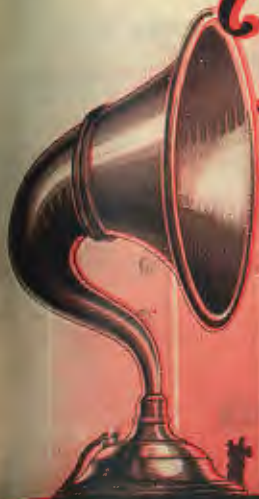


The Queensland Radio News

"Your Own Wireless Journal"

6^d



Vol. II.

Thursday, 1st July, 1926.

No. 6.

Registered at the General Post Office, Brisbane, or transmission by post as a Newspaper

America Acknowledges Amplion Supremacy

THE BEST features and latest developments of radio and phonograph are effectively combined in the beautiful Adler-Royal creation shown above. The price of Model 10 (a 5 tube Neutrodyne Radio-Phonograph with Amplion loud speaker unit) is, without accessories, \$275.00.



One of the Famous

DRAGON Class

Amplions

AR 19
£6-10-0

"... with AMPLION Loud Speaker Unit."

The manufacturers of the famous Adler-Royal are intent on providing the very best that money can buy. Thus it happens that Britain's Best Loud Speaker is incorporated in this famous American Radio Receiver.

The Amplion Range comprises the most extensive selection of Loud Speakers in existence. Prices from £1/15/- to £19/-/-.

Ample stocks of all types are now held by the Sold Distributors for Australasia

The World's Standard

AMPLION

Wireless Loud Speaker

Amalgamated Wireless (Australasia) Ltd.

King & King Buildings, Queen Street, BRISBANE

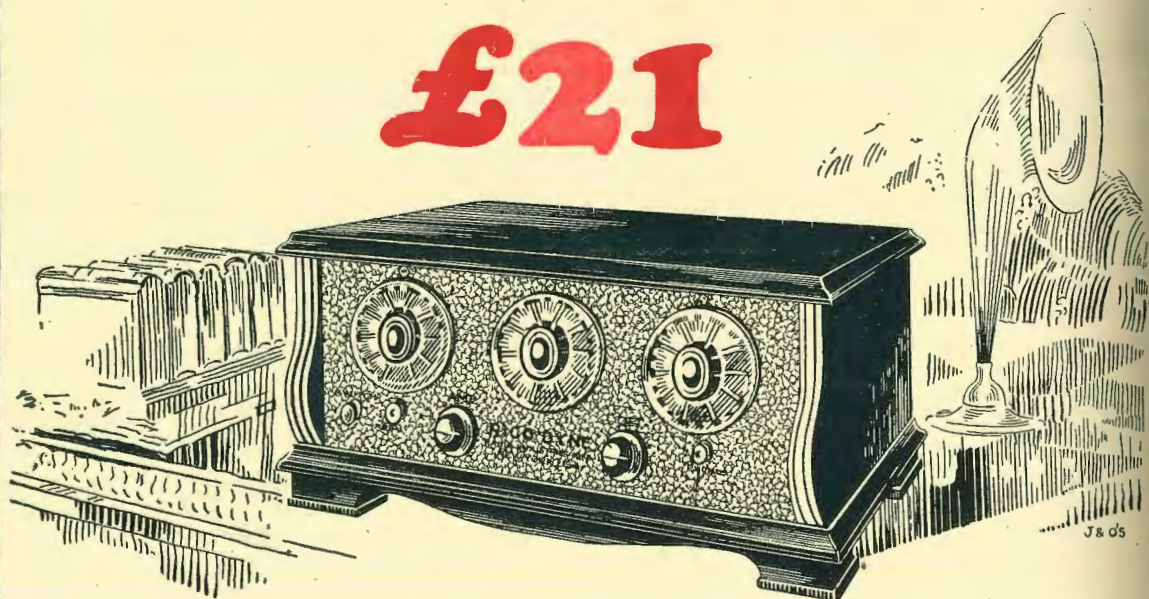
British Factory Representative:
WILLIAM BLOGG, 56 Margaret Street, Sydney

The Wonderful 5-Valve

RICO-DYNE

is now REDUCED to

£21



Owing to the great demand for this famous 5-Valve Set the cost of production has been decreased and the new price renders it the most remarkable value in radio instruments to-day. 4QG can be tuned in easily and perfectly.

If you are outside a radius of 5 miles the "Rico" patented parts make it possible to completely tune out 4QG and bring in the southern stations with remarkable volume.

*Order one from your dealer to-day or get in touch with
the Queensland Distributors*

HOME RADIO SERVICE LTD.

First Floor, Courier Buildings, Queen Street, Brisbane

PHONE 6143

The Best Book on Wireless Yet!

25 Chapters,
12 Illustrations,
and
60 Diagrams
of Tested Sets.

“WIRELESS”

by
J. W. ROBINSON
(Director, Station 4QG, Brisbane)
and
G. WILLIAMS
(Instructor, Marconi School of Wireless, Sydney)

No other Book
is so lucidly
written and
thoroughly
illustrated.

Price Only **3/6** [Post Free] 4/-

Read This Letter from the President of the All Clubs' Council

March, 8th, 1926.

A. McLeod, Bookseller,
Elizabeth Street,
Brisbane.

Dear Sir,

It has been my pleasure to peruse the advance proof of "Wireless," by Messrs. J. W. Robinson and G. Williams.

Wireless experimenters and club members will welcome this book, as it deals with technical subjects in a simple manner, which can be quickly understood.

I would also recommend it to the broadcast listener who seeks information on the transmission and reception of programmes, or the control of his set.

The book is profusely illustrated with circuit diagrams and photographs, and is written for Australian conditions, by two well known Australian radio experts.

In fact, here is a book which every prospective buyer, or owner, of a radio set should possess.

I congratulate the authors, and feel sure their efforts will be appreciated by all wireless enthusiasts.

Yours for radio,

HUBERT KINGTON,
President, Woolloowin Radio Club.
Chairman, All Clubs' Council.

Sole Wholesale Distributors

A. McLEOD

101 ELIZABETH STREET, BRISBANE

McLeod's are always up to date with the newest books and diagrams on radio. When there is something you want to know, come and ask us where to find it.

Single Copies obtainable from
All Bookstores and Radio
Dealers or from The Read
Press Ltd. Adelaide St., Brisbane

Order Your Copy To-day!



A Wireless Personality

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

Born at Middleton, Northamptonshire, in 1890, and educated at Worksop College, Nottinghamshire, he came to Australia and joined the Commonwealth Wireless Service (then under the control of the late Mr. Balsillie) as assistant engineer at Pennant Hills Wireless Station in 1912. Major C.W.C. Marr, Secretary to the Federal Cabinet, was at that time chief engineer at Pennant Hills. Mr. Brown was present at the first daytime test from V.I.S. to New Zealand, which really marked the establishment on a working basis of commercial wireless stations in Australia. At the test was also present Mr. Hirsch, representative of the German Telefunken Company, who erected the station. After eight months at Pennant Hills, Mr. Brown was transferred to the newly-erected station at Thursday Island, where trouble was being experienced with the Gardner engines. All traffic for Papua in those days passed through Thursday Island. Four and a half years later Mr. Brown was transferred as engineer to Townsville Radio, where he remained for three years, after which he was transferred back to Sydney Radio.

In 1924 he severed connection with the Coastal Radio and joined the staff of the Electricity Meter Manufacturing Co. Ltd., and in his capacity as manager of the wireless department has contributed in no small measure to the efficiency of the Emmco products.



Radio Brightens Your Home

£5 Deposit

**HARRINGTONS
POPULAR RADIO RECEIVERS**

- 3 Valve £27/10/-
- 4 Valve £32/-/-
- 5 Valve £40/-/-

Complete with All Accessories including "Ghorola" Speaker and carrying a 12 months guarantee.

The above New Models have unusual range, selectivity and wonderful tone quality. Only the very best of parts are used. The cabinets are polished in Oak or Maple. Supplied with all accessories, either dry batteries or accumulators, and loud speaker.

And all carry our 12 months' Guarantee.
No Extras to Buy.

Harringtons Ltd

Photographic and Radio Warehouse
93 QUEEN ST.,
BRISBANE.

CUT OUT
AND POST.

Please send me Post Free
Illustrated Folder of Radio Sets

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

Name

Address

Price 6d. Copy

Published Monthly



Vol. 2

THURSDAY, 1st JULY, 1926

No. 6

The Official Organ of the Queensland Division of the Wireless Institute of Australia and Radio Societies of Queensland

CONTENTS

(Copyright Registered)

	Page
A Wireless Personality	2
Editor's Page	5
The Wavelength Question	7
4QG Programme Forecast for July	8
Broadcast Sermons are Not Appreciated	9
A Cigar Box Amplifier	11
The Listeners' Obligation	14
Notes from 4QG	18
With the Hams	19
How to Construct a 60-volt High Tension Accumulator	21
Personalities	27
Club Activities	29
Uncle Ben's Corner	31
Picking Perfection	33
How to Eliminate the High Tension Battery	35
The Care and Maintenance of Accumulators	37
Great Broadcasting Demonstration	41
Questions Answered	48

LITERARY CONTRIBUTIONS.

especially original articles of interest to readers, are invited. Accounts of Club doings or unusual receptions, &c., &c., will be welcomed. This journal reserves the right to reject any contribution deemed unsuitable.

THE SUBSCRIPTION PRICE

of "The Queensland Radio News" is 6/6 per annum, post free within the Commonwealth. Single Copies are 6d. each, or 7d. if posted.

THE ADVERTISING RATES

will be supplied on application to the Publishers. Copy must be in the hands of the Publishers not later than the 20th of the month preceding date of issue.

REMITTANCES

may be made by Cheque, Postal Note, or by Cash at the Office of the Publishers. Cheques should be crossed "The Queensland Radio News," and exchange (if any) added. STAMPS CANNOT BE ACCEPTED.

Wholesale Distributing Agents: GORDON AND GOTCH (A'sia) LTD.,

Published by THE READ PRESS LTD., Box 1095 Brisbane.

All original articles appearing in this book are fully protected by copyright, and must not be copied either wholly or in part.

4WN DANCE.

To the tinkling of cow bells and the strains of jazz, the members of the Wooloowin Radio Club and their friends endeavoured to take their minds off radio topics for a brief period by holding a dance in aid of the club funds, in St. Mark's Hall, Clayfield, on Friday, July 25.

The function was a great success, both socially and financially, and the club is feeling very well pleased with itself.

Mr. Wally Best, of the United Distributors, seized the opportunity to demonstrate a "Udisco" Eight to those present. Of course, that left quite a few ladies minus partners, for not even the wiles of the fair sex could draw away some club members from the de luxe receiver.

Supper was served, and dancing was continued until 11.45 p.m.

Commencing on Friday, July 2nd, a series of organ recitals will be given through 3LO, Melbourne, by Dr. A. E. Floyd, organist of St. Paul's Cathedral, Melbourne. In the Sunday religious services, broadcast by 3LO, listeners-in have already heard most of Dr. Floyd's beautiful music, and his special recitals will find every receiving set in Victoria in operation.

SPEEDY MESSAGE.

Telegraphic records all fade before the facts of radio, which conquers distance and brings furthermost into close touch. Acting on the request of relations of Mr. A. D. Freeman, a lay delegate to the Methodist General Conference, meeting at Brisbane, an urgent message concerning a family bereavement was recently broadcast by 3LO, Melbourne, asking that Mr. Freeman, who had left Melbourne by the Sydney Express, should return home at once. A private wireless experimenter in a Brisbane suburb picked up the message and immediately telegraphed it to the Government station, which relayed the message, and Mr. Freeman was found. The message had been broadcasted by 3LO at 9.26 p.m., but at 10.15 p.m. the studio was able to announce that its message sent 36 minutes earlier had been delivered. Mr. Freeman was on his way home next day.

SWEDEN PROFITS FROM BROADCASTING.

Sweden is making money out of broadcasting. The Telegraph Administration came to the close of the year with a net profit of more than 150,000 crowns and the broadcasting company which divides things up with the Government also reports large profits. More than 120,000 licenses were taken out by the Swedish fans, and it is proposed that a reduction in the license fee is in order for 1926. The revenue from licenses is divided fifty-fifty between the Telegraph Administration and the broadcasting company, but of the other income the radio company receives 75 per cent.

FOR SALE

The Rolls-Royce of Radio

Recently Imported Radio
Corporation of America
Second Harmonic Portable
Superheterodyne Model 24

This set has only been in use six months and is in perfect condition. At a distance of one hundred yards from Station 4QG it will bring in Melbourne and Sydney on the Loud Speaker. The set is built in the form of a small suitcase containing all batteries and loud speaker. It works from a small loop, and can be carried anywhere. It uses six U.V. 199 Valves, and is very economising.

Complete with two sets of batteries. Price on application to "GRID LEAK," C/- "Q'land Radio News," Box 1095N, G.P.O., Brisbane.

OREGON
WIRELESS
MASTS

IN the use of Masts to carry Wireless Aerials, Rosenfeld's Oregon has proved to be the most serviceable. The Oregon for these masts is specially selected. Call, 'phone 5991, or write to us for further particulars and prices of Wireless Masts.

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

Rosenfeld & Co. (Q'ld.) Ltd.

"The Oregon Specialists"
TIMBER MERCHANTS.

Moray Street, New Farm, Brisbane
'Phone C. 5991.

THE QUEENSLAND
RADIO NEWS



A Magazine for Amateurs
A. T. BARTLETT, Editor

THE EDITOR'S PAGE

The Listener, the Law, and the License

The law has at last been brought to bear upon the radio pirate. After many appeals and warnings given by the P.M.G. Department through Station 4QG, it had been found necessary to resort to the unpleasant procedure of prosecuting persons who have been caught operating wireless receivers without a license.

Apart from the moral viewpoint, it will be seen from the figures and facts set out below that there is a very real financial need for every listener to pay his license fee.

From a conservative estimate we should imagine that a service such as Station 4QG is at present giving costs from £15,000 to £16,000 per annum. This figure would comprise artists' fees, administration, and staff expenses, depreciation on plant, etc., etc. The total licenses issued in Queensland ending May 31, numbered 7,200. Taking into account the variance of the license fees in Zones 1, 2 and 3, and allowing for the Commonwealth Government's deduction of 2/6 per license, the total revenue at present received by Station 4QG would total approximately £8,250 per annum—just half of what it costs to run the station on its present basis.

Now the question arises as to whether the taxpayers of Queensland are going to foot the difference or whether the programmes and service are to be curtailed in accordance with the revenue received, increasing and improving the service as the license revenue swells.

The former plan would be an unfair one to the taxpayers as a whole. Disagreeable as it seems, the latter course is, we understand, now being considered by the station.

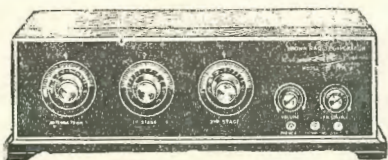
Of course, the licenses are increasing daily, and it is quite likely that the prosecutions now going through the court will stimulate the figures considerably. If the increase is sufficient the contemplated policy of curtailment may not be necessary. The radio inspector told us recently that the department fully hoped to reach 10,000 mark before the end of July.

The crowded radio stores, the scarcity of components in Brisbane, the network of aërials now to be seen in every suburb all indicate big business—business out of all proportion to the licenses being received. This, of course, points strongly to piracy.

Why a man should evade this little obligation puzzled us. He pays 1/6 to go to a picture show—perhaps 7/6 to a play—yet he begrudges the insignificant five-sixths of a penny it costs him and his household for the nightly radio concert.

In Station 4QG, Queenslanders should have the best radio service in Australia, for it is the only broadcasting station in Australia which is controlled by a Government. Station 4QG is not run for profit. It has no directors' fees or shareholders' dividends to find at the end of the financial year. It is run for the people, and every penny of revenue goes back into the programmes provided by that station.

In consideration of these facts is it necessary for us to urge every non-license holder to take out his license? Need we stress the ultimate advantages which will be reaped by all if license holders will induce their friends to follow their own example? We think not.



RAY-O-DYNE

"It Works Like a Charm"

First and foremost Ray-O-Dyne clarity of tone is a true virtue, and is excelled by nothing other than the actual presence of the entertainment.

Ray-O-Dyne does not oscillate. There's no interruption by distorted noises or whistling, whether one is listening in on local or distant stations.

Volume is so great that invariably one is compelled to reduce the current, thereby giving added life to the batteries. Selectivity is proved by the slightest turn of the dials, which tunes-in one station and completely muffles another.

Ray-O-Dyne easily brings in stations on all wave lengths, local or distant, smoothly and uniformly, affording the most enjoyable entertainment. With its marvellous qualifications it is the easiest to operate. No unnecessary dials or taps. Circuit—Tuned radio frequency. Two stages of radio amplification, detector, and two stages of audio amplification. Five valves in all. Jacks provided for ear-phones and loud speaker.

Batteries—6 volts storage, and 90 volts "B" battery. Genuine bakelite panels. £42/10/- complete with all accessories. At its low cost it is an unparalled value from any angle you may choose.

Call and inspect or arrange for a demonstration in your own home.



QUALITY is Economy

The market is flooded with unreliable rubbish, sold in many cases by people lacking the most elementary knowledge of Radio.

Everyone knows that QUALITY is ECONOMY, though the purchaser often buys an inferior article, under the impression that he is saving money.

In Radio work THE BEST ONLY IS GOOD ENOUGH.

Do not pay dearly for YOUR experience, but insure perfection by using

ADVANCE RADIO GOODS

They are of the highest standard.

Two Coil Holder	10/6
Three Coil Holder	15/-
(Both Vernier Movement)	
Honeycomb Plug	1/6
Spiderweb Plug	1/6
Rheostats—	
6, 10 and 30 ohms	4/6
Potentiometers 200 ohms	5/6
" 400 ohms	7/-
Low Loss Variable Condensers—	
Complete with dial—	
.00025 M.F.D.	12/6
.0005 M.F.D.	15/-
.001 M.F.D.	18/6
Without Dial, 2/6 off these prices.	
Audio Transformers	19/6
Success is Yours if you Buy Advance Radio Products.	
Call and Inspect or Send for Free Descriptive List.	

Radio
Department
First Floor



Phone
Central
5040

The Wavelength Question

Radio Clubs of Queensland Move in the Matter

PETITION SUGGESTED.

It is very evident that the listening fraternity of Australia are most determined to bring about a re-allocation of the wave lengths of "A" Class Broadcasting Stations.

"The Queensland Radio News" set the ball rolling on this most vital matter, when in our April issue we addressed an open letter to the Chief Inspector of Wireless and Telegraphs for the Commonwealth (Mr. J. Malone). In this letter we stressed the position of listeners regarding the interference of 4QG, 2BL, 3LO, and 5CL, and urged that the Postal Department in Melbourne should speedily and effectively solve the problem by a much needed reallocation of the stations referred to.

As stated in our May issue we had received a reply from Mr. Malone in which he inferred that the matter was at the time of writing being reviewed by the authorities.

To us this news sounded hopeful, but, realising that the wheels of administration move exceedingly slow, we expected to see some move made within a month or six weeks from that date.

Three months have rolled by without a sign of any official activity in the matter.

"Radio" and "Wireless Weekly" (of Sydney) have now taken the matter up, for evidently Sydneyites are experiencing the same trouble as we who reside in proximity to 4QG. These two journals sought the opinions of many authorities in all parts of Australia regarding the question, and practically without exception, every answer received advocated the reallocation.

There is no doubt whatever that it is badly needed. Take the position of those who are suffering interference from 4QG as an example. They are all residents of Zone 1 in the State of Queensland, and they pay the highest license fee. Yet those who reside outside this zone and are free from interference have a greater choice of programmes, although their license fee is less.

The Commonwealth authorities are mostly to blame for granting such ridiculously close wave lengths to the four stations. A little foresight would have warned them of the confusion and trouble which would eventually follow.

The radio dealers are behind the movement to a man. They know that people are content to buy crystal and one-valve sets, for they realise it is useless to buy a set that is built for distance, while the local interference exists.

At the time of writing the daily press reports some official move in Sydney. By the time this issue is in the hands of readers we trust this report will have materialised into something very definite.

THE RADIO CLUBS ORGANISE.

Some weeks ago the Woolloowin Radio Club circulated the other clubs in the Brisbane district, asking their opinion of a concerted movement to endeavour to have the wave length of Station 4QG altered so as to minimise the interference at present experienced with the reception of Southern broad-

casting stations. Receiving satisfactory answers from the majority of the clubs, a meeting of delegates was held at the Woolloowin Club's headquarters on 10th June last. The clubs represented were Woolloowin, St. Andrews, Graceville, Ipswich, Wynnum and Manly, Eastern Suburbs, and Toombul. Each delegate reported the views of the respective clubs, which showed that all the clubs were prepared to unite in an endeavour to have 4QG's wave length altered. It was resolved that a petition be printed and distributed among the different clubs and radio dealers in No. 1 Queensland zone, for the purpose of obtaining signatures from interested persons.

A committee of one delegate from each club was formed to handle the petition, and Messrs. H. Kington and H. A. Jiear were asked to act as chairman and secretary. The petition is worded as follows:—

PETITION.

Requesting the alteration of 4QG's wave length.

"In view of the fact that "A" Class Broadcasting Station 4QG operating on a wave length in close proximity to those of Southern Broadcasting Stations is placing broadcast listeners in No. 1 Queensland zone in a less favourable position than those in the other fourth district zones by reason of the severe interference at present experienced, the undersigned petitioners therefore ask that consideration be given by the proper authorities to the re-allocation of the wave length of the said Station to approximately 450 metres and thus enable broadcast listeners in No. 1 Queensland zone to enjoy the same privileges as those in Nos. 2 and 3 zones, who, for the payment of a lesser fee, have access to a larger number of Stations."

This Petition Closes 18th August, 1926.

There is space allowed on each petition for the signing of about 30 to 40 names.

At a subsequent committee meeting it was resolved that Mr. Malone, the chief manager of Telegraphs and Wireless, Melbourne, be written to, and informed of the petition about to be launched, and asked if any definite assurance could be given that the authorities would be taking immediate action in the re-allocation of the various wave lengths.

Pending the receipt of a reply from Mr. Malone, no further action is being taken with the petition. The committee feels sure that it will have the support of every broadcast listener and other interested persons in the affected zone in this matter. Should it be found necessary to launch the petition, the committee urges all interested to sign without delay, but appeals to over-enthusiastic supporters not to sign more than once.



Wireless Aerials

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

G. H. BUSBY

Lily Street, Stones Corner,
South Brisbane

STATION 4QG

Programme Forecast for July

The following is an outline of programme attraction at Station 4QG for the month of July:—

Thursday, July 1.—Studio programme, followed by a recital by the Greater Brisbane Municipal Concert Band.

Friday, July 2.—Recital by the combined representatives of Metropolitan Roman Catholic Choirs, followed by a Studio programme, featuring the "Savoy" Orchestra.

Saturday, July 3.—Studio Concert, Lennon's Ballroom Orchestra.

Sunday, July 4.—International Bible Students' Association, morning and evening services; Federal Band Concert (afternoon); Greater Brisbane Municipal Concert Band Recital (night).

Monday, July 5.—Organ Recital, from Exhibition Hall, South Brisbane Orchestra.

Tuesday, July 6.—Studio Concert; The Pacific Trio; The White Rose Musical Novelty Trio; The Centennial Hall Orchestra.

Wednesday, July 7.—A full evening by "The Lyric Entertainers."

Thursday, July 8.—The 4QG Concert Orchestra; Greater Brisbane Municipal Concert Band Recital.

Friday, July 9.—Special Concert by the students of Mr. and Mrs. T. Croft, followed by Studio Entertainment.

Saturday, July 10.—Studio Concert; Lennon's Ballroom Orchestra.

Sunday, July 11.—Wharf Street Congregation Church (morning and evening); Metropolitan Band Concert (afternoon); Greater Brisbane Municipal Concert Band Recital (night).

Monday, July 12.—The "Bijou" Orchestra; South Brisbane Orchestra.

Tuesday, July 13.—The Holy Cross Choir; Studio Entertainment; Centennial Hall Orchestra.

Wednesday, July 14.—Studio Concert; Hawaiian Music; The Tivoli Orchestra.

Thursday, July 15.—A Classical Night, by a special party organised by Miss Lottie Richter.

Friday, July 16.—Studio Entertainment; Crystal Palace Orchestra.

Saturday, July 17.—Special Recital from the Studio of Mr. Luis Amadeo Pares.

Sunday, July 18.—Albert Street Methodist Church (morning and evening); Excelsior Band Concert (afternoon); Greater Brisbane Municipal Band Concert (night).

Monday, July 19.—Studio Concert; South Brisbane Orchestra.

Tuesday, July 20.—St. Mary's Church Choir; The White Rose Musical Novelty Trio; The Pacific Hawaiian Trio.

Wednesday, July 21.—Apollo Club Second Grand Concert of the season (relayed from the Exhibition Hall).

Thursday, July 22.—Studio Concert; the 4QG Concert Orchestra; The Greater Brisbane Municipal Concert Band.

Friday, July 23.—A Classical Night. Programme by Miss Lottie Richter's Party, supported by the "Savoy" Orchestra.

Saturday, July 24.—Studio Concert; Lennon's Ballroom Orchestra.

Sunday, July 25.—All Saints' Church of England (morning and evening); Federal Band (afternoon); Greater Brisbane Municipal Concert Band (night).

Monday, July 26.—Queensland Christian Endeavour Union Rally; Studio Concert to follow.

Tuesday, July 27.—State Orchestral Concert, relayed from the Exhibition Hall.

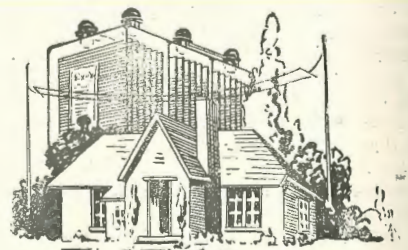
Wednesday, July 28.—Special Concert, relayed from the Auchenflower Bowling Club's House.

Thursday, July 29.—A full programme by the "Lyric Entertainers."

Friday, July 30.—"The Queensland Radio News" Special Grand Concert, relayed from the Albert Hall. An extra special programme.

Saturday, July 31.—Studio Concert; Lennon's Ballroom.

"Exide"



Exide

WIRELESS BATTERIES

Mean clearer receptions and the best possible service from your Set. Obtainable at all Radio Dealers.

EXIDE BATTERY SERVICE
[Q.] LIMITED

QUEEN ST., PETRIE BIGHT, BRISBANE.

S.A.S.

"Broadcast Sermons are Not Appreciated"

Anglican Minister's Remarkable View

"I do not think that people receive much help and comfort from broadcast sermons. I am a wireless enthusiast myself, and my experience has satisfied me that the broadcasting of church services has no value whatever in a spiritual sense. No one can worship God from a loud speaker . . ."

Such was portion of a remarkable statement made by the Rev. R. W. Shand, of Wynnum, when denouncing and moving a motion against the broadcasting of church services at the recent Anglican Synod held in Brisbane.

It is inconceivable that a man of God could advocate a policy that would be in direct opposition to that preached by Christ Himself, who said, "Go ye into all the world and preach the Gospel unto every living creature."

Fortunately his remarkable views were not allowed to go unchallenged, for several of his ecclesiastical brethren voiced their whole-hearted opinions on the benefits of the broadcasting of church services, and the original motion was greatly modified ere the session closed.

However, the debate was a very lively one, and the various opinions given on this all-important matter were much divided. It is hard to believe that men whose mission upon this earth is to spread the Word of God, to tend the sick and afflicted, to comfort the lonely—could publicly denounce and discard Providence's latest and greatest gift to mankind as a means of reaching those whom they cannot reach in person.

According to these reverend gentlemen who supported the Rev. Shand's unseemly motion, the Gospel should be reserved for those who pay for their pews. It is not a thing to be enjoyed by the masses. The sick, the bed-ridden, the maimed, the isolated have no right to hear or receive spiritual benefit unless they attend divine service, evidently to pay their portion toward the church funds. Such a policy does not bespeak Christianity, as our readers will agree.

The Rev. Shand proclaims himself as a "wireless enthusiast." What a wonderful spirit he displayed to his fellow listeners! As a radio man he must have heard or read of the vast mail which reaches Australian broadcasting stations regularly, testifying to the unbounded joy and appreciation of people of all denominations who are so situated as to be unable to attend church, but who can tune in to the broadcast services.

Ask these people if the Voice of God can make itself heard and felt through the medium of their

loud speaker. Ask them of the measure of help and comfort the church services bring to their isolated lives. It would appear that the Rev. Shand forgets that he or any other clergyman is but a medium. The voice of the loud speaker as a medium can influence listeners to an equal degree as can the mouth of the man who utters the sermon.

It is the writer's pleasure to know of one old lady who has been deaf for over 35 years. During all these years she has been denied the joy of music, lectures, and church services. Being at one time a public speaker herself, she has greatly felt her handicaps, especially with regard to church services, for she is a fine type of Christian. I imagine her joy when she put the phone to her ears and heard not only the preacher's message but the organ and choir, and other things from which she had been separated so long. Had those ministers at the Anglican Synod caught but one fleeting glance of that dear soul's expressions, their tongues would have been silenced and their minds convinced of their misjudgment.

We respect this church's views regarding the broadcasting of the portion of the service, known as the Holy Eucharist, but many listeners who read the Rev. Shand's concluding remarks on the matter, greatly resented them. He said:—

"The broadcasting of the Holy Eucharist is leveling religion to the dust. It is like casting pearls before swine. It is abhorrent to me to think of such a solemn service being broadcast to hotels and such places."

Comment upon such a statement would seem superfluous.

Perhaps the most outspoken of all the preachers who opposed the original motion of the Rev. Shand, was Mr. S. J. Cossart, who said:—

"Only those who are profane at heart and devoid of fine feeling could fail to benefit from the broadcasting of church services. Even to evil people it could do no harm. There is nothing at all in the suggestion that people stop away from church because they could hear the sermons broadcast."

The Archbishop's viewpoint of this matter is most disappointing. He summed up the position thus:—

"I wish to goodness broadcasting had never come in for church services, but as it is here, and the services of all other churches are broadcast, it makes me wonder if we would be quite right in leaving out Church of England services. I think we would be taking a dangerous step if we declared our objection to broadcasting altogether, but we should set our faces against the broadcasting of the Holy Eucharist."

The sooner the churches recognise radio in the light of a missionary rather than that of hindrance, the better it will be for everybody. Rather than deplore its introduction—rather than denounce and reject this God-given gift, the church should be the first to grasp and utilise this wonderful and unique method as a means of reaching those who cannot and do not go to church.

It is interesting to note that at a recent plebiscite taken in Victoria and run by a Melbourne paper to determine whether the public favoured sporting news, jazz, fashion talks, band music, vocal music, church services, etc., etc., church services received the greatest number of votes. There were over 20 subjects from which the voter could make a choice, and over 10,000 people voted. The people cast their vote for church services by a large majority. This, in itself, is an effective reply to the Rev. Shand's supporters. Queenslanders do not differ from Victorians in such matters. It also proves that there is a spark of religion in every man or woman—no matter how careless they may have become or how long since they have darkened a church door. They believe in God—and who knows but the broadcast sermon may be the means of fanning the spark into a living flame?

As far as we know this is the first time in Australia that church broadcasting has come in for such a severe censuring from any church body. It does not stand to Queensland's credit as a State, and much less does it to those who by their denunciations showed such poor taste and lack of judgment.

HOW EUROPE IS AVOIDING INTERFERENCE IN RECEPTION.

One of the hardest radio problems for Europe to adjust, until recently, has been the radio interference situation. However recent tests to determine how it would be possible for all of the continental broadcasting stations to transmit at the same time without causing difficulty showed that proper allocation of wave lengths will solve the difficulty.

American fans who consider a station five to six hundred miles away as a "local" can readily picture the condition of affairs in Europe, in which the different States, various radio regulations and petty national differences has made difficult the co-ordinating power which the United States, twice its size, has been able to create in broadcasting.

Experimenting with a ten kilocycle separation between wave lengths of over 100 broadcasting stations in Europe an International Committee was able to separate all of the stations with ease. It was necessary to readjust the wave lengths of German and Spanish stations for the purposes, and the range was similar to the American one, 200 to 600 metres.

With headquarters in Paris, the observers heard English, Belgian, French, German and Spanish stations with loud-speaker volume. Italian stations and one or two British and German stations were reported weak, however. The interference that was experienced was largely due to the stations' variations from their duly assigned frequencies.

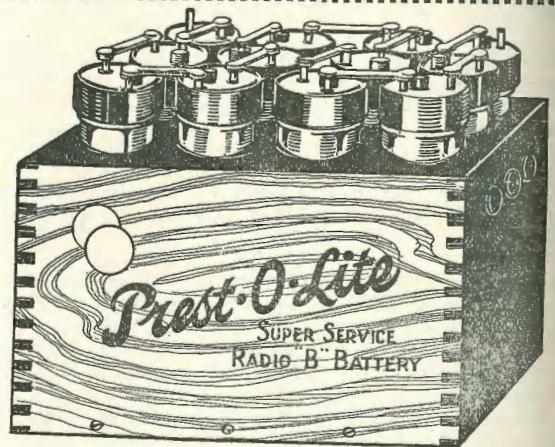
Strong, Silent POWER

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.



Prest-O-Lite 'A' and 'B' Batteries

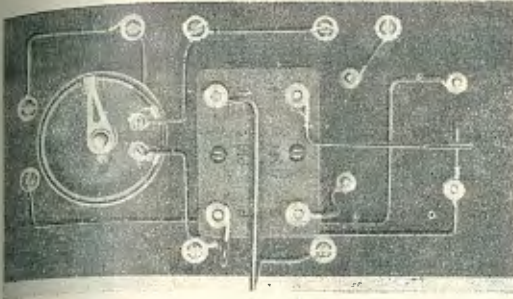
Will Hold Their Charge Over Longer Periods

QUEENSLAND MOTORS LIMITED

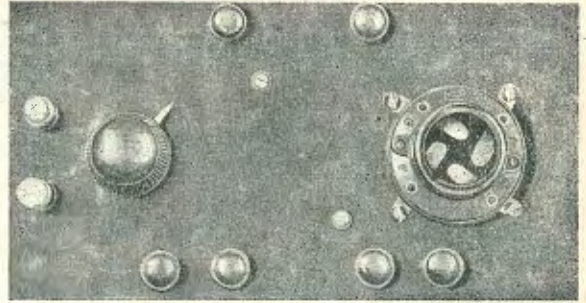
Service Station:
WICKHAM ST., VALLEY

BRISBANE

Head Office:
ADELAIDE STREET



Back View



Front View

A Cigar Box Amplifier

(By "The Fan's Friend.")

Are you a crystal crank? Here, then, is a simple, easy-to-build valve Amplifier clearly explained and illustrated in terms and signs that the merest novice will find easy to follow. Build it and boost up your crystal signals.

Many listeners who reside within a few miles of a broadcasting station begin their radio experience with a crystal receiver, because it is not only the cheapest form of receiving apparatus, but because it is also the simplest to operate and keep in order.

Bye-and-bye, however, the bug grows, and the ardent fan longs for fresh fields to conquer. He gets the "itch for distance," and he either discards his crystal for a valve set or alternately adds a valve amplifier to his existing set.

Here is described a one-valve amplifier, which may be used on any crystal set without altering it in any way. This amplifier will, in the majority of cases allow the use of a loud speaker providing good signals were being received by the crystal set. In any case the amplification will be sufficient to enable a number of extra telephones to be used without any serious loss of volume.

The method of amplification used is known as "low" or "audio" frequency amplification. Such an amplifier attached to a crystal set is more powerful than a one-valve set, and on a good crystal set almost equals a two-valve set. Providing a good transformer is used the clarity of the crystal is not impaired in any way.

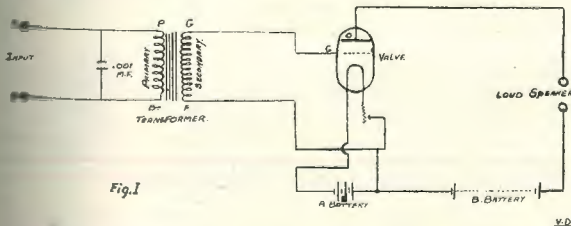


Fig. 1

Fig. 1 shows the theoretical diagram of the connections for the set under consideration. A and B are joined to the telephone terminals of the existing crystal set.

The variations in the primary winding of the transformer caused by the wireless signals are stepped up in the secondary winding. This leads to the grid of the valve (G) thence through the valve to the plate or anode (O), to the telephone or loud speaker terminals, and finally the circuit is completed through the high tension battery or "B" battery and the filament.

CONSTRUCTION.

Now we come to the actual construction of the amplifier. All we require in the way of tools is an ordinary drill, a pair of pliers, and screw driver.

The parts required are:—

- 1 piece of ebonite or bakelite ($8\frac{1}{2} \times 4\frac{1}{2} \times \frac{1}{2}$).
- 1 audio transformer (5 to 1 ratio).
- 1 rheostat.
- 1 socket to suit 199 valve.
- 1 199 valve.
- 8 terminals.
- 1 43-volt or 60-volt "B" battery.
- 1 $4\frac{1}{2}$ -volt "C" battery.
- About 3 yards of insulated connecting wire.
- 2 small $\frac{3}{16}$ in. metal thread screws.
- 1 cigar box to suit panel.

Note.—The socket used in the illustrated model was a Na-ald or Benjamin 499S socket. The reason for using this make being chiefly that it simplifies the wiring quite a lot and keeps all wires hidden. Should any other make be used it will be necessary to bore holes through the panel near the terminals on the socket and bring the wires through.

Regarding the transformer, one of reputable manufacture having a ratio of 5 to 1 is recommended.

CONNECTING AMPLIFIER UP.

It will be clearly noted there are eight terminals or binding posts marked 1 to 8 on Fig. 2. Terminals 1 and 2 connect to the phone terminals of the existing



FAMED THE WORLD OVER

For Quality, Tone and Dependability

IGRANIC

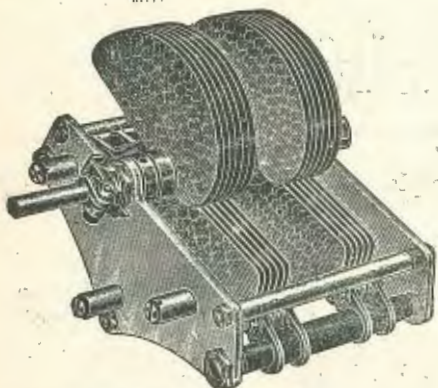
We have recently landed a complete range of additions to the famous Igranic components, and the Dual Variable Condenser is a typical specimen.

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

BROWN

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

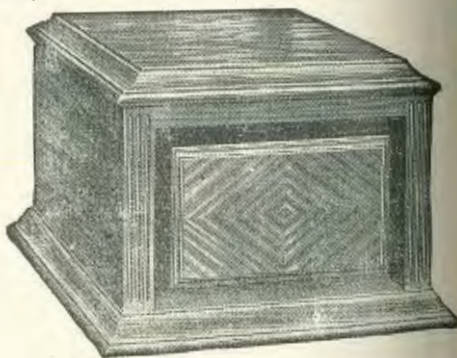
At the back of this name stands an organisation rich in the experience resulting from many years devoted to the production of Headphones and Loud Speakers. They are unexcelled for tonal purity and volume.



The IGRANIC Low Loss Dual Variable Condenser. Similar in design to the standard Igranic Variable Condenser, it comprises two sections which are accurately matched. Indispensable for tuning two oscillatory circuits simultaneously. Complete with 4 inch Bakelite Knob and Dial

OLDHAM

We have been appointed sole agents for the Oldham (Special Activation Process) Battery, and you should investigate its unique merits before investing in an accumulator. Due to the patented method of construction, the plates are rendered active right through, and not merely on the surface as in most batteries. The charge is obviously held much longer with consequent large saving in charging costs.



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

NOYES BROS.

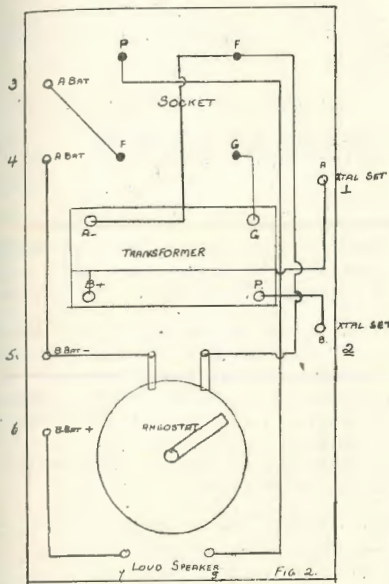
(SYDNEY) LTD. (MELBOURNE) PTY. LTD.

BRISBANE: Perry House, Elizabeth Street.
SYDNEY: 115 Clarence Street.
NEWCASTLE: 11 Watt Street.
MELBOURNE: 495 Bourke Street.
ADELAIDE: Darling Buildings, Franklin Street.
HOBART: 145 Macquarie Street.
And at LAUNCESTON. Also from J. W. R. Gardam, PERTH.

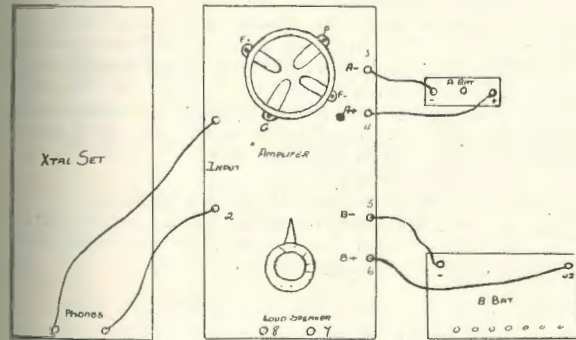
Write for Booklet
No. 19, post free



set as in Fig. 3; it is not very important which way these wires are connected. Terminals 3 and 4 go on to the small 4½-volt battery as shown in Fig. 3—the negative (minus) to 3 and the positive (plus)



to No. 4. Terminals 5 and 6 are connected to 40 or 60 volt "B" battery—No. 5 going to the negative and No. 6 going to the positive. Terminals 7 and 8 go to the phones or loud speaker.



The amplifier is now ready for operation. The small knob on the front of the panel controlling the rheostat is turned on until the signal stops increasing in strength, and always remember to keep this as low as possible without decreasing the strength. Not only does this precaution increase the life of your batteries but also of your valve.

Anyone wishing to construct a two-valve amplifier may make two amplifiers such as this, and connect the second one up to the first just in the same manner as connecting the first to the crystal set, that is by connecting the phone terminals of the first

amplifier to 1 and 2 of the second. The same batteries may be used but it would be economising to use a separate "A" battery. This amplifier or amplifiers may be connected up to a one-valve set in a similar manner, and will give very satisfactory results.

Before commencing to build the amplifier, study photographs and diagrams thoroughly and no difficulty should be experienced building a really efficient amplifier.

Jap Listens-in to 4QG

Wireless knows no nation wide barriers.

This fact is amply demonstrated by a rather striking letter which has reached station 4QG from Japan.

Writing from Kazusa, Mr. Takee Kimizuka, says:—"I am a radio fan of Japan. Please reply me your broadcast time, wave length, powers, call letters, as fast as you can. And kindly teach me the call letters, owners, wave length, and powers, broadcast time of States and cities of your country. Can you receive broadcast music of Japan. I can receive broadcast music and English talk on the waves about 353, 370, 390, 400, 425, and 485 metres by loud speaker every night, but I do not know the radio whereabouts.

"Please reply me your precious judgment. I beg you will henceforth favour me with your friendship in perpetuity. Kindly consent my entreaties. I am awaiting with craned necks for your yearning reply."

OVERSIZE Westinghouse Batteries

Built with more plate area than ordinary types

Queensland Distributors—

Bizzy Cycle-Motor Works Ltd.

Roma Street, Brisbane

"The House of Westinghouse"

The Listeners' Obligation

What am I doing to further the interest of radio, the science in which I am so greatly interested?

This is a question which every radio enthusiast of Queensland might well ask himself at the present day.

The importance of such a question does not, at first glance, appear to be very great, but a little careful thought will soon show that it is a vital one.

The past twelve or eighteen months have been outstanding ones in the history of wireless as far as Queensland is concerned. In the middle of last year temporary Station 4QG was erected and a regular broadcasting service was commenced from it. Prior to the commencement of operation by this station radio trade in Brisbane was just about as dead as it was possible to be. So serious had matters become that those who had invested money in the radio trade held not one but several meetings to try and find a way out of the bog into which wireless seemed to have stumbled.

The placing of temporary Station 4QG in commission saved the trade and gave the radio public something to go on with until the big station was complete. In doing so it admirably fulfilled its purpose.

Towards the end of last year, and at the commencement of this year the radio trade was not what might be termed animated. A dullness seemed to have set in, and although a certain amount of business was effected it was by no means of the volume which traders desired.

This state of affairs was of course only natural, and was due mainly to two reasons. First of all the time of year was not suitable for an expectation of good radio business. It was the middle of the summer period and a slump in sales was therefore only to be expected. Secondly, the temporary station which was operating possessed no range and was therefore not interesting to dwellers in distant parts of the state. The dwellers in the whole of the outlying parts of Queensland were therefore not in the market for the purchase of radio sets.

With the commencement of operations from the permanent station 4QG, however, a big demand for radio sets and parts became noticeable. This demand has continued for some weeks past and today big business in radio apparatus is being transacted in Brisbane. A casual visit to the leading wireless shops of the city or suburbs soon proves this to be a fact. It is almost impossible to receive attention in some of the traders' emporiums during the busy hours, so great is the rush of customers to secure their radio needs.

Such a state of affairs augurs well for wireless in Queensland. It means that the wonderful broadcasting movement has "taken-on," has become popular, and is being made use of by an ever increasing army of people.

What has been responsible for this display of interest in the movement?

There can only be one answer to such a question.

The programmes and general service given from the new station 4QG, have been of so high a standard as to interest thousands and thousands of people in wireless.

The enthusiast who thinks must realise this to be a fact. Had there been no 4QG there would have been no wireless movement and no wireless trade.

In what then lies an assurance for the future of broadcasting in Sunny Queensland? Surely the answer is quite simple. The assurance of the future of wireless lies in the hands of Station 4QG, if that station maintains and improves the excellent service which it is already giving there should be very little doubt as to whether broadcasting in this part of Australia will flourish.

But, can Station 4QG even maintain, let alone improve its standard?

The answer to this question is entirely in the hands of the radio public and the radio traders themselves. Station 4QG both can and will maintain and improve its service, provided that the revenue which it receives from listeners' licences is sufficient to enable to finance the running of the station. The service is a public utility and if more money is expended than is collected in license fees then the loss must be borne by the general taxpayer. Such a position is quite out of the question, and the fact therefore remains that the station must only spend as much money as it receives. In other words, like any other commercial undertaking, it must remain solvent. There would soon be a public outcry if such were not the case.

Almost simultaneously with the printing of this issue of the "Queensland Radio News" the estimates for the Queensland Radio Service for the forthcoming year are being prepared.

The cost of maintaining a first class service is very, very heavy indeed, and becomes heavier as the quality of the service increases. Against this the revenue from licenses remains disappointingly small. We understand that not only has it been found necessary to refrain from adding to the service at the present time, but it has been found necessary to prune in some directions.

It is safe to assume that were every listener to immediately take out a license such a state of affairs would not exist.

As this paper is being printed it is being found necessary to prosecute certain persons in Brisbane on charges of the non payment of license fees. It is common knowledge in the wireless world that large numbers of people have refrained from taking out their licenses.

Surely these persons hardly realise just what their action means. Every person who refrains from immediately taking out his license (and the price is small enough too!) is directly helping to restrict and harrass the development of wireless in Queensland, and is directly helping to reduce the quality of the programmes from Station 4QG.

The position interests every trader and every wireless enthusiast.

What am I doing to further the interests of radio?

Let the reader again ask himself this question.

Let him add—"What can I do to further the interests of radio?"

His reply must be—"I can see that I must take out a license, and in order to safeguard myself and my honest neighbours from the effects of the actions of thieves and fools I will induce everybody whom I know to be listening in without a license to take out a license immediately.

4DO—Shake !

He Shoots His Signals into U.S.

4DO (Mr. H. L. Hobler, Rockhampton), has placed himself on the amateur map by exchanging confabs with U.S. hams on Saturday, June 5th, last.

Harold may now be justly admitted into the select circle of the "Big Fours." He is the fourth Queensland-lander to establish a two way communication with America.

On Saturday, June 5th, at 11.28 p.m., 4DO sent out a general call, and it was answered by U-6ANQ at Hemet, California who reported signals at strength R2. The following night (Sunday) a general call was answered by Hu-6AXW, a station in Hawaii, who was worked for a long period and who reported strength R4—readable. A few minutes later, communication was established with U-7WU, a station at Portland, Oregon, U.S.A. This contact was the best of all and 4DO states that during the twenty minutes in which signals were exchanged, only once had a few words to be repeated. Signals were reported by this station to be very steady and comfortable to read.

The power used throughout these QSO's was 28 watts input to a 5-watt tube using 400 volts rectified A.C. on the plate and straight A.C. on the filament.

4DO is now trying to raise distant stations with a power of one watt using 84 volts on the plate. Recently in broad daylight he worked 4AN (Brisbane), who reported R5 with this power compared to R7 with the 28 watts input. He is now endeavouring to reach out much further with these one-watt signals.

Why did the grid leak?—Because fila ment 2MT it but forgot.

IF IT IS OF STEEL - HARVEYS CAN SUPPLY IT

SPEED and HARVEY STEEL SERVICE

When we tender a quotation you may depend it is cut to a minimum, based on the best of steel, and the finest and most efficient workmanship.

Orders from Western People are all part of our day's work.

Whether it be for a Steel Flood Boat or for Structural Steel, or again, for a Cantilever Awning.

When speed is essential, our large stocks of steel, our points of distribution and our system of delivery unite to make Harvey Steel Service an influence in the placing of orders.

HARVEY & SON

"Staunch Service"

Structural Steel Engineers

MARGARET ST., BRISBANE S.A.S.



The
QUAM
Radio's Best Speaker

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

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

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

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

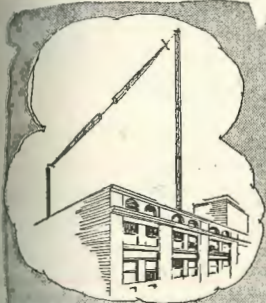
PRICE £9/-/-

Your nearest Dealer will be pleased to demonstrate

UNITED DISTRIBUTORS LIMITED

(Wholesale Only) **343 QUEEN ST., BRISBANE!**

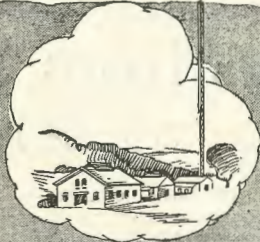
72 Clarence Street, Sydney. 66 Charles St., 26 Chesser St., Adelaide Cr. Jervois Quay and
 26 Queen St., Perth. Launceston, Tas. 664 Bourke St., Melbourne. Harris Sts., Wellington, N.Z.



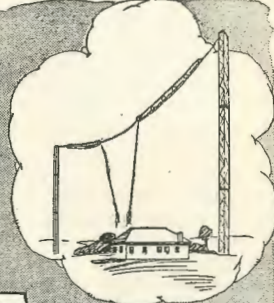
3.A.R. MELBOURNE



2.K.Y. SYDNEY



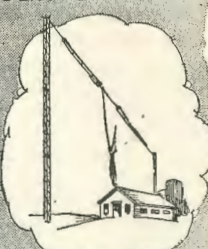
2.F.C. SYDNEY



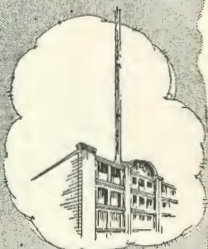
3.L.O. MELBOURNE



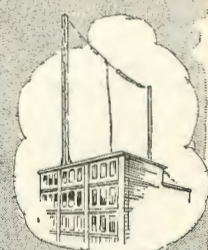
4.Q.G. BRISBANE



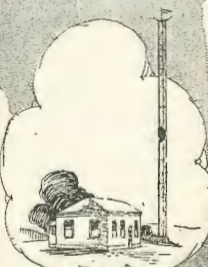
2.B.L. SYDNEY



6.W.F. PERTH



7.Z.L. HOBART



5.C.L. ADELAIDE

Distance no longer a bar!
UDISCO
RADIO RECEIVERS
Lay Australia at your finger-tips.

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

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

All "UDISCO" Sets, whether "Eights," "Sixes," "Fives," or "Threes," are built to a standard of excellence in efficiency and design never before equalled in the world.

Only the best components—assembled with scientific precision by a specially trained corps of radio Engineers—are incorporated.

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

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

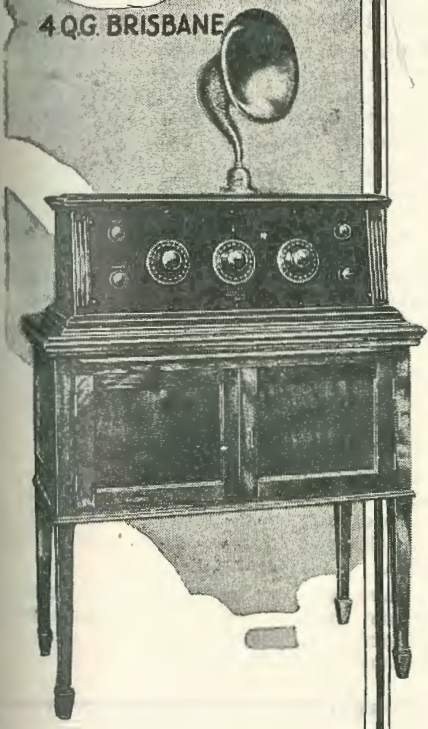
Housed in full polished cabinets of pleasing design, "UDISCO" Receivers are masterpieces of craftsmanship.

"UDISCO" Eight on Stand with Quam Loud Speaker, Clyde United Wet Accumulator, Ray-O-Vac B Batteries, Valves, and Aerial Equipment ... 110 gns.
 "UDISCO" Five with Hawley Speaker, and requisite Batteries. No Stand. ... £45

"UDISCO" Six on Stand with Quam Loud Speaker, Clyde United Wet Accumulator, Ray-O-Vac B Batteries, Valves, and Aerial Equipment ... 75 gns.
 "UDISCO" Three, with similar equipment to Five, but with Hawley Junior Speaker .. £29/10/-

United Distributors Ltd.

343 Queen Street Brisbane.
 MELBOURNE, SYDNEY, ADELAIDE,
 PERTH, WELLINGTON, JAUNCESTON,
 NEW ZEALAND.



SEND FOR illustrated Catalogue, folders, and literature. Demonstrations arranged at your own home without any obligation whatever on your part to purchase.

Notes from Station 4QG

Past and Present Events

The appearance of the Anglo Male Quartette Party in recent programmes broadcast from Station 4QG has drawn forth quite numerous favourable comments, not only from listeners in the Northern State but also from enthusiasts in New South Wales and Victoria. The balance of the party is excellent and as its members will be contributing to future programmes, listeners are to have the pleasure of hearing them again.

During the Brisbane Gipsy Smith Campaign Station 4QG granted quite a large amount of its time to the committee with the result that several mid-day meetings, several night meetings and two Sunday afternoon meetings were broadcast. In many parts of the State churches cancelled some of their usual services, installed wireless sets, and the congregation listened in to the Gipsy's service in the Exhibition Hall, Brisbane. The transmission throughout was very creditable, especially in view of the fact that in the transmission the engineers were faced with the problem of handling a temperamental speaker who did not remain near the microphone for more than a few seconds consecutively.

Uncle Ben and Uncle Jim remain very firm favourites with the kiddies at Station 4QG. On a recent evening they took a voyage to Honolulu and managed to cover between four and five thousand miles during half an hour. They have lately been taking listeners on radio motor rides to various towns. Some of their effects are very, very clever.

The various "feature" nights which have been organised from Station 4QG have proved very popular. So many congratulatory letters have reached the station regarding the "Scotch Night" and the "Old Time Song Night" that both these entertainments will be repeated at an early date.

The monster radio and electrical exhibition which is to be held in Brisbane during Show Week (August 9 to 16), is already exciting quite a good deal of interest. A committee is working very hard indeed and it is expected that the exhibition will result in the radio movement being given a boost. One of the main, if not the main attraction at the Exhibition will be the studio of 4QG. This will be staged on the main stage and the concerts held on it will be broadcast from the hall at night.

Coming features from 4QG should please every radio enthusiast. Arrangements have been completed for the transmission of a series of recitals by the City Organist (Mr. G. Sampson, F.R.C.O.). The first of these will be broadcast on Monday night, July 5th, and will be followed by a recital by the South Brisbane City Orchestra. During the organ recital Mr. Sampson will play several numbers of his own composition.

The White Rose Novelty Trio (including saxophone, piano-accordion and clarinet), and the Pacific and Kalua, Hawaiian Instrumental Trios are

all tried and tested groups of performers at 4QG. They will appear during the week ended July 11th.

The "Lyric Entertainers," a new concert party, will be broadcast from 4QG for the first time on Wednesday, July 7th. The party has been made up of members of the original Lyric Male Quartette, Lyric Glee Party and an orchestra has been added to it. Its members will provide a full programme of mixed music, including instrumental numbers, vocal solos, vocal duets, quartettes and glees. Further appearance on 4QG's programmes are to follow.

The farmers continue to be well catered for from 4QG. Some of the lectureries which are included in the programmes arranged by the Council of Agriculture being of especial value.

A special concert by the students of Mr. and Mrs. T. Croft will be provided in the studio of 4QG on Friday, 9th July. It will be followed by a popular concert provided by leading 4QG artists.

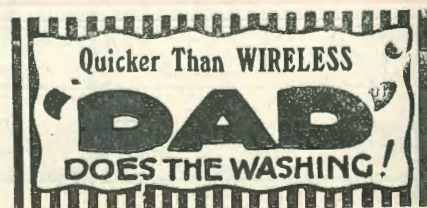
Rumour hath it that arrangements are now being made to connect the new Crystal Palace Dance Hall by land line with Station 4QG, Brisbane, for the purpose of broadcasting some of the very fine dance music played at the hall.

Captain Frank Hurley's vivid word pictures of his experiences with the Shackleton expedition in the Antarctic were greatly appreciated by all who listened to 4QG on the nights of June 22 and 23. Captain Hurley speaks clearly and distinctly and has the happy knack of being able to hold his audience enthralled all the way through.

The Wharf Street Congregational Church Authorities have arranged special services for Sunday, July 11th, when 4QG will broadcast both the morning and evening meetings. In the afternoon of the same date a specially good programme by the Brisbane Metropolitan Band will be relayed from the Botanical Gardens.

In the near future a number of recitals by selected representatives of various city and suburban Roman Catholic Church Choirs will be broadcast from 4QG.

Listeners have noted with pleasure the inclusion of choral music by the Brisbane Austral Choir in 4QG's programmes. It is to be hoped that more will be broadcast at an early date.



With the Hams



Other than the opening up of one or two new Queensland stations, very little has been doing for the last month. 4MM, one of the new hams in question, has been kicking the ether about since the beginning of the month, on 35 metres. A 20IA tube is in use at present (even though a perfectly good "five-watter" is lying suspiciously idle in a corner of the shack!), with about 10 watts input. We're expecting a lot from you OM—Gotta uphold the reputation of Coowong y' know!

Things have been going peacefully again at 4CM. He has now put down a 250 cycle alternator in place of the 500 cycle one, thus changing his Q.S.B. from a musical tone to what is not unlike a "rattly" R.A.C. note. He says he's found it to be the very "berries" for DX, so it's probably in to stay.

4DO, of Rockhampton, has, since my last notes, worked several Yanks off his "fiver" with 28 watts input. U-6ANQ, Hemet, California, was the first in, QSO followed, by many others. His DX-worked now includes Java, Hawaii, U.S.A.—more next month! Congrats. Hal! Keep it up!

4GO is at present suffering from that formidable malady, "no-toobitis." His poor old 5-watter gave up the ghost some nights ago, but he says he will be back with something larger next time.

4AN was off the air for a few days as a result of a slight conflagration. His 3000 "jolts" transformer burst into flames and several buckets of water were required to extinguish it. The damage could not have been great, as the OM was soon back on the air and pounding away with the usual 8000 mile DX.

4RB has put in a Z2 tube, but tells us that his old "fiver," with 25 watts on the plate, was equally efficient as the "Z2" with 50!—Hw cum? He has received a card from U.S.A. reporting his sigs "terrific punch—R8!" Incidentally he now takes two sizes larger in hats!

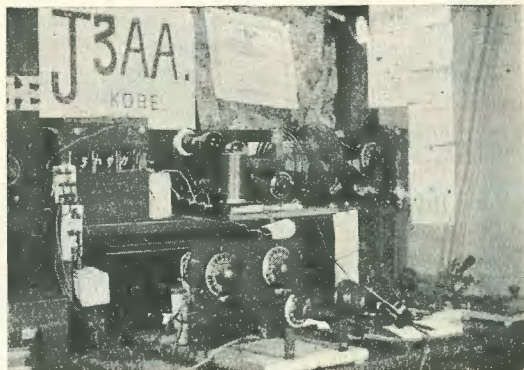
4WI held their annual meet some weeks ago, and an excellent schedule for the year has been roughly mapped out. A new transmitter that will equal 2WI's is being installed. There will be treats in store for everyone from the most hardened ham to the lowlies B.C.L. Joint up OM's, and we'll tell you all about it!

Most of the Southern stations are coming through very strongly these nights. 2LK holds the bun for punch. A T.250 with 2500 volts R (??) A.C. on its plate is the cause of all the racket in our phones. 2CM comes a good second with a much better, almost D.C., note. 3BD and 3EF are on par as regards respective strengths, both are much louder than they were during summer. Hardly any "sixes" have been heard on the air lately, Westralian activities are looking pretty dead.

South Australia has the usual bunch of "dyed-in-the-wool" hams going hard at it. The inimitable 5BG is again covering some great DX with his low-power 'mitter. 5LO has been making a lot of Q.R.P. tests on 80 metres. Heard him the other night when he was using only 20 volts on a UX.210 (7.5 watter), that seems quite good going. 5LF, 5RG, and one or two others are heard very frequently. The S. Aussie "I.W.W." stations are not so plentiful now; maybe some of the P.M.G. personnel have been finding things out. They're beggars for doing so—believe me!

The Jewell "miles per watt" contest is evoking a good deal of interest among Australasian transmitters. The date of closing has been extended to July 5th, so any ham who has not yet entered will have one or two days to do something. Log sheets containing full information may be obtained from 4WI or 4RB.

A Q.S.R. received at 4WI from G-20D per Ausle-2LM asks all "A" and "Z" transmitters to keep above 34 metres as (as stated in my last notes) the Europeans are now using a lower wave band, officially recognised as 31 to 34 metres.



J3AA (Japan) sends us this interesting photo of his station.

Met an old Queenslander (over the air) the other night by name of Mr. Pickering, now of Rivera (near Los Angeles), California, U.S.A. He says he left our sunny shores some four odd years ago. He now sigs U-6CCO.

Koi Kasahara, of Japanese-3AA, sends us some first-hand dope. He writes:—"There are a number of amateurs in Japan. They are using "fivers" or 20IA's (except some). J-3WW, Kobe, a friend of mine worked five "U" stations during last month by a 201A, J-1TS, 1KB, 1SO (Tokio), have worked "US" also 1KB and 1SO have 201A's. I suppose you will QSO, J-1ZO (Tokio Electrical Co.'s Laboratory, near Tokio) shortly. He has 500 watts input. J-3AX, Osaka, is using a 7.5 (watter (UX201). J-1KK . . . will be on the air again shortly. They are on the air every night from 1300 G.M.T. (11 p.m. Brisbane time)."

I remember receiving a letter from a foreign ham a few years back confirming a report on his signals,

He penned a very nice script and ended up with:—
 "I think amateur radio should be the means of establishing world peace, as it seems to bring us closer together and promote a better feeling of friendship." Quite true, OM! Isn't that one of the main fascinations of the game nowadays?

* * *

New and revised list of international intermediates:—

- | | |
|-------------------------|------------------|
| A—Australia | J—Japan |
| AU—Alaska | K—Germany |
| B—Belgium | L—Luxembourg |
| BE—Bermuda | M—Mexico |
| BZ—Brazil | N—Netherland |
| C—Canada | O—South Africa |
| CH—Chile | P—Portugal |
| CR—Costa Rica | PI—Philippines |
| E—Spain | PR—Porto Rica |
| F—France | Q—Cuba |
| FC—China | R—Argentina |
| FI—Indo-China | S—Scandania |
| G—Great Britain | SS—Ceylon |
| GI—N. Ireland | U—United States |
| GW—Free State (Ireland) | V—Army and Naval |
| H—Switzerland | W—Algeria |
| HU—Hawaii | X—India |
| I—Italy | Y—Uruguay |
| | Z—New Zealand |

New Q.R.A.'s:—

4GO—G. Oxlade, "Thelmyra," Irving Street, Newmarket.

4MM—M. M. O'Brien, Fewings Street, Toowong.

A GOOD "A" BATTERY FOR COUNTRY FANS.

Several country radio fans whom I know use the battery from their automobile, during the winter, as an "A" battery; but I had to go fifty miles from home to find a man who is using his home lighting plant batteries for this purpose. He has the common 16-cell 32-volt system which is charged periodically by a gasoline engine and is located under the house just below the radio receiver.

Two holes, properly insulated, were drilled in the floor and two No. 14 insulated wires, long enough to reach any of the 16 cells, were put through them. A spring clip was attached to the basement end of each wire to attach it to the battery poles.

He needs six volts, of course, for his set, so he connects only three cells of the lighting plant at one time. That is, one wire from the set is snapped to the negative pole of say No. 4 cell and the other is snapped to the positive pole of No. 6 cell.

In order that there will be no unequal drain on the lighting system he changes the connections every three days or even oftener at times if the set is used much.

Satisfactory results have been had from this plan for two years.—T. H. W.

"Longer Life"



"Better Service"

Guaranteed 12 Months—Winchester 'B' Batteries

No other Battery carries such a guarantee as this. No other "B" Battery is so dependable or constructed on such a serviceable principle.

Winchester "B" Batteries give better service and longer life, because they are made better.

See these Batteries at our Showroom.

22½ Volt Size

13/-

45 Volt Size

26/-

AMICO {Q'land} LTD.

"Brisbane's Electrical House"

QUEEN STREET :: BRISBANE

How to Construct an Inexpensive 60-Volt High Tension Accumulator for your Radio Set

By 4CM.

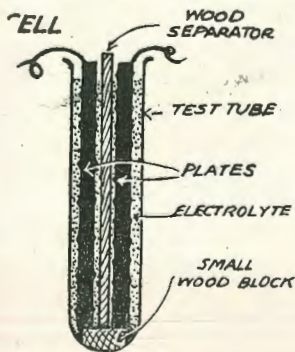
There are hundreds of radio fans who, while realising the expensive renewal costs of dry cells for their high tension supply do not feel disposed to face the comparatively large initial expenditure of an accumulator.

Of course everybody agrees that the small recharging cost of an accumulator is infinitely cheaper than the replacement costs of dry cells. It is also well known that with proper care and regular recharging, accumulators will give years of faithful service.

In this article it is my purpose to explain how easily is the home construction of an efficient 60-volt "B" battery. The only materials required are a supply of old negative plates from a discarded motor car battery, 30 test tubes (6in. x 1 1/2in.), a wooden containing box, connection rods, and small quantity of thin wooden slats.

If you are not in possession of an old car battery, you could secure the old plates from any recharging station. When selecting them take care to see that they are not buckled or corroded in any way. Plates measuring 5in. thick are recommended. The test tubes may be secured from any wholesale druggist, the wooden case you can make yourself. The wooden slats can also be obtained from any battery recharging depot.

Now cut the negative plates secured into 60 strips, measuring 5in. x 1in. Take care when cutting the plates to run the saw along one of the lead seams of the plate so as to give the finished plate a casing of lead. The easiest and quickest way to cut the plates into strips is to insert a number of them in a vice, carefully watching that all edges are square before running the hack saw through them.

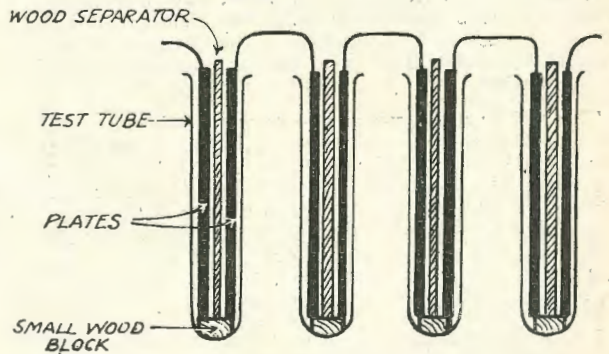


On to the finished plates, fuse a short lead connecting strip. This can be burnt on to the plate by means of a hot soldering iron, the soft lead will readily fuse on to the plate when quick heat is administered. (Do not use solder, otherwise trouble

will be experienced). When working the lead use resin or candle grease as flux.

Having all the plates so treated, place two of them in one test tube, inserting a thin slat of wood which should measure the same size of the plates or if anything a little larger. It is wise, though not essential, to place first of all a small wooden block at the bottom of the test tube. This prevents the plates from touching the cell; it also prevents debris from settling at the bottom of the cell, and so obviate risk of short circuits.

A wooden box (well waxed) could be constructed to hold the 30 test tubes. A perforated stand fitting into the centre of the box is the most satisfactory method of holding the cells in position. When the cells are placed in position connect them up as shown in following diagram.

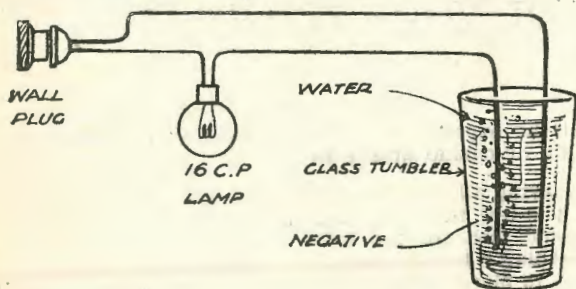


After connecting the cells up in the manner shown, place in each tube enough electrolyte or battery acid to cover the plates in each cell. (The battery acid can be purchased from the battery charging station when securing the old plates and separating slats).

Arrange two terminals at the beginning and ending lugs, marking one with a plus sign (positive) and the other a minus sign (negative). The battery is then ready for charging.

Those listeners who have a D.C. (direct current) supply connected to the house lighting system will be able to charge the battery themselves through a 16 candle-power lamp arranged as shown in diagram below. Before connecting up to the battery make sure of the polarity of the leads by inserting them into a tumbler or saucer of water into which a pinch of salt has been mixed. The lead which gives off small bubbles is the negative. Take care when doing this not to leave the two leads come in contact with each other.

Those listeners who live within the suburbs of Brisbane are supplied with A.C. (alternating current). Current will not be able to charge the battery with-



out the aid of battery charging apparatus. Failing this it will be better to take the battery to a re-charging station.

The battery will need charging and recharging a few times, until one of the plates in each cell assumes a dark brown hue which will be the positive plates. The negative plates will retain their light grey shade. When the battery is fully charged each cell will read a little over 2 volts, and when discharged should read 1.5 volts. The voltage should never be allowed to drop below this reading, otherwise the plates will show a whiteish deposit known as sulphating.

The writer some years ago constructed a 60 volt battery along the same lines as those described above, and after giving eighteen months' excellent service, it was passed over to a friend in the country, where it is still giving very good results. The new owner of this battery charges it from his 32 volt Delco lighting system, charging 12 volts at a time, and when charged connecting them up in the ordinary manner.

6in. x 1 1/4in. has been mentioned as the size of the test tubes to be used, but these dimensions need not be religiously followed. Smaller or larger tubes with corresponding larger or smaller plates may be used satisfactorily, but it is always well to remember the smaller the plates the smaller is the capacity of the cell.

Phone C. 1612

F. NOLAN

Licensed Radio Dealer

will build the "Selective 3-Valver" as described by him in the May Issue of the Queensland Radio News;

for £19-0-0

Complete with Cabinet, Loud Speaker, Valves, Batteries, Phones, Aerial Equipment.

Best Components and Workmanship Guaranteed. One to Five Valve Models a Specialty

All Saints Rectory, Wickham Terrace, Brisbane

READERS!

Come to the
Big

Broadcasting Demonstration

in the

ALBERT HALL
Friday, 30th July
at 8 p.m.



Mr. Erich John and his artists are giving their "Queensland Radio News" Concert from the Albert Hall on this date. A Splendid Concert and a Broadcasting Demonstration combined.



Tickets 1/6 (Reserved) 2/6

Obtainable from The Read Press Ltd., Adelaide St.
-J. B. Chandler & Co., Adelaide St.
or Wireless House Ltd., Adelaide St.

Jazz and Jollity

brought to your home via wireless

Only perfect reception will give you the uninterrupted dance and Philips valves will give you perfect reception. The B406 is the new wonder valve, designed for use with a 4-volt accumulator, and controlled by a rheostat of at least 12 ohms resistance.

The unique purity of tone and wonderful volume given with this valve combined with its low filament consumption of one-tenth amp. make this valve perhaps the most economical, considering its accomplishments, on the market.

The main characteristics are as follows :

Filament voltage, 3.4-4.0 volts.

Filament current, 0.1 amp.

Saturation current, 30 m.a.

Plate voltage, 20-120 volts.

13/6 each.

Let your next valve be a PHILIPS



PHILIPS

The better phone - The DULCEPHONE

This Month we offer for Your Perusal the following List of Accessories :-

Valves

Mullard D.06, H.F.	13/6
D.06 Detector and D.06, L.F. . .	13/6
D.F.A.O., valve power	17/6
D.F.A.1, power valve	13/6
D.F.A.3, valve power	17/6
D.F.A.4, valve power	13/6
P.M.3	13/6
P.M.4	13/6
Philips' A.110, A.106	13/6
A.310	13/6
B.406	13/6
Radiotron, U.V. 199	13/6
U.V. 200	17/6
U.X. 201A	13/6
De Forest D.V.3	13/6
D.V.5	13/6

Condensers Variable

Ormonde S.L., .0005, plain	12/6
Ormonde S.L., .0005, with Vernier	15/-
Pilot Straight Pine Frequency—	
.00035 Aluminium Plates	13/6
.0005 Aluminium Plates	14/3
.00035 Brass Plates	15/9
.0005 Brass Plates	17/3
New York .0005, with Vernier	20/-
Igranic S.L., .00035	32/6
.0005	35/-
.00	42/-

Headphones

Dulcephone, 8000 ohm	17/6
Ericsson, 4000 ohm	25/-
Baldwin, Type C	39/6
Murdock, 3000 ohm	15/6
Trimm Dependable, 2400 ohm	22/6
Brown Featherweight	32/6
Brandes	30/-

Batteries 'B'

Ever Ready, 42	12/6
Ever Ready, 60	18/9
Hellesen, 45	14/-
Hellesen, 60	18/6
Columbia (heavy duty), 22½	13/-
Columbia (heavy duty), 45	26/-
Winchester (heavy duty), 22½	13/-
Winchester (heavy duty), 45	26/-

Transformers

K. & C.	12/6
Jefferson Stars (6-1 and 3-1)	18/6
Jefferson 41 (3.75-1)	25/-
Jefferson 38 (6-1)	25/-
Emmco (5-10 and 3-1)	21/-
Igranic (3-1 and 5-1)	31/6
Ferranti	45/-

BETTER SERVICE. WIRELESS HOUSE. Quality of Goods, the service given gratis, and Popular prices when responsible position would in the Radio Industry today.

Sockets

English Panel	1/3
English Base	2/3
American Special	2/6
American H. & H., porcelain	4/-
American Bakelite	4/6

Coils - Honeycomb

Koh-I-Noor.		
Turns.	Mounted.	Unmounted.
20	3/-	1/6
25	3/6	1/6
35	3/6	1/6
50	4/-	1/6
75	4/3	1/9
100	4/9	2/3
150	5/-	2/6
200	6/-	3/-

Igranic.		
Turns.	Mounted.	
25	5/-	250 10/6
30	5/-	300 12/-
35	5/-	400 13/6
40	5/6	500 13/9
50	5/6	600 15/-
60	6/-	750 15/6
75	6/-	1000 18/-
100	8/-	1250 22/6
150	9/-	1500 25/-
200	10/-	

Loud Speakers

Amplion A.R. 102	£1 15/-
A.R. 111	3 10/-
A.R. 114	4/0/0
A.R. 38	2/10/-
A.R. 19	6/10/-
R.2	6/10/-
R.1	9/0/0
Sterling Dinki	1/18/9
Baby	3/9/9
Primax	9/5/-
Brown H.2	3/5/-
H.3	4/2/6
H.1	7/10/-

Crystals

Neutron	2/3
Russell's Hertzite	1/6
N.H.M. Galena	1/6
Ajax, Galena Mounted	9d.

Rheostats

Pilot, 30 ohm	3/9
H. & H., 6, 15, 20, and 30 ohm, with Calibrated Dial	5/9
Yaxley, air-cooled, 6 and 30 ohm	8/6

We again wish to thank especially our many hundreds of Country Clients for the valuable orders received, and to express our appreciation of their remarks regarding the quality of the goods received from us, also the excellent reports of the operation of the "DULCEPHONE" Receiver.

The third edition of our most popular illustrated 64-page Catalogue will be available in a few days' time, and a copy will be posted free on application.

Wireless House

Queensland's Oldest Wireless Supply Adelaide St. [opposite Normal School] Brisbane

MISCELLANEOUS.

Staples—Insulated, 4d. doz.	Studs—Contact, 2d. and 6d. dozen.
Screw Eyes—Insulated, 3d. each.	Switch Arms, 9d. and 1/6 each.
Battery Clips, small, 7d. each	Spaghetti Covered Wire (assorted colours), 1/3 roft. length.
Talking Tape, 7/6 each.	Pilot Neutralising Condensers, 6/- each.
Catwhiskers (packet of 5), 9d. each.	Emmco Vernier Dial, 9/6
Transfer Sheets, 1/- each.	Pilot Vernier Dial, 7/6 each.
Grid Leak Mounting, 2/9 each.	
Stops, 1d. each.	

New to Brisbane!



2-VALVE RADIO SET

at **£12/10/-** only

Such value has never before been offered in 2-Valve Radio Sets. The price is amazing in the light of previous opportunities for the Radio enthusiast.

This new 2-Valve Set is made of the best materials, mounted in a handsome cabinet of highly polished Queensland Maple, which raises it to the level of a neat piece of furniture.

It reproduces broadcasting from Brisbane (4QG) with splendid volume and clarity, also Southern Stations on the loud speaker.

The Set is sold complete with everything needed for erection and operation. This includes: A and B Batteries, Valves, Loud Speaker, Aerial Wire, Insulators, Lighting Arrester.

PRICE £12/10/-

Inspect it in our Showrooms. We will be glad to demonstrate it to you.

J. B. CHANDLER & CO.

"For Radio Service"

45 ADELAIDE STREET, BRISBANE

(next Allan & Stark)

S.A.S

Personalities



During the month we were very pleased to meet Mr. L. S. McP. Jackson, visiting representative of The Mullard Wireless Service Co., London. Mr. Jackson predicted a wonderful future for wireless in Australia—especially Queensland.

Mr. Read, of the Medical and Surgical Requisites Ltd., wouldn't swap his crystal for a ten-valve soupy-dyne. At least, that's what he tells us. Nevertheless we wouldn't urge any multivalve operators to approach Mr. Read re this matter. He MAY change his mind.

We are glad to learn that Mr. Leighton Gibson (4AN) has launched out in his own little canoe upon the busy wireless waters. That he will steer his craft through the channels of success we have no doubt, for Leighton—despite the fact he is still in his teens—is one of Queensland's really clever radio men.

Tex. Ward, of VIB Radio, Pinkenba, has undertaken the hazardous journey to Sydney. We hear he passed Aberdeen safely. Tex is going down to give the new Harbour Bridge the "once over." We do hope he'll let a few Sydneysites know of OUR new Bridge. Oh! but of course, we 'avert got the 'arbour 'ave we?

They say America is the land of prohibition and thimble-nips. Well, we reckon the eyes of a few American hams must have oscillated a little the other night when Tom Elliott was calling up Dr. McDowall (owner of 4CM), who is now in San Francisco. One of the interesting snatches we picked up sounded something like this: "Well, if you can't get 250 bottle get a 500 bottle." Lordy! Tom don't tell us that your recent blow-out is driving you to fire-water. Nothing could be worse than an inebriate at the key.

Talking about the interesting things one hears over the air. On a recent evening, 4KR (Barcaldine) was heard confabing to 4HW (Brisbane). To me it sounded like a regular pawn-shop argument. 4KR was saying "I tell you what; you give me your loud speaker and I'll give you my 150 watt Philip bottle." 4HW replied in good old yiddish caution, "Is it a good yun?" I didn't hear the outcome of the discussion but it is hoped that 4KR isn't shutting up shop altogether.

Mr. G. Smith, of VIB Radio, copied the whole programme from the German Experimental Broadcasting Station (POZ), which was broadcasting on 30 metres. No doubt his receiver was perking fine. George states that most Aussie amateur short-wave stations simply roar in.

We believe this is the first time these columns have been opened to a female radio fan. Well, let's introduce her. She's Miss Vale, of Brisbane, who, dissatisfied with the selective properties of her three

valve receiver, is constructing herself a six-valve super-het., by which she hopes to overcome local interference. She has built and tried out wave traps without much success and she believes the super het is the only solution to the problem. Now you weak-kneed men who "couldn't be bothered" to build even a crystal set—what about it? Doesn't this piece of news make you feel just a little bit dusty?

Mr. B. Kilne, a dentist of Preston House, is twiddling dials when he isn't twiddling tooth-crunchers. He is an ardent worshipper of the humble crystal, and states he can tune in 3LO when his aerial is pointing south. That's a point worth noting crystal cranks!

Dr. McLean, of the Brisbane General Hospital, has heard the call. But whether its the call of the crystal or of the valve yet remains to be seen. The doctor is attracted by the clarity of the crystal, yet he feels indisposed to wear the head-phones on his cranium. Valve reception is much stronger he says, but the "noise" from the loud speaker is unpleasant. Dear! dear! Doctor—what an awkward predicament! We are at a loss what to prescribe for an ailment such as yours.

Mr. J. Trezise, of Paddington, frequently heard from 4QG's studio in tenor solos, has installed a swell little three-valver at his residence. Now, the folks at home can gather round the loud speaker and hear the talented little fellow fill the air with song.

Mr. H. Kington, President of the Woolloowin Radio Club, has returned from his state-wide tour on behalf of The Read Press Ltd. Mr. Kington states that he called upon many prominent amateurs and enthusiasts where time permitted. He reports a most enjoyable time with 4DO of Rockhampton.

"Way out West," at Gunnewin, they do things in fine style on race day. Recently, according to a handbill we have received, Mr. Smith's super six receiver was advantageously used to raise funds for the Soldiers' Memorial Hall by holding a radio dance. We believe it was a great success. According to the dodger, however, it was evident that the races were not run by radio, for the starting time was set down as "after the arrival of the Roma train."

Ever hear about Vern Kenna, the Marconi of the Woolloowin Radio Club? He's a wizard. He always has some trick thing to show his club-mates—some brain-wave to inflict upon their baffled intelligence. As this page is written we learn that he is to "put over" some stunt lighting at the club's dance on 26th June. Be careful Vern—don't electrocute the guests!

Mr. G. Crew, of "Garston," Annerley, now operates a neat little two-valver with good interstate results. It has been said that radio changes a man's habits. This theory has never been more forcefully demonstrated than at "Garston." "Lights out" at 8 p.m. was the general rule a month ago; now the midnight oil is regularly burned, as this ardent enthusiast explores the air for distant stations.

*Don't be
in the
Dark!*



When you ask a few friends over to hear the Radio, naturally you—and they too—want to know what's on the programme. Don't pass round a newspaper. Buy

**THE
BROADCAST
BULLETIN**

which has 4QG's, 2BL's, and 3LO's weekly programmes printed in a compact little booklet and contains other matter of interest besides—including artists' photographs, etc.

Price **2d.** Copy

11/6 12 Months [Posted]

6/- 6 Months [Posted]

You'll find use for the "Bulletin" every night in the week—for you have the choice of three programmes at your finger-tips. SEND A POSTAL NOTE TO-DAY—you'll not regret it.

The
"Broadcast Bulletin"
c/o "The Queensland Radio News"
Box 1095 N, G.P.O., BRISBANE

*Obtainable at all Radio
Stores and Bookstores.*

The "Broadcast Bulletin" is lodged at the G.P.O., Brisbane by 11 p.m. every Friday, thus ensuring early receipt of copies by subscribers in country centres. The programmes are arranged from Monday to Sunday of each week.

**Welcome Re-appearance
of Two Popular Artists
at 4QG**



MR. NORMAN BROWN (baritone).



MR. J. TREZISE (tenor).

Mr. Norman Brown (Baritone) and Mr. J. Trezise (Tenor) make a welcome reappearance at 4QG during July. Both of these young men have excellent voices. Their duet numbers are also very enjoyable.

**THE UNIQUE ACCOMPLISHMENT OF AN
ENGLISH AMATEUR.**

A neat little job of broadcasting has been accomplished by Gerald Marcuse, of Caterham, Surrey, England. Working on a wave length of 45 metres, he has succeeded in presenting a number of concerts given at the Savoy Hotel, London, to fellow radio amateurs in the eastern sections of Canada and the United States. The vocal parts of these re-broadcasts have been particularly good.

Club Activities



NOTE.—Reports must reach this office by the 20th of the month.

Wooloowin Radio Club

In August, 1924, there joined the Wooloowin Radio Club an embryo radio fan—his age, reckoned in terms of his dabbling in the necromancy of wireless being about four years. In the passing of time the club authorities found that as well as wagging a nimble tongue he could as occasion warranted write quite a passable report (carefully censored for public consumption), on club activities, and he was pitchforked (note the word!) into the rank and duties of club press correspondent.

The climax to his rocky career in this unremunerative occupation came when, in a moment of illogical reasoning, he decided that the Wooloowin Club notes might well be made a source of entertainment to himself as well as to the club members, and some months back he committed the atrocity which appeared in these notes under the hand of one, Prescores.

The immediate outburst of sarcastic comment that arose when the "Radio News" was issued caused Prescores to dodge the reporting job in subsequent issues, and club members report that each meeting night, he appeared to grow happier at the thought of having finally shelved the job. New press correspondents were appointed, and all went well until last month, the new appointee forgot (? couldn't be bothered) to send in Wooloowin Club's report.

The president of the club once more called upon Prescores to fill the gap, much (it is reported) to his disgust and disillusionment. However, the "Queensland Radio News" regrets that Prescores has lost his old punning, as our older readers will notice on reading the report that arrived at this office, and which is printed below.

Dear Editor,—The Wooloowin Radio Club is about dead. Members don't seem to take the interest in club matters that they ought, and attendances are falling off very badly. The secretary reports that for the last few meetings the attendance has only averaged 14 per week, out of a list of 19 members. Indeed, the club is moribund and should be livened up. I have myself only been down to four meetings this month, and have not very much to report. The secretary has been reading us quite a lot of interesting correspondence with Mr. Malone in Melbourne, and Mr. Watt (of "Wireless Weekly," Sydney) on the question of wave length changes. Why should the wave lengths be changed? I'm quite satisfied to listen into 4QG on my little star aerial. I know I can't get Melbourne or Sydney as things are, so I'm not tempted to try. But if the wave length is altered I'll have to try to get the Southerners, and that will mean paying a license fee, which would break my heart and shock the radio inspector.

This club is trying to run a dance on 19/7. More foolishness! Why can't the committee leave such things alone? I am afraid it will be a success, too, which would be unexpected. About 300 invitations

have been issued, and about 400 people are sure to turn up to the supper. The tables only hold about 50, but I don't suppose the committee has thought of that! Anyway, I'm not going, so there!

A meeting was held at the club rooms during the month at which nine (9!—Note that—Ed.) metropolitan clubs were represented. Couldn't swing a condenser in the room when everyone was there and talk?—Ye gods, talk?—I was absolutely overwhelmed. I didn't get a chance to say more than a hundred and seven words all night. The chaps all seemed keen on jumping on 4QG's wave length. They want him to QSY higher. I heard the chairman say that meant use a higher wave length. When I got home I looked it up and found he was right. I was the only one who didn't want any alteration, but the shortsighted committee couldn't see my argument. There's been a petition arranged, and 500 copies are ready for printing—waste of good paper. Does the committee think Mr. Malone will take any notice of their thousands of signatures when he won't even listen to me? Me? Why should he?

At other meetings Mr. Kenna talked a lot of guff about electronic theories and ions and electrons. I knew as much when he started as when he finished. Then he tried to blow out two or three fuses. I see that the club dog has been drinking out of the rectifier jars again. The committee should step in and stop this. It's not good for the club transmitter and might harm the dog as well.

The Croydon Radio Club (2YB) has sent us a copy of its "Gazette"—now that's something like a ham paper. Nearly as good as Q.S.T. But I don't know why 2YB sends it up here—it's really over the heads of most of our club members who are still on crystal sets. Wooloowin will never have a paper like that—the appointed press correspondents are public servants, and the club's finances are not in a good enough condition for them to pay me to do the job.

Yes, Mr. Editor, this radio game's no good now. I really think the Wooloowin Club is lucky to have the syndicate to stir things up a bit now and again.

Must close now and listen to "Uncle Ben" and Co. on their trip to Mud Island.—Yours in oscillation,
"PRESCORES."

Comment is unnecessary!—Ed.

Graceville District Radio Club

Marked attention and a keener enthusiasm were the outstanding features of the usual monthly meeting of the above club held on Friday evening last, 4th inst., in the Graceville Methodist Hall, the president (Mr. Pledge) occupying the chair. Considerable time was spent in completing the final arrangements in connection with the forthcoming radio dance from which gratifying results are anticipated, members reporting a good sale of tickets. Four crystal sets of unique design (including one built into a pill box), and a short wave receiving set were exhibited by different members, all of which were viewed with considerable interest. Two donations, in the form of a crystal receiving set, and a pair of telephones, were presented to the club by two of the members, and which are to be disposed of to supplement the club's funds. The next meeting of the club will be held at the above-mentioned address on Friday evening, 2nd July, when an address on valve amplifiers will be given by one of the members.

"Baby Listens In"—Delightful Camera Studies



ANTICIPATION

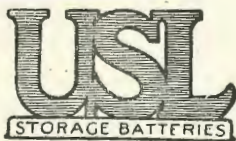
EXPECTATION

REALISATION

The bonny son of Mr. and Mrs. Bowser, of Nundah, enjoys himself immensely when listening-in to the bedtime stories

"U.S.L. Will Serve You Well"

There's Longer Life and Better Service in U.S.L. Radio Batteries



Service Station
CREEK STREET
BRISBANE
(Opposite Gresham Hotel)

INSTALL a U.S.L. Radio Battery for the Better service it means. For its ability to receive clearly the long distances.

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

RADIO BATTERIES

6 Volt 60 Amp	£3 18 0
6 Volt 80 Amp	4 19 0
6 Volt 100 Amp	6 0 0
6 Volt 120 Amp	7 10 0

BUTLER BROS. [Aust.] LTD.

"Monarch House"

CREEK STREET, BRISBANE

Uncle Ben's Corner



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

Toot! Toot!! Toot!!! Here I come—Here I come—oh! I really thought I was actually driving my old motor car up the stairs to 4QG's studio! But I'm not—I'm just writing to all my little sweethearts through the "Radio News." You will forgive my error, won't you? Yes, I knew you would.

How did you like our trip to Honolulu the other Saturday night? Poor old Uncle Jim and Mabel Sunshine, weren't they ill?—the seas made them so sick I thought they were going to die. Uncle Jim was green, and Mabel was blue—but I didn't feel a bit sick. I suppose it's because I'm so used to being shaken about in my old car.

But, oh dear! the waves were awful! I've never seen such a rough sea. It was a shame that such a big storm should come up, wasn't it? Of course, you wouldn't see the lightning, but no doubt you all heard the thunder. I know a little girl who wanted her Mummy to put up her umbrella!—she really thought it was going to rain.

Everybody loved the Honolulu trip so well that we'll have to go again. Wasn't the Hawaiian music sweet? Mabel didn't like the black motor driver a bit, did she? I think her thoughts were too full of little Tommy. I saw him on the wharf when our boat left Brisbane. He was holding Mabel's creamer, and when at last it snapped I thought he was going to jump into the water after it. As I said before, we'll have to take another trip to Honolulu. The next boat goes on 10th July; if we can't go in that one, we'll go on 17th July. It will be on a Saturday night, and I do hope the sea will behave itself this time.

Anyway, sweethearts, don't forget to listen in for this trip, and bid us a jolly old "good-bye" when we leave Brisbane.

Cheerio until next month, little ones. Cheerio!

Yours, very fondly,
UNCLE BEN.

P.S.—I just love photos of little children. So just pop yours in an envelope and address it to Uncle Ben at 4QG. Thank you, children.

Our Song Competition The Prize Winners



ESTELLE DENNIS,
of Manly



CEDRIC DAHL
of Kelvin Grove

Congratulations to every little boy and girl who entered for the "How-do-you-do" Competition. You all deserve a kiss and a pat on the back for your excellent attempts. I want to say this to the many who did not win a prize—it is better to have tried and lost than never to have tried at all.

Estelle and Cedric whose photos you see above are doubtless very pleased at their success—and rightly so too—for nearly 500 entries were received. I know if I were a little boy I'd just love to be one of the lucky winners.

So good were the verses sent in, that I decided to give a second prize of 5/- to the two next best verses sent in by a boy and a girl. These were awarded to Kathleen Florence Brosnan, of South Brisbane, and Master David Rothera, of Brown's Plains, Kingston.

The competition was well supported, and the judging of the verses was no easy task—so meritorious were the entries. To the successful children I extend my hearty congratulations, and to the unsuccessful ones I say, "better luck next time."

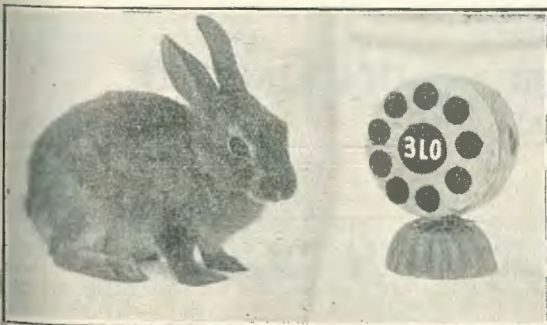
To every competitor "Uncle Ben" sends his very best wishes, and thanks every one of you for your interest and your clever attempts.

STOP PRESS PAR.

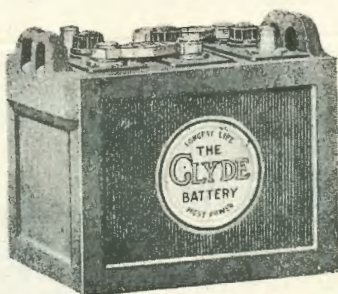
Since writing this page I learn that the Editor is playing a practical joke on "Uncle Jim" and myself. On another page of this issue appears a cartoon of "Uncle Jim" on his horse pulling my motor car along with a rope. Now that's unkind, isn't it. Although my old car is a bit "shakey," it isn't as bad as all that—"Uncle Ben."

COMPETITIONS.

Owing to lack of space I was unable to include in this issue the competitions I promised. They will appear next month.



PETER RABBIT LISTENS-IN.



SUPER-POWER PERFORMANCE ENDURANCE

The combination of these three features is the reason why *Clyde Radio Batteries* are guaranteed to give efficient service every night in the week for fifty-two weeks on end.

Made in Australia, Clyde Batteries, in moulded one-piece rubber containers, leak proof, acid proof, and indestructible, are the radio batteries de luxe for Australian conditions.

AND THEY LAST LONGER

Manufactured by

THE CLYDE ENGINEERING CO. LIMITED
SYDNEY

.....
ASK YOUR DEALER FOR "CLYDE"

Picking Perfection

A Novel Competition to determine Most Popular Programmes from 3LO

It is certain that not many idle sets of headphones or silent loud speakers could be heard in Victoria during the week ending June 19th. Most listeners in this State, and thousands in other parts of Australia, tuned in to the "perfect" programmes arranged in connection with the 3LO and 'Sun Pictorial' competition. It is not so much a matter of entertainment, for in this case the public have to be the judge, and on their opinion it is decided which of the six programmes selected by the preliminary judges is worthy of the first prize of £50.

Right from the first programme the telephones at 3LO, Melbourne, set up a continuous tinkle with the messages of radio fans who wished to express their enthusiastic opinion regarding the entertainment, and the busy staff is certain to be somewhat thankful when affairs get back to normal.

It has been a busy time for Mr. Lewis and his assistant programme arrangers at 3LO, Melbourne. The best possible artists have been secured for each of the selected programmes, but in some instances great trouble had to be gone to in order that an unusual item included by a competitor might be done. Take a xylophone solo, for instance. In one programme "Light Cavalry" by Suppe was the item mentioned for a xylophonist, but it is not every one who can play that rather difficult and energetic piece, and as a xylophone artist would be wanted only for that one item there were not many for Mr. Lewis to choose from. The same difficulties were encountered in vocal and instrumental items in each of the six programmes. However, finally all the intentions of the competitors were perfectly complied with, and there is no doubt that all the best talent that has ever appeared for 3LO, Melbourne, was assembled for the perfect programmes.

POPULAR SONG HEADS LIST.

The most noteworthy feature of the 10,000 entries received was the unanimity with which competitors included an Australian composition for various items. "After the Dawn" composed by Mr. Jack O'Hagan of Melbourne, was included in 2240 of the programmes, the nearest popular rival being the "Blue Danube Waltz" by Strauss which was mentioned by 1902 competitors. Other popular items were well up in the list, a fact which seems to indicate that the youthful listener in had not been very much interested in the recent wireless plebiscites which placed classical items in an unassailable position, and gave popular numbers a place low in the scale of approval. The figures of song popularity demonstrated most of all that there are distinct classes to please, and each is not too fond of the items fancied by the other.

Naturally Mr. O'Hagan was delighted that his composition "After the Dawn" should head the poll in popularity, and he states that the result will be welcomed by all writers of popular numbers, as the public is beginning to realise that just because a number has rhythm and a haunting melody it

should be regarded as having no status in the music world. "Even the most prominent musicians and orchestral conductors of today have realised the musical worth of popular numbers, and are including such works in their repertoire," said Mr. O'Hagan.

Times Selected	Name of Piece.	Composer
2240	After the Dawn	O'Hagan
1902	Blue Danube Waltz	Strauss
1891	Humoresque	Dvorak
1637	Moonlight and Roses	Lemare
1596	Poet and Peasant	Suppe
1524	Cavalleria Rusticana	Mascagni
1464	Rosary	Nevin
1427	Ave Maria	Gounod
1365	Sitting on Top of the World	Henderson
1342	Barcarolle (Tales of Hoffman)	Offenbach
		St. Saens
1318	Le Cygne	
1311	Annie Laurie	
1239	Ukulele Lady	
1187	Danny Boy	
1174	I Miss My Swiss	
1118	The Lost Chord	Sullivan
1117	Floral Dance	Moss
975	I Passed by Your Window	Brahe
952	Il Trovatore	Verdi
943	Pai of My Cradle Days	
931	Softy Awakes My Heart	St. Saens
904	Yearning	
869	Maid of the Mountains	Simson
846	Prelude	Rachmaninoff
944	Sleepy Time Gal	
757	Minuet in G	Beethoven
751	Faust	Gounod
734	Toreador's Song (Carmen)	Bizet
713	Land of Hope and Glory	Elgar
652	Ave Maria	Schubert
617	Lo! Hear the Gentle Lark	Bishop
611	Robin Adair	
594	Good-bye	Tosti
562	Broken Melody	Van Biene

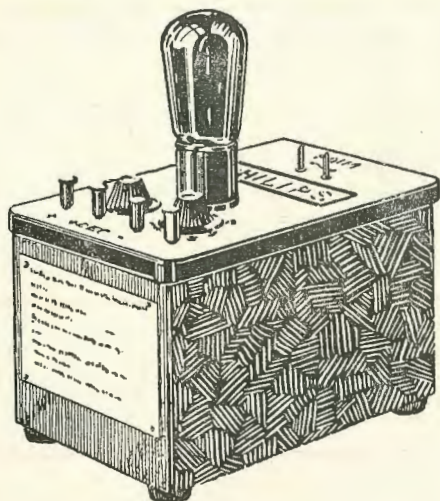
Afternoon Tea and Supper at SYRMIS'



When in town of an evening call at Syrmis Cafe for refreshments, and be entertained by 4QG's Studio music broadcasted through our Super Six Receiver.

Dainty Afternoon Teas a Speciality

SYRMIS CAFE
GEORGE STREET, BRISBANE.



High tension supply unit

Depicted herewith is the Philips High Tension Supply Unit, distinctly an advance in modern radio. A real "B" battery eliminator which does away entirely with "B" batteries and their troubles. The apparatus may be used with all types of receiving sets using the ordinary three electrode valve. Silent operation is a feature of this unit. The hum of alternating current being completely eliminated. In this Philips' apparatus the alternating current is converted into pulsating direct current, which is

subsequently smoother to a perfect direct current. Special attention has been paid to this smoothing action. The choking coils have been carefully constructed and condensers of great capacity contribute to the complete smoothing.

A special rectifying valve obtainable separately has been designed for this apparatus, and normally used will have a long life.

By means of a rheostat the plate voltage can be adjusted. This rheostat should, however, be kept inserted as far as possible for good reception. Special attention has been paid to a supply of lower plate voltage to the detector. A special connection is provided and by means of a second rheostat the detector voltage can be adjusted in three stages. Samples of this unit have now arrived in Australia, and may be inspected at any Philips distributor.

"N.Z. RADIO."

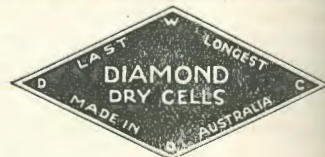
We are in receipt of the first issue of a new arrival in the Radio magazine field, entitled "The N.Z. Radio." This attractively produced and very interesting book is published fortnightly, and is sold at 6d. copy.

It is stated by the Editor in his "introduction" that the book has been started to fill a great need for a "live wire" magazine devoted to New Zealand interests. He states there are many able Australian magazines on the bookstalls but they all lack the "N.Z." touch.

We wish the new comer every success. Copies are not for sale in Australia but anybody wishing to subscribe is advised to communicate with the editorial offices, 407 Queen Street, Auckland.



DIAMOND DRY CELLS

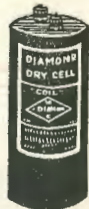


"Diamond Batteries Make Good Sets Better"

Diamond Radio Batteries are powerful, silent, and outlast any other make of Dry Cell. More than a million are manufactured in Australia annually. Every cell is guaranteed, and should a fault be found in any Diamond Dry Cell it will immediately be replaced. Remember a Radio Set is no better than its battery, therefore it is most essential to choose a battery that will give long and honest service. Such are Diamond Dry Cells.

RETAIL PRICE LIST ASK YOUR DEALER FOR THEM

	Battery	"Coil"	
A-	1.5Vt.	"Coil" ..	2/9
	1.5 "	"Buzzer	
		hamp ..	3/-
	1.5 "	"C"wealth-	
		type ..	5/9
B-	1.5 "	"AVER" ..	5/6
	60 Vt.	Large Type	27/0
		10 1/2 x 7	
	45 "	Large Type	22/6
		10 1/2 x 7	
C-	4.5 Vt.	"Bison	
	4.5 "	Large	
	Special	..	13/6
	6.0, Ignite	..	16/6



SUPPLIED TO

P.M.G. Dept.,	Water Board.
Q'd Railways.	Ordnance
Public Works.	Stores. etc.
Department.	

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

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



How to Eliminate the High Tension Battery

(By D. Winterford)

...!!—?!!—. Such are the epitaphs which are hurled into the innocent ether when a radio bug sees his pet valve go up in smoke. In nine cases out of ten the disaster is caused by the high tension or "B" battery.

Many methods have been brought forward in an endeavour to eliminate this "tube-destroying" battery. The following is one of the most successful methods and has been proved and found to give excellent results. It incorporates the four electrode valve.

The circuit to be described is not an original one. It is the "Unidyne," a well known English circuit from the laboratory of a well known English journal.

COILS.

The coils may take the form of any popular type. The type favoured by the writer, however, is the single layer tubular tapped coil for they are easily and cheaply constructed.

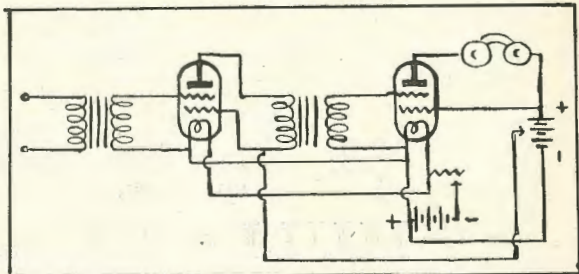
Grid Coil. 50 turns on a 3in. former (22 enamel S.U.G. is a good gauge) tapped at 30th, 40th and last turns.

Plate or Reaction Coil. 75 turns of 265 U.G. single-cotton covered (or enamel) wire on a 3½in. former.

Valve. The valve used by the writer was a Philips B6, although any type of "4 electrode" valve may be used. On this type of valve it will be noted that an extra connection is provided on or just above the cap—depending whether English or American base is used. This extra connection goes to the inner grid of the valve.

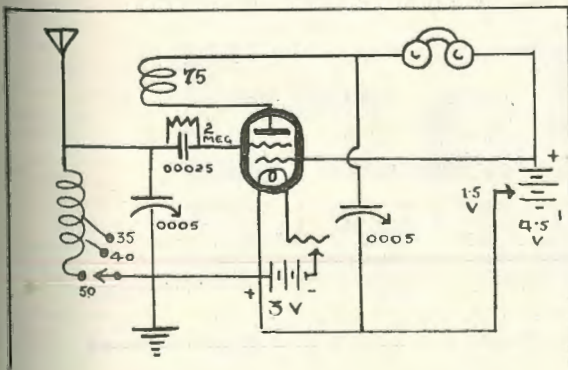
voltage is extremely critical; in fact if the experimenter is fortunate enough it may be dispensed with completely. It will be noticed that the grid and plate coils are shown tightly coupled and that reaction is controlled by means of the .0005 m.f. condenser. If the experimenter so desires, this may be reversed and the .0005 m.f. fixed condenser and variable coupling of the grid and plate coils employed.

Using this type of valve and a circuit very similar to the above, 3AR, 5CL, 2BL, 3LO, and 3SW (a Victorian amateur on 50 watts) were easily received on broadcast wavelengths, and on short waves Australian amateurs are received regularly. On two occasions, once at night and the other in broad daylight the American station K.E.L. (California) was received at good phone strength, all this on one valve. Amplifiers may be added if desired.



Showing Two Valve Amplifier

If any point concerning this article is not quite clear to any reader, the writer will be pleased to explain, provided a stamped and addressed envelope for return mail is enclosed. Address letters to D. Winterford, "Eastbourne," Clifton Terrace, Red-Hill, Brisbane.



The circuit is quite simple, being only a modification of the PI type. It will be noticed that a small "B" Battery of from 1½ to 4½ volts is used. This

Electric Federation Smoke Concert

On the evening of Friday, June 18th, the Electric Federation of Queensland held a Smoke Concert at Finney's Roof Garden Cafe.

An enjoyable time was spent, and the musical numbers rendered by the following artists were much appreciated: Mr. Jack Lord (tenor), Mr. Erich John (pianist), Mr. Fred Homer (baritone), Miss E. McLennan (soprano), and Miss "Mabel Sunshine" (elocutionist).

The REAL Pure tone Valve



GIVES EVERY NOTE IT'S TRUE VALUE

DESIGNED to give pure and strong amplification in all L.F. stages. Produces abundant volume free from distortion and will operate all loud speakers.

MULLARD Double Green Ring VALVES

Type D.3 for 2-volt accumulator **EACH 13/6** Type D.06 for 2 or 3 dry cells or 4-volt accumulator **EACH 13/6**

NOTE: MULLARD D.3 DOUBLE GREEN RING VALVE IS A 2-VOLT POWER AMPLIFIER.

GET ONE FROM YOUR RADIO DEALER

Mullard

THE · MASTER · VALVE

(ARKS. 2)

Mullard Valves can be obtained from All Radio and Electrical Dealers

Advertisement of the Mullard Wireless Service Co. Ltd., Balham, London S.W. 12, England

The Care and Maintenance of Accumulators

(By H. L. HOBLER, A4DO.)

The accumulator A and B batteries used in radio receivers and transmitters are for the purpose of supplying current to the filaments and plates of the respective valve employed. If we could afford it, and had ready means for recharging, practically every one of us who use valve sets would use an accumulator for both the filament and high-tension supply, for the beautiful steady direct current they supply is the best possible for wireless reception and transmission purposes. To get the maximum results from any receiving set, good steady current and voltage of the correct value is essential, especially when certain types of valves are used. Since most of us, who live near a service station, employ one kind of accumulator at least, it will be seen that there are a great many in use at the present time, and as there are a number of users who are not conversant with the rules governing the proper care and maintenance of these storage batteries, it follows that a large percentage of the battery trouble experienced is brought about through neglect. Thinking that a little information on battery care and maintenance may be of help to some fellow enthusiasts, this article is written.

An accumulator, or storage battery, or secondary cell, is an arrangement used for the storage of electrical energy. An accumulator consists generally of a number of cells in which a chemical change is brought about by the passage of an electric current through them. The change is such that the cells are capable of giving back the electrical energy, and while doing so returning to their original chemical condition.

In the ordinary type of accumulator there are two metal plates, the anode or positive plate, and the cathode or negative plate, suspended in a liquid called the electrolyte. The negative plate is made of chemically pure lead, and the positive plate consists of a lead frame, strengthened with antimony, into which a paste of red lead and sulphuric acid has been pressed. The charging current for the accumulator enters by the positive plates and leaves by the negative. The discharging current on the other hand, leaves by the positive plate and returns by the negative. The polarity of the ordinary type of accumulator used for wireless work, can be found in several ways. One of the simplest methods is to immerse a wire, connected to each terminal of a single cell, in a glass of water. Gases will be given off from each wire, but more freely from the wire, which is connected to the negative pole of the accumulator. Another method for determining the polarity is to look to the colour of the plates. The positive are always brown or of a chocolate colour, while the negative plates are the familiar greyish lead colour.

If the difference in potential of the two plates is tested by means of an instrument known as a volt-

meter, it will be found that it is invariably in the neighbourhood of two volts, slightly over or under. The electrical pressure, E.M.F., or voltage, therefore, to be obtained from any individual cell can only be considered as two volts. It may be a little more than this when the cell is fully charged, perhaps 2.4 volts, and even a little higher when the charging current is still passing. When the cell has been discharged to the practical limits of ordinary usage, the voltage drops to about 1.85 volts. The voltage of any cell should never be allowed to fall below 1.8 volts, because draining or "milking" an accumulator spells ruination for the plates as a result of sulphation, which quickly ends the accumulator's operating life.

The voltage or electrical energy that can be taken from a single cell depends upon the surface area and number of plates, and in some cases upon individual variations in manufacture, and also upon the quality and purity of the materials used in their construction. The capacity of a lead accumulator as expressed in ampere-hours, depends primarily on the amount of active material in it. This takes the form of peroxide of lead, spongy lead, and the electrolyte. Another factor ascertaining the capacity of an accumulator is the weight and arrangement of the active material contained in the cell.

The chemical action in an accumulator or storage battery, appears to be greatest at or near the surface, and practice shows that with a low discharge rate, less weight of active material is needed than is the case when the discharge rate is high. That is to say, if only one or two amps are taken from an accumulator every hour, it need not be of the same capacity, or be of such design as an accumulator, such as that used on a motor car, where, when a self-starter is used, the current taken from the battery is several amperes an hour. Under these conditions a thick plate will be satisfactory, as the low discharge rate allows time for the fullest chemical action from the diffusion of the electrolyte in the porous material. However, when the discharge rate is high, a great number of thin plates are needed. The filament heating battery for a 3 or 4 valve receiving set will, therefore, have to be of ample size to realise the benefits of a low discharge rate, and so get the full advantage from a thick plate.

The current density, or the number of amperes per square inch of plate surface, varies considerably. At a normal of 8-hour discharge rate a positive plate surface area of about 3 square inches should be provided. For example: A cell containing five plates, three negative and two positive (for there is always one more negative than positive plate so that both sides of the latter can be acted upon), and all measuring 4 x 3 ins., gives a positive plate surface area of 4 x 3 x 2 x 2, equals 48 square inches, since both sides of the plates must be taken into account. You

will see how this positive plate surface area is obtained. To find the surface area of one plate we multiply 4 x 3 which gives 12, there being two positive plates we multiply the surface area of one plate, which is 12 x 2, which gives 24 square inches. Then since both sides of the plates must be considered, 24 is multiplied by 2, which gives the total positive plate surface area of 48 square inches. This cell, therefore, has a capacity of about 16 ampere hours at the 8-hour rate—that is, it will yield up to 2 amperes for 8 hours before the voltage drops to the lowest limit for safe working, which, as mentioned previously, is 1.8 volts.

Small radio accumulators are often rated commercially at the ignition rate, that is, an intermittent discharge rate. This means that if an accumulator is rated at 6 to 8 volts, lighting capacity 30 ampere hours, an ignition capacity 60 ampere hours, that it will deliver a maximum voltage of 6 to 8 volts, and if used continuously, such as for lighting, will allow of one ampere being taken from it for 30 hours before the voltage will drop to the lowest limit for safe working. On the other hand, if it is used for ignition, such as buzzer work, where the current is intermittently used, it will allow of one amp being taken from it for a period of 60 hours.

The ignition rate is marked as double that of the actual continuous rate, and in the example just given the cell referred to would rate as a 30 ampere-hour cell.

CHARGING OF ACCUMULATORS.

The main duty of the accumulator in wireless reception is to supply current to the filaments of the valves. Sometimes small types of these cells are used for the high-tension or plate supply, but only when very convenient methods are adaptable for recharging, such as with a home charger. One of the most important points in regard to an accumulator is charging, and too much attention cannot be paid to this process of re-supplying the storage battery with energy. Radio batteries, or any battery used for small loads, must not be recharged at a high amperage. Three amps is a good, safe charging rate, and a longer charge at two amps is better still. A long charge at a low amperage is much better than a quick charge at a high amperage; in fact, the latter should never be done, as the accumulator, in all probability, would break down or the plates buckle.

Most battery service station's charging plants are designed for charging motor car batteries at about 10 amperes an hour, and consequently if this current passes through a small radio accumulator for long, the positive plates will soon fall to pieces. Therefore, before having your accumulator charged, ascertain at what rate it will be charged or what amount of current will pass through it in one hour. If this amount exceeds four amperes per hour, take my advice and have it charged somewhere else at not more than three amperes per hour. Charged always at a proper and safe rate an accumulator will last for many months, but when the charging current



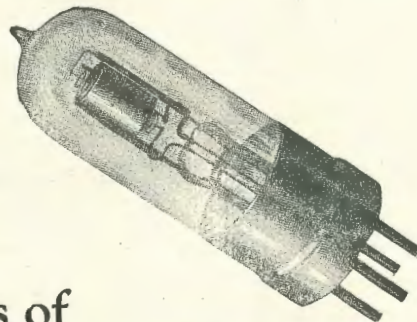
Famous Symbols
The World's First Valve
 Was Made by EDISWAN



TYPE R

Filament Voltage, 4.
 Filament Amp., .75.
 Plate Voltage, 50-100.

If you are not using Ediswan Valves already buy now and enjoy better reception.



OTHER TYPES

- ARDE 12/6
- AR.06 Dull Emitter 13/6
- PV5 Dull Emitter 18/6
- PV6 Dull Emitter 18/6
- PV8 Dull Emitter 18/6

Reduced Prices of
 the Famous "R" and "AR" Valves **5/-** each

Stocked in English and American Caps

OBTAINABLE FROM ALL WIRELESS DEALERS

Wholesale—THE EDISON SWAN ELECTRIC CO. LTD., 156 Creek Street, Brisbane

stipulated by the manufacturers of the battery is exceeded the battery will have a very short life. This low charging rate applies only to small accumulators, such as those used for wireless work. Batteries used on motor cars are of a much stronger type, and consequently will stand being charged at a higher rate. Ten amperes per hour is the general rate of charge for a car battery, while chloride accumulators have a normal charging rate of 12 amps an hour. The makers generally give full instructions for charging, etc., and these should always be referred to and taken as the correct thing.

There is no need to explain how to prepare the accumulator for its initial charge, as instructions regarding this point are supplied by the makers of the battery.

When choosing an accumulator it is always wise to purchase one larger than appears necessary. If you invest in a large type you will not regret it, but if you get one too small you will always be sorry, and wish you had paid the little extra for the larger type. The former can be kept in perfect condition by numerous small charges, whereas the small accumulator will always have to be recharged to its full capacity, and with great frequency if much current is used. Remember a large accumulator soon pays for itself by the less number of times it has to be charged.

CARE AND MAINTENANCE.

The operating life of an accumulator depends largely upon the correct initial charge and the subsequent charges and care bestowed upon it. The electrolyte should always cover the plates, and the terminals or lugs should be kept well greased with vaseline to prevent sulphate from ruining the connections and eating away the metals. If sulphation occurs inside the battery a long charge at a low amperage will probably remove this substance. Never use acid of too high a specific gravity, as in tropical climates "heavy" acid ruins the plates. It is as well to note that tropical climates are regarded (with respect to storage batteries) as those places where freezing of water never occurs. From time to time it is necessary to add pure distilled water to the electrolyte to compensate for that lost by evaporation, always making sure the electrolyte covers the plates. When mixing the sulphuric solution for the initial charge be very careful of your eyes, your clothes, and any surrounding objects. Immediately the sulphuric acid touches the water the solution becomes very hot. Always try and add water to acid and not acid to water, but for those who do not understand the action of these solutions, it would be as well for them to let a competent battery man attend to the mixture of the solution.

The best method of testing an accumulator is by means of a hydrometer, an instrument resembling a syringe, which determines the density of the electrolyte. A little of the electrolyte out of the battery is sucked up into the glass tube of the hydrometer, in which is a glass float marked at different points along its length. This float rises with the solution sucked up and by noting the level of the solution and the marking in the float nearest to this level, the density of the electrolyte is determined. When the accumulator is fully charged this reading will be highest, and falls as the accumulator is discharged.

The only means of testing an accumulator or any battery which is thought to be faulty, is to subject that battery to a load and see that the voltage remains constant. Don't think because the density of the electrolyte in an accumulator is high that the cell itself is in proper order. I have had accumulators that would only deliver half a volt and practically no current, show a reading, by the hydrometer, indicating a fully charged cell. The only correct method for a test of this kind is to connect a lamp or valve, taking about one ampere of current across the accumulator, and also connect a voltmeter across the accumulator terminals. If the lamp glows brightly at first then gradually dims with the voltmeter reading dropping lower all the time, it shows that the cell is devoid of electricity.

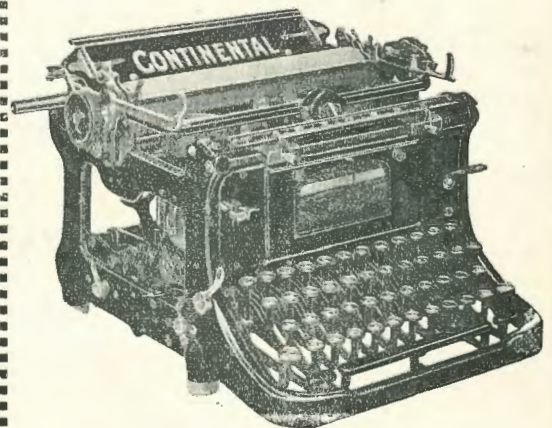
Above all never short circuit a battery. This procedure very quickly buckles the plates and thereby ruins the accumulator. I have heard of a man who used to follow this practice for lighting a gas jet, until his hand touched a bare piece of one of the leads. He uses matches now. A wise move, surely? Yes, very.

RADIO REPLACES MAGNETIC COMPASS ON NEXT POLAR FLIGHT.

A thousand-mile radio transmitter, together with very sensitive receiving apparatus and a special direction finder, will compose the radio equipment of the Norge I, the new airship in which Captain Amundsen and Lincoln Ellsworth will make their next flight to the North Pole.

The direction finder is of new design, and it was specially built for the airship.

The CONTINENTAL Typewriter For Exceptional Service



Sharp, clean impression—type that has indefinitely—keyboard of 90 characters—responsive touch—quiet operation—are but a few of the features of this splendid machine. Recognised everywhere as the Typewriter Supreme.

B. J. BALL LTD. Australian Agents

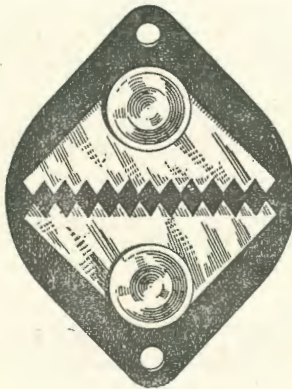
23 Charlotte St., Brisbane and at Sydney & Melbourne

Buy

Emmco
RADIO PRODUCTS

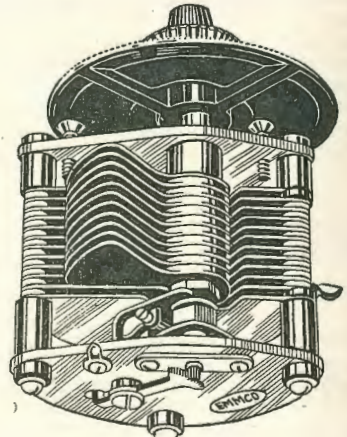
THIS name EMMCO is more than a mere trade mark. It is a definite and undisputed guarantee of efficiency and satisfactory performance, combined with reasonable price. There are no inferior grades of EMMCO products, because every part is manufactured to only one standard—the highest that engineering skill can reach.

Emmco Lightning Arrestor



Made
in
Australia

Emmco Condenser



Emmco Lightning Arrestor

FAR better to be sure than sorry. Every EMMCO Arrestor carries an insurance guarantee to replace any damage up to £25. Your receiver is safe from lightning when you fit an EMMCO Arrestor. Operating on the gap principle, and mounted solidly on a bakelite base. PRICE . . . 4/3

Emmco Condensers

ABSOLUTE insulation—grounded rotor and plates—straight line wave-length—most minute adjustment. These are some of the features contributing to the efficiency of EMMCO Vernier Condensers.

PRICES.

Vernier Type.		Plain Type.	
.00025	20/--	.00025	13/6
.0005	21/--	.0005	15/--

Manufactured by

Electricity Meter Manufacturing Company Limited, Sydney

Great Broadcasting Demonstration and "Queensland Radio News" Concert

Albert Hall, Friday, 30th July

"The Queensland Radio News," in conjunction with Mr. Erich John, are arranging a very special concert in the Albert Hall on Friday, July 30, at 8 p.m.

This concert will take the form of a broadcasting demonstration, the artists, microphone, and announcer all being placed on the stage.

Those who know anything of Mr. John's ability in arranging such entertainments, and who reside within the suburbs of Brisbane, will welcome the opportunity of attending this concert to hear and see their favourite artists broadcast.

Apart from the high musical value of this entertainment, this demonstration will give all who attend some idea of the routine of a broadcasting studio.

Mr. John has arranged many of the vocal and instrumental numbers very effectively. He states that some new and beautiful effects are obtained from his Ladies' Octette, which comprises eight soloists (four sopranos and four contraltos).

The male choir of nine soloists (four tenors and five basses) are also contributing some fine numbers, both in ensemble and individual renderings.

The "Queensland Radio News" concerts—thanks to Mr. John and his artists (many of whom are strictly professional) have won a reputation among listeners as second to none in excellence. The music broadcast is mostly of a classical nature—comprising for the most part picked gems from famous works with which nearly everybody is familiar.

The "Queensland Radio News Orchestra," comprising some 20 skilled instrumentalists, are to feature in no small measure at this concert. As with the choir, Mr. John has trained this body into a high state of perfection.

As we go to press Mr. John is busy preparing the concert. The following are some of the many enjoyable numbers which are to be featured:—

Announcer: Mr. Harry Borrodale

PART I.

"Gloria," from the 12th Mass (Mozart)
Combined "Radio News" Choirs and "Radio News" Orchestra.

"Mimi," from "La Boheme" (Puccini)
Miss Maye Hughes.

"War March of the Priests" (from "Athalie")
Mendelssohn
"Radio News" Orchestra.

"Ave Verum" (Erich John)
"Radio News" Male Choir.

"Serenade" (Toselli)

Miss Clarice Cox (Contralto),
(With violin, flute, and 'cello accompaniment).

Plantation Song (Gatty)
Mr. J. B. Cloirec (Baritone) and Mixed Chorus.

Pianoforte Solo—"Sherzo in B Flat Minor" (Chopin)
Mr. Erich John.

Shubert's "Serenade"
Mr. Jack Lord (Tenor), and "Radio News" Vocalists.

Eloctuary Number—Selected
Mr. Harry Borrodale.

"Egyptian Ballet" (2nd and 3rd movements from
"1st Suite") (Luigini)
"Radio News" Orchestra.

PART II.

"O Power of Love" (Sacred)
"Radio News" Vocalists.

"By the Waters of Minnetonka" (Laeurence)
Miss Mildred Bell (Contralto), with "Radio News"
Male Choir and Orchestra.

Plantation Song Gatty
Mr. Stanley Tamblin (Bass) and "Radio News"
Vocalists.

"Ave Maria" (Erich John)
Ladies' Octette.

Cor Anglais Solo "Berceuse" from "Jocelyn"
(Goddard)
Mr. Leonard Custance (with Orchestra).

"Lo Hear the Gentle Lark" (Bishop)
Miss Mabel Malouf (Soprano),
(With flute obligato).

Pianoforte Duet—"Dance" (Yorke Bowen)
Miss Enid Tardent and Mr. Rees Morgan.

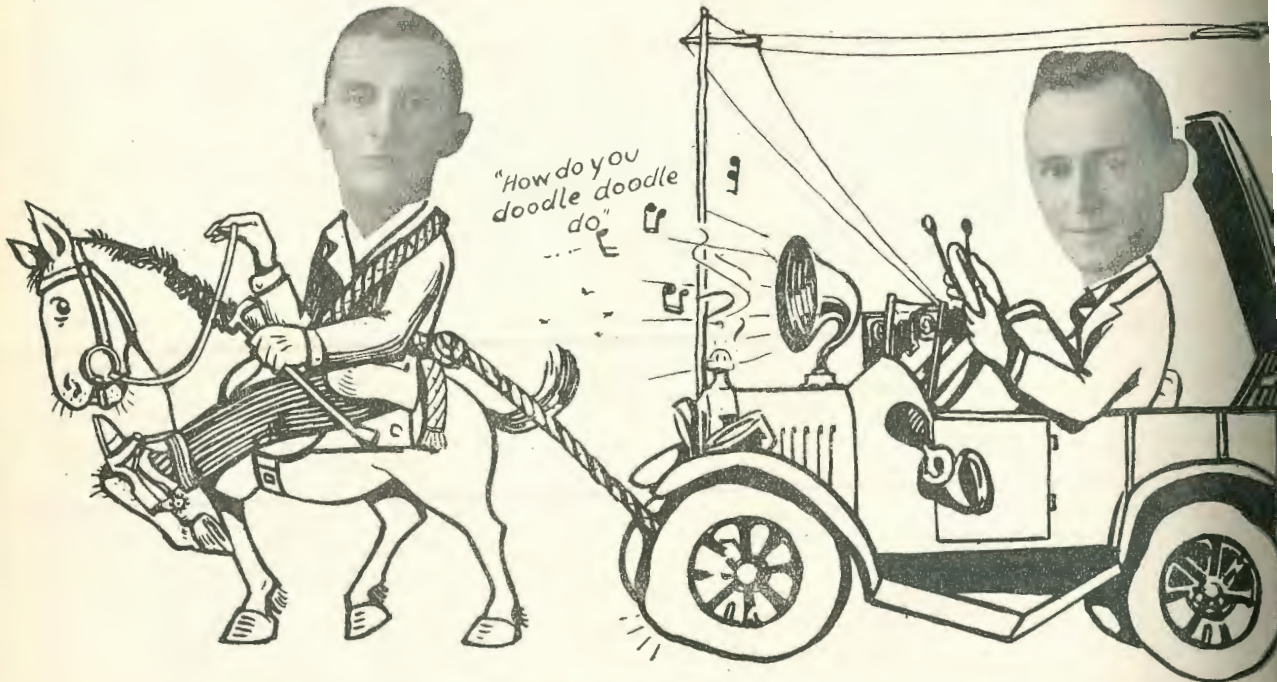
"Evening Bells"
Geo. Williamson (Tenor) and "Radio News"
Vocalists.

"Hungarian Dance No. 5" (Brahms)
"Radio News" Orchestra.

"The Lost Chord" (Sullivan)
Mr. Fred Homer (Baritone) and "Radio News"
Vocalists.

We strongly urge all our readers who can come along on that night to do so. Excellent artists and splendid numbers will make the evening an enjoyable one for you, and the prices of admission are only 1/6 or 2/6 (reserved).

Tickets may be obtained from The Read Press Ltd., Adelaide Street, Wireless House Ltd., Adelaide Street, or J. B. Chandler and Co., Adelaide Street. Ticket sellers will be outside the door on the night of the concert.



UNCLE BEN AND UNCLE JIM AT 4QG.

Few, indeed, are the listeners (young and old) of Queensland who do not tune in to the Children's Hour when these two merry makers are before the microphone. Uncle Ben invariably comes to the studio in his motor car in which he and Uncle Jim

pay visits to various places of interest in a remarkable short space of time.

The clatter of the hoofs of Uncle Jim's trusty steed generally announces Uncle Jim's approach. Our artist has depicted Uncle Jim lending a hand to Uncle Ben to garage his rather ancient bus.

Listen-in to the Messages from the Ships and Oversea Stations



LEARN MORSE

Our Evening Course will show you how

Instructor: Mr. H. L. Miller, late of Amalgamated Wireless Marine Service, ex-wireless operator R.M.S. "Makura" and S.S. "Bingera."

Fees Moderate.

Particulars on application.

UNDERWOOD BUSINESS COLLEGE

452 QUEEN ST. (opp. Customs House) BRISBANE

Single Valve Sets — R.E.G. —

Made completely in England. Highly finished of Best Parts. Mounted in Rosewood Cabinet.

4QG on small Reproducer. Southern Stations on Phones.

Complete with R.E.G. Headphones, Mullard Valve, Batteries and Aerial Equipment, ready to install.

£10-10-0

FROM ALL DEALERS.

Wholesale from—

EDGAR V. HUDSON

55 CHARLOTTE STREET, BRISBANE.

Hints for Using the Soldering Iron.

When the inveterate radio constructor starts on a job, it is usually of the marathon type and he does not leave his shop until the batteries are connected and the tubes inserted in the newest radio acquisition.

The electric soldering iron is generally the tool that suffers in this procedure. It is continuously being heated for a period of two to five hours; and it shows all the effects of hard use when all of the wiring is finally completed.

Not only must the builder watch the iron, turn it off when it is getting too hot, turn it on again before it becomes too cold, but he must tin it, keep it clean and generally devote as much time to keeping it in condition as to the actual soldering itself.

Here is how the problem was solved in my work shop:—

I have a line with plug receptacles located at convenient intervals along the working bench. Near the switchbox, which is off to one side, there is a socket into which I placed a 75-watt electric light bulb. This bulb is connected in series with the line.

This bulb allows sufficient current to pass through to the electric soldering iron to keep it at just the right temperature. I never have to watch its temperature, and the tinning process does not have to be repeated except occasionally.

Of course, other devices besides the soldering iron may be operated from the plug sockets. My small electric drill also connects to the plug, as well as a small motor which runs a buffer, coil-winder, and drilling arrangement. The insulation is comparatively inexpensive and its saving in temper alone is worth the trouble. It can be installed by the radio fan builder himself at the cost of very little time and trouble.—D.L.



A RED CROSS in this square

denotes that your subscription
expires with THIS ISSUE

Send 6/6 (P.N. or Cheque) to-day to
BOX 1095N, G.P.O., BRISBANE



“STERLING” Head Phones

We have just landed a limited number of the FAMOUS STERLING 4000 OHM PHONES. These we can offer at

30/- pair

As you know, this is a particularly keen price, so an early call is absolutely necessary to save disappointment. There is an exceptional demand for Headphones at the present time. Quantities are limited.

OVERELLS’ Crystal Sets

These are without a doubt the most popular Crystal Sets in Brisbane. They are built by Experts—not by apprentices. We guarantee every Crystal Set to give good, clear reception.

SLIDE COIL CRYSTAL SET, complete with Phone and Aerial Equipment. Price, 37/6.

“PHOENIX” VARIOMETER CRYSTAL SET, highly finished, complete with Phones and full Aerial Equipment. Price, 46/-.

“PHOENIX” DE LUXE CRYSTAL SET, complete with all Accessories. Price, 65/-.

Amplifiers

“PHOENIX” ONE-VALVE AMPLIFIER, complete with Valve and Batteries. Price, £7/10/-.

OVERELLS LTD

THE VALLEY, BRISBANE.

GRODAN RADIO APPLIANCES

RAYTRON Crystals

"Better than the Best of the Rest"

Galena 2/-	Bornite 2/-
Zincite (synthetic) 2/-	Pericon Refills . . 1/6

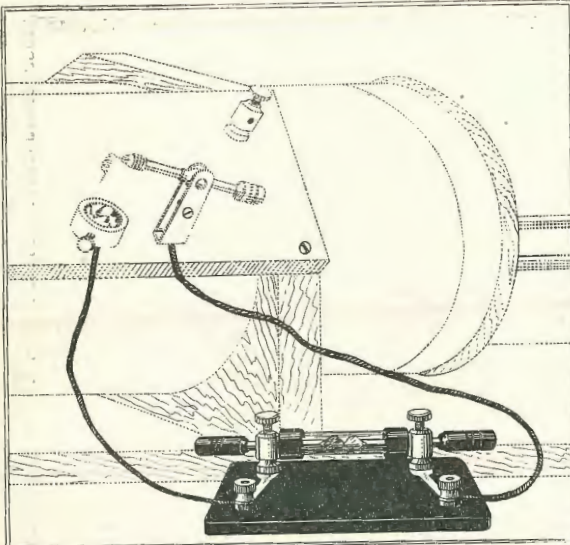
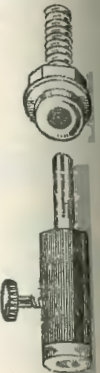
Packed with Silver Catswhiswer and Tweezers. Ask your dealers for the box with the window.

E.C.S. Plug and Socket Terminals

are enjoying a phenomenal sale in the Southern States owing to the utility and appearance they give to all Wireless and electrical connections.

E.C.S. on Merit for Service

Plug and Socket, 9d. Four colors—Red, Blue, Green and Black



PERICON DETECTOR

The Crystals are enclosed in a dust and moisture-proof glass tube, giving entire protection against dust and moisture. Can be wired to any existing set in a few seconds. Tested on actual broadcasting before leaving factory, 3/9 EACH.

The GRODAN
NEW
Hinged Spider Former 1/9

6^d 1/3 9^d PAIR

The feature of this new Spider Former is the Hinge, which allows of wonderfully fine tuning. Easy to wind. Fits all Standard Sockets. Cheapest and Best Device on the Market.

The Grodan Folding
LOOP AERIAL

A most attractive Grodan product. Constructed of best Litz Wire. Folds into tube 2 1/2 in. x 3/4 in. When open stands 33 in. high.

Price, £1/19/6 each.

All Radio Stores, or from the Manufacturers,
GROSE & DANIELL, REDFERN, SYDNEY.



THE PACIFIC TRIO.

A Group of Hawaiian Instrumentalists, whose primitive melodies delight listeners to 4QG.

A Splendid Opportunity to Learn Morse

Listeners who tune in to the broadcast programmes certainly derive a lot of fun and entertainment from their receivers. Apart from broadcasting, however, there is much of interest to be ingathered from the ether if you can read Morse.

The well known "Underwood Business College is instituting a Morse class, under the direction of Mr. Miller (well known radio man and an ex-operator of the "s.s. Bingera"). For a very reasonable fee listeners who live in or around Brisbane will be afforded a splendid opportunity to learn how to read and send Morse, speed and proficiency being guaranteed in a very short time.

FROM PHILADELPHIA TO SIBERIA ON ONE TUBE.

The Philadelphia amateur who received word that his signals had been heard in Siberia is entitled to all the elation the achievement undoubtedly brought to him. The "ham" is E. S. Rahn, who operates a 20-watt transmitter, 3LJ, at 1519 North Allison Street. The confirming letter came from Tomsk, Siberia, reporting that the Russian operator picked up the Philadelphian's signals on a one-tube Reinartz receiver.



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

A. E. NEWNHAM
LOGAN RD. WOOLLOONGABBA

(opp. Johns & Co.)

Phone J 4379

Learn to Play the Steel Guitar

(Real Hawaiian Method)

EASY TO LEARN
EASY TO PLAY

Listeners who have heard the strains of this instrument over the Radio are captivated with its beauty. It is one of the easiest instruments to learn. YOU CAN PLAY Songs, Pieces in a few lessons, if you learn from

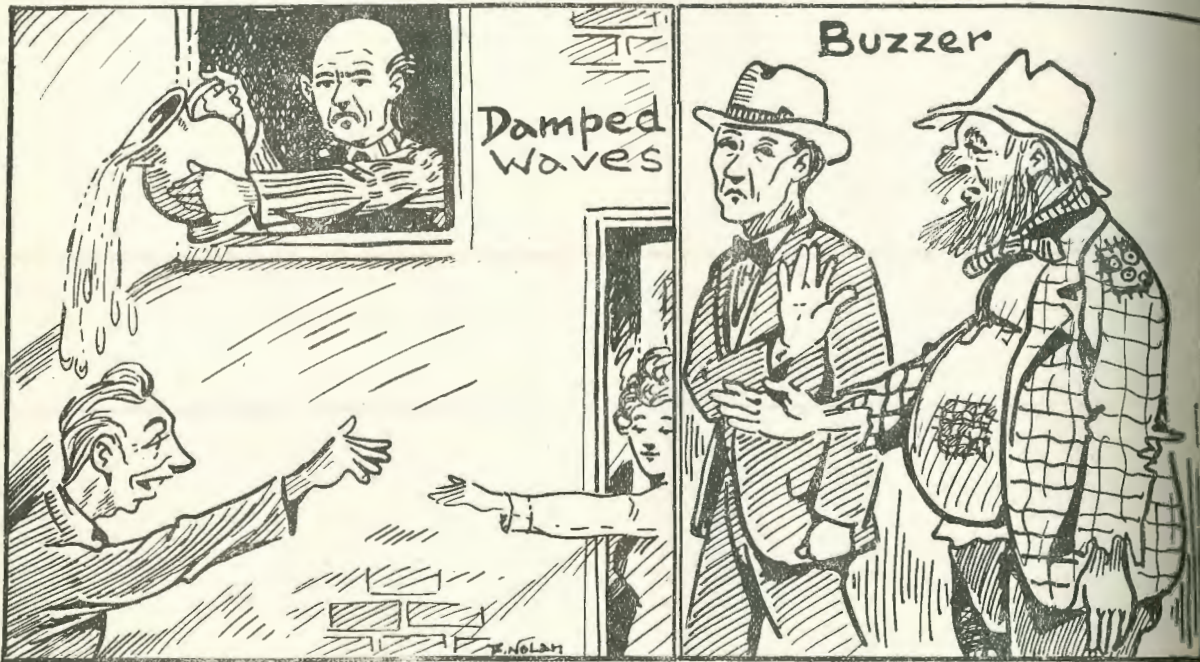


The Royal Academy of Hawaiian Music

(C. D. PENFOLD, PRINCIPAL)

Head Office—Watson's Chambers, Queen St., Brisbane
also at Corona Cafe, Ipswich every Tuesday until 10 p.m.

Wireless Terms Illustrated



Some Good Lines

- Emmco Variable Condensers: .0005, 21/- each. Complete with dial.
- Igranic Variable Condensers: .001, 37/6 each. Complete with dial.
- Igranic Variable Condensers: .0005, 17/6 each. Complete with dial.
- Spitfire High Resistance Telephones: 17/6 per pair.
- Rico 3000 ohm Telephones: 22/6 pair.
- B.T.H. Loud Speakers, C2: £7/10/-.
- Meistersinger: £5/15/-.
- Amplion: £2/10/-.
- R.E.C.: £1/10/-.

J. T. Greenlees & Co.

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

The Citizens' RADIO CALL BOOK

A Complete Radio Encyclopedia

We have just received a supply of the revised edition (published April, 1926) of this splendid Encyclopedia, which contains, among other interesting things, the following:—

- "Broadcasting Stations of the World"
- A Radio Map of the World
- A detailed List of Broadcasting Stations of the United States.
- Dozens of splendid constructional articles, featuring the world's latest and best Circuits and a host of other valuable data.

We only have a few dozen of these Books left, and advise early buying.

SEND P.N. TO-DAY.

Price 3/- Posted 3/6

"The Queensland Radio News"
Box 1095N, Brisbane

The Queensland Radio and Electrical Exhibition

As stated in our last issue the radio dealers and electrical houses of Brisbane are organising a great radio and electrical exhibition, to take place in the Exhibition Building during Show week—from 9th to 15th of August.

Residents of Brisbane and country visitors will doubtless avail themselves of the opportunity to attend this—the first show of its kind in Queensland.

The firms taking stalls are now busy planning for this big event, for they recognise that a good display means much to the success and attractiveness of their stall.

The catalogue is now in the hands of the printers. Everything indicates the Exhibition being a huge success from every viewpoint, and this journal extends every wish to the committees and those interested that it may be so.

Obituary

With the deepest regret we record the death of Mr. A. E. Graham, head of the House of Graham, the old established British concern which manufac-

tures the famous Amplion Loud Speakers. Mr. Graham was an outstanding figure in British commercial circles, possessing technical genius of a very high order, combined with the business ability which has enabled him to build up the largest production of loud speakers of any individual organisation in the world.

According to a cable received by Mr. William Blogg, managing director of Amplion (A'sia) Ltd., Sydney, Mr. Graham passed away after an operation on June 15. His death will leave a very big gap in the British Wireless Industry, where he has long been recognised as a leading authority on loud speaking telephones and wireless loud speakers.

During his business career he gathered around him many eminent engineers and commercial men, who will carry on the business along the same lines.

SHORT RADIO WAVES REACH THE SPHINX.

Short waves were largely responsible for the 7000 mile DX record achieved by R. H. Skinner, director of a round-the-world cruise, who heard KDKA (Pittsburgh), at the base of the Sphinx in the early part of February.

The short-wave receiver was set up in the shadow of the Sphinx; and American tourists heard the voice of Mr. Skinner's wife and of friends, which reached them there in the desert after crossing oceans and continents.

This demonstration of the DX possibilities of short waves should prove of special interest to American amateurs who think a 1000-mile range a local one.



BEARD Radio Sets

Cost Less and are 100% Efficient

Only High Grade Trouble-Proof Parts are used Throughout

SPECIAL FEATURES

SIMPLICITY OF CONTROL, combined with hair-splitting final adjustment, thus ensuring volume with clear and pure tonal quality.
DISTINCT PANEL DESIGN enhanced by highly polished Silky Oak Cabinets

Beard Standard 1 Valve Receiver, with all the improvements of the Beard multi-valve sets, built for headphone reception of local and interstate stations. £10/10/-, with Brandes Phones.

Beard Standard 2 Valve Receiver, includes a 1 Stage Amplifier, giving enough volume to operate a loud speaker on the local station, and consequently gives comfortable volume for the headphones on the interstate stations. £12/12/- without loud speaker, £16/16/- with Amplion AR111 Speaker.

Beard Standard 3 Valve Receiver is built to give ample volume on the loud speaker for the interstate stations under favourable conditions, £22/10/-, with Amplion AR111 Loud Speaker.

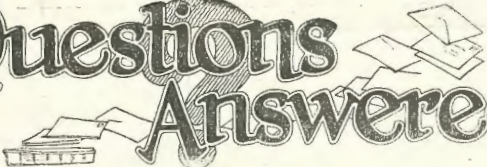
Beard Standard 4 Valve Receiver has been specially designed for broadcast listeners who are situated a long distance from the broadcasting stations, and who want to hear stations from a great distance with enough volume to operate a loud speaker comfortably, £30, with Amplion AR19 Loud Speaker.

L. S. BEARD

LOSE STREET
SOUTH BRISBANE
Phone J4320

Demonstration arranged. Other Sets made to your order and to suit your pocket.

Questions Answered



W.R.N., Allora.—The transformer ratio we would suggest for use in the portable five valver, which appeared in our Christmas issue is 5—1. This set should give you excellent results from all Australian stations. With careful tuning no interference between stations should be experienced.

S.K., Manly.—Any reliable make of condenser should answer the purpose. The one used in the circuit referred to was an "Igranic."

O.U.J., Bundaberg.—Two valves should give you good loud speaker results from 4QG. More valves, of course, would be an advantage.

J.K.M.—We suggest that you read Mr. Hobler's article in this issue, entitled "The Care and Maintenance of Batteries."

"Worried," Ipswich.—The station you hear is 4HW, a local ham, who frequently transmits gramophone selections on about 230 metres.

INVESTORS!

AN excellent opportunity presents itself to secure a controlling interest in, or acquire the whole of, a well-established Wireless Business, showing exceptionally good results.

Audited accounts available for inspection. Genuine inquirers will, if necessary, be allowed inspection of Income Tax Returns for past years.

Further particulars will be given to principals only, or to Public Accountants duly appointed on their behalf, on application to

THE VENDORS

Box 699K, G.P.O. Brisbane

You'll spend less for batteries—

You'll have better reception—

When you buy Willard's you buy Batteries that last for years. Your investment in Battery economy is an investment in better reception, too, for these

Batteries are rechargeable. No need to tell the difference this makes in the quality of reception.

Obtainable from all Licensed Dealers

Queensland
Agents

Motor Supplies Ltd.

Where Adelaide and Boundary
Streets meet—Brisbane.

Willard

RADIO BATTERIES



Genuine R.C.A. RADIOTRONS

bear the above seal



RADIOTRON UX 199

Equally serviceable as a detector or as a high efficiency radio or audio frequency amplifier. Extremely economical in operation. Adaptable to dry battery operated sets.

Filament voltage 3. Current .06 amps. **Price 13/6**

RADIOTRON UX 201A

The standard all round flexible storage battery valve—good in any detector or amplifier circuit—sure to give the best results at the lowest operating cost.

Filament voltage 5. Current .25 amps. **Price 13/6**

RADIOTRON UX 120

New dry cell Radiotron for use in the last stage of audio amplification only. Exceedingly high filament emission. Volume equal to that of two UV199's.

Filament voltage 3. Current .125 amps. **Price 17/6**

RADIOTRON UX 112

A new power valve similar to the familiar UV201A, but several times as powerful. Designed for use as last valve in accumulator operated sets, when it will deliver far more energy than the average loud speaker requires. Two of these valves will give exceptional results. Filament voltage 5. Current .5 amps.

AT ALL DEALERS Price £2/5/0



Amalgamated  Wireless
(Australasia) Ltd.

97 Clarence St., Sydney 167/9 Queen St., Melbourne
King and King Chambers, Queen St., Brisbane

Radiotron



New Reduced Prices

on

TRIMM HEADSETS and SPEAKERS

"Dependable" Headsets

"Dependable" Headsets are the best metal-cased headsets on the market, regardless of price. Coils resistance is 2400 ohms. The Trimm "Dependable" is a high quality Headset at a moderate price. Especially suited for crystal sets. **22/6**

"Professional" Headsets

The "Professional" Headset is the choice of amateurs and professionals who want to get distance. Used on MacMillan expeditions for two successive years. Resistance, 3000 ohms. Bakelite case ensures maximum insulation and low losses. **35/-**

A significant tribute to Trimm Head Sets was the decision of MacMillan when he took them on his recent Polar Expedition. McMillan knew that the lives of the party depended on the signals received in the Head Sets—that's why he selected TRIMM.

TRIMM Entertainer

A Loud Speaker that appeals to every radio fan. The "Entertainer," gives the performance and tone of speakers selling at much higher prices. Slide adjustment lever gives instant control of tone and volume. Large diaphragm gives purer, sweeter musical tones over the entire broadcast range. **£4/9/-**

TRIMM Concert

The Trimm "Concert" is the speaker with the natural tone. Extra large diaphragm gives beautiful tones over the entire range, from high note of violin to the low bass note of the organ. The "Concert" is the only speaker that reproduces the bass notes of instrumental music faithfully. Volume is easily controlled by easily accessible adjustment. **£6**

If your Radio Dealer cannot supply you write direct to

W. E. PETERMAN

PERRY HOUSE

Cnr. Albert and Elizabeth Streets, Brisbane

Phone 8099

Specify "Red Lined Dilecto"
the Perfect Panel for your
Radio Set. Ask your dealer
about this wonderful panel.