

WIRELESS WEEKLY

Vol. 8. No. 17.

Registered at the G.P.O., Sydney, for
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Friday, Aug. 20, 1926.



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FEATURES

Does Broadcasting Affect Church Attendances?

See Article by Rev. HOWARD LEA

NEW "WIRELESS WEEKLY" RECEIVER

LAW AND THE LISTENER

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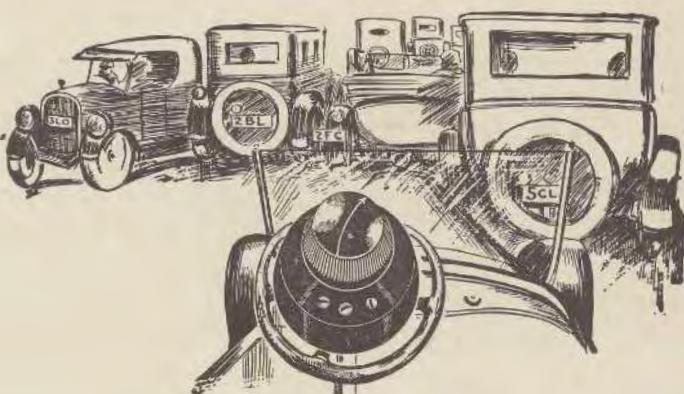
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without interference from 2BL VOLUME sufficient to fill this Speaker can be obtained from Interstate Stations when it is attached to our Selectrodyne 4 Valve Set, Price £26/10/- Complete

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Broadcasting Programmes for the Coming Week



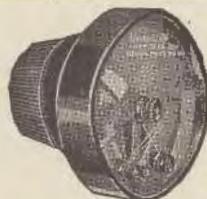
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Leo Curran, Esq., Bathurst, N.S.W., writes:—

"Radiola Super to hand. I have given same a thorough test out, and it is fully a hundred per cent. better than expectations. I am bringing in Sydney, Melbourne, and Brisbane on loop. This is most remarkable reception."

"You will be pleased to learn that I have succeeded in bringing in 4YA, Dunedin, New Zealand, with the Radiola Super on loop aerial. The items came through remarkably clear. On an outside aerial, 4YA was received, good loud speaker strength."

I. J. Failes, Esq., Bagaldi, North West N.S.W., writes:—

"I am delighted with the performance of the Radiola Super, and must say it exceeds my expectations. Just a tit bit of D.X.—I tuned and held KGO (California) for an hour and half last night. The dance items and piano solos were very clear."

Victor R. Peacocke, Esq., Bingara, N.S.W., writes:—

"You will be pleased to hear that I have been most successful with my Radiola Super, having had no trouble in tuning in to 2BL, 3LO, 4QG, 5CL, loop, and obtaining loud and clear reproduction. When one considers the distance of Bingara from the broadcasting centres and the position of the town, among the mountains, it is a very creditable performance. I am more than satisfied with the Radiola Super."

Hunter Bros. Ltd., Wagga, N.S.W., write:—

"We tried out the Radiola Super last night, and it surpassed all expectations. It gave good loud speaker results, 2BL, 3LO, 4QG, using only loop."

Messrs. Marsh & Webster, Department Stores, Mackay, Queensland, telegraphed:—

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Fourthly, it is so arranged that contact is always at the exact delicate tension required for perfect reception.

Fifthly, it is adjusted by simply turning the knob—in the dark as easily as the light—and without disturbing the crystal, too—a great advantage when you want to adjust whilst others continue to listen-in.

There's a sixth reason. The Harlie-Detector has been officially adopted for use on Lifeboats and in the Mercantile Marine—and you can't do better than follow the experts.

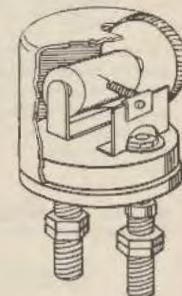
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AUGUST 20, 1926

AERIAL TRANSPORT AND RADIO

OUR cherished dream of an aerial mail service between Great Britain and Australia was brought one step nearer realisation by the arrival of Captain Alan Cobham last week. What part wireless will play in that service remains to be seen, but it is easy to show that for the successful operation of all aerial transport, the entire operation of services will be completely dependent on wireless. Captain Cobham's experiences indicate that the journey is still hazardous, and he himself admits that radio might have helped him to arrive here much sooner.

The modern air liners maintaining air routes throughout Europe are each equipped with wireless. Yet, despite the story of the pilot who ordered an ambulance by radio in anticipation of a smash, wireless is still looked upon as an interesting toy.

At present, it ostensibly helps air liners by providing weather reports during voyages, and by giving the machine its bearings by directional instructions from the ground. Most of this information is received in a desultory fashion by pilots, who proceed over their well-known route without its aid.

In cases where advantage has been taken of this information, machines have been held up by adverse weather reports when the air line is quite clear, simply because the stations from which the reports emanate are in a local bad weather area. At other times fogs and storms have been re-

ported which have cleared by the time the machine reached the point in question. Directional instructions for landing are objected to, on the ground of time taken. These are the chief objections raised against wireless by Britain's leading pilots. Yet not one of these seriously affect the general application of radio as an aid to aerial transport. The trouble is that radio has never yet been put to the test seriously.

That time will come just as soon as air transport becomes of serious use; until it can run with as much regularity, and in the same kind of weather as other forms of transport. When planes are forced to pass through bad weather, then will radio help to overcome navigation difficulties and lessen the risk of collision.

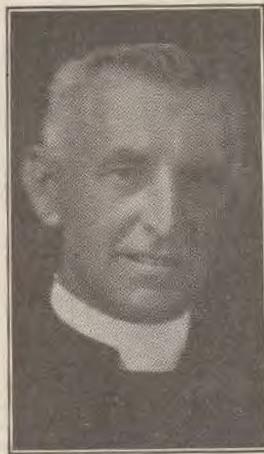
Probably the first large scale attempt of this kind will be the Australia to Great Britain air service. This can only be accomplished successfully when aeroplanes can become "blind" according to the foremost aviation authorities. Visibility is the greatest difficulty in the way of the progress of aerial transport. An aeroplane cannot stop still to get its bearings, they explain. It must move at high speed, and in order to be sure of clearing ground obstacles, it must in practice fly at a minimum height. It can be seen that on a cloudy day, when a drizzle would not affect a ferry or train, the aeroplane is rushing at great speed through the clouds and what little visibility there is, is of no use to prevent it from colliding

with another machine, or in landing.

Consideration of this point will show that if our dream of aerial transport is to be realised, then the aeroplane must not depend on visibility for navigation purposes. Radio is the only solution. Just as a ship at sea depends on the sun and stars for its position, so the aeroplane will have to depend on radio directional finding apparatus for its position. It will fly "blind," trusting entirely to the reliability of the operators.

Imagine how such a scheme would revolutionise aviation as it stands at present. It would mean that air transport would be placed on a sound commercial footing by the elimination of risk. Planes would be able to run to schedule, despite weather conditions, over regular routes from town to town. Instead of lighthouses or semaphore signals there would be apparatus sensitive to certain radio signals registering the approach of a machine, and automatically transmitting correct bearings. It is not impossible. Apparatus for this work already exists. Further development is all that is required to bring it to a pitch of absolute accurate functioning.

No doubt the time will come when machines will be improved, and we will have apparatus which will both drive and guide them through the air from terminus to terminus with marvellous accuracy. Perhaps the time is not so far distant as may seem, for even now a score of radio engineers and air pilots are conducting research on the lines mentioned above.

*The Writer.*

ON Sunday, January 8, 1924, the Rev. H. R. L. Sheppard, Vicar of St. Martens in the Fields, London, at the request of the Religious Committee of the British Broadcasting Co., broadcasted a service for the first time.

About the same date, in Sydney, Messrs. Farmer & Co. were just completing their arrangements to broadcast. When the account of Mr. Sheppard's effort reached me on March, 1924, I was quite convinced of the great opportunity that broadcasting offered, and when the pioneers in the great enterprise approached me, with an invitation to broadcast from St. Marks, I obtained the willing consent of my wardens and gladly accepted. No time was lost, and before Good Friday, April 18th, all arrangements were complete, a special line from St. Marks to the studio had been prepared, and on that night we sent out into the ether the wonderful music of Stainer's oratorio, "The Crucifixion." In my brief address that night I said: "For the first time to-night in the history of Australia, this miracle of science, broadcasting, is to be used for the sending out over the whole of the Commonwealth the message of God's love."

Although at the time, the listeners-in were comparatively few, the warm welcome which greeted our effort, encouraged us to persevere. Perhaps

"Broadcasting does not affect Church Attendances"

—THE REV. HOWARD LEA

Who outlines in this article the history, result, and future of Church Broadcasting in Australia

the one that cheered me most was the testimony of a yachtsman, who said that as he rode at anchor in his yacht at Broken Bay, the wireless service brought the message of Good Friday as nothing else could have brought it.

I waited for some three months, then the first Sunday in August being the 10th Anniversary of the declaration of war, we held a special service, which was broadcast. The response to this effort came from a much wider circle, and the message which His Excellency the Governor kindly wrote for the occasion was heard throughout the State, in Victoria, and in South Australia. But it was not till the following month that I realised how widespread was the interest. It was the 70th anniversary of St. Marks, and I suggested that I should be very glad to hear from any of my unseen congregation who cared to write to me. Within a week I received over 100 letters, and they bore overwhelming testimony to the value of a service broadcast.

The Rev. T. E. Ruth, of the Congregational Church, Pitt Street, was the first to follow my example, and his services were and are greatly appreciated. Before very long Messrs. Farmer and Co. were hard put to it to comply with the many requests made to them, and eventually Broadcasters also commenced to transmit Sunday services, so that now the movement has spread throughout the Commonwealth, and listeners-in can, if they so desire, receive a service two or three times each Sunday.

Having thus given the history of the movement, I go on to answer a question very often asked, "Does not a broadcast service keep people away from their church?" It is not, from the nature of the case, an easy question to answer, but generally speaking I have no hesitation in saying NO.

The Christian who really desires to

worship will not be content with merely "listening-in," but there are thousands who, for various reasons, have lost touch with the churches, and there are also thousands who, for divers reasons, cannot attend church, and to both these large groups a broadcast service offers a great opportunity.

I should like to quote a few concrete examples from letters I have received:

I give three illustrations of the first group:

One man writes:

"I have a friend of mine listening-in. He appreciated your efforts in broadcasting your service into the highways and byways, and he openly confessed to me that he could not repeat the Lord's Prayer; he had forgotten it, not having attended a church service for over 30 years."

Another man writes:

"I beg to thank you for the service. . . . I might state, although I am ashamed to say it, that it is the first service I have heard for over 20 years, but if God spares me I intend to hear more in future. I think this listening-in will be the means of a large number of people hearing the Word of God that otherwise would not."

A third man writes from New Zealand:

"We listened last night to your service. Everything came in beautifully clearly per ZFC. As two of the party had not been to church for a number of years, it brought its influence to them once again. This alone justifies the broadcasting of Sunday services."

Betwixt and between the two groups a wife writes as follows:

"I feel I must write and tell you how thoroughly I enjoyed listening-in to your beautiful service last Sunday evening. I am not able to

go to church at present, having been on the sick list for some months. My husband also listened with great attention, and enjoyed your address very much, I am glad to say, for he does not believe in going to church."

The testimonies from the second group, viz., from those who for various reasons cannot attend service, are so numerous that it is difficult to make a selection. I will give four brief ones, and a fifth from one, who for many years has filled an important post in the public service of this State.

A man writes:—

"It was really grand, as you gave out the hymns to turn to them in my book and follow through . . . the whole service was grand, more especially as I cannot walk to church."

A lady writes, as follows:—

"You will know how much I appreciate being able to hear it, as I am almost a cripple, and unable to attend church."

One who signs himself, "A King's School Old Boy," writes:—

" . . . It was quite a new experience, and I felt the atmosphere and reverence of church transferred to my home."

A lady writes:—

" . . . Last night, the first time for thirty years, my mother was enabled to unite in a church service."

An old public servant bears the following testimony:—

"My wife suffers from chronic rheumatism and cannot move out of the house, and misses her former privilege and practice of attending divine worship. She now keenly looks forward to such opportunities of hearing God's Word passed through the ethereal empyrean right into her home and fireside. The good that is being done and the spiritual comfort that is offered by broadcasting the fine old services of our church is beyond compute. We are miles from Sydney and heard splendidly."

Before I went to England, in October last, the directors of Messrs. Farmer and Co. very kindly gave me a letter of introduction to Mr. Reith, the Chairman of the British Broadcasting Co. Mr. Reith received me

most graciously, and gave me every facility for inspecting the elaborate plant at their headquarters on Savoy Hill, London, E.C.

From Mr. Reith, I learned of the rapid strides that broadcasting had made. No less a number than ten millions of people listen-in every day to the bulletins that are issued from headquarters, twice every evening. "London calling the British Isles" is an announcement which always quickens the interest of the listener-in. Very great care is taken in the selection of the man who fills the office of announcer. He must be a graduate of an University, and must excel both in tone of voice and correct diction.

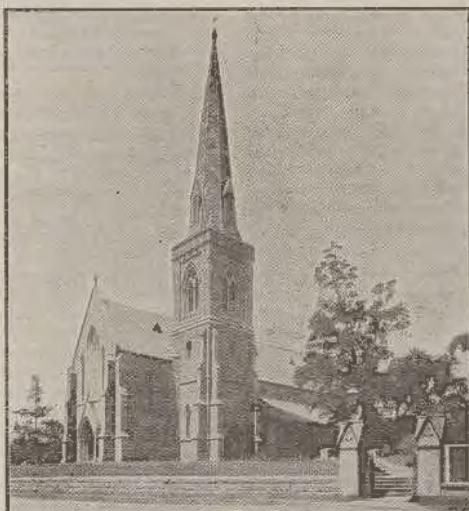
I shall always remember the pleasure and profit with which I listened-in to the account of the signing of the Locarno Treaty, transmitted in the evening of the day on which this historic meeting had taken place.

The vivid description of the personalities who signed the Treaty, the correct pronunciation of their names, the concise summary of the Treaty itself, made the account far more interesting and informative than merely reading it in the columns of a newspaper.

Another occasion also stands out in my memory. I was again over a hundred miles from London, and the Prince of Wales was speaking on behalf of British industries at the Mansion House. The clear, quick tones of the speaker came through most distinctly, and no single point of his speech was lost. The instantaneous "Hear, hear" of the Chairman, as well as the applause from the audience, were alike clearly heard. In addition to the headquarters station in London, there are twenty-two sub-stations, up and down the country, each of these had its own programme, but each can be linked up to London for transmission of items of special interest.

The B.B. Co. began as an experiment five years ago, and has so demonstrated the enormous value of unified control, that the Royal Commission which was sitting in England, when I was there, and has just recently issued its findings, most strongly recommended that, in the best interests of all, unified control should be maintained. The whole management will now come under the Postmaster General's Department, the

(Continued on Page 32.)



St. Mark's Church, Darling Point, from where the first church service in Australia was broadcast by 2FC.



Studio News & Notes



Mr. M. F. Bourne, leader of the 2FC orchestra.

NEW 2BL FEATURES.

The broadcasting of a corroboree from French's Forest is the first of a series of radio novelties arranged by Station 2BL.

Only two real aborigines were available for the stunt, which took place on Friday, August 18th, owing to the scarcity of the tribesmen nowadays, but "Bringa," the authority on the aborigines who arranged the broadcast, has a troupe of boy scouts whom he has trained to assist him, and they are almost as effective as real blacks.

The second of Broadcasters' stunts will be a visit to the historic towns of Windsor, Richmond and Castle-reagh, whence 2BL will describe the old buildings and places associated with the early days of New South Wales. Some of the interesting inscriptions on the tombstones of the old churchyard will be read, and stories of the district will be told by old identities.

Included in 2BL's new feature series is a visit to Burinjuck Dam, and the Murrumbidgee Irrigation Area, and later the station will broadcast from either Yarrangobilly or Wombyan Caves—or both—and from the depths of a coal mine.

A trip will also be made to a sheep station, from which 2BL will broadcast all the sounds of a shearing shed, together with a description of the whole business.

A feature of these broadcasts is that they will be carried out by the use of the small portable transmitter. This is carried from place to place, and is used to send a very short wave (about 30 metres) to a receiver connected with the telephone line leading to the high power broadcasting station at Coogee, where the message is placed on the air for listeners.

In the near future, 2BL will give a series of broadcasts from country towns, using local artists.



Madame Vera Tasman, lyric soprano, who will co-operate with Mme. Evelyn Greig in a joint recital from 2FC, on Sunday evening, August 22nd.

PRIME MINISTER'S SPEECH.

Farmer's will broadcast the speech of the Prime Minister (Mr. Bruce) on the Referendum proposals from the Town Hall, on Friday, August 20. Other features of the day are: Early morning cricket scores, if Test match is continued. Orchestral programme from the Haymarket in the afternoon. At night, from the Crystal Palace, the special musical prologue from the new picture "Don Q." featuring Miss Eileen Castles, soprano. From the studio, Mr. Walter Kingsley, baritone, Mr. Cyril Monk, well-known violinist, will commence a series of travel talks about his recent trip round the world, illustrating his talks by violin solos typical of the countries referred to.

LECTURER ON STAMPS.

Captain R. C. Dettman, V.D., who is lecturer from 3AR Studio on Australian stamps. Captain Dettman has been lecturing now for some weeks on this interesting subject, and many letters and also many enquiries have been received from listeners with reference to his lectures. He has an undoubted grasp of his subject, and has quite evidently made a deep study

of the various issues of the stamps of Australia, making his lectures of deep interest to all philatelic collectors in Australasia. Captain Dettman will be continuing his lectures on Thursday evenings at 8 o'clock until further notice, and is prepared to answer enquiries by post through 3AR Studio.

NEW MUSICAL COMEDY?

A pleasing rumour, as yet too faint for confirmation, is tingling through the air. It is to do with the production of a second musical comedy by the Studio of 3LO, and also hints that Alfred Andrew's capable hand will again direct proceedings.

NEW COMIC OPERA.

The wonderful run of comic operas broadcast by 2FC will be added to when "The Runaway Girl" will be transmitted on the 1st and 2nd September. This opera will be produced by the Kuring-gai Gordon Operatic Society. The previous operas given by this station during the past two weeks include "The Merry Widow," "The Sunshine Girl," "The Pink Lady," and "A Knight for a Day."

RADIO TALKS FROM 2KY.

These are being conducted by Mr. G. T. Beard, every Monday night in the form of "Talk Back" and is proving extraordinarily successful. As well as answering the questions put to him on the telephone, Mr. Beard



Captain C. H. Peters, who discourses learnedly and humorously on "Books" from 3LO.

receives dozens of enquiries by post. The clarity of the transmission is reported as excellent.

"SHALL I HAVE TO MARRY."

Frenzied enquiries are flooding the Studios of 3LO Melbourne, as the closing date of the September Bride Competition draws near. "Is it necessary to have the wireless installed before entering the competition," or "Shall I have to marry if I do not win," were the two problems most frequently presented by the excited entrants.



Dr. Floyd, organist at St. Paul's, Melbourne, whose recitals at 3LO have entertained thousands.

Handel's "Largo," "Bouree" (Bach), two Minuets by Beethoven, and "Boccherini." Then, to add to the variety of the entertainment, Madame Vera Tasma, the well known soprano, will sing groups of French, English, and Italian songs to the accompaniment of the Dulcitone.

FAMOUS JAZZ BAND.

The most expensive vaudeville engagement yet entered into by Australian management is that of Tivoli Theatres Ltd., who introduce a complete combination of 17 jazz musicians, headed by Fred Santrey. This combination is reputed to be one of the finest in the world, and opens at the Tivoli Theatre, Sydney, on Monday, August 20th. Arrangements are being completed with the management of the theatre to give 2FC listeners an opportunity of hearing their musical act, which will include many novelties. In connection with their visit to Australia, an interesting talk will be given in the 2FC studios on Friday night, August 20th, when the story of the evolution of jazz will be told, and then the following week, before the engagement commences, listeners will be taken behind the scenes and be allowed to hear portions of the rehearsals by the band on the Tivoli stage.



Law and the Listener

HOW BROADCASTING IS CONTROLLED

WHAT are these regulations we hear of now and then? Why is it necessary to have regulations? The motor business, for instance, does not appear to have so many or restricting conditions placed on it; wireless is the regulation-ridden industry, and the making and re-making of regulations is apparently an annual affair. One hears that the Government officials are at this little pastime again and we will have some more changes before long. Is there any real need for all this policing?

I have recently endeavoured to find the genesis of this regulating process and the reasons given for so many changes. The reasons given are not as open to objection as might appear at first, and the temporary irritating effect on the industry generally following any change are unavoidable and are for the greatest good for the greatest number. No one country is able to legislate in all wireless matters just as it chooses. There is an international law governing the conduct of wireless communications and all nations are expected to comply with these laws. A congress of the nations is held periodically and the laws revised or brought up to date in keeping with the advance of the art. Those meetings are not held very frequently, which is probably a good thing for us. The last one was held in 1912, and the next meeting to be held in 1915 was postponed owing to the war. The nations apparently have not resumed their pre-war friendliness because the place and date of meeting was not fixed until recently. It is to be in Washington, U.S.A., in 1927. That meeting is certainly well overdue, as the development during the past 12 years has rendered the international laws inadequate, and in some degrees, obsolete. For instance, there are no international laws dealing with broadcasting. Those laws were framed at a time when marine wireless, between ship and shore stations, was the only commercial use of wireless, and consequently that phase of

wireless is the one regulated in all countries on a common basis.

The international laws are binding on every country that subscribes to the convention and this universal obligation is obviously necessary when we reflect on the chaos that would result if different countries adopted their own methods of control of communication. The laws are not restrictive, however, and do not limit the rights of any country to make

Did you know that there are more regulations governing radio than the motor industry? "Ray Dio," who writes this article, explains clearly the maze of regulations and restrictions which surround listening in.

its own internal laws in keeping with the principles laid down in the convention. Thus we find, on examining the year book of wireless, that nearly every country has its own set of domestic laws or regulations. These local laws principally concern the conduct of marine communication and the protection of defence wireless services, but lately the spread of broadcasting has brought with it regulations governing that latest phase of wireless.

In Australia, where the laws follow the English laws generally, we have an Act of Parliament passed in 1905 which gives to the Postmaster-general a monopoly of wireless. But as it was apparently foreseen even then that the Government would not desire to carry on all wireless activities itself, the Act provides that the P.M.G. may permit any person, under a license, to make use of wireless in such a way as the P.M.G. prescribes in regulations. Hence, we have regulations, or as they are called officially, Statutory Rules, which are

capable of being altered from time to time without amending the Act. This is a wise proviso, as it would be a long and uncertain procedure to make any change by amending the Act. The P.M.G. is not allowed to make any regulation he likes, however; the regulations must not exceed the terms and limits of the Act. And the regulations, or statutory rules really become the Governor General's regulations, as all statutory rules have to be approved by the Governor General in council. Consequently, these regulations are as binding on the P.M.G. as upon anyone else. The importance of the regulations being strictly within the limits laid down in the Act was demonstrated last year when the High Court decided that the regulations of 1924 concerning dealers' licenses were ultra vires; they exceeded the terms of the Act. These terms refer to the "erection, use, and maintenance" of a wireless station; incidentally it should be noted that every receiver together with its aerial system is legally called a station. The high court decided that the Act did not refer to trading or dealing, and consequently the regulation stipulating that a dealer's license should be obtained was wrong. The wily Government people got over the difficulty by amending their regulations and making a Dealer's listening license.

The necessity for regulations cannot be denied when we consider the multiplicity of uses to which wireless is put these days: naval, military, aviation, maritime, land and broadcasting services as well as amateur activities. There must be some abiding law and controlling organisation; otherwise there would be confusion arising out of the use of one wavelength by two stations as an example. But it does appear that we could do with fewer changes of the laws. The change of the conditions seriously affects traders and listeners as well as broadcasting companies.

Most people remember the story of
(Continued on Page 41.)



Radio Auction Bridge

Game No. 5—Broadcast by 2 F C

"Wireless Weekly" has secured from 2FC, Farmer's Broadcasting Service, the exclusive right of publishing the Radio Auction Bridge Games which 2FC commenced broadcasting on Wednesday, 21st July.

There are 24 Bridge Games in the series, and one will be broadcast each Wednesday evening, and the following Friday's issue of "Wireless Weekly" each week will give the game in detail as it should be correctly played. These games were arranged by the United States Playing Card Company of Cincinnati, Ohio, U.S.A., and played by Bridge experts. Some very slight alterations have been made in the original games broadcast in America in order to adapt them to the calling of the Portland Club, which is the most universally followed rule, so far as Auction Bridge is concerned, in Australia.

Mr. W. F. H. Master, an acknowledged expert in the game of Auction Bridge in Sydney, is carrying out the transmissions from 2FC, and if any Bridge enthusiasts, on reading these articles, care to submit any questions or problems arising out of the games as published, arrangements have been made for Mr. Master to answer them through the columns of "Wireless Weekly."

THE complete hands held by each of the players of the Radio Auction Bridge game played on August 18th, were as follow:—

Dealer, "South," holds:—

Spades: 9, 8, 7, 6, 5, 4.

Hearts: None.

Diamonds: A, 10, 2.

Clubs: A, K, Q, 3.

"West" holds:—

Spades: K, Q, J, 10.

Hearts: Q, 10, 7, 2.

Diamonds: 8, 7.

Clubs: 10, 8, 4.

"North" holds:—

Spades: 3.

Hearts: K, 9, 8, 6, 5, 3.

Diamonds: K, Q, J, 6, 3.

Clubs: Jack.

"East" holds:—

Spades: Ace, 2.

Hearts: A, J, 4.

Diamonds: 9, 5, 4.

Clubs: 9, 7, 6, 5, 2.

The bidding will now begin. Dealer (South) opens the bidding with one club. You should understand that original bids are purely informative. Unless they are pre-emptive or shut-out bids, they express no desire to play the hand at the declaration named. Their primary purpose is to inform the partner that the bidder holds better than average high cards, aces, kings, etc., in support of a possible bid by partner or in defence of a bid by an opponent. The bidder's ability to play the hand at the declaration he has named, is of only secondary importance. In bidding,

you and your partner are endeavouring to find the best bid for game, or failing game, for contract between your twenty-six cards. This best bid rarely proves to be the declaration originally named. In the great majority of instances, it is overcalled, if not by partner, then by an opponent.

When you are Dealer or Second Hand, your partner has yet to bid. He can well hold a hand of considerable strength, but not strong enough to bid in his position unless previously assured of better than average high card support from you. Any hand that contains two or more sure tricks, contains better than average high card support. Consequently, whenever as Dealer or Second Hand you hold as good or better than two quick tricks, and are able by means of a justifiable original bid to convey that information to partner, it is not only advisable, but as a rule obligatory to do so.

Here South holds more than two quick tricks. Thus, the only question is, has he any legitimate means of conveying this information to his partner? His spade suit is too weak to bid originally and his diamond suit too short. To bid No Trump when defenceless in two suits, and particularly when void of one of the two, would not only give his partner an incorrect picture of his hand, but would be dangerous as well. Therefore, his only legitimate original bid is one club.

West bids one spade. While a four-card K, Q, J, 10 suit is a doubtful original bid unless accompanied by more than a side queen, it warrants a defensive bid, if for no other purpose than to indicate the lead desired from his partner in case his opponent on left becomes the Declarer.

Now what would you do with North's hand? No doubt you would do what he did; bid two hearts, and not two diamonds. Four odd and no more may be possible with either suit as trump; and four odd in game with hearts and not game with diamonds as trumps. Moreover, with two suits, both justifiable bids, the rule is to show the higher ranking suit first, and, subsequently, when necessary, the lower. This method allows partner to show his preference for either suit without increasing the contract. These two considerations prompt North to bid two hearts instead of two diamonds, although his diamond suit is much the stronger of the two.

East passes, demonstrating the soundness of East's game. With his holding, most players would assist his partner's spade bid. Had East three small spades and two side aces he would have done so. But with only normal assistance in spades and one side ace, he holds no more than partner expects him to hold. Normal assistance is three small cards or ace small, king small or queen small in the suit bid by partner. Consequently an immediate assist would deceive

West by stating that he holds strength he does not possess.

Now South is in a quandary. He should make some effort to inform partner of the heart situation. But what? His spade suit, such as it is, is not available as a bid because already bid by an opponent. To bid two No Trumps with his holding is out of the question. His partner's heart bid, however, did not necessarily deny club support. Therefore, he bids three clubs in emphatic denial of hearts.

West, of course, passes, as he has already bid the full strength of his hand.

North now shows his second suit by bidding three diamonds, because his heart suit is too weak to rebid in the face of partner's emphatic denial of hearts, and because he in turn is called upon to deny his partner's clubs.

All pass and North is the Declarer, with three diamonds as his contract.

East leads the ace of spades. When holding only two cards of the suit bid by partner, the proper procedure is to always lead the higher card first. South is Dummy.

Dummy follows suit with the 4 of spades, West with the 10, and North with the 3.

East stops to consider his next lead. Knowing that West must have held at least four spades originally, he can see from the six spades originally held by Dummy, the two originally held in his own hand, and the one played to the first trick by Declarer, that North holds no more spades. He sees also that there are no hearts in Dummy and three trumps, and, hence, that if Declarer is permitted to trump hearts three times in Dummy, he, East, will lose his ace of hearts. Therefore, the question in his mind is whether to lead another spade to shorten Declarer's trump suit by forcing him to trump, or to lead a trump to reduce the apparently impending double ruff of spades and hearts by at least one trick, and thus increase the chances of his ace of hearts winning. The latter course appearing to offer the best defence, East leads the 4 of diamonds to trick two.

Dummy plays the 2, West the 7, and North wins with the king. If North were playing the defence, he would win with the knave so as not to deceive his partner, but having the

Dummy opposite him, he false-cards.

North now pauses to analyse the situation, in order to see how he may best overcome this line of defence. He has already lost one trick. To go game, he can afford to lose only one more. If he takes his knave of clubs and then two rounds of trumps, winning the second round in Dummy and follows with three high clubs, he can—with the best possible break of the club suit—discard only three hearts on the clubs. He would then be compelled to trump a spade lead from



Miss Kathleen Robinson, a well-known artist at 3LO, Melbourne.

Dummy, which would leave him with only one trump and four very weak hearts from which he would have to lead, thus losing probably three—and maybe four—heart tricks. This line of play is palpably unsound.

Estimating the prospects still further, North sees that by trumping two rounds of hearts in Dummy, he can go game, if the outstanding clubs are evenly divided in the hands of opponents. He knows that according to the doctrine of chances, the three outstanding diamonds are probably divided one and two between his opponents. Therefore, he can count the possibility of eleven tricks, that is, one trick already won, two hearts trumped in dummy, four club tricks, and four more diamond tricks in his own hand, so he determines to try for game by this method of play. Therefore, at trick three, North leads the 3 of hearts, East plays the 4, Dummy ruffs with the 10 of diamonds and

West plays the 2 of hearts.

Dummy leads the 3 of clubs, West plays the 4, North wins with the knave, and East plays the 2. Now North leads the 5 of hearts, East follows with the knave, Dummy trumps with the ace of diamonds, and West plays the 7 of hearts.

Dummy leads the ace of clubs, West plays the 8, North discards the 6 of hearts and East plays the 5 of clubs. The king of clubs is then led from Dummy, on which West plays the 10. The play of the 10 of clubs by West causes North to again take stock of the situation. He realises that West has no more clubs, and will, therefore, trump the next lead of the queen of clubs with probably the 8 or 9 of trumps, as he had played the 7 on the first trump lead. He sees, therefore, at once, that the line of play that he had mapped out will prevent him from going game, as he would have to overtrump West with one of his remaining honors, which might result in establishing a good trump in the hand of East. Therefore, North determines to change his plan of campaign. There remains only one other chance for game. East has already played the knave of hearts on the second heart lead. If he holds but one more, and that one the ace, North sees that he can go game in spite of the club suit failing him; but in order to do so, he must get into his own hand at once without danger of being overruffed, in order to exhaust the opposing trumps.

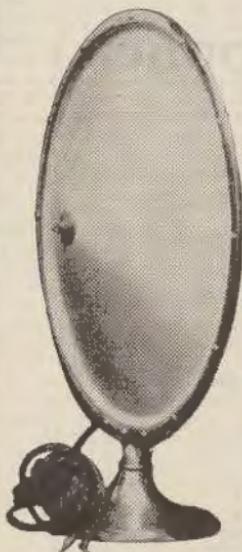
Therefore, he trumps his Dummy's king of clubs with the six of diamonds. East following suit with the 6 of clubs. North now leads the queen of diamonds, East plays the 5. The 5 of spades is discarded from Dummy, and West plays the 8 of diamonds.

North leads the knave of trumps, East plays the 9, Dummy plays the 6 of spades and West discards the knave of spades. West's discard of the knave of spades is made because he wishes to stop Declarer's heart suit, which perhaps he can do by holding the queen and 10. Opponents' trumps now being exhausted, North leads the 8 of hearts, East plays the ace, Dummy the 7 of spades, and West the 10 of hearts.

North then spreads his hand, stating that he will trump any lead East

(Continued on Page 55.)

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S.O.S. CALLS FROM 2BL AND 2FC

MORE frequently than ever before broadcasting is being used for urgent calls of assistance for the sick and dying. Partly this is due to the remarkable results which have attended those land S.O.S. calls sent out in the past. Very few have failed to bring forth response from someone.

The last call to bring immediate response was the broadcast from 2FC one Sunday recently. At the request of the Chatswood police, the description of a man found dying on Chatswood railway station. The only means of identification was a bill-head of a local electroplater. As it happened, the electroplater was listening, and instantly rang the Chatswood police, identifying the man five minutes later.

GOOD NEWS, TOO.

Radio is not always the bearer of bad tidings, however. Here is a case where it brought good news a few weeks ago.

A lady living at Glenorchy, Victoria, received a telegram stating that her father was dying, and asking her to come to Sydney immediately. She prepared to catch the next train, but

in the meanwhile a listener at Rupanyup, near by, heard radiocasting station 2BL announcing: "Please tell Mrs. —— that her father is not dying and to cancel the telegram she received."

As the lady was not likely, in the circumstances, to have heard the message herself, the listener promptly rang up the police at Stawell, who notified her of the news, in time to obviate the long journey to Sydney.

BROADCASTING FIGHTS.

2KY is broadcasting every Friday night from the ringside of McHugh's Stadium, Leichhardt. This feature is apparently well received and popular, as a majority of reports of reception refer to the fight feature in some way. An amusing incident happened last Friday. At one stage of the contest someone in the crowd called the odds on one of the fighters —within a few minutes, the studio telephone rang and an enquiry was made whether 2KY could arrange for some money to be put on at the odds heard on the air. The party was informed that 2KY had not yet extended its facilities by taking out a book-maker's license.

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Rayovac 22½ volt Batteries .	0 15 9	Radiotechnique, Super Ampli	0 13 6
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Where the Programmes Come From

UP two flights of stairs in a Collins Street building is the "studio" from which entertainment and instruction are sent out across Australia and New Zealand.

Great care had to be used in preparing this studio for use. All street noises have to be kept out of it, so provision has been made for shutting the windows when the studio is in use, so that the tinkling of tram bells will not interfere with music or speech.

Similarly the constant noise of telephones must be shut out of the broadcasting rooms. This has necessitated special padding of walls. The only door has a glass partition let into it so that no one will be able to enter suddenly, letting in a flood of outside noise. The interior of the room may be seen from outside, though the sounds of voice and music are inaudible, except as made so by the amplifying apparatus in a glassed-in room from which the operator may see the whole interior of the studio.

Let me give you a picture of the studio. It is a very comfortable room, like a drawing-room. A large, roomy couch is on one side, and a couple of deep arm-chairs in which one might easily drop off to sleep. Just at the elbow of one of these chairs, on a long, swinging arm, is a microphone, a round pierced disc, about four or five inches in circumference. When the speaker sits in the arm-chair the arm of the disc is pulled into position across the speaker, and he speaks as quietly and naturally as if he were talking to a friend a foot away.

It is curious to observe a beginner at the microphone. He is very apt to suffer from micro phone-fright. His voice deepens suddenly with panic—sometimes it dies in his throat, and an observer through the glass of the amplifying room is often amused to see his wild, hunted look, as though he feared the host of silent, unknown hearers he is about to address.

There is a piano in this room as well, and a much taller microphone,

set at the height of an average man, but capable of adjustment to any height. It is before this that a singer stands.

I have often been amused to see how a performer, unused to the microphone, adopts the attitude he is accustomed to on a public platform. His face, if he is a comic singer, will unconsciously grimace and twist, as if he had to do it to get laughter. I have seen a man nod and smile to himself, as his dialogue went on, precisely as if he were being watched by an audience. You know, we are all creatures of habit, and it is a law of association that forces us to do the thing we have always linked in our minds with something else.

Thousands of listeners in have never visited a broadcasting studio. Taking 3LO as an example 'Valve' in this article gives an excellent word picture of the place where the programmes come from.

Similarly, we have all caught ourselves smiling into a telephone transmitter and nodding a pleasant good-day to someone invisible miles away from us.

In the amplifying room an operator stands, intent on whatever performance is going on. His hand is ready to twist and turn his instrument, so as to remedy any defect that he may notice in the course of broadcasting. A voice of a singer that is too harsh, too loud, too soft, may be improved by a skilful operator. Quite often a watchful announcer, not actually in the studio, may hear something by means of the loud speaker that tells him all is not well, and he hurries into the studio to put it right. He must creep about, for his slightest word will go "over

the air." Many ludicrous effects have been produced in this way. A nervous singer will often break off with a sibilant whisper—"What's the matter? Am I all right?" while the announcer shakes a finger furiously to warn him that he is being heard by thousands.

On one occasion there was noticeable a curious fading effect and swelling of sound. A child was singing at the time, and examination showed that she was swaying away from the microphone in all the soft passages and coming right up to the mouth of the instrument when she was singing fortissimo.

Besides the two rooms already mentioned, there is a big common-room, where the artists meet and sit while waiting to be called. This is a very comfortable place, warmed by radiators, and possessing a big table where, towards mid-evening, tea and coffee and cake are served, for 3LO is kind to its artists.

A loud speaker is in one corner, and the waiting people hear the concert. Curiously enough, there is very little talking going on, for everyone wants to listen, and so it happens that very few of 3LO's artists know one another. It is funny sometimes to hear one say to another—"Oh, you are Miss So-and-so?" I have often heard you sing, but never before knew what you were like." A chance hearing of a name through one of the officials has brought about the meeting. For the most part, the people sit in silence, a whisper being the only sound heard except that through the loud speaker.

In the fourth room of this singular place, the band sits and tunes up. They are in a "silence room," specially fitted so that they can practice their little runs and trills without being heard. There are two or three microphones in here, for band music must be well distributed, or it sounds wrong. If the bassoons were nearer to the microphone than the cornets, they would overbalance the latter and it would be a mere heavy jumble of

(Continued on Page 46)

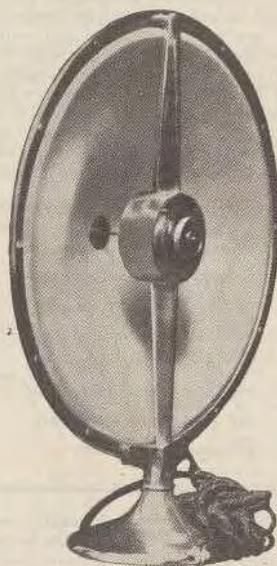
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Gems from Listeners' Letters

"It has been raining and I have caught a cold. Oh! sniffle, sniffle." Extract from 2FC letter.

Does Mr. Cochrane feel his responsibility? As the confidant of the children who tune-in the bedtime story he receives the secrets of thousands of Australian homes revealed in naive, childlike terms. Perhaps that is why he is looking so serious lately.

Many mothers and fathers would protest, and many children would go to bed without their tea should the letters be made public. But they need not fear, for the "Hello Man" respects his confidences and struggles bravely onward with the worries of a thousand people on his mind.

But just through sheer need of a safety valve, he showed the writer one letter last week. It was from Tom, one of his many radio nephews. He showed it to me, he said, because it had a kick in the last line. It read:—

"I was coming to the lecture on Saturday, but as Mum was sick I couldn't. I am going to frame my welcome to the Radio Birthday Club. It has been raining, and I have caught a cold. Oh! sniffle, sniffle. Our dog is still pulling the hairs out of the horse's tail."

No less remarkable are the letters received by Uncle George and Jack.

Services for children have for several months been a feature of broadcasting station 2BL, and the following letter was received a few days ago:—

"Dear Uncle George and Jack. We the children of Mona Vale, listened to Uncle Jack last Sunday night at the Mona Vale Methodist Church. The wireless has been installed in this church by Christ working through one of its servants. We think it is very good of you to have these talks to the children on Sunday nights, especially for those in hospitals, and we trust that Jesus will comfort those

on their beds of sickness and pain, and make them well again, and that God will bless you both in this work." The signatures of thirty-five children are attached to this letter.

Of more serious vein are the letters from older listeners-in. A well-known business man wrote to 2FC last week, as follows:—

"As an Anglican, I appreciate the opportunity of listening-in to the sermon from St. Patrick's, and deeply valued the delightful music. To my mind, it would do incalculable good to broadcast the various modes of worship, for it may bring about a better understanding, removing some of the existing religious intolerance, showing to the people that the doctrinal difficulties of the church are after all not so very great."

From Nullabor Station, via Coorabie, S.A., comes the most distant South Australian letter yet received by 2FC. Excellent reception is reported, despite the atmospheric difficulties which generally beset radio in that district.

The transmission from the Jenolan Caves, undertaken by 2BL and sponsored by the N.S.W. Government Tourist Bureau, was an outstanding success in every way, if the budget of letters received at that station are to be taken as an indication. Correspondence has rolled in, and from every side congratulations have been forthcoming.

One of the first communications to be received was a telegram from Samsonville, in Queensland, which read: "Transmission from Caves received perfectly Saturday night; every word distinct." From a long and appreciative letter from Stockton, Newcastle, the following extract is taken: "Incidentally the Caves transmission was wonderful and clear; it was actu-

ally like being in the Caves themselves."

Yet another letter has been received from Tariki, Taranaki, New Zealand, which reads as follows:—"As I write this letter I am listening to the excellent transmission given by your splendid broadcasting station 2BL, transmitting from the Jenolan Caves. The transmission has been a huge success, most especially the bedtime story hour given by Uncle George in the Caves, and the description of the Caves by Mr. Wiburd. . . The relay of 4QG and 3LO from the Lucas Cave came in at good strength but not very clear. . . To Broadcasters Ltd., I send my sincere thanks for all the trouble they must have gone to enable them to transmit such a novel programme, and I can assure you that we in New Zealand highly appreciate such efforts. Australian broadcast is a God-send to all of us in this country, and I for one heartily thank you for all the excellent programmes, etc., you transmit every night. . . 2BL is received here much stronger than any of our New Zealand stations, and enables us to work the loud speaker at full strength very soon after sundown."

"I feel it my duty to drop you a few lines to thank you and all for the brightening of the lives of all our poor old crippled ones," is the commencement of a letter received at the Melbourne broadcasting station, 3LO, last week from "An Unseen Guest." "They cannot go out to see anything, but now we have got something to put new life in us and make us forget our pains. I, for one, think the programmes very beautiful, and may God bless the hands which are responsible. The items make us feel we have something to live for after all."



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"Wireless Weekly" Receiver No. 5

IT is generally recognised that the average valve receiving set which has extensive range is apt to increase the effects of nearby electrical disturbances, static, generator noise, etc. This interference, when intensified by the radio frequency amplifier, changes the wave form of the received signals before they are rectified, and often results in distortion and bad tone which obviously cannot be eliminated by the audio amplifier. The only practicable method of avoiding this trouble is to reduce the amplification of the radio frequency circuits to a point where they are non-responsive to such interference. This, unfortunately, defeats the object of the radio frequency amplifier, and we find that in most cases we can do better by using the straight out detecting circuit, especially if we are situated close to the local broadcasting station.

We learn from this that it is a fallacy to use radio frequency amplification unless it is absolutely necessary. It should be distinctly understood that the grid of the detecting valve, or a crystal detector, can only handle a certain limited amount of energy, and if that energy is present in tuning circuits without H.F. amplification, there is obviously no object in using it. Many letters have been received from country readers who support these statements. For instance, dozens of readers state that with the "All Australian" Receiver (published in "Wireless Weekly," of February 19th) they get all Australian stations (at night) quite as strongly as a five-

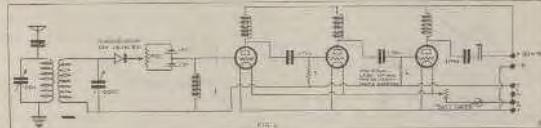


Fig. 2. Circuit diagram. One H.F. amplifier crystal detector and three choke coupled audio amplifiers.

Parts Required.

- 1 Panel, 17in. x 7in. x 3-16in.
 - 1 Baseboard, 17 x 6in. x 7in.
 - 1 .001 Variable Condenser.
 - 1 .0005 "
 - 2 Terminals.
 - 1 .0001 Fixed condenser.
 - 1 1 m.f.d. condensers.
 - 1 Carbideum Crystal Detector.
 - 1 Two-coil Holder or 1 Panel Plug and 1 Coupling Plug.
 - 1 Rheostat.
 - 1 Switch.
 - 1 S.C. Jack.
 - 3 Valve Holders.
 - 3 Valves.
 - 3 Choke Coils.
 - 2 Grid Leaks.
 - 2 1.5 Volt "C" batteries.
- The additional parts necessary to use the H.F. valve ahead of the crystal detector are:-
- 1 Aperiodic High Frequency Transformer.
 - 1 Valve Holder.
 - 1 Valve.
 - 1 Potentiometer.
 - 1 Rheostat.

valve receiver is capable of giving. This is due to the fact that the straight-out regenerative detector, as used with the "All Australian" Receiver, is quite sufficiently sensitive to give excellent night-time reception in their districts, and no matter how many H.F. amplifiers are added the volume cannot be increased.

If comparisons were made in the daytime, however, with those two receivers, the five valver would undoubtedly considerably outshine the three valver, due to the fact that the two H.F. valves would then be doing their work of amplifying the feeble energy and passing it on to the detector valve, and would not "load" as they appear to at night with the strongly received energy.

The receivers described in this issue cater for readers whose only desire is distortionless and life-like loud speaker reproduction from the nearest broadcasting stations. Whilst it is a comparatively short distance receiver (up to 200 miles), it has the following definite advantages:-

(1) The tuning circuit has a sufficiently high decrement to pass side bands without distortion. This is not strictly true of highly regenerative or sharp tuned radio frequency circuits.

(2) The carbideum crystal affords pure and clean rectification with a pleasing absence of back-ground noise.

(3) The detector tuning circuit, being only sufficiently sensitive for comparatively short distances, local electrical and static disturbances are

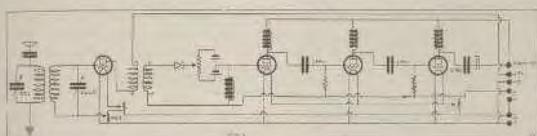


Fig. 1. Circuit diagram. Crystal detector, three choke coupled audio amplifiers.

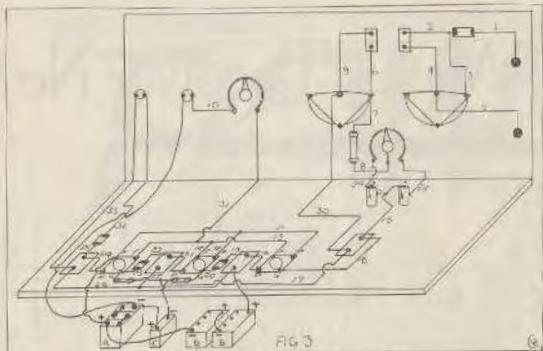


Fig. 3. Back of panel view of three-valve.

very much suppressed, hence the receiver is particularly suitable for summer or winter conditions.

(4) The use of high impedance audio frequency choke coil amplification with large blocking condensers, permit of practically perfect amplification, as they have almost equal influence on all frequencies in the audio frequency range.

One stage of H.F. amplification is added (see Fig. 4), for readers who are out of the ordinary crystal range of their State broadcasting stations, but should only be used if absolutely necessary. It employs three or four valves (as necessary), is exceptionally easy to make, and operates a loud speaker with more than sufficient volume for family use, which cannot be excelled for fidelity and clarity of tone.

The Circuits Described.

The usual two-circuit tuner with plug-in coils is used, with a .0001 fixed condenser in series with the aerial. This affords maximum selectivity on all broadcast wavelengths. When the H.F. amplifier is necessary, it is coupled with an aperiodic H.F. transformer, the fixed carbonium electrically controlled crystal detector ensuring perfect rectification without any crystal adjustment whatever.

The clear rectified signals from the detector are impressed across an audio frequency choke coil, which may be the secondary or an audio transformer, or the special audio chokes which are now available on the Australian

market. This choke or impedance builds up the audio frequency component of the rectified energy and in-

Coil Table.

Station.	Primary.	Secondary.
2KY	25	35
2BL	35	50
3LO	35	50
4QG	35	50
5CL	50	75
3AR	50	75
2FC	135	150

presses it directly on the grid of the first audio frequency amplifying valve.

These grid voltage variations cause amplified current variations in the

plate circuit of the first valve, which are then impressed across a second choke coil and larger audio frequency voltage variations are produced. These are impressed on the grid of the second valve through a blocking condenser of 1 m.f.d., which in turn causes greater variations in the plate current of the second valve.

Likewise these current variations are again impressed across a second choke coil and larger audio frequency voltage variations are produced. These are now impressed on the grid of the third amplifying valve, and cause greater variations in the plate circuit of the third choke. These large final current variations produce large audio frequency voltage variations across a fourth choke coil, which are then fed into the speaker through a third blocking condenser. Direct "B" battery current does not flow through the speaker unit, so that the distortion caused by core saturation and diaphragm displacement is eliminated.

A Word About The Components.

The audio frequency choke coils should possess high inductive value and low distributed capacity. Several good makes are now available.

The blocking condenser of 1 m.f.d. capacity should have a high insulation resistance. If necessary values as low as .1 m.f.d. may be used, but they are not recommended.

The grid leak should have a resistance value of .5 megohms. High resistances may cause instability and lower valves decrease the volume. If

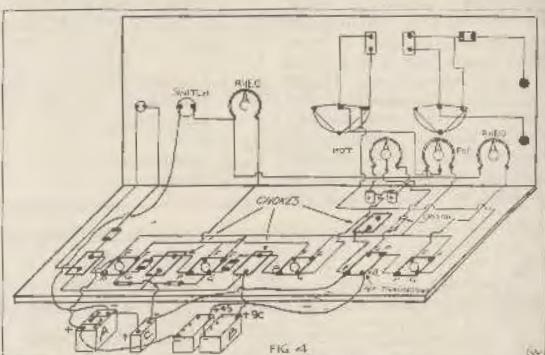


Fig. 4. Back of panel view of four-valve.

desired, the grid leak connected to the third valve may be of a good variable type. It may then be used very efficiently as a volume control.

A 20-ohm rheostat controls all three of the amplifying valves, and the battery switch shown in the negative A lead cuts off the batteries when the receiver is not in use. A "B" battery of 90 to 136 volts is required, together with a "C" battery of from 3 to 9 volts.

The potentiometer, which controls the detector, should be set for the clearest response and maximum selectivity.

The actual results with this receiver are really very gratifying. The reproduction lacks the usual mechanical tint and sounds very natural, distinct and clear.

Constructional Details.

The size panel suitable for either the 3 or 4 valve receiver is 17in. x 7in. Lay out the panel components, according to the template, and back views, after which the following connections may be wired:

Panel Connections.

No. 1.—Aerial to fixed .0001 condenser.

No. 2.—Fixed condenser to top connection of primary coil holder.

No. 3.—Link soldered from No. 2 to fixed plate connection of first variable condenser.

No. 4.—Lower primary coil holder to moving plate connection of first variable condenser.

No. 5.—Moving plate connection, first condenser to earth.

No. 6.—Lower connection of secondary coil holder to fixed plate connection of second condenser.

No. 7.—Fixed plate connection of second variable condenser to crystal detector.

No. 8.—Crystal detector to potentiometer moving arm contact.

No. 9.—Upper connection, secondary coil to moving plate connection of second condenser.

No. 10.—Filament switch to rheostat.

These completed, mount up the baseboard according to back view, and wire the following connections.

Baseboard Connections:

No. 11.—Left hand F terminal third valve holder linked with right hand terminal first valve holder.

No. 12.—Right hand F terminal second valve holder linked to No. 11.

No. 13.—Right hand F terminal of third valve holder linked with left hand F terminal of first valve holder.

No. 14.—Left hand F terminal of second valve holder linked to No. 13.

No. 15.—Centre connection of the two 1.5 volt batteries to the first choke coil.

No. 16.—Choke coil G terminal of first valve holder.



Fig. 5. Template of three-valve panel.

No. 17.—Choke coil to negative "C" battery connection.

No. 18.—P of first valve holder to second choke coil.

No. 19.—Second choke coil to first blocking condenser.

No. 20.—First blocking condenser to G terminal of second valve.

No. 21.—P of second valve holder to third choke coil.

No. 22.—Third choke coil to second blocking condenser.

No. 23.—Second blocking condenser to G terminal of third valve holder.

No. 24.—P terminal of third valve holder to fourth choke coil.

No. 25.—Same connection of choke coil to third blocking condenser.

No. 26.—Links the two vacant terminals of the second and third choke coils together.

No. 27.—Links the second choke coil with the No. 26 connection.

The two grid leaks are connected between the No. 20 and No. 23 connections.

Panel to Baseboard Connections.

Nos. 28 and 29 link the negative and positive terminals of the two 1.5 volt batteries with the right and left hand terminals respectively of the potentiometer.

No. 30 links the No. 16 connection with the moving arm contact of the second variable condenser.

No. 31 links the No. 13 connection with the right hand terminal of the rheostat.

No. 32 links the fourth blocking condenser with the S.C. jack.

No. 33 links the S.C. jack with the No. 26 connection.

These completed wire-up the batteries as shown, being particularly careful to see that no errors are made with "A," "B," or "C" battery connections.

AUSTRALIA TO NEW ZEALAND.

Following the publication of the Press Association cable message announcing the proposal to put on an early Australian programme each evening, says a New Zealand paper, we have been inundated with letters from listeners residing in the North and South Islands, enthusiastically commending the plan, and expressing the hope that it will be put into operation as soon as possible. Several of the writers are farmers, who find it impossible to sit up late at night to receive the Australian broadcasting, as they are required to rise very early in the morning. City correspondents also point out the disadvantage of having to wait till 9.30 p.m. for the Australian evening entertainment to commence.

LIGHTS ARE BURNING BRIGHTLY

Wearied of the glassy blueness of the summer seas and the brawling fury of the storm tossed waves, with the monotony of their sacrificial lives broken only for an hour or so perhaps three times a year, the sentinels of our coast line are amongst the keenest broadcasting enthusiasts, and many letters of appreciation have been received at the 3LO studio from these lonely lightkeepers, whose vigils are rendered less tedious and whose lamps, therefore, shine the brighter for the cheering companionship they enjoy via wireless.

BURGESS—"Power!
Harmony! Endurance!"

—BATTERIES.



Len O'Donnell's Embassy Orchestra, which is a feature of 3LO's programme.

News from North and South

COMPARATIVELY few people have a real idea of the enormous amount of work done in any broadcasting station in connection with the compilation of programmes. Not only is the work heavy, but it is continuous also. There is no "letting up," no spelling, because a week-end or a public holiday arrives. Broadcasting stations operate for 365 days in each year, and 366 in leap year, and on each of these days lengthy programmes must be provided. The task of the programme director is rendered even more difficult owing to the fact that he must cater for a vast audience composed of people of all shades of belief and opinion. He must attempt to cater for, and please all classes of listeners—a task which often seems an almost impossible one.

At station 4QG, Brisbane, a most modern and thorough system is employed in connection with the arrangement of programmes. This covers artist's tests, artist's bookings, financial arrangements, the filing of all personal and musical records and the actual arrangements of the programmes.

Quite a staff is employed to do this work, and the successful broad-

casting of any one item represents merely the successful application of a most carefully thought-out system of working.

ORGAN RECITALS SUCCESSFUL.

No efforts have been spared by station 4QG to make the recitals by the Brisbane city organist a success from the point of view of transmission. In addition to the carrying out of tests by the engineers attached to the service, the city organist (Mr. George Sampson, F.R.C.O.), has cooperated with the station. On several occasions when tests have been made, engineers have been in attendance at the Exhibition Concert Hall, others at the station, and Mr. Sampson has also attended the station. One of Mr. Sampson's pupils has played the grand organ while the engineers of the service and Mr. Sampson have collaborated and made certain adjustments to ensure evenness of transmission and faithful reproduction of the organ solos.

THE POLICE REPORTS.

Many people object to the police reports which are announced by 3LO from time to time. Some say they

are depressing, others maintain that they interrupt interest in the musical programme, but few of these seem to have given any thought to the matter. It may be their turn next to avail themselves of 3LO's generosity in cases of urgency. On July 1st, a message was broadcast concerning a Mr. Waterstrom, the case being one of serious illness of a member of the family. Those whom it was intended to reach were listeners-in, and were able to act upon the message immediately. In a letter to 3LO, Melbourne, one of the members of the family stated that he had once been one of those people who thought that the police reports were unfortunate and unnecessary. In fact, on the very evening of the transmission he had been reading the article in the "Listener-In" supporting 3LO's service.

PHILCO—"Have you got one yet?"—BATTERIES.

Guaranteed 2 Years

and from 15/- deposit too



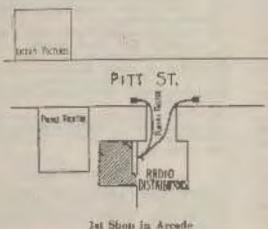
LISTEN IN TO MELBOURNE, BRISBANE, ADELAIDE, ETC., ETC.

	£ s. d.
1 Valve Sets, per week	0 2 6
2 Valve Sets, per week	0 5 0
3 Valve Sets, per week	0 7 0
4 Valve Sets, per week	0 9 3
5 Valve Sets, per week	0 11 6
5 Valve Sets (Super 5), per week	0 14 0
9 Valve Sets (Super-het.), per week	2 0 0

YOU PAY THE DEPOSIT - - - - - WE DO THE REST

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No coils to change. For long distance stands supreme*



Radio Distributors

29 ROYAL ARCADE
SYDNEY

MA 1798
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Broadcasting Programmes

for the Coming Week

STATIONS TO TUNE IN.

Farmer's service, Sydney, call sign 2FC, wave length 1100 metres.

Broadcasters Ltd., Sydney, call sign 2BL, wave length 353 metres.

Broadcasting Co. of Australia, Melbourne, call sign 3LO, wave length 371 metres.

Associated Radio Co., Melbourne, call sign 3AR, wave length 484 metres.

Queensland Radio Service, Brisbane, call sign 4QG, wave length 385 metres.

Central Broadcasters Ltd., Adelaide, call sign 5CL, wave length 335 metres.

Friday, August 20

2 FC

Early Morning Session.

- 7-Time Signals. The Chimes of 2FC. Announcements.
- 7.4-Cricket Score of 5th day's play of the 5th Test Match—Australia versus England. These scores will be repeated at 8, 9, 10, 11, 12.
- 7.10-Weather Information. Commercial news, Shipping Intelligence and Markets.
- 7.40—"Sydney Morning Herald" news service.
- 8-Time signals. Musical items. Cricket scores.
- 9.15—Close down.

Morning Session.

- 9.15-The Chimes of 2FC and Announcements.
- 9.20-Music from the studio.
- 9.45-A morning reading.
- 10-Time signals. Music from the Studio. Cricket scores.
- 10.5-Late "Sydney Morning Herald" news service.
- 10.15-Music from the Studio.
- 11-Progress Cricket talk. Cables.
- 11.15-A Cooking Talk and Recipes by Miss Ruth Furst.
- 11.30—Close down.

Midday Session.

- 12-Time signals. The chimes of 2FC and Announcements.
- 12.5-Stock Exchange. First Call.
- 12.10-Music from the Studio.
- 12.45-Broadcaster's Special News Service.
- 12-Time signals. Weather intelligence.
- 1.30—"Evening News" midday news service. Producer's Distributing Society's report.
- 1.30-Music from the Studio.
- 1.30-Stock Exchange. Second Call.
- 2-Time Signals: Close down.

Afternoon Session.

- 2.30-The Chimes of 2FC and Announcements.
- 2.35-A Recital by the pupils of Lawrence Campbell.
- 3.30-From Farmer's Tea Rooms: The Oak Hall Trio.
- 3.40-Miss Jeanne Slapofski, soprano.
- 3.45-From Farmer's Tea Rooms: The Oak Hall Trio.
- 3.55-Music from the Studio.
- 4-Miss Dorothy Bowden, contralto; "Wait" (O'Harede).
- 4.5-From Farmer's Tea Rooms: The Oak Hall Trio.
- 4.55-Music from the Studio.
- 4.24-Miss Jeanne Slapofski, soprano.
- 4.25-From Farmer's Tea Rooms: The Oak Hall Trio.

4.35-Music from the Studio.

- 4.40-Miss Dorothy Bowden, contralto; "Whatever he is Best" (Lohr).
- 4.45—Stock Exchange. Third Call.
- 4.46-Music from the studio.
- 5-Time Signals. Close down.

Early Evening Session.

- 6-Time signals. The chimes of 2FC and announcements.
- 6.5-The "Hello Men" talks to the children.
- 6.45-Vocal and Instrumental Items from the Oak Dining Hall.
- 7.13-From the Studio: "Evening News" late news service. Weather information.
- 7.30-Dalgarno's Market Reports (wool, wheat, stock), Fruit and Vegetable Markets. Close down.

Night Session.

- 7.05-The Chimes of 2FC and Announcements.
- 8-Broadcast from the Crystal Palace Theatre: Orchestral score of the new film "Don Q," orchestral items conducted by Mr. Harry Stone. Vocal items by Miss Ethel Castle, soprano and Bert Miller, tenor.
- 8.45-From the Studio: Mr. Cyril Monk, the well-known Australian pianist, will commence a series of travel talks concerning his recent tour of the world. To-night he will deal with the Pacific Islands, Colombo, the Red Sea, and Mombasa. His talk will illustrate his talk with violin solos significant of the places he has visited.
- 9.6-Miss Dorothy Erbawak, soprano.
- 9.13-Miss Goodie Reeve, in a "behind the scenes" talk.
- 9.20-Mr. Walter Kingsley, Baritone.
- 9.36-Mr. Walter Hunt and Company in a one act play.
- 9.50-An Act from the Tivoli.
- 10.10-Miss Dorothy Erbawak, soprano.
- 10.15-Mr. Walter Kingsley, baritone.
- 10.30-Mr. Walter Hunt, and Company in a one act play.
- 10.44-Broadcast from the Wentworth Hotel, Sydney—Wentworth City Dances Orchestra, under the baton of Mr. Sydney Simpson.
- 12-National Anthem. Close down.

2 BL

Early Morning Session.

- 7.15-Physical Training and Health Exercises.
- 7.30-Talk on Health and Hygiene.
- 7.35-Physical Training and Health Exercises.
- 7.45-Broadcaster's Special News Service.
- 7.50-Music Programme from the Studio.
- 8-G.P.O. Clock and Chimes. Close down.

Morning Session.

- 10-G.P.O. Clock and Chimes. Special News Service from the "Daily Telegraph."
- 10.10-Music from the Studio.
- 10.25-Special news from the "Daily Telegraph."

10.40-Music from the Studio.

- 11-G.P.O. Clock and Chimes. Social Cricket Session.
- 11.15-Civil Serial Programme from the Studio.
- 11.15-Market.
- 11.20-London Metal Quotations.

11.20-Broadcasters' Information Service, including Mails, Shipping, Weather, Rainfall, Social Fixtures for the following day.

- 11.30-Social Programme from the Studio.
- 11.45-National Cable Edition.

- 12-G.P.O. Clock and Chimes. Talks to women by Mrs. Jordan.
- 12.30-Broadcasters' Turf Experts will discuss the training operations and horses' form from Randwick.

- 12.45-Hillier's Instrumental Quartette, under the direction of Cyril Casting.
- 1.15-Music from the Studio.

1.45-Sydney Stock Exchange Call.

- 2-G.P.O. Clock and Chimes. Close down.

Afternoon Session.

During the afternoon, results of races broadcast immediately after each race.

- 3-G.P.O. Clock and Chimes. Weather Report and Stock Exchange from "The Sun."

- 3.10-Civil Service Restaurant Train under the direction of Miss De Curcy Bremer.

- 3.20-A talk on English Literature and Poetry by Mr. J. M. Prentiss.

- 3.45-Music from the Studio.

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

- 4.30-Serial Story, entitled "The Mad Sow" (Mabel Maginnell).

- 4.45-Music from the Studio.

- 5-G.P.O. Clock and Chimes. Producers Distributing Society's Market Report.

- 6.10-Shipping Information when available.

- 6.15-G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 6-G.P.O. Clock and Chimes. Uncle George and the Kiddies. Performals of Miss Monica Seely will entertain the middle.

- 6.45-Broadcasters' Dinner Orchestra. Special Country Session.

- 7.15-Australian Mercantile Land & Finance Co.'s Stock and Wool Report.

- 7.20-Weather Report.

- 7.24-Speak on Land Subjects.

- 7.30-Stock Exchange Reports.

- 7.37-Producers' Distributing Society's fruit and vegetable report.

- 7.41-Fruit and vegetable reports (Sun).

- 7.45-Fruit and Fodder Reports (Sun).

- 7.48-Consumer news from "The Sun."

- 7.55—Close down.

Evening Session.

- 8-G.P.O. Clock and Chimes: Hoyt's Imperial Orchestra, under the direction of Mr. Lionel Hart, broadcast from Hoyt's Picture Theatre.
- 8.25-Scottish Programme by Mr. Richard McLelland and his professional pupils.

8.45—"Concerning your Valve et al."
8.45—Miss Phyllis Addison (mezzo soprano).
8.45—Weather Report and Forecast by courtesy of Mr. C. J. Maree, Govt. Meteorologist.
9.—G.P.O. Clock and Chimes.

9.1—Review of following day's programme.
9.3—The senior sporting editor of "The Sun" will talk on "The Prospects of to-morrow's Big Match."

9.35—Interval.
9.35—Mr. Richard McLellan.

9.45—Hort's Imperial Orchestra.

9.45—Great Love Stories: The love story poets tell. Mr. W. H. M. Valentine.

10.15—Miss Phyllis Addison.

10.32—Dec. Morrison and his Gleemchangers from the ballroom of the Bondi Casino. During the intervals between dances, Newsmen, by courtesy of the Sun, will be broadcast.

11.2—From the Studio: The Palmgrove Orchestra under the direction of Mr. Stan Fotheringham.

12.—G.P.O. Clock and Chimes: National Anthem.

3 LO

Midday Session.

12—Time Signals. Latest cricket, Australian League-Gower's XI, played at Maidenhead, by courtesy of Reuters Ltd. British Official Wireless news from Rugby. Reuters' and the Australian Press Association cables "Argus" and "Herald" news service.

12.45—Stock Exchange information.

12.50—Meteorological information. Weather forecasts for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast.

1—Time Signals.

1—Studio Orchestra.
1—Alice Mallon, soprano (of the Gilbert and Sullivan Opera Co.).

1.17—G.P.O. Chimes.
1.22—Studio Orchestra.

1.22—Alice Mallon, soprano.
1.24—Studio Orchestra.

1.25—Doris Gunning, violin.
1.26—Studio Orchestra.

2—Close down.

Afternoon Session.

3—Latest cricket news, by courtesy of Reuters Ltd. Technicals, a half-hour program transmitted from the Brighton Technical School.

3.20—Studio Orchestra.

3.45—Miss Frances Fraser, Italian song.

3.45—Doris Gunning, violin.

4—Kathleen Roughton, soprano (Gilbert and Sullivan Opera Co.).

4.15—Raymond Carey, tenor.

4.15—Reginald Bradley, violin.

4.20—C. Richard Clugue, flute.

4.25—Raymond Carey, tenor.

4.35—Interlude: "An Faid" of Messrs. Buckley and Nunn Ltd., "Fashion Talk."

4.45—Latest cricket scores, by courtesy of Reuters Ltd. "Herald" news service. Stock Exchange information.

5—Close down.

Evening Session.

4.45—Children's Hour. Answers to letters and birthday greetings.

4.50—"Bunny": Littlest fairy story: "The Lost Princess," "Black Beauty." 4.45—Latest cricket news, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association cables.

6.55—Weather synopses. Shipping movements.

6.57—Stock Exchange information.

7.2—Fruit Market Reports by J. R. Barrett Ltd.

7.4—River Reports.

7.6—Market Reports by the Victorian Producers' Co-operative Co. Ltd. Haymarket sales. Poultry, grain, chaff, hay, straw, oats, dairy produce, potatoes and onions. Market prices of oranges and lemons, supplied by the Victorian Central Citrus Association Pty. Ltd.

Night Session.

7.30—Under the auspices of the Department of Agriculture, Mr. C. H. Wilson, manager of State Research Farm. "Farm Management and Sub-Division."

7.40—Miss Fleda Allott, at present playing the part of "Bonnie Reeves" in "Tell Me More" at His Majesty's Theatre, will speak from her dressing-room, by permission of J. C. Williamson Ltd.

8—Collingwood Citizens' Band.
8—"The Captain," school life and school sports.

8.35—Organ recital by Dr. Floyd, Organist at St. Paul's Cathedral, transmitted from the Cathedral.

8.55—Collingwood Citizens' Band.

9.1—Elay Trewell, soprano.

9.3—Collingwood Citizens' Band.

9.15—Turn out your Rights and listen!

9.30—Elay Trewell, soprano.

9.37—Collingwood Citizens' Band.

9.42—Mr. Lennox, author of gardening notes.
10.2—George Lee, character comedian (by permission of Thivill Theatres).

10.9—Announcements. Road reports supplied by the Royal Automobile Club of Victoria. Latest cricket news, by courtesy of Reuters Ltd.

10.24—Elay Trewell, soprano.

10.31—British Official Wireless news. "Argus" news service. Meteorological information. Announcements.

10.41—George Lee, will again entertain you.

10.48—Collingwood Citizens' Band.

11—God Save the King.

5 CL

Morning Session.

11.30—G.P.O. Chimes.

11.31—"Advertiser" News Service.

11.43—"Advertiser" News Service.

11.55—Vocation number.

12—G.P.O. Chimes.

12.1—"Advertiser" News Service and Cricket scores.

12.18—Featuring a Stock Duo Art Number?

12.30—G.C.L. Studio Orchestra will be heard in a series of classical numbers.

1.55—(approx.)—Ward & Co.'s Stock Exchange Intelligence: Weather Reports and Station Announcements.

2—G.P.O. Chimes.

Afternoon Session.

3—G.P.O. Chimes.

3.1—Relay from "Maple Leaf" Cafe—Orchestral numbers.

3.45—From Studio—Serial Story.

4—G.P.O. Chimes.

4.1—Broadcast from "Arcadia" Cafe—Orchestra numbers.

4.45—Stock Exchange Reports, General Information, and Station Announcements.

5—G.P.O. Chimes.

Evening Session.

6.30—G.P.O. Chimes.

6.45—Horizon Stories.

7.30—Market Reports.

7.40—Sporting talk by "Old Timer."

8—G.P.O. Chimes.

8.1—Comedy Duo.

8.15—The Merrymakers.

8.30—Soprano, Miss G. Cusden.

8.35—The Merrymakers.

8.35—Contest, Miss E. Wilton.

8.40—Song, Mr. Wildsmith.

8.45—The Merrymakers.

8.50—Soprano, Miss H. Wheeler.

8.55—Musical Recital, Mr. C. Verne.

9—G.P.O. Chimes.

9.1—Weather Reports.

9.3—Concert Continued.

10—G.P.O. Chimes.

10.1—Concert continued.

10.15—"Advertiser" news service.

10.30—Concert Continued.

10.35—Station announcements and international cricket.

11—G.P.O. Chimes. National Anthem.

7 ZL

Morning Session.

11—"The Mercury" news, stock market, shipping, commercial intelligence, weather information. Records from the Studio.

12—Time Signals.

Afternoon Session.

9—Musical items from the Studio, weather information.

9.30—Robert Stock Exchange quotations.

9—Time Signals.

Early Evening Session.

7—Children's Corner. "Big Brother" chats to his Pal.

Evening Session.

7—"The Mercury" special Tasmania news service. Railway auction produce sales. Weather forecasts.

8—Robert Stock Exchange quotations.

8.15—Weekly gardening chat, by Mr. George Nation.

8.20—"Sports Budget," supplied by Mr. T. W. Newton, of Robert Sports Dept.

8.30—Miss Ruby Please, pianist; Mrs. L. H. Belts, contralto; Mr. S. J. Hall, baritone; Mr. George Collins, cloutnian; Mr. Jack Broadbent, baritone; Mr. J. Taylor, flautist.

9—"The Mercury" special interstate news service. Weather synopsis. Station announcements. National Anthem.



Saturday, August 21

2 BL

Early Morning Session.

7.15—Physical Training and Health Exercises.

7.30—Talk on Health and Hygiene.

7.45—Physical Training and Health Exercises.

7.45—Broadcasters' Special News Service, including news from Rugby.

7.45—Musical Programme from the Studio.

8—G.P.O. Clock and Chimes. Close down.

Morning Session.

16—G.P.O. Clock and Chimes. Special news service from the "Daily Telegraph."

18.10—Broadcasters' Turf Expert will discuss the training operations and horses' form from Randwick.

18.25—Special news from the "Daily Telegraph."

19.45—Music from the Studio.

19.45—G.P.O. Clock and Chimes. Special Cricket Session.

19.55—Musical Programme from the Studio.

20.15—London Metal Quotations.

20.35—Broadcasters' Information Service, including Mail, Shipping, Weather, Rainfall, Special Notices for the following day.

20.35—Musical Programme from the studio.

21.45—News from Sun Cable Edition.

21.55—Talk to Women by Mrs. Jordan; Race Results broadcast immediately after each Race.

22.25—Talk on Sporting and Athletic Fixtures for the day.

1—G.P.O. Clock and Chimes. Close down.

Afternoon Session.

2—G.P.O. Clock and Chimes. Special Sporting Information broadcast by courtesy of The Sun Newspapers.

2—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

4—G.P.O. Clock and Chimes. Uncle George and the Kite.

6—Pantomime Dinner Orchestra.

7.15—Results of football, increases, and sporting information.

7.30—Country news from "The Sun".
7.45—G.P.O. Clock and Chimes. Close down.

Evening Session.

- 8—G.P.O. Clock and Chimes; Empire Theatre Symphony Orchestra, under the direction of Mr. F. Watkins.
8.10—From the Studio: Lecture Recital by Mr. Roland Foster, of the State Conservatorium.
8.45—Sydney Orpheus Orchestral Society, broadcast from Adyar Hall.
10.15—From the studio: Miss Edith Dickerson (songs at the piano).
10.22—Al. Hammett and the Ambassadors Dance Band, broadcast from the ballroom of the Ambassador. During his broadcast he will introduce dances. Miss Edith Dickerson will sing songs at the piano, together with news reports by courtesy of The Sun News-papers.
12—G.P.O. Clock and Chimes; National Anthem.

3 L O

Morning Session.

- 11—Sonora Recital.
11.10—Harold Rodgers, organ.
11.20—Kathleen Rochfort, soprano.



A flashlight of the dinner to Captain Cobham at Farmer's. The aviator is seen at the back of the hall before the microphone. Before the dinner was finished a cable was received stating that New Zealanders had listened in and heard every word of his speech.

- 11.27—Sonora Recital.
11.37—Harold Rodgers, piano.
11.47—Kathleen Rochfort, soprano.
11.55—Sonora Recital.
12—Time Signal. Latest cricket news, Australia v. Leinster-Gower's XI, at Maida Vale, London. Broadcast by Reuters Ltd. British Official Wireless news from Rudy, Bettlers and the Australian Press Association cables. "Argus" and "Herald" news services. Shipping intelligence.
12.45—Stock Exchange information.

12.50—Meteorological information. Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports.

1—The Concert.

- 1.1—Studio Orchestra.
1.2—Result of August Hurdle.
1.10—Lillian Crisp, soprano.
1.17—Will Gaffey in ten minutes of Irish humour.

1.27—Studio Orchestra.
1.37—Result of Apprentices' Handicap.
1.38—Lillian Crisp, soprano.
1.45—Will Gaffey will again entertain you.
1.54—Studio Orchestra.
2—Close down.
2.35—Result of August Steeplechase.
2.40—Leslie Football, Melbourne v. Colling-

wood. Mr. Tod Collins will speak on the teams, the ground, the crowd, weather conditions, topical remarks.

2.45—The houses.

Afternoon Session.

- 3—Studio Orchestra.
3.10—Mr. Tod Collins, quarter-time interval. Story of Tod Collins' play. The scores.
3.12—Result of August Handicap.
3.16—Studio Orchestra.
3.40—Mr. Tod Collins, half-time interval. Story of second quarter's play. The scores.
3.45—Studio Orchestra.
3.50—Result of Three-year-old Handicap.
3.51—Mr. Tod Collins, third quarter starts. News of any special incidents in the interval.
3.55—Studio Orchestra.
4.20—Mr. Tod Collins, three-quarter time. Interval. Story of third quarter's play. The scores.
4.25—Studio Orchestra.
4.30—Result of August Welter.
4.31—Studio Orchestra.
4.45—Sporting results. "Herald" news service.
5—Close down.

Evening Session.

- 5.45—Sporting Results.

bidding on the play as the game proceeds.
7.50—Dr. J. A. Lench, D.Sc., "A Talk on Bridge."

8.10—A short lecture on Greco-Roman History, illustrated by several artists.

8.18—Kingsville and Yarraville Band, Mr. P. C. Johnston, conductor.

8.28—British Official Wireless News from Rugby. Latest cricket news by courtesy of Reuters Ltd. Meteorological information.

9.30—Kingsville and Yarraville Band, with the Melodious Minstrelsy, Bert Bradley and the Studio Orchestra, Kingsville and Yarraville Band.

10.30—Sporting Results—Races, Football, Metropolitan Soccer League. Metropolitan Amateur Association Lacrosse. "Argus" news service. Announcement.

11—God Save the King.

5 C L

Morning Session.

- 10.30—G.P.O. Chimes.
10.51—Studio Orchestra.
11.45—Ward & Co.'s Stock Exchange Intelligence; Official Weather Reports.

6—Children's Hour. "Mary Gamble." Answers in letters and birthday greetings. Poems: "Pussy's Lesson," "Baby Pig's Tail," "Story for the little ones," "The Babe who went to bed early." Stories for boys and girls, "Home and the making" and "How we can help the returned soldiers".

6.40—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd.; "Argus" and "Herald" news services. Sporting results, Reuters and Australian Press Association cables.

6.51—Weather synopsis. Shipping movements.

6.57—Stock Exchange information. 7.2—Fish Market Reports by J. R. Borrett Ltd.

7.4—River Reports.
7.5—Market Reports by Victorian Producers' Co-operative Co. Ltd.: Grain, chaff, hay, straw, jute, dairy produce, potatoes and onions.

Night Session.

7.20—Bridge—a team from the Melbourne Club, comprising Capt. E. A. Neale, home secretary, and Mr. V. A. Neale. Mrs. Mrs. Wimber and Mrs. Norman McCance will play several selected hands. Mr. Norman McCance, the Brisbane Editor of the "Australian," will announce the position of the cards in the various hands, and the

12—G.P.O. Chimes: Station announcements. 12.50—SCL Studio Orchestra will be heard in a series of classical numbers.

Afternoon Session.

2—From the Studio: Intermediate sporting results and "A" grade football results as available.

Evening Session.

6.30—G.P.O. Chimes.
6.31—Bedtime Stories.
7.30—Market Reports.

7.40—Resume of the chief sporting results throughout the Commonwealth.

8—G.P.O. Chimes.

8.1—Concert, continued.
8.30—Relay from Palais Royal, Tom Swift's Palace Royal Orchestra.

8—G.P.O. Chimes.

9.1—Concert, continued.
9.30—Concert, continued.

9.45—Tom Swift's Palace Royal Orchestra.
10.15—Sporting Results continued.
10.30—Concert, continued.
10.49—Relay from Palais Royal.

10.55—Station announcements and ships within wireless range.

11—G.P.O. Chimes. National Anthem.

7 ZL

Morning Session.

11—"The Mercury" news, stock market, shipping, commercial intelligence, weather information and sporting anticipations. Results from the Studio.
11.45—Robert Stock Exchange quotations.
12—Time signal.

Early Evening Session.

1—Children's Corner: "Big Brother" chats to his Pals.

Evening Session.

1—"The Mercury" Special Tasmanian News Service. Railway auction produce sales. Weather information, and sporting results.
1.45—Robert Stock Exchange quotations.
1.45—Song to Tasmania Movement. Miss Stella M. MacFarlane: "The Seaside Beauties of Tasmania."
2.20—Palais de Danse Hand. City Hall.
4.15—"The Mercury" Special Interstate News Service. Weather synopsis. Station announcements. Close down.



Sunday, August 22

2 BL

Morning Session.

11—Service broadcast from Chalmers Presbyterian Church.

Afternoon Session

2.30—Elbie Class, conducted by Mr. W. (Cain) Bradbury.
4—From the Trio, under the direction of Mrs. G. Vern Barnett.
4.15—Madame Iva Clarke (contralto).
4.25—Trio Selection.
4.40—Madame Iva Clarke.
4.47—Trio Selection.
5—G.P.O. Clock and Chimes; Close down.

Evening Session.

5—G.P.O. Clock and Chimes: Uncle Jack and the Kiddies.
7.15—Lecture broadcast from The King's Hall.

3 LO

Morning Session.

10.30—Express Train Information. Reuters Ltd., Australia v. Somerset.
10.45—Latest Cricket Scores, by courtesy of Service from The Salvation Army City Temple, conducted by the Chief Secretary and Mrs. Gaskin.

Afternoon Session.

2.05—Latest Test Cricket scores, by courtesy of Reuters Ltd., Australia v. Somerset, played at Taunton.
2— Pleasant Sunday Afternoon Service. General Wesley Church. Chairman, Rev. J. B. Cain.
4.15—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia v. Somerset, played at Taunton.

Evening Session.

6.15—Children's Hour. Answers to letters and birthday greetings. Songs by "Billy Bumby" and his "Bear Rabbits." Stories: "Mingo and Lovelot Life," and "Crocodile Farm and Crocodile Tears."
6.45—Close down.

Night Session.

6.55—Latest Cricket Scores, by courtesy of Reuters Ltd.
7—Service from Seels' Church, Collins Street, Melbourne, conducted by the Rev. Dr. Burland.
8.30—Brunswick City Band.

8.35—Eisy Trewick, soprano.
8.45—Alberto Zelman, violin.
8.50—Brunswick City Band.
9.15—Eisy Trewick, soprano.
9.20—Alberto Zelman, violin.
9.30—Eisy Trewick, soprano.
9.35—Brunswick City Band.
9.35—"Armenia" news service. Announcements. Latest cricket scores, by courtesy of Reuters Ltd., Australia v. Somerset, played at Taunton.
10—God Save the King.

5 CL

Morning Session.

11—Bible from Pitt Street Methodist Church
—Divine Service.

Evening Session.

6.30—G.P.O. Chimes.
6.31—Songs for the children.
7—Relay from Black Forest Baptist Church
—Divine Service.
8.15—Approach—from the studio; Studio Concert.
9—G.P.O. Chimes.
9.15—Weather Report.
9.3—Studio concert, continued.
10.25—Station Announcements.
10.30—G.P.O. Chimes; National Anthem.



Monday, August 23

2 FC

Early Morning Session.

7—The Chimes of 2FC and Announcements.
7.15—Time signals.
7.30—Music from the Studio.
7.30—Weather Information, Commercial News, Shipping Intelligence, and Markets.
7.40—"Sydney Morning Herald" news service.
8—Time Signals. Music from the Studio.
8.15—Close down.

Morning Session.

9.15—The Chimes of 2FC and Programme Announcements.

9.20—Music from the Studio.
9.45—A Morning Reading.
10—Time Signals. Music from the Studio.
10.15—Late "Sydney Morning Herald" news service.
10.15—Music from the Studio.
11—Progress Cricket Talk.
11.15—Cables; Music from the Studio.
11.30—Close down.

Midday Session.

12—Time Signals. The Chimes of 2FC and Announcements.

12.05—Stock Exchange first call.
12.10—Music from the Studio.
12.40—Rugby Wireless News.
1—Time Signals. Weather Intelligence.
1.15—"Evening News" news service.
1.20—Music from the Studio.
1.30—Stock Exchange—second call.
1.35—Music from the Studio.
2—Time Signals: Close down.



Afternoon Session.
2.30—The Chimes of 2FC and Announcements.
2.35—A Recital on the Upright Player Piano.
3.20—From Farmer's Tea Room: The Oak Hall Trio will play (leader, Mr. Horace Keats).
3.40—Miss Gladys Finister, soprano.
3.45—From Farmer's Tea Room: Oak Hall Trio.
4.15—Music from the Studio.
4.25—Miss Muriel Humphries, contralto.
4.35—From Farmer's Tea Room: The Oak Hall Trio.
4.45—Music from the Studio.
4.55—Music from the Studio.
4.55—From Farmer's Tea Room: The Oak Hall Trio.
4.55—Music from the Studio.
4.55—Miss Gladys Finister, soprano.
4.55—From Farmer's Tea Room: The Oak Hall Trio.
4.55—Music from the Studio.
4.55—Miss Muriel Humphries, contralto.
4.55—From Farmer's Tea Room: The Oak Hall Trio.
4.55—Music from the Studio.
4.55—Music from the Studio.
5—Time Signals. Close down.

Early Evening Session.

6—Time Signals: The Chimes of 2FC.
6.15—The "Hobie Man" talk to the children.
6.45—Broadcast from the Hotel Australia, Sydney, item by the Hotel Australia Orchestra, conducted by Miss A. H. Bean.
7.15—From the Studio: "Morning Show" late news service, weather information.
7.30—Dalgety's Market Report (wool, wheat, stock), fruit and vegetable markets.
7.45—Close down.

Night Session.

7.55—The Chimes of 2FC and Announcements.
8—Broadcast from the Haymarket Theatre, Sydney, Operatic Orchestra, under the baton of Mr. Stanley Fenton.
8.25—A talk by Mr. W. F. Jackson, "Popinjay-leau"—"Chaise and Forest."
8.35—Mr. Lionel Lawson, violin solo.
8.45—Mr. Jack Lunadine, well-known composer and entertainer, will commence a new series of "Musical Stories" in which listeners will be invited to send in their guess as to the title of each piece played by Mr. Lunadine. The correct answer will receive a prize.
8.50—Miss Elizabeth White, piano solo.
9—Broadcast from the Haymarket Theatre, Sydney, vocal act.
9.20—Miss Gladys Rees will continue her "Behind the Scenes" talk.
9.35—Miss Anna Donia, soprano: "A Dream Garden"; "Lullaby"; (b) "Just a Little Bit" (Manhattan).
9.45—Mr. Lionel Lawson, violin solo.
9.52—Mr. Jack Lunadine, Sleepyhead.
10.2—Broadcast from the Haymarket Theatre, Sydney: Orchestral Items.
10.25—Miss Elizabeth White, piano solo.
10.35—Miss Anna Donia, soprano: (a) "Bird of Love Divine" (Wind); (b) "O Soie Moi" (Casta).
10.35—Broadcast from the Wentworth Hotel, Sydney: Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12—National Anthem: Close down.

2 BL

Early Morning Session.

7.15—Physical Training and Health Exercises.
7.20—Talk on Health and Hygiene.
7.25—Physical Exercise and Health Exercises.
7.45—Broadcasters' Special News Service, including news from Rugby.
7.55—Musical programme from the studio.
8—G.P.O. Clock and Chimes. Close down.

Morning Session.

10—G.P.O. Clock and Chimes: Special News Service from the "Daily Telegraph."
10.15—Music from the Studio.
10.25—Special news from the "Daily Telegraph."
10.45—Music from the Studio.
11—G.P.O. Clock and Chimes: Special Cricket Session.
11.25—Medical Programme from the Studio.
11.45—Music.
11.25—Broadcasters' Information Service, including Mails, Shipping, Weather, Rainfall, Social Fixtures for the following day.
11.45—Musical Programme from the studio.

- 11.50—News from "Sun" Cable Edition.
 12—G.P.O. Clock and Chimes. Talks to Women by Mrs. Jordan.
 12.30—Burmasters' Turf Expert will discuss his training operations and horses form from Handvale.
 12.45—Hillier's Instrumental Quartette, under the direction of Garry Casting.
 1.15—From the studio: Palm Grove Orchestra, under the direction of Mr. Stan Fotheringham.
 1.30—Sydney Stock Exchange calls.
 1.45—Latest sporting information from the "Sun."
 2—G.P.O. Clock and Chimes. Close down.

Afternoon Session.

- During the afternoon results of races will be broadcast immediately after each race.
 1—G.P.O. Clock and Chimes. Weather report and Social Notes from the "Sun."
 3.10—Resume of night's programme.
 3.15—David Jones' Tea Room Trio.
 3.30—Talk on "A Concert in Philanthropical Thought" by Mr. J. M. Prentiss.
 4.15—Music from the Studio.
 4—G.P.O. Clock and Chimes; David Jones' Tea Room Trio.
 4.16—Music from the Studio.
 4.30—Serial Story, entitled "The Mad Song" (Continued).
 4.45—Music from the Studio.
 5—G.P.O. Clock and Chimes; Producers' Distributing Society's Market Report.
 5.10—Shipping Information.
 5.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 5—G.P.O. Clock and Chimes. Uncle George and the Kiddies.
 6.45—Pavilion Dinner Orchestra, under the direction of Cec. Morrison. Special Country Session.
 7.15—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.
 7.20—Weather Reports.
 7.30—Talk on Land Subjects.
 7.30—Stock Exchange Reports.
 7.37—Talk on distributing Society's fruit and vegetable report.
 7.42—Fruit and vegetable reports (Sun).
 7.45—Grain and folder Reports (Sun).
 7.48—Country News from The Sun.
 7.55—Close down.

Evening Session.

- 8—G.P.O. Clock and Chimes; Newtown Band, broadcast from Industrial Hall, Newtown.
 8.20—Morris and Vane (musical novelties).
 8.40—Lecture from the Studio.
 9—G.P.O. Clock and Chimes.
 9.10—Weather Report and Forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist.
 9.25—Al. Hammert and the Ambassadors Dance Band broadcast from the ballroom of the Ambassadors. During the intervals between the dances description of friends and social notes will be broadcast by Mrs. Potts.
 9.30—Interval.
 9.35—Lecture from the studio.
 9.55—Newtown Band broadcast from Industrial Hall, Newtown.
 10.15—Al. Hammert and the Ambassadors Dance Band, broadcast from the ballroom of the Ambassadors. During intervals between dances, News Reports by courtesy of the Sun Newspaper will be broadcast.
 12—G.P.O. Clock and Chimes; National Anthem.

4 Q G

Midday Session.

- 12.55—Tune-in.
 12.58—Time Signal.
 1—Market Reports supplied by the Council of Agriculture; Stock Exchange Information supplied by the Committee of the Brisbane Stock Exchange; Weather Information supplied by the Commonwealth Weather Bureau; News Service supplied by "The Daily Mail." News service supplied by "The Daily Standard."
 1.20—Close down.

Afternoon Session.

- 2.30—A programme of Music from the Studio.

- 4.15—News Service supplied by "The Telegraph."
 4.30—Close down.

Early Evening Session.

- 6.25—Tune-in.
 6.30—The Children's Session—Stories by "The Sunday Post."
 7—The Farmers' Session. Market Reports supplied by the Council of Agriculture. Lecturer: "Organisation of Pig Industry." Mr. Sheldon (Instructor in pig raising).
 7.20—News Service supplied by "The Standard." Stock Exchange Information supplied by the Committee of the Brisbane Stock Exchange.
 7.30—Lecturer: "The Menace of Mahomedanism," by Rev. Canon Garland.

Night Session.

- 7.45—Lecture Session: A talk by Mr. P. Creyton (President, Brisbane Branch, Workers' Educational Association).
 8—Studio's programme will be operatic, and has been arranged by Mrs. Robert Bell.
 9.20—Weather Information and Announcements.
 9.30—From the Band Practice Room. A programme of music by the South Brisbane City Orchestra, under the leadership of Mr. J. W. Ferguson.
 10—From the Studio. "The Daily Mail" News Service. Close down.

3 L O

Midday Session.

- 12—Time Signal. Latest cricket news, by courtesy of Reuters Ltd. British Official Wireless news from Rugby. Reuters and the Australian Press Association cables, "Argus" and "Herald" news services.
 12.45—Shipping Intelligence. Stock Exchange Information.
 12.55—Meteorological Information. Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports.
 1—Time signal.
 1.1—Studio Orchestra.
 1.15—Elliott Burke, contralto.
 1.17—Arthur Cornell, alto/contralto.
 1.24—Studio Orchestra.
 1.41—Elliott Burke, contralto.
 1.46—Studio Orchestra.
 2—Close down.

Afternoon Session.

- 3—Latest cricket news, by courtesy of Reuters Ltd.
 3.1—Will Page and his Popular Players.
 3.15—Harry Wotton, baritone.
 3.17—Will Page and his Popular Players.
 3.27—Mrs. Sill will give a talk on Homecrafts.
 3.42—Will Page and his Popular Players.
 3.52—Vera Spaul, soprano.
 4—Will Page and his Popular Players.
 4.7—Flora Ell, Supervisor of Domestic Arts, Education Department, Melbourne, "Domestic Economy."
 4.52—Harry Wotton, baritone.
 4.56—Will Page and his Popular Players.
 4.57—Vera Spaul, soprano.
 4.45—"Herald" news service. Latest cricket news, by courtesy of Reuters Ltd. Stock Exchange Information.
 5—Close down.

Evening Session.

- 5.45—Children's Hour. Answers to letters and birthday greetings. "Little Miss Keebra-harras" will tell her smallest friends how "Max, Tom and Bubble Go Skating," then the third instalment of "The Girl Who Played the Game."
 6—Miss Belle Lockwood, will sing "Wee McGreene."
 6.40—Latest cricket news, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association cables.
 6.52—Weather synopsis. Shipping movements.

- 6.57—Fish Market Reports by J. R. Burnett Ltd.
 7.2—Stock Exchange Information.
 7.4—River Reports.
 7.6—Market Reports by the Victorian Producers' Co-operative Co. Ltd.: Haymarket sheep sales, poultry, grain, chaff, hay, straw, etc., dairy produce, potatoes, and onions. Market prices of oranges and lemons, by the Victorian Central Citrus Association Pty. Ltd.

Night Session.

- 7.20—Under the auspices of the New Settlers' League, Mr. L. B. Fanning, "Country Telephone Services."
 7.40—Under the auspices of the Department of Agriculture, Mr. R. T. Archer, Senior Dairy Inspector, "Cream Grading."
 8—Pianoforte Recital by Harold Elivins, will be transmitted from Allan's Music Warehouse.
 8.45—Rev. R. G. Nicholls, "St. Mark's Social Settlement."
 9—Studio Orchestra.
 9.10—T. Semple, tenor.
 9.17—Studio Orchestra.
 9.27—Victorian Railways Institute Dramatic Society.
 10.2—Reginald Bradley, violin.
 10.2—Mr. D. H. Dureau.
 10.17—"Argus" news service. Latest cricket news, by courtesy of Reuters Ltd. British Official Wireless News from Rugby. Announcements. Weather Forecasts.
 11—God Save the King.

5 C L

Morning Session.

- 11.30—G.P.O. Chimes.
 11.45—Featuring a Stock Due Art Number.
 11.49—Advertisement News Service.
 11.55—Voluntary number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket scores.
 12.15—Featuring a Stock Due Art Number;
 12.20—5CL Studio Orchestra will be heard in a series of classical numbers.
 1.55 (approx.)—Ward & Co.'s Stock Exchange Intelligence; Weather Reports and Station Announcements.
 2—G.P.O. Chimes.

Afternoon Session.

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

Evening Session.

- 6.30—G.P.O. Chimes.
 6.45—Bedtime Stories.
 7.30—Market Reports.
 7.40—Mr. W. Fredrickson, automotive engineer, of Vacuum Oil Co., will give his weekly motor talk.
 7.50—Care of the Teeth, by Mr. A. E. Dunney.
 8—G.P.O. Chimes.
 8.1—A programme of dance music relayed from the Palais Royal, interspersed with "Maple Leaf" Cafe.
 8.20—Twinkle's Boys' Club.
 8.40—Palais Royal, continued.
 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Palais Royal Orchestra.
 10.10—"Advertiser" news service and ships wireless reports.
 10.30—Palais Royal Orchestra.
 10.55—Station Announcements and International Cricket.

7 ZL

Morning Session.

11—"The Mercury" news, stock market, shipping, commercial intelligence, weather information. Records from the Studio.
11-Time signal.

Afternoon Session.

1-Musical items from the Studio. Weather information.
1-Stock Exchange quotations.
4-Time signal.

Early Evening Session.

1-Children's Corner. "My Brother" chats to his pals.

Evening Session.

1—"The Mercury" special Tasmanian news service. Railway auction produce sales. Weather information.

12-Hobart Stock Exchange quotations.

11.10—Talk by Mr. W. E. Schuster, lectures in mechanical engineering. "Some Relations of the Engineer to Society."

11.30—Miss Dorothy Newton, contralto; Miss Dorothy Glover, mezzo contralto; Miss Eileen Lupton, soprano; Miss Beryl Steele, soprano; Mrs. E. W. Gately, M.A.B., conductor; Miss Amy Butterworth, pianist; Mr. George Muir, tenor; Mr. Bob Lyons, baritone.

5.30—"The Mercury" special Interstate news service. Weather synopses. Station announcements. National Anthem.

3.30—From Farmer's Tea Rooms: The Oak Hall Trio will play leader, Mr. Horace Keats.
3.40—Miss Eleanor Stanton, contralto: "Kilberryne" (Ballad).
3.45—From Farmer's Tea Rooms: The Oak Hall Trio.
3.55—Music from the Studio.
4—Miss Sybil Athwood, mezzo.
4.5—From Farmer's Tea Rooms: The Oak Hall Trio.

4.55—Music from the Studio.

5—Miss Eleanor Stanton, contralto: "As I went a-roaming" (Brahms).

4.23—The Oak Hall Trio.

4.30—Music from the Studio.

4.40—Miss Sybil Athwood, mezzo.
4.45—Stock Exchange, Third Call.

4.45—Music from the Studio.

5—Close down.

Early Evening Session.

5.30—The Chimes of 2FC and Announcements.
5.35—The Chimes of "Hello Mum" talk to the children.

6.25—The juvenile pupils of Miss Stafford.

6.35—The Radiograph Competition.

6.45—Broadcast from the Hotel Australia, Sydney—Orchestral items.

6.50—From the Studio: "Evening News" late news service, weather information.

7.30—Daugety's Market Reporta (wool, wheat, stock), fruit and vegetable markets.

A Talk by Mr. J. K. Powell on: "Exercising."

7.50—A Talk by Mr. J. (3) Leachley, on "Cavatines on the G.P.O."

Night Session.

7.45—The Chimes of 2FC and Announcements.

8—Broadcast from the Strand Theatre, Leichhardt District Band, conductor, Mr. E. P. Kerr.

8.12—Mr. R. A. Burfman, baritone.

8.20—Broadcast from Burdettin House, vocal recital by Daphne Starkey, assisted by Roy Scrivenor, baritone.

8.30—Leichhardt District Band.

9.10—Miss Virginia Bassett, contralto.

9.18—Leichhardt District Band.

9.32—Mr. R. A. Burfman, baritone.

9.40—Leichhardt District Band.

9.50—Miss Virginia Bassett, contralto.

10—Broadcast from the Lorrie Wintergarden, featuring several items; conductor, Mr. Alfred Monson.

10.30—Broadcast from the Wentworth Hotel, Sydney—Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.

12—National Anthem; Close down.

2 BL

Early Morning Session.

7.15—Physical Training and Health Exercises.

7.20—Talk on Health and Hygiene.

7.35—Physical Training and Health Exercises.

7.45—Broadcast Special News service.

7.52—Special News from Rugby.

7.55—Musical Programmes from the Studio.

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

8—Usual Morning Session.

Afternoon Session.

During the Afternoon results of races will be broadcast immediately after each race by courtesy of the Sun Newspaper.

3.15—Clock and Chimes: Weather Report and Social Notes from "The Sun."

3.15—Civil Service Restaurant Trio.

3.30—Talk on Modern Psychology" by Mr. J. M. Prentice.

3.45—Miss Ruth Michael (soprano).

3.55—Musical programme from the studio.

4.00—G.P.O. Clock and Chimes: Civil Service Restaurant Trio.

4.30—Serial story, entitled "The Mad Song."

4.45—Musical programmes from the studio.

5—G.P.O. Clock and Chimes: Shipping Information when available.

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

Early Evening Session.

6—G.P.O. Clock and Chimes: Uncle Jack and the Kiddies.

6.15—Broadcasters' Dinner Orchestra.

6.30—Special Country Session.

6.45—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.

7.15—Weather Reports.

7.20—Talk on Land Subjects.

7.31—Stock Exchange Reports.

7.37—Producers' Distributing Society's Fruit and Vegetable Report.

7.45—Fruit and Vegetable Reports (Sun).

7.45—Grain and Woolster Reports (Sun).

7.45—Country News from the Sun.

7.55—Close down.

Evening Session.

8—G.P.O. Clock and Chimes: Broadcasters' Miniature Orchestra.

8.15—Mr. Norman Janson (Baritone).

8.25—Miss Anna Burke (mezzo-soprano).

8.35—Miss Crosby Brown (soprano solo).

8.37—Mr. Chas. O'Mara in Irish songs and stories.

8.45—Broadcasters' Miniature Orchestra.

8.55—Resume of following day's program.

8.55—Market Reports and Forecast by courtesy of Mr. C. J. Moore, Govt. Meteorologist.

9—G.P.O. Clock and Chimes: Announcements.

9.15—Elite Old Time Dances, broadcast from Marrickville Town Hall.

9.20—Interval.

9.25—Selections from the Studio.

9.35—Broadcasters' Miniature Orchestra.

10—Mr. Norman Janson.

10.15—Miss Anna Burke.

10.17—Mr. Crosby Brown.

10.25—Mr. Chas. O'Mara.

11—Elite Old Time Dances from Marrickville Town Hall. During the intervals between o. dances, news reports, by courtesy of the Sun, will be broadcast.

11—From the Studio: Palm Grove Orchestra, under the direction of Mr. Stan Fotheringham, until midnight.

12—G.P.O. Clock and Chimes: National Anthems.

4 QG

Midday Session.

12.35—Tune-in Signal.

12.35—Time Signals.

1—Market Reports, Stock Exchange, Weather, "The Daily Mail" News, the "Daily Standard" News.

1.20—Close down.

Afternoon Session.

2.30—A programme of music from the Studio.

4.15—"The Telegraph" News.

4.30—Close down.

Early Evening Session.

6.25—Tune-in.

6.30—"The Children's Session, Stories by 'Uncle Ben' and 'Uncle Jim.'

7—The Farmers' Session, Stories and Reports.

7—Lectures: "On the Road to Cooktown"; "The Impressions of a 'Queenslander'" by Mr. A. T. Baker (Secretary, Queensland Beekeepers' Association).

7.20—"The Standard" News, Stock Exchange.

7.30—Close down.

Night Session.

7.45—Lecture Session: "Photography," by Mr. F. C. South (Manager, Kodak Ltd.).

8—Limeliters' Soldier Concert.

9—From the Studio: "The Daily Mail" News Service. Close down.

3 LO

Midday Session.

12—Time Signal. Latest cricket, Australia v. Somerset, by courtesy of Reuters Ltd.

British Official Wireless news from Rugby, Reuters and the Australian Press Association cables.

"Argus" and "Herald" news service, Melbourne, Melbourne Intelligence.

12.30—Stock Exchange Information.

1—Weather Reports.

1—Marine Observatory.

1.15—Herbier, Newhouse, educationist.

1.20—Zoe Harrison, violin.

1.27—Studio Orchestra.

1.31—Gwen Harrison, piano/piano.

1.47—Studio Orchestra.

2—Close down.



Tuesday, August 24

2 FC

Early Morning Session.

1—The Chimes of 2FC and Announcements. Time Signals.

1—Cricket Scores of the second day's play, of the Test Match; Australia versus Somerset.

1—Weather Information; Commercial News; Shipping Intelligence and Markets.

1—Sydney Morning Herald" News Service.

1—Time Signals; Cricket Scores; Music from the Studio.

1.30—Close down.

Morning Session.

1.15—The Chimes of 2FC and Announcements.

1.20—Music from the Studio.

1.45—A Talk by the 2FC Racing Commissioner.

10—Time Signals; Music from the Studio.

Cricket Scores.

1.45—Late "Sydney Morning Herald" News Service.

1.45—Music from the Studio.

11—Procrust Cricket Talk; Cables.

11—Australian Press Association and Reuters' Cable services.

1.15—Cooking Tales and Recipes by Miss Mary.

1.30—Close down.

Midday Session.

12—Time Signals; The Chimes of 2FC and Announcements.

12—Stock Exchange—First Call.

12.10—Music from the Studio.

12.10—Rugby Wireless News.

1—Time Signals; Weather Intelligence.

1.30—"Evening News"; Midday News Service, Producer's Distributing Society's Report.

1.30—Music from the Studio.

1.30—Stock Exchange—Second Call: Musical Items.

1.30—Time Signals; Close down.

Afternoon Session.

1.30—The Chimes of 2FC and Announcements.

1.30—Some New Records.

Afternoon Session.

- 5 Latest Cricket Scores, by courtesy of Reuters Ltd., Australia v. Somerset, played at Taunton.
 3.1—Songs by the Students of Wesley College, transmitted from the School Hall.
 8.30—Studio Orchestra.
 9.45—"Argus" News. Meers, Buckley and Nunn Ltd. will give a Fashion Talk.
 3.35—Very Small, sombre.
 4.2—Studio Orchestra.
 4.12—Duet for flute and clarinet.
 4.17—Vera Spain, soubrette.
 4.24—Nation Moreland, Infant Welfare.
 4.36—Studio Orchestra.
 4.45—Latest Test Cricket Scores, by courtesy of Reuters Ltd., "Herald" news service, Stock Exchange information.
 5—Close down.

Evening Session.

- 5.45—Children's Hour. Answers to letters and Birthday Greetings.

- 6—Billie Lockwood will sing, "O How I Long to See You Again"; "The Girl I Left Behind Me"; "Mary Gunness"; "Thimble the Prickle Hedge"; "Playing Music." Story for the littler ones, "Lilian's Puppy." Story for boys, "Robert Clyde in India." For girls' stories from "The Golden Window."

- 6.40—Latest Test Cricket Scores, by courtesy of Reuters Ltd., "Argus" and "Herald" news services, Reuters and the Australian Press Association cables.

- 6.55—Weather synopses. Aerial mail information by the Australian Aerial Services Ltd.

- 6.58—Stock Exchange information.

- 7.2—Fish Market Reports by J. R. Forrest Ltd.

- 7.4—River Reports.

- 7.6—Market Reports by the Victorian Producers Co-operative Co. Ltd.; Haymarket sales, poultry, grain, meat, hay, straw, live, dairy produce, potatoes, and onions.

Night Session.

- 7.20—Mr. H. R. Wilmet will speak on "Perfume."

- 7.45—Under the auspices of the University Extension Board—Mr. K. H. Bailey, B.A., D.L.C. Principal of Queen's College, "International Labour Organisations."

- 8—Dr. Earl Page's speech on the Referendum Proposals, transmitted from the Temperance Hall, Hamilton.

- 9.20—Studio Orchestra.

- 9.40—Eddy Trewick, soprano.
 9.44—Dubbo Hills, Popular Science.

- 10.3—Studio Orchestra.

- 10.0—Eddy Trewick, soprano.

- 10.16—Latest Test Cricket Scores, by courtesy of Reuters Ltd., British Official Wireless news from Rugby. Announcements.

- 10.26—Studio Orchestra.

- 10.38—Eddy Trewick, soprano.

- 10.49—"Argus" news service. Announcements. Weather forecasts.

- 10.56—Studio Orchestra.

- 11—God Save the King.

5 CL

Morning Session.

- 11.00—G.P.O. Chimes.
 11.31—Picture of a Stock Two Art Number.
 11.40—"Advertiser" News Service.
 11.45—Vocalion number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket scores.
 12.16—5CL Studio Orchestra will be heard in a series of classical numbers.
 1.55 (approx.)—Ward & Co.'s Stock Exchange Intelligence; Weather Reports and Station Announcements.

- 2—G.P.O. Chimes.
 Afternoon Session.
 2.1—G.P.O. Chimes.
 2.2—Relay from "Maple Leaf" Cafe—Orches.
 2.3—A series of classical numbers.
 2.45—5CL Studio—Serial Story.
 4—G.P.O. Chimes.
 4.1—Broadcast from "Arcadia" Cafe—Orches.
 4.2—Close numbers.

- 4.55—Stock Exchange Reports, General Information, and Station Announcements.
 5—G.P.O. Chimes.

Evening Session.

- 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories.
 7.30—Market Reports.
 7.44—Million talk by Mr. Jackett.
 8—A programme of classical music by the Caledonia Quartette.
 9—G.P.O. Chimes.
 10.1—Weather Reports.
 10.3—Caledonia Quartette.
 10—G.P.O. Chimes.
 10.1—Miss J. Watson, soprano;
 10.5—Caledonia Quartette.
 10.6—"Mercury" news service, and ships within wireless range.
 10.30—Musical Items.
 10.43—Caledonia Quartette.
 10.45—Mr. V. McMurray, tenor.
 10.55—Station announcements and International Cricket.
 11—G.P.O. Chimes. National Anthem.

7 ZL

Morning Session.

- 11—"The Mercury" news, stock market, shipping, commercial intelligence, weather information. Records from the Studio.
 12—Time Signals.

Afternoon Session.

- 2.30—Hobart Stock Exchange quotations.
 4—Weather forecasts. Time Signals.

Early Evening Session.

- 7—Children's Corner. "Big Brother" chats to his pals.
 7.15—The adventures of George the Bookshelf Cat. "Nancy and Nugget rule the Roost," by Aunt Stella.

Evening Session.

- 8—The "Mercury" special Tasmanian news service. Railway auction produces sales. Weather information.
 8.30—Hobart Stock Exchange quotations.
 8.45—Literary Lapses and Library Lists, by Mr. W. E. Fuller.
 8.50—Musical Items from the Studio—special request numbers.
 8.55—Photograph talk, by Mr. Ch. H. Sims, manager of Kodak Ltd., Hobart, "A Great Australian Industry."
 9.20—Musical Items continued.
 9.50—The "Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.



Wednesday, August 25

2 FC

Early Morning Session.

- 7—The Chimes of 2FC and Announcements.
 7.3—Time Signals.
 7.5—Cricket Scores of the third day's play, Australia versus Somerset.
 7.10—Weather Reports. Shipping Intelligence.
 7.25—Wool Sales, Broadcast Markets, Interstate Markets, Produce Markets.
 8—Time Signals; Cricket Scores; Music from the studio.
 8.10—Close down.

Morning Session.

- 9.15—The Chimes of 2FC and Programmes Announcements.
 9.20—World news from the studio.
 9.45—Australian Headline.
 10—Cricket Scores.
 10.5—Late "Sydney Morning Herald" news service.

- 10.15—Music from the Studio.
 11—A Programmatic Cricket Talk on to-day's cricket match in England.

- 11.30—Music from the Studio.
 11.36—Close down.

Midday Session.

- 12—Time Signals. The Chimes of 2FC and Announcements.
 12.15—Stock Exchange, first call.
 12.50—Rugby Wireless News.
 1—Time Signals. Weather Intelligence.
 1.5—Cricket Scores.
 1.7—"Evening News" Middle News Service. Producer's Distributing Society's Report.
 1.20—Music from the Studio.
 1.30—Stock Exchange, Second Call.
 1.33—Music from the Studio.
 2—Time Signals. Close down.

Afternoon Session.

- 2.36—The Chimes of 2FC and Announcements.
 2.35—Broadcast from the Pitt Street Congregational Church; organ recital by the people of the Little Free Library.
 2.30—From Farmer's Tea Rooms: The Oak Hall Trio (Leader, Mr. Horace Keats).
 3.40—Miss Persis Butler, soprano.
 3.45—From Farmer's Tea Rooms: The Oak Hall Trio.
 3.55—Music from the Studio.
 4—Miss Florence Barrow, contralto: "In Heaven." (Elgar).
 4.15—The Oak Hall Trio.
 4.20—Music from the Studio.
 4.25—Miss Persis Butler, soprano.
 4.30—The Oak Hall Trio.
 4.35—Music from the Studio.
 4.45—Miss Florence Barrow, contralto: "If there Were." (Ireland).
 4.40—Music from the Studio.
 4.45—Stock Exchange, Third Call.
 4.46—Music from the Studio.
 4—Close down.

Early Evening Session.

- 6—Time Signals. The Chimes of 2FC. Announcements.
 6.5—The "Hello Man" talks to the children.
 6.45—Broadcast from the Hotel Australia, Sydney. Orchestral items.
 7.15—Dinner and Supper Reports (wheat, stock, fruit and vegetable markets). "Evening News" Late News Service and Weather Intelligence.
 7.30—Close down.

Night Session.

- 7.55—The Chimes of 2FC and Announcements.
 8—Broadcast from the Picnic Hall, Dubbo; to be carried over a line of 200 miles, the Dubbo District Caledonian Society presents the Royal Scots' Kiltie Quartette, in a Grand Scottish Concert, comprising quartets, duets, solo numbers etc., including many original arrangements of Scotch folk songs. The Royal Scots' commander Miss Jean Grant, soprano; Miss Jean Graham, contralto; Mr. Robert M. Baxter, tenor; Mr. Stuart Peters, bass baritone and manager, and Mr. James Brack (at the piano), musical director. "God Save the King."
 8.5—Piano selection: "Burdens Boys" Pipe Band; "Something to Stir the Blood"; 2, Too the Chief Is Piped until His Chair By Pipe Major Young. All standing.
 8.15—The Royal Scots' Kiltie Quartette will salute him "Hail to the Chief."
 8.20—Mr. Robert Baxter will salute his Native land "Hail Caledonia."
 8.25—Miss Jean Grant will revive many tender memories w/ her song: "Dream o' Home."
 8.30—Mr. Stuart Peters make a lovin' invitation the Jeanie Graham, "Will you gang lea the Highlands. Lassie Lindsay."
 8.35—Mr. Stuart Peters will summon all the lasses w/ the Jacobite recruiting song (1746): "The Standard on the Braes o' Mar."
 8.44—Miss Jean Graham, the limer—declares "He's my Kissin' me."
 8.48—Moors, Baxter and Peters in a duet: An anti-feminist in a modern setting (arr. J. S. Bach).
 8.52—The Royal Scots' Kiltie Quartette, in song o' Burns' love singer: "Bonnie Wee Thing."

Art. J. Beach; Robert Baxter, solo voice.
5—Mr. Stuart Peters, like the Souther, who "Told his queerest stories" in Scott's famous "Swatches o' Homecoming."
6—Prize Winners will give in a gulf Scotch dance as it should be done.
10—Address by Vice-Chair Rev. A. McCallum.

11—The Burnsides Hear Laddies will blow up again in one o' their selections.

12—The Royal Scots' Kilts present a Scottish Scene entitled "The Shepherd's Cot." Written and arranged by James Brindall, Ian MacLennan, Robert Hunter, Jean Higgins, Jean Grahan; their daughter, Jean Graham; The Laird, Stuart Peters. Scene, interior of the Shepherd's Cottage, Time, early morning. The musical numbers are as follows: (a) "Up the Mountain No so far as Me"; (b) "Cue the Yester in the Morning"; (c) "Down the Burn"; (d) "The Laird o' Cawdor"; (e) "Huntingtower"; (f) "Come under my Plaidie"; (g) "My Love She's but a Lassie Yet!"
16—Winners in a lighsome step: A Scottish dance.

10—No—For a comic—Stuart Peters: "Tim and Garrison."

10—From the studio: the 5th of the Radio Bridge series in which four players led by Mr. F. M. Martin, will play through a selected hand at Bridge. The complete play will be broadcast. Mr. Martin, who also has the key to the perfect playing of the hand will answer on the phone and broadcast simultaneously inquiries by listeners concerning the play. The perfect hand as played by expert players in U.S.A. will be given to Bridge enthusiasts each week after the games are played every Wednesday.

10—The 2PC Dance Band, conductor, Mr. Eric Pearce.

11—Report from the Wentworth Hotel, Sydney: Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.

12—Close down.

2 BL

Early Morning Session.

1.15—Usual Early Morning Session.

Morning Session.

18—Usual programme.

Afternoon Session.

During the afternoon Race Results will be broadcasted immediately after the race.

1—G.P.O. Clock and Chimes: Weather Report and Song from "The Sun."

1.15—Closure of night's programme.

2.15—Special Operatic Session with explanatory talk by Mr. J. M. Prentiss.

2.45—Music from the Studio.

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

4.30—Social story, entitled "The Mad Song."

4.45—Music from the Studio.

5—G.P.O. Clock and Chimes: Producers' Distributing Society's Market Report.

5.10—Shipping Information.

5.15—G.P.O. Clock and Close down.

Early Evening Session.

1—G.P.O. Clock and Chimes: Uncle George and the Kiddies.

2.45—Pavilion Dinner Orchestra, under the direction of Cec. Morrison.

Special Country Session.

7.15—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.

7.45—Special Country session: Talk on Land Sales.

7.48—Stock Exchange Reports.

7.47—Producers' Distributing Society's Fruit and Vegetable Report.

7.48—Fruit and Vegetable Reports (Sup).

7.48—Grain and Potato Reports.

7.48—Country News from the Sun.

7.48—Close down.

Evening Session.

1—G.P.O. Clock and Chimes: City of Sydney Band broadcast from Barlow Chambers.

2.10—Sydney Orpheus Society, under the direction of Mr. F. Penman.

3.30—Lecture from the Studio.

8.55—Resume of following day's programme.
9—G.P.O. Clock and Chimes: Announcements.
9.3—City of Sydney Band.
9.25—Interval.
9.30—Sydney Orpheus Society.
9.30—Mr. J. M. Prentiss will talk on "Football Affairs."
10.5—City of Sydney Band.
10.25—The Movie Ball, broadcast from the Ambassador until midnight. During intervals between dances, News Reports, by courtesy of the Sun, will be broadcast.
12—G.P.O. Clock and Chimes: National Anthem.

4 QG

Midday Session.

12.05—Tune-in Signal.
12.55—Time Stamps.
1—Market Reports: Stock Exchange; Weather; "The Daily Mail" News; the "Daily Standard" News.

Afternoon Session.

3.25—Tune-in.
3.30—A musical programme.
4.15—The "Telegraph" News.
4.30—Close down.

Early Evening Session.

6.25—Tune-in.
6.30—The Children's Session: Stories by Little Miss Brisbane.
7—The Farmers' Session: Market Reports, "The Australian" on Stock Raising—The Wild Duck and other Poets; Mr. W. G. Brown (Sheep and Wool Expert).
7.20—"The Standard" News, Stock Exchange.
7.30—An address by His Grace, Archbishop Sharp.
7.45—Lecture Session: "Around the World Travel Book," No. 3—New York," Mr. C. V. Woodland.

Night Session.

8—March, The Federal Band; soprano solo: Miss Maude Malone. Intermission: The Federal Band, monologue, Mr. V. Scanlan; tube: The Federal Band; baritone solo: Mr. L. R. Little; humoros; The Federal Band; tenor solo, Mr. Gerald Cashman; concert solo, accompanied by the Federal Band; Mr. N. H. D. Smith, piano; Mr. J. E. O'Farrell, organist: The Savoy Orchestra; soprano solo, Miss Maude Malone; selection, The Savoy Orchestra; monologue, Mr. V. Scanlan; Suite of songs, The Savoy Orchestra.
9.28—Weather Information officially supplied by the Commonwealth Weather Bureau, Announcements.
9.30—Value, The Savoy Orchestra; baritone solo, Mr. L. R. Little; musical novelty, the Savoy Orchestra; tenor solo, Mr. Gerald Cashman; march: The Savoy Orchestra.
10—From the Studio, "The Daily Mail" News Service. Close down.

3 LO

Midday Session.

12—Time Signal, Latest cricket news, by courtesy of Reuters Ltd., Australia v. Somerset, played at Taunton. Reuters and the Australian Press Association cables, "Argus" and "Herald" news services. Shipping intelligence.
12.45—Stock Exchange Information.

12.50—Meteorological Information. Weather forecasts for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.

1—The Sirs.

1.1—Jack O'Hagan, baritone.
1.1—Le Gacocks Quartette.

1.53—Jack O'Hagan, baritone.
2—Result of Oaklands Hunt Club Race, Cambrian Hurdle Race.

2.30—Result of Yurke Walker Plate, Oaklands Hunt Club races. Close down.

Afternoon Session.

8—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia versus Somerset, played at Taunton. Result of Rolls Handicap, Oakland Hunt Club Races.

8.2—Studio Orchestra.

8.10—Vera Spaniol, soprano.

8.17—Agnes Fortune, pianoforte solo.

8.21—Mrs. Mahood, "Colour in Interior Decoration."

8.27—Studio Orchestra.

3.15—Oaklands Hunt Club Races, Oakland Cup.

3.42—Arthur Cornell, electrician.

3.54—F. Stanham, cincin solo.

4—Studio Orchestra.

4.10—Vera Spaniol, soprano.

4.15—Albert Peet, Masterball.

4.21—Result of Yurke Walker Purse, Oaklands Hunt Club Races.

4.28—C. Richard Clark, flute; Jessie Garrison, violin; Thorne Ternan, cello; Agnes Fortune, piano.

4.45—F. Stanham, electrician.

4.45—Latest Cricket scores, by courtesy of Reuters Ltd., "Herald" News Service; Stock Exchange Information.

4.55—Result of Seaford Corinthia Handicap, Oaklands Hunt Club Races.

5—Close down.

Evening Session.

5.45—Children's hour, "Bobby Bluebon" will answer letters and give birthday greetings.
6—A musical programme arranged by Mr. Eric Pearce.

6.45—Latest Cricket scores, by courtesy of Reuters Ltd., Australia versus Somerset, played at Taunton, "Argus" and "Herald" News Services; Reuters and the Australian Press Association Cables.

6.55—Latest Cricket scores, including Movements; Overseas Shipping News.

7—Stock Exchange Information.

7.15—Fruit Market Reports by J. E. Borrett Ltd.

7.25—River Reports.

7.30—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Hammarby Sheep sales; poultry, grain, shaft, hay, straw, oats, dairy produce, potatoes and onions. Market prices of oranges and Lemons, by the Victorian Central Citrus Association Pty. Ltd.

Night Session.

7.26—Under the auspices of the Department of Australian Industries, Crowe, Sports Superintendent, "Market Committee."

7.45—Under the auspices of the East and West" Missionary Exhibition, Auckland, N.Z., specially transmitted for the benefit of N.Z. listeners, "East Africa" and the Modern Missionary Appeal," by the Rev. Dr. Bambridge.

7.50—Pearce: Physical Culture Talk.

8.10—Salvation Army Territorial Staff Band.

8.15—Albert Zelman, violin recital.

8.30—Salvation Army Territorial Staff Band.

8.45—Conductor Button, cornet solo.

9.45—Male Quartette.

9.45—Capt. Peter, "Books, Wise and Otherwise."

9.45—Rev. Nielsen violin.

9.45—Salvation Army Territorial Staff Band.

9.45—Albert Zelman, violin recital.

9.45—Madame Zelman, soprano.

10.2—H. Small, tenor.

10.3—Announcements. Latest Cricket scores, by courtesy of Reuters Ltd.; British Official news, news from Rugby.

10.15—A. Thomson, bass.

10.33—Salvation Army Territorial Staff Band.

10.43—"Argus" News Service; Weather Forecast.

10.45—Male Quartette.

11—God Save the King.

5 CL

Morning Session.

11.30—G.P.O. Chimes.

11.31—Featuring a Stock Duo Art Number.

11.40—"Advertiser" News Service.

11.45—Vocalion number.

12—G.P.O. Chimes.

12.1—"Advertiser" News Service and Cricket scores.

12.16—Featuring a Stock Duo Art Number.

12.30—G.P.O. Studio Orchestra will be heard in a series of classical numbers.

1.05 (approx.) Ward & Co.'s Stock Exchange

Intelligence; Weather Reports and Station Announcements.
2-G.P.O. Chimes.
Afternoon Session.
3-G.P.O. Chimes.
21—Relay from "Maple Leaf" Cafe—Orchestral numbers.
4.45—From Studio—Serial Story.
4-G.P.O. Chimes.
4.1—Broadcast from "Arcadia" Cafe—Orchestra numbers.
4.55—Stock Exchange Reports, General Information, and Station Announcements.
1-G.P.O. Chimes.

Evening Session.

6.30—G.P.O. Chimes.
6.31—Bedtime Stories.
7.30—Stock Reports.
7.40—Box Score corner.
8-G.P.O. chimes.
8—Special programmes of vocal and instrumental numbers by artists from Adelaide Conservatorium.
8.40—Science Lecture, by Messrs. F. H. Franklin and Co.
8.45—Serial story, continued.
9-G.P.O. Chimes.
9.1—Weather Reports.
9.3—Studio Concert, continued.
10.15—"Advertiser" news service, and ships within wireless range.
10.30—Studio Concert, continued.
10.55—Station announcements and International Cricket.
11—G.P.O. Chimes, National Anthem.

7 ZL

Morning Session.

11—"The Mercury" news, stock market, shipnews, commercial intelligence, weather information, and sporting anticipations. Reports from the Studio.
12—Time Signal.

Afternoon Session.

8—Musical Items from the Studio. Story from "Illustrated Tasmanian Mail."
8.30—Hobart Stock Exchange quotations.
4—Time Signal.

Early Evening Session.

7—Shakespearian Evening, Children's Hour, Miss Stella Macfarlane, Mr. J. D. A. Collier.

Evening Session.

8—"The Mercury" special Tasmanian news service. Railway auction, produce sales, weather, information and sporting results.
8.1—Hobart Stock Exchange quotations.
8.10—Mr. V. D. Eliotson, "Malvalos Sheesh" from "Twelfth Night"; Miss Katherine Collinane, "Rosalind" from "As You Like It"; Mr. W. E. Fuller, "Grave Diggers Scene" from "Hamlet"; Captain Collier, Mr. E. Small, "Katherine Speech" from "Henry VIII"; Above interspersed with Shakespearian songs and quartettes under the direction of Mr. James Marsh.
9.50—"The Mercury" special Interstate news service. Weather synopses. Station announcements. Close down.



Thursday, August 26

2 FC

Early Morning Session.

7-The Chimes of 2FC and Announcements.
Time Signals.
7.5—Music from the Studio. Cricket Scores, the result will play of the match, Australian versus Samoa.
7.10—Weather Information, Commercial News, Shipping Intelligence, and Markets.
7.45—"Sydney Morning Herald" news service.
8—Time Signals; Music from the studio.

8.13—Close down.

Morning Session.

9.15—The Chimes of 2FC and Programme Announcements.
9.20—Music from the Studio.
9.45—A Talk by the 2FC Racing Commissioner.
10—Time Signals. Music from the Studio.
10.5—Late "Sydney Morning Herald" news service.
10.15—Music from the Studio.
11—Progress Cricket Talk—Cables.
11.15—Musical Items from the Studio.
11.30—Close down.

Midday Session.

12—Time Signals. The Chimes of 2FC and Announcements.
12.1—Stock Exchange, first call.
12.10—Music from the Studio.
12.55—Radio Wireless News.
1—Time Signals. Weather Intelligence.
3—"Evening News" Midday News Service, Producer's Distributing Society's Report.
3—Music from the Studio.
3.30—Stock Exchange, Second call.
1.35—Music from the studio.
2—Time Signals. Close down.

Afternoon Session.

2.30—The Chimes of 2FC and Announcements.
2.35—A Recital by the pupils of Miss Gertrude Barton, "Study of 25" (Chopin), Miss Phyllis Lynch, "Albumines" (Gutmann), Miss Betty Higgins, "Dances" (Purcell), Miss Alice Weston, "Country Garden" (Grainer), Miss Joyce Boukje, "The Sea" (Palmgreen), Miss Noel Palfreyman, "The Wedding Day" (Grieg), Miss Lorna Forrester.
3.30—From Farmer's Tea Rooms: The Oak Hall Trio will play (Leader, Mr. Horace Keats).
3.45—Miss Joyce Gillespie, soprano.
3.45—From Farmer's Tea Rooms: The Oak Hall Trio.
3.55—Music from the Studio.
4—Miss Eve Webb-Jones, contralto.
4.5—The Oak Hall Trio.
4.15—Music from the Studio.
4.20—Miss Joyce Gillespie, soprano.
4.25—The Oak Hall Trio.
4.35—Music from the Studio.
4.40—Miss Eve Webb-Jones, contralto.
4.45—Stock Exchange, Third Call.
4.46—Music from the Studio.
6—Close down.

Early Evening Session.

6—Time Signals. The Chimes of 2FC and Announcements.
6.5—"Hello Man" talk to the children.
6.45—Broadcast from the Hotel Australia: Orchestral items.
7.15—From the Studio: "Evening News" late news service, weather information.
7.30—Dalgety's Market Reports (wool, wheat, stock), fruit and vegetable markets.
7.45—Mr. Walter Hunt, A talk on "A demonstration of the Purity of the Vowel Sounds."

Night Session.

7.55—The Chimes of 2FC and Announcements.
8—Broadcast from Lyceum Theatre, Sydney: Orchestral Items, conductor, Mr. Emanuel Axzman.
8.30—A Talk on Old Time Plays and Theatres by Mr. S. H. Howden.
8.45—Sydney Stock Exchange Trio, Mr. Lionel Lawson, violinist, Mr. Gladstone Bell, cellist, Mr. Lindley Evans, pianist.
8.65—Announcements of an interesting programme entitled 2FC Magic Carpet in which Major Stanford Morgan, D.C.M., will take us on a imaginary aeroplane from Sydney to the "Roof of Mankind," Starting from Columbia, India, Persia, Egypt and Baghdad. An interesting description with wide lights of these countries will be given and physically described by Mabel Hatchelor, soprano, and Mr. Harold Tollemache, baritone and the Instrumental Trio.
9.25—Vocal Act from the Lyceum Theatre, Sydney.
9.35—From the Studio, continuation of the Magic Carpet.

10.30—Sydney Instrumental Trio.

10.40—Broadcast from the Wentworth Cafe, Sydney. Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12—National Anthem. Close down.

2 BL

7.15—Usual Early Morning session.
10.10—Usual Morning session.

Afternoon Session.

During the afternoon, results of races will be broadcast immediately after each race, by courtesy of the Sun Newspapers.
2-G.P.O. Chimes and Chimes; Weather Report.
3—G.P.O. News from "The Sun."
3.15—Results of night's programme.
3.15—In the Jones' Tea Room Trio.
3.30—Music from the Studio.
4-G.P.O. Clock and Chimes; David Jones' "Song of Music."
4.30—Music from the Studio.
4.30—Serial story, entitled "The Mad Song" (Mabel Magnets).
4.45—Music from the Studio.
5—G.P.O. Clock and Chimes; Producers Distributing Society's Market Report.
5.10—Shipping Information when available.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes; Uncle Jack and the Kidlets.
6.45—Broadcasters' Dinner Orchestra.
7.15—Australian Monetary Land & Finance Co.'s Stock and Wool Report.
7.20—Weather Report.
7.24—Stock Exchange Report.
7.30—Producers' Distributing Society's Fruit and Vegetable Report.
7.30—Fruit and Vegetable Report (Sun).
7.35—Grain and Wool Report.
7.41—Sporting Talk by Broadcasters' Sporting Representative.
7.55—Close down.

Evening Session.

8—Ambassadors' solo Quintette.
8.20—Lectures from Studio.
8.30—Miss Dorrie Ward.
8.57—Results of Programme.
9—G.P.O. Clock and Chimes.
9.1—Weather Forecast.
9.2—Announcements.
9.3—Mr. W. E. Lewis.
9.15—Mr. Baye Carter.
9.22—Duet: Miss Dorrie Ward and Mr. W. E. Lewis.
9.36—Interval.
9.50—Music from Studio.
9.55—Miss Dorrie Ward.
10.5—Miss Dulcie Blair (violin).
10.5—Mr. W. E. Lewis.
10.12—Al. Hammets and the Ambassadors Dance Band broadcast from the ballroom of the Ambassadors. During the intervals between the news reports, by courtesy of the Sun Newspapers will be broadcast.
12—G.P.O. Clock and Chimes; National Anthem.

4 QG

Midday Session.

12.55—Tune-in Signal.
12.56—Time Signal.
1—Market Reports; Weather Information; "The Daily Mail" News; the "Daily Standard" News.
1.20—Close down.

Afternoon Session.

3.30—A programme of music from the Studio.
4.15—"The Telegraph" News.

4.30—Close down.

Early Evening Session.

6.25—Tune-in.
6.30—The Children's Session: Stories by "The Sandman."
7—The Farmers' Session: Market Reports; Lectures: Talk on Live Stock Feeding, No. 1—"General Principles of feeding live

school." Mr. J. K. Murray (Principal), Agricultural High School and College.
22—"The Standard" News, Stock Exchange.
23—Close down.

Night Session.

- Eric St James' Choir; soprano solo, Miss Mabel Malout; violin solo, Miss Peggy Adams; St. James' Choir; cornet solo, Mr. J. Dauth; baritone solo; Mr. L. R. Little; Benedictus; St. James' Choir; soprano solo, Miss Mabel Malout; violin solo, Miss Peggy Adams; laude; St. James' Choir; organ solo; Mr. L. R. Little; cornet solo, Mr. J. Dauth; male chorus, St. James' Choir; Mendelssohn; Mr. V. Scanlan.
- 23—Weather information, officially supplied by the Commonwealth Weather Bureau, Announcements.
- 24—from the Band Practice Room; An impromptu programme of music by the Greater Bendigo Municipal Concert Band.
- 16—from the Studio, "The Daily Mail" News Service. Close down.

3 LO

Midday Session.

- 12—Time Signal. Latest cricket scores, by courtesy of Reuters Ltd., Australia versus Kent, played at Canterbury; British Official Wireless News from Rugby, Reuters and the Australian Press Association cables; "Argus" and "Herald" news service.
- 13—From the Band Practice Room; An impromptu programme of music by the Greater Bendigo Municipal Concert Band.
- 16—from the Studio, "The Daily Mail" News Service. Close down.

Afternoon Session.

- 2—Latest Cricket scores, by courtesy of Reuters Ltd.
- 1—Studio Orchestra.
- 11—Mr. Robert H. Courtney, "Windsor and Windsor Castle."
- 3.30—Miss Cornell, dramatic recital.
- 3.45—Leslie Gauvin and Reginald Bradley, violin duet.
- 4.42—Grace Jackson, contralto.
- 4.45—Studio Orchestra.
- 5.35—"Mary Gaines," Talk to the Mother.
- 4.45—Arthur Cornell, humorous recital.
- 4.50—Latest Cricket scores, by courtesy of Reuters Ltd., Australia versus Kent, played at Canterbury; "Herald" News Service; Stock Exchange Information.
- 4.45—Evenings, transmitted from St. Paul's (Cathedral).
- 5.30—Close down.

Evening Session.

- 6.45—Children's Hour. Answers to letters and birthday greetings.
- 6—Billie Lockwood, will sing "Who wants a little boy?" Cecilia Ward, Miss Gaines; "Maple Leaf Story Book"; "Lily" Story for the littler ones; "The Little House in the Woods"; Songs by the Wattle Girl; Story for the boys and girls; "Saturday Island" by Lillian Pike.
- 7—Latest cricket scores, by courtesy of Reuters Ltd., Australia versus Kent, played at Canterbury; "Argus" and "Herald" news services, Reuters and the Australian Press Association cables.

- 6.45—Weather synopses, Shipping movements, Aerial mail information, by the Australasian Aerial Services Ltd.; Overseas Shipping News.
- 7—Stock Exchange information.

- 7.15—Fish market reports by J. B. Borrett, Ltd.
- 7.45—River reports.
- 7.50—Market Reports, by the Victorian Producers' Co-operative Co., Ltd. Haymarket Sales, Poultry, Graha, Chaff, Hay, Straw, Live Dairy Produce, Potatoes and Onions.

Night Session.

- 7.20—Mr. J. D. Barron, Staff Officer, Melbourne and Metropolitan Tramways Board; Melbourne's Street Transportation, No. 2.
- 7.40—Under the auspices of the "East and West" Missionary Exhibition, Auckland, N.Z., especially transmitted for the benefit of N.Z.L. listeners.
- 7.45—Australia's Responsibility in the Pacific.
- 7.50—Mr. H. Webb, Tasmanian Government Tourist Officer; "Angling in Tasmania."
- 8.00—3LO Dance Orchestra.
- 8.15—Ted Collins, Fonthill Talk.
- 8.30—3LO Dance Orchestra.
- 8.45—Vocal solo, Mr. C. E. Scott.
- 8.52—3LO Dance Orchestra.
- 9.00—Latest Cricket scores, by courtesy of Reuters Ltd., Australia versus Kent, played at Canterbury; British Official Wireless News from Rugby. Announcements.
- 9.30—Under the auspices of the Launceston 50,000 League, Lt.-Col. Senator H. Sampson, D.S.O.: "Launceston, the Centre of Australia's Playground."
- 9.37—3LO Dance Orchestra.
- 9.45—"Empire" toner.
- 9.45—3LO Dance Orchestra.
- 10.45—"Argus" News Service; Announcements; Weather Forecast.
- 10.14—3LO Dance Orchestra.
- 10.24—Vera Spaul, soprano.
- 10.31—3LO Dance Orchestra.
- 10.45—"Empire" toner.
- 10.48—3LO Dance Orchestra.
- 11—God Save the King.

5 CL

Morning Session.

- 11.30—G.P.O. Chimes.
- 11.41—Featuring a Stock Duo Art Number.
- 11.40—"Advertiser" News Service.
- 11.45—"Advertiser" News Number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" News Service and Cricket scores.
- 12.16—Featuring a Stock Duo Art Number; 12.20—Studio Concert, which will be heard in a series of classical numbers.
- 12.30—(approx.)—Ward & Co.'s Stock Exchange Intelligence; Weather Reports and Station Announcements.
- 2—G.P.O. Chimes.

Afternoon Session.

- 3—G.P.O. Chimes.
- 3.1—Relay from "Maple Leaf" Cafe—Orchestra numbers.
- 3.45—From Studio—Serial Story.
- 4—G.P.O. Chimes.
- 4.1—Broadcast from "Avalon" Cafe—Orchestra numbers.
- 4.35—Stock Exchange Report, General Information, and Station Announcements.
- 5—G.P.O. Chimes.

Evening Session.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories.
- 7.15—Health talk by Mr. A. M. Whittenbury.
- 7.30—Market Reports.
- 7.49—Poultry talk by Mr. A. M. Whittenbury.
- 8—G.P.O. Chimes.
- 8.1—Miscellaneous Concert from the Studio.
- 9—G.P.O. Chimes.
- 9.1—Weather reports.
- 9.3—Studio Concert, continued.
- 10—G.P.O. Chimes.
- 10.1—Studio Orchestra.
- 10.10—Tenor, Mr. Keith Clarke.
- 10.15—"Advertiser" news service, and ships within wireless range.
- 10.20—Studio Concert, Continued.
- 10.55—Station announcements and International Cricket.
- 11—G.P.O. Chimes. National Anthem.

7 ZL

Morning Session.

- 11—"The Mercury" news stock market, shipping, commercial intelligence, weather information, Records from the Studio.
- 12—Time Signal.

Afternoon Session.

- 3—G.P.O. Chimes and Chimes; Concert broad-

cast direct from the Lyceum Club, Hobart. 4—G.P.O. Clock Chimes, Hobart stock Exchanges Quotations; Weather Forecasts.

Early Evening Session.

- 1—Children's Corner. "Big Brothers" chats to his pals.
- 7.15—The adventures of George, the Bookshelf Cat. "Daffy down taffies" by Aunt Sleda.

Evening Session.

- 8—"The Mercury" special Tasmanian news service. Halfway auction produce sales, Weather information.
- 8.10—Hobart Stock Exchange quotations.
- 8.10—Soltions by Jones' I.X.L. Band conductor, Mr. L. M. Barnett.
- 9.15—Physical Culture talk by Mr. George Collis.
- 9.15—Continuation of concert by Jones' I.X.L. Band.
- 9.30—"The Mercury" special Interstate news service. Weather synopses. Station announcements. National Anthem.

2 BE

Wavelength, 318 metres. Power, 100 watts. Every Monday and Thursday evening, from 6.30 p.m. to 8 p.m.

6.30 to 7.30—Mediterranean Music, consisting of vocal and orchestral items.

7.30 to 8—Lectures, orchestral and vocal items.

8.15 will be glad to get into touch with artists willing to give their services to this station.

2 KY

Wavelength, 280 metres.

MONDAY TO FRIDAY.

Luncheon Hour Session.

12.15—Tune in to the ticking of the clock. Luncheon Hour session consists of vocal and musical items, news service and Union matters, closing down at 1.45 p.m.

TUESDAYS AND THURSDAYS.

Afternoon Session.

3.15—Tune in to the ticking of the clock. The afternoon session consists of popular science talks by Mr. A. T. Keable, B.Sc.; Book reviews; Home talks and special features of new Lincoln records, closing down at 4.45 p.m.

MONDAY, TUESDAY, FRIDAY.

Children's Hour.

6.30—Tune in to the ticking of the clock. The Children's Hour is conducted by Mr. Thompson, the well-known hospital story teller.

Evening Session.

7.45—Tune in to the ticking of the clock. The evening session consists of news service, shopping list, industrial lectures; Editorial; news and musical items from the studio and music by the Palais Royal Californians; from J. C. Bendix's Palais Royal, Walter Beeban (leader).

BURGESS—"Over twice the life"—BATTERIES.

N.Z. Broadcasters.

IYA.—The Radio Broadcasting Co. of New Zealand Ltd., Auckland. Power, 500 watts; wavelength, 330 metres. Transmissions on Tuesday, Wednesday, Thursday, Friday and Saturday, 8-9, 9.15-10.15 a.m. Last two Sundays of the month, broadcast from Pitt Street Methodist Church.

IYB.—La Gloria Gramophone Co., Auckland. Power, 50 watts; wavelength, 275 metres. Transmits first two Sundays in the month, broadcast from Congregational Church, commencing 4.30, last two Sundays, gramophone items, 8-10 p.m.

IYC.—N. G. Shepherd, Whangarei. 15 watts; 350 metres. Transmits Monday, Wednesday, and Friday, 8-10 p.m.

IYD.—L. A. Keith, Auckland. 50 watts, 285 metres. Broadcasts Monday, Wednesday, 8-10 p.m. Saturday afternoon, 3-5, instrumental items, shortly introducing kiddies' items, 4.30-5 p.m., Sunday.

IYE.—Palmerston North Radio Club. 5 watts, 200 metres. Transmits Monday, Friday, 7.30-8.30 p.m.

IYF.—Radio Broadcasting Co., Wellington. Power, 120 watts; wavelength, 295 metres. Transmits Tuesday, Thursday, Friday, Sunday, 8-10 p.m.

IYH.—The Gisborne Radio Co., Gisborne. Power, 500 watts; wavelength, 260 metres. Transmits Tuesday, Thursday, Sunday, 8-10 p.m.

IAC.—The Radio Broadcasting Co., Christchurch. 50 watts; wavelength, 240 metres. Tuesday, Wednesday, Saturday, Sunday, 8-10 p.m. Friday, 6.45-7.15, 8-9.30 p.m.

IYA.—Radio Broadcasting Co., Dunedin. Power Input, 350 watts; wavelength, 290 metres. Present transmissions, Sunday, Monday, Wednesday and Friday, 7.45-10 p.m.

(All above times are N.Z.M.T., one and a half hours ahead of Sydney.)

CATALOGUE RECEIVED.

We have just received from Noyes Bros. (Sydney), Ltd., their illustrated 52-page catalogue, containing a full description of the well-known Igranic parts, for which this firm are the distributors. The Igranic parts are, of course, already familiar to most radio enthusiasts, but this catalogue contains a wealth of information which should prove of extreme value to the home constructor. Amongst other features of this nicely printed book is a full list of Igranic coils, covering wavelengths from 117 metres to 22,400 metres, and the catalogue abounds with illustrations covering every known Igranic part, each being fully described and numbered. It would be impossible to enumerate the many attractive points contained in this valuable booklet, but it is beyond question that anybody in possession of a copy has an immediate reference to all the parts required for building receivers.

More than a million supplied annually.

Diamond — RADIO BATTERIES

"The SUPREME Achievement in RADIO BATTERIES."

The 5 Big Reasons.

FRESHNESS.
APPEARANCE.
CONSTRUCTION.
QUALITY.
OPERATION.

For DIAMOND Master Supremacy.
60v. Super Capacity.



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Its internal construction is its guarantee of protection.

A Radio Set is no better than its battery.
DIAMOND Batteries make good sets better.

Retail Price List



BATTERY	
A-	1.5 Vt "Coff"
	1.5 .. "Brace" Lamp 3/0
	1.5 .. "Albatross" 2/0
B -	1.5 .. "Dominion" 2/0
	1.5 .. "Navy Special" 3/0
	60 .. Large Type 25/0
C -	10% x 7 45 .. Large Type 20/0
	4.5 .. "Nigger" 2/0
	4.5 .. "Ego Special" 15/0
	6.0 .. "Igulus" 15/0



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SCOTT SANDERS FOR 3LO.

So far as a series of broadcasting concerns is concerned, one of the most important engagements made by 3LO Melbourne, is that of Scott Sanders, the English comedian, who will be heard in song and story in programmes during the coming fortnight. Ranked as one of England's best music hall comedians, Sanders had an interesting rise to fame and fortune. Before the war he was a dancer on the music halls, but enlistment with the Imperial forces kept him in France for three years, and when he returned a wound in his leg prevented him from continuing a terpsichorean career. Then he thought he would become a Scotch comedian. But he found that kilted "comics" were as common as they were poor, and after many unsuccessful applications for engagement he spent his last shillings on a train fare away from the town in which he experienced his worst rebuff. It was in Wigan, a cotton city noted for the hardness of its audience. He had managed to get a one night engagement, but was booted off the stage. So he wearily made his way to the railway station, and idly turned over the pages of the guide book to see what direction he would go in next. On the road to anywhere was his destination, and the idea struck him so forcibly that he wrote a song of that title, "On the road to Anywhere" was an immediate success. It established his fame and fortune, and when he wrote a new character comedy act it was in Wigan that he made his premiere before an enthusiastic house. Sanders has a splendid baritone voice, and an unlimited stock of brilliant stories, and is able to create clever material on the spur of the moment.

4QG'S ANNOUNCER.

Mr. C. V. Woodland.

Listeners-in in all parts of Australia have commented on the excellent "stage management" of Station 4QG. During transmission from this station there is hardly any waiting or delay between items, and no number is broadcast without the call sign of the station being given.

The reputation of any broadcasting station in this direction mainly lies in the hands of its announcer. Station 4QG's announcer is a com-

paratively young man. Mr. C. V. Woodland, who was appointed shortly after the big station commenced operation. He possesses quickness and decisiveness, combined with a pleasing voice, and is also a baritone singer of no low standard.

It is interesting to note that at Station 4QG, Brisbane, full use is always made of the two Studios. When the station was designed these were so grouped as to have their doors within two paces of each other. Each night the two Studios are used for alternate items, and the system of grouping artists in one while an item is proceeding in another has resulted in the station gaining a reputation for smartness in operation.

AMPLION PROGRESS.

A recent arrival in Australia is Mr. R. C. Jones, who is on the staff of Amplion (A'sia) Ltd., holding the position of Chief Engineer.

Mr. Jones has been actively and professionally engaged in Wireless since 1912, and he had extensive experience in Great Britain with the Sterling Telephone Co., Siemens Bros., Western Electric Co., and other telephone concerns. Early last year Mr. Jones left England and made a tour of the Canary Islands and South Africa on behalf of the Sterling Telephone Co., for the purpose of going thoroughly into the conditions of broadcasting, and to familiarize himself with overseas broadcasting affairs.

It is the intention of Amplion (A'sia) Ltd. to partly manufacture the famous Amplion loud speakers in Australia, thus establishing an entirely new industry, which will give employment to many workers, and also prove of the greatest value to the radio industry in Australia. Mr. Jones will be actively engaged in the manufacture and production of the Amplion loud speakers, and the associated apparatus also handled by this concern.

**BURGESS—“Constant satisfaction assured
—BATTERIES.**

Wm. Lambert Hamilton**Radio Specialist**

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

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

I will build you a set to suit your local conditions.
I will answer any enquiries immediately.

My charges will be moderate.

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

I am at your service in any radio wants.

City address:

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handsome Cabinet.

PRICE, £19·10·-

*The best value ever offered in 3-Valve Sets
Call in and see it, hear it, buy it.
Easy Terms. Easy Terms.*



Radio Industry's Greatest Need.

This is the subject for the Leader of the latest issue of America's Pioneer Radio Trade Journal. We here, in Australasia, should take notice. There is no more generous buying public in the world than we have in Australia. They want the best and will pay its value, but they will not buy blindly. It is, therefore, up to the Radio dealer to educate his customers, to co-operate with them to the fullest extent. They should be educated along the lines of only buying quality goods — parts that will stand up to use — batteries that will give service. The stabilisation of the industry in Australia depends not on the public being able to buy something cheap, but on being satisfied that his radio gives him service and not a joy for a week, but a joy and a pleasure for years.

Public Should Insist on Brand They Want.

The public should insist on being supplied with the brand or make of accessories that they want. Good accessories and batteries play such a big part towards results, that it sometimes seems a pity a customer should become dissatisfied with a really good set just because, for instance, the batteries petered out and didn't last as long as he expected.

Buy Advertised Goods.

Goods which are extensively advertised are, as a general rule, sold by wholesalers of good repute, who have thoroughly tested out the goods before they are offered to the public. They invariably stand behind their goods with a sensible guarantee.

Price or Quality—Which?

Price talk is often very tempting, but when it is understood where putting price ahead of quality will finally lead us, we invariably choose the quality job. Without possibly an exception, the quality lines on the market to-day are the "Best Buy"—not only do they last longer but they give such good service results. It must be realised that although the dearest article may not necessarily be the very best value, it is certain that a cheap one is inferior. It can safely be taken as an axiom that "Quality" must be paid for, and that real bargains in radio are as hard to find as in anything else. *

Full of Life!

An Ever-Ready Radio Battery is well and truly alive. It helps your set to perform its duties ably and efficiently. Instal an Ever-Ready Radio Battery and you will have less trouble and better results from your wireless.

EVER-READY RADIO BATTERIES

SAFETY FIRST — UTILITY ALWAYS

LOOK FOR THE TRADE MARK



"WANDA" PLUG RADIO BATTERIES.

This illustrates the New Radio High Tension "B" Battery, which can be obtained 3½, 42 or 63 volts—fitted with a Wanda Plug, and 3 screw terminals.

PRICE:

Small size, type WP, 30 volt	9/-
Small size, type WP, 40 volt	12/-
Small size, type WP, 50 volt	18/-
Large size, type XP, 30 volt	16/-
Large size, type XP, 40 volt	21/-

THE NEW EVER-READY RADIO "A" BATTERY.

L.T.S.

For use with all low temperature valves within this range of voltage. Possessing 3 insulated terminals 1 positive, 2 negative, at 3 volts and 4½ volts.

This L.T.S. battery is adaptable to at least 6 different types of valves in UV.199, C.299, DV.1.8, DE.9, and E.T.H.35, and many others.

Is also invaluable as an "A" battery, and for many other uses where up to 4½ volts are required.



THE NEW EVER-READY NO. 128, OR "A," "B," OR "C" BATTERY.

PRICE

One of a group of radio batteries. Useful in wireless, lighting, and amplification. Size: 3½ x 4 x 1¾. Most useful for bells, telephones, burglar alarms, medical coils, etc. With three brass terminals. Voltages 1.5-3—or 4.5 volt. Useful for all wireless purposes as well as general utility.



If unobtainable locally, write for address of nearest source of supply

THE EVER-READY CO. (Gt. Britain) Ltd.

163 PITT STREET, SYDNEY

RADIO IN BRISBANE.

Mr. H. J. Hapgood, of Manufacturers' Products Sales Coy., has just returned from a trip to Brisbane, and reports very favourably on radio conditions in the North. The general radio situation is in a most healthy condition in Brisbane, and all the dealers are busy as the volume of business is several times more than they expected, and therefore stocks of both sets and parts are exceedingly low. Licenses issued are increasing at the rate of nearly 1000 per week in Queensland. Great preparations were made for the Radio Exhibition, and twenty-seven elaborate stands with attractive design were erected, and there were an unusual number of prizes, everyone in radio competing to make the exhibition a success.

The transmitting station has greatly improved in both programmes and modulation, but there is still a great deal of difficulty experienced because of broadness of tuning, and it is extremely difficult for anyone living within ten miles of 4QG to shut them out with the average set, so that they can receive Interstate stations.

Everybody is looking forward to, and hoping that the new allotment of transmitting wave lengths will be made in the immediate future, and that the transmitting stations will all be spaced further apart. When this is done, and Interstate reception made practicable, the Brisbane situation will be greatly improved.

Amateurs in Queensland seem to experience less difficulty in picking up American stations than anywhere else in Australia. Every week several authentic reports are received of international reception by amateurs.

RADIO IN SCHOOLS.

PARENTS LIKE IT.

Among public schools which have recently obtained radio receiving sets are Boggabri and Tuggerah, and to judge from press reports both the school children and their parents are deriving much satisfaction from the investment. The Boggabri Examiner says the editor attended an informal gathering of the school, where a very complete wireless receiving set was in operation. There was quite a large gathering of parents, and all seemed to appreciate market news, stock

returns, band and dance music and songs which constituted the programme. Each item was distinct and well delivered.

"Practically no expense is entailed in the idea," says the Examiner, "and it is going to alleviate the present drab conditions which obtain locally."

The editor evidently refers to running costs, which are negligible; a good set probably costs £40 or £50.

Writing of the radio set at Tuggerah school, the "Gloucester Advocate" says: "The teacher, pupils, and parents frequently crowd the school at night, and the results are as clear as though one were in the Sydney music hall. The time has surely arrived when every school in New South Wales should have its loud sounding wireless set."

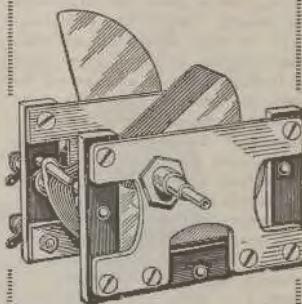
BROADCASTING IN U.S.A.

An analysis of the United States broadcasting stations, which number over 530, is interesting. The latest list shows that there are only 15 classed as 5000 watts; to this may be added two, whose power is not specified (KDKA and WJZ); three are of 4000 watts, four of 3500, four of 2000, five of 1500, forty of 1000, and seven of 750. This gives a total of 80 stations of over 500 watts. There are 144 rated as 500 watts. The balance, 300, embraces an enormous majority of quite small powers, for only 35 exceed 100 watts. The balance run all the way down to 5 watts.

MONEY BOXES FOR LISTENERS.

A special service of the best selected gramophone records has been arranged with Lincoln's and the number of request items is extraordinary. The most applications received are for steel guitar, chimes, and laughing song numbers. Though it is over a month ago that 2KY broadcasted the message to the children of Australia from the Commonwealth Bank, the flood of letters from far and near, asking for money boxes, is only just starting to ease off. Quite a few of the letters were funny, and one or two pathetic, especially one from a weary wife of evidently a ne'er-do-well husband, asking if she could have a money box for him. Everything is now in order for the broadcasting of the racing from the Speedway at the Royal Agricultural Ground, Moore Park. Full descriptions of each race will be broadcast from the ground,

Murdoch's



Announce Special Prices for
the Famous

"Ormond Condensers"

Ever to the fore in all Radio matters, Murdoch's are first in the field with the new Ormond Condensers, and at special value.

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(as illustration).

	Plain	Vernier
.001	13/-	
.0005		14/-
.0003	10/9	13/-
.00025	9/6	11/6

THE NEW SLOW MOTION.

.001	25/-
.0005	23/6
.0003	22/6
.00025	21/-

**THE ORIGINAL TYPE
ORMOND.**

	Plain	Vernier
.0005	8/6	10/6
.0003		8/6

Murdoch's Radio Department is specially equipped to give advice to all country users of Radio, and handle all Radio equipment for country customers.

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MURDOCH'S
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Specialists in all Radio Equipment.

"WHO'S WHO IN MYTHOLOGY."

Starting on August 20th, Mr. C. G. C. Christie, L.L.B., will commence a series of lecturettes on a subject which always has an absorbing interest—"Who's Who in Mythology." In these days, one meets classical allusions in almost every class of literature, and an attempt will be made in these lecturettes to make known the many beautiful myths and notions of the ancients, which furnish a rich storehouse of the most varied and beautiful allegory. The stories will be told surrounding names in Roman and Grecian mythology, which are to-day household words and used as figures of allusion, without, probably, a knowledge of the associations.

RADIO FOR FARMERS.

Short Talks Nightly.

Broadcasting station 2BL, Sydney, is now giving a lecturette or talk of 10 or 12 minutes each night to farmers and primary producers. The talks pertain to all manner of subjects connected with the land, from the treatment of diseases in stock to the construction of a pig pen or the testing of a can of cream. Information is given as to land available for settlement, the activities of the Prickly Pear Board, destruction of rabbits and noxious weeds. The addresses are either given by experts or read from material compiled from departmental and expert sources.

RESTRICTIONS IN EL SALVADOR.

Several important, and in some respects drastic alterations are announced by the Government in regard to the employment of broadcasting in the State of El Salvador. A presidential decree was recently issued which, while confirming the Government monopoly, stipulates that owners and managers of places of public amusement must permit, at the request of the Government, the broadcasting of special performances.

Foreigners, desirous of operating receiving sets, will be licensed only on condition that in the event of disputes arising, no resort shall be had to diplomatic interference. The initial fee for a licence has been fixed at five colones (one colone equals 2/-), with an additional fee of three colones per month as long as the wireless sets are used. The Government undertakes to instal sets at a minimum cost of thirty colones (£3).

INTERNATIONAL BROADCASTING.

The continually increasing interest in broadcasting has induced the Vienna Fairs Ltd. to arrange an International Exhibition of Broadcasting at this year's Autumn Fair, September 3rd to 12th. A great many applications have already been received for this exhibition from Austria and from abroad, so that four halls in the Palais of the Fair had to be reserved. The exhibition will show all apparatus and installations connected with broadcasting. It will be the greatest show of the kind ever seen in Austria, and will be open for a whole week after the closing of the fair.

DIAL TWISTING A BANE.

Those who twist their radio dials insistently might be compared to a movie fan who entered and left fifteen or twenty different motion picture theatres in a night. Such an evening's entertainment would result in a haphazard jumble of impressions that would be anything but to the credit of motion pictures. Lead-

ing stations are building their programmes in consecutive units that are cumulative in effect. The American station KFI is pleased as a result to receive many letters saying that listeners tune in for the supper programme right through to signing off. This type of radio reception results in fuller enjoyment as it induces relaxed, restful listeners.

REPUTATION OF THE**CALIFORNIANS ORCHESTRA.**

The Californians Orchestra from the Palais Royal seems to hold a wonderful reputation everywhere. A letter has been received by 2KY from Dunedin, N.Z., stating that people in New Zealand listen-in continually for these items broadcast from 2KY, and reports that the orchestra is one of the most popular of those contained in any programmes of the Australian stations. The transmission of the orchestra is going out on the air with a tremendous punch.

From the length and breadth of Australia, reception of its items is reported.

They NEVER Vary!

Not so much the gloriously pure tone or their astonishing range nor the valve-power volume, but it is by their day-in and day-out consistently—the absolute certainty of getting perfect and uninterrupted programmes—that these super crystals have made a new pleasure in Radio. They NEVER vary!

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Imitations.
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Agents :

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There are 3 real reasons why you get extra value in



- (1) They are built to the highest standards of engineering skill.
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- (3) They are made by an Australian firm with an outstanding reputation.

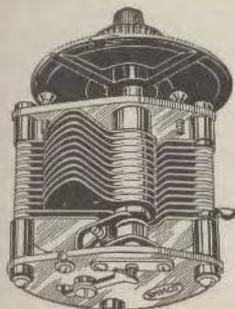
RUGGED in build—handsome in appearance—reliable in operation—and more than reasonably priced, the New EMMCO Transformer needs no introduction to radio users who know the consistent quality and economy of EMMCO parts.



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Absolute insulation—grounded rotor end plates—straight line wavelength—and the most minute vernier adjustment.

United with modern production facilities and the most skilled workmanship obtainable, these features have combined to produce a condenser that is amazing both in its efficiency and low price.

For fine tuning and real selectivity, EMMCO condensers are unequalled.

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Vernier Type.

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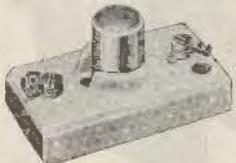
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Reliable Sets & Accessories.



Safety First! Use a "Banco" Lightning Arrester. No installation is complete without one. Price

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"Mullard - The Master Valve."

Perfect valve for those distant stations. A valve for every purpose.

D66, H.P. and D8HP.	Price . . .	13/6
D86, L.F. and D8LF.	Price . . .	13/6
D66 and D8LF Detector.	Price . . .	13/6
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DEAO.	Price	13/6
DEAF.	Price	13/6
DEAF.	Price	17/6
DFAF.	Price	13/6
PM3.	Price	13/6
PM4.	Price	13/6

Specify American or English Base.



"Radiokes"

HONEYCOMB COILS.

Turns . . .	20	25	35	50	75
Mounted . . .	4/-	4/3	4/3	4/6	4/6
Turns . . .	100	150	200	250	
Mounted . . .	4/9	5/-	5/6	5/-	



"Ever-Ready" Batteries—to suit Australian conditions.

4.5 volt, "C" Battery . . .	2/9	42 volt, W.P. Price . . .	12/6
42 volt, X.P. Price . . .	21/-	60 volt, W.P. Price . . .	18/-

Wireless Sets & Accessories, Ground Floor.

COUNTRY BROADCASTING. WAGGA WANTS STATION.

AS showing the tendency of other cities and towns to follow the example of Bathurst and establish a local broadcasting station it is of interest to record that an application has been made by Mr. Otto Sandell, of Bellevue Hill, Sydney, owner of the "B" class broadcasting station 2UW for a license to erect and operate a broadcasting station in Wagga. Negotiations have been in progress with the postal department for five months, and some finality should be reached almost at once.

Mr. Sandell's intention, if the license is granted, is to continue to broadcast from his Sydney station and to pick up the programmes on a receiving set in Wagga and re-broadcast everything as it is received. This will mean to listeners in Wagga, that on small receivers like crystal sets, they will be able to hear the whole programme, whereas, at present a valve receiver is required to hear the Sydney stations and Melbourne stations.

Mr. Sandell has been carrying out experiments in Wagga for some time. He has a mast 100 feet high at 8 Gurwood Street, Wagga, from the aerial of which, he is satisfied, his Sydney station can readily be picked up for re-broadcasting. On some nights in the week, he says, he will broadcast a programme by Wagga district musicians—of whom there are several of high standing—and during the other nights of the week he will stick to the re-broadcasting from Sydney.

Both the A class stations in Sydney have expressed their intention of building stations at Wagga for re-broadcasting, but as their intention is to send their programmes by land lines to Wagga and not through the air, nothing, apparently can be done for about two years, which is the earliest the postal department can provide the necessary lines.

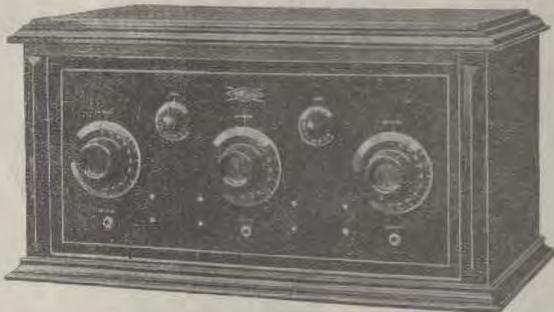
PROBLEM: FIND THE PLAN.

Portugal is said to be desirous of modelling her broadcast system on the United States plan.

COLMOVOX

SUPER FIVE MODEL

1926



PRICE - £52/10/-

FULFILS YOUR UTMOST DESIRE IN BEAUTY
AND PERFORMANCE



HE 1926 SUPER COLMOVOX is beautiful to look at—lends an atmosphere of dignity and worth to Library or Drawing Room. Naturally you expect unusual performance from so beautiful a Radio Set and unusual performance is exactly what you get. Tuning, for example, is controlled by three dials only—so perfectly adjusted that each station comes in always at the same dial settings. It never varies. Powerful locals may be on full blast, yet you can tune them out completely and bring in distant stations. Tone reproduction is always clear and true, the volume always adequate. Non regenerative and extremely silent in operation, this Receiver comprises two stages of tuned Radio Frequency Amplification, Detector, and Two stages of Distortionless Audio Amplification. Before you choose the receiving set to occupy the place of honour in your home, be sure to see and try the COLMOVOX. Its beauty you will recognise at a glance. Its extraordinary capabilities we will be always glad to demonstrate.

The above and 250,000 other parts obtainable from

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FREE !

A copy of Philips Radio Catalogue is waiting for you to send for it. From cover to cover, it is filled with information of absorbing interest to every Radio Owner. No one should be without. Fill in the attached Coupon and mail to-day.

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Sirs, Please send me by return a copy of your Radio Catalogue free of charge.

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PHILIPS

Law and the Listener

(Continued from Page 8.)

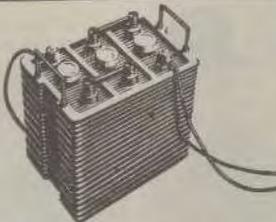
the sealed set. That restrictive type of set, whereby the owner of a set could listen in to one station only, was stipulated by regulation in 1923. To their credit it must be said that the government officials were not to blame for the setback to broadcasting development which that absurd system caused. The system was advocated unanimously by a conference representing all the principal broadcasting interests—broadcasters, traders, amateurs and manufacturers—then in the field. After a very short time the absurdity of the system was demonstrated and the people who originated the idea, or most of them, clamoured for a repeal of the regulations. This was done in 1924, but not before the trade and the listeners were put to considerable expense and many prospective listeners were frightened off.

Wavelength regulation has produced many difficulties for listeners; the sealed set was a "tied wavelength" idea, and the long wavelength also arose out of the scheme. Now we hear of more pending wavelength changes. One change has been beneficial to the business. The change of wavelength of 3LO, Melbourne; whose directors insisted on a change in order to improve their service. Let us hope that splendid service is not going to be affected by any other change.

We must have regulations to protect the listener as well as the broadcaster and trader. The application of them is the main thing, as regulations hastily prepared or harshly enforced, would hinder rather than help broadcasting. As in the old rhyme, "... however much we may flout them, we may live with, but we cannot live without them."

A country reader writes: "Would you kindly send me a hook-up of a 14 valve set, and would like to know what parts to use?"

A.: To date we have been unable to find a circuit for the home constructor that has any more than nine valves at the most. We do not know your idea of having a 14 valve set, but we can truthfully state that such a set would be less efficient than a smaller one.



Hope's Free — why buy it?

When you see a capacity in amp-hours printed upon a P. & R. Battery, then you know it's the capacity. It isn't what somebody thought it might be; it isn't optimism; it isn't an oh-so-hopeful "intermittent" rating; it's capacity; honest-to-goodness valve burning capacity.

Here are a few more points about P. & R. Batteries. First of all the "Dagenite" is a material the invention and secret of P. & R. It is absolutely acid-proof and leak-proof and it is practically unbreakable even if dropped from a height. Corrosion of terminals is stopped by petroleum-jelly glands; paste is "keyed" in place by a special section of grid: NO MESSY, EXPENSIVE, EVER-LASTINGLY-ROTTING CRATE IS REQUIRED. The battery is complete.

And, other things being equal, it costs no more than the other kind.

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ACCUMULATORS
The beginning and the end in
POWER

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DIRECT FACTORY REPRESENTATIVE
JOHN ARNOLD
 DELGAVES BUILDING
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"Dad—I want these batteries"

THAT'S the almost unanimous recommendation from Boyland. A spontaneous, good-natured, yet positive expression of preference.

Based upon—perhaps the building and rebuilding of set after set. The constant tinkering and improving of receiver equipment.

And who is more observant than these youngsters? Who in your family first recognizes improved reception through the addition to your set of newly developed and superior parts?

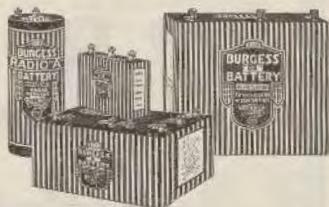
It is not surprising then that every day, everywhere, when Dad buys batteries, he respects the experienced recommendation of his young adviser. And when he says, "Dad, I want these batteries with the black and white stripes"—well, what would you do?

Only obtainable from High-Class Dealers

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NEW SYSTEM TELEPHONES PTY. LTD.
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Stocked by all leading Radio
Dealers.

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Studio News and Notes (Continued)

OLD TIME DANCE MELODIES.

Broadcasters' Miniature Orchestra will play a selected programme on August 24. Mr. Norman Jansen, the distinguished baritone, will be heard in items from his repertoire. Miss Anna Bourke, soubrette, will figure on the programme, and Mr. Crosby-Brown will be heard in clarionet solos. Mr. Chas. O'Mara, in Irish songs and stories will strike a distinct National note. The Elite Old Time Dances will be broadcast from the Marrickville Town Hall. The players who provide these Elite Old Time dance melodies are swinging rapidly into favour and there is an increasing amount of appreciation being shown for their work.

Mr. C. Montague Orr will deliver the fourth of a series of talks on the compilation of income tax returns, and will reply to telephone questions. As Mr. Orr has distinguished himself by the ease and clarity by which he handles the most involved questions and already proved the value of the information which he is prepared to supply, his talks are looked forward to with great interest. The dance programme, as usual, will be continued until midnight. The Palm Grove Orchestra, under the direction of Stan Fotheringham, continuing the programme after the Elite Old Time Dances are concluded.

MUSICAL STEEPLECHASE.

The evening programme from 2FC on Monday, August 23, will commence with the usual vocal and instrumental items from the Haymarket Theatre. Banjo solos by Mr. Garrison White, a travel talk by Mr. W. F. Jackson. Miss Anna Donna, in soprano solos. A new musical monologue by Mr. Maurice Price. Violin solos by Mr. Lionel Lawson, and Mr. Jack Lumsdaine, the well-known entertainer, will commence a new series of appearances entitled "Musical Steeplechase," in which he will play a number of musical numbers, and the listener who correctly guesses the pieces played will receive a prize.

BROADCAST FOR N.Z.

A Missionary Address, by the Rev. Mr. Ferry, will be broadcast to New Zealand by 2BL on August 23. The

Newtown Band will be broadcast from the Industrial Hall, Newtown in a specially selected programme, and a talk by Mr. Stanley Critenden, introducing his inimitable character, "The Man with the Headphones," who will deal with photographic matters.

Madame Henri, of the State Conservatorium of Music, will deliver the second of a series of fascinating talks dealing with various French and English ideas and contrasting the French and English methods of expression. The Ambassadors' Dance Band, under the direction of Mr. Al. Hammett, will provide the dance programme lasting until midnight, and during the intervals between dances, descriptions of frocks worn and social notes generally, will be broadcast by Mrs. Potts.

ANNIVERSARY SUNDAY.

St. Mark's Church, Darling Point, will celebrate its centenary on Sunday, August 22, by a special service broadcast from 2FC.

The afternoon programme will be devoted to a concert by the Marrickville Band, conducted by Mr. Hawkins, and broadcast from the Town Hall, Marrickville. The early evening session will present, for the first time, a novel vocal and Dulcitone recital by Madame Evelyn Greig, and Madame Vera Tasma, soprano. Various groups of songs, accompanied by the Dulcitone, which is an ideal instrument for broadcasting, and a number of solos will be given by Madame Greig.

As this night is also the anniversary of the Retreat from Mons, Major Sandford-Morgan, D.C.M., one of the "Old Contemptibles," will revive memories of this historic feat. At the conclusion of the church service, a band concert by the N.S.W. State Military Band will be transmitted from the Grand Opera House.

SUNDAY PROGRAMME.

For Sunday, August 29, station 2BL will broadcast the usual church service, commencing with the Petersham Baptist Church at 11. In the afternoon, the Bible Class, conducted by Mr. W. Cairo Bradley, will be con-

tinued at 2.30 and at 4, a studio concert will be featured, with items played by Broadcasters' Trio, numbers by Madame Iva Clarke, Mr. Norman Wright, and at 6, Uncle George will entertain the kiddies with bible stories, and hymns will be sung from the studio. At 7.15, the service from St. Jude's Church, Randwick, will be broadcast. At 8.30, the Manly Band, under the direction of Mr. J. Pheloung, will provide an hour's band music from the Rialto Theatre, Manly, together with vocal numbers, and Broadcasters' Trio will complete the programme by playing selections from the studio.

DUBBO TRANSMISSION.

The rehearsal of Harry Santrey's Jazz Band of 17 players, at the Tivoli Theatre, will be a unique broadcast from 2FC on August 25. An afternoon recital by the pupils of Miss Lilian Frost will be broadcast from the Pitt Street Congregational Church. The whole of the evening session will be devoted to a land line transmission from Dubbo, a distance of 280 miles, of a concert organised by the Caledonian Society. Artists will include the Royal Scottish Kilties, a combination specially engaged for this purpose.

VOCAL ART.

Playing from the Enmore Theatre, the Enmore Symphony Orchestra will be broadcast by 2BL on August 28. An illustrated lecture will be delivered by Mr. Roland Foster on the Romance of Vocal Art and solos will illustrate the remarks of this distinguished and well-known teacher from the State Conservatorium of Music. Miss Freda Gilder will sing contralto numbers, and Professor Randel Woodhouse will be heard in tenor solos. As Professor Woodhouse specialises in old Irish melodies and old time ballads, his offerings are listened to with interest. It may be said of Professor Woodhouse that his vocal art is an education in singing. Mr. Fred Brown will deliver a short talk on the electrical part of a motor car, and the musical programme for the evening will be supplied by Al. Hammett and the Ambassadors' Dance Band.

"AMPERITES" — means — RIGHT AMPERES



Use them instead of hand rheostats and prolong the life of your valves and get better results.

A TYPE FOR BOTH VALVES.

Type 201A, 5 volts, .25 amps 8/- each
Type 199, 4 volts, .06 amps

Radex Valves are Now Made with Standard 201A Base

Type 199, .06 amp.

7/6

Type 201A, .25 amp.

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Crescent Audio Transformers, 6 or $3\frac{1}{2}$ to 1

A high-grade article at 13/6
a low price.

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Sockets, for 199 Valves	Metal Shell, 1/6; Porcelain	3/3
Sockets, for 199 Valves	Metal Shell, 1/11; Bakelite	2/7
Bremer Tully Valve Sockets, 201A Universal		3/-
Vernier Dials	Emmico Bakelite, 9/6; Black Metal	6/9
Vernier Dials	Pilot Bakelite. Price	7/6
Lead-in Rods	Ebonite, 6in., 1/-; 9in., 1/3; 12in.	1/8
Egg Insulators	White Porcelain, per doz.	1/-
Ebonite Sheet3/16in. thickness, per square inch	id.
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3-Coil Holders—Columbia Outside Mounting		13/6
3-Coil Holders—Columbia Inside Mounting		11/6
2-Coil Holders—Pinnacle Vernier		7/9
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Apex Honeycomb Coils, highly efficient—		
Size 25 85 50 75 100 150 200 turn.		
Unmounted 1/2 1/4 1/7 1/11 2/2 2/7 2/10		
Spider Web Formers, with Plug and Socket		1/3
Loud Speakers—Amplion Dragon Fly		25/-
Amplion Swan Neck, type AR38		60/-
Junior De Luxe Amplion, type AR114		£4
Bosch Ambertone Cone Speaker		£4/5/-
Amplion Dragon Speaker		£9/10/-
"C" Batteries—	"Ever-Ready," 4 <i>h</i> volts., 2/9; "Volton"	3/-

"Yours for Lower Prices"

THE ECONOMIC RADIO STORES

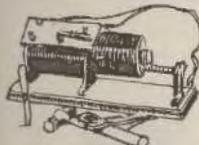
25 ROYAL ARCADE

(Right side, 3 Doors from Pitt Street)
SYDNEY

'Phone—M 3049

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NEWCASTLE



Beginners' Problems



"E.S." (Collaroy): Reports excellent reception with the two-valve reflex, and asks if it is freak reception to receive Interstate stations without the aerial connected to the receiver.

A.: "No, but we fear your aerial wire or lead-in is forming sufficient coupling to the tuning coils. If you will take the trouble to remove the aerial or lead-in right away from the receiver, your reception will undoubtedly be limited to the locals."

"J.W.R." (Adamstown): "I am contemplating building a three or four-valve receiver for family use. In your edition of July 9th, you describe how to build a three-valve Reinartz receiver, and in the next edition you described a four-valve receiver. Would you tell me which of these you would advise for family use? What are the advantages and disadvantages of the four-valve receiver?"

A.: "A three-valve regenerative receiver will undoubtedly give you excellent night time results at Adamstown, but the four-valves with the stage of H.F. amplification will increase the daylight range. Perhaps the best advice we can give you is to make enquiries from other listeners in your district, and find out how many valves they find necessary for daylight and dark reception. If H.F. amplification is not necessary, don't use it. The advantage of the four-valve receiver is increased range. The disadvantages, (a) static and local interferences increased, (b) heavier on "A" and "B" batteries, (c) initial cost heavier."

"S.T.C." (Smithfield) reports that he has constructed the long distance crystal receiver which was published in "Wireless Weekly," dated July 16th, and 2BL, 2UW, 3LO, 4QG, and 2FC have been received at good readable strength.

"Nom-de-plume" (Granville) writes: "A friend of mine made up for me the two-valve choke coupled receiver published in 'Wireless Weekly,' dated

January 1st. The set is all that you claim as far as volume and clarity are concerned; but I am disappointed with the selectivity. 2FC breaks through when using the coils suitable for 2BL. (It is not my set alone that does this, my friend's own set is the same.) I have bought a good straight line frequency condenser and fitted it with an Eumco slow motion dial, with no improvement. Can you please advise me how I can improve selectivity?"

A.: "The following is the best and quickest method:—Place another coupling plug alongside your present grid coil. Then disconnect present aerial connections from grid coil and place them on the connections provided by the new coupling plug. It will be necessary to link the earth side of coupling plug with the filament side of grid coil. The coupling of the primary and tickler coil plays an important part in the selectivity."

Another report of the long distance crystal receiver has been received from C.L. (Richmond River), who writes:—"I have received with medium 'phone strength the following stations: 4QG, 2BL, 2FC and 3LO. I think this reception is marvellous for a crystal set, and circuit is very simple, as a beginner can construct it in about two hours."

N.T. (Randwick) writes:—"I have taken your valuable paper for some long time now, but only last week did I become a regular subscriber, and I hope you will not mind my starting to ask questions so early. However, here goes. I made the 'All Australian' receiver, as described in 'Wireless Weekly,' of February 19th, and am very pleased with the results as far as local work is concerned, but I find that owing to my proximity to station 2BL (about one mile), it is quite impossible to get any Interstate station while they are on the air, although I brought in 4QG on the speaker last Sunday night, after 2BL had closed down. Can you advise me of any means of cutting out 2BL so as to get the Interstate stations? I know you have already described how

to add a stage of R.F. amplification to this receiver, also the Reinartz, and several other four-valve circuits. But I would like to know which would be the most suitable one for my particular position in Randwick, so that I can get Interstate stations without interference from 2BL, if that is possible."

"There are many of us wireless enthusiasts in Randwick and Coogee who are 'in the same boat' ever since 2BL came to this district, and indeed before I made the receiver (the 'All-Australian') I was unable even to get 2FC without interference from 2BL.

"I feel sure there must be some way out of the difficulty, and if you would be so good as to help me I shall be very grateful."

A.: "It is very doubtful whether any receiver except a Super-het will entirely eliminate 2BL at your home. The following receivers, however, all of which have been fully described in 'Wireless Weekly,' are recommended for your consideration:—The acceptor and rejector method of elimination of unwanted stations ("W.W." Feb. 12th, 1926), the Neutrodyn ("W.W." March 12th, 1926), the Sure Fire circuit for 3LO ("W.W." July 31st, 1925), and the five-valve loop receiver described in the issue of April 23rd, 1926. Of these the loop receiver will undoubtedly be the most successful."

"OLD SYDNEY."

That interesting personality, Mr. J. G. Lockley, so well known to garden lovers as "Redgum," has been induced to enter into a series of interesting old-time talks from the 2FC Studios. Mr. Lockley will deal with such interesting subjects as Old Ferries on Sydney Harbour, Old Pyrmont Bridge, Paddy's Markets, Identities of 50 Years Ago, Reminiscences of a Errand Boy, etc.

Where the Programmes Come From

(Continued from Page 13.)

sound. As far as possible the sounds of the instruments are balanced, and sent through microphones evenly.

In each broadcasting room there is a little "tell-tale" which shows if the microphone is open. Otherwise all sorts of unrehearsed effects might go "on the air," to the joy of listeners, and the shame of the officials. This tell-tale device is simply a tiny electric-light bulb. When it is shining, you are "through," and nothing but the programme number must be heard. You very quickly get the habit of looking for the light before you make the faintest whisper.

Sometimes people with no business in the studio creep up the stairs and "listen-in." They are the waifs of the radio. It is pleasant to wander in from the cold streets and warm myself with the song and story of a broadcasting studio. It is not supposed to be allowed, but I think every official would turn a blind eye to anyone who was getting so innocent a treat. Even the liftman gets into the habit of keeping his lift at the second floor, so that he will miss nothing of what is going on. From an early hour in the mid-morning until after 11 o'clock at night, there is a constant coming and going of people who have been engaged to bring smiles to the faces of listeners. For nearly every hour of the day, sweet music, brave words, thoughtful instruction, helpful encouragement, go winging their way out through the ether. They are heard by plucky, tired women in spaces of the far outback, by idle people entertaining guests at afternoon tea, by groups in the street congregated at a radio dealer's door, by little sick children in hospitals, by soldiers for whom life has been too hard—by every sort and condition of men and women; and the whole comforting business is born in these four rooms perched up near the roof of a building in Collins Street.

BURGESS—"Standard of Comparison"—
BATTERIES.



Two Valve Set

£12

Our standard 2-valve Set complete with all accessories—but not including loud speaker, ready to instal, thoroughly tested and guaranteed to give satisfaction.

Price, complete £12/-

Standard 1-valve Sets, tested and guaranteed. Complete with all accessories but not including loud speaker, only a few at £6/15/-

Accessories

We have now full stocks of UX valves, including 200A, the famous new detector. Priced from 17/6 to £3/10/- "Orient" Loud Speaker. Price £3/15/- Peto and Radford Accumulators, 55 amp., actual. Price £6/12/6

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For Service ————— Sydney



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

MULLARD Double White Ring VALVES

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

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

HF Amplification.	LF Amplification.			Power Valves.			Detector.
	FIL	FIL	Type	FIL	FIL	Type	
Type	Volt	Curr.	Price	Type	Volt	Curr.	Price
D.3	2.0	0.5	13/6	D.06	2.0	0.18	13/6
D.06	2.0	0.06	13/6	D.06	2.0	0.08	13/6
D.3	1.0	0.3	13/6	D.7	1.0	0.18	13/6
D.06	5.0	0.25	13/6	D.06	1.0	0.08	13/6
P.M.3	2 to 4	0.1	13/6	DPA.1	1.0	0.08	13/6
				DPA.1	1.0	0.08	13/6
				DPA.2	2.0	0.18	13/6
				DPA.3	6.0	0.08	13/6
				DPA.4	8.0	0.25	13/6
				PM.4	2.1	0.1	13/6

When valve is followed by
an Intervalue Transformer
use Type D.06 or D.08
Amplifier or Power Valve.

When valve is followed
by a Resistance Capacity
use Type D.06 or D.08
HV Amplifying Valve.

All Mullard Valves are manufactured at Mullard Works, London, England.
obtainable from every radio dealer in Australia.

Mullard

THE · MASTER · VALVE

(Arks 3)

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



MR. E. R. VOIGT.

Mr. E. R. Voigt is at the present time delivering most interesting lectures on scientific training and general principles of keeping fit. This gentleman is recognised as the world's authority on training, and at the Olympic Games, 1911-12, he was considered the best trained athlete present. At those Games he carried off the Five-mile Olympic Championship. He also has held championships of nearly all the European nations, England, U.S.A., and Australia. Mr. Voigt is a most versatile and exceedingly well-read man, being conversant with sociology, science, wireless, etc., and speaks in six or seven foreign languages. He was the originator of 2KY, to which station he has devoted his untiring energies, and is now chairman of the Wireless Committee. Mr. Voigt is private secretary to the Hon. A. C. Willis, M.L.C.

MR. WALTER KINGSLEY.

Mr. Walter Kingsley is an exclusive FFC artist whose baritone voice, which has been heard many times from that station, has made him extremely popular. He is the eminent London baritone of the Humphrey Bishop Musical Comedy Company, well-known in Australia.

DR. FLOYD.

In recent years, one of the most spirited denunciations of modern music has been made by Dr. Floyd, organist of St. Paul's Cathedral, Melbourne. He sees little of value, either educational or entertaining, in the music so popular to-day, stressing, in fact, the demoralising effects of syncopation. Testing out his theories,

Dr. Floyd conducted a choral concert from St. Paul's, through 3LO, Melbourne, on August 10th. The items were not entirely sacred, a lighter element being the introduction of old nursery rhymes to new settings.

BILLIARDS BY RADIO.

Walter Lindrum (billiard champion of Australia) who has been lecturing from 3AR Melbourne on billiards as it should be played at home. As may be seen from the accompanying photograph, Mr. Lindrum has a very graphic way of describing the various shots, and his series of lectures on



Mr. H. P. J. Sinclair, 2KY's engineer.

this fascinating subject were very much appreciated by many listeners to 3AR concerts. This was made very evident by the number of messages and letters received during the series.

As a result of the success attending the inauguration of a broadcasting station at Balboa, Panama, the public demand for crystal sets has become insistent. It is reported that stocks are almost exhausted and that dealers are sending urgent orders for shipments to foreign manufacturers.

2KY'S ENGINEER.

Mr. H. P. J. Sinclair is the engineer in charge of 2KY Broadcasting Station, and of the Stations' Research Bureau. He is 27 years of age, and entered the radio profession 12 years ago, in the Royal Australian Navy.

Since then, he has served the wireless branch of the Navy in the following ships, "Tingira," "Melbourne," "Australia," "Success," and "Brisbane." During his naval career, he passed through extensive training at the Williamstown and Westerport wireless schools, and also the Grand Fleet wireless school at Longhope, Scotland. He saw active service in the North Sea and West Indies for 3½ years.

On returning to Australia, he won a coveted higher educational certificate, and was appointed schoolmaster to H.M.A.S. "Success." One of his final appointments was wireless instructor to the naval training ship, "Tingira," where he helped 40 young men towards a wireless career. Leaving the Navy two years ago, Mr. Sinclair obtained his commercial experience under one of the world's foremost radio engineers, E. G. Beard, C.E., United Distributors Ltd. Mr. Sinclair is the second son of Police Inspector Sinclair, of Goulburn.



Mr. Walter Lindrum, billiard champion of Australia, head'd from 3AR.



Shipment Just Landed



We are glad to announce that we have just landed a shipment of this well-known and popular line. Our stocks have been landed, but as these are rapidly booking out, dealers will be well advised to place their orders at once.

Trade Discounts on Application.

FIL-KO-LEAK
SCIENTIFICALLY CORRECT VARIABLE GRID LEAK



RETAIL PRICE . . . FIL-KO-STAT . . . 12/6

These are two instruments distinctly designed to improve reception through their ability to control valve action—FIL-KO-LEAK to tune the grid by securing correct grid bias—FIL-KO-STAT to tune the plate-filament circuit by its control of electronic flow. Together they assure you maximum audibility, clearer signals and freedom from oscillations and other valve noises. They bring in stations you never heard before.

Recommended by Mr. C. D. MacLurcan in "Radio"

General Indent & Export Co. Ltd.

Basement, Broughton House, King & Clarence Sts., Sydney

Telephones—MA 1790, MA 1744



Mr. F. C. Cochrane announcing early morning test scores.

N.Z. LISTENER RECEIVES TEST SCORES FROM 2FC

WRITING from Hawkes Bay, N.Z., more than 12,000 miles from Sydney, a listener in states he has not missed a syllable of any of the test match scores since the cricket season began three months ago. He has been able to post a bulletin outside his shop window containing results much in advance of those received at the local newspaper office.

"Thanks to 2FC, my shop has become one of the most popular in this town" he says. "Every morning at 8.30 a.m. (corresponding to 7 a.m., Sydney time), I tune in that station for stumps scores."

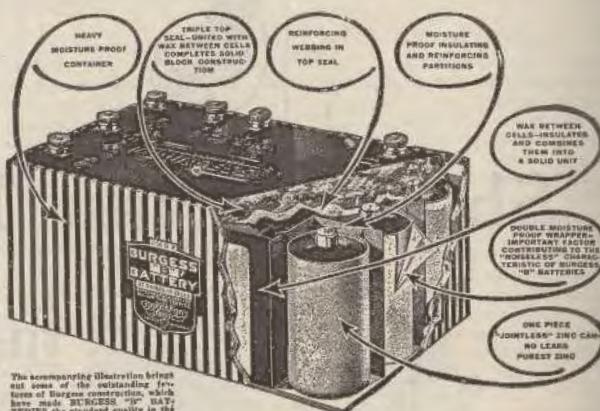
The letter is a striking testimony to the excellence of Farmer's broadcasting service. The exclusive cricket information read out by Mr. Cochrane every morning is creating widespread interest among listeners in all parts of the Commonwealth and in New Zealand.

By establishing a cable service enabling full scores to the drawing of stumps to be broadcast first thing in the morning, listeners in no matter how far distant can have the results just as soon as the city man opens his morning paper.

The final test match, beginning on Saturday, August 14, will be dealt with thoroughly every night before the station closes down. The scores to the luncheon adjournment will be given. This will continue each day until the game ends.

BURGESS

"THE DRY BATTERY SUPREME"



The accompanying illustration brings out some of the outstanding features of Burgess construction, which have made the Burgess battery a standard in the wireless field.

"ASK ANY RADIO ENGINEER"

COULD ANY FINER RECOMMENDATION BE GIVEN THAN THE NAMES OF BURGESS USERS

They're used by the most famous Radio Engineers. They are standard equipment in the U.S. Navy. The U.S. Aeroplane Mail Service has them. The U.S. Shipping Board uses them. They flew round the world with the World Flyers. They went to the North Pole with Macmillan. Captain Wilkins relied on them too. Captain Byrd circled the North Pole with them. The first news of Amundsen was flashed from Alaska by them. They were used by the Radio Corporation of America when the first Radio photos were transmitted between London and New York. They are the preferred equipment in leading broadcasting stations. Westinghouse station KYW uses them, so does 2BL, Sydney. They're in the wireless room of the liner Leviathan. They're used on the United States Submarines.

OBtainable ONLY FROM HIGH CLASS DEALERS.

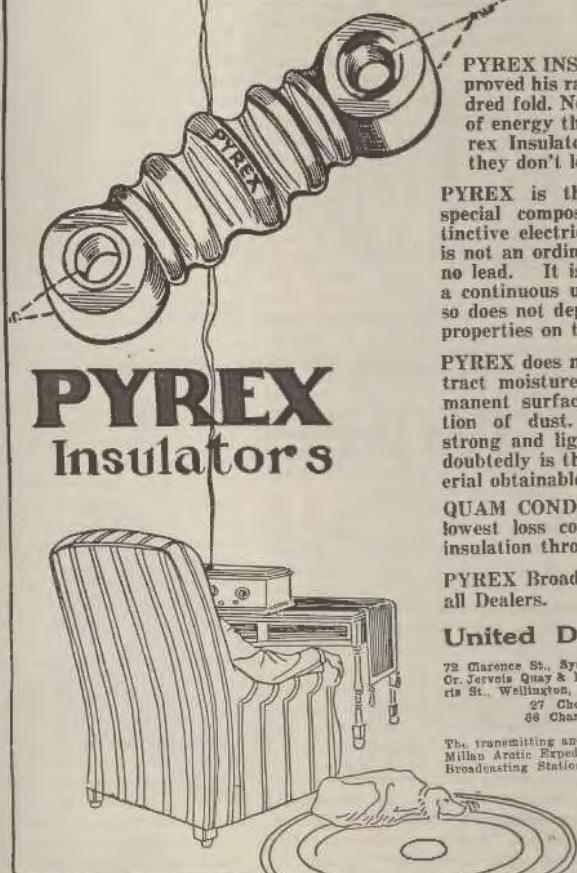
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BURGESS

"BATTERIES"

THE IMPORTANCE OF PERFECT INSULATION EMPHASISED



PYREX INSULATORS have improved his radio reception a hundred fold. Now he gets every bit of energy that is on the air. Pyrex Insulators really insulate—they don't let energy leak away.

PYREX is the trade mark of a special composition possessing distinctive electrical characteristics. It is not an ordinary glass—it contains no lead. It is homogeneous and of a continuous uniform structure, and so does not depend for its insulating properties on the surface glaze.

PYREX does not absorb water or attract moisture, and its smooth permanent surface prevents the collection of dust. It is mechanically strong and light in weight, and undoubtedly is the best insulating material obtainable.

QUAM CONDENSERS—the world's lowest loss condensers use PYREX insulation throughout.

PYREX Broadcast Insulators, 3/6 at all Dealers.

United Distributors Ltd.

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tin St., Wellington, N.Z. 26 Queen St., Perth
27 Chester St., Adelaide
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The transmitting and receiving antennae of the McMillan Arctic Expedition are PYREX insulated. 84 Broadcasting Stations in the U.S.A. have recently replaced other insulators with PYREX. The U.S.A. Navy and Coast Guard Lighthouses and the Mail Service specify and use genuine PYREX.

Radio and Church Attendances

(Continued from Page 5.)

services of those officers who during the last five years have rendered such invaluable assistance being retained.

As I was living in Bournemouth, Mr. Reith asked me to broadcast a service from there. This I did on the night of February 7th, and, as a result of that service, an old father called on me and told me that he had lost trace of his son in Australia, could I help him. I knew the district, and on my return I found the son, and told him of the anxiety that his silence was causing in the Old Land, and he at once wrote home. I have since had a most grateful letter from his people.

The B.B. Co. is very careful in its Sunday broadcasting. From each studio every Sunday night, a service for which it is responsible, is sent out. The whole choral part of the service is supplied by its own staff, and from my own experience I can bear witness to the care and reverence with which it is prepared. Clergy of all churches are invited to give the address, but the manuscript of that address must be in the hands of the local manager a fortnight before the date of the service. To show how seriously this side of the work is regarded, I will tell of an incident that happened to me. I prepared my address, and felt that it was my duty to give particulars of our life and conditions here. The manager, in acknowledging the receipt of my manuscript, asked if I would add to it something of a more spiritual character. I very gladly accepted the suggestion, indeed, re-wrote the whole address.

Mr. Reith, who listened-in from London, afterwards rang me up and thanked me for what I had said.

I would say, in conclusion, that the broadcasting of religious services is a very great responsibility. Only the best music should be used, and the most carefully prepared addresses given by men who are specially fitted. I would also put in a plea for brevity, as my experience is that the concentration demanded for proper listening-in, is more tiring than listening when the eye can help the ear.

If due reverence and care are

Radio for Hospitals

THERE is being installed by Amalgamated Wireless (A'sia) Limited, at the Western Suburbs District Hospital, a wireless telephone service of the most modern type.

The installation has been donated to the hospital by Mr. F. J. Stewart, in memory of his nephew, David Henry Stewart, who lost his life at Corrimony on Good Friday last, after heroically saving his mate from drowning.

The installation is on the same lines as that recently installed at the Ryde Home for Incurables. It consists of 2 complete Radiola receivers, operating at the same time off one aerial. These two receivers feed two distribution panels or amplifiers, which in turn provide a broadcasting service to 67 bedside head-phones, in addition to a loud speaker in the children's ward and also one in the nurses' quarters.

On the wall at the side of each bed, there is affixed a small box in which are two plug sockets, the patient plugging in for either Farmer's broadcasting service or Broadcasters Ltd., whichever is desired. The headphones when not in use are fixed on to a hook on the plug box.

Whilst the volume from the loud speakers is sufficiently loud enough to dance to in comfort, the instrument is also designed that at all times the volume in the headphones never exceeds that of comfort.

Furthermore, the wiring of the phones has been so arranged that should all but one of the patients disconnect from one broadcasting station and plug into the other, the volume in the remaining pair of phones in circuit is exactly the same as when the whole sixty-seven are being operated.

Should one pair of phones break down, burn out, or otherwise become inoperative, it does not interfere with any of the other listeners-in to any material extent, so it will be seen

brought to bear on the transmission of religious services and on their reception, I have no hesitation in saying that it is a wonderful agency for spiritual ministration, and that no accurate estimate can be made of its undoubted power for good.

that all contingencies have been provided for.

The manipulation of the set is exceedingly simple, being confined to four "on" "off" switches for each broadcasting station. A simple change over switch disconnects the accumulators from the set and connects them on to a Tunger charger, which silently charges them through the night, and in the morning they are ready for the next day's work. The instrument is in use at every broadcasting period throughout the day.

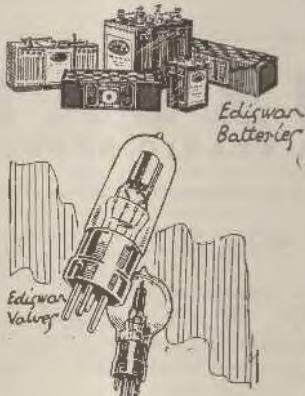
The distribution wires for the telephones throughout the building terminate at a common panel in the wall in the control room immediately under the main distribution panels, into which they are connected by special cords and plugs.

The operation of the installation is entirely in the hands of the nursing staff.

BROADCAST TO HOSPITALS.

On Friday, August 20th, the regular features will be presented by Station 2BL, and during the afternoon session the literary talk will feature a cheery optimistic note addressed to a considerable body of listeners-in who are in hospitals, or who are prevented from participating in the active life of the world. Special consideration without undue emphasis is being given to these listeners-in, in the form of a cheerful talk delivered once a month. The evening programme will have a distinctly Scottish flavour, introduced by Mr. Richard McLellan and his professional pupils. Miss Phyllis Atkinson, mezzo soprano, will also be found on this programme, and a sporting talk by the Senior Sporting Expert of the "Sun" newspaper will be featured at 9 p.m., when telephone questions in regard to form will be answered. Mr. J. M. Prentice will deliver the third of a series of Great Love Stories, dealing with the tragedy of Paolo and Francesca, under the title of "The Love Story Poets Tell." Mr. Cec. Morrison and his Gloom-chasers will be heard from the ballroom of the Bondi Casino, and the Palmgrove Orchestra, under the direction of Mr. Stan Fotheringham, will be broadcast from the Studio until midnight.

Helping the Amateur



Valves and Batteries

Probably more necessary to success than any other component.

To ensure correct tuning, your valves and batteries must be of the best.

*Leading Dealers
Sell Them*

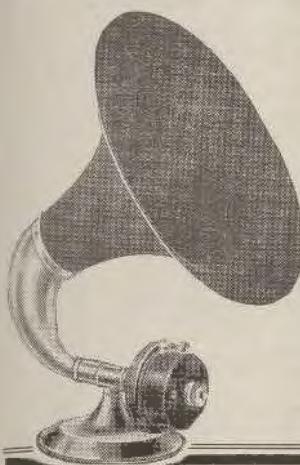
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Electric Co. Ltd.**
58 Clarence Street,
SYDNEY.
Also at Melbourne,
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EDISWAN for WIRELESS

(PATON.)

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The "BULLPHONE Nightingale"



ACCLAIMED the Wonder Speaker of the World. The pure rich tone of the "BULLPHONE" is true to its name, the *Nightingale*.

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DEALERS desirous of further particulars should write to

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14 inch Bell, 21 inches high.
Nickel-plated Arm and Stand.
Stand. Black Crystal Bell £4

14 inch Bell, 21 inches high. Nickel-plated Arm and Stand.
Mahogany finished Bell £4/5/-

NO
MORE
DISTORTED
MUSIC

Even the poorest Receiver with its harsh reproduction can be converted into a mellow-toned musical instrument with the new

MACLURCAN

TONE PURIFIER AND STATIC REDUCER

(Patent app. 26132)

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EMMCO
PRODUCT

NOW READY
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Price, 21/-

WITH A MONEY
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PRATTEN BUILDING, JAMIESON STREET, SYDNEY
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ECONOMIC RADIO STORES

COUNTRY CLIENTS NOTE OUR CHANGE OF ADDRESS

We beg to advise our country customers that we can now handle your enquiries and orders without delay.

We regret that, on account of the volume of business being greater than ever during our transfer, many orders were unduly delayed.

We are now settled and every facility will be used to execute your orders same day as received.

"WIRELESS WEEKLY" RECEIVER NO. 3.

Parts Required:

1	Ebonite Panel, 24 x 9 x 3/16	8/6	8	Rheostats, 30 ohms., each	2/1	6/3
2	Panel Plugs, each	1/-	2/-	.00025 Grid Condenser	..	1/9
1	Coupling Plug	..	1/9	1 .001 Fixed Condenser	..	1/6
1	.001 Variable Condenser	10/9	1	Variable Gridleak, "Watmel"	..	4/6
2	Vernier Dials, Emmco, 6/9	13/6	2	Audio Transformers, Crescent, 13/6	..	27/-
1	Potentiometer, 400 ohms.	8/-	4	Terminals, black tops, each	3d.	1/-
4	Valves—Radex, 7/6	90/-	1	Push-Pull Battery Switch	..	1/8
4	Valve Sockets, 1/11 each	7/8	1	Doz. Sq. Buswire	..	1/10

NOTE THE NEW ADDRESS

THE ECONOMIC RADIO STORES

25 ROYAL ARCADE (3 doors from Pitt St., right side), SYDNEY

And at NEWCASTLE



Radio Auction Bridge

(Continued from Page 10.)

snakes, exhaust the last opposing heart with his king, and his remaining hearts are good. North and South, therefore, make five odd and game.

The important features are as follows:—

South's original bid of a four-card suit. Extensive analysis has demonstrated the soundness of four-card suit bids, both as informative bids, that is, conveying information to partner as to strength in the suit bid or in the suit and hand combined, and also as bids that can be played with safety when left in. A four-card suit must not be bid, however, unless you know that your partner will take you out when he holds less than normal assistance in the suit. Normal assistance, as I said before, is three small cards of the suit, or two to the queen or the king or the ace.

According to the table of four-card suit bids, prepared by the American writers, a four-card suit headed by the ace, king and queen may be bid without any side strength, while to bid a suit of ace and king and two small cards requires at least one sure trick on the side, either an ace or king-queen. Therefore, South was more than justified in bidding one club originally as he had a side ace in addition to his four-card ace-king-queen suit. He is well prepared for a possible No Trump take-out by his partner, being able to deliver at least four sure tricks at No Trumps.

West's bid of one spade was sound because of the four honors, as well as being a call for a lead from his partner in case North became Dealer.

Analyse North's play of the hand after he had won trick two with the king of trumps. Wouldn't you have led the knave of clubs, then got into Dummy by leading a trump or trumping a heart and then led the ace, king and queen of clubs in the hope that they would be evenly divided between your opponents? Try it and see where you land. West would trump the club queen with the eight of diamonds which would compel North to over-

trump with the knave or queen. Then it is impossible for him to go game.

QUERIES ANSWERED.

"Listener" (Parramatta): Should not have South have led spades as the second lead of the game which was broadcasted on August 4th, instead of the lead of hearts which he did make, so as to shorten the trump holding in Dummy? I am sorry I cannot agree with you entirely. The spade lead would have been better than the lead of hearts, but it would not have materially affected the game. The diamond lead was the best, so as to shorten Dummy's trump holding. When North eventually gets the lead with the king of clubs and leads diamonds for the third time, unless East, the Declarer, discards 3 of hearts he loses game.

"Merueta" (Cremorne): Is it advisable to bid one No Trump on three aces only? No. It is far too weak. You can only count on three certain tricks. Normal expectation without any further bidding is two tricks in your partner's hand, or five in all. Why contract to get seven?

"Settee": My opponent on the right, his partner, the dealer having passed, bid one spade. I held seven spades to the king, queen, singleton, king of hearts, ace, queen, x clubs, xx diamonds. I bid two spades. Dealer bid three hearts on the second round, my partner doubled; what should I have done? In the first place you should not have bid two spades. Neither you nor your opponent on the right could get game. As you made the mistake in bidding, you should have left the three hearts doubled.

"Coal" (Newcastle): What is the correct lead from ace king bare? Lead the ace followed by the king. This is the only occasion on which from such a holding, you lead the ace first. No, I would not call it a convention, but good players always lead this way. It is easy to remember by likening it to the lead of ace and one other. Treat the king as the other card, and you must always lead the ace first.

"Remmick" (S.A.): Dealer calls one No Trump. My partner, sitting on the Dealer's immediate left, doubles. Next player goes two No Trumps. I pass, Dealer passes, my partner again doubles. What should I do? Pass and let the double stand. If there had

been no intervening bid by the opponent on your right you would then have been bound to bid a major suit for preference, failing that minor one. The intervening bid relieved you of that obligation. The second double of your partner can only be meant for business, and not for forcing you to bid. If he doubled a suit bid of the dealer, and again doubled the same suit put up by Dealer's partner, then you would be obliged to bid your best major or minor suit, but a double of two No Trumps means business.

"A.C.Y." (Neutral Bay): At the end of a hand the declarer had five cards and the other players only one each. The Declarer must have picked up a trick inadvertently and put it in his hand. Contract was made, and the Declarer claimed that the hand must stand. What is the rule? There must be a fresh deal.

"Ohlo.": Please repeat your question. You have stated that you and your partner held the queen of hearts.

"Union.": Anybody is at liberty to play with me at 2FC studios. I would be very pleased if you would come in. Please give me one week's notice.



Registered Trade Mark.

Published by E. C. Mumford, of William Edward St., Longueville, for the Proprietors, Wireless Newspapers Limited, 61 Castlereagh St., Sydney; and printed by Publicity Press Limited, 71-75 Regent St., Sydney.

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

Subscriptions: Six months (52 issues), 12/- post free. Six months (52 issues), 6/6 post free. Single copies 3d. each, or post free 4d. Subscriptions should be addressed to Wireless Newspapers Ltd., 61 Castlereagh Street, Sydney.

Advertising. Copy must be in the hands of the Managing Editor by the Friday preceding each issue. If copy is not received in time, the previous week's advertisement will be repeated.

Agents in Great Britain.—The Colonial Times & News Ltd., Dudley House, Southampton Street, Strand, W.C. 2.

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When you cannot get your stations, use a Neutron Crystal and get quick results. Interstate stations are being received on Neutron crystals throughout all of Australia.

LOUD SPEAKER can be operated with a Neutron Crystal on your crystal set.



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**Test with
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Designed on Sound Scientific Principles.
Each Strand of the Twin-Wire Winding
is thoroughly Insulated.

With the best of the rest
Put "ATLAS" to the test:

TELEPHONES -BW 6938, B 4917

Low Loss Coils give a good set its best chance

It's unfair to choke it with poorly designed coils. H.F. Currents demand area; ATLAS LOW-LOSS COILS are wound with twin wire and offer a double-surface path. Everything that is known of low-loss coil design is incorporated, and whether it's a question of distance, selectivity, volume, or all combined, there's no serious rival to Clarke's "ATLAS" LOW-LOSS COILS.

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"Corran"
Via Marsden N.S.W.
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The Manager
Amalgamated Wireless (Aust.) Ltd.
Sydney -
Dear Sir -

You will be interested to hear
that I have a Radiotron 201A that has
been in constant use for two years.
It has had shockingly bad treat-
ment but even after this misue
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cast receiver. Yours faithfully,
L. M. Wilson
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Radiotrons

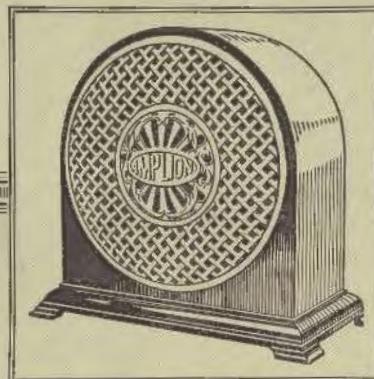
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- U.X.199.
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WIRELESS Wireless
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Designed to match the furniture of the home

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