

WIRELESS WEEKLY

Vol. 8. No. 14.

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Friday, July, 30, 1926.



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Further particulars on page 37.

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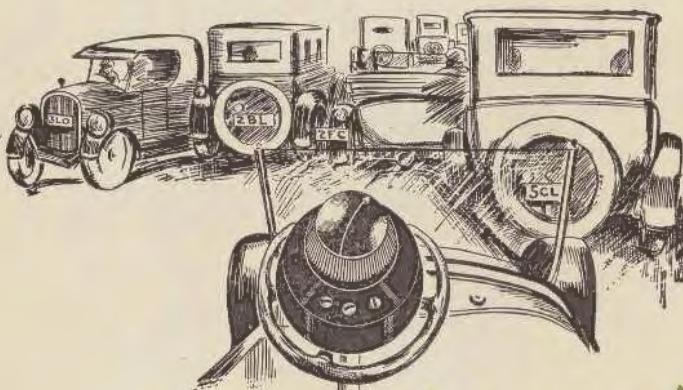
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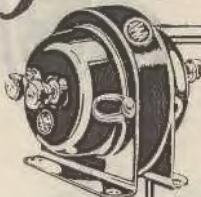


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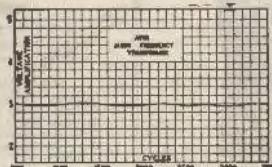
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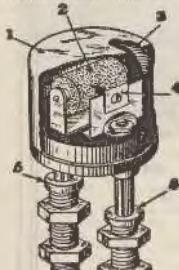
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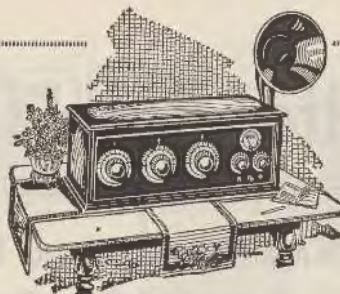
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JULY 30, 1926

Broadcasting to New Zealand

DURING the last week or two, there have appeared in the daily Press paragraphs relating to the possibility of arranging for the co-operation of the Australian broadcasting stations to provide entertainment for broadcast listeners in New Zealand, and it is stated that Mr. W. R. Blow, representative of the New Zealand Government in Sydney, is supporting the proposal. It has been suggested to the New Zealand Government that negotiations be opened up with a view to arranging a special weekly programme, to be broadcasted from Sydney, picked up by the New Zealand stations, and re-broadcasted throughout the Dominion.

Some months ago the New Zealand Broadcasting Company was established in the Dominion, and it was decided to instal four 500 watt stations, one in each of the principal cities. The first of these stations was erected at the Exhibition at Dunedin, and many of the broadcasts from there were received by listeners in situated in Australia. Since the establishment of this station, a great deal of controversy has been carried on in the Press of New Zealand, and if the published announcements are to be believed, then quite a number of New Zealand broadcast listeners are dissatisfied with the present arrangement, although, of course, it must be realised that there has been scarcely time yet to offer an authoritative opinion as to whether the scheme laid down in the Dominion is the best that could have been devised.

At the present time the bulk of the radio audience across the Tasman depends upon the Australian stations for its broadcast entertainment, and practically the whole of the radio columns of the daily papers and the broadcasting items published in the two technical journals, deal with Australian broadcasting stations. Some idea of the interest that is taken in New Zealand in our stations, may be gained from a letter published recently in a Christchurch paper protesting emphatically against the Daylight Saving Bill, on the ground that if it becomes law, the Australian stations will not commence their evening programmes till 10.30 p.m., New Zealand time, during the summer, instead of 9.30 p.m., as at present. There can be no doubt that practically all the valve sets in the Dominion are tuned in every night to Australian stations, although the 30/- license fee which is paid in each case, is primarily intended for the New Zealand Broadcasting Company. Under normal conditions, even a one valve set is capable of receiving the high power Australian stations very well. The position is different, however, with regard to crystal sets, and the owners of these stand in a most unfortunate position when compared to those people who have valve sets, since they are necessarily limited to whatever is broadcasted from their local station. While the musical and artistic talent available in New Zealand

may be of a high standard, still it is limited, of course, by the size of the country, and its comparative isolation. Under these circumstances, therefore, provided whatever technical difficulties may lie in the way can be overcome, the rebroadcasting of Australian programmes will bring within the scope of the crystal enthusiasts, far better programmes than they could otherwise obtain.

There is an important factor which must be taken into account in this matter, and that is the difference in time between the two countries. New Zealand is one and a half hours ahead of Sydney, so that in order to commence a programme at 8 p.m., Dominion time, the Sydney station would have to commence its transmission at 6.30 p.m. Naturally this would involve a considerable amount of extra expense, and obviously this would have to be borne by somebody other than our local broadcasting station.

Provided, therefore, that some mutually satisfactory financial arrangement could be made between Australia and New Zealand, and that no inconvenience is suffered by Australian broadcast listeners, we see no reason why this question of broadcasting special programmes to New Zealand should not be taken up without delay, and it is to be hoped that the New Zealand Government will give official recognition to the Australian stations, and at the same time increase the popularity of broadcasting in the Dominion.

Radio and the Church

A HELPFUL INFLUENCE

A SIMPLE but powerful illustration of the remarkable hold of Gypsy Smith over his audience, even by radio, where the personal element of seeing is removed, is provided by the following incident. In a city radio shop at midday on Monday, July 19th, two modern young ladies listened to the great evangelist on the loud speaker. Although several people entered the shop while they were listening, the two girls were apparently unaware of their arrival, so intent were they on the words of the speaker. Just at the point where Gypsy Smith had worked his audience up to a tense moment, the telephone in the radio shop rang sharply, and both girls jumped as though a cannon had been fired.

Gypsy Smith possesses a dynamic personality; he is a never-failing fountain of complex emotions, changing so rapidly that his audience are held spellbound, hanging tensely upon every word. His actions constitute a large proportion of his weapons of offence upon the unresponsive listener — yet his marvellous personality, his forcefulness, lose not the slightest fascination when his sermons are heard by radio, and he is hidden from the listeners' view. Some idea of his wonderful power over even his radio audience may be gained from the letters that have been pouring into 2FC during the last week or so. They all



Rev. Howard Lee, St. Mark's, Darling Point.

tell the same story of human interest and spiritual uplift. The evangelist has a sense of humour developed to an extremely high degree, as for instance the little anecdote concerning his adventure when as a small boy he was caught stealing an old gentleman's plums. Gypsy Smith says, "He threw an old boot at me, but he forgot to take his foot out of it."

That the influence of the "Radio Church" is widespread and beneficial cannot be doubted. The Sunday services are directly helpful to thousands of listeners who would otherwise never be enabled to hear a sermon or to derive the comfort that is spread by the unseen preacher. The "Radio Church" is world wide, and there is not now a station of importance anywhere which does not devote a fair proportion of its time to broadcasting church services. Old prejudices have been set aside, and to-day clerics generally realise the tremendous extent and the vast numbers of the audience they are enabled to address. A remarkable illustration of how the church has adapted itself to radio and how great a force it is considered, was afforded recently when the minister of a suburban church stood down and gave his parishioners the opportunity of hearing Gypsy Smith speak from the loud speaker.

It is almost impossible to find a dissentient voice when seeking the opin-

ions of Sydney preachers regarding the matter of broadcast sermons.

Discussing the subject a little while ago, the Rev. T. E. Ruth, of the Pitt Street Congregational Church, said:

"Church broadcasting has a very definite purpose, but it also has its limitations. You cannot, for one thing, speak to the congregation and the listeners-in too. If I remembered I was speaking to the listeners-in I would not be preaching; I always forget the microphone. A preacher cannot serve two masters. There are hundreds of gestures, expressions, and significant pauses which must inevitably be lost upon the listener-in. A pause made by the preacher may convey to his congregation more meaning almost than his words; but those listeners-in will probably only wonder if something has suddenly happened to their set. Then there are the restrictions placed upon the modulation and pitch of a speaker's voice. What may be an expressive whisper to the congregation is lost altogether upon many listeners."

"A better plan, I think, would be to conduct services specially for broadcasting purposes, without any attempt to convey the atmosphere of an ordinary church. This, I am sure, would be more effective. But there is little doubt that the services, broadcast as they are at present, are doing a great amount of good, both to our church



Rev. T. E. Ruth, Pitt Street Congregational Church.



Rev. Howard Lee, St. Mark's, Darling Point.

itself and to those who listen to them."

It is worthy of note that services conducted on similar lines to those suggested by Rev. Ruth are regular features of the B.B.C. programmes, ordinary services being broadcast about once every month. They are conducted on strictly non-denominational lines, and are drawn up by a committee consisting of clergymen from all branches of the church, including Roman Catholic. Recently a suggestion was mooted here that the churches from which transmissions are made should take it in turn to give an all denominational service—a sort of combined effort for broadcasting purposes. In the opinion of Rev. Ruth, however, this would be impracticable, and many other clergymen agree with this view.

The first church to be put on the air in Australia was St. Marks, Daring Point, on April 15, 1924, and since then 2FC have frequently transmitted from this church.

"We receive letters from all parts, indicating the widespread nature of our broadcast services," said the Rev. Howard Lea, of St. Marks.

"They come from Palmerston North, Yass, Bellingen River, and from the most remote places imaginable. Our last anniversary service was particularly well received—the statement was made to me personally by some listeners recently in Sydney, that it sounded as though the service was in the room. It must, undoubtedly, be a boon to many otherwise prevented from attending church. I can say definitely that it has not affected the attendances in any way, or, if it has, it has been to increase them."

It was suggested that the services may not be always regarded from a proper devotional viewpoint by some listeners—that the services may be treated with irreverence.

"Undoubtedly the broadcasting must fall on a certain number of un-receptive minds," said the Rev. Lea, "but you will find this anywhere. It is inevitable in any public worship. In the case of broadcasting, whatever irreverence there may be is easily offset by the increased benefit which it brings to so many."

The Rev. Raward, of the Central Methodist Mission, is another keen supporter of broadcast services.

"I think its missionary aspect is the biggest part of church broadcasting," he said, "as it reaches so many—those in all walks of life—who otherwise may never think of church," said the Rev. Raward. "In this way the possession of a wireless set may be a very definite step towards active religion. From all States—we even received a letter from Apia recently—some acknowledgement and comments of our services. Not always, of course, do these opinions agree with our own, but we don't mind that. It shows, at the very least, that no apathy exists among our invisible congregations. There is a possibility, of course, of irreverence in connection with our services, but this is balanced by the link which is formed between so many people and ourselves. Broadcasting is doing very real work in church life."

"Even one service," remarked Rev. Father Bond, of St. Mary's, Presbytery, "brought us many letters. I do not think there has been any suggestion of a lack of reverence in the matter. Perhaps the greatest value in broadcast services lies in the fact that they bring the outback dweller into the very doors of the church. Some time ago, the Rev. E. H. Baker, of St. Thomas', North Sydney, received this remarkable letter from a lady on the Macleay River: 'I know you often wonder and question if it is wise to broadcast; you are afraid of making people forget their duty to go to church—but be cheered with the knowledge that those people who cannot go to service are thankful for the wonder of wireless. Here in Smithtown, twelve hours by rail from the city, with an evening service once a fortnight, we eagerly watch the programmes for something good. So, when your doubts arise, think of the waybacks who thank you for broadcasting.'

This letter could be supplemented by hundreds of others received by ministers and the broadcasting stations, and they are ample evidence of the wonderful aid that broadcasting has brought to the church.

BURGESS—"Assure Clear Reception"—BATTERIES.

MILK OF KINDNESS.

Whether the educational facilities of radio entertainment have had a refining influence on the community, or whether broadcasting licenses are monopolised by charitably minded people, cannot be determined definitely, but it is very noticeable that listeners—in always show a remarkable response in cases of distress or special appeal. Last week 3LO Melbourne broadcast a message concerning the straying of a Friesian cow in full milk. "We do not generally broadcast messages of this nature," explained the announcer, Mr. Andrew, "but we understand that the younger members of the family to whom the cow belongs are entirely dependent on the animal for their sustenance." Every set in the Frankston district in which the cow strayed must have been in operation, for within a few minutes Mr. Andrews was able to announce, "The world is at rest—the cow has been recovered, and the sustenance of the children is assured." However, the aftermath was the most remarkable circumstance of all. Next morning the astonished owner of the now famous cow opened his front door, to find nearly a dozen persons with cows which they were either willing to loan to the family in case the Friesian had not turned up, or other straying animals which had been brought along in mistaken identity. Two neighbouring children brought along jugs of fresh milk, and the family were faced with enough sustenance to last for months.

FINAL SUNDAY SERVICE.

On Sunday, August 1, in the early morning, a description will be given through 2FC from Kosciusko of the various sports and Snow Carnival. The morning service will be taken from the Lyceum Methodist Hall. The afternoon programme will be given by Mr. Christian Hellemann, who is arranging a vocal and instrumental concert from the Congregational Church, Petersham. Gipsy Smith's final Sunday evening service will be transmitted from the Hippodrome at 7 p.m., and at 8.30 the Leichhardt Band will be heard from the Strand Theatre, Leichhardt. At 6.20, Mr. R. S. Adams will continue his interesting talk on Mexican music, playing some more records taken in Buenos Ayres.

**BENNETT NORTH RECITAL.**

The Bennett-North recital will be broadcast from the King's Hall, through 2FC on Wednesday, 4th, for a period of an hour. Third Session of the Radio Auction Bridge will be given. Photo Talk by Mr. Van-de-Velde. Baritone solos, by Mr. Lawrence Halbert. Instrumental programme from the Lyceum. Harry de Boebeck, comedian.

"WENLOCK EDGE."

For the first time on the air will be heard from 2FC, on Thursday, 5th, the popular song, "Wenlock Edge," to be sung by Mr. William Dallison, accompanied by a string quartette arranged by Mr. Lionel Lawson. Solos by Mr. Gladstone Bell and Mr. Lindley Evans. Play by Mr. Walter Hunt and Miss Eve Warhurst. Madame Vera Tasman, soprano, will sing. Steel guitar solos by Mayo Hunter.

COMIC OPERA ON THE AIR.

Arrangements have been completed with Messrs. J. C. Williamson Ltd. and the Mosman Musical Society, whereby listeners will hear "The Merry Widow," which will be broadcast in August, produced by the Mosman Musical Society. The following week, by arrangements with the Roseville Musical Society, "The Sunshine Girl" will be transmitted, and from the Conservatorium Hall on August 9 an act from the comic opera, "A Knight for a Day," produced by the Bankers Operatic Society.

TOURIST INFORMATION.

2KY has made arrangements with the Tourist Bureau for the broadcasting regularly of tourist information affecting Sydney and the country attractions. Arrangements are also being made with the tourist bureaus in the other capitals to reciprocate.

so that there will be a general dissemination of tourist information right through the Commonwealth.

The Agricultural Department are co-operating with 2KY in broadcasting special information and lectures on individual subjects, not only for



Madame Evelyn Greig, distinguished composer-pianiste, who has returned from a successful tour of the United States of America, and who is to deliver a series of travel talks from the studio of 2BL.

the benefit of the people on the land, but also for the people surrounding the city. 2KY are making this a regular feature also. So important are rural matters to a community like Australia that 2KY has decided to appoint an Associated Agricultural Editor.

For Friday night, July 30th, 2KY are broadcasting from the Leichhardt Stadium. This is a feature which is being used in connection with lectures and scientific training by Mr. E. R. Voigt (Olympic Champion, 1911-1912).

BURGESS—Constant satisfaction assured—BATTERIES.

WILL PRIOR'S ORCHESTRA.

2FC features on Friday, July 30th, include:—Midday Gipsy Smith meeting from the Town Hall. A vocal recital in the afternoon by pupils of Madame Viceroy-Goossens. Racing and film talks in the evening. Harmony numbers by "The Alwyns." Soprano solos by Miss Marie Segur. Baritone solos by Mr. Walter Kingsley. Orchestral programme in connection with the film, "The Vanishing Race," from the Prince Edward Theatre, including items by the Will Prior concert orchestra, and others from Mr. Leslie Harvey on the orchestral organ. From his dressing-room, Mr. Guy Bates Post will give an interesting 10 minutes' talk, and from the Palace Theatre, by permission of Messrs. J. C. Williamson Ltd., the second act of "The Climax."

RADIO ADVERTISING.

A maximum of entertainment with a minimum of advertising is the new plan of radio station KFON, Long Beach, California. As advertising is absolutely necessary to a certain extent, reliable business firms in the city are permitted fifty words nightly and these ads are given between musical numbers, two or three in a group, on a two-hour dinner programme.

The dinner programme is being broadcast every night in the week from 5 to 7 o'clock. An all-star concert orchestra of six pieces, violin, piano, flute, clarinet, 'cello and bass, furnishes high-class music. As listeners-in are learning that this period consists mostly of music with very little conversation, they do not immediately tune out and seek another station on the dial when they hear the advertising announcements.

SPORTING ITEMS.

On Saturday, August 7th, 2BL will be on the air with a special series of sporting items, including the latest up-to-the-minute information consisting of race results, football, and other sporting activities. During the evening programme, Miss Ruby Michael, soprano, will be featured, and the Enmore Theatre Symphony Orchestra will be broadcast in a special programme. Miss Dorrie Ward, and Mr. W. Lewis will be heard in solos and duets, and Mr. Russell Phillips will provide cornet solos. The Pavilion Dinner Orchestra will provide music during the early evening session, and the Ambassadors will be later called upon to provide a dance programme, when the Ambassador Dance Orchestra, under the direction of Mr. Al. Hammett, will be broadcast. The lecturer on this occasion will be Mr. J. H. Holmes, who will deliver a lecture of particular interest, entitled "Romance of the Colonial Clippers," and Mr. Fred Brown will also speak on "Electricity and the Motor Car."

SPECIAL NEWS SESSION.

2BL will broadcast on August 8th talks to women, luncheon orchestra, and special news sessions in conjunction with the "Daily Telegraph" and "Sun." During the afternoon there will be a talk on literature and poetry, and a musical programme from the Studio. During the evening bed-time stories the pupils of Miss Monica Scully will assist in entertaining the little listeners-in, and the evening programme will consist largely of dance night. The Palmgrove Orchestra will provide dance numbers from the Studio, and the Bondi Casino, under the direction of Mr. Cec. Morrison, will also entertain the listeners-in. During the evening a talk will be delivered, entitled "Concerning your valve sets," and the "Sun" Sporting Expert will discuss racing form and tips and reply to telephone communications, while Mr. J. M. Prentice will deliver the first of a series of Great Love Stories, on this occasion dealing with the "Love Story of an Emperor."

THE EMPTYIES.

Major Condor's eyes rested upon a pile of bottles—which had once contained beer. He was not pleased that

such objects should decorate the interior of 3LO Melbourne. "Who left these empties in here?" he asked with a decided note of disapproval in his voice. For a moment no one was able to throw any light upon the "supplies" or as to who had deposited it

broadcast the fact, and this was picked up in Melbourne, and three quarters of an hour after the original message 3LO was able to announce that Pritchard was already on his way to Melbourne.

DAILY DOZEN EXERCISES.

2BL on Monday, August 2nd, will be on the air with their regular daily programme, which commences at 7.15 a.m. The Daily Dozen Exercises and physical training hints, together with weight reducing features, have proved enormously popular under the capable hands of Mr. Frank Marshall. The News Service will be provided by the "Daily Telegraph" and "Sun" Newspapers, and the luncheon orchestra, which has been incorporated as a regular feature, is exceedingly popular. During the afternoon session, Mr. Prentice will speak on "A Course in Philosophic Thought," and David Jones' Tea Room Trio will be broadcast from that well-known store. The evening programme is being broadcast from the Warringah Hall at Neutral Bay, where the Orphan's Wail will be presented. The programme on this occasion is a particularly brilliant one. The lecturer on this occasion will be Madame Evelyn Greig, pianist, who has recently returned from U.S.A., and who will speak on "San Francisco—the City of the Golden." Mr. A. Henning, B.A.), who has been recently awarded the French Travelling Scholarship, will speak on "Slang—its use and abuse." The dance programme will be provided by the Ambassadors' Dance Orchestra, under the direction of Mr. Al. Hammett, and social notes will be broadcasted during the intervals.

CONQUERING DISTANCE.

Just as the motor car is gradually being superseded by the aeroplane, so is radio making the telegraph appear almost antiquated by comparison. For speed and potency radio is by far in advance. At five minutes to seven o'clock on Sunday, July 11th, 3LO Melbourne broadcast a message to Walter Pritchard, leading seaman of the H.M.S. "Penguin," in Sydney, stating that he was required urgently at his home in Malvern. Within a few minutes the message had been received in Sydney and Pritchard notified, thus able to catch the express for Sydney at 7.25 p.m. 2BL Sydney



Lawson Graham.

MORE MUSICAL COMEDY.

Although the intimation that 3LO, Melbourne, is to once again broadcast "The Belle of New York" has already been made, there is still a flood of letters to the studio asking for another performance. By this time, however, the requests are mostly from distant states. Western Australian and New Zealand listeners are just to hand with their appreciation of the splendid transmission, and all are agreed that very little of the charm of the famous musical comedy was lost by its conversion to wireless needs.



Radio Auction Bridge

Game No. 2—Broadcast by 2FC

"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 correct hands as held by each player on the night of July 28th:

"South" deals and holds:

Spades: Q, 8, 6, 3;

Hearts: J, 5, 4;

Diamonds: 4, 2;

Clubs: : Q, J, 9, 5.

"West" sitting on "South's" left holds:

Spades: K, 2.

Hearts: Q, 10, 9.

Diamonds: A, Q, 7, 3.

Clubs: A, K, 10, 8.

"North," "South's" partner, holds:

Spades: A, 9, 7, 5.

Hearts: A, K, 6, 3, 2.

Diamonds: K, J, 10.

Clubs: 4.

"East," "West's" partner, holds:

Spades: J, 10, 4.

Hearts: 8, 7.

Diamonds: 9, 8, 6, 5.

Clubs: 7, 6, 3, 2.

South passes, as he has a hand that does not justify a bid.

West bids one no trump. He has a very powerful hand of four quick tricks, with at least one stopper in each suit.

North doubles. This double is what is called an informative double. It is informative because it is a double of one no trump, the partner of the doubler not having previously bid. If the bid were two no trumps,

or if the partner of the doubler had previously bid, the double would be business. By this double, North tells his partner that he has distributed high-card strength of sufficient amount to justify forcing his partner to bid the best suit that the partner has. North's informative double is preferable to a bid of two hearts, because the double allows his partner to select the declaration which may best fit the two hands, whereas a bid of two hearts would be blind, in that he would not know whether it would suit his partner. If South should bid two clubs, North is prepared to either bid the heart suit or two no trumps. He can support any other call his partner may make. It might be well to add that North knows that South, in response to the informative double, will give preference to a four-card major suit, so he (North) hopes that his informative double will result in a spade or a heart response.

East, with his very weak hand, passes.

The informative double of North's leaves three courses open to a player in South's position, dependent upon the strength and character of his hand. First, he may make a business pass if his hand, in combination with North's declared strength, be sufficiently strong to be

sure of defeating West's contract; second, he may bid two no trumps, should his hand justify the possibility of game, knowing that a strong hand is on the other side of the original no trumper; and third, he may bid any suit of four or more cards, giving preference to the major suits. South's hand is of such complexion that the third course only is open to him. Therefore, he bids two spades in response to his partner's informative double.

West is fairly certain that his hand is strong enough to prevent his opponents going game in spades, therefore he passes.

It should be noted, however, that were the score so advanced that a successful two spade contract would complete rubber for opponents, then West would make an informative double of two spades, forcing East to bid unless released from the obligation by an intervening bid from North.

Since the spade bid by South suits North, he also passes, as he knows that his partner holds at least four spades although of doubtful strength.

East, of course, passes.

West leads the king of clubs, this card being the proper lead from his holding. The lead of a king always shows that either the ace, or the queen, or both, are held in combina-

tion with it, and shows also that the suit is one of at least three cards, probably more. Dummy (North) follows with the four of clubs, East the deuce and South the five.

West is now in a quandary, if he should lead the club ace it would be trumped in dummy and would establish the adverse queen, therefore a club lead is out of the question. The lead of a trump from the king and one other is not seriously to be considered. If he leads a heart and declarer holds the jack he might never make a heart trick. So he makes the best of a bad situation, and leads the ace of diamonds, intending to follow with a small diamond so as to conceal his queen.

Dummy plays the 10. Now East makes a clever play. He deduces that his partner was probably in a bad way for a lead and may have led the ace from the ace-queen, with the idea of inducing Declarer to jump with the king on the second diamond lead and desires to help his partner's plan and to mislead Declarer, if possible. Therefore, he plays the 8 of diamonds. This is what is called a "come-on" card to his partner, that is, a card palpably higher than the lowest card held in the suit, and shows either the beginning of a "down and out" signal, which in a suit declaration is the play of the higher and then the lower card of a suit when holding only two; or shows length in the suit probably with the ability to win the third round; above all, a "come-on" card invites partner to continue the suit. In this instance, the play of the eight of diamonds apparently places the queen in East's hand. If the Declarer should hold the queen, nothing is lost by this play.

South plays the two of diamonds.

West now leads the three of diamonds. The Declarer takes stock. He has already lost one club trick and one diamond trick. He counts also on one heart trick lost and one (maybe two) spade tricks, making a possible loss of five tricks in all. He cannot avoid the loss of one spade trick, but may prevent the loss of the heart trick if he can get rid of one of the hearts in his hand, and the only way he can shed a heart is on the king of diamonds in dummy. If he can prevent the loss of the heart

trick, he sees that he may be able to go game. So, in spite of the probability that East holds the queen of diamonds, South plays the knave from Dummy, taking every chance in order to save his contract and possibly go game.

East plays the 9 of diamonds, in order not to deceive his partner, as, if he had followed with a lower diamond, he would be telling West that he (East) had no more of the suit.

South plays the four of diamonds.

Now, if South can establish the heart suit, there is a good chance for four odd. He knows that when partners hold eight cards of a suit between them that the remaining five cards are split three and two between the opponents about 75 per cent of the time. If the hearts are so split, he can establish two good hearts in Dummy on which to discard two losing clubs.

First, however, as a preliminary to establishing the hearts, he must, if possible, exhaust opponent's trumps, which are also probably divided three and two. Dummy leads the ace of trumps, East plays the 4, Declarer the 3 and West the 2.

Dummy now leads the 5 of spades, and East plays the knave, false-carding in order to cause Declarer to think that West holds the king and ten. South, however, plays the 6, because he recognises this to be a situation that often arises at the Bridge table, that is, that he has nothing to gain by playing his queen, because if West holds both the king and 10, they are both bound to make that West probably has the king because of his no trump bid, and because if East had held both the king and knave he would undoubtedly have played the king on this trick. This play is often called the obligatory duck, because to cover the knave with the queen cannot gain but may lose a trick.

West wins with the king, and is again in the lead. He has no other sound lead except to continue the diamond suit, so he plays the 7 of diamonds. Dummy plays the king, East the 5 and South discards the 4 of hearts.

Now South sees that it is plain sailing if hearts are divided, so Dummy leads the 7 of trumps, East

plays the 10, South the queen, and West the 8 of clubs.

South leads the knave of hearts, West covers with the queen, Dummy the king, and East the 7.

Dummy plays the ace of hearts, East the 8, South the 5, and West the 9.

Dummy leads the 2 of hearts, East plays the 3 of clubs, South ruffs with his last trump and West plays the heart 10.

South leads the queen of clubs, which West covers with the ace; Dummy ruffs with the 9 of trumps, and East plays the 6 of clubs.

Dummy's two hearts are now good, so that South makes four odd and game. The important features are:

The informative double of North is an American innovation which has proved one of the most popular conventions ever added to the game of Auction Bridge. For many years it was not liked by English players, but it has just been recently approved by the Portland Club of England, which club is the recognised Auction Bridge authority in the British Empire. When made after a suit bid of one, two or three, the informative double, if made at first opportunity and if partner has not bid, usually denies strength in the suit bid and announces a holding of at least 2½ quick tricks in the hand. The partner of the informative doubler is supposed to let the double stand if he feels that the contract bid can be severely defeated, or if not, to bid either no trump if he has the suit originally bid safely stopped, or otherwise, to bid his best four-card suit, preferably a major.

It is not generally known by Auction Bridge players that in this position, partner of the informative doubler should generally bid a four-card major in preference to a stronger minor suit. If doubler should deny the major suit thus bid with some other suit in which his partner is perhaps weak, his partner may then show his stronger minor suit. A double of one no trump, if made at the first opportunity and when partner has not bid, gives similar information and instruction to the partner. The double of a bid of two or more no trumps, however,

(Continued on Page 46.)



Gems from Listeners' Letters

"We have a lovely big cat, and when we put the ear-phone to his ear he laughed."—Your loving nieces, Heather, Phyllis, Joyce, and Jacko (the cat).

"Love to you and the Man in the Moon," writes Ken, a ten-year-old.

Ken is like thousands of other cheery youngsters who roam over thousands of subjects in their letters to the "Hello Man" at 2FC. They are as wide apart in many cases as Ken distributes his love.

It is quite fascinating in reading these letters to see what a real figure "Peter Rabbit," the hero of the Children's Hour song, has developed into. Hundreds of children write to him and of him.

"I am sending a nice fresh carrot down to Peter," writes one little girl. "He must be getting thin. Tell him to be careful and not to eat it too quickly, or he will get a pain in his sawdust."

Rarely does a day pass that some thoughtful child does not send Peter Rabbit a lettuce leaf for his breakfast, and dozens ask where he can be seen and what sort of a little house he has to live in at the Studio. Embryo artists picture him, till the mythical "Bunny" must be either flattered to a state of unutterable conceit or driven to desperation in endeavouring to recognise himself.

But behind all these beautiful little letters is the sheer delight and love of the little ones for pets. They talk of Peter and tell tales of their cats, dogs, chickens, and ponies. One little girl tells with obvious affection of how her Daddy shared his 11 o'clock cup of tea and cake with the horse in the plough, another of the sorrow that fell upon the household when the old cat was missing for two days and the sheer joy with which he was forgiven when he appeared covered with jam, having upset a jar in the pantry immediately after his return home.

After apparently striving to cure her little girl of using her left hand

instead of her right, a mother makes her appeal to the "Hello Man":—"Say something to Noreen," she writes, "she uses her left hand instead of her right, and we are trying to break her of the habit. If you said something about it to her, I am sure she would take a lot of notice of what you said."

There is evidence, too, that the youngsters do take serious notice of the "Hello Man" in cases of this kind. One cheery little chap used to write and sign himself "Alan, the left-handed," so the "Hello" Man told him that since he had given himself such a good name, and was making himself famous like "Richard the Lion-hearted," "William the Conqueror," and "Alfred the Great," he was sure he could correct this habit. The little chap paid great attention to the "Hello Man's" advice, and a few days ago he wrote:

"Dear Uncle,—I hope you are well. The teacher has made me write with my right hand now. We have a lamb and some fowls. Since you taught at me, I have learned to write with my right hand. Your loving nephew, Alan."

And the writing with the right hand is quite a good effort.

Jackie was a lover of nursery tales and had a liking for "Icketty Dicketty Dock." Mother tells of the effect it had on him:

"Jackie, who is 3½ years, was over interested in your story of 'Icketty Dicketty Dock,' the mouse ran up the clock, and almost ruined the dining room clock to-day, swinging the hands round at a great rate, trying to repeat the 'mouse ran up the clock.' He put all the striking wrong. He had to climb up to the mantelpiece on the back of an armchair. Please tell him

if he touches the clock again he will not be told any more stories. Jackie will get a shock."

Little David apparently took one long breath before he wrote this:—"I have two brothers and a little sister, and their names are Bob, Philip, and Judith; and my little sister Judith is very fat and I like her very much, and she is too little to listen-in, for she is only one and my little Philip is too little to listen-in, and Judith was one on 11th September, and we only asked two boys and I will write 2 or 3 riddles, and this is one; Which bridge is it impossible to cross? The bridge of your nose. What do we often look for but we never wish to see? A hole in your sock."

But it is not only the children who have interesting stories to tell. An old lady, 66 years of age, is a regular correspondent. She is now living quite alone, her husband having died some time ago, and she writes in a remarkable strain of gratitude for the new interest wireless has brought into her life.

"Wireless," she says, "is just lovely, especially to anyone who is lonely like I am. Well, it is a good old world after all for the wireless to come along. The Sunday services are very nice. My favourite minister is Mr. T. E. Ruth—he speaks so beautifully. The Children's Hour, too, I listen-in to. That Peter Rabbit and the Dicky Bird are very interesting. I know when my children were young there was one of the same birds, and that old piece of music you play, called the 'Jolly Blacksmith,' put me in mind of old-time square dances."

PHILCO—"Experience teaches"—
BATTERIES.

Land Line Transmission

THE special transmission by 2FC from Canberra on July 17th, constitutes an Australasian record for an unbroken transmission of three hours, carrying speech and music. The distance covered by the landline used in connection with the transmission is 200 miles. Reports are pouring in to 2FC from many parts of the State, congratulating that station upon the successful transmission of the concert at Canberra, and the fact that the transmission went through without a single flicker or break for even a second, and that all the items were put over without one hitch, is a wonderful tribute not only to the officials of the Telephone Department, who worked the exchanges so well, but also to the concert organisation.

The concert was organised by Mr. Ernest Mowle, who, together with his family, has been intimately connected with Canberra, the Federal Capital, for many years. His father was christened in the old Canberra church which still stands—an imposing piece of masonry—in the pine-trees on the hill. Mr. Mowle, who at one time was closely associated with the Melba Grand Opera Company, is a Federal public servant located at the capital, and he has succeeded in organising a Philharmonic Society, comprising an orchestra of thirty members and a choir of sixty voices.

The Sydney artists accompanying the 2FC broadcasting party were Miss Mabel Batchelor, the well-known soprano, Mr. Ernest Archer, tenor, Mr. R. A. Butterworth, baritone, and Alfred Thomas, basso. These artists, in conjunction with the Philharmonic Society, were successful in putting out one of the best performances that has been known in the annals of Australian broadcasting.

The outstanding feature of the night was the sextette from "Lucia," with the four artists mentioned above as principal soloists, in association with the Philharmonic orchestra and choir. The evening opened with a fanfare of trumpets and "God Save the King," followed by a description of Canberra yesterday, to-day and tomorrow. An unique feature of this

was that when the National Anthem was played the guests at the Canberra Hotel, which is fitted with loud speakers, stood to attention.

The landline transmissions so far carried out by 2FC are Moss Vale (speech), Newcastle (concert), Wollongong (concert), Goulburn (concert), Grafton (speech), Dandenong (speech), and this broadcast from Canberra on July 17. On July 31, a special transmission will be carried out from Kosciusko, and at later dates from other important towns in the Northern and Western districts.

KOSCIUSKO BROADCAST.

Another record will be created by 2FC on Saturday, July 31st, in connection with land line transmissions, when from the Kosciusko Hotel a programme will be given over a land line of 300 miles length. Artists will include Mr. Jack Lumsdaine, the popular song writer and entertainer; Mr. James Donnelly, tenor, who will sing numbers specially written for the occasion. Mr. Ewart Chapple, pianist and accompanist. Other artists will include members of the 2FC Dance Band, and from the hotel a popular programme of dance music will be transmitted at intervals. During the intervals from Kosciusko, the Newtown Silver Band will play in the Studios at Sydney, and guests at the Kosciusko Hotel will hear the band by means of receiving sets installed there.

PAY AS YOU LISTEN.

A Philadelphian has invented a nickel-in-the-slot receiving set, by means of which the passer-by may amuse himself while waiting for his car. The question naturally arises—will there be a rebate for static and tube squealing?

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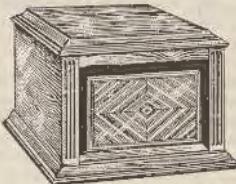
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Now that Broadcasting has awakened such an intense national interest, it is only natural to find that Loud Speakers, in common with many other commodities, Radio or otherwise, must be produced in a variety of types at prices that will be within the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

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

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Burgess 45 volt "B" Batteries	1 8 0	Radiotron Valves, UX129	0 13 6
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*Manufacturers of the well known
"RADIAIR" Radio Sets.*

A QUAIANT MIXTURE.

A story is going round the Sydney radio circles of a suburban housewife who let the baby play with the dials of the radio set while she was doing her housework. It happened that one of the Sydney stations had been broadcasting a cooking lesson, and the other—or it may have been an Interstate station, as Melbourne, Brisbane and Sydney stations were all on the air at the time—was giving physical culture exercises. Anyhow, the astonished lady heard the following proceeding from the loud speaker:—

"Hands on hips, place one cup of flour on the shoulder, raise knee, depress toes, and wash thoroughly in one half cup of milk. In four counts, raise and lower left foot and mash two hard-boiled eggs through a sieve. Repeat six times, inhale one-half-teaspoonful salt, one teaspoon baking powder, and one cup of flour. Then breathing naturally, exhale and sift. Attention. Jump to an upright position of quick time. Twist sideways and forward right and left as far as possible and beat egg swiftly and briskly, arms forward over head. Raise the cooked egg with the flour and in four counts make a stiff dough, which is stretched at the waist. Thighs flexed, lie flat on the floor and roll into marbles the size of a walnut. Hop to a straddle in boiling water, but do not boil at a gallon. After ten minutes remove, wipe with rough towel and serve with fish soup."

The lady of the house did her best to follow the instructions, but now she takes the radio cooking talks separately and leaves the physical culture exercises to her husband.

BE CONSTANT.

The constant drop of water wears away the hardest stone,
The constant gnawing Towner masticates the toughest bone;
The constant cooling lover carries off the blushing maid,
And the constant advertiser is the one who gets the trade.

ART BY RADIO.

A recent innovation by station 2FC was an invitation issued to Arthur Tosseau, the poster king, to draw a picture of some well-known person in the studio, describing the whole draw-



Charles Chaplin, by Tosseau.

ing as it was made. After the drawing had been completed, Mr. Tosseau announced that to the person who sent in the best drawing made from the description would be forwarded a prize in the form of the actual drawing. As a result of the first trial of this innovation, station 2FC have received between 80 and 90 entries from listeners-in situated in various parts of the state. Mr. Tosseau, whose photo appears in this issue, and whose drawing is also reproduced, is now publishing the entries, and an announcement will be made in another part of this issue of the name and address of the successful artist. We shall also reproduce in our next issue the actual drawing by the winning artist.

Mr. Tosseau is a very well known personality in Sydney, where his posters have attracted a vast amount

of attention both from an artistic and a publicity point of view. For some time he was conducting a publicity deal in posters at the Manly Beach, and many humorous as well as educational posters were instituted there as a result of his genius. Mr. Tosseau's next appearance at station 2FC will be on Friday next, when similar competitions will be held with regard to the drawing innovation. Undoubtedly, this is one of the most interesting features that has ever been put over by an Australian broadcasting station.

MYSTERY!

When 3LO Melbourne broadcast a mystery item last week there must have been many shivery spines and wide-awake eyes. "This is going to be very mysterious," announced Mr. Andrew in eerie tones—and it was. The ghost story which listeners-in were asked to receive with the lights turned out, gripped the attention from start to finish. The speaker, whose identity many guessed, told the weird tale with a wealth of awe-inspiring expression, and at each appearance of the "ghost" the feelings of the audience must have been much akin to those of the characters in the story. It was hardly a story, because the speaker founded the tale on a basis of fact. His little child had frequently stated that she could see strange shapes at various times, and it was from this that the father evolved his "grey shape" of the story. The item was a great success, and in these enlightened times its weird details could be appreciated with a thrill not marred by fear.

AUSTRALIAN COMPOSITIONS.

On Monday, 2nd, from 2FC in the afternoon, a recital by the pupils of Mr. Fred Mewton, organist at St. Andrew's Cathedral. In the evening the usual programme from the Haymarket. Mr. Raymond Ellis, the English baritone, by permission of Messrs. J. C. Williamson, Ltd. Miss Gwendolyn Flimister, soprano; Mr. Bryson Taylor, tenor, will present some new Australian compositions. 2FC Dance Band. A talk by S. H. Bowden on Kandy's festivals. Mr. Tosseau will continue his poster drawing, and invite listeners to send in their efforts to the Studio.



FOR Radio Dance music you need volume—as much as the Loud Speaker can provide without distortion. This means obviously the use of a Loud Speaker Valve—and here is where the Cossor W3 is winning unstinted praise for Dull Emitter users throughout the country.

The old idea that a power valve meant extravagance and costly high tension voltage and excessive filament current was rudely dispelled when the Cossor W3 Valve was placed upon the market.

You do not need to rebuild half your set to get real volume if you use a W3. Provided your set is already equipped with a first-class L.F. Transformer and that you can add grid bias if required, and that your L.F. valve can receive a greater anode voltage than the Detuned or H.F. Valves, all you need to do is to take out your existing valve and insert a W3.

The increase in volume and the wonderful mellowness of tone will amaze you. And it will be entirely due to two distinct points of superiority. The Wuncell filament and the

famous electron-retaining Cossor principles of design. The Wuncell filament is manufactured under a process known only to Cossor, whereby it is built up layer upon layer—the only filament in the world to be made under this method.

Whereas other valves obtain low current consumption by using a small and thinned down thoriated filaments, the Cossor uses one as stout as that used in a bright emitter valve, but which gives off a prolific stream of electrons at a dull red glow. A real, long-life filament in fact. Couple such a filament to the efficient hood-shaped anode and you'll obtain an exceptional degree of efficiency.

If you would know more about the unique Wuncell—how it will save its entire cost in accumulator recharging within a few months—how its almost unbreakable filament is securely anchored in three distinct places, how the same valve can be used for either a 12 or 24 volt accumulator, without alteration to your Receiver. So go to your dealer and ask for some of the new Cossor Folders free of charge—they are well worth reading.



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Voltage, 1.8 volts.
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W3. Voltage, 1.8 volts. Consumption, .5 amp. Price, 17/6
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(As featured in last week's issue of Wireless Weekly)

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Simplicity is the keynote in the construction of the "Reflex," and our Wireless Expert will accord purchasers of parts every help and advice.

SEE IT COMPLETE IN OUR HAYMARKET WINDOW

Component Parts for the "Reflex"

AT THE LOWEST POSSIBLE PRICES

	each.	a.	each.	a.
1 Panel, 16 x 7 x 3/16 inches	7	0	2 Transformers, 3½ or 4 to 1	21
2 Dials, 4 inch, Bakelite	4	0	as desired	0
2 Movable Coil Mounts, De Luxe Bakelite	3	3	1 Carborundum Crystal Detector	11
1 Fixed Coil Mount, De Luxe Bakelite	3	0	1 .001 Fixed Condenser, "Freshman"	2
1 Variable Condenser, .0005	12	6	1 .002 Fixed Condenser, 1/6 or	2
1 Variable Condenser, .001	15	0	1 .0003 Fixed Condenser, 1/6	0
2 Rhenstats (to suit valves used)	4	6	or	2
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"The Manhattan Junior Adjustable"

An efficient Loud Speaker that ensures you perfect Radio reproduction. Speech, Song or music—there is the same purity of tone without distortion. The "Manhattan Junior" is the most reasonably-priced high-grade Speaker on the market to-day.

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Write direct to our Wireless Expert, who will supply you with the fullest particulars.

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"Wireless Weekly" Receiver No. 2

MANY experienced broadcast listeners and experimenters have written us from time to time asking for constructional details of a short wave receiver, capable of receiving English and American amateurs. Others enquire whether any music or speech is transmitted on a short wave and whether the expense involved in building this type of receiver is really worth while to a long distance enthusiast who cannot read *morse*.

We can definitely state that whether you are a *morse* reader or not a short wave receiver is very decidedly worth while, and for this reason we have pleasure in publishing the details of a receiver which "Wireless Weekly" has found to be much more efficient than any other. It embodies the simplest form of tuning and regeneration, which is so absolutely essential for the novice on

far as you want." Conditions of reception on short wave (viz., high frequencies), are somewhat strange, and may at first, even mystify the layman as well as fascinate him but after a little experience with the tuning operation, it will be comparatively easy to tune in stations, even as far away as England. "Wireless Weekly" has consistently taken dictaphone records of speech and music transmitted in England, using this receiver followed by two stages of power amplification.

The majority of short wave receivers employ an aperiodic primary coil, having anywhere from three to ten turns, according to the wavelength to be received, but with this receiver the aerial is directly connected to the grid coil, via a small semi-fixed condenser which is made of two pieces of brass or aluminium, two inches long by one inch wide,

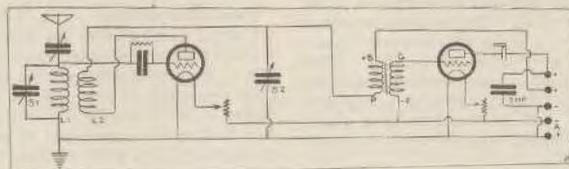
Tuning.

Two condensers of the variable type are used for reception of all amateur wavelengths, and with the coils as recommended, the wavelength range will be from ten to 200 metres. The condenser which tunes the grid circuit is shunted directly across the L1 coil and should be a seven plate condenser made up of four fixed and three moving plates, while the regeneration condenser should be a 9 plate condenser, 5 fixed and 4 moving.

Readers who have condensers on hand will find it comparatively easy to take out some of the fixed or moving plates of their larger sized condensers. All coils except two are constructed with No. 16 D.C.C. wire wound in the usual Lorenz fashion. For new readers the following instructions for winding coils should suffice.

First obtain a piece of wood 4 or 5 inches in diameter. Knock in 11 nails firmly at equal distances on a 3 inch circle. After being careful to see that each nail is firm, the heads should be cut off with a sharp pair of pliers. This now forms the coil former for winding all the coils. The wire is passed inside one nail and outside the next, the odd number of nails causing each alternate layer or turn to form a neat circle round each one. When the desired number of turns has been wound on the former, they should be secured together with thin string, which will then form a coil of rugged mechanical construction, which, if mounted as shown, will ensure a constant inductive value that cannot be affected by constant handling.

For reception of frequencies between 10 and 32 metres, the L1 coil is wound with four turns of No. 16 D.C.C. and the L2 with five turns, diameter of coil, 3 inches. Reception of wavelengths between 30 and



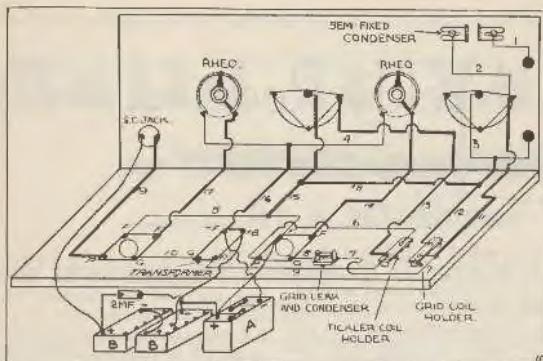
The Circuit Diagram.

the short wave bands. A number of inductances, two variable condensers, two valves and a transformer are practically all the components necessary; but simple as it may be, its wavelength range is somewhat extensive, and the actual receiving range is practically unlimited.

Nine times out of ten when a receiver is described in any radio journal, the first thing asked by those reading the article, is "How far will it get"? In describing any efficient short wave receiver, the answer could almost always be, "As

bent at right angles and mounted face to face. By moving these to and from each other, a variable capacity effect is obtained, which serves its purpose of reducing the natural fundamental wavelength of the aerial very well indeed.

A further advantage of coupling the aerial in this manner is that it eliminates one coil, making interchangeable coils much easier to handle and increasing the speed with which one wavelength can be changed to another.



Back of Panel Wiring Diagram.

50 metres is accomplished by using a 7-turn coil as L1 and eight turns for L2. A 12-turn coil and an 8-turn tickler with the same diameter as the other coils is used for reception of wavelengths between 49 and 84 metres.

The separation between tickler coil L2 and grid coil L1 should be between 1½ inches and 2 inches, 77 to 131 metres is covered by using a 20-turn coil with an 8-turn tickler. It should be noted that the 8-turn tickler is used for the three bands, ranging in wavelengths from 30 to 131 metres. The 124 to 206 metre wavelength band is amply covered by use of a secondary coil of 36 turns and a tickler of 12 turns of No. 18 D.C.C. wire, 3 inches in diameter.

All dimensions and coil data, regarding wavelengths remain the same for use will all types of valves, as long as the variable condensers as recommended are used.

Those readers who desire to use this receiver for the broadcast wavelengths may do so by winding larger size coils with 22 D.C.C. wire. For the lower broadcast wavelengths, two 50's and two 75's will be required, and for 2FC, two 150-turn coils. If the usual type of honeycomb or spider-web coil is used they must be mounted in the same way as the short wave coils, in order that they may be plugged into the baseboard adaptors.

Although 22 volts is specified, for best all-round operation of the detector valve, constructors should experiment with various plate voltages

until they find the best working voltage for all wavelengths. In one or two cases the writer has found that certain valves worked best with voltages as high as 67 volts on the plate for detection. It will be found that if too high a plate voltage is used, the receiver will go into oscillation with a plop. With this action it is practically impossible to receive radio phone signals.

The most efficient type of aerial to be recommended for the reception of short waves is a single wire 30 feet in length of generous cross section wire (preferably enamelled) and tightly stretched at as great a height as possible. The average broadcast listener's aerial will, however, usually give good all-round results. With this hook-up, or if desired, one of the indoor type as described in May 23rd issue, will be found to give almost unbelievable reception on the short waves.

The photograph shows clearly the method of mounting and constructing the coils. If eses or clix are used, good contacts are assured, and

The following materials are necessary to build this receiver:

- 1 panel, 18 x 6 x 3/16 inches.
- 1 baseboard, 18 x 6 x ¾ inches.
- 2 terminals.
- Small quantity of sheet brass or aluminium.
- 2 variable condensers.
- 2 valves.
- 2 rheostats to suit valves used.
- 2 valve holders.
- 1 S.C. jack.
- 1 transformer.
- 1 grid condenser and 2 megohm grid leak.
- A and B batteries.
- 2 small radio bakelite strips, 2½ x ¾ inches.
- Quantities of screws, wire, etc.

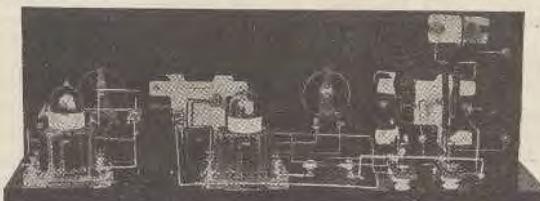
quick change of wavelengths is very easily and efficiently accomplished. The two panels which take the hole connections of the eses or clix, should be placed approximately 1½ ins. apart. With the dry cell type of valve, however, it may be necessary to place them a little closer, in order to ensure smooth regeneration on all wave bands. Readers who cannot understand circuit diagrams, will find the back of panel view together with the numerical order of connections very helpful.

Numerical Order of Connections.

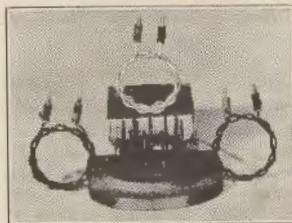
Panel Components. No. 1 links the aerial terminal with the one connection of the semi-fixed condenser. No. 2 semi-fixed condenser to fixed plate connection of first variable condenser. No. 3 moving plate connection first variable condenser to earth terminals. No. 4 two left hand terminals of rheostats linked together.

Baseboard Components.

No. 5 links the two left hand F terminals of first and second valve



View showing Mounting of Components.



Showing Coil Construction.

holders. No. 6, P of first valve holder to hole connection of clip or seas of tickler coil. No. 7 hole connection of grid coil to grid con-

first rheostat. No. 15, moving plate connection of second condenser linked to No. 5. No. 16, —F terminal of first transformer linked to No. 4. No. 17, right hand F terminal of second valve holder with right hand terminal of second rheostat. No. 18, No. 15, and No. 12 linked together. No. 19, P of second valve holder to S.C. jack.

Carefully follow our drawings when connecting up batteries. The semi-fixed condenser needs very little adjustment. For the short waves the two plates should be placed fairly close together (not touching), but for wavelengths above 200 metres,

The Circuit Described.

Many of the experienced home constructors will readily recognise that the hook-up employed is the well-known single circuit regenerative receiver (better known perhaps as the "P" one) with two small modifications, viz., (a) a semi-fixed series condenser in the aerial circuit. (b) The variable condenser in the plate circuit.

Reaction or regeneration is obtained by capacitative and magnetic coupling by means of L₂ and S₂, both of which are included in the plate circuit of the detector valve. The magnetic coupling is fixed, but

LIST OF SHORT WAVE STATIONS

Call Sign.	Commercial Broadcasting Stations.	Owner of Amateur Station.	Where Situated.	Power.	Wavelength Metres.	Nature of Transmissions.
2YT . . .	POLDHU		England	2 K.W.	25	Experimental
NKF . . .	Bellevue		U.S.A.		20.8	Experimental
	Amacostia					
2XI . . .	Schenectady, N.Y.		U.S.A.		30	Regular
WIZ . . .	New Brunswick, N.J.		U.S.A.	2 K.W.	43	Regular
NPG . . .	San Francisco, Cal.		U.S.A.	1½ K.W.	43	Experimental
KDKA . . .	East Pittsburg		U.S.A.	5 K.W.	62	Regular
KGA . . .	Oakland, Cal.		U.S.A.	1 K.W.	143	Regular
GW-15B . . .		Mr. W. R. Burne	Ireland	250 W.'s	45	Experimental
G-2OD . . .		Mr. E. T. Simmonds	England	1 K.W.	32 & 45	Experimental
G-2NM . . .		Mr. G. Marcuse	England	500 W.'s	40 & 80	Re-broadcasts
2XAF . . .	General Elec. Co.		America	10 to 20 K.W.	32	Regular
2BL . . .	Broadcasters' Sydney Ltd.		Australia	600 W.'s	27	Experimental

2XAF often re-broadcasts WGY's special programmes on Tuesdays and Saturdays, 5.30 to 10 p.m. Sydney time.

denser and leak. No. 8, grid condenser to G terminal. No. 9, hole connection of tickler coil to P terminal of transformer. No. 10, G transformer to G terminal of second valve holder.

Panel to Baseboard Connections, shown in heavy type.

No. 11, fixed plate condenser connection linked to No. 7. No. 12, hole connection of grid coil linked to No. 3. No. 13, fixed plate connection of second condenser linked to No. 9. No. 14, right hand F terminal of first valve holder to right terminal of

plates should be fully extended. The groove as shown cut in the brass or aluminium provides a ready means of adjusting the variation of capacity.

the amount of feed back energy to the grid coil is controlled electrostatically by the variable condenser. It is necessary to fit both condensers



Front Panel View.

with slow motion dials, as the need for extremely fine tuning and reaction control becomes more and more important, the lower the wavelength.

Readers who have not handled short wave receivers must therefore be prepared to spend a reasonable amount of time in becoming familiar with the peculiarities of the very high frequencies, before they can consistently tune in these extreme long distance stations.

WG Y BROADCASTS.

The well-known American station WG Y is now conducting special short-wave transmissions through 2XAD, at times corresponding to 4 a.m. to 5 p.m. and 8 a.m. to 2 p.m., Sunday, Monday, and Wednesday, Australian times. These broadcasts are conducted on 26 metres Sundays, 22 metres Mondays; and 15 metres Wednesdays. Any reports of these programmes sent to "Wireless Weekly" will be forwarded to the proper quarter. Particulars are required concerning the quality of the transmission, fading, strength of signals, and general reliability.

EXERCISE BY RADIO.

The practice of broadcasting station 2BL (Broadcasters) of giving physical culture exercises at 7.15 each morning, is an adaptation from America, where broadcasting before breakfast is a common feature of the radio casters, and quite a number of stations run a physical jerks programme every morning. In U.S.A., however, the course commences by the loud ringing of an alarm bell, and then the instructor before the microphone pours cold water over the back of his neck and takes deep breaths, while thousands of listeners follow his example and advice. All the exercises are done to music, and it is estimated that at least half a million American people expand their chests and sponge their necks in unison.

BURGESS BATTERIES FOR POWER.

BATTERIES AND GARAGES.

(To the Editor.)

Sir—I have read with interest the letter in June 25th issue, by Mr. R. J. Turner, on the subject of "Garages and Batteries," stating having received satisfaction from the "constant potential system" of charging as applied to radio batteries.

Having had a constant potential set for eight months, and observing carefully the behaviour of all classes of batteries, I thoroughly endorse his remarks.

A charging station receives all classes, from $1\frac{1}{2}$ volt-5 amp. cells to 12 volt-100 amp. batteries, and to place these cells in series for charging is a practical impossibility. Even series-parallel cannot always be done, as the voltage of the banks cannot be balanced, the small battery taking too much current, even with high resistances, which are very wasteful. The constant potential serves all batteries alike, and, as explained by Mr. Turner, each battery takes only the current it requires, which is in proportion to its plate area. Heating of cells is not present, even with a battery very much run down, as the ammeter in series with each battery shows exactly what each is taking. Heavy gassing is also absent, due to the fact that as each battery becomes charged, the current is reduced and no energy is turned into heat or gas.

The active material of the plates (which is really the vital substance of a battery) is not loosened or deposited, and the life of the plates is lengthened. If for any reason a battery is left on charge for several days, no damage results; it simply comes up to full charge and remains at that.

I do not wish to say anything against series-charging, it is quite alright for batteries of about equal capacities; but to handle a range of batteries, all voltages, capacities and types, the "constant potential system" gives better service to the owner and garage proprietor alike.

Yours truly,

A. F. MCLEAN,

Turremura.

BROADCAST LISTENERS' LEAGUE.

The formation of the Broadcast Listeners' League has been under consideration for some time. The Wireless Institute has now taken over the organisation of the Listeners' League, using the existing organisation of the Institute for the purpose. It is proposed to establish the League as a section of the Institute, but having its own Chairman. By being a branch of the Institute it will enable the members of the League to avail themselves of the services of the Institute's Technical Committee in advice and help in any difficulty. Further, it will enable the Institute to help country members through the country Radio Clubs affiliated with the Institute.

Realising that there is a large number of listeners-in who have no technical interest further than the programmes received, the question will arise as to how the League will benefit them. It will be a means of taking up any matter regarding radio which will be of interest to them and also a means of approach to the authorities when necessary.

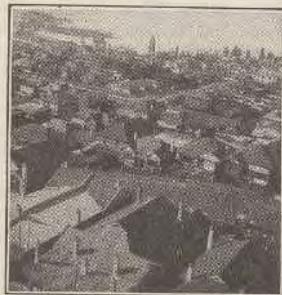
To those who wish to go further in the science the Institute will be in a position to arrange lectures, demonstrations, etc., at central points, on suitable subjects. This also applies to the country districts where the local Radio Clubs will be asked to assist.

The subscription has been fixed at 2/6 per annum, which is considered the lowest possible amount that will enable the organisation to function properly. The headquarters of the Institute will handle the affairs of the metropolitan section, and each country district will be asked to appoint a local secretary to look after affairs in his own district.

Application forms are now being prepared, and when ready will be distributed to the local radio dealers. Any information will readily be supplied if a letter is addressed to the Secretary of the Wireless Institute, Royal Society's Building, Elizabeth Street, Sydney.

ST. JUDE'S CHURCH.

SUNDAY, August 1st, will see Station 2BL broadcasting St. Jude's Church of England service from Randwick. The Rev. Canon Cakebread will be the preacher, and his scholarly sermons are always of interest to the listeners-in. During the afternoon there will be the usual Bible Class, conducted by Mr. W. Cairo Bradley, with solos and music, followed by a Studio concert. During the evening, the service from the Enmore Church of Christ will be followed by a sacred concert by the Newtown Band.



Looking towards Coogee from 2BL's Mast.

The Modern Girl and Her Dress.

"Things are not what they were" is a statement that is heard on all sides every day, but of all the accompaniments of present day life, dress and apparel comes in for the greatest criticism, particularly with regard to the fair sex. On Friday, July 30th, 3LO Melbourne will be able to throw some light on the subject when the University debate concerning "That modern dress needs reform" will be broadcast. The debates from the Varsity are always popular, partly because student humour at its best is always brilliant, and that from the Varsities come our greatest orators.

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UNCLE JACK: A Pen Portrait

It is generally admitted that the requirements which go to make up a successful radio announcer are legion. It is interesting even to speculate as to what new mythology may yet develop round the personalities of these unseen but ever-present personalities. Knowledge beyond the ordinary, ability to handle an ever-changing situation, so that smoothness and lack of ragged edges mark the passage of a programme—and above all an ever-present sense of humour; these are some only of the total of what a radio announcer must possess.

One of the most successful announcers on any station in Australia is the ubiquitous Mr. J. M. Prentice, of 2BL. Although his co-worker, Mr. George Saunders was first in the field and is exceedingly well known, it is generally admitted that the personality of Mr. Prentice has been more firmly impressed upon the listeners-in by reason of his greater versatility. Mr. Prentice has a unique way in handling each successive problem, and his equanimity under all difficulties marks him as an executive with capacity, while his undoubted sense of humour serves to save him from any suggestion of staleness.

To his work as announcer he has brought the inspiration of success in other fields. It is generally known that with his ability, Mr. Prentice could have made a success in almost any capacity. As a lecturer and writer his reputation is international—as a soldier he served in the Great War and annexed two of the most coveted decorations obtainable, as well as getting himself mentioned in despatches. It is not so well known that the possession of the Order of the Crown of Belgium—equivalent to knighthood in Great Britain—opened many European doors and gave him entree and access to many highly placed personages not easily approached. His interest in foreign politics was fed and stimulated by the very fact that he was able to meet many of the statesmen on level terms. To hear him tell of his wearing the tiny red button of the Order in his buttonhole and having stout

elderly gentlemen offer him seats on trams in Brussels is very funny.

After the war Mr. Prentice made a tour of Europe during the reconstruction period, and his studies in foreign politics were carried out in such places as Cairo, Nice, Monte



Uncle Jack.

Carlo and other cosmopolitan centres where pleasure alternates with serious affairs. It is said to be an open secret that a gaming table in the Casino Municipale in Nice paid for one long holiday—having annexed the cash the player promptly disappeared into Italy to take cognisance of the situation there—and stumbled upon a big strike in a motor car factory, in time to see the birth of Fascism.

From Europe to the United States of America was a small step; a course in psychology in an American University followed. As Mr. Prentice is something of a linguist, speaking French and German in addition to his native Australian, he found no difficulty in the American language! But the Prohibition legislation, enacted only a few months prior to his arrival, seems to have been regarded by him as a personal affront. At any rate a year in America was sufficient to see him longing for the sight of Circular Quay and the hostilities that abound in its vicinity, and so a passage was booked back home. After a few weeks' holiday, Mr. Prentice accepted an ap-

pointment in the Federal Public Service, but the conditions were too irksome, and the burden of red tape too heavy for his volatile nature and he returned to commercial life in Melbourne. Coming on to Sydney to recuperate after an illness, Mr. Prentice put a new note into broadcasting by placing on the air a series, Great Love Stories, which were unique. So great an impression did these talks make, that Mr. Prentice was immediately engaged as announcer in co-operation with Mr. Saunders. Then came his further opportunity: an illness sent "Uncle George" (Mr. Saunders) to hospital, and the telling of the bedtime stories devolved upon Mr. Prentice. Immediately, as "Uncle Jack" he endeared himself to the little ones who had been so well catered for by Mr. Saunders and the dual Uncles set a standard which is well known all over Australia and New Zealand.

These are some of the things that can be told of one who has done much to lift the standard of radio announcing from a commonplace to a profession! There is much that cannot be told in cold print. It is rumoured that as a recontre Mr. Prentice possesses a fund of stories that seems inexhaustible. In two or three languages he entertains his friends and the roars of laughter that invariably accompany him when he visits club or drawing-room are ample evidence that he is what is called in America a "good mixer." But behind all this is a much more evenly developed personality, with a real appreciation of the deeper things of life. There are those who are students of the mystical philosophy of Theosophy, who say that as an exponent of the teachings of Madame Blavatsky, the old Russian lady who electrified Europe fifty years ago, he stands alone.

Summed up, it may be said of Mr. J. M. Prentice that he is cultured, courteous and ever ready to do anything that will assist in raising to the highest point the whole field of wireless. Coming into the world of wireless when it was in its infancy, he has set a standard that will be long adhered to.



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Frequent charging will keep your batteries full of "life," always ready for use.

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48 volt accumulator B batteries, slightly damaged. Only a few available. 5/- and ..	7 5
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2 oz. reels 20, 21, 22, 25, 26, 28 and 29 single silk covered wire, per reel	0 2
Other gauges in larger reels, etc., etc., at gift prices.	

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Write for Special Catalogues.
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Manufacturers**COMIC OPERA MEMORIES.**

From 2FC on Tuesday, 3rd, the whole night will be devoted to Comic Opera memories, presenting one of the most unique programmes that has yet been given from 2FC. The items will be drawn from operas of the "Florodora" to the "Our Miss Gibbs" period, and such well-known favourites as Miss Olive Godwin, Vinie de Loitte, and other well-known comic opera artists will be invited to the Studio to sing the numbers in which they appeared with the production. Other singers will assist, so that listeners will be regaled with the popular items from the following operas: "Florodora," "The Belle of New York," "San Toy," "The Country Girl," "The Runaway Girl," "Dorothy," "Our Miss Gibbs," and many others. The Randwick Band will play comic opera selections.

CHEERED BY RADIO.

Actress in Hospital.

An intimate human touch about radio was shown by an incident arising out of the Aberdeen railway smash.

While Miss Marie Burke and Mr. Ward Morgan, of the "Katja" Company, were inmates of the Muswellbrook Hospital, broadcasting station 2FC broadcast the first act of "Rose Marie." Miss Burke has now written to friends in Sydney, stating what it meant to them all, during their hours of suffering in the hospital, to hear such a wonderful transmission of their fellow artists in another of the firm's companies.

FROM HONOLULU.

"It may be of interest to you to know that the musical programme as sent by your station on June 5th, was picked up by my eight-tube Ultradyne set and came in on the loud speaker so distinctly that it could be heard in the next room," writes Mr. L. A. Landes, of Hilo, Hawaii, to 3LO Melbourne. "I would appreciate very much to hear what nights you are broadcasting during the week, as I would like to be able to tune in again and listen to your very interesting programmes." The only interference he experienced was from a local, powerful naval station.

BURGESS—"They're on the Leviathan"—BATTERIES.

"SEPTEMBER'S MOST BEAUTIFUL BRIDE" COMPETITION.

We are desirous of drawing the attention of all listeners-in to 3LO Melbourne's forthcoming competition, this is entitled "September's Most Beautiful Bride."

Intending brides who have planned to be married during the month of September, and who are desirous of entering this competition, are requested to forward to 3LO Melbourne, 193 Collins Street, not later than 14th August next, three photographs of themselves in different poses. These photographs will be judged by an authority appointed by 3LO.

The only stipulations that 3LO Melbourne make are:—

1. That the wedding shall take place during the month of September.
2. That the Company will broadcast the wedding ceremony.
3. That 3LO Melbourne will be the final judge.

The winning bride will be given a present of £25 by 3LO Melbourne, and a honeymoon trip to Launceston, first class fares, accommodation, entertainments and motor trips to the value of £50 will be given by the Launceston 50,000 League. This latter prize, however, will be awarded to the bride desirous of spending her honeymoon in Launceston. If the bride winning the 3LO prize does not desire to spend her honeymoon in Launceston, the Launceston 50,000 League prize will be offered to the next in order in the competition, provided the conditions are fulfilled.

It is expected great interest will be taken in this competition, and in order to facilitate the work of the judge intending entrants are requested to send along their photographs as soon as possible.

THE COPYRIGHT BUGBEAR.

Broadcasting in New Zealand has a difficulty to face because of the demands that are being made by the holders of the copyright of musical items, and the position has become so acute that a decision of the Supreme Court must be necessary. Wireless enthusiasts look forward to the receipt of popular airs each night, and there is the possibility that these may not be broadcast.

BUSHLAND'S GOOD FAIRY.

"I write to thank you for the splendid entertainment you provide for us isolated bush folk," writes a settler from Nanango, Queensland, to 3LO Melbourne. "You can imagine how the news is appreciated when I say the mail comes twice a week and the newspaper is sometimes a week old when it arrives. We have been enjoying your broadcasting for several months, and appreciate every item you send forth. The reception is always perfect, volume good and tone clear. We have recently listened to the six perfect programmes, and do not consider that they are at all better than has been planned by your studio," continues the correspondent. He uses a four-valve set.

EVERY CARE TAKEN AT 4QG.

Can anyone walking along George Street, Brisbane, towards the State Insurance Building, fail to feel a thrill of satisfaction on catching sight of the two stately masts supporting the fine aerial of Station 4QG? They form a landmark for miles and miles, and are looked after more carefully than a child. A weekly inspection of them is made, and all joints, bolts, and nuts are carefully tested. Recently the whole of the towers were repainted with a special rust-resisting paint.

RADIO CABINETS FOR SALE

Quality Workmanship at Bargain Prices.

Since stocktaking we find we have a number of Radio Cabinets on hand which do not suit our latest models of receivers, and we are therefore sacrificing same from

10/- EACH.

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The Radio Manager,

Harringtons Ltd.
386 George St. (near G.P.O.)
SYDNEY.

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Highly selective, extremely powerful, inherently stable and producing a large volume of well modulated sound, it has been hailed as the set of the year. And remember always IGRANIC quality.

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2FC

**FARMER'S SERVICE,
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Call Sign: 2FC. Wave Length: 1100 Metres.

Power: 5 Kilowatts.

FRIDAY, JULY 30.

Early Morning Session.

- 7.—The Chimes of 2FC and Announcements.
7.—Time Signals.
7.—Cricket scores, 2nd day's play, Australia versus Surrey. These scores will be repeated at 8, 9, and 10 a.m.
7.—Weather Information, Commercial News, Shipping Intelligence and Markets.
7.—"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 Announcements, Cricket scores.
9.15—Music from the Studio.
9.15—A Musical Reading.
10.—Time signals. Music from the Studio.
10.—Late "Sydney Morning Herald" News service.
10.15—Music from the Studio.
10.—Proverb, Cricket Talk, Cables.
11.15—Cooking talk and Recipes by Miss Ruth Furst.
11.30—Close down.

Midday Session.

- 12—The Chimes of 2FC and Announcements.
12—Stock Exchange, First Call.
12.10—Music from the Studio.
12—Time Signals, Weather Intelligence.
1.15—Music from the Studio.
1.15—"Evening News" midday news service.
1.20—Report of the Society's Report.
1.20—Rugby wireless news.
1.30—Stock Exchange, Second Call, Broadcast from the Sydney Town Hall—The Midday Meeting of Gipsy Smith Campaign.
2—Time Signals—Close down.

Afternoon Session.

- 2.30—The Chimes of 2FC and Announcements.
2.35—A Vocal Recital by the students of Madame Vierry Georges.
3.30—From Farmer's Tea Rooms, The Oak Hall Trio will play (leader, Mr. Horace Keats).
4.45—Miss Alice Fournay, soprano.
4.45—The Oak Hall Trio.
4.55—Music from the Studio.
4.—From Farmer's Tea Rooms, Miss Eileen Sampson, contralto: "My World" (Jordan).
4.—The Oak Hall Trio.
4.45—Music from the Studio.
4.45—From Farmer's Tea Rooms, Miss Alice Fournay, soprano.
4.45—The Oak Hall Trio.
4.45—Music from the Studio.
4.45—From Farmer's Tea Rooms, Miss Eileen

Sampson, contralto: "Open Thy Blue Eyes" (Ashdown).

4.45—Afternoon Call, Stock Exchange, Third Call.
5—Time Signals, Close down.

Early Evening Session.

- 6—The Chimes of 2FC and Announcements.
6.5—The "Hello Man" talks to the children.
6.45—Broadcast from Farmer's Dining Hall, Instrumental and Vocal Items.
7.15—From the Studio: "Evening News" service, Weather Information.
7.30—Dalgety's market reports (wool, wheat, stock), fruit and vegetable markets.
7.40—Close down.

Night Session.

- 7.45—A Film Talk.
7.55—The Chimes of 2FC and Announcements.
7.55—Talk by Mr. Guy Bates Post from his dressing room at the Palace Theatre.
8—Broadcast from the Prince Edward, musical prologue to the film "The Vanishing Heart," with the singing of Bob Miller, Orchestral numbers by the concert orchestra, conducted by Mr. Will Prior and organ solo on the Organistic Organ by Mr. Leslie V. Harvey.
8.45—From the Studio—Mr. Walter Kingsley, English tenor, singing.
8.45—Mlle. Marie Segur, soprano.
8—The Alwyns Harmony Duo.
9.10—Broadcast from the Palace Theatre, The Second Act of "The Climax" (comedy drama) featuring amateur actor, Guy Bates Post and Miss Dorothy Brunton.
9.10—Mr. Walter Kingsley, English baritone.
10—The Alwyns Harmony Duo.
10.10—Mlle. Marie Segur, soprano.
10.10—The Alwyns Harmony Duo.
10.30—Broadcast from the Wentworth Hotel, Sydney—Wentworth Cafe Dance Orchestra.
12—National Anthem, Close down.

SATURDAY, JULY 31.

Early Morning Session.

- 7—Time Signals, The Chimes of 2 FC and Announcements.
7.15—Weather Information, Commercial News, Shipping Intelligence and Markets, Cricket Scores, last day's play of the match between Surrey and Australia. "Sydney Morning Herald" News service.
7.30—Music from the Studio.
8—Time Signals—Cricket Scores.
8.15—Close down.

Morning Session.

- 8.15—The Chimes of 2FC and Programme Announcements.
9.20—Music from the Studio.
9.45—A Morning Reading.
10.—Time Signals—Cricket Scores.
10.5—Late "Sydney Morning Herald" news service.
10.15—Music from the Studio.
10.15—An actress Talk on To-day's Cricket match in England.
11.30—A Handeeling Talk by "Redgum," Mr. J. Lockley.
11.30—Close down.

Midday Session.

- 12.30—The Chimes of 2FC and Announcements.
1—Time Signals, "Evening News" midday news service and weather information. Race results will be transmitted at regular intervals.

Afternoon Session.

- 2.55—The Chimes of 2FC and Announcements.
3—Time Signals—"Evening News" News Service. A musical programme will be given from the Studio during the intervals between sporting and racing results.
4.30—A complete resume of the afternoon's sporting events.
5—Time Signals. Close down.

Early Evening Session.

- 6—The Chimes of 2FC and Announcements.
6.45—The "Hello Man" talks to the children.
6.45—Broadcast from the Hotel Australia: Orchestral Items (Directress, Miss A. J. Egan).
7.15—From the Studio: "Evening News" late news service, weather information.
7.30—Late Sporting Results.

Night Session.

- 7.40—Announcing the first broadcast from Kosciusko, creating a record in land line transmissions of approximately 300 miles. The programme from the Hotel Kosciusko, by courtesy of the N.S.W. Government Tourist Bureau.
7.45—Kosciusko, the highest point in Australia. Some interesting details of our delightful winter resort.
7.45—2FC staff at Kosciusko. A few words of greeting and Rite of Passage.
8.10—Mr. James Donnelly, tenor.
8.10—Miss Jack Lumbard, entertainer.
8.30—From the Studio—Newtown Silver Band will play: (a) "Flag of Freedom" (Onies); (b) "Exaltation" (Hill); (c) "One by One" (Partson).
8.30—Mr. F. Kosciusko, Mr. F. Bennett in conversation.
8.35—Mr. James Donnelly, tenor.
9.45—Mr. Everett Chapelle in piano-music.
9.45—From the Studio—Newtown Silver Band will play: (a) "Reign of Gladness" (Jakes); (b) "Comrades in Arms" (Hawkes); (c) "Memories of Otria" (Button).
9.45—Mr. Jack Lumard, entertainer.
9.45—Mr. F. H. Smythe, host.
9.55—Comments on the guest.
10—From the Studio—Newtown Silver Band will play: (a) "My Proletor" (Goldsmith); (b) "Strike the Cymbal" (Gore); (c) "Wellingtonian" (Scorney).
10.20—From the Studio—Dance music by the Wentworth Cafe Dance Orchestra.
10.30—Some Humour.
10.40—Kosciusko Dance Orchestra.
11—FC parts in some melodious moments.
11.10—The Kosciusko Dance Orchestra will play.
11.30—Close down.
11.30—Broadcast from the Wentworth Hotel, Sydney—Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12—National Anthem. Close down.

SUNDAY, AUGUST 1.

Morning Session.

- 7—The Chimes of 2FC and Announcements. Cricket Scores: First day's play to the drawing of stumps at the match Australia versus Glamorgan, played at Cardiff. These scores will be repeated at 8, 9, 10, and 11 a.m.
10—The Chimes of 2FC and Announcements. From Kosciusko—a description of the Winter Snow Carnival. These descriptions will be carried on till 11 a.m.
11—Morning Service broadcast from the Lynton Hall, Pitt Street; Preacher: Rev. P. H. Howard.
12.15—From the Studio, News Session.
12.30—Close down.

Afternoon Session.
2.55—The Chimes of 2FC and Announcements.
3—Broadcast from the Petersham Congregational Church—an organ and vocal recital arranged by Mr. Christian Hellermann.
5—Close down.

Evening Session.

6—The Chimes of 2FC and Announcements.
6.20—from the Studio: Mr. R. S. Adams recently returned from South America will be continuing his detailed talk on his recent tour, and will discuss further particulars on "Creola" music by means of unique records produced in South America, which have been collected by him, and heard for the first time in Australia.

7—Broadcast from the Hippodrome: the final Sydney Concert by Gipsy Roy.
8.30—Broadcast from the Strand Theatre, Leichhardt District Band, conducted by Mr. E. P. Kerr. Song "The Mulatto of Malaga" (Trotere), Mr. Alex. Whiston.
8.38—Violin solo, "Canari" (Paliskin), Miss Leone Kelly.
8.40—Song "Jesus of Arc" (Hound), Leichhardt District Band.
8.54—Waltz song: "Beauty Sleep" (Arditti), Miss Elsie Pearless.
9.2—Cornet solo: "Australia" (Lithgow), Mr. Lorne Martin.
9.10—Song: "For the Green" (Loehr), Mr. Alex. Whiston.
9.18—Soprano solo: "The Gondoliers" (Sullivan), Leichhardt District Band.
9.30—Song: "The Nightingale of Jane" (Sanderson), Miss Elsie Pearless.
9.34—Waltzes: (a) "Pal of My Cradle Days" (Plantelos), (b) "Moonlight and Roses" (Lomare), Leichhardt District Band.
9.46—"Country Boy" and "Peasant" (Song).
9.54—March, "Heroes of Liberty" (Rimmer), Leichhardt District Band.
10—National Anthem. Close down.

MONDAY, AUGUST 2.

Early Morning Session.

Time signals.
7—The Chimes of 2FC and Announcements.
7.5—Music from the Studio.
7.10—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.
10.5—Late "Sydney Morning Herald" news service.
11—Music from the Studio.
11.15—Music from the Studio.
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.
12.40—Rugby Wireless News.
12.55—The Chimes of 2FC and Announcements.
1—"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.
2—Time Signals. Close down.

Afternoon Session.

2.30—The Chimes of 2FC and Announcements.
2.36—A Recital by the pupils of Mr. Frederick G. E. Smith.
3.30—From Farmer's Tea Rooms: The Oak Hall Trio will play (leader, Mr. Horace Keats).
3.40—Miss Eleanor Stanton, contralto: "In Late September" (Barker).
3.45—From Farmer's Tea Rooms: Oak Hall Trio.
3.56—Music from the Studio.
4—Miss Florence Grant, soprano.

4.5—From Farmer's Tea Rooms: The Oak Hall Trio.
4.15—Music from the Studio.
4.20—Miss Eleanor Stanton, contralto: "Five Little Piccaninnies" (Anthony).
4.25—From Farmer's Tea Rooms: The Oak Hall Trio.
4.30—Music from the Studio.
4.40—Miss Florence Grant, soprano.
4.45—Stock Exchange, Third Call.
4.46—Music from the Studio.
5—Time Signals. Close down.

Early Evening Session.

Time Signals.
6—The Chimes of 2FC and Announcements.
6.30—The "Hello Man" talks to the children.
6.35—Radiograph Competition.
6.45—Broadcast from the Hotel Australasia, Sydney: Orchestral items.
7.15—From the Studio: "Evening News" late news service, weather information.
7.30—Dalgety's Market Reports (wool, wheat, sugar, tea, and vegetable markets).
7.40—Close down.

Night Session.

7.55—The Chimes of 2FC and Announcements.
8—Time Signals: Broadcast from the Haymarket Theatre, Sydney, Operatic Orchestra, under the baton of Mr. Stanley Porter.
8.15—From the Studio: Mr. Raymond Ellis Taylor in a group of songs by Australian composers: (a) "My Rose Song" (Marshall); (b) "This Would I do" (Marshall); (c) "A Fantasy" (Marshall).
8.25—Talk by Mr. S. H. Bowden—"Kandy's Festival of the Holy Tooth", Buddhist's Day, celebrated in Ceylon.
8.40—Mr. Raymond Ellis, English Operatic baritone (by permission of J. C. Williamson Ltd.).
8.48—Miss Gladys Flimister, soprano.
8.56—Mr. Nevin Tosseus will continue his series of talks on "How to draw a poster" intended to help children to follow him and send in their effort of drawing for the first time by communication on the air.

9—Broadcast from the Haymarket Theatre, Sydney, vocal act.

9.20—From the Studio: Mr. Bryson Taylor, second group of songs by Australian composers: (a) "Floradora" (Dubble); (b) "I Want a Girl" (Penecook); (c) "A Rondel" (Cohen).
9.30—2FC Dance Band, conductor, Mr. Eric Pearce.
9.35—Mr. Raymond Ellis, baritone.
9.46—Miss Gladys Flimister, soprano.
9.54—2FC Dance Band.
10.30—Broadcast from the Haymarket Theatre, Sydney, Orchestral items.
11.15—Broadcast from the Wentworth Hotel, Sydney: Wentworth Cafe-Dance Orchestra under the baton of Mr. Sydney Simpson.

12—National Anthem. Close down.

TUESDAY, AUGUST 3.

Early Morning Session.

7—The Chimes of 2FC and Announcements.
7.5—Cricket Scores of the second day's play, Glamorgan versus Australia, played at Cardiff.

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

7.40—"Sydney Morning Herald" News Service; Time Signals; Music from the studio.
8—Time Signals, Cricket scores.

Morning Session.

9.15—The Chimes of 2FC and Announcements.
9.20—Music from the Studio.
9.40—Morning Reading.
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—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.
12.40—Rugby Wireless News.

1—Time Signals; Weather Intelligence.
1.2—"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.
2—Time Signals; Close down.

Afternoon Session.

2.30—The Chimes of 2FC and Announcements.
2.45—Recital on the Bechir Player Piano.
3.30—From Farmer's Tea Rooms: The Oak Hall Trio will play (leader, Mr. Horace Keats).
3.40—Miss Joan Shorter, soprano.
3.45—Oak Hall Trio.
3.55—Music from the Studio.
4—Miss Gladys Briggs, contralto.
4.45—Stock Exchange, Third Call.
4.46—Music from the Studio.
5—Close down.

Early Evening Session.

6—The Chimes of 2FC and Announcements.
6.3—The "Hello Man" talks to the children.
6.35—Radiograph Competition.
6.45—Broadcast from the Hotel Australasia, Sydney: Orchestral items.
7.15—From the Studio: "Evening News" late news service, weather information.
7.30—Dalgety's Market Reports (wool, wheat, sugar, tea, and vegetable markets).
7.40—A Talk by a member of the Wireless Institute of Australasia.

Night Session.

7.55—The Chimes of 2FC and Announcements.
8—Time Signals: Broadcast from the Randwick Municipal Band in selections from "Floradora".
8.15—Mr. Alfred Pulbrook, baritone (a) "The Shade of the Sheltering Palm" (Floradora); (b) "How can I Want" (Geisha).
8.25—Wentworth Fair or folk comic opera.
8.30—Miss Virginia De Lille, soprano: (a) "Molly the Matchmaker" from "The Country Girl"; (b) "La Belle Parisienne" from "Helle of New York".
8.38—Mr. Wally Baynes in songs that were sung by the late George Laurier.
8.48—Miss Olive Godwin, who will be many years leading soprano with G. O. Williamson will sing: (a) "Hark to the Sound of 'Coo'" (Country Girl); (b) "Follow on, Follow on" (Helle of New York).
8.56—The Randwick Municipal Band, Reminiscences from "The Geisha".
9—Selected from "Floradora" by members of the Musica Thalia Society.
9.20—Mr. Alfred Pulbrook, baritone: (a) "Queen of my Heart" (Dorothy); (b) "A Few words from Mr. Leslie Holland".

9.28—Randwick Municipal Band, selections from "The Country Girl," "Runaway Girl"; (a) "Our Miss Gibbs".
9.38—Miss Virginia De Lille, soprano: (a) "I was Dreaming" (Mrs. N. Rossetti); (b) "I want to be a Grand Lady" (from "The Little Michon").
10.8—Mr. Wally Baynes entertainer.
10.18—Miss Oliver Godwin, soprano: (a) "Time and the Doctor" (Country Girl); (b) "Time" (Country Girl).
10.28—The Randwick Municipal Band, further selections from comic operas.
10.40—Broadcast from the Wentworth Hotel, Sydney: Wentworth Cafe-Dance Orchestra under the baton of Mr. Sydney Simpson.

12—National Anthem. Close down.

WEDNESDAY, AUGUST 4.

Early Morning Session.

7—The Chimes of 2FC and Announcements.
7.5—Cricket Scores of the third day's play, Glamorgan versus Australia, played at Cardiff.

7.10—Weather Information, Commercial News, Shipping Intelligence, and Markets.
7.40—"Sydney Morning Herald" news service.

—Time Signals—Cricket scores.
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—Time "Sydney Morning Herald" news service.
10.15—Music from the Studio.
11—Progress Cricket Talk.
11.15—Cables; Cooking Talk and Recipes by Miss Ruth Furst.
11.30—Close down.

Midday Session.

12 Time Signals. The Chimes of 2FC and Announcements.
12.45—Stock Exchange, first call.
12.45—Some Columbia records.
5.45—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.
2—Time Signals. Close down.

Afternoon Session.

2.30—The Chimes of 2FC and Announcements.
2.35—Some New Columbia records.
3.10—A Dickens' Reading by Mr. A. S. Constance.
3.30—From Farmer's Tea Rooms; The Oak Hall Trio (Leader, Mr. Horace Keats).
3.45—Miss Katherine Beverley, soprano.
3.55—Music from the Studio.
4—Miss Peggy Dunbar, contralto.
4.45—The Oak Hall Trio.
4.45—Music from the Studio.
4.45—Miss Katherine Beverley, soprano.
4.45—Bith Katherine Beverley, soprano.
4.45—Music from the Studio.
4.45—Miss Peggy Dunbar, contralto.
4.45—Stock Exchange, Third Call.
4.45—Music from the Studio.
5—Close down.

Early Evening Session.

6—Time Signals. The Chimes of 2FC.
6.5—"Hello Man" talk to the children.
6.45—Broadcast from the Hotel Australia, Sydney, 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.
7.35—E. J. Vasey-Vassell, giving descriptive conditions concerning Radio Photo Competition.

Night Session.

7.55—The Chimes of 2FC and Announcements.
8—Broadcast from the Lyceum Theatre, Sydney, (by courtesy of Union Theatres Ltd.), Orchestra, under the baton of Mr. Emanuel Aristoff.

8.20—Radio Auction Bridge, third game broadcast, arranged by Mr. F. H. Master. The whole game will be broadcast and listeners are invited to phone the Studio and answer questions concerning the play which will be answered on the air.
9—Mr. Jack Lumsdaine will complete his "Music While you Wait" series writing to a title suggested by listeners; words and music of a song to be composed in the Studio.

9.10—Mr. Harry de Roobek, comedian, makes his first appearance at the studio.
9.20—Broadcast from the King's Hall, Items from the Bennett-North Costume Comedy Company—Scene 2, "Gipsy Life," "Children's Play Hour."

9.40 (approx.)—Broadcast from the Conservatorium of Music, Sydney, "Ride of the Valkyries," played by the N.S.W. Conservatorium Orchestra, conducted by Mr. Arundel Orchard.

10—Broadcast from the King's Hall, Scene 3, "Gipsy Life"—"The Enchantment." Played by the Bennett North Costume Comedy Company.

10.30—From the Studio. Mr. Jack Lumsdaine will play and sing the songs written by him since his first appearance this evening.
10.45—Mr. Harry de Roobek, comedian.
10.45—Broadcast from the Wentworth Hotel, Sydney, Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.

12—National Anthem. Close down.

THURSDAY, AUGUST 5.

Early Morning Session.
7—The Chimes of 2FC and Announcements.
7.5—Cricket Scores of the first day's play, Australia versus Warwickshire, played at Birmingham.
7.5—Weather Intelligence. Commercial News, Shipping Intelligence, and Markets.
7.45—"Sydney Morning Herald" news service.
8—Time Signals, Cricket Scores.
8.15—Close down.

Midday 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, Cricket Series.
10.15—"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.
12.45—Stock Exchange, first call.
12.45—Music from the Studio.
12.45—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—Broadcast from the Y.M.C.A. midday talk by Rev. H. W. A. Barden, on "The Great Adventure."
2—Close down.

Afternoon Session.

2.30—The Chimes of 2FC and Announcements.
2.35—A Recital of new H.M.V. Records.
3.30—From Farmer's Tea Rooms: The Oak Hall Trio will play (Leader, Mr. Horace Keats).
3.30—Miss Gwendolyne Finisterre, soprano.
3.45—From Farmer's Tea Rooms: The Oak Hall Trio.
3.55—Music from the Studio.
4—Miss Muriel Humphries, contralto.
4.20—Miss Gwendolyne Finisterre, soprano.
4.25—The Oak Hall Trio.
4.35—Music from the Studio.
4.40—Miss Muriel Humphries, contralto.
4.45—Stock Exchange, Third Call.
4.45—Music from the Studio.
5—Close down.

Early Evening Session.

6—Time Signals. The Chimes of 2FC and Announcements.
6.5—"Hello Man" talks 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.
7.40—Close down.

Night Session.

8—Broadcast for the first time, Vaughan Williams' song cycle, "Wenlock Edge," six poems for tenor solo with string quartet accompaniment and piano. The poems selected from "The Shropshire Lad" by Roumanian, William Ballou will sing the cycle, and the string quartet will comprise Mr. Lionel Lawson, 1st violin; Miss Lesley Lawrie and John; Mr. Gladstone Bell, cello; Mr. Lindley Evans, pianist; Miss Marjorie Harley, viola.
8.30—Play in one act by Mr. Walter Hunt and Miss Eve Warhurst.
8.50—Madame Vera Tasmania, soprano.

9—Mr. Gladstone Bell, cello solo.
9.10—Mr. William Ballou, tenor.
9.12—Mr. Lionel Lawson, violin solo.
9.22—Madame Vera Tasmania, soprano.
9.30—Miss Marjorie Harley, steel guitar items.
9—Amusement Items.
9.30—Madame Vera Tasmania, soprano.
9.55—Mr. Lindley Evans, piano solo.
10.5—Mr. Walter Hunt and Miss Eve Warhurst, in act plays.
10.15—Mayo Hayes steel Guitar items.
10.25—Broadcast from the Wentworth Hotel, Sydney, Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12—National Anthem. Close down.



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FRIDAY, JULY 30.

Early Morning Session.

7.15—Physical Training and Health Exercises.
7.30—Talks in Health and Hygiene.
7.45—Broadcasters' Sporting News Service, including news from Rugby.
7.55—Musical Programme from the Studio, 8—G.P.O. Clock and Chimes. Close down.
8—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."
10.45—Music from the Studio.
11—G.P.O. Clock and Chimes. Special Cricket Session.
11.45—Musical Programme from the Studio.
11.55—Markets.
11.55—Metal Quotations.
12.25—Broadcasters' Information Service, including Mails, Shipping, Weather, Rainfall, Social Pictures for the following day.
11.45—Musical Programme from the Studio.
11.55—Talks from "Sun" Cable Edition.
12.10—G.P.O. Clock and Chimes. Talks to women by Mrs. Jordan.
12.30—Broadcasters' Tour Expert will discuss the training operations and horses' form from Handley.

12.45—An Instrumental Quartette, under the direction of Carol Castling.

1.15—Music from the Studio.

1.45—Sydney Stock Exchange Gall.

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

Afternoon Session.

3—G.P.O. Clock and Chimes. Weather Report and Social Notes from "The Sun."
3.15—Talks from "Sunday."
3.20—Talks on "Modern English Poetry," by Mr. J. M. Prentiss.
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes. Music from the Studio.
4—Musical Story, entitled "The Seventh Bunch."
4.45—Music from the Studio.
5—Early country news. The Producers' Distributing Society's late market report.
5.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes. Uncle George and the Kiddies. The pupils of Miss Monroe and their entertainers the kiddies.
6.45—Broadcasters' Dinner Orchestra, Special Country Session.
7.15—Talk on Land Subjects.
7.25—Australian Merchantile Land & Finance Co. Ltd. and Wool Report.
7.30—Stock Exchange Reports.
7.37—Producers' Distributing Society's fruit and vegetable reports.
7.41—Grain and fodder reports.
7.45—Country news from "The Sun."
7.55—Close down.

Evening Session.

- 8—G.P.O. Clock and Chimes; Old Syneyan's Amateur Jazz Band, playing from the Marrickville District Hospital Dance from the Marrickville Town Hall. Concert from Studio.

12—G.P.O. Clock and Chimes.

SATURDAY, JULY 31.

Early Morning Session.

- 7.15—Physical Training and Health Exercises.
7.30—Musical Programme from the Studio.
7.39—Broadcasters' Special News Service, including news from Rugby.
7.40—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."
10.10—Broadcasters' Turf Expert will discuss the training operations and horses' form from Randwick.
10.25—Special news from the "Daily Telegraph."
10.45—Music from the Studio.
11—G.P.O. Clock and Chimes. Special Cricket Session.
11.5—Musical Programme from the Studio.
11.15—Markets.
11.20—London Metal Quotations.
11.25—Broadcasters' Information Service, including Mails, Shipping, Weather, Rainfall, Social Fixtures for the Following day.
11.40—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. News reports, by courtesy of "Sun" Newspapers. Sporting information. News reports ("Sun").
1—G.P.O. Clock and Chimes. Close down.

Afternoon Session.

- 2—G.P.O. Clock and Chimes. Special Sporting information.
6.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 4—G.P.O. Clock and Chimes. Uncle Jack and the Kiddies.
6.45—Pavilion Dinner Orchestra.
7.15—Results of football, lacrosse, 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. Emmore Theatre Symphony Orchestra under the direction Mr. F. Watkins, broadcast from Emmore Picture Theatre. Concert from the Studio. Mr. J. Holmes will talk on "The Romance of the Colonial Clippers." Mr. D. G. Stead will talk on "Australian Trees in other Countries." Ambassadors Dance Orchestra, broadcast from the ballroom of The Ambassadors until midnight. The Ambassadors Clock and Chimes. National Anthem.

SUNDAY, AUGUST 1.

- 10.55—Special Cricket Session.
11—Service broadcast from St. Jude's Church, Randwick.
7—Service broadcast from Emmore Church of Christ.
8.30—City of Sydney Band broadcast from Barlow Chambers.
10—G.P.O. Clock and Chimes. Close down.

MONDAY, AUGUST 2.

Early Morning Session.

- 7.15—Physical Training and Health Exercises.
7.30—Talk on Health and Hygiene.
7.45—Broadcasters' Special News Service, including news from Rugby.
8—G.P.O. Clock and Chimes. Close down.

Morning Session.

- 4—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."

- 10.45—Music from the Studio.
11—G.P.O. Clock and Chimes. Special Cricket Session.
11.5—Musical Programme from the Studio.
11.15—Markets.
11.20—London Metal Quotations.
11.25—Broadcasters' Information Service, including Mails, Shipping, Weather, Rainfall, Social Fixtures for the following day.
11.40—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—Sydney Stock Exchange Calls. Race results broadcast immediately received.
12.45—Hillier's Instrumental Quartette, under the direction of Cyril Casting.
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.

- 1—G.P.O. Clock and Chimes. Weather report and Social Notes from "The Sun."
3.15—Music from the Studio.
8.30—A talk on "A Course in Philosophical Thought," by Mr. J. M. Prentiss.
8.45—Music from the Studio.
9—G.P.O. Clock and Chimes. Music from the Studio.
4.15—Music from the Studio.
4.30—Serial Story, entitled "The Seventh Hunch."
4.45—Music from the Studio.
5—Early country news. The Producers' Distributing Society's late market report.
5.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes. Uncle George and the Kiddies.
6.45—Pavilion Dinner Orchestra, under the direction of Cee. Morrison. Special Country Session.
7.15—Talk on Land Subjects.
7.25—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.
7.30—Stock Exchange Reports.
7.37—Producers' Distributing Society's fruit and vegetable report.
7.41—Grain and Fodder Reports.
7.45—News (country) from "The Sun."
7.55—Close down.

Evening Session.

- 8—G.P.O. Clock and Chimes. Orphans' Wall from Wahringah Hall, Neutral Bay: Travel impressions by Maze, Evelyn Greig—"San Francisco—The City of the Golden Gate"; Mr. Ian A. Henning, B.A., will talk on "Young Australia"; David Jones' Ambassadors Dance, broadcast from the ballroom of the Ambassador until midnight. During the intervals between dances, news reports by courtesy of "Sun" Newspapers will be broadcast.
12—G.P.O. Clock and Chimes: Close down.

TUESDAY, AUGUST 3.

- 7.15—Usual Early Morning Session.

10—Usual Morning Session.

Afternoon Session.

- 8—G.P.O. Clock and Chimes; Weather Report and Social Notes from "The Sun."
3.15—Music from the Studio.
3.20—Lecture from the Studio.
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes.
4.15—Serial story entitled "The Seventh Hunch."
5—Early Country News; The Producers' Distributing Society's late market report.
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.
6.45—Broadcasters' Dinner Orchestra.
7.15—Talk on land subjects.
7.25—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.
7.30—Stock Exchange Reports.
7.37—Producers' Distributing Society's fruit and vegetable Report.
7.41—Grain and Fodder Reports.
7.45—Country news from "The Sun."
7.55—Close down.

Evening Session.

- 8—G.P.O. Clock and Chimes; Concert from the Studio. Mr. Orr will talk on "Personal Exertion Income Deductions."
12—G.P.O. Clock and Chimes. National Anthem.

WEDNESDAY, AUGUST 4.

Early Morning Session.

- 7.15—Physical training and health exercises.
7.30—Musical programme from the Studio.
7.39—Broadcasters' special news service, including news from Rugby.
7.45—Musical programme from the Studio.
8—G.P.O. Clock and Chimes.

Morning Session.

- 10—Usual programme.
- Afternoon Session.
- 3—G.P.O. Clock and Chimes; Weather Report and Social Notes from "The Sun."
3.15—Music from the Studio.
3.30—Special operatic session with explanatory talk by Mr. J. M. Prentiss.
4—G.P.O. Clock and Chimes; Music from the Studio.
4.30—Serial story entitled "The Seventh Hunch."
4.45—Music from the Studio.
5—Early Country News; The Producers' Distributing Society's Late Market Report.
5.15—G.P.O. Clock and Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes; Uncle George and the Kiddies.
6.45—Pavilion Dinner Orchestra, under the direction of Cee. Morrison.
7.15—Special Country session; Talk on land subjects.
7.25—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.
7.30—Stock Exchange Reports.
7.37—Producers' Distributing Society's Fruit and Vegetable Report.
7.41—Grain and Fodder Reports.
7.45—Country news from "The Sun."

Evening Session.

- 8—G.P.O. Clock and Chimes; 22nd Annual Meeting of the Hospital Saturday Fund of New South Wales, broadcast from Arden Hall, High Street; Musical programme including the following artists: Mr. Norman Jameson (songs); Miss Daisy Richards (violin solo); Miss Frank Hirst (piano solo); Miss Hilda Appleby (soprano); Mr. Stanley Carter and Mr. Johnstone Jameson (duet); Accompanist: Mr. Horace Knott.
12—G.P.O. Clock and Chimes; National Anthem.

THURSDAY, AUGUST 5.

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

Afternoon Session.

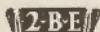
- 3—G.P.O. Clock and Chimes; Weather Report and Social Notes from "The Sun."
3.15—David Jones' Ten Room Trio.
3.30—Music from the Studio.
4—G.P.O. Clock and Chimes; David Jones' Ten Room Trio.
4.15—Music from the Studio.
4.30—Serial story entitled "The Seventh Hunch."
4.45—Music from the Studio.
5—Early Country News; The Producers' Distributing Society's Late Market Report.
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.
6.45—Broadcasters' Dinner Orchestra.
7.15—Talk on land subjects.
7.25—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.
7.30—Stock Exchange Reports.
7.37—Producers' Distributing Society's fruit and vegetable Report.
7.41—Grain and Fodder Reports.
7.45—Sporting Talk by Broadcasters' Special Turf representative.
7.55—Close down.

Evening Session.

8-G.P.O. Clock and Chimes; Concert from the Studio; Al. Hammert and the Ambassadors Dance Band broadcast from the ballroom of the Ambassador until midnight.
12-G.P.O. Clock and Chimes. National Anthem.



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Every Monday and Thursday evening, from 6.00 p.m. to 9 p.m.

6.30 to 7.00—Meatline Music, consisting of vocal and orchestral items.
7.00 to 9—Lectures, orchestral and vocal items.

2BE will be glad to get into touch with artists willing to give their services to this station.



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.

8.15—Tune in to the ticking of the clock; The afternoon session consists of popular science talks by Mr. A. R. Keightley (B.B.C.); news bulletins and special records of new Lincoln records, closing down at 4.45 p.m.

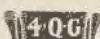
MONDAY, TUESDAY, FRIDAY.

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.

7.30—Tune in to the ticking of the clock; The evening session consists of news service; shipping log; industrial lectures; Editorials; vocal and musical items from the studio and music by the Palace Royal Californians, from J. C. Bendix's Palace Royal, Waller Beeban (leader).



QUEENSLAND RADIO SERVICE

Wavelength, 385 metres. Power, 6 kilowatts.

MONDAY, AUGUST 2.

Midday Session.

12.45—Tune-in.
12.55—Time Signal.
1—Market Reports supplied by the Council of Agriculture; Weather Information supplied by the Commonwealth Weather Bureau; News Service supplied by "The Daily Mail"; News Service supplied by "TheDaily Standard."
1.30—Close down.

Afternoon Session.

8.30—A programme of Music from the Studio.
4.15—News Service supplied by "The Telegraph."
4.30—Close down.
6.25—Tune-in.
6.30—The Children's Session—Stories by "The Standard."
7—The Farmers' Session; Market Reports supplied by the Council of Agriculture. Lecturette: Selecting pure bred stock for pigs breeding; by Mr. E. J. Shelton, (Pig Instructor).
7.30—News Service supplied by "The Standard." Stock Exchange Information supplied by the Committee of the Brisbane Stock Exchange.
7.30—Close down.

Night Session.

7.45—Lecture Session—Preference to Queensland Goods. A talk by the officials of the Queensland Preference League.
8—By courtesy of the Greater Brisbane Council and the City Organist, the organ recital given in the Exhibition Hall, by George Sampson (P.R.O.), will be relayed.
9.00—From the Studio: Weather Information officially supplied by the Commonwealth Weather Bureau. Announcements. 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.

TUESDAY, AUGUST 3.

Midday Session.

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

Afternoon Session.

8.30—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; Market Reports; Lecturette: Insect Pests in Culture, by Mr. E. E. Bell (Commonwealth Cotton Entomologist).
7.20—"The Standard" News, Stock Exchange.
7.30—Close down.

Night Session.

7.45—Lecture Session. The Psychology of Hearing, by Mr. Philip O'Hryon Head. A portion of 10-centime entertainment will be provided by St. Joseph's Choir, Corinda.
9.10—Weather Information officially supplied by the Commonwealth Weather Bureau. Announcements.
9.30—From the Centennial Hall: By courtesy of the brass band music by the Centennial Hall Orchestra will be relayed from the Centennial Hall.
10—From the Studio. "The Daily Mail" News Service. Close down.

WEDNESDAY, AUGUST 4.

Midday Session.

12.55—Tune-in Signal.
12.58—Time Signal.
1—Market Reports; Weather Information. "The Daily Mail" News; the "Daily Standard" News.
1.30—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 Little Miss Brisbane.

7—The Farmers' Session.

7.20—"The Standard" News, Stock Exchange.

7.30—Close down.

Night Session.

7.45—Lecture Session: Around the World Travel Talks No. 1—"Tahiti"—Mr. C. V. Woodward.

8—A Vocal and Instrumental programme from the Studio, including The Savoy Orchestra.

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

9.20—Announcements. Hawaiian Instrumentalist, The Pacific Triad; baritone solo, Mr. Fred Homer; concert solo, Mr. W. H. Davis; baritone solo, Mr. C. V. Woodward; march, The Savoy Orchestra.

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

THURSDAY, AUGUST 5.

Midday Session.

12.55—Tune-in Signal.

12.58—Time Signal.

1—Market Reports; Weather Information; "The Daily Mail" News; the "Daily Standard" News.

1.30—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 Standard."

7—The Farmers' Session; Market Reports; Lecturette: Margaret Fly, by Mr. W. G. Brown (Government Sheep and Wool Inspector).

7.20—"The Standard" News, Stock Exchange.
7.30—Close down.

Night Session.

7.45—Lecture Session. A talk on Books, by Mr. W. Braithwaite in the Studio.

8—A Concert in the Studio.
8.50—Weather Information officially supplied by the Commonwealth Weather Bureau.8.55—Announcements.
9—From the Band Practice Room: An impromptu programme of music by the Greater Brisbane Municipal Council Band.

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



BROADCASTING CO. OF AUST. PROP. LTD.

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FRIDAY, JULY 30.

Midday Session.

12—Time Signal. Latest cricket scores, Australia v. Surrey played at the Oval, by courtesy of Reuters Ltd. British Official Wireless News from Rugby, Reuters and the Australian Press Association cables, "Argus" and "Herald" news services. Shipping intelligence.

12.45—Stock Exchange information. Weather forecasts for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast.

1—Time Signal.

1—Studio Orchestra.
1.10—Keith Desmond, Elocutionist.
1.20—Arthur Douglas, Scotch humorist.
1.27—Studio Orchestra.
1.37—Keith Desmond, Elocutionist.

MONDAY, AUGUST 2.

Midday Session.

- 12—Time Signal. Latest cricket news, by courtesy of Reuters Ltd. Australia v. Glamorgan, played at Cardiff. 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.
 12.50—Meteorological information. Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecasts. River reports.
 1—Time signal.
 1.1—Studio Orchestra.
 1.18—Scott Sanders, tramp comedian.
 1.17—Percy Sillier.
 1.20—Studio Orchestra.
 1.30—Community Singing by the Students of the University of Melbourne, transmitted from the Club House, University Grounds, Carlton.
 2—Close down.

Afternoon Session.

- 3—Latest cricket news, by courtesy of Reuters Ltd.
 3.1—Studio Orchestra.
 3.14—Mr. J. M. Locke, Sudan, part 2.
 3.25—South Sanders, tramp comedian.
 3.32—Dorothy Roxburgh, violin solo.
 3.35—Miss Hilda Dohoniost.
 3.47—Studio Orchestra.
 3.57—Miss Flora Poll, Supervisor of Domestic Arts, Education Department.
 4.12—Arthur Douglas, Scotch comedian.
 4.19—Bessie Gannon, violin solo.
 4.26—Miss Dorothy Roxburgh, elocutionist.
 4.28—Studio Orchestra.
 Exchange information.
 5—Close down.
 4.45—"Herald" news session. Latest cricket news, by courtesy of Reuters Ltd. Stock

Evening Session.

- 5.45—Children's Hour. Answers to letters and birthday greetings.
 6—"Little Miss Kookaburra" will tell the story of "The Little Witch Girl," and "How Sandy Mac and Jimmy find Magia Boat." 6.40—Latest cricket news, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association cables. Shipping movements.
 6.53—Weather synopsis. Shipping movements.
 6.57—Fish Market Reports by J. R. Barrett Ltd.
 7.02—Stock Exchange information.
 7.04—River Reports.
 7.06—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep sales; poultry, grain, chaff, hay, straw, jute, dairy produce, potatos, 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 Develop Australia League—Mr. J. J. Waldron, "Central Australia, Part 1."
 7.30—Under the auspices of the Department of Agriculture—Mr. L. C. Bertel, Senior Irrigation Officer—"Irrigated Agriculture—Grading Land for Lucerne."
 8—University Conservatorium Students. National nights—first of the series, "Italian night."
 8.15—Under the auspices of the Launceston 30,000 League—Lt-Col. Senator E. Sampson, D.S.C.—"Launceston, the Mother of Victoria."
 8.30—Latest Cricket News, by courtesy of Reuters Ltd. British Official Wireless news from Rugby. "Announcements." "Argus" news service. Meteorological information.
 8.35—Second Act of the Musical Comedy "Tell Me More." Book by Fred Thompson and Wm. K. Wells, music by George Cernakwin, lyrics by H. G. De Silva, Desmond Carter, and Ira Gershwin. Produced by Harry E. Burgher, transmitted from the Theatre Royal by permission of J. C. Williamson Ltd.
 11.3—God Save the King.

TUESDAY, AUGUST 3.

Midday Session.

- 12—Time Signal. Latest cricket, Australia v. Glamorgan, played at Cardiff. By courtesy of Reuters Ltd. British Official Wireless news from Rugby. Reuters and 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 forecasts. River reports.
 1—Time signal.
 1.1—Studio Orchestra.
 1.16—Joe Harrison, violin solo.
 1.17—Scott Sanders, tramp comedian.
 1.20—Studio Orchestra.
 1.34—Gwen Harrison, pianoforte solo.
 1.40—Scott Sanders, tramp comedian.
 1.50—Studio Orchestra.
 2—Close down.

Afternoon Session.

- 3—Latest Cricket Scores, by Courtesy of Reuters Ltd. Australia v. Glamorgan, played at Cardiff.
 3.1—Will Page and his Popular Players of Carlyon's.
 3.16—Jack O'Hagan, baritone.
 3.17—Will Page and his Popular Players.
 3.21—Mrs. Morris, Banjo & Nunn.
 3.22—Will Page, "Fisher Talk."
 3.23—Will Page and His Popular Players.
 3.50—Arthur Douglas, Scotch comedian.
 3.57—Will Page and His Popular Players.
 4—Matron Moreland, "Infant Welfare."
 4.14—Jack O'Hagan.
 4.15—Will Page and his popular players.
 4.30—Arthur Douglas, Scotch comedian.
 4.45—Latest Cricket scores—Australia v. Glamorgan, played at Cardiff, 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—Stories by "Mary Gumbley." For the little ones, "The White Kitten," Poems: "The Sweetest Gumbelly," "Belland."
 6.15—Ten minutes with Mr. J. C. Banks, the creator of "Ginger Meggs." Boys and girls "Mary Gumbley" visit to the Blind Institution.
 6.40—Latest Cricket—Australia v. Glamorgan, played at Cardiff, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association cables.
 6.53—Weather synopsis.
 6.58—Stock Exchange information.
 7.2—Fish Market Reports by J. R. Barrett Ltd.
 7.4—River Reports.
 7.6—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep sales, poultry, grain, chaff, hay, straw, jute, dairy produce, potatos, 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 Town Planning Association—Commissioner Right.
 7.40—Under the auspices of the University Extension Board—Mr. C. R. Long, Professor MacKenzie, editor, Australian poet.
 8—Royal Australian Air Force Band, conductor, Mr. Hugh Niven.
 8.10—Scott Sanders, tramp comedian.
 8.20—Dr. Loftus Hills, popular scientist.
 8.40—"A Day in the Dickens Life." Royal Australian Air Force Band, Percy Peters, baritone, Syd Eaton, tenor, Percy Rogers, baritone, Johnny Marks, comedian, Horace J. Book, elocutionist, Tris, Bobby Pearce, Syd Eaton, and Percy Rogers. Bobby Pearce, and Johnny Marks, double Royal Air Force Band. The Royal Air Force Band will also play during the evening.
 10—"Argus" news service. Announcements. Latest cricket, by courtesy of Reuters Ltd.

- British Official Wireless news from Rugby. Weather forecast. God Save the King.

WEDNESDAY, AUGUST 4.

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. Shipping intelligence.
 12.45—Stock Exchange information.
 12.50—Meteorological information. Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecasts. River reports.
 1—Time Signal.
 1—Dance Music. Ham Johnson's Monte Carlo Band.
 1.1—Ham Johnson's Monte Carlo Band.
 1.17—The Premier Four.
 1.18—Ham Johnson's Monte Carlo Band.
 1.20—The Premier Four.
 1.27—Ham Johnson's Monte Carlo Band.
 2—Result of Trial Handicaps—Moonee Valley. Close down.

Afternoon Session.

- 2.30—Israel G. Oram and the Thivoli Orchestra, transmission of first act of Thivoli's programme, by permission of Musgrave's Theatres Ltd.
 3.40—Result of Children's Hospital—Moonee Valley. Result of Hospital Highweight. Result of President's Handicap.
 3.45—Miss G. Page, "Great Lovers of Children—Penhaligon, Mother of Penhaligon."
 3.52—Arthur Douglas, Scotch comedian.
 4—Mairinve Hayrgrave, pianoforte.
 4.14—Louise Hillburn, contralto.
 4.21—Mairinve Hayrgrave, pianoforte.
 4.30—Miss G. Page, "Gothic Trial Handicap."
 3.31—Louis William, contralto.
 4.38—Sister Peak, "Mothercraft."
 4.45—Result of Carlton Handicap. Latest cricket results, by courtesy of Reuters Ltd. "Herald" news service. Stock Exchange information.
 5—Close down.

Evening Session.

- 5.45—Children's hour. "Bobby Bluegum" will answer letters and give birthday greetings. Musical hour for children—conductor, Mr. Eric Hart. Millicent Osmond, soprano.
 6—Latest cricket scores, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association cables.
 6.53—Weather Synopsis; Shipping Movements.
 6.58—Stock Exchange information.
 7.2—Fish Market Reports by J. R. Barrett Ltd.
 7.4—River Reports.
 7.6—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep sales, poultry, grain, chaff, hay, straw, jute, dairy produce, potatos 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 Department of Agriculture, Dr. S. S. Cameron, Director of Agriculture, "Co-operative Freezing for Export."
 7.40—Mr. H. C. Slocombe, "Gas Light Papers."
 8—First Act of the Musical Comedy, "Tell Me More," transmitted from His Majesty's Theatre, by permission of Dr. W. W. Thomson, Ltd. Book by Fred Thompson and Wm. K. Wells. Music by George Gershwin. Lyrics by B. G. de Sylva, Desmond Carter, and Ira Gershwin. Produced by Harry B. Burgher.
 9.25—Capt. Peters, "Books, Wigs and Otherwise."
 9.40—Scott Sanders, tramp comedian.
 9.50—Reginald Bradley, violin; Bessie Gannon, violin; Dorothy Roxburgh, viola; Tasmania Tiers, cello; and Agnes Fortune, piano.
 10.5—W. Davies, baritone.
 10.12—Reginald Bradley, violin; Tasmania Tiers, cello; and Agnes Fortune, piano.



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Type	Amp. Hour Capacity	Charge Rate
UD.44	15	.05
UD.86	30	1
56.RW-RX	60	2
76.RARX-RW-RX	90	3
96.RARX-RW-RX	120	4
116.RAR-RW	150	5
RB	1.5	.05
DX-DXO	3.0	.15
DHO	6.0	.25

Philco Charging Indicators.

These indicators are built in all Philco glass-jar batteries (UD.44, UD.86, 53.X and DXO types) and can be procured in a different form for use in wood (RW type), or rubber (RX type) batteries. The action of the indicator is as follows:-

When the battery is fully charged, both of the indicating balls will float.

After 15 to 20 per cent. of the capacity has been used, one will sink.

After discharging the battery until 80 per cent. has been used, the second ball will sink.

The battery should not be discharged much beyond this point.

Never add any acid to Radio batteries after the initial filling unless it is known that some acid spilled. Do not try to make the charge indicating balls float by adding acid to the cells.

Keep the solution level to the proper height by adding distilled water regularly; keep the battery fully charged and keep it clean and dry on top.*

Get More Enjoyment from your Wireless!

Install an "Ever-Ready" Radio Battery and get maximum satisfaction. Whether you want a high or low tension type battery you will find an "Ever-Ready" suitable for your needs. These efficient batteries give you more enjoyment from your wireless.

EVER-READY RADIO BATTERIES

SAFETY FIRST - UTILITY ALWAYS

LOOK FOR THE TRADE-MARK



"WANDA" PLUG RADIO BATTERIES

The New Radio High Tension "H" Battery can be obtained in 31½, 42 or 48 volts—fitted with Wanda Plug and 2 screw terminals. Varied tappings.

Small size type W.P. 30 volt ..	3/8
Small size type W.P. 40 volt ..	12/6
Small size type W.P. 60 volt ..	18/-
Large size type X.P. 30 volt ..	15/-
Large size type X.P. 40 volt ..	31/-

THE NEW EVER-READY RADIO "A" BATTERY, LT3 — 12/-

This LT3 Battery is adaptable to at least 5 different types of valves in UV.129, C.289, DV.18, DE.9, BTH.35, and many others. Also invaluable as an Ignition Battery and for many other uses where up to 4½ volts are required.

THE NEW EVER-READY
No. 126, or A, B or C Battery

2/9

One of a group of Radio Batteries, useful in Wireless, Lighting and Amplification. Size, 3½ x 4 x 1½, with three brass terminals. Voltages 1.5-3 or 4.5 volt. A general utility battery for many purposes.

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

THE EVER-READY CO. (Gt. Britain) Ltd.
163 PITT STREET, SYDNEY

- 10.24—W. J. Davies, baritone.
 10.31—Reginald Bradley and Jessie Gaunton, violin and unaccompanied.
 10.41—Latest Cricket News, by courtesy of Reuters Ltd., "Argus" news service. Meteorological information. British Official Wireless news from Rugby. Announcements, etc.
 10.55—Scott Sanders, tramp comedian, in a few minutes of fun before closing down.
 11—God Save the King.

THURSDAY, AUGUST 5.

Midday Session.

- 12 noon—Time Signals. Latest Cricket scores by courtesy of Reuters Ltd., Australia v. Warwickshire, played at Birmingham. British Official Wireless news from Rugby. Reuters and the Australian Press Association cables. "Argus" and "Herald" news service.
 12.15—Community Singing, under the auspices of Community Singers and Concert Goers' Association, transmitted from the Assembly Hall, Collins St., Melbourne.
 12.45—Stock Exchange Information; Meteorological information; Weather forecast for Victoria, Tasmania, South Australia and New South Wales.
 2—Close down.

Afternoon Session.

- 3—Latest Cricket scores, by courtesy of Reuters Ltd., Australia v. Warwickshire, played at Birmingham.
 3.1—Studio Orchestra.
 3.10—Arthur Purcell.
 3.15—Richard Chizet, flute.
 3.30—Studio Orchestra.
 3.44—Mary Gumbley, some poems from "Stray Sunbeams," by Ruby Sykes Lyon.
 3.50—Studio Orchestra.
 3.4—Scott Sanders, tramp comedian.
 4.1—Trio: Tessa, Helen, collar, Richard Church flute and Agnes Ferguson piano.
 4.30—Latest Cricket scores, by courtesy of Reuters Ltd.; Australia v. Warwickshire, played at Birmingham. "Herald" news service. Stock Exchange information.
 4.45—Evening song, transmitted from St. Paul's Cathedral.
 5.00—Close down.

Evening Session.

- 5.45—Children's Hour. Answers to letters and birthday greetings.
 6—"Mary Gumbley" Poems: "The Nursery Pudding," "The Tragic Tale of a Pot," Story for the littlest ones, "The Duckling Family." Ten minutes with Mr. J. C. Banks, the creator of "Ginger Meggs." For boys and girls, "Dante—a Patriot Who Wasn't." For adults, "Dante—a Patriot Who Wasn't."
 6.10—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia v. Warwickshire, at Birmingham. "Argus" and "Herald" news service. Reuters and the Australian Press Association cables.
 6.30—World news stories. Shipping movements.
 6.38—Stock Exchange information.
 7.2—Fish 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, Jute, Dairy Products, Potatoes and Onions.

Night Session.

- 7.20—Tramways, Dr. Carlton-Ellis, F.R.C.S., Medical Officer, Melbourne, and Metropolitan Tramways Board—"Trammen and All That".
 7.40—Mr. J. Newell Ross, Sir Henry Parkes.
 8—Collingwood Citizens' Band.
 8.10—Mr. Todd Collins, Football talk.
 8.30—Ham Johnson's Monte Carlo Orchestra.
 8.40—Scott Sanders, Merry Meanderings.
 9—Collingwood Citizens' Band.
 9.7—Ham Johnson's Monte Carlo Orchestra.
 10.15—Under the auspices of the Launceston 50,000 League, Lt. Colonel Senator B. Thompson, "A.S.O." Interesting Historical Facts of Launceston.
 9.30—Collingwood Citizens' Band.
 9.40—Scott Sanders, tramp comedian.
 9.50—Ham Johnson's Monte Carlo Orchestra.

- 10—Announcements. Latest cricket scores, by courtesy of Reuters Ltd., Australia versus Warwickshire, played at Birmingham. British Official Wireless News from Rugby.
 10.10—Collingwood Citizens' Band.
 10.20—"Lillian" Studio Performances.
 10.30—Ham Johnson's Monte Carlo Orchestra.
 10.40—"Argus" News Service; Meteorological Information.
 10.50—Collingwood Citizens' Band.
 11—God Save the King.

- 9—G.P.O. Chimes.
 9.1—Studio Concert.
 10.15—"Advertiser" News Service and sporting results.
 10.25—Station Announcements and International Cricket.
 10.30—G.P.O. Chimes: Close down.

SUNDAY, AUGUST 1.

Morning Session.

- 11—Rely from Maughan Church, Divine Service.

Afternoon Session.

- 8—Violet Day Commemoration Service.

Evening Session.

- 6.30—G.P.O. Chimes.
 6.31—Sunday Stories for the children by "King Electron."
 7—Relay from the Parkside Baptist Church, Divine Service.
 8.15—From the Studio: Holden's Silver Band in a programme of band music.
 8.50—Mr. O. H. Nichols will talk on "Science of Thought."
 9—G.P.O. Chimes.
 9.1—Holden Band, continued.
 10.25—Station Announcements.
 10.30—G.P.O. Chimes: National Anthem.

MONDAY, AUGUST 2.

Morning Session.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Stock Duo Art Number.
 11.40—"Advertiser" News Service.
 11.55—Vocalion number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket score.
 12.16—Featuring a Stock Duo Art Number;
 12.30—GCL 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.
 3.1—Relay from "Maple Leaf" Cafe—Orchestra numbers.
 3.45—GCL 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.
 5—G.P.O. Chimes.

Evening Session.

- 3.30—G.P.O. Chimes.
 3.45—Bedtime Stories.

- 3.50—GCL Studio—Serial Story.
 4—G.P.O. Chimes.
 4.1—Broadcast from "Arcadia" Cafe—Orchestra numbers.

- 4.05—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.
 7.20—Mr. Alexander will talk on the leather industry.

- 7.30—Market Reports.
 7.40—Mr. Frederickson, automotive engineer of Vacuum Oil Co., will give his weekly motor talk.

- 7.50—Mr. Dungey will talk on "The Care of the Teeth."

- 8—G.P.O. Chimes.

- 8.1—Studio Concert.

- 8.45—Studio Concert, continued.

- 9—G.P.O. Chimes.

- 9.1—Weather Reports.

- 9.3—Studio Concert, continued.

- 10.15—"Advertiser" News Service.

- 10.25—Station Announcements and International Cricket.

- 10.30—G.P.O. Chimes: Close down.

TUESDAY, AUGUST 3.

Morning Session.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Stock Duo Art Number.
 11.40—"Advertiser" News Service.
 11.55—Vocalion number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket score.
 12.16—Featuring a Stock Duo Art Number;
 12.30—GCL 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.

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

Evening Session.

- 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories.
 7.30—Market Reports and Stock Exchange Intelligence.
 7.40—Milling Talk by Mr. Jackett.
 8.1—The Cadenza Quartette in a programme of classical music, interspersed with vocal items.
 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Studio Concert, continued.
 10.15—"Advertiser" News Service.
 10.25—Station Announcements and International Cricket.
 10.30—G.P.O. Chimes; Close down.

WEDNESDAY, AUGUST 4.

Morning Session.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Sleek Duo Art Number.
 11.40—"Advertiser" News Service.
 11.55—Vocalion number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket scores.
 12.16—Featuring a Sleek Duo Art Number.
 12.20—GCL 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—Orchestral numbers.
 4.55—Stock Exchange Reports, General Information, and Station Announcements.
 5—G.P.O. Chimes.

Evening Session.

- 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories.
 7.30—Market Reports.
 8—G.P.O. Chimes.
 8.1—Studio Concert.
 8.30—Lecture by Messrs. F. R. Faulding & Co.
 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Studio Concert, continued.
 10—G.P.O. Chimes.
 10.15—"Advertiser" News Service.
 10.25—Station Announcements and International Cricket.
 10.30—G.P.O. Chimes; Close down.

THURSDAY, AUGUST 5.

Morning Session.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Sleek Duo Art Number.
 11.40—"Advertiser" News Service.
 11.55—Vocalion number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket scores.
 12.16—Featuring a Sleek Duo Art Number.
 12.20—GCL 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.



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THIS is our standard 2-Valve Set greatly reduced. Complete with all accessories—but not including loud speaker; ready to instal. Every set thoroughly tested, guaranteed to give satisfaction. Usually £12/10/-. Now reduced to . . . £10/10/-. Standard 1-Valve Set with all accessories, not including loud speaker. Usually £8/12/6. Sale Price £6/15/-

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Take this opportunity to purchase your Radio needs. All sets, parts and accessories are substantially reduced—indeed prices were never so low before. This being the last week everything is marked at prices which ensure clearance.

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- 4.—G.P.O. Chimes.
4.1—Broadcast from "Arcadia" Cafe—Orchestral numbers.
4.55—Stock Exchange Reports, General Information, and Station Announcements.
5.—G.P.O. Chimes.

Evening Session,

- 6.30—G.P.O. Chimes.
6.31—Bedtime Stories.

- 7.15—Health Talk by School for Mothers, arranged by Mr. A. M. Whittenbury.
7.30—Market Reports and Stock Exchange Intelligence.
7.40—Poultry Talk, by Mr. A. M. Whittenbury.
8.1—Studio Concert.
8.2—G.P.O. Chimes.
8.3—Market Reports.
9.3—Studio Concert, continued.
10.—G.P.O. Chimes.
10.1—Studio Concert, concluded.
10.15—"Advertiser" News Service.
10.30—G.P.O. Chimes; Close down.



HOBART

Wavelength, 588 metres. Temporary Power.
FRIDAY, JULY 30.

Morning Session,

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

Afternoon Session.

- 3.—Musical items from the Studio, weather information.
3.30—Hobart Stock Exchange quotations.
4—Time Signals.

Early Evening Session.

- 7—Children's Corner. "Big Brother" chats to his Pals.
7.16—Hobby Talk.
Evening Session.
8—"The Mercury" special Tasmanian news service. Railway auction produce sales, Weather forecasts.
8.5—Hobart Stock Exchange quotations.
8.10—Weekly gardening chat, by Mr. George Watson.
8.20—"Sports Budget," supplied by Mr. T. W. Newton, of Hobart Sports Depot.
8.30—Miss Gwenida Hibbenou mezzo soprano; Mrs. H. L. Beta, soprano; Miss Dulcie Tait, alto; Mr. J. S. Harwood, tenor; Mr. C. J. Watson, baritone.
8.50—"The Mercury" special interstate news service. Weather synopsis. Station announcements. National Anthem.

SATURDAY, JULY 31.

Morning Session.

- 1.—"The Mercury" news, stock market, shipping, commercial intelligence, weather information, and sporting anticipations. Records from the Studio.
11.45—Hobart Stock Exchange quotations.
12—Time signal.

Early Evening Session.

- 7—Children's Corner. "Big Brother" chats to his Pals.
Evening Session.
8—"The Mercury" Special Tasmanian News Service. Railway auction produce sales, Weather information, and sporting results.
8.5—Hobart Stock Exchange quotations.
8.10—"Come in Tasmania Movement," by Mr. G. W. R. Ho, Rowing in Tasmania.
8.20—Palais de Danse Band, City Hall, Hobart.
8.50—"The Mercury" Special Interstate News Service. Weather synopsis. Station announcements. Close down.

SUNDAY, AUGUST 1.

Evening Session,

- 7—Service from St. David's Cathedral, Hobart.
8.45—Concert from the Studio: Miss Ruby

Please, accompanist: Miss Frances Evans, contralto; Mr. W. E. Fuller, violin; "Dramatic Recital": Mr. Charles G. Tennant, baritone; Mr. W. J. Clarke, Jr., trumpet.
9.45—"The Mercury" Special Interstate News Service. Weather Synopsis. Station announcements. National Anthem.

MONDAY, AUGUST 2.

Morning Session.

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

Afternoon Session.

- 3—Musical items from the Studio. Weather forecast.
3.30—Hobart Stock Exchange quotations.
4—Time signal.

Early Evening Session.

- 7—Children's Corner, "Big Brother" chats to his pals.

Evening Session.

- 8—"The Mercury" special Tasmanian news service. Railway auction produce sales, Weather information.
8.10—Mr. A. N. Lewis, subject: "The interior of the Earth."
8.30—Miss Ruby Please, accompanist: Miss Joan Hibberd, soprano; Mr. W. J. Clark, junr., trumpeter; Mr. Jack Broadbent, baritone; Mr. W. P. Harwood, basso.
9.50—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.

TUESDAY, AUGUST 3.

Morning Session.

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

Afternoon Session.

- 3—Musical items from the Studio. Weather forecast.
3.30—Hobart Stock Exchange quotations.
4—Time Signal.

Early Evening Session.

- 7—Children's Corner. "Big Brother" chats to his pals.
7.15—The adventures of George the Book-shelf Cat, "George and the Jumper," by Aunt Stella.

Evening Session.

- 8—"The Mercury" special Tasmanian news service. Railway auction produce sales, Weather information.
8.5—Hobart Stock Exchange quotations.
8.10—Literary Lapses and Library Lists, by Mr. W. E. Fuller.
8.30—Musical Items from the Studio—special request numbers.
9—Photographic Talk, Mr. Ch. H. Sims, of Korky Ltd., Hobart. "Photographic Art."
9.20—Musical Items from the Studio.
9.30—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.

WEDNESDAY, AUGUST 4.

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

Afternoon Session.

- 3—Records from the Studio. Weather information. Story from "Illustrated Tasmanian Mail."
3.30—Hobart Stock Exchange quotations.
4—Time Signal.

Early Evening Session.

- 7—Children's Corner, "Big Brother" chats to his pals.
7.15—Story from "Illustrated Tasmanian Mail."

Evening Session.

- 8—"The Mercury" special Tasmanian news service. Railway auction produce sales, Weather information and sporting results.
8.5—Hobart Stock Exchange quotations.
9.50—Palais de Danse Band, City Hall.
9.50—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. Close down.

THURSDAY, AUGUST 5.

Morning Session.

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

Afternoon Session.

- 3—Musical items from the Studio. Weather forecasts.
3.30—Hobart Stock Exchange quotations.
4—Time signal.

Early Evening Session.

- 7—Children's Corner, "Big Brother" chats to his pals.
7.15—The adventures of George, the Bookshelf Cat, "What happened under the Window" by Aunt Stella.

Evening Session.

- 8—"The Mercury" special Tasmanian news service. Railway auction produce sales, Weather information.
8.5—Hobart Stock Exchange quotations.
8.10—Physical Culture talk by Mr. George Colling.
8.30—Concert from the Studio under the direction of Miss Ruby Please.
9.50—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.

New Zealand Broadcasters

- 1YA—The Radio Broadcasting Co. of New Zealand Ltd., Auckland. Power, 300 watts; wavelength, 330 metres. Transmits on Tuesday, Wednesday, Thursday, Friday, and Saturday, 8.30-9.15-10.15 p.m., Friday, 2.30-4.30 p.m. Last two Sundays of the month, broadcast from Pitt Street Methodist Church.

- 1YB—La Gloria Gramophone Co., Auckland. Power, 50 watts; wavelength, 275 metres. Transmits first two Sundays in the month, broadcast from Congregational Church compound, 6.30. Last two Sundays gramophone hours, 8-10 p.m.

- 1YC—N. C. Shepherd, Whangarei. 15 watts; 290 metres. Transmits Monday, Wednesday, and Friday, 8-10 p.m.
- 1YQ—L. A. Keith, Auckland. 50 watts, 235 metres. Monday and Thursdays, 8-10 p.m. Sunday afternoons 3.35, instrumental items. Shirlily producing "Kiddies" items, 4.30-5.15 p.m. Sunday.

- 2YM—Palmerston North Radio Club. 5 watts, 290 metres. Transmits Monday, Friday, 7.30-8.30 p.m.

- 2YK—Radio Broadcasting Co., Wellington. Power, 120 watts; wavelength, 295 metres. Transmits Tuesday, Thursday, Friday, Sunday, 8-10 p.m.

- 2YM—The Gisborne Radio Co., Gisborne. Power, 500 watts; wavelength, 249 metres. Transmits Tuesday, Thursday, Sunday, 8-10 p.m.

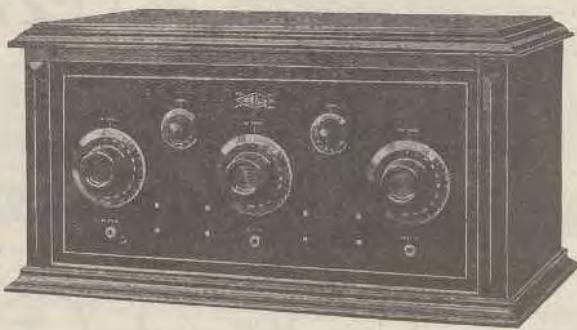
- 3AC—The Radio Broadcasting Co., Christchurch. 50 watts; wavelength, 249 metres. Tuesday, Wednesday, Saturday, Sunday, 8-10 p.m. Friday, 4.30-7.15, 8.30-9.30 p.m.

- 4YA—Radio Broadcasting Co., Dunedin. Power input, 750 watts; wavelength, 380 metres. Present transmissions, Sunday, Monday, Wednesday and Friday, 7.30-10 p.m.

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

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THE LONDON RADIO
EXHIBITION.

We have recently received some very interesting information from our London Correspondent concerning the National Radio Exhibition to be held in London next September. In previous years London has had two Exhibitions, one at the Albert Hall and a further one for those firms who were not members of the National Association of Manufacturers. The forthcoming Exhibition, which is to be held at Olympia, will be open to every manufacturer and distributor of British manufacturers, irrespective of membership of any association, greatly, one feels, to the benefit of the British Radio Industry, and most assuredly to the added conveniences of visitors from overseas, who will have this year under a single roof a complete review of the industry. Olympia is, of course, a very great improvement upon the Albert Hall for exhibition purposes; it is doubtful, in fact, if any city can boast a more admirable venue, and those who in previous years have bemoaned that use was not made of it will be congratulating themselves this year.

The Exhibition authorities seem determined to make the 1926 Exhibition overshadow those of previous years, and when one has regard to the greatly increased interest which has been taken in wireless since the general strike, there seems to be every reason for anticipating their success.

The B.B.C. are giving their full support to the Exhibition, and it is intended to build replicas of the studios which are at present at their headquarters in Savoy Hill in the gallery. The Air Force Band, one of the best in the country, will also be there.

Special steps are also being made to attract overseas buyers by the provision of interpreters and by a concerted effort to look after their interests and comfort, and since they will now have the advantage of a combined Exhibition completely representative of the Radio Industry in Great Britain, there is good reason to hope for a record attendance.

LOG THE WORLD
Build your SUPER with
ALL-AMERICAN

SUPER-FINE
PARTS

LONG WAVE TRANSFORMER
(Intermediate Frequency)
For Amplification at
4,000 to 20,000 meters
(75 to 15 Kilocycles)

R-110 . Each £2/7/-

10,000 METER TRANSFORMER
(Filter or Input)
High selectivity and no
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RADIO FREQUENCY COUPLER
(Oscillator Coupler)
A uniform output at 150
to 650 meters.

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SUPER-FINE PARTS:

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1 R-120	
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Maximum amplification at intermediate frequencies, with absolute quietness of operation

When you build your ultimate set, take no chances with parts of unknown quality. Use the tried and dependable products of the world's leading transformer maker.

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The Radio Key Book
Hints, "hook-ups" and practical articles on the "Super," Power Amplifiers, Radio Frequency and Audio Amplification. Sent for Sixpence in coin or stamps.

LARGEST SELLING TRANSFORMERS IN THE WORLD.

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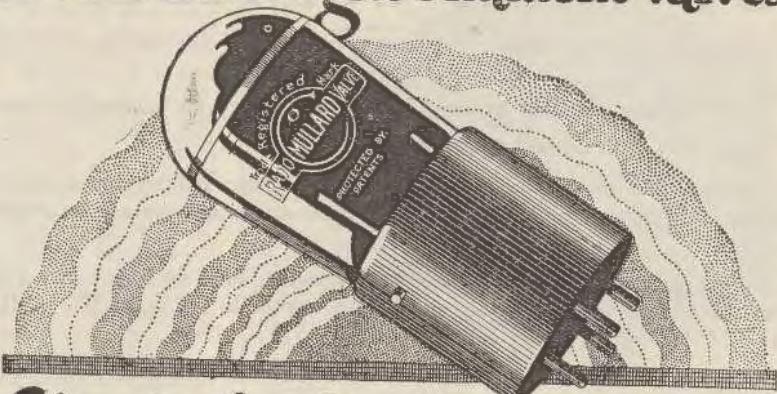
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Giants for Strength & Vitality

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

MULLARD SINGLE RING VALVES

Red Ring for H.F. amplification

Green Ring for L.F. amplification

These valves only require a 4-volt accumulator

7/- each

HF Amplification.			LF Amplification.			Power Valves.			Detectors.		
Type	Volts	Circuit	Type	Volts	Circuit	Type	Volts	Circuit	Type	Volts	Circuit
H.F.	3.0	F.H.	L.F.	2.8	G.H.	D.P.A.1	5.0	G.C.S.	H.F.	12.0	Interv.
D.45	3.0	G.H.	L.D.	2.8	G.H.	D.P.A.2	5.0	G.C.S.	H.F.	12.0	Interv.
D.3	1.8	G.H.	D.3	1.8	G.H.	P.M.4	3.7	G.C.S.	H.F.	12.0	Interv.
D.P.A.4	5.0	G.H.	D.P.A.1	5.0	G.H.	D.P.A.8	5.0	G.C.S.	H.F.	12.0	Interv.
D.P.A.2	4 to 4.1	G.H.	D.P.A.2	4 to 4.1	G.H.	D.P.A.4	5.0	G.C.S.	H.F.	12.0	Interv.
						P.M.4	3.7	G.C.S.	H.F.	12.0	Interv.

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

Mullard

THE · MASTER · VALVE (ARKS 6)

BUY WITH CONFIDENCE

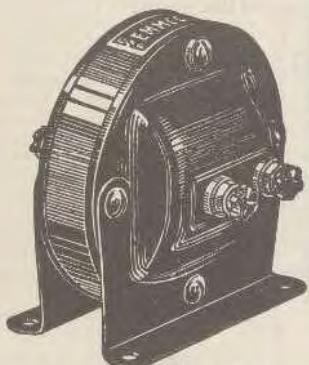
KNOW what you are buying. That is the key to successful results with the home-built radio receiver.

With so many different types to select from, it is sometimes difficult to use your true judgment in discriminating between the high quality articles and the inferior imported goods.

So that you may be confident of getting the best possible value for your money, and of getting the most efficient parts for your set, **ASK YOUR DEALER TO SHOW YOU EMMCO.**

You will quickly recognise the superiority of EMMCO parts because they are not only distinctive in appearance, but every EMMCO product is submitted to a thorough test before production is commenced, so as to insure absolute efficiency.

Local manufacture and modern production methods have combined to place these Australian made radio products on the market at lower prices and higher quality than similar articles manufactured overseas.



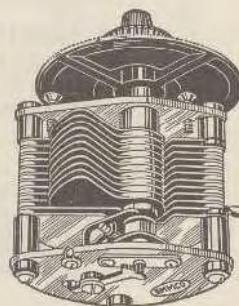
EMMCO TRANSFORMER.

EMMCO TRANSFORMER.
Ruggedly built and of handsome appearance, the New EMMCO Transformer fulfills the very highest demands of modern engineering standards. Obtainable in Ratios $3\frac{1}{2}$ to 1 and 5 to 1; also 2 to 1 and $7\frac{1}{2}$ to 1.
PRICE 21/-.

EMMCO CONDENSER.
Absolute insulation—grounded rotor end plates—straight line wavelength—most minute adjustment. These are features which contribute to the efficiency of EMMCO Vernier condensers.

Vernier Type.	.00025	20/-
	.0005	21/-

Plain Type.	.00025	13/6
	.0005	15/-



EMMCO CONDENSER.

Manufactured by

ELECTRICITY METER MANUFACTURING CO. LTD.
SYDNEY - N.S.W.

BROADCASTS TO NEW ZEALAND.

Mr. W. R. Blow, the New Zealand Government representative in Sydney, is taking active interest in the question of the relay by New Zealand stations of programmes from the "A" class stations of Australia. Mr. Blow is taking up the matter with his Government as to the possibility of setting aside from the funds received from New Zealand listeners' licence fees a proportion for the purpose of buying programmes from Australia for New Zealand. The ice was broken by 2FC when that station put over the special New Zealand transmission on July 29th. In this programme 12 native born New Zealand singers took part, and the other artists sang or played items of New Zealand composition. Thus it was truly a representative New Zealand broadcast.

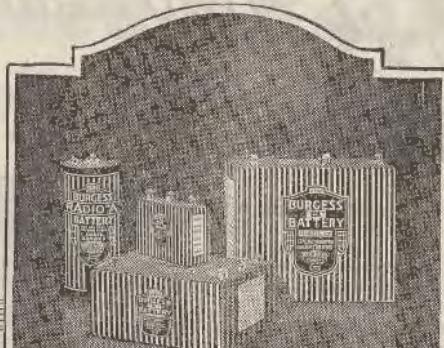
Considerable interest is being shown in this matter of relaying Australian programmes in the New Zealand press, and we believe that several of the Australian broadcasting stations are giving the matter consideration. Should it be eventually decided to broadcast special programmes by arrangement with the New Zealand stations, New Zealand listeners should get a most satisfactory service.

OUT OF THE KFI MAILBAG.

Gaye H. Malone, one time resident of Huntington Beach, California, and now in the oil fields of Miri-Sarawak, Borneo, has written to the Los Angeles station, KFI, asking for information regarding a receiving set that will pick up not only 2BL and 2FC Sydney, Australia; KZRQ Manila; and JOAK, Tokyo, but KFI as well. When KFI went looking for this information, it was discovered that everyone could recommend and guarantee the very set—the set in his own front room. Which reminds one of the immortal verse:

Lives there a man with soul so dead
Who never to himself has said,
"My radio ain't no super-hot,
But there's darn few stations
That the thing won't get.

BURGESS—"Ask any Radio
Engineer"—BATTERIES



Contributors to your radio entertainment

VERY probably hidden away in the cabinet of your receiving set, the batteries you use are nevertheless sur- rendering their power unseen and unheard.

And to be able to contribute their energy and to add to the complete efficiency of your receiving equipment, those batteries must combine every desirable factor and formula known in the electro-chemical field.

Such Batteries are Burgess—products of the Burgess Laboratories—products which have been used by practically every famous explorer, the majority of amateurs and the leading radio engineers.

That's why when you use Burgess Radio 'A', 'B' and 'C' Batteries you are using batteries which assure the utmost dependability, longer life and complete satisfaction.

Obtainable only from high class dealers.
WHOLESALE:
NEW SYSTEM TELEPHONES PTY. LTD.,
Sydney ————— Adelaide ————— Melbourne.



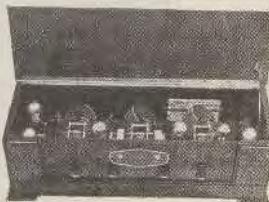
BURGESS RADIO BATTERIES



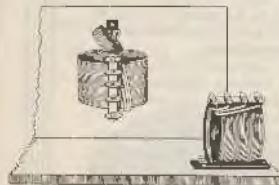
AIRZONE BROWNING DRAKE KIT.

This kit is comprised of one aerial coil and one regenaformer, and may be mounted very conveniently in the way illustrated, the aerial coil on the baseboard and the regenaformer (which has a special panel mounting device affixed) on the panel. These coils are rigidly constructed, and are attractively wound with green silk-covered wire, the secondaries of each coil being "space" wound. They have an all-air construction, which is the

up for differences caused through using valves of varying characteristics. The internal wiring of the re-



ceiver is excellently carried out, and an attractively finished cabinet completes a set that should be popular in Australia.



highest type of inductances possible, having a low resistance and low distributed capacity. These coils are made with bank weave and bound with No. 24 wire, guaranteed efficient and durable, with a very good type of low loss construction. Agent: Manufacturers Products and Sales Co., Challis House, Martin Place, Sydney.

ROSCHE AMBOROLA.

The Weldon Electric Supply Co. Ltd., is showing a new type of receiver known as the Amborola. Six valves are incorporated, and for country use especially, where long distance reception is required, the instrument should be capable of giving good loud speaker results. The circuit embodies two stages of radio, detector and two audio. A compensating feature has been added to make

CLEARTRON VALVE.
Depicted here is an illustration of the Cleartone CT 101A, which is being handled by Harringtons Ltd. This is a new product valve, especially designed for use with resistance and reactance coupled amplifiers. It makes an excellent detector in all type sets.

It is also suitable for use in the intermediate stages of super-heterodyne receiver, and increases stabilisation when used in the R.F. stages of a tuned radio frequency set.

Characteristics:

Filament Terminal Voltage	... 5 volts
Filament Current	... 0.25 amps.
Plate Voltage	... 40 to 150 volts
Plate Current	... 3 to 1 milliamp
Amplification constant	... 20
Voltage amplification with 100,000 ohms in plate circuit at 135 volts plate	... 18

PHILCO—"Super Power" BATTERIES.

RADIOTRON UV-200.

The Radiotron UV-200 is a Detector Valve belonging to the well known group of Radiotrons being known as what is a "gas content" valve. It is admirable as a detector. Unlike other types of Radiotrons, this valve, however, cannot be used as an amplifier, being what is termed a "soft" valve, as against a "hard" valve such as the Radiotron UV-199 and Radiotron UV-201A types.

One very important point to bear in mind in connection with this valve is that owing to its characteristics, the sensitivity varies considerably, according to the filament potential, which is critical and therefore requires a separate control. This is more than compensated for, however, by reason of its splendid detecting



qualities. In over-all dimensions and general appearance, it is very similar to the Radiotron UV-201A type, except that the glass envelope is clear instead of having a silver appearance, which is characteristic of the UV-201A caused by the process termed "gutting."

Characteristics:

Filament Battery Voltage 6
Filament Terminal Voltage 5
Filament amps. 15
Plate Voltage 221-45
Base, Standard V.T.	

Agents:

Amalgamated Wireless (A'sia) Limited.

Guaranteed 2 Years

and from 15/- deposit too



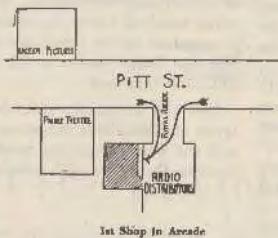
LISTEN IN TO MELBOURNE, BRISBANE, ADELAIDE, ETC., ETC.

	£ 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

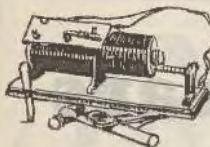
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No coils to change. For long distance stands supreme*

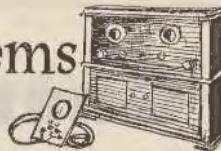


Radio Distributors
29 ROYAL ARCADE
SYDNEY

MA 1798
MA 1764



Beginners' Problems



WILL you please let me know what is the matter with my four-valve home-constructed tuned plate receiver? It has been working wonderfully well for this last three months, but the other night I could not get it to work the speaker at all. The noises that it produces are like a hailstorm and are unbearable. I have checked the "A" and "B" batteries; both are of the accumulator type and are well charged. About a fortnight ago, when listening in, the signals stopped without warning, and by pulling the clip off the "B" battery, and replacing it, it would go alright for a few minutes and then start crackling again. Can you please advise me?"

A.—Judging by the symptoms you mention, we fear your loud speaker unit has been damaged. Perhaps the best and surest test is to get one of your friends to try your loud speaker on his receiver. If it proves to be O.K., test the other apparatus in the following order:—"A" and "B" batteries, transformers, grid condensers, bye-pass condensers. Check over aerial and earth connections. Coil holders often make improper contact by constantly pulling them in and out.

"How can I find out whether I am interfering with my neighbour's reception?

When a receiving set is oscillating it is then sending out or transmitting electrical impulses at the frequency or wavelength at which receiver is tuned. If a signal of very nearly this same frequency is being received via the aerial and tuning circuits, their combined effect will be an audible note in the 'phones or loud speaker. The pitch of this note will depend upon the difference in frequency between the received signals and the tuning coils. The greater the difference in frequency between the two, the higher will be the pitch of the note. As the receiver is brought into tune with the received signal the pitch be-

comes very low and eventually disappears, but as the receiver is again brought out of tune with the received signal the audible note is again heard at a low pitch, gradually increasing to a very high pitch as the tuning dials are rotated.

The pitch of an oscillator beat, therefore, can always be varied in pitch by rotating the tuning dial, and when a signal is crossed by rotating

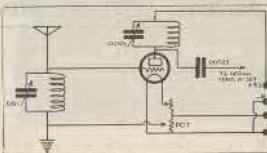


Fig. 1

the dials this audible beat will first be heard at a high pitch, reducing to a low pitch when in tune, then will be heard again as a low pitch, gradually increasing to a high pitch. Such beat notes or whistles always indicate that your receiver is in an oscillating condition, and these same beats or whistles will be heard by all nearby broadcast listeners who are tuned to the same station.

Beats or whistles, which cannot be changed in pitch by rotating the tuning dials, are not caused by oscillation of your receiver.

PROPER SIZE BATTERIES FOR "B" SUPPLY.

Many of our readers send us complaints regarding the constant renewal of "B" batteries, which they find very necessary. It is reassuring to know that short "B" battery life can be eliminated without a big attack on the banking account.

"B" battery satisfaction is largely a matter of choosing the one made up of the correct sized cells. The secret is to buy a reputable battery of adequate capacity for the set with which it is to be used. You would not install a Ford engine in a ten ton truck and expect it to stand up under a full load. Yet it is not an uncommon sight to see a five-valve receiver

working from the small size "B" batteries, which are intended only for portable use, or for one or two valves.

For receiving sets employing two or three valves the most economical battery to buy is the large sized one, while receivers with four or more valves require the extra large, heavy duty "B" batteries.

"I possess a conventional three-valve P.I. receiver, consisting of detector with reaction, and two transformer coupled audio amplifiers. I wish to construct an H.F. amplifier unit for coupling to this receiver when conditions permit. I want also to be able to tune the H.F. amplifier to any wave length by means of plug-in coils."

Fig. 1 shows the circuit diagram of an efficient H.F. amplifier (tuned plate method). The aerial coil may consist of a plug-in coil of value suitable to the desired wavelength. For the lower wave broadcast stations a 25 and 35 turn coil will be O.K., for 2FC a 100 turn coil.

It is assumed that the same batteries will be used for the H.F. amplifier as for the existing receiver. If so, the existing connections of the three-valve receiver will in no way be upset. The first coil of the detecting unit merely becomes the tuned grid coil of the detector valve with the reaction coupled to it in the usual manner. It should not be forgotten, however, that the aerial coil in the original receiver should be changed in favour of a coil one size larger, the actual value required being the same as will be required in the tuned plate holder. For the lower waves a 50, and for 2FC, 150 turn coil.

The unit is equally suitable for all types of straightout detecting circuits, and can equally well be used for extending the range of a crystal set.

PHILCO—"You never need guess"
BATTERIES.

A Conquest

"The Wireless Wonder"

You all know the Wireless Weekly One Valve Reflex?

Meet his Big Brother

The Wireless Weekly 2-Valve Reflex

With which you can get Loud Speaker Strength on Interstate Stations

Study Economy and build with our Parts

	£ s. d.
1 Ebonite Panel, 17 x 7 x 3/16; Beautiful matt finish	0 3 6
2 Variable Condensers: With brown ends, .0005, at 8/6	0 17 0
2 4 inch Black Dials: Neatly engraved, at 2/4	0 4 8
2 Coupling Plugs: (Moving panel plugs), at 1/9	0 3 6
1 Panel Plug: (Fixed panel plug)	0 1 0
2 30 ohm. Rheostats: Ajax, at 2/1	0 4 2
2 Standard Valve Sockets: at 1/11	0 3 10
2 Audio Transformers: Sterling, at 13/6	1 7 0
1 Carborundum Detector: (Genuine)	0 11 0
1 "Wetless" .001 Fixed Condenser	0 1 6
1 "Wetless" .002 Fixed Condenser	0 1 6
1 "Wetless" .0003 Fixed Condenser	0 1 6
4 Terminals: Nickel plated, at 2d.	0 0 8
6 Lengths tinned copper buswire	0 0 6
1 C Battery: 4½ volts	0 2 9
Total	£4 4 1

**Let us advise you on the construction of
The Wireless Weekly 2-Valve Reflex Set**

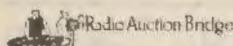
See Insulator, Mr. W. L. Hamilton, at our
Sydney Store every Friday evening. Advice Free.

"Yours for Lower Prices"

THE ECONOMIC RADIO STORES

25 ROYAL ARCADE, SYDNEY
8 Doors from Pitt Street, right side.

569 HUNTER ST. WEST, NEWCASTLE
'Phone M 3049



(Continued from Page 9.)

is always considered as a business double and not informative.

When such a hand as that held by North, that is, holding four cards in one major and five in the other, it is always better to double informatorially, in order to find out whether partner has a four card major suit, that is to blindly overcall with a five-card suit to the ace, king, such as the heart suit in this instance. Analysis and experience have shown that when partners hold eight trumps between them, divided four and four, that the two hands play to much better advantage than when the trumps are divided five-three or six-two.

The value of the informative double is well illustrated in this particular deal, because South with his very weak hand was able to obtain game, which would have been lost had North bid his hearts.

South's finesse of the jack of diamonds in Dummy, on the second diamond lead, in spite of his almost sure conviction that East held the queen. In Bridge parlance, this is called an obligatory finesse, that is, a finesse that may gain and cannot lose. In this case, if Declarer should play the king, he will lose either a heart or a diamond trick; if he takes the finesse and East should win with the queen, he will have lost a diamond trick; thus, playing the king and losing the finesse would have the same identical result, the loss of a trick. But, if the finesse should win, it will prevent this loss of a trick, as shown by the play. By taking this finesse, South was able to discard a heart on Dummy's king of diamonds, which enabled him to trump the third round and establish the two good hearts in dummy. One of the cleverest plays South made was when he did not cover East's knave of trumps with his queen. This is the play that really enabled him to obtain game, because if he had covered his queen, he would have lost to the king and East would have still held the good ten of trumps.

QUERIES ANSWERED.

"Beginner" (Turramurra).: What exactly is the 11 Convention.

The 11 Convention, or rule, was discovered by R. F. Foster, the well-known American writer, in 1881, but it was many years before he told anyone about it. Briefly, it is this: Should your partner lead the fourth best card, deduct the number of pips on the card led from 11. The answer will tell you the number of cards not in the leader's hand better than the card led. This rule is only used by good players in a no trump contract.

"Enthusiastic": In cutting the cards to the dealer I left only two cards in one packet. Was this a correct cut?

No. Four cards at least must be left in either packet.

"Cremorne": Should a dealer bid a minor suit on the first round on queen, knave six times?

No, nor a major suit either. If necessary, such a suit may be bid on the second round.

"Val": I held ace, king, knave, 9, 4, 2 of hearts, ace of clubs, and one small card in spades and small diamonds, and bid 2 hearts as the original bid. Was I right?

Yes. The proper time to use a pre-emptive bid is when you are afraid of a major suit. This disclosed to your opponents that you were afraid of spades, which may be a disadvantage, but probably your partner held some spades.

"Palm": What is the correct term used to indicate "passing."

No bid.

"Student": I held ace, queen, knave, 2, 4 of diamonds; Dummy held 10, 8, 3. I, the declarer, played the 10 from dummy; the second player followed with six. I played the 2, and fourth hand played the 5 and gathered up the trick. Before I could expostulate one of the opponents led the king of spades. I objected that the trick was mine, but was told that the play had to continue as the trick had been turned and quitted and the next card led. What remedy had I?

The trick was yours and nobody else could claim it. Your remedy lay in treating the lead as out of turn and treating the card led as an exposed card.

INSIST ON GENUINE

Radiokes Precision Products

Browning Drake, Neutrodyne,
and Roberts Coil Kits.
Honeycomb, Duolateral and
special wound coils.

Stocked by all leading Radio
Dealers.

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Marvellous Talking Tape, 7½
Complete Valve Sets and Parts
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Loud Speakers and Headphones,
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The Reliable Radio House

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FATHFUL REPRODUCTION: TONE: ELIMINATION OF DISTORTION
attained by the use of

RADIOTECHNIQUE

SCIENTIFIC SUPER VALVES

The product of years of Research and Experimentation by the best brains in France at the Famous Laboratories of LA RADIOTECHNIQUE, at Paris.

SUPER AMPLI 13/6

New Semi-Dull Emitter Power Valve. Detector and High or Low Frequency Amplification.

Type R46 Filament: 5 volts, .25 amp. (201A).

Type R41 Filament: 3.8 volts, .4 amp. (In English base only).

RADIO WATT 32/6

Power-Valve and Low Power Transmitter. Filament, 9.5-3.9 volts, .85 amp.; Plate 80-200.

RADIO MICRO 13/6

The most improved type of low consumption valve. Highly efficient as Detector or Amplifier. Can be worked off dry cells.

Filament, 3.5 volts, .06 amp., 40-80 volts.

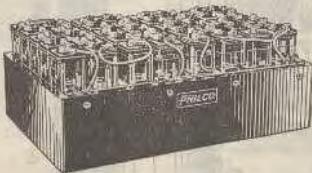
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ASK YOUR DEALER. If you cannot readily obtain supplies, please communicate with

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BROUGHTON HOUSE, CLARENCE ST., SYDNEY; and at Melbourne, Perth, Wellington and Auckland, N.Z.

The New
"Eighty Three X"

"Replaces
90-volt
Dry
Battery "



"Necessary
with
Super
Hets"

"Increase Efficiency All Sets"

Type	Voltage	Capacity	Price
248 DXO	48	3,000 Ma. Hours	£6 4 0
88 X (Replaces 90 volt Dry Battery)		3,000 Ma. Hours	£8 15 0
22 DX	2	3,000 Ma. Hours	£0 5 0
248 DHO	48	6,000 Ma. Hours	£8 5 0
86 H (Replaces 90 volt Dry Battery)		6,000 Ma. Hours	£10 10 0

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Square Glass Cells
Mahogany Finished Cabinet
Built in Charge Indicators

Easily Recharged
Tremendous Capacity
Dynamic Features

You'll want to know more about these remarkable New "Philco" B Batteries

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New System Telephones Pty. Ltd., 230 Castlereagh Street, SYDNEY.	
SIRS.—I am interested in learning more about the new Philco Rechargeable Storage Batteries for radio.	
Name	State
City	
Name of radio set	
If you are a dealer in radio, please state	

PHILCO
DIAMOND GRID
BATTERIES

A FEAST OF OPERA.

Two operas in one week is almost a record for the stage, let alone one for broadcasting, and listeners-in to SLO Melbourne are particularly lucky in being able to enjoy such a feast. Commencing on July 24th with "Cavalleria Rusticana" by the Gilbert and



Arthur Tosreau, the Poster King, whose art lessons from 2FC are providing a fresh interest for broadcast listeners.

Sullivan Opera Company Choristers, there is a week of exceptional musical fare; and then on July 28th, the "Belle of New York" will be repeated in response to the thousands of requests from all over Australia. Practically the same cast will be heard in this charming comic opera, and if anything the transmission should be even better than before, as observations from the original performance will be put into operation.

FOR SALE:—3-Valve Set, complete, Cone Speaker, Two Sets Earphones, etc.; will tune-in Interstate on speaker; all parts of best; in use 3 months. Demonstration given. £12/10/- Cash. N. DEAN, Smith Road, Artarmon.

POSTER COMPETITION.

The winner of the Poster Competition arranged by Arthur Tosreau from 2FC, on Friday night, July 16, was Mr. W. H. Cotton, 26 Prince Albert Street, Mosman. The sketch forwarded by Mr. Cotton will be published in "Wireless Weekly" next week.



Listen-In To-night with B406

LISTEN-IN to-night to an entertainment plucked from the air. Enjoy nights of perfect reception by equipping your set with Philips Valves. Philips Valves, especially the B406 which is designed for Loud Speaker Reception, combine undoubted economy with the highest efficiency. The B406 has a filament consumption of only one-tenth amp. but the purity of tone and wonderful volume given add merit to its name, the New Wonder Valve.

Price 13/6

Obtainable at all Radio Dealers.

Stocked with either Standard, English or American Cap, also the New UX Cap.

Makers of the Famous Philips Lamps.

B406 Characteristics.

Filament Voltage $3\frac{1}{2}$ to 4 Volts

Filament Current - 0.1 amp.

Plate Voltage 20 to 120 Volts

Plate Current - 12 m. A.

PHILIPS

Mr. Ward Morgan Enjoys It : Wireless in the Hospital

THE voices came through so beautifully clear on the wireless, that I completely forgot that I was lying in bed in hospital, a long way away from the speaker, and caught myself saying, "Thank you, thank you," just as if he were actually in the room with me." Thus, Mr. Ward Morgan, when referring to the Birthday Greetings which were broadcasted to him from 2FC on July 22. The Greetings were received on a wireless set, which had been presented by the Directors of J. C. Williamson Ltd., and installed by Farmer & Co., Ltd., in the well-known actor's room, at the Jenner Private Hospital, Darlinghurst. "I have been able so many times to provide amusement and entertainment for listeners-in, during the theatrical performances which have been broadcast through 2FC, that it seems to me quite a fitting thing that wireless is proving such a wonderful help to me in my illness. I lie here when it is quiet, and listen for hours to the broadcasting stations, which I have already come to regard as being amongst my best friends. I think that wireless is the most wonderful thing that has ever been invented, and speaking out of my own experience, I really think it should be part of the equipment of every modern hospital. It takes one's mind very largely off one's illness or pain, and from this point of view, I regard it as being one of the most inestimable benefit to hospital patients."

It will be remembered that Mr. Ward Morgan received serious injuries in the railway smash at Aberdeen, some weeks ago, while travelling to Brisbane with the "Katja" Company. Continuing his conversation, Mr. Morgan said that what worried him most at the present time was that everybody insisted upon regarding him as being terribly ill. "They stand outside the door, and with bated breath ask, 'May I just see him for a moment?'—just as if I were on my last legs, and waiting for the undertaker to call. You can imagine their surprise, when I bawl out in a loud voice, 'Hey, come inside.'"

In discussing broadcasting, Mr. Morgan, who has himself broadcasted individual items from 2LO, London,

and, of course, through one or two Australian stations, showed a decided interest and wide knowledge of the subject. At one time, there was a vast amount of opposition on the part of English theatrical companies, to artists performing for the broadcasting stations, and it was threatened that drastic action would be taken if anybody departed from the rule that there should be no broadcasting. At the time, Mr. Morgan was playing in a show called "Patricia," at Her Majesty's Theatre, London, and the newspapers had given the play an extremely bad notice. It was decided to broadcast the second act, and Mr. Morgan states that the business went up a hundred per cent., despite the adverse published criticisms. "This fact," said Mr. Morgan, "impressed upon me more forcibly than anything else the power and scope of this wonderful new invention, and I hope the time is not far distant when such a thing as television shall be an accomplished fact. When this comes, then the ideal of a broadcasting receiver in every home should be quickly realised."

"This receiver," continued Mr. Morgan, indicating his wireless receiver standing on the table at his bed-side, "has proved a tremendous comfort to

me, even in the short period that I have been fortunate enough to possess it, and it is perhaps the very nicest thing that could have been given me, under the circumstances. Despite the fact that I have hosts of friends who have been wonderfully kind to me, there are times when I like to lie back, close my eyes, and listen to the voices that come to me out of the air. It is remarkable that so little manipulation is required to receive the music; in fact, I consider that the receivers here are infinitely more simple than those that I saw in England.

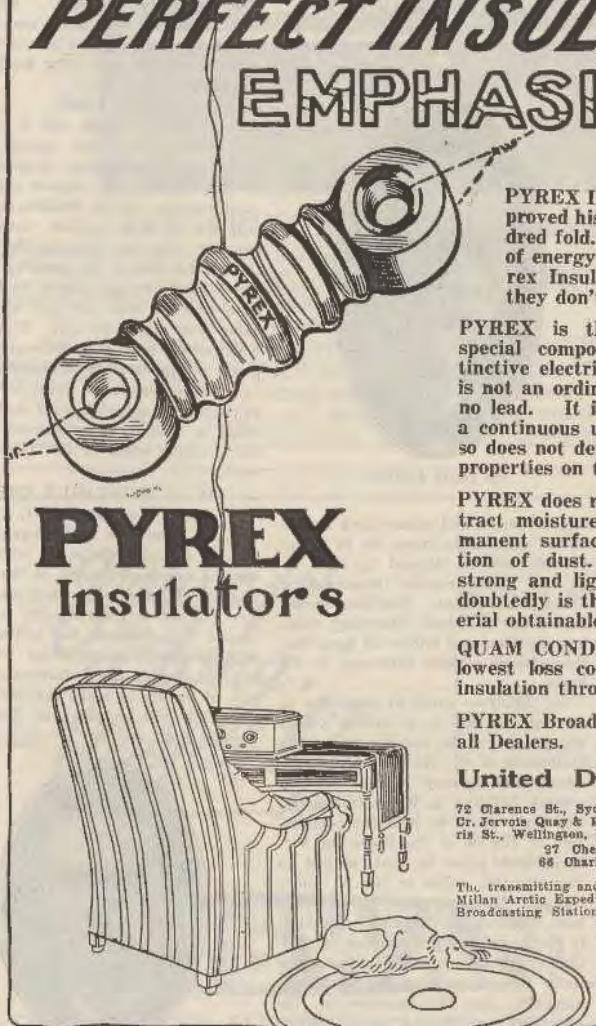
Lying back comfortably on his pillow, with his head-phones on, and with his pipe grasped firmly in his left hand, Mr. Morgan looked anything but the melancholy individual which popular opinion of the last few weeks has made him appear. A cheery smile lighted up his face as he glanced around at the masses of flowers, fruit and decorations, with which friends have inundated him since his removal to Jenner hospital.

Mr. Morgan has a philosophical outlook, and in the most whimsical manner referred to an operation which he was to undergo the next day. "After that is over," he concluded, "I shall be able to return to my head-phones."



Ward Morgan Listening-In.

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MISS HELEN MOORE.

IN the oval above is a portrait of Miss Helen Moore, who is a singer and accompanist of a very high order. This lady, in conjunction with two others, arranges the programmes from the BAR Studio. Under their direction several concerts are produced and broadcasted each week. The time and personality which have to be expended in securing not only the service of new artists, but in maintaining the excellent quality of the programmes is very considerable. Miss Moore is to be highly congratulated upon the success which she is achieving, and upon her popularity with the BAR listeners-in.

MR. DION BOUCICAULT.

Dion Boucicault, who was brought specially from England by J. C. Williamson Ltd., to act in the Barrie plays, the first of which—"Quality Street"—is now being played at the Theatre Royal. These plays will, from time to time, be broadcast by 2FC.

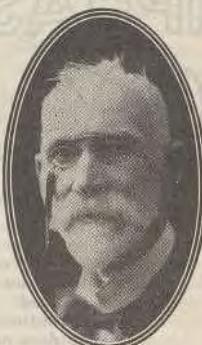


Mr. Dion Boucicault.

Programme Personalities

MR. DAVID EDELSTEN.

Mr. David Edelsten, a native of Warrington, Lancashire, the birthplace also of Sir Luke Fildes, the



Mr. David Edelsten.

famous artist, and where Lord Leverhulme started business, is 82 years of age, and is claimed by 2KY to be the oldest regular broadcasting artist in the world. Excellent monologues are broadcast Thursday evenings by him, and letters of appreciation always contain reference to his items.

Mr. Edelsten came to Australia in the late sixties in a sailing vessel which brought the machinery for the Melbourne Mint. He recalls the time when the Sydney G.P.O. was a wooden building in Wynyard Square. For forty years he held the commission of Justice of the Peace for Victoria, and prior to that, served in the detective police in N.S.W. under Captain McCleary, and under Captain Standish in Victoria. Accordingly he knew a large number of old-time criminals, including the notorious Kelly Gang, and was personally responsible for the capture of the notorious s.s. "Avoca," gold robber, after a long search in the bush with black trackers, and now has a

sovereign as a souvenir. Of late Mr. Edelsten has been associated with the moving picture business, and has appeared in over fifty local productions.

A CONVERT.

Prejudice dies hard, but it took a long time to convince many stage folk that broadcasting injured the theatre. Coram, the famous ventriloquist recently at the Melbourne Tivoli, was of that opinion until just recently. He had been notified that the second half of the programme in which he did his act was to be broadcast, and he was not too keen on being sent over the air. However, when shown over 3LO Melbourne and given an opportunity of hearing the excellent transmission from theatres, he withdrew all objections and provided a special entertainment from the dressing room of the Tivoli last week.

MR. C. MONTAGUE ORR.

Mr. C. Montague Orr, B.Ec., A.F.I.A., who has been engaged by 2BL to deliver a series of talks during the month of August on the Compilation of Income Tax Returns. Mr. Orr will not only assist with hints in regard to deductions, but will answer written questions submitted by persons who are in the unfortunate position of having to make returns! His first talk will be given on Tuesday, August 3rd.



Mr. C. Montague Orr.



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AN outstanding example of the amazing strides that the radio amateur has made in the last few years is furnished by the record of a recent message that originated in the Hawaiian Islands for delivery in China. Although ordinarily such messages are sent either direct to the destination or by means of one or two intermediate relays, the communication in question travelled a distance of nearly twice the circumference of the earth before it reached the party for whom it was intended.

The message was started from amateur station 6DBL, at Honolulu, and from there went to 2NZ, E. S. Strout, Jr., of New York City, no direct communication to China being possible. 2NZ gave it a fresh start toward the Orient by passing it along to 9ZT, Don Wallace, in Minneapolis, but the latter evidently deciding that it would be better to go back a little and get a running start, passed it to the U.S. Navy's experimental

station, NKF, at Bellevue, near Washington, D.C.

From Bellevue it was sent over to New Zealand, where 2AC, again unable to connect with China, handed it to a French station. The Frenchman evidently still had faith in the Southern route, for he passed it along to a South African amateur. The South African happened to hear a Philippine amateur, so gave it to him, and the Philippine amateur delivered it to an amateur in China, who saw that the message reached its ultimate destination.

Casual though this incident is, the average radio public will probably be startled to realise the way the amateur of to-day tosses messages back and forth between the different continents of the earth. Where five years ago it was considered a noteworthy achievement for an amateur to be able to transmit over a distance of 1000 miles, the amateur of 1926 finds the world no larger than one of our smallest States.

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50	124	425	.0007	.0020	780	7 8
75	170	620	.0010	.0030	1130	7 8
100	220	800	.0015	.0040	1530	9 8
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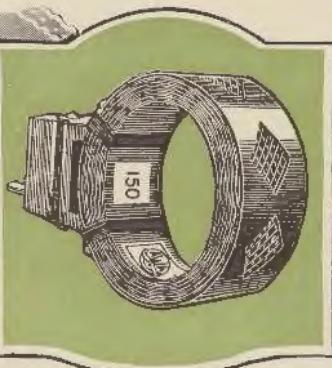
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2BL	3LO	4QG	5CL	(35	35 35	35 35	50
3AR	7ZL			50	75	75	50
2FC				100	150	150	75
6WF				150	200	200	100

No. of Turns	M.H. Inductance	Wave-lengths with .001 Condenser	Price Mounted	Price Unmounted	No. of Turns	M.H. Inductance	Wave-lengths with .001 Condenser	Price Mounted	Price Unmounted
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25	30	100-375	5/-	2/2	400	9,000	1,800-6,000	11/-	5/-
35	80	150-525	5/-	2/2	500	15,000	2,000-7,500	12/6	7/-
50	150	190-675	5/6	2/4	600	21,500	3,000-9,000	13/6	9/-
75	330	240-925	6/-	2/6	750	35,500	4,000-11,000	14/6	10/6
100	550	340-1,340	8/-	2/9	1,000	62,250	4,500-16,000	16/-	12/-
150	1,300	600-1,950	8/8	3/-	1,250	100,000	6,310-18,240	18/-	14/-
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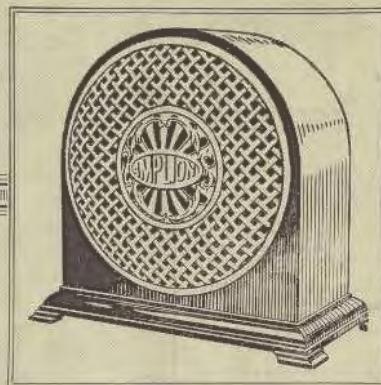
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