

The Queensland Radio News

"Your Own Wireless Journal"

6^d



Vol. II.

Monday, 1st NOVEMBER, 1926

No. 10

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(with metal flare)
£3-10-0

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The "*Junior Dragon*" offers the choice of two distinctive models—Type A.R.114—artistically designed with oak-panelled trumpet and metal ribs; Type A.R.111—sturdily built and strikingly handsome with its fine black metal flare.

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Crosley 2-Valve Set, complete
£10/15/. **Deposit £2/5/0**

Crosley 3-Valve Set, complete
£13/10/. **Deposit £2/15/0**

Ricodyne 5-Valve Set, complete
£35/-/-. **Deposit £7/0/0**

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£45/-/-. **Deposit £9/0/0**

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£47/10/. **Deposit £9/10/0**

Pay the Balance in Terms
convenient to yourself.

Get Your Set from an Authorised Home Radio Service Ltd. Set Dealer.

You will always be able to recognise one of our authorised dealers—look for the notification on his window.

OR COME DIRECT TO

HOME RADIO SERVICE LTD.

FIRST FLOOR, COURIER BUILDING, BRISBANE.

CROSLEY MUSICONES

The NATIONAL RADIO EXHIBITION which is now open at Olympia, London, is claimed to be the Greatest the World has seen.

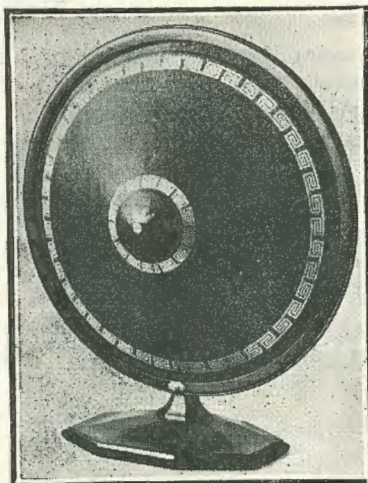
Receiving Sets for home use, mostly of type designed for simple operation, were the greatest attraction, and these in almost every instance, in conjunction with cone type speakers, as it is claimed that those speakers with their large reproducing surface give softer tone and non-directional distribution, making them ideal for drawing-room use.

The speakers that created the furore at the above exhibition were the famous **Crosley Musicones** pictured below, which have also taken America by storm.

In this their first year the production has already exceeded half a million, and most of those sets have been to replace the now obsolete, horn-type speakers.

£4/17/6

Sold on a satisfaction or money back guarantee.



£4/17/6

Hear a Crosley Musicone before you decide.

Contrast the slender beauty of the Crosley Musicone with the fat ugliness of a horn. Contrast its perfect tonal properties with the best you have ever heard. Contrast its price with the prices of to-day's "loud speakers." The answer is plain—you will choose the Crosley Musicone.

Why not buy the Latest and get Correct Musical Reproduction.

From the best Radio Dealers, or direct from

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55 Charlotte Street, BRISBANE,

Representing Metropolitan Electric Co., Ltd., 27-29 King Street, Sydney (N.S.W.).



Low Loss!

WHY buy expensive condensers and coils and then nullify their efficiency by mounting on an inferior high loss panel?

RADION is the foundation on which to build your set. It is made expressly for radio and far excels any other insulating material in the four essential characteristics of wireless, namely:

- 1—Low angle phase difference
- 2—Low dielectric constant
- 3—High resistivity
- 4—Low absorption of moisture

In addition, Radion is easily worked and is truly beautiful in appearance. In cost, it is more economical than any other material and will prove to be far more efficient in every way.

Always insist upon genuine Radion Panels and Parts (dials, sockets, knobs, insulators, etc.). Inferior material cannot possibly give you the same satisfactory results. The name Radion stamped on every piece is your assurance of complete satisfaction.

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The Supreme Insulation

RADION

PANELS ~ DIALS ~ SOCKETS ~ KNOBS

382

Queensland Distributors—

4QG's Programmes for November

The following list sets out the main programme attractions for station 4QG for the month of November. It will doubtless prove useful to radio enthusiasts who may desire to make arrangements some few days ahead.

Monday, November 1st.—Recital by the city organist, the Clarwin Orchestra, the Francis Sisters (Hawaiian instrumentalists).

Tuesday, November 2nd.—The Brisbane Metropolitan Band; the Studio Instrumental Quartette, Miss Ivy Plane (soprano).

Wednesday, November 3rd.—The Savoy Orchestra, Mr. A. W. Crane (baritone).

Thursday, November 4th.—St. Mary's (South Brisbane) Church Choir, Mr. F. Bowers (cornet), band recital.

Friday, November 5th.—The Savoy Orchestra and popular 4QG artists.

Saturday, November 6th.—The Gaiety Theatre Orchestra, the Kalua Trio, Miss Dorothy Brown (contralto), Miss Tiny Brosnan (soprano).

Sunday, November 7th.—All Saints' Church (morning and evening), band concerts (afternoon and evening).

Monday, November 8th.—The Piccadilly Orchestra, Mr. Arthur Tilbury (baritone).

Tuesday, November 9th.—The Wilston State School Choir and Orchestra.

Wednesday, November 10th.—Studio Concert.

Thursday, November 11th.—Mr. A. N. Falk's party

Friday, November 12th.—The Studio Orchestra, popular artists.

Saturday, November 13th.—Catholic Church Choir competition, relayed from the Albert Hall.

Sunday, November 14th.—St. Paul's Presbyterian Church (morning and evening), early afternoon—choral recital by the Holy Name Church Choir (Toowoomba), late afternoon—band concert, evening—band concert.

Monday, November 15th.—The Clarwin Orchestra.

Tuesday, November 16th.—The Studio Instrumental Quartette.

Wednesday, November 17th.—The Silkstone Apollo Club in a special recital from the studio of 4QG.

Thursday, November 18th.—West End Salvation Army Band.

Friday, November 19th.—The Studio Orchestra, Mr. Stanley Tamblyn (bass), Mr. Virgil Ring (tenor),

Saturday, November 20th.—Gaiety Theatre.

Sunday, November 21st.—Wharf Street Congregational Church, Home Mission Service, massed band concert.

Monday, November 22nd.—A programme from "The White House" (Woolloongabba).

Tuesday, November 23rd.—A.N.A. Eisteddfod winners' recital.

Wednesday, November 24th.—Grand violin ensemble, the Studio Orchestra, the Moana Duo.

Thursday, November 25th.—The Lyric Entertainers.

Friday, November 26th.—The Federal Band.

Saturday, November 27th.—A.N.A. Eisteddfod winners' recital.

Sunday, November 28th.—St. Andrew's Church of England, Citizens' Band, Municipal Band.

Monday, November 29th.—The Kalua Trio, Miss Vera Parker (contralto), Mr. Tom Kelleher (blind baritone), music talk.

Tuesday, November 30th.—The Moana Duo, Mr. M. Levoi (racouteur), Lauri—the entertainer, Holy Cross Choir.

3,250 Miles on Crystal

Remarkable Long Distance Reception

The following is an extract of a letter received at Station 4QG:—

The S.S. "Tapti" reports 4QG, picked up 3,250 miles (on Panama to Sydney track), clearly audible on Telefunken type E5 Crystal with I.L.F. amplifier. Heard every day from that distance at greater strength than any other Australian or American Station. The S.S. "Niagara" reports 4QG superior to any station heard on the Sydney to Vancouver run. The "Niagara" also reports that many Honolulu residents regularly sit up to hear 4QG in preference to the U. S. A. Pacific Coast stations. United States Shipping Board operators also comment favourably on 4QG's good sea range and good quality transmission.

Crystal Users

Valve amplifier, to give you loud speaker results from your present set, £4/10/-.

Loud Speakers—

Spitfire Baby	£1 5 0
Spitfire Junior	1 17 6
Amplion AR38	3 0 0
B.T.H. Cr	4 10 0
Meistersinger	5 19 6

'Phones—

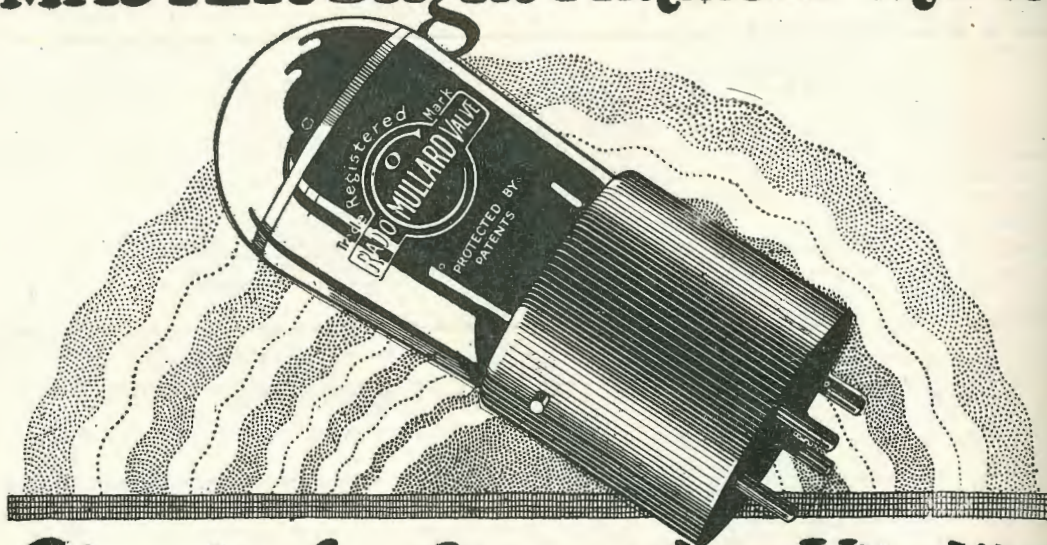
Spitfire, per pair	0 17 6
Rico, per pair	1 2 6
Siemens, per pair	1 5 0
Brandes, per pair	1 10 0

Glass enclosed Barrel Detectors, 3/6 each.

J. T. Greenlees & Co.

Albert House, Ann Street, Brisbane
(Round the corner from the Givoli Theatre)

MASTER Bright Filament Valves



Giants for Strength & Vitality

DESIGNED on a unique principle which secures remarkably robust construction with highly efficient performance. For long useful life, ample volume and greater range ask for

MULLARD SINGLE RING VALVES

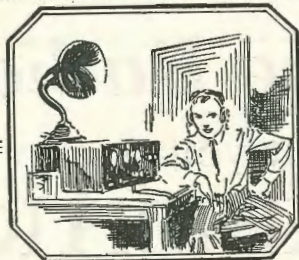
Red Ring for H.F. amplification 7/- each
 Green Ring for L.F. amplification
 These valves only require a 4-volt accumulator

HF Amplification.				LF Amplification.				Power Valves.				Detectors.
Type	Fil. Volts	Fil. C'rent	Price	Type	Fil. Volts	Fil. C'rent	Price	Type	Fil. Volts	Fil. C'rent	Price	
HF	3.8	0.6	7/-	LF	3.8	0.6	7/-	DFA.1	5.0	0.35	13/6	When valve is followed by an Intervalve Transformer or telephones, use an LF Amplifier or Power Valve. When valve is followed by a Resistance Capacity Intervalve system, use an HF Amplifying Valve.
D.06	3.0	0.06	13/6	D.06	3.0	0.06	13/6	DFA.3	6.0	0.06	17/6	
D.3	1.8	0.3	13/6	D.3	1.8	0.3	13/6	PM.4	3.7	0.1	13/6	
DFA.4	5.0	0.35	13/6	DFA.1	5.0	0.35	13/6	DFA.0	3.5	0.35	13/6	
PM.3	3 to 4	0.1	13/6	DFA.3	6.0	0.06	17/6	DFA.4	5.0	0.25	13/6	
				PM.4	3.7	0.1	13/6					

All Mullard Valves are manufactured at Mullard Works, London, England.
 OBTAINABLE FROM EVERY RADIO DEALER IN AUSTRALIA.

Mullard

THE MASTER VALVE

THE QUEENSLAND
RADIO NEWSA Magazine for Amateurs
A. T. BARTLETT, Editor

THE EDITOR'S PAGE

Buying Radio on Easy Terms

MAYOR JOLLY, in his opening speech at the recent Radio and Electrical Exhibition, caused the faces of all who heard him to wrinkle in smiles when he made reference to the rapidly-expanding system of buying almost anything on easy terms. He told of a young American couple who had just been blessed with their first baby. It was pay-night and hubby was coming up the garden path. Wifey and baby waited at the front porch; after the customary embrace, hubby excitedly exclaimed, "Just fancy, dear—one more payment to the doctor and baby will be ours!"

It really is surprising to learn of the vast amount of business transacted to-day on the Easy Terms principle. Homes, furniture, motor cars, pianos, electric lighting and fittings, and latterly radio sets are a few of the many commodities included in the Easy Terms method of business.

Indulged in to moderation, Easy Terms buying is an excellent thing for the working man, who may not be in the position to pay cash. Particularly is this true with regard to the purchasing of a radio receiver. Every home deserves the comfort and enjoyment of a good radio set, and many manufacturers and dealers are now making this possible.

The crystal-set listener need no longer gaze with longing eyes at an attractive two or three valver displayed in the radio window. A small deposit and easy weekly payments will place the set within his home, giving him access to the programmes of not one, but many stations.

The fan with a modest single valver who aspires to manipulate a more powerful set need not wait months for his dreams to come true. The few shillings weekly he would arduously save may now be banked at his radio dealer and all the while he enjoys the use of his new receiver.

Of course, it is far the better policy to pay cash. But if the ready money is not available the next best thing is to buy a set on terms and join the vast happy family of radio listeners.

Handsome Radio Cabinets

Put your set in an "EXHIBITION" WIRELESS CABINET

and you have the satisfaction of knowing that you have made the best possible choice both as regards effectiveness and appearance.

All of our cabinets are faithfully made from Rosewood and Silky Oak, while standardised methods of production result in lower prices.

Period or Special Cabinets

We make special styles in Cabinets, designing them where necessary to harmonise with any Furnishing Scheme.

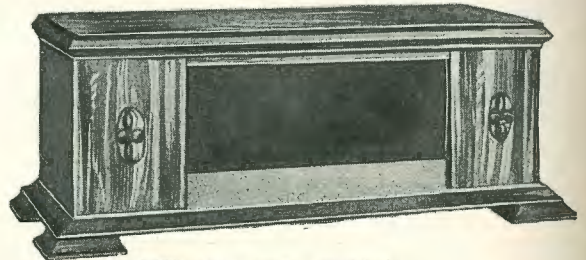
Period Styles such as JACOBAN, QUEEN ANNE, HEPPLEWHITE, CHIP-PENDALE, etc., also supplied.

ESTIMATES AND SKETCHES FREE ON APPLICATION. COMPLETE SETS SUPPLIED WHERE DESIRED.

Those living out of town may order with every confidence. Goods are carefully packed and placed FREE ON RAIL BRISBANE.

IMMEDIATE DELIVERY GUARANTEED.

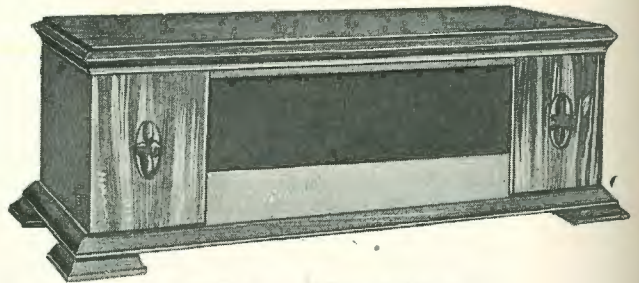
TERMS OF PURCHASE.—Cash with order, or Goods sent C.O.D.



R.W. 100 3-Valve Cabinet

Illustration R.W. 100 is for a Three-Valve Set, the measurements being 15 inch x 7½ inch x ½ inch (Bakelite Panel Size.)

PRICE 45/.



R.W. 101 4-Valve Cabinet

This is a Four-Valve Model. Panel Size 18 inch x 9 inch x ¾ inch.

PRICE 50/.

ON VIEW AT the Gramophone Exchange, George Street, Brisbane, or at our showrooms in Brunswick Street.

Robert's "EXHIBITION" Wireless Cabinets

HENRY ROBERTS
BRUNSWICK
HOME FURNISHERS
BRUNSWICK ST. - OPP. JACKSON'S BOND
STORES - NEAR EXHIBITION - VALLEY - BRISBANE

Crystal Reception without Aerial or Earth

A Novel Crystal Set which delivers good strength within a 3-mile radius of 4QG, no aerial or earth being necessary

By E. E. LOMAS.

A crystal set that will bring in 4QG without aerial or earth up to three miles from the transmitter is a novelty that will interest many wireless enthusiasts. This can be done with the set we are about to describe, but it must be clearly understood that reception at three miles will be faint, and very careful searching and tuning will be required to pick up signals the first time. Once you are sure of the correct tuning it is only a matter of turning the left side of the set to 4QG and finding a sensitive point on the crystal. The set will be found just as directional as a frame aerial.

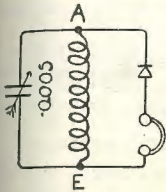


FIG. 1.

The theoretical circuit is shown in Fig. 1. It is well known and in very common use. Any set

constructed on this circuit, provided the correct values of inductance and capacity are used, should bring in 4QG faintly without ariel or "earth" if operated close to the station. The increase in signal strength is obtained by using a coil of larger diameter than usual.

The materials required for the construction of the set will be: 1 lb. 18-gauge D.C.C. wire, 1 .0005 Var. condenser, 1 detector unit and crystal, 4 terminals, 4 contact studs, 1 panel Bakelite (7 1/2 in. x 5 in.), 3 strips Bakelite (2 1/2 in. x 1/2 in.), 1 strip Bakelite (3 1/2 in. x 1/2 in.) Radion may be used with equal effect.)

The internal measurement in inches of a suitable cabinet would be 7 1/2 in. x 7 1/2 in. x 3 1/2 in., for which a suitable baseboard would measure 9 in. x 5 1/2 in. overall.

Commence by drilling holes for the contact studs in the four strips of Bakelite. The dimensions of these strips are shown at A, Fig. 2. They are used for gripping the turns of the coil. The longest strip

should have four holes drilled in it, so that it can be screwed to the baseboard runners by brass wood screws. Next obtain a cylindrical former, preferably a block of wood 6 inches in diameter and 2 inches thick. This should be slotted as shown in Fig. 2, B, so that the strips of Bakelite can be placed under and over the coil and screwed together. When these strips are in position the coil will keep its shape unless roughly handled.

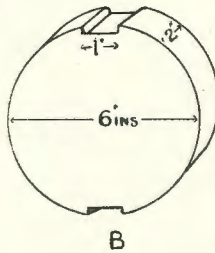
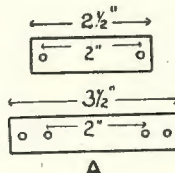
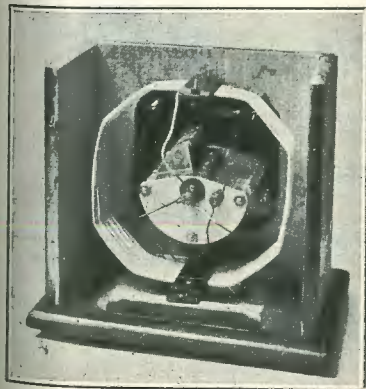


FIG. 2.

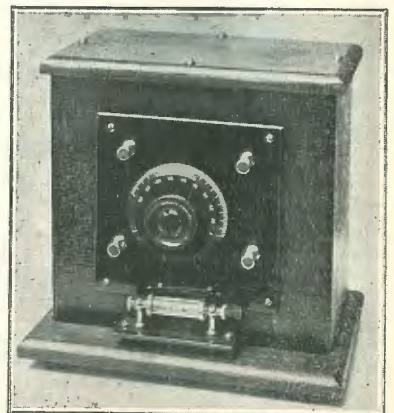
Twenty-two turns of wire should then be wound on the former and secured by the Bakelite strips. The coil may then be slipped off the former, and it is ready for mounting. The coil should be raised 1/2 of an inch above the baseboard. This can be done by screwing the large strip of Bakelite on wooden runners or bearings nailed to the baseboard instead of on the baseboard itself. The variable condenser is then mounted on the panel so that it sits in the centre of the coil, and the detector unit is mounted just above the coil.

In the photograph of the original set the detector unit is shown mounted on the baseboard, but it will be found more convenient if a larger panel is used and the unit mounted at the top. The wiring is simple and can easily be followed from Fig. 3, viz.: Coil to catwhisker, to aerial, to variable condenser—detector to phones—coil to earth, to variable condenser, to phones.

Reception is obtained with the original set when carried round a lawn 3 miles from 4QG where there is



This is how this super-het crystal looks with the back and top of cabinet removed. The photo shows how the coil is secured to the Bakelite strips.



A neat looking panel—you'll agree. The aerial and earth terminals are mounted, enabling an aerial or earth to be utilised if desired.

no possibility of pick-up from neighbouring aerials, and it gives equally good results indoors. If the set is connected to a 6ft. aerial and to earth, reception is greatly improved, and with a good standard aerial and efficient earth fair loud speaker strength can be obtained.

The set may also be used as a wave-trap, and is very efficient at three miles when connected in series as shown at Fig. 4. Then more turns may be added with advantage if it is intended

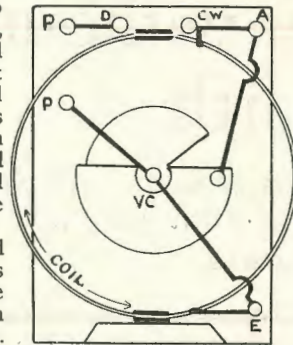


FIG. 3.

for use as a wave-trap nearer the station, but in this case it would not be much use as a crystal set for reception of 40G.

The original set, which delivers good reception at Windsor and Rosemount nightly, is now displayed in Messrs J. B. Chandler's Radio Section, Adelaide-st., and may be heard in operation any day during transmission sessions.

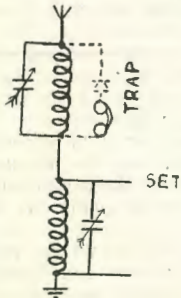


FIG. 4.



Logging Them All!

on his "AENOLA"

Twelve Month's Unconditional Guarantee

AENOLA Receivers

Cheapest Prices — Best Parts Used

NOTE THE PRICES:

- Crystal £3-0-0 3 Valve £20-0-0
- 1 Valve £9-0-0 4 Valve £25-0-0
- 2 Valve £14-0-0 5 Valve £32-0-0

These prices include Dull Emitter Valves, Batteries, Headphones, Cabinet, Aerial Equipment and Coils. Loud Speakers from £2 upwards extra.

Demonstrations and Installations Free

NEWNHAM & BARNES

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LOGAN RD. WOOLLOONGABBA
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Phone J 4379

Improve Your Reception

with

EDISWAN Valves

(Stocked in English and American Caps)

Reduced Prices of the Famous "A" and "A.R." Valves **5/-** ea.



TYPES "A," "R," and "R."

Plate Voltage, 30-80.
Filament Voltage, 4.
Normal Filament Current 0.75 amperes.
Prices, 5/- each.



TYPE "A. R. 05."

Filament Voltage, 2.5.
Plate Voltage, 20-50.
Filament Current, .06 amperes. Price, 13/6 each.

- ARDE 12/6
- PV5 Dull Emitter, 18/6
- PV6 Dull Emitter 18/6
- PV8 Dull Emitter 18/6

ALL WIRELESS DEALERS

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EDISON SWAN ELECTRIC CO., 156 Creek St., Brisbane

4QG's Successful Year

Twelve Month's Work Reviewed

One section of the voluminous report issued this year by the Auditor-General of Queensland is of especial interest to radio enthusiasts. It is the section dealing with the Queensland Radio Service and setting out the financial statement in connection with the first twelve months' operations of Station 4QG.

As the Queensland Radio Service was established in January, 1925, the annual report this time covers a period of eighteen months—from January, 1925, to June 30th, 1926.

The most gratifying feature of the report is that the operations of the station for the first year of its existence show a profit of £729/18/.

The report states that in January, 1925, the State Government secured the only "A" grade license allotted to Queensland under the Commonwealth Wireless Regulations.

Broadcasting was commenced from the temporary station in July, 1925, and from the permanent station in April last..

The total expenditure on the station to June 30th last was £29,223, made up as follows:—

Transmitting Gear (temporary station)	£1,671
Transmitting Gear (permanent station)	9,654
Erecting Main Station	13,221
Towers	2,130
Erecting Temporary Station	184
Subsidiary Apparatus	2,363
Total	£29,223

Revenue Account.

The following is the revenue account for the service for the twelve months:—

Expenditure.		Revenue.	
Salaries	£2872	Advertising	£820
Incidentals	1425	Sales	9
Artists	3311	Demonstration	31
Royalties	2670	Licenses	£10,147
Balance (profit)	729	Total	£11,007
Total	£11,007		

To launch a movement such as broadcasting in a State and to provide a service of high quality and at the same time to make the station pay its own way is no mean achievement, and certainly speaks volumes for the efficiency of the station.

One item in the revenue account is interesting. The balance-sheet shows that the revenue from advertising during the period under review was £820. One often hears the advertising session at 4QG criticised. The station is, however, the property of the taxpayers, and had there been no advertising session, either the operations of the station would have shown a loss, or the director would doubtless have been compelled to reduce his programmes, and so reduce his expenditure in order to keep his ledgers balanced.

Praise in Parliament.

During the debate in Parliament during October, when the Station 4QG was under review both members of the Government benches and prominent members of the Opposition joined forces in praising the station and its staff.

Mr. H. E. Sizer (member for Sandgate) said:— I realise that this is not a Government concern in the real sense of the word, but, as one who listens almost nightly when I am home to the wireless concerts, I desire to pay a compliment to the station which Queensland has established, and say that I am satisfied with the results from it. As one in a position to get in touch with southern stations, I am quite confident that Queenslanders are obtaining an excellent service from their own station. No doubt enthusiasts like to pick up long-distance stations, but our own station is splendidly conducted. It would be an educational treat to many hon. members if they visited the station—and this applies also to the general public—and made an inspection of the station. I am convinced they would come away with the impression that the director is extremely capable, and gives the public a very good service indeed.

In fairness to those concerned with the station, I consider that I should say one or two words in relation to criticism of the station that one occasionally sees. I quite realise that the director and those connected with the station are often unable to reply to this criticism. Complaints arise particularly with respect to atmospheric disturbances. Everything possible, so far as human effort is concerned, is being done to overcome that difficulty. Queensland has established an efficient service, and I consider the officers of the station should be complimented on their efforts. We have as good a station as can be found in any other part of Australia, and those who listened in last week to the long-distance relay from Nambour must realise that 4QG provides as good a programme as could be asked for.

The Premier (the Hon. W. McCormack, M.L.A.), said:—The establishment of a radio station by the Government has fully justified itself. Indeed it has shown that the running of wireless stations should never have been allowed to fall into the hands of people for private profit. In the other States the rights have been given to companies which are doing excellently out of those stations with very little expenditure of money.

Mr. Fry: They do not put up as good a programme as we do here.

The Premier: It is a difficult thing to determine the relative quality of programmes. Frequently I ask visitors from Sydney what they think of our Queensland programmes and they praise them, while, vice-versa, Queenslanders praise New South Wales programmes. Each person praises the station farthest away, the same as most of us are willing to put money into the investment that is a long way away. No doubt all reputable stations endeavour to put up as good a programme as possible, as their interests are involved.

Mr. Morgan: This station is self-supporting, it is not?

The Premier: Yes. Of course, last year was the year when the whole of the capital expenditure took place. Even with the temporary station that was originally instituted by Mr. Robinson the public received a great deal of consideration. Since the larger station has been erected the public have been enabled to get a good service, and are getting better and better programmes, and the revenue more than exceeded the expenditure during the past year.

In the coming year, with an increase in the number of listeners-in, and the successful yarding of those listeners-in who will not take out licenses, the indications are that we shall have rather a good surplus after paying interest and redemption. It is not the intention of the Government to exploit the radio service for the purpose of making a profit. As the resources aggregate, we hope to extend the system of wireless further afield in Queensland. With the power station operating, perhaps, the whole of the people of Queensland will be able to take advantage of the programmes that are broadcast by 4QG. Let us hope that people will more and more go in for this very cheap form of recreation. Speaking for myself, there is no doubt that wireless has educated me from a musical point of view. I certainly now know the names of the composers of most of our well-known music. The announcer has certainly educated the public in that regard, and the service itself will be improved as artists are secured. In a few months we shall have as fine a service as there is anywhere in the world.

I would take this opportunity of adding a word of praise to what has already been said by the hon. member for Nundah. The director knows no 44-hour week. (Laughter.) He works night and day to make a success of that service. The whole of the staff I have co-operated with him, and the results the public are getting to-day are largely due to the energetic work of the director and his staff. I think the least we can do is to say a word of appreciation to those people who have at least shown that this State enterprise can be efficiently carried on, render a very good service to the people, and at the same time not have that wonderful incentive "exploitation of the public" that seems so necessary in the eyes of the Opposition. It was a wise action on the part of the Government to get control of radio. We may have our little differences with the Commonwealth Government over the use of radio, but no doubt we can get over that.

I think that this wonderful invention is going to be a great factor in education. Let us hope that it will be used not only for the broadcasting of music and for the pleasure of people, but that later on it will be generally used in the cause of education and of advancement in the case of people in country districts. City people, of course, have opportunities that country people do not have, and I believe that, with a better knowledge of looking after their sets, with

facilities for getting their batteries charged with the advent of electric installations in country towns, radio will become a splendid thing for the wide-flung people who live in the country districts of Queensland.

Mr. Kelso (member for Nundah), Mr. Fry (member for Kurilpa), Mr. Hynes (member for Townsville) and Mr. Barnes (member for Wynnum) also praised the station.

"Brisbun" or "Brisbane."

A humorous interlude occurred during the discussion. Mr. Fry (member for Kurilpa) was referring to the work of the announcer and was remarking how well it was carried out when somebody interrupted him with: "Yes, but he says BrisbAne."

There was much laughter in the House.



This is how "Russell," of Toombul, received the "ginger-pop" sent out to the children from 4QG by "The Sandman" some little time ago. Russell's father is a photographer, which perhaps, explains this unusual picture.



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A British Battery from the well known and the earliest established electrical equipment manufacturers in the British Empire.

"A" Batteries.

6 Volt 24 amp hours	£3 5 0
36 " "	3 15 0
48 " "	4 10 0

"B" Batteries.

60 Volt	£5 5 0
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Wireless Aerials

Supplied, Delivered and Erected.
Good Timber, Solid Foundations.
Enquiries Invited.

G. H. BUSBY

Lily Street, Stones Corner,
South Brisbane

"The Ham"

(Dedicated to the Hammal Realm, DX Fiends, Card-hunters, and over-enthusiastic BCL's.)

By CLIFF GOLD (A-4CG).

He sits before his radio,
His head fone on his ears.
He twists a knob and turns a dial—
Hark! What is this he hears?
"Dar dit dar dit—dar dar dit dar—
Dit dar—dit dit dar—2AB!"
He holds his breath, he grips his dial,
While his heart beats fast with glee.
Then "QTC" floats to his ear;
It's some guy wants to talk
To a bloke out in Australia
From his mansion in New York.
Then comes a "K" which means "go on."
He signs "U2AB"—
The ham turns on his 202's
And reaches for his key.
"U2AB," "U2AB"!
He keys with all his might;
He gives his "K," but sad to say,
Yank sez., "Nil her. Good nitel"
He sez, "GN om 7 3's."
Then, poor, simple crank,
Turns to his darling wife and sez,
"I've worked another Yank."

She sez, "Oh, dear, I'm proud of you;
But I think 'twould do more good
To do some 'working' round the house;
F'instance—chop some wood."

He lifts his fones from off his ears,
Pauses, as tho' in doubt;
Turns a knob, snaps a switch;
Watches his tubes go out.

He hangs the fones up on their hook,
And with movement slow and loose,
He reaches to his power-board,
And switches off the "juice."

Sadly he rises to his feet
And turns and makes to go;
But casts a longing look behind—
"Adieu, my Radio."

Out by the wood-heap with the axe,
He gazes at the sky;
Above the clouds he thinks he sees
Yanks' signals flying by.

He gazes at his aerial,
And mumbles, "Safe and sound,
But since you're switched to earth, old cage,
You're just elevated ground."

Tears—big tears—come to his eyes.
By unknown mystics spurred
Those signals "bump" his aerial;
But pass him by—unheard.

The tears run slowly down his cheeks,
And then in accents low,
With aching heart and longing ears—
"ADIEU, MY RADIO."

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STORAGE BATTERIES

Complete Satisfaction at all Times with U.S.L. Wireless Batteries

Radio Batteries

6 Volt	60 Amp.	£3 18 0
6 Volt	80 Amp.	4 19 0
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Power to receive the distant stations
clearly, and clearness for 4QG.

There's long life and dependable ser-
vice in U.S.L. Batteries, too.

Bring your Battery troubles to U.S.L.
and have them remedied at low cost.

Butler Bros. [Aust.] Ltd.

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as never before at*

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McWHIRTERS'

The Valley, Brisbane

Coils and How to Make Them

By H. L. HOBLER (A-4DO).

At the present time, with the great number of varieties of different coils in regular use, it is a very difficult matter to say which is the perfect coil. Although many theories have been put forth claiming certain advantages for certain coils, no definite announcement that the perfect coil has been found has yet been made, and consequently most of us when building a transmitting or receiving set follow the advice given by someone who has met with success in the design and arrangement of his coils and construct them after his method.

Up to about twelve months ago the most popular type of low-loss coil was that of the Lorenz type. Wound on pegs in an over-and-under fashion, and then slipped off their form and tied with cotton or some such material as waxed string. This method of construction proved satisfactory in most cases, but had serious disadvantages when looked at from a highly technical and theoretical point of view. In the first place, in order to keep the radio-frequency resistance of the coil as low as possible, more wire than is necessary should not be used, and there should be no sharp bends in the wire. In these respects the Lorenz coil differs, and as a result it is by no means the most efficient type of coil.

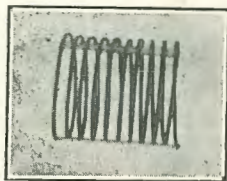


FIGURE 1.

Of late, many excellent descriptions of coil-making have been given in various radio journals, and it is not my intention to enlarge on these articles, but merely to describe a few types of coils which I have recently made, and which are very efficient. I might mention, however, that before constructing these coils all points regarding the making of a very efficient inductance were taken into consideration and built into these coils. The trouble repaid me well, and the results are shown in Figs. 1 and 2, the coil in the first figure being a transmitting helix and those in Fig. 2 inductance coils for a short-wave



FIGURE 2.

receiver. The illustration in Fig. 1 does not do the helix justice, but it will serve to show what the coil does look like. Other coils are also illustrated, and will be described later.

First of all, we will proceed with the construction of the solenoid type of transmitting coil, shown in Fig. 1. It will be seen that this coil has ten turns, space wound, with a diameter of $4\frac{1}{2}$ inches. The distance between each turn is $\frac{3}{8}$ inch, and the winding is perfectly round, or as near so as possible. The turns are well spaced, and are held firmly in position by means of cemented celluloid strips. The construction is as follows:—Secure a cardboard former of sufficient length and of the correct diameter for the coil to be made. Cut three lengths of celluloid each twice as long as the coil will be when it is completed, and about half an inch wide. This celluloid can be obtained from automobile rain curtains, or, better still, the celluloid strip for mounting honeycomb coils is just the thing. Fix the three strips along the length of the cardboard tube, and space them at equal distances around the circumference of the form. The celluloid must only be temporarily fixed to the former, as when the coil is completed the whole thing must come away from the cardboard form. Stamp paper will suit admirably for holding the celluloid strips to the cardboard, but be careful to see that the centre of each strip of celluloid is in such a position that when the coil has been wound its middle is directly over the middle of each celluloid strip. When the strips of celluloid are fixed in position, commence winding the coil around the form and over the celluloid, after seeing that the middle of the coil will pass over the centre of the celluloid strips.

When the required number of turns have been wound, and spaced as wanted, attach the ends of the wire or strip (if copper strip is used) to the cardboard tube. Now procure some acetic aether from a chemist (about a tablespoonful will be sufficient), and in it dissolve a piece of clean motion-picture cinematograph film about the size of a three-penny piece. This solution is the celluloid cement.

With the turns of the coil spaced to the correct distance, turn back one free end of a celluloid strip at a time, so that it will lie on top of the wire and directly over the strip underneath the winding. Paint some of the acetic aether on the celluloid between the first two turns, and immediately press the celluloid strips, under and over the wire, tightly together, and hold in position until they are tightly cemented. This cementing must be done very quickly for best results. Proceed in this fashion half way along one strip at a time, cementing between two turns only at a time. When half of the length of the coil has been cemented with one strip start at the other end of the strip and do the same, using the other free end of celluloid to lie along the top of the coil. When the middle is reached make a neat join together with the two ends of the celluloid strip, and you have completely finished with that strip.

Proceed with the two remaining strips in the same manner, attaching the ends of the coil securely to one of the celluloid strips. When the cementing has been completed all that remains is to gently push the cardboard former through the coil, when an inductance coil similar to that shown in Fig. 1 will be completed.

The coil illustrated in Fig. 2 is made in a similar manner to the helix just described, save that a different solution is used as a cement. The acetic collodion is used for cementing insulated wires to the celluloid. These short-wave coils are wound in the same way as the transmitting coil, but instead of being cemented to the celluloid strips with acetic aether, are fixed in position with collodion, which is cheaper than the aether. The ends also terminate in convenient plugs (Grodan E.C.S., shown) instead of being fixed to one of the strips of celluloid.

Having been under the influence of aether and chloroform nine times, I did not bother about cementing these coils in the open, but if anyone is subject to insomnia I would advise them to do the cementing part in the open air, as the fumes from either solution are very unpleasant, and if properly inhaled may have disastrous effects.

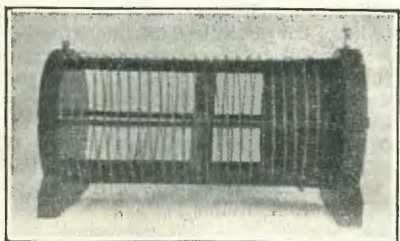


FIGURE 3.

In Fig. 3 a rod supported helix is shown. The supporting strips are of fairly thick bakelite, so that when the wire is wound over them they will not be pulled into the form of a curve. Small grooves are cut at equal distances along all of the strips, so that the winding of bare or tinned copper wire will not slip about. The end of each supporting insulating strip terminates in a tight-fitting groove in a wooden end cheek, and so long as the strip fits tightly into the cheek there is no need to use any fixing screws. Each end of the winding connects to a terminal mounted on the top of each end cheek. The wooden ends used in the helix shown in the photograph were made of silky oak, approximately one inch in thickness. Each end is in one piece, and was so cut to leave a stand on the bottom, with the result that the completed helix rests firmly on these stands and needs no mounting arrangements. The coil wound on this former is very rigid, and can be easily tapped and handled without displacing or bending the wire. Inside the winding, and attached to the right end cheek, is another coil, which was formerly used as a grid coil. However, if only the rod supported coil is needed, this inside coil can be dispensed with.

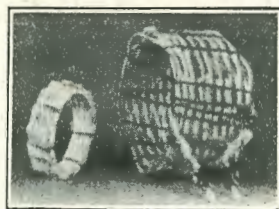


Fig. 4.

Fig. 4 illustrates two Lorenz coils, wound with double cotton-covered wire, the turns being held together with waxed cord. These coils are seldom used nowadays, as they have few points to recommend them, when looked at from the theoretical point of view. Their main use is in sets where a large amount of inductance is required in a small space, but if this must be so I would recommend the use of a jumbled or closely-wound cylindrical coil.

Always, when making coils, it should be borne in mind never to use more insulating material than is absolutely necessary. Never make the diameter too large (3 inches is about correct). Have the winding as direct as possible, and space the turns well. Never less than the thickness of the wire itself. No. 16 gauge wire is one of the most suitable sizes for winding short-wave coils, and it should be remembered that certain gauges are better for certain purposes. Radio-frequency currents travel along the surface of a conductor, and it is for this reason that copper tubing or copper strip are extensively used in short-wave coils, thereby doing away with the waste material, which acts only as a resistance to the current.

HERE ARE SOME INTERESTING FIGURES.

Trade in articles and apparatus connected with wireless work has developed very quickly in the United States. Two million (2,000,000) dollars worth of apparatus was sold in 1920, 350,000,000 dollars worth in 1924. This is an output beyond all comparison even with that of motor cars, and goodness only knows how many cars found their way into the market in recent times. Articles of sport and photographic goods are produced in America in far less quantities, and these we see flooding the market at all corners of the globe. In that great country of the West, the country of Kodaks, golf and tennis, you do not have to look very far for wireless goods in quantities running into numbers of ten figures.

Here are some more interesting figures. In the vacuum of your receiving valve, 1,000,000,000 molecules and even more of air are present, and yet this valve has been exhausted by the most modern method known to science. That is what we call a high vacuum! That is something to think about. You will be more astonished still to know that there are never any collisions between these molecules, even though they are animated by a continual movement inside the glass bulb. Perhaps they have found what we humans in our large cities have been striving to attain for a long time, namely, perfect rules for the circulation of traffic.

Personalities



The City Architect (Mr. Foster) has turned his thoughts from town-planning to wireless. He is becoming most dexterous in the manipulation of his crystal-valve receiver.

Another City Council-ite (Mr. Jack Mankelton) is also a keen krystal krank. He now wears the crystal halo of victory, having carried off first prize at the recent Enoggera show. Rumour has it that he wears the certificate in his hatband, while the blue ribbon shows to striking advantage worn as a necktie.

Michael O'Brien (4MM), a son of Israel, has mastered the art of automatic key-punching. He has assembled a very neat idea which he describes in detail in this issue.

Old 2HM (H. Marshall, of Armidale, N.S.W.) is now in Brisbane. Listeners of by-gone days would be pleased to meet Mr. Marshall, whose voice was very amusing over the air.

Wanted a steeplejack to crawl to dizzy altitudes to repair 4CM's aerial—recently blown down. All volunteers work entirely at their own risk. Remuneration consists of a few dud tubes, burnt-out phones, and sundry junk.

Ray McIntosh—one of 4QG's engineers—recently judged the radio exhibits at the Nundah show. With much pomp and circumstance Ray deliberated carefully on each exhibit, looking anything but the "har case" he really is.

Mr. J. B. Andrews, of the Samarai Mission, Papua, has graduated from the BCL school to the College of Hams. He states he copies 4WI on their morse tests each Tuesday night.

When Mr. D. J. Harkins (3YN) of Victoria called upon a few of the local 4's recently he created quite a bit of envy amongst them. He was all "done up" in flying officers' uniform and spoke gallantly of the noble deeds he intends to do when he takes up duties as wireless operator with the aerial survey of the Great Barrier Reef.

There mightn't be any flies on 4QG, but there were a fair number of moths about that station a few Saturday evenings ago. Bush fires raging about Brisbane drove swarms of moths into the city, and the big transmitting tubes at 4QG proved a great attraction for the insects. It was feared that they would cause interference with the transmission of the bedtime story session, and the director made a preliminary announcement at 6.30 p.m., requesting listeners to bear with any delays that might occur through electrocuted moths throwing the transmitter temporarily out of commission.

"Service with a smile"—that's the motto of Ernie Holt, of Stanley Street, Woolloongabba. Ernie recently launched out in business for himself and reports good bizz.

Which is it—4GQ or 4QG? The question has evidently caused the Hon. William Lennon some concern for, when speaking at the recent Hotel Carlton function the hon. gentleman became quite confused over the matter. After some hesitating and a little prompting, he decided to let it go as "4QG."

Leo. J. Feenaghty (4LJ) who recently secured his ham ticket, writes us as follows:—"Just on the giddy, old ether about two weeks, and only worked local 4's and one lone 2 (2JA) to date, using ye olde ubiquitous UV201A avec anything from 240 to 600 on her vitals in a L.C. Hartley hook-up." Leo. has been swotting over a rectifier, and hopes to do big things in the near future.

Mr. A. R. Thoms, advertising practitioner of this city, is now a keen radio fan. At present his interest is centred round Browning Drakes and wave traps.

Mr. Neville Harper, of Messrs Noyes Bros., Ltd., is the proud daddy of a little radio fan. We recently saw Neville with Mrs. Harper and the baby in a city tramcar, Neville handling that child with the precision of an Igranic condenser.

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Radio is an Electrical Job—I am an Electrician.

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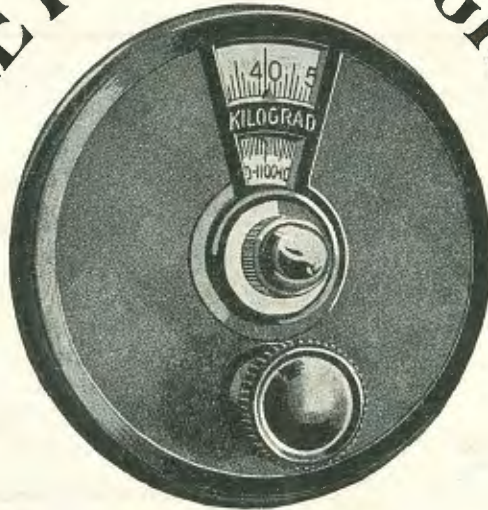
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Shows the way to better tuning

Reasons why the Pilot Kilograd Dial is the Best of the New Type Vernier Dials on the Market

None excel it in appearance. It can be put on any old set now in use and, of course, improve the tuning control. It is the only vernier dial that will show both clockwise and anti-clockwise calibrations, so that dealers can make no mistake in placing quantity orders.

It has a friction control that prevents the slightest backlash.

Finally, while being as mechanically strong as any offered to the public, it is the cheapest bakelite moulded vernier dial available in Australia to-day.

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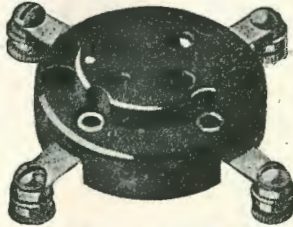
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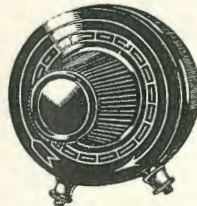
Height Line Wavelength.	
5113, 13 plate	£0 11 3
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Height Line Frequency aluminium plate, from	£0 12 0
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1 Universal Fitall socket	0 2 3
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906, 6 ohm rheostat	£0 3 9
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1 Jacks from	£0 2 6
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1	£0 3 0
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1	0 2 9
1	0 2 9

1 Bakelite Rheostat, with White Arrow knobs, 6 ohm	0 3 3
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1 Standard Bakelite sockets of all types; round base and standard panel type	0 2 6
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Amplifiers in 1st, 2nd, 3rd, and 4th stages

Also 3 stages Resistance Coupled.



No. 1700 Fixed Rheostats for 201A, with 6 volts	£0 3 3
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Standard 201A Sockets	£0 2 6
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ris Sts., Wellington, N.Z.

A few club members "snapped" on the jetty.



The Portable B.C.L. Receiver.



The portable low wave transmitter and receiver with op. 4AW (A. E. Walz) at the key.

Toombul Club Mingles Wireless Waves with Ocean Waves

On the afternoon of Saturday, October 16th, residents of Nundah and district were somewhat interested and curious to see a motley group of motor cars, Fords, motor "bikes," push-pull bikes, tricycles, and scooters—numbering in all about 20 conveyances—wending their dusty way towards the Redcliffe Road.

This group of young fellow-me-lads comprised none other than the notorious Toombul Radio Club out on a week-end trip to Woody Point, where some interesting experimental work was carried out.

The official illustrator of the club (Mr. A. D. MacPherson) kindly loaned the club his seaside residence, and took upon himself the unenviable duties of cooking for and feeding the hungry lambs.

A small portable transmitter (the property of 4AW) using a Ford coil and one 201A tube on 80 metres was taken along. Other gear consisted of two short wave receivers, a B.C.L. receiver (receiving from 80-450 metres); and sundry other necessities such as a collapsible aerial pole, brass earth spike, etc., etc.

The "Lizzie" transmitter was successful in raising 4WE "first pop," and fairly good communication resulted, when the rough improvised aerial, high surrounding trees, and an asthmatic accumulator were taken into consideration.

Sunday afternoon was spent in entertaining holiday makers on the Woody Point jetty with the band concert from Brisbane.

Every member was indeed loth to leave the cool breezes and commence the journey back home. And it proved to be a journey of misfortune. First of all both silencers fell off the motor-bikes. This looked rather suspicious and the wrathful owners glared savagely at each member of the party in an endeavour to

discover a guilty face. None could be detected, so it was put down to "accidental causes."

A little later 4AW found that something was amiss with his flivver. A diagnosis revealed the fact that a small rod had become unput. This fixed, the party proceeded merrily on its way until a thunderclap beneath the car announced that it was "time to re-tyre." It is rather an unusual experience for the Toombul Club to have a "blow-out"—but as this was of the non-intoxicating variety no harm resulted.

A few grunts, much "phewing," and a little "cussing" put the matter right, and after offering up a short but earnest prayer, the party proceeded on its way rejoicing, and eventually, to the accompaniment of flivver horns, motor-bike exhausts, and push-bike bells, the club returned again to the home village after a most enjoyable week-end.

On Wednesday Evenings

Spend a happy as well as an instructive evening with Mr. H. L. Miller, the Wireless Expert.

LEARN MORSE

easily and quickly under his direction. You will then be able to understand those puzzling dot-and-dash messages you hear from ships and overseas. Fees moderate. Write or call.

Underwood Business College

Opposite Customs House, Brisbane.

Machine-Made Morse

By M. M. O'BRIEN (4MM).

Attention, all ye who bang the brass or aspire thereto! Here is what will bring a "qrq pse send single om" from the ham at t'other end—here is what will mark your sigs, as the product of an expert key-rusher.

Doubtless all listeners on the 30 and 80 metres wave-bands have spent hours trying to straighten out a jumble of apparent "Morse"; mentally supplying the missing dots and lengthening the murdered dashes, and have slightly applauded the operator who rolls back with "r." Same here! OM !!

Having used a key (perhaps I should say keys) for a matter of six or seven years, and helped sundry students to form c's and v's, I can recommend the trigger about to be described and with which I have worked N.Z., in response to his QRG, doing 25 to 28 words per minute.

The key is a variation of the PMG Vibroplex, but it breaks with a wide gap to allow of its use in the plate supply. This refinement was introduced in the design, and works fb. Herewith the particulars:—

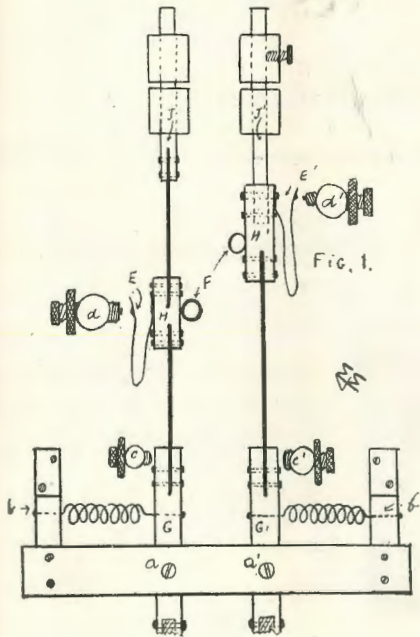


Fig. 1 shows the completed job, and Fig. 2 the pivot and pivot-mounting assembly. Good brass is sawn out, and tapped as per sketch. The pivots here used were the shafts of alarm clock wheels, which was primarily despoiled to get at the mainspring, which provides the spring throughout the job.

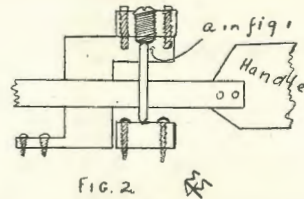
The screws a and a' are just touched with the drill (one-sixteenth) to provide the necessary seat for the shafts. These screws are a tight fit for the thread, and have no lock screws upon them. As there is not much rotary action at this point, the above arrangement suffices.

B and b' are coiled springs so cut to ensure that the arm (either dot or dash) is brought back to centre when the finger or thumb is released. This is a matter for experiment on the constructor's part. The spring must not "belly" the arm in any way. Drops of solder secure the spring as shown.

The columns c and c' are built with adjustable screws through them to allow of the amount of the play of the arms being varied. Once the correct adjustment is found leave it alone. D and d' are similar, but are provided with contact points which close on points on the flat spring brass e and e'. The pins from "Shurgrip" sockets are OK for making e and e'. Solder the flat springs to the key arm, or rivet them as desired.

F are rubber-covered pillars to damp out the vibration. English valve sockets are just the thing and a rubber tube of suitable size is pushed down upon them. To ensure absolute damping F are place in position near weights instead of centre of arm.

The arm pieces g, g', h and h' are of 1/4 in. square brass sawn down and rivet-holed to take the steel spring. As for pivoting, Fig. 2 is self-explanatory. The handles are of 1-8 in. bakelite or red fibre.



The steel should be heated to cherry red, placed in the brass and bored through, the rivet-holes in the brass having previously been made. The temper is then restored to the steel. It will be noticed that the left-hand side-arm has two steel springs in its entire length; this is to maintain the amplitude of the dots, and this function is aided by the action of the flat brass springs, e and e' previously referred to. The arm, properly adjusted, will send three dots per second for about fifteen seconds without any shortening of the signals, with the weights removed.

J and j' are circular pieces of brass 1-8 in. in diameter. The dot lever is sawn down to take the steel spring in the usual way, whilst the arm-piece of the dash-lever is bored a press fit and each is rivetted as shown. Bootmakers' 5-8 in. brass tacks make excellent rivets. The counterweights can be the locking pieces of rheostats or rotary switch arms, which are sure to be found in every junk box. Use those which are provided with set-screws, as illustrated. The weight lever should be long enough to take six of the stated weights. Of course, weights can be turned up from rod brass if desired. Generally speaking, the dash lever requires two and a half times the weight that the dot lever does to give good-length signals.

CLYDE

Radio Storage Batteries

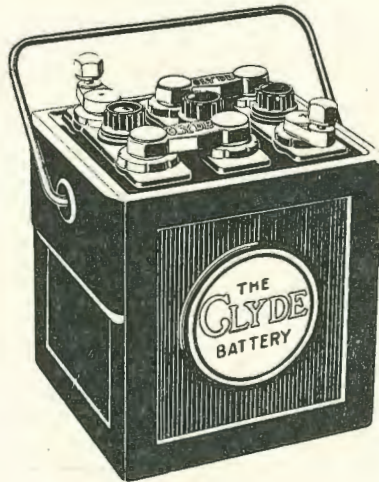
Work well———Wear well

Your radio set is no better than the batteries you use—and no better battery is made than the CLYDE.

Ruggedly powerful in construction and operation, made of the best materials by battery experts of long experience, and notably long lived, it is especially equipped to meet the heavy demands of continual radio usage.

Use Clyde Radio Batteries and you will know the meaning of "real radio satisfaction."

To Motor Owners: There is a CLYDE suited to every make or model of car, which may be absolutely depended on to give the fullest degree of service at the lowest possible cost. Let your next battery be a CLYDE.



Clyde radio and car batteries are obtainable from garages and radio dealers right throughout Australia. Main Service Station, 106 Goulburn Street, Sydney.

Manufactured by

The Clyde Engineering Company Ltd.

GRANVILLE, N.S.W.

Though no measurements are given, the drawing is to scale. If when building, the overall length of the bed plate is assumed to be four inches, a cue will be afforded. The job will be neat and active. The spring should be of such strength to resist sag or tendency to "lie over," or else adjustment of contact to contact will be unattainable.

Operation.—The auto is mounted in such a way that the wrist can be laid upon the bench. In using a bug key, "slap" the handles only. No compulsion is called for as the signals will roll out as long as the handle is deflected. The whole secret is to learn to control the number of dots and dashes propagated, and not to have a long space between a dot and a dash, viz., q should not be ---. — or v ... ---- The thumb controls the dots and the index finger the dashes. "Chain lightning operating" may sound good to the sender, but what are the comments of the receiver? It is generally found that a v is read as a or a 5, and k becomes x or the hyphen. Learn to control the bug at about ten w.p.m., on a buzzer before making your debut on the air. Machine-made Morse at 18 w.p.m. is far better to take than a Lewis gun signal which is hardly out of the way before the phones are crackling again on the next word. QRS is the motto till accuracy is attained.

In the model I have the points can be set to break in., and it can be used in the plate circuit of the set using 100 watts without any sign of an arc. Once adjusted the jigger will give good steady work, and when properly handled "sigs fb to read om" is heard from the other end. When the mechanical key comes

more into favour with all telegraphists less repeating and speedier traffic will be our lot. For good work listen to the short wave commercial stations, which use the bug and not the Wheatstone.

Should difficulty be found in assembling the key, a card to the popular "Q.R.N." will bring along the wanted information.

The Blue Spot Multidyne A New Wonder Coil

This coil attracted a lot of attention at the recent radio show on the C.C.M.'s stand, and hundreds of them would have been sold had they been available.

The Blue Spot Multidyne Coil receives all wave lengths from 160 to 4300, and will replace the ordinary honeycomb coil. The wavelength desired may be adjusted by simply moving a small lever to the wavelength required. Internal tapings automatically make contact with the number of turns necessary. It can be built in as a permanent fixture in any set. Its beauty of finish will enhance the most expensive receiver. Amateurs and dealers who are interested should obtain full information from the distributors as advertised in this issue.



"All Australian Stations can be heard distinctly 400 yards from the Loud Speaker"

So writes an enthusiastic Queensland owner of a Five Valve Burginphone Set. The Burginphone offers you the finest recreation from Wireless. And offers it with clarity and faithful reproduction. There are any number of letters from enthusiastic owners we can show you.

SOME OF THE PRICES.

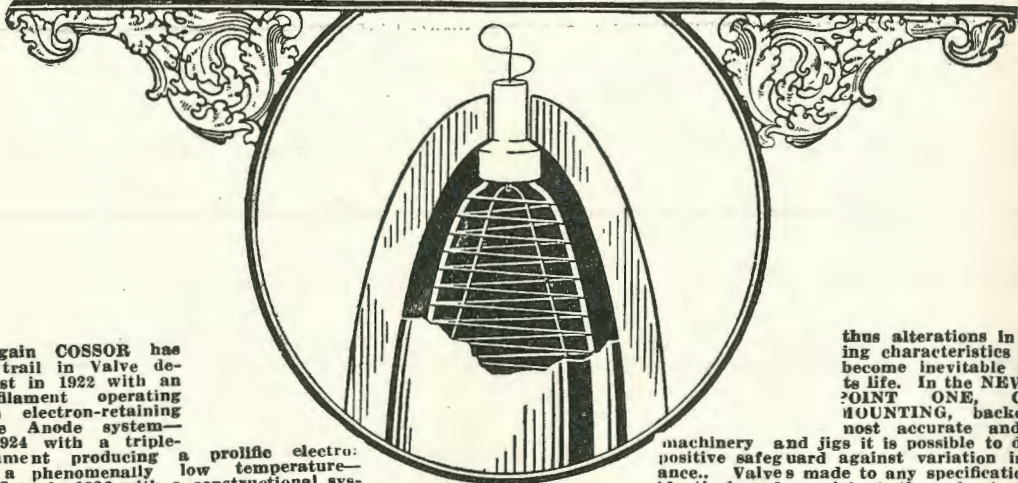
Junior Two, complete	£19 10 0
Junior Four, complete	35 0 0
Senior Five, complete	56 10 0
Master Five, complete	89 0 0
Grand Seven, complete	185 0 0

Make a special visit to our Showrooms.

BURGINPHONE AMICO (Queensland) LTD.
Wireless Receivers
(Opp. Preston House),
364 QUEEN STREET, BRISBANE

A Great Improvement in Valve Design

Filament, Grid and Anode are now secured at top and bottom in the new Cossor Point One.



Once again COSSOR has blazed a trail in Valve design. First in 1922 with an arched filament operating within an electron-retaining hood-shape Anode system—first in 1924 with a triple-coated filament producing a prolific electron stream at a phenomenally low temperature—and now first in 1926 with a constructional system which automatically aligns and secures the filament, grid and anode at the top as well as at the bottom. THE ONLY VALVE IN WHICH THE ELEMENTS ARE FIXED IN THREE DISTINCT POSITIONS.

The principle of Co-axial Mounting is not new. In fact, it has been the ultimate goal of every valve manufacturer since the invention of the three-electrode valve. But for years the difficulties proved insurmountable until COSSOR—by reason of the peculiar advantages afforded by the hood-shaped Anode—was able to perfect a method sufficiently robust and accurate.

Co-axial Mounting ensures greater uniformity.

The COSSOR system of Concentric Mounting possesses far-reaching advantages. In the first place, it ensures absolute uniformity of characteristics for all valves made to a certain specification. Experienced wireless enthusiasts know that in the past—in spite of the most critical manufacturing supervision—it has been difficult to prevent variations between valves of the same class. Two valves—identical to the eye—might give varying performances owing to minute differences in the spacings of the internal elements. Even if complete uniformity were possible in the factory, the wear and tear of everyday use causes changes in the relative positions of the filament, grid and anode. And

Sectional view of the elements in the new Cossor Point One

In the above illustration a section of the Anode is cut away in order to expose the grid and the filament. Observe the neonite insulator which securely holds in position the grid and the anode. To all intents and purposes this insulator becomes an integral part of these two elements—the slightest individual movement of either of them is quite impossible. Through the centre of the insulator is passed the fine wire which retains the filament in position. Thus—come what may—even the hardest shock cannot disturb the exact relative positions of the filament, grid and anode.

thus alterations in the working characteristics of a valve become inevitable throughout its life. In the NEW COSSOR POINT ONE, CO-AXIAL MOUNTING, backed by the most accurate and sensitive machinery and jigs it is possible to devise—is a positive safeguard against variation in performance. Valves made to any specification must be identical and constant throughout the whole period of use—variation is impossible.

THE SUPREME IMPORTANCE OF THIS WILL BE AT ONCE OBVIOUS TO USERS OF NEUTRODYNE AND "SUPER-HET" RECEIVERS EMPLOYING TWO STAGES OF MATCHED HIGH FREQUENCY AMPLIFICATION.

Tests prove a great increase in life.

A further tremendous advantage of this new system of construction lies in its shock-proof filament support. Whereas in many valves the filament, being straight, is retained under tension and is therefore subjected to considerable mechanical strain, that used in THE NEW COSSOR POINT ONE is arched and retained in position by a fine wire passing through a neonite insulator.

It is not kept under tension, and the sole object of the fine wire support is to hold the filament in position and to permit the slight elasticity necessary should the valve be dropped or otherwise subjected to accidental rough usage.

A series of tests—far more rigorous than any conditions under which the COSSOR POINT ONE would normally be used—has proved the complete efficacy of this new shockproof filament system. A concussion which caused an immediate fracture of the filament in an ordinary valve was easily and harmlessly absorbed by the filament in the Cossor Point One.

TYPES AND PRICES:	
PLAIN TOP. For Detector and Audio 1.8 volts .1 amp.	13/6
RED TOP. For Radio Frequency use 1.8 volts .1 amp.	13/6
The new Cossor Stentor Two GREEN TOP. Power Valve 1.8 volts, .15 amp.	17/6

The new Cossor Point One

Red Top: For $\overline{M.F.}$ 12/6.
(Consumption .1 amp.)
Plain Top: For Detector. 13/6.
(Consumption .1 amp.)

The New Cossor Stentor Two

Green Top: For power use, 17/6.
(Consumption .15 amp.)
All operate at 1.8 volts.

All consume only 1-10th of an ampere

Queensland Distributors:
UNITED DISTRIBUTORS
343 Queen Street, Brisbane.

J. B. CHANDLER & CO.,
45 Adelaide St., Brisbane.

OBTAINABLE FROM ALL RADIO AND ELECTRICAL DEALERS.

The New COSSOR Point One

The new Dull Emitters with the long-life .1 amp. filament.

Factory Representative and Sole Agent for Australia.

A. H. CARTER, 20 Clarence St., Sydney, N.S.W. 'Phone BW6992

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, A. E. Newnham, Logan Road, Fiveways, Woolloongabba, Brisbane.
GRACEVILLE—Secretary, S. W. Keeping, Ettie Street, Sherwood.
IPSWICH—Secretary, S. J. Aspinall, Brisbane Street, Ipswich
SOUTH BRISBANE—Secretary, W. R. Gilbert, Gordon Street, Coorparoo.
TOOMBUL—Secretary, T. Starkie, Sandgate Road, Nundah.
WIRELESS INSTITUTE (Queensland Division)—Secretary, O. R. C. Runge, c/o Finney, Isles, Ltd., Brisbane.
WOOLLOOWIN—Secretary, H. A. Jear, Lisson Grove, Woolloowin.
WYNNUM AND MANLY—Secretary, P. J. Golden, c/o Trackson Bros. Ltd, Elizabeth Street, Brisbane.

Wireless Institute [Q'land Division]

Institute activities have, for the past month, been confined chiefly to the reliability traffic tests. Owing to postal delays quite a considerable amount of time was lost on both numbers 1 and 2 tests. The second test had commenced several days before the Queensland section was notified of the fact. As it was then too late to compile, and forward messages to all competitors, it was agreed to make No. 2 a "receiving" test only. This of course infers that a competing station will operate in the same manner as in test No. 1, with the exception that he will have no message of his own origin to transmit. All stations have been circularised to this effect.

Mr. O. R. C. Runge has been forced to resign his secretaryship owing to business pressure. This position has now been ably filled by Mr. A. A. Jackson.

Mr. Jackson, who is also Federal delegate or Queensland, gave an interesting outline of the activities of the Federal Convention, held in Sydney, at a recent meeting.

The lecture to be delivered by Captain George A. Taylor (M.I.A.E., F.R.A.S., F.R.G.S., A.M.I.E., Aust.) in the Ann Street School of Arts on the 27th October, is being looked forward to by all members. All metropolitan clubs have been issued invitations. Captain Taylor, it will be remembered, is one of the pioneer wireless experimenters of Australia. As far back as 1910 he was conducting practical experiments by controlling models and firing cannon by wireless.

The institute station, 4WI, has been off the air for a short period owing to power supply trouble, but it is expected that this matter will be rectified, and 4WI will be again in operation within a few days.

The "Information Bureau" is now in full swing, and any member desiring information on articles pertaining to transmitters, etc., may obtain same by writing to the bureau, care of Mr. A. A. Jackson, "Clock House," Elizabeth Street. The institute has also access to a fine range of sub-standard calibrating instruments, of which members may take advantage.

Woolloowin Radio Club

Perhaps our most important doing during the past month was the much-delayed erection of our two new masts. Friend Blaikie managed to get a bunch of members down to the club rooms on a recent Saturday afternoon to commence work. One, Nim Love, our worthy treasurer, offered us a load of sand for foundations, which, after consideration (we wanted it pretty badly, though we did not like to show it), was accepted with much gusto. Further details of the first days' work I know not, for I did not put in an appearance until about 5 p.m., when the "feet" of the masts were firmly concreted into a couple of good holes. The gang told me the holes were 6ft. deep. Maybe they are, but "are'n't we all"?

At any rate the gang was very QSA on the following Saturday, when WE put up the masts proper. Harry Jear spent 27 minutes making a good splice in one of the guy wires. We don't mean any harm, but the words which followed the discovery that the said guy was 3 inches too short, caused it to expand the necessary. Nothing else of importance happened during the proceeding, except the arrival of Friend Faber, of Wireless House. We were very busy, when a terrific noise smote our receptive organs. 4LJ, our machine-gun expert, promptly warned us that one of these animals was loose, and had developed a knock in the big-end—calm fellow, ole 4LJ. An hour or so later we cautiously came out from under dust-bin lids, behind guy wires, etc., to find it was only ole Faber on his A.J.S., or vice-versa. This gentleman, later on, stopped the head of a hefty "Kelly" which decided to go "off the handle." The gang then retired to the club-room for refreshment, and later returned to find someone's coat, together with a flat bottle containing an amber-coloured liquid (transformer oil) pulled up to the top of one of the masts.

The way of the radio-ham is not all bee'ah and skittles, believe muh. Other night I was riding home with my little bike lamp that won't, er safely, when said lamp decided to war mup. Those who witnessed the resultant pyrotechnic display realise my troubles, for your only mug had to ride home with two 3ft. 6in. flames issuing from the infernal thing.

Was up to see ole Col. Grant, of "Prescoves" fame, the other night, who, as you may know, has just undergone a pretty serious operation. "Say, Vern," sez he, "pike this," and out comes a good 150 watt, step-down transformer which he made in bed. Hot stuff! Next time I saw him he unearthed a 1200 volt step-up job, also made in bed—and he's supposed to be weak and all that after the op. By the time this appears in print he will probably be with us again, gang, so welcome back O.M.

At a committee meeting held recently a syllabus for the coming half-year was drawn up. This should prove interesting, as it comprises lectures, debates, question evenings, and several other items, of which more anon. Mr. Jear puts forward a very good suggestion, that an interchange of lectures between the various clubs be made. Every club must have an expert on something interesting—radio or otherwise—mostly otherwise. If it comes to the pinch we have experts on "Girls," "Baboons," Peanut Butter," etc., eh, Gang?

Saw 4LJ burn out a 0-20 milli-ammeter recently when he tried to test the voltage of the mains with it. Hi, the glow, while it lasted, was well worth the cost of a new meter.

Nothing remains to be said except that our coppers, Anderson, Buchanan and Rhode, are as mad as ever on motor mangles; Chas. Stephenson on H. of M.; Nim Love on "goff"; Col. Grant on exams.; and Bill Blaikie and the rest of us on radio.

Toombul Radio Club

The Nundah Show has come and gone, leaving the Toombulites happy to know that their demonstration was a complete success. The receiving was done by the individual club members on a 3-valve set.

Our worthy O.I.C. 4AW, performed the transmitting part of the entertainment. The power used was 210 volts in B batteries on 2 x 201A valves. The juice was supplied by the members of the club. The total absence of A.C. hum played an important part in the success of the demonstration. Reports were received from New Farm, Ascot, and other suburbs, remarking on the purity and volume of the transmission.

A small demonstration transmitter, viz., A4WE was installed at the exhibit at the show and acted well in communicating with 4AW, and reporting modulation, etc. Particulars of the radio exhibit, arranged entirely by the Toombul Club, along with the list of prize winners, appears elsewhere in this issue.

We believe our worthy secretary has passed his ticket. (F.B. Tom ole son). Two more are expected to sit next time. The morse class is in full swing, and we hope to put a few more A4's on the air.

The long-awaited license has not turned up yet, but the transmitter is well and truly taking shape.

At a meeting of the club on the 19th October, a hearty vote of thanks was extended to Mr. A. D. MacPherson, who kindly loaned his cottage at Woody Point for the club's recent week-end outing.

Next Saturday a working bee will commence work in enlarging our club-room, as the room we have now is not large enough for our increasing membership. We have plenty of room for more, and visitors will be always welcome on a Tuesday night.

Note address: Care of Mr. A. Walz, corner Eton Street and Sandgate Road, Nundah.

Graceville Radio Club

Annual Report

The first annual meeting of the Graceville Radio Club took place on Friday, 1st October. The retiring president (Mr. F. W. Pledge) gave a resume of the club's activities during the past twelve months.

In brief he outlined the progress of the club since its inception. He stated that the membership had grown from 19 members to its present strength of 40—all of whom were enthusiastic.

The report submitted to us was lengthy, but very interesting, and we regret that space forbids us publishing the complete report. We consider the Graceville Radio Club as one of the real active clubs of

Brisbane, and we feel sure, if future years reveal the same enthusiasm as displayed in this their first report, their success as a body is highly assured.

Eastern Suburbs Radio Club

The 70ft. mast of this club now soars high into the heavens, and the club's low loss low wave receiver has been built and tested with an aerial wire strung from the top of the mast.

On Wednesday evening, October 20th, a pleasant evening was spent in the club rooms, when the club entertained a number of visitors and friends, including two members of the South Brisbane Radio Club.

The club is showing good progress. There is still room for a few enthusiastic members. The secretary (Mr. A. E. Newham) may be communicated with at Logan Road, Woolloongabba, or by phone J1678.

Auchenflower and District Radio Club

Two very interesting and instructive meetings of the above club have been held during this month.

Mr. L. Cribb gave a lecture at the first meeting on "Elementary Terms as applied to Radio." He handled the subject well and bids fair to become a lecturer of consequence and a decided asset to our club.

The second meeting was graced by the presence of Mr. A. A. Jackson, secretary of Wireless Institute of Queensland, who also delivered a lecture of an instructive and technical nature, entitled "Inductance," illustrated by diagrams on a blackboard.

These visits to our club are of great value to every listener and club members, and we take this opportunity of inviting any gentleman who may be prepared to give us an address on "Wireless," to visit us. Our meetings are held every second and fourth Friday in each month at our president's residence, Mr. E. G. Abbott, "Brelmeth," Birdwood Terrace, Auchenflower.

Intending members are invited to communicate with our secretary, Mr. L. Cribb, Ridley Street, Auchenflower.

South Brisbane Radio Club

The executive of the club has been very busy arranging a syllabus for the coming months, and Mr. Young has been good enough to consent to again conduct a morse class. The class is mainly for those members who have joined recently, and those who failed to take advantage of Mr. Young's previous lessons. Short talks on various radio matters, some elementary, and others of a more technical nature, are being prepared, which should prove of much interest to all members.

The past month was uneventful, due to a large extent to poor attendance, so we would take this opportunity of reminding members that to derive the



most benefit from the club their attendance must be regular, as only by the continuity and unity of effort can anything be accomplished.

Several members have been busy on short-wave reception and our worthy president reports a rapidly filling log, while our energetic secretary is occupied in making several extensive alterations and additions to his previously beloved short-wave receiver.

The KDKA tests refused to come in as expected, hence the drastic treatment. Never mind, O.M., you are at least successful in logging subs.

Intending members should communicate with W. R. Gilbert, Secretary, South Brisbane Radio Club, Gordon Street, Coorparoo.

Radio Exhibits at Local Shows

Toombul Radio Club at Nundah Show

At the recent Nundah Show the Toombul Radio Club arranged an interesting exhibit of radio sets and apparatus. The prize winners were as follows:—

Valve Sets:

First, E. Morrison, Zillmere; second, H. Kingtong, Toombul.

Crystal Sets.

First, Mr. Clarkson; second, A. E. Walz, Nundah.

Accessories.

Fist, H. and C. Stephenson, Woolloowin; second, S. and A. Costin, Kalinga.

The Wireless Section at the Enoggera Show

As this was the first effort on the part of the committee to introduce a wireless section into the show, the competitions were confined to crystal sets. In all sections the entries were neatly made and efficient in operation.

Mr. T. Elliott (4CM) acted as adjudicator, and gave his decisions as follows:—

Crystal set, loose coupler type: R. Morgan 1, W. Blockley 2. Single slide type: R. Morgan 1, C. O'Mara 2. Crystal set, tapped coil type: R. W. Davey 1, S. M. Paskins 2. Crystal set, condenser tuned type: S. Mancktelow 1, C. O'Mara 2, R. W. Davey 3. Variometer, tuned: J. C. Smith. Novelty: W. C. Ellis. Champion crystal set: S. Mancktelow. Juvenile section.—Best wireless crystal set, any design, open to boys and girls 15 years and under: Wallace Davey.

Leighton Gibson
RADIO SPECIALIST

Box 106B, BRISBANE

Phone J 3167

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VALUES

now offering in our

Wireless Section

Call and see our Bargain Table

General reduction to make room for new stock arriving

Condensers, from	10/6 each
Valves, from	2/ each
Combined Lightning and Switch Arrester	2/6 "
Series Parallel Switches	1/9 "
Earth Clips	/9 "
Boys' Wireless Book	1/ "
Egg Insulators	/1 1/2 "
Bezels	/1 "
Insuline	/1 sq.in.
Valve Sockets	2/6 each
Crystal Cups	/3 "
Cat's Whisker Brackets	/6 "
H.C. Coils	1/ "
.00025 Fixed Condenser with clips	1/ "

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Branches in all States and N.Z. Representatives Everywhere.

RADIO NEWS

For the Discriminating Set Builder



Transformers.

Insulated Screw Eyes	3
Formo 3 and 5 to 1	18/6
The F.M.C.	18/6
Emmco 3½ and 5 to 1	21/
Signal 3½ and 5 to 1	21/
R.C.A. Model 712	30/
Ferranti	52/6

Condensers.

Ormond 0005 Vernier	15/
Ormond 0005 Friction	25/
Emmco 0005 Vernier	21/
Advance 0005 plain	10/6
U.S.L. 00035 S.L.F.	15/
Fada 0004 plain	7/6
Pilot 0005 brass S.L.F.	17/3

Loud Speakers.

Spitfire	1/17/6
Brown H4	2/0/0
Brandes Table Talker	2/5/0
Dulcivox	2/0/0
Amplion ARS8	3/0/0
3feravox Cone	5/5/0

Sundries.

Electron Aerial Wire	3/6
Talking Tape Aerial	7/6
Winchester 45v. B Batteries	1/6/0
Bright Star 45v. B Battery	1/6/0
A Battery Testers	3/6
B Battery Testers	5/3
Insulated Screw Eyes	3

Special
Just Landed!

Spitfire Loud Speaker

*The Speaker for use with
Crystal Sets*

£1-17-6

WIRELESS SUPPLIES LTD.

ASCOT BUILDING

Cnr. Queen & Edward Street, BRISBANE

Phone 3785 Central



Showing a corner of the lounge with guests seated at the tables.

Brilliant Function

Hotel Carlton Entertainment

On the night of October 5th, Station 4QG broadcast something in the way of a novelty when a drawing-room entertainment was broadcast direct from the lounge of the Hotel Carlton, Queen Street, Brisbane.

During the past few months some very extensive alterations have been made to Hotel Carlton, and the lounge now represents the finest of its kind in Queensland, if not in Australia.

On the night of October 5th a number of guests were entertained, the joint hosts of the evening being Mr. J. Winterbottom, proprietor of the hotel, and Mr. J. W. Robinson, Director of the Queensland Radio Service. Those present included His Excellency the Lieut.-Governor, the Hon. Wm. Lennon, the Chief Justice, his Honour Mr. J. W. Blair, and Mr. Justice Macrossan.

During the course of the evening a very excellent musical programme was broadcast, and reports of ex-

cellent reception of it have reached both Hotel Carlton and Station 4QG., from all parts of the Commonwealth, from New Zealand, and the Pacific Islands.

On this page we are reproducing a flashlight photograph which was taken during the evening, and which shows the Carlton lounge.

4 QG's microphone is seen in the foreground.

REPAIRS

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

HAMILTON & PASS

BURNETT LANE, BRISBANE.

'Phone C1050.

Queensland's Largest Radio & Electrical Store

HEAD PHONES.

Spitfire	17/6
Rayton Adjustable Dia- phragm	21/
Trimms Dependable	22/6
Brandes 4000 ohm	30/
Brown's Featherweight	32/6

LOUD SPEAKERS.

Spitfire	37/6
stirling Dinkie	38/9
Brown, H.4.	40/
Amplion A.R. 38	60/
" A.R. 58	80/
" A.R. 88 Metal Horn	5/15/
" A.R. 88 Oak Horn	6/10/
" A.R. 19	6/10/

TRANSFORMERS AUDIO.

Pival 3 to 1	15/
Pival 5 to 1	15/6
lhigh 3½ & 5 to 1	18/6
Emmco 3½ & 5 to 1	21/
Signal 3½ & 5 to 1	21/

VARIABLE CONDENSERS.

Ormond, plain 11/3, 12/6, 14/, vernier 13/9, 15/, 16/6, slow motion 22/6, 25/.
Advance, square law 11/6, 12/6, straight line frequency 10/6.
R.V.G., low loss .0005 12/6.
Pilot Brass Plate S.L.F., .0005 17/6.
Emmco, 15/, 16/.
Montrose, S.L.F., .0005 27/6.

LIGHTNING ARRESTORS.

Advance Combina- tion	2/6
Parkson	2/9
Muter	3/6
Electrad	3/6
Fire Fly	4/6
Beanco	5/9

**SAME DAY COUNTRY
ORDER SERVICE.**

Send your orders to us, and
goods will be posted or railed
to you on the same day as
order is received by us.

HONEYCOMB COILS.

25 Turn, Mounted	3/
35 " "	3/3
50 " "	3/6
75 " "	3/9
100 " "	4/
150 " "	4/3
200 " "	4/6

H. & H. PRODUCTS.

Variable Condensers—	
Straight Line Frequency .0005 .	25/
Square Law .0005	27/6
Standard Sockets Bakelite	4/6
Standard Sockets Porcelain	3/6
Rheostat 30 ohm with Pointer Knob	5/6
Rheostat 30 ohm with 2in. dial ..	6/
Phone Plugs	2/6
S.P.D.T. Switches	3/
Potentiometers, 400 ohm	8/6
20ft. Speaker Cords	4/6
Indicating Battery Switch	2/9
Grid Leaks and Resistances	2/6
Fixed Condensers .00025	2/6

Miscellaneous.

Glazite Special Wiring Wire, 1/3 packet.
Coil Holders, Cam Vernier, 9/6.
Peep Screens, 3d each.
Justrite Soldering Irons, 7/6 each.
Talking Tape, perfect Indoor Aerial, 7/6
Mars Phospher Bronze Aerial Wire, 100ft. 3/; 3/20 Aerial, 100ft. 3/.
Edison Bell Twin Detectors, 5/.
Battery Cables, 4/6.
Extension Handles, for 2 and 3 Coil Hold- ers, 9d and 1/.
Galvanized Pulleys, 6d and 9d.
Egg Insulators, 1½d each.

CRYSTALS.

Neutron	1/6
Russell's Hertzite	1/6
Galena	1/
Mounted	1/6
Lion Micro Perm- anent Mineral .	6/6
De Luxe	7/6
Maxtone	8/6

J. B. CHANDLER & CO.

"For Radio Service"

CHANDLER'S

"For Radio Service"



KLEARTONE

New Idea
in
"B" Battery Construction

Kleartone Radio Batteries incorporate a new idea in "B" Battery construction, which insures longer life, greater power, and utmost reliability. This construction idea marks the greatest single improvement that has yet been made in Dry Cell Batteries. Their internal construction has certain advantages, which in turn reflect in the efficiency and service life, making them the most economical "B" Batteries obtainable.

Twin Dry Cell can be used in place of two cells, and is specially suitable for dry emitter valves. Price 6/3 each.

No. H-15-D Kleartone "B" Batteries contain 15 cells, giving 22½ volts. Price 12/6 each.

No. H-30-D Kleartone contains 30 large-size cells, giving 45 volts. Price 25/ ea.

No. V-30-D Kleartone Upright Type contains 30 large-size cells, giving 22½ to 45 volts. Price 25/.

The Long-Life Battery—The MASSE

For power, economy, reliability, "MASSE" Batteries are unexcelled—made in three sizes, guaranteed for 15 months. Solid rubber one-piece container with strong metal carrying handle, sensible terminals, and ample sediment clearance below the plates.

Type "P"	6 volts 45 amps	£4/15/
Type "R"	6 volts 60 amps	£5/5/
Type "S"	6 volts 75 amps	£6/15/

For Soldering Your Set—The JUSTRITE

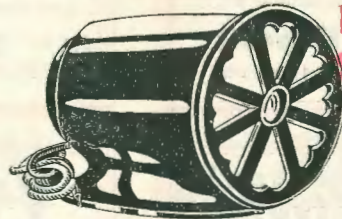
Large shipment of the "JUSTRITE" SOLDERING IRON and BLOW LAMP now to hand. The "Justrite" requires no gas or fuel heating. A drop of methylated spirits is all that is required for soldering. Your work can be continuous—no waiting for an iron to be re-heated. Complete with Solder, Pricker, Leaver, Sal-ammoniac Block. Price, 7/6 each.

Make Your Own Radio Set

Make up a powerful 5-Tube Radio Set with the "FRESHMAN KIT" and get southern stations without lengthy searching. It comprises three low loss condensers and three specially balanced coils of the usual high-class "Freshman" materials and workmanship, being the tuning portion of a set, which when assembled will give you clear, undistorted concerts with volume to spare. Full instructions and drilling templates supplied with each "Kit." An amateur can assemble the set in a few hours. Price, £4/17/6.

Small, yet Powerful FRESHMAN"

Loud Speaker



PRICE
67/6

A Triple Reflex Speaker with a powerful unit is the "FRESHMAN" MASTER SPEAKER. Though only 6 inches high, has volume equivalent to a 24in. horn, and tone quality unexcelled by speakers costing a great deal more. No adjustment of diaphragm is needed. The unit of the speaker is entirely enclosed, and so absolutely free from dust. The body of the speaker is manufactured from special fibre, exclusive to the "Freshman" Master Speaker—covered with high-grade leatherette. Being only 6in. high, and attractive in design, it is ornamental to any room. Complete with 5ft. cord

Lowest Price Offered "MANHATTAN" Speaker

The special features of the Manhattan Junior Red Seal Loud Speaker are:—Heavy adjustable diaphragm which prevents "rattle," and an upright horn of compressed fibre which eliminates all metallic sounds. This is the lowest-priced Loud Speaker procurable, and a high-grade article—splendid value. Pleasing in design—every Speaker guaranteed. Complete with 5ft cord, only 32/6 each.

Adelaide St., Brisbane

(Next to Allan & Stark's)

Buy Radio on Easy Terms

The following Sets are offered on Easy Terms! A Small Deposit will place them in Your Home



Radio Sets

Best Makes
Best Prices

The public of Queensland must realise from the particulars of this advertisement that Wireless House, Ltd., is out to introduce wireless into every home in Queensland. By making your purchases from Wireless House, Ltd., you have the assurance of satisfaction, service and sound technical advice.

Wireless House Ltd.

City Buildings,
EDWARD STREET
BRISBANE

"Dulcephone" Receivers

Queensland Built for Queensland Conditions

CASH PRICES

CASH PRICES

"Dulcephone" 1 Valve Set

£7/10/-
COMPLETE

Scientific Headphones
1 De Forest D.V.3.
Valve
1 Lightning Arrester & Switch
3 Dry Cells
1 60-Volt Ever Ready B Battery
Aerial Equipment

"Dulcephone" 2 Valve Set

£14/10/-
COMPLETE

1 Spitfire Loudspeaker
Scientific Headphones
2 De Forest D.V.3 Valves
Lightning Arrester & Switch
3 Dry Cells
1 60-Volt Ever Ready B Battery
Aerial Equipment

"Dulcephone" 3 Valve Set

£18/15/-
COMPLETE

1 Spitfire Loudspeaker
Scientific Headphones
3 De Forest D.V.A. Valves
Lightning Arrester & Switch
3 Dry Cells
1 60-Volt Ever Ready B Battery
Aerial Equipment

"Dulcephone" 4 Valve Set

£35/-/-
COMPLETE

Including:—
1 A.R. 19 Amplion Speaker
1 Pair Ericsson 4000 ohm Headphones
4 U.X.201A Valves
1 Lightning Arrester & Switch
1 60-Volt Ever Ready B Battery.
1 6-Volt 40/80 amp-hour Exide Accumulator
Aerial Equipment

"Dulcephone" Super-selective 5 Valve Set

£55/-/-

Including:—
1 A.R. 19 Amplion Speaker
1 Pair Brandes Headphones
2 45-volt Heavy Duty Batteries
1 6-Volt 40/80 Exide Accumulator
5 U.X.201A Valves
Aerial Equipment
High quality components used throughout including Ferranti transformers and Igranic variable condensers

"Dulcephone" Super-selective 6 Valve Set

£60/-/-

1 A.R. 19 Amplion Speaker
1 Pair Brandes Headphones
3 45-Volt Heavy Duty Batteries
1 6-Volt 40/80 Exide Accumulator
6 D.E.5 and O.E.5.B Valves (assorted)
Aerial Equipment
High quality components used throughout, including Igranic variable condensers and three stages of specially designed resistance coupling.

IGRANIC SUPERSONIC HETERODYNE 6 Valve Set Complete £ 75

Including: 1 A.R. 19 Amplion Loud Speaker, 1 Igranic Loop Aerial, 6-volt 50/100 amp-hour Exide Accumulator, D.E.5 and D.E.5.B. Valves, 3 45-volt Heavy Duty Batteries. The whole of the components are of high grade English manufacture. This Set is highly selective, and is able to eliminate 4QG right against the Station, and bring in 3LO, Melbourne, at full loud speaker strength on the frame aerial supplied.

"Auditone" 1 Valve Set

£6/10/-
COMPLETE

1 Pair Spitfire Phones
1 De Forest D.V.3 Valve
1 Lightning Arrester
3 Columbia Dry Cells
1 Ever Ready B Battery (45 volts)
Aerial Equipment
Earth Wire, Lead-in Tube, Insulators, &c.

30/- Deposit
Balance 3, 6, 12 months

"Crosley" 2 Valve Set

£10/15/-

1 Pair Spitfire Phones
1 Midget Spitfire Speaker
2 De Forest D.V.3 Valves
1 Lightning Arrester
3 Columbia Dry Cells
1 Ever Ready B Battery (45 volts)
Aerial Equipment
Earth Wire, Lead-in Tube, Insulators, &c.

45/- Deposit
Balance 3, 6, 12 months

"Crosley" 3 Valve Set

£13/10/-
COMPLETE

1 Pair Spitfire Phones
1 Midget Spitfire Speaker
3 De Forest D.V.3 Valves
3 Columbia Dry Cells
1 Ever Ready B Battery (45 volts)
Lightning Arrester
Aerial Equipment
Earth Wire, Lead-in Tube, Insulators, &c.

55/- Deposit
Balance 3, 6, 12 months

"Ricodyne" 5 Valve Set

£35/-/-

1 Brandes Table Talker
1 White Cross Accumulator
1 Pair Spitfire Phones
5 De Forest D.V.5 Valves
2 Bright Star B Batteries (45 volts)
1 Battery Cord, Phone Plug
1 Lightning Arrester
Aerial Equipment
Earth Wire, Lead-in Tube, Insulators, &c.

£7 Deposit
Balance 3, 6, 12 months

DE FOREST 5 Valve Neutrodyne Set

£45/-/-

In this compact model the F.5 with the powerful De Forest Balanced Circuit is incorporated in a beautifully brown leatherette cabinet. Though space is provided for "A" and "B" Batteries, an external Loud Speaker is required. This instrument, too, is a welcome addition to the most perfectly appointed home. Including: 5 De Forest D.V.3 Valves, 2 Bright Star B Batteries (45 volts), 6-Volt Accumulator, pair Brandes Headphones, Brandola Loudspeaker, Telephone Plugs, Aerial and Ground Wire, Insulators, Lead-in Tube and C. Battery.

£9 Deposit
Balance 3, 6, 12 months

"Thermiodyne" 6 Valve Set

£47/10/-

6 De Forest D.V.5 Valves
1 Brandes Table Talker
1 White Cross Accumulator
1 Pair Spitfire Phones
2 Bright Star B Batteries (45 volts)
1 Battery Cord, Phone Plug
1 Lightning Arrester
Aerial Equipment
Earth Wire, Lead-in Tube, Insulators, &c.

£9/10/- Deposit
Balance 3, 6, 12 months

"Splitdorf" 5 Valve Set

Set only £27/10/-
Complete with all accessories, including Burn's Tortoiseshell Loud Speaker and 6-volt Clyde Accumulator,
£47/10/-

"Minuet" 3 Valve Portable Set

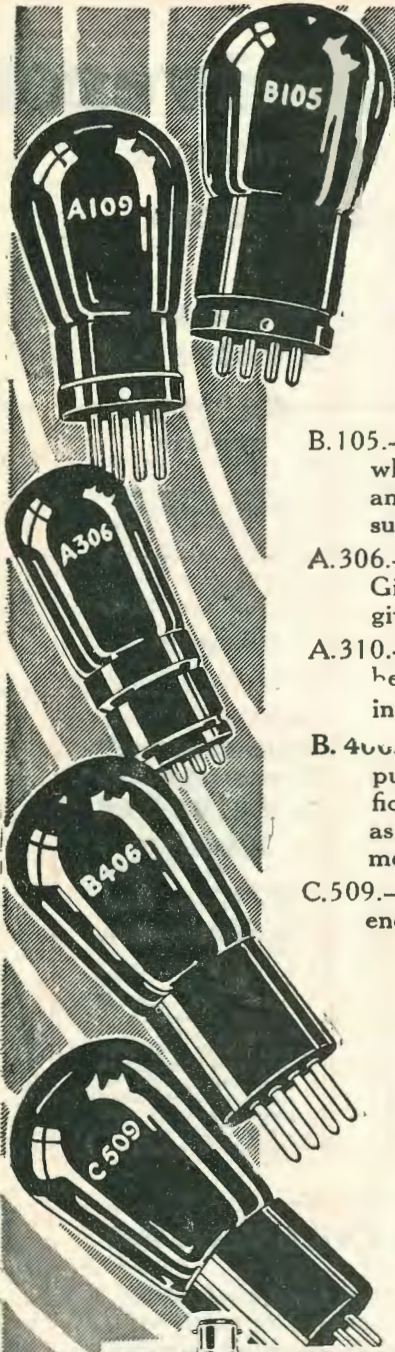
Including 1 pair Spitfire Headphones, 3 D.V.3 Valves, 3 Columbia Dry Cells, 1 45-volt Ever-Ready B Battery, 1 Brown H.4 Loud Speaker.
£30/-/-

WIRELESS HOUSE LIMITED

City Buildings, Edward Street, Brisbane

WIRELESS HOUSE LIMITED

City Buildings, Edward Street, Brisbane



A PHILIPS Valve for every Need

A.109.—An excellent valve where only limited supplies of "A" Battery current are available. Suitable for H.F., detector, and 1st stages of L.F. Requires only one Dry Cell for filament.

B.105.—Specially designed for Low-Frequency stages where one Dry Cell valves (A.109) are used for H.F. and Det. A remarkable Loud Speaker Valve for such a small filament consumption.

A.306.—Designed for use with 2 dry cells for filament. Gives sufficient energy to work a small Loud Speaker giving distortionless amplification of sound.

A.310.—Filament requires 2 dry cells. Recommended to be used as H.F. and Detector valve with our A.306 in the L.F. Stages.

B.406.—The New Wonder Valve. Gives unsurpassed purity of tone, splendid volume, and perfect amplification. This valve has revolutionised Listening-in, as it takes only One-seventh of the amount of Filament current formerly necessary.

C.509.—This valve may be relied upon to give sufficient energy for every type of Loud Speaker—even the largest sizes—and will always give perfect reproduction of sound.

Type.	Filament Volta.	Filament Amps.	Plate Volta. Max.	List Price.	"A" Battery Needed.
A.109	1.0 to 1.3	0.06	20-120	13/6	1 Dry Cell
B.105	1.0 to 1.3	0.15	20-120	13/6	1 Dry Cell
A.306	3.0	0.06	20-100	13/6	2 Dry Cells
A.310	3.0	0.06	20-100	13/6	2 Dry Cells
B.406	3½ to 4	0.1	20-120	13/6	3 Dry Cells or 2 Accum. Cells
C.509	5.0	0.25	20-120	13/6	3 Accum. Cells

Obtainable in English or American Cap.



PHILIPS

LAMPS AND RADIO



Common Aerial Faults

WHAT, in your opinion is the most common fault made by the wireless beginner in the erection of his aerial?

Our experience has been that the beginner's most frequent mistake is in soldering his down-lead to some point a yard or two from one end of the horizontal portion of his aerial. The down-lead should, of course, come from the very end of the horizontal portion. In fact, far and away the best method of fixing up an aerial is to have one long continuous wire from the free horizontal end straight to the lead-in tube.

It always seems a great pity to cut a length of aerial wire. There is no need whatsoever to cut it. Yet many beginners seem to glory in joining their aerial together with anything from two to half-a-dozen shorter lengths. We recently saw an aerial constructed in this unnecessary manner. The horizontal portion of eighty feet was stretched between a mast and the side of a house. There was an insulator at either end of the horizontal portion.

The down-lead was soldered to the horizontal portion at a point some six or seven feet from the house end. The aerial, therefore, was not the inverted L variety, but was of the T shape, the top of the T consisting of two parts, one part being over seventy feet long, and the other part being quite short—six or seven feet.

We suggested that the aerial be altered to a true inverted L type. When this was done there was one long, continuous wire starting from the insulator at

the mast or tree end, passing through the insulator near the side of the house, and ending at the lead-in tube.

The owner of the aerial reported greatly improved reception from the re-arranged aerial.

4QG's Early Evening Session

Revised Schedule.

Commencing from Monday, November 15th, Station 4QG will slightly re-arrange their early evening session as follows.—

- 6.0 p.m.—Tune-in. News service, supplied by "The Daily Standard"; weather information supplied by the Commonwealth Weather Bureau.
- 6.30 p.m.—Bed-time story session.
- 7.0 p.m.—Market reports and lectures from the Council of Agriculture.
- 7.30 p.m.—Stock Exchange reports and announcements.
- 7.45 p.m.—Lecture session.
- 8.0 p.m.—Musical entertainment.
- 10.0 p.m.—Close down.

From this date (15th November) there will be no advertisements broadcast between the hours of 8 p.m. and 10 p.m., thus giving an uninterrupted entertainment.

They Give Long Service

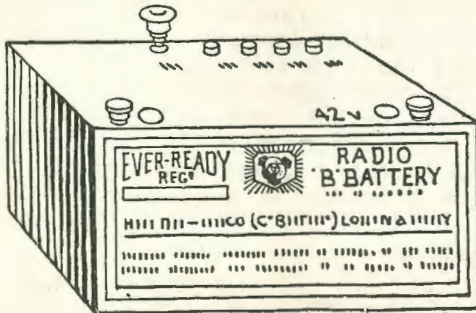
EVER-READY

RADIO BATTERIES

SAFETY FIRST - UTILITY ALWAYS

LOOK FOR THE TRADE MARK

They are Made in Australia



Ever-ready 'Wanda' Radio Batteries Plug
The New Radio High Tension "B" Battery, fitted with a Wanda Plug and 2-Screw Terminals. Any size you need, but all of guaranteed good service.

The popularity of Ever-Ready Batteries is due to their dependable qualities. They are always fresh, and give maximum service. They are made in Australia of finest materials. Positive tappings are arranged to suit all required voltages.

"Ever-Ready" Prices

- W.P. 40V. 12/6 X.P. 40V. (heavy ser.) 23/-
- W.P. 60V. 18/9 X.P. 60V. (heavy ser.) 34/6
- SUPER 40V. (Extra Heavy Service) 30/-

Sold by all Radio Stores

Wholesale Distributors—
EDISON SWAN ELECTRIC CO. LTD.
156 CREEK ST., BRISBANE

New Price 45/- Each



Brandes

The Table-Talker

makes a friend of the electrical impulse

Acoustics is the science of sound. Radio acoustics is the science of transforming the electrical impulse into a audible sound. The electrical impulse is a jolly little fellow who needs to be consulted if you are to get the best out of him. We've been making friends with him for seventeen years and the *Table-Talker* is but one result of our efforts. The goose-neck horn means clearer and more rounded tones, and the patent material of which it is constructed eliminates any suggestion of harshness or metallic resonance. Fitted with an adjustable diaphragm, it is finished in a pleasant shade of neutral brown. Height 18", bell 10".

Ask your Dealer for Brandes.

Now 45/- Each

Factory Representatives—**INTERNATIONAL RADIO CO. LTD.**

91-93 Courtnay Place, WELLINGTON, N.Z.

200 Castlereagh Street SYDNEY

Queensland Distributors: HOME RADIO SERVICE LTD., Courier Buildings, Brisbane.



M. STANISLAW DE TARCZYNSKI.

The engagement of the eminent Polish violinist, M. Stanislaw de Tarczynski, by 3LO is an event of great interest in the musical circles of Melbourne, and some really fine recitals may be anticipated, as he is an artist of exceptional ability and master of his instrument.

M. de Tarczynski is a member of a highly talented and musical family, whose names are household words on the Continent. His father, a pianist and composer, is the late Professor of the Warsaw Conservatorium, whilst both his mother and sister are pianists of considerable merit and charm, his sister having usually acted as solo pianist at his concerts in Warsaw. His uncle, H. Bobinski, was the late Professor of the Moscow and Kijow Conservatorium, and was a great pianist and composer.

The little Stanislaw showed musical ability at a very early age, and recalled how he used to lean quietly against the piano whilst his father played, composed, and improvised settings of the old Polish Folk songs. Then the little chap would collect scraps of paper, take them away to his own secret hiding place and draw small models of the piano, everywhere in the house these little drawings would be scattered. and his father has kept some of them until to-day.

As soon as he could hold a violin, Stanislaw commenced to play, and made his first appearance at a very early age, playing, as a schoolboy, before Czar Nicholas II., on the occasion of his coronation visit to Warsaw. After studying at the Warsaw Conservatorium he received the highest diploma for violin, piano and composition. He studied under the great Polish violinist, Barcewicz, afterwards going to Berlin and studying under the great maestro, Henry Marteau, Joachim's successor at the Imperial Academy, who said, "I have heard M. de Tarczynski in such pieces as Lalo's Spanish Symphonies, Concertos, Paganini, Saint

Saens, and others. He has a remarkable gift of the violin and the quality of a real musician. In Brussels he was selected by competition from a number of violinists to play at the Yssaye concerts at the Theatre Royal, one of the concerts being given before the King and Queen of Belgium.

From the few preceding remarks it may be gathered that the opportunity has been placed before listeners-in to hear one of the foremost violinists of the present day, and one that every person, both musical and otherwise, should avail themselves.

**THE WATERBURY TELECELL
A Notable Achievement**

A new arrival in the realm of radio "A" batteries is the Waterbury "Telecell," termed by the makers, "a dry-wet battery."

These batteries, which are enclosed in glass cells, may be connected in series in the same manner as dry cells, but give nearly three times the amperage.

Their great advantages are: Guaranteed capacity of from 55 to 70 ampere hours; constancy of voltage; great reliability; no deterioration while in stock; no polarisation while in use; advance indication of approaching exhaustion.

The "Telecell" is made operative by simply adding water. They are a great boon to radio enthusiasts. The Queensland agents are Messrs. Norman Bell & Co., Ltd, Adelaide Street, Brisbane.



Back Numbers
of "The Queensland Radio News"
FOR SALE

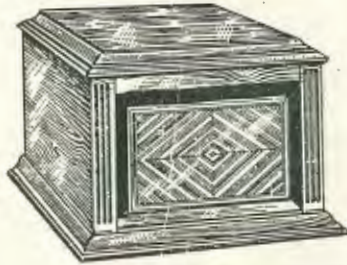
- | | |
|----------------|-----------------|
| July, 1925 | March, 1926 |
| August, 1925 | April, 1926 |
| October, 1925 | May, 1926 |
| November, 1925 | June, 1926 |
| December, 1925 | July, 1926 |
| January, 1926 | August, 1926 |
| February, 1926 | September, 1926 |
| | October, 1926 |

PRICE
3d.
EACH or
4d. posted

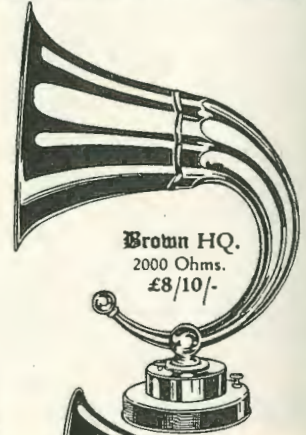
"Queensland Radio News"

Box 1095N, Brisbane.

BRITISH **Brown** THROUGHOUT



Brown Cabinet Model.
2000 Ohms £8/10/-



Brown HQ.
2000 Ohms.
£8/10/-

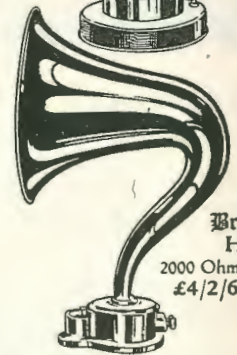
The Incomparable **Brown**
in Seven Superb Models

Now that Broadcasting has awakened such an intense national interest, it is only natural to find that Loud Speakers, in common with many other commodities, Radio or otherwise, must be produced in a variety of types at prices that will be within the reach of all. It is for this reason, therefore, that there are now available seven superb models of **Brown** Loud Speakers.

Of all the Loud Speakers on the market to-day, the **Brown** is unique, because, by a brilliant application of an entirely original principle, it achieves results which can be obtained in no other speaker. **Brown** principles of design and construction can be found only in **Brown** Loud Speakers. The famous tuned reed mechanism, which permits the use of a supersensitive cone-shaped aluminium diaphragm as thin as paper, is responsible for a tonal purity and mellowness which must be heard to be fully appreciated.



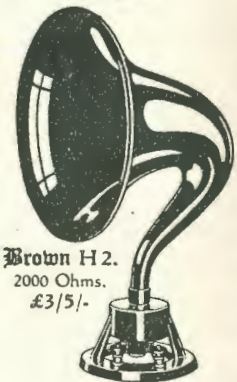
Brown H1.
2000 Ohms
£7/10/-



Brown H3.
2000 Ohms.
£4/2/6.



Brown H4.
2000 Ohms.
40/-



Brown H2.
2000 Ohms.
£3/5/-

Obtainable from all Radio Dealers.

Sole Agents:

NOYES BROS.

(MELBOURNE) Pty. Ltd.

(SYDNEY) Ltd.

Melbourne.
495 Bourke Street
Adelaide
Darling Building
Franklin Street
Hobart:
145 Macquarie Street
Launceston:
123a Charles Street

Sydney:
115 Clarence Street
Newcastle:
11 Watt Street.
Brisbane:
Perry House, Elizabeth St.
Agent for W.A.:
J. R. W. GARDAM,
138 Murray St., Perth.

Broadcasting News

From Sydney Town

DANCES BY RADIO.

To Help Cancer Research.

FRIDAY, October 1st, marked the occasion of the first organised radio dance night in New South Wales in which a number of broadcasting stations co-operated to provide music for social gatherings. The idea originated with the radio traders and the broadcasting stations of Sydney as a contribution to the Cancer Research Fund.

Radio listeners were asked to hold social evenings in their own homes, and to make a collection among their guests for the fund. It cannot yet be stated how many dances were held, but the number must have been considerable, as the programmes arranged by the broadcasting stations were known in advance to offer perhaps the best radio entertainment that has been on the air for months. A number of public dances were held at places, including Goulburn, Forbes, Castlereagh, Cabramatta, and De Why.

It is understood that in view of the success of the evening, the radio interests intend to organise a similar evening in the near future to assist some worthy object.

CALL IT BEER.

Theosophical Radio.

2GB is the official call sign (or name) of the new theosophical broadcasting station at Sydney, but a listener at South Richmond, Victoria, writing to the manager of the station, suggests that the call sign be given occasionally as 2G Beer, because 2GB sounds too much like 2GD.

Since the theosophical station has been operating on its full power of 3000 watts, letters have been received from many parts of Australia complimenting the manager of the quality of the transmissions and programmes.

Listeners were asked to indicate their views as to a "request night," and so many replied that they would like it that "request programmes" will be a feature of the station. The treasurer of the Queensland branch of the Musicians' Union (Mr. C. S. Collier) wrote an extensive eulogy, remarking: "Both vocal and instrumental items were all that could be desired, not the slightest trace of roughness being discernible at any time. The chamber music was particularly acceptable."

Mr. G. Hawkes, hon. officer of the Canterbury-Bankstown Ambulance, wrote that the ambulance men derived much enjoyment from their radio set. "Our work is of such a nature that the broadcasting programmes provide real pleasure. When we are at the station waiting for cases, wireless makes the time pass pleasantly." Mr. Hawkes suggests Mondays for request nights as most people remain indoors on Monday evenings on account of "Mondayitis."

CHINESE RADIO BAND.

Mr. Henry Foo's Chinese jazz band, which has been playing at broadcasting station 2BL, Sydney, comprises six performers who play a three-string violin, a two-string banjo, another two-string instrument, a trumpet (or something like it), a cymbal and a drum. The operas rendered by the band are fairly modern (for China), being only 3700 years old. To properly appreciate the band and the accompanying singing one must hear it.

RACES BY RADIO.

Early Morning Gallops.

Tuesday, October 28th, marked a new period in the history of radio in Australia as being the day on which broadcasting station 2FC first broadcast the early morning track work of the horses engaged in the A.J.C. Spring Meeting.

The station was on the air at six o'clock in the morning, and the racing expert described the gallops of each horse as he went over the Randwick course. The style and appearance of each animal was the subject of the "Commissioner's" remarks and the times of each gallop were broadcast. So much interest has been taken by sporting men in the description of races that station 2FC expects these early morning broadcast talks to become a feature of its programme.

BROADCASTING.

Extending the Service.

The reduction in wave length of broadcasting station 2FC has been brought about by the Postal Department with a view to giving better service to listeners. Much can be said about the change from the technical point of view, but the underlying idea is that the wave of 442 metres will give better results to listeners generally, and work in best with the department's plans for extending broadcasting throughout New South Wales.

The next step in the development of radio service will be the establishment of relay stations at various places in the country, so that the programme of the Sydney stations can be sent out again from those points with increased power.

Just where and when these relay stations will be established cannot yet be stated. There is competition between the State Government and the A-class broadcasting stations. The N.S.W. Government has announced the intention of establishing a station at Sydney with relay stations in towns like Wollongong, Goulburn, Bathurst, Dubbo, Newcastle, Tamworth, Wagga and Grafton, and these are the very towns which the existing broadcasting stations contemplate using as relaying centres. The question is, which will get in first. In either case the listener will get the benefit.

PLAYS FOR RADIO.

Radio is creating a new technique in play-writing, and broadcasting station 2FC has, for some time, endeavoured to develop the writing of special plays for broadcasting purposes. Mr Scott Alexander has been very successful in this direction, preparing and producing more than 50 comedies and dramas for that

station. In addition, new plays are being written for 2FC by Mr. James Donnelly, one of whose plays will be given from that station on Monday, October 4th, in which an attempt will be made to show how a listener searches for his radio amusement by dialling every station in Australia, and just missing the item he is looking for.

**FIRE BRIGADES
Radio Equipment.**

Radio is to be adapted to the uses of the fire-fighters of Melbourne. The chief of the brigades, Mr. H. B. Lee, intends to have all fire engines equipped with wireless sets, so that when any of them go out on a job, and those in charge find that they require assistance, a message may be sent from the spot to any of the metropolitan stations. The homes of all the head officers of fire districts have already been supplied with sets.

**RADIO PARISH.
Preachers "Air Ministry."**

So popular have broadcast church services become in the United States that a "radio parish" has been organised in the State of Maine. One of the local ministers whose sermons were regularly broadcast received so many letters of appreciation and thanks for the help given by wireless that he decided to resign from his church and devote all his time to the "air ministry." He has the co-operation of nine denominations. A group of business men are organising to ensure that the church is supported financially.

RADIO ON TRAINS.

Radio could be used for the prevention of railway accidents such as the disastrous Murulla collision (writes C. C. Faulkner, director of the Radio Bureau to the editor of this paper).

"My suggestion is that the Railway Commissioners equip the principal passenger trains in each State with radio telephones. These are used in Russia and Germany, so that business people and others can ring up travellers on the train and talk to them just the same as to ordinary telephone subscribers. The conversations are carried along telephone wires at the side of the railway and have only a few feet to skip from the telephone line through the air to the radio receiver on the train. In the case of the Murulla accident, as soon as the goods train broke away, someone would have run to the telephone in the Murulla station office and telephone the on-coming mail train. In this particular case there was (so far as I can estimate) only about three to five minutes to spare, as the goods train travelled only one and a half miles on the main line, so that it is just possible that in any case the accident might not have been averted. But there was time to try, and the terrible consequences of the accident suggest that the Commissioners might well take into consideration the question of equipping their trains with a radio service.

"Apart from the value of radio to prevent accidents of this kind, radio reception on long distance trains has proved in Canada particularly an excellent means of whiling away the todium. For the whole of the 3000 miles' trip across Canada passengers can listen in to the broadcast stations. Radio has also been tried on trains in New South Wales and proved successful. The cost to equip a passenger train like

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WIRELESS

**"HIXCO"
Announce—**

A Wireless Section is now included at "Hixco"—our range includes small Crystal Sets for 4QG and the large Valve Sets to receive all Australian Stations. Sets supplied to all parts of Queensland, and our experts will instal them and erect aerial at a nominal charge.

The block at the top of this advertisement is not a Wireless Set—it is an Ice Chest. Besides Wireless Sets "Hixco" can supply all Home Furnishings, including "Mawson" Ice Chests and Boxes. All sizes available for household, hotel, or store use.

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The Best Book for Beginners.
By J. W. Robinson and J. Williams. 3/9 (post free)

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And Methods of Tuning.
By W. James. 3/9 (post free)

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How to Make and Use It.
By A. Hyatt Verrill. 3/10 (post free)

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Illustrated. 2/3 (post free)

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Covers both Reception and Transmission.
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"BROADCAST RECEPTION"

In Theory and Practice.
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the Melbourne limited express with a receiving set and 20 pairs of headphones would be about £200. Most passengers would be willing to pay 1/ for the privilege of listening, at which rate the radio set would be a profitable investment."

RADIO IN HOSPITALS. Riverina Towns Moving.

The "Pastoral Times" newspaper, Deniliquin, is receiving subscriptions for the installation of a receiving set at the Deniliquin Hospital.

The Mayor of Hay (according to the Hay "Gazette") is inviting subscriptions for a radio set at Hay District Hospital.

Royal Prince Alfred Hospital, Sydne, has received tenders for equipping every bed in the hospital, about 500, with a pair of headphones, so that patients can listen in to the broadcasting stations. The experience of the Alfred Hospital (Melbourne) shows that the comfort of listening in cheers up the patients so that the average stay in hospital is now two days less than formerly.

THEOSOPHICAL RADIO. On Increased Power.

The Theosophical Society's new radio broadcasting station, known as 2GB, Sydney, is now operating on its full power of 3000 watts. On the night the power was turned on fully something went wrong with the electrical supply, and the voltage fell considerably. The engineers rectified the trouble before the evening programme was completed, and 2GB is now reaching all over New South Wales. The Mayor of Nelson (New Zealand) has written to say the new station is heard well on the other side of the Tasman Sea.

MAGIC SUNSHADE. Children's Radio Trips.

An entertaining feature of the children's hour at Broadcasting Station 2BL, Sydney, are the trips on Uncle George's magic sunshade. It appears that when Uncle George was a digger in Egypt he did a good turn for a local magician, who rewarded him with a present of a magic sunshade and a few magic words.

Uncle George appears to be not too certain how to use the gift. However, he invites all the children listeners to come under the sunshade with him. Then over the air George can be heard muttering mystic remarks, and away goes the sunshade carrying the listeners with it. Last week they started out for Mullumbimby, but passed over the town. It transpired that George had forgotten how to stop the sunshade, and the whole party arrived at Brisbane before he remembered. After a while he remembered and a return to Mullumbimby was made, and the youthful listeners were taken for a visit over a sugar cane where they were introduced to barking dogs, bellowing cattle and sundry other farm sounds.

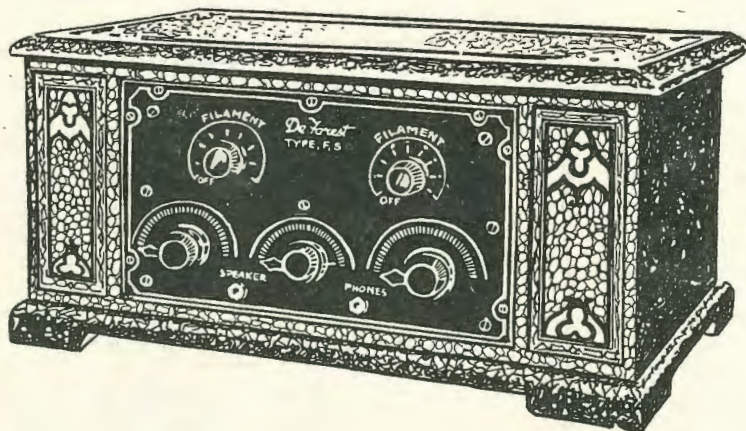
These trips on the magic sunshade are being made a feature of 2BL. The Pacific Islands and the East are yet to be visited.

One of the most amusing items of the children's hour put over by Station 2BL of late has been the emergency band. Uncle George notified the children that a special band was coming to the studio. The band did not arrive, but an emergency band did, and the weird noises made by the scratch band were enough to split the receiving set.



New DE FOREST Balanced Circuit Marks New Era in Radio

THIS marvellous new circuit which was created and developed in the De Forest Laboratories writes a new chapter in radio history. It reproduces flawlessly the mellow, soft modulations of the human voice and captures the hitherto elusive overtones of the musical register. The De Forest Type F-5 Radiophones, which utilize this circuit, are five-tube instruments designed for use with a short aerial. They are unapproached for sensitiveness and selectivity, separating the stations positively, thus allowing you to pick the broadcast gems without interference and to bring them in with rich, full volume. Tuning is extremely simple, all dial settings being practically identical for any given station and unaffected by length of antenna used. There are no objectionable noises while tuning in.



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Complete with
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Valves and Aerial
Equipment

De Forest F-5-AL Radiophone.

In this compact model the F-5 with the powerful De Forest Balanced Circuit is incorporated into a beautiful two tone leatherette cabinet. Though space is provided

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Good DXing is again going in full swing, and numbers of our chaps can be heard working the antipodes morn and night.

4BD is the latest "nine day wonder." Although he had started up only a matter of a few weeks back he is now working DX in fine style. He has been QSO, U.S.A., Chile, Japan, and Borneo with 45 watts or so on a UX210. Very fine work indeed, keep it up!

4CG has now been QSO the best part of the globe on his "7½ watter." Heard him working Swedish—SMTN the other morning.—F.B.!

4RB, at last, has hooked up with all continents. Africa, which was the last one to QSO, was connected with per FM—8MB, Morocco. 8MB reporting 4RB R6? Several other QSO's for last month were Italy, France, Sweden, Norway, England, China, etc. F-8KU, F-8GI, and G-20D were worked "the long way round" via U.S.A.

A new one, 4LJ, has been heard on the air on 40 and 80 metres. A 201A hooked on to the 240 A.C. house mains, makes all the noise. He's a good op., and knows how to waggle a key.

4LC is on the air again after his transfer to sunny VIB. I haven't heard him yet, but if his sigs. still retain the wallop they had at his old QRA in Port Moresby, Papua, he'll not be doing so bad.

4DO is up and doing again with a low-power set. His QRO outfit is still going strong and putting out plenty of noise. He has been trying to click with Europe lately, but am not sure as to whether he's had any success up to the present.

Not very much from 4AN these last few weeks. I believe another T250 will shortly replace the UX210.

4AZ is with us once again on 30 metres and seems to be working a good deal of DX. His note sounds not unlike "sink" R.A.C., but he says he is using two tubes in a self-rectifying circuit.

4MM is off with a "shot" transformer, but expects to be on the air again shortly.

Another case of skip distance on 35 metres comes from 4DO and 4RB. Both had arranged a schedule on two occasions at 5 a.m. on Monday mornings, but neither could hear a "peep" out of the other. 4DO could hear G-20D calling 4RB, but couldn't hear "RB's" replies. Both (4RB and 4DO) had been QSO on previous evenings reporting each other R7. No adjustments were made before the "sked" time the next morning. How come?

The Rag Chewers' Club membership continues to swell, and certificates, about the size of a QSL card with "R.C.C." printed in large green letters on the front, are being issued to members. No membership

fee is charged, the only qualification being a transmitting licence. The rules are similar to the American R.C.C. For fuller particulars QSO either 4GO or 4RB, who were elected "Chief Windbags" and foundation members for Queensland.

The new fashion in aerials—the Hertz—is rapidly gaining popularity among Aussie hams. The "Zepplin" type seems the most popular, and the easiest to operate. On page 13 of July "QST" we find a very good article on it, written by old friend Kruse. The August issue also follows up with some good dope. Everybody who is getting a "Zep." to "Zep." properly is booming them up to the skies, so the idea (quite an old one—by the way) seems to be worth trying. When cutting your aerial to the exact length, it might be advisable to add, for the benefit of those whose education has been neglected, that 1 (one) equals 39.37079 inches. Conversely 1 (one) inch equals 2.539954 centimetres. It isn't necessary to be as exact as all that though!

2CM's new crystal controlled outfit is putting out some beautiful signals, and one could scarce credit it that R.A.C. is being used for plate supply. The note is absolutely pure D.C. A pair of MRI (valve) rectifiers are used, but the "rects" are not responsible for the fine QSB; it's the crystal that does it.

Many other Aussie stations are coming in very well. 5RM is about the best of the lot, at times his sigs. are as loud as locals. 7CW is also a good one and although using only a 201A, he is often heard working Yanks and an occasional European.

The fone craze seems to be starting again. Numerous Aussies can be often heard on the 30-metre band. The same old raucous voices, "How's my modulations," cheap gramophones and worn out records bring back sweet (?) memories of by-gone days on 250 metres.

The "Short wave WGY," experimental station 2XAF is heard nearly every morning on 32.79 metres between 6 and 8 a.m.; our time (3 to 5 p.m. E.S.T.). The modulation is really excellent, and strength is very good, considering that the waves at this time are travelling through the "darkness zone," which is then over Europe and Africa. 2XAF is one of the G.E. Co.'s experimental transmitters at South Schnectady, N.Y., U.S.A. The input is 20 K.W. This station re-broadcasts the afternoon programme of WGY, which seems to consist mainly of vocal, instrumental and gramophone items.

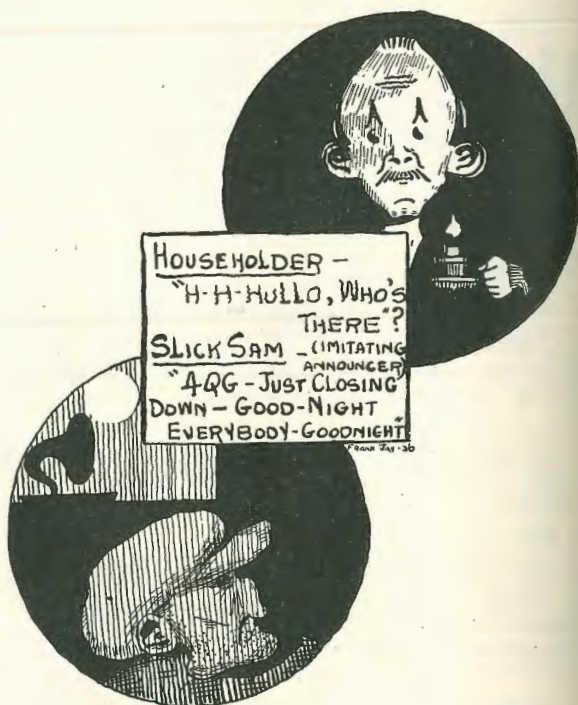
2XO, another of the G.E.'s short wave fone transmitters at Schnectady, is heard now and again during our evenings on waves between 36 and 28 metres, but the op. seems to amuse himself all night blowing a top trumpet, pitch-pipe, or sum'pin., Nevertheless, strength is always good and speech very clear.

KDKA is also making a big noise higher up on my condenser scale, but our summer QRN is, as usual, impossible. They'd do far better by QSYing to about 30 metres.

Thirty-five to 37 metres has been closed to amateur use. It is now reserved for army, naval and air force stations, but I can't see how such a frequency band is going to serve chaps like VKQ, 5KN and Co., who, I'll wager, couldn't squeeze in "edge-wise on."

Quite a lot of new countries are being heard of late. GC-1A is received at R6 during our afternoon. This station is worked by Phillips, of Cape Coast Castle, Gold Coast (Africa). FM-8MA and 8MB of Morocco are heard now and again, but both have those beastly 40 cycle A.C. notes which are so common among the Frenchmen. LAIX, at Stavanger, Norway, punches some good sigs. into our phones. F-8XZ is operated by P. Perennes, of Radio Centre, Noumea, New Caledonia. He says he receives our local hams very QSA. 4RB registers R9 there, so if any of our QRP chaps click with him don't fly into an apoplectic fit, believing him to be a real "F," as his QRB is but some 950 odd miles. Another chap who ought to change his intermediate letter "P" is P-9AA; only that his sigs. are so strong he might easily be mistaken for a ham 'way off in Portugal. 9AA is owned by the Portuguese firm of Chaves and Estrela, Macao, China.

Not many Englishmen have been heard for the last two months, but Frenchmen are almost as numerous as Yanks during the early evenings. The Japs. are increasing in number. J-ITS is the loudest of the hams, he uses 100 watts onto a 203A tube. J-3AA has shifted his QRA to Osaka again, and his sigs. seemed to have improved somewhat. Both he and J3KK were recently arrested by the Japanese authorities for operating and maintaining transmitters, so be careful to enclose your cards to Japs in envelopes, otherwise you may get them into trouble. No amateur transmitting licenses are legally granted in Japan. The Japanese Amateur Radio League fixes the call sigs, etc.



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The supersonic or double detection principle of wireless reception, to which has been given the generic name of "Super Heterodyne," is likely, before long, to become a topic of interest to many people. For general use (that is to say, "omitting short-wave work"), it is undoubtedly the most selective circuit in use to-day. It is employed in the vast majority of totally enclosed sets, having no earth or aerial connection.

Many people, then, will be interested to learn that the patent rights of the circuit are the absolute property of Standard Telephones and Cables (A'asia), Ltd., within whose power, therefore, it is to say under what circumstances the "Superhet" may be manufactured or sold. On this point, an official notification of the company's stand in the matter was delivered to the trade by Mr. C. R. Foster, Victorian representative of Standard Telephones, in an interview with a trade journal.

Insofar as it affects the general public, it may be summarised thus:—

Every "Superhet" sold in the Commonwealth must bear a numbered license-plate, on which is a small royalty is paid to Standard Telephones and Cables (A'asia), Ltd.

It should be pointed out that the master-patents held by the company are absolute and exclusive, and that it is fully within the power of the company to enforce them.

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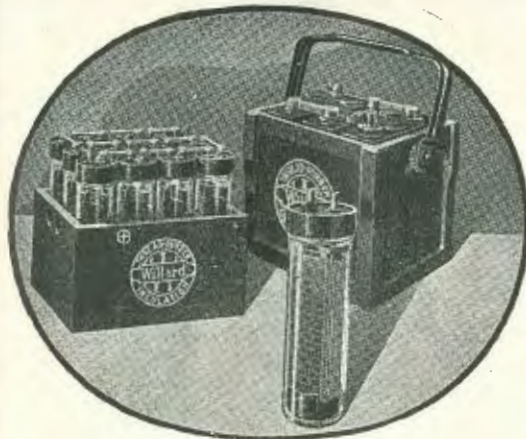
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1½-Volt Cells. Price	2/6
"Silvertown" Two-Coil Holders	8/6
Other Makes Two-Coil Holders, 5/ upwards.	
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COLUMBIA Radio Batteries are all made of exceptionally large sized cells which insure far greater satisfaction and much longer life. Used in accordance with chart below, they will greatly reduce your battery costs and prove the most economical batteries you can buy.

On 1 to 3 tubes, use *Columbia* No. 4772. Listening in on the average of 2 hours daily, it will last a year or more.

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2 hours daily, these will last 8 months or longer.

On all but single tube sets, connect a "C" Battery. The length of Service given is based on its use.

Remember it does not pay to buy cheap, inferior batteries of small-sized cells. *Columbia Batteries* will save you considerable money throughout the year.



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The Studio Orchestra at 4QG

This popular group of instrumentalists, formerly appearing at 4QG under the title of the Savoy Orchestra, have been appointed the Official Studio Orchestra at Station 4QG. Mr. Alf. Featherstone (leader) is seen in the centre of the picture holding a sheet of music.

England to Russia

NEW WIRELESS SERVICE.

Advice has been received from London that the British Government has permitted the Marconi Company to erect and operate a wireless station in England for communication with Russia. The notice states that private and commercial telegrams will be accepted at any Marconi office in England for wireless transmission to Moscow or any part of Russia, facilities having been arranged for the rapid distribution of such messages throughout the country.

Mr. E. T. Fisk, managing director of Amalgamated Wireless (Asia.) Ltd., comments "That it seems difficult to understand why the British Government should permit an English company to own and operate a wireless station for communication with Russia, while refusing to permit an Australian company to own and operate a similar station in England for communication with Australia."

Have you seen THE WONDERFUL WATERBURY "TELECELL"

"The Dry Wet 'A' Battery"

The Telecell is a self-contained compact unit—all parts being sealed in a glass jar. It is made operative by simply adding water.

It has a guaranteed capacity of from 55 to 70 ampere hours depending upon the rate of discharge.

The Telecell does not require Recharging.

There is no deterioration when not in use, and no polarisation while being used, giving a constant, even flow right to the end of its useful life. The voltage of the Telecell is .6 when in use. A battery of cells will give

250 Hours' Actual Use.

Using 5 valves consuming not more than .06 amps. each, a battery of these cells would give you 250 hours' actual use.

No Deterioration; you simply add Water.

Price 7/6 each

If your dealer cannot supply you, write direct to

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AD LAIDE STREET, BRISBANE

The Federal Convention

of the

Wireless Institute of Australia

held in Sydney from 16th to 24th September, 1926



Delegates, reading from left to right:—A. A. Jackson (Q'ld), B. J. Masters (Vic.), P. O. Fysh (Tas.), Phil. Renshaw (Fed. President), H. A. Stowe (Fed. Treas.), Maxwell Howden (W.A.), H. C. Austin (S.A.), and Walter R. Hardy (N.S.W.).

The third annual conference opened at 7.30 p.m. on September 16th, and after formalities, it was decided to carry straight on with the agenda paper.

President Renshaw closed the first session at 10.30 p.m., establishing a precedent for the whole of the period of conference.

On the agenda paper were 21 items, and those of greatest interest will only be dealt with.

On a motion by the Victorian delegate (Mr. B. J. Masters), it was recommended that a bureau for the distribution of QSL cards be established. QSL's to and from foreign countries can be handled by this bureau, which will work in co-operation with similar bodies in other countries. In forwarding QSL's for other countries, be sure you send the necessary postage, and the card sign is correct. The bureau will do the rest.

Under item 3 the complaints of interference with BCL's by amateur transmitters caused considerable discussion, and numerous examples were given where the cause of the interference was the poorness of the receiving set used by the BCL. The IWW, who has been causing a lot of trouble and friction between the department and the licensed transmitter, was considered a menace to the amateur, and a most astonishing letter from one of these men in South Australia was read. Steps will be taken to prevent, as far as possible, the operation of unlicensed transmitters. A vigilance committee is to be formed in each State, whose duty it will be to watch these matters, and report any breaches to the proper authority.

Item 4.—The International Amateur Radio Union is a body whose headquarters at present are located in Hartford (U.S.A.) with the A.R.R.L., and is composed of experimenters in all parts of the world. The objects are, of course, the furtherance of the interests of the experimenter, and ultimately it is proposed to make the I.A.R.U. the central council on which national associations such as the A.R.R.L., the W.I.A., and the R.S.G.B. will be represented. In the meantime members of the institute are recommended to join the I.A.R.U., the cost being only a dollar per annum. Applications will be forwarded on by the institute secretary if desired.

The clause in the articles of association limiting membership to those of British nationality has been deleted.

Radio is world-wide, and the activities of the experimenter are not confined to the particular part of the globe at which he happens to be living. Many Australians are members of foreign radio bodies, and

yet we did not allow others to join us. This was obviously out of date and the alteration will meet with general approval.

It was decided to further encourage the Listener's League which, in New South Wales, is growing to fair proportions. This body, membership of which can be obtained by paying 2/6 at any dealers, asks for no qualifications or proof of ability from applicants, and is formed for the express purpose of crystallising the point of view of the listener in and enabling the listening-in public to have an authorised mouthpiece. With the close contact that is maintained between the institute and the league, a harmony is ensured which cannot fail to enhance the interests of both experimenters and B.C.L.

Other items dealt with were communication between Federal executive and State divisions, interference from commercial stations, capitation fee, duties on apparatus, and several others of executive interest only.

When the deliberations had reached this stage a refresher was considered necessary, and two days were given to sight-seeing. An all-day trip up the beautiful Hawkesbury River in Phil. Renshaw's launch was a revelation to those who had not before visited this wonderful work of nature. Lunch at the waterfall in Kefuge Bay, tea at Palm Beach, and supper in the basin near Mackerel were incidents in a most enjoyable time. On Sunday 14 cars left Martin Place for Bulli Pass, headed by Mr. Geo. A. Taylor's Nash Sedan with the delegates aboard and flying a W.I.A. pennant that could not be missed at a mile.

After visiting Cataract Dam (one of the sources of Sydney's water supply) the top of the famous Bulli Pass was reached, and a magnificent view of the coast line for many miles is obtained. At least five separate towns can be seen, while directly underneath the almost perpendicular sides of the hill lies the townships of Thuroul and Bulli with their coal mines disfiguring their natural beauty. A short run to the surfing sheds on the beach brought us to lunch, and over 70 members of the institute and affiliated clubs were present. More speeches by the delegates, and then for home via the coast road—the glorious Lady Carrington Drive through the National Park and Liverpool. Some of the cars crossed the George River at Tom Ugly's Point, and the line of cars, quite usual at week-ends, which stretched for over a mile, was evidence of the tremendous car traffic around Sydney. The punts, two of which are always work-

ing, carry 60 cars each trip, and yet it is quite usual to wait over an hour during the busy time.

The following morning the delegates were accorded a civic welcome at the Town Hall by the Lord Mayor of Sydney, at which the usual congratulatory remarks were made and photos, one of which is reproduced here. Unfortunately, the official photo including the Lord Mayor and Town Clerk, has not come to hand.

One of the most important features of the conference was the address by Prof. Madsen, of the Sydney University, who outlined the working of the British Radio Research Board, and explained the lines on which it was proposed to operate the Federal Council of Scientific and Industrial Research. As a result of discussion it was decided to approach the Federal Government and suggest a scheme of co-operation between the institute and this work on certain work.

At this meeting Colonel Cox-Taylor and Flying Officer Duncan also were present, and both spoke, indicating directions in which their branches of the Army would welcome assistance from a body such as the institute, and before the conference concluded a tentative scheme was outlined in which every wireless experimenter will be organised so that he may be able to make his ability of use to the State. The possibilities in this scheme are very great, and much is expected of it.

Already something has been done unofficially in one of the States, but with official recognition, not only will the scheme be of more value, but the incentive for the individual to become more efficient will be greater.

In connection with the working of traffic it was considered that the mere handling of messages was not the objective to be aimed at by the experimenter, and as the DX craze seemed to be dying a natural death, the encouragement of original research work should be more closely looked to. There are many questions, well within the ability of the average amateur, the investigation of which will provide much interesting experimentation.

Other items will be dealt with at a later date, when the executive has had time to finalise the details.



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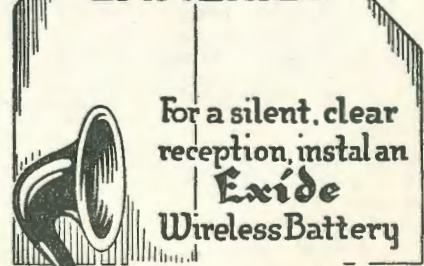
The annual dinner of the New South Wales division was the occasion of much interesting discussion, and the attendance was very pleasing. The star speaker of the evening was undoubtedly 2CS—Swain, of the Newcastle Club—who proved quite the "wag" he is reputed to be. The souvenir menu and toast list was the work of Mr. Geo. A. Taylor, the honorary publicity officer to the N.S.W. division, who throughout the conference, was always doing something towards making the visit of the delegates to Sydney interesting.

At the monthly meeting of the N.S.W. division, which was also all clubs' night, held in the Royal Societies' House Hall, delegates met representative from all the principal clubs. The principal business of the evening was the excellent lecture by Mr. Maxwell Howden on "Crystal Control." Other visits which were arranged for delegates were those to 2CM, 2YI, 2CX, and 2WI, and also inspections of the plant of the Electricity Meter Manufacturing Co., the Australian Wireless Co., United Distributors, and 2BL among others.

The final business of the conference was the election of the Federal president, and Phil Renshaw was unanimously re-elected, and it was decided that next future Federal executives should hold office for at least two years. Next year's conference will be held in Adelaide, and if the South Australians desire to outdo the Sydneysiders in hospitality they will have to work hard, as all delegates were in accord that they had a wonderful time in Sydney.

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PETRIE BIGHT, BRISBANE

S.A.S.

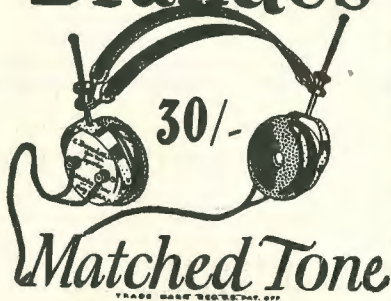
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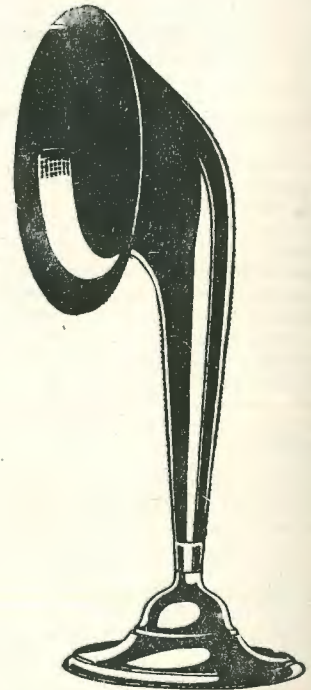
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Conducted by Uncle Ben, of Station 4QG, Brisbane.

TO ALL MY SWEETHEARTS,—

Hello, Children! Here we are again, and you see my prophecy came true. You remember I told you last month that by my next letter I would be well again and back at 4QG? Well, sure enough, I'm quite recovered, and I'm feeling just splendid.

I hope all my little friends are well, too—and I hope you've all been good. Now, children, you'll all have to be good till Christmas. Why? you ask. Well, Santa Clause has been ringing me up on the telephone quite a lot lately, asking me about my "Book o' Fun." He says he is going to put a copy in all the good boys and girls' stockings this Christmas. So you see how very necessary it is to be good until December 25th—and ever after for that matter.

Little Miss Brisbane has written a beautiful story that you'll enjoy reading over and over again. Uncle Jim has written a good yarn about poor, old Tony, and it really is funny. If Tony could speak he'd say a lot more about it, too—I'll bet. The Sandman has written an interesting story, too—all about his early life. Sambo and Pete have a page all to themselves, and it's full of laughs.

Oh, there's pages and pages of lovely pictures, and stories in Uncle Ben's Book o' Fun, so you will really have to be good and Santa Claus might put one in your stocking. Wouldn't that be nice?

The printer-man is setting up the type now, and soon the big machines will be rolling and turning out thousands of Books o' Fun for thousands of good boys and girls.

Cheerio, sweethearts, until next month.

Yours very fondly,

UNCLE BEN.

This Month's Competition

W L C A O L N R

The above letters represent two words. The first word is something Uncle Jim should give Tony, and the second is part of a house. The two words together represent an English county.

M S C H B T K L I A

The above letters also represent two words. The first is a colour, the second a workman; the two together still make a workman.

First Prize, storybook, value 7/6; second prize, storybook, value 4/.

Last Month's Competition

Hundreds and hundreds of attempts were received by the Editor of the "Radio News," and myself—and they were nearly all correct! I think the competition was a bit too easy for you. The first prize—a framed photo of Uncle Ben and Uncle Jim—will be forwarded to:

First—S. Patterson, Latrobe Terrace, Paddington, Brisbane.

The second prize—an unframed photo of Uncle Ben and Uncle Jim—will be sent to:—

Second—Doris Speary, 10 Newtown Parade, Moonee Ponds, Victoria.

Well done, children—try THIS month's puzzle.

Can You Guess This?

Why is Uncle Ben's Book o' Fun like a doctor?

A prize of 5/ will be awarded for the best and wittiest answer received by the Editor of this journal.

Closing date for all competitions—November 20th.



A RING O' ROSES.

Did you ever see a prettier posy? There's Sambo right at the back with a loving arm of friendship about his prospective father-in-law. Sambo's "Lulu" stands shyly on the left in a white frock w' th smart little hat to match. Lulu's relations gather proudly round while Uncle Ben—the guest of honour—adds fame to the group by placing his noble figure in the centre foreground.

The photograph was taken during Uncle Ben's recent holiday at the Tweed.

Q We want DEALER AGENTS throughout Queensland

To sell up-to-date and efficient Radio Sets under our sound merchandising plan.

If you have the business organisation and sales ability to sell profitable Radio Sets, we are in the position of being able to stand right behind you.

Are you ready to advance your business along the lines of a sane, sensible and constructive radio merchandising programme? If so, tell us who you are, what your business is, the territory you can profitably cover, your financial position and your sales policy. This will be held in strictest confidence. We will then send you full particulars of how we can help you.

Our Dealer-Agency is the insurance policy of your future business

IT GIVES YOU—

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| <p>(1) A line of highest quality radio products to meet a demand all the year around.</p> <p>(2) The protection of a Dealer-Agency giving exclusive representation in your locality. We mean a REAL Dealer-Agency, NOT a "Scrap of Paper."</p> <p>(3) A line built by many years of experience with financial strength and a reputation of fair dealing.</p> | <p>(4) New stocks supplied promptly, making it unnecessary to carry large stocks.</p> <p>(5) A Sales and Finance Scheme that permits of easy selling.</p> <p>(6) A ready public demand from our proposed National Advertising campaign.</p> |
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If you want to take the safe, sure road to lasting success, write to-day for full information about a Mingay's Wireless Dealer Agency in your district.

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Notes on 4QG

Past and Future Events

Art is many sided. Just as a gem has its many facets reflecting its scintillating beauties, so has art its differing forms of expression. The musical side of art alone has a diversified power in conveying its message, and its greatest effect is sometimes felt in the least obtrusive manner of its utterance. Take for example the musical monologue in which the spoken work has a musical accompaniment acting as a "highlight" to its dramatic picturisation. Station 4QG has given the listening public many fine examples of the dramatic art, and one of its most popular entertainers, Miss Eileen McLennan, will be heard on November 14 in that clear descriptive effort—"The Youkon Trail."

A broadcasting station must at all times endeavour to maintain unbroken service. In order to enable this to be effected much care must be exercised in the overhauling of gear. Station 4QG has just completed the manufacture of a duplicate aerial which is stored in a convenient place on the roof of the State Insurance Building. In the event of a heavy storm damaging or carrying away the one now in use a new feed can be rigged with very little delay.

Any large broadcasting station has countless numbers of visitors who are so keen about radio that they are compelled to call at the station just to see "where the programmes come from." With hardly an exception the first question asked by a visitor is, "Which is the microphone." The little wonder instrument which transforms sound waves into minute pulsating electrical currents and delivers them to banks of brightly glowing valves, seems to hold an irresistible attraction to all wireless devotees. The studios with their sound proof windows and doors and their drapings are also objects of wonderment to the visitor. At station 4QG the caller certainly sees quite a lot. The whole lay-out of the studios and halls are very pleasing, and through the plate-glass windows in each studio a glimpse of the transmitting equipment is obtainable—a feature which is missing where the station is removed from the studio.

On Wednesday, November 24, lovers of violin music will be afforded a treat by station 4QG. On that night the "Grand March" from "Tannhauser" (Wagner) will be played by a grand ensemble of 80 violins in the studio of Mr. Luis Amadeo Pares, and will be relayed from his rooms by the station.

The November programmes from 4QG will contain the names of quite a number of artists who have not yet made their appearance before the microphone. The policy of the station is to give, as far as possible, variety in artists. Of course this does not mean that numbers are sought for and quality of voice neglected. It means that as large a number of good artists as possible are added to the stations list and included in the programmes. During November the new artists will include:—The Francis Sisters (Hawaiian entertainers), Mr. G. L. Horn (baritone), the Studio Instrumental Quartette (piano, violin, cornet and flute), Mr. A. W. Crane (baritone), Mr. F. Bowers (cornet), Mr. J. D. Abrahams (baritone), Miss Alice Gill (contralto), Miss Beatrice Pugh (soprano), Mrs.

R. C. Henley (soprano), the Piccadilly Orchestra, the Jose Sisters (Musical Novelty Act), Mr. J. Newton (bass), Miss Fonda Ingram (soprano), Mr. W. May (tenor), Mr. J. Watson (bass), Miss Donna Toppin (elocutionist), the West End Salvation Army Silver Band and the pupils of Miss Florence Makin.

One very often hears disparaging references made (usually by the devotees of severally classic music forms) concerning the present day song ballad. While this exceedingly popular musical item has not perhaps the highest artistic aim, it is certainly a great advance on the sickly sentimental product of the Victorian era. The ballad therefore has an accepted place in the musical firmament and ordinary mortals would do well to enjoy what the Gods provide. Such a sample, for instance, is "Wake Up," a very fine example of the work of Montague Phillips. This will be heard from station 4QG on November 2nd, and its rendition will be in the capable hands of Miss Ivy Plane, one of 4QG's most satisfactory sopranos.

Radio enthusiasts who have at times listened to the splendid entertainments which Mr. Eric John (Brisbane's Gifted pianist) has arranged in conjunction with this journal, will doubtless be more than delighted to know that the Director of the Queensland Radio Service has made arrangements with Mr. John to organise a series of feature entertainments which will be given from 4QG at intervals. Mr. John intends separating these evenings by a period of one month, so that the necessary rehearsal work may be carried out. Mr. John's feature entertainments will include: "A Night for the Old Folks at Home," "A Musical Soiree at the Court of King Louis the 16th," and "An Eastern Night." It is safe to assume that they will be very fine entertainments.

The travel talks which were delivered at 4QG recently by the announcer (Mr. C. V. Woodland) proved interesting. They consisted of an imaginary trip from Brisbane to London via the Panama Canal and New York. Arrangements have now been made for Mr. Woodland to deliver another series of travel talks, commencing in the early part of November. The places to be described will be Paris, the Mediterranean, Suez, Port Said and Colombo.

The return of the popular Uncle Pen to the bedtime story staff at 4QG has been welcomed by many little listeners. Uncle Ben has now recovered from his illness and has returned to 4QG with renewed vigor.

The broadcasting of the State banquet, which was tendered visiting members of the Empire Parliamentary Delegation and was held at Parliament House, Brisbane, was a feather in 4QG's cap. It was a most difficult undertaking, the speakers being scattered around the room at various points. Two microphones were used and these were moved about into various places. The musical items came through with remarkable clarity and all the speeches were most clear and distinct.

The average listener knows but little of the very thorough manner in which much of the delicate ap-

paratus in a broadcasting station has to be nursed. At 4QG breakdowns are very rare, and this is doubtless due to the policy which is adopted of finding faults before they occur. Every day much overhauling work is carried out while the station is not actually "on the air."

Music seems to be the natural outlet for the emotions. Do we not celebrate all important festivals by such means, and in do so are we not merely following an old-established custom? Even in the days of Babylon the national feasts were accompanied by dancing and necessarily music. It does not seem strange, therefore, that the Great War should have resulted in our pent-up emotions finding their outlet in song. Station 4QG Brisbane produced a revival of music in vogue during that anxious period on October 29, and listeners thoroughly enjoyed a "Digger's Night."

The spirit of music is said to exist in all things. The spirit of music certainly hovered round 4QG's studios when Leo Martin, in a unique novelty turn, proved to listeners that music may exist even in bottles. (N.B.—We are just wondering if Leo's bottles harboured any more spirits than that of music.)

With the approach of summer, and having in view the comfort of artists during the warm months, special arrangements have been made at 4QG in connection with the use of the studios.

A very efficient ventilating system will supply fresh air to the large studio, which during summer will be used for broadcasting solo, duet and quartette

numbers. The small studio which hitherto has been used for singers will now solely be switched on the air for lecturers and other speakers.

In the big reception hall, bands, orchestras and choirs will be accommodated. These arrangements have been made after the carrying out of a series of tests, the result of which is that the spacious reception hall has been found to be most suitable for bodies of instrumentalists or singers.

The programmes from 4QG for the month of November open very appropriately with an organ recital by Mr. Geo Sampson. His numbers will include the works of Beethoven, Handel, and the ever-popular "Berceuse" from Jocelyn also Mendelssohn's "Wedding March."

An innovation has been introduced into the afternoon programmes at 4QG in the way of little French talks by Mlle. Amelia Rinquet. These talks should be appreciated by ladies who desire to learn or improve their French.

Uncle Ben's BOOK O' FUN

Every boy and girl will want one of these splendid storybooks, compiled by the bed-time story-tellers at 4QG. Filled from cover to cover with pictures, stories, and original verse. Ready for distribution in late November. Watch next issue for full particulars.

Strong, Silent POWER

Twenty years ago when the motor-car industry was in its infancy, PREST-O-LITE gave the automobile its first dependable headlights.

To-day, PREST-O-LITE Radio Batteries are giving wireless enthusiasts the world over, wonderful service and satisfaction.

Prest-o-Lite Batteries are the Rolls-Royces of the Battery Field. They outlive other makes by years, and give a steady and constant discharge under all conditions.

Write for full information and prices.

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ARTICLE No. II.

(Continuing a discussion on the Morse code, alphabet, and punctuation, etc.)

Most of the signals described in last issue have an obvious application and need no explanation. Such however as are not quite plain to the novice will be covered in this and the following articles.

First of the signals requiring explanation is the distress call (...---...). Most people when the signal is made, but comparatively few know how. The signal, correctly made, is transmitted at the rate of about five words per minute; that is, about eight repetitions of the S.O.S. Similarly, ships responding to such a distress signal also transmit S.O.S. slowly, if such signal should form part of their reply. The first S.O.S. call originated from the distressed vessel is transmitted for one minute. The distress call has absolute priority over all other traffic, and all stations within range must immediately suspend transmission on hearing the S.O.S. Unless the calling station mentions any particular ship after sending S.O.S., all vessels within range are bound to render assistance. Mention of any particular ship places the onus on that ship to respond, unless, after a reasonable time, the vessel called does not reply, in which case any other vessel must enter into communication. The responding stations must take every care to avoid jamming of signals. Supplementary regulations approved by the London Radiotelegraph Convention lay down that all ships must stop transmission at 15 and 45 minutes past each hour G.M.T., and listen in for three minutes on the 600-metre wave for distress calls and the danger signal.

The danger signal (---TTT) is transmitted slowly ten times on full power, and is used as a warning that information dealing with the safety of navigation is to be transmitted. The message is transmitted one minute after the last TTT and is repeated three times at intervals of ten minutes. Such signals usually deal with derelicts, cyclones, change of landmarks, etc. Stations hearing TTT must immediately suspend all communication (except such dealing with messages of distress) to ensure the successful reception of the TTT information.

The Admiralty signal (---...---XIX) is the warning signal used to indicate that a British war vessel or R.A.F. aircraft wishes to pass official traffic through a British coast station. On hearing the call the coast station must cease all traffic (except communication dealing with an S.O.S. call) and take the messages offering from the warship or aeroplane. Similarly all nearby stations must suspend traffic so far as is necessary to ensure the due reception of the messages by the coast station called.

The High Power warning signal (---...---MM) is used to give notice that the calling station is about to increase its power (eg. to communicate with some station outside its normal range). The signal is sent three times on the station's normal power and the high-powered transmission commences thirty seconds later.

Amongst the other signals, the double dash, or break sign (---) is used, as indicated, to separate the various parts of a radiotelegram. The end of transmission signal (---) indicates the close of one particular message, but not the end of all communication, which is indicated by the end of work signal (...---). This latter signal indicates that all traffic between the two stations concerned has been finally dealt with. The preliminary call signal (---) precedes all transmissions and is, in fact, the first signal sent by any station.

Now we shall consider the international abbreviations, known as the Q-signals.

As the name indicates, these signals are abbreviations intended to shorten the traffic between two stations. All of the signals are of three letters, and, with one solitary exception, all commence with the letter Q. In use, each Q-signal is transmitted three times for the sake of definitely certain reception. The length of the list of Q-signals is slowly increasing. Formerly it used to end with QSZ. Nowadays, since the advent of direction finding stations, the list has grown to QTG. Then too, the radio amateurs of the world have taken the official list of international abbreviations into their own domain, and have added one or two abbreviations of their own to express shades of opinion not exactly given by the official list of signals. The complete list of these abbreviations is given below, and in every case the correct official meaning is shown against each signal. Candidates for the A.O.P.C. are warned to learn the meanings exactly as given as, for examination purposes, the correct answer, and not the nearly correct answer is required. Many radio journals have, from time to time, published a list of these abbreviations, but from considerations of space have not published the exact meanings. For example, QSD has often been published as "What is the time?"—Now look at the correct meaning as shown below. To say that QSD means "What is the time?" is to put the matter very loosely. Similarly amateurs working on old lists will find other points of dissimilarity between their copies and the official list given herewith. Let it be once more urged upon intending examinees to thoroughly learn the list given. It is not harder to learn anything correctly than incorrectly.

Signal.	Question.	Answer.
PRB	Do you wish to communicate by means of the International Signal Code?	I wish to communicate with your station by means of the International Signal Code.
QRA	What is the name of your station?	This station is ---
QRB	How far are you from my station?	The distance between our stations is --- nautical miles.
QRC	What are your true bearings?	My true bearings are --- degrees.
QRD	Where are you bound?	I am bound for ---.
QRF	Where are you coming from?	I am coming from ---.

Signal	Question.	Answer.	Signal	Question.	Answer.
QRG	To what company or line of navigation do you belong?	I belong to —.	QSZ	(No question.)	Transmit each word twice. I have difficulty in receiving your signals.
QRH	What is your wavelength?	My wave length is — metres.	QTA	(No question.)	Transmit each radiotelegram twice. I have difficulty in receiving your signals; or: repeat the radiotelegram you have just sent; reception doubtful.
QRJ	How many words have you to transmit?	I have — words to transmit.	QTB	(No question.)	Number of words not agreed. I will repeat the first letter of each word and the first figure of each group.
QRK	How are you receiving?	I am receiving well.	QTC	Have you something/anything to communicate?	I have something to communicate. I have message(s) for —.
QRL	Are you receiving badly? Shall I transmit ... 20 times for you to adjust your apparatus?	I am receiving badly. Transmit ... 20 times for me to adjust my apparatus.	QTE	What is my true bearing from you? (or: from —?)	Your true bearing from me (or: from —) was — deg.
QRM	Are you being interfered with?	I am being interfered with.	QTF	What is my true position?	Your true position is latitude —, longitude —.
QRN	Are the atmospherics strong?	The atmospherics are very strong.	QTG	Shall I transmit call-sign of this station order that a bearing may be obtained?	Please transmit your station's call sign for one minute in order that a bearing may be obtained.
QRO	Shall I increase my power?	Increase your power.			
QRP	Shall I decrease my power?	Decrease your power.			
QRS	Shall I transmit faster?	Transmit faster.			
QRZ	Shall I transmit slower?	Transmit slower.			
QRT	Shall I stop transmitting?	Stop transmitting.			
QRU	(No question).	I have nothing to communicate; I have nothing for you.			
QRV	Are you ready?	I am ready; all is in order.			
QRW	Are you busy?	I am busy with another station (or with —). Please do not interrupt.			
QRX	Shall I stand by?	Stand by; I will call you at — o'clock (or when required.)			
QRY	What is my turn?	Your turn is No. —.			
QRZ	Are my signals weak?	Your signals are weak.			
QSA	Are my signals strong?	Your signals are strong.			
QSB	Is my tone bad?—Is my spark bad?	The tone is bad; or, the spark is bad.			
QSC	Is my spacing bad?	Your spacing is bad.			
QSD	Let us compare watches—my time is —. What is your time?	The time is —.			
QSF	Are the radiotelegrams to be transmitted alternately or in series?	The radiotelegrams are to be transmitted alternately.			
QSG	(No question).	The transmission will be in series of 5 radiotelegrams.			
QSH	(No question).	The transmission will be in series of 10 radiotelegrams.			
QSI	What is the rate per word to —?	The rate per word is—.			
QSK	Is the last radiotelegram cancelled?	The last radiotelegram is cancelled.			
QSL	Have you got the receipt?	Please give a receipt.			
QSM	What is your true course?	My true course is — degrees.			
QSN	Are you communicating O.K.?	I am not communicating with land.			
QSO	Are you in communication with another station (or: with —)?	I am in communication with — (through the medium of —).			
QSP	Shall I signal to — that you are calling him?	Inform — that I am calling him.			
QSQ	Am I being called by —?	You are being called by —.			
QSR	Will you despatch the radiotelegram —?	I will forward the radiotelegram.			
QST	Have you received a general call?	I have received a general call for all stations.			
QSU	Please call me when you have finished (or at — o'clock).	I will call you when I have finished.			
QSV	Is public correspondence engaged?	Public correspondence is engaged. Please do not interrupt.			
QSW	Must I increase the frequency of my spark?	Increase the frequency of your spark.			
QSX	Must I diminish the frequency of my spark?	Diminish the frequency of your spark.			
QSY	Shall I transmit with a wave length of — metres?	Let us transfer to the wave length of — metres.			

The list contains 53 abbreviations which, after all, are not too many for a keen amateur to tackle. The actual A.O.P.C. examination will only demand such abbreviations as are likely to be used in amateur signalling. Such signals as QTE, PRB, QSM and the like cannot by any stretch of imagination be regarded as falling within this category, but all the same, it is very nearly as easy to learn the whole list as to learn part of it, and once thoroughly learned it will stick in the memory with the tenacity of scototine.

Now, let us give further consideration to the various abbreviations. The point may arise in a novice's mind—How is one to know that the question is meant when an abbreviation is transmitted and not the answer? The reply is this: After every abbreviation, if the question is meant, the signal (..—..) IMI (question) is added. Take an example. A transmitting station, signalling QTC IMI, or in another form QTC, is seeking information, that is, is asking another station whether this second station has any traffic for the first. If the second station has messages for the first it replies QTC, not followed by the sign of interrogation IMI). If there is no traffic to transmit, the second station gives the sign QRU still without the IMI. Now is that clear? Not? Well, let us imagine a conversation between two amateurs. Say their calls are 2CQ and 4CQ—one being in Sydney and the other in Brisbane. 2CQ may have trouble in hearing 4CQ, and so transmits to him the QRZ, meaning "Your signals are weak." Also, 2CQ is being interfered with by some local howler, so, after sending QRZ he adds QRM, meaning "I am being interfered with." 4CQ, in Brisbane, receives QRZ QRM from 2CQ, and comes back with, possibly, QRK, "I am receiving well." But it is necessary to render some assistance to 2CQ, so 4CQ suggests QSY?33 which 2CQ will read as an invitation to change his wave length to the 33-metre band to see if the signals are more satisfactory there. Note that when a question is being asked by means of the Q-signs, the mark of interrogation (..—..) must be signalled after the sign.

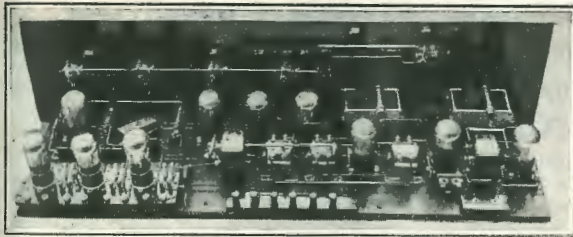
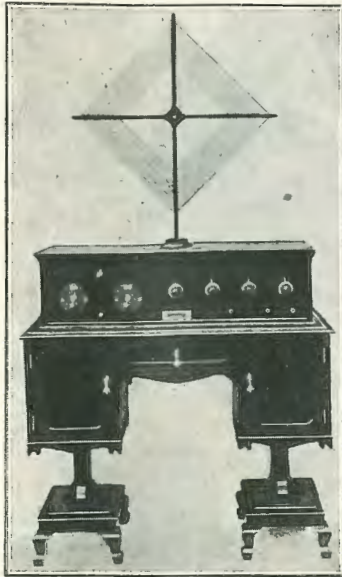
**A
Beautiful
10-Valve
Super-Her**

Here is a receiver that does credit to Queensland radio engineering and cabinet-making. It is a 10-Valve Super-Heterodyne receiver, designed and constructed on the premises of Messrs J. B. Chandler & Co., of Brisbane, to the order of a western client.

The cabinet is polished to piano-finish in a very rich rosewood, and is designed to period lines. A plate-glass loop-aerial pedestal cut to diamond shape, is let into the lid of the cabinet.

The circuit is comprised as follows:—1st stage, oscillator; 2nd, detector; 3rd, 4th and 5th, three intermediate stages of H.F. amplification; 6th, detector; 7th, audio; 8th, 9th and 10th, three stages of resistance coupled amplification.

The panel is shown below.



Uncle Ben and Sambo at Children's Ball

It did not take the children of Coolangatta and Tweed Heads long to discover that Uncle Ben and Sambo were in their midst, and consequently when a children's fancy dress ball was arranged in the Capitol Theatre, Coolangatta, Uncle Ben and Sambo were asked to adjudicate.

The top picture shows Uncle Ben and Sambo with the little girl who won the novelty competition, and the six little "Oxford Boys" who came first in the "Best Group" section.

The lower picture shows a portion of the crowd that attended.

FOR SALE

A bargain for somebody. A Four-Valve Set in maple cabinet, of best parts—all new—with two good speakers—"Amplion AR88" and a Dulcivox"; a 6-volt Exide A accumulator, 100-volt Ediswan "B" accumulator, Tungar "A" and "B" battery chargers, wave-trap, and enough spare parts to make another big set. Complete with kit of tools and aerial gear, etc., etc. Reason for selling—owner leaving State. This apparatus is easily worth £60. Will take £45 for cash. A "Stella" Steel Guitar, in nice black case given in Free.

Apply "Lead-in," c/o this office, Box 1095 N, Brisbane.

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"It was sure to come"

"It has come"

A revolutionizing
Wireless Invention

(London Sales, 10,000
Monthly.)



Does Away with
Obsolete Sets
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'It's some coil'

4 Patents—

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MULTIDYNE-COIL

Indispensable for every Radio Amateur

The Universal All-wave Receiving Coil

covering all wavelengths from 160 to 4300 metres

One single Multidyne All-wave Coil replaces any type of the conventional plug-in coil

THE MULTIDYNE ALL-WAVE COIL is equally suitable for use on either a crystal or valve set, and as a primary, secondary or reaction coil.

SOME SPECIAL FEATURES OF THE MULTIDYNE COIL:—

1. High Self-Induction, low Self-Capacity.
2. Windings not used, do not oscillate. No dead-end losses.
3. Extraordinary sharp resonance at multiple coupling.
(Can be built into any set.)
4. Rapid switching over from one station to another.
5. No changing of coil needed. Divisions of stage and wavelength easily discernable on the dial.
6. Easy tuning-in with reaction coupling by switching over to the corresponding stage of the reaction coil. This has not hitherto been possible with any other kind of coil.
To Change Polarity Reverse the Point.
7. Obviating the Hand Capacity effect by the lever projecting beyond the container.
8. The MULTIDYNE COIL can be used in a detector as well as in a Valve Set as primary, secondary or reaction coil.

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Whispers from Maoriland

Some three weeks ago the small coastal steamer "Awarua" was missing for several days, after having sent a morse lamp signal to the mail ship "Makura" that she was in need of supplies. After a great deal of anxiety the "Awarua" was eventually picked up by the H.M.S. Dunedin. The fact of the "Awarua" not being fitted with wireless has again brought forward the question of the fitting-out of the small ships with wireless installations. To very cutting press criticisms the authorities have replied that it is not the cost of so fitting out that is the bar, but the difficulty in training the navigation officers in wireless telegraphy. There is only one wireless school in this Dominion, and it has been found difficult in the past to make suitable arrangements for mercantile officers to take up the study.

The number of listeners has increased by leaps and bounds throughout New Zealand since the high-powered Auckland and Christchurch broadcasting stations commenced operation a month or two ago. The Auckland station (1YA) opened on 7th August, and the Christchurch station (3YA) on 1st September. Both stations transmit with a power of 500 watts, so that listeners who have reasonably good sets, no matter what part of the country they live in, are able to receive from either.

Before these two stations opened there were approximately 4000 receiving sets through the Dominion, for which licenses had been granted. Now there are 6500, an increase of 2500. The rush set in when 1YA (Auckland) commenced operating, and became even more marked when the 3YA Christchurch station began its work.

On the average about 300 licenses have been issued each week since these new stations were opened, and there appears to be no sign of a diminution in the numbers of applications. Four thousand licenses were issued between 1st April (when the radio year commenced) and 7th August (when the new 1YA came into being. The average for the previous two or three years was between 2000 and 3000.

Why not University lectures by wireless? This question was asked of the Auckland University College Council by one of its members at a recent meeting. It was pointed out that lectures on agriculture and kindred subjects were already being broadcast, and after some discussion it was decided to recommend the proposal for consideration.

If there is really such a thing as a radio voice, then Gipsy Rodney Smith possesses that gift. Your correspondent has had a great deal of experience of listening in to the spoken voice, but has never on any occasion heard such a clear intonation over the radio as that possessed by the missionary.

A sum of £1500 has been placed on the Marine Department estimates for the erection of a radio beacon at Wellington and at Lyttleton. This step has been taken as a recognition of the value of wireless direction finding apparatus on ships in foggy weather.

A direction finding beacon has been installed at Cape Maria Van Diemen, and will be calibrated on the next northern trip of the Government survey ship "Lutanekei."

Although the Government is providing radio direction beacons at various points on the New Zealand coast, their usefulness will be entirely dependent on whether ships trading in New Zealand waters are fitted with wireless direction finding apparatus.

A further record in marine wireless telegraphy is claimed for the installation on the Aorangi, two-way communication having been maintained between the vessel and the Canadian Government station at Estevan (British Columbia) over a distance of 6500 miles. Under an arrangement for mutual co-operation, the operators on the ship and at the shore station have been paying attention to the maintenance of two-way communication while the Aorangi has been crossing the Pacific and Tasman. On her two previous voyages south, messages were received and despatched over a distance of 6200 miles, but this distance was eclipsed when the Aorangi was a day out from Sydney on her last trip from Auckland. The position of the ship was then calculated as being 6500 miles from Estevan. Mr. H. T. Longnebaye, a member of the Aorangi's wireless staff, who has been so successful with the tests, said that the ship was now able to maintain communication with Estevan throughout her voyages. Occasionally freak distances had been bridged by wireless, but the results achieved by the Aorangi's plant on her recent trips removed these performances from the realm of the freak to the realm of the regular.

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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.

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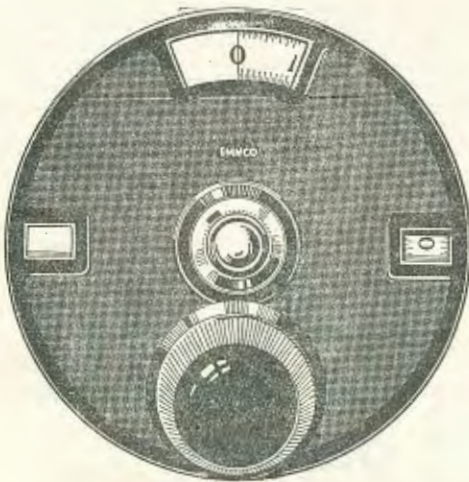
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Scrap those old dials and put in Emmco Verniers. You'll be amazed at the difference. **Selectivity** such as you've never had before—hair-breadth tuning that **gets between** those crowded stations—**easy control** that makes tuning-in the work of a moment—and last, but not least, a wonderful **lustrous finish** that makes your old set look like new.

If you are not already familiar with the merits of Emmco investigate NOW. Remember that it has the advantage of hair-line adjustment and a special logging window. Remember also, there is no back-lash, no slipping, and it makes tuning easy and absolutely precise.

The Udisco Three

An Extremely Popular Receiver

A set which has become extremely popular during the past radio season is the Udisco Three, a United Distributors Ltd. product, and as this receiver has been responsible for some excellent distance reception recently, a description of the instrument would probably be of interest to our readers.

The set as the name implies, is a three-valve model, employing a detector and two stages of audio amplification in a Reinartz circuit, which has been made to tune over a wave band of 150/1600 metres, no interchangeable coils being used, and the wave length being varied merely by turning a switch. It has one main wave length adjustment, and the different stations are brought in by turning a single knob which consequently makes operation extremely simple.

In spite of its simplicity of operation the set is very sharply tuned, and the degree of selectivity can be varied by means of a special device fitted to the instrument. Tuning can be so sharpened up that there is absolutely no interference whatever from nearby stations, and with a simple series rejector, so difficulty is experienced in tuning in all southern stations within a short distance of 4QG. This extreme selectivity is due very largely to the high quality of the components of which the set is built. The tuning coils are a specially wound low loss type consisting of a self-supporting single layer of wire, this being

the most efficient type of inductance yet evolved. The tuning condenser is also of low loss construction and all radio circuits have been so designed to give perfect balance. The consequence is, of course, a smoothness of operation and a volume on distant stations which is amazing in so small a set.

The manufacturers guarantee loud speaker reception in any part of Australia from all principal stations, and although at first this seems an extravagant claim for a three, reports from all parts of Queensland show that it is quite justified. Even on small indoor aerials no difficulty is experienced in getting excellent volume, and some idea of the efficiency of the instrument can be gathered by the inspection of the following log which has just been sent in to us.

Mr. Holden of Sandgate has had a radio set for only about two months, and in this time he has logged the list of stations shown, and has had their acknowledgment. In addition he says he has another dozen or so, but whose reception he has not yet had positive proof, so these have not been included. Everyone knows what a difficult feat it is to get 6WF Perth, but on his three, Mr. Holden gets this station regularly and has had his reception confirmed in a very complimentary letter.

Stations Logged.—4QG Brisbane, 3LO Melbourne, 2BL Sydney, 2KY Sydney, 5CL Adelaide, 2FC Sydney, 3AR Melbourne, 1YA Auckland, 5DN Adelaide, 2HD Newcastle, 3MA Melbourne, 5CM Adelaide, 3YD Melbourne, 2UE Sydney, 4WI Brisbane, 2BG Sydney, 2UW Bellvue Hill, 3SW Kew, 3SA Ararat, 3WI Melbourne, 3DP Melbourne, 2MK Bathurst, 2MC Sydney, 6WF Perth.



DIAMOND DRY CELLS

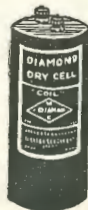


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| C— | 1.5 " " "AVER" .. 5/6 |
| | 60 Vt. Large Type 27/0 |
| | 45 " " "Large Type 22/6 |
| | 45 " " "Large Type 22/6 |
| C— | 4.5 Vt. "Biaxon" .. 13/6 |
| | 4.5 " " "Large Special" .. 13/6 |
| | 6.0 " " "Ignite" .. 16/6 |



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Special Offering of
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We have just landed good stocks of the following lines. Many of these have been scarce of late, so this announcement will be read with pleasure by the many enthusiasts who have been enquiring for these lines. Our prices are right; you can see that from the following:—

CONDENSERS.

Ormond 0005 Plain	8/6
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Yesley Micrometer Detector	5/-
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Hertzite Crystal	1/6
Neutron Crystal	1/6
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Coronet with G. & S. Whisker	1/9
Ebro 2 Coil Holders	8/6
Polar 2 Coil Holder	10/6
Polar 3 Coil Holder	15/-
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7/22 Enamelled Aerial Wire, per 100	5/6
7/20 Bare Copper Aerial Wire, per 100	5/-

SPEAKERS.

Brown H.4	40/-
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Arriving first week in October, a large shipment of English 4000 ohm Head-phones. Price, 17/6.

Overells' Ltd.

THE VALLEY :: BRISBANE.



Drake Street. Brisbane, 20/10/26.

(The Editor, "Queensland Radio Noos"—Hi.)

Dear Eddy,—Thanks very much for write-up on 4CG in last isshew!

Since then things have been happening at 4CG. Our sigs. have since covered all America (Canada, too). To date nearly 50 Yanks have been worked, but to make it look nice we worked J3KKK on fone at R7—when it didn't look nice enough so we worked friend SMTN at Djursholme (Sweden). Not satisfied with R3 from there, we rose at 5.30 a.m. and had another shot, and worked him again—this time R5—twice in the same week! Not bad, eh? No!

But that didn't suit our op. Oh no, not by a long way, so last Monday we turned out at 5.40 a.m., and after calling for a while he was rewarded with a call from G2SI at Shrewsbury (Shropshire, England) and he gave me R4—this at 6.11 a.m., exactly one hour after sunrise. That did—we sleep in now.

Thanking you again for your favours, I am, yours,
etc. CLIFF GOLD, A4CG.

Important Notice!

**Super Heterodyne
Wireless Receiving Sets**

Commonwealth Patent 16552/20

**To Manufacturers—
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of above type of Wireless Set—

A license under the above Patent is required by all manufacturers, sellers, and users of Super Heterodyne Wireless Sets

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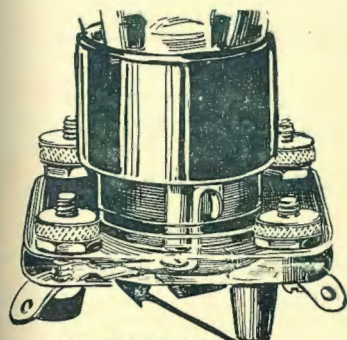
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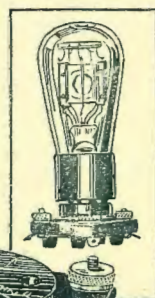
BENJAMIN CLE-RA-TONE Push Type Socket.



**SPRING SUPPORTED
SHOCK ABSORBING**

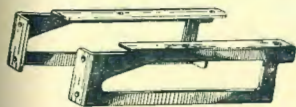
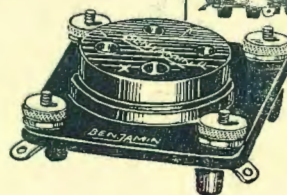
Some of the outstanding features of this socket are :

1. It is compact and neat appearing.
2. Side wiping contacts, insure perfect electrical connections to the tube prongs.
3. Suspension spring and contact member are made in one piece, thereby eliminating the high resistance joints.
4. All metal parts are heavily nicked.



By replacing the old type of socket in your set with the Benjamin Cle-Re-Tone "Push" Type Socket, you positively eliminate tube jar and resultant microphonic noises.

No. 9049 is without lower mounting base and is intended for direct panel mounting. They include a drilling template and four machine screws with nuts for attaching.



Description.

No. 9040 with mounting base. Price 5/-

No. 9049 without mounting base
(for direct mounting to
1/8 inch panel). Price . . . 3/6

Benjamin Self Supporting Bracket

The Benjamin Self Supporting Brackets are designed for use with sub-panels and are of such depth that all wiring and mounting of small radio parts can be done underneath the sub-panel, thereby decreasing the hazards of short circuiting and blowing of tubes. Brackets are intended to be attached to the front panel.

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To secure great loud speaker volume, even on distant stations, add to any set a stage of All American Power Amplification. Tone quality is perfect, because the signal current is divided between two tubes which neutralise distortion.

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