6/-
Type	H.F.	L.F.	D06 H.F.	D06 Det.	D06 L.F.	MD06	D3 H.F.
Filament voltage.	3.2—3.8	3.2—3.8	3.0	2.5—3.0	3.0	3.0	1.8—2.0
Filament current, amps.	0.6	0.6	.06	.06	.06	.06	0.3
Anode voltage	30—90	30—90	50—125	20—100	30—100	30—100	50—125
Total emission, m/a.	5	5	8.0	8.0	8.0	8.0	8.0
Impedance, ohms.	90,000	30,000	60,000	17,000	17,000	17,000	60,000
Purpose	Radio, also Resistance Coupling	Audio	Radio, also Resistance Coupling	Detector	Audio	Audio	Radio, also Resistance Coupling
	6/-	6/-	6/-	7/6	7/6	7/6	7/6
Type	D3 Det.	D3 L.F.	MD3	DFA0	DFA1	DFA3	DFA4
Filament voltage.	1.6—2.0	1.8—2.0	1.8—2.0	3.5	5.5	5.5—6.0	5.5
Filament current, amps.	0.3	0.3	0.3	0.35	0.2	.06	0.2
Anode voltage	20—100	30—100	30—100	50—100	50—100	50—100	75—125
Total emission, m/a.	8	8.0	8.0	20.0	25.0	15.0	15.0
Impedance, ohms.	16,000	16,000	16,000	7,000	8,300	13,000	27,000
Purpose	Detector	Audio	Audio	Power Amplifier	Power Amplifier	Audio	Resistance Coupling

Every Valve is guaranteed to function perfectly.

OBTAINABLE FROM EVERY RADIO DEALER IN AUSTRALIA

Also from

A. Beal Pritchett, Aust. (Ltd.), Sydney A. Beal Pritchett, Aust. (Ltd.), Melbourne
 Edgar V. Hudson, Brisbane Wedma Ltd., Adelaide Gibbs, Bright & Co., Perth

A Talk on Circuits

REFLEX CIRCUITS.

Reflex receivers enjoyed considerable popularity two or three years ago owing to their economy in valves, and therefore in upkeep, but there is now not the same demand for this type of receiver, owing to the valves being much cheaper and more economical in current consumption, and also because this type of receiver has a reputation for not giving good quality. This reputation has been deserved, but with our better knowledge of the principals of receiver design, it is now possible to obtain quite good quality from reflexes when certain rules are observed and the correct values of valves are used.

It used to be a common practice to connect the low frequency transformer in the earth or negative return lead, and this was the cause of much of the distortion, but it can be avoided by the use of a circuit similar to the Hartley, which enables the transformer to be connected between negative filament and centre tap of grid coil.

The centre tap of the coil is at a negative high-frequency potential and so no by-pass condenser is necessary across the secondary of the transformer, as would be the case if the transformer was connected in the earth lead or in the negative filament lead when a centre tapped coil is not used. This by-pass condenser seriously affects the characteristics of the transformer, for it has the effect of passing higher notes.

Reflex receivers employing crystal detectors are the most economical, but are apt to be unstable and erratic in behaviour, and a valve detector will generally be found best. Where crystals are used, one of the permanent types will be best and should be connected across half only of the secondary of the high-frequency transformer to reduce damping and thus improve selectivity. The stability of the set is upset everytime the catswhisker of one of the galena type detectors is raised, and it is made very difficult for a novice to operate.

The low-frequency transformer is an important component in this type of receiver, as the results very often depend on the type employed. Where a valve detector is used the transformer may be one of the types to suit the detector valve impedance, but where a crystal is used it had better have a high step-up ratio and one such as the Igranic 5-1 ratio "E" type will be found very suitable.

The reflex valve is best of the low impedance type, as it has to function as a low-frequency amplifier as well as a high-frequency amplifier, and if of the general purpose or high-impedance type it would not be able to handle the signals without distortion.

NEUTRALISED CIRCUITS.

The great obstacle to the designing of a really efficient high-frequency amplifier used to be the tendency which a valve had of falling into self-oscillation

when an efficient form of coupling is employed. In order to obtain stability it was often necessary to wind transformers with very fine wire and even resistance wire and, in the case of the tuned anode coupling, to introduce some other form of loss such as the application of a positive grid voltage to the valve, with the aid of a potentiometer, which had the effect of making grid current flow and thus cause damping.

Under these conditions the amount of amplification which could be obtained from a high-frequency amplifying valve was so small that many authorities declared that the results did not justify the inclusion of such valve or valves.

The principle cause of this self-oscillation was traced to the small condenser which is formed by the grid and anode of the valve and their connecting wires as it will be seen on inspection of a circuit diagram that this condenser is so placed as to be equivalent to the application of a measure of capacity reaction, and the same effects are produced as would be produced by excessive reaction. That is the valve oscillations.

To stop this oscillation by introducing losses was merely avoiding the problem, so the trouble was attacked at the root by a number of engineers, and the principle of neutralising the valve capacity, now generally used, was eventually evolved. This entails the connection of a small condenser in such a way that its effect is equal and opposite to the effect of the condenser formed by the grid and anode.

To obtain an opposite effect it is necessary to connect one plate of the neutralising condenser to a point equal and opposite potential to that on the anode of the valve and the other plate to the grid. The various forms of neutralised circuits now in use are really due to the designers making use of different points which are at opposite potential.

One of the most popular forms of circuit provides a point of equal and opposite potential by adding a coil to the primary of the high-frequency transformer, and which is the same size as the primary and connecting the neutralising condenser to the end. The primary is then really a centre-tapped coil, the centre tapping going to the high tension battery.

The ordinary tuned anode circuit can be neutralised by centre tapping the tuned anode coil, in the same way as the transformer primary in the previous circuit. In all these circuits neutralisation is carried out by adjusting the neutralising condenser until the receiver remains stable over the whole tuning range. This condenser should be of small capacity, as typical example extensively used for the purpose being the "Igranic" Micro Condenser.

When an efficient neutralised circuit is used, it is then possible to greatly improve the efficiency of this receiver by employing really efficient transformers and working the valves under the best possible conditions.

Big Move by 3LO Melbourne

Application for Licenses in South Australia, West Australia and Tasmania

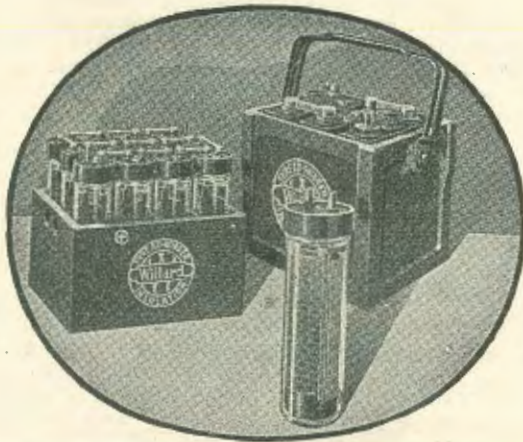
One of the most significant items of to-day's wireless news is the announcement that the Broadcasting Company of Australia is applying for licenses in South Australia, West Australia, and Tasmania.

It is intended to operate these stations, if the licenses are granted, on the same lines and just as efficiency as 3LO Melbourne. It is undoubtedly to the advantage of these States to have stations installed and operated by skilled and successful operators with such experience behind them as have those of 3LO Melbourne.

The applications for licenses, when one comes to consider the matter, are a logical development of the recommendation of the Wireless Commission that 3LO and 2FC should assist

the weaker States with portion of their revenue. It is obvious that to take, say, £10,000 out of the coffers of a successful company like 3LO Melbourne and hand it without conditions or guarantees to a weak and inexperienced in another State would be neither wise nor expedient. To assist in organising a station equal to the task of making wireless popular is praiseworthy, but the grant of money is only one factor in success. 3LO Melbourne has come to the conclusion that it is infinitely better, both for itself and the States in question for it to assume the responsibility of administering its own funds, if it is to be charged with the duty of aiding the weaker brother. Two birds will then be killed with the one stone. The other States will get the help they want, but 3LO Melbourne will not lose by granting it.

*Your Set is no better than
your Batteries !*



Willard "A" and "B" Batteries are the same reliable batteries that are used by Australian broadcasting stations you hear day and night. You'll never know what a difference they make in the performance of any set until you use them.

Save with
WILLARD
RADIO
BATTERIES

Ask at Any Willard Dealers.

MOTOR SUPPLIES LIMITED

PERRY STREET off Boundary Street

BRISBANE

"CHANDLERS" For Everything in RADIO

In building a radio receiver, remember that its performance depends primarily upon two things: An efficient circuit, and the use of good parts. For the latter reason radio enthusiasts have come to know Chandler's for Everything in Radio. Every radio component at Chandlers bears the name of a world famous maker and is recognised as a Standard of Quality. Remember that before you make your next radio purchase.

AMPLION CARBONCELS Give Twelve Months Service on One Charge

Amplion Carboncels will prove a boom to country residents and those who have no facilities for battery charging. They may be recharged at home in a few minutes by simply adding a little sal-ammoniac. Lower maintenance costs makes them far cheaper than ordinary accumulators in the long run.



Number 222 Carboncel, large size. Price £3. Complete with Sal-ammoniac.
Number 229 Carboncel, smaller size. Price £1/12/6. Complete with Sal-ammoniac.

Amplion Carboncels are constructed to an exclusive formula which makes for constant voltage, large output and long life. There are no corrosive acids used—no objectionable fumes. It will give twelve months service on its first charge. Write or call for full particulars of Amplion Carboncels for your set. State size of set you have in use.

Carboncel No. 276 is used for H.T. or plate supply. Voltage 1.45, capacity 10 ampere hours. Complete with Sal-ammoniac. Price 3/-.
Price 3/-.

COST LESS PER RADIO HOUR!



Yale Radio Batteries contain more energy, are built to retain that energy longer, and regenerate their energy almost as fast as it is consumed. They cost less per radio hour! Ask our advice on the correct size for your radio set.

- Yale "B" Batteries, 22½ volt 14/-; 45 volt, 26/-
- Yale Special Heavy Duty "B" Batteries, 45 volt, 35/-
- Yale "C" Batteries 4/-
- Yale Hot Shot Batteries, 6 volt 13/6
- Yale No. 1611 Special Radio "A" Batteries 3/-
- Yale Mono Cells for Torches 10d. each
- Yale Baby Mono Cells for Torches 9d. each



RADIO BATTERIES

Queensland Distributors:

J. B. CHANDLER & CO.

Queensland's Largest Radio Store

45 ADELAIDE ST. [Next Allan & Stark's] BRISBANE

S.A.S.

CHRISTMAS-TIME IS PORTABLE TIME

Away to the seaside—the countryside—the mountainside. Follow the long road behind the wheel of your flivver or head the bows of your boat towards the breezy Bay. Go where you will and enjoy yourself —BUT—don't miss the companionship of your radio set.

A good portable set is a decided acquisition. Wireless House Ltd. now makes the possession of a portable set a very easy matter for you. Just look at these values:—

"AZARKA"

4-VALVE PORTABLE

A well-made and extremely compact Receiver utilising an efficient circuit. Complete with self-contained speaker and battery compartment.

£13/5/0

MINUET

3-VALVE PORTABLE

A very popular instrument selling at a much reduced figure. Fitted with collapsible aerial, battery compartments, etc.

£4/0/0

CROSLEY

3-VALVE PORTABLE

A cheap little job that performs very well. Quite good enough for camp life or anywhere where an expensive set may become damaged.

£2/10/0

R.C.A.

2-VALVE RECEIVER

A small but efficient little job that can be tucked away in a corner of your port. The name R.C.A. guarantees satisfaction.

£2/10/0

Other Sets at Bargain Prices

Two only, 2-Valve Dulcephone Receivers. Great little sets fitted in polished cabinets. Reduced to

£5

One only (sample) 6-Valve Shielded Silver Marshall, The most talked of set in America today. A wonderful job at a ridiculous price.

£20

One only, 4-valve Dulcephone set, shop-soiled, but in perfect order. The parts alone are worth more than the price

£5

One only A.W.A. Crystal Set—an ideal gift for that boy. An elaborate little set selling originally for. The Price is now

17/6

Twelve only, No. 2 Crystal Sets, made by the Brownie Wireless Co., England. Three months ago we sold these sets at 22/6 Xmas Box Price

14/6

NOTE.—All prices mentioned on this page do not include accessories. These may be chosen here as desired at equally keen prices.

A Merry Christmas

We are to read our Journal our Greetings for a happy Christmas

We are full for your during the year look forward to continued during 1928.



FREE!
1928 CADARS

We have prepared some Radio Calendar for 1928, and giving a copy free to each of our country. Customers who reside in or around are advised to call for their calendar, as there is only a limited supply available.

XMAS BOX BARGAINS

Pre-Stocktaking Throw-outs

Utility Triple-Gang Condensers for Solodyne Set, only £3/3/	Walnut Var. Condensers (3 and 5 plate)	2/6
Brandes Table Talkers £1/7/6	Pinacle Var. Cond., .0005... ..	5/
U.X. Sockets (Buffalo)	Trimmed Headphones	15/
Galena N.H.M. Crystals	Dulcephone Headphones	15/
Polar 3-Coil Holders	Ericcson Headphones	15/
U.S.L. Rheostats	Unmounted Coils	1/6
H. & H. Rheostats, 30 ohms. with calibrated dials	Mounted Coils	1/
Phone Plugs (H. & H.	H. & H. Fixed Cond., .00025 2/- and	1/
Phone Plugs (Fillmore)	3-Coil Holder (Polar) 15/ and ..	5/
Readrite Voltmeters	Torch Cases, flat 9d , 1/ and ..	1/6
Crystal Detectors, glass enc.	Torch Cases, round 2/ and ..	2/6

AND MANY OTHER XMAS BARGAINS AT COST AND UNDER.

An Ideal Xmas Gift

If you have a Gramophone in your home, give a "MAGNAPHON" PICK-UP DEVICE, which enables you to play your records through your radio receiver. Wonderful Value at **75/** Complete.

Material for Building "Everybody's Three"

Described in this Issue

1 K.I.N. Three Coil Tuner	1 0 0
1 Engraved Panel, 15 x 7½ x 1/8th	0 13 4
1 Baseboard, 14½ x 7 x ½	0 3 0
1 .0005 Variable Condenser	0 12 6
2 H. & H. (30 ohm and 15 ohm) Rheostats (each 5/3)	0 10 6
1 Yaxley Battery Switch	0 4 6
1 2-inch Dial	0 1 6
1 .00025 Grid Condenser	0 2 3
1 2-Meg. Grid Leak	0 2 3
2 Jefferson 41 Type Transformers (ea. 18/6)	1 17 0
1 B.M.S. D.C. Jack	0 3 0
1 B.M.S. S.C. Jack	0 2 9
3 Buffalo U.X. Sockets (each 1/9)	0 5 3
1 Box Engraved Terminals	0 3 3
1 Bakelite Terminal Strip, 10 x 1 x 1/8th	0 10 0
2 Terminal Strip Supports	0 0 6
1 Dozen Lengths Bus-Bar Wire	0 1 0
2 Lengths Spaghetti	0 0 10
1 Box Assorted Screws	0 3 0



WIRELESS HOUSE LTD.

The Pioneer Radio Supply House
Edward St. BRISBANE



THE PHILIPS POINT-O-SIX

Miniwatt
SERIES



**You need Philips
Valves ~ if TONE
EXTREME ECONOMY
and DISTANCE
mean anything to you.**

When you use these low consumption valves, your accumulator will quickly know the difference, as well as your ears, for—taking but '06 of an amp—they use four times less current than many other makes and types. Scan the list below and cut it out. It will be mighty helpful.

PHILIPS VALVES MEAN BETTER AND CHEAPER RADIO RECEPTION

FOR 1 ACCUMULATOR CELL (2 volts)		FOR 3 ACCUMULATOR CELLS (6 volts)	
General Purpose A209	13/6	General Purpose A609	13/6
Audio B205 (.15 amp)	13/6	Audio and Power B605 (.1 amp)	13/6
Power B203 (.15 amp)	15/-	FOR RESISTANCE COUPLING	
FOR 2 ACCUMULATOR CELLS (4 volts)		Two Volt	A225 15/-
General Purpose A409	13/6	Four Volt	A425 15/-
Audio B406 (.1 amp)	13/6	Six Volt	A630 13/6
Power B403 (.15 amp)	15/-	SPECIAL 4 VOLT DETECTOR "The Four Fifteen" (A415) 20/-	

PHILIPS VALVES



So This Is 3LO!

(By Nora Cooper.)

Away in a back lane in the heart of Melbourne there is an innocent looking building which might be anything from a Jewish Tabernacle to the latest thing in baby clinics. Over the door is a strange device, circular in shape, inscribed with mystic signs, apparently the hieroglyphics of some dead and gone religious faith. Screw your head round and look a little closer, though, and you will be pained to find that they are written in ordinary plain English—not "Excelsior," as you might have supposed, but 3LO.

Through the dark doorway and upstairs to No. 1 Studio, and you find yourself in a soft, warm-toned stillness, the pregnant stillness of which is always associated with the "inside of things."

For this is truly the "inside." Here are born all the broadcasting programmes with which 3LO delight the hearts of Mr. and Mrs. Suburbia and all the little Suburbians, to say nothing of the country folk, and which make the welkin ring, to the probable disgust of the heavenly choirs who have hitherto had the air to themselves.

Here you can see and hear many strange things, and lose perhaps one or two illusions. You may discover that the lady whose touching little ballad moved you to tears the other night when you listened-in, is fat and fifty, with a devastating smile. You may see a nervous violinist bowing and smiling futilely to an invisible audience after his turn, or a plump comedian singing comic songs with an awful fixity of face and gesture, so afraid is he of getting out of the radius of the microphone. You may hear just what a band can do in the way of a recital when there are no tiresome regulations for the restriction of its noise to cramp its enthusiasm. You may see a bedtime story in the flesh.

Perhaps the last is the greatest thrill of all. For it is hard to believe that yon stately personage, who looks like John Wesley, Beerbohm Tree and Abraham Lincoln rolled into one is the genial "Billy Bunny" who can put such pathos into the adventures of "Brer Rabbit," or who has such a large family of nephews and nieces that it takes him twenty minutes every night just to wish them many happy returns of the day.

Whether you are familiar with the ways of wireless or not, it is fun to watch a programme being made. Here comes a lady vocalist, a little nervous—it is obviously the first time she has sung to the microphone, but the impressive announcement of her name and piece by Maurice Dudley would give courage to a newly-wed bridegroom to meet his mother-in-law. Her voice is sweet and true, though halting. Suddenly the peaceful gloom of the studio is stabbed by a flash of light on the indicator. "Louder!" is the silent command. The lady gives one terrified glance, treads on the gas and goes for her life, ending in a final triumphant top note which could almost travel out to Braybrook by itself.

That over, we draw a long breath, and wipe our heated brow, whilst a well-known Tivoli comedian tries

conclusions with the microphone. He does his best to confine the expression of his art to its cramping radius, and the red sign calls him to order several times. At the end, we favoured few who comprise the studio audience, applaud him heartily, but whether it is his actual jokes, or his dexterity in "putting them over" au naturel, so to speak, without the comforting support of his usual "business," it is hard to tell. From sheer force of habit our friend comes forward to the footlights to take his call, beamingly ready with an encore. But, alas! there are no encores on the air, and his place is taken instantly by an earnest person who explains with lurid details, just what is wrong with the dietary of civilisation. He regards the microphone in front of him very much as a Government meat inspector might regard a consignment of condemned mutton. Fortunately the instrument receives his burning words with the same impassivity as it receives everything else—otherwise it might have gone hard with it.

Then there is Joe Aronson's jazz band. What power—what picturesque vigour! Listening to it at one's own fireside is not nearly so thrilling as seeing it in the flesh. Here is an instance when the doubtful privilege of television—if it can be applied to radio—would be really a blessing. To be able to see Joe and his trusty henchmen tossing their heads and putting their backs into the latest fox-trot—why we would rush the chance of dancing to a neighbour's wireless instead of dodging it as we do now very often.

One longs to talk in the studio. There are so many interesting things to comment upon, so many questions to ask—for instance, why does Mr. "So and So" always stand on one leg when he sings? or why Miss "Somebody Else" regards the microphone with such concentrated scorn as she plays her piece that one feels it ought to blush for very shame for eavesdropping—caught in the act, so to speak? But the management—wisely—do not allow anyone to talk. There are gentle little red notices all around the walls enjoining "Silence!" which keep you in place whilst the mosaic pattern of song and story, musical thunder and thunder of eloquence which makes up a 3LO programme is slowly unrolled for the benefit of a waiting world.

And wireless programmes are not at all easy to make. 3LO Melbourne have a very efficient system of selection and arrangement, and they have done much and are doing more to lift the wireless concert out of the slough of boredom and harmless inanity in which it seems to have hitherto unaccountably languished. Artists and their repertoires undergo searching examination before they are finally admitted to the "invisible choir," and should one break his leg, or lose his voice or his nerve at the critical moment, another is ready to take his place at an instant's notice, as not for one instant is the voice of 3LO silent once it has begun to talk.

So it goes on. For twelve hours every day, 3LO flings out gay patters of sound on to the limitless air. One might wonder at the music of the spheres becom

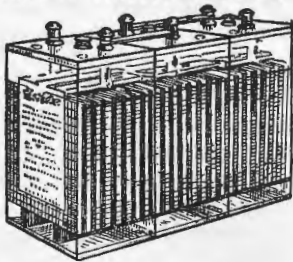
ing peevish at so much competition. One might imagine celestial performers who have hitherto had it all their own way complaining to their musical directors that some of their best bits were being spoiled owing to interference from a go-ahead station in Melbourne, or, perhaps—such is the power of progress—they might find themselves obliging inadvertently with bits out of Gilbert and Sullivan, or "To-night's My Night With Baby," which they had "picked up" and taken a fancy to.

It is soothing to sit in the dim blueness of the studio, lulled by the sonorous voice of "Billy Bunny" as he flings his nightly message of innocent cheer to his invisible audience—scores and scores of bright little eyes and eager little ears, tense, silent, excited, listening in had for the magic sound of their own name; or later, when the music starts, to imagine how in some far away settlement "Dad Wayback" is pushing back his chair from the tea table, wiping the crumbs from his whiskers, and reaching out for the earphones.

He will listen to the programme with varying emotions—keen and shrewd over the weather and stock reports, bored and inattentive when the educational gentleman comes along, frankly bewildered when the band breaks into Tannhauser, wiping a surreptitious tear over "Annie Laurie," or lost in a maze of chuckles and thigh slapping at the jokes of the funny man. So that in this, apart from its myriad other uses, wireless is a truly great servant of mankind.



The Right L. C. M. S. Amery, P.C., M.P., Secretary of State for the Dominions, who broadcast an important speech from 3LO Melbourne during his visit to Australia.



EXIDE Low Tension wireless Battery Type CZ

Made up and sold in separate 2-volt units in numerous capacities, the Exide Type C.Z. Low Tension Wireless Batteries are suitable for use with any type of Wireless Valve. Ask for them by name.

Remember that every EXIDE Battery sold has EXIDE SERVICE behind it!

Exide WIRELESS BATTERIES

Exide BATTERY SERVICE (Q) LTD.
PETRIE BIGHT BRISBANE

EXIDE BATTERIES are sold at all Wireless Stores and any Exide Dealers.

EXIDE Battery gives Satisfactory Service at Thursday Island—

READ what this enthusiastic user at Thursday Island has to say about EXIDE WIRELESS BATTERIES:—

"September last year I got through my employers from your house two C.Z. Type Cells, and I have been using these on a five-valve receiver since I got them, and they are still giving good service, but what I want to know is, when will I have to re-fill with new acid; would you please advise me about same.

"I must say a few words of praise with regards to the "EXIDE" Cells. I think that they are second to none after the use that they have given me. Since I received them I have had myset going this last 12 months on an average of four hours a night—the only interval was when the Battery was at the charge depot. Wishing you further success."

(Name of Writer on Request.)

Club Activities



RADIO CLUBS OF QUEENSLAND.

- AUCHENFLOWER AND DISTRICT**—Secretary, L. Cribb, "Frampton," Ridley Street, Auchenflower.
- CAIRNS AND DISTRICT**—Secretary, Mr. Tarbit, c/o Mr. Les. Fitzsimmons, Cairns.
- EASTERN SUBURBS**—Secretary, J. Burns, Longland Street, East Brisbane.
- GRACEVILLE**—Secretary, H. Carter, Cr. Molonga Terrace and Wylie Streets, Graceville.
- IPSWICH**—Secretary, S. J. Aspinall, Brisbane Street, Ipswich.
- SOUTH BRISBANE**—Secretary, W. R. Gilbert, Gordon Street, Coorparoo.
- TOOMBUL**—Secretary, T. Starkie, Sandgate Road, Nundah.
- TOWNSVILLE**—Secretary, E. J. Jefferies, Fletcher Street, West End, Townsville.
- WIRELESS INSTITUTE (Queensland Division)**—postal address Box 689K, G.P.O., Brisbane.
- WOOLOOWIN**—Secretary, C. J. Grant, Old Sandgate Road, Wooloowin.
- WYNNUM AND MANLY**—Secretary, P. J. Golden, c/o Trackson Bros., Ltd., Elizabeth Street, Brisbane.

Wireless Institute of Aust. [Q'd Div]

Due to the alteration of the location of the transmitting set the usual Sunday morning transmissions from 4WI had to be suspended for two mornings recently. The set has now been reinstalled and was on the air on the mornings of the 6th and 13th inst.

Quite a number of reports of appreciation on the reception of the transmissions have been received from Toowoomba, Cooroy and Dunwich as well as the metropolitan area, and the Council of the Division extend their thanks to all those who have associated in this way. These reports would indicate that the generator hum has more or less been eliminated and that the voice and music is in good tone and volume.

A one-stage speech amplifier is being installed and this should still further improve the transmission. The Morse practice is still in demand, and from all reports is being a much appreciated service.

During the month a convention of the various divisions is being held in Adelaide, and among other matters, the report of the Royal Commission on Wireless will be considered.

It is good news to all amateurs that the Commission has recommended that a conference between the Wireless Committee of Control and other parties concerned be held each year to discuss matters of interest and that representatives of the Wireless Institute of Australia should attend that conference to represent the amateur bodies. The Commission's report also recommended that immediate consideration be given to the proposals put forward by the various divisions of the Institute. Two of these proposals should have a far-reaching effect upon the amateur activities. The first is to get certain wavebands allocated exclusively for amateur use. The second is that amateurs be allowed to transmit messages of greater interest and to include certain personal information. These pro-

posals the Commission reported could be allowed without any effect upon the revenue of the country and would make amateur messages of value to the community.

The Council of the Queensland Division heartily welcomes the interest of all amateurs and experimenters in its work, and a post card addressed to 4WI, Box 689K, G.P.O., Brisbane, setting out any difficult or matter of interest, will receive prompt attention.

Wooloowin Radio Club [oa-4WN]

Since last month's notes were written for the "Q.R.N." club members appear to have been most energetic. Secretary Col. Grant, 4JG, has sat for his final University examination with 4WN's best wishes for success. He has been greatly missed from the club meetings of the last few months, but no doubt his splendid total attendances will soon be again mounting up.

4FK, "Marconi" Kenna, has been putting his knowledge of telephones on paper under the supervision of the P.M.G.'s examiner. By the way, 4FK is shortly to put in another Thursday night demonstrating various electrical phenomena at the club room. On the last occasion it will be remembered that he brought along a real live death ray plant; for the next night, however, he promises something even better—perhaps it will be a wireless crematorium!

4LJ Feenaghty has stowed all his gear into and around a kerosene case, and packed it, together with his mother, sister and dog, into his flivver (Essex breed) and departed on a cruise of the Northern Northern Rivers, with high hopes of putting up new DX records for a portable transmitter.

The Harold Stephenson part of 4RG has gone the way of a lot of good and near-good hams. Lest the reader should conjure up a vision of Harold forming the principle item on the menu at some cannibal festival, we will hasten to explain that it is to the wireless variety of ham and not the Xmas type we refer. Harold now spends his spare time disturbing the neighbourhood with QRM, and on a low QRH with QRN from a new Triumph motor cycle. Brother Chas. fell for a Douglas months ago, and has been falling off every now and again since. Chas. appears to get enough of high power transmitters at 4QG, as only very low power is used at 4RG, but the sigs. get as many DX reports as a number of the higher-powered 4's. Charlie has had the club transmitted working on the thirty-metre band fairly regularly of late, and has been QSO a number of southern stations, getting better results with the old "slop jar" rectifier than with the newly-installed Raytheon tube.

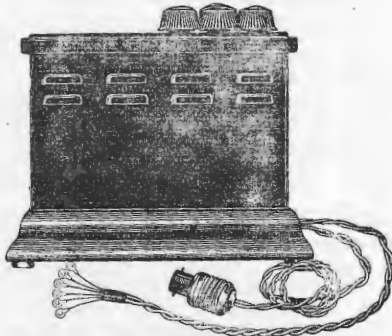
There is another Scott besides 4LJ now operating a transmitter in Australia! He is a "3" and disclosed his nationality by recently addressing QSL cards to the QRA's of 4RG and 4LJ, putting both cards into one envelope, addressed to the club, and placing one penny stamp on the envelope—nett saving two halfpence! We are thinking of giving him the position of financial adviser to the club!

The emerging from its shell of the Eastern Suburbs Club which took place a couple of months ago, was noted with pleasure by 4WN, and we are looking forward to a visit from 4ER's members at any nearly date.

Complete Electrical Operation

Now Made Possible by EMMCO

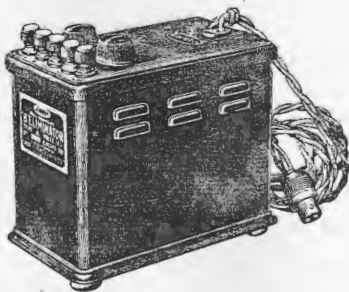
At last—a complete range of electrically operated radio power units. These Emmco units are designed to take the worry and expense out of radio reception. Your set will work better, reach further and give you greater pleasure when you have installed your Emmco electrical power unit. See and demonstrate one at your dealers.



Emmco ABC Eliminator, supplies, plate, filament grid bias battery direct from the light socket. Cost less than one penny for a full evening's entertainment. Gives greater, improved, constant power.

Price, complete with Raytheon Valve, for .06 (199 type) valves **£15-15-0**

Same, complete with amplifying unit incorporated, **£17/17/.**



Emmco "B" Battery Eliminator, for use with sets up to five valves. Complete with cord and adaptor. Neat metal case, bakelite top.

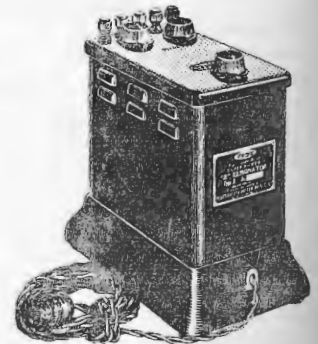
Price £10-10-0

At the New York Radio Show, eighty per cent of the sets shown were electrically operated.



Emmco Battery Charger made for A. C. Current, 220/240 volts, also for 200/220 volts. Made in two capacities, both charges have tappings for charging either four or six volt batteries. Aluminium base, bakelite top. Complete with cord and adaptor.

Prices—
2½ amps, **£4-15-0**; 5 amps, **£7-7-0.**



Emmco Super Power Eliminator, especially designed for use with multi-valve sets. Sturdily built with handsome metal case and bakelite top. Supplied complete with cord and attachment plug.

Price £12-12-0.



ELECTRICAL
RADIO
POWER
UNITS
for
XMAS

All Instruments Supplied With Clear Instructions.

AT ALL DEALERS.

Manufactured by **ELECTRICITY METER MFG. CO. LTD.**

4ER's notes in last month's "Q.R.N." contained a reference to the old inter-club lecture scheme. 4WN would also like to see this scheme working, and it is suggested that if any other clubs are interested they write to 4WN and a meeting of delegates from the various metropolitan clubs will be arranged to be held in town. The delegates could furnish a list of subjects on which their clubs desired to be lectured, together with the names of any members prepared to lecture to other clubs, and the subjects on which they could speak. Doubtless, it would in many cases be possible to arrange for the admission of the public to these lectures, which, besides being a good advertisement for the local club, would in no small degree further one of the main objects of the existence of many clubs, including 4WN—namely, the radio education of the general public.

4WN does not claim to exist for the education of other club's in the design of transmitting benches, shelves and aerials for radio clubs, but as both the Eastern Suburbs and Toombul Clubs mentioned in their last reports that they had constructed these articles, we cannot help mentioning that members of both have been over at 4WN and evidently taken notes of the various adjuncts to 4WN. To these visits we justly attribute the sudden bursts of energy at 4ER and 4TC. We are, in fact, overawed by the splendid tribute from the latter which, to quote last "Q.R.N.," "Considers itself an organisation to foster and further the public interest in radio . . . not a debating society, hence its refusal to debate with another 'radio' club on anything but a purely radio subject."

Doubtless, mention will be found in 4TC's notes of the debate with "the other 'radio club.'" This was 4WN, and the subject chosen by 4TC was "Thermionic v. Mechanical Rectification." Needless to say, Toombul had been rehearsing its side of the question since it first decided it 'some eight months ago.' It should perhaps be mentioned, however, that the adjudicator's decision was in favour of 4WN. This was received with the best grace possible by 4TC, and its members mounted their mangles, styled by their owners as motor cycles, and returned to their lairs in the hills of Toombul. But 4WN (generous fellows!) have offered to meet them again in debate, and as the last has been definitely proved too technical a subject for Toombul, we may be forced to meet them on ground on which they are more familiar—a suggested subject, "Cardboard v. Tin Flares for Kiddies' Trumpets." It was noted that 4TC team consisted of all its three ham transmitters, while 4WN fielded (or is it floored?) two ordinary members and one transmitter.

Visitors are welcome at the club any Thursday night; it is situated on Mr. Thomas' property, Willmington Street, Woolloowin. Correspondence should be addressed to the secretary.

Toombul Radio Club

On Wednesday, 19th October, a representative of 4TC attended the official opening of the clubrooms and "shack" at 4ER, Eastern Suburbs Radio Club. The rep. reports having had a most enjoyable time. During the evening the subject of interchange of lectures between clubs was brought up, and it would no doubt be to their mutual benefit if the several suburban clubs could arrange something definite in this direction.

During the week-end of 29th October, and 30th, the club spent a quiet (?) holiday at Mr. Macpherson's seaside residence at Humpybong. It must not be supposed that all the members were industriously experimenting with weird radio gadgets during their stay at the seaside. The majority were interested in a collection of two-wheeled, rattling, fume-emitting contraptions (known to each proudful owner as "my motor-bike") and in a "dinkie-die" little movie-picture camera with which the members were "shot" individually and collectively. (Gracious!—and on Sunday. Ed.)

On Thursday, 27th October, the long put-off debate with 4WN took place at their palatial clubrooms, situated, as we are all aware, in one of the finest streets in the district; and after a fearful lot of hot-air from both sides had passed through the knot-holes in the wall the adjudicators decided in favour of 4WN (7-6). A peculiar point about the decision is that the debate was the first that 4WN had won during its history; but it is also true that it was the first debate 4TC has lost (ahem!). Woolloowin defended Thermionic rectifiers whilst Toombul expounded the merits of the mechanical types.

The following Thursday, 3rd November, a dance and euchre tourney in aid of the clubs funds was held at the Northgate-Virginia School of Arts and the excellent decorations and smooth manner in which the function was run reflects great credit upon the social committee. There was a fair roll-up and as a result the club will benefit to the extent of a little of £3.

The club rooms have electric light and power installed and thanks are due to Mr. Hubner for donating several fine forms and hat racks.

During the progress of the meeting on November 16th, opportunity was taken to inspect an unusual collection of radio apparatus: A 250 watt transmitting tube connected in a five metre transmitter. The gear had been arranged by 4AW, 4HW and 4NW, and is being used in five metre tests at present being conducted by amateurs the world over.

Following the meeting proper, a lecturette on "Thermionic valves" was delivered by a member, after which numerous questions relative to the use of car batteries in radio receivers were asked by members anxious to utilise there car generators to charge their radio batteries.

From the foregoing paragraphs readers see that 4TC has spent a very interesting month, and there is no reason why every succeeding month should be equally, if not more interesting; and local enthusiasts would do well to visit the clubrooms any Wednesday evening.

The Queensland Transmitters' League

November still finds the good work going on. The lectures from 4QG have been resumed and are being well received. The number of requests for assistance coming to hand is increasing.

Members are still doing good dx despite the static 4NW, 4CG, 4GO particularly being QSO America nightly. 4PM has contacted with India and China while 4LJ has had a schedule with ai 2KT India and has OSO ai-2KW. 4BW also had a sked with ai-2KT.

The secretary went for a tour of the Northern Rivers district of N.S.W. during the month and has some interesting things to report.

Meetings are held every Friday, and experimenters are invited.

4AW, 4NW, 4TC and 4NW found forces to construct and operate at 4TC under that call sign, a 250 watt 5 metre set for the International 5 metre CQ party in November.

The League wishes everyone the best of good things for Xmas and New Year.

Inquiries to Leo. J. Feenaghty, oa-4LJ Secretary QRTL, 4th Floor, Desmond Chambers, Brisbane.

3LO CHILDREN'S SONG COMPETITION.

There were great things going on at Studio 3LO Melbourne recently, when hundreds of important looking small people thronged the building, each arrived with a music case containing the song which was to decide whether they were the champion vocalist of their section. This is the third year this "Song Competition" has been held, and each year it has grown in popularity—and has "discovered" several very promising juvenile voices. Especially was this first noticeable during the recent voice tests—when owing to so many "childish trebles" being nearly equal in both "quality and quantity" the genial adjudicator Mr. Lane—had no end of difficulty in finally deciding which was to be "the" one.

Bright Star Batteries in the United States Navy

Bright Star Batteries are now used exclusively in the United States Navy. Long lived at sea these Batteries have proved strong safety elements in many emergencies. During the cruise of the ill fated Six Destroyers of the Pacific Fleet they were used with every success and when these Destroyers crashed on the rocks of Honda Head, Bright Star Batteries were the means of saving many of the personal of the fleet, by furnishing lights for rescue purposes, and these batteries were procured from the radio room which had been full of water for hours. Bright Star Batteries played no mean part on the Hawaiian flight of Commander John Rodgers. It will be remembered he was forced down 350 miles away from his destination and for nine days the spirits of the crew were bolstered up by listening to the reports of ships searching for them—Bright Star Batteries kept that set going.

On British, French and German ships these Batteries will be found. The German Cruiser Hamburg, recently in port of Los Angeles specifically ordered Bright Star Batteries. The French Cruiser Jeanne D'Arc, and the British Battleship Dunedin, called only for Bright Star Batteries on their requisitions in United States Ports.



Ask your dealer for Diamond

Ask your dealer for Diamond

DIAMOND Radio Batteries

Diamond Radio Batteries are powerful, silent, and outlast any other make of Dry Cell. More than a million are manufactured in Australia annually. Every cell is guaranteed, and should a fault be found in any Diamond Dry



Cell it will immediately be replaced. Remember, a Radio Set is no better than its battery, therefore it is most essential to choose a battery that will give long and honest service. Such are Diamond Dry Cells.

RETAIL PRICE LIST

- "A" Buzzer Cells, 1.5 volt 2/9 each.
- "B" 60 volt Super B. Battery, 27/6 each.
- 45 volt Super B. Battery, 22/6 each.
- 60 volt Standard B. Battery, 18/ each.
- 45 volt Standard B. Battery, 15/ each.
- "C" 4.5 volt "Bison" C. Battery, 3/3 each.

Wholesale only from:—
JOHN REID & NEPHEWS,
 CHARLOTTE STREET,
 BRISBANE.

Manufactured by
WIDDIS DIAMOND DRY CELL COY. LTD.
 W. Melb., Vic.

SUPPLIED TO
ALL GOVERNMENT DEPARTMENTS



MIKE'S NEW JOB

Microphone Displaces Megaphone in Ring Announcements at Brisbane Speedway

Two microphones now operate at the Brisbane Speedway. One is connected by landline to 4QG, and is used by the station's announcer when describing the various races to listeners.

The second microphone is part of the equipment of the Amplion Public Speech and Band Repeater Equipment recently installed on the grounds, and is used by the speedway announcer to keep the huge crowd informed with particulars of the various events and with happenings upon the track and within the ring.

Hitherto the Speedway announcer (Mr. "Skip" Rees) has relied on his trusty megaphone to shout his announcements to the crowd. This has been a



The Speedway announcer (Mr. "Skip" Rees) before the microphone.

great strain upon both "Skip" and the crowd, for as can well be imagined, a multitude of Speedway fans are by no means the quietest crowd in the world to address.

As a result, only a comparatively small portion of the crowd could ever hope to hear a complete announcement without interruption of some sort.

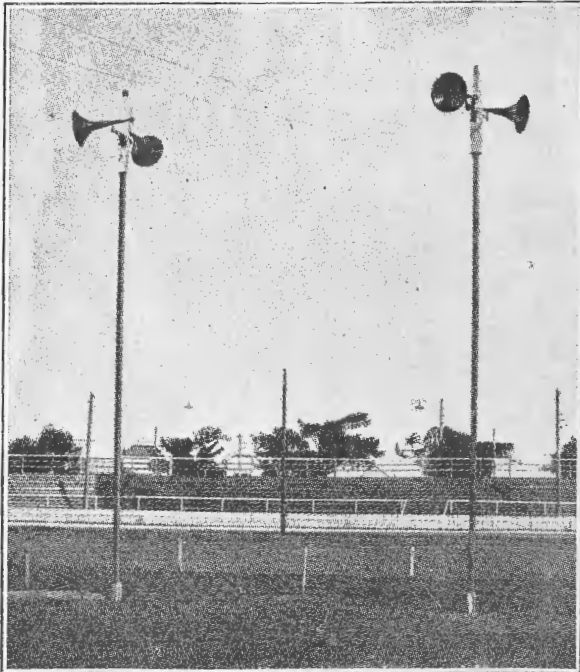
The problem has now been relieved by calling radio to the rescue. A new and remarkable instrument named "The Amplion Public Speech and Band Repeater Equipment," which is being used in show grounds, dance halls, and theatres the world over has been installed on the grounds. This device makes the addressing of huge crowds a very easy matter. The announcer talks into the microphone in an ordinary conversational tone; his voice impulses are carried into the instrument where they are modulated, amplified and passed out to remote points, and reproduced through Amplion speakers of the P.S.1 type.

The results are nothing short of astonishing. There is an entire absence of distortion, noises, or "throatiness" common to similar devices in the past. Each word of the speaker, or if used as a band repeater, each note of the band, is reproduced clear and true.

At the Brisbane Speedway, announcer, microphone and instrument are stationed in the ring enclosure. Posts supporting the reproducers are, as our photograph shows, arranged so that the sound is distributed evenly to the four points of the compass. Although the instrument has, at the time of writing, been installed for but a week, it is giving excellent results, the sonorous voice of the announcer detailing the various events and the entrants therein with a clarity that can easily be heard above the din of the huge crowd.

The Instrument.

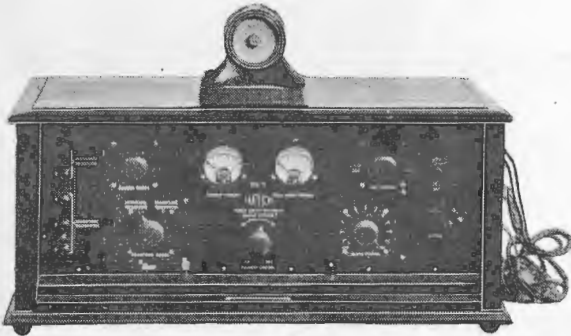
A brief description of the instrument is as follows. The instrument contains five valves, just the same type of valves as are used in everyday radio receivers. Looking inside the set from the front are the five valves standing along the back of the cabinet, the first one on the left being a high impedance valve of the L.S. 5. B. type, the remaining four being L.S.5's.



Showing the four speakers erected in the grounds.

The batteries are tucked neatly away below the set. The "A" battery or accumulator is similar to that used on a radio receiver using bright emitter valves, and is of the six-volt type, with a capacity of about eighty ampere hours.

The "B" battery supply is slightly different to that used in radio reception. It consists of three banks of accumulators, each having a voltage of about one hundred, making the total high tension current used



The Instrument and the "Mike".

approximately three hundred volts. A grid bias battery of the usual type having a variable voltage of about 27 to 36 volts is also used.

There are two outputs which are totally distinct from each other, each one being controlled by one valve, and each of these valves is capable of energising one or two loud speakers.

Not only is this instrument capable of reproducing speech, but gives equal clarity to music. An attachment to link up the gramophone is part of the equipment, and when a record is played through this instrument it takes a very quick ear to detect it from the original performance.

The microphone is of such a type so that it can be readily adapted to the weakest or loudest voice by means of a small switch on the control panel. Both tone and volume can be easily altered to suit the surroundings by the mere twist of a knob.

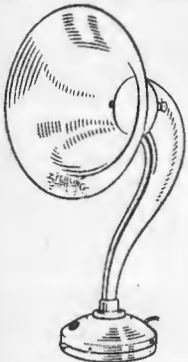
Chatting to Mr. "Skip" Rees, he displayed great enthusiasm for the instrument. "It is very wonderful," he stated, "and makes my task very much lighter. Whereas before I had to 'bawl' every word, I can now speak naturally and I find it much easier on my voice."

Mr. Rees went on to say that he thought it would be an added advantage if a longer lead were attached to the "mike," allowing him to walk around a little more, enabling him to follow the race while making his announcements. No doubt his suggestion will be put into effect at an early date.

STERLING

L O U D S P E A K E R S

The Sterling Range of Loud Speakers offers you a choice of instruments for every purpose and for every purse, each the best in its class for tone, volume and finish.



STERLING BABY
Sterling "Baby". Offers special charm in its soft and rich mellowness of tone. May be had in three finishes.



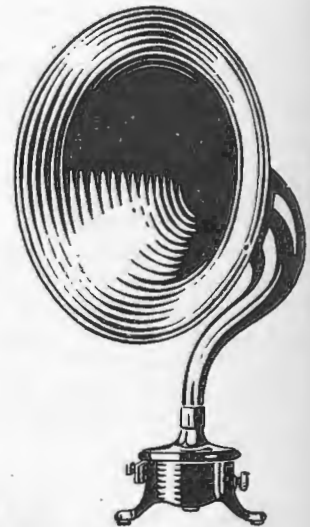
STERLING MELLOVOX

Sterling "Mellovox". A loud speaker of exquisite colour and design. A beautiful reproducer of symphony and song.



STERLING DINKIE

Sterling "Dinkie" the little fellow "with the big voice". In brown or black and gold.



STERLING TYPE 33.

Sterling "Type 33". A new loud speaker of great capacity. Reproduces melody to the original.

In Walnut or Mahogany.

Agents for Queensland:

THE LAWRENCE & HANSON ELECTRICAL COY., LTD.

35-37 Charlotte St., Brisbane.

Representative **A. COLLINS**

(Room 12), 5th Floor
**DAILY TELEGRAPH BUILDINGS,
SYDNEY, N.S.W.**



MR. J. W. ROBINSON,

Director of 4QG, who was recently congratulated in Parliament on the Efficiency of his Station.

A New Valve from France

Many readers who owned radio sets in the early days of broadcasting—that is, two or three years ago—will remember that valves were a very expensive item, necessitating special care when handling the battery leads. Considerable progress has been made since then in valve manufacture, with the result that at present valves, while costing only about one quarter of their former price, also include other great improvements.

Recently we had submitted to us for test, the R.T.56 valve, a product of the laboratories of La Radiotechnique, France. This valve is, essentially, a power valve for use in the last audio stage, and the design is rather unusual in that it includes two sets of elements—that is, two grids, two filaments, and two plates. Each set of elements is connected in parallel, thus giving practically the same effect as two separate valves wired in parallel.

Tested under ordinary working conditions, a great improvement was noticed in both volume and clarity, when this valve was used, even though a fairly low plate voltage was being used. Most power valves have a fairly high filament consumption, but the rating for the R.T.56 is only .1 amp., which makes it a very economical valve to use.

The filament voltage is also only 3.4 to 3.8 volts, which is another point in its favour.

The attention of our readers is drawn to the advertisement appearing on another page of this issue, where further particulars are given. We certainly have no hesitation in saying that it is well worth investing in one of these valves for use in the set as a last stage power valve. It was also tested in the radio and first audio stages of the set with success. It is not recommended by the makers for use as a detector.

Our sample was supplied by the Queensland representatives, Messrs Brown & Dureau Ltd., Ryan House, Eagle Street, Brisbane.

Notes from 2BL.

Have you ever thought that it is possible to receive a "thrill" by listening to the chimes of the G.P.O. clock? A listener-in writes from Stanthorpe (Q.), to this effect. Having been away from the Harbour City for eight years, with no prospect of visiting Sydney for some years to come, he tunes in regularly to 2BL, just for the pleasure of hearing the hour boomed forth by the big, old clock in Martin Place. He concludes his letter by stating that, for him, it is worth while having a radio set just to hear those chimes.

The latest suggestion made to 2BL is to stage from the studio an eight-hour procession. The suggestion is put forward by a listener-in as being compensation for the disappointment caused by the postponement of the procession on account of the heavy rain on the day arranged for same. After giving the idea serious consideration, the programme manager decided that the suggestion was not practicable, as difficulty was experienced in persuading people to represent the stone masons' display. Each person approached considered that hard work was in store for them. The studio staff refused to play any parts other than those representing the brewery displays. "Uncle George" wanted to be the brass band, although he was cast for the noise of draught-horses. So, in order to have peace and quiet on the station, the scheme has been abandoned.

OREGON WIRELESS MASTS

IN the use of Masts to carry Wireless Aerials, Rosenfeld's Oregon has proved to be the most serviceable. The Oregon for these masts is specially selected.

Call, 'phone 5991, or write to us for further particulars and prices of Wireless Masts.

You can purchase your Masts in one length of Oregon Pine, from 30ft. lengths of 3 x 3, to 80ft. lengths of 6 x 6, also 4 x 4, and 5 x 5 to any length.

ROSENFELD & Co. (Qld.) Ltd.

"The Oregon Specialists"

TIMBER MERCHANTS.

Moray Street, New Farm, Brisbane

Phone C. 5991.

THE **FERRANTI** TRANSFORMER

We know what you want to get out of your set. Everyone wants it. It is clear, pure-toned reception—and you don't want to miss a note from the muffled base of the kettledrum or the profound booming of the baseviol to the shrill "sky-high" tones of the fife and piccolo.

A.F.3 ... 42/6

So much depends on your circuit, so much on your speaker—but even more on your transformers. To render sweet music and to get the full range of orchestral or instrumental performance, the transformer must faithfully reproduce all frequencies.

A.F.4 ... 32/-

The Ferranti Transformer Meets Every Condition of Good Audio Reception

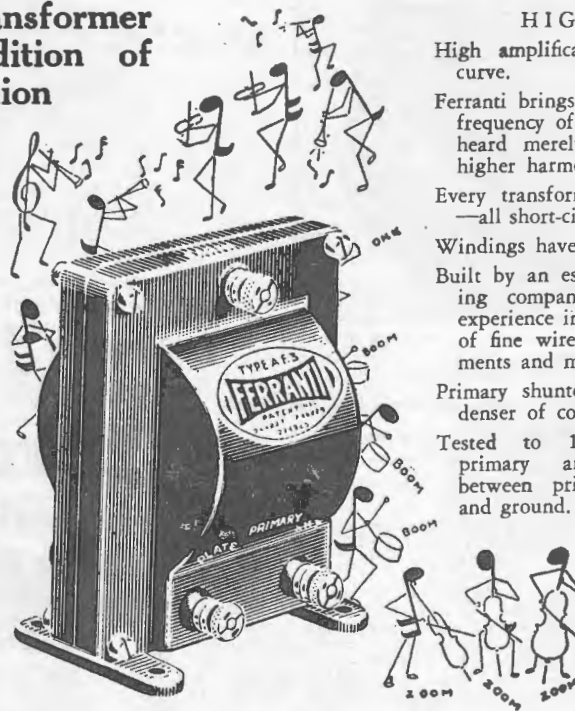
It takes two and a half miles of wire for the coils of the A.F.3, and one and a half for the A.F.4, plus the many refinements which the genius of Dr. Ferranti has made possible, to create transformers whose amplification curve is almost perfect—almost a straight line. By installing Ferrantis you can modernise your old set or perfect your new one. **Ferranti will give you an uncensored message from the sending station.**

If you want to make the best of the power valve, feeding the loud speaker, use Ferranti.

Ask your dealer for a Ferranti. Don't be satisfied until you have installed one. No better transformer is available at any price.

For the best available transformer results—Ferranti Audio Frequency Transformer A.F.3—ratio $3\frac{1}{2}$ to 1—42/6.

For a transformer far superior to the average, use Ferranti A.F.4—ratio $3\frac{1}{2}$ to 1—32/-.



HIGHSPOTS

High amplification ratio with flat curve.

Ferranti brings out the fundamental frequency of low tones—none are heard merely by inference from higher harmonics.

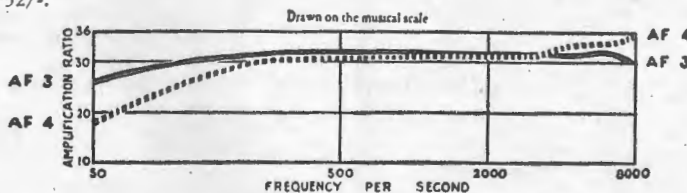
Every transformer tested ten times—all short-circuit turns eliminated.

Windings have high impedance.

Built by an established manufacturing company with forty years' experience in the winding of coils of fine wire for electrical instruments and meters.

Primary shunted with built-in condenser of correct capacity.

Tested to 1000 volts between primary and secondary and between primary and secondary and ground.



This graph is drawn on a musical scale—the only accurate way of showing the full value of each tone which your set receives. Note that the evenness and fullness of amplification in both the Ferranti A.F.3, and the A.F.4, extends throughout the range of the organ, cello and the human voice.

ISOLATE YOUR SPEAKER WITH A FERRANTI OUTPUT TRANSFORMER

41/-

Obtainable from every Radio Dealer in Australia.

Dealers please communicate with:—A BEAL PRITCHETT (Aust.) LTD., Sydney & Melbourne. WEDMA, LTD., Adelaide - - EDGAR V. HUDSON, Brisbane - - GIBBS BRIGHT & CO., Perth.

Notes from 2FC

A MATTER OF OPINION.

The real difficulty broadcasting stations have to contend with, as far as natives of "Our 'Arbour" are concerned, is the absence of a concrete expression of general taste. Strange that in a community that boasts freedom of opinion, and the right to express it, it is so hard to strike universal popularity. Is it just plain apathy—or have listeners ceased to try and obtain what they want? There are always the rebellious few who continuously complain against what is given to them, but they are a meagre handful, when compared with the silent majority, who accept the unpalatable and roam the ether in vain for what they consider palatable.

If a genuine plebiscite was taken of the most popular "air" item—and by "genuine" we mean a universal expression of listening—Sydney's taste in the matter of radio entertainment, orchestral music would probably top the list. 2FC have consistently given more orchestral music than any other station. Regular transmissions are arranged from Her Majesty's, the Prince Edward, and the Union Theatres, and the recent broadcast of the N.S.W. Conservatorium Orchestra was hailed with delight by hundreds who only have the opportunity of hearing such music through the medium of the loud speaker. And 2FC have added yet another feature to the programme, in the formation of a Studio Orchestra of picked musicians, under the direction of Horace Keats, whose ability and wide experience eminently fit him for the position. The orchestra will play regularly from the studio two nights a week—Monday and Thursday.

CHRISTMAS FEATURES.

Christmas, 1927, will mark an epoch in radio history. 2FC, in co-operation with Amalgamated Wireless have gained an unassailable position in the forefront of Empire broadcasting, and through their activities on Christmas Day listeners will have the opportunity of hearing a programme of carols, replete with all the atmosphere of a typical English Christmas, which is being specially prepared for relay by the British Broadcasting Corporation. Then on Monday morning (Boxing Day), at 5 o'clock, 2FC will stage what is probably the most unique Empire broadcast ever attempted. The microphone will be set up on one of Sydney's beaches where the surf ". . . froths and hisses, enticing weary feet," and listeners on the other side of the world will revel in the mind picture of a golden summer morning in Australia, in vivid contrast to the roaring log fires and snow-covered countryside of the Homeland.

THE LURE OF THE MICOPHONE.

The lure of the microphone is just as strong to old broadcasting artists as the lure of the footlights is to the old actor. Captain Frank Hurley has been so overwhelmed with newspaper work for many months past, he has hardly had time to spare even a thought for his 2FC friends. But at last he has suc-

cumbed to a power greater even than the Fourth Estate, with the result that listeners are again to have the pleasure of spending a happy hour with his word pictures. 2FC have arranged a new series with Captain Hurley, the first of which will be given on 15th December. One of his talks is set down for 25th December, and he has some wonderful adventures to relate of a Christmas night spent in other lands.

CHRISTMAS CHEER.

2FC have a litany all their own for those who are sick and suffering, and particularly at Christmas time are their energies redoubled in spreading cheer through the hospitals. On Saturday, 17th December, a special concert has been arranged, both afternoon and evening, for the patients at Waterfall Sanatorium. The Smith Family are lending their valuable aid, and over twenty-five artists will brighten the hours with their entertainment. On Monday, 19th December, 2FC will again participate in merrymaking, when fifty artists will descend on the Prince of Wales Hospital, Randwick, and in song and story relive happier days with the patients there.

"ONE MAN ONE VOTE."

"One man one vote" is the maxim of the arbiters of our political fate, and 2FC have adopted the same principle in the matter of microphones, as far as the spoken word is concerned. The H.W. Varna Company scored a radio triumph with their reading from "The Silver King," but in acknowledging the well-merited congratulations, Mr. Varna paid deserving tribute to the mechanical skill which played no small part in the production. In the old days, the actors stood round in a semi-circle before the microphone, with the result that those nearest to it recorded clearly, but those on the "outer," as it were, could scarcely be heard. 2FC have now arranged for the company to sit at a long table on which are arranged as many as six microphones. Thus each actor has an individual microphone, and the balance is evenly maintained throughout.

ALEX. WHITSON.

2FC listeners will be delighted to know that their old favourite has made his mark on the hardest of all musical critics—a London audience. The "Daily News" says: "Mr. Alex. Whitson, the well-known Australian baritone, made an instantaneous success upon his first appearance in London, at the Sunday National League cert in the People's Palace last Sunday evening. Mr. Whitson sang no fewer than eight numbers, and his rendition of "The Night Watchman," a new song by Miss Barte Adams, won for him a treble encore. So impressed was a West End manager with the robustness of the singer's voice, that before Mr. Whitson left the building he was offered a contract to appear in a new British musical play to be produced in London within the next two months."

OLDHAM

High Tension Accumulators

ONLY OLDHAM ACCUMULATORS HAVE PLATES MADE UNDER THE SPECIAL
ACTIVATION PROCESS.



Supplied in 20
volt units, and
built up on the
expanding
hookcase prin-
ciple

PRICES:-

- 20 volt £1/5 / ea.
- 40 volt £2/10/ ea.
- 60 volt £3/15/ ea.
- 80 volt £5/0 / ea.
- 100 volt £6/5 / ea.
- 120 volt £7/10/ ea.

ORDER THROUGH YOUR RADIO DEALER

Write to the Sole Agents for full Oldham Price List

NOYES BROS. (Sydney) Ltd.

PERRY HOUSE

ELIZABETH STREET

BRISBANE

(SYDNEY) LTD.

Sydney 115 Clarence Street
 Newcastle Devonshire Street
 Brisbane Perry House, Elizabeth Street

Agent for W. Australia

(MELBOURNE) PTY. LTD.

Melbourne 495 Bourke Street
 Adelaide Darling Building, Franklin Street
 Hobart 36 Argyle Street
 Launceston 123A Charles Street
 J. R. W. GARDAM & CO., PERTH

A Home-Made Battery Charger

(By the Technical Editor.)

Accumulators, or storage batteries as they are often called, are to many people a constant source of worry; as they have, at regular intervals to be carried to and from the battery charging station. This is a decided disadvantage, for accumulators as a rule are rather heavy and also contain sulphuric acid which, if spilt on the clothes will very quickly ruin them.

Then again it often happens that the battery service man forgets, to "connect in" the battery until an hour or two before it is called for: the result is that he hooks it up and passes an excessive current through the battery in order to make it appear charged.

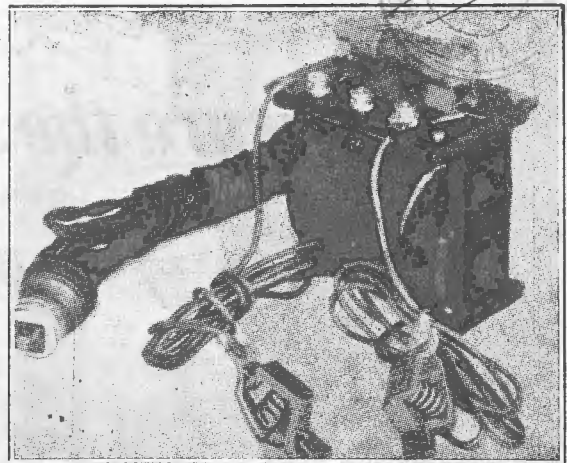
This not only does the battery a great deal of harm, but leaves the battery flat after a few hours' use, which is most annoying.

These troubles may be easily overcome by using an inexpensive yet efficient battery charger such as the type which is described on this page.

The amateur who can charge his own batteries at home saves himself much money, labour and inconvenience. He can charge his batteries overnight at small cost without missing a programme.

He need never allow his battery to go "flat" before recharging. He can give it a few hours on the charger every week or fortnight and keep his battery in the "pink of conditions" so to speak.

While some charging stations do give proper care and attention to batteries entrusted to them for recharging, there are some, who particularly if they are busy, will connect up a battery on a line that is carrying far too great a voltage that the plates can safely withstand. The method "brings them up" very quickly but is not conducive to the long life of the battery or satisfactory service between re-charging.



Showing the Completed Charger with Leads, Clips, and Flex Attached.

Below we list the specifications of a suitable transformer.

Silicon Steel Core.

Core cross section 1 sq. inch.

Leg Sheets 1 inch by 3 1/2 inches.

Yoke Sheets 1 inch by 2 1/2 inches.

Primary winding, 2000 turns 26g. Enamel Copper Wire.

Secondary winding, 70 turns 16g. D.C.C. Wire.

If a centre tapped transformer is required, the secondary winding will have to be wound accordingly.

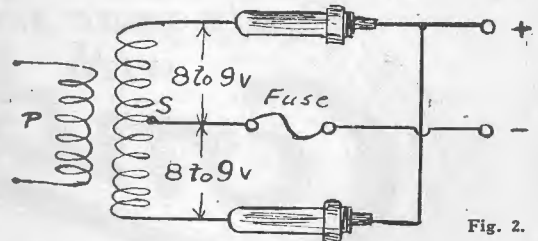


Fig. 2.

Upon inspecting the circuit diagrams it will be noticed that a centre tapped transformer and two rectifying tubes are employed when full wave rectification is required. It will also be noticed that the charging rate in this case is 5 amperes against 2 1/2 amperes for half wave rectification.

Of course the full wave charge would be more costly to construct on account of the extra "A" tube, however, the constructor must decide for himself which will best serve his purpose. It is preferable to mount the rectifier tube on a bakelite platform on the top of the transformer, the small cylinders should be connected to the positive output circuit while the large cylinder should be connected to the negative through the transformer.

It is advisable also to mount a 10 amp. fuse on the bakelite platform in case the charger becomes short circuited at any time.

Battery leads fitted with suitable clips should be attached to the charger and also a good length of flexible wire for attaching the charger to the power point.

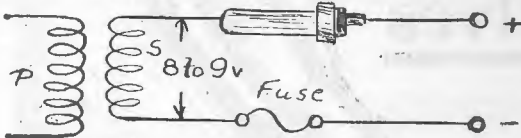


Fig. 1.

Constructional Details.

The heart of this battery charger is the small rectifying cartridge shown in Fig. 1, a new device which has recently made its appearance on the market.

This new "A" tube lends itself to either half wave or full wave rectification, the charging rate being 2 1/2 amperes in the first case and 5 amperes in the second. It is absolutely silent in operation and does not require any attention once it has been installed.

A stepdown transformer having a capacity of approximately 50 watts and an output voltage of 8 to 9 volts is all that is required to complete the charger.

On referring to the article on Transformer Construction in our last issue, readers will find a full description for the building of a suitable transformer.

To ensure the success of your **RADIO EVENING**



The radio programmes have been scrutinised carefully . . . the set has been overhauled . . . the guests have been invited and the supper dishes have been selected. But two details remain—your lamps and your radio valves. On these two accessories is hinged the success of the evening.

Your lighting must be softly, pleasingly brilliant. And to furnish without interruption, the delightful music your guests expect, your set needs good valves.

Condor Lamps and Valves meet both needs perfectly.

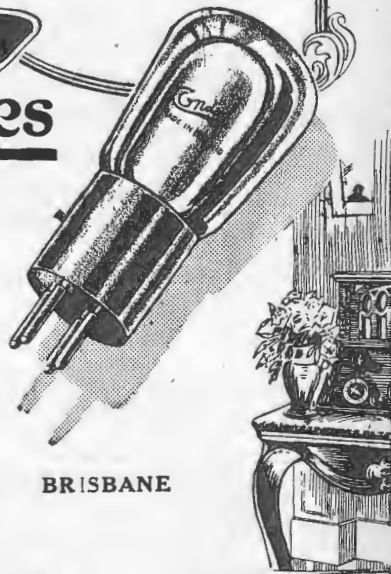
Equip your set
with

Condor Valves

and let the
light be from
Condor LAMPS

**CONDOR LAMPS
[AUSTRALASIA] LTD.**

SYDNEY, MELBOURNE, ADELAIDE BRISBANE
WELLINGTON (N.Z.).



Notes from 4QG

4QG SERVES THE PASTORALIST.

"It would be of great benefit and interest to all pastoralists and people in the outback country of Queensland if you would broadcast particulars of the forthcoming wool sales. The wireless is very popular in the West, and there is not the rush for the weekly mail there used to be."

The above is an extract from a communication received by 4QG, and is typical of many along similar lines. No broadcasting station strives harder than 4QG to provide an up-to-date and useful service for the man on the land, and if at times city dwellers may be bored with the items broadcast for the benefit chiefly of country residents, they can at least appreciate that in addition to the usual musical entertainments 4QG is carrying out a national service to their brothers and sisters of the big open spaces.

WHO IS RIGHT ?

Evidence of the almost impossible task confronting the programme director of any broadcasting station is evident in two letters which were received at 4QG one morning recently. One reads:—

"Please accept my congratulations for the very excellent programme, and particularly the Digger plays "Off Duty," "Homeward Bound," and the "Battalion Reunion."

The other letter, which was opened immediately after the one just quoted, says:—

"As a listener-in I would like to send a little criticism of your programmes. My opinion of your sketches of the "Homeward Bound" and "Battalion Reunion" type, I regret to say, is very poor."

While every effort is made at 4QG to cater for the majority, these letters show how very hard it is to gauge public opinion.

LIGHTS AT 4QG.

Persons who have cause to frequently visit 4QG notice that quite often one or more of the lights in studios, reception hall or station are not alight.

Although this might at first appear to be the result of carelessness on the part of those responsible in not replacing burnt-out lamps, the trouble is not this at all. As a matter of fact, special care is taken in this respect, and almost every day a new light goes on somewhere.

The trouble is that the dissipated energy from the 5000 watt transmitter is so great that the lamps all glow to a certain degree irrespective of whether they are switched on or not, the consequence being that when the power is supplied to them in the usual way, more energy is passing through the filament than they are designed for. The lamps do not, therefore, stand up for any length of time under the overload.

"IT'S AN ILL WIND"

For some time past the City Congregational Church has been holding its services in the Constitutional Club and His Majesty's Theatre, pending extensive alterations to the church building. This circumstance has greatly inconvenienced the congregation, for the conveniences of these makeshift churches are somewhat meagre.

Still, "it's an ill wind which does blow someone some good," and in this case the listeners were the "someone," for on a recent Sunday evening the church was fortunate enough to obtain the services of the Australian Commonwealth Band.

The church was at the time holding its evening service in His Majesty's Theatre, and the acoustic properties of the theatre, coupled with the wonderful playing of the band, gave listeners to 4QG a rare musical treat.

MELBOURNE CUP BROADCAST.

Apart from the regular racing enthusiasts, hundreds of thousands of people are keenly interested in the greatest of all Australian turf events—the Melbourne Cup.

Few people a few years ago would have imagined it possible to listen to a description of the epic race in the streets of Brisbane, but the marvel of the age—wireless—supplies the means.

On Melbourne Cup day an excited group of citizens could be seen congregated outside a radio dealer's premises in Brisbane listening to a full description of the race broadcast from Flemington Racecourse, and re-broadcast by 4QG. The progress of the race was followed with intense interest, and for the first time in history the result was known in Brisbane immediately the horses flashed past the winning post.

100 PER CENT. EFFICIENCY 4QG'S OBJECT.

By exhaustive experiments carried on when the station is officially "off the air," the transmitting apparatus at 4QG has been brought to a very high plane of efficiency. The station staff, however, is not content to let the matter rest there; in the eyes of 4QG perfection is never reached. In between transmissions members of the staff carry out experimental work in the station laboratory with a view to more and more efficiency.

CHRISTMAS ARRANGEMENTS.

Interesting Xmas and New Year programmes have been arranged by 4QG, and during the Festive Season 4QG's aerial will virtually radiate "Peace on earth, goodwill toward mankind."

NOTES FROM 2FC—Continued from Page 43.

The manager of 2FC (Mr. Oswald Anderson) had a personal note from him in connection with the second Empire Broadcast, with cuttings from the "Daily Mail," in which the B.B.C. is accused of losing excellent reception, through undue haste. "When the attempt began a few minutes before six o'clock last night (16th October)," says the "Daily Mail," "atmospheric conditions were very bad on all wavelengths. There was an abundance of crashes and bangs which practically blotted out all signals from distant stations. Patience, however, is the greatest of all wireless virtues. And lack of patience caused the authorities at Savoy Hill to switch over to Keston at 6.8 p.m., when the Australian programme was still far from clear. At 6.20 they switched off, having had enough of speech and music heard only in indistinct fragments. Just ten minutes later the long-awaited conditions arrived. The atmospherics faded away, and for 40 minutes the Keston receiver picked up Australia even more clearly than during the first Australian experiment a few weeks ago."

Mr. Whitson says: "I heard your voice and also Mr. Cochrane's on Sunday evening (16th October), and I got homesick after the Australian 'Coo-ees,' which were all splendid. Essie Ackland rang me up to listen-in, and she also heard you." It will be remembered that Miss Ackland (now Mrs. Reginald Morphew) who is a native of sunny New South Wales, went home two years ago to pursue her vocal studies.



Joe Aronson, of 3LO Melbourne, demonstrates his belief in his big broadcasting hit, "Go Wash an Elephant if You Wanna Do Something Big."

We are now able to offer at a Remarkably Low Price

The New "Phoenix" Three Valve Set

This Set has now been brought right to the present day standard—no coils showing outside the set—one (1) tuning dial only, giving greater simplicity of tuning. This Set is supplied complete with the following accessories, and all guaranteed of a dependable quality and tested by us.

3 Mullard P.M. Type Valves
6 No. 6 Columbia Dry Cells.
2 45-Volt Hellelesen "B" Batteries
1 Pair Warren Phones and Plug.
40 and 75 turn Igranic Coils.

Amplion Cabinette A.R.100-M. or Mellovox
Speaker

1 Plug for Speaker.
6 Egg Insulators
Battery Cable
A.E. Switch.
12 Yards Earth Wire
Lead-in Wire

NEW PRICE £17/10/-

The Latest in Novelty Crystal Sets—gives equal results to any higher-price Set; will fit into coat pocket. PRICE 13/6—or complete with Warren Phones and Electron Wire—31/-.

**OVERELLS LTD., THE VALLEY
BRISBANE**

AMONG THE AMATEURS

'Tis Xmas and all the gang are digging out their biggest and most commodious sox to hang up on the Antenna pole so that Santa Claus can just pop in a nice new "fifty" and a 500 watt power 'tranny, aren't you Gang? Chorus—2 rite!! Anyway even though Santa is not going to crawl down your particular stovehouse chimney this year perhaps someone might give you a fifty—there are lots of busted ones about! Hi!!

The 23 band has a few new converts and the stations heard last month were 4LJ, 3GR, AGW, ANDIR etc. Fone still holds sway ZSS, putting out some nice stuff on his d.c. carrier. He's a real Dr. Jekyll and Mr. Hyde. He uses R.A.C. and D.C. at all and any old times. His fone tests with 3AL come in nr. r. max.

How many of the gang had a similar experience to mind on 30/10/27. The wx was QRN-y and stormy but every sig. copied was r7 to r max. Station which are usually r4-5 increased to 7 and 8. The reports received from them on my sigs revealed a similar state of affairs, among the r max sigs were 2MR (using both earth and cpse) 2SS, 2RX, and many others—this reminds me of something I read in "QTC" the mag. edited by 4LJ for the QRTL. It said that some of the league observers had reported increased strength then QRN was bad and storms imminent.

Sat up the other evening, having put the wife, and ten youngsters to bed, Hi! Between 0000 and 0200 hours heard 4LJ QSO ai-2KT in India; fone from ??? Could it be 2FC or 6WF dual transmission? It was decidedly a broadcast programme on 29 metres; and last, but by no means least, QRM fm A.C. r8!! 4PM still conquers the D.X. Has been QSO ai and ac lately and his sigs. are sure fb. Good man, Rus, you still find time to pound brass at home when not pounding ivory as the fb pianist of the fb Tivoli Orchestra.

Some of the "unusual" ones are coming in now on the 32-40 band ai from 2200 to 0000; ac from 2000 to 2300, ef from 1600 to 1830; BAM from 1700 to 2000; DGK from 1700 to 2100; the Indians are ai-2KT Lieut. Rodman, Jubblepore; and ai-2KW Lieut. Jones, Karachi. Chinese are ac-8RJ, ac-2FT, ac-2FF; French pf-8XO, ef-8ARO, ef-8ST, eb-4BC.

4ER, mentioned last month, is the station of Eastern Suburbs Radio Club, operated by 4AT (Alf Bauer). They often test with 4RM. This one, by the way, puts out a nice r4-r5 sig., using an indoor aerial and a receiving tube, FB Mac.

4MF is back again with a low rac QRZ sig. Welcome, Dud; what's happened to ur old dc QSB?

4LJ has just recovered from "blewitis"—in the 'tranny, this time. Howsumever he wound a new 240 volt one, but haven't hrd yet how she perks. He's been awa on the New South Wales side with a portable.

The Cup results were well received on 29 metres and many folk QRX for the Empire broadcast on Armistice Day.

Well, gang, its very warm to-day, and as it's getting near Christmas I'm feeling quite friendly towards everyone, so I'll refrain from shewing up all your dirty pasts and unfiltered presents. To each and every amateur experimenter, BCL, Trader, the C.I. and our R.I., the staff of the "Q.R.N.," and to every reader near and far, I desire to extend the heartiest good wishes for a bright Christmas and a most happy and prosperous 1928. Cheerio, and gud luck.

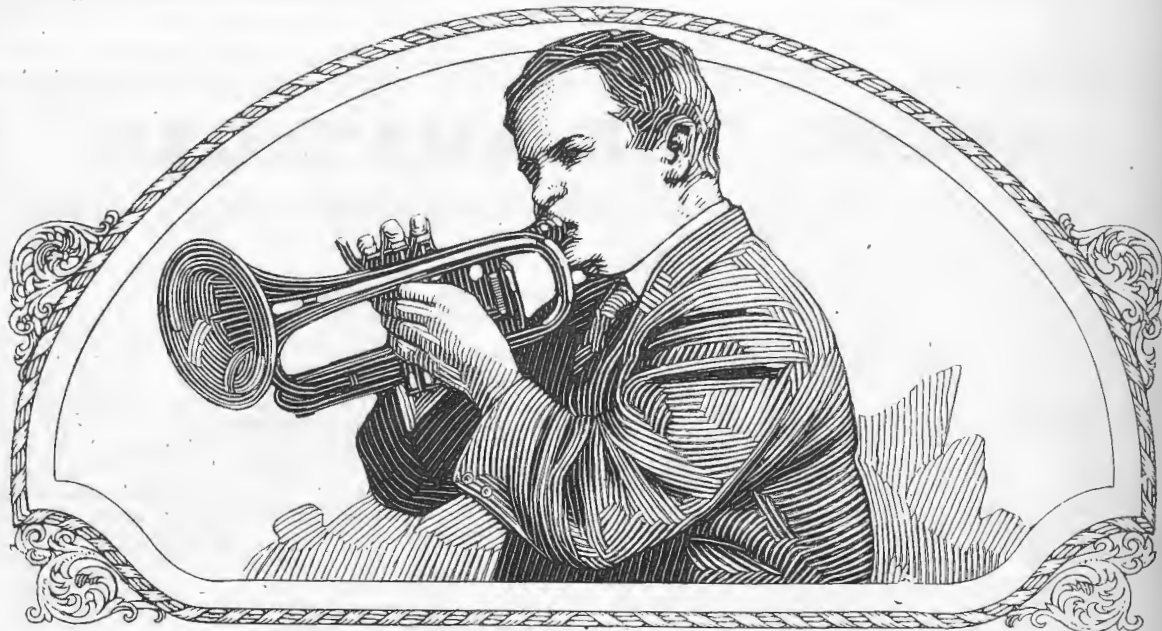
Second District Notes

The 'Rag Chewers' Club

The club was formed eighteen months ago, with the idea of promoting friendly conversations among the hams and to eliminate the "Nil hr. cul." type of QSO, also to encourage good operating. Any member who calls CQ thirty times before is liable to be crossed off the membership list, Hi! All that is necessary to join the club is to join the club is to "chew the rag" with a member for at least half an hour, report this conversation to the "Old Sock" (2NS), and get the member to do the same, and if all is in order your membership card will be forwarded. Chewing the rag for half an hour does not mean trying to get your sigs. through QRM or QRN for that time, but a solid half-hour of conversation. Members are asked to send single whenever possible. Entrance fees are nil, as all expenses are born by the "Old Sock."

The following is a list of members:—OA: 2MH, 2DG, 2RB, 2GW, 2SS, 2DY, 2SO, 2UK, 2IJ, 2WB, 2RO, 2RT, 2HC, 2RX, 2EP, 2SA, 2IM, 2RH, 2MR, 2NS, 3IP, 3AJ, 3HL, 3AL, 3GF, 3YN, 3KR, 3VP, 3HR, 3RB, 3LJ, 3ES, 3GR, 3GM, 3IF, 4DO, 4RB, 4GO, 4WE, 4NW, 4MM, 4LJ, 4CG, 4MF, 5LF, 5WH, 5HG, 5BW, 5BY, 5CM, 5DX, 6MU, 6IS, 7DX, 7CS, CBQ, 7 CW, 7LJ, 7CH. OZ: 1AF, 1AL, 1FE, 1AP, 1AB, 1AV, 2BN, 2AR, 2AA, 3AQ, 3AP, 3AN, 3AW, 3AX. NU.: 5ATF, 5QL, 6BPG, 7MH, 8BAW, 9UU, 9CKR. .New Hebrides: HVW.

"Old Sock" would like to thank all who have helped with the club, particularly 2MH, 3AL, 7DX, 7LJ and 4MM, the latter being the club's booster in Queensland. Also would be very pleased to hear from members at any time who may have any suggestions or ideas. Let's hear from you, OM's.



The Cornet Player steps into the room when Cossor Valves are used

USE the new COSSOR POINT ONE VALVES and you will enjoy the thrill of true-to-life Radio. No longer an inanimate and mechanical reproduction, but life itself. Every vibrant passage is reproduced with great mellowness. From the French horn to the cornet and from the 'cello to the violin, each instrument is heard in all its natural beauty. No harshness, no discordant sounds—no distortion. And the underlying reason for such marked superiority in tone and volume lies in the Wonderful Kalenised Filament used in combination with the method of construction employed. This is an exclusive Cossor feature—not other valve has it. No other valve gives such long service with such a meagre consumption of current.

2, 4 and 6 Volt
 UX Bases **13/6** Each

Queensland Distributors:

J. B. CHANDLER & CO

ADELAIDE STREET, BRISBANE.

UNITED DISTRIBUTORS LTD.,

343 QUEEN STREET BRISBANE.

Cossor

"The British Valve which
 serves you longest"



4QG Programmes for December

The following is an outline of the December programmes from Station 4QG:—

Thursday, December 1st.—Classical party, Cadenza Plectral Club, West End Salvation Army Band.

Friday, December 2nd.—A concert arranged by the C.C.M.

Saturday, December 3rd.—Violin recital.

Sunday, December 4th.—Albert Street Methodist Church and band concerts.

Monday, December 5th.—Organ recital, students' concert, studio programmes.

Tuesday, December 6th.—“Winds in the Sands”—a radio drama by Michael Croger.

Wednesday, December 7th.—The Silkstone Apollo Club.

Thursday, December 8th.—Grand Concert from Southport.

Friday, December 9th.—Concert from St. Mary's, recital by Miss Frost and Miss Hammond.

Saturday, December 10th.—Tivoli Theatre, Speedway, Lennon's Ballroom.

Sunday, December 11th.—St. Stephen's Cathedral, and band concerts.

Monday, December 12th.—White House concert, classical hour.

Tuesday, December 13th.—Concert arranged by John Hicks & Co.

Wednesday, December 14th.—A radio interlude, “All Aboard,” Mr. A. Sharman's party.

Thursday, December 15th.—Yeronga Choral Society, concert by students of Miss Makin.

Friday, December 16th.—An old-time night.

Saturday, December 17th.—Violin recital.

Sunday, December 18th.—I.B.S.A. Service, band concerts, Ann Street Presbyterian Church.

Monday, December 19th.—Choral recital, pianoforte recital.

Tuesday, December 20th.—Sandgate Methodist Choir.

Wednesday, December 21st.—A jazz night.

Thursday, December 22nd.—Mr. Erich John's party.

Friday, December 23rd.—Studio concert.

Saturday, December 24th.—Special Christmas Eve programme, midnight Mass from St. Stephen's Cathedral.

Sunday, December 25th.—St. Stephen's Cathedral, St. John's Cathedral, band concerts.

Monday, December 26th.—The Richmond party.

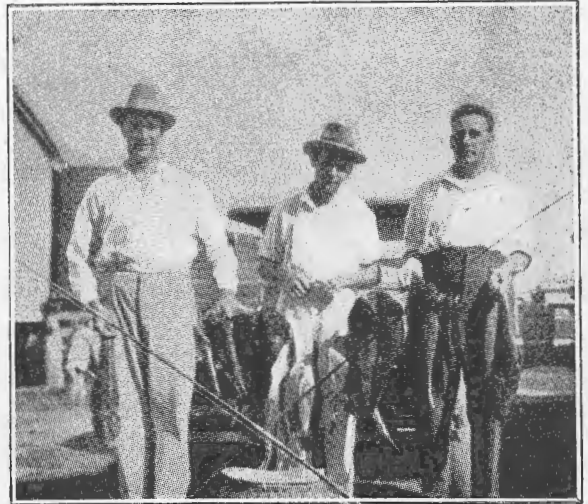
Tuesday, December 27th.—Studio concert.

Wednesday, December 28th.—Studio concert.

Thursday, December 29th.—The Troubadours.

Friday, December 30th.—Jazz night.

Saturday, December 31st.—Sporting broadcasts, special New Year's Eve entertainment.



Uncle Ben Goes A-fishing

Listeners to 4QG Bedtime Session will remember that early in November the ever popular “Uncle Ben” was absent from the station for a short period enjoying a brief holiday at Southport.

Our photograph proves that Uncle Ben is no mean fisherman. Mr. Clifford Haigh (of W. Haigh & Co., Ipswich), on “Uncle Ben's” right, looks rather jubilant with their splendid haul, while Mr. W. Berry (also of Ipswich) holds the fruit of his skill proudly before the camera.

We do not definitely know, but we feel sure that during the period of this trip, Uncle Ben's Bedtime Stories referred more to fish than to fairies. Anyway we're pleased to see and hear him back again at his old post, much bronzed, but ever so much better in health than he has been for some time.

TRICKLE CHARGERS and ELIMINATORS

Make Your Own Everlasting and Efficient Charger.

TANTALUM, 8/6. TRANSFORMER, 10/6

Obtainable only at

THE RADIO SHOP

474 QUEEN STREET.

Phone: Cent. 4315.

Makers of PURATONE WIRELESS SETS (5-V.), £12 bare retail. Get Particulars.

OUR RELIABLE RADIO SERVICE.

Five Shillings monthly includes all battery charging; test and overhaul of your set; valve rejuvenation; and rebates on any accessories you may require.

A.W.A. Super-Audio Choke Coil



Messrs. Amalgamated Wireless (Aust.) Limited, of King House, Queen St., advise that stocks of their new Superaudio choke coils are now to hand. In connection with these the following technical data been supplied by the A.W.A. research laboratory. In designing a choke for impedance-coupled amplifiers three very important factors

must be taken into careful consideration. These are as follows: (a) The impedance must be high with respect to the valve so that all frequencies will be amplified to the same extent; (b) the D.C. (direct current) resistance must be relatively low so that the ampere turns value will not cause saturation of the core and thus rise to distortion; (c) the size and the cost of the unit.

Usually the detector valve has a relatively high resistance and a comparatively low plate current. It is possible then to wind a choke with many turns of

fine wire without danger of the core being liable to saturation. These factors have been provided for in the low Henry A.W.A. Superaudio choke.

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

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

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

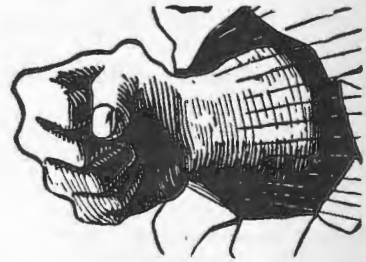
Get

More Punch

Into Your Reception

When is reception at its best? When are distant stations easily tuned in? When is your receiver most selective?

WHEN YOUR BATTERIES ARE WELL CHARGED. To get the most out of radio—and incidently out of your battery—you should have your batteries re-charged every five weeks. Bring them to Barnes Auto Coy., where an



Phone

8687

Central

Expert Battery Recharging and Repairing Service

is maintained. We have installed the most up-to-date Battery Charging Apparatus in Australia, which is under the direction of a competent battery expert.

We repair and recharge all makes of Radio and Automobile Batteries at competitive prices and we GUARANTEE our work. Give us a trial.

BARNES AUTO COMPANY

Corner Queen Street and
North Quay Brisbane

De Forest Finally Wins Over Regenerative Patent

U.S. Circuit Court of Appeals Finds He Invented Feedback and Audion

The decision just rendered by the United States Circuit Court of Appeals for the Third Circuit at Philadelphia on October 6th, is perhaps the last word on the controversy that has been waged through the various Federal Courts between the De Forest Radio Company, Westinghouse Electric and Manufacturing Company, General Electric Company, American Telephone and Telegraph Company, and the United States Government since 1917. More specifically the problem has been one to determine who invented the feed-back circuit, popularly known as the regenerative circuit.

Dr. Lee De Forest, Major Edwin H. Armstrong, Irving Langmuir, and Alexander Meissner all claimed to have made the invention, but the principal contest has been between Armstrong and De Forest. The invention itself is familiar to everyone in radio because present day radio would be impossible without it.

There is scarcely a transmitting station in the world to-day which does not use the "oscillating audion," the subject of the invention. Similarly there is scarcely a radio receiving set manufactured to-day which does not in one form or another employ the regenerative principle, also the subject of the controversy, for amplification purposes.

The cases just decided by the Circuit Court of Appeals were brought there for its decision from the District Court of Pennsylvania, where the De Forest Radio Company (owners of the De Forest Patents) sued the Westinghouse Company (owners of the Armstrong Patent) to cancel the Armstrong patent because the De Forest patents were the same and both of them could not exist. The District Court cancelled the Armstrong patent and the decision of the Circuit Court of Appeals now makes the cancellation final.

In addition to this case, suits in the District Court of Delaware, instituted by the Government, and joined and aided by the Westinghouse Company and the General Electric Company, and all directed against the De Forest Company, were likewise acted upon by the Court of Appeals from decision in De Forest's favour, and were in the same opinion affirmed, forever putting a quiescence on adverse claims of any of these companies as to priority of invention of the feed-back circuit. Therefore Dr. Lee De Forest, the scientifically accredited inventor of the audion and its feed-back circuit, is now also the judicially accredited inventor thereof.

This contest, which has occupied a large amount of space in radio news for a number of years, has been dragged through the Patent Office Tribunals in Washington, the Court of Appeals of the district of Columbia, the United States Courts of New York, Pennsylvania and Delaware since 1924, when Armstrong's patent was first issued, although applications for patents of the other claimants for patent rights were pending at the time in the patent office.

The Circuit Court of Appeals holds as a matter of law and as a matter of fact that De Forest manufactured the feed-back circuit, used, and made records of its use by himself and his assistants at Palo Alto, California, before any of the other claimants ever claimed to have conceived of the idea.

Asked for a statement as to whether or not the case would reach the U.S. Supreme Court, Samuel E. Darby, junr. (the Patent Attorney who has conducted the litigations through the various courts for the De Forest Radio Company) stated:—"It is doubtful whether or not the case will be heard by the Supreme Court. The case is based on old questions of law which are well established and, therefore, present nothing novel to warrant the Supreme Court considering the case. There is no appeal from this decision as a matter of right. It is a mere matter of grace and is wholly dependent upon whether or not the Supreme Court cares to review it by granting a writ of certiorari." On the question of the practical effect of this decision on the radio art as a whole, Mr. Darby stated:—"It is difficult to predict how far reaching the effect will be. One thing is certain, the so-called 'Armstrong Licensees' who have been paying tribute to the Armstrong patent will now realise that they have been paying tribute to the wrong parties, and will be liable to the De Forest Coy., the owners of the De Forest Patents, for all infringing operations since September 2nd, 1924, the date of the issuance of the De Forest patent, unless of course they have in the interim acquired licenses under the De Forest patents."

The De Forest Radio Company who, because of the injunction that was granted against it in the New York Courts restraining it from manufacturing radio apparatus employing the regenerative circuit, will now be at liberty to resume manufacture of apparatus employing that circuit, to which it is justly entitled by reason of the fact that it was founded by and bears the name of the great scientist whose invention of the feed back circuit and oscillating audion forms the basis on which the entire radio art is founded.

LIBEL OR PROPHECY.

To advertised the visit of Joe Aronson's Synco-Symphonists to Ballarat a very clever advertising poster was prepared by a local artist showing a jazz band with drums, cymbals, trombone, and all the other instruments being played by one down and out performer, who looked as though he had imbibed rather freely from a row of bottles which he was using as a xylophone. Underneath was emblazoned "Joe Aronson's Symphonists." When Joe saw this his feelings went through a cyclone of passion, but finally he grasped the humour of the cartoon and laughingly said: "Well, I don't know whether it is the artist's idea of what my band is or a prophesy of what I am going to be. In any case it is clever and funny, and I will sure take it as a warning and be careful to guard against such tragic end."

The *NEW* 1928 Edition of
UNCLE BEN'S
BOOK-O'-FUN

**Now
 on Sale
 at all
 Booksellers
 and
 Stationers**



**The Price
 this Year
 has been
 REDUCED
 to**

**2/-
 Per Copy**

Posted 2/3

This, the 1928 edition of this popular story-book, has excelled in every way last year's effort. Coloured pictures, stories, verse, jokes, games, tricks, puzzles, etc., are featured in galore.

Every child who listens-in to the bedtime stories will want a copy. All the bedtimers contribute. Children! Tell Santa Claus to put a copy of Uncle Ben's Book-o'-Fun in your Xmas Stocking.

— FILLED WITH CLEAN, BRIGHT HUMOUR —

Wholesale Distributors:
**EDWARDS DUNLOP & CO.,
 LTD.**
 Brisbane, Sydney & Melbourne.

**THE
 IDEAL
 XMAS
 GIFT**

Single copies may be bought from
THE READ PRESS LTD.,
 Adelaide Street, Brisbane.

The
Children's Corner

The Professor's Page

Dear Children.

Well! Well!! you 'didn't expect that the "Old Professor" would be writing to you this month, did you children? Fancy an "old buffer" like me having the children's page all to myself! Well, never mind, I'm very glad for the opportunity and I'm particularly happy because this is the Xmas issue of "The Queensland Radio News."

I'd like to talk to you about the Xmas Days of my boyhood. My mind goes back to my home in London, where Xmas Day is entirely different to the Xmas Days in Sunny Queensland.

I had four brothers and of course, like all other youngsters, we used to wake at daybreak to see what Santa Claus had left us. We would play with our toys until breakfast-time and after breakfast all five boys would set to and help mother cook the Xmas Dinner.

My work generally fell to "twisting the turkey" and "basting the turkey". Now, I suppose you all wonder what these duties consisted of—so I will explain.

In the old country we did not cook the turkey in a baking dish as your mummy does. The turkey was suspended before the open grate on a string from the mantleshef. A string was twisted on a key and when this was "wound" the turkey would twist round and around as the string wound and unwound itself. Every five minutes or so the key would have to be "wound" again. This was called "twisting the turkey."

"Basting the turkey" was the term given to the act of pouring the hot fat over the turkey, as it cooked before the fire. My word, I can smell the turkey cooking now as the fat dripped down into the big pan on the floor.

When the Xmas Dinner was cooked, we would all sit down to the most wonderful meal of the year—according to we boys.

We used to eat plenty of turkey, but we always reserved a big corner of our little stomachs for the Xmas Pudding—for mother used to put threepenny pieces in, and they were worth eating for!

After we had helped wash the dishes we used to go into the sitting room, and while the snow and sleet beat up against the windows we would sit on the floor before the log fire roasting chestnuts.

What a difference there is between Xmas Day in England and Xmas Day in Australia. Here we love to be in the surf and as far away from log fires as possible, while boys and girls in England are shivering with the cold.

Well children, this is quite a long letter, and I can see some of you are getting sleepy, so I will close.

Don't forget to help mother and cook the Xmas Dinner. I hope you all find plenty of threepenny-pieces and that you all have a wonderful time during the holidays.

Little Miss Brisbane, Sandy, Uncle Ben, Grandfather, Brighteyes, Uncle Jim and myself all send you many kisses and a hearty wish for a Happy Xmas.

Good-bye little friends

Yours truly,

"The Professor"

The Professor's Competition

Here is a verse of poetry with the last line missing. The child who can supply the best line to complete the verse will receive a prize of 10/-; while the second best attempt will be rewarded with 5/-. Try and win one of these prizes. The best attempts win the prizes.

Uncle Ben made a Christmas Cake,
'Twas the first he'd ever tried;
But when we tasted—goodness me!

Note.—The last word of the line should rhyme with "tried."

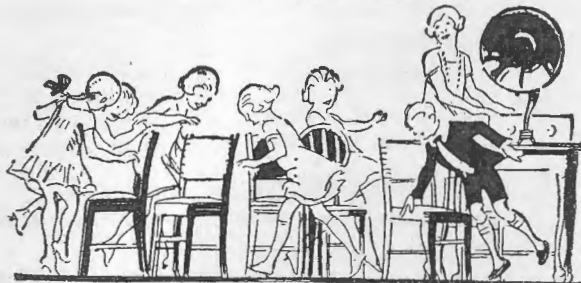
Mark your envelopes "Professor Competition, and address them to "The Queensland Radio News", Box 1059 N, G.P.O. Brisbane, before 20th December.

Results of "The Sandman's" Competition

The child who guessed nearest the number of birthdays entered in 4QG's Birthday Book, was Miss Dorothy Baxter, "Braeside", Buckland Road, Nundah, to whom a prize of 10/- will be forward.

The second nearest guess came from Miss Enid Higgs, Eva Street, Red Hill. Enid will receive the second prize of 5/-.

RADIO MUSICAL CHAIRS.



Here is a good idea for the Xmas Party. Play "Musical Chairs" in the usual way. Have mother turn on the radio set. As the children are moving carefully from one chair to another she can suddenly turn the music off, when there will be a wild rush for chairs.

The Latest from France

The first shipment of this new product of the scientific laboratories of La Radiotechnique—which has created such widespread interest on the Continent—arrived in Queensland this week.

The success of tests carried out by Brisbane dealers and amateurs during the week have proved the contention of the Manufacturers that there is no better Valve offering to-day for economy, volume and perfect clarity.

Crystal Set Owners

can listen-in to Loud Speaker receptions at a low cost and with more than sufficient volume with the

RT56

THE 2-POWER VALVE
in ONE Stage of Audio

The usual expensive second stage is not required, for the R.T.-56 does the work of two valves at only one-tenth amp. fil. consumption (suitable for dry cells). It is because the R.T.56 has actually two filaments, grids and plates each with the same characteristics carrying the current load between them, that double amplification with balanced smoothness is achieved.



Radio Technique

Obtainable in
Brisbane from

- McWhirters Ltd. Valley.
- Melton & Co., Queen Street.
- Overells Ltd., Valley.
- Radio Supplies Unlimited, T. and G. Bldgs., Queen St.
- Mick Simmons Ltd., Queen Street.
- Thomas Radio Co., Adelaide Street.
- Trackson Bros. Ltd., Elizabeth Street.
- Wireless House Ltd., Edward Street.

For all Standard Circuits. R.T. Characteristics: 3.8 13/6
volts; .1 amp.; 20 to 120 volts. PRICE

The RADIO-MICRO—a dull emitter Detector Valve, for use with the R.T. 56 Amplifying Valve. Characteristics: Fil. voltage, 3.2v. to 3.8v.; fil. current, 0.06 amp.; anode voltage 9/
40 to 80v.; voltage amplification factor, 9 to 12. PRICE

In case of difficulty, obtain from the Factory Representatives:

BROWN & DUREAU LTD.

RYAN HOUSE, CHARLOTTE STREET, BRISBANE.

And at Sydney, Melbourne, Perth and N.Z.

Notes from 3LO

MAGGIE FOSTER.

Listeners will be glad to know that Miss Maggie Foster—with her curls and violin—is once again broadcasting from Studio 3LO Melbourne after having had a wonderful successful tour throughout Australasia. Among her most successful contributions to the programmes is a solo on which she gives a lifelike imitation of a canary. This was written for her during a tour of New Zealand some little time ago, and presented at the close of a selection in which Miss Foster had imitated a number of musical instruments—the composer thinking she might care to add another novelty to her already extensive repertoire.

TWO DISTINGUISHED MUSICIANS.

On Sunday, November 27th, music lovers had a great treat from Studio 3LO Melbourne for a joint recital of piano and flute were broadcasted, the two artists being the distinguished Australian pianist (Mr. William G. James) and the well known flautist (Mr. Stanley Baines). Both these artists are well known to listeners as musicians of exceptional ability, and the very attractive programme that they arranged for this occasion was greatly enjoyed and appreciated by everyone.

FAMOUS FOOTBALLER ON CRICKET.

Few people are more welcome over the air than Mr. Rod McGregor who, during the football season, made thousands of friends among listeners, and now is proving himself a brilliant broadcaster of the descriptions of the various cricket matches. Although many listeners were under the impression that Mr. McGregor's activities in the realm of sport were confined to the football field, this is not the case, for in addition to being a "pennant" cricketer, he is the secretary of the State Schools' Amateur Athletic Association, and, with a selected committee, controls and selects the sports and games in the schools, both boys and girls coming under his jurisdiction.

ONE OF THE DIGGERS.

One of the most popular artists broadcasting from Studio 3LO Melbourne is "Bobby" Pearce, whose pleasing baritone voice is heard to best advantage in breezy songs of the open road, such as "Stonecracker John." Among his friends, this favourite artist is regarded as something of a "wonder"—for he was badly knocked about during the War—having many operations—and spending the later part of his time overseas in many hospitals. On returning home, he joined the "Famous Diggers" Concert Party, and with them made many successful tours of Australia and New Zealand—and has now settled in Melbourne—being much in request at various smoke nights and other musical functions. It is interesting to note that two other artists frequently heard from Studio 3LO—Syd Exton, the well-known tenor, and "Johnny" Marks, the versatile comedian, have been his companions "throughout

the piece"—for they fought side by side in Flanders—spent several months together in hospital—toured Australia and New Zealand in the same concert party—and have met at the end of the journey in the spacious studio at 3LO Melbourne.

OPERATIC ENTERTAINERS.

Two newcomers to Studio 3LO Melbourne are Pollard and White (entertainers) who, with the aid of a well-trained baritone and soprano voice—and a piano—contrive a musical turn which is much above the average, and distinctly original. Their repertoire contains a pleasing variety of songs—ranging from grand and comic opera selections to light comedy—daintily rendered by Miss Pollard—whilst their artistically arranged duets will form a welcome addition to the programme.

THE PRIDE OF BALLARAT.

During the recent great 3LO broadcasting week at Ballarat, Joe Aronson, who had heard so much about the famous thoroughfare of that city, asked when he arrived there, "Where is Sturt Street?" Upon being told that he was standing right in it, he exclaimed with surprise that it looked more like a big city square. He was informed that it was not a square but the main business thoroughfare which opened out into the Avenue of Honour and extended for over fourteen miles into the country with gardens and plantations all the way. Later in the day when Joe was being motored through Sturt Street, the driver said that it was twenty miles long. Joe looked rather perplexed and said that it had grown from 14 to 20 miles in a couple of hours. That evening the popular city Mayor (Cr. Alex. MacKenzie) in a speech at the 3LO concert, exclaimed with pride that Sturt Street and the Avenue of Honour were over fourteen thousand miles long, Aronson collapsed at this and decided that it had him entirely baffled. However, the next day at the civic reception which was tendered to Joe Aronson's Synco-Symphonists, the Mayor exclaimed that he had slightly elongated the street by adding the word "thousands" after "fourteen." Joe then breathed freely again and said: "Well, it is a sure fine street and quite as good as the best in the world. From an American this is some praise—sure!"

ANGELIC COLIN.

Colin Turner, who usually plays a saxophone in Joe Aronson's Band at 3LO Melbourne, is quite an expert organist, and at times is called upon play upon the classic wind instrument in the big symphony production under the baton of Joe Aronson. Colin looks very inspired and angelic at the organ, and one imagines a surrounding atmosphere mellowed with the light from old cathedral windows. It has not yet been suggested, however, that a halo has been seen hovering over Colin's head.

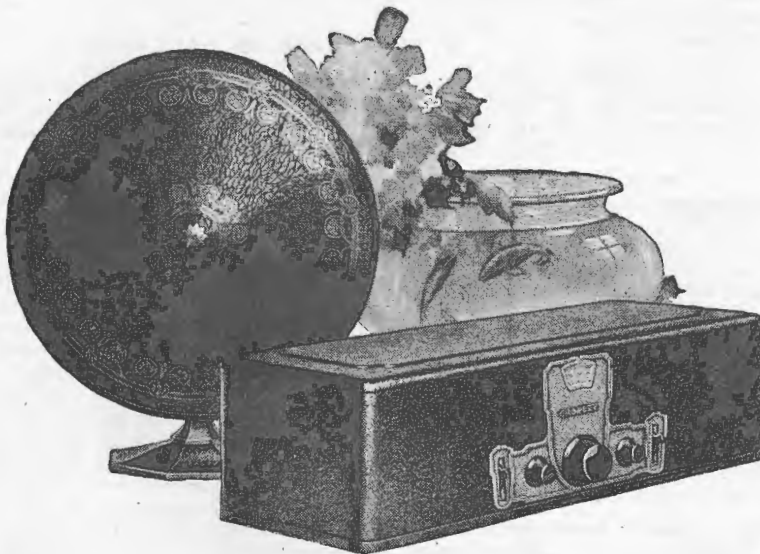
You're there with a Crosley !

The Most Phenomenal Receiver for the 1927--28 Season

Powel Crosley Junr., Master Producer of Radio
for the Millions, introduces the Six Valve

BANDBOX

AND MUSICONES



IT HAS—

Single Dial Control, illuminated.

Full Shielding.

Absolute Balance.

Accumulators, giving the set dial accuracy.

Volume Control, from a whisper to a roar, without distortion.

A Battery Cable, anybody can instal it.

Removable Case for easy console installation.

The "BANDBOX" £25-10-0

The Ultra Musicone

The Super Musicone

DEALERS! We want an active representative in each district. WRITE US. Everybody can have our catalogue—it's free.

Factory Representatives:

INTERNATIONAL RADIO CO. LTD.

299 Castlereagh Street, SYDNEY

Whispers from Maoriland

All New Zealand calling! Hello, Australia-Radioland! A merry Christmas and a happy New Year, totally devoid of all atmospheric, to you all from the fans throughout Maoriland.

The following is a novel idea so far as we are concerned, and if the scheme has not been tried out it might be operated with success in Australia. Arrangements have been made for the Wellington Amateur Radio Society to provide a special evening's entertainment which will be broadcast from 2YA. The programme will be put on the air on a Wednesday night when, in the ordinary course of events, 2YA is silent. There will, therefore, be no interference with the usual programme from the station, and listeners will be able to judge whether the Broadcasting Company supplies programmes of a higher grade or not than those which would be supplied if the society had the permanent selection. To say the least of it, the event will be very interesting, and a very original programme may be looked forward to.

The broadcasting of racing and trotting events has become increasingly popular, and this side of the wireless business must have given great impetus to the radio trade. Hardly a hotel in the country is without a loud speaker in the bar, set there for the sole purpose of giving the punters the latest turf results. A bombshell, however, was exploded in Auckland the other day when the stewards of the Trotting Club, at the eleventh hour, forbade the broadcasting of the club's meeting. The Press asked for reasons, but none were forthcoming. One does not have to look far, however, to see why the ban was placed upon the broadcast. Totalisator clubs view the bookmakers as their worst enemies, and the two people who would benefit most by hearing the races broadcast would be Mr. Punter and Mr. Bookie, hence the action taken to prevent the latter following, with added ease, his illegal (in N.Z.) calling. If other clubs follow suit listeners will suffer great inconvenience, but the body governing racing in New Zealand is big-hearted and an appeal to the fountain head, should it become at all necessary, would hardly be in vain.

The Stratford Radio Society has had printed an applause card for the use of members desiring to express to stations and artists their appreciation of broadcastings received. The idea is an excellent one, and is largely used in the States. The Stratford Society has very wisely designed the card to be of return value for two views of the town of Stratford are incorporated in the card with items of interest concerning the town and district, and its attractiveness to the tourist.

READERS

The Editor is always pleased to receive suggestions from readers. If there is some feature you would like to see added to QRN— or something you would like taken out—write.

The Wellington Tramways Band has been getting itself into hot water with the local listeners. With the consent of their executive bandsmen have been seeking out radiomen for subscriptions to their band fund, on the ground that the falling-off in attendance at band recitals which have been broadcasted has resulted in a severe financial loss to the band. No doubt it is quite true that there has been a falling-off in the attendance at the concerts, but is not any loss attendant thereon a matter for adjustment between the band and the broadcasting company? A very dangerous precedent would be established if listeners gave the band the assistance asked for.

Both the Auckland and Christchurch branches of the Anglican Synod are enthusiastic about the setting up of a church broadcasting station, equal in power to 1YA, Auckland. According to one of the speakers to a motion relating to the matter heard by the Auckland Synod, the greatest handicap under which the church is placed at present is that the Government stations refuse to broadcast anything which is deemed to be of a contentious nature. It is estimated that £8000 would be required to establish the station, and a further £4000 a year to maintain the same.

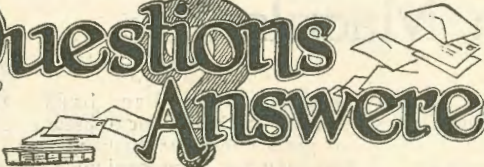
There's mystery in the air. A distant station has been gravely puzzling amateurs for some time, but a Christchurch man has come to the rescue and identifies the ghost as the Khabarosk (Siberia) Station. There are two announcers, one a Russian; speaking his native tongue, the other an American engineer attached to the station.

Weekly lectures in Esperanto are delivered from 2YA, and if these lectures dealt with "Who Won the War?" I do not think there could be more bitterness shown in correspondence to the press than there has been in the present instance. Without going into the different arguments raised, your correspondent heartily agrees with those in active opposition to the lectures. My next door neighbour is endeavouring to reduce his girth by doing his morning exercises per gramophone instruction, while his little girl is trying to find out where little Bo-Peep's sheep got to by medium of the same machine, but I defy even a professor of language to learn Esperanto by short radio lectures each week. Methinks the half-hour spent teaching us all how to speak our mother tongue correctly would be much more profitable.

XMAS DISCOUNTS 20%

Readers will be glad to learn that they will be able to receive 20% Xmas Discount on the very latest in Wireless—namely the "ASTOR SETS", for which the Queensland Pastoral Supplies Ltd. are Sole Queensland Agents. Full particulars are advertised in this issue. An Astor Log Card is supplied with every Astor Set and full guarantee given, so readers can have every confidence in buying from this Firm. Their Policy of Supplying direct to the men on the land is becoming more appreciated every year. It would be advisable to write at once, if interested.

Questions Answered



"G.C." Bundaberg.—(1) The BremerTully short-wave kit retails at £3/3/ complete with set of coils to cover 12½ to 200 metres. (2) Yes, provided the condensers are of good quality and have the same capacity as those set down in the article. (3) An Emmco 3 to 1 transformer would function quite well in the short-wave receiver, although the amplification would not be as great as when a 5 to 1 is used.

"C.F." Cooroy.—We suggest that you write to the Radio Inspector, G.P.O., Brisbane. He will supply you with all details connected with the A.O.P.C. examination.

"J.K." Gympie.—Yes, we certainly advise the use of a 4.5 volt "C" bias battery. You will find that this greatly reduces "B" battery consumption and will also improve tone and amplification.

"G.L." Lutwyche.—The noise that you speak of is known as motorboating and can be sometimes overcome by reversing the primary connection of one of the low-frequency transformers. If this does not get over the trouble, have your "B" eliminator tested by a reputable radio house.

"L.L.V." Maryvale.—From the information contained in your letter it is quite safe to assume that the trouble is due to a reversed reaction coil. Try changing the two flexible leads leading to the coil.

"B.V.D." Toowoomba.—An ammeter should be used for testing your "A" batteries. The meter should be placed smartly across the battery and the reading noted. Ten to 20 amps is a good reading for a useful "A" battery.

"Reader," Thursday Island.—A "Pick-Up" is a device which, when attached to a gramophone, will enable one to play records through a radio receiver and loud speaker. The tone and volume is excellent. Prices for commercial productions range from £3/15/ to £8/10/. See our July issue for particulars of a home-made job.

REPAIRS

We do rewinding and overhauling of all kinds of Electrical Apparatus, including Armatures, Meters, Loud Speakers, Coils, etc., and guarantee the work. Also Panel Engraving.

HAMILTON & PASS

BURNETT LANE, BRISBANE.

Phone Crogo.

"Colo" Coils

It has been our pleasure to inspect a complete range of "Colo" coils, submitted to us by their manufacturers, the Colo Coil Co. The quality of the workmanship revealed in these goods was a revelation, and they are indeed a credit to the Queensland radio industry.

The Colo Coil Co. was originally founded by Messrs. Cole and Lowe; later the existing company was formed, and several well-known Brisbane business men are interested.

Messrs. Cole and Lowe have been connected with radio and all its branches for many years, and have justly earned themselves the title of "Radio Engineers." Mr. Cole was for some years manager of the Star Electric Co., Ltd., of England, designing and manufacturing all types of radio material, while Mr. Lowe is very well known in Sydney radio circles.

Apart from radio coil manufacturing the Colo Coil Co. are specialising in the re-winding of headphones and loud speakers. Brisbane radio dealers have been in need of such a service for a long time.

The production of radio-frequency coils and transformers in Brisbane will be a great asset to the Brisbane trade, and it is now up to the Brisbane radio dealers and enthusiasts to support the local industry.

The Colo Modified Reinartz Coil, the manufacturers believe, will fill a long-felt want for the enthusiast who requires a receiver which is exceptionally sensitive, and yet smooth in operation. This is an ideal radio-frequency unit for a two or three valve receiver.

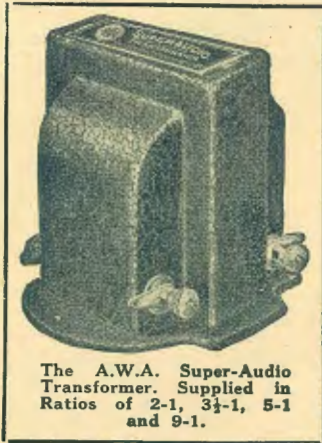
A radio-frequency choke is now a very popular piece of apparatus, and practically essential in a Reinartz set, the choke made by the Colo Coil Co. is most efficient and is very convenient in size.

The Colo Masterdyne Kit is exceptionally suited for a four-valve set; it is often spoken as the Marco dyne. In reality the circuit is a modified Reinartz with one stage of radio-frequency added. This circuit has gained great popularity in America owing to its extreme selectivity.

The Colo Multi Circuit is indeed an interesting piece of apparatus, designed by Colo engineers for the experimenter who desires an inductance which will allow him to experiment with many circuits without the necessity of mounting new coils each time a change is made. This coil has been tested under nine different circuits with forty-five modifications. The following are the main circuits tried successfully: Direct Coupled Aerial Coil, Tapped Aerial Coil, Aperiodic Aerial Coil, Semi-Aperiodic Aerial Coil, Auto Coupled Aerial Coil, Three Absorber Wave Traps, Reinartz Tuner, Radio-frequency Transformers, Five Rejector Wave Traps.

Every kit is supplied with a circuit and instructions for using them to their best advantage, and the Colo engineers are always ready to give assistance to anyone in difficulties. Colo coils may be bought at all radio dealers, and dealers should note that the trade only is supplied.

5.0.2.



The A.W.A. Super-Audio Transformer. Supplied in Ratios of 2-1, 3½-1, 5-1 and 9-1.

An Achievement

The Efficiency of Audio Transformers depends on the amount of iron and copper used, ALL OTHER THINGS BEING EQUAL. The A.W.A. Super-Audio Transformer truly represents an achievement!

Weight - 1lb. ¾ozs.



The A.W.A. Super-Audio Choke. Supplied in values of 25, 50 and 100 Henries.

Compare it with any other at the same price.

-A.W.A. Transformers and Chokes-
-ARE GUARANTEED-
Price 18/-

An Unsolicited Testimonial



SEND THIS COUPON NOW!
For Illustrated Leaflet.

Extract of Letter to Amalgamated Wireless (A/sia) Ltd.

Brisbane,
10th October, 1927.

Since receiving those A.W.A. Super-Audio Transformers I have installed one in a broadcast four-valve receiver, and one in my short wave receiver at my radio station 4AL. There is no doubt that they are the berries, as we amateurs say, for on the four-valve I found an increase in volume, clearer music, especially the high notes of the violin and the cornet, and very quiet operation.

Results on the one that I installed in my short wave receiver are as follows: A much more musical note on Morse stations, telephony much clearer, elimination of noises, thus making a better set all round. It is indeed with pleasure that I have found in this case that an Australian Transformer was better than an American manufacture.

Wishing every success to A.W.A. Australian-made products.

Yours faithfully,
(Sgd.) B. W. M.

Messrs. Amalgamated Wireless
(A/sia), Ltd.,
Queen St., Brisbane.

Dear Sirs,—
Please forward me your Free Illustrated Folder giving full particulars of the A.W.A. Transformer and Choke.

Name

Address.....

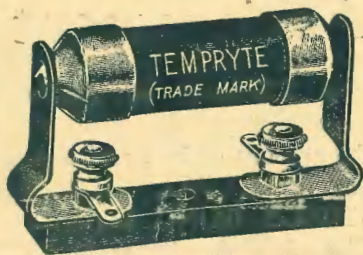
T-2

It's an A.W.A. Product
Obtainable at
All Radio Dealers

The Perfect Control for all Valve Filaments

CYLDON
(Pronounced SIL-DON)

Every Cyldon Tempryte is branded with its true resistance—the only correct method. A Cyldon Tempryte made for every Valve—No Guesswork.



TEMPRYTES

(They treat your Valves Right)

Ask for the Cyldon Table of Valves and Temprytes.

Order your Filament Controls by their resistance value.

Note Reduced Prices—NOW 4/6 With Mount —Cheaper and Better

Be up-to-date and use something better. The day of the old valve destroyer, the variable rheostat, is gone.

Use Cyldon Temprytes and the whole danger of ruining your valves is past.

THREE REASONS WHY YOU SHOULD USE CYLDON TEMPRYTES

1st—Temprytes are guaranteed to function perfectly with any valve, providing they are chosen from our valve chart by our formula.

scientifically designed for correct filament temperature calculated from valve maker's data.

3rd—Temprytes are "wire-wound"—not carbon mixtures or chemical combinations—therefore noiseless. Each one is twice tested during manufacture.

2nd—Temprytes cannot overheat your filaments, being

When Better Condensers are Made—

When Better Valve Controls are Made—

"CYLDON" (Sydney S. Bird & Sons) WILL MAKE THEM

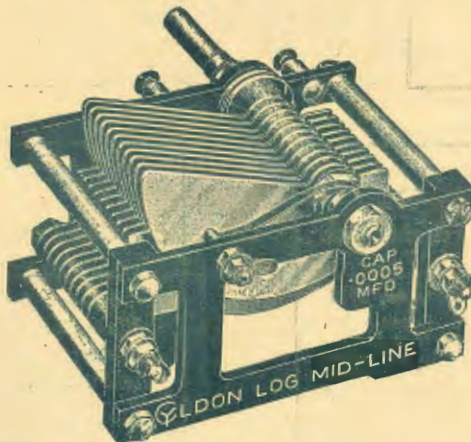
The Perfect Condenser for all Circuits

CYLDON

Eventually all condensers will be Log mid-line type. The CYLDON is the first.

For the Solodyne Receiver the CYLDON is the only three-gang Condenser that will give satisfaction because the CYLDON is log-mid-line.

In all receivers there are individual differences in the various circuits. Therefore, all the tuning condensers must be set at some point of the scale to be accurately in tune, but only log-mid-line Condensers will be accurate over all the scale, because only log-mid-line Condensers have the same difference in dial movements for the same alteration in wavelength over all the scale.



Log-Mid-Line Condensers

A wide experience has definitely proved that CYLDON Condensers are just perfection for short wave work. The solid plates and solid bearings and frame, mean that exact tuning which brings a station once logged in at the same dial reading every time. The capacity of the CYLDON Condensers can be altered by removing plates in a few minutes. Insulation is of the highest grade and right out of field.

Prices: Single .0005, 22/6; Three Gang .0005, 95/- other capacities in proportion.

— Be Guided by Experience Let CYLDON be Your First and Final Choice —

EDGAR V. HUDSON

The Leaders in Radio Merchandising

55 Charlotte Street

'Phone Cent. 2562.