

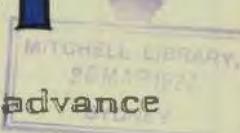
# WIRELESS WEEKLY.

Broadcast Programmes a Week in advance

VOLUME 9

Registered at the G.P.O., Sydney, in  
transmission by post as a Newspaper.

NUMBER 22



*Duke of York  
to broadcast  
March 27<sup>th</sup> & 29<sup>th</sup>*

*See  
page II*



Friday, March 25, 1927.

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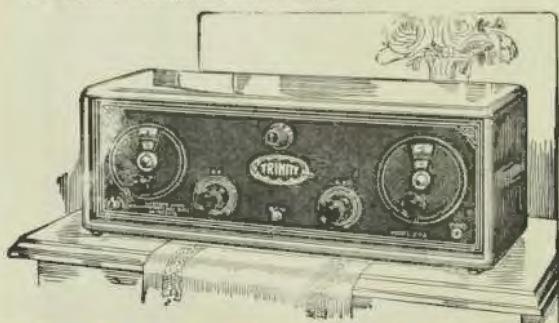
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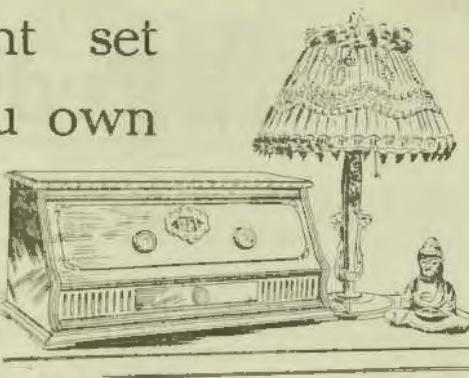
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# WIRELESS WEEKLY

VOL. 10, No. 22.

FRIDAY, MARCH 25, 1927.

## *The Chance of a Lifetime.*

**I**N the newspaper blare of trumpets heralding the arrival of the Duke of York, a few ragged notes have been heard to the tune that the historical broadcasting of the opening of Canberra presents an unequalled opportunity for the radio industry. For broadcasting, the occasion will be unique.

No transmission like it has ever been planned here, and it is not likely that several million Australians will ever again have the chance of hearing the world's greatest singer, and a son of the King of England, at the opening of the capital city of a continent. Yet it is doubtful whether the radio industry quite realises the magnitude of its opportunity.

Not more than a few thousand people will be present at the opening of Canberra, but every Australian interested in the progress of his country will want to hear what is to be the greatest political event since Federation. There is no reason why he cannot. Four high-power broadcasting stations in four states will be connected up with Canberra, and their combined power of 20,000 watts will enable the broadcast to be heard on the smallest set.

But every man does not know that he can hear this ceremony for not more than two or three pounds. He believes that the operation of a radio set requires special skill which cannot be acquired overnight, and that a radio set is a costly article.

It is the duty of the traders to dismiss this idea, but a visit to a radio firm serves but to confirm his

opinion. He is told that the cheap crystal set is out of date, and unselective, and is introduced to the 1927 hundred-guinea model.

He finds that the purchase of a radio set is like buying a piano or an orthophonic talking machine, and he is frightened away never to swell the ranks of listeners-in that we may have better programmes. It is misleading him to say that the crystal set is out of date, for there is a large percentage of listeners who have used no other receiver for years. Any crystal set will tune in 2FC or 2BL within a 30 or 40 mile radius of those stations, and that is all that is necessary for the man who wishes to tune in the Canberra broadcast.

If the radio trader could see further than his handsome profit on the hundred guinea article, he would have vision enough to take the fullest advantage of this opportunity. He would unite with other traders, and by a general publicity campaign acquaint those people only slightly interested in radio, of the coming broadcast. He would produce a small crystal receiver selling with head phones aerial and licence, for not more than £2 10/-.

In short, he would realise that, by taking advantage of this unique opportunity, he could place in the hands of hundreds of people not at all interested in wireless, a receiver and six months of broadcasting programmes, and it is certain that half of these people would return to him at the end of that time for a larger and better set.

# Between You And Me And The Microphone



Conducted by Jack Plugge



**MANCHURIA** is making a bid for a place in the world's ether by the erection of a high-power wireless station at Mukden, plans for which are being considered by the Mukden Government.

FIGURES for the year 1925, just compiled, show that the total programme hours of the British Broadcasting Corporation were 65,876, giving the average hours per week per station as 59. The average percentage breakdown was .07. Assuming an average year's transmission of 3,000 hours per station, .01 per cent. breakdown represents actually only 18 minutes' break in broadcasting during the whole year.



HOW LONG does a dream last? That has always been a perplexing question, especially when one is falling down the abysmal depths of a bottomless pit. Here is an interesting answer from Mr. L. L. Loring, Ballarat, Vic. He says he had just listened to the last item of a programme broadcast by 3LO, and then fell asleep. He continues:

"While sleeping, I heard someone say 'Melbourne,' and I found myself on a train preparing to get off at Spencer Street station after the train had reached the city. I got off, checked my bag in the cloak room, and found out about my next train from the Man in Grey. I then decided to stop at a hotel for the night. It being my first visit to the city for several years, I walked down Flinders Street to see the sights. I found the city just as I remembered it—warm, windy and dusty.

"Before reached a hotel it seemed to me I walked a very long way, but I did not mind, for, in fact, I was having a fine time sightseeing. Suddenly I was startled by someone saying 'Goodnight.'

"I jumped up, fully awake, and looked at my watch and found that it was one half minute past 10.40—the end of the programme. So in thirty seconds I had been on a regular trip—in a dream."

A VERY human note is touched in a letter received this week by 2RL from C. P. Wright, of Kangaroo Island, South Australia: "I am taking the liberty of addressing you these few lines in appreciation of your wonderful programmes which are everlastingly looked forward to here nightly," says Mr. Wright. "I am stationed at the lighthouse here and there are two other keepers here also. We have a 5, a 4, and a 2 valve set and as your programmes are so interesting and full of interesting variety such as vocal, instrumental, chats, talk, etc., we enjoy them to the utmost."

THE BROADCAST description of Stewart Dawson's fire in Melbourne on Saturday, March 12, affords a good example of what is likely to happen in the near future with the development of Wireless as a public news agency. This fire happened to be visible from 3LO's studio, and it was a simple matter for an observer to lean out of a third storey window with a microphone at his elbow and give all those listeners-in who were well home a lunch hour the benefit of hearing about an occurrence that had delayed hundreds more from catching trams and trains.

A SIMILAR description was broadcast recently when 4QG was relaying a description of the motor cycle races at the National Speedway. A very large crowd was present and a disturbance occurred in one part of the ground, it being alleged that a young man had been assaulted. Two or three police moved across to arrest another man and a sensational fight ensued. The prisoner made a determined effort to resist arrest and even when brought into the ring put up a strenuous fight. Police reinforcements were rushed from various parts of the ground and for a little while the situation was ugly. The prisoner fought the police with all his might, but was eventually overpowered. All this happened not far from 4QG's microphone, and the announcer took full advantage of it to give a description of the happening to the thousands who were listening in. His word picture of the ugly happening carried excitement into many peaceful homes.

A SON of Mr. J. Coomber, of Orange, was summoned by wireless to attend the bedside of Mr. Coomber, reported as dangerously ill. The son made hot haste to Orange, only to find Mr. Coomber in his usual health. Some one had blundered.

WIRELESS TEADERS report that as a direct result of the recent Wireless Exhibition in Melbourne, there has been a decided boom in the sale of radio stocks, some estimating the increase in business during the next few weeks will total about £25,000. It is estimated that nearly 70,000 people attended the exhibition during its season.

THE LATEST EDITION to hand of the San Francisco "Examiner", heads its radio section with the title "Everybody is catching Australians" and mentions 3LO Melbourne as the only station identified. "Inspired by 'The Examiner' reports, rather numerous during the last few weeks, about the successful reception of Australian and Japanese stations, California listeners are giving a good deal of attention to trans-Pacific broadcasting," says the paper. "Standard and home made five tube sets are bringing in the foreign stations with loud speaker volume."

AN INTERESTING COMPANY was registered in London on January 13, with the name "Wireless Pictures, Ltd." The objects of the company are to acquire any patents for inventions relating to television and what is known as "photo telegraphy," and the electrical transmission and reception by wire or wireless of signals, drawings, etc.



A NOVEL means of identification has been adopted in Sweden. Each broadcast station has been assigned a well-known folk-song melody and with each announcement the particular air allotted to the station is played on a celesta.

# SETS THAT CAN EARN INCOMES

**H**ow radio is changing the marketing methods of up-to-date farmers, and the value of 4QG's system of market reporting.

**S**IX months ago Harvey Anderson, a typical Queensland settler, bought a radio receiver and installed it in his homestead some hundreds of miles from Brisbane for the benefit of his wife, a city girl.

A few weeks later, while listening-in, Mr. Anderson picked up a voice of a speaker who was giving out a market report and who observed that "a sudden fall in the price of onions which were now quoted at — had taken place."

It happened that the listener had a considerable quantity of onions that he had intended to sell that day but refused to close at the price offered by his dealer at the local township in the hope of a rising market. But the words of the speaker, whose voice had so unexpectedly been introduced into the farmhouse, caused Mr. Anderson to pause in thought.

The following morning before the local post and telegraph had opened work with the city he had closed with the dealer at the price offered. All Queensland farmers will remember how onions slumped that season and remained down for several months, and how many dealers suffered losses.

Radio had enabled Mr. Anderson to escape with a profit. That was in the days when 4QG was still ignored by the hard-working farmer as a needless and expensive amusement.

Instances of this kind are being recorded in increasing number. Radio is beginning to change the methods—particularly the marketing methods—of entire groups of farmers.

N.S.W. wheat-growers will remember when the first wheat of last season arrived at Alexandria goods sheds, Sydney, from Boggabri. Half an hour after it was sold, growers all over the State heard the broadcasting stations



*Not as a luxury but as a necessity—as a part of his farm equipment—does this Queensland farmer regard his receiver. Market information which he receives from broadcast stations has increased his earnings many times in excess of the original cost and upkeep of his radio equipment.*

announce that the Boggabri truck of wheat weighed 651-lbs. to the bushel, and that the opening price fixed for the new season at auction was 7/- a bushel. The price was repeated on the air the same evening, so that wheat men all over the State must have known the news many hours, in some cases, days before they could have learned it from other sources.

There is one A class station which has made a special effort to give the farmer a broadcasting service of some value. The Queensland Council of Agriculture maintains a staff of market officers who make a special study of market conditions in the farmers' interests. The Council publishes its own newspaper, and thus does a great deal of work in the direction of placing marketing knowledge before the farmers. But better even than its official organ the Council of Agriculture is now co-operating closely with the Queensland Radio Service and is using station 4QG for the purpose of providing accurate and speedy infor-

mation for farmers. A special studio has been constructed in the offices of the Council near the main markets of Brisbane, and this studio is connected by land line to station 4QG. Mr. R. Wight, a market officer of experience and an officer whose heart is in his task, has been appointed special radio officer by the Council of Agriculture and attends to the provision of all radio news for country dwellers. Mr. Wight personally visits the various markets every morning and notes prices and market conditions. He then adjourns to the Council's own studio and at one o'clock each weekday broadcasts a talk to the farmers.

The value of this system of market reporting is obvious. The farmers' own representative visits the markets each day, and at midday personally talks to his own people by radio. He quotes all the prices and gives expressions of opinion regarding the market. At night time station 4QG provides a special half-hour session for farmers only, and the matter

which is broadcast during this session is of very great value to the man on the land.

The State Department of Agriculture and Stock comes into the scene during this session and co-operates with the Council of Agriculture for the purpose of giving farmers lectures. From seven o'clock until a quarter past seven each week night the Council's Radio Officer gives latest market reports, and from a quarter past seven until half past seven a lecture on some subject of interest to the farmer is given.

The most notable feature of these lectures lies in the fact that they are all given by some Agricultural Expert. They do not consist of mere readings or of views given by some person not competent to lecture. The whole of the various Government experts in the various branches of farming have co-operated with the station and the Council of Agriculture, and some capital lectures have been, and are still being provided. These have included a series of talks to dairy farmers by the Government Dairying expert, lectures to pig farmers by the Government Pig expert, and so on. In short every branch of farming is being dealt with and lectures by the particular Government expert in each separate branch have been arranged.

The economic side of farming also farms the subject of lectures. For instance a tractor expert recently discussed the costs of maintaining tractors for farm work. The services of the professors of the Queensland University have also been enlisted and farmers are now receiving expert advice by radio on such subjects as insect and plant pests. The Government bacteriologist has also given a series of lectures, some of which have already been broadcast and others of which will be transmitted shortly.

It is quite safe to assume that the whole system of the supply of information to the farmers by radio in Queensland is very much in advance of that in any other portion of Australia.

Apart from news sessions and the market reports the other A class stations have not done anything like enough in bringing broadcasting to the dwellers in the country districts.

There should be, and really is, a particularly strong appeal in the new method of disseminating news and entertainment to people remote from the cities. We in the city have every form of entertainment near at hand, and the news of the day is before us in the morning or evening papers soon after it "breaks." The family in the country, on the other hand, must wait one, two, or even three days for their newspaper. That was before the advent of broadcasting. There is no need nowadays for that family to

continue its remoteness from the centres of important happenings. A few rounds spent on a wireless receiver and the payment of a licence fee that amounts to about one penny per day will place the farm dwellers in touch with the world's news, and bring in a nightly programme of music.

But why are there not more wireless sets found in the country? A traveller in country districts still notes the very occasional aerial with surprise. He wonders why the sight of an aerial is not the rule instead of the exception. He must conclude that the wireless traders are to blame for a lot of the inattention paid to wireless by country people. The farmer and the grazier will not be long in making up his mind to instal a set if the advantages of it are made clear to him, and the initial fears regarding the difficulty of operating the set cleared away. Probably the traders still find a sufficient market in the Metropolitan districts, without troubling with the country. If that be the reason, it is to be regretted, because broadcasting is of greater usefulness to the distant dwellers, and their claims and requirements should not be neglected or postponed.

## U.S. Farmer and Radio

**M**ORE than half a million U.S. farmers are warned of incoming storms or other changing weather conditions instantly by means of radio; approximately 553,000 farms are equipped for receiving spot market quotations by radio; 24 agricultural colleges maintain broadcasting stations, and several hundred commercial or private broadcasting stations disperse agricultural information. Such, by way of summary, is the status of broadcasting in its relation to rural life at the present time.

On January first there were 121 stations, located in 40 different states broadcasting weather forecasts by radio-telephone on regular schedules. About 95 per cent of all the powerful radio-telephone stations in the United States are now co-operating and many of them broadcast forecasts for several states. People in every section of the country are being served. The scope of the radio-telephone weather service may be estimated when it is known that, for instance, in the State of Iowa alone there are over 32,500 receiving sets on farms. It is estimated that the weather forecasts are available by radio to more than 500,000 farms in the United States.

The annual report of the U.S. Secretary of Agriculture, W. M. Jordine, contains a sub-title heading, "Radio and the Farmer." This

official cognizance of radio as an agency for spreading information and entertainment to folk of the countryside takes into consideration, briefly, the history of radio as it pertains to agriculture, its rapid development, and its economic value to farmers.

"The department made its first experiment with radio in 1920," notes Mr. Jordine. "Since then, there has been great development in the use by farmers of this new means of communication."

A survey made by county agricultural agents in 1923 indicated there were about 145,000 radio sets on farms throughout the country. In 1924 the estimated number had jumped to 305,000, and in 1925 to 553,000. The average number of radio sets on farms per county has increased from 51 in 1923 to 204 in 1925. This increase of 400 per cent is evidence that the farmer appreciates the radio service provided for him.

"There has also been rapid growth in the number of radio receiving sets on farms in states at great distances from good broadcasting service. In Florida, for example, the increase in 1925 over the estimated number in 1923 in that State in the preceding year was 1556 per cent. Idaho increased the number of its farm receiving sets 850 per cent in the year; Alabama reported an increase of 850 per cent. Arizona of 450 per cent, and Louisiana of 600 per cent. In Pennsylvania, on the other hand, the gain in 1925 over 1924 was only 5 per cent.

"Farmers generally have bought very good radio sets. A questionnaire answered by 2500 farmers in 1925 indicated the average price of their manufactured sets was \$35. This sum will buy a better set today than it would two years ago. Yet farmers are not on that account reducing their investments in radio. Dealers in several parts of the country say that radio sets worth from \$25.00 to \$400.00 sell much more readily to farmers than those costing under \$100.00. Farmers have discovered that they need good long-distance sets to get the weather and market reports and entertainment they demand."

"Twenty-four agricultural colleges maintain radio broadcasting stations. The colleges are becoming enthusiastic users of radio. They co-operate with the Department of Agriculture in broadcasting its weather, crop, and market reports. Several hundred broadcasting stations regularly obtain information for broadcasting from the department. Many farmers have more than saved the price of their radio sets by profit gained by the use of market information issued by the department for broadcasting."



The chorus in the "Lilac Domino" which will be heard from 2FC on April 2 and 6, when that station broadcast the opera. See paragraph below.

## Coming Features in the Programmes

**T**HE first and the second and third acts of the "Lilac Domino" will be broadcast from 2FC on April 2 and 6 respectively. The transmission will be relayed from Mosman, where the Mosman Musical Society is producing this as their 16th opera. This Society is the oldest musical society in Australia, having been in existence for the past 23 years. The "Lilac Domino" has a powerful cast in Miss Gladys Evans, Miss Gladys Rowling, Messrs. Fred Wilkins, Eric Howell, Bryson Taylor, and the scenery is being specially painted by the Sydney Scenery Co. on a lavish scale. The production is being entrusted to Mr. Spencer Barry and should ensure one of the finest productions put on by this Society.

**AUSTRALIAN LIGHT HORSE BAND:** One of the finest bands outside Sydney is the Australian Light Horse Band at Goulburn. Through the recent transmission by 2FC at Goulburn, the Band was heard, and their work so impressed the Station that negotiations were entered into, and it has now been arranged to bring this Band to Sydney on Saturday, April 2, in connection with the Boy Scouts Corroboree at the Showground, arranged specially for the Duke. The description of the Corroboree will be given, interspersed by items from the Band. They will also play from the Studio on Sunday evening, 3rd April.

**ROSEHILL RACES** will be described in running on Saturday, 28th March.

**NEW STORIES FOR THE CHILDREN:** Tal Ordell, the Australian playwright and film producer, who has recently released most successfully a film of "Fatty Finn," in which the historic Goat Race for the Kid Stakes is included, has wonderful stories for the children. He is no stranger to 2FC, and opportunity has been taken to ask him to give a week's story-telling on typical Australian adventures. This will commence on Monday, March 28, and there is indeed a treat in store for the younger ones.

**MALE CHOIRS BROADCAST WELL:** It is an undoubted fact that a good choir of male voices goes over the air well. Take, for instance, the Royal Sydney Apollo Club concerts which are heard regularly from 2FC. This body of men, directed by Arnold Mote, have given some beautiful programmes during the past two years. Their next broadcast appearance is on March 28. They will include items suitable for the festive week.

**24 SAXOPHONES AT ONCE:** A concourse of sweet sounds will be placed on the air on Sunday afternoon, March 27, when Will James will conduct his orchestra of twenty-four saxophones from the Lyceum Hall. There are many people who have an idea that a saxophone is an instrument of torture, but in the hands of capable musicians some remarkable symphonic effects can be obtained. Rev. F. H. Raward has arranged this novelty for that afternoon. This is the last entertainment he will arrange prior to his departure for England. 2FC placed a saxophone band on the air some time ago. It consisted of thirteen players, and their work was so remarkable that professional bookings from all over the place followed their appearance at the Studio, with the result that the band was booked on the spot by different theatrical enterprises, and 2FC lost the opportunity of using them further.



Miss Gladys Evans, leading lady in the "Lilac Domino."

**ORGAN RECITAL:** Miss Lilian Frost will give her final recital from the Pitt Street Congregational Church on Wednesday, 30th March. This is her 506 recital, and will be broadcast by 2FC.

**BEETHOVEN:** March 26th marks the centenary of the death of Beethoven, and every Station is busy preparing programmes suitable for the occasion. One evening last week a listener tuned in three separate Beethoven programmes. This was a fortnight before the actual Commemoration. It is interesting to know that the controversy which has been raging recently concerning the popularity or the classics on the air has created so much interest with listeners. 2FC is receiving a continual stream of letters canvassing both sides of the question. So many listeners have written to them on the subject, a special photograph of Beethoven is being printed in postcard form, and will be sent to the various listeners interested. The Commemoration of this great master's death will be made the occasion of a wonderful programme to be presented at the Conservatorium Hall on Wednesday evening, March 29. The Director, Mr. Arundel Orchard, will conduct the N.S.W. Conservatorium Orchestra in the Lemora Overture No. 3. Frank Hutchins will join with the orchestra in the piano-forte concerto. Mr. Cyril Monk is giving a talk which will be broadcast from 2FC on Sunday evening, 27th, on "Beethoven—the Man." This will be of more than ordinary interest, as he has made a special study of the works of Beethoven.

**ON FRIDAY, MARCH 25, 2GB** will give a programme of instrumental and vocal items from the works of Beethoven. This programme is in commemoration of Beethoven's death one hundred years ago. Many musical societies in many lands are holding commemoration concerts in his honor, and 2GB has much pleasure in being able to give an evening's programme devoted to the compositions of so great a man. There will be played by Mr. Dan Scully and Miss Ada Brook the first movement of Beethoven's famous "Kreutzer" Sonata for violin and piano. Mr. Scully will also be heard in smaller solo violin pieces by Beethoven. Miss Ada Brook will play a Beethoven Sonata for Piano and Miss Nellie Ravons, the well-known and well-liked contralto, will sing four of Beethoven's songs. The 2GB String Quartette will play movements from one of Beethoven's string quartettes, and there will be an interesting short talk upon "Beethoven, the Man and Composer."

**MONSTER FLAGS:** One of the distinct features of the decorative scheme of Sydney celebrating the Duke of York's arrival will be the immense flags which will be erected on Farmer's new building, one facing George Street and one facing Market Street. These are the largest flags in the State, probably in the Commonwealth. The reason we do not give the actual size is because a competition has been arranged by the "Hello Men" of 2FC, who is asking his young listeners if they can tell him what is the actual size of the flag, or to put it more definitely "How many pennies can be placed on the flag side by side?" when it is spread out on the ground. A prize will be offered to the one who gives the closest solution. Size is a deceptive thing, and when flags are placed on a high building, they dwindle to very small proportions, and the competition should prove of interest to parents, as well as the Kiddies.

**SEA CHANTIES:** Listeners will remember the sea chanties broadcast by 2FC from King's Hall recently in connection with the lecture on "The Battle of Jutland." This male voice party will have an opportunity of giving their songs away from the conventional atmosphere of the concert platform, when the party will go aboard the "Tingira" and give a complete programme from the deck of this historic training ship. All sorts of novelties in the matter of effects have been arranged by Mr. Laurence Halbert, who has been all over the ship with an eye to all the features for this occasion.

**ARE DEBATES POPULAR?** Most Stations steer clear of debates, but we think the debate on "Is the Modern Girl an improvement on her Grandmother?" by Rev. F. H. Raward in conjunction with Mr. William Adams will give listeners food for thought. This has been set down for Monday evening, March 28, and will doubtless present endless opportunity for humorous criticism. There are six speakers, each limited to five minutes.

**PROFESSOR BERNARD HEINZ, UNIVERSITY CONSERVATORIUM:** Listeners will be glad to learn that arrangements have now been completed to continue the series of interesting musical "lectures" that proved such an immense success during the year 1926. Professor Bernard Heinz of the University Conservatorium has arranged a series of "Talks" that will prove both interesting and instructive, especially to musical students, who will welcome this pleasant way of acquiring information. As is usual on these occasions, Mr. Heinz will have the co-operation of some of the clever University students, who will illustrate his remarks with both vocal and instrumental solos.

**THE PREMIER FOUR:** An ever-welcome addition to 2LO programmes comes in the shape of the Premier Four, who are again broadcasting for a brief season. Part singing is always greatly enjoyed by listeners, and when the repertoire of a quartette includes old English gies, popular right up to the minute songs, and appealing Southern melodies of the cotton fields, the artists will always find their audience asking for more.



Two Old Shell-backs Discuss Sea Chanties: Capt. Wylie and Herbert Fry arranging some rousing songs for a Nautical Night at 2FC.

# 500 Installations in 2½ Hours

**How 200 Postal Mechanics set out to break a record in the installation of radio at the Melbourne Benevolent Home. Granny McLean, 106, listened in.**

**W**IRESLESS has had a number of new recruits to its ranks in Melbourne during the last few days. I don't mean as a result of the very successful Wireless Exhibition, I am referring to the great numbers of hospital patients, whose beds have been recently equipped with headphones by public subscription.

St. Vincent's has been already "on the air" for a fortnight, and now the biggest of all, in point of patients, the Melbourne Benevolent Asylum, with 700 patients, has been completed.

It was an extraordinary sight to see these old people, for whom the world was apparently ended, and life but a slow sinking back into nothingness, perk up and take notice, when 200 young stalwarts from the Postal Mechanics' Union marched into the hospital and took up their allotted places. There was a complete absence of bustle and confusion. Each man knew from a plan where he was to go, and he went there straight, and set about his job. The patients watched them, wondering, bewildered. They had, in some cases, not even heard of wireless, so finished with "life's fitful fever" were they in their quiet backwater.

Others had heard of it, and had been told that by the kindness of the public they were to have this boon. They looked at the men as though they were magicians, as indeed they were.

In an incredibly short time, 2½ hours, to be precise, 500 points were finished, and the juice turned on. The naive surprise and delight of the old people were touching. They could hardly believe their ears, and a feeble cheer went up from the old men in Ward 7, when they actually heard the delicious commotion of a racecourse and bookmakers calling the odds. They had thought that life could never again give them back the thrill of a race, and yet, here they were, listening to a description of one, so that they could almost see it run. Indeed some old men, wild with excitement, took off the phones and levelled them like race-glasses.

It was a wonderful scene. One old lady of 106, Granny McLean, was a bit doubtful of the "dreaded things." She had been born not long after Waterloo, and had known the days when folks thought a railway train was an invention of the devil. She had read of the first trials of gas,

of electric light, of the telephone, and had shaken her head over each one. And now here was an invention that let you hear music that came from far away. "It wasn't right, some 'ow," she felt, but curiosity got the better of scruples and she listened like the rest. I should like to recommend to 3LO to get some sympathetic and understanding person to give a short programme especially for these old people. Bear in mind they don't know, many of them, how the world has been wagging for these 20 years, they would love to hear again the songs of their boy and girlhood. Think of the delight with which they would hear again such old favorites as "Twickenham Ferry," "Ehren on the Rhine," "Apart," and "Won't You Tell Me, Molly Darling?" I am for an Old Folks' Night. Who's with me?

## THE WIRELESS EXHIBITION.

Well, the Exhibition is over. What's the net result? I asked a big dealer that question, and he replied that he had booked a large number of orders for big sets. Personally, he had done well.

Apparently the night attendance consisted mostly of curiosity seekers; the afternoon brought the keen buyers who wanted to know everything the dealers could tell them.

I was speaking to the representative in Australia of one large English firm. He told me that the similar exhibitions in England were run for a couple of days before the official opening in order to give the press and the trade a chance of seeing the show in comfort, when they could ask questions and be seriously answered. It seems a good idea. His own firm received orders for 50,000 sets at one exhibition. It gives some indication of how wireless is progressing. It has now become a necessity.

## THE COMMISSION MUST BEWARE.

The other day I dropped into conversation with a young musician at the house of a mutual friend. There were a couple of dozen guests present, when the talk turned on wireless. "It is helping the cause of music," I ventured, "the whole profession must benefit when people hear such fine performers in classical numbers."

The musician interrupted with a tirade against 3LO.



**SIR WILLIAM NOBLE**, a well known personality in the broadcasting world, spoke in no uncertain tones during his stay in Sydney and Melbourne concerning the standard of Australian broadcasting. Several opportunities were given to him of explaining his view on this matter. He broadcast from both 3LO and 2FC and each time reiterated his statement that the standard of broadcasting in Australia was remarkable, and our programmes were wonderfully diversified. Considering the lack of world's artists, he considered we were able to produce very gratifying results.

"How can the cause of music be helped," he asked, "when 3LO pays no one more than a guinea, however good the artist?"

"But they do pay more," I pointed out, reasonably. "The other guests listened in at this juncture."

"They don't," said the young artist. "A guinea is their maximum. Have you ever heard a really good artist on the air? No, because they refuse to broadcast for a guinea."

"Well, I've heard Melba, Toti, Dal Monte, and a few others," I pointed out. "Toti got a very big fee, and I happen to know many artists who get a great deal more than a guinea."

He subsided, because he was guessing, whereas I happened to have the knowledge, but what I want to point out is that that young chap might quite easily be giving evidence before the Wireless Commission and tell his sad, but entirely untrue, story. It is to be hoped that steps are being taken to see that witnesses know what they are talking about.

# The Safety Valve

A department in which readers are invited to relieve their feelings by commendation or condemnation of broadcasting stations and their programmes. All letters must be addressed to "The Safety Valve," Wireless Weekly, 51 Castlereagh St., Sydney.



## JAZZ BO.

Dear Sir.—Perk Up! I do belong to that fickle class called "Jazz-fiends," but having paid my licence fee, I have a certain right to voice my views. Briefly summed up, I and my friends want more jazz items between the so-called classics, and I am sure that if Eric Pearce talked his way into giving us more of his melody, he would make many friends for life, amongst them being myself.

Yours, etc.,  
JAZZ.

Northbridge.

## MURDERED!

Dear Sir.—The other night, the First Act of "The Mikado" was broadcast from the Theatre Royal by 2FC. Instead of being a musical treat it was murdered by that station. It is unfortunate that our two main N.S.W. stations are unable to give the clear, steady transmission of 3LO, Melbourne.

There is another matter in which the two Sydney stations could follow Melbourne's lead. In the programmes set out in "Wireless Weekly," 3LO is very definite. For instance, if a racing enthusiast wants to get the results of the various Melbourne races, 3LO's programme tells him exactly when to listen-in. 2FC and 2BL apparently require him to sit at the set all the afternoon if he wants to be sure of receiving the results. As the average man hasn't that time to spend he simply doesn't bother. It is a real boon to listeners-in to have 3LO on the air.

Yours, etc.,  
J.B.

Glen Innes.

## CUT OUT CLASSICAL.

Dear Sir.—In my opinion, and I think in most listeners-in' opinion, there is far too much classical music—especially singing, broadcast every evening. Everyone, I think, enjoys one or two good singers during the evening, such as Madame Vera Tasma. She is a firm favorite. But some of the singers we hear, especially at 2FC, well, it would be absolutely impossible to put their songs under the heading of music.

A good programme, consisting of band and orchestral items, the latest fox-trots and latest most popular songs, are far more enjoyed by 80 per cent. of the listening-in public. So my advice is: Cut out the classical, or, at least, moderate it.

Yours, etc.,  
M.M.S.

Tyalgum.

## NOT HARD TO READ.

Dear Sir.—I have built the Five-Valve Neutrodyne as described in "Wireless Weekly," of 22/10/26, and I can say it is the set and then some. I can tune in all the Southern stations with great ease, and with remarkable volume. I can tune-in 5CL (Adelaide) when Brisbane is on the air; there is only a difference of ten metres between these stations, and I am about 14 miles air-line from Brisbane.

I greatly enjoy the Technical Editor's talks from 2FC every Thursday night, but the quarter of an hour goes by too quickly.

Yours, etc.,  
J.G.

Ipswich, Queensland.

## LOST INTEREST.

Dear Sir.—As I have lost interest in radio I am not renewing my licence. The programmes are not as interesting as they could be in a city like Sydney, and the wavelength tangle, together with the interference, prevents true enjoyment of the programme. To tune in Interstate or New Zealand stations is a joke, for one does appreciate outside items of interest when they pick them up, which cannot be done now except on the expensive sets.

Yours, etc.,  
A. F. McL.

Turramurra.

## A LISTENER'S CRITICISM.

Dear Sir.—2BL programmes of late have been very poor, but it is always a pleasure to hear Uncle George's voice over the air at any time. He must have a wonderful personality.

I see no reason why the programmes should not be improved by broadcasting records in the daytime, as it is a change from the many ladies' voices which we hear during the night programmes. Some are very good, but we do get too many of them at times. It is up to the companies to see that their programmes are on as high a standard as will permit.

2FC's programmes are generally pretty fair, but we do not want too many playlets.

Yours, etc.,  
IN GENERAL.

Marrickville.

## CRYSTAL RECEPTION OF 2FC IN QUEENSLAND.

Dear Sir.—I pick up 2FC every night after the local station 4QG has closed down, and greatly enjoy the programmes. My set is a simple crystal receiver and I can hear 2FC clearly, and by adding a one-valve amplifier, reception is excellent headphones strength. I think the programmes of 2FC among the best in Australia, even better than those of our local station.

Yours, etc.,  
A. H. BARFF.

Ipswich, Q.

# 2FC & 2BL Programmes for Royal Visit

THE visit of the Duke and Duchess of York to Australia is expected to cause a great revival in broadcasting, and from all indications thousands of persons who have not yet invested in radio receiving sets will do so in the immediate future.

Indeed it is reported in radio circles that a very considerable increase in trade has already taken place attributable to the approaching royal visit.

The main reason prompting the purchase of radio sets is the fact that the ceremonies connected with the Duke's visit have so great an historical interest. The landing of the Duke and Duchess at Farm Cove, for instance, will be a highly picturesque event and the broadcasting stations have planned to exploit it to the uttermost. As the great battle cruiser "Renown," bearing the Royal Duke, approaches the heads official of both the A class broadcasting stations 2FC and 2BL, will give a running description of the scene until the warship moors in Farm Cove.

The words of the announcers, together with all the attendant sounds which fill the air, the cock-a-doodling of other vessels, the firing of guns, and the cheering of the crowd will be heard in the uttermost parts of the State. As the Royal Party lands trained announcers will describe the scene and doubtless their words will be heard by thousands of persons who on account of distance or for other reasons cannot hope to see the proceedings.

On Sunday, March 27, the Duke will pay a visit to the Prince of Wales Repatriation Hospital at Randwick, where he will address the sick and disabled soldiers. The words of His Highness will be broadcast and again the Duke will be heard over the air in a speech on Tuesday, March 29, when he will be entertained at lunch by the Returned Soldiers and Sailors' Imperial League.

Of course the official ceremonies at Canberra—where on May 9 the Duke will open the Federal Parliament—will also be broadcast and the Federal Government has expressed the wish that at every school in the Commonwealth, especially those in the more remote areas, children and parents will be gathered to hear by radio the Duke's speech.

It is interesting to note that probably not more than ten or twenty thousand persons actually heard the Prince of Wales speaking when he visited Australia, but probably three or four million will hear his brother, thanks to the excellent system of broadcasting now firmly established in Australia.

## A World's Record Broadcast from 2FC.

*THE gala performance to the Duke and Duchess of York at Her Majesty's Theatre on Tuesday, 29th March will create a world's record in broadcasting. Following conferring of degrees at 4.00, 7.45, and 9.00 p.m., 2FC through Messrs. J. C. Williamson Ltd., with the English authorities holding the Gilbert and Sullivan copyrights, arrangements have been made for the complete gala performance to be broadcast.*

*The two operas "Trial by Jury" and "H.M.S. Pinafore" will be transmitted in their entirety for the first time in any part of the world. The broadcast will commence at 7.45 with a description of the audience. The orchestra, 150 strong, will play the "Aida" trumpet as the Royal Highness arrives. It is obvious the National Anthem will be played by the enlarged orchestra. At 8.30 "H.M.S. Pinafore" will be broadcast in full followed after the interval by a full transmission of "Trial by Jury."*

### 2FC's Programme.

2FC will broadcast the following entertainments and functions during the Royal Visit:-

SATURDAY MARCH 26: Arrival of the "Renown" and the passage of the vessel up the harbour, transmitted from S.S. Gwydir.

The landing of the Royal party at Farm Cove.

Description of the procession from Farmer's strong post.

A choir of sixty voices and a band of thirty members will be associated with this description.

Descriptions from the Town Hall of the arrival of their Royal Highnesses at the official reception to be given by the Government of N.S.W.

SUNDAY, MARCH 27: Duke of York's speech to disabled soldiers at Prince of Wales Hospital, Randwick.

MONDAY, MARCH 28: Description of the arrival of their Royal Highnesses at the Lord Mayor's Ball.

TUESDAY, MARCH 29: Description of the public reception at the Town Hall. Speech by the Duke of York at the Luncheon to be tendered to him by the Returned Soldiers and Sailors' League at the Wentworth.

2.45: School children's display, Sydney Cricket Ground.  
4.00: Conferring of degrees, at Sydney University.

7.45: Gala performance, Her Majesty's Theatre.

THURSDAY, MARCH 31: Pro-

gramme from H.M.A.S. "Tingira."

FRIDAY, APRIL 1: Description of the Barbecue at the Showground.

SATURDAY, APRIL 2: Description of the Boy Scouts' Corroboree at the Showground.

SUNDAY, APRIL 3: "Renown" Band plays at the Zoo.

THURSDAY, APRIL 7: 2FC Concert from the "Renown."

THURSDAY, APRIL 14: Return of the Royal visitors from Queensland. Description from the Showground, and of departure of the "Renown" for Hobart. 2BL's Programme.

The first glimpse of the "Renown" from the Australian Coast will be described by 2BL. With the aid of a powerful telescope at South Head Signal Station, the vessel will be picked up from the time she rises over the horizon and her progress from then, until she moors in the Harbor, will be described to listeners.

From a vantage point near the landing stage the official landing and scenes beforehand will be broadcast. Then there will be a description of the Royal route—an hour before the landing and then actually as the procession through the city is taking place. For this purpose a small transmitting set will be placed in a motor car which will take part in the Royal procession, and the description from the car "picked up" and re-broadcast.

A description of the procession will be broadcast also from the verandah of Burdekin House, Macquarie Street. Next afternoon music played by the famous concert band of the "Renown" will be broadcast from Taronga Park and the following evening a concert on board the "Renown" will be "put on the air."

On Tuesday, March 29, proceedings at three important functions will be broadcast—the reception at the Sydney Town Hall, Children's Display at the Sydney Cricket Ground and the reception to the Duchess of York by the National Council of Women at the Sydney University.

For the visit to Jenolan Caves, 2BL has arranged to instal microphones in various parts of the Caves, so that listeners-in will have a continuous description of the sights viewed by the Royal visitors and in all probability will hear some of their remarks.

On the day of departure from Sydney the reception of the Duke of York at the Show Ground, by the President of the Show, will be broadcast, as also will a description of the departure from Man o' War Steps, Farm Cove.

# Choosing A Radio Receiver

*An expert's advice on the purchase of a receiver. How to get the best return for your investment.*

By H. K. LOVE

(President Victorian Section Wireless Institute)

FOR those who contemplate the purchase, or the construction of a receiver, there is the question of "What kind of a receiver do I need?" The answer is governed by many factors—the chief among these being the location in which the set is to be used. If it is to be used in the country, a considerable distance from 3LO, anything less than a four valve receiver will not give good consistent reception. For local work, up to a few miles from a station, a crystal receiver will give good ear-phone results, and should a speaker be desired, it can be made use of in conjunction with a crystal and valve amplifier. It must be clearly understood, however, that the addition of a valve audio amplifier to a crystal will not increase its range, only the volume will produce.

To make this quite clear. If a station cannot be picked up on the crystal, the audio amplifier will not help one bit. As long as the station can be heard on a crystal receiver, the audio amplifier will magnify the sounds to sufficient proportions to allow a speaker to be worked. For medium distances, a 3 valve receiver can be made good use of.

It is as well when buying a receiver of this type, to have a radio frequency valve, a detector, and one audio valve. The radio frequency valve increases the pick up range of the receiver, and should be included rather than a detector and two audio stages, another valve is not so easily added to the detector and two steps—while the addition of an additional audio valve to a radio detector and one audio completes a standard 4 valve receiver.

The amount of volume required will, of course, enter into the points of deciding the type of receiver needed for any particular circumstance. If nothing more than an ear-phone reception close to the broadcast Station is required, I would advise nothing but a good crystal set. If ear-phone reception of 3LO is desired in Sydney or at distances greater than, say, 100 miles from the station, a 2 valve receiver may be employed.

For loud speaker work at any distance, the safest investment is a four valve receiver. Five valves have their use for the picking up at full loud-speaker strength all Inter-State stations. This same applies to super

heterodyne, and the many types of multi valve receivers.

Perhaps the most important factor in the choice of a receiver is the price. But as in the case of most good things, price is not everything. Always buy the best, it will pay in the end. One may buy a piano for a few pounds, others pay hundreds, and it is usually found that the dearer instrument is the better bargain.

The same applies to a wireless receiver. If the money is not available when you desire to purchase, get the best you can afford, and add to it as you can. Don't buy a complete set, because it is cheap, if it is not good.

When buying parts always buy the best you are able to procure. A wireless receiver is only as good as the parts it contains, and is like a chain, a weak link determines the strength of the whole chain. Seek advice when buying, explain to your dealer what you require of the set or part, and he will advise you to make the best choice.

A CLUNIES ROSS, B.Sc., F.I.I.A., continues his talks on business efficiency on Mondays at 2GB. Mr. Ross is an Australian business man who believes that business demands soul as well as enterprise and profit and loss accounting.

FOLLOWING a number of requests it has been decided to continue the morning sessions at 2GB. The time, however, has been altered; instead of commencing at 9.30 a.m. and finishing at 10.30 a.m., they are now starting at 9 a.m. and will finish at 10 a.m. This is because so many women in the homes find this time more suitable to their household duties.

THE LECTURES on Finance by Mr. Frank Loch at 2GB are creating wide interest throughout many States. Mr. Loch is an acknowledged master of economics and he treats the subject in quite a different way to most economic leaders. He is worth listening to.

## BOUQUET FOR DE FOREST.

Writing to International Radio Co., a wireless fan of Wotomora Dam states he has been using three De Forest valves consistently for three years. This is an excellent tribute for the longevity of these well-known valves.

PICKING THE WINNERS: To the average person a horse is a horse, large or small, chestnut or grey, old or young. But to the turf writer each one of the many hundreds of horses racing in Australia is a distinct personality, an individual to be recognised on sight just as one would recognise an acquaintance. This familiarity is only secured by long experience and close study. In entering for the entertainment of local racing enthusiasts, 3LO, Melbourne, has secured the best experts available. The descriptions of races by Musket of the "Sporting Globe" are an institution in Melbourne, and racegoers get as much excitement out of his faultless descriptions as they do from an actual sight of a race. Mr. W. Priestly, as Musket, is known outside the broadcasting world, has to know the colors of every owner racing in Victoria and the characteristics of every jockey in order to describe accurately each race.

The opinions and comments on races on Friday evenings are also a popular feature, this talk usually being in the hands of Mr. H. Wolfe, Cardigan of the "Australasian." Mr. Wolfe has been a sporting writer for many years and could speak with equal knowledge and precision on racing matters in Western Australia or Queensland. Occasionally his place is taken by Mr. F. H. Dexter, Doncaster of the "Argus," who has been brought up in the atmosphere of turf journalism. His father, who writes under the title of "Pilot" for a Sydney paper, is the senior racing expert in Australia.

MEMORY TRAINING BY RADIO: 2GB is making a special offering to the public every Sunday evening at 7.15 by presenting a course on training the memory which would usually, they say, cost those who desire it several guineas. They have secured for this series a recognised expert in this line for the past twenty years, Professor Ernest Wood, recently from India. The Professor has studied the ancient methods of the Hindus, the Greeks and the monks of the Middle Ages, as well as the most recent devices, some of which he originated himself in his work published fifteen years ago. The lecture of March 27 will deal with "Special methods of memory training, including the ancient Hindu method of Niakantha and the Professor's own adaptation of this, the symbol and picture system of the Greeks, and the system of Gregor von Feinagle." Prof. Wood's unusually clear voice and ability as a teacher are well known, so listeners may anticipate pleasure and profit at the same time.

WORK is proceeding with all possible speed on the new high power station which is being constructed by SAR. It will be operated from North Essendon, where the present 12-k.w. is situated, the power to be used being 5-k.w. The control panel which will be used at the studio end is ready and tested, and embodies the latest improvements necessary for perfect reproduction of voice and music. It contains 3 amplifiers, one for the large studio, one for the small or Speaking studio, and one for the outside broadcasts. It is neat and compact, having been assembled in Australia by Australian workmen. The whole panel is set up with something like 24 separate compartments, and 75 switches all doing their own particular and essential work. The large studio is wired for six microphones, which, if necessary, can be used simultaneously. The smaller studio possesses three. The control room divides the two studios. A certain section of the amplifier apparatus allows for the using of the microphones simultaneously, SAR and the new TZL Hobart being the only two stations using this modern system of control. The transmitting station at Essendon will be crystal controlled. The same wavelength will be used, viz., 484 metres. Comments on the new transmission by N.S.W. listeners will be fully appreciated by the management of SAR.

The Edison Swan Electric Co., Ltd., have introduced a new receiving set, the R.C. Threesome, which, for simplicity, cheapness, and quality performance, they claim, to be unequalled. It uses a resistance-capacity coupled circuit, with three valves, and can be put together in three hours. The cost of the component parts is about £3/15/- Reproduction from the completed sets is mellow, and free from coarseness; the volume obtained is ample.

The valves used are the Edison RC2 and PV2, economical and free from microphonics. On application to The Edison Swan Electric Co., Ltd., 58 Clarence Street, Sydney, a blue print of the wiring diagram and a book of instructions will be forwarded free.

#### VOLTON BATTERIES.

Readers will be glad to learn that the world-famous Voltion Batteries are now available in Australia. The Weldon Electric Company Limited have secured the agency for this battery, which is manufactured by the Voltion Battery Company of Brooklyn, New York, and at the present time Mr. West, the Director of the Weldon Electric Company, is in Brisbane, arranging for the distribution of these excellent batteries in Queensland.

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With an extremely Selective Set, such as the Cockaday 4 Circuit Tuner, it is possible under favorable conditions to receive two stations between 2BL & 3LO

## WHY NOT BUILD THE COCKADAY ONE VALVE RECEIVER

As described in this issue of "Wireless Weekly." Here are the parts as actually used in the set—

	£ s. d.
1 Polished Bakelite Panel, 12 x 7 x 3-16 (cut true and square)	0 7 0
Or (12 x 7 x 3-8), 4-7	
2 Accuracy Mylar Dials (Vernier), at 0/9	0 13 6
30 ohm. De Juex Rheostat (one hole fixing)	0 3 9
1 B.M.S. Single Circuit Midget Jack	0 1 0
1 Rotary Switch Arm	0 0 7
7 Contact Studs and Two Stops	0 0 2
1 28 Plate Modified Pilot Condenser	0 14 9

(We can supply also, Advance, 28  
Plate, 10.5.)

These Parts are Covered by a Money Back Guarantee.

1 17 Plate Modified Pilot Condenser	0 13 9
(Can supply also 17 plate Advance, 10/—)	
1 Benjamin UK Socket (Cushion Type)	0 5 0
1 Electrogrid Grid Condenser	0 2 3
1 2 Meg. Gridleak and Holder	0 3 3
1 5in. length of 3in. Diameter Radion Tube, 10d	0 4 2
1 2in. length of 3in. Diameter Radion Tube, at 10d.	0 2 1
1 Wooden Baseboard (properly finished).	0 1 0
6 Lengths Sq. Tinned Copper Buswires	0 0 6
1 Length Spaghetti Tubing	0 0 3

Total ..... £3 13 1



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Volts, "A" Batteries ..... 0 9 0

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60 Volts ..... 0 18 0

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Volts, 21/-; 60 Volts ..... 1 11 6

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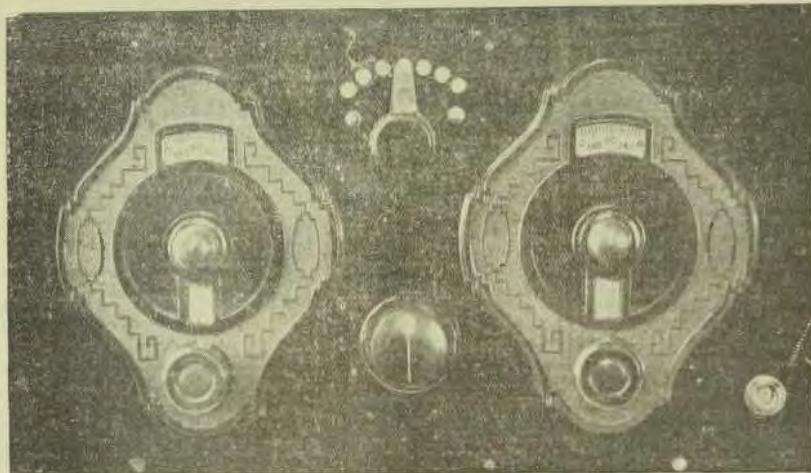
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NEWCASTLE: 569 Hunter Street West. Phone: New.1622.



## The Cockaday Four Circuit Tuner

**W**E make no apology whatever for resurrecting this well-known receiver which will, we feel sure, be welcomed by our many readers. This receiver is extremely selective and will solve the problem of interreference for a good many people.

Within half an hour of its completion 3LO, 4QG and 5CL were heard faintly but nicely on the headphones, free from interference from each other. The volume of the local stations was all that could be desired, therefore, we may be pardoned for feeling enthusiastic.

Towards the end of 1923 or the beginning of 1924 Lawrence M. Cockaday startled the American listeners when he produced this Four Circuit Tuner, and even to-day in U.S.A. it is extremely popular. Sharp tuning is the keynote.

In "Wireless Weekly" of June 20, 1924, this excellent receiver was described by "The Little American." Read what he says then and prove it for yourself to-day—almost three years later—"This set has proved exceptionally selective, and the signals from nearby stations can be eliminated even when the difference in frequency between these signals and desired ones is very small. This circuit is also very sensitive to weak signals and the regeneration is easily

*A popular receiver of years ago which even to-day proves its qualities of sensitivity and selectivity. The decorative front panel is reproduced exactly half-size above.*

controlled." That statement reads well, doesn't it?

### The Circuit.

Suppose now we analyse the circuit to see just why this should be. Looking closely we find that taking coil B and the valve battery and phone circuit, we have a circuit which very closely resembles the ultra audion circuit popularised in N.S.W. by "Inegrator" and known to most as "The Marnikay." Readers who constructed the Marnikay will know just how selective it proved and will, no doubt, welcome this receiver, which is far more easily handled. Again we have coil C, which is not connected conductively to any other part of the circuit, but is of course inductively coupled to coil B. Coil C is tuned and really becomes a wave trap, to which is coupled one turn of the aerial coil D. This ensures extremely sharp tuning, and a nice smooth reaction control, which are features mostly desired to-day by listeners. As again all aerials are not of a standard length, coil D is tapped and is well worth the trouble,

as will be explained later on. And don't forget to note that the grid leak is taken from the grid of the valve to the negative A battery, not the positive as is usual.

### Parts Required.

Here is a list of parts and the brands alongside to assist the constructor to make a duplicate of the receiver built by us. All the parts may be obtained from any of the advertisers in "W.W."

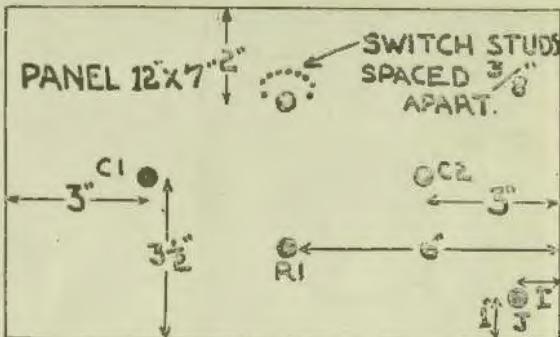
- 1-Radion or Dilecto Panel 12x7x3-16.
- 2-Accuratone Mydar Dials.
- 1-30 ohms De Jur Rheostat.
- 1-H.M.S. SC Jack.
- 1-Rotary Switch Arm.
- 7-Contact Studs and two Stops.
- 1-23 plate Modified Pilot S.L.F. Condenser.
- 1-17 plate Modified Pilot S.L.F. Condenser.
- 1-Benjamin Socket.
- 1-Electrad Grid Condenser.
- 1-Philmore 2-meg Leak and Clips.
- 1-Terminal Board.
- 1-5-inch length of 3-inch diameter Radion tubing.
- 1-24-inch length of 3-inch diameter Radion tubing.
- 1-lb. 22 D.C.C. Wire.
- 1-Baseboard 11x8x1in.
- 6-Busbars.
- 2-Lengths of Spaghetti Tubing.
- Sundry screws, etc.

All these parts are of a good quality and their inclusion in this excellent little receiver will greatly repay the constructor. Anything that is worth doing is worth doing well, and remember there is nothing more annoying than to have the fixed and moving plates of a variable condenser touch together. The remedy is to get good parts at the beginning.

#### Construction.

That pleasant occupation of winding coils comes first. Tackle the 5-inch length of tubing and wind firstly the 65 turns for coil B. Begin by drilling two small holes  $\frac{1}{8}$  an inch apart and both 3-16ths. of an inch from one end of the former. Now thread one end of the 22 gauge D.C.C. wire through each hole, securing in this manner, and wind on the 65 turns, each turn close to the other, and finish off by threading through two more holes drilled at the termination of this winding. Secure tightly here. This winding should be approximately 2½ inches long. At a distance of  $\frac{1}{8}$  of an inch away start the winding for coil C, which consists of 37 turns of the same wire. Secure at the beginning and end as previously effected in coil B. The beginnings and terminations of these windings should all be in line, so that when the former is mounted on the baseboard all the connections may be made on the top of the coils.

Next wind coil D on the, 2½-inch long former. This coil comprises 48 turns and is commenced on the former  $\frac{1}{8}$  of an inch from one end. This



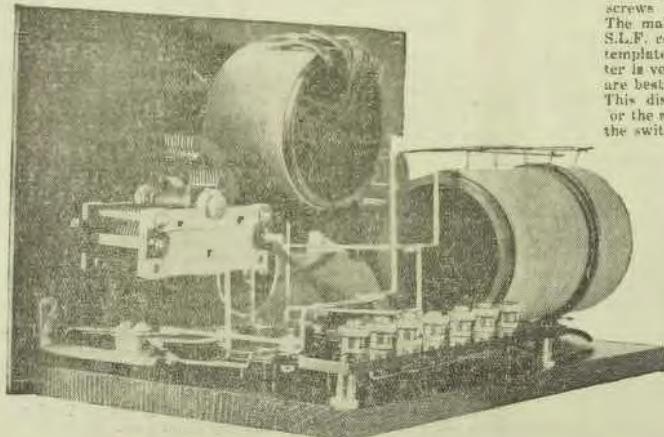
The drilling template for the front panel. This layout was used in the construction of the panel shown on the previous page.

coil is tapped at the 7th, 13th, 21st, 27th and 31st turns. The taps consist of a small loop twisted in the wire as the winding proceeds. When finished there should be approximately  $\frac{1}{4}$  of an inch of former to spare. This is to be used for mounting the coil.

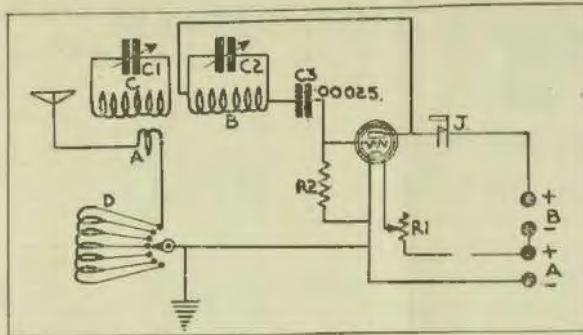
Coil winding is very simple provided the wire runs freely off the reel. To do this get a flat piece of wood about 9-inches square and drive a nail of a sort 2½-inches long in the centre. Place the reel over this, allowing the nail to fit inside the hole in the reel.

Another method is to grip a pencil or a rat-tail file in the vice and slip the reel over this. This will allow the wire to run off the reel quite freely and is a great aid. Before leaving coil D aside carefully scrape the coating covering off the loops or taps so that the leads may be easily soldered later on.

Next prepare the panel. This has to be marked off and drilled, in accordance with the diagram reproduced. This diagram, by the way, besides showing measurements and distances, is also drawn to scale. Mark out the positions with a centre punch, keeping the panel on a flat surface and then determine the positions for the fixing screws for the variable condensers. The makers of the Modified Pilot S.L.F. condensers include an accurate template in each packet, so this matter is very simple. The contact studs are best placed  $\frac{1}{8}$  of an inch apart. This distance allows an easy riding of the switch arm. Don't forget that the switcharm used in this receiver is



A side and rear view of receiver. Note the coil tappings and the relation of each end to the others. The two S.L.F. condensers are seen either side of the tapped coil. In the foreground is the plug-jack and the battery and phone connections.



*The Technical Editor has added several small modern improvements to the circuit as originally designed by Lawrence M. Cerkaday.*

1½-inches in radius. If yours varies then be careful not to mark out the switch hole in a wrong position.

Carefully drill all the required holes, remembering the good old rule, "A high speed and light pressure accomplishes much." Countersink the holes for the fixing screws of the variable condensers, using a larger sized drill if a rose bit is not found in the kit of tools. Assemble the panel components, noting that the lock nut of each contact stud is made tight. Don't forget to make provision for the fixing screws at the bottom of the panel, so that it may be secured to the baseboard.

#### Baseboard.

This useful article is best when sandpapered and given a coat or two of shellac varnish or Ezywurk. Layout all the parts, following out the suggestion in the back of panel wiring diagram for position. The larger former is mounted on the baseboard and is kept up from the board by means of two small pillars, a screw right through holes drilled in the edge of the former sufficient to take a brass wood screw through former, and pillars, and into the baseboard. See when mounting this coil to note that all the connections are on top as already explained. The terminal board also requires small pillars for a similar purpose.

#### Wiring.

At this stage start the wiring—before the tapped coil is mounted in position. The Wiring Instructions to-

gether with the back of panel view, and the circuit will give all the instructions necessary and you are advised to follow out the wiring in the order given in the Wiring Instructions. When soldering is called for then do this carefully. Wunderflux is an easy flux to work and is also non-corrosive. Take each wire step by step and be certain that you are correct.

When it comes to soldering the taps from coil D to each stud, tin the stud firstly, and also the end of a short piece of wire long enough to go back through the inside of the coil former to the contact stud. Solder this short piece of wire (any gauge will do) to the tapping and then encase it in a short length of varnished cambric

spaghetti and then solder to the already tinned stud. Keep these tapings and studs in order of rotation.

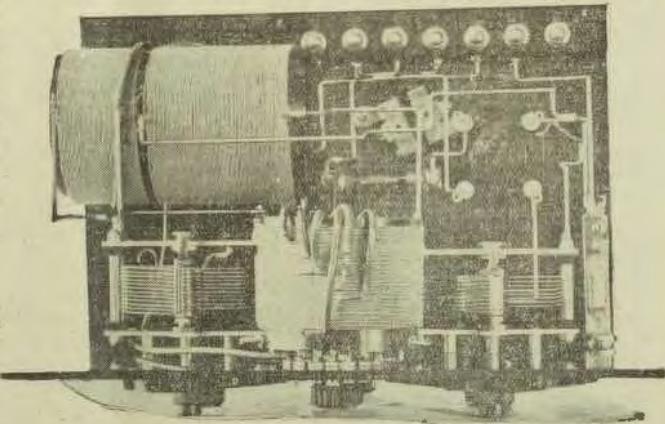
It should have been mentioned previously that two small holes—big enough for a contact stud—should be provided in the edge of coil D former, approximately one-third of the circumference of the coil apart, and on the ¼ of an inch edge left free from wire. Through these holes should be fixed a screw or contact stud to support a small bracket made from a piece of busbar and shaped in such a way that they will be gripped under the nut of the switch stops on the panel. These brackets, of course, are not even being inside the coil former. Of course it is easier for soldering purposes to solder the taps first, then fix the former to the panel in the manner prescribed.

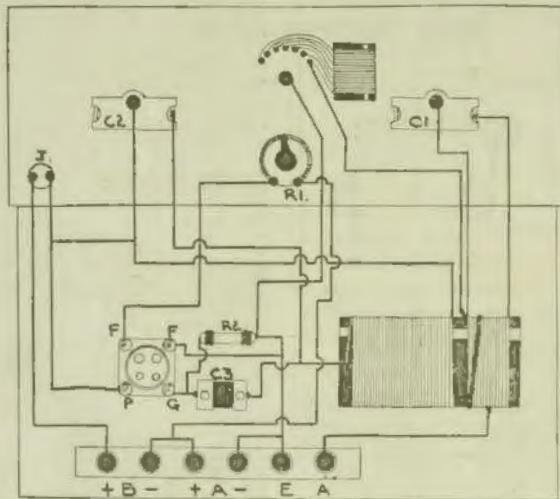
It will be noticed that the terminal board uses boards of seven terminals, but only six are used, one being left free—the Bx amplifier in fact.

#### Testing.

Check every connection to be sure that no error has arisen, and then hook on the aerial and earth and connect up the correct A battery to suit the valve being used. The B battery may be between 16½ and 18 volts according to the valve used. Be sure you don't connect the B battery to the A battery terminals, or you will have to replace the valve which, while pleasing the hearts of the radio dealers, to put it mildly, hurts the feelings of the constructor.

Leaving your condensers set at zero, plug in the 'phones and turn up the rheostat. Slowly turn both dials together until the nearby station is





*The simple wiring diagram of the Cockaday receiver. No novice is likely to experience difficulty in constructing a set if he follows this correctly.*

heard. Remember all the time you have a sharply tuned receiver, so you are not allowed much leeway on the dials. Tune in this station to the loudest pitch possible, then rotate the switch over the contact stud until the most suitable stud is found. A slight retuning, particularly of the smaller condenser, will effect a vast difference in signal strength. If this receiver is inclined to oscillate too freely, then turn back the rheostat until the oscillations disappear. Remember that vernier dials are strongly advised, particularly if inter-state stations are to be received. The switch arm is very interesting indeed, as it shortens or lengthens the aerial according to the degree of selectivity desired. Use the condensers slowly and the receiver will render yeoman service.

#### Test Report.

At Marriekville, using a Mullard P.M.4 valve, excellent results were received as mentioned at the beginning of the article. Other Mullard and De Forest valves were tried and used with equal success. We are so pleased with the qualities of this set that next

week we will describe how to build an amplifier to increase the volume to loud speaker strength.

#### CANADIAN LISTENERS INCREASING.

Wireless trade developments in Canada have been very rapid during the last three years, and there exist at present about sixty broadcasting stations entering for 185,000 licensed listeners. Broadcasting is under Government control, and comes under the Marine Department's jurisdiction, which deals with popular broadcasting as well as official signalling to ships at sea. The licence fee is 4/- per annum.

Britain supplies about 30 per cent. of the country's requirements in sets and component parts. The numerous small companies which sprang into being with the first boom in wireless are now mostly consolidated into fifteen important firms. There is also a considerable import trade, in which America heads the list, with Great Britain second, France third, and Germany fourth.

The market is constantly widening, and Great Britain has every prospect of more successful competition with U.S.A. She is favored by a preferential tariff of 10 per cent. less than the ordinary rate. There is a good market for British amplifiers and loud-speakers of first-class quality. The French competition is strongest in loud-speakers, but in all other apparatus America is Great Britain's strongest rival. Under the commercial treaty with France a duty of 22% per cent. is payable on French goods, 5 per cent. less than the ordinary tariff.

#### WIRING INSTRUCTIONS

Join on terminal board B- to A+ and thence to right hand side of rheostat.

Join on terminal board A- to Ground or Earth terminal, thence to right hand F terminal of valve socket and to right side of grid leak.

Connect left hand side of rheostat to left hand terminal of valve socket.

Clamp grid condenser under G terminal of valve socket and join other side of grid condenser to nearest end of coil B (65 turns) and thence to feed plates of C2 (17 plates).

Join remaining side of grid leak to grid terminal of valve socket.

Join bottom end of SC Jack to moving plates of C2 (17 plates), thence to P terminal of valve socket and from thence to remaining side of coil B (65 turns).

Link together B+ terminal of terminal board to top side of jack.

Connect moving plates of C1 (28 plate) to nearest end of coil C (37 turns) and the other side of this end to the feed plates of condenser C1.

Run a flexible connection from the A- side of the grid leak to the switch arm.

Next solder connections from each tap of coil D (43 turns) to each respective stud, also the beginning and end of this coil to the respective two outside contact studs.

Run a flexible lead from Ant terminal of terminal board around the nearest end of coil C (37 turns) for one turn in the same direction as the winding itself and thence to the outside stud to which the beginning of coil D is soldered.

This completes the wiring.

# HOW TO TUNE

- ¶ A Neutrodyne
- ¶ A Browning - Drake
- ¶ A Harkness Reflex
- ¶ A Super Heterodyne

**L**AST week we learned how to tune a straight out detector circuit, we learned the method of tuning in on a carrier wave, we learned just what an important part may be played by a rheostat in some receivers, and now let us discuss the methods of handling a receiver employing radio frequency.

At the very outset let it be understood that audio frequency or note magnification plays no part in tuning. It is the detector circuit and the radio frequency circuits that require tuning, and very often careful tuning at that. Remember, too, that a receiver using regeneration is a little more critical of control than those without regeneration. Many multivalue sets don't employ regeneration in any direct shape or form, and are, therefore, easy to handle. Take a five-valve Neutrodyne for example. This well known and rightly popular receiver comprises two stages of radio frequency, detector, and two stages of audio frequency.

Radio frequency, we know, serves its purpose by building up the power of a signal before it is detected. Radio frequency is the term applied to the energy which is transmitted from a transmitting station and is really an alternating current which changes the direction of its flow many thousands of times a second. To further explain alternating current it may be described as an electrical energy which flows first in one direction and then in the opposite direction round a circuit alternately. One way round the circuit is taken as positive and the other as negative. The time intervals for the two directions are usually equal in magnitude but opposite in direction after the expiration of equal fractions of the intervals. Alternating Electro Motive Forces and Magnetic Fluxes may be defined in a similar manner.

The sequence of values attained by the current in passing through one complete set of positive and negative values is called one Cycle (or wave

**B**eing a continuation of the article "To Tune or not to Tune" in last week's issue. In this article the writer gives some helpful hints on the art of tuning several well known receivers.

(when plotted a graph to a time base). The number of cycles passing a given point in one second is known as the Frequency.

Now broadcasting stations transmit energy at an enormous frequency, too high, indeed, for the human ear to detect—the eardrums won't vibrate at such a high speed to hear these sounds normally. This is known as radio frequency, and as mentioned is beyond human hearing without the aid of something to lower or detect this frequency. This is precisely what the detector valve, or a crystal for that matter, does; it detects and renders audible the sounds emitted at this radio frequency.

It is quite accepted that this radio frequency energy can be built up before detection, so that we have receivers employing one, two and three stages of radio frequency which is explained in its functioning increases the value of signals received, building it up in each stage.

The Neutrodyne, previously mentioned, employs two stages of radio frequency, so that a weak signal, too weak to actuate a detector valve straight out, is built up in strength, passed on to the detector, and detected or rectified, and then through the audio amplifiers to the loud speaker.

This means that the very weak signal which may come from the inter-State stations such as SLO, Melbourne, is built up in strength, firstly by the radio frequency portion of the receiver, then detected and then built up again by the audio-frequency section afterwards, and then produced through the loud speaker. It is, therefore, understood that a signal ordinarily too weak to actuate a straight out detector valve, can be made strong enough with radio frequency to do this job and consequently be heard through the loud speaker with the addition of audio frequency.

This, we realise, is apart from the subject of tuning, but is of such a kindred subject to merit this short description here. As has been pointed out last week, one must realise what is going on within one's receiver before it can be thoroughly understood, and the most made from it. The radio frequency transformers used in a Neutrodyne are so designed that selectivity results, and only the secondary of these neutroformers or radio frequency transformers are tuned with variable condensers. As again these neutroformers are usually matched—that is, they are all of the same inductance and, incidentally, capacity value—it follows that as three are used in the average circuit, and all three are invariably tuned by the same brand and the same capacity condenser when a certain station is received, all three, three altogether, should read the same. For example, after slowly turning two out of three dials very slowly—we only have two hands—it is only necessary to bring the third dial into the same reading as the other two at which the desired station should be received at maximum strength. Understand that now!

To put it more plainly, suppose using the right hand on the third dial, that is the dial governing the condenser which tunes the grid of the detector valve, and again the left

hand is on the dial which tunes the middle condenser, and by very slow turning of these two dials, keeping both in unison, a certain local station is heard, even so faintly by bringing the third condenser into unison, or to the same degree setting the desired station should be heard at maximum volume. A slight readjustment will prove this for yourselves.

Once the local station, or the two local stations are located, say 2BL and 2FC, it, therefore, follows that 3LO and 4QG and 5DL will be found between the settings of the two local stations. Suppose, for example, that 2BL is located at 32 degrees on the dial and 2FC on 30 degrees, then look for 3LO on 35 degrees, 4QG on 40 degrees and 5DL on 42 degrees. Only by slow turning of the two dials mentioned can stations be located. With a properly neutralized receiver the different stations should just slide in without any sign of carrier wave, and provided the aerial is not too long—not longer than say 70 feet—and provided the dials are evenly matched, no difficulty should be experienced in any way in bringing in all stations below 600 metres and above 200 metres. This is the usual wavelength governed by Grudan, Wellens, or Radiotrons. Neutralizers in conjunction with a .0005 mfd. S.L.F. condenser. With the Alizone neutralizers a .0006 mfd. condenser is required to cover this wave length. Bear in mind a Neutrodyn is easily tuned. The Browning Drake, on the other hand, uses regeneration and accordingly, though simple to tune, it is, perhaps, slightly more difficult than a Neutrodyn. This fact is brought about by the use of regeneration purely and simply. Regeneration in this instance takes the form of a rotor coil acting in the field of a grid coil governing the input to the detector valve. To tune this circuit correctly the rotor should be left at right angles to the grid coil and both condensers rotated slowly again until a local station is heard. Then by carefully using the reaction the volume of signals will be increased until a point is reached when extreme oscillation is produced. Keep away from this point and return carefully with the second condenser. Now plot out where the other local A class station is and determine approximately just where the distant station may be reconceiving in your mind as far as is possible the relations between the wavelength of the desired station and the dial reading. Of course, don't forget to incorporate a .001 fixed condenser across the primary of the first audio transformer, otherwise the set will not oscillate as nicely as it should. If, on the other hand, the set is inclined to oscillate

too violently reduce the capacity of this condenser to .0005 or .00025. This hint is worth while.

Sometimes again it happens that there is not sufficient value of selectivity in a Browning Drake or in any other set for that matter, and it is a drawback which makes one think seriously. The writer had that experience some time back, and it was overcome by including a .0001 condenser in series with the aerial aerial. This proved worth while. Another method of making the Browning Drake receiver more selective is to loosely couple the aerial circuit. By loosely coupling I mean the insertion of another coil alongside of the grid coil and connecting the aerial to one side of this coil and the earth to the other side. This coil may conveniently be a honeycomb coil or a Rogetone coil placed inductively to the grid coil, that is alongside and close to the grid coil, so that the windings of both coils are running in the same directions. The aerial and earth should, of course, be disconnected from the existing coil and transferred to the newly installed coil, which need not be tuned by a variable condenser. Realise, of course, that when this extra coil is added much sharper tuning will result on the first condenser. The second condenser is at any time very sharp in tuning. The Browning Drake is an extremely selective receiver, and is capable of bringing in all inter-State stations excepting 6WF at loud speaker strength. Oftentimes difficulty is met with in neutralising the radio frequency valve, so it behoves the constructor to employ a valve of a low internal capacity in this radio stage. Such a valve is of the UX395 type for 4 volts or a True Blue Power Plus Valve for a 6 volt accumulator job. These valves are much more easily neutralised than the standard 201A type and are worthy of great consideration.

The Harkness Reflex having two dials is indeed very simple to tune. Read over the instructions in last week's "Wireless Weekly" with reference to dial handling and rheostat and B battery control. Valves play a most important part, and it is good to see the British manufacturers making special purpose as well as general purpose valves. For example, we have valves designed especially for radio frequency purposes, for detectors and for low frequency amplification, as well as power amplification. These special purpose valves are interesting from the point of view of tuning, and are, therefore, included in this article. The Super Heterodyne is just a bit different to the average straight receiver from the point of view of tuning. Suppose the receiver has a

separate oscillator valve there will be at least two dials, one tuning the grid circuit of the detector valve and the other tuning the oscillator condenser.

In operation, the main tuning condenser is slowly rotated in the usual way, while the oscillator condenser is swung fairly rapidly backwards and forwards over a small arc until the desired station is picked up. When the receiver is first handled it will be necessary to rotate the oscillator condenser round its full scale for every degree or so of the grid condenser, until the settings of the two which approximately correspond have been discovered.

Subsequently it will be possible to confine the searching with the oscillator condenser within much smaller limits. For any given position of the grid condenser, it will normally be possible to bring in the signals at two distinct settings of the oscillator condenser. Either of these may be chosen by the operator, and in the event of interference from undesired stations it will often be possible by selection of the correct one of the two settings to eliminate the interfering station altogether.

These receivers mentioned are perhaps the most popular of all, and the hints given here we hope will serve a useful purpose. Remember in almost all instances the secret of successful tuning lies in handling the dials very slowly, for, paradoxical as it may seem, it is only by learning slow handling that one can be accomplished at quick tuning. After all one must learn to write slowly before one can do so quickly. Remember, it is true,

**CHECK HAYES, THE TALKATIVE CHAP:** During the past three or four years, various brands of humor having sprung into being. We no longer rely upon the old-fashioned red-nosed comedian, who works hard to get a laugh, and who relies, in his turn, upon a pair of dilapidated trousers and a battered bowler hat to move his audience to mirth. As a matter of fact, this style of humor would not "work" on the wireless, for, as the artist is invisible, the effects would be lost. Instead of this, we have the more or less "docile" comedian, who depends on the smartness of his jokes, and the subtle inflection of his voice, to get points home. One of the latest recruits to the fun makers at 3LO is Mr. Check Hayes, who, billed as the "talkative comedian," has evolved a distinctly original brand of mirth, and "gets away" with some very smart patter, which listeners will find very much to their liking.

# PRICE AND QUALITY.



*Baldwin speaker £1/3/-  
Height 17"; Diameter  
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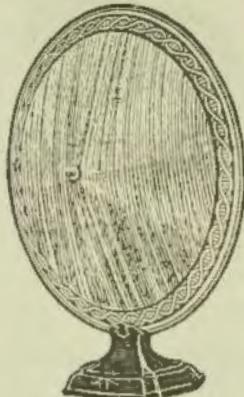
# Let all the Family Hear the Duke of York

Have a Loud Speaker in readiness for the following Historic Broadcasts:—March 26th—Duke of York's arrival. March 27th—Duke's speech to disabled soldiers. March 29th—Duke's speech to Soldiers and Sailors' Imperial League. April 1st—Barbecue. April 2nd—The corroboree. May 9th—Opening of Parliament House at Canberra.



Brown H1.

Brown H1 .....	£7/10/-
" H2 .....	43/5/-
" H3 .....	£4/2/6
" H4 .....	22/-/-
Cabinet Model .....	£8/10/-
Type HQ .....	£8/10/-
Type Q .....	£21/-/-



The "Farrand" Cone Speaker, 80/-.



Amplion AR19.

Amplion AR19 ..	£6/10/-
" AR102 ..	£1/5/-
" AR38 ..	£3/-/-
" AR111 ..	£3/10/-
" AR58 ..	£4/-/-
" AR88 ..	£5/15/-
" AR880 ..	£6/10/-
" AR88M ..	£6/10/-
" AR65 ..	£4/15/-
" Radiolux" Amplion Model RS2 .....	£6/10/-



Amplion AR114, £3/15/-.



"Manhattan" Speaker, 23/-.



The "Crossley Musicon" Speaker, 97/6.

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# BROADCASTING PROGRAMMES

*for the COMING WEEK*

**Friday, March 25**

**2FC, SYDNEY**

**Farmer's Broadcasting Service.**

Wave Length, 442 Metres.

**EARLY MORNING SESSION.**

- 7 a.m.—"Big Ben" and announcements.
- 7.5 a.m.—Studio music.
- 10 a.m.—Official weather forecast, rainfall, temperatures, astronomical messages, shipping intelligence, mail service.
- 10.30 a.m.—Investment market, mining share markets, metal quotations.
- 10.45 a.m.—Wool sales, headcounts, markets, Inter-State markets, produce markets.
- 11.45 a.m.—"Sydney Morning Herald" news service.
- 12.15 p.m.—"Big Ben," Studio music.
- 12.15 p.m.—Close down.

**MORNING SESSION**

- 9.30 a.m.—Marching music for school children.
- 9.45 a.m.—Studio music.
- 10 a.m.—"Big Ben" and announcements.
- 10.30 a.m.—Late "Sydney Morning Herald" news service.
- 10.45 a.m.—Studio music.
- 11.45 a.m.—A serial story.
- 11.50 a.m.—"Big Ben," Australian Press Association and Reuter's cable services.
- 11.55 a.m.—A talk on Home Cooking and Recipes by Miss Ruth Furst.
- 11.55 a.m.—Marching music for school children.
- 11.55 a.m.—Close down.

**MIDDAY SESSION.**

- 12 noon—"Big Ben" and announcements.
- 12.30 p.m.—Stock Exchange, first call.
- 12.35 p.m.—Studio music.
- 12.50 p.m.—Rugby wireless news.
- 12.55 p.m.—Miss Kathleen Horn, soprano ("Piper Jane") (Carey).
- 1 p.m.—"Big Ben," Weather intelligence.
- 1.30 p.m.—"Evening News" midday news service.
- Producers' Distributing Society's report.
- 1.30 p.m.—Studio music.
- 1.35 p.m.—Stock Exchange, second call.
- 1.40 p.m.—Marching music for school children.
- 1.45 p.m.—Miss Kathleen Horn, soprano ("Until") (Sanderson).
- 1.50 p.m.—Studio music.
- 2 p.m.—"Big Ben," Close down.

**AFTERNOON SESSION.**

- 2.30 p.m.—The Chimes of 2FC.
- 2.45 p.m.—A vocal recital by the pupils of Madame Skapelska.
- 3 p.m.—"Big Ben," A talk on Scotland Yard by Mr. S. H. Bowden.
- 3.15 p.m.—Further vocal items arranged by Madame Skapelska.
- 3.30 p.m.—Marching music for school children.
- 3.45 p.m.—FROM FARMER'S TEA ROOMS: Miss Alice Kent, mezzo ("Powder and Patches" (Phillips)).
- 3.45 p.m.—Poetry by the Student: Mr. Leslie Pearce, telephone calls.
- 3.45 p.m.—Studio music.
- 4 p.m.—"Big Ben," FROM FARMER'S TEA ROOMS:

Miss Mervyl Holliday, contralto;

- "Meadow Sweet" (Draize).
- 4.30 p.m.—A music talk by Mr. Ewart Chapple.
- 4.30 p.m.—FROM FARMER'S TEA ROOMS: Miss Alice Kent, mezzo;
- "Sing, Sing, Blackbird" (Phillips).
- 4.30 p.m.—Studio music, xylophone solo.
- 4.40 p.m.—FROM FARMER'S TEA ROOMS: Miss Mervyl Holliday, contralto;
- "Dreams of the Hawk" (D'Hardelet).
- 4.45 p.m.—Stock Exchange, third call.
- 4.45 p.m.—Close down.

**EARLY EVENING SESSION**

- 4.45 p.m.—The Chimes of 2FC.
- 5 p.m.—The "Hello Man" talks to the children.
- 5.30 p.m.—A story about the Duke and Duchess of York.
- 6.00 p.m.—Dinner music from FARMER'S GAK HALL.
- 6.30 p.m.—Instrumental and vocal items.
- 7 p.m.—"Big Ben." Last minute sporting information by the 2FC Racing Committee.
- 7.30 p.m.—Dalseth's market reports (wool, wheat and stock).
- 7.45 p.m.—Fruit and vegetable markets.
- 7.50 p.m.—Weather and shipping intelligence.
- 7.55 p.m.—Late "Evening News" news service.

**NIGHT SESSION**

- 7.45 p.m.—Announcing a programme specially prepared for the approaching entrance into Sydney Heads of the "RENEWN."
- 7.45 p.m.—The Leichhardt District Band.
- 8 p.m.—"Big Ben," Mr. Alfred Cunningham, baritone.
- 8.45 p.m.—The Leichhardt District Band.
- 8.45 p.m.—Miss Alice Kent, contralto;
- "Song of the Fisherman" (Coates).
- 8.50 p.m.—Mr. Billie Price, entertainer.
- 8.54 p.m.—The Leichhardt District Band.
- 8.58 p.m.—Mr. Charles Lawrence, entertainer;
- "All about Love" (Gwen).

## NEW SOUTH WALES "A" AND "B" CLASS BROADCASTING STATIONS.

- 2FC—Farmers' Broadcasting Station, Ltd., Sydney, wavelength 442 metres, power 500 watts.
- 2BL—Broadcasters' Ltd., Sydney, wavelength 353 metres, power 6000 watts.
- 2GB—Theosophical Broadcasting Station, Ltd., Sydney, wavelength 310 metres, power 300 watts.
- 2KX—Trades and Labor Council, Sydney, wavelength 250 metres, power 100 watts.
- 2W—Oltre Sandel, Sydney, wavelength 357 metres, power 500 watts.
- 2UX—Oltre Sandel, Wagga, wavelength 360 metres, power 100 watts.
- 2MK—Muskies Bros., Burleigh, wavelength 275 metres, power 250 watts.
- 2UE—Electrical Utilities Supply Co., Sydney, wavelength 250 metres, power 250 watts.
- 2BE—Burgen Electric Co., Sydney, wavelength 314 metres, 100 watts.
- 2HD—H. A. Daniels, Newcastle, wavelength, 258 metres, 100 watts.

2.45 p.m.—Miss Gwendoline Fimister, soprano.

- 2.49 p.m.—Mr. Alfred Cunningham, baritone.
- 2.52 p.m.—The Leichhardt District Band.

2.55 p.m.—"Big Ben." A message of welcome to our ROYAL VISITORS.

3 p.m.—The Pearl of Bellis, after which Mr. Alfred Cunningham will sing (with effects) a song of welcome, specially written for the occasion.

- 3.15 p.m.—The Leichhardt District Band,
- 3.20 p.m.—Miss Alice Prosser, contralto.

3.25 p.m.—Mr. Ellis Price, entertainer.

- 3.30 p.m.—Mr. Harrison White, banjo solo.
- 3.35 p.m.—The Leichhardt District Band.

3.45 p.m.—Mr. Charles Lawrence, entertainer.

- 3.45 p.m.—"Big Ben," (Harold.)
- 3.50 p.m.—"That Cat" (Burroughs).

3.55 p.m.—Mr. Alfred Cunningham, baritone.

- 3.58 p.m.—Miss Gwendoline Fimister, soprano.
- 3.58 p.m.—Transmission from the Trocadero Theatre.

4 p.m.—FROM THE STUDIO:

- Mr. Harrison White, banjo solo.

4.15 p.m.—Late news and announcements.

- 4.15 p.m.—"Big Ben." The WENTWORTH SYMPHONIC DANCE ORCHESTRA (conductor, Mr. Sydney Simpson) is popular numbers until midnight.

12 midnight—"Big Ben." National Anthem. Close down.

**2BL, SYDNEY**

**Broadcaster's Ltd.**

Wave Length, 353 Metres.

**Friday.**

## EARLY MORNING SESSION.

- 7.15 a.m.—G.P.O. clock and chimes.

7.16 a.m.—Metropolitan weather forecast.

- 7.17 a.m.—Musical programme from the Studio.

7.28 a.m.—Physical training and health exercises.

- 7.30 a.m.—G.P.O. clock and chimes.

7.31 a.m.—Hints on health.

- 7.36 a.m.—Physical training and health exercises.

7.45 a.m.—G.P.O. clock and chimes.

- 7.46 a.m.—Weather report.

7.47 a.m.—Broadcasters' special news service.

- 7.48 a.m.—G.P.O. clock and chimes.

Close down.

## MORNING SESSION.

- 10 a.m.—G.P.O. Clock and chimes.

10.1 a.m.—Weather report.

- 10.3 a.m.—Musical programme from the Studio.

10.39 a.m.—News service from the "Daily Telegraph."

- 10.45 a.m.—Musical programme from the Studio.

11 a.m.—G.P.O. clock and chimes.

- 11.1 a.m.—News fit to fit the "Daily Telegraph."

11.16 a.m.—Babbin market report.

- 11.17 a.m.—Flax market report.

11.19 a.m.—Vegetable market report.

- 11.21 a.m.—Fruit market report.

11.23 a.m.—Lamb, dairy, farm, egg, and poultry market report.

11.55 a.m.—London news bulletins.  
12.29 p.m.—Ships in call by wireless.  
12.31 a.m.—Information re interstate and overseas mails.  
12.39 p.m.—Shipping information—arrivals and departures.  
12.40 a.m.—Woman's program—Talk on "Golf" with Miss L. Taylor, broadcaster women's sports authority.  
12.45 a.m.—Social notes from Mrs. Jordan.  
12.55 a.m.—Mrs. Jordan replies to correspondents.  
12.55 p.m.—Talk on "Feeding Our Family" by Mrs. Jordan.  
12.55 p.m.—G.P.O. clock and chimes.  
12.55 p.m.—Weather report.  
12.55 p.m.—Sydney Stock Exchange calls.  
12.55 p.m.—News reports from overseas.  
12.55 p.m.—Billiter's Instrumental Quartet—Direction: Corp. Cartlidge.  
1.00 p.m.—G.P.O. clock and chimes.  
1.02 p.m.—Weather report.  
1.05 p.m.—Sydney Stock Exchange calls.  
1.05 p.m.—News from the "Sun."  
1.15 p.m.—Musical programme from the Studio.  
2 p.m.—G.P.O. clock and chimes.  
Close down.

## AFTERNOON SESSION:

Racing information broadcast by courtesy of the "Sun".  
9 p.m.—G.P.O. clock and chimes.  
11 p.m.—Weather report and forecast.  
11.30 p.m.—Social notes from the "Sun."  
11.35 p.m.—News from the "Sun."  
11.45 p.m.—U.S.A. Service Stars Trio—direction: Miss Le Cozette, violin.  
2.00 p.m.—G.P.O. clock and chimes.  
3.31 p.m.—News from the "Sun."  
3.45 p.m.—Musical programme from the Studio.  
4 p.m.—G.P.O. clock and chimes.  
4.15 p.m.—Civil Service Stars Trio.  
4.15 p.m.—Serial story.  
4.30 p.m.—G.P.O. clock and chimes.  
4.30 p.m.—Musical programme from the Studio.  
4.45 p.m.—Producers' Distributing Society's fruit and vegetable market report.  
4.50 p.m.—Shipping information when available.  
4.55 p.m.—Day's racing results on race days.  
4.55 p.m.—News from the "Sun."  
4.55 p.m.—Review of night's programme.  
5 p.m.—G.P.O. clock and chimes.  
Close down.

## EARLY EVENING SESSION:

6.02 p.m.—G.P.O. clock and chimes.  
6.45 p.m.—Little Willie and Daily Long Legs will entertain the kiddies.  
6 p.m.—The pupils of Miss Weston Smiley will entertain the kiddies.  
6.45 p.m.—Musical programme from the Studio.

## SPECIAL COUNTRY SESSION:

7 p.m.—G.P.O. clock and chimes.  
Australian Merriwa Land and Finance Co. report.  
Weather report and forecast.  
Stock Exchange calls.  
Producers' Distributing Society's fruit and vegetable market report.  
Grain and fodder report ("Sun").  
Dairy produce report ("Sun").  
7.15 p.m.—Country news from the "Sun."  
7.30 p.m.—Talk on "Gardening Science" by Mr. G. Cooper, Park Superintendent of City Council.  
7.45 p.m.—Talk on "The Tour of the Reindeer" by Mr. Holden.  
8 p.m.—G.P.O. clock and chimes.  
Broadcaster's Topical Chorus.  
8.30 p.m.—Mr. Albert Cartlidge, comedian.  
8.30 p.m.—Mr. Stan Cartlidge, comedian.  
8.27 p.m.—Miss Myrtle Hobbs, soprano.  
8.34 p.m.—Miss Eily Daigleish, soprano.

8 p.m.—G.P.O. clock and chimes.  
Weather report and forecast by courtesy of Mr. C. J. Marx, Government Meteorologist, Melbourne.  
8.11 p.m.—Miss Marx Neal, comedian.  
8.15 p.m.—Review of following day's programme.  
Announcements.  
8.20 p.m.—Mr. Albert Cartlidge.  
9.11 p.m.—The Sporting Editor of the "Sun" will talk on the prospects of Saturday's racing.  
9.11 p.m.—Mr. Stan Cartlidge.  
9.15 p.m.—Interval.  
9.45 p.m.—Broadcasters' Trio.  
9.45 p.m.—Miss Myrtle Hobbs.  
10 p.m.—G.P.O. clock and chimes.  
10 p.m.—Mr. Stan Cartlidge.  
10.15 p.m.—Miss Mary Neal.  
10.15 p.m.—The Ambassadors' Dance Band broadcast from the ballroom of the Ambassador Hotel. During the intervals between dances news reports by courtesy of the "Sun" will be broadcast.  
10.45 p.m.—G.P.O. clock and chimes.  
National Anthem.

## 2GB, SYDNEY

Theatrical Broadcasting Service  
Wave Length, 316 Metres.

## Friday.

## MORNING SESSION:

Choir House conducted by Mr. J. K. Powell.  
9 a.m.—Music.  
9.15 a.m.—Psychological Class.  
9.15 a.m.—Music.  
9.15 a.m.—Biographical Talks for Schools.  
9.15 a.m.—Music.  
9.45 a.m.—Close down.

## AFTERNOON SESSION:

2.30 p.m.—Music.  
2.45 p.m.—Talk.  
4 p.m.—Music.  
4.15 p.m.—Talk.  
4.20 p.m.—Music.  
4.30 p.m.—Talk.

## INTERSTATE "A" AND "B" CLASS BROADCASTING STATIONS.

**SLO**—Broadcasting Company of Australia, Ltd., Melbourne, wavelength 725 metres, power 5000 watts.  
**GTC**—Government Radio Service, Brisbane, wavelength 385 metres, power 2000 watts.  
**CLC**—Central Broadcasters' Ltd., Adelaide, wavelength 495 metres, power 5000 watts.  
**WEF**—Western Farmers, Ltd., Perth, wavelength 1250 metres, power 5000 watts.  
**ZL**—Tasmanian Broadcasters, Ltd., Hobart, wavelength 630 metres, 3000 watts.  
**JAR**—Associated Radio Co., Ltd., Melbourne, wavelength 484 metres, power 1600 watts.  
**JDB**—Druidic Business and Technical College, Melbourne, wavelength 255 metres, power 800 watts.  
**12ZG**—O. J. Nitze & Co., Melbourne, wavelength 319 metres, power 300 watts.  
**GR**—Gold Radio Electric Service, Toowoomba, Queensland, wavelength 284 metres, power 100 watts.  
**SKA**—Sport Radio, Broadcasting Station, Adelaide, wavelength 256 metres, power 1000 watts.  
**SDN**—SDN Pty. Ltd., Adelaide, wavelength 212 metres, 600 watts.

## EVENING SESSION:

8.30 p.m.—Children's Session conducted by Mr. Powell.  
8.30 p.m.—Music.  
8.30 p.m.—Address by The Rev. G. S. Arundale, "Is man really want to be happy?"  
8.30 p.m.—Music.  
8.30 p.m.—Cheerful Talk.  
8.30 p.m.—Violin solo, DAN SCULLY.  
8.30 p.m.—Address by Professor Ernest Head.  
8.30 p.m.—Short talk on Beethoven in commemoration of his death, followed by a programme of chamber music and songs from his works.  
8.30 p.m.—Violin and piano duet, by Beethoven soloist, DAN SCULLY, ADA BROOK.  
8.30 p.m.—Piano Sonata, by Beethoven.  
8.30 p.m.—Piano Solo, by Dorothy Brock.  
8.30 p.m.—Music by Dorothy Brock.  
8.30 p.m.—Organ Solo, artist, Nellie Barnes.  
8.30 p.m.—Announcements.  
8.30 p.m.—Topical Talk.  
8.45 p.m.—An half hour with the 212B String Quartet, LLOYD DAVIES, MONICA DAVIES, CHARLES HOWITT, MURIEL LANE.  
8.50 p.m.—Songs by Beethoven, artist, Nellie Barnes.  
8.55 p.m.—Cheerful Talk.  
9 p.m.—Great Thoughts from Great Minds.

## 3LO, MELBOURNE

Broadcasting Co. of Aust.  
Wave Length, 371 Metres.

## Friday.

## MIDDAY SESSION:

## THE STUDIO ORCHESTRA:

**MASON WOOD**, baritone.  
**AGNES FORTUNE**, piano.  
**ALMA HORLOCK**, soprano.  
**DOROTHY ROXBURGH**, violin.  
**CHECK HAYES**, The Talkative Chap.  
Announcer ..... ALFRED ANDREW.  
Accompanist ..... AGNES FORTUNE.  
Results of Public Schools Cricket will be given at Luncheon, Tea and Stumps adjustments.

12 noon Time signal, British Official Wireless news from Rugby, Reuters' and the Australian Press Association cables, Stock Exchange information, "Argus" and "Herald" news services.

## 12.30 p.m.—STUDIO ORCHESTRA:

12.40 p.m.—**MASON WOOD**, baritone: "Turner's Song"—Carmon (Bliss).  
12.47 p.m.—**AGNES FORTUNE**, piano: "Thou'rt like a lovely flower" (Schumann); "When Love is Kind".  
1.15 p.m.—**ALMA HORLOCK**, soprano: "Two Novelties" (Adeste).  
1.15 p.m.—**DOROTHY ROXBURGH**, violin: "Internous" (Brani).  
1.23 p.m.—**E. MASON WOOD**, baritone: "Uncle Romeo" (Homey).  
1.30 p.m.—**THE GANG OF ALL** (Macbeth).  
1.30 p.m.—**STUDIO ORCHESTRA**: "Three Irish Pictures" (Anon).  
1.40 p.m.—**ALMA HORLOCK**, soprano: "Una Voce" (Burke of Seville).  
1.47 p.m.—**CHECK HAYES**, The Talkative Chap, has a "Talkative Afric".  
1.55 p.m.—**STUDIO ORCHESTRA**: "A Deep Sea Romance" (Lake).  
2 p.m.—Close down.

## AFTERNOON SESSION:

## Speakers:

"AU FAIT" .....  
MISS M. CALLOWAY MAHOGAN,  
GORDON AND PERINER,  
MAGGIE FOSTER, Violin.  
KEITH DESMOND, Electrical.  
MARJORIE VERE, Soprano.  
ORGAN RECITAL BY DR. FLOYD.

## THE STUDIO ORCHESTRA.

- Announcer ..... ALFRED ANDREW  
Accompanist ..... AGNES FORTUNE  
2 p.m.—STUDIO ORCHESTRA:  
"Reve Angelique" (Rabenstein).  
3.10 p.m.—"AU FAIT" of Music. Buckley & Nunn Ltd.: Fashion Talk.  
3.25 p.m.—DR. FLOYD will give an Organ Recital from the Central Organ.  
1. "Elsa's Bridal Procession" in the Cathedral; from Lohengrin (Wagner).  
2. "Bridal March"—Lohengrin (Wagner).  
3. "The Question" (Wolsteholme).  
4. "The Answer" (Wolsteholme).  
5. "Two Old Church Tunes illustrating specified varieties of Organ Tone."  
3.40 p.m.—OSBORNE AND PERRYEE: "Flickers of Fun".  
4.00 p.m.—STUDIO ORCHESTRA: "Glimpses of London" (Herbert Grey).  
4.00 p.m.—MAGGIE FOSTER, violin: "Melody in E".  
"Walker's Prize Song".  
4.15 p.m.—KEITH DESMOND, elocutionist: "The Girl on the Stair"; "Snows".  
4.14 p.m.—STUDIO ORCHESTRA:  
"A Dervish Chorus" (Rebel).  
4.25 p.m.—MARJORIE EWER, soprano: "A Day in May".  
"Will you think of me" (O'Hagan).  
4.35 p.m.—MRS. M. CALLAWAY MAHOU: "Art in Modern Life".  
4.45 p.m.—"Herald" news service. Stock Exchange information.  
5 p.m.—Close down.

## EVENING SESSION.

- 6.40 p.m.—CHILDREN'S HOUR. Answers to letters and birthday greetings.  
6.55 p.m.—TRELLA READY will give you two little melodies on her harp.  
6.2 p.m.—ALMA HURLOCK, soprano: "Tiny Songs for Tiny Tots".  
6.6 p.m.—"BILLIE BUNNY" will tell the latest news story.  
6.15 p.m.—ALMA HURLOCK, soprano: Will give two more little songs.  
6.20 p.m.—"BILLY BUNNY" Stories: "The Queen Bee"; "The Black Princess".  
6.35 p.m.—"Argus" and "Herald" news services. Weather synopsis, shipping movements.  
6.47 p.m.—Stock Exchange information.  
6.52 p.m.—Fish Market reports by J. B. BORDELL.  
6.55 p.m.—River reports.

- 6.58 p.m.—Market reports by the Victorian Producers' Co-operative Co. Ltd. Haymarket sheep sales. Poultry, Grain, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions.  
7.8 p.m.—Market reports of Fruit, by the Victorian Producers' Association, compiled by the "Fruit World", exclusive to SLO. Market prices of Oranges and Lemons by the Victorian Central Citrus Association Pty. Ltd.

## NIGHT SESSION.

- Speakers:  
MR. D. B. ADAM, MR. H. K. LOVE  
"CARDIGAN".  
THE STUDIO ORCHESTRA.  
HASTINGS AND ADAIR.  
TASMA TIERMAN, Cello.  
KEITH DESMOND.  
MADAME E. ASHLEY, Soprano.  
REG. WYKEHAM AND PRESSY PRESTON.  
SYD. L. EXTON, Tenor.  
OSBORNE AND PERRYEE.  
BESSIE GAUNSON, Violin.  
CHECK HAYES, The Talkative Chap.  
THE COLLINGWOOD CITIZENS' BAND  
Announcer ..... MAURICE DUDLEY  
Accompanist ..... AGNES FORTUNE  
7.15 p.m.—Under the auspices of the Department of Agriculture, MR. D. B. ADAM, Vegetable Pathologist, will speak.  
7.30 p.m.—STUDIO ORCHESTRA:  
"Serenade" (Moszkowski).

7.30 p.m.—HASTINGS AND ADAIR:  
Song, "Looking at the world through rose-colored glasses".

"Hello, Little Girl of my Dreams." Comedy, "I know where the Flies Go".

7.45 p.m.—TASMA TIERMAN, cello: "Chant Sans Paroles" (Tschaikowsky).

7.45 p.m.—KEITH DESMOND:  
"Shicker" (Spose); "The Gossamer".

8.12 p.m.—COLLINGWOOD CITIZENS' BAND conductor, Mr. F. C. Johnston: "A Rustic Suite".

8.12 p.m.—MADAME E. ASHLEY, soprano: "Il Bacio".

"Little Brown Cottage".

8.19 p.m.—STUDIO ORCHESTRA: "Rose Marie" (Frucht).

8.21 p.m.—CHECK HAYES, The Talkative Chap: "The Gossamer".

8.25 p.m.—SALLY, not the same old Sally?" "I ain't in love no more—and no wonder."

8.25 p.m.—COLLINGWOOD CITIZENS' BAND "Boocheria's Minuet".

Duet from "Il Trovatore"—"Misere", Solotka, W. Honey and A. Thorne.

8.45 p.m.—SYD. L. EXTON, tenor: "Mary" (Richardson).

"The Secret" (Scott).

8.45 p.m.—MR. H. K. LOVE: "Technique Talk".

8.45 p.m.—STUDIO ORCHESTRA: "St. Agnes Eve" (Caligari Taylor).

8.45 p.m.—MADAME E. ASHLEY, soprano: "If I were a Lark" (Chamfort).

"The Market" (Caruso).

8.55 p.m.—OSBORNE AND PERRYEE: "Radio Frolics".

9.02 p.m.—COLLINGWOOD CITIZENS' BAND March: "British March".

9.05 p.m.—MR. D. ADAM: Mr. H. A. Wallis, Supervisor of the "Argus" and "Australian", will speak on Saturday's Races.

9.15 p.m.—E. MARION WOOD, baton: Selected.

9.05 p.m.—STUDIO ORCHESTRA: "The Merry Willow" (Letts).

10.00 p.m.—"Argus" news service. British Official Wireless news.

10.15 p.m.—BESSIE GAUNSON, violin: "Ave Maria" (Gasparini).

10.20 p.m.—REG. WYKEHAM AND PRESSY PRESTON: Sketch, "The Artist".

## NEW ZEALAND STATIONS:

1YA, Auckland, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 500 Watts; Wavelength, 420 Metres. Silent Night, Monday.

2YK, Wellington, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 120 Watts; Wavelength, 295 Metres.

3YA, Christchurch, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 500 Watts; Wavelength, 400 Metres. Silent Night, Thursday.

4YA, Dunedin, The Radio Broadcasting Co. of New Zealand, Ltd.

Power 750 Watts; Wavelength, 380 Metres.

2YM, The Gisborne Radio Co., Gisborne.

Power 50 Watts; Wavelength, 260 Metres.

10.45 p.m.—SYD. L. EXTON, tenor: "The Spirit Flower"; "Ailsa Mine".

10.45 p.m.—COLLINGWOOD CITIZENS' BAND: Selection, "Rigoletto".

10.45 p.m.—Meteorological information. Announcements.

11 p.m.—OUR GREAT THOUGHT: "Discretion and hard savor are the twin of humor."—Ben Jonson and Fletcher.

11.1 p.m.—JOE ARONSON AND HIS SYNC-SYMPHONISTS: "I wish I had my old gal back" (Yellow).

"Dixie" (Blackbird) (Dixie).

"In a Little Spanish Town" (Wayne), "Idolizing" (West).

"That's Why I Love You" (Donaldson).

"To-night's My Night with Baby" (Moyer), "Dreaming of Castles in the Air" (Ward), "Burgundy" (Male).

"Am I waiting my Time" (Bilby).

"A Little Bit Colored" (Steiger).

"Hi Ho, the Merry" (Brown).

"John the Waiter" (Ari, Brown).

"Let's Talk about my Sweetie" (Kahn).

"I Wish You were Jasmin of Me" (Rowell).

"That Samson and Delilah Melody" (Grey).

11.45 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE

Queensland Radio Service

Wave Length, 385 Metres.

Friday

## MIDDAY SESSION.

1 p.m.—Market reports. Weather information. The Daily Mail" news. "The Daily Standard" news.

1.15 p.m.—From Hotel Carlton: Lunch Hour music played by Hotel Carlton Symphony Orchestra.

1.45 p.m.—From the Observatory: Standard Time Signal.

2 p.m.—Close down.

## AFTERNOON SESSION.

3.30 p.m.—From Hotel Carlton: Afternoon Tea Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.

4.15 p.m.—"The Telegraph" news.

4.30 p.m.—Close down.

## EARLY EVENING SESSION.

5 p.m.—"Daily Standard" news. Weather information. Announcements.

6.30 p.m.—Bellring Stories by "The Sandman".

7 p.m.—Market reports. Stock reports. Letters from Farmers. "Farmers' Letter" by J. F. F. Reid (Editor, Queensland Agricultural Journal). 7.45 p.m.—Weather news. Announcements.

7.45 p.m.—Standard Time signal.

## NIGHT SESSION.

7.45 p.m.—Lecture sessions: "The Modern Novel"; Mr. R. V. Smith (Liberian Workers' Educational Association).

## IPSWICH CITY ORCHESTRA.

The first portion of tonight's programme will comprise the broadcasting of a concert by the Ipswich City Concert Orchestra, and will be relayed from the Town Hall, Ipswich.

8 p.m.—From the Town Hall, Ipswich: Orchestra, march, "Triana" (Lope), the Ipswich City Concert Orchestra (conductor, Mr. T. H. Edwards); Lester, Mr. "Phantom"; solo, "Billie Holiday"; "The Moon is Blue" (Wagner); Miss Nancy McNeice, orchestra, "Bricklayer Sparrow" (Baldini); instrumental trio, Serenata (Torvaldi); Miss Jessie Hargraves (harp); Mr. E. Fitzpatrick (violin); Mr. T. White (cello); tenor solo, "Goodnight, Beloved"; Orchestra, orchestra, "Egyptian Ballet" (Lugnini), the Ipswich City Orchestra.

9 p.m.—From the Studio: Weather news.

Friday, 25th March, 1927.

## BOYS' CLUB NIGHT.

The second portion of the concert provided by the Theatrical Estate Freechildren Boys' Club will be relayed from the South Brisbane Town Hall. The programme will include: Soprano solo by Mrs. P. Knott; violin solo by Mr. Luis Amadeo Fares; tenor solo, Mr. W. W. Cripe; mezzo-soprano, Miss G. Whiddup; bass solo by Mr. Stanley Tamblyn; Hawaiian instrumentals; drums; Molars; Gardner and Black's contralto solo; Mr. Bleek's piano solo; Mr. Tait.

10 p.m.—From the Studio: Week-end road information for motorists, officially supplied by the Royal Automobile Club of Queensland. "The Daily Mail" news. Weather news. Close down.

## 5CL, ADELAIDE

Central Broadcasters, Ltd.

Wave Length, 395 Metres.

## Friday.

## MORNING SESSION.

12 noon—G.P.O. Chimes.

12.15 p.m.—Selections from Autogene Reproductor and new Reproductor Scores.

12.30 p.m.—Advertiser's news service.

12.55 p.m.—Market reports.

1 p.m.—Musical programme continued.

2 p.m.—G.P.O. Chimes, and close down.

## AFTERNOON SESSION.

3 p.m.—From Maple Leaf Cafe—Orchestral selections.

3.15 p.m.—Selections from the Studio.

4 p.m.—G.P.O. Chimes.

4.15 p.m.—Relay from the Arctic Cafe—Orchestral numbers.

4.35 p.m.—Market reports.

5 p.m.—G.P.O. chimes. Close down.

## EVENING SESSION.

6 p.m.—G.P.O. Chimes.

6.15 p.m.—Dinner music.

7 p.m.—Feature stories.

7.30 p.m.—Market reports.

7.45 p.m.—Song by "Metropolitans."

8 p.m.—G.P.O. chimes.

8.15 p.m.—Relay from Malcolm Reid's, Orchestral selections.

8.15 p.m.—Song, Miss Eliza Elford.

8.18 p.m.—Malcolm Reid's orchestra.

8.24 p.m.—Song, Mr. Eric Stephenson.

8.30 p.m.—Song, Miss Dorothy Newlyn.

8.42 p.m.—Song, Miss Alice Newlyn.

8.44 p.m.—Malcolm Reid's Orchestra.

8.45 p.m.—G.P.O. chimes.

9.1 p.m.—Weather report.

9.15 p.m.—Relay from the Arctic cafe.

9.15 p.m.—Paint from the Arctic champion.

9.35 p.m.—Song, Mr. Kevin Stewart.

9.40 p.m.—Song, Mr. Harry Warden.

9.43 p.m.—Hans Solo, Mr. Seth Smith.

9.47 p.m.—Song, Miss Eliza Elford.

9.47 p.m.—Malcolm Reid's orchestra.

9.47 p.m.—Song, Mr. Eric Stephenson.

10 p.m.—G.P.O. chimes.

10.15 p.m.—Advertiser's news service.

10.25 p.m.—Malcolm Reid's concert continued.

10.25 p.m.—Song, Miss A. Newlyn.

10.27 p.m.—Bango solo, Mr. Seth Smith.

10.27 p.m.—Song, Mr. Eric Stephenson.

10.27 p.m.—Malcolm Reid's orchestra.

10.42 p.m.—Song, Mr. Harry Warden.

10.45 p.m.—Song, Miss A. Newlyn.

10.45 p.m.—Malcolm Reid's orchestra.

10.45 p.m.—Song, Mr. Eric Stephenson.

11 p.m.—G.P.O. chimes, and close down.

## 6WF, PERTH

West Australian Farmer's,

Wave Length, 1250 Metres.

## Friday

10.30 p.m.—Tone in.

12.15 p.m.—First local news bulletin. Market reports.

Cables.

1 p.m.—Time signal from Perth Observatory.

1.15 p.m.—Weather news supplied by the Meteorological Bureau of Western Australia.

1.30 p.m.—Studio Quintette.

March—"Sports" (Bingo).

Values—"Idiot's Hourglass".

Overture—"Orpheus" (Ostwald).

"Romance" (Reinhardt).

Selection—"Marlboro" (Wallace).

"Les Caravanes" (Gied).

2 p.m.—Close down.

3.30 p.m.—Tone in.

3.30 p.m.—Musical programme.

4.30 p.m.—Close down.

5 p.m.—Tone in.

5.30 p.m.—Musical evening for the children, by Aunt Jessie and Uncle Henry, Leslie, Perry, Ray and Duff.

5.45 p.m.—Stock and share intelligence.

Market reports.

Cables. News supplied by the editor of "The West Australian" Newspaper Co. and the Bureau from Perth Observatory.

5.45 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.

6 p.m.—A REPLAY.

Lecture, No. 2, "The Sonata and its development," by Miss Florence Hood, L.R.A.M.

No. 1, "Smiles for two voices and piano," (Purcell), Misses Wright and Hood.

No. 2, "Morning at Flat" (C. P. E. Bach), Miss Paul, L.H.M.

7 p.m.—From the Studio.

Deems by Miles Mason and De Meester, instrumental duo, and the s.a. Rattomino.

Talk—"Gardening Notes" by Mr. E. A. Hughes, "surviving Moses Dawson and Barron.

10 p.m.—Second local news bulletin, supplied by courtesy of "The Daily News" Newspaper Co.

10.30 p.m.—Close down.

## EVENING SESSION.

6 p.m.—G.P.O. Chimes.

6.15 p.m.—Dinner music.

7 p.m.—Feature stories.

7.30 p.m.—Market reports.

7.45 p.m.—Song by "Metropolitans."

8 p.m.—G.P.O. chimes.

8.15 p.m.—Relay from the Arctic cafe.

8.15 p.m.—Paint from the Arctic champion.

9.35 p.m.—Song, Mr. Kevin Stewart.

9.40 p.m.—Song, Mr. Harry Warden.

9.43 p.m.—Hans Solo, Mr. Seth Smith.

9.47 p.m.—Song, Miss Eliza Elford.

9.47 p.m.—Malcolm Reid's orchestra.

9.47 p.m.—Song, Mr. Eric Stephenson.

10 p.m.—G.P.O. chimes.

10.15 p.m.—Advertiser's news service.

10.25 p.m.—Malcolm Reid's concert continued.

10.25 p.m.—Song, Miss A. Newlyn.

10.27 p.m.—Bango solo, Mr. Seth Smith.

10.27 p.m.—Song, Mr. Eric Stephenson.

10.27 p.m.—Malcolm Reid's orchestra.

10.42 p.m.—Song, Mr. Harry Warden.

10.45 p.m.—Song, Miss A. Newlyn.

10.45 p.m.—Malcolm Reid's orchestra.

10.45 p.m.—Song, Mr. Eric Stephenson.

11 p.m.—G.P.O. chimes, and close down.

## Saturday, March 26

## 2FC, SYDNEY

## MORNING SESSION.

8 a.m.—"Big Ben" and announcements.

8.30 a.m.—FROM THE DECK OF THE NEWLAND AND HUNTER RIVER STEAMER COMPANY'S BOAT, s.s. "GYWDYR" preparing to leave the Heads to take up a position in view of the arrival of the "KESWICK" and "WINDERMERE" (see "Morning Herald") news service will be given, interspersed with items by a brass band on board the "Gywdyr."

This transmission will be carried out by means of a transmitter not erected on the steamer, but placed on land related to the steamer, so as to have them sent in Pendant Hill to broadcast.

The s.s. "Gywdyr" will follow the "Benbow" until anchor is dropped at the place allotted. Descriptions will continue with all the attendant atmosphere and noise.

10.30 a.m.—Interval.

10.30 a.m.—"Big Ben" and announcements.

10.30 a.m.—"Big Ben" FROM THE CRYSTAL PALACE THEATRE, GEORGE STREET, SYDNEY: The Orchestra, conducted by Mr. Harry Stoen.

10.30 a.m.—Miss Mybel Hatchett, soprano; "Korean Invaders" (Donizetti); "Tender Tie" (Delibek).

10.30 p.m.—The 2FC Dance Band, conducted by Mr. Eric Pearce.

10.30 p.m.—Miss Virginia Bassett, contralto.

10.30 p.m.—Mr. Cliff Arnold, novelty pianist.

10.30 p.m.—The CRYSTAL PALACE THEATRE ORCHESTRA, conducted by Mr. Harry Stoen.

8.45 p.m.—FROM THE STUDIO:

Miss Mabel Hatchett, soprano; "Won't you tell me" (Claribel);

8.45 p.m.—Mr. Jack Lundstone, songs at the piano.

9.15 p.m.—Miss Virginia Bassett, contralto.

9.15 p.m.—Miss Dorothy Dwyar, soprano.

9.15 p.m.—Mr. Cliff Arnold, novelty pianist.

There will be news for the "Rowdy" (Owen).

9.30 p.m.—Mr. Jack Lundstone, songs at the piano.

9.45 p.m.—Miss Virginia Bassett, contralto.

9.45 p.m.—The 2FC Studio Dance Band, with the popular quartette, Mr. Len Maurice.

Philcos are Aristocrats among Batteries.



Emmco transforms and amplify music and speech without distortion, because they are designed and manufactured to the highest possible degree of electrical and engineering efficiency. Ratios 2 to 1,  $3\frac{1}{2}$  to 1, 5 to 1,  $7\frac{1}{2}$  to 1 ... 21/.



Made of moulded bakelite, adaptable for all standard valves and with rubber shock absorbing cushions. Emmco valve sockets cannot become displaced by long usage. Springs make positive contact, eliminating all microphonic noises. They are of handsome appearance. Price ..... 4/6



Every detail in the Emmco headphones is manufactured to the highest standard of efficiency. A light spring headband, with sliding adjustment, on each earpiece, enables them to be worn with utmost comfort. Price ..... 21/-

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Before you buy the parts for your new 1927 receiver inspect EMMCO components at your dealer's. You will find that the EMMCO parts illustrated on this page have no superior in price or quality. In other words EMMCO parts mean Economy and Efficiency.



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Bakelite moulded frame, ball-bearing adjustment and pig-tail connection are main features of the Emmco straight line frequency condenser. Prices, .0005, .25; .00035, .23/6; .00025, .22/6.

## 10.5 p.m.—THE CRYSTAL PALACE THEATRE ORCHESTRA

10.15 p.m.—Miss Dorothy Dower, soprano.  
10.20 p.m.—Miss Dorothy Arnold, novelty pianist.  
10.25 p.m.—Miss Virginia, comic contralto.  
10.30 p.m.—The EPO Studio Dance Band.  
10.45 p.m.—Miss Dorothy Dower, soprano.  
10.55 p.m.—Trombone solo by Mr. Harry Mandel.

10.55 p.m.—Late news and announcements.  
11 p.m.—"Big Ben." The EPO Studio Dance Band.

**NOTE:** During the evening opportunity will be taken for transmission and descriptions of incidents in connection with the historic landing, including actual stories told from the streets and on the harbour, and our studio will be spared to convey to listeners a complete outline of what is happening in Sydney.

11.15 p.m.—FROM THE WENTWORTH CAPE: The Wentworth Symphonie Dance Orchestra in popular numbers until midnight. Conductor, Mr. Sydney Simpson.  
midnight—"Big Ben."  
National Anthem.  
Close down.

## 3LO, MELBOURNE

Saturday.

ORPHIC SCHOOLS CRICKET. Results will be given at Latrobe, Tiv, and Stamps. Kyneton.

11.30 a.m.—STUDIO ORCHESTRA: "Pilgrim Chorus" ("Tannhauser"). "Evening Star" ("Tannhauser").

11.45 a.m.—C. RICHARD CHIGH, radio: "Clown's Fortune" ("Korngold").

11.55 a.m.—STUDIO ORCHESTRA: "Ballet Music from William Tell" (Russia).

12.15 p.m.—IAN GENEOREX, baritone of the Royal Marie Can, by permission of J. C. Williamson Ltd.: "The Hills of Donegal" (Sutherland). "I Love You Truly" (Jacobs-Ross).

12.30 p.m.—THELMA READY: "Hear me now."

12.45 p.m.—STUDIO ORCHESTRA: "An Idol" ("Cagliari").

12.55 p.m.—KEITH DESMOND, clarinettist: "Gimme the Ground" ("Rouse").

1.00 p.m.—Tele signal: British Official Wireless News from Rugby. Reuters' and the Australian Press Association Cable. Stock Exchange information: "Argus" and "Herald" news services.

1.00 p.m.—STUDIO ORCHESTRA: "Summer Days Suite" (Gates).

1.10 p.m.—IAN DEVEREUX, baritone: "The world is awake, Beloved."

1.15 p.m.—THELMA READY, banjo: "Popular air."

1.30 p.m.—HASTINGS AND ADAIR: "In a comedy sketch, Walk and Measures."

1.45 p.m.—STUDIO ORCHESTRA: "Peer Gynt Suite"—Part I.

1.55 p.m.—Metronome information. Weather report for Victoria, Tasmania, South Australia, and New South Wales.

2.00 p.m.—HARJORIE VERL, soprano: "Moon Song."

"Thrush's Love Song."

2.15 p.m.—CHECK HAYES, The Talkative Chap: "Silver Moon; All Mine."

"The Wedding of Dame Malone."

2.30 p.m.—STUDIO ORCHESTRA: "Peer Gynt Suite"—Part 2.

2.45 p.m.—MARJORIE VERL, soprano: "Just around the Corner" (Tilse). Selected.

2.55 p.m.—STUDIO ORCHESTRA: "It Happened in Nordland" (Herbert).

3.00 p.m.—Description of Two Year Old Handicaps. MENTONE RACES, by "Musket" of the "Sporting Globe."

## AFTERNOON SESSION.

3.15 p.m.—Description of MENTONE PLATE. MENTONE Races, by "Musket" of the "Sporting Globe."

3.30 p.m.—JOE ARONSON AND HIS SYNCOPHONISTS: "I'm a Roaman on the Veige?"

"Doin' the Country with Me."

"Mary Land."

"Ring-a-ring of the Bells."

"A Cup of Coffee, a Sandwich and You."

"Somebody's Lonely."

3.45 p.m.—Description of BRISBNE STEEPLE CHASE. Races, by "Musket" of the "Sporting Globe."

3.55 p.m.—JOE ARONSON AND HIS SYNCOPHONISTS: "Until Tomorrow."

"Piano-ing."

"Baby Face."

"Let's all Henry Ford."

"Hello Alice."

"I Don't Want Nobody but You."

"A Night of Love."

4 p.m.—Description of MENTONE HANDICAP. MENTONE Races, by "Musket" of the "Sporting Globe."

4.15 p.m.—JOE ARONSON AND HIS SYNCOPHONISTS:

"Beside a Garden Wall."

"Just one more kiss."

"Just a Bird's Eye View of my old Kentucky Home."

"Thinking of you."

"I wish I had my old Gal back."

4.30 p.m.—Description of MENTONE PURSE. MENTONE Races, by "Musket" of the "Sporting Globe."

4.45 p.m.—JOE ARONSON AND HIS SYNCOPHONISTS:

"The Samson and Delilah Melody."

"On the Riviera."

"Some other bird, whistled a tune."

4.55 p.m.—Description of MENTONE PURSE. MENTONE Races, by "Musket" of the "Sporting Globe."

"The Sporting Globe."

Close down.

## EVENING SESSION

5.30 p.m.—SPORTING RESULTS.

5.40 p.m.—CHILDREN'S HOUR. Answers to letters and birthday greetings.

5.55 p.m.—MAGGIE FOSTER, violin: "Liebestraum" (Listz).

"Ave Maria" (Gounod).

6.2 p.m.—MISS KOKABUBURA will tell you more about the kitten "Skurry" about his games and his likes.

6.45 p.m.—MARJORIE VERL, soprano: Two little songs for the kiddies.

6.55 p.m.—MAGGIE FOSTER, violin, will now play two small pieces.

6.55 p.m.—MISS KOKABUBURA will tell us the bigger boys and girls the next instalment of Carol of Hollywood School, 1 Minna gets lost.

7.15 p.m.—"Argus" and "Herald" news service. Weather information. Aerial Mail information by the Australian Aerial Services Ltd.

7.45 p.m.—Stock Exchange information. Overseas shipping news.

8.00 p.m.—Fish Market reports by J. R. Berry Ltd.

8.00 p.m.—Market reports by the Victorian Producers' Co-operative Co. Ltd. Haymarket sheep sales. Potatoes and Onions. Market prices. Oranges and Lemons. From the Victoria General Club Auction. Fresh fruit market reports by the Victorian Wholesale Fruiterers' Association, compiled by the "Fruit World," exclusive to 3LO.

## NIGHT SESSION.

Speaker:

MR. W. A. M. BLACKETT, MR. R. RAWSON, DR. LEACH.

ST. AUGUSTINE'S BAND.

HANTINGS AND ADAIR.

LEN GIBSON'S NEAPOLITAN SKETET.

LEN MASON WOOD, Baritone.

EDWARD AND PERRY.

KEITH DESMOND, Clarinetist.

MAGGIE FOSTER, Violin.

CHECK HAYES, The Talkative Chap.

MADAME EVELYN ASHLEY, Soprano.

JOE ARONSON AND HIS SYNCOPHONISTS.

Accompanists: ... ERNEST FORTUNE.

... MAURICE DODLEY.

8.00 p.m.—Under the auspices of the Royal Victorian Institute of Architects, MR. W. A. M. BLACKETT, F.R.V.I.A., Vice-President, R.V.I.A.: Melbourne's Historical Buildings of Architectural Interest.

8.15 p.m.—DR. R. B. RAWSON: Esperanto Talk.

8.45 p.m.—DR. J. A. LEACH: "Albatrosses or Mollymawks."

8 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND; Conductor, Mr. Peter Jones: March: "Blondine" ("Rimmer"). Intermission: "Cinderella's Bridal Procession" (Dicker).

8.15 p.m.—HANTINGS AND ADAIR:

"When Autumn Leaves are Falling."

"Pal of my Yesterday."

"I've only come down for the Day."

"Never be too sure about the Ladies."

# Special Announcement

## BURGIN ELECTRIC CO. LTD.

desire to announce that notwithstanding the recent fire at their premises, arrangements are being made to carry on business with a minimum of delay and inconvenience to customers.

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## 8.30 p.m.—LEN GIBSON'S NEAPOLITAN SEXTET:

"Marches,"  
Mandolin solo, "Le Cygne" (St. Saens),  
"Moon River."

8.40 p.m.—E. MASON WOOD, banjoist:  
"The Lone Player" (Hirsch),  
"The Goddess of Allah" (Marshall).

8.57 p.m.—OSBORNE AND VERNER:  
"Radio Ratings."

8.47 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND:

Selection, "Goldiggers" (Sullivan),  
"Dance 'Til Dawn" (Monod), Etceterianist:

8.57 p.m.—MAGGIE FOSTER, violin:  
"Spring Song" (Kierue),  
"An Old Air."

8.14 p.m.—MADAME EVELYN ASHLEY, soprano:

"British Soldier Song" (Scott),  
"As I went a roving" (Brake).

8.21 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND:

Humoreske, "March of the Manhatten" (Fletcher),  
"The Postman" (Walker).

8.28 p.m.—"The Young Hostess in a Fancy Dress Ball"!—CHECK HAYES, The Talkative Chap, will give his experiences at one.

8.41 p.m.—LEN GIBSON'S SEXTET:

"Marguerite" (Nicholas),  
Mandolin and Spanish Guitar duet, "Members of Comic Opera" (arr. by Len Gibson).

9.46 p.m.—British Official Wireless news from Rugby.

10 p.m.—E. MASON WOOD, banjoist:

"From the land of six blue water" (Camden),  
"The Early Morning" (Prest).

10.15 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND:

Selection, "Echoes of Erin" (Burton).

10.17 p.m.—MADAME EVELYN ASHLEY, soprano:

"Nightmare and the Rose" (Thompson),  
"My Curly-headed Baby" (Oliver).

10.22 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND:

Selection, "Mail of the Mountain" (Fraser-Hompson).

March, "Territorials" (Blankenberg).

10.40 p.m.—Station results, announcements, etc.

10.50 p.m.—JOE ARONSON AND HIS SYNC-SYMPHONISTS:

"Blowin' on Steam,"  
"No Foolin',"

"Wee Little Walks,"

10.58 p.m.—OUR GREAT THOUGHT:

"The emotional utterances of thought, by speech or action, to any end, is art,"—Emerson.

11.11 p.m.—JOE ARONSON AND HIS SYNC-SYMPHONISTS:

"Then I'll be Happy,"  
"Rose Marie,"

"Indian Love Call,"

"Dixie,"

"Ginger's a Little Kiss,"

"Any for to-day, Lady?"

"Fire, Fire, turn the Hoe on Me,"

"Raintime,"

"Precious,"

"I'd Climb the Highest Mountain,"

"Rock-a-bye, Nights,"

"Smiling Eyes,"

"Hi Diddle Diddle,"

11.40 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE

Saturday.

## NO MIDDAY TRANSMISSION.

## AFTERNOON SESSION.

2.25 p.m.—Tune in.

2.40 p.m.—A Matinee for Little Listeners by "Miss Waratah."

4.40 p.m.—Close down.

## EARLY EVENING SESSION.

5.35 p.m.—Tune in.

5.40 p.m.—Children's Session—Bedtime stories by "Uncle Ben" and "Uncle Jim."

7.13 p.m.—Sporting News.

## NIGHT SESSION.

A Musical Evening will be held in the Ipswich Bowling Club House, and will be relayed by 420.

8 p.m.—Down House Concert from Ipswich.

10 p.m.—From the studio: "The Sunday Mail" news service. Weather news. Close down.

## SCL, ADELAIDE

Saturday.

## MORNING SESSION.

12 noon—4 P.O. chimes.

12.30 p.m.—Station on New Reproducing House and Auto Reproducer.

12.30 p.m.—New service.

12.45 p.m.—Market reports.

1 p.m.—Station programme continued.

2 p.m.—Close down.

## AFTERNOON SESSION.

3 p.m.—Orchestral selections from Maple Leaf Cafe.

4.15 p.m.—Orchestra selections.

4.30 p.m.—Orchestra selection from Arcadia Cafe.

4.45 p.m.—Market reports.

5 p.m.—4 P.O. chimes and close down.

## EVENING SESSION.

6 p.m.—G.P.O. chimes.

6.15 p.m.—Station news broadcast by Covent Garden orchestra.

7 p.m.—Station news broadcast by 420.

7.15 p.m.—Market reports.

7.45 p.m.—Reporting results.

8 p.m.—4 P.O. chimes.

8.15 p.m.—Relay from Osborne Hall—Mr. Edward's concert orchestra.

8.30 p.m.—Relay from Osborne Hall—Mr. Edward's concert orchestra.

8.45 p.m.—Relay from Osborne Hall—Mr. Edward's concert orchestra.

8.55 p.m.—Song, Mr. H. Tidman.

9 p.m.—Song, Miss Stela Soehle.

9.10 p.m.—Mandolin-Guitar, Mr. Jack Lenthal.

9.20 p.m.—Song, Mr. H. Tidman.

9.30 p.m.—Song, Mr. H. Tidman.

9.45 p.m.—Song, Miss Stela Soehle.

10 p.m.—G.P.O. Chimes, and close down.

10.15 p.m.—Song, Mr. H. Tidman.

10.30 p.m.—Mandolin-Guitar, Mr. Jack Lenthal.

10.45 p.m.—Song, Miss Stela Soehle.

10.55 p.m.—Mr. H. Carmichael's orchestra.

11 p.m.—4 P.O. chimes, and close down.

## 6WF, PERTH

Saturday.

12 noon—Tune in.

12.55 p.m.—Musical programme, including pianoforte selections by Miss Evelyn Willis, A.R.C.M.

12.47 p.m.—First local news bulletin.

Market reports.

1 p.m.—Time signal from Perth Observatory.

1.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.

1.30 p.m.—Close down.

1.45 p.m.—Tune in.

2 p.m.—Detailed description of races, relayed from the Ascot Races, Belmont.

Close down after last race.

7 p.m.—Tune in.

7.5 p.m.—Uncle Perry with "The radio bird."

7.55 p.m.—Children's story, "Real Australia," introducing "Professor Kookaburra," and "Archie Kookaburra."

7.58 p.m.—Sports results supplied by courtesy of "The Mirror" Newspaper Co.

8 p.m.—Time signal from Perth Observatory.

8.15 p.m.—Weather notes supplied by Meteorological Bureau of Western Australia.

8.30 p.m.—"Birds of the Arctic Region," by Mr. T. Lawrence Jackson.

8.45 p.m.—Music and song.

Musical programme, including articles.

9 p.m.—Second local news bulletin supplied by courtesy of "The Daily News" Newspaper Co.

Sports results supplied by courtesy of "The Mirror" Newspaper Co.

Ship within range announcement.

Weather report and forecast.

10.15 p.m.—Close down.

## Sunday, March 27

## 2FC, SYDNEY

## MORNING SESSION.

Announcer, Day ..... A. S. COCHRANE ANDERSON, Evening ..... LAURENCE HALBERT.

At the 9.30 ..... EWART CHAPPLE

10.45 a.m.—Studio announcements.

11 a.m.—Big Ben ..... FROM ST. ANDREW'S CATHEDRAL, GEORGE STREET, SYDNEY.

The morning service, conducted by the Right Rev. Dr. Dean Talbot.

The Royal Wedding of the Duke and Duchess of York will attend the ceremony at the conclusion of which they will proceed to the Prince of Wales Hospital.

10.45 a.m.—Relay from Osborne Hall in that hospital.

12.15 p.m.—FROM THE PRINCE OF WALES HOSPITAL, SYDNEY:

Community singing, solo and choruses supplied by 2FC artists.

NOTE: It is understood that His Royal Highness, the Duke of York, will speak to the Disbanded Soldiers.

12.45 p.m.—Close down.

## AFTERNOON SESSION.

2.25 p.m.—Programme announcements.

2.30 p.m.—Big Ben ..... FROM THE LYCEUM BALL, PITT STREET, SYDNEY.

The Pleasant Sunday Afternoon Service, arranged by the Central Methodist Mission.

The chair will be occupied by the Rev. F. H. Haward. This will be his last service broadcast prior to his departure for England.

The programme is particularly interesting as it includes an appearance of a saxophone band of 24 players—a unique offering on the air and the combination will be under the baton of Mr. Will James.

3.00 p.m.—FROM THE STUDIO:

A Vocal Recital arranged by Miss Eleanor Metcalfe.

3.45 p.m.—Religious Hour:

"When my ship comes sailing home,"

2. Miss Geneva Engle, soprano;

"Life has sent me many roses," (Lohe),

2. Miss Jeanette Rooney, contralto;

"The Carpet" (Sanderson);

4. Miss Besse Keane, mezzo-soprano;

"Believe in me," (Clementi);

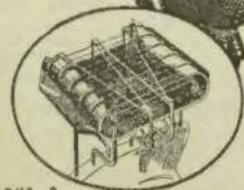
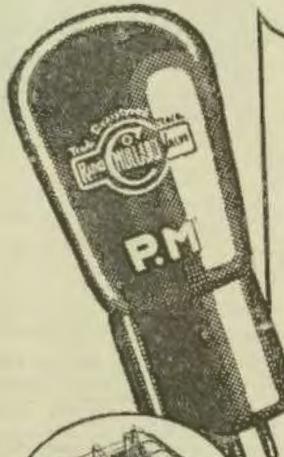
5. Miss Betty Eckford Martin, soprano;

"The Woodpecker," (Lehmann);

6. Miss Kitty Benn, mezzo-soprano;

"Speak to me," (D'Alessio).

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Denmark Street, London S.W. 2 England.

## EVENING SESSION.

8 p.m.—"Big Ben," FROM THE CONGREGATIONAL CHURCH, PETERSHAM: An Organ Recital arranged by Mr. Christian Hellmann, A.R.C.M. (London).

6.45 p.m.—FROM THE STUDIO:

Mr. Cyril Monk, the well-known Violinist and his accompanist and Staff of the Conservatorium of Music will give a talk on the Beethoven Concerto.

7 p.m.—"Big Ben," FROM THE CONGREGATIONAL CHURCH, PETERSHAM: Organ solo by Mr. Christian Hellmann, A.R.C.M. (London).

7.15 p.m.—The Evening Service, conducted by Rev. R. P. Doran.

8.25 p.m.—Interval.

8.25 p.m.—FROM THE BAND ROTUNDA, BONDI BEACH:

Items by the Bondi Beach Concert Band (Champion Band for 1926), conducted by Mr. W. Farnham.

March, "Brilliant" (Home); Waltz, "On the St. Lawrence" (Holtier); Overture, "The Village Bride" (Rimmer).

8.45 p.m.—FROM THE STUDIO:

Madame Ada Thorburn, mezzo-soprano.

8.45 p.m.—FROM THE BAND ROTUNDA, BONDI BEACH:

The Bondi Beach Concert Band: Fox Trot, "Give me to-night" (Bell); German solo, "Just a minute small" (Hans Ley).

Selection, "Rose Marie" (Fried).

9.10 p.m.—FROM THE STUDIO:

Mr. C. M. Duncanson, pianist.

"She awoke charmed at sadness" (Gounod).

9.14 p.m.—FROM THE BAND ROTUNDA, BONDI BEACH:

The Bondi Beach Concert Band: Fox Trot, "On the Riviera"; Characteristic, "Come in the Cotton"; Overture, "The Girl from the Country" (Rimmer).

9.30 p.m.—FROM THE STUDIO:

Madame Ada Thorburn, mezzo-soprano.

9.35 p.m.—FROM THE BAND ROTUNDA, BONDI BEACH:

The Bondi Beach Concert Band: Morceau, "Dance Patrol" (Michelin); Solo, "Dark Eyes, Brown Hair" (Rimmer).

9.45 p.m.—FROM THE STUDIO:

Mr. C. M. Duncanson, pianist.

"Blow, Blow, then Winter Wind" (Kohler).

9.50 p.m.—FROM THE BAND ROTUNDA, BONDI BEACH:

The Bondi Beach Concert Band: Fox Trot, "Semolina" (Warren); March, "Anglo-Oriental" (Home).

10 p.m.—"Big Ben," National Anthem.

Close down.

At the Piano .... MR. ROHACEK KRATZ

## 2BL, SYDNEY

## Sunday.

10.45 a.m.—Special news service.

11 a.m.—Service broadcast from Chalmers' Presbyterian Church, Sydney.

2 p.m.—"The Colour" (Westinghouse) broadcast from Burdett House.

4 p.m.—Organ recital broadcast for Chalmers' Church.

4.30 p.m.—Bible Class, conducted by Mr. W. "Cato" Bradley.

4.35 p.m.—Close down.

4.45 p.m.—Children's service.

7 p.m.—Service broadcast from St. Jude's Church in Eastern Suburbs.

8.00 p.m.—Broadcaster's Trium.

8.10 p.m.—Miss Helena Stewart, soprano.

8.47 p.m.—Mr. Lance Jeffree, tenor.

8.54 p.m.—Review of following day's programme.

Weather report and forecast by courtesy of Mr. G. J. Marsh, Government Meteorologist.

8.55 p.m.—P.D.Q. clock and rhymes.

9.11 p.m.—Miss Madge Helmeid, contralto.

9.36 p.m.—Mr. Leslie Herford, bassoon.

9.15 p.m.—Duet: Miss Helena Stewart and Mr. Lance Jeffree.

9.20 p.m.—Broadcasters' Trio.

9.30 p.m.—Music Broadcast.

9.34 p.m.—Mr. Leslie Herford.

9.35 p.m.—Mr. Lance Jeffree.

9.38 p.m.—Broadcasters' Trio.

10.30 p.m.—National Anthem.

## 2GB, SYDNEY

## Sunday.

10.30 a.m.—Organ Music from St. Alban's Liberal Catholic Church, Belgrave.

10.45 a.m.—Morning Service from St. Alban's: Celebration of the Holy Eucharist sermon.

12 noon—Close down.

1 p.m.—Movie from Studio.

1.15 p.m.—Music and Lecture from Adyar Hall.

2.15 p.m.—From Studio.

2.30 p.m.—CLERMONT HOBSON QUARTETTE:

Hymn Tunes Selection:

1. "Rock of Ages"

2. "I heard the voice of Jesus say."

3. "Lord of Heaven and Earth and Sea."

2.25 p.m.—Song by EVA CHOTT.

2.45 p.m.—Talk.

2.50 p.m.—CLEMENT HORNING QUARTETTE:

1. "The Shades of Night around us Steal."

2. "Softly Falls the Shades of Evening."

2.30 p.m.—Songs by ELSIE BROWN.

3.00 p.m.—CLEMENT HORNING QUARTETTE:

1. "Jesus Christ is Born Today."

2. "When Christ in Glory Came to Earth."

3. "Come, ye Thankful People, Come."

2.45 p.m.—Close down.

3LO, MELBOURNE

## Sunday.

## MORNING SESSION:

10.30 a.m.—St. Paul's Bell.

10.45 a.m.—British Official Wireless News from Rugby.

11.45 a.m.—SERVICE FROM BAPTIST CHURCH, Collins Street, Melbourne.

Midday, REV. W. D. JACKSON, B.A.

Sermon.

Call to Worship.

Lord's Prayer (Choral).

Hymn 155, "Breathe on me, breath of life."

Sonnet, "Behold the Lamb of God" (Childress). Children's Address. More words to young Saints' Collector.

Hymn 164, "Little Drops of Water."

Midday Offering.

Offertory Prayer.

PSALM, "O for the wings of a dove" (Montelius).

Prayer.

Hymn 274, "O for a closer walk."

SERMON, "The barren months of the soul."

Hymn 288, "Still, still with Thee."

Benediction.

12.15 p.m.—Close Down.

1.30 p.m.—AFTERNOON SESSION.

3.00 p.m.—A SPECIAL SERVICE FOR MEN'S MEETINGS, transmitted from St. Paul's Cathedral, Speaker, BISHOP OF LONDON.

Hymn.

Lord's Prayer.

The Apostles' Creed.

Psalm XV, and VIII.

Lesson.

Hymn.

Intercessions and Prayers.

Hymn.

## SERMON, THE BISHOP OF LONDON.

Hymn (Collection).

Blessing.

1.30 p.m.—Close Down.

## EVENING SESSION.

1.45 p.m.—CHILDREN'S HOUR. Hymns &

"The Pied Piper."

"Jerusalem the Golden."

"All the World is Glad."

1.50 p.m.—"BILLY BUNNY." The Christmas Carol.

1.55 p.m.—Musical Programmes by "The Pied Pipers."

Chorus, "In the Morning Each."

Solo, "A Little Birdie."

Piano, "Snowy Dawn."

Duet, "God of Mercy."

Chorus, "My Land."

Evening Hymn, "O Little Child."

2.15 p.m.—Answers to letters and Birthday Greetings.

2.30 p.m.—"BILLY BUNNY," more about "David Livingstone."

2.45 p.m.—Close Down.

## NIGHT SESSION.

6.00 p.m.—Bell from St. Paul's Cathedral.

6.15 p.m.—Sister (from ST. PAUL'S TAUGHT).

6.30 p.m.—Mahogany.

Evening (Choral).

Sentences.

General Confession.

The Lord's Prayer.

Versicles and Responses.

Psalm.

1st Lesson.

Magdalene.

Nine Dainties.

The Apostles' Creed.

The Catechism.

ANTHEM: "O come, my soul, that thirstest, O come to the waters; come, see Him, O hear, and your souls shall live for ever.

Mendelssohn.

Prayers.

Hymn.

THE SERMON: THE BISHOP OF LONDON.

Benediction.

## FROM THE STUDIO.

ST. AUGUSTINE'S ORPHANAGE BAND.

—WESLEY CHURCH CHOIR.

GRACE JACKSON, Contralto.

W. G. JAMES, Flautoforte Recital.

J. ALEXANDER BROWNE, Baritone.

Accompanists ..... AGNES FORTUNE.

Announcer ..... ALFRED ANDREW.

A SPECIAL PROGRAMME ARRANGED BY REV. J. H. CAIN.

8.30 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND. Conductor, Mr. Percy Jones.

—Tchaikowsky's "Works" (Douglas).

8.42 p.m.—WESLEY CHURCH CHOIR, Under direction of Mr. W. G. James.

"Hear My Prayer" (Mendelssohn).

Soloist, Mrs. William James.

8.45 p.m.—ST. AUGUSTINE'S ORPHANAGE BAND.

March, "Old Comrades" (Taube).

8.54 p.m.—GRACE JACKSON, Contralto.

"Arioso" (Cracke Day).

"Be Brave and Sing" (Pepper).

9.00 p.m.—W. G. JAMES, Flautoforte Recital.

"The Cox-Cox" (Basil).

"Mountain" (Dr. Ann).

"Polonaise A Major" (Chopin).

"Waltz D. Flat" (Chopin).

"Mazurka" (Chopin).

By arrangement (Last).

9.15 p.m.—A NEW AUSTRALIAN NATIONAL ANTHEM.

OH! FAUVED ISLE."

Words by ..... C. H. Dennis

Music by ..... W. G. James

Mr. Dennis' explanation of how the song was written will be given by HOWLETT ROBERTS.

Soloist ..... J. ALEXANDER BROWNE.

Accompanied by the Wesley Church Choir,

under direction of W. G. James.

9.25 p.m.—ST. AUGUSTINE'S BAND.

Overture, "Bohemian Girl" (Balfe).

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handle without distortion sufficient energy to operate any  
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**AT ALL DEALERS**



9.35 p.m.—GRACE JACKSON, Contralto, "The Enchantress" (Hutton).  
"The Arrow and the Song" (Raife).  
2.35 p.m.—ST. AUGUSTINE'S BAND, Instrumental, "In a Persian Market" (Kesby).  
9.45 p.m.—WESTLEY CHURCH CHOIR, "Annie Laurie," by request. Unaccompanied.  
"The Angels' Chorus" (Marshall).  
9.45 p.m.—"Austral News Service" (Wallace), "Austral News" News Service; Announcements; Meteorological Information.  
6.02 p.m.—OUR GREAT THOUGHT:  
"Genuine benevolence is not stationary, but  
perpetual. It goes about doing good."—NEWTON.  
11.00 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE

Sunday.

## MORNING SESSION.

The complete Morning Service from St. Stephen's Roman Catholic Cathedral will be relayed.

10.45 a.m.—Tune in.

11 a.m.—Almighty God; Introit; Kyrie, Mass in honor of St. Patrick; Gradual; Credo; Offertory; Sanctus; Benedictus; Agnus Dei; Communion; Laudate Dominum—Organ solo.  
11.45 a.m.—Close down.

## AFTERNOON SESSION.

The Classic Festival provided by the Blackheath Ipswich Camerata Choir, in conjunction with the Ipswich Municipal Band, will be relayed from the Wintergarden Theatre, Ipswich.

3 p.m.—Relax.

3.30 p.m.—Close down.

## NIGHT SESSION.

## CHURCH SERVICE.

The complete Evening Service from St. Stephen's Roman Catholic Cathedral will be relayed.

7.30 p.m.—Choral Service.

8.30 p.m.—Conclusion.

## BAND CONCERT.

At the conclusion of the Church Service, the Concert provided by the Brisbane Municipal Concert Band will be relayed from Wickham Park. The programme will include: Over the Hills (Herrin); Variations; "Reminiscences of Russia"; (Godfrey); descriptive piece, "A Highland Scene" (Moore).  
8.30 p.m.—Close down.

## 5CL, ADELAIDE

Sunday.

## MORNING SESSION.

11 a.m.—G.P.O. chimes.  
11.15 a.m.—Relay from Black Forest Baptist Church.  
12 noon.—G.P.O. chimes, and close down.

## EVENING SESSION.

6.30 p.m.—G.P.O. chimes.  
6.45 p.m.—Sunday stories for children.  
7.30 p.m.—Relay from Rose Park Congregational Church.  
8.10 p.m., (approx.)—Relay from S.A.R. Institute; Instrumental and vocal concert, by S.A.R. Band, Miss Lucy Foglin, Mr. Harold Durbin (bass), and Mr. George Whittle (soloist).  
9.15 p.m.—"The Assignment."  
9.15 p.m.—Mr. T. H. Nicholls, "The Kingdom."  
9.18 p.m.—Concert continued.  
10.00 p.m.—G.P.O. chimes, and close down.

## 6WF, PERTH

Sunday.

10.45 a.m.—Tune in.  
11 a.m.—Morning service relayed from the Wesley Church, Perth. Preacher, Rev. J. W. Grove, M.A., LL.B.  
11.45 a.m.—"Relax." (Lorin). Le Souffle will give a short talk on animals at the Zoo.  
12.30 p.m.—U.S.I. Band and vocal concert, relayed from the Zoological Gardens, South Perth. Conductor: Mr. Geo. S. Mellor.  
4 p.m.—Close down.  
7 p.m.—Tune in.  
7.30 p.m.—Children's bedtime stories by Miss Alice Bear, Mexico.  
7.30 p.m.—Evening service relayed from St. Andrew's Presbyterian Church, St. George's Terrace, Perth. Preacher, Rev. Geo. Tollock.  
8.45 p.m.—Perth City Band and vocal concert relayed from the Government Gardens, Perth. Conductor, Mr. W. A. Halvorsen.

## Monday, March 28

## 2FC, SYDNEY

## EARLY MORNING SESSION.

7 a.m.—"Big Ben" and announcements.  
7.15 a.m.—Studio music.  
7.15 a.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services, commodity news.  
7.25 a.m.—Investment market, mining share market, metal quotations.  
7.35 a.m.—Wool sales, breakfast markets, inter-state markets, produce markets.  
7.45 a.m.—"Sydney Morning Herald" news service.  
8 a.m.—"Big Ben." Studio music.  
8.15 a.m.—Close down.

## MORNING SESSION.

9.00 a.m.—Marching music for school children.  
9.45 a.m.—Studio music.  
10 a.m.—"Big Ben" and announcements.  
10.20 a.m.—Studio music.  
10.45 a.m.—Last minute racing information by the I.R.C. Racing Commissioners.  
11 a.m.—"Relax." Australian Press Association, and Trotter's Cable Service.  
11.15 a.m.—Studio music.  
11.15 a.m.—A serial story.  
12.00 a.m.—Marching music for school children.  
11.45 a.m.—Close down.

## MIDDAY SESSION.

12 noon.—"Big Ben" and announcements.  
12.15 p.m.—Stock Exchange, first call.  
12.30 p.m.—Studio music.  
12.45 p.m.—Rugby wireless news.  
12.55 p.m.—Miss Bertie Solomons, soprano.  
1.00 p.m.—"Relax." (Wright).  
1.15 p.m.—"Big Ben." Weather Intelligence.  
1.30 p.m.—"Evening News" midday news service. Producers' Distributing Society's report.  
1.45 p.m.—Studio music.  
1.55 p.m.—Stock Exchange, second call.  
1.55 p.m.—Marching music for school children.  
1.55 p.m.—Miss Bertie Solomons, soprano.  
1.45 p.m.—"Relax." (Wright).  
1.45 p.m.—Studio music.  
2 p.m.—"Big Ben." Close down.

## AFTERNOON SESSION.

3.30 p.m.—Programme announcements.  
3.35 p.m.—A Finis Recital arranged by Mr. George Wayne.

3 p.m.—"Big Ben." A talk by the well-known Sculptor, Miss Thea Cowan.  
Subject: "WORLD FAMOUS STATUES."

3.45 p.m.—Flute Recital.  
3.50 p.m.—Marching music for school children.

3.40 p.m.—FROM FARMER'S TEA ROOMS: Miss Katherine Beverley, soprano.  
"Mighty like a Bull" (Nevin).

3.45 p.m.—Studio music.  
4 p.m.—"Big Ben." FROM FARMER'S TEA ROOMS: Miss Alice Bear, mezzo-soprano.

"A Little Love Nest" (Lohr).

4.30 p.m.—Studio music.  
4.45 p.m.—FROM FARMER'S TEA ROOMS: Miss Alice Bear, soprano.  
"Walk in the Woods" (Lorin).

4.45 p.m.—Studio music.  
4.50 p.m.—A reading.  
4.45 p.m.—FROM FARMER'S TEA ROOMS: Miss Alice Bear, mezzo-soprano.

"Stock Exchange, third call." (Wright).  
4.45 p.m.—Close down.

## EARLY EVENING SESSION.

5.45 p.m.—The Chimes of J.P.C.  
5.50 p.m.—"The 'Hello Man'" talks to the children.

6.00 p.m.—Mr. Tal Ordell, well-known Australian Playwright and Film Producer, will commence an original series of stories for the children.

6.40 p.m.—Dinner music.  
7 p.m.—"Big Ben." Late sporting news.

7.10 p.m.—"Dalyell's" Market reports (whole).  
7.15 p.m.—Fruit and vegetable markets.

7.20 p.m.—Weather and shipping intelligence. Stock Exchange.

7.26 p.m.—Late "Evening News" news service.

## NIGHT SESSION.

7.40 p.m.—Programme announcements.  
7.45 p.m.—A talk by Mr. E. J. Van de Velde; Subject: "How to take close up photographs of YOUR ROYAL HIGHNESSES and the 'REGENTS'."

8 p.m.—"Big Ben." FROM THE HAYMARKET THEATRE, GEORGE STREET, SYDNEY.

Items by the Orchestra under the baton of Mr. Sydney Porter.

8.15 p.m.—FROM THE STUDIO: Miss Elsie Pearcey, soprano.  
"Be Still, Blackbird" (Anderson).

8.16 p.m.—FROM THE STUDIO: A Debate by Members of the C.M.C.: Subject: "THAT THE MODERN GIRL IS SURPRISED TO HER GRANDMOTHER." Chairwoman, Mrs. F. R. Rawlins.

The Leader, Mr. A. Brown, opens the Debate.

8.21 p.m.—Leader of the Opposition, Mr. Walker.

8.20 p.m.—For the Motion, Mr. Pigott.

8.24 p.m.—Against the Motion, Mr. Hood.

8.30 p.m.—For the Motion, Mr. Starke.

8.41 p.m.—Against the Motion, Mr. Jones.

8.45 p.m.—FROM BEALE'S CONCERT SALON: Gems by the Royal Sydney Apollo Club of 80 Male Voices.

1 a.m.—"Drum's Drum" (Coleridge Taylor).

1 a.m.—"The Handy Man" (Spencer).

5.45 p.m.—FROM THE STUDIO: Miss Nancy McGilchrist and Miss Freda Fish.

Violin Duet, "Sonata" (Parell).

8.30 p.m.—FROM THE HAYMARKET THEATRE, GEORGE STREET, SYDNEY: Vocal Act.

9.00 p.m.—FROM THE STUDIO: Miss Freda Fish, Violinist; "Slow Movement" (Tchaikowsky).

9.25 p.m.—Miss Edith Pearcey, soprano.  
"My Beloved" (Vanhall).

9.20 p.m.—FROM THE SIDNEY TOWN HALL: Descriptions from the Ball given by the Lord Mayor and Lady Mayoress of Sydney.

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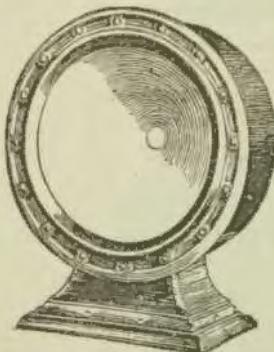
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8.05 p.m.—The arrival of Their Royal Highnesses.  
9.45 p.m.—FROM BEALE'S CONCERT SALON:

Items by the Royal Sydney Apollo Club of 40 voices:  
(a) "Apostles" (Jephcott).  
(b) Solo.  
(c) "Land of Hope and Glory" (Elgar).  
10 p.m.—"Big Ben." FROM THE STUDIO: Miss Freda Fish and Miss Nancy McGilchrist, violin duet; (arrangement, Mandolin).

10.45 p.m.—Miss Ethel Pootson, soprano:  
(a) "Passion-Power" (Coxon);  
(b) "Spring is Here" (Hirschberg).

10.55 p.m.—FROM THE HAYMARKET THEATRE, GEORGE STREET, SYDNEY: The Haymarket Operatic Orchestra of 20 members, under the baton of Mr. Stanley Porter.

11.25 p.m.—FROM THE SYDNEY TOWN HALL:

Descriptions of the Lord Mayor's Ball.  
11.35 p.m.—FROM THE STUDIO: Miss Nancy McGilchrist, violin solo; (arrangement, Mandolin).

12.45 p.m.—FROM THE WENTWORTH HOTEL, CHURCH HILL, SYDNEY: Items by the Wentworth Symphonic Dance Orchestra under the baton of Mr. Frederick Leighton.

11 p.m.—"Big Ben." Late news and announcements from the Studio.

11.55 p.m.—The Wentworth Symphonic Dance Orchestra in popular numbers until midnight.

12 midnight—"Big Ben."  
National Anthem.  
Close down.

## 2BL, SYDNEY

Monday.

### EARLY MORNING SESSION

7.15 a.m.—G.P.O. clock and chimes.  
7.18 a.m.—Metropolitan Weather forecast.  
7.20 a.m.—Musical programmes from the Studio.  
7.22 a.m.—Physical training and health exercises.  
7.30 a.m.—G.P.O. clock and chimes.  
7.32 a.m.—Hints on health.  
7.35 a.m.—Physical training and health exercises.  
7.45 a.m.—G.P.O. clock and chimes.  
7.46 a.m.—Weather Report.  
7.47 a.m.—Broadcasters' special news service.  
8.00 a.m.—G.P.O. clock and chimes; close down.

### MORNING SESSION

8.05 a.m.—G.P.O. clock and chimes.  
8.11 a.m.—Weather Report.  
8.15 a.m.—Musical programmes from the Studio.  
10.20 a.m.—News service from the "Daily Telegraph."  
10.25 a.m.—Musical programme from the Studio.  
11.00 a.m.—G.P.O. clock and chimes.  
11.11 a.m.—News from the "Daily Telegraph."  
11.15 a.m.—Rabbit Market Report.  
11.17 a.m.—Milk Market Report.  
11.19 a.m.—Vegetable Market Report.  
11.21 a.m.—Fruit Market Report.  
11.23 a.m.—London Dairy Farm, Egg and Poultry Market Report.  
11.28 a.m.—Ship in call by wireless.  
11.30 a.m.—Information re Interstates and Overseas Mail.  
11.33 a.m.—Shipping information—arrivals and departures.  
11.35 a.m.—Women's Session. Talk on "Gold" by Mrs Gwen Varley, Broadcasters' Women's Social Service.  
11.45 a.m.—Social notes by Mrs. Jordan.  
11.55 a.m.—Mrs. Jordan replies to correspondence.  
12.55 p.m.—Talk on "How to Choose a good Fur," by Mrs. Jordan.

12.55 p.m.—G.P.O. Clock and Chimes.  
12.57 p.m.—Sydney Stock Exchange Call.  
12.58 p.m.—"Sun" Newspapers News Service.  
12.59 p.m.—Miller's Instrumental Quartet direction, Garry Easting.  
1.00 p.m.—G.P.O. clock and chimes.  
1.01 p.m.—Weather Report and Forecast.  
1.05 p.m.—Sydney Stock Exchange Call.  
1.06 p.m.—Musical Programme from the Studio.  
1.10 p.m.—G.P.O. Clock and Chimes. Close down.

### AFTERNOON SESSION

Racing information broadcast by courtesy of the Sydney Turf Club.  
3 p.m.—G.P.O. clock and chimes.  
3.15 p.m.—Weather Report.  
3.30 p.m.—Social notes from the "Sea."  
3.35 p.m.—News from the "Sun."  
3.45 p.m.—Musical programme from the Studio.  
3.50 p.m.—News from the "Sun."  
3.55 p.m.—Musical programme from the Studio.  
4.00 p.m.—News from the "Sun."  
4.05 p.m.—G.P.O. clock and chimes.  
4.15 p.m.—Serial Story entitled "The Buried Shield."  
4.30 p.m.—G.P.O. clock and chimes.  
4.45 p.m.—Musical programme from Studio.  
4.47 p.m.—Producers' Distributive Society Vegetable and Fruit Market Report.  
4.50 p.m.—Shipping information when available.  
4.55 p.m.—Boys racing resume on race days.  
4.58 p.m.—News from the "Sun."  
4.58 p.m.—Resume of night's programme.  
5.00 p.m.—G.P.O. clock and chimes; close down.

### EARLY EVENING SESSION

5.05 p.m.—G.P.O. clock and chimes.  
5.10 p.m.—Uncle George and the children.  
5.15 p.m.—Musical programme from the Studio.

### SPECIAL COUNTRY SESSION

7.00 p.m.—G.P.O. Clock and Chimes. Australian Agricultural and Finance Bank, Repatriation Society's Fruit and Vegetable Markets Report; Stock Exchange Report; Grain and Fodder Report ("Sun"); Dairy Products Report ("Sun"); Primary Producers' Report on London Butter Market.

7.15 p.m.—Country News from the "Sun"—Book to Read.  
7.30 p.m.—Talk on "The Fundamentals of Work and Measures," by Mr. Robert McWhirter, B.E.

8.00 p.m.—G.P.O. Clock and Chimes. Broadcasters' Topical Chorus.  
8.05 p.m.—Broadcasters' Trio.

8.15 p.m.—Miss Mainie Barnett (Contralto), Mr. Bertie Morrison (Tenor), Miss Hilda Lane (Soprano).  
8.27 p.m.—Miss Hilda Lane (Soprano).  
8.34 p.m.—Mr. Douglas Graham (Scotch Comedian).

8.41 p.m.—Miss May Nanswain (Soprano).  
8.45 p.m.—Mr. Fraser Coss (Baritone).  
8.55 p.m.—Announcements: Resume of Following Day's Programme.

9.00 p.m.—G.P.O. clock and chimes; weather report and forecast by courtesy of Mr. C. J. L. Green, Geophysical Meteorologist.

9.12 p.m.—Mr. Stan Carrill (Comedian).  
9.20 p.m.—Broadcasters' Trio.  
9.25 p.m.—Miss Mainie Barnett.

9.30 p.m.—Mr. Phil Mountain.  
9.35 p.m.—Miss Hilda Lane.  
9.40 p.m.—Mr. Bertie Morrison.  
9.47 p.m.—Miss May Nanswain.  
9.55 p.m.—Mr. Fraser Coss.  
10.05 p.m.—Mr. Stan Carrill.  
10.12 p.m.—The Ambassadors Dance Band from the Ballroom of the Ambassadors, during their Internationally known Dances. News Reports by courtesy of the "Sun" will be broadcast.

## 2GB, SYDNEY

Monday.

### MORNING SESSION

1.00 p.m.—Piano Recital, conducted by Mr. J. K. Powell.  
8.00 a.m.—Music.  
8.05 a.m.—Geological Class.  
8.15 a.m.—Music.  
10.10 a.m.—Biographical Talks for Schools.  
10.25 a.m.—Music.  
10.30 a.m.—Close down.

### AFTERNOON SESSION

3.00 p.m.—  
3.45 p.m.—  
4 p.m.—  
4.45 p.m.—  
5.20 p.m.—  
4.30 p.m.—

### EVENING SESSION

8.30 p.m.—Children's Session.  
7.15 p.m.—Music.  
7.20 p.m.—Address by the Rt. Rev. G. S. Aristotle. "Is God really worth to be happy?"  
7.30 p.m.—Music. Studio.  
7.45 p.m.—Violin Solos. DAN SCULLEY.  
8 p.m.—Address by Professor Ernest Wood.  
8.15 p.m.—Songs by Frederick Turrell.  
8.20 p.m.—Concerto. DEAN TWO, Violin and Piano by Maxine CRAVEN. DAN BROOK, MONICA HODDER, ADA BROOK.  
8.40 p.m.—Songs by Sylvia Ley.  
8.45 p.m.—Violin Solos. MONICA HODDER.  
8.50 p.m.—Announcements.  
9 p.m.—Poppy Talk.  
9.15 p.m.—Sonata for piano by Beethoven Artist. Ada Brook.  
9.30 p.m.—Songs by Frederick Turrell.  
9.45 p.m.—Duet for two violins with piano accompaniment. DAN SCULLEY, MONICA HODDER, ADA BROOK.  
9.50 p.m.—Songs by Sylvia Ley.  
9.55 p.m.—Cheerio Talk.  
10 p.m.—Great Thoughts from Great Minds.

## 3LO, MELBOURNE

Monday.

### MIDDAY SESSION

THE STUDIO ORCHESTRA.  
CHECK HAYES, The Talkative Chap.  
HASTINGS AND ADAIR,  
GRACE JACKSON, Contralto.  
JAMES WILKINSON, Bass.  
TOMA TURNER, Cello.  
Accompanist ..... AGNES FORTUNE  
Announcer ..... MAURICE DUDLEY  
"RICOCHETS."

12 noon—Time signal. Broadcast Official Wireless time from Sydney, Radio, and the Australian Press Association. Cables, Stock Exchange Information; "Argus" and "Herald" News Service.

12.30 p.m.—STUDIO ORCHESTRA.  
Raymond Overture.

12.40 p.m.—CHECK HAYES, The Talkative Chap.  
"The Troubles of Billy the Button Boy."

12.55 p.m.—HASTINGS AND ADAIR,  
Peggy Adair. "Where did you set those eyes?"  
Oscar Neebe, Violin.

Duet. "The King Isn't King Anymore..."

1.00 p.m.—STUDIO ORCHESTRA.  
"Ballet of the Flowers" (Hadley).  
1.10 p.m.—GRACE JACKSON, Contralto.  
"Thank God for a Garden" (Del Rio).  
"I'm in Love" (Jack Thompson).

1.15 p.m.—Metronome Intelligence; Weather Forecast for Victoria, Tasmania, South Australia, and New South Wales; Ocean Forecast; River Reports.

1.20 p.m.—STUDIO ORCHESTRA.  
"Little Miss Butterfly" (Cossens).

1.32 p.m.—IAN DEVEREUX, Baritone (of the Rose Marie Co., by permission of J. C. Williamson, Ltd.).

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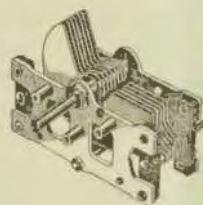


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No. 400, 400 ohm Potentiometer ..	0	5	9



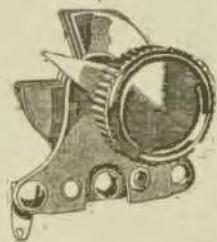
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double condenser ..	1	14	6
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 In an Old Fashioned Town" (Squire).  
 La La La La LA LA LA TIBERIA (Sally).  
 "Bingo" (Helen).  
 2.45 p.m.—CHARICE JACKSON, Contralto.  
 "My Land" (Howard Da Silva).  
 "Lascivious" (Crompton).  
 2.55 p.m.—STUDIO ORCHESTRA.  
 3.00 p.m.—"Premiere" (Percy).  
 3.15 p.m.—Description of HANDICAP HURDLE.  
 MOONEY VALLEY RACES, by "Mister" of the "Sporting Globe." (Charity Race Meeting in aid of funds for the Queen Victoria Memorial Hospital).  
 3.30 p.m.—"Premiere" (Percy).  
 3.45 p.m.—"Premiere" (Percy).  
 3.55 p.m.—"Handicap" (Howard Da Silva).  
 Two-Year-Old Hammarup, Stomach, Valley Race, by "Mister" of the "Sporting Globe."

## AFTERNOON SESSION

**Speakers:**  
**MRS. DOROTHY SILK, MISS FLORA PELL,**  
 THE PREMIER FOUR.  
 DR. ALFRED CRAN.  
 CHARLES LINDBERGH.  
 ARTHUR DOUGLAS, Scotch Composer.  
 ASSOCIATION—AGNES FORTUNE.  
 ASSOCIATION—MAURICE JUDLEY.  
 LOVE AND ADVENTURE.  
 4.00 p.m.—Description of DAY-DRAP RIBBLES.  
 Mooney Valley Races, by "Mister" of the "Sporting Globe."  
 4.15 p.m.—STUDIO ORCHESTRA.  
 Schubert Songs (Robert).  
 4.30 p.m.—MRS. DOROTHY SILK.  
 Homewards.  
 4.45 p.m.—"Premiere Four".  
 "Barbershop".  
 "There Never Was a Pal Like You".  
 4.55 p.m.—DR. FLOYD, Green Rooster, transmitted from St. Paul's Cathedral.  
 5.15 p.m.—"Premiere" (Percy).  
 "The Cardinals" (Lobengula) (Wardens).  
 "Birds Marion" (Lobengula) (Wardens).  
 5.30 p.m.—"The Question" (Westlandwines).  
 "The Answer" (Westlandwines).  
 5.45 p.m.—Two Old Indian Songs (Illustrating the War of 1812).  
 5.55 p.m.—Recital of QUOTES VICTORIA.  
 HANDICAP, Mooney Valley Races.  
 6.10 p.m.—ALICE INMAN, Soprano.  
 "Morning" (Ober Eckhoff).  
 6.25 p.m.—STUDIO ORCHESTRA.  
 Four Indian Songs (Graham).  
 6.40 p.m.—ARTHUR DOUGLAS, Scotch Composer.  
 "When I Mete Matilda" (Lander).  
 6.55 p.m.—STUDIO ORCHESTRA.  
 "Male Pictures" (Percy).  
 7.00 p.m.—Description of TRIAL MILE.  
 Mooney Valley Races, by "Mister" of the "Sporting Globe".  
 7.15 p.m.—"Premiere Four".  
 "Violence".  
 7.30 p.m.—MISS FLORA PELL, Inspector of Schools, Education Department, Melbourne. "Domestic Economy".  
 7.45 p.m.—Herald News Service; Stock Exchange Information.  
 7.55 p.m.—Description of HOSPITAL HANDI-CAP, Mooney Valley Races, by "Mister" of the "Sporting Globe".  
 8.00 p.m.—Close Down.

## EVENING SESSION

8.10 p.m.—CHILDREN'S HOUR. Arrives by Letters and Birthday Greetings.  
 8.15 p.m.—"Hello! Miss, I'm so glad you can 'creep' to do the good little bitin'. Shucks! I wish she will tell me."  
 8.30 p.m.—OSBORNE AND PERRY will make you laugh for a few minutes.  
 8.45 p.m.—CHARICE JACKSON, Banjoist, will sing some songs like "Minstrels".  
 8.55 p.m.—"Little Miss Kookaburra" will tell some more about "Card of the Indians School" (The Mungah Gymnasts).  
 9.00 p.m.—"Argus" and "Horrid" Miss Semiconductor. Weather Symbols; Shipping Memoranda.  
 9.15 p.m.—Stock Exchange Information.  
 9.30 p.m.—Fish Market Reports, by J. R. Harriet Ltd.  
 9.45 p.m.—River Reports.

8.45 p.m.—Market Reports by the Victorian Producers' Cooperative Co., Ltd.; Hammarup Sheep Sales; Poultry, Gram, Bay, Charcoal, Scarf, Zinc, Dairy Products; Postmen and Oilmen.  
 8.55 p.m.—Market Prices of Oranges and Lemons by the Victorian Central Citrus Association, Pty. Ltd.; Fruit Market Reports by the Victorian Wholesale Fruiterers' Association, compiled by the "Fruit World" association in S.E.O.

You've Got to Black Shuffle." "Red Colored Glass." "Am I Wasting my Time?" "The Village Blacksmith Owns the Village Now." "This is Why I Love You." "Ahka Uh." "Hi, Ho, the Merry." "Me Ho, Ho Ho, Ha-Ha." "Burgundy." "The Little Spanish Town." "Idolising." "To-night's my Night with Baby." "Bye Bye, Blackbird." "I Wish I Had My Old Gai Parey." "Antry." 11.45 p.m.—GOD SAVE THE KING.

## NIGHT SESSION

**Speakers:**  
**KENETH HENDERSON, MR. J. L. ELLIS, MR. S. C. HARRIS,**  
**MARGUERITE VIRE, Soprano.**  
**HAROLD AND ADAIR.**  
**GEORGE AND PERRY.**  
**ARTHUR DOUGLAS, Scotch Composer.**  
**MOANA LUA DUO.**  
**THE PREMIER FOUR.**  
**CHARICE JACKSON, The Talkative.**  
**JOE ABRONSON AND HIS SYNCOPATING SYMPHONISTS.**

**Announcements:**  
**MAURICE JUDLEY**  
**AGNES FORTUNE.**  
 1.15 p.m.—Dishes the answers of the Development Australia League, Mr. J. L. Ellis, of the Australian Silver.  
 Playing the Game for Australia.  
 1.30 p.m.—JOE ABRONSON AND H. TAYLOR.  
 "Colonial City and State".  
 1.45 p.m.—Under the auspices of the Department of Agriculture, Mr. S. C. Harris, Research Pesticide Inspector.  
 Creation of Industrial Units.  
 2.00 p.m.—JOE ABRONSON AND COLLOQUIAL.  
 2.15 p.m.—STUDIO ORCHESTRA.  
 "Miss Book of Bellman" (Paul Hubens),  
 2.30 p.m.—MARGUERITE VIRE, Soprano.  
 "A Birthday" (Coxon).  
 "Little Girl" (Coxon).  
 2.45 p.m.—HAROLD AND ADAIR.  
 "Fever Adam," "OK you son of a Gun,"  
 "Pal",  
 "Carrie Ann," "Little Love,"  
 "Parade My Home".  
 2.55 p.m.—JOE ABRONSON AND PERRY.  
 "Vinegar Concerto".  
 3.15 p.m.—STUDIO ORCHESTRA,  
 Selection "Maritania".  
 3.30 p.m.—ARTHUR DOUGLAS, Scotch Composer.  
 "That's what made me join the Soldiers".  
 3.45 p.m.—S. V. KENNETH HENDERSON.  
 "Written in Schools—General Possibilities".  
 3.55 p.m.—CONDUIT OF THE UNIVERSITY CONSERVATORIUM STUDENTS' SOCIETY, featuring PROFESSOR BERNARD HEINZ.  
 4.04 p.m.—CATHY BROS, English Comedians.  
 Some Types of English Humor.  
 4.20 p.m.—British Official Wireless News from London (Announcements).  
 4.45 p.m.—MOANA LUA DUO.  
 "Lullaby".  
 "Kewpie Waltz".  
 4.55 p.m.—PREMIER FOUR.  
 "I'm a Man".  
 "All for You".  
 5.00 p.m.—STUDIO ORCHESTRA.  
 "La Boheme" (Puccini).  
 5.10 p.m.—CHARICE JACKSON, The Talkative.  
 5.25 p.m.—JOE ABRONSON AND COLLOQUIAL.  
 5.45 p.m.—MOANA LUA DUO.  
 "Kewpie March".  
 "Rose of Wanak".  
 5.55 p.m.—PREMIER FOUR.  
 "Song for Lovers".  
 "Goodbye" (the "Pops").  
 6.15 p.m.—ARGUS, News Service. Meteorological information.  
 6.30 p.m.—OUR GREAT THOUGHT.  
 "In almost everything, experience is more valuable than knowledge." (Quintilian).  
 6.45 p.m.—JOE ABRONSON AND HIS SYNCOPATING SYMPHONISTS.  
 "That Soothes and Delights Melody".  
 "I Wish You Were Jealous of Me".  
 "Let's Talk About My Sweetie".

## 4QG, BRISBANE

Monday.

## MIDDAY SESSION.

1.00 p.m.—Market Reports; Weather Information supplied by the Commonwealth Weather Bureau; News Service, supplied by the Daily Mail" and "The Daily Standard".  
 1.20 p.m.—From Hotel Carlton; Lunch Music played by Hotel Carlton Symphony Orchestra.  
 1.30 p.m.—From the Observatory; Standard Time Signal.  
 2.00 p.m.—Close Down.

## AFTERNOON SESSION.

3.00 p.m.—From Hotel Carlton; Afternoon Tea Music, played by Hotel Carlton Symphony Orchestra.  
 4.15 p.m.—From the Studio; News Service supplied by "The Telegraph".  
 4.45 p.m.—Close Down.

## EARLY EVENING SESSION.

4.45 p.m.—News Service supplied by the "Daily Standard".  
 5.00 p.m.—The Children's Session; Stories by "The Sunday Post".  
 5.15 p.m.—Market Reports; Stock Reports, Lecturette, "Prospects for the Easter Pig Market"; Mr. R. J. Chisholm (Instructor in Pig Raising).  
 5.30 p.m.—Weather News, Announcements.  
 5.45 p.m.—Standard Time Signal.

## NIGHT SESSION.

7.45 p.m.—Lecture Session; The Children's Music Course, conducted by "The Music Man".

## STUDIO CONCERT.

## PART I.

## INSTRUMENTAL QUARTETTE.

8.00 p.m.—Quartette, "Lee Burgesses" (Orff Harmonium), Ipswich City Vice Regal Band (Police); Mr. W. Ryder, W. B. Bergmeister, A. Clark and D. Jordan; contralto solo, "In An Old Fashioned Town" (Squire); Miss Dorothy, soprano solo, "Police Concert", "Birth of the Queen" (Orff); Miss W. Ryder and W. Bergmeister; monologue, "The Highwayman" (Noyes); Miss Ruby Massey; quartette, "Memories of Wagner" (Orff Harmonium), Ipswich City Vice Regal Band (Police); Mr. J. Lord, euphonium solo, "The Sazelle" (Clay Smith); Mr. A. Clark; soprano solo, "Carissima" (Penn); Miss Evelyn Crise; tenor solo, "Stradella" (Kapoor); Mr. D. Jordan; contralto solo, "Out a Rose of Sunshine" (Squire); Miss Dorothy Brown.  
 9.00 p.m.—Metropolitans Weather Forecast.

## PART II.

THE GAIETY THEATRE ORCHESTRA.  
 10.00 p.m.—Overture, "Conradina in Arms" (Greenwald), the Gaiety Theatre Orchestra (conductor, Miss Jean Taylor); monologue, "Cohen Rings up His Doctor" (Brown), Miss

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Ruby Magee; soprano solo, "Who?" (Kerr), the Gaiety Theatre Orchestra; soprano solo, "Chanson Indien" (Briekis-Korankov); Miss Beatrice Pugh; cornet and mandoline duet, "My Lady's Pleasure" (Smith), accompanied by the Gaiety Theatre Orchestra; tenor solo, "White and True" (D'Hardelot), Mr. Lerd, tenor; "White and True" (D'Hardelot) by (Kahn), the Gaiety Theatre Orchestra; a thought for to-night, "Life's Shanties," by Will H. Lister; set and solo, "My Task" (Asperd), Miss Evelyn Greig, contralto; "The Old Bremen" (John Smith); "Baby Face" (David and Aske), the Gaiety Theatre Orchestra; soprano solo, "Down Vauxhall Way" (Oliver); Miss Beatrice Pugh; selection, "Red Rose" (Howells), the Gaiety Theatre Orchestra.

10.15 p.m.—From the Studio: "The Daily Mail" News; Weather News; Close Down.

## 5CL, ADELAIDE

Monday.

### MORNING SESSION.

11.15 a.m.—G.P.O. chimes.  
12.15 p.m.—Report on the Automobile Exporter and the new Reproductive Service.  
12.20 p.m.—"Advertiser" news service.  
12.30 p.m.—Market reports.  
1 p.m.—Musical programme continued.  
2 p.m.—G.P.O. chimes, and close down.

### AFTERNOON SESSION.

3 p.m.—G.P.O. chimes.  
3.30 p.m.—Orchestral selections from Radio City Cafe.  
4.15 p.m.—From the Studio: New Reproductive Service and Automobile Reproductive service.  
4 p.m.—G.P.O. chimes.  
4.15 p.m.—Relay from the Arcadia Cafe—orchestral numbers.  
4.30 p.m.—Station announcements.  
5 p.m.—G.P.O. chimes, and close down.

### EVENING SESSION.

5 p.m.—G.P.O. chimes.  
6.15 p.m.—Dinner music broadcast by Concert Garden orchestra.  
7 p.m.—Bedtime stories.  
7.30 p.m.—Market reports.  
7.45 p.m.—Physical culture talk by Mr. Noel Hulme of the Central College of Physical Culture.  
8 p.m.—G.P.O. chimes.  
Experimental relay test.  
8.20 p.m.—"Twinklers" (Mr. F. J. Mills) burlesque talk.  
8.30 p.m.—Relay continues.  
9 p.m.—G.T.O. chimes.  
9.15 p.m.—Weather report.  
Garling orchestra.  
9.30 p.m.—Singing concert by Mr. Mervyn Skinner, Mr. Tom King, Mr. Stephen Dunks, Miss Betty Coulter.  
10 p.m.—G.P.O. chimes.  
10.15 p.m.—"Advertiser" news service.  
10.15 p.m.—Concerts nearly concluded.  
11 p.m.—G.P.O. chimes and close down.

## 6WF, PERTH

Monday.

Cables.  
12.30 p.m.—Time in.  
12.35 p.m.—First local news bulletin.  
1 p.m.—Time signal from Perth Observatory.  
1.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.  
1.30 p.m.—Studio Quintette.  
2 p.m.—Close Down.  
3 p.m.—Time in.  
3.30 p.m.—Musical programme.  
4 p.m.—Studio trio.

4.30 p.m.—Close down.

7 p.m.—Time in.  
7.30 p.m.—Children's bedtime stories by Uncle Duffy and Harry.  
7.45 p.m.—Stock and Share intelligence.  
Market reports.

Cables. News supplied by courtesy of "The West Australian" Newspaper Co.

8 p.m.—Time signal from Perth Observatory.  
8.15 p.m.—Time posts supplied by the Meteorological Bureau of Western Australia.  
8.30 p.m.—Bee Keeping talk by Mr. C. Walshaw, under auspices of the Bee Keepers Association.

8.45 p.m.—BAND NIGHT.  
Concert by the Perth Forces Silver Band.

Conductor, Mr. J. C. Palmer.

March: "Lassana" (Langwarrin).

Song: "Crescent in Arms" (Adam Hawkes).

"War March of the French" from "Mendelssohn's Athalia".

Hymn: "The Village Blacksmith" (Hawkes).

Soloist: Deputys Bandmaster Everett.

Descriptive selections: "The Voyage to Heaven" (Hawkes).  
One selected.

Fanfare: "Old Kentucky Home" (Garrison).

Selection: "The Banner of Liberty" (Goldsmith).

Two Hymns: "Maryton and Maldonstone".

March: "Undaunted" (Colais).

8.55 p.m.—Health talk by Mr. H. S. Hilton, of the Haven School of Physical Culture.

9 p.m.—Second local news bulletin supplied by courtesy of "The Daily News" Newspaper Co.

10.15 p.m.—Close down.

4.30 p.m.—Studio music.

1 p.m.—"Big Ben." Weather intelligence.  
1.15 p.m.—"Evening News" midday news service.  
1.30 p.m.—"Producers" Distributing Society's report.

1.30 p.m.—Studio music.

1.35 p.m.—Stock Exchange, second call.

1.40 p.m.—Studio music.

1.45 p.m.—FROM THE THY HOTEL WENTWORTH: The Lieutenant Governor, His Royal Highness, the Duke of York, by the Returned Soldiers' and Sailors' Imperial League. Speeches will be transmitted.

NOTE: At approximately 2 p.m. the Duke of York will speak.

2.15 p.m.—Close down.

### AFTERNOON SESSION.

2.30 p.m.—Programme announcements.

2.35 p.m.—Studio music.

2.45 p.m.—FROM THE SYDNEY CRICKET GROUND:

Description of the Display by the Children of the State Schools of New South Wales. Their Royal Highnesses will be received by the Minister of Education and Director of Education.

This will continue until 3.30 p.m.

3.30 p.m.—Marching music for school children.

3.40 p.m.—FROM FARMER'S TEA ROOMS: Miss Jeanette Rooney, contralto:

"Some quiet day" (Hips).

3.45 p.m.—A reading.

3.50 p.m.—Studio music.

4 p.m.—"Big Ben."

FROM FARMER'S TEA ROOMS: Miss Eileen Crowley, soprano:

"A heart that's free" (Robyn).

4.15 p.m.—FROM THE SYDNEY UNIVERSITIES:

The Conferring of Degrees on His Royal Highness, the Duke of York, who will be received by the Chancellor and the Senate.

4.20 p.m.—FROM FARMER'S OAK HALL: Miss Jeanette Rooney, contralto:

"Parting" (Streets).

4.25 p.m.—FROM THE SYDNEY UNIVERSITY:

The Conferring of Degrees transmitted in detail.

4.40 p.m.—FROM FARMER'S OAK HALL: Miss Eileen Crowley, soprano:

"Bird Song at Evening" (Oates).

4.45 p.m.—Stock Exchange, third call.

4.48 p.m.—Close down.

### EARLY EVENING SESSION.

5.45 p.m.—The Chimes of 2FC.

5.50 p.m.—"The Helm Man" talks to the children.

5.55 p.m.—Miss Sybil Arborthwood, mezzo-soprano for the young folk:

(a) Australian Bush Song, "Kangaroo Song" (Peterson).

(b) Little songs for little folk:

1. "The Happy Child" (Krechman, arr. by Kahn).

2. "The Naughty Boy."

3. "Fiddle Fiddle."

6.30 p.m.—Mr. Tal Ordell continues his series of stories for the children.

6.45 p.m.—Dinner music.

7.00 p.m.—"Big Ben." Late sporting news.

7.05 p.m.—Dalglish's Market reports (wool, wheat and stock).

7.10 p.m.—Fruit and vegetable markets.

7.14 p.m.—Weather and shipping intelligence.

7.15 p.m.—Late "Evening News" news service.

### NIGHT SESSION.

7.30 p.m.—Programme announcements.

7.35 p.m.—The Rev. A. H. Garner, M.A., Warder, St. Paul's College (in connection with the Workers' Education Association), will talk on "International Relationships".

7.45 p.m.—FROM HER MAJESTY'S THEATRE, PITT STREET, SYDNEY:

A description of the audience present at the Gala Performance (arranged by J. C. Williamson Ltd.) in honour of the visit of Their Royal Highnesses, the Duke and Duchess of York.

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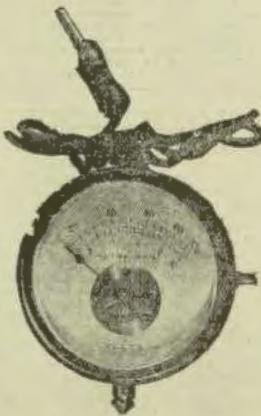
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# RADIO

March 16th  
Issue

Articles include full constructional details of THE INVICTA FIVE, the receiver which gained a special prize at the recent Sydney Radio Exhibition.

THE AIRZONE 500, another excellent receiver specially constructed and described by R. H. Oxford and C. Carter.

A wealth of technical information always handy for the broadcast listener.

# RADIO

6d.

AT ALL BOOKSTALLS

7.45 p.m.—The Fanfare for Trumpets, written by Mr. Andrew MacConn, and played by four trumpeters on the famous "Aida" trumpets.

8.00 p.m.—"God Save the King" by the Australian Orchestra under the baton of Mr. Andrew MacConn.

8.15 p.m.—BRIEF HISTORY FOR THE FIRST TIME IN THE HISTORY OF THE WORLD.

Two complete Gilbert and Sullivan Operas:

"TRIAL BY JURY"

"H.M.S. PINAFORE"

NOTE: During the intervals at Her Majesty's Theatre, the descriptions of interest to listeners will be given and the following items transmitted from the Studio:

Miss Eileen Gray, contralto:

(a) "When the tide comes in" (Danby).

(b) "Three fishes" (Fuller).

(c) "Boat and land" (Rogers).

(d) "Saved Order" (Whitby).

The F.C.U. Studio Dance Band, conducted by Mr. Eric Pearce, well-known basso:

(a) "Now Phoenix sinketh in the West" (Armen).

(b) "Give a man a horse he can ride" (Bridgeman).

(c) "You along o' me" (Sanderson).

(d) "Young and old" (Edelberry).

Augnes:

11.45 p.m.—"Big Ben" FROM THE STUDIO:

Late news and announcements.

11.50 p.m.—Mr. Reid Philomus trumpet solo.

11.55 p.m.—The F.C.U. Dance Band in popular numbers until midnight.

12. midnight—"Big Ben."

NATIONAL ANTHEM.

Closes down.

## 2BL, SYDNEY

Tuesday.

### EARLY MORNING SESSION.

7.15 a.m.—G.P.O. Clock and Chimes.

7.16 a.m.—Metropolitan Weather Forecast.

7.17 a.m.—Musical Programme from the Studio.

7.18 a.m.—Physical Training and Health Exercises.

7.20 p.m.—G.P.O. clock and chimes.

7.21 a.m.—Hints on health.

7.20 a.m.—Physical Training and Health Exercises.

7.20 a.m.—G.P.O. Clock and Chimes.

7.46 a.m.—Weather Report.

7.47 a.m.—Broadcaster's special news service.

8.00 a.m.—G.P.O. clock and chimes; close down.

### MORNING SESSION.

8.05 a.m.—G.P.O. clock and chimes.

8.12 a.m.—Musical Programme from the Studio.

8.20 a.m.—Reception to the Duke and Duchess at the Sydney Town Hall and presentation of Albert Medal to disaster Gibbs.

8.30 p.m.—G.P.O. Clock and Chimes.

8.30 p.m.—Stock Exchange Reports.

8.45 p.m.—"Bitter News" (News Service).

8.45 p.m.—Billiter's Instrumental Quartet—direction: Caryl Casting.

8.50 p.m.—G.P.O. Clock and Chimes.

8.52 p.m.—Weather Report and Forecast.

8.55 p.m.—Australian Stock Exchange Cates.

9.00 p.m.—News from the "Sun."

9.15 p.m.—Musical Programme from the Studio.

9.30 p.m.—G.P.O. Clock and Chimes; close down.

### AFTERNOON SESSION.

Rising Information broadcast by courtesy of the "Sun."

2.45 p.m.—Children's Display at Sydney Cricket Ground to the Duke and Duchess of York.

3.45 p.m.—Musical Programme from the Studio.

4.00 p.m.—Reception to the Duchess by the National Council of Women, at the Sydney University.

5.15 p.m.—G.P.O. Clock and Chimes; close down.

### EARLY EVENING SESSION.

5.30 p.m.—G.P.O. Clock and Chimes.

5.45 p.m.—Uncle George and the Kelpies.

5.45 p.m.—Musical Programme from the Studio.

### SPECIAL COUNTRY SESSION.

5.45 p.m.—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co.'s "Country Broadcasts"; Financial News Exchange Report; Produce Distributing Society's Fruit and Vegetable Market Report; Dairy Produce Report ("Sun"); Grain and Foodstuffs Report ("Sun")

5.15 p.m.—Country News from the "Sun."

7.00 p.m.—Talk on "The Motor Car," by Mr. Eric Pearce.

8.00 p.m.—G.P.O. Clock and Chimes; Broadcasters' Topical Chants.

8.30 p.m.—Broadcasters' Miniature Orchestras, under the Direction of Mr. J. Knight.

8.45 p.m.—Professor Randal Woodhouse (Tenor).

8.50 p.m.—Broadcaster's Male Quartet.

8.55 p.m.—Mr. Henri Penn (Pianist).

8.55 p.m.—Miss Gladys Verona (Soprano).

9.00 p.m.—Results of Following Day's Programmes.

9.00 p.m.—G.P.O. Clock and Chimes; Weather Report and Forecast, by Courtesy of C. M. Clark, Government Meteorologist.

9.00 p.m.—Broadcasters' Miniature Orchestras.

9.15 p.m.—Miss Nellie M. Ferguson.

9.15 p.m.—Mr. Macready Wilson (Bass).

9.20 p.m.—Mr. Henri Penn.

9.30 p.m.—Professor Randal Woodhouse.

9.45 p.m.—Broadcasters' Miniature Orchestras.

9.50 p.m.—Broadcaster's Male Quartet.

9.55 p.m.—G.P.O. Clock and Chimes.

10.15 p.m.—Miss Nellie M. Ferguson.

10.30 p.m.—Mr. Macready Wilson.

10.45 p.m.—The Broadcasters' Dance Band.

Broadcaster from the Ballroom of the Ambassador. During the Intervals between Dances, News Reports by Courtesy of the "Sun" will be broadcast.

12. midnight—"G.O.D." Clock and Chimes.

NATIONAL ANTHEM.

## 3LO, MELBOURNE

Tuesday.

### MIDDAY SESSION.

THE STUDIO ORCHESTRA.

C. HEDDERLEY CHUCC, Flute.

ADELE INMAN, Soprano.

HESIE GAUNSON, Violin.

HILTON PORTER, Trombone.

Accompanied by GAILLES FORTUNE.

"MELLOW TIDE."

12. noon—Time Signal; British Official Weather News from Rugby; Reuters' and the Australian Press Association Cables;

Stock Exchange Reports; "Argus" and "Herald"; News Services.

12.30 p.m.—STUDIO ORCHESTRA,

"Dance and Pantomime" (Supper).

12.45 p.m.—THE PREMIER FOUR.

"Where'd You Get Those Eyes?"

"That's Why I Love You."

12.50 p.m.—RICHARD CHUCC, Flute.

"Romance" (Sainz Santa).

12.55 p.m.—ADELE INMAN, Soprano.

"Down the Vale" (Frank L. Mair).

"The Little Damselfly" (Ivor Novello).

1.00 p.m.—STUDIO ORCHESTRA,

"Dance and Pantomime" (Supper).

1.10 p.m.—THE PREMIER FOUR,

"Minuetto."

"Hello, Aloha."

1.17 p.m.—HESIE GAUNSON, Violin.

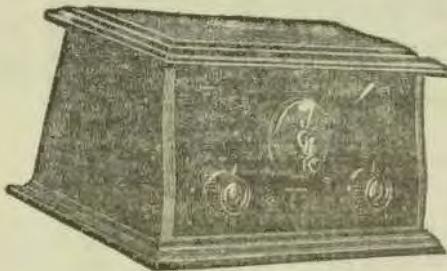
"Chord" (Brahms-Kreiswijk).

1.22 p.m.—Metronome Information; Shipping Intelligence; Weather Forecast for Victoria, Tasmania, South Australia and New South Wales; Ocean Forecast; River Reports.

1.30 p.m.—HILTON PORTER, Baritone, of the Rose Marie Co., by permission of J. C. Williamson, Ltd.  
 "Harlequin" (Sanderson).  
 "When I'm Dreaming" (Liss Lehman).  
 1.45 p.m.—STUDIO ORCHESTRA,  
 "Moskowkiana" (Moskowsky).  
 1.47 p.m.—HILTON PORTER, Baritone,  
 "The Call of the Wild."  
 "Friend."  
 1.50 p.m.—STUDIO ORCHESTRA.  
 "Woodland Blue" (Kebbelby).  
 2.0 p.m.—Close Down  
 Results of Mainsbury and Quambatook  
 Races will be given as they come to hand.  
 Speakers:  
 AU FAIT, MATRON MORELAND.  
 JOE ARONSON AND HIS SYNCOPATING  
 SYMPHONISTS.  
 ARTHUR DOUGLAS, Scotch Comedian.  
 HASTINGS AND ADAIR.  
 OSBORNE AND PERRYER.  
 CARTHY BROS., English Comedians.  
 Accompanist ..... AGNES FORTUNE  
 "DISSIPATED SYMPHONISATION."  
 3.0 p.m.—JOE ARONSON AND HIS SYNCOPATING  
 SYMPHONISTS.  
 "Sunday" (Miller).  
 "By the Sign of the Rose" (Fields).  
 "Hello Little Girl of my Dreams" (Berk).  
 3.30 p.m.—AU FAIT, Fashion Talk.  
 3.45 p.m.—JOE ARONSON AND HIS SYNCOPATING  
 SYMPHONISTS.  
 "The British Black-Bottom" (Henderson).  
 "Hello Again" (Baer).  
 "Let's All Henry Ford" (Leslie).  
 "Consultation" (Walz) (Gumsky).  
 3.55 p.m.—ARTHUR DOUGLAS, Scotch  
 Comedian.  
 "Sooie McLean" (Ander).  
 3.60 p.m.—JOE ARONSON AND HIS SYNCOPATING  
 SYMPHONISTS.  
 "Buffordish" Piano Solo (Barry).  
 "The More We Are Together" (Campbell).  
 "Merry Land" (Lyman).  
 3.49 p.m.—HASTINGS AND ADAIR,  
 Song, "Georgia."  
 Pastry.  
 One String Violin, "Berceuse" (Godard).  
 Duet, "The King Is In, King Any More?"  
 4.00 p.m.—JOE ARONSON AND HIS SYNCOPATING  
 SYMPHONISTS.  
 "Tink a Ling Waltz of the Bells" (Britt).  
 "Baby Face" (Akst).  
 "Somebody's Lonely" (Davis).  
 4.05 p.m.—OSBORNE AND PERRYER.  
 Microphone Talk.  
 4.14 p.m.—JOE ARONSON AND HIS SYNCOPATING  
 SYMPHONISTS.  
 "A Cup of Coffee, A Sandwich, and You" (Meyer).  
 "Just One More Kiss" (Owens).  
 "Just a Bird's Eye View" (Donaldson).  
 "Thinking of You" (Ash).  
 4.25 p.m.—CARTHY BROS., English  
 Comedians.  
 "Humor From Home."  
 4.30 p.m.—MATRON MORELAND,  
 Infant Welfare.  
 4.45 p.m.—"Herald," News Service; Stock  
 Exchange Information.  
 5.0 p.m.—Close Down.

## EVENING SESSION.

5.40 p.m.—CHILDREN'S HOUR, Answers to  
 Letters and Baby Greetings.  
 5.45 p.m.—STUDIO ORCHESTRA,  
 Nursery Rhymes.  
 6.00 p.m.—MARY GUMLEAF, Poems,  
 "When He Grows Up."  
 "Prayer Under Difficulties."  
 Story for the Littlest Ones, "Doll o' Dreams".  
 6.15 p.m.—THE CLARINET, Violin and Piano,  
 "Pretty Tales" (Sanderson).  
 6.25 p.m.—MARY GUMLEAF, Story for  
 Girls, "A Symbol."  
 Story for Boys, "The Never de Well."  
 6.35 p.m.—"Argus" and "Herald" News  
 Service; Weather Synopsis; Shipping Move-  
 ments.  
 6.45 p.m.—Stock Exchange Information.  
 6.52 p.m.—Fish Market Reports, by J. R.  
 Barrett, Ltd.  
 6.55 p.m.—River Reports.  
 6.58 p.m.—Market Reports by the Victorian  
 Producers' Co-operative Co., Ltd.; Dairy  
 Produce; Potatoes and Onions; Haymarket  
 Sheep Sales; Poultry; Grain; Straw, Hay  
 and Jute.



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RADIO DEPARTMENT, GROUND FLOOR.



## Trouble Shooting

The grandest sea game of a century is "trouble shooting" in the stormy Atlantic.

If I were an American boy I should lie awake at night imagining myself in a tiny coastguard cutter stealing up to some huge sleepy iceberg, plugging a deep crevice with dynamite, and then racing away to safety.

How wildly I would cheer as I pressed down the "plunger" and saw the enormous mass of ice rent asunder with a terrific roar, throwing up mountainous waves!

The perils of "trouble shooting" would fascinate me—the days and nights on a tossing cockle-shell out on a rough ocean; the danger of sudden death from shallow ice below the surface; the risk of freezing to death; the ever-present possibility of a dynamite-tossed block of the berg falling on to me, or some mighty wave wiping all out in an instant.

Even more alluring would be the duty of sending wireless warnings to the mighty liners across whose track an iceberg was drifting. I could even see the brilliantly-lighted steamers catch the alarm as they rushed across the seas and abruptly race away to right or left of the annihilation ahead.

Just fancy being able to direct the mightiest fleets in the world by the simple pressure of a finger in a craft lying like a hair-line one hundred miles away!

But it would be all a dream if it were not that the wonderful Burgess Batteries carried by every American coastguard vessel enable the Atlantic liners to carry on in perfect safety. Upon the life and strength, the un-failing service of the finest dry battery ever made, depend the lives of tens of thousands of care-free passengers.

Some day men will build a great monument to the black and white striped radio battery introduced to Australia by the New System Telephones Pty. Ltd., 280 Castlereagh Street, Sydney.\*

7.45 p.m.—Market Prices of Oranges and Lemons by the Victorian Central Citrus Association; Fresh Market Reports by the Victorian Wholesome Fruiturers' Association, compiled by the "Fruit World" exclusive to SJO.

### NIGHT SESSION.

#### Speakers:

MADAME SOWARD, MR. IAN MAXWELL, M.A., MR. KINGSLY A. HENDERSON, REV. ERNEST HENDERSON, M.A., MARYANNE THAMWAYS BAND, ADELLE INMAN, Soprano, THELMA READY, Banjo, THE PREMIER FOUR, TAYLOR AND SUMMERS, CLIFFORD LEWIS, Comedians, HASTINGS AND ADAIR, GRACE JACKSON, Contralto, UNCLE TOM'S CABIN.

JOE ARONSON AND HIS SYNCOPATING SYMPHONY BAND.

Accompanists: AGNES FORTUNE, Announcer: MAURICE DUDLEY, 7.45 p.m.—MADAME SOWARD, "In Case The Curtains," 7.50 p.m.—Under the auspices of the University of Melbourne, MR. IAN MAXWELL, M.A., Lectures on British Literature at University Extension Board, "Tramps, Scholars and Paupers," 7.55 p.m.—Under the auspices of the Royal Institute of Architects, MR. KINGSLY A. HENDERSON, F.R.V.A., "A Civic Lecture."

BY SPECIAL REQUEST, 8.0 p.m.—MALVERN TRAMWAYS BAND, Conductor, Mr. Harry Shurge, selection, "Mikado" (Sullivan).

8.15 p.m.—ADELLE INMAN, Soprano, "Frailster Your Neck" (Kendis and Brockwood).

8.20 p.m.—SUMMERTIME (Cotton Brothers).

8.25 p.m.—THE PREMIER FOUR, "Hush a Bus," "Just a Snug at Twilight."

8.30 p.m.—REV. KENNETH HENDERSON, Wireless in Schools—The Bush School," 8.35 p.m.—MALVERN TRAMWAYS BAND, March, "Hobson's Choice" (Alford), "Walla, Star of the Ball" (Rimmer).

8.40 p.m.—TAYLOR AND SUMMERS, Songs and Impressions.

8.45 p.m.—MALVERN TRAMWAYS BAND, Fantasy, "The White Rose" (Hinman).

8.50 p.m.—UNCLE TOM'S CABIN, MUSICAL NUMBERS.

Quartette, "My Old Kentucky Home," Huxham Serenaders.

Quartette, "Shine Fly" (Huxham Serenaders Song and Dance—Day).

"The Real Poppy," Woppe, Topay," Marie Le Vaee.

Dancer: Thelma Brown.

Quartette, "O, Dem Golden Slippers," Huxham Serenaders.

"Who's Dat" (selections) Huxham Serenaders.

Solo—Uncle Tom, "Swans River," Eardley Turner.

Quartette, "Poor Old Joe," Huxham Serenaders.

2.30 p.m.—UNCLE TOM'S CABIN, Adapted and Produced by Mr. Eardley Turner, Musical Items by Huxham's Serenaders and Malvern Tramways Band.

Mr. Shirley (Plants), John Forde

Mr. Haley (Plants), Beresford Fowler

Uncle Tom, Eardley Turner

Philips Fletcher, Norman Pitt

Lawrie Marks, Edward Lester

Sutton Lester, David May

Lake Smith, Charles Smith

Samuel, Thomas Williams

Mr. St. Clare, P. L. Julian

George Shelly, Sidney Burdman

Edna Harris, Eugene Dugan

Mr. and Mrs. St. Clare, Eddie Furthinger

Little Eva, Madge Herrick

Topay, Marie La Vaee

Banjo Selection, Thelma Brown

Clog Dancers, Huxham Serenaders

10.15 p.m.—British Official Wireless News from "Olympus."

10.15 p.m.—MALVERN TRAMWAYS BAND, Embouchure Solo, "Asleep in the Deep" (Patriot). Sonjor, E. F. Ellis.

Voxoret, "After I Say I'm Sorry" (Donaldson).

10.20 p.m.—CARTHY BROS., English Comedians.

In a Few Merry Moments.

10.27 p.m.—HASTINGS AND ADAIR, "Where'd You Get Those Eyes?" (Hall).

10.30 p.m.—ONE STRING VIOLIN, "Traumser."

Duet, "Old Tom Hat Father Wore."

10.37 p.m.—MALVERN TRAMWAYS BAND, Marie, "Carde du Corse" (Hall).

10.40 p.m.—GRACE JACKSON, Contralto.

"The Ball of Magenta" (Brube).

"Knotting" (Gabel).

10.50 p.m.—ARMS News Service, Announcements: Meteorological Information.

10.50 p.m.—OUR GREAT THOUGHT.

Strong characters are brought out by shades of situation, and gentle ones by permission.

BUCHER

11.15 p.m.—JOE ARONSON AND HIS SYNCOPATING SYMPHONY BAND.

"Face," "Smile a Little Bit."

"At Peace with the World," "Hi, Diddle Diddle."

"Smiling Eyes," "Neopolitan Nights," "Sally Goodin," "Katinka,"

"Fire, Fire, Fire, Turn the Hose on Me," "Princess Betty's Lullaby," "Any Ice Today, Lady?"

"Glimmer, Glimmer, a Little Kid, Will Ya, Huh?"

"Ring My Bell," "Indian Love Call," "Nin Feolin'!"

"Blowin' On Steam," "Picardy," "Then I'll be Happy."

11.40 p.m.—GOD SAVE THE KING.

## 4QG, BRISBANE

### Tuesday.

### MIDDAY SESSION.

1.0 p.m.—Market Reports; Weather Information supplied by the Commonwealth Weather Bureau; News Service supplied by "The Daily Mail" and "The Daily Standard."

1.20 p.m.—From Hotel Carlton: Lunch Music played by Hotel Carlton Symphony Orchestra.

1.30 p.m.—From the Observatory: Standard Time Signal.

2.0 p.m.—Close Down.

### AFTERNOON SESSION.

3.30 p.m.—PROGRAMME: MUSIC FROM THE THEATRE—Radio Art selection, "Secondo" (Schubert); Australian Vocal Selections (a) viola, "Berzerke" (Cul), Miss Peggy Cochrane, (b) contralto solo, "O Western Wind" (Brabe), Miss Ethel Hook; Duo Art selection, "Apple Blossom" (Kodak), (c) vocal solo, "Vocalise" (selections) (a) fox-trot, "Kinky Kids Parade" (Donaldson), Jeffries Rialto Orchestra, (b) baritone solo, "Tasyevsky Goras Vair" (Tsyblik), Mr Ernest Butcher, Duo Art selection, "Moon Moths" (Kraemer); Australian Vocal Selections (a) violin, "Carnival" (Sousa), U.S.A., 7th Regiment Band, (b) contralto solo, "In the Gloaming" (Harrison), Miss E. Francis Fischer, Duo Art selection, "Concerto in G-Minor" (Mendelssohn).

4.10 p.m.—From a representative of the Australian Ladies' Baseball Association,

4.25 p.m.—"The Telegraph" News Service.

4.30 p.m.—Close Down.

### EARLY EVENING SESSION

5.0 p.m.—Daily Standard" News, Announcements.

6.10 p.m.—The Children's Session: Stories by Uncle Ben and Uncle Jim.

7.0 p.m.—Market Report, Stock Reports; Londoner, "A Tip on Dairying," Mr. C. McGrath (Chief Dairy Supervisor).

7.10 p.m.—Weather News, Announcements.

7.30 p.m.—Standard Time Signal.

## NIGHT SESSION.

7.45 p.m.—Lecture Session, "The Home Beautiful," by Mr. E. J. Chilton.  
CONCERT FROM MR. W. DONALD'S HOME.

The whole of tonight's programme will be relayed from the home of Mr. W. Donald, of West End.

8.0 p.m.—West End: Male Quartette, "Aldersfield"; the Serendipers; soprano solo, "Sound the Pibroch"; Miss H. Oswald, baritone solo, "March of the Cameron Men"; Mr. F. Currow, tenor solo, "Song of the Kingpriest"; Miss G. Henderson, duet, "Werther in the Caubil Bluff"; Miss Donald, soprano solo, "The Old Soldier"; Mr. Tamm, tenor solo, "Willie's Toss to Melville Castle"; Mrs. Wilson, baritone solo, "Jack o' Hindhead"; Mr. D. Donald, interlude, "The Story of Three Men in a Tent."

9.0 p.m.—Metropolitan Weather Forecast; Pinocchio solo, selected, Mrs. A. Woodin; male quartette, "The London Day Class"; the Serendipers, contralto solo, "Auld Robin Gray"; Miss G. Henderson, baritone solo, "Standard on the Braes o' Mar"; Mr. F. Currow, comic song, "My Old Corduroys"; Mr. W. Donald, soprano solo, "Friends Across the Sea"; Miss H. Oswald, soprano solo, selected, Mr. D. Donald, baritone solo, "The Auld Diesel"; Mr. D. Donald, humorous item, selected, Mr. Johnstone; soprano solo, "Castles in the Air"; Mrs. Wilson, tenor solo, "Draw the Sword"; Mr. W. Donald, June; recitation, "Cudlie Doon"; Miss B. Frederiksen, bass solo, "The Quaker"; the Serendipers, male quartette, "The Soldier's Farewell"; the Serendipers, comic song, "Dan Maloney"; Mr. Donald, soprano solo, "Annie Laurie"; Mr. J. Woodland, AULD LANG SYNE.

10.0 p.m.—From the Studio: "The Daily Mail News"; Weather News; Close Down.

## 5CL, ADELAIDE

Tuesday.

## MORNING SESSION.

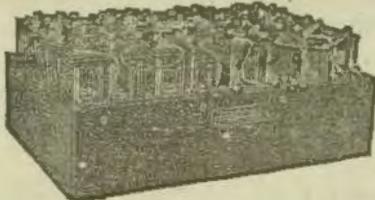
12 noon—G.P.O. chimes.  
12.1 p.m.—Antarctic Broadcasts and New Reproducing Sonora recitals.  
12.20 p.m.—"Advertiser...ws Service." —  
12.50 p.m.—Market Reports.  
1.0 p.m.—Musical Programme Continued.  
2.0 p.m.—G.P.O. Chimes and Close Down.

## AFTERNOON SESSION.

3.0 p.m.—Relay from Maple Leaf Cafe;  
Orchestra selected.  
3.45 p.m.—Sonora selections from the Studio,  
4.1 p.m.—Relay from the Arundel Cafe—  
Orchestral numbers.  
4.45 p.m.—Market reports.  
5.0 p.m.—G.P.O. Chimes and Close Down.

## EVENING SESSION.

6.0 p.m.—G.P.O. Chimes.  
6.1 p.m.—Music Broadcast by Covent  
Garden Orchestra.  
7.0 p.m.—Health Stories.  
7.20 p.m.—Market Reports.  
7.40 p.m.—Home beautiful talk by "Domus."  
8.0 p.m.—G.P.O. Chimes.  
8.1 p.m.—Evening of comic opera gems by  
the following: Miss Marjorie Walsh, Mr.  
Fred Williamson, Mr. Lionel Clark, Miss  
Muriel May, Miss Ruth Schneider, aug-  
mented 5CL Orchestra.  
8.0 p.m.—G.P.O. Chimes.  
9.1 p.m.—Weather Report.  
9.3 p.m.—Dalgity's Wheat Report.  
9.5 p.m.—Operas Continued.  
10.0 p.m.—G.P.O. Chimes.  
10.1 p.m.—News Session.  
10.15 p.m.—Operas Continued.  
11.0 p.m.—G.P.O. Chimes and Close Down.



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SYDNEY.

**6WF, PERTH**

Tuesday.

10.40 p.m.—Tune in.  
10.45 p.m.—First local news bulletin.  
Market reports.

Cables:  
1.00 p.m.—Signal from Perth Observatory.  
10.15 p.m.—Weather news supplied by the Meteorological Bureau of Western Australia.  
1.45 p.m.—Studio Talk.  
1.45 p.m.—Close down.  
8.00 p.m.—Tune in.  
8.45 p.m.—Musical programme, including piano-roll selection by Miss Evelyn Willis, A.R.C.M.

4.45 p.m.—Studio Talk.

4.45 p.m.—Close down.

5.00 p.m.—Stories for tiny tots, by Auntie Katie.

5.30 p.m.—Uncle Leslie will talk to the boys.  
7.35 p.m.—Stocks and Shares intelligence.

Market reports.

Tablet News supplied by courtesy of "The West Australian" newspaper, Perth, Western Australia.

8.30 p.m.—Weather news supplied by the Meteorological Bureau of Western Australia.

8.45 p.m.—"Talk" (777) by Mr. F. Hick.

8.45 p.m.—Music and song.

Musical programme, including articles.

10.00 p.m.—Second local news-bulletin, supplied by courtesy of "The Daily News" newspaper, Perth.

10.30 p.m.—Close down.

**Wednes., March 30**

**2FC, SYDNEY**

**EARLY MORNING SESSION**

7.00 a.m.—"Big Ben" Programme announcements.

7.00 a.m.—Studio music.

7.10 a.m.—Official weather forecast, rainfall, temperatures, astronomical, memorandum, shipping, Intelligence, mail service.

7.25 a.m.—Investment market, mining share market, metal quotations.

7.30 a.m.—Wind, sailor, handicrafts market, advertisements, picture markets.

7.30 a.m.—"Sydney Morning Herald" news service.

8.00 a.m.—"Big Ben" Studio music.

8.15 a.m.—Close down.

**MORNING SESSION**

8.30 a.m.—Marching music for school children.

9.00 a.m.—Studio music.

9.15 a.m.—"Big Ben" news announcements.

9.20 a.m.—"Sydney Morning Herald" news service.

10.30 a.m.—Studio music.

10.45 a.m.—A serial story.

11.15 a.m.—"Big Ben," Australian Press Association and Reuters' Cable Service.

11.30 a.m.—"Big Ben" news.

11.45 a.m.—A talk on home cooking and recipes by Miss Ruth Park.

12.00 a.m.—Marching music for school children.

12.45 a.m.—Close down.

**MIDDAY SESSION**

12.00 noon—"Big Ben" and announcements.

12.30 p.m.—"Big Ben," Exchange, first call.

12.45 p.m.—Studio music.

12.55 p.m.—"Big Ben," weather news.

1.00 p.m.—"Big Ben," Weather intelligence.

1.30 p.m.—"Evening News" midday news service. Producers' Distributing Society's reports.

1.30 p.m.—FROM THE CONGREGATIONAL CHURCH—PITT MEETING, VICTORIA:  
The Last Monday Oration, delivered by Mrs. Lillian Frost prior to her departure for England.

2.00 p.m.—"Big Ben," Stock Exchange, second call.

2.30 p.m.—Close down.

**AFTERNOON SESSION**

2.50 p.m.—Studio programme announcements.

2.55 p.m.—Vocal items as the pupils of Madame Ads' class.

3.15 p.m.—What our pets first saw.  
1. "If shell one throw a smile at you" (Penn).

2. "The Trust" (Sibelius).

3. VIOLIN SOLO, "Berceuse" (Townsend).

4. Monologue, "He Did" (Purdie).

5. "The Big Ben," A talk by Captain Fred Arrowsmith, subject: "Drama of the Ancient Greeks."

5.15 p.m.—Vocal items by Madame Ads' pupils:

6. (a) "My Guest" (Clarke).

7. (b) "A Bowl of Roses" (Clarke).

8. (a) "Dido and Aeneas" (Handel song).

8. (a) "Powder and Paints" (Phillips).

8. (b) "With Courteous Grace" (Phillips).

5.30 p.m.—Marching music for school children.

5.40 p.m.—FROM FARMERS' TEA ROOMS

Miss Gladys Austin, soprano:

"The Pipes of Pan are Calling" (Monckton).

5.45 p.m.—Studio music.

6.00 p.m.—"Big Ben,"

FROM FARMERS' TEA ROOMS: Miss Peggy Dunbar, contralto:

"When my Ships" (Doris).

6.15 p.m.—Reading.

6.30 p.m.—FROM FARMERS' TEA ROOMS

Miss Gladys Austin, soprano:

"Baffo in London Town" (Phillips).

6.45 p.m.—Studio music.

6.40 p.m.—FROM FARMERS' TEA ROOMS

Miss Peggy Dunbar, contralto:

"If I might come to you" (Dubreuil).

6.45 p.m.—Stock Exchange, third call.

6.45 p.m.—Close down.

**EARLY EVENING SESSION**

6.45 p.m.—The Chimes of 2FC.

6.50 p.m.—"Hello, Max" talks to the children.

6.55 p.m.—Mr. Ted Ordell continues his series of stories for the young folk.

6.55 p.m.—Dinner music.

7.00 p.m.—"Hello, Ben," Late sporting news.

7.10 p.m.—Dulcet's market reports (wool, wheat and stock).

7.15 p.m.—Fruit and vegetable markets.

7.20 p.m.—Weather and shipping intelligence.

7.25 p.m.—Late "Evening News" news service.

**NIGHT SESSION**

7.45 p.m.—Programme announcements.

7.50 p.m.—A talk on Community Service Clubs by Mr. J. W. Allen.

8.00 p.m.—"Big Ben," Madame Vera Tasmania, soprano:

"Tell me of my heart" (Bishop).

8.15 p.m.—FROM THE N.S.W. CONSERVATORY OF MUSIC: (In courtesy of the Director and the artists.)

Blow from the Beethoven Commemoration Concert:

Overture, "Leopold," No. 2 (Beethoven).

The N.S.W. Conservatorium Orchestra, Conductor, Mr. W. Arundel Orchard, Musician.

8.30 p.m.—FROM THE STUDIO:

Madame Vera Tasmania, soprano:

(a) "Daffodil" (Scott).

(b) "She's" (Thomas) (by request).

8.35 p.m.—FROM THE N.S.W. CONSERVATORY OF MUSIC: (In courtesy of the Director and the artists.)

Concerto No. 3 in C Minor for Piano-forte and Orchestra, Opus 37 (Beethoven).

Solo Pianist, Mr. Frank Mulcahy; and the N.S.W. Conservatorium Orchestra.

8.45 p.m.—"Big Ben,"

"THE FOUR WAIFS," Male Quartet:

(a) "Mulligan's Mississippi" (Atherton).

(b) "Nellie was a Lady" (Gocks).  
 (c) "Cornfield Melodies" (arr. Waifs).  
 8.8 p.m.—Miss Daisy Richards, violinist;  
 "Spanish Dance" (Sarante).  
 9.12 p.m.—Madame Vera Isacke, soprano;  
 "I was Dreaming" (Jucker).  
 9.30 p.m.—Frank Leonard, comedian;  
 "A Telephone Story" (Melivo).  
 9.31 p.m.—The Four Waifs; Male Quartette:  
 (a) "Lost Chord" (Sullivan).  
 (b) "Pennsylvania".  
 (c) "Picassianum Lullaby" (Macy).  
 9.42 p.m.—Miss Daisy Richards, violinist;  
 (a) "Humoreske" (Dunkirk) (by request).  
 (b) "Cavatina" (Bach-Kreisler).  
 9.45 p.m.—Mr. Frank Leonard, comedian;  
 "She's All That" (Weston Dels).  
 9.48 p.m.—The Four Waifs; Male Quartette:  
 (a) "In Abeyance" (Dudley Buck).  
 (b) "Medley" (arr. Waifs).  
 (c) "Every Rustling Tree."  
 9.52 p.m.—The Radio Serial Forces; THE MAN WHO WOULDNT QUIT, written by Cordinning Hall and produced by Scott Alexander and his Company.

Part Three will be broadcast this evening and listeners who have followed this Story will require to send in their solutions by midday of the 5th April as the final instalment will be given on that evening and the winners of the £10 cash prize will be announced.  
 10.34 p.m.—Miss Daisy Richards, violinist;  
 "Dirge of the North" (Bulagh-Kreisler).  
 10.36 p.m.—The Four Waifs; Male Quartette:  
 (a) "Dear Little Shamrock" (Hinchliffe).  
 (b) "Show Me the Way to go Home" (King).  
 (c) "Down South" (arr. Waifs).

10.45 p.m.—FROM THE WENTWORTH CAFE!  
 The Wentworth Symphonic Dance Orchestra under the baton of Mr. Frederick Leighton.  
 10.45 p.m.—Mr. Frank Leonard, comedian;  
 (a) "Loved Lov" (im. Weston Dels).  
 (b) "Have one more before you go."  
 (c) "Panda."

10.52 p.m.—The Wentworth Symphonic Dance Orchestra in popular numbers. Conductor, Mr. Frederick Leighton.  
 11.00 p.m.—"Big Ben." Late news and announcements from the Studio.  
 11.15 p.m.—Celebrity records.  
 11.15 p.m.—The Wentworth Symphonic Dance Orchestra will play until midnight.  
 12 midnight—"Big Ben."  
 National Anthems.  
 Close down.

## BBL, SYDNEY

Wednesday.

### EARLY MORNING SESSION.

7.18 a.m.—G.P.O. Clock and Chimes.  
 7.18 a.m.—Metropolitan Weather Forecast.  
 7.17 a.m.—Musical Programme from the Studio.  
 7.28 a.m.—Physical Training and Health Exercise.  
 7.30 a.m.—G.P.O. Clock and Chimes.  
 7.31 a.m.—Hints on Health.  
 7.38 a.m.—Physical Training and Health Exercises.  
 7.45 a.m.—G.P.O. Clock and Chimes.  
 7.46 a.m.—Weather Report.  
 7.47 a.m.—Broadcaster's special news service.  
 8.0 a.m.—G.P.O. Clock and Chimes; Close Down.

### MORNING SESSION

11.9 a.m.—G.P.O. Clock and Chimes.  
 11.9 a.m.—Weather Report.  
 11.9 a.m.—Musical Programme from the Studio.  
 11.8 a.m.—Sydney "Daily Telegraph" News Service.  
 11.15 a.m.—Rabbit Market Report.  
 11.17 a.m.—Flax Market Report.  
 11.19 a.m.—Vegetable Market Report.  
 11.21 a.m.—Fruit Market Report.  
 11.23 a.m.—London Dairy Farm Egg and Poultry Market Report.  
 11.28 a.m.—London Metal Quotations.  
 11.30 a.m.—Ships in Call by Wireless.  
 11.32 a.m.—Information re Interstate and Overseas Mails.

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15/- per 2-volt cell.  
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Sets rewired in any circuit.



11.30 a.m.—Shipping information—arrivals and departures.  
11.30 a.m.—WOMEN'S SECTION: Talk on "Camping," by Miss G. Varley, President of Women's Sports Authority.

11.45 a.m.—Social Notes, by Mrs. Jordan.  
11.55 a.m.—Mrs. Jordan replies to correspondents.

12.15 p.m.—Talk on "Rheumatic Fever," by Dr. J. Morris.

12.30 p.m.—G.P.O. Clock and Chimes

12.35 p.m.—Sydney Stock Exchange Calls.

12.35 p.m.—News from the "Sun."

12.45 p.m.—Musical Programme from the Studio.

1.15 p.m.—G.P.O. Clock and Chimes.

1.15 p.m.—Pianoforte Lecture Recital, by Mr. Arnold B. Mota, R.A. Broadcast from the Fine Art Gallery, Anthony Horderns.

1.45 p.m.—News from the "Sun."

1.45 p.m.—Sydney Stock Exchange Calls.

2.00 p.m.—G.P.O. Clock and Chimes.

2.15 p.m.—News from the "Sun."

2.45 p.m.—Musical Programme from the Studio.

3.00 p.m.—G.P.O. Clock and Chimes.

3.15 p.m.—Young People's Session.

3.30 p.m.—News from the "Sun."

3.50 p.m.—Musical Programme from the Studio.

4.15 p.m.—News from the "Sun."

4.30 p.m.—G.P.O. Clock and Chimes.

4.45 p.m.—Musical Programme from the Studio.

4.45 p.m.—Serial Story entitled "Tim Empowered Shield."

4.50 p.m.—G.P.O. Clock and Chimes.

4.50 p.m.—Musical Programme from the Studio.

4.45 p.m.—Producers' Distributing Society's Fruits and Vegetables Market Report.

4.50 p.m.—Shipping Information when Available.

4.55 p.m.—Days racing results on race days.

4.55 p.m.—News from the "Sun."

4.55 p.m.—Review of Night's Programme.

5.00 p.m.—G.P.O. Clock and Chimes; Close Down.

### EARLY EVENING SESSION.

5.45 p.m.—G.P.O. Clock and Chimes.

5.45 p.m.—Mr. and Mrs. W. and D. Lock will entertain the middle class.

6.00 p.m.—Musical Programme from Studio.

### SPECIAL COUNTRY SESSION.

7.00 p.m.—G.P.O. Clock and Chimes.

7.00 p.m.—G.P.O. Clock and Chimes. Australian Mercantile Land and Finance Co.'s Report; Weather Report and Forecast, by courtesy of Government Meteorologist. Fresh Produce Report; Sydney Fruit and Vegetable Market; Stock Exchange Reports; Grain and Feeders Report; Dairy Products Report ("Sun").

7.15 p.m.—Country News from the "Sun."

7.30 p.m.—St. John's Ambulance.

7.45 p.m.—G.P.O. Clock and Chimes; Broadcasters' Topical Chorus.

8.00 p.m.—Mr. A. G. Steel (Baritone).

8.10 p.m.—Mr. Reg. Harrison (Cassinet).

8.17 p.m.—Miss Helen Kinsford (Contralto).

8.20 p.m.—Mr. Frank Ryan (Cassinet).

8.31 p.m.—Morris and Charlton in Duets.

8.40 p.m.—Miss May Fotheringham (Soprano).

8.53 p.m.—Mr. Stanley R. Callett (Tenor).

9.00 p.m.—G.P.O. Clock and Chimes; Weather Report and Forecast by courtesy of Mr. C. J. Marks, Government Meteorologist.

9.05 p.m.—Mr. A. G. Steel.

9.15 p.m.—Mr. Reg. Harrison.

9.20 p.m.—Miss Helen Kinsford.

9.25 p.m.—Mr. Frank Ryan.

9.30 p.m.—Miss May Fotheringham.

9.45 p.m.—Mr. Frank Ryan.

9.52 p.m.—Neil Crane and Alf. J. Lawrence.

10.00 p.m.—Australian Dancers Dance Band.

Broadcasts from the Ballroom of the Ambassador. During the Intervals between Dances, News Reports by courtesy of the "Sun" will be broadcast.

12.00 midnight—G.P.O. Clock and Chimes.

## 2GB, SYDNEY

### Wednesday.

#### MORNING SESSION.

9.30 a.m.—Music.

9.45 a.m.—Psychological Class.

10.15 a.m.—Music.

10.45 a.m.—Biographical Talks for Seniors.

10.45 a.m.—Music.

10.50 a.m.—Close down.

#### AFTERNOON SESSION.

3.55 p.m.—

4.10 p.m.—

4.15 p.m.—

4.45 p.m.—

4.45 p.m.—

4.50 p.m.—

#### EVENING SESSION.

5.30 p.m.—Children's Session conducted by Mr. J. K. Powell.

7.15 p.m.—Music.

7.20 p.m.—Address by the Rt. Rev. G. S. Arding, "Do you really want to be happy?"

7.30 p.m.—Music from Studio.

7.50 p.m.—Song by Miss Ethel Jones.

8.00 p.m.—Address by Professor Ernest Wood.

8.15 p.m.—Vocal duet.

8.25 p.m.—Piano solo, ADA BROOK.

8.30 p.m.—Violin solo.

8.35 p.m.—Laughter and a "fat."

8.40 p.m.—"Merry over the waves we go."

8.45 p.m.—"I don't see it."

8.45 p.m.—Violin solo, MONICA HORDER.

8.55 p.m.—Announcements.

9.00 p.m.—Topical talk.

9.05 p.m.—Vocal duet.

9.20 p.m.—Clement Hocking.

9.30 p.m.—Piano solo, ADA BROOK.

9.35 p.m.—Violin solo, MONICA HORDER.

9.40 p.m.—2GB Vocal Quartette.

1. "Away to the West."

2. "Hunting Song."

3. "Good Night, Ladies."

10.00 p.m.—Cheerful talk.

10.00 p.m.—Great Thoughts from Great Minds.

## 3LO, MELBOURNE

### Wednesday.

#### MIDDAY SESSION.

LENTEN MIDDAY SERVICE from ST. PAUL'S CATHEDRAL.

MAJORIE VERE, soprano.

TAYLOR AND SUMMERS.

CHECK HAYES, the Talkative Chap Accompanied by AGNES FORTUNE.

#### "FOOD FOR THOUGHT."

12 noon—Time Signal. British official wireless news from Rugby. Beuter's and the Australian Press Association cables. Stock Exchange information. "Argus" and "Herald" news service.

12.15 p.m.—SPECIAL LENTEN MIDDAY SERVICE, transmitted from St. Paul's Cathedral. Speaker: Mr. F. C. PURBRICK.

12.35 p.m.—STUDIO ORCHESTRA.

"Merry Widow" (Lehar).

1.00 p.m.—MARJORIE VERE, soprano.

"The Wood Pigeon" (Lehar).

"The Owl" (Lehar).

1.12 p.m.—TAYLOR AND SUMMERS.

Story and Intermission.

1.17 p.m.—Meteorological information. Shipping intelligence. Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.

1.24 p.m.—STUDIO ORCHESTRA.

"Tunes in Algeria" (Rossini).

1.31 p.m.—CHECK HAYES, the Talkative Chap, wants you to join him for a few minutes.

- 1.42 p.m.—**MARJORIE VERN**, soprano:  
"The Yellow Hammer" (L. hamay).  
"The Starling" (Lechman).
- 1.50 p.m.—**STUDIO ORCHESTRA**:  
Selections, "Sauvad Senses" (Fletcher).
- 2 p.m.—Close down.
- Results of the **SHEPPARTON JOCKEY CLUB** will be given as they come to hand.
- 2.45 p.m.—Description of **THAI, HANDICAP**.  
Geeing races, by "Musket" of the "Sporting Globe."
- AFTERNOON SESSION.**
- THE STUDIO ORCHESTRA.
- WELTER FOUR, male quartet.
- WALTER SMITH, cornet.
- CARTHY BROS., English comedians.
- DOROTHY ROXBURGH, viola.
- ADELE INMAN, soprano.
- HASTINGS & AIR, AIR.
- Accompanist ..... **AGNES FORTUNE**
- 2 p.m.—Description of **WELTER HANDICAP**.  
Geeing races, by "Musket" of the "Sporting Globe."
- 2.45 p.m.—**STUDIO ORCHESTRA**.
- "In Sunny Spain," Part 1. (Perry Elliott).
- 3.15 p.m.—**THE PREMIER FOUR**:  
"Midnight Waltz".  
"Just around the corner".
- 3.22 p.m.—**WALTER SMITH**, cornet.  
"Showmen's Morning Song" (Suppe).
- 3.30 p.m.—Description of **14.2 PONY RACERS**.  
Geeing races, by "Musket" of the "Sporting Globe."
- 3.45 p.m.—**STUDIO ORCHESTRA**.
- "In Sunny Spain," Part 2. (Perry Elliott).
- 3.45 p.m.—**CARTHY BROS.**, English comedians.
- Bite from home.
- 3.55 p.m.—**DOROTHY ROXBURGH**, viola.  
"Andante" (Haydn).
- 4 p.m.—Description of **ST. PATRICK'S DAY HANDICAP**. Geeing races, by "Musket" of the "Sporting Globe."
- 4.45 p.m.—**STUDIO ORCHESTRA**.
- "Dance Orientale".
- 4.45 p.m.—**ADELE INMAN**, soprano.  
"Chanson de Flora" (Godard).  
"Night Birds' Coos" (Helf).
- 4.55 p.m.—**STUDIO ORCHESTRA**.
- "The Show Suite" (Ansell).
- 4.50 p.m.—Description of **FLYING HANDICAP**. Geeing races, by "Musket" of the "Sporting Globe."
- 4.55 p.m.—**HASTINGS & ADAIR**:  
Song, "The Day He Took Me to Wensley."  
"Kiss you good morning."  
Comedy Sketch, "Egyptian Mummy"  
"I like Latin".
- 4.45 p.m.—"Herald" news service.  
Stock Exchange information.
- 5 p.m.—Description of **NOVELTY PONY RACE**. Geeing races, by "Musket" of the "Sporting Globe."
- 5.15 p.m.—Close down.
- EVENING SESSION.**
- 5.40 p.m.—**CHILDREN'S HOUR**. Answers to letters and birthday greetings.
- 5.55 p.m.—**HAROLD COLLIER'S CRACKA-JACK MOUTHORGAN BAND**.  
Popular melodies.
- 6.15 p.m.—**MARY, MARY**. Story for the little ones.  
"The Princess and the Muffin Man."
- 6.15 p.m.—**GRACE JACKSON**, will sing two little songs to the children.
- 6.30 p.m.—**ELSPETH BRADSHAW**,  
"Commemorate MARY, MARY".
- 6.35 p.m.—"Araxis" and "Herald" news services.  
Weather and serial mail information, by the Australian Aerial Services, Ltd.
- 6.34 p.m.—Stock Exchange information.  
Overseas shipping.
- 6.32 p.m.—Fish market reports by J. R. Barrett, Ltd.
- 6.35 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Hay-market sheep sales. Poultry, grain, hay, straw, oats, chaff. Dairy products. Potatoes and onions. Market prices of oranges.



*'As clear  
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# DAVID JONES'

For Service - - - Sydney

and lemons, by the Victorian Central Citrus Association. Fruit market reports by the Wholesale Fruiterers' Association, compiled by the "Fruit World," exclusive to ELO.

## NIGHT SESSION.

Speaker: Mr. H. CROWE.  
"GARGOYLE."  
CAPT. PETERS.  
THE STUDIO ORCHESTRA.  
CARTHY BROS. English comedians.  
LEN GIBSON'S NEAPOLITAN SEXTET.  
MADAME E. ASHLEY soprano.  
CHECKER HAYES, the Talkative Chap.  
TASMA THORAN, violin.  
SYD L. EXTON tenor.  
ARTHUR DOUGLAS Scotch comedian.  
TAYLOR & SUMMERS.  
JOE ARONSON & HIS SYNCOPHONISTS.

Accompanist ..... ANNE FORTUNE.  
Announcer ..... MAURICE DUGLEY.  
7.15 p.m.—Under the auspices of the Department of Agriculture, MR. R. CLARKE, Export Superintendent, "Market Comments."

7.30 p.m.—"GARGOYLE." Your car in winter. A short talk about the operation of your car during winter, and a few simple suggestions of how to avoid trouble.  
7.45 p.m.—CAPTAIN PETERS.  
"How's Weather?" (Continued).  
8.00 p.m.—STUDIO ORCHESTRA.  
"A Love Story," Part I (Lake).  
8.15 p.m.—CARTHY BROS. English comedians.

"Humorous Bamboozles."  
8.30 p.m.—LEN GIBSON'S NEAPOLITAN SEXTET.  
"The Little Chapel" (Sullivan).  
"Reverting" (Trinity).  
8.45 p.m.—MADAME E. ASHLEY, soprano.  
"Quando Men Vi" (Puccini).  
8.55 p.m.—STUDIO ORCHESTRA.  
"La Suite" (Romance) (Gounod).

9.05 p.m.—CHECKER HAYES, the Talkative Chap, has a little trouble with "Calvary's Drunks".

9.15 p.m.—TASMA THORAN, violin.  
"Romantic Side Pictures" (Daventry).  
9.30 p.m.—SYD L. EXTON, tenor.  
"When Shadows Gather."  
"You're in a Gondola."

9.45 p.m.—STUDIO ORCHESTRA.  
"The Old Reform" (Kreisler).

9.51 p.m.—ARTHUR DOUGLAS, Scotch comedian.  
"The Human Hollow Poster" (Douglas).

9.54 p.m.—LEN GIBSON'S NEAPOLITAN SEXTET.  
"Moldies of Old Time Memories" (Art. Gibson).

Mandolin solo, Len Gibson.  
"Medley in F" (Rahmatullah).

9.51 p.m.—MADAME E. ASHLEY, soprano.  
"The Blue Danube" (Lanner).

"Revering" (Continued).  
9.55 p.m.—TAYLOR & SUMMERS.  
Songs and Jingle songs.

9.45 p.m.—STUDIO ORCHESTRA.  
"Intermezzo from Masseuse's Night Dream" (Mendelssohn).

9.55 p.m.—British official wireless news from Rugby. Announcements.

10.05 p.m.—SYD L. EXTON, tenor.  
"The Indian Love Lyric" (Woodfords-Ford).

10.15 p.m.—LEN GIBSON'S NEAPOLITAN SEXTET.  
"Where did you get those eyes?"

Mandolin and guitar duet.  
"Plantation Medley" (Liza, Gibson).

10.25 p.m.—ARTHUR DOUGLAS  
"The Human Hollow Poster" (Douglas).

10.25 p.m.—STUDIO ORCHESTRA.  
"Inlanden" (Art. Godfrey).

10.35 p.m.—"Argus" news service. Announcements. Meteorological information.

10.45 p.m.—JOE ARONSON & HIS SYNCOPHONISTS.  
"While the Sakura Sleeps."

"Romances and sorry."

"There'll come a sometime."

"Call me early in the morning."

11 p.m.—OUR GREAT THOUGHT.

The true greatness of man is in those qualities which constitute the greatness of his individuality." Charles Bonaparte.

11.15 p.m.—JOE ARONSON & HIS SYNCOPHONISTS.

"Blame it on the West."

"Lie down to your upon strings."

"All the world 'round."

"Joy to the Moon."

"Oh, Miss Lillian."

"Love Bound."

"That's why I love you."

"There's a mountain on the Vilka."

"Nobdy but you."

"Idolizing."

"Moonlight on the Ganges."

"Good old bird whistled a tune."

"While the river go drifting by."

11.45 p.m.—OD SAVE THE KING.

## 4QG, BRISBANE

Wednesday.

## EARLY MORNING SESSION

6.00 a.m.—Physical Culture Session.

7.0 a.m.—Close Down.

## MIDDAY SESSION.

1.0 p.m.—Market Reports: Weather Information supplied by the Commonwealth Weather Bureau; News Service supplied by "The Daily Mail" (Brisbane); "The Courier-Mail".

1.20 p.m.—From the G.P.O.: Lunch Hour Music played by the Postal Institute Orchestra.

1.35 p.m.—From the Observatory: Standard Time Signal.

2.0 p.m.—Close Down.

## AFTERNOON SESSION.

3.30 p.m.—From Hotel Carlton: Afternoon Tea Music from the Lounge, played by Hotel Carlton Symphony Orchestra.

4.15 p.m.—From the Studio: News Service supplied by "The Telegraph".

4.30 p.m.—Close Down.

## EARLY EVENING SESSION.

5.0 p.m.—"Daily Standard" News: Announcements.

6.30 p.m.—The Children's Hour: Stories by Little Miss Brisbane.

7.0 p.m.—Market Reports: Stock Reports Lecturette, "Conserving Fodders for Drought Periods"—Mr. J. K. Murray (Principal, Queensland Agricultural High School and College, Gatton).

7.20 p.m.—Weather News Announcements.

7.30 p.m.—Standard Time Signal.

## NIGHT SESSION.

7.45 p.m.—Lecture Session: A talk to motorists, by Mr. W. J. Donoghue.

## STUDIO CONCERT.

8.0 p.m.—Overture, "Catherine Carnaro" (Lachner), the Studio Orchestra (conductor, Mr. A. R. Featherstone); soprano solo, "The Carnival" (Moloy); Miss Lilian McLean, "The Whole of Time"; Miss Ruth Mason, tenor solo, "Come into the Garden, Maud" (Hoffel), Mr. John Steel; fox-trot, "Step Along Henry" (Olman), the Studio Orchestra, a lullaby for tonight by Will H. Linton, "The Silver Man"; berceuse, solo, "Silent, Still, Soft Song of Troy" (Clay), Mr. C. B. Askey; selection, "Queen of the Pirate Isle" (Isaacs), the Studio Orchestra; contralto solo, selected, Miss Lilian McLean; group of mouth organ numbers, "The Spanish Gypsies"; ballad solo, "Mother o' Mine" (Joural), Mr. C. B. Askey; violin solo, "Nocturne in E flat" (Chopin-Sarasate), Mr. H. Scott MacCallum; soprano solo, "The 'De'" (Ronald), Miss Jill Manners; dance fantaisie, "Pleureuse" (Greenwald), the Studio Orchestra.



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9.0 p.m.—Metropolitan Weather Forecast.  
 Tenor solo, "Rose" (Adams). John Steel: march, "The Weatherman" (Lithgow). Studio Orchestra: monologue, "When You Care for a Girl"; Miss Ruth Masser: song; mouth organ numbers by "The Sandman"; contralto solo, selected, Miss Lilian McLean; two-sets, "Violetta" (Olman); Studio Orchestra: monologue, "The Weatherman" (Lithgow); Miss Eileen McLennan: intermezzo, "Brown Eyes" (Weeks); Studio Orchestra.  
 10.0 p.m.—The "Daily Mail" News; Weather News; Close Down.

## SCL, ADELAIDE

Wednesday.

### MORNING SESSION.

12 noon—G.P.O. Chimes.  
 12.1 p.m.—Autotone Reproducer and New Reproducing Sonora recitals.  
 12.20 p.m.—"Advertiser" News Service.  
 12.50 p.m.—Market Reports.  
 1.0 p.m.—Musical Programme Continued.  
 2.0 p.m.—G.P.O. Chimes and Close Down.

### AFTERNOON SESSION.

3.0 p.m.—Relay from the Maple Leaf Cafe—Orchestra numbers.  
 3.45 p.m.—From the Studio—Autotone Reproducer and Sonora recitals.  
 4.0 p.m.—G.P.O. chimes.  
 4.1 p.m.—Relay from the Arcadia Cafe—Orchestra numbers.  
 4.25 p.m.—Market Reports.  
 4.30 p.m.—G.P.O. Chimes and Close Down.

### EVENING SESSION.

6.0 p.m.—G.P.O. Chimes.  
 6.1 p.m.—Dinner Music Broadcast by Cowent Garden Orchestra.  
 7.0 p.m.—Bedtime Stories.  
 7.30 p.m.—Market Reports.  
 7.40 p.m.—Song, "Sister, Sister" (Corner).  
 8.0 p.m.—G.P.O. Chimes.  
 8.1 p.m.—Relay from Osborne Hall—Mr. Robert Carmichael's Janes Band.  
 8.20 p.m.—Song, Mr. A. Matters.  
 8.24 p.m.—Humorous Interlude, Mr. W. Tonge.  
 8.30 p.m.—Mr. H. Carmichael's Band.  
 8.45 p.m.—Song, Miss Linda Wald.  
 8.48 p.m.—Song, Mr. Fred Williamson.  
 8.54 p.m.—Humor, Mr. W. Tonge.  
 9.0 p.m.—G.P.O. Chimes.  
 9.1 p.m.—Weather Report.  
 9.3 p.m.—Dalgety's Wheat Report.  
 9.6 p.m.—Relay from Osborne Hall.  
 9.8 p.m.—Song, Miss Jean Sinclair.  
 9.9 p.m.—Song, Miss M. Morgan.  
 9.98 p.m.—Song, Mr. Arnold Matters.  
 10.0 p.m.—Relay Osborne Hall.  
 10.1 p.m.—"Advertiser" News Service.  
 10.15 p.m.—Song, Miss Linda Wald.  
 10.19 p.m.—Humor, Mr. W. Tonge.  
 10.22 p.m.—Song, Mr. Fred Williamson.  
 10.28 p.m.—Relay Osborne Hall.  
 10.45 p.m.—Song, Miss Jean Sinclair.  
 10.49 p.m.—Pianoforte solo, Miss M. Morgan.  
 10.54 p.m.—Song, Mr. A. Matters.  
 10.58 p.m.—Station announcements.  
 11.0 p.m.—G.P.O. Chimes and Close Down.

## 6WF, PERTH

Wednesday.

12.30 p.m.—Tune In.  
 12.35 p.m.—Matinee news and cables.  
 1 p.m.—Time signal from Perth Observatory.  
 1.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.  
 1.2 p.m.—Studio Septette.  
 2 p.m.—Close down.  
 3.20 p.m.—Tune In.  
 3.35 p.m.—Musical programme.  
 4 p.m.—Studio Trio.  
 4.30 p.m.—Close down.  
 7 p.m.—Tune in.

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7.30 a.m.—Children's programme, "Dadie Tum's Cabin," by Uncle Duffy.  
7.30 p.m.—Stocks, markets, news.  
8.00 p.m.—"Phone signal from Perth Observatory."  
8.15 p.m.—"The Weather." (Anon.)  
8.30 p.m.—"Talks, 'Birds of the Antarctic,'" by Mr. F. Leeson-Whittle.  
8.45 p.m.—"With the Tramps."  
Selected by the Radio String Tuna.  
Miss Evelyn Willis, A.M.C.M., piano.  
Mr. E. G. Bradman, cello.  
Mr. E. G. Newton, violin.  
10.15 a.m.—Second hand news bulletin broadcast  
by courtesy of "The Daily News" newspaper.  
10.30 a.m.—Close down.

Thursday, March 31

2FC, SYDNEY

EARLY MORNING SESSION

7.30 a.m.—"Big Ben" and announcements.  
7.45 a.m.—Studio music.  
7.50 a.m.—Official weather forecast, rainfall, temperatures, astronomical phenomena, shipping intelligence, mail service.  
7.55 a.m.—Investment market, mining share market, metal quotations.  
7.58 a.m.—World and inter-state markets, inter-state markets, produce markets.  
7.45 a.m.—"Sydney Morning Herald" news service.  
8.00 a.m.—"Big Ben," Studio music.  
8.15 a.m.—Close down.

MORNING SESSION

8.20 a.m.—Marching music for school children.  
8.40 a.m.—"Big Ben" and announcements.  
9.45 a.m.—Last minute sporting information by the 2FC Racing Commissioner.  
10 a.m.—"Big Ben" and announcements.  
10.15 a.m.—"Sydney Morning Herald" news service.  
10.30 a.m.—"Big Ben," Studio music.  
10.45 a.m.—A Dinner's Heading.  
11 a.m.—"Big Ben," Australian Press Association and Reuters' cable services.  
11.15 a.m.—Studio music.  
11.30 a.m.—Marching music for school children.  
11.45 a.m.—Close down.

MIDDAY SESSION

12 noon—"Big Ben" and announcements.  
12.15 p.m.—Stock Exchange, first call.  
12.30 p.m.—Studio music.  
12.50 p.m.—Rugby wireless news.  
12.55 p.m.—Miss Dorrie Carroll, mezzo-soprano.  
1 p.m.—"Big Ben," Weather intelligence.  
1.05 p.m.—"Evening News" midday news service.  
Programme illustrating Society's report.  
1.25 p.m.—Stock Exchange, second call.  
1.50 p.m.—Marching music for school children.  
2.10 p.m.—Studio music.  
2.15 p.m.—Last minute sporting information by 2FC Racing Commissioner.  
2 p.m.—Close down.

AFTERNOON SESSION

2.30 p.m.—Programme announcements.  
2.35 p.m.—Elocutionary items by the Pupils of Mr. Lawrence Campbell:  
1. "Bauermann der Dampfsegen" (Werther).  
2. "Mädel Wachtmeister."  
3. "Eine Sweet Home" (Anon.).  
Miss Betty Thomas.  
2. "The Quilter" (Sister).  
Mr. Harry Thorne.  
4. "The Rebet" (Anon.).  
Miss Oliver McMenamy.  
5. "The Celebration" (Brasham).  
Miss Mary Bryant.  
6. "The Test" (Anon.).  
Miss Ursula Vowles.

3.30 p.m.—Mr. Cliff Hanney, violinist; "Londonderry Air" (Kreisler).  
3.30 p.m.—Marching music for school children.  
3.45 p.m.—FROM FARMERS' TEA ROOMS—  
3.50 p.m.—"Song of the Snows" (Mezzo-soprano).  
"Tell me, Gipsy" (Pina).  
3.55 p.m.—Studio music.  
4 p.m.—"Big Ben."  
FROM FARMERS' TEA ROOMS:  
3.55 p.m.—"Song of the Snows" (Mezzo-soprano).  
"Nostalgia" (Jarmus).  
4.05 p.m.—"Song of the Snows" (Mezzo-soprano).  
4.10 p.m.—Studio music.  
4.15 p.m.—FROM FARMERS' TEA ROOMS—  
3.55 p.m.—"Song of the Snows" (Mezzo-soprano).  
"Two Young Lovers" (Elkins).  
4.15 p.m.—Studio music.  
4.30 p.m.—FROM FARMERS' TEA ROOMS—  
Miss Mary Halliday, contralto.  
"The nut, Jingle she" (Bridge).  
4.45 p.m.—Stock Exchange, third call.  
4.55 p.m.—Close down.

EARLY EVENING SESSION

5.45 p.m.—The Chorus of 2FC.  
5.50 p.m.—"The 'Hobbit Man'" talks to the children.  
6.00 p.m.—Mr. Ted Ordell continues his series of stories.  
6.15 p.m.—"Dinner music."  
7 p.m.—"Big Ben." Late sporting news.  
7.15 p.m.—Dalyell's market reports (wool, wheat, flour, etc.).  
7.18 p.m.—Fruit and vegetable markets.  
7.20 p.m.—Weather and shipping intelligence, Stock Exchange.  
7.25 p.m.—Late "Evening News" news service.

NIGHT SESSION

7.40 p.m.—Programme announcements.  
7.45 p.m.—Talk by the Technical Editor of "Wireless Weekly".  
8 p.m.—"Big Ben."  
FROM THE ERIC WINTER GARDEN THEATRE, GEORGE STREET, SYDNEY: Songs by Jimmy Elkin's Orchestra, with the Grand Organ.  
8.10 p.m.—DEPARTURE FOR THE FIRST TRADE FAIR FROM THE DECK AND QUARTERS OF THE NAVAL TRAINING SHIP, H.M.A.S. "TINGHA," ANCHORED AT ROSE BAY, SYDNEY;  
Descriptions of the ship and various items. See Sketches by Mr. Herbert Fry and his Male Voice Chorus.  
(a) "We're all bound to go."  
(b) "Bally Brown."  
(c) "Sheanadair."  
(d) "What shall we do with the drunken sailor?"

8.20 p.m.—Mr. Alfred Cunningham, baritone; "When I write to you again" (Brookfield).  
8.30 p.m.—The 2FC Studio Dance Band, conducted by Mr. Eric Pearce, in popular numbers.  
8.35 p.m.—Some humorous cartoons and comic drawings by Mr. Herbert Julius.  
8.40 p.m.—Miss Mabel Batchelor, soprano; "Cantando" (Uhlen).  
8.50 p.m.—Mr. Harry Randle, trumpet solo.  
8.54 p.m.—Community singing by the boys on the "Tingha."  
9 p.m.—"Big Ben."  
Miss Kitty Elliott, comedienne.  
9.10 p.m.—The Studio Dance Band, conducted by Mr. Eric Pearce.  
9.12 p.m.—Mr. Alfred Cunningham, baritone; "In Happy Moments" (Wallace).  
9.15 p.m.—Miss Mabel Batchelor, soprano  
(a) "O'er in the silly night."  
(b) "Musetta Waltz Song" (Bohemian).  
9.22 p.m.—The 2FC Studio Dance Band in a programme of popular songs.  
9.25 p.m.—Mr. Herbert Fry and his Male Party in Sea Chanties:  
(a) "Blow me down."  
(b) "Good morning, ladies all."  
(c) "Tom's gone to Hilo."  
(d) "The Dead Horse."  
9.40 p.m.—Miss Kitty Elliott, comedienne.  
9.45 p.m.—Mr. Alfred Cunningham, baritone  
(a) "Langane's Log" (Loche).  
(b) "Dawn."

9.52 p.m.—A few words from the Commander of the H.M.A.R., "Tingira."

9.55 p.m.—Miss Mabel Batchelder, soprano:

"Hallelujah Chorus" (Machado).

9.58 p.m.—The ZPC Symphonic Dance Band.

10.5 p.m.—FROM THE LYRIC, WINTER GARDEN THEATRE, GEORGE STREET, SYDNEY:

Jimmy Elkin's Jazz Band with the Grand Organ.

10.55 p.m.—Mr. Norman Leslie, comedian:

"When I owe my kindly-never dollars" (Berlin).

10.58 p.m.—Mr. Cy Peir, Ukulele Troubadour:

"A Man never Knows" (Frederick).

10.59 p.m.—FROM THE LYRIC, WINTER GARDEN THEATRE, GEORGE STREET, SYDNEY:

Jimmy Elkin's Jazz Band with the Grand Organ.

10.55 p.m.—FROM THE STUDIO:

Mr. Cy Peir, Ukulele Troubadour:

"I've named my yellow after you" (Roseland-Waldorf).

"Oh, see, George!" (Sherman).

10.56 p.m.—Mr. Norman Leslie, entertainer:

"He was very kind to me" (Handel).

10.40 p.m.—FROM THE WENTWORTH CAFE, CHURCH HILL, SYDNEY:

The New Wentworth Symphonic Dance Orchestra, Conductor, Mr. Frederick Leighton.

10.45 p.m.—FROM THE STUDIO:

Mr. Norman Leslie, entertainer:

"Oh, see, George!" (Sherman).

10.52 p.m.—Mr. Cy Peir, Ukulele Troubadour:

"If I can't have you" (Lucas).

10.59 p.m.—Mr. Norman Leslie, entertainer:

"What does the pussy-cat mean?" (Nelson).

11 p.m.—"Big Ben."

Late news and announcements.

11.5 p.m.—FROM THE WENTWORTH CAFE, CHURCH HILL, SYDNEY:

The New Wentworth Symphonic Dance Orchestra, conducted by Mr. Frederick Leighton, in popular numbers until midnight,

12 midnight—"Big Ben."

National Anthem.

Closes down.

## 2BL, SYDNEY

Thursday.

### EARLY MORNING SESSION.

7.15 a.m.—G.P.O. clock and chimes.

7.16 a.m.—Metropolitan weather forecast.

7.17 a.m.—Musical programme from the Studio.

7.28 a.m.—Physical training and health exercises.

7.30 a.m.—G.P.O. clock and chimes.

7.31 a.m.—Hints on health.

7.38 a.m.—Physical training and health exercises.

7.45 a.m.—G.P.O. clock and chimes.

7.46 p.m.—Weather report.

7.47 a.m.—Broadcasters' special news service.

8 a.m.—G.P.O. clock and chimes.

Closes down.

### MORNING SESSION.

10 a.m.—G.P.O. clock and chimes.

10.1 a.m.—Weather report.

10.1 a.m.—Musical programme from the Studio.

10.20 a.m.—News service from the "Daily Telegraph."

10.35 a.m.—Musical programme from the Studio.

10.50 a.m.—Ten minutes talk supplied by the N.R.M.A.

11 a.m.—G.P.O. clock and chimes.

11.1 a.m.—News from the "Daily Telegraph."

11.15 a.m.—Rabbit market report.

11.18 a.m.—Sheep market report.

11.19 a.m.—Vegetable market report.

11.21 a.m.—Fruit market report.

11.23 a.m.—London dairy, farm, veg. and poultry market report.

11.28 a.m.—London metal quotations.

11.29 a.m.—Ships in call by wireless.



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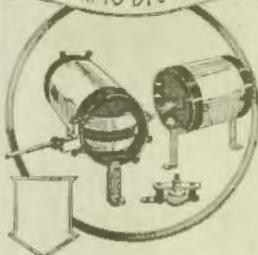
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11.00 a.m.—Information re Interstates and  
various mail.

11.30 a.m.—Shipping information—arrivals  
and departures.

11.35 a.m.—Women's Session—Social notes by  
Mrs. Jordan.

11.45 a.m.—Mrs. Jordan replies to correspon-  
dents.

11.55 a.m.—Talk on "Decorating Furniture"  
by Mrs. Warner.

12.00 p.m.—Musical programme from the  
Studio.

12.30 p.m.—G.P.O. clock and chimes.

12.35 p.m.—Sydney Stock Exchange calls.

12.40 p.m.—"Sun" Newspapers' news service.

12.45 p.m.—Hillier's Instrumental Quartet—  
Direction, Cyril Castling.

1.00 p.m.—G.P.O. clock and chimes.

1.05 p.m.—Weather report.

1.10 p.m.—Sydney Stock Exchange calls.

1.15 p.m.—News from the "Sun."

1.20 p.m.—Musical programme from the  
Studio.

2 p.m.—G.P.O. clock and chimes.  
Close down.

#### AFTERNOON SESSION.

Racing Information broadcast by courtesy of  
the "Sun."

2 p.m.—G.P.O. clock and chimes.

2.15 p.m.—Weather report.

2.30 p.m.—Social notes from the "Sun."

2.45 p.m.—News from the "Sun."

3.00 p.m.—Musical programme from the  
Studio.

3.30 p.m.—G.P.O. clock and chimes.

3.45 p.m.—Country Women's Session.

3.55 p.m.—Musical programme from the  
Studio.

4 p.m.—G.P.O. clock and chimes.

4.15 p.m.—News from the "Sun."

4.30 p.m.—Serial story, entitled "The Bor-  
derland Shield."

4.45 p.m.—Musical programme from the  
Studio.

4.55 p.m.—Producers' Distributing Society's  
fruit and vegetable market report.

4.55 p.m.—Shipping information when avail-  
able.

4.55 p.m.—Tues.'s racing results on race days.

4.55 p.m.—News from the "Sun."

4.55 p.m.—Some of night's programmes.

5 p.m.—G.P.O. clock and chimes.  
Close down.

#### EVENING SESSION.

5.45 p.m.—G.P.O. clock and chimes.

5.45 p.m.—Little White and Dicky Longings

will entertain the kiddies.

5.45 p.m.—Musical programme from the  
Studio.

#### SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. clock and chimes.

Australian Newsreel, Land, and Finance  
Co.'s report.

Weather report and forecast by courtesy of  
Government Meteorologist.

Stock Exchange reports.

Producers' Distribution Society's fruit and  
vegetable market report.

Trade and General Report ("Sun").

6.00 p.m.—Product review ("Sun").

7.15 p.m.—Country news from the "Sun."

8 p.m.—G.P.O. clock and chimes.

Broadcasters' Teatime Chorus.

8.15 p.m.—Miss Winifred Jenner, monolog-

ue.

8.20 p.m.—Fashion and social notes by Miss

Hilda Lexington, Broadcasters' fashion re-

port, broadcast from the ballroom of the

Ambassador.

8.30 p.m.—Mr. Holly Watson, comedian.

8.35 p.m.—Miss Beryl Scott, comedienne.

8.40 p.m.—Mr. Albert Jones, tenor.

8.45 p.m.—Miss Ethel Gill, comedienne.

8.50 p.m.—G.P.O. clock and chimes.

9.00 p.m.—Following day's programme.

Weather report and forecast by courtesy of

Mr. G. J. Marx, Government Meteorolo-

gist.

8.00 p.m.—Broadcasters' Trio.

8.15 p.m.—Fashion and social notes by Miss

Hilda Lexington, from the Ambassador.

8.20 p.m.—Mr. Holly Watson.

8.25 p.m.—Miss Beryl Scott.

8.40 p.m.—Walter Champney and Eileen Gil-

bert.

8.45 p.m.—Broadcasters' Trio.

8.50 p.m.—Mr. Holly Watson.

10.10 p.m.—The Ambassadors' Dance Band

broadcast from the ballroom of the Ambas-

sador. During the intervals between dances,

news report by courtesy of the "Sun" will

be broadcast.

12 midnight—G.P.O. clock and chimes.

National Anthem.

## 3LO, MELBOURNE

Thursday.

#### MIDDAY SESSION.

A ribbon gay we weave  
Of fair and faire,  
And cast it far abroad  
Our gair and done.

#### THE STUDIO ORCHESTRA.

JAN DEVEREUX, baritone.

TASMA TIERNAN, cello.

ALICE HARRIS, soprano.

GRAE JACKSON, contralto.

C. RICHARD CRUICK, flute.

Accompanist, AGNES FORTUNE.

12 noon—Time signal, British official wireless

news from Rugby, Reuter's and the

Australian Press Association cables. Stock

Exchange information.

12.30 p.m.—STUDIO ORCHESTRA.

12.45 p.m.—JAN DEVEREUX, baritone (of

the Rose Marie Company), by permission

of J. C. Williamson, Ltd.),

"Lighterman Tom" (Soulie).

"My Dreams" (Tohi).

12.45 p.m.—TASMA TIERNAN, cello.

"The Last Rose of Summer" (Moore).

12.55 p.m.—ALICE HARRIS, soprano.

"Madame Tussaud" (Gordon).

"Wake Up" (Philips).

1 p.m.—STUDIO ORCHESTRA.

"Ballet Suite" (Eames-Moore).

1.10 p.m.—GRAE JACKSON, contralto.

"Open the Blue Eyes" (Mason).

"In a Monastery Garden" (Ketley).

1.15 p.m.—C. RICHARD CRUICK, flute.

1.15 p.m.—Broadcasters' Trio.

1.30 p.m.—JAN DEVEREUX, baritone.

"The Yeomen of England" (German).

"Wayfarer's Night Song" (Easthope Ma-

tin).

1.45 p.m.—STUDIO ORCHESTRA.

"Beranda" (Chaminade).

"Love Song" (Wright).

1.45 p.m.—AGNES FORTUNE, contralto.

"Bliss of Mine" (Murdock).

"Bliss You" (Newell).

1.47 p.m.—STUDIO ORCHESTRA.

"Padjou" (Lemontville).

2 p.m.—Close down.

Results of Wanganella Turf Club Races and

Granbourne Races will be given as they

come in to hand.

#### AFTERNOON SESSION.

##### BY WAY OF VARIETY.

Speaker: MISS FRANCES PHASE.

THE STUDIO ORCHESTRA.

HASTING AND ADAIR.

CARTHY BROS.

WALTER SMITH, concert.

"CHECK" HAYES, the Talkative Chap.

TAYLOR & SUMMERS, English comedians.

#### EVENING SESSION.

Accompanist, AGNES FORTUNE.

2 p.m.—STUDIO ORCHESTRA.

Selection, "March" (Tehui).

8.10 p.m.—MISS FRANCES PHASE.

"Early Woman Novelist."

1.35 p.m.—HASTINGS AND ADAIR.  
"A Little Nonsense."  
1.51 p.m.—STUDIO ORCHESTRA.  
"Serenade" (Carroll).  
1.45 p.m.—CAFFERY BROS., English humorists.  
Snaps and Snatches.  
1.51 p.m.—WALTER SMITH, cornet.  
"Dada" (Clegg).  
3.31 p.m.—CHECK HAYES, the Talkative Chap—be patient, he may stop talking some day.  
4.51 p.m.—STUDIO ORCHESTRA.  
"Salut D'Amour" (Elgar).  
4.15 p.m.—TAYLOR AND SUMMERS.  
Songs and Impressions.  
4.22 p.m.—STUDIO ORCHESTRA.  
"Iolanthe" (Sullivan).  
4.30 p.m.—"Herald" news service. Stock Exchange information. Acceptances for Epsom Races, Saturday, 2nd April.  
4.45 p.m.—EVANSONG, transmitted from St. Paul; Cathedral.  
5.00 p.m.—Close down.

## EVENING SESSION.

5.40 p.m.—CHILDREN'S HOUR—Answers to letters and birthday greetings.  
5.45 p.m.—THE PREMIER FOUR.  
"Chain that the Rye."  
"Barcelona."  
6.22 p.m.—HAROLD COLLIER.  
Mouth organ selections.  
6.30 p.m.—MARY GUMBLEAF—poems.  
"The Naughty Mouse."  
"Bushland Beauty."  
Story for the littlest ones.  
"The castle of make believe."  
6.35 p.m.—THE PREMIER FOUR.  
"Little Irish Girl."  
"I'm gonna hump my blues."  
6.37 p.m.—MARY GUMBLEAF—Story for boys and girls.  
"Heroes of the World in Conflict."  
6.45 p.m.—"Argus" and "Herald" news service. Weather synopsis. Shipping movements.  
6.47 p.m.—Stock Exchange information.  
6.52 p.m.—Fish market reports by J. H. Barrett, Ltd.  
6.55 p.m.—River reports.  
6.58 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Hay-market sheep sales. Poultry, grain, hay, straw, jute. Dates produced. Potatoes and onions.  
7.00 p.m.—Market reports of fruit by the Victorian Fruit-growers' Association, compiled by the "Fruit World," exclusive to SLO. Market prices of oranges and lemons by the Victorian Central Citrus Association Pty. Ltd.

## NIGHT SESSION.

"THE ALABAMA STOMP." JOE ARONSON AND HIS SYMPOSIUMISTS.  
CHECK HAYES, the Talkative Chap.  
THE PREMIER FOUR.  
CARTHY BROS., English comedians.  
TAYLOR AND SUMMERS.  
SHEPHERD AND EDWARD SIMMS.  
MR. A. W. JACKSON.  
MISS STEPHANIE DESTE.  
Announcer ..... MAURICE DUDLEY.  
Accompanist ..... AGNES FORTUNE.  
7.15 p.m.—MR. EDWARD SIMMS, secretary of the Commonwealth Railways, "The History and Construction of the East-West Railway, (Kalgoorlie-Port Augusta.)  
7.30 p.m.—MR. A. W. JACKSON will speak on "Golf."  
8.45 p.m.—MISS STEPHANIE DESTE, now appearing as "Wanda" in Room Marie, will speak to you from her dressing-room, by permission of Mr. J. Williamson.  
8.00 p.m.—JOE ARONSON AND HIS SYMPOSIUMISTS.  
"The Royal Ambassadors" (Stanton).  
"Julieka My Desert Maid" (Gunning).  
"In a Little Garden" (Jula).

# RADION

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**AN IMPORTANT AUCTION SALE**  
Will be Held  
**AT A DATE TO BE ANNOUNCED  
LATER,**  
**OF THE SALVAGE**

removed from the scene of the late fire at the premises of The Burdin Electric Company, 340 Kent Street, to the rooms of the Auctioneer, No. 1 Hamilton Street (between Bridge and Hunter Streets).

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THE ABOVE IS NOW BEING SORTED AND DISPLAYED FOR SALE, AND INSPECTION WILL BE INVITED IN DUE COURSE.

**F. R. STRANGE,**  
Auctioneer,  
(Offices and Rooms),  
1 HAMILTON STREET.

Phone: NW 6128.

8.10 p.m.—"CHECK" HAYES, the talkative Chap, will only keep you a few minutes.  
8.14 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.  
"There ain't no man in my婆's eyes" (Kahn).  
"Thinking of you" (Ash).  
"Perfume of the night" (Morgan).  
8.24 p.m.—THE PREMIER FOUR.  
"That certain Party".

8.28 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"We don't want to be married" (Stern).  
"Dive, Bye Blackbird" (Dixie).  
"Laughing at the Frolics" (Wendahl).

8.38 p.m.—CARTHY BROS., English comedians.  
"Foolishness".

8.42 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Boulevarde" (Walker).  
"I can't forget" (Morton).  
"While the years go drifting by" (Kahn).

8.52 p.m.—TAYLOR AND SUMMERS.

Songs and impressions.

8.56 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Paradise Alley" (Kahn).  
"Where did you set those eyes" (Donaldson).

"Sing, Katie, but leave the piano alone" (Tracy).

9.02 p.m.—MARY CLAXTON, soprano.

"You are still in the sunshine" (Cole).

"I'm a Little Teapot" (Kahn).

9.10 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Whisper Sh!" (Bryan).

"No feeling—what do you have?" (Bach).

"Charlie I love you" (Gershwin).

9.20 p.m.—CHECK HAYES, the talkative Chap.

"Humorous Soliloquy".

9.24 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"The Swan Muster of Medleys" (Arr. Somers).

"Tonight we sing with baby" (Meyer).

"Lonesome and sorry" (Dixie).

9.31 p.m.—THE PREMIER FOUR.

"Gipsy Land".

9.35 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Say that you love me" (Nichols).

"Schubert's back again".

"I'd climb the highest mountain" (Brown).

9.44 p.m.—CARTHY BROS., English comedians.

Fragnments of Humor.

9.52 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"She's everybody's Sweetheart" (Rose).

"It made you happy" (Donaldson).

"While we waited till dawn" (Shneider).

10.2 p.m.—"ARGUS" news service, British office, giving news and International information. Sporting notes by "Olympian".

10.27 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Let's grow old together" (Nichols).

"Talking to the moon" (Baskette).

"The Animals Fair" (La Forrette).

10.27 p.m.—TAYLOR AND SUMMERS.

Songs and impressions.

10.31 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"At peace with the world" (Berlin).

"Freddie" (Gershwin).

"Say it again" (Richman).

10.41 p.m.—MARY CLAXTON, soprano.

"I'm a Little Teapot" (Kahn).

10.44 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Save your sorrow" (De Sylva).

"Humperdinck" (Barry).

"In a little Spanish town" (Young).

10.58 p.m.—THE PREMIER FOUR.

"The winds are calling" (Ronald).

11 p.m.—OUR GREAT THOUGHT.  
"To be content with little is difficult; to be content with much is impossible." Marie Kerner-Eberle-Sinatra.

11.15 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"Somewhere's Lonely" (Davis).  
"How could Red Robin know" (Randolph).  
"My Pal Jerry" (Rosen).

11.30 p.m.—MARY CLAXTON, soprano.  
"White Song from 'Maid of the Moon'" (Maurice).

11.45 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"My dream of the big parade" (Dixie).  
"It's a wonderful world after all" (Davis).  
"Rose colored Glasses" (Mulgrew).

11.55 p.m.—THE PREMIER FOUR.  
"Row, Row, Row".

11.58 p.m.—JOE ARONSON & HIS SYNO-SYMPHONISTS.

"All I'm waiting for my time" (Bibb).  
"Dream of love and you" (Taylor).  
"Leave of Malmont" (Nichols).

"Just a bird's eye view" (Kahn).

12.05 p.m.—GOD SAVE THE KING.  
"Row, Row, Row".

## 4QG, BRISBANE

Thursday.

### MIDDAY SESSION.

1.0 p.m.—Market Reports: Weather Information supplied by the Commonwealth Weather Bureau; News Services supplied by the British Press and "The Daily Standard".  
1.15 p.m.—From Hotel Carlton: Lunch Hour Music played by Hotel Carlton Symphony Orchestra.

1.25 p.m.—From the Observatory: Standard Time Signals.

2.0 p.m.—Close Down.

### AFTERNOON SESSION.

3.30 p.m.—A PROGRAMME OF MUSIC FROM THE STUDIO: A.A.C. Selections, "Blue Danube", "Waita" (Stravinsky), Aviolar Vocalion Selections—(violin solo, "Summer Song" (Wood), Mr. Samuel Kastner, (b) cast "Carry me back to my native land" (Shaw), Misses Irving and Jean Knott, (b) Art Selections, "Unprinted Love" (Linkens).

3.45 p.m.—Lectures: "A Child Welfare Lecture" (Dr. Feeding) by Nurse Adrienne Vocation selection; (violin solo, "Lonesome" (Nightingale), Royal Troubadour, (b) cast "Carry me back to my native land" (Shaw), Misses Irving and Jean Knott, (b) Art Selections, "Dardos March" (Wagner), Mr. F. E. Gilligan, (b) Art Selections, "Lullaby" (Shaw), Shamoun Four; (b) Art Selections, "Romance" (Rubinstein).

4.10 p.m.—Lectures: "A Talk on Baseball" (No. 2), by a representative of the Australian Ladies' National Association.

4.20 p.m.—Telegrams: News.

4.20 p.m.—Close Down.

### EVENING SESSION.

6.0 p.m.—"Daily Standard" News, Announcements.

6.30 p.m.—Bedtime Stories by "The Sandman".

7.0 p.m.—Market Reports: Stock Reports; Leisure, "A Talk on Sheep Raising" Mr. W. G. Brown (Instructor in Sheep Raising).

7.30 p.m.—Weather News: Announcements.

7.45 p.m.—Standard Time Signals.

NIGHT SESSION.

7.45 p.m.—Lecture Session, A. Talk on books by Mr. W. A. Braiden.

## THE CURLEW TROUBADOURS.

6.0 p.m.—Male chorus, "The Marseillaise" (Bouquet de Lys); the Curlew Troubadours tenor solo, "Aveled"; Mr. A. Smith, male, "The Immortal Love"; solo, the Troubadour Instrumental Quartette (Miss G. Vaughan piano, Messrs. Lawrence and Misses Evans, violin; and Mr. R. Yorston cello); vocal duet, "The Moon Hath Rained Her Lamp" (Borealis); Messrs. C. Birkbeck and H. Powers, male parts, songs, "Remember Song" (Hermann); solo, the Curlew Troubadour soprano solo, "Valse de Concert" (vanek); Miss Elsie Yorston, L.T.C.L.; baritone solo, "The French Bazaar" (Hope Temple); Mr. T. Griffiths; male chorus, "The Pilgrim's Chorus from Tannhauser" (Wagner); the Curlew Troubadours, vocal solo, "Ain't Moon of My Delight" (Lisa Lovelace); Mr. H. Duncanson, comic (fanatic William Tell) (Suppe); the Troubadour Instrumental Quartette; humorous item, "I'd Rather Have a Hard Boiled Egg," Mr. E. Kenyon, the entertainer; male part-songs—(a) "When the Great Red Dawn is Shining" (Shaw), (b) "Old Mother Hubbard" (Webster); the Curlew Troubadours.

9.0 p.m.—Metropolitan Weather Forecast; March "Stars and Stripes" (Sousa); the Troubadour Instrumental Quartette; tenor solo, "The Realms of Paradise" (Ekelberg); Mr. C. T. Birkbeck; male chorus, "Comrades in Arms" (Adams); solo, "Lullabye" (Laurie); piano forte, "Country Gardens" (Laurie); Miss Elsie Yorston, L.T.C.L.; male part-song, "Sing Me Love's Lullaby" (Morse); the Curlew Troubadours, vocal duet, "Fever and Harlowe" (H. Lane Wilson); Messrs. C. Kelly and E. Pike; humorous "A Musical Switch" (Alford); the Troubadour Instrumental Quartette; Lassane solo, "Berkshire Cream and Cider" (Russell); Mr. Stanley Yorston; male part-songs—(a) "An Evening's Pastoral" (Shaw), (b) "Old Folks at Home" (Sutton); the Curlew Troubadours; tenor solo, "My Dreams" (Tosti); Mr. A. Smith, selection, "Les Contes d'Hoffmann" (Offenbach); the Troubadour Instrumental Quartette; male parts, "The Tickling Trick" (Martini); the Curlew Troubadours; humorous item, "Dh. the Shadow on the Window Blind," Mr. E. Kenyon, the entertainer; male part-song, "How Can I Bear to Leave These" (Kinkel); the Curlew Troubadours.

10.0 p.m.—From the studio, the "Daily Mail" News, Weather News, Close Down.

## SCL, ADELAIDE

Thursday.

## MORNING SESSION.

12 noon—G.P.O. Chimes.  
12.15 p.m.—Selections on the Autotone Reproducer and the New Reproducing Sonora.  
12.30 p.m.—Advertiser's News Service.  
12.45 p.m.—Market Reports.  
1.0 p.m.—Musical Programme Continued.  
2.0 p.m.—G.P.O. Chimes and Close Down.

## AFTERNOON SESSION.

3.0 p.m.—G.P.O. Chimes.  
3.15 p.m.—Relay from the Maple Leaf Cafe—Orchestral Selections.  
3.45 p.m.—Selections from the Studio.  
4.0 p.m.—G.P.O. Chimes.  
4.1 p.m.—Relay from the Arcadia Cafe—Orchestral numbers.  
4.45 p.m.—Station announcements.  
5.0 p.m.—Market Reports and Close Down.

## EVENING SESSION.

6.0 p.m.—G.P.O. chimes.  
6.1 p.m.—Dinner music broadcast from Covent Garden Cafe.  
6.45 p.m.—Bedtime Stories.  
7.0 p.m.—Market Reports.  
7.45 p.m.—Mr. Whitenbury will deliver an address.  
8.0 p.m.—G.P.O. Chimes.

# BRANDES

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Note

Each week following this advertisement, we have something new to show, and tell you about—

Brandes Aristocrat Condenser, .0003, 30/-, .0005 with 50-1 Vernier Dial.

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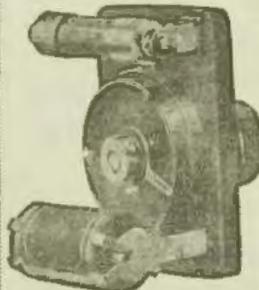
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- bourne,  
9.1 p.m.—Piano organ solo by St. Bartholomew's Church organist, Mr. Frank Bowden.  
9.10 p.m.—Song: Miss Grace Couston.  
9.11 p.m.—Recitation, Mr. Frank Part.  
9.20 p.m.—Song: Mr. Norman Shephard.  
9.24 p.m.—Violin solo, Mr. Joe Gleeson.  
9.25 p.m.—Song: Miss Grace Couston.  
9.27 p.m.—Song: Mr. Frank Bowden.  
9.32 p.m.—Song: Miss Grace Couston.  
9.40 p.m.—Recitation, Mr. Frank Part.  
9.42 p.m.—Pianoforte solo, Miss Lotte Foglia.  
9.45 p.m.—Song: Mr. Eric Wickens.  
9.48 p.m.—Organ solo by St. Bartholomew's Church organist, Mr. Frank Bowden.  
9.50 p.m.—"Dolgey's" West Report.  
9.55 p.m.—Organ solo, Mr. Frank Bowden.  
10.15 p.m.—Song: Mr. Ken Hughes.  
10.19 p.m.—Violin solo, Mr. Joe Gleeson.  
10.22 p.m.—Song: Mr. Norman Shephard.  
10.27 p.m.—Organ solo, Mr. Frank Bowden.  
10.37 p.m.—Song: Mr. Eric Wickens.  
10.41 p.m.—Recitation, Mr. Frank Part.  
10.48 p.m.—Song: Miss Grace Couston.  
10.50 p.m.—Song: Mr. Frank Bowden.  
10.55 p.m.—G.P.O. Chimes and "Close Down."

## 6WF, PERTH

Thursday.

- 12.30 p.m.—Tune in.  
12.35 p.m.—West local news bulletin.  
Market reports.  
12.45 p.m.—Time signal from Perth Observatory.  
1.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.  
1.25 p.m.—Adult Quintette.  
2 p.m.—Close down.  
3.30 p.m.—Tune in.  
3.35 p.m.—Musical programme, including pianoforte selections by Miss Evelyn Willis, A.L.C.M.  
4 p.m.—Piano Trios.  
4.30 p.m.—Close down.  
5 p.m.—Tune in.  
7.30 p.m.—Stories for tiny tots, by Auntie Rose.  
7.30 p.m.—Uncle Duffy will talk to the children.  
7.30 p.m.—Stock and Share intelligence.  
Market reports.  
7.45 p.m.—Supplied by courtesy of "The West Australian" Newspaper Co.  
8 p.m.—Time signal from Perth Observatory.  
8.15 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.  
8.25 p.m.—Orchestral Night.  
Concert by 6WF's Station Orchestra, conducted by Mr. Edward E. Moye, A.T.C.M., and consisting entirely of solo numbers.  
9 p.m.—Travel talk by John Cowie, Esq., representing Coochee's Tourist Agency, Fremantle.  
10 p.m.—Second local news bulletin supplied by courtesy of "The Daily News" Newspaper Co.  
10.30 p.m.—Close down.

**Friday, April 1**

## 2FC, SYDNEY

EARLY MORNING SESSION.

- 7 a.m.—"Big Ben" and announcements.  
7.10 a.m.—Studio music.  
7.10 a.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail service.

- 7.25 a.m.—Investment market, mining share market, metal quotations.  
7.35 a.m.—Wool sales, broadcasted markets, inter-state markets, produce markets.  
7.45 a.m.—"Sydney Morning Herald" news service.  
8 a.m.—"Big Ben," studio music.  
8.15 a.m.—"Close down."

### MORNING SESSION.

- 8.30 a.m.—Marching music for school children.  
8.40 a.m.—Studio music.  
10 a.m.—"Big Ben" and announcements.  
10.15 a.m.—"Close down."  
10.30 a.m.—"Studio music."  
10.45 a.m.—Serial story.  
11 a.m.—"Big Ben," Australian Press Association and Ruter's cable services.  
11.15 a.m.—A talk on home cooking and recipes by Miss Ruth Purse.  
11.30 a.m.—Marching music for school children.  
11.45 a.m.—"MIDDAY SESSION."

### MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.  
12.30 p.m.—Stock Exchange, first call.  
12.45 p.m.—Studio music.  
12.50 p.m.—Rugby wireless news.  
12.55 p.m.—Miss Anne Luciano, soprano.  
1 p.m.—"Big Ben," Weather intelligence news.  
1.15 p.m.—Evening News, midday news service.  
Producers' Distributing Society's report.  
1.20 p.m.—Studio music.  
1.25 p.m.—Stock Exchange, second call.  
1.30 p.m.—Marching music for school children.  
1.45 p.m.—Miss Anne Luciano, soprano.  
1.50 p.m.—Studio music.  
2 p.m.—"Close down."

### AFTERNOON SESSION.

- 2.30 p.m.—Programme announcements.  
2.35 p.m.—A pianoforte recital by pupils of Mr. S. Gordon Lavers:  
1. "The Hebrides," overture (Mendelssohn).  
2. "Mazeppa," overture (Mendelssohn).  
3. "Toccata" (Debussy).  
Miss Lesley Reynolds, L.A.B.  
3. "Sequidillas" (Albeniz).  
Miss Ruth King.  
4. "Andante and Rondo Capriccioso" (Men-  
delsssohn).  
Miss Isobel, A.T.C.L.  
5 p.m.—"Big Ben," A Reading.  
2.10 p.m.—Pianoforte items by the pupils of Mr. S. Gordon Lavers:  
6. "Dance in E Major" (Debussy).  
7. "Gymnopedies" (Satie), A.T.C.L.  
6. "La Valse" (Ravel).  
Miss Mary Simpson.  
7. "Reve Angelique" (Rahmstein).  
Miss Edith Toomer, A.L.C.M.  
8. "Value" in F. Op. 34 No. 2" (Chopin).  
Miss Lily Smart.  
9. "Polka" (Hochmannoff).  
Miss Jessie Rundell, A.L.C.M.  
3.30 p.m.—Marching music for school children.  
3.30 p.m.—FROM FARMER'S TEA ROOMS: Miss Ethel Muller, contralto: "A Little Love Song" (Liber).

- 4.15 p.m.—Studio music.

- 4.20 p.m.—FROM FARMER'S TEA ROOMS: Miss Ethel Muller, contralto:

- "I'm a Little Sun" (Duke).

- 4.25 p.m.—Studio music.

- 4.45 p.m.—FROM FARMER'S TEA ROOMS: Miss Ethel Muller, soprano:

- "Bubble" (from "High Jinks").

- 4.45 p.m.—Stock Exchange, third call.

- 4.50 p.m.—"Close down."

### EARLY EVENING SESSION.

- 4.45 p.m.—The Chimes of 2FC.  
4.45 p.m.—The "Hello Man" talks to the children.

6.30 p.m.—Mr. Tal O'Byrne continues his series of stories to the young folk.  
 6.45 p.m.—FROM FARMER'S DINING HALL:  
 Instruments and vocal items.  
 7.00 p.m.—"Big Ben." Last minute sporting information by the JFC Racing Commissioner.  
 7.10 p.m.—Dugley's Market Reports (wool, woolens and stock).  
 7.15 p.m.—Food and vegetable markets.  
 7.20 p.m.—Weather and shipping intelligence.  
 7.25 p.m.—Late "Evening News" news service.

## NIGHT SESSION.

7.40 p.m.—Programme announcements.  
 7.45 p.m.—A talk by Miss Theo Cowan, the well-known Sculptress; Subject: "World Famous Pictures."  
 8 p.m.—"Big Ben"  
 FROM THE LYCEUM THEATRE, PITT STREET, SYDNEY:  
 Orchestral items.  
 8.15 p.m.—FROM THE STUDIO:  
 Mr. Alec Whiston, baritone: "The Fisherman of England" (Phillips).  
 8.16 p.m.—Mr. Victor Gourlet in Comic Opera Memories.  
 8.20 p.m.—FROM THE LYCEUM THEATRE, PITT STREET, SYDNEY:  
 Orchestral items.  
 8.30 p.m.—FROM THE ROYAL AGRICULTURAL SOCIETY'S GROUNDS, SYDNEY:  
 Description of the Barbecue organised by the Sydney Hospital and Boy Scouts' Association.  
 A Brass Band supplied by JFC will provide selections during the evening.  
 8.45 p.m.—FROM THE STUDIO:  
 Mr. Alec Whiston, baritone: "The Yeoman of England" (German). "The Fing" (Haselhurst).  
 8.55 p.m.—Mr. Victor Gourlet in Comic Opera Memories.  
 9 p.m.—"Big Ben." Music and descriptions from the R.A.S. Grounds.  
 9.10 p.m.—Miss Margaret Grimshaw, mezzo.  
 9.14 p.m.—The Honolulu Trio—Steel Guitar, Spanish Guitar and Ukulele:  
 (a) "My Blue Girl" (Smith).  
 (b) "Hawaiian Stroll" (Merry Earl).  
 9.25 p.m.—FROM THE LYCEUM THEATRE, PITT STREET, SYDNEY:  
 Orchestral numbers and vocal act.  
 9.25 p.m.—FROM THE R.A.S. GROUNDS:  
 Further descriptions of the Historic Pageant and Barbecue, interspersed with band items.  
 9.45 p.m.—FROM THE STUDIO:  
 Miss Margaret Grimshaw, mezzo.  
 9.52 p.m.—The Honolulu Trio—Steel Guitar, Spanish Guitar and Ukulele: "Old Time Melody" Medley.  
 10 p.m.—Mr. Victor Gourlet, in Comic Opera Memories.  
 10.05 p.m.—Miss Margaret Grimshaw, mezzo.  
 10.12 p.m.—FROM THE LYCEUM THEATRE, PITT STREET, SYDNEY:  
 Orchestral numbers.  
 10.17 p.m.—FROM THE R.A.S. GROUNDS, SYDNEY:  
 Descriptions of the Historic Pageant and Barbecue, with brass band items.  
 10.30 p.m.—FROM THE WENTWORTH CAFE, SYDNEY:  
 The New Wentworth Symphonic Dance Orchestra, conducted by Mr. Frederick Leighton.  
 10.45 p.m.—FROM THE STUDIO:  
 Celebrity records.  
 10.55 p.m.—Late news and announcements.  
 11 p.m.—"Big Ben." The New Wentworth Symphonic Dance Orchestra in popular numbers until midnight.  
 12 midnight—"Big Ben."  
 National Anthem.  
 Close down.

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# Saturday, April 2

## 2FC, SYDNEY

### EARLY MORNING SESSION.

7 a.m.—"Big Ben" and announcements.

7.15 a.m.—Studio music.

7.18 a.m.—Official weather forecast, rainfall, temperature, astronomical, moonrises, tides, intelligence, mail service.

7.25 a.m.—Investment market, mining share market, metal quotations.

7.35 a.m.—Wool sales, breadstuffs markets, inter-State markets, produce markets.

7.45 a.m.—"Sydney Morning Herald" news service.

8 a.m.—"Big Ben," Studio music.

8.15 a.m.—Close down.

### MORNING SESSION.

9.30 a.m.—Programme announcements.

9.30 a.m.—Studio music.

9.45 a.m.—Last minute sporting information by the 2FC Racing Commissioner.

10 a.m.—"Big Ben" and announcements.

10.15 a.m.—"Late Sydney Morning Herald" news service.

10.30 a.m.—Studio music.

10.45 a.m.—A serial story.

11 a.m.—"Big Ben," Australian Press Association and Reuters' cable services.

11.10 a.m.—Studio music.

11.15 a.m.—A talk on Gardening by Mr. G. J. Lockley ("Regum").

11.30 a.m.—Close down.

### MIDDAY AND AFTERNOON SESSION.

12.30 p.m.—Programme announcements.

1 p.m.—"Big Ben," Weather intelligence.

1.30 p.m.—Stock Exchange information.

1.45 p.m.—"Evening News" midday news service.

3.20 p.m.—Studio music.  
NOTE: DIRECT FROM THE COURSE the Roselawn Racing Club's Meeting will be delayed until Saturday, April 2nd.  
During the intervals of racing events, musical items will be given from the Studio and the Wentworth Symphonic Dance Orchestra, under the baton of Mr. Frederick Leighton, will play popular numbers.

4.30 p.m.—Complete resume of the afternoon's events.

5 p.m.—"Big Ben." Close down.

### EARLY EVENING SESSION.

5.45 p.m.—The Chimes of 2FC.  
The "Hello Man" talks to the children.

6.30 p.m.—Mr. Tal Ordell continues his series of stories for the young folk.

6.40 p.m.—Dinner music.

7 p.m.—"Big Ben." Complete sporting resume of the day's events.

7.20 p.m.—"Evening News" late news service.

7.35 p.m.—Weather intelligence, Studio music.

### NIGHT SESSION.

7.40 p.m.—Programme announcements.

7.45 p.m.—FROM THE ROYAL AGRICULTURAL SOCIETY'S GROUNDS, SYDNEY:

A description of the Corroboree which is being organised at the Sydney Hospital and Bay Street Association.

Led by the Australian Light Horse Band, specially engaged from Goulburn, will play:

(a) March, "Aztec Prom" (Blankenberg).  
(b) Waltz, "Golden Grain" (Truscott).

8 p.m.—"Big Ben."

FROM THE MOSMAN TOWN HALL:

Heard on the air for the first time Culver's delightful Comic Opera, "Li, Li DOMINO" (by arrangement with J. C. Williamson Ltd.), produced by the Mosman Musical Society.

9 p.m.—"Big Ben."

FROM THE ROYAL AGRICULTURAL SOCIETY'S GROUNDS, SYDNEY:  
Further descriptions of the Boy Scouts' Corroboree, interspersed with the following items played by the Australian Light Horse Band (Goulburn):

(a) March, "Dawn of Freedom" (Rimmer).

(b) Selection, "The Sunshine Girl" (Rubens).

9.20 p.m.—FROM THE STUDIO:

Miss Eileen Boyd, contralto.

9.40 p.m.—Mr. Jack Lumsdaine, Songs at the Piano.

9.50 p.m.—FROM THE ROYAL AGRICULTURAL SOCIETY'S GROUNDS, SYDNEY:

Descriptions of the Corroboree and Hymns by the Australian Light Horse Band:

(a) Fox Trot, "Sweet Child" (Whiting).

(b) Trombone, "Where," "Cotton Club" (Hilditch).

(c) March, "B.B. and C.F." (Hamer).

10 p.m.—FROM THE STUDIO:

Miss Eileen Boyd, contralto.

10.15 p.m.—FROM THE WENTWORTH CAFE, CHURCH HILL, SYDNEY:

The Wentworth Cafe Orchestra in popular numbers.

10.30 p.m.—Mr. Jack Lumsdaine, entertainment from the Studio.

10.45 p.m.—Celebrity records.

11 p.m.—"Big Ben." Late sporting news and announcements.

11.10 p.m.—The Wentworth Symphonic Dance Orchestra in popular numbers until midnight.

11.30 p.m.—"Big Ben." National Anthems.

Close down.

## All Readers' Queries Answered Here

D.S. (REDFERN)—Q.—In your queries, W.E.M., of Rose Bay, wanted to know two stations calling about 2 a.m. and 2.30 a.m. on a wave length of 230 metres. The station, 3BC, is the "Brighton" Radio Club," Highbotham Hall, Brighton Library Buildings, Bay Street, Brighton, Melbourne. The other station he fancied was 3AF, was probably 3AE, which is A. W. Bent, 14 Coronation Street, Geelong West, Victoria. Both stations would be pleased if he wrote and told them how they were working.

A.—Thanks for the information. I greatly appreciate it, as will also the readers in question. It is a good spirit.

H.D. (MANLEY)—Q.—Would you be good enough to inform me through next Friday's edition of "Wireless Weekly" how I shall obtain the best results from a 5-valve Neutraldyne, which I have been using for the past three months? I am particularly anxious to know the exact tapping to take from the B battery, also the correct length of aerial. At present I am using a 75% cut-door aerial overall (Electron wire), and can get almost any local station, with a fair amount of volume, but cannot get the interstate stations. I am enclosing a rough diagram of the tapings, which I am using at present, and shall be pleased if you will advise me on this particular point. I am not in a position to take this set back, as the gentleman who made it has left this State.

A.—You have too many tapings altogether. See "Radio," 5/1/27, wherein full particulars of the wonderful Neutraldyne are available. There are so many different tapings.

E.M.—Q.—I have built the Burgess Jumbo Receiver per "Wireless Weekly" and I can get 2FC, 3HL and 3GB at very good load speaker, about 100 watts from speaker, but cannot get 4QC, 3LC and 5CL as good, 4QC, and 3LD about 150 watts from speaker, while 4CL is the weakest. Can you explain why this should be?

I would like to have an opinion of the different ("W.W.") readers on the subject, through this "Wireless Weekly."

A.—What old man'll pull up! You are doing well. Were I assured that everyone did as well as you are doing I would start to grow hair on my head. Now just you shake yourself by the hand and be pleased.

Still to explain: you realize, of course, that 3LO and 4QC and 5CL are further away from Dce-Why than are 2FC and 3HL, and it naturally follows that these stations will be weaker. Again 5CL is only a low power station. Say, Mac! If I published your address I am afraid many "Wireless Weekly" readers would be anxious to call on you and give you their opinions verbally. You are doing well, old man; push out your chest. I am glad to hear from you. But tell me, are you in the real estate line trying to sell land at Dc-W? (No offence, of course.)

E.D. (WAVERLEY)—Q.—Re cage aerial on page 12 of "Wireless Weekly," January 25th, I am living in Cowper Street, Waverley. I would like to know if you think it would improve my reception. I have a 5-valve regeneration set. I can get Sydney stations fairly well. Before Farmer's (2FC) wavelength was altered I could get 4QC, now I can only get Sydney. I have to use a wave trap to cut out 2BL (as I am only about one mile from their station), even then I hear them a little. My present aerial is a single wire, 100 feet long, and leads to 4CL. It is advisable to build a cage aerial, would you please give me an idea what length I should make it? I will listen on Thursday if possible and also buy "W.W." for an answer if you could please oblige me with your advice.

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S.S.

N.S. 39

A: The many reports I have received that the new serial described in a distinct advertisement over the radio single wire aerial. Read the article over again carefully and all your little queries will be answered.

115-TUNER-R. (ALEXANDRIA) — Q: I have a radio receiver consisting of BROWNING DRAKE FOUR VALVE RECEIVER. I have had it in your journal a little while back. It has given wonderful results on the inter-State stations, but I find the set very hard to tune in. The other night when tuned in on 4000 K.C.H.Z. a very sharp whistle comes cutting out the programme completely. I thought it might have been that the two trans-formers were too close together, but as they are 15 inches apart from one another and at right angles, I immediately put it down to the untrained RADIOPHONIC VALVE STAGE. I am using 2500 H.P. B 4000 H.P. throughout in connection with the 4000 K.C.H.Z.

I ask you as a favor to let me know how I can balance this receiver, as it is a wonderful set and amazingly selective on all wave lengths.

A: You don't tell me if this whistle comes about every night. See article on "To Tune or Not to Tune" in this issue also "Radio" 2/8/27.

H.N. (NORTH RYDE) — Q: Having built the Regenerative Interfader described in "W.W." 2nd October, I can get good results on the 1st valve, but when I turn on the 2 valves the volume decreases and after the second valve is turned on in the amplifier, the volume decreases again and again, and what can be heard on 1 valve is not very clear. Trusting you can help me out of my trouble.

A: To me it seems that the primary winding of one of the audio transformers is broken down. On again, check over the jack connections.

E.T. (MCGARRAH) — Q: I wish to ask you if you will be good enough to answer a question through the "Reader's Questions Column" in your valuable paper, of which I am a constant reader. I have had a radio set built from the amateur (West Maitland) to hear and somewhat familiarised with the reception of broadcast programmes. I can receive 2SL, 2FC, 2WV, 2GB, 2UE, etc. all on 1 valve very clearly, but am troubled by inter-State stations. In West Maitland, employing a short antenna, I have been unable to receive 4000, and earth about 650. I tried to receive 810 and 4000 higher than any other station and more clearly than any other using a 2-valve set (Atmosonic 3 coil circuit—standard circuit below it is). Down here I cannot hear 2LC, 4QG, 3AR, or any inter-State station. Can just get their carrier wave and that's all.

A: As I have explained over and over again the great trouble with city conditions is shock excitation from the high-powered local broadcasting stations. Your present receiver taken back to the country would again receive 4000 and earth without any difficulties. I am against you. Mind you I am not suggesting that it can't be done. The other night on a similar set at Marrickville I filled the room with inter-State music. But it takes some handling. Increase the height of the aerial and also add about 20 volts extra to the B battery and watch the tuning. I am sorry to say.

H.E.W. (AUBURN) — Q: Being interested in your book, the "Wireless Weekly," and eagerly looking forward for any new set, as yet cast, the "Interfader Four" as mentioned in December, number seven, to complete my radio building, but before doing so I should like to know whether any further tests have been made with this machine, as reading the article carefully through, mention is made of a further test that would be made and the results published in the next or following issue. Also, so far nothing has appeared. What I would like to know is whether it is possible to pick up 810, 8CL, 4QG. The article makes mention of 4QG being received very well, but as the house was late no further test was carried out. If the set is worth building can all the parts be obtained in Sydney? I have not had any experience with valve sets, being con-

tested with the Icomo Complex Crystal set, but I intend to build one this summer. I understand the inter-state stations can be heard. I also enclose postage for a copy of "Wireless Weekly" of November 19, 1926. I understand there is an article on the building of Batteries which, I am told, is of great interest.

A: The "Elatonelex Two" or further test proved to be a very good all-round receiver. Inter-State stations were heard but not too loudly. I have had many letters from readers inquired in many letters from our readers. Provided you adhere strictly to the particulars given in the article for constructing this set, you should be pleased with the results. But I can't guarantee any results at any time. Send reply to G.H.C. (Penruddick).

A.W.D. (ASHFIELD)—Q.—In connection with the "Marvel Reflex" set described in "W.W." 4/2/27; (1) is it possible to construct this receiver without the two Dubler Microphones I used? condenser without greatly affecting performance?

(2) I use a Philips A109 valve. Can I use one 1.5 "A" battery for the "C" batteries, or would a 4.5 "C" battery be necessary?

A: The 1 mfd. condenser across the H battery may be dispensed with providing your H batteries are good and don't tend to crackle. But I am afraid the second 1 mfd. is too useful to throw out. Now the C battery depends on the H battery for bias. You will have the clip enclosed in your val. It gives full particulars or write Phillips Glow Lamp Works, Margaret Street, Sydney, mentioning this paper and asking the information.

NEW READER (CONCORD)—Q.—I would be greatly obliged if you would reply to my questions in this week's "Wireless Weekly." (1) Is pure tin a better metal to use on bus-bars than ordinary solder? If so, would this be good for the 1 mfd. I am referring to that home-made heat speaker (see page II "Wireless Weekly," 12/11/26), do you mean a proper heat speaker unit, or an earphone from a Baldwin loudspeaker as stocked by Anthony Horner's? If you mean a lead speaker unit, would you advise me where I could procure same? I would be greatly obliged.

A: Ordinary solder is quite alright. Why don't you get a stick of Wunderbar? Believe

me, it is much better. The Baldwin Unit is a special speaker unit. I saw one at the other day in Cobville Moore's in Rose Street.

G.E.L. (MARQUINA JUNCTION)—Q.—I constructed the "Boinaire" set described in "W.W." 15/10/26 and found same successful both in selectivity and volume. In two occasions I have been able to pull in 3140 which, considering my nearness to 2BL is good.

Now sir, can you explain the following problem? I have just been to Katoomla and Bathurst for a holiday, and have friends at both places who are interested in wireless, but have not yet got sets up. In view of this I took my set in the car with me and to my surprise I could get nothing at Katoomla, and only the local station at Bathurst (Mockin). Now that I am home again the set is working well, so that nothing was wrong in that direction.

I would esteem it a favor if you can throw some light on this problem?

A: I am afraid many another person has come to grief under similar circumstances. Generally such encounters are the result of an unpractised affair and the erratic valves still, so that often too much is asked under the conditions. Again I know that both places mentioned are sometimes difficult to receive in on account of the mountains intervening. Still you should have got 4QG and 4LQ. Still I am afraid I can only sympathise with you.

E.J. (QUEENSLAND)—Q.—There is four and a half瓦特 set in our house and we would like to take the tone and volume out, so could you please give me a diagram showing how to join them, also what coils to use, and what stations we would be likely to get?

The valves on the four valves are six volt and on the two are four volt. Both the sets are the "Dialophone" circuit.

A: Dear me, I am afraid I can't. Send me a list of the parts and then I'll tell you more.

But I strongly advise you to build a Neutrodyne. See "W.W." 22/10/25 or "Radio" 5/1/27.

C.E.S. (WAKILDAWA)—Q.—I am not very wish to weary you unduly, but I am in very great trouble, indeed. The facts are:

I have just secured a set of parts for a five valve Neutrodyne receiving set and have had a lot of very tedious trouble with the wiring. I have now got the parts and a suitable wiring diagram to suit the parts he supplied. He does not seem to be able to do this, or I may be too dense to grasp what he means. However, I decided to come to you with my troubles, seeing that you answer so many similar "rings" in "W.W." in such a clear fashion. I have anxiously watched for a five valve Neutrodyne to be published in "W.W." for the last few months, but have been taking this paper, but I have not seen one. If you can spare me a little of your valuable time, would you please fix me up with a sketch in which I can use the parts I have just bought?

A: I am indeed sorry to hear of your trouble. Still "Radio" of 5/1/27 (our companion paper) has the full details of how to build a Neutrodyne using similar parts to yours. But don't expect any results with three dry cells on a five valve set. Use 150 valves by all means, and use the dry cell A oscillator run with Ammonium Carbamate. If you strike any further difficulty write me again. I'll gladly help you.

C.R.K. (MERRIVELLETH)—Q.—I am thinking of replacing my 2.5 volt "B" batteries with either an accumulatior battery or Philips eliminator. Which do you advise? Are the results obtained when using an eliminator equal to those with the wet "B" battery, and is the eliminator entirely free from "A.C. hum" or other noise?

A: I can't advise you on this matter. Both are good. A good eliminator should be free from A.C. hum. I've tried several eliminators and send them to you by O.K.

E.R. (NEWCASTLE)—Q.—I have struck trouble with my set ever since Farmer's closed their wireless. It is a 10 volt 2 coil set, name the Norwegian Type A.T.A. and is used with a 10 volt 2.5 mfd. condenser with 6 controls. Aerial tuning, Aerial untuning, Stabilizer. Det. H.F. Audio, reading in that order from left to right. I cannot describe it any better as I am only a novice and a very poor one at that. I get very good results during the day both from Farmer's and 2BL, but at night time I cannot get either very clear the voice and music seems very distorted or foggy. Could you give me any information about this or tell me how to get out of my difficulty?

A: I am sorry to hear of your trouble, but I must confess that I can't help you. It seems that many people in your locality suffer in a similar manner with poor reception at night times. Perhaps it is a summer condition which will disappear in a few weeks. Keep a log for a month noting the bad nights and submit me a copy. Point out just when one station was more clearly received than the other, and just what items were better, and so on. Let me hear from you later on.

H.S.V. (STANTHORPE)—Q.—Q.—I have built the Neutrodyne described in an October (2nd) issue of "W.W.". Concerning this I would ask a question or two.

The set is giving most excellent results. In fact using a Brown H3 speaker I can obtain as much volume as it will hold on one stage of Audio. The Southern stations rear in and 4QG does likewise even in the daytime. The tone is all that can be desired, it being difficult to conceive a sweeter set from a musical point of view.

I have used an Armstrong kit, Pyle Condensers, and vernier dials. My trouble is as follows—

2BL is located on a dial setting of 54 and 2PC on 97, 3LQ, 4QG, 5CL, all come in without one interfering with the other. However, 2PC is the limit as the condensers' plates all smash at a dial reading of 100. Would 5000s

condensers overcome this? If used, would they tend to cramp the stations making them difficult? (3) The dials are difficult to match. At 97 they are matched for ZFC, whilst 2BL is located on 78—84—81. What might be the cause of this and how would I remedy it? Perhaps it would be better to leave them as they are. The wiring was followed out with meticulous care.

A: I would advise you to leave things as they are unless you wish to move the stations. In that case, use 5000 mfd condensers of the Straight Line Frequency variety. The Modified Pilot No. 6123 S.L.P. condenser is very good and doesn't take up too much space—it, therefore, be recommended for the change over. The stations would not be cramped much more than they are at the minute.

V.E. (LAVENDER BAY)—Q.—Three weeks ago I asked you asking whether a certain circuit would suit for a one valve reflec. I am very pleased to see the Marvel in this week's issue.

(Q.) May I ask why a midgrid condenser cannot be placed in parallel with C1 or C2 so that C1 and C2 may tune in at the same degree on the dial which should allow a double condenser with single control? The suggestion to remain set like N.G.

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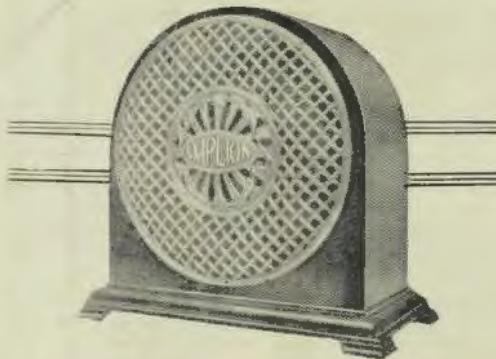
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