

WIRELESS WEEKLY

Vol. 8. No. 26.

Registered at the G.P.O. Station, for transmission by post as a newspaper. Friday, Oct. 22, 1926.



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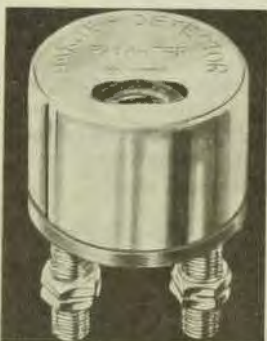
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WIRELESS WEEKLY

VOL. 8. No. 26.

FRIDAY, OCTOBER 22, 1926.

Educational for Instructional

IN his article in this issue, Mr. James Nangle, Director of Technical Education and Government Astronomer, clears up a matter which has been the subject of much hot air by unthinking writers and speakers for many years.

We have had with us the enthusiast who has advocated radio as an educational factor, we have had the uplift speaker who cites radio as a civilised force of epochal import. This would be an age of mental marvels all because of the widespread influence of broadcasting. Yet, excluding a certain type of radio fan, most of us have retained our normal faculties.

Many of these statements came from people personally interested in the matter. They were inclined to over estimate radio's teaching ability in the hope that the Government would spend several thousands of pounds installing receivers in schools. But the Government has not done this because it has been shown that radio is not educational.

This may seem a sweeping statement, but analysis will show that no class of boys or girls will ever be educated by radio. The utopian idea of one teacher for a hundred schools is hopelessly impracticable.

Education implies development, and discipline of both the intellectual and moral faculties. For reasons which are apparent, radio as we know it now, cannot discipline the mind. Imagine a class learning philosophy or English composition or sociology by radio, subjects which are utterly un-broadcastable.

But if interested parties vastly over-estimate radio's potentialities in this field, the average person, likewise, under-estimates the undeniable instructive value of radio. And in these words lies the mistake made by the educational enthusiast from the beginning.

If every speaker and writer had substituted the word "instructional" for "educational" there would be less confusion over the subject. An educated man is vastly different from the informed man. The possession of a fund of information does not make one educated, nor has one to know the principal fish caught in Alaskan waters or the line of succession to the throne of Portugal to be educated.

Mental discipline is gained almost exclusively from the study of so-called cultural subjects, presenting unknown difficulties to the broadcaster. But informing is no hard task.

Between You and Me and the Microphone

A TRADE journal says that wireless traders are not living in a fool's paradise. And there is another sort of paradise that some of them won't see much of, either.

THERE IS a distinct possibility that 5XX the super power station at Daventry, England, will shortly be heard here regularly. It is proposed to increase the station's power.



Mr. Oswald Anderson, studio manager of 2FC, who has defied all the best traditions of the Trades Hall by working 14 hours a day since 2FC reduced its wave length.

"I WAS summoned to Roseville last week to bury a lady who had been an invalid for many years," writes the Rev. Hugh Paton. "She did not belong to St. Stephen's, but was delighted in our services on the wireless. That was why her friends sent for me."

LEADING American stations are now selling broadcast time just as newspapers sell space. Political parties and candidates have bought dozens of hours for the coming campaign. Imagine such conditions in Australia.

HERE'S SELECTIVITY for you. During a recent rainstorm in Brisbane, a 4QG engineer tuned in 30 broadcasters in the 4QG laboratory while the station was transmitting. The laboratory receiving aerial is less than three feet from and parallel with the 4QG transmitting aerial.

Conducted by
R. E. CORDER

SO WE ARE to have a night of Scottish humour shortly. That ought to be a programme with plenty of the right spirit in it.

IN THE London studios of the B.B.C., approximately 700 auditions are given to would-be radio artists each week.

A DISTINCT advantage of the new studio at 3LO in the eyes of the staff and artists is that it is large enough for couples to dance in while the orchestra is broadcasting. On a recent Thursday, thirty couples danced on the floor of the studio, while the whole of the seating accommodation was also occupied.

A FORECAST. A.D. 2000.

He saw his lady love one day,
Though she was ninety miles away.
By television, he it said,
He saw her shake her pretty head.
When he—by wireless—bogged
her hand,
She 'phoned, "It's 'no' to your demand!"
In S.O.S. he next sent out,
He saw her smile, he saw her pout.
Then just as she began to turn,
She smashed to his great concern;
Fainted, although he waited long,
The "referee" had none aveng!

Lester M. Oyster.

HOSPITAL WIRELESS has indeed spread to the furthestmost corners of Australia. The Birdsville Mission Station, Queensland, in conjunction with the Muckadilla Hotel, is the latest to appeal for funds. Rheumatic patients from all parts of Australia spend lonely months at Muckadilla awaiting cure.

A BROADCASTING station, costing about \$6,000, is to be constructed in Mukden. Receiving sets will be taxed 25 cents, a month for crystal sets, and 50 cents, a month for valve sets. Hitherto, the use of radio sets in South Manchuria has been prohibited.

A TWO-FRANC increase has been imposed on the licenses of Swiss listeners. Incidentally, their comments are also too frank for publication.

THIRTY NEW stations are to be erected in Europe shortly under the Geneva plan for allocation of wavelengths. British listeners are alarmed at the possibility of interference.

MR. ALFRED LANE, adjudicator at 3LO's recent children's singing competition, examined more than 700 competitors, of whom 70 were boys.

TO STUDY radio drama, the B.C.A. has engaged Mr. Emedley Turner, elocutionist and character artist. Mr. Turner has a wide knowledge of stagecraft, and will write a number of original playslets for 3LO.

MORE THAN 240 letters were received in 2FC's mail one morning last week. This is just above the average number received daily by 2FC. A staff of four is continually engaged answering each letter personally.



Mr. Lawrence Halbert, new 2FC announcer, who believes that there's no life like that of an announcer.

IT MUST be admitted that announcers sometimes make a mistake, says a writer. Like the Scotsman who fired his car for the insurance without first removing his whisky flask from the tool box.

Has Radio any Value as an Educational Medium?

JAMES NANGLE

Who is director of Technical Education in N.S.W. and Government Astronomer answers this question in the article below. Indirectly broadcasting is a potent force for education, he says, but directly it is a failure.



Mr. James Nangle.

IN ancient times, men communicated their thoughts and reasonings to others as we do now, by writing and speaking. The ancients, however, were without means of manifolding their writings, and their audiences were restricted. The great philosopher, Euclid, taught a small school of philosophers, who, in their turn, spoke to other small schools, and thus his wonderful geometrical reasonings were passed to posterity.

There are in a few museums of the world priceless treasures in the form of Egyptian writings on papyrus. Excavations of the sites where stood ancient cities in Crete have brought forth tablets in pottery were inscribed in strange writings, which tell of events at a time when they were made. All of our knowledge of ancient times comes to us by way of inscriptions of some kind or other, either on buildings, on pottery ware, on papyrus leaves, or on parchment. These writings were necessarily seen by very few at the time when they were written, so that knowledge in those days was transmitted by slow and restricted methods. Consequently very few benefited by the thoughts and opinions of the few educated men of the time.

The invention of printing, which marks one of the great epochs in the history of civilization, brought about a prodigious change. By its means, those who were educated and who were able to think and reason, and who could write of what they knew, could have their knowledge widely disseminated in book form. It is hard to imagine the position in which we would find ourselves if we were sud-

denly deprived of the use of books. No sooner does a thinker in any of the arts or sciences write of what he has studied than we can share with him what he knows.

The knowledge of the world has increased immensely as a result of the invention of the art of printing. Printing, however, takes some time, and ideas often are not at all new by the time we see them in print. On the other hand, strange as it may seem, books are not as accessible to everybody as ought to be the case.

The invention of the steam engine and its application to land and sea transport aided considerably in the rapid distribution of knowledge which had been printed, and when the invention of the electric telegraph came about, a still greater means of the rapid dissemination, both of news and more formal knowledge, was at hand.

It has remained, however, for a still more wonderful invention to come for our use. This has been the discovery of means of transmitting speech by wireless. It is not too much to say that anybody situated in the most isolated and inaccessible places on the earth is now in just as good a position as the man who lives in the most populated and civilized city, when it comes to the question of getting current news or learning.

In Australia, there is hardly an hour when ordinary men are awake that there is not available "through the air," by means of the use of a very simple instrument, news of every kind, and a good deal of information about matters which make up real knowledge.

Then the question has been asked, has radio any value as an educational medium? Surely, a little reflection will show that it has a tremendous value in this regard.

Lectures by men and women eminent in all branches of human activity, are continually lecturing over the whole land by means of radio. Listeners-in find themselves able, under the most comfortable conditions, to gather first-hand much valuable knowledge.

A feature of what is being done in this regard is the excellent taste in judgment shown by the broadcasting companies in selecting those speakers. It may be that this kind of educational work has to be offset with matter of a lighter character, but even the lighter music is not without its value. On the other hand, a great deal of music is of a high-class and educational in its value.

There are some enthusiasts who poster the educational authorities to instal receiving sets in the schools with a view to having lessons given in this way. This is one of the ways in which radio is distinctly valueless.

Experiments have been made and it has been found that a loud speaker in front of a class of children, used as a means of teaching a lesson, is almost useless. Children and youth-



Gundaroo public school children with their box valve set. They are regular listeners to 2FC after school hours.

ful pupils must always depend on the personal value of the teacher who has to display considerable ability in holding the attention of the class. As a rule, use has to be made of continual illustration, either by blackboard or other means.

There is a use of radio for direct educational work which has some possibilities. This lies in the use of broadcasting during extra school hours, in the evenings, when lectures by eminent people, could be made available to young people in isolated places.

There are many young people in this and other parts of the State who are busy studying for the Leaving Examination. One of the subjects set for this examination in the English paper is the study of Shakespeare's play, "Hamlet."

Boys and girls now living in Sydney have an opportunity of visiting the Conservatorium of Music, where the play is to be rendered by a celebrated Shakespearian actor. The influence of seeing and hearing the play will have a great bearing in their studies. Country children will be without this opportunity. They can, however, be given the chance of hearing one, or, perhaps, several, lectures by Shakespearian scholars in the play "Hamlet."

They would need to be equipped with a wireless set. The set should be used in the school during the evening, but should not be allowed to interfere with the ordinary school work.

The success of this scheme would depend on atmospheric conditions, to a great extent. This type of direct educational work will only become successful when we have a system of relay stations, and provided the broadcasting stations continue their high standard of programme.

2FC Lecture Use-d in School.

By broadcasting marching time music for scholars marching into school, 2FC helps dozens of small country schools. Many schools make use of the lectures broadcast from 2FC. Mr. H. W. H. Brown, of the Bondi North public school, writes as follows:

"I must congratulate 2FC and also the lecturer, Major H. Sandford Morgan, D.C.M., for the most interesting lecture delivered and broadcast recently. I made use of the information in my school to-day. I made full explanatory notes of the lecture, and passed them on to my senior boys and girls, who used them to deliver lectures to the lower classes. The idea is an excellent one, and will meet with hearty support from all teachers.

MAGIC CHILDREN'S HOUR.

An entertaining feature of the children's hour at broadcasting station 2BL, Sydney, are the trips on Uncle George's magic sunshade. It appears that when Uncle George was a digger in Egypt he did a good turn for a local magician, who rewarded him with a present of a magic sunshade and a few magic words. Uncle George appears to be not too certain how to use the gift. However, he invites all the children listeners to come under the sunshade with him. Then over the air George can be heard muttering mystic remarks, and away goes the sunshade carrying the listeners with it. Last week they started out for Mullumbimby, but passed over the town. It transpired that George had forgotten how to stop the sunshade and the whole party arrived at Brisbane before he remembered. After a while he remembered and a return to Mullumbimby was made, and the youthful listeners were taken for a visit over a sugar cane farm where they were introduced to barking dogs, lawing cattle, and sundry other farm sounds. These trips on the magic sunshade are being made a feature of 2BL. The Pacific Islands and the East are yet to be visited. One of the most amusing items of the Children's Hour put over by Station 2BL of late has been the emergency band. Uncle George notified the children that a special band was coming to the studio. The band did not arrive, but an emergency band did, and the weird noises made by the scratch band were enough to split the receiving set.

RADIO IN THE HOLY LAND.

During the last year the Royal Air Force has established a large number of posts in the Holy Land, and in nearly every instance it was not long afterward before members of the posts constructed short-wave transmitters. The wave lengths used are between 20 and 40 metres, and the calls are usually prefixed with the letters "PE" to indicate that the sender is in Palestine. Many two-way chats have been effected with brother experimenters in the United States, England, France, South Africa and South America.

How Race Descriptions are Radioed

Hundreds of appreciative letters from Queensland, Victoria and New Zealand, as well as N.S.W., have been received by the 2FC racing commissioner. Read how it is done.

THE barrier flies up. A score of sinewed forms leap forward, and the race has begun.

The crowd settles down to a steady watch, as the flashing horses thud past the first furlong post. The field lengthens out.

Get the picture in your mind. Randwick on a Spring day, a warm breeze flutters gaily coloured fracks and drives the raucous cries of the bookies across the flat. It is familiar enough to most of us, familiar also to thousands of country listeners who have never visited Randwick.

Thousands of men and women listen in to Mr. M. A. Ferry's race descriptions broadcast from 2FC. These listeners see the race through the announcer's eyes. The clear incisive tones of his voice carry the atmosphere of the turf across hundreds of miles of space.

The scene at the saddling paddock is the first to be



The course at Randwick, as seen by Mr. Ferry.

described. He names the horses and their riders as they enter the course, and gives their places at the barrier.

"They're off—Vitality has made a good jump away," and in perhaps less than a minute he has described the whole race movement for movement, with the order of the horses as they flash past the judges' box. A pause

picture of the observer rising to his feet, with each word thrilling the intensity, as the race rushes to a finish before his eyes. Whew! it must have been some marathon.

But Mr. Ferry's work does not begin and end with the race. At daylight he attends the training gallops, later reporting the track work from 2FC long before the newspapers appear with the news.

Mr. Ferry is a blood stock buyer of many years' experience, having acted as a handicapper and steward in Western Australia and the Riverina. He attends all yearling sales, which he reports from 2FC.

He is also associated with Mr. D. G. Doyle, veterinary surgeon at Randwick. He is racing correspondent for several leading Queensland papers.

Mr. Ferry has a full view of the course from 2FC's own private stand. He speaks directly into the microphone as he watches the horses through his glasses. An assistant takes the fractional time of the horses as they pass each furlong post.

A landline connects the stand with the 2FC control room. Mr. Ferry has received hundreds of appreciative letters from Queensland, Victoria, and New Zealand, where his descriptions are eagerly awaited.



Mr. M. A. Ferry, 2FC's racing commissioner. Left, the amplifier at 2FC's stand.

—and the official placings are announced.

Sometimes the race is particularly thrilling, and the announcer, thrown off his experience hardened poise, allows a little of the excitement of the roaring throng to creep into his voice. Listeners get a mental



What are your impressions of the scenes being enacted at the studio as you sit before your loud speaker each night?

A NIGHT AT 3LO



The 3LO Studio Orchestra ready to broadcast.



Another view of the Studio, showing central room window.



The central room. A curtain covers the Studio window.



Tuning the Steinway piano in the new Studio on the third floor, where there is room for an audience of 50.

LET me take you on a personally-conducted tour through 3LO.

Hundreds have visited the studios since the Royal Melbourne Show, but we still receive letters from listeners, both young and old, asking us to tell them something about the studio.

In the first place, close your eyes put on your caps of imagination, and come with me at about 7 o'clock any evening, and after walking up Collins Street, we turn in at the 3LO studios, step into the lift, and are taken to the second floor.

We enter the reception room, which is by day the busy office, where all the letters are answered, and on the wall you will notice a special letter rack, sometimes stacked full of letters for "Mary Gumleaf," or any of the other favourites that listeners-in write to. In its evening garb—with the typewriters put away for the night, and the pen and pencil racks ever so tidy—the reception room looks very cosy, luxurious lounges, cosy arm chairs, the kind that you sink right into, and don't want to get out of, to say nothing of beautiful vases of gum tips, and flowers of all descriptions. Then there is the loud speaker giving a wonderfully clear representation of what is being broadcast from the studio, and waiting artists are thus able to hear the turns preceding their own. I was nearly forgetting a beautiful old grandfather clock, the sort you read about in old English novels, which is the very clock that chimes so sonorously over the air each day.

Now, our turn has come, and we must go into the studio, and "do our bit" to entertain our vast unseen audience. We step quietly in, in fact the thick carpet on the floor deadens all sound. The first thing we see is the announcer sitting on a low cosy arm chair; he immediately makes the announcement and we step to within a few feet of the microphone and begin. If we are going to sing, the pianist plays the opening bars of the song, and whilst we are waiting for

In the article below the writer takes you on an imaginary trip through the studios of the Broadcasting Company of Australia

B.C.A. ENTERTAINS

our "cue," we take in at a glance the rich curtains, embroidered with peacocks, the gaily coloured tapestry, the rich soft furnishings, the musical instruments that are always there in case of emergency, and the antique vases full of flowering peach. A chord suddenly brings us back to earth, and we realize that although we can't see them, the audience are waiting for us, and we rise to the occasion.

Our "number" finished, we take a last look round, the soft light falling from the electric lamps carefully shaded with oriental silks and fringes, and creep out as quietly as mice.

Returning to the reception room, we receive the congratulations of our friends, who one and all assure us that our number went "wonderfully," and whatever we may think in our own private minds, we accept their word. Then comes pleasant chatty conversation—all the artists at 3LO seem to belong to one huge friendly family party, and finally we take ourselves down to the station, and board the train for home.

This, of course, is on an ordinary night. Occasionally, when something extra special happens, and a "great gun" comes to fire off something very important, both studio and reception room are tense with suppressed excitement.

Nonchalant reporters sit, pencil and folded copy paper in hand, around the loud speaker. As soon as the special "talk" commences, however, they become all attention. Then, again, if it is someone of paramount importance, such as Mr. Alan Cobham, photographers are there in force, ordering these great ones of the earth to "step a little to the left, sir, please," so as to catch the full blast of the camera lens.

Now for the new studio. Up you go in the lift to the third floor, and step out into the angle of an L-shaped room, the long leg of which lies along Collins Street, and the

(Continued on Page 45.)

The Studio as seen from the control room window.



The B.C.A. staff at work. Billy Hunsy is seen in the foreground.

With Mr. Andrew by the microphone, the dance orchestra preparing to broadcast.



A corner of the reception room, where visiting artists listen in to preceding turns. Supper is served here.

New Observation Reports of Fading Expedition

FURTHER investigations were made into the cause of fading by an expedition from 3LO during the last week in September. The following towns were visited: Seymour, Wangaratta, Albury, Wagga, Geelong, Goulburn, Moss Vale.

The receiver used for the purpose of making the observations was an Igranac superonic set of the standard six-valve type with frame aerial. In addition to the data collected by listening on this receiver, an effort was always made to learn the experiences of local listeners in each town visited in order to get a general idea of the quality of reception over long periods.

No evidence was found of fading being due to frequency changes and the loop direction was in every case found to be normal. As regards 3LO, there was an almost entire absence of distortion, certainly nothing similar to that experienced in Gippsland, although fading was still in existence. This, however, was of a slow and more or less regular type which did not interfere very much with the actual tonal quality of the music received.

2BL was found to give very unstable reception over approximately the same area as 3LO, but this was due to fading more than to distortion. The signal strength of 2BL was not so great as one would have expected from a station of its normal power. The night strength was never as great as, say, 4QG, although the distance of the latter was always considerably greater.

2FC was always steady, but the modulation seemed to be slightly muffled. While this was not unpleasant to listen to, it did not give the station the sharp, clear cut signals that characterise some of the shorter wave stations, notably 3LO and 4QG. Another point of interest is the great amount of interference from electrical machinery, that has to be put up with by listeners in country towns. Trouble from this source was experienced in every town visited, and in most cases it was

Having reported on conditions in Gippsland the 3LO Fading expedition next turned its attention to Northern Victorian and N.S.W. country centres. Below is a report of the observations taken at seven new towns.

necessary to get away from the business part of the town before any observations whatever could be made. As a general rule, it was found that—although the reception from 4QG was steadier—3LO was the most sought after station, this being due to the type of programme presented.

Although 2FC was always perfectly steady, many of the sets in use were not capable of being tuned easily to the longer wave length, and it was invariably more subject to atmospheric disturbances than the shorter wave stations.

Below is a detailed report of the work of the expedition.

SEYMOUR.

Reception of both Melbourne stations here was good, there being no trace of distortion and the fading being so slight as to be negligible. Considerable difficulty was experienced in receiving the various stations owing to interference from a generator in a neighbouring dance hall. Owing to this, it was undesirable to point the frame in the exact bearing of Melbourne, as this was also the direction of the source of interference. However, the signals were strong enough to give good volume with the frame out of adjustment, and the local disturbance was kept at a minimum.

With some of the Interstate stations, however, notably 2FC, the interference constituted a great menace to the making of useful observations. 4QG was received clearly, and with good volume, only very slight fading being noticed. 5CL was weaker than Brisbane, but remained steady throughout the evening. 2BL's signals were very weak

and were also somewhat marred by the local interference referred to above. Fading accompanied by distortion was frequently observed. Although conditions were good during this particular test, local listeners advised that fading was as a rule very pronounced, but was seldom accompanied by distortion. Daylight signals were always strong and steady.

WANGARATTA.

Speech and music from 3LO were received clearly and loudly during the day. 2BL was received strongly from about 4 p.m., and remarkably strong signals from 2GB came in during the same period. At sunset, 3LO began to fade badly at very irregular intervals, but later the fades became more regular—the strength falling to about half maximum and remaining so for about two minutes, then rising to maximum again for a further two minutes.

Atmospherics gave considerable trouble, the short sharp crashes drowning the signals at intervals. Up to 11 p.m., the fading was not accompanied by distortion, except for about half an hour following sunset, and this was of a minor character. After 11 o'clock, however, distortion increased, and signals became weaker—being difficult to follow even though by this time the atmospheric disturbance had almost disappeared. A little fading was apparent on 5CL, but signals from all other Interstate stations were steady.

ALBURY.

Much trouble was again experienced from electrical machinery, so much so that it was often impossible to judge the extent of the fading; or even to hear some of the weaker stations. Fading of 3LO was of the true type, no trace of distortion being apparent. The signals would slowly fall in strength to about 50 per cent. of the maximum, and remain so for about two minutes, then gradually rising, and keeping steady for the same length of time. 4QG was clear

(Continued on Page 47.)

Studio Notes and News

HOSPITAL CONCERT PARTY

The newly organised 2FC Hospital Concert Party, under the direction of Mr. Russ Garling, will give the first entertainment at the Home for Incurables, Ryde, on Friday, October 22. An excellent group of artists have been brought together, and will appear at the various hospitals and charitable institutions. 2FC will broadcast direct from the entertaining halls of the hospitals.

FLUTE CLUB TO BROADCAST

Few people know that there is a Flute Club—a live organization in Sydney, which boasts of a great number of members. The Secretary, Mr. Garside, is in touch with 2FC, and is making arrangements to broadcast the concert by the Flute Club to be held at the Adyar Hall on Monday, November 1. It is hoped that Mr. John Lemmon, Australia's most famous flautist, will be heard on the air on this occasion.

NEW 2BL FEATURE.

Mr. Raymond Beattie, basso cantante, and Miss Millie Hughes, soprano, will be featured from 2BL on Saturday, October 23, in duet and solo numbers. Mr. Beattie is the holder of a scholarship at the State Conservatorium of Music, and Miss

Hughes specialises in Russian songs as well as songs by modern composers. Their duet work is particularly effective, inasmuch as their voices blend exquisitely.

THE ELIJAH.

An important broadcasting event of the near future is Mendelssohn's dramatic oratorio "The Elijah," which will be performed in private especially for broadcasting by the Welsh Choral Society on Monday, November 1. Station 2BL, Sydney, will place "The Elijah" on the air, and it is of interest to note that this is the first occasion upon which such an important work has been performed in Australia without an audience for broadcasting only. The conductor of the choir is Mr. E. H. Jones, and the soloists will be Misses Millie Hughes, Heather Kinnaird, Messrs. Robert Harper and Raymond Beattie.

WOMEN'S TALKS.

Special talks to women will be broadcast from 2GB on Wednesdays at 4 p.m. The bringing up of baby, and domestic hygiene will be dealt with.

"OUR MISS GIBBS."

The ever-green opera, "Our Miss Gibbs," is being produced by the

Bankers' Operatic Society at the Conservatorium, and the whole of the production will be broadcast by 2FC on Melbourne Cup Night, Tuesday, 2nd November.

TRAVEL RADIOGRAPHS

Mr. E. J. Van de Velde, one of the most travelled men in Sydney, will, on October 27, give a talk—"Who's who in the Zoo"—dealing with animals and birds taken in the various zoos of the world. Artists are being engaged to sing songs suitable for the occasion and the effects, which will be worked into the talk, are in the capable hands of Mr. Laurence Herbert.

FAMOUS HYMNS.

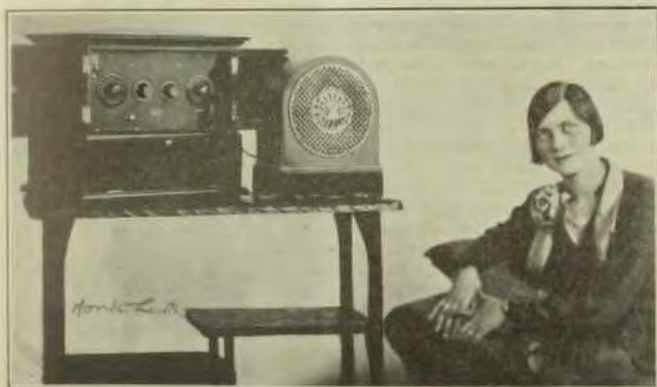
Few "talks" will meet with greater approval than that arranged by Mr. Howlett Ross to be broadcast from 3LO, the subject being "The History of Famous Hymns." A choir of specially picked voices will "illustrate" the talk. The history of famous hymns opens up a wide field of literature, unfortunately unfamiliar to the majority of us, but Mr. Ross, by reason of this talk, is going to invest the beautiful familiar words with a new meaning.

SIGNOR D'ALLISANDRO.

A newcomer to the ranks of 3LO studio artists is Signor D'Allisandro. The Signor is a tenor of wide operatic experience, and has recently been associated with Madame Elay Treweek, in the prologue of the "Phantom of the Opera." His voice, being pure and resonant, and pleasingly free from any distressing "tremolo" is singularly adapted to radio work.

CHRISTIAN SCIENCE LECTURE.

A new departure has been inaugurated by the 3LO studio in the broadcasting of a Christian Science lecture. The lecturer is Mr. John Randall Dunn, C.S.B., member of the Board of Lectureship of the Mother Church, the "First Church of Christ Scientists" in Boston, Mass., U.S.A.



Miss Clarice Barry, 2FC's radio bride, who will be married at St. Andrew's Cathedral on October 28. The service will be broadcast.

Broadcast Controversies

This week our 3LO correspondent discusses the problem confronting the broadcasting companies in regard to broadcasting controversial matter.



Charlie Pope, well-known minstrel entertainer, who has returned to 3LO.

TO what extent is it to the general interest to broaden controversial opinions, is a question with which 3LO, Melbourne, is continually faced. The fact that they are instinct with the interest of doubt and speculation, and charged with the electricity of conflict certainly makes them interesting, and at first sight it would appear possible to regulate such disputes by a set of broadcasting rules equivalent in their own sphere, to those of the celebrated Marquis of Queensbury. But there are obvious difficulties. It is, for example, peculiarly exasperating to have to listen to opinions which disagree with one without having the opportunity to reply. Smashing the instrument is but transient consolation! Of meetings for propaganda, people can take their choice, attending or staying away as they like, and in

the case of those they do attend they have the option of listening peacefully or being ejected. They may, of course, listen or not listen as they like to wireless talks, still, the object of such is to interest as many as possible.

Again, it is easier to begin controversy than end it, as every editor knows. Once the blood is up, the contentious one always leaves something to reply to, and inspires his opponent with a fervent desire to respond. Another objection that holds is that a dispute is not the best means of discovering truth. Moreover the public usually weary before the protagonists. It seems, therefore, the wisest policy not to allow broadcasting to be used for the express purpose of controversy.

It is, however, scarcely possible to draw a hard and fast line between what is provocative of wrath, and that which is stimulating to discussion. Everyone draws the line at a different place. Experts struggling with a doubtful problem must form tentative opinions open to challenge, and before they agree, their work must pass through stages in which their views conflict with one another. If the ether is to carry the "thinking aloud" of men who are really thinking, it must bear many doubtful opinions. The wireless, it is obvious, is far more suited to the discussion of ideas than either the newspaper, which is tied to policy, or the public meeting which may be swayed by the skilful eye and gesture of the trained orator, and charged with his personal current of influence, or swept by gusts of "crowd emotion," whereby each individual in the audience, by transmitting some of the heat of his excitement to his neighbour and receiving some in return, "fuses" the control of reason. Each individual "on the air" listens in the calm of his home, and dis-

cusses the matter with his own soul, or the family circle. The orator is deprived of his tricks. Gesture does not carry, and it is difficult to practise the arts of crowd psychology in the absence of the crowd.

There is a definite thrill in all search for truth, and to deprive listeners of the opinions of those striving for knowledge would be to deprive a great invention of one of its characteristic uses. The partiality and one-sidedness of an enquirer's views may be best corrected by a variety of views on the same question, and the listeners will thus get a taste of something of the real excitement and difficulty of the search for truth. There is all the difference in tone, in intention, and in effect upon the listener, between the man who is dealing with difficult and doubtful issues with the sincere desire to throw light upon them, and the man who, may be, deals with the same subject with the object of controverting the opinions of those who do not agree with him. "Live" issues cannot be excluded from broadcasting programmes, but they should be dealt with judicially and impartially by the lecturer, and received in a tolerant and enquiring spirit by the listener. The liberty allowed a speaker at a meeting called for propaganda purposes, and at-



Robert Gilbert, understudying Leyland Hodgson in "Tell Me More," who is now broadcasting from 3LO.

tended by those who go to agree or to argue cannot in the nature of the case be allowed the use of the air. Each medium of human communication—speech, novel, treatise, newspaper article — has its laws and limits, and broadcasting is no exception to the rule. The waves of the ether may be set in motion by the energy of thought. They cannot profitably be stirred by the "atmospheres" of argument.

Experience proves that while deliberate sectional propaganda rouses indignation, thoughtful speeches do not provoke disapproval from listeners. The majority of these complaints come from what the Americans would call the "low-browed" section of listeners—people who begrudge the interruption of dance music by weightier matters. But as wireless establishes itself more and more in the community, it will become a powerful agent in enabling people to "think together." If a tradition is established that only genuine thinking, inspired by the desire to discover and communicate truth, has a claim to the microphone, it will help mightily in making broadcasting the power that it ought to be in human affairs.

U.S. LIGHTKEEPER HEARS 2BL.

Letters continue to reach the Australian broadcasting stations not only from listeners throughout the Pacific Islands, but from the United States. The latest has been received by Station 2BL, Sydney, from F. H. Story, of the Yaquina Headlight Station, Agate Beach, Oregon, U.S.A. The writer is evidently on night duty, as he dates his letter 4.15 a.m. "Your programme was coming in fine up to a few minutes ago," he writes. "A lady sang three songs which came in very well, followed by a gentleman singing two numbers—the first entitled 'Lady Mine.' The second title I missed. I looked for Station 4QG (Brisbane) and when I came back you were broadcasting a musical number."

MR. D. A. WATSON, on behalf of the Glenreagh School Radio Club, wrote recently that the school set could pick up all the broadcasting stations in Australia, except Perth.

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2 30 ohm De Jun Rheostats, 3/9	0 7 6	2 Bremer Tully sockets, 3/6	0 0 0
1 Battery Switch (Toggle)	0 3 0	1 Crescent 6 to 1 transformer	0 13 6
2 Quaker, 0005 S.L.F. Condensers, 12/6	1 5 0	1 Set engraved terminals	0 1 9
1 .00025 Grid Condenser	0 1 9	6 inch length Radion tube, 3 inch	0 4 2
1 2 megohm gridleak	0 1 0	1 lb. 22 D.C.C. wire	0 2 5
Total	£ 11 4		

Radion (hard rubber) Tube, 3 inch diameter, polished, per inch	£ s. d.
Harkness Reflex Coils, per pair	0 0 10
Advance Low Loss Condensers: S.L.F., 0005, 10/6; 00035	0 8 0
Harlie Crystal Detectors: Absolutely foolproof	0 10 0
Exide Accumulators: DTG for dull emitter valves, 4 volts	0 7 4
Exide Accumulators: DFG for bright valves, 6 volts	0 17 0
Loop Wire: 50 strands phosphor bronze, per 100 ft.	2 8 0
Aerial Wire: 3 strands 20 gauge wire, per 100 ft.	0 3 0
Enamelled Aerial Wire: 7 strands 22 gauge, per 100 ft.	0 2 6
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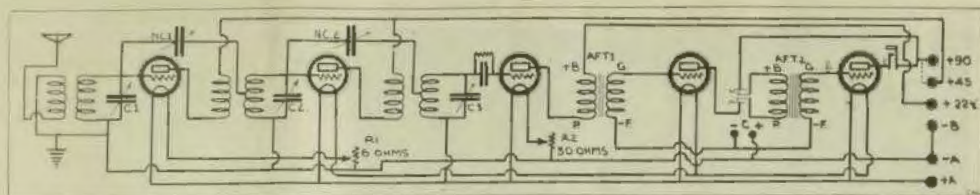
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Few five valve receivers are more popular than the neutrodyne. The circuit is reproduced above. The text explains the shorting of the two top B battery terminals

Working Drawings and Constructional Procedure for A NEUTRODYNE

THERE are receivers that are born great. There are receivers that have greatness thrust upon them by the skillfully penned enthusiasm of the constructors or the selling talk of unscrupulous salesmen. And there are receivers that achieve greatness, gaining the confidence of the public through creditable performances in the past.

Of this latter type, is the neutrodyne, probably the most popular five-valve receiver. It is likely to become more popular than ever now that 2FC is broadcasting on a low wave length. The neutrodyne will respond to all wave lengths between 200 and 600 metres. This means that 6WF will not come within its range, but every other broadcasting station in the Commonwealth and in New Zealand can be tuned in on this set.

Selectivity, ease of operation, and sweetness of tone, are the features which popularise the neutrodyne. Selective it is surely, as all the Australian stations, excepting 7ZL has been brought in at loud speaker strength without one interfering with another. The two stages of radio frequency employed, to a certain extent, assists in the pure tone as well as bringing in the distant station. Ease of operation is shown by the front view of the panel. The three large dials control the tuning, and to receive any given station, each dial is set at a given number, all three being alike. For example, 2FC may be tuned in on 55 on each dial,

whereas 2BL may be 30, 30, 30. This will appeal as being simple indeed, so simple in fact that grandmother can work it, as once located on any setting, you can go back to the same setting and find the same station.

The radio frequency system adopted in the neutrodyne is one of the most efficient methods of radio frequency known to-day. For the benefit of those who don't know the difference between radio frequency and audio frequency, a word here won't be out of place.

Looking up a Wireless Dictionary we find this:—

Radio Frequency: Often called high frequency current, abbreviated to H.F. This refers to the currents

as received in an aerial and earth circuit before they have been rectified or changed to an audible frequency.

"Audio Frequency: Frequencies which come within the range that can be detected by the human ear."

There is the difference, and, by way of further explanation, let us explain that in the neutrodyne is two stages of radio frequency amplification. This means that the incoming energy is stepped up greatly before being detected by the detector valve from which the energy is again stepped up by means of the two audio transformers. The signal, music or speech (which ever it may be) is audible after it has been detected prior to which it is inaudible, as the frequency is altogether too high for the human ear to respond.

From this, you can imagine just how a weak signal, which otherwise would not actuate a plain detector, would be increased to such strength to be within the rectifying power of the detector valve, and again be built up to be loud enough to punch a speaker.

Without going into detail, it is a fact that the method of neutralized radio frequency used in this receiver is, perhaps, the most efficient method known to science to-day. Scott Taggart, the eminent Englishman, and Hazeltine, the well-known American, are both largely responsible for the production of this type of high frequency amplification and there is no doubt that it is along these lines that

List of Parts.

- 1 Panel, 24 x 7 x 3/16.
- 3 .00035 Variable Condensers.
- 1 Neutroformer Kit.
- 2 Neutralising Condensers.
- 1 6 ohms. Rheostat.
- 1 30 ohms. Rheostat.
- 1 D.C. Jack.
- 1 S.C. Jack.
- 1 Battery Switch.
- 2 Audio Transformers.
- 5 Valve Sockets.
- 1 .00025 Grid Condenser.
- 1 2 meg. Grid Leak.
- 9 Terminals on bakelite.
- 18 Busbars, Screws, etc.
- 1 Baseboard, 22 x 9 x 3/4.



Here is the front view of the Neutrodyne.

much radio development of the future will take place.

In the circuit diagram, the stabilizing, or neutralizing, condensers are marked N.C.1 and N.C.2. These condensers, when properly adjusted, balance out the squeals and howls often prevalent in radio frequency, and makes the set so stable that one station after another just slides nicely in without any carrier wave being discernible. These neutralizing condensers (neutrodons) are seen in the back of panel view, between the neutroformers and immediately behind the two radio frequency valve sockets. While your attention is directed to this illustration the neutroformers are seen mounted on an angle. This angle is 54.7 degrees in actual practice, but the set constructor need not worry too much over this, as the neutroformers on the market to-day are always provided with a bracket which is just shaped to this correct angle. The neutroformers are angled thus to minimize interaction between the coils (magnetic coupling it is called).

Construction.

In the construction, not much space is wasted, as the aforementioned illustration will prove. The two radio valves just sandwich nicely between the variable condensers actually used, so be careful when you lay out your baseboard. Still, the panel layout has also to be watched in this matter.

Still, the best way is to drill your panel, following out the panel layout, which will then present a nice appearance when finished.

Don't forget the thickness of your baseboard when you drill holes, for your jacks and switch, which should just rest on the baseboard. If you are afraid of scratching your panel in the marking-out process, paste a

sheet of brown paper over the whole of the panel, and draw out your different settings, after which a centre punch may be used, and the panel drilled. The brown paper can be easily removed and the panel cleaned up by the application of Brasso, "finishing off with a dry rag," as usual.

The baseboard, as was mentioned before, calls for a little more thought. But, still, the clear illustration, and the back-of-panel wiring diagram are invaluable assets in this respect. Should there not be sufficient space between the condensers to allow the insertion of your valve sockets, bring your sockets back a little, and also your neutroformers. Remember to place your audio transformers at right angles to one another to overcome whistles. The terminal board—actually used—has been cut in two—the aerial and earth terminals being separate from the battery terminals, to save long leads in each respect. (Otherwise, everything is O.K.)

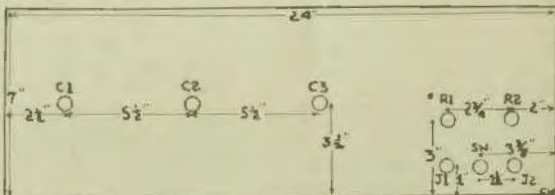
Wiring.

The wiring of the neutrodyne may seem rather complicated, but in actual fact this is really not so. Taking things by easy stages, it will soon be wired; but, of course, be neat always.

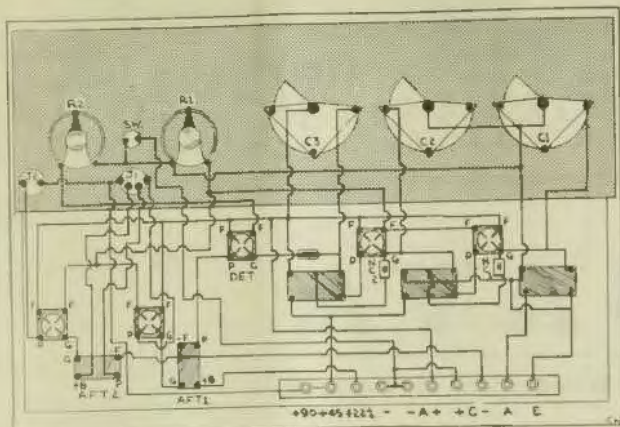
Start off by joining together one side of all your valve sockets, keep-

ing this busbar low. One length of busbar is shaped from the F+ terminal first socket to the similarly-marked terminal last socket, and soldered to it are short pieces from each F+ terminal. Next the F—terminal of the two radio and the two audio valve sockets are connected in a similar manner. Now, wander to the audio end of your baseboard, and link up the G terminal of your last valve socket to the G terminal of the second audio transformer. Carry on with your audio wiring as far as is possible without the terminal board. Now link up one side of each rheostat on the panel, and take a wire from this connection to one terminal or lug of your battery switch. Screw your panel to your baseboard, and continue the wiring, following out the back-of-panel wiring diagram, and also the circuit. The aerial in the circuit diagram is taken to the bottom turn of the primary of the first neutroformer. Perhaps, by reversing this connection, better results will take place—try it out when the set is put on the air.

The terminal board is the last of all to be wired, and, perhaps, you may have to shape the busbar many times from the A—to the battery switch before you will be satisfied with the appearance. For the sake of clearness, the battery switch in the back-of-panel wiring diagram is shown in a different position. Before leaving the subject of wiring, a few more hints will please you. The neutroformers must, at least, be spaced 5 inches apart—measurement taken from the centres, of course. Don't under any circumstances jam them close together—they won't work. There are three well-known makes on the market to-day—Airzone, Grojan, and Radiokes. All are equally



Mark out your panel to this diagram.



A clear back of panel wiring diagram. The battery switch is shown out of position for simplicity sake.

good. It doesn't matter which way they are facing, provided the angle is correct, and all face one way. All the makes specified are not standard in the positions and design of the wiring connections, but each includes full particulars of circuit, etc. It is inadvisable to wind your own coils, as too many difficulties are in the way. Obtain a completed kit from your dealer, and save yourself much trouble.

The circuit and back-of-panel diagram shows a separate terminal for the B+ for the radio frequency valves. This may be useful to you, but if not required, the full 90 volts can be supplied to these valves by joining the two terminals between which is the dotted line. This paragraph is an attempt to presuppose any questions you may have in your mind, and is worth reading again.

Operation.

Connect up your batteries, shorting your C battery terminals if a C battery is not on hand. Hook on the aerial and earth, and plug in your speaker. Light up your valves and slowly move your condenser evenly all the way. Bring two round to 18 on the dial, one in each hand, and then bring around the third; repeat this all the way a few degrees at a time, until you bring in a station. Adjust your condensers until the

loudest point is reached. Perhaps, 2FC might read 49, 49, 52. Leaving your condenser plates in this position, adjust your third dial on the condenser spindle, so that it reads 49. This applies to any of the other dials as well, and gives you the even reading so much desired. Tune in and out the local stations, familiarising yourself with your new receiver, and then seek the Interstate, Brisbane, 4QG, will romp home; Melbourne may be a wee bit more difficult. You'll get 3LO all right, but, perhaps, 2BL may still be present. Still, try to tune them out, using your rheostats to the best advantage. If unable to clear them up, don't worry as this calls for neutralization.

Neutralization.

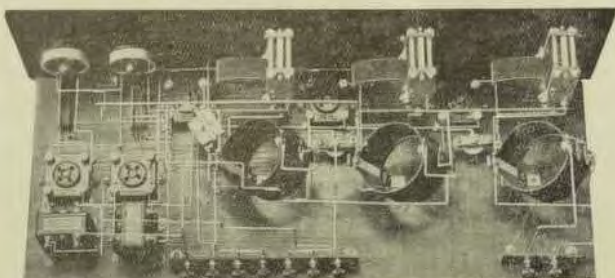
This operation is often approached with great diffidence by the constructor, but it shouldn't be. Exercise patience, and care, and you'll soon get the required effect. The effect desired is to banish all squeals and howls from the receiver, and make it so that each station comes in without the whistle known as the carrier wave. To do this, tune in some Interstate station, say, 4QG, for example, to its loudest pitch, and then lift out your first R.F. valve, and insert a small piece of paper inside the socket, and over one of the filament springs.

Re-insert your valve now, which, of course, will not light, although the station will still be heard not quite so loud as before. Re-adjust your dials until the loudest results are again received, and then, with a thin stick or pointer, adjust your neutralizing condenser until the signals disappear altogether, or if this is not possible, adjust until the station is at its weakest point or scarcely audible. Remove the paper from the contact spring, re-insert your first valve, which now lights up.

Without touching your settings, lift out your second R.F. valve, insert paper as before, repeat the operation on this valve as you did the previous one, and neutralizing is now complete.

It may be that you will have to lower your plate voltage on the radio frequency valves before this neutralization is complete, but experiment for yourself will determine this. A

(Continued on Page 52.)



The angle of the Neuroformers is clearly seen from this back view. This will help you in laying out your components.

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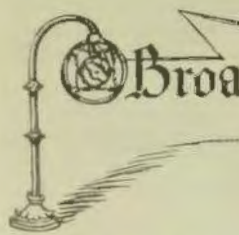
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Broadcasting Programmes

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Friday, Oct. 22

2FC

EARLY MORNING SESSION.

- 7.—The Chimes of "Big Ben."
 7.5.—Music from the Studio.
 8.—Weather information, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
 9.25.—Investment Market, Mining Share Markets, Metal quotations.
 9.35.—Food Sales, Breadstuffs Markets, In-terstate Markets, Produce Markets.
 9.45.—"Sydney Morning Herald" News Service.
 9.—Chimes of "Big Ben." A "Cheers" Talk by Mr. J. K. Powell.
 9.15.—Close down.

MORNING SESSION.

- 9.15.—The Chimes of 2FC and Announcements.
 9.20.—Music from the Studio.
 10.—"The Chimes of 'Big Ben.'" Music from the Studio.
 10.5.—Late "Sydney Morning Herald" News Service.
 10.55.—Music from the Studio.
 10.45.—A Morning Reading.
 11.—The Chimes of "Big Ben." Australian Press Association and Denton's Cash Service.
 11.10.—Music from the Studio.
 11.15.—Cooking talk and recipes, by Miss Ruth Farn. 2FC.
 11.30.—Close down.

MIDDAY SESSION.

- 12.—The Chimes of "Big Ben."
 12.5.—Stock Exchanges, First Call.
 12.10.—Music from the Studio.
 12.20.—Marching Music for the Children.
 12.40.—From Farmer's Tea Rooms: The Oak Hall Trio.
 12.50.—Buffy Wireless News.
 1.05.—Miss Aileen Hoar, mezzo.
 1.—The Chimes of "Big Ben."
 1.35.—"Breeding News" midday service, Premier's Distributing Society's Report.
 1.20.—Music from the Studio.
 1.25.—From Farmer's Tea Rooms: The Oak Hall Trio.
 1.40.—Stock Exchange—Second Call.
 1.45.—Miss Aileen Hoar, mezzo.
 1.48.—Music from the Studio.
 1.50.—From Farmer's Tea Rooms: The Oak Hall Trio.
 2.15.—Close down.

AFTERNOON SESSION.

- 2.30.—The Chimes of 2FC and Announcements.
 2.40.—Broadcast from the Haymarket Theatre, Orchestra under the baton of Mr. Stanley Forster.
 3.30.—From Farmer's Tea Rooms: The Oak Hall Trio will play Gleder, Mr. Horace Kents.
 3.40.—Miss Hele Summons, soprano.
 3.45.—From Farmer's Tea Rooms: The Oak Hall Trio.
 3.55.—Music from the Studio.
 4.—Mr. Frank McCarthy, baritone.

- 4.5.—From Farmer's Tea Rooms: The Oak Hall Trio.
 4.15.—Music from the Studio.
 4.20.—Miss Belle Simmons, soprano.
 4.25.—From Farmer's Tea Rooms: The Oak Hall Trio.
 4.35.—Music from the Studio.
 4.40.—Mr. Frank McCarthy, baritone.
 4.45.—Stock Exchange, Third Call.
 4.48.—Close down.

EARLY EVENING SESSION.

- 5.45.—The Chimes of "Big Ben."
 5.50.—The "Hello Man" talks to the children.
 6.20.—A talk to the older children.
 6.15.—From Farmer's Dining Hall: The Oak Hall Trio.

- 6.45.—Mr. Walter Kinnsley, baritone.
 6.55.—Miss Ella Goodman, soprano, makes her first appearance since her return from England.
 7.—Mr. Russell Callow, tenor.
 7.5.—Broadcast from the Crystal Palace, items by the orchestra, conductor Mr. Harry Stone.
 7.55.—Miss Eda Goodman, soprano.
 7.45.—Mr. Walter Kinnsley, baritone.
 8.50.—Mr. Russell Callow, tenor.
 11.—Broadcast from the Wentworth Hotel, items by the Wentworth Cafe Orchestra, conductor, Mr. Sydney Simpson.
 12.—Close down; National Anthem.

2BL

EARLY MORNING SESSION.

- 7.15.—Physical Training and Health Exercises.
 7.30.—Broadcasters' Special N-wa Service.
 7.45.—Physical Training and Health Exercises.
 8.—G.P.O. Clock and Chimes. Close down.

MORNING SESSION.

- 9.—G.P.O. Clock and Chimes; Musical programme from the studio.
 10.15.—Special News Service from the Daily Telegraph.
 10.25.—Musical programme from the studio.
 10.40.—Special News Service from the Daily Telegraph.
 11.—G.P.O. Clock and Chimes; Market Reports and London Metal Quotations.
 11.15.—Musical programme from the studio.
 11.30.—Broadcasters' Information Service, including Mail, Shipping, Weather, Rainfall.
 11.40.—Women's Section; Social Notes by Mrs. Jordan.
 11.55.—Mrs. Jordan Replies to Correspondence.
 12.—G.P.O. Clock and Chimes; Feeding the Family, Mrs. Jordan.
 12.25.—A Talk by Miss Helen Jean Bouffant.
 12.30.—Sydney Stock Exchange Calls.
 12.45.—Hiller's Instrumental Quartette, under the direction of Caryl Castella.
 1.30.—Sydney Stock Exchange calls.
 1.45.—Latest sporting information from the "Sun."
 2.—G.P.O. Clock. Close down.

AFTERNOON SESSION.

- Racing Information broadcast by courtesy of
 3.—G.P.O. Clock and Chimes; Weather Report and Forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist; Social Notes from the Sun.
 3.15.—Civil Service Restaurant Trio, under the direction of Miss De Curcy Bremer.
 3.20.—A talk on English Literature and Poetry by Mr. J. M. Prentice.
 3.35.—Music from the Studio.
 4.—G.P.O. Clock and Chimes; Civil Service Stores Trio.
 4.15.—Musical Programme from the Studio.
 4.30.—Serial story, entitled, "The Scarlet Cockade."
 4.45.—Music from the Studio.
 5.—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.
 5.5.—Shipping information when available.
 5.10.—Resume of night's programme.
 5.15.—G.P.O. Clock and Chimes. Close down.

EARLY EVENING SESSION.

- 6.—G.P.O. Clock and Chimes. The pupils of Miss Monica Reilly will entertain the kiddies.

Farmer's Service, Sydney, call sign 2FC, wave length 442 metres.
 Broadcasters Ltd., Sydney, call sign 2BL, wave length 355 metres.
 Trades Hall Broadcasting Station, call sign, 2KY, wavelength, 280 metres.
 Theosophical Broadcasting Service, call sign, 2GB, wavelength, 316 metres.
 Burgin Electric Coy. Ltd., Sydney, call sign, 2BE, wavelength, 316 metres.
 Broadcasting Co. of Australia, Melbourne, call sign 3LO, wave length 371 metres.
 Associated Radio Co., Melbourne, call sign 3AR, wave length 484 metres.
 Queensland Radio Service, Brisbane, call sign 4QG, wave length 385 metres.
 Central Broadcasters Ltd., Adelaide, call sign 5CL, wave length 295 metres.
 Radio Broadcasting Co. of N.Z., Auckland, call sign 1YA, wave length 425 metres.
 Westralian Farmer's, Perth, call sign 6WF, wave length 1250 metres.
 Tasmanian Broadcasting Pty. Ltd., Hobart, call sign 7ZL, wave length, 335 metres.

- 7.—Racing information, supplied by 2FC Racing Commissioner.
 7.15.—A Talk on next week's Films.
 7.40.—An Imaginary Drive through Socorro.
 7.55.—Amusements.

NIGHT SESSION.

- 8.—Broadcast from the Hospital for incurables, a concert by the newly organized 2FC Hospital Concert Party, directed by Mr. Hans Garling. This party will visit the various hospitals and charitable institutions, entertaining the convalescents.
 2FC artists that will be broadcast will include: Miss Lurline Hammond, soprano; Mr. Hans Garling, ventriloquist; Mr. R. M. Baxter, tenor; Miss Muriel Humphries, contralto; Mr. Arthur Prince, harp and saxophone items; Mr. Bruce Prince, novelty pianist.
 9.30.—From the Studio: A talk on Japan, by Miss Gertrude Mack, dealing with "Shrines of Nooko."

- 6.40—Pavilion Dinner Orchestra, under the direction of Mr. Cec. Morrison.
 Special Country Session.
 7—G.P.O., Clark and Chimes, Australian Mercantile Land and Finance Co. Stock, Wool and Hide Report.
 7.5—Weather Report and Forecast, by courtesy of Mr. C. J. Marsa, Government Meteorologist.
 7.55—Stock Exchange Reports.
 7.15—Producers' Distributing Society's fruit and vegetable report.
 7.30—Fruit and vegetable Report (Sun).
 7.35—Grain and Tallow Report (Sun).
 7.45—Bull and Finance Report (Sun).
 7.50—Country News from the Sun.
 7.55—Lecture.

NIGHT SESSION.

- 8—Mrs. Bilda Walker, soprano, Miss Mary Neal, mezzo soprano; Ethel Mansfield Orchestra, Mr. Lance Jeffrey, tenor.

2 G B

NIGHT SESSION.

- 8.45—Talks to Children, by "The Man from Broadland."
 7.15—Interval.
 7.30—Music from Studio.
 7.45—Announcements.
 7.55—Instrumental Trio, Artists' Dan Scully, Merril Lang, Ada Brook.
 8.3—Address by Rt. Hon. G. R. Arundell, M.A., L.L.B., D.L.
 8.35—Voice Solo, by Monica Border.
 8.40—Songs by Miss Bilda Boyle.
 8.50—Instrumental Trio, Lloyd Davies, Muriel Lane, Ada Brook.
 8.55—Mr. R. Tremaine, tenor.
 8.58—Address by Professor Ernest Wood.
 9.1—Miss Ada Brook, piano solo.
 9.15—Announcements: Result of Home Examination Ball.
 9.25—Miss Bilda Boyle, solo.
 9.25—Instrumental Quartette, Dan Scully, Lloyd Davies, Monica Border, Ada Brook.
 9.35—Monica Border, violin solo.
 9.45—R. Tremaine, solo.
 9.50—God Save the King.

3 L O

MIDDAY SESSION.

- 12—British Official Wireless News from Rugby, Beaters and the Australian Press Association tables.
 12.15—Stock Exchange Information: Meteorological Information: Weather Forecast for Victoria, Tasmania, South Australia and New South Wales.
 1.10—Original Sketch, written by Hattie Turner.
 1.30—Agnes Fortuna, pianoforte.
 1.35—Bruce Green, Gamine Performance Items, in selections from his repertoire.
 1.40—Studio Orchestra.
 2—Close down.

AFTERNOON SESSION.

- 2.30—Metropolitan Fire Brigade, at work and 984.
 Metropolitan Fire Brigade Band. During the intervals between the band items, descriptions of events will be given by Mr. White, Deputy Chief.
 4—Mrs. M. Callaway Mahood, Interior Decorations: "Colour Schemes."
 5.15—Studio Orchestra.
 5.20—"Au Pair" of Messrs. Buckley & Sunn Ltd., Fashion talk.
 5.25—Studio Orchestra.
 4.45—"Herald" news service, Stock Exchange information.
 5—Children's Song Competition, Radio Voice Trials. Finals.

EARLY EVENING SESSION.

- 6.45—Children's hour. Answers to letters and birthday greetings.

- 6.45—Kath Desmond will recite to the children.
 6.47—"Billy Bunny's" story for the little ones.
 6.47—Kath Desmond will recite just one more poem.
 6.54—"Billy Bunny" story for the bigger children. ("Black Beauty"), "The Lost Princess."
 6.49—"Arms" and "Herald" News Service; Reviewer and the Australian Press Association.
 6.55—Weather synopsis, Shipping movements.
 6.57—Stock Exchange Information.
 7.2—Fish Market Reports, by J. R. Barrett Ltd.
 7.3—Race Reports.
 7.4—Market Reports, by the Victorian Producers' Co-operative Co. Ltd. Haymarket sheep sales, Poultry, Grain, Calf, Drama, Tins, Dairy Produce, Potatoes, and Onions.
 Market prices of Oranges and Lemons, supplied by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

- 7.20—Under the auspices of the Department of Agriculture, Mr. S. A. Cook, principal, "Cultivation of the Lemon."
 7.40—Mr. E. C. Taylor, Secretary, Associated Public Schools, "School Life and School Sports."
 8—Traveller, Collingwood Citizens' Band.
 8.10—Mr. J. Howlett Bass, "Traveller Day."
 8.20—Horatia E. Dickson, tenor.
 8.25—Collingwood Citizens' Band.
 8.47—Horatia Dickson, tenor.
 9.4—Farewell chat to my singer and other friends, by Commissioner M. Kemm, "Fighting Mac."
 9.20—Agnes Fortuna, pianoforte.
 9.30—Ethel Davies, soprano.
 9.35—A. Frank, cornet.
 9.45—"A Fragment" Maurice Dudley, incidental music by Ronald Beatty.
 10.4—Ethel Davies, soprano.
 10.15—British Official Wireless news from Rugby, Announcements.
 10.20—Collingwood Citizens' Band.
 10.35—"Arms" News Service; Meteorological information; Road News, supplied by the Automobile Club of Victoria.
 10.45—Collingwood Citizens' Band.
 11—Our Great Thought: "England expects that every man this day will do his duty."
 —Nelson.
 11.4—E.L.D. Dance Orchestra.
 11.45—God Save the King.

3 A R

MORNING SESSION.

- 11.30—The British Official Wireless Press, reviewed by 3AR's operator from Rugby Wireless Station, England. Express train information. "Am" news bulletin.
 12—Time Signal Chime from the G.P.O. First Weather Forecast, Studio Barometer Readings.
 12.5—Musical Selections, relayed from Hoyt's De Luxe, Bourke Street, Mr. T. J. Campbell at the organ.
 15.50—Stock Exchange News.
 12.40—Musical Selections.
 12.58—Mail Notices, Shipping Movements.
 1—Close down.

AFTERNOON SESSION.

- Bullarat Miners' Meetings: results after each race and at half-hourly intervals.
 2.30—Hoyt's Premier Orchestra, under the direction of Miss Ethel Brien, special Birthday musical programme.
 4—Time Signal Chime from G.P.O.
 4.5—Hoyt's Premier Orchestra.
 5.30—Fandango Chat to Children, by Mr. Stanley Haines.
 5—Time Signal, Studio Barometer Readings. Close down.

EARLY EVENING SESSION.

- 6.45—The Children's Corner, by Unck Rad.
 EVENING SESSION.
 7.45—The British Official Wireless Press.

- Studio Barometer and Outdoor Thermometer Readings.
 8—Time Signal Chime; An Australian Night with our Artists' comedians and authors. The Parslo Instrumental Trio (violin, cello and piano).
 8.8—Miss Irene Ryan, contralto.
 8.14—Mr. Leo O'Kelly, soloist, "The Intro" from "The Sentimental House."
 8.20—Louis Lavater, the Melbourne composer, will give a little explanatory talk before his songs will be rendered by Mr. Ernest Sage, baritone.
 8.34—Mr. R. Stanley Haines will talk on "Australian Shrubs."
 8.40—Mr. Owen Schumann, violinist.
 8.52—Miss Edna Howard, solo baritone.
 8.55—Farmers' Instrumental Trio. A few minutes' talk will be given by Mr. Stammers (the composer) before his items are played by the Trio.
 9.5—Mr. Louis Lavater will again tell you a little about the songs to be sung by Mr. Ernest Sage, baritone.
 9.26—Miss Hazel Ralph, soprano.
 9.27—Mr. Paul Glenister, solo baritone. Mr. David Coates, tenor, and Mr. Melville Marshall, baritone, solo for three voices.
 9.30—Mr. W. W. Fishercell, talk "Useful Hints for Farmers: Measurement of tanks, paddocks, etc."
 9.45—Miss Irene Ryan, contralto.
 9.58—Miss Della Bevan, cellist.
 10.10—Miss Leo O'Kelly, soloist.
 10.25—Miss Hazel Ralph, soprano.
 10.18—"Am" News Bulletin.
 10.20—Lorrett's Orchestra.
 11—Close down.

4 Q Q

MIDDAY SESSION.

- 12.15—Tone-in.
 12.15—Time Signal.
 1.1—Market Reports. Weather Information. "The Daily Mail" news. "The Daily Standard" news.
 1.20—From the Hotel Carlton: Lunch Music from the Lounge Hotel Carlton, by Hotel Carlton Symphony Orchestra.
 2—Close down.

AFTERNOON SESSION.

- 2.30—From Hotel Carlton: Afternoon Tea Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
 4.15—From the Studio: "The Telegraph" news.
 4.20—Close down.

EARLY EVENING SESSION.

- 6.35—Tone-in.
 6.39—"The Children's Session"—Stories by "The Sandman."
 7—From the Council of Agriculture Studio: "The Farmers' Session." Market reports. "The Australia's" "Among Scottish Heels," by Mr. J. F. Reid, editor "Queensland Agricultural Journal."
 7.10—Lecture: System: A talk, arranged by the Workers' Educational Association, Mr. H. V. Smith, Librarian. "The Standard" news. Stock Exchange.
 7.40—Announcements.

NIGHT SESSION.

- 7.45—Lecture: Session: A Garden Talk, by "Tone-in."
 8—The Federal Band.
 8—Week-end Road Information for Motorists, officially supplied by the Royal Automobile Club of Queensland. The Savoy Orchestra.
 9.15—Radio Voice Contest items. Weather information officially supplied by the Commonwealth Weather Bureau. Announcements.
 9.30—Savoy Orchestra. Mrs. Con. Thomas, soprano. Miss Irene Ephraïm, contralto.
 10—"The Daily Mail" new service. Close down.

5CL

MORNING SESSION.

- 11.30—G.P.O. Chimes.
- 11.41—Stock Duo Art.
- 11.46—"Advertiser" News Service.
- 11.53—Vocalion number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" news service.
- 12.16—Stock Duo Art number.
- 12.30—5CL Studio Orchestra will be heard in a series of musical numbers.
- 1.03 (approx.)—Mard & Co's. Stock Exchange Intelligence, Weather Reports and Station Announcements.
- 2—G.P.O. Chimes.

AFTERNOON SESSION.

- 3—G.P.O. Chimes.
- 4.1—Relay from "Maple Leaf" Cafe—Orchestral numbers.
- 3.16—Stock Duo-Art numbers.
- 4—G.P.O. Chimes.
- 4.1—Relay from "Arcadia" Cafe—Orchestral numbers.
- 5—G.P.O. Chimes.

EVENING SESSION.

- 6.30—G.P.O. Chimes.
- 6.51—Belltime Stories, by "Auntie Peggy."
- 7.30—Market Reports.
- 7.40—Sporting Talk, by "Old Timer."
- 8—G.P.O. Chimes.
- 8.1—The Margranks Orchestra, interspersed with vocal and instrumental items.
- 9—G.P.O. Chimes.
- 9.1—Weather reports.
- 9.3—Studio concert, continued.
- 10—G.P.O. Chimes.
- 10.1—Studio concert, continued.
- 10.15—"Advertiser" News Service.
- 10.30—Studio concert, continued.
- 10.35—Station announcements.
- 11—G.P.O. Chimes. National Anthem. Close down.

7ZL

MORNING SESSION.

- 11—"The Mercury" news, stock market shipping, commercial intelligence, weather information. Records from the Studio.
- 12—Relations of the Salomola. G.P.O. Clock and Chimes. Close down.

AFTERNOON SESSION.

- 3—G.P.O. Clock and Chimes.
- 3.30—Hobart Stock Exchange quotations.
- 3.55—Weather information.
- 4—G.P.O. Clock Chimes. Close down.

EARLY EVENING SESSION.

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

EVENING SESSION.

- 8—G.P.O. Clock Chimes. "The Mercury" special, Tasmanian news service. Railway auction produce sales. Weather information.
- 8.5—Hobart Stock Exchange quotations.
- 8.16—Weekly gardening chat, by Mr. George Nation, of the Glen Nursery, Cascade.
- 8.20—"Sisters Badge," supplied by Mr. T. W. Newton, of Hobart Sports Depot.
- 8.30—Studio Concert: Miss Katherine Cullinane, alto-soprano; Miss Kathleen Pearce, contralto; Miss Jean Hilliard, mezzo soprano; Miss Gwenda Bidencupe, mezzo soprano; Mr. Jack Broadbent, baritone; Master Victor Pharoah, baritone solo.
- 9.30—"The Mercury" special interstate news service. Weather synopsis. Station announcements. National Anthem.



Saturday, Oct. 23

2FC

EARLY MORNING SESSION.

- 7—Chimes of "Big Ben" and Announcements.
- 7.5—Music from the Studio.

- 7.10—Official Weather Forecast; Rainfall; temperature; Astronomical Memoranda; Shipping Intelligence; Mail Services.
- 7.25—Investment Market, Mining Share Market, Metal Quotations.
- 7.35—Wool Sales, Brendestuffs Markets, Intermediate Markets, Produce Markets.
- 7.45—"Sydney Morning Herald" News Service.
- 8—"The Chimes of 'Big Ben'"; A Chorus Talk by Mr. J. K. Powell.
- 8.15—Close down.

MORNING SESSION.

- 9.15—"The Chimes of 'Big Ben'" and Programme Announcements.
- 9.20—Music from the Studio.
- 9.45—A Talk by the 2FC Racing Commissioner.
- 10—Chimes of "Big Ben" and Announcements.
- 10.5—Late "Sydney Morning Herald" news service.
- 10.15—Music from the Studio.
- 11—"The Chimes of 'Big Ben'" and Announcements.
- 11.5—A talk on Gardening by "Red Gum."
- 11.30—Close down.

MIDDAY SESSION.

- 12.55—"The Chimes of 2FC and Announcements."
- "The Chimes of 'Big Ben'" and Announcements; "Evening News" Midday News Service; Weather Information.

AFTERNOON SESSION.

- 3—"The Chimes of 'Big Ben'" and Announcements. During the intervals of sporting results, musical items will be given from the Studio.
- 4.50—Resume of the afternoon's sporting events.
- 5—Close down.

EARLY EVENING SESSION.

- 5.15—"The Chimes of 2FC and Announcements."
- 5.30—"The 'Hello Man'" talks to the Children.
- 5.35—A Story for the older children.
- 6.45—Broadcast from the Hotel Australia, Orchestral Items.
- 7.15—"Evening News" News Service.
- 7.45—"Motor Fuel" a talk on the common characteristics of motor fuels marketed to-day's. Close down.

NIGHT SESSION.

- 7.55—"The Chimes of 2FC and Announcements."
- 8—"The Chimes of 'Big Ben'"
- 8.5—From the Studio. The Leichhardt District Band will play. Mr. E. P. Kerry, conductor.
- 8.15—Mr. Russell Callow, tenor.
- 8.19—Items by the Leichhardt District Band.
- 8.20—Miss Edna Baldoek, "The Not Mender."
- 8.35—Comedy sketch, written for 2FC by Annie Hughes.
- 8.45—Items by the Leichhardt District Band.
- 9—Mr. Russell Callow, tenor.
- 9.4—Mr. Gladstone Bell, solo solo.
- 9.15—Leichhardt District Band.
- 9.30—Miss Edna Baldoek, "My Ships."
- 9.34—Leichhardt District Band.
- 9.45—A Radio Sketch, written for 2FC by Annie Hughes.
- 10—Mr. Russell Callow, tenor.
- 10.8—Mr. Gladstone Bell, "celist."
- 10.15—Mr. Wally Byrnes, comedian.
- 10.24—Miss Edna Baldoek, solos.
- 10.50—2FC Dance Band. Mr. Eric Pearce, conductor.
- 11—Mr. Wally Byrnes, comedian.
- 11.10—2FC Dance Band.
- 11.30—Broadcast from the Wentworth Hotel, Sydney; Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 12—National Anthem. Close down.

2BL

EARLY MORNING SESSION.

- 7.15—Physical Training and Health Exercises.

- 7.30—Broadcasters Special News Service.
- 7.45—Physical Training and Health Exercises.
- 8—G.P.O. Clock and Chimes. Close down.

MORNING SESSION.

- 11—G.P.O. Clock and Chimes. Special news service from the "Daily Telegraph."
- 11.10—Musical programme from the Studio.
- 11.25—Special news from the "Daily Telegraph."
- 11.45—Musical programme from the Studio.
- 11.55—G.P.O. Clock and Chimes. News results will be broadcast immediately after each race by courtesy of "The Sun" Newspapers. Social notes and a talk on "Simple Cookery for Children," by Mrs. Jordan.
- 12.30—London Metal quotations.
- 12.35—Broadcasters' Information Service, including Mail, Shipping, Weather, Rainfall.
- 12.50—News from "Sun" Cable Edition.
- 1—G.P.O. Clock and Chimes. Music from the Studio.
- 1.10—Talk on Sporting and Athletic Fixtures for the day—Lawrence, Hockey, Tennis, Rugby League and Fixtures, Rugby Union all fixtures, Soccer, Australian Rules, Baseball, Boxing, Trotting, Coursing, Bowls. During the afternoon sporting information will be broadcast by courtesy of "The Sun" Newspapers.
- 3.15—G.P.O. Clock. Close down.

EARLY EVENING SESSION.

- 6—G.P.O. Clock and Chimes; Uncle Jack and the Kidnies.
- 6.45—Facillion Dinner Orchestra under the direction of Mr. Ger. Morrison.
- 7.15—Results of all sporting information, including Sailing, Swimming, Racing, Coursing, Bowls, by courtesy of Sun Newspapers.
- 7.45—Country News from the Sun.
- 7.45—Close down.

NIGHT SESSION.

- 8—Ambassadors Instrumental Salon Quartette under the direction of Mr. Claude McQuinn; Mr. Norman Wright, tenor; Miss Annie Harrow, contralto; Chas. O'Mara and Anna Barker; Miss Millie Hughes, soprano; Mr. Raymond Beatty, basso cantante; Al Hammett and the Ambassadors Dance Band, broadcast from the ballroom of the Ambassadors.
- 12—G.P.O. Clock and Chimes. National Anthem.

3LO

MORNING SESSION.

- 10—Children's Song Competition, Radio Voice Trials.
- 12—Time Signal, British Official Wireless news from Rugby, Bunter's and the Australian Press Association cables. "Arpeg" and "Herald" news services. Shipping intelligence.
- 12.45—Stock Exchange information.
- 12.50—Meteorological information. Weather forecast for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports.
- 1—Time signal.
- 1—Studio Orchestra.
- 1.10—Elicie Davies, soprano.
- 1.17—Dorothy Roxburgh, viola.
- 1.24—Station Trio, flute, cello, and piano.
- 1.30—Elicie Davies, soprano.
- 1.37—Tasma Theano, cello.
- 1.47—Studio Orchestra.
- 2—Result of Burde—Moonee Valley Races. Close down.

AFTERNOON SESSION.

- 2.5—Transmission from Henley on Yarra—Yarra Challenge.
- 2.20—Second Maiden Fours.
- 2.30—Result of St. Alban's Handicap, Moonee Valley Races.
- 2.35—Second Maiden Eights.
- 3—From the Studio: description while race is in progress of Cox Plate.
- 3.3—Henley on Yarra; Stewards' Challenge. Interstate Boat Race Forecast.
- 3.5—Grand Challenge Senior Eights.

- 3.30—From the Studio: Result of St. Albans Handicap.
 4.5—Description while race is in progress of Valley Cup.
 4.8—Hendley on Yarra—Final.
 4.15—Blewick Challenge.
 4.20—Saunders' Challenge.
 4.25—Yarra Challenge.
 4.30—Ladies' Challenge.
 4.35—From the Studio: Result of Steeplechase at Yarra—Grand Challenge.
 4.40—Stewart's Challenge.
 4.45—Maiden Fours.
 4.50—Maiden Fights—Final.
 5—"Herald" News Service; Race Results.
 5.15—Close down.

EARLY EVENING SESSION

- 5.45—Evening Results.
 6—Children's Hour.
 6.15—Keith Desmond will recite to the children.
 6.22—"Mary Garden" Poems: Story for the Blind: "Babies in the Wood."
 6.40—"Argus" and "Herald" News Services; Sporting results. Reuters and Australian Press Association cables.
 6.55—Weather systems, Shipping movements.
 6.57—Stock Exchange information.
 7.2—Fish Market Reports, by J. R. Barrett Ltd.
 7.4—Bever resorts.
 7.6—Market Reports, by Victorian Producers' Cooperative Co. Ltd.; Grain, sheep, hay, straw, pigs, dairy produce, potatoes and onions.

NIGHT SESSION

- 7.20—Mr. F. R. S. Sanders, General Secretary of the Bus Societies Association, Victorian Branch "Aims and methods of the Association."
 7.45—Mr. Ed. E. Prescott, F.L.S., F.R.H.S., "Australian Plants."
 8—Under the auspices of the Victorian Amateur Sports Committee, Dr. H. Abbott "Racing and Weathering."
 8.15—Studio Orchestra.
 8.25—V. Harrison, baritone.
 8.45—Round the Camp Fire: Music, story, and verse, songs and say, by the poets and writers of Australia.
 Narrator: V. Upton-Brown.
 9.15—Studio Orchestra.
 9.17—Reynold Bradley, violin recital.
 9.35—Put out your lights and lamps.
 9.45—A society from Birmingham.
 10.2—British Official Wireless News from Rugby; "Argus" News Service; Announcements.
 10.12—Jack O'Hagan, baritone.
 10.19—Studio Orchestra.
 10.26—V. L. Harrison, baritone.
 10.32—Sporting results: Horse, football, Metropolitan Soccer League; Metropolitan Amateur Association Lacrosse; Announcements.
 10.42—Studio Orchestra.
 11—Our Great Thought: "Gladly is the soul's health; sadness is its poison."
 11.1—B.L.O. Dance Orchestra.
 11.10—God Save the King.

3 AR

MORNING SESSION

- 11.20—The British Official Wireless Press, received from Rugby Super Wireless Station, England, by M.A.P.'s operator, the "Ase" News Bulletin, Express Train Information.
 11.5—Time Signal from G.P.O.; Studio barometer and outdoor thermometer readings; 1st Weather Forecast; events of the day; Sporting fixtures.
 12.5—Musical Selections, relayed from Hoyt's De-Luxe, Bourke Street. Mr. T. L. Campbell at the Warfield.
 12.30—Stock Exchange News, Foreign Exchanges of the World, Supplied by Messrs. Thos. Cook and Sons.
 12.55—Market Reports.

- 12.40—Musical Selections.
 1—Close down.

AFTERNOON SESSION

- Monroe Valley Cup Meeting.
 2—Description of Miss Miss Hurdle, 3 miles.
 2.30—Result of St. Albans Handicap for Colts, 4 furlongs. Hoyt's Premier Orchestra, under direction of Miss Ellis Brian.
 3—Result of W. S. Cox Plate, 500 fms.
 3.30—Result of St. Albans Handicap for Fillies, 4f.
 4—Time Signal Chime from G.P.O.
 4.5—Result of Monroe Valley Cup, 1m. 4 1/2 f.
 4.8—Hoyt's Premier Orchestra.
 4.85—Description of Broadmeadows Steeplechase, 2m. 5f.
 4.9—Result of Dundonald Welter, 8f.
 5.7—Close down.

EARLY EVENING SESSION

- 5.45—Children's Corner, by Uncle Steve.

NIGHT SESSION

- 5.45—Time Signal from G.P.O.; Studio Barometer and Outdoor Thermometer Readings. The British Official Wireless Press; Sporting results; Local News.
 6.15—Dance, Night. The Rhythmic Dance Orchestra, relayed from the Maison de Luxe, Elwood. Latest popular dance music, under the leadership of Mr. George Lewis.
 6.30—Week-end Travellers' Information, supplied by the Melbourne Metropolitan Tramways Board and Victorian Railways Department.
 6.45—The Maison de Luxe Rhythmic Dance Orchestra.
 10—Time signal from G.P.O.; Studio Barometer and Outdoor Thermometer Readings.
 10.5—The Maison de Luxe Rhythmic Dance Orchestra.

1 QG

NO MIDDAY TRANSMISSION.

AFTERNOON SESSION

- 3.30—Tune-in.
 3.45—A Message for Little Listeners, by "Miss Waratah."
 3.55—Close down.
 4.20—Tune-in.
 4.30—The Children's Session, Bedtime Stories by "Uncle Jim," assisted by "Mabel Sunshine."
 4.55—Sporting news.
 7.35—Close down.

EARLY EVENING SESSION

- 7.45—A Sporting Talk.
 8—From the Galaxy Theatre, Towns: Ten minutes music by the Orchestra.
 8.10—From the Studio: Mr. Arthur Tibbity, baritone. The Kalua Trio, Hawaiian instrumentalists. Miss Alice Raven, contralto. Radio Voice Contest Items. The Kalua Trio, Hawaiian Instrumentalists, Mrs. Suller, contralto. Mr. H. Humphries, monologue. Kalua Trio, Hawaiian Instrumentalists. Miss Alice Raven, contralto. Mr. H. Humphries, monologue.
 8.50—Weather Information, officially supplied by the Commonwealth Weather Bureau, Announcements.
 9—From Lakson's Ball-room: Dance music by the Ajax Novelty Band.
 10—From the Studio, "The Daily Mail" news service. Close down.

5 CL

MORNING SESSION

- 10.30—G.P.O. Chimes.
 10.31—B.C.L. Studio Orchestra, Selections.
 11.45—"Advertiser" news service.
 12—G.P.O. Chimes.

AFTERNOON SESSION

- Relay from Gawler Racecourse, running description of meeting by Mr. Arnold Trevlar. From the Studio—Interstate sporting.

EVENING SESSION

- 5.30—G.P.O. Chimes.
 6.51—Bedtime stories.
 7.30—Market reports.
 7.46—Resume of the chief sporting results throughout the Commonwealth.
 8—G.P.O. Chimes.
 8.1—Programme of dance music, relayed from Palais Royal interspersed with vocal items from the studio.
 9—G.P.O. Chimes.
 9.1—Weather reports.
 9.3—Studio concert continued.
 10.15—"Advertiser" news service.
 10.20—Studio concert continued.
 10.55—Station announcements.
 11—G.P.O. Chimes, National Anthem, and close down.

7 ZL

MORNING SESSION

- 11—G.P.O. Clock Chimes. The "Mercury" stock market, shipping, commercial, intelligence. Weather information and sporting anticipations.
 "Radio" selections.
 11.45—Robert Stock Exchange quotations.
 12—G.P.O. Chimes. Close down.

EVENING SESSION

- 7—Children's Corner: "The Brother" chats to his Pals.

NIGHT SESSION

- 8—G.P.O. Clock Chimes. The "Mercury" special Tasmanian news service, Railway annual produce sales; Weather information and sporting results.
 8.5—Robert Stock Exchange quotations.
 8.19—Talk, "Come to Tasmanian Movement," by Mr. J. G. Turner, chairman of Mount Burnett Association, "The Hobart Herald."
 8.30—Dance numbers from the Studio.
 9.45—British Official Wireless News, copied direct from Rugby by our own operator. Weather systems, Station Announcements.



Sunday, Oct. 24

2 FC

MORNING SESSION

- 10.55—The Chimes of 2FC and Announcements.
 11.2—Broadcast from St. Mark's Church of Ensland, Darling Point; Morning Service, Francher, Rev. E. Howard Law.
 12.15—From the Studio News section.
 12.30—Close down.

AFTERNOON SESSION

- 1.3—The Chimes of "Big Ben" and Announcements.
 1.5—A recital arranged by Mr. Clement Houkirk.
 3.50—Broadcast from the Lyceum Hall, Pitt Street. An address by Miss Preston Stanley.
 4.30—Close down.

EVENING SESSION

- 6—The Chimes of "Big Ben" and Announcements.
 6.2—A recital, arranged by Mr. William Dallois.
 7—Broadcast from the Backdale Methodist Church, the Anniversary Service.
 8.15—Broadcast from the Kalua Theatre.

Manly; Band Concert, by the Manly Military Band, Mr. Pheloung, conductor.
 9.30—From the Studio: A Vocal Recital, by Mr. Herbert Browne, by courtesy of J. C. Williamson Ltd.
 9.40—From the Studio: Piano Solos.
 9.50—Mr. Herbert Browne, baritone.
 10—National Anthem; Close down.

2 BL

MORNING SESSION.

11—Service from Chalmers Presbyterian Church.

AFTERNOON SESSION.

2.30—Bible Class, Conducted by Mr. W. "Ouro" Bradley.

EVENING SESSION.

7.15—Service from Christ Church, St. Lawrence.
 8.30—Concert from the studio, including Miss Marycye Skell, soprano; Miss Grace Saville, contralto; Broadcasters' Trio.

2 GB

MORNING SESSION.

10.30—Organ music from St. Alban's Church.
 10.30—Morning Service from St. Alban's Church, Redfern. Celebration of the Holy Eucharist, Celebrant: Rt. Rev. C. W. Leadbeater.
 12—Close down.

NIGHT SESSION.

9.45—Music from Studio.
 1—Lecture from Adyar Hall, by Professor Ernest Wood, entitled "Thought-Power and the Unseen World."
 2—Music from the Studio.
 5.15—Wind Quintette, by Beethoven. Artists: Edgar Richmond, Thomas Russell, William Lees, Norman Inghamella, Ada Brook.
 5.35—Miss Ann Casey, solo.
 8.30—Quintette by Mozart. Artists: F. Reddy, M. Harder, Dan Scully, Chas. Boutt, J. Peat.
 8.50—Violin solo, by Dan Scully.
 9—Announcements.
 9.1—Choirist solo, by Thomas Russell.
 9.15—Songs by Miss Ann Casey.
 9.15—Wind Quintette, by Beethoven. Artists: Edgar Richmond, Thos. Russell, William Lees, Norman Inghamella, Ada Brook.
 9.25—Violin solo, by Monica Harder.
 9.30—Oboe solo, by Edgar Richmond.
 9.35—Quintette by Mozart, "Larghetto." Artists: Edgar Richmond, Thos. Russell, William Lees, N. Inghamella, Ada Brook.
 9.45—God Save the King.

3 LO

MORNING SESSION.

10.45—Express Train Information.
 10.45—St. Paul's Cathedral—Hospital Sunday.
 12.15—British Official Wireless News from Ruby; Announcements; Close down.

AFTERNOON SESSION.

3—Plenary Sunday Afternoon Service: Central Mission, Wesley Church. Chairman: Rev. J. H. Cain.
 4.30—Announcements; Close down.

EARLY EVENING SESSION.

8.45—Children's Hour: Chorus by Billy Bunny and his Brer Rabbits.
 9—Answers to letters and birthday greetings.
 9.15—Another Hymn by Billy Bunny and his Brer Rabbits.
 9.25—Stories by Billy Bunny; Mimosa and Lovelost Life.
 9.45—Close down.

NIGHT SESSION.

7—Service from Australian Church, Rev. Charles Strong, D.D.
 8.30—From the Studio: Malvern Tramways Band.

8.40—Elsie Davies, soprano.
 8.47—Malvern Tramways Band.
 8.57—Mr. J. Howlett Ross, a Talk on Famous Ryans.
 9.42—Bandmen Nelson, Blair, and Willis, trombone trio.
 9.46—"Argus" News Service: Meteorological Information; Announcements.
 9.51—Malvern Tramways Band.
 10—God Save the King.

3 AR

MORNING SESSION.

11—Morning Service from the Collins Street Independent Church. Rev. Ernest James, B.D., preacher.

AFTERNOON SESSION.

2—Concert from the Studio: Miss Iris Turner (soprano); Miss Margaret Green (contralto); Miss Sheila Macfie (pianist); Mr. A. Drinkwater (tenor).

EVENING SESSION.

7—Evening Service from the Collins Street Independent Church. Rev. J. Ernest James, B.D., preacher.
 8.30—Concert from the Studio: by the Pitany Children's Band. Miss Ivy Price (soprano), Miss A. Dodds (contralto).
 9.30—"Arg" news service, exclusive to 3AR.
 9.35—Close down.

4 QG

MORNING SESSION.

10.55—Tune-in.
 11—Church Service from the Albert Street Methodist Church; Invocation, Prayer, Hymn, First Lesson, Te Deum, Second Lesson; Offertory, Anthem, Hymn, Sermon, Hymn, Benediction.

AFTERNOON SESSION.

The Concert provided by the Brisbane Children's Band (Mr. A. F. Kasser, conductor) will be relayed from the Botanical Gardens.
 4.30—Close down.

NIGHT SESSION.

7.25—Organ music from St. Andrew's, South Brisbane.
 7.30—Evening Service from St. Andrew's Church of England, South Brisbane. Rev. L. J. Hobbs, rector.
 At the conclusion of the Church Service, the concert provided by the Greater Brisbane Concert Band will be relayed from Wickham Park.
 9.30—Close down.

5 CL

MORNING SESSION.

11—Relay from Flinders Street Baptist Church Divine Service.

EVENING SESSION.

6.30—G.P.O. Chimes.
 6.31—Sunday stories for the children.
 7—Reins from the Parkside Baptist Church.
 8.15—Relay from Railways Institute—Holden's Silver Band.
 8.40—Boy Week talk, Mr. J. A. Haslam, D.Sc., "Taking the lead."
 8.45—Mr. P. H. Nicholls, "Tenayann and modern thoughts."
 9—G.P.O. Chimes.
 9.1—Weather reports.
 9.3—Holden's Silver Band.
 10—G.P.O. Chimes. National Anthem. Close down.

7 ZL

EVENING SESSION.

7—Service from Wesley Church, Moltville Street, Hobart; Preacher, Rev. Robert Williams; Anthem by the choir; Hymns No. 48, 70, 236, 641.

8.45—Concert from the Studio: Miss Frances Evans, contralto; Miss Maryzeen Jones, contralto; Mr. W. E. Fuller, dramatic recital; Mr. L. M. Barnett, vocal solo.
 9.45—"Mercury" Special Interstate news service; Weather Synopsis; Station Announcements; National Anthem.



Monday, Oct. 25

2 FC

EARLY MORNING SESSION.

7—The Chimes of "Big Ben" and Announcements.
 7.15—Music from the Studio.
 7.16—Weather Information; Commercial News; Shipping Intelligence; Rainfall; Temperatures; Astronomical Memoranda.
 7.25—Investment Market, Mining Share Market; Metal Quotations.
 7.40—Wool Sales, Breadstuffs Markets; Inter-Island Markets; Produce Markets.
 7.45—"Sydney Morning Herald" News Service.
 8—"The Chimes of 'Big Ben'"; A Cheerful Talk by Mr. J. K. Powell.
 8.15—Close down.

MORNING SESSION.

9.15—The Chimes of 2FC and Programmatic Announcements.
 9.20—Music from the Studio.
 9.30—Marching music for school children.
 9.40—Music from the Studio.
 10—"The Chimes of 'Big Ben'." Announcements.
 10.5—Late "Sydney Morning Herald" News Service.
 10.15—Music from the Studio.
 10.45—A Morning Reading.
 11—"The Chimes of 'Big Ben'."
 11.5—Australian Press Association and Reporter's Cable Services.
 11.15—Music from the Studio.
 11.30—Marching Music for School Children.
 11.35—Close down.

MIDDAY SESSION.

12—"The Chimes of 'Big Ben'." Announcements.
 12.5—Stock Exchange, First Call.
 12.10—Music from the Studio.
 12.30—Marching Music from the Studio for School Children.
 12.40—Mr. Robert Wellard, baritone.
 12.45—From Farmer's Oak Hall; The Oak Hall Trio.
 12.50—Rugby Wireless News.
 12.55—Miss Joyce Gillespie, mezzo.
 1—"The Chimes of 'Big Ben'"; Weather Intelligence.
 1.3—"Evening News" midday news service.
 1.20—The Oak Hall Trio.
 1.25—Stock Exchange. Second call.
 1.30—Marching Music for School Children.
 1.40—Mr. Robert Wellard, baritone.
 1.45—Music from the Studio.
 1.50—The Oak Hall Trio.
 1.55—Miss Joyce Gillespie, mezzo.
 2—National Anthem. Close down.

AFTERNOON SESSION.

2.30—"The Chimes of 2FC and Announcements."
 2.35—A Recital by the pupils of Harrison Allen, educationist.
 3.10—Music from the Studio.
 3.30—Marching Music for the School Children.
 3.40—Miss Naomi Mercer, contralto.
 3.45—From Farmer's Tea Rooms; The Oak Hall Trio.
 3.55—Music from the Studio.
 4—Miss Marjory Cole, soprano.
 4.5—A serial story by Miss Annie Hughes.
 4.50—Miss Naomi Mercer, contralto.
 1.25—From Farmer's Tea Rooms; The Oak Hall Trio.

- 3.35—Music from the Studio.
3.40—Miss Margaret Cole, soprano.
3.43—Stock Exchange: Third Call.
3.45—Close down.

EARLY EVENING SESSION.

- 5.45—The Chimes of 2 P.C.
5.50—The Hello Man talks to the Children.
5.55—A Serial Story for the Older Children.
6.25—Broadcast from the Hotel Australia, Sydney: Orchestral Items.
7.15—From the Studio: "Evening News"
Late News Service and Weather Information.
7.30—Dalrymple's Market Reports (wheat, wheat, stock), fruit and vegetable markets.
7.40—Close down.

NIGHT SESSION.

- 8.—The Chimes of "Big Ben" and Announcements.
8.5.—Broadcast from Adelaide Hall: the monthly recital by the British Musical Society, presenting a concert programme by Australian composers.
"Viola and Piano Solos" (Wentzell), Messrs. Charles Wentzell and Herbert Wentzell.
8.15—Songs (a) "Since Thou O' Pandolf and Borsari," (b) "April Children" (Carpel), Madame Lucette Goulet.
8.21—Violin and Piano "Sonata in E. Minor" (Bocini), Miss D. Thompson and Mrs. Betty Vincent.
8.32—Songs (a) "Song of Triumph" (Anderson), (b) "For God and My George" (Rog. Stenham), Mr. A. E. Y. Boulton.
8.45—Piano—Piano, Violin, and Cello (Hutcheon), Mr. Lindley, Emma Young, Mr. Lionel Lawson, violin, Mr. Gladstone Bell, cello.
8.55—Songs (a) "A mes Amis Les Chinois," (b) "Chansonette" (Mons. M. Barzay), Miss V. Rogers.
9.7.—Pianoforte (a) "Vignette" (Rivani), (b) "Hilpanadi" (Cromas), (c) "Vivier Soliste" (Krems), Messrs. Lionel Lawson and Gladstone Young.
9.15—"Quintet for Piano and Strings in A Major" (Edith Piper), Miss Margaret Edlin, piano and the British Music Society's String Quartette.
9.30—Mr. W. F. Jackson will talk on "The Ascent of Mount Blanc."
9.40—Mr. Scott Sanders, Scotch comedian.
9.45—Mr. Andy Kistner, baritone.
9.50—2 P.C. Dance Band, Mr. Eric Pearce conductor.
9.55—Mr. Scott Sanders, Scotch comedian.
10.00—Mr. Andy Kistner, baritone.
10.40—2 P.C. Dance Band.
11.30—Broadcast from the Wentworth Hotel, Sydney: Westworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12.—National Anthem: Close down.

2 BL

EARLY MORNING SESSION.

- 7.15—Physical Training and Health exercises.
7.30—Broadcasters' Special News Service.
7.45—Physical Training and Health Exercises.
8.—G.P.O. Clock and Chimes: Close down.

MORNING SESSION.

- 10.—G.P.O. Clock and Chimes: Musical programme from the Studio.
10.10—Special News Service from the "Daily Telegraph."
10.25—Musical Programme from the Studio.
10.40—Special News Service from the "Daily Telegraph."
11.—G.P.O. Clock and Chimes: Market Reports.
11.10—Musical programme from the Studio.
11.25—Broadcasters' Information Service, including Music, Radio and wireless. SHillinger: Weather and Rainfall.
11.40—Women's Session: Social Notes by Mrs. Jordan.
11.55—Mrs. Jordan answering correspondents.
12.—G.P.O. Clock and Chimes: A Talk on Jam Making by Mrs. Jordan.
12.5—A Talk by Miss John Jean Bowling.
12.30—Sydney Stock Exchange Calls.

- 12.45—Hillier's Instrumental Quartette, directed by Carl Cassell.
1.30—Sydney Stock Exchange Calls.
1.45—Latest Sporting Information and News from the Sun.
2.—G.P.O. Clock and Chimes: Close down.

AFTERNOON SESSION.

- Racing Information broadcast by courtesy of The Sun.
2.—G.P.O. Clock and Chimes: Weather Reports and Forecast by courtesy of Mr. J. Mares, Genl. Meteorologist: Social Notes from the Sun.
3.15—David Jones' Tea Room Trio.
3.40—A Course in Palimpsest Thought, by Mr. J. M. Venetian.
3.45—Musical programme from the studio.
4.30—Serial Story entitled, "The Scarlet Pheasant" (Sublette).
4.45—Musical Programme from the Studio.
5.—G.P.O. Clock and Chimes: Producers' Distributing Society's Market and Fruit Reports.
5.5—Shipping Information when available.
5.15—Revue of night's programme.
5.45—G.P.O. Clock and Close down.

EARLY EVENING SESSION.

- 6.—G.P.O. Clock and Chimes: Derek George and the Kiddies.
6.45—Banquet Dinner Orchestra under the direction of Mr. Cox, Murrison Special Country Session.
7.—G.P.O. Clock and Chimes: Australian Maritime League, entitled "Finance Co's Stock Wood and Hub Report."
7.15—Weather Report and Forecast by courtesy of Mr. C. J. Mares, Genl. Meteorologist.
7.30—Stock Exchange Reports.
7.45—Producers' Distributing Society's Fruit and Vegetable Report.
8.00—Fruit and Vegetable Reports (Sun).
8.15—Grain and Poultry Reports (Sun).
8.30—Country News from the Sun.
8.45—A Talk on "The Route taken by the Australian Commonwealth Line of Steamers," by Mr. J. Hillier.

NIGHT SESSION.

- 8.—G.P.O. Clock and Chimes: Broadcasters' Tonal Chorus.
8.5—Newtown Band, broadcast from Industrial Hall, Newtown.
9.25—Miss May Kennecore (soubrette).
9.30—Mr. W. E. Lewis, baritone.
9.41—Miss Dorrie Ward, mezzo soprano.
9.44—Mr. Bob Harrison, comedian.
9.45—Duet: Miss Ward and Mr. Lewis.
9.55—Revue of following day's programme: Weather Report by courtesy of Mr. C. J. Mares, Genl. Meteorologist.
9.—G.P.O. Clock and Chimes.
9.5—A. L. Hammett and the Ambassadors' Dance Band, broadcast from the ballroom of the Ambassadors. During the intervals between dances there will be Social Notes and a description of freaks by Mrs. Potts.
9.50—Mr. W. E. Lewis.
9.55—Interval.
9.55—Newtown Band, broadcast from Industrial Hall, Newtown.
10.—Miss May Kennecore.
10.15—Miss Dorrie Ward.
10.15—A. L. Hammett and the Ambassadors' Dance Band, broadcast from the ballroom of the Ambassadors. During the intervals between dances there will be Social Notes and a description of freaks by Mrs. Potts.
12.—G.P.O. Clock and Chimes: National Anthem.

3 LO

MIDDAY SESSION.

- 12 noon—Time Signal: British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables: "Argus" and "Herald" News Services.
12.45—Stock Exchange Information; Shipping Intelligence.
12.50—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South

- Australia, and New South Wales: Ocean Forecast; River Reports.
1.—Time Signal.
1.5—Studio Orchestra.
1.10—A Free Lecture on Christian Science, by Rev. R. D. Dora, C.S.R., Member of the Board of Lecturers of the Mother Church, the First Church of Christ, Scientist, in Boston, Mass., U.S.A.
1.55—Studio Orchestra.
2.—Close down.

AFTERNOON SESSION.

- 3.—Studio Orchestra.
3.10—Elsie Davison, soprano.
3.17—Mrs. Dorothy Silk, will chat to you on "Homocraia."
3.32—Keith Diamond, electrician.
3.45—Studio Orchestra.
3.52—Walter Smith, soprano solo.
4.—Miss Flora Peil, conductor of Domestic Arts, Education Department: Domestic Economy.
4.10—Elsie Davison, soprano.
4.22—Keith Diamond, electrician.
4.30—Studio Orchestra.
4.45—"Herald" News Service: Shipping Intelligence; Result of Richmond Trotting Races will be given as they come in.
5.—Close down.

EVENING SESSION.

- 5.45—Children's Hour: Announcement to entertain and Birthday Greetings.
5.55—Evelyn Van Asche will sing.
6.7—Little Miss Kookaburra will tell the tiny tots an amusing story.
6.17—Evelyn Van Asche will sing.
6.25—Little Miss Kookaburra will give an amusing installment of the Girl who played the Game.
6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association.
6.45—Weather Synopsis; Shipping Movements; Overseas Shipping.
7.—Stock Exchange Information.
7.15—Fish Market Reports by J. R. Barrett.
7.40—Live Reports: Arch'd Mail Information by the Australian Arch'd Services Ltd.
7.5—Market Notes by the Victorian Producers' Cooperative Co. Ltd., Hiramford Sheep, Ints., Poultry, grain, stuff, hay, silage, etc.; Dairy produce, potatoes and other market notes of oranges and lemons by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

- 7.50—Under the auspices of the Develop Australia League, Mr. T. M. Burke: Impressions of his recent world tour: The Old World and the New.
7.40—Under the auspices of the Department of Agriculture, Mr. H. T. Arch'd Senior: Dairy Inspector: Conservation of Fodder for Dairy Cows.
8.—Newport Workshops Band.
8.10—Elsie Day and Hesper Hazel, in Harmonium.
8.15—Alfred Marshall, Lord Mayor Elect, will speak on his experiences abroad.
8.30—Newport Workshops Band.
8.40—Mr. J. Sutton Cross, musical instrument maker.
8.50—Royal Caledonian Boys' Pipe Band.
9.—Evelyn Leckie, solo.
9.17—Newport Workshops Band.
9.24—British Official Wireless News from Rugby; Announcements; Weather Forecast.
9.41—Elsie Day and Rupert Hazel insist on musical entertainment.
9.41—Royal Caledonian Boys' Pipe Band.
9.50—Evelyn Leckie, solo.
9.57—Royal Caledonian Boys' Pipe Band.
10.—"Argus" News Service: Announcements; Results from Ballarat—South Street Competitions.
10.17—Newport Workshops Band.
10.27—Under the auspices of the Associated Amateur Sports Committee, Mr. H. Welf, Genl. Secretary: Wrestling and Boxing.
10.42—3 LO Dance Orchestra.
11.—Our Great Thought for to-night is: "Change comes not in kindly overbook, but in quiet, but in serene fit and conquering fit."—Bichter.
11.10—3 LO Dance Orchestra.
11.40—God Save the King.

3 AR

MORNING SESSION.

- 11.00—British Official Wireless Press, received from Ruby Super Wireless Station, England, by 3AR's operator. Express Train information. Events of the day. "Are" news bulletin, exclusive to 3AR.
- 12—Time Signal Chime. Studio Barometer Readings. 1st Weather Forecast. Sporting Fixtures.
- 12.5—Musical selections, relayed from Hoyt's DeLuxe, Bourke Street. Mr. T. L. Campbell at the Wurlitzer.
- 12.50—Stock Exchange news. Market reports.
- 12.55—Musical selections.
- 12.55—Shipping Movements. Mail Notices.
- 1—Close down.

AFTERNOON SESSION:

- Highland Trotting: Results immediately after each race, and at half-hour intervals.
- 2.30—Hoyt's Premier Orchestra, under direction of Max Kila Brien.
- 3.—The Melbourne Piano Trio.
- 3.15—Mr. Horace Parisi, baritone.
- 3.20—Mr. Bert Peter, violinist.
- 3.25—Mr. Horace Parisi, baritone.
- 3.30—Mr. Ronald Brazley, cellist.
- 3.45—The Melbourne Piano Trio.
- 4—Time Signal Chime. 2nd Weather Forecast. Hoyt's Orchestra.
- 4.15—Revelry Amusement Guide.
- 4—Time Signal Chime from G.P.O. Studio Barometer and Thermometer Readings. Close down.

EARLY EVENING SESSION.

- 6.45—Children's corner, by Uncle Rad.

EVENING SESSION.

- 7.40—Mr. Athol Wilson: Talk—"The Public School Sports."
- 7.50—British Official Wireless Press. Studio Barometer Readings.
- 8—Time Signal Chime from G.P.O. The Harmony Trio, instrumentalists.
- 8.5—Miss Lillian Booth, mezzo.
- 8.10—Mr. Herbert (Bunns) dramatic recital.
- 8.20—Mr. Howard Andrews, baritone.
- 8.25—Miss Ivy Mills, contralto.
- 8.30—Mr. S. P. England, the well-known tennis coach. First of a series of talks on "Tennis."
- 8.40—Mr. David Shaw, baritone.
- 8.45—Mr. Will Alexander, humorous entertainer at the piano.
- 9.—The Harmony Instrumental Trio.
- 9.15—Mr. Howard Andrews, baritone.
- 9.25—Mr. Herbert Oziana, humorous monologue—"My word, you do look queer."
- 9.30—Miss Ivy Miller, contralto.
- 9.35—Miss Hazel Gould, violinist.
- 9.45—Mr. Will Alexander, humorous entertainer, at the piano.
- 9.55—Miss Lillian Booth, mezzo.
- 10—Time Signal Chime from G.P.O. "Are" news service, exclusive to 3AR.
- 10.50—Symphony readings.
- 10.55—Lennett's Ballroom Orchestra, under the leadership of Mr. Harry Naspale.
- 11—Time Signal. Close down.

4QG

MIDDAY SESSION.

- 12.25—Time-in.
- 12.35—Time Signal.
- 1—Market Reports, supplied by the Council of Agriculture. Weather information, supplied by Commonwealth Weather Bureau. News, supplied by "The Daily Mail." News Service, supplied by "The Daily Standard."
- 1.25—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 2—Close down.

AFTERNOON SESSION.

- 1.30—From Hotel Carlton: Afternoon Tea

- Music, played by Hotel Carlton Symphony Orchestra.
- 4.15—From the Studio: News Service, supplied by "The Telegraph."
- 4.30—Close down.

EARLY EVENING SESSION.

- 6.25—Time-in.
- 6.30—Children's Session: Stories by "The Sandman."
- 7.—From The Council of Agriculture Studio: The Farmer's Session: Market Reports supplied by the Council of Agriculture; Lectures: World's Market for Pig Products, Mr. F. J. Shelton.
- 7.30—From the Studio of 4QG: News Service, supplied by "The Daily Standard." Stock Exchange information, supplied by the Committee of the Brisbane Stock Exchange. Metal quotations. Overseas shipping information.
- 7.40—Announcements.

NIGHT SESSION.

- 7.45—Lecture Session: Talk arranged by the Queensland Preference League.
- 8.—From the White House (Olan and Goodrich Bldg), Woolloombatula: Ten minutes' music.
- 8.10—To-night's programme from the studio will be provided by the Silestone Apollo Club, supported by the Studio Orchestra. The Studio Orchestra will play selections from four popular musical comedies.
- 9.20—Weather information officially supplied by the Commonwealth Weather Bureau. Announcements.
- 9.30—Studio Concert, continued.
- 10.—From the White House (Woolloombatula): A musical programme celebrating the opening of the Ideal Homes Exhibition.
- 10.30—"The Daily Mail" News Service; Close down.

5CL

MORNING SESSION.

- 11.30—G.P.O. Chimes.
 - 11.31—Featuring a Stock Day Art number.
 - 11.40—"Advertiser" news service.
 - 11.55—Vocal number.
 - 12—G.P.O. Chimes.
 - 12.10—"Advertiser" news service.
 - 12.14—Featuring a Stock Day Art number.
 - 12.20—5CL Studio Orchestra in concerted numbers.
 - 1.15—Relay from Y.M.C.A. Hall—Hon. the Premier (Mr. L. L. Hill) will speak on "Citizenship."
 - 1.45—Studio Orchestra.
 - 1.55—Ward & Co's Stock Exchange intelligence, official weather synopsis, and station announcements.
 - 2—G.P.O. Chimes.
- AFTERNOON SESSION.
- 3—G.P.O. Chimes.
 - 3.1—Relay from "Maple Leaf" Cafe—Orchestral numbers.
 - 3.45—From the Studio: Stock Day-Art and Vocation numbers.
 - 4—G.P.O. Chimes.
 - 4.1—Relay from "Arcadia" Cafe—Orchestral numbers.
 - 5—G.P.O. Chimes.
- EVENING SESSION.
- 6.30—G.P.O. Chimes.
 - 6.31—Bojone stories.

- 7.15—Mr. C. H. Arnold, Superintendent Magill Boys' Reformatory, "Using the spare moments."
- 7.30—Market reports.
- 7.40—Twickler's Boys' Club.
- 8—Dance music from Palais Royal, interspersed with vocal items from Studio.
- 9—G.P.O. Chimes.
- 9.3—Studio concert continued.
- 10.15—"Advertiser" news service and ships within wireless range.
- 10.30—Studio concert continued.
- 10.45—Station announcements.
- 11—G.P.O. Chimes. National Anthem. Close down.

7ZL

MORNING SESSION.

- 11—G.P.O. Clock Chimes. The "Mercury" news, Stock Market, Shipping, Commercial Intelligence, Weather information. "Salonika" selections.
- 12—G.P.O. Clock Chimes. Close down.

AFTERNOON SESSION.

- 3—G.P.O. Clock Chimes. Musical items from the Studio.
- 3.30—Robert Stock Exchange quotations.
- 3.55—Weather information.
- 4—G.P.O. Clock Chimes. Close down.

EVENING SESSION.

- 7—Children's Corner. "Die Brother" chats to his Pais.

NIGHT SESSION.

- 8—G.P.O. Clock Chimes. The "Mercury" special (Bumalay) news service. Railway auction produce sales. Weather information.
- 8.5—Robert Stock Exchange quotations.
- 8.10—Talk by Miss A. Rowntree, M.A., subject: "Poetry for Children."
- 8.20—Concert from the Studio: Miss Doreen Glinzer, mezzo contralto; Miss Amy Butterworth, pianist; Miss Joan Dook, alto; Mr. Rolf Lyons, baritone; Mr. G. T. Lewis, tenor; Mr. Ray Sutcliffe, cornet solo.
- 9.15—Tasmanian District Weather Reports.
- 9.50—"The Mercury" special (Bumalay) news service. Weather synopsis. Station announcements. National Anthem.

2GB

EVENING SESSION.

- 6.45—Talks to Children by The Man from Dreamland.
- 7.15—Interval.
- 7.30—Music from the Studio.
- 7.45—Announcements.
- 7.55—Instrumental Trio.
- 8.5—Address by Rt. Rev. G. S. Arundale, M.A., LL.B., D.L.
- 8.20—String Quartette.
- 8.40—Songs by Mr. E. B. Butterworth.
- 8.45—Unaccompanied duets for violin and viola, articles: Monica Border, Chas. Boubli.
- 9—Announcements.
- 9.5—Violin solo by Dan Scully.
- 9.8—Talk on Wireless by E. G. Beard, Constructional Engineer, 2GB.
- 9.25—Songs by Mr. E. B. Butterworth.
- 9.35—Instrumental Trio.
- 9.45—Cello solo by Muriel Lang.
- 9.50—God Save the King.

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Tuesday, Oct. 26

2FC

EARLY MORNING SESSION.

- 7—The Chimes of Big Ben, and Announcements.
- 7.5—Music from the Studio.
- 7.10—Weather Information; Commercial News; Shipping Intelligence; Rainfall;

- Temperatures; Astronomical Memoranda.
 7.25—Investment Market, Mining Share Market, Metal Quotations.
 7.35—Wool Sales; Breadstuffs Market; International Markets; Produce Markets.
 7.45—"Sunday Morning Herald" News Service.
 The Chimes of Big Ben; A Chorus talk by Mr. J. K. Powell.
 8.15—Close down.

MORNING SESSION

- 9.15—The Chimes of Big Ben and Programme Announcements.
 9.20—Music from the Studio.
 9.30—Marching Music for School Children.
 9.45—Lactinimatic Review; Information for the 2FC Racing Commission.
 The Chimes of Big Ben.
 Music from the Studio.
 10.10—Late "Sydney Morning Herald" News Service.
 10.15—Music from the Studio.
 10.45—A Morning Reading.
 11.15—The Chimes of Big Ben; Music from the Studio.
 11.5—Australian Press Association and Reader's Cable Service.
 11.15—A Talk on Home Cooking and Baking by Mrs. W. J. Carr.
 11.30—Marching Music for School Children.
 11.35—Close down.

MIDDAY SESSION

- 12—The Chimes of Big Ben; and Announcements.
 12.5—Stock Exchange, First Call.
 12.10—Music from the Studio.
 12.30—Marching Music for the School Children.
 12.40—Music from the Studio.
 12.45—From Farmer's Oak Hall—The Oak Hall Trio.
 12.50—Radio Wireless News.
 1.25—Miss Gladys Briggs, contralto.
 1.30—The Chimes of Big Ben; Weather Intelligence.
 1.35—"Evening News" midday news service.
 1.40—Stock Exchange, Second Call.
 1.45—Marching Music for School Children.
 1.50—Miss Gladys Briggs, contralto.
 1.55—Music from the Studio.
 2—The Chimes of Big Ben; Close Down.

AFTERNOON SESSION

- 2.30—Chimes of "Big Ben."
 2.35—A vocal recital by the pupils from the Studio of Maestro Fasani.
 2.45—A Serial Story by Miss Annie Hughes, entitled, "When the Devil was Sick."
 3.00—Marching Music for School Children.
 3.10—Miss Kybil Abbotwood, mezzo.
 3.15—From Farmer's Tea Room, the Oak Hall Trio.
 3.25—Music from the Studio.
 3.45—Miss Alban Moroz, soprano.
 3.55—Music from the Studio.
 4.15—Miss Kybil Abbotwood, mezzo.
 4.45—From Farmer's Tea Room, the Oak Hall Trio.
 4.55—Music from the Studio.
 4.59—Miss Alban Moroz, soprano.
 4.55—Stock Exchange, Third Call.
 4.45—Close down.

EARLY EVENING SESSION

- 5.15—The Chimes of 2FC and Announcements.
 5.30—"The Hello Man" talks to the Children.
 6.00—A 2FC to the Girls Children.
 6.15—Broadcast from the Hotel Australia—Orchestra Items.
 7—From the Studio; Racing Information, supplied by the 2FC Racing Commissioner.
 7.15—Even the Studio, "Evening News" Service.
 7.30—Dalziel's Market Reports (Wool, Wheat, Stock, Fruit and Vegetable Markets).
 7.40—Close down.

NIGHT SESSION

- 8—The Chimes of Big Ben, and Announcements.
 8.5—Broadcast from the Haymarket Theatre, Sydney; Operatic Orchestra under the baton of Mr. Stanley Parker.

- 8.15—Broadcast from the Royal Naval House, given by the R.S.W. State Military Band.
 8.45—From the Studio; Signor Alberto Marini (vocal).
 8.48—Broadcast from the Royal Naval House; Band (Instrumental).
 9—From the Studio; Mr. Lionel Lawson, violin solo.
 9.5—Haymarket—vocal act.
 9.20—Band Items from the Naval House.
 9.35—From the Studio; Signor Alberto Marini (vocal).
 9.40—Miss Alban Moroz, whistling solo.
 9.47—Mr. Lionel Lawson, violin solo.
 9.50—Mrs. J. W. Carr, vocal, comedienne.
 9.55—Signor Alberto Marini, tenor.
 10.3—Miss Alban Moroz, whistling solo.
 10.15—Mr. Ben. Goswami, comedien.
 10.25—Band item from the Wentworth Hotel, Sydney; Westworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
 11—National Anthem; Close Down.

2 BL

EARLY MORNING SESSION

- 7.10—Physical Training and Health exercises.
 7.20—Broadcasters' Special News Service.
 7.45—Physical Training and Health Exercises.
 8—G.P.O. Clock and Chimes; Close down.

MORNING SESSION

- 10—G.P.O. Clock and Chimes; Musical programme from the Studio.
 10.15—Special News Service from the "Daily Telegraph."
 10.25—Musical programme from the Studio.
 10.40—Special News Service from the "Daily Telegraph."
 11—G.P.O. Clock and Chimes; Market Reports and London Metal Quotations.
 11.10—Musical programme from the Studio.
 11.25—Broadcasters' Information Service, including Staff, Book to call by wireless; Shipping; Weather and Rainfall.
 11.40—Women's Session; Social Notes by Mrs. Jordan.
 11.55—Mrs. Jordan answering correspondents.
 12—A.P.O. Clock and Chimes; What to Plant, by Mrs. Jordan.
 12.20—A Talk by Miss Jean Jean Bowling.
 12.30—Sutton's Stock Exchange, Calif.
 12.45—Hilder's Instrumental Quartets, duet; Caryl Castling.
 1.00—Sydney Stock Exchange Calls.
 1.15—Largest Sporting Information and News from the Sun.
 2—G.P.O. Clock and Chimes; Close down.

AFTERNOON SESSION

- Racing Information, broadcast by courtesy of the Sun.
 2—G.P.O. Clock and Chimes; Weather Report and Forecast by courtesy of Mr. C. 2.
 Mars, Coast, Meteorological, Social Notes from the Sun.
 3.15—Civil Service Stores Trip, direction, Miss de Cussy Bremer.
 3.20—A talk on Modern Psychology, by Mr. J. M. Prentice.
 3.45—Musical Programme from the Studio.
 4—G.P.O. Clock and Chimes; Civil Service Stores' Trip.
 4.15—Musical Programme from the Studio.
 4.30—Serial Story, entitled "The Scarlet Cuckoo" (Sublette).
 4.45—Musical Programme from the Studio.
 4.55—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.
 5—Shipping Information when available.
 5.10—Revue of Night's Programmes.
 5.15—G.P.O. Clock; Close Down.

EARLY EVENING SESSION

- 4—G.P.O. Clock and Chimes; Uncle Jack and the Kiddies.
 6.10—Byallion Dinner Orchestra, under the baton of Mr. C. E. Morrison.
 Special Country Sessions.
 7—G.P.O. Clock and Chimes; Australian Mercantile, Land and Finance Co's Report.
 7.5—Weekly Report and Forecast, under the baton of Mr. C. J. Mars, Government Meteorologist.
 7.9—Stock Exchange Reports.

- 7.10—Producers' Distributing Society's Fruit and Vegetable Report.
 7.25—Forecastable Reports (Sun).
 7.30—Rug and Poultry Report (Sun).
 7.35—Country News from the Sun.
 7.45—Lecture.

NIGHT SESSION

- 8—Classical Concert from the Studio, including Broadcasters' Miniature Orchestra, under the direction of Mr. J. Knight Harwood; Mr. Peter Archibald (baritone), Mr. Gerald Walton (violinist), Miss Helen Stewart (soprano), Mr. Herbert, Hindrichsen (bassoon), Miss Edna Leach (contralto).
 8.15—Parron Orchestra, under the direction of Mr. S. Bennett.
 9—G.P.O. Clock and Chimes; National Anthem.

3 LO

MIDDAY SESSION

- 12 noon—Time Signal; British Official Wireless News from Rugby; Reuters and the Australian Press Association (London); "Argo" and "Herald" News Service.
 12.45—Stock Exchange Information; Shipping Intelligence.
 12.50—Meteorological Information; Weather Forecast by Victoria, Tasmania, South Australia, and New South Wales; Ocean Forecast; River Reports.
 1.1—Time Signal.
 1.1—Studio Orchestra.
 1.10—Keith Desmond, Eucalyptist.
 1.17—C. E. Moran, Glasgow, Tate.
 1.2—Station Trio.
 1.30—Ralph Desmond, eucalyptist.
 1.40—Agnes Fortune, pianist.
 1.45—Studio Orchestra.
 2—Close down.

AFTERNOON SESSION

- 2—Travellers' Aid Society of Victoria, Tenth Annual Meeting, transmitted from the Hotel King St., Melbourne.
 2—Studio Orchestra.
 3—At. J. E. Moran, Baskley & Nairn Ltd., Fashion Talk.
 3.45—Matron Newsland, Infant Welfare.
 4.4—Broadcasters' News Service; Stock Exchange Information.
 5—Close down.

EVENING SESSION

- 5.15—Children's Hour; Answers to letters and Birthday Greetings.
 6—Sybil Van Asche will sing.
 6.5—Mary Gumbel will recite.
 6.17—Sybil Van Asche will sing again.
 6.34—Mary Gumbel for the benefit children; The Flag that flies the World.
 6.40—"Argo" and "Herald" News Service; Reuters and the Australian Press Association (London).
 6.55—Weather Synopsis; Shipping Movements; Ocean Shipping.
 7—Stock Exchange Information.
 7.3—Fish Market Reports by J. B. Bennett.
 7.4—River Reports; Aerial Mail Information by the Australian Aerial Services Ltd.
 7.55—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep Sales; Poultry, grain, chaff, hay, straw, jute, dairy produce, potatoes and onions; Market prices of oranges and lemons, by the Victoria Central Cattle Association Pty. Ltd.

NIGHT SESSION

- 7.20—Under the baton of the Town Planning Association; Mr. S. Tuson, L.F.C. A Paper Session for Melbourne.
 7.40—Under the auspices of the University Extension Board, Mr. O. de R. Foulden, L.L.M. Lecturer in Economics and European History in the University; Phases of the Socialist Movement, At Home.
 Studio Orchestra.
 8.10—Gwen, Barham, contralto.
 8.15—Round the Campfire; Music story and songs.
 8.20—Australia, Narrator, Mr. V. Upton Brown.
 8.40—Studio Orchestra.

- 8.55—Queen Barbara, contralto.
- 9.—Dr. Loftus Hills, Popular Science.
- 9.15—Mr. G. Peracca, Victorian Amateur Cycling Union, will speak under the auspices of the Victorian Amateur Sports Committee on Amateur Cycling.
- 9.30—Hart Howell and his concert orchestra, transmitted from the Victor Theatre, St. Kilda.
- 10.—"Arson" News Service, British Official Wireless News, from Rugby; Announcements; Meteorological Information.
- 11.—Our Good Thought: "Cheerfulness is health"; the opposite, melancholy, is disease.—Hullman.
- 11.30—L.D. Dance Orchestra.
- 12.30—Good-bye the King.

3 AR

MORNING SESSION.

- 11.30—British Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's operator, Express Train Information, Events of the Day, "Aze" news bulletin, exclusive to 3AR.
- 12.—Time Signal Chime from G.P.O. Studio Barometer Readings, 1st Weather Forecast, Sporting Pictures.
- 12.30—Musical Selections from Hoyt's De-Luxe, Donkey Street, Mr. T. L. Campbell at the Whistler.
- 12.35—Stock Exchange News, Market Reports.
- 12.40—Musical Selections.
- 12.45—Shipping Movements, Mail Notices.
- 1.—Close down.

AFTERNOON SESSION.

- 2.30—Hoyt's Premier Orchestra, under direction of Miss Mills Brown.
- 3.—Mr. Lionel Davies, solo pianist.
- 3.1.—Mr. Clement Kenny, tenor.
- 3.14—Miss Eva DeLany, soprano.
- 3.21—Mr. Syd Henry, "Moments, Grave and Gay," etc.
- 3.27—Mr. Gerald Brocklesby, baritone.
- 3.34—Mr. Lionel Davies, solo pianist.
- 3.41—Mr. Clement Kenny, tenor.
- 3.48—Miss Rosa Dobson, soprano.
- 3.55—Mr. Syd Henry, recitations.
- 4.—Mr. Gerald Brocklesby, baritone.
- 4.—Time Signal Chime, 2nd Weather Forecast, Hoyt's Orchestra.
- 4.15—Evening Announcement Galle.
- 5.—Time Signal Chime, Studio Barometer Readings, Close down.

EARLY EVENING SESSION.

- 6.45—The Children's Corner, by Brother Steve.

EVENING SESSION.

- 7.40—Mr. C. W. Joyce will speak on "The Significance of Poppy Day."
- 7.45—British Official Wireless Press, Studio Barometer Readings, Fat Sheep and Cattle Report, supplied by courtesy of Messrs. J. & C. Munster & Co., Pty., Ltd.
- 8.—Time signal chime from G.P.O. The Peerless Trio, selections from "The Belle of New York."
- 8.15—Miss Isobel Harris, lyric soprano.
- 8.22—Mr. Trevor Wilson, Theosophical Talk.
- 8.26—Mr. Jack Thompson, baritone.
- 8.43—Miss Lillian Furlong, entertainer.
- 8.56—Mr. John Farrell, tenor.
- 8.57—Mr. Clive Fortham, baritone.
- 9.—Miss Francis Drake will speak on Symbols: "The Man."
- 9.16—Miss Beatrice Phillips, violiniste.
- 9.24—Miss Isobel Harris, soprano.
- 9.32—Miss Lillian Furlong, entertainer.
- 9.39—Mr. Clive Fortham, baritone.
- 9.46—The Peerless Trio.
- 10.—Time Signal Chime from G.P.O. Studio Barometer Readings, "Aze" news service, exclusive to 3AR.
- 10.10—Leggott's Ballroom Orchestra, relayed from Pruhlan, under the leadership of Mr. Harry Nangle.
- 11.—Time Signal Chime, Close down.

4QG

MIDDAY SESSION.

- 12.55—Time In.
- 12.57—Time Signal.
- 1.—Market Reports, Weather information, "The Daily Mail" and "The Daily Standard" news.
- 1.26—From Hotel Carlton, Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 2.—Close down.
- 3.30.—A programme of Music from the Studio.
- 4.—A French Talk by Mlle. Amelia Ringard.
- 4.15—"The Telegraph" news.
- 4.30.—Close down.

AFTERNOON SESSION.

- 5.30.—A programme of Music from the Studio.
- 4.—A French Talk by Mlle. Amelia Ringard.
- 4.15—"The Telegraph" news.
- 4.30.—Close down.

EARLY EVENING SESSION.

- 6.25—Time In.
- 6.30—The Children's Session, Stories by "Uncle Ben" and "Uncle Jim."
- 7.—From the Council of Agricultural, Studio "The Farmers" Session, Market Reports, Lectures by Prof. J. H. and Miss D. Ringard, from the Studio of 4QG; "The Daily Standard" news, Stock Exchange Information.
- 7.45—Announcements.

NIGHT SESSION.

- 7.45—Lecture Session: A Gardening Talk by "Tocoma"; Some aspects of Springtime gardening.
- 8.—The Metropolitan Band.
- 9.15—Radio Voice Contest Hour.
- 9.30—Weather information officially supplied by the Commonwealth Weather Bureau, Announcements.
- 9.30—Musical Items.
- 9.35—From the Centennial Hall: A quarter of an hour's dance music.
- 10.—From the studio "The Daily Mail" news service, Close down.

5CL

MORNING SESSION.

- 11.30—G.P.O. Chimes.
- 11.31—Featuring a Stock Duo Art number.
- 11.40—Advertiser news service.
- 11.45—Vocalion number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" news service.
- 12.16—Featuring a Stock Duo Art number.
- 12.30—5CL Studio Orchestra.
- 1.15—Relay from M.P.F.A., Roy Week, "The value of a boy," by Mr. A. T. Wroford.
- 1.45—Studio Orchestra.
- 1.55—Ward & Co., Stock Exchange intelligence, official weather synopsis and station announcements.
- 2.—G.P.O. Chimes.

AFTERNOON SESSION.

- 3—G.P.O. Chimes.
- 3.1—Relay from the "Maple Leaf" Cafe—Orchestral numbers.
- 3.45—From the Studio: Stock Duo-Art and Vocalion numbers.
- 4.—G.P.O. Chimes.
- 4.15—Relay from the "Arcadia" Cafe—Orchestral numbers.
- 5—G.P.O. Chimes.

EVENING SESSION.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime stories.
- 7.15—Mr. S. Mosby, Headmaster Adelaide Technical High School, "Ten years from now—what?"
- 7.30—Market reports.
- 7.40—Milling talk, by Mr. Jackott.
- 8—G.P.O. Chimes.
- 8.1—Cadman's Quartets, interspersed with vocal items from Studio.
- 9—G.P.O. Chimes.
- 9.1—Weather reports.
- 9.5—Studio concert, continued.
- 10.15—"Advertiser" news service.

- 10.30—Studio concert continued.
- 10.55—Station announcements.
- 11—G.P.O. Chimes, National Anthem.

7ZL

MORNING SESSION.

- 11—G.P.O. Clock Chimes.
- 11.12—The "Mercury" News; Stock Market; Shipping; Commercial Intelligence; Weather Information; School Selections.
- 12—G.P.O. Clock Chimes; Close Down.

AFTERNOON SESSION.

- 3—G.P.O. Clock Chimes.
- 3.4—Musical Items from the Studio.
- 3.30—Robert Stock Exchange Quotations.
- 4.25—Weather Information.
- 4—G.P.O. Clock Chimes; Close Down.

EVENING SESSION.

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

NIGHT SESSION.

- 8—G.P.O. Clock Chimes; the "Mercury" Special Tasmanian News Service; Railway Auction Produce Sales; Weather Information.
- 8.5—Robert Stock Exchange Quotations.
- 8.10—Library, Lapses and Library Lists, by Mr. W. E. Fuller.
- 8.30—Musical items from the studio; special request numbers.
- 9.15—Tasmanian District Weather Reports.
- 9.50—The "Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements; National Anthem.



**Wednesday, Oct. 27
2FC**

EARLY MORNING SESSION.

- 7—The Chimes of Big Ben and Announcements.
- 7.5—Music from the Studio.
- 7.10—Weather Information; Commercial News; Shipping Intelligence; Rainfall; Temperatures; Astronomical Memoranda.
- 7.35—Investment Market; Mining Share Market; Moral Quotations.
- 7.35—Wool Sales; Produce Markets; Interstate Markets; Breadstuffs Market.
- 7.45—"Sydney Morning Herald" News Service.
- 8—The Chimes of Big Ben & Chorus talk by Mr. J. K. Powell.
- 8.15—Close down.

MORNING SESSION.

- 9.15—The Chimes of 2FC and Programme Announcements.
- 9.30—Music from the Studio.
- 9.30—Marching music for the School Children.
- 9.40—Music from the Studio.
- 10—The Chimes of Big Ben, Music from the Studio.
- 10.5—Late "Sydney Morning Herald" News Service.
- 10.15—Music from the Studio.
- 10.45—A Morning Reading.
- 11—The Chimes of Big Ben.
- 11.5—Australian Press Association and Reuters's Cable Service.
- 11.15—A Talk on Home Cooking and Recipes by Miss Ruth Furst.
- 11.30—Marching Music for the School Children.

MIDDAY SESSION.

- 12—The Chimes of Big Ben; and Announcements.
- 12.5—Stock Exchange, First Call.
- 12.10—Music from the Studio.
- 12.30—Marching Music for the School Children.

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MA 2141

- 12.45—From Farmer's Tea Rooms—The Oak Hall Trio.
12.50—Early Wireless News.
12.55—Miss Jeanette Rooney, contralto.
1.—The Chimes of Big Ben; Weather Intelligence.
1.1—"Evening News" Mid-day Service; Producers' Distributing Society's Report.
1.20—Oak Hall Trio.
1.30—Stock Exchange, Second Call.
1.35—Miss Jeanette Rooney, contralto.
1.45—Music from the Studio.
1.50—From Farmer's Oak Hall: The Oak Hall Trio.
2.—Chimes of "Big Ben" Close down.

AFTERNOON SESSION

- 2.30—Chimes of "Big Ben" and Announcements.
2.35—Music from the Studio.
2.45—A talk by Mr. S. H. Bowden.
3.—Miss Edith McAreey, soprano.
3.10—A serial story, "When the Devil was Sick," by E. J. Rath.
3.20—Marching Music for the School Children.
3.40—Miss Beaulé Cooke, contralto.
3.45—From Farmer's Tea Rooms, the Oak Hall Trio.
3.55—Music from the Studio.
4.—Miss Thelma Lamsonne, mezzo.
4.15—From Farmer's Tea Rooms, the Oak Hall Trio.
4.15—Music from the Studio.
4.20—Miss Beaulé Cooke, contralto, "My Prayer" (Soprano).
4.25—From Farmer's Tea Rooms, the Oak Hall Trio.
4.35—Music from the Studio.
4.40—Miss Thelma Lamsonne, mezzo.
4.45—Stock Exchange, Third Call; Close Down.

EARLY EVENING SESSION

- 5.15—Chimes of Big Ben and Announcements.
5.30—The "Hello Men" talks to the Children assisted by "Jerry."
5.35—A serial story for the older children.
5.45—Incidental from the Home Orchestra—orchestral items, diatress, Miss A. J. Funn.
7.15—From the Studio, "Evening News" Service and Weather Intelligence.
7.30—Dalgely's Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).
7.40—Talk on "Eugenics," music, pronunciation, and verbs," by Mr. I. E. Pfah.

NIGHT SESSION

- 8.—The Chimes of Big Ben.
8.5—Broadcast from the Lyric Wintergarden Theatre, items by the Theatre orchestra, under the baton of Mr. Alfred Moulton.
8.15—Broadcast from the Adyar Hall, items arranged by Miss Daisy Richards and Miss Thelma Houston.
9.—From the Studio: A Travel grammophone, conducted by Mr. E. J. Yan-de-Velde, talking for his subject, "Who's Who in the Zoo," talking listeners in imagination through the principal Zoos in the world. Effects will be supplied by the Studio staff, under the direction of Mr. Laurence Hubert. During the talk, Miss Dorothy Ewbank, soprano, will sing songs from the Cycle of Bird Songs, by Lisa Lehmann, including the "Woodpecker," "The Starling," "The Yellow Hammer," "The Wren," "The Owl." For the benefit of listeners, pictures of the various Zoos and Animals will be shown in the issue of the "Evening News," Sydney, on October 25th.
10.15—From the Lyric Wintergarden Theatre; items by the orchestra, under the baton of Mr. Alfred Moulton.
10.30—Broadcast from the Palais Royal, a few words from Miss Clarice Barry, "October Bride," whose wedding takes place the following day.
10.40—From the Studio: Dance music from the ZPC Dance Band, 101 sidewalk.
12—National Anthem; Close Down.

2BL

EARLY MORNING SESSION.

- 7.15—Physical Training and Health Exercises.
- 7.30—Broadcasters' Special News Service.
- 7.45—Physical Training and Health Exercises.
- 8—G.P.O. Clock and Chimes; Close down.

MORNING SESSION.

- 10—G.P.O. Clock and Chimes; Musical programme from the Studio.
- 10.10—Special News Service from the "Daily Telegraph."
- 10.25—Musical programme from the Studio.
- 10.40—Special News Service from the "Daily Telegraph."
- 11—G.P.O. Clock and Chimes; Market Reports.
- 11.15—Musical programme from the Studio.
- 11.25—Broadcasters' Information Service, including Maps, Deals in call by wireless; Shipping; Weather and Rainfall.
- 11.40—Women's Session; Social Notes by Mrs. Jordan.
- 11.55—Mrs. Jordan answering correspondents.
- 12—G.P.O. Clock and Chimes. A Talk on "The Adolescent Girl," by Mrs. Jordan.
- 12.25—A Talk by Miss Helen Jane Beesling, "Surfing."
- 12.45—Latest Sporting Information and News from the Sun.
- 1—Midday Music, broadcast from Christ Church, St. Lawrence.
- 2—G.P.O. Clock and Chimes; Close Down.

AFTERNOON SESSION.

- Racing Information broadcast by courtesy of the Sun.
- 3—G.P.O. Clock and Chimes; Weather Report and Forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist; Social Notes from the Sun.
- 3.10—Special Operatic Session, with explanatory talk by Mr. J. M. Prewitt, illustrated with specially selected musical items.
- 3.45—Musical programme from the Studio.
- 4—G.P.O. Clock and Chimes; Musical programme from the Studio.
- 4.20—Serial Story, entitled "The Scarlet Cookery" (Siblette).
- 4.45—Musical programme from the Studio.
- 5—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.
- 5.3—Shipping Information when available.
- 5.10—Remains of Night's Programme.
- 5.15—L.P.O. Clock; Close Down.

EARLY EVENING SESSION.

- 6—G.P.O. Clock and Chimes; David George and the Kiddies.
- 6.40—Pavilion Dinner Orchestra under the direction of Mr. Eric Morrison.
- 7—Country Sessions.
- 7.45—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co.'s Stock, Wool and Hides Report.
- 7.5—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
- 7.10—Stock Exchange Reports.
- 7.15—Producers' Distributing Society's Fruit and Vegetable Report.
- 7.30—Fruit and Vegetable Reports (Sun).
- 7.35—Grain and Fodder Reports (Sun).
- 7.45—Race and Poultry Reports (Sun).
- 7.50—Country News from the Sun.
- 7.55—Lecture.

NIGHT SESSION.

- 8—G.P.O. Clock and Chimes; Broadcasters' Topical Chorus.
- 8.5—Cancer Research Concert, broadcast from Turner Hall.
- 9.15—Mr. William Everard, tenor.
- 9.22—The Abad Duo, steel guitars.
- 9.25—Mr. Cyril James, baritone.
- 9.30—Interval.
- 9.40—Mr. Howard Leighton (novelty pianist of Messrs. Winkworth's Limited).
- 9.50—Mr. William Everard.
- 9.55—Resume of following day's programme; Weather Report, by courtesy of Mr. C. J. Mares, Govt. Meteorologist.
- 10—G.P.O. Clock and Chimes.
- 10.1—Abad Duo.

- 10.8—Mr. Cyril James.
- 10.10—Al. Hammett and the Ambassadors Dance Band, broadcast from the ballroom of the Ambassadors. During the intervals between dances, News Reports, by courtesy of the Sun Newspapers will be broadcast.
- 12—G.P.O. Clock and Chimes; National Anthem.

2GB

AFTERNOON SESSION.

- 3.20—Music from Studio.
- 3.45—Address by Mrs. Ernest Wood: The Women of Japan.

EVENING SESSION.

- 6.45—Talks to children by the Man from Dreamland.
- 7.15—Interval.
- 7.30—Music from Studio.
- 7.45—Announcements.
- 7.55—Duets for two violins and piano: Dan Scully, Monica Harder, Ada Brook.
- 8.5—Address by R. Rev. G. S. Arundale.
- 8.20—Vocal Quartette.
- 8.25—Violin solos by Lloyd Davies.
- 8.35—Talk, Ocean Piers, by Commander Kellett.
- 8.40—Songs by Miss Gwladys Edwards.
- 8.45—Address by Prof. Ernest Wood.
- 8.5—Vocal Quartette.
- 9.10—Piano solo by Miss Ada Brook.
- 9.20—Talk on Radio, by Mr. E. G. Best, Constructional Engineer, 2277.
- 9.25—Violin solos by Lloyd Davies.
- 9.30—Announcements.
- 9.35—Duets for two violins and piano, Dan Scully, Monica Harder, Ada Brook.
- 9.45—Songs by Miss Gwladys Edwards.

3LO

MID-DAY SESSION.

- 12 noon—Time Signal; British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables; "Argus" and "Herald" News Services.
- 12.45—Stock Exchange Information; Shipping Intelligence.
- 12.50—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South Australia, and New South Wales; Ocean Forecast; Hives Reports.
- 1—Time Signal.
- 1.1—Elicie Day and Rupert Hazel in Harmony (solo).
- 1.25—Le Caslick's Quartette.
- 1.55—Rupert Hazel, entertainer.
- 2—Studio Orchestra.
- 2.10—Eily Treweek, soprano.
- 2.15—Ronald of Hurdle, Kyneton Races.
- 2.15—Tasma, Therman, cello.
- 2.25—Eily Treweek, soprano.
- 2.32—Studio Orchestra.
- 2.35—C. Richard Chong, flute.
- 2.47—Eily Treweek, soprano.
- 2.54—Result of Novice Handicap, Kyneton.
- 2.55—Dorothy Roxburgh, viola.

AFTERNOON SESSION.

- 3—Studio Orchestra.
- 3.10—Second Act of Katja, transmitted from His Majesty's by permission of J. U. Williamson Ltd.
- 4.10—Result of Kyneton Handicap and Pony Race.
- 4.11—Studio Orchestra.
- 4.20—Sister Peck, Mothercraft.
- 4.30—Result of Distance Trot, Kyneton.
- 4.31—Franklin Stubbins, clarinet.
- 4.35—Studio Orchestra.
- 4.45—"Herald" News Service; Stock Exchange Information.
- 5—Result of Flying Handicap, Kyneton; Close down.

EVENING SESSION.

- 5.45—Children's Hour: Answers to letters and Birthday Greetings.
- 6—Musical Programme for Children by Children: The Sunbeam Singers.
- 6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association Cables.
- 7—Stock Exchange Information.

- 7.4—Fish Market Reports, by J. R. Borrett Ltd.
- 7.5—River Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep Sales; Poultry, Grain, Chaff, Hay, straw, etc.; dairy produce, potatoes and onions; Market prices of oranges and lemons, by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

- 7.20—Under the auspices of the Department of Agriculture, Mr. R. Crowe, Exports Superintendent; Market Comments.
- 7.40—Mr. H. C. Slocombe, A Chat on Photographs.
- 8—Studio Orchestra.
- 8.10—National Night, German Music, Part 2, by the students of the University Conservatorium, Lecturer Mr. J. Sutton Crow.
- 9.10—Capt. Peters: Books, Wise and otherwise.
- 9.25—Elicie Davies, soprano.
- 9.40—Col. E. J. Dilsen, D.S.O.; Significance of Poppy Day.
- 9.50—Reginald Bradley, violin.
- 10.5—British Official Wireless News from Rugby; Announcements.
- 10.10—Studio Orchestra.
- 10.20—A Little fun with Bruce Green.
- 10.30—String Quartette.
- 10.35—Elicie Davies, soprano.
- 10.42—Studio Orchestra.
- 10.45—More fun with Bruce Green.
- 10.55—"Argus" News Service; Meteorological Information.
- 11—Our Great Thought: "Cheerfulness is like money well expended in charity; the more we dispense of it, the greater our possession."—Victor Hugo.
- 11.10—BAP's, Dance Orchestra.
- 11.40—God Save the King.

3AR

MORNING SESSION.

- 11.30—British Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's Operator; Events of the Day; Express Train Information; "Age" News Bulletin.
- 11.45—Time Signal; Chime from G.P.O.; Studio Barometer and Outdoor Thermometer Readings; First Weather Forecast; Sporting News.
- 12.5—Musical Submissions relayed from Hoyt's De-Luxe, Bourke Street, Mr. T. L. Campbell at the Wireless.
- 12.30—Stock Exchange News; Market Reports.
- 12.40—Musical Selections.
- 12.55—Shipping Movements; Mail Notices.
- 1—Close Down.

AFTERNOON SESSION.

- Kyneton Race Meeting. Results immediately after each race, at half-hourly intervals.
- 2.30—Hoyt's Premier Orchestra, under direction of Miss Edie Brice.
- 3—The Three Shades Trio.
- 3.10—Miss Yvonne Landau, entertainer.
- 3.23—Miss Ethel Sutherland, vocalist.
- 3.40—Miss Yvonne Landau, entertainer.
- 3.47—Miss Alice Davies, vocalist.
- 3.44—The Three Shades Trio.
- 4—Time Signal; Chimes; 2nd Weather Forecast; Hoyt's Orchestra.
- 4.45—Evening Amusements.
- 5—Time Signal; Chimes; Studio Barometer Readings; Close Down.

EARLY EVENING SESSION.

- 6.45—Children's Corner, by Uncle Sad.

EVENING SESSION.

- 7.50—British Official Wireless Press; Studio Barometer and Outdoor Thermometer Readings.
- 8—Mr. Eric Aitchin, entertainer.
- 8.8—Madame Marion Rowan, mezzo-soprano.
- 8.15—Mrs. Sage (mexico), and Mr. Ernest Sage (baritone), in a duet.
- 8.19—Miss Hilda Parousian, elocutionist.
- 8.23—Instrumental trio.
- 8.30—Mr. Edgar Wayne, talk, "Cricket."

- 8.45—Mr. Ernest Sage, baritone.
 9.02—Miss Ernestine Whitlinton, alto.
 9.05—Miss Ernestine Merle, soprano.
 9.06—Mr. and Mrs. Ernest Sage, vocal duet.
 9.10—Mr. Eric Atkin (pianist).
 9.15—Miss Hilda Parvianin, pianist.
 9.24—Instrumental Trio.
 9.35—Miss Muriel A. Huggins, Hon. Treasurer Ladies Guild of Youth, in a talk, "The Youth Movement in Australia."
 9.46—Madame Marion Rowe, mezzo.
 9.53—Miss Kathleen Barry, violinist.
 10.00—Time Signal (Chimes). Mr. Will Jenkins, tenor.
 10.07—"Age" News Bulletin, exclusive to I.A.R.
 10.10—Boy's Premier Orchestra.
 10.40—Class Down.

4 QG

MIDDAY SESSION.

- 12.55—Time in.
 12.56—Time Signal.
 1—Market Reports, Weather information, "The Daily Mail" and "The Daily Standard" news.
 2—From Hotel Carlton, Lined Music from the Ladies, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
 2—Class down.

AFTERNOON SESSION.

- 3.50—From Hotel Carlton, Afternoon Tea Music from the Ladies, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
 4.15—"The Telegraph" news.
 4.30—Class down.

EARLY EVENING SESSION.

- 8.25—Time in.
 8.30—The Children's Standard Stories by "Little Miss Brimble."
 9—From the Council of Agricultural Studies, The Farmers' Session, Market reports, Lectures: "Farmers' Shop in Queensland—Handling of Sheep," Mr. W. G. Brown, Lecturer in Hissin and Wool.
 9.30—From the Studio of 4QG, "The Daily Standard" news, Stock Exchange information.
 7.10—Announcements.

NIGHT SESSION.

- 7.45—Lecture Session: "The Divine Spark" (episode No. 1), "The Story of the 'Sumerians,'" by Mr. J. W. Robinson.
 The Federal Band.
 9.15—Radio Voice Concert Items.
 9.25—From the Studio: Weather information, officially supplied by the Commonwealth Weather Bureau, Announcements.
 9.30—Selection by Studio Orchestra, Miss Ivy Pines, soprano solo, Spanish music, the Studio Orchestra, Mr. G. V. Woodland, baritone, Voice, Ballet, the Studio Orchestra.
 9.40—"The Daily Mail" news, Class down.

5 CL

MORNING SESSION.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Stock Duo Art number.
 11.40—"Advertiser" News Service.
 11.55—Vocalist Number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service.
 12.16—Featuring a Stock Duo Art number.
 12.30—G.L. Studio Orchestra.
 1.15—Rayley from Victoria Hall—Boy's Week, Sir David Gordon, M.B.C., "Working Capital."
 1.45—Studio Orchestra.
 1.51—Word & Code, Stock Exchange Intelligence, Official Weather Synopsis and Station Announcements.
 2—G.P.O. Chimes.

AFTERNOON SESSION.

- 3—G.P.O. Chimes.

- 3.1—Holey from "Maple Leaf" Cafe—Orchestral Numbers.

- 5.45—From the Studio—Stock-Duo Art number.
 4—G.P.O. Chimes.
 4.1—Rocky from Arcadia Cafe—Orchestral and vocal numbers.
 5—G.P.O. Chimes.

EVENING SESSION.

- 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories.
 6.45—Mr. L. H. Parnell (Librarian of Public Library), "A Talk about books."
 7.30—Market Reports.
 7.40—Boy Scouts' Corner.
 8—G.P.O. Chimes.
 8.30—Programme of Instrumental and vocal items from the Studio.
 8.7—Weather Reports.
 8.30—Concert Continued.
 10.15—"Advertiser" News Service.
 10.40—Station concert continued.
 10.55—Station Announcements.
 11—G.P.O. Chimes; National Anthem.

7 ZL

MORNING SESSION.

- 11—G.P.O. Clock and Chimes, the "Mercury" News, Stock Market, Shipping, Commercial Intelligence, Weather Information, and Sporting Anticipation, Salooni Selections.
 12—G.P.O. Clock Chimes; Class Down.

AFTERNOON SESSION.

- 3—G.P.O. Clock Chimes; Musical Items from the Studio; Story from Illustrated Tasmanian Mail.
 3.30—Hobart Stock Exchange Quotations.
 3.45—Weather Information.
 4—G.P.O. Clock Chimes; Class Down.

EVENING SESSION.

- 7—Children's Corner, "Big Brother" chats to his pals.
 7.15—Story from Illustrated Tasmanian Mail.
 7.30—"Camp Fire Entertainment" by a "Guisler."

NIGHT SESSION.

- 8—G.P.O. Clock Chimes, the "Mercury" Special Tasmanian News Service, Railway Station Reading Room, Weather Information and Sporting Results.
 8.30—Hobart Stock Exchange Quotations.
 8.10—Abolition and Stock Market reports from Roberts & Co. Ltd., Murray Street, Hobart.
 8.15—Physical Culture Talk by Mr. George Collins.
 8.40—Concert from the Studio under the direction of Miss Ivy Pines.
 9.15—Tasmanian District Weather Reports.
 9.30—"The Mercury" Special Interstate News Service, Weather Synopsis, Station Announcements, National Anthem.

- 8—The "Chimes of Big Ben" A Cheer by Mr. J. K. Powell.
 8.15—Class down.

MORNING SESSION.

- 9.15—The Chimes of 2FC and Programme Announcement.
 9.20—Music from the Studio.
 9.42—Last Minute starting information, by 2FC Racing Commissioner.
 10—The Chimes of "Big Ben"; Music from the Studio.
 10.15—Late "Sydney Morning Herald" News Ser.
 10.45—Music from the Studio.
 11—"The Chimes of 'Big Ben'" and Announcements.
 11.5—A. Dickson's Reading, by Mr. A. S. Cochran.
 11.30—Class Down.

MIDDAY SESSION.

- 12—"The Chimes of Big Ben" and Announcements.
 12.30—Stock Exchange, First Call.
 12.40—Music from the Studio.
 12.50—Marching Music for the School Children 12.40—From Farmer's Oak Hall; The Oak Hall Trio.
 13.05—Daily Wireless News.
 13.20—Miss Myrtle Holliday, contralto.
 13.30—The Chimes of Big Ben; Weather Intelligence.
 13.35—"Evening News" midday News Service; Publishers', Distributing Society's Report.
 1.30—Oak Hall Trio.
 1.42—Stock Exchange; Second Call.
 1.50—Marching Music for the School Children.
 1.40—Miss Myrtle Holliday, contralto.
 1.45—Music from the Studio.
 1.50—The Oak Hall Trio.
 1.55—Last Minute Sporting Information.
 2—Chimes of "Big Ben."
 2.10—Class down.

AFTERNOON SESSION.

- 3.30—"The Chimes of 2FC" and Announcements.
 3.35—A Recital by the piano pupils of Mr. Gordon Lavers.
 3.50—Marching Music for the school children.
 3.40—Mr. Fred Harman, baritone.
 3.15—From Farmer's Tea Rooms, the Oak Hall Trio.
 3.55—Music from the Studio.
 4—Miss Annie Payne, mezzo.
 4.15—"A Serial Story," "When the Bell was Sank."
 4.10—Music from the Studio.
 4.20—Mr. Fred Harman, baritone.
 4.25—From Farmer's Tea Rooms, the Oak Hall Trio.
 4.35—Music from the Studio.
 4.40—Miss Annie Payne, mezzo.
 4.45—Stock Exchange, Third Call.
 4.40—Class down.

EARLY EVENING SESSION.

- 8.45—Chimes of "Big Ben" and Announcements.
 8.50—"The 'Hello Man'" talks to the Children.
 9.30—A talk to the Older Children.
 9.45—Broadcast from the Hotel Australia—Orchestral Items, under the direction of Miss A. J. Ryan.
 9.15—From the Studio, "Evening News" Service, and Weather Information.
 9.20—Broadcast from St. Andrew's Cathedral, Sydney: The Wedding of the 13th October Bride (Miss Clarice Barry), who is to be married to Mr. Harry Bray. During the signing of the Register, Mr. Alfred O'Shea will sing.
 9.30—Hobart's Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).

NIGHT SESSION.

- 11.15—From the Studio: Sydney Instrumental Trio, consisting of Mr. Lionel Lawson, violinist; Mr. Gaudetion Bell, cellist; and Mr. Lindley Evans, pianist, will play Trio, by Chausson.
 11.35—Madame Vera Tanna, soprano.
 11.32—Mr. Gladstone Bell, cellist.

Thursday, Oct. 28

2 FC

EARLY MORNING SESSION.

- 5—"The Chimes of Big Ben" and Announcements.
 7.40—Music from the Studio.
 7.45—Weather Information, Commercial News, Shipping Intelligence, Rainfall, Textures, Astronomical Memoranda.
 7.55—Investment Market; Mining Share Market; Metal Quotations.
 7.50—Wool Sales, Broadbent's Market; Interstate Markets; Frosline Markets.
 7.45—"Sydney Morning Herald" News Service

- 3.40—Madame Vera Tarnas, soprano.
- 3.45—Mr. Lincoln East, pianist. "Scenes from Childhood" (Schumann).
- 3.50—From the Wentworth Hotel, songs by Mr. A. E. Y. Benham, basso, at the Wedding Breakfast of the "October Bride" (Miss Clarice Harry).
- 9.10—From the Studio: The Instrumental Trio
- 9.25—From the Wentworth Hotel: Mr. Alfred O'Shea, Australia's foremost tenor.
- 9.35—From the Wentworth Hotel: At the Wedding Breakfast, a few words from the Happy Couple.
- 9.45—From the Wentworth Hotel: Mr. Walter Kingsley, baritone.
- 10—Dance music by the Wentworth Cafe Orchestra, under the direction of Mr. Sydney Simpson.
- 10.15—Mr. A. E. Y. Benham, basso.
- 10.25—From the Wentworth Hotel: Dance Music.
- 10.30—Mr. Walter Kingsley, baritone.
- 10.40—From the Studio: Ray Brennan and his "Four Aces" will play dance music.
- 11—Close down. National Anthem.

2BL

EARLY MORNING SESSION.

- 7.15—Physical Training and Health exercises.
 - 7.30—Broadcasters' Social News Service.
 - 7.45—Physical Training and Health Exercises.
 - 8—G.P.O. Clock and Chimes: Close down.
- MORNING SESSION.**
- 8.30—G.P.O. Clock and Chimes: Musical programme from the Studio.
 - 9.10—Special News Service from the "Daily Telegraph."
 - 9.25—Musical programme from the Studio.
 - 9.40—Special News Service from the "Daily Telegraph."
 - 10.00—Ten Minutes' Talk supplied by the N.R.M.A.
 - 11—G.P.O. Clock and Chimes: Market Report.
 - 11.10—Musical programme from the Studio.
 - 11.25—Broadcasters' Information Service, (studio) Mail Boxes in call by Wireless Shipping: Weather and Rainfall.
 - 11.40—Women's Session: Social Notes by Mrs. Jordan.
 - 11.55—Mrs. Jordan answering correspondents
 - 12—G.P.O. Clock and Chimes: A Talk on Arts and Crafts, by Mrs. Jordan.
 - 12.30—A Talk by Miss Helen Jean Bonnier. "The benefits of Sport."
 - 12.50—Austral Stock Exchange Calls.
 - 1.30—Hillier's Instrumental Quartette, directed by Carl Castling.
 - 1.35—Sydney Stock Exchange Calls.
 - 1.45—Latest Sporting information and news from the Sun.
 - 2—G.P.O. Clock and Chimes: Close Down.

AFTERNOON SESSION.

- Racing information broadcast by courtesy of the Sun.
- 3—G.P.O. Clock and Chimes: Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Govt. Meteorologist: Social Notes from the Sun.
- 3.15—David Jones' Ten Room Trio: Pianist, Miss Gagners, violinist, Mr. Ahlsson cellist, Mr. Gleaves.
- 3.30—Country Women's Session.
- 3.45—Music from the Studio.
- 4—G.P.O. Clock and Chimes: David Jones' Ten Room Trio.
- 4.15—Music from the Studio.
- 4.30—Serial Story, entitled "The Scarlet Chokers" (Schibetto).
- 4.45—Music from the Studio.
- 5—G.P.O. Clock and Chimes: Producers Distributing Society's Market and Fruit Report.
- 5.15—Shipping Information when available.
- 5.30—Resume of Nohia Programme.
- 5.35—G.P.O. Clock: Close Down.

EARLY EVENING SESSION.

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

- 6.40—Pavilion Dinner Orchestra, under the direction of Mr. Cec. Morrison.
- Special Country Session.
- 7—G.P.O. Clock and Chimes: Australian Mercantile Land and Finance Co's. Stock, Wool and Hides Report.
- 7.15—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Govt. Meteorologist.
- 7.30—Stock Exchange Reports.
- 7.45—Producers' Distributing Society's Fruit and Vegetable Report.
- 7.57—Fruit and Vegetable (Sun).
- 8.20—Grain and Fodder Reports (Sun).
- 8.45—Mr. Loris H. Inganbells will speak on: The Reactions of Poison and Crime.

NIGHT SESSION.

- 8—G.P.O. Clock and Chimes: Broadcasters' Topical Chorus.
- 8.15—Ambassadors' Instrumental Salon Quartette under the direction of Mr. Claude McEglin.
- 8.35—Miss Alice Prowse, contralto.
- 8.45—Broadcasters' Trio.
- 8.55—Mr. Stanley R. Catlett, tenor.
- 9.04—Resume of following day's programme: Weather Report by courtesy of Mr. C. J. Mares, Govt. Meteorologist.
- 9—G.P.O. Clock and Chimes.
- 9.3—Mr. Tom Angus, comedian.
- 9.5—Miss Hilda Walker, soprano.
- 9.15—Broadcasters' Trio.
- 9.30—Intermission.
- 9.35—Miss Alice Prowse.
- 9.42—Mr. Stanley R. Catlett.
- 9.49—Broadcasters' Trio.
- 10—G.P.O. Clock and Chimes.
- 10.15—Mr. Tom Angus.
- 10.8—Miss Hilda Walker.
- 10.15—Al. Hammett and the Ambassadors Dance Band broadcast from the ballroom of the Ambassadors. During the intervals between dances News Reports by courtesy of the Sun will be broadcast.
- 12—G.P.O. Clock and Chimes: National Anthem.

3LO

MID-DAY SESSION.

- 12 noon—Time Signal: British Official Wireless News from Ruxby: Reuters and the Australian Press Association Cables: "Arctic" and "Herald" News Services.
- 12.30—Community Singing, under the auspices of the Community Singers and Concert Givers Association, transmitted from the Assembly Hall, Collins St., Melbourne.
- 1.45—Stock Exchange Information: Meteorological Information: Weather Forecast for Victoria, Tasmania, South Australia, and New South Wales.
- 2—Close Down.

AFTERNOON SESSION.

- 3—Mr. C. R. Long, Shakespearean Talk.
- 3.15—Will Page and his Popular Players.
- 3.25—Bruce Green, Pantomime Dame.
- 3.35—Will Page and his Popular Players.
- 3.45—George Barham, contralto.
- 3.48—Will Page and his Popular Players.
- 3.55—Bruce Green, Pantomime Dame, entertains once again.
- 4.0—Will Page and his Popular Players.
- 4.15—Mrs. Goodwin's talk to the mothers: "Ideal Companionship between Mother and Daughter."
- 4.35—"Herald" news service: Stock Exchange information.
- 4.45—Choral Evensong, transmitted from St. Paul's Cathedral.

EVENING SESSION.

- 6—Sylvia Van Asche, solo.
- 6.7—"Mary Gunden" will recite.
- 6.17—Sylvia Van Asche will sing again.
- 6.24—"Mary Gunden" story for the bigger ones: "The Knights of the Round Table in Story."
- 6.35—"Songs by the Wattle Girl and Mary Gunden."
- 6.4—"Arctic" and "Herald" News Services: Reuters and the Australian Press Association Cables.

- 6.55—Weather Synopses: Shipping Movements: Overseas Shipping.
- 7—Stock Exchange Information.
- 7.2—Fish Market Reports by J. R. Dorrett Ltd.
- 7.4—River Reports.
- 7.8—Market Reports by the Victorian Producers' Co-operative Co. Ltd., Haysmarket Sheep Sales: Poultry, grain, chaff, hay, straw, lime, dairy produce, potatoes and onions: Market prices of oranges and lemons, by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

- 7.20—Under the auspices of the Electrical Federation, Mr. S. J. Salmon, President of the Electrical Federation, "Electric Domes—40 Appliances in the Home."
- 7.40—Mr. A. W. Jackson, "Golf."
- 8—Kiss Day, soprano.
- 8.10—Captain Woodley, British schoolboys.
- 8.30—Rupert Hotel, monologue.
- 8.47—H.O. Dance Orchestra.
- 8.57—Keith Desmond, elocutionist.
- 9.11—H.O. Dance Orchestra.
- 8.51—Jack O'Hagan, baritone.
- 8.58—H.O. Dance Orchestra.
- 9.0—Kiss Day, soprano.
- 9.3—H.O. Dance Orchestra.
- 9.19—Keith Desmond, elocutionist.
- 9.24—H.O. Dance Orchestra.
- 9.34—Mr. Cantor, Yodelling solo.
- 9.38—H.O. Dance Orchestra.
- 9.44—British Official Wireless news from Ruxby: Announcements, etc.
- 9.58—H.O. Dance Orchestra.
- 10.8—Jack O'Hagan, baritone.
- 10.12—H.O. Dance Orchestra.
- 10.22—Rupert Hazell, entertainer.
- 10.28—H.O. Dance Orchestra.
- 10.38—Keith Desmond, elocutionist.
- 10.40—H.O. Dance Orchestra.
- 10.50—"Arctic" news service: Weather forecast. Results from Ballarat—South Street Competitions.
- 11—Our great thought for to-night is: "Sweetness of spirit and easiness is famous for dispelling fears and difficulties: patience is a mighty help to the burden-bearer."—James Hamilton.
- 11.1—Mr. Cantor, Yodelling solo.
- 11.4—H.O. Dance Orchestra.
- 11.15—Jack O'Hagan, baritone.
- 11.20—H.O. Dance Orchestra.
- 11.40—Good Bye the King.

3AR

MORNING SESSION.

- 11.30—British Official Wireless Press, received from Ruxby Super Wireless Station, England; by 3AR's Operator: Events of the Day: Express Train Information: "Age" News Bulletin.
- 12—Time Signal: Chime from G.P.O.: Studio Barometer and Outdoor Thermometer Readings: First Weather Forecast: Sporting News.
- 12.30—Musical Selections relayed from Hoyal's De-Luxe Boule's Street. Mr. T. L. Campbell at the Wheelbarrow.
- 12.50—Stock Exchange News: Market Reports.
- 12.40—Musical Selections.
- 12.55—Shipping Movements: Mail Notices.
- 1—Close Down.

AFTERNOON SESSION.

- 2.30—Hoyal's Premier Orchestra, under direction of Miss Elbi Irien.
- 3—Musical Items from the Studio by the Eric's Trio: Miss Elsie Holtsworth, pianist: Mr. T. Bayley, violinist: Mr. James Maxwell, flautist.
- 4—Time Signal: Chimes: 2nd Weather Forecast: Hoy's Orchestra.
- 4.55—Evening Amusements.
- 5—Time Signal: Chimes: Studio Barometer Readings: Close Down.

EARLY EVENING SESSION.

- 6.45—Children's Corner, by Brother Steve.

EVENING SESSION.

- 7.35—British Official Wireless Press: Studio Barometer and Outdoor Thermometer Read-

cup; Special Pic and Call Report, supplied by courtesy of Messrs. McPhail, Anderson and Co. Pty. Ltd., Pat Shong and Kettle Report, supplied by courtesy of Messrs. John, McNamara & Co.

6.—Time Signal Chime from G.P.O. Miss Nancy Satchell, volunteer.

7.—Miss Bartell, lyric soprano.

8.—Miss Mary Liffey, contralto.

9.—Mr. Stephen McDonald, talk on Voice Production, 19th series.

10.—Mr. Arthur Shaw, baritone.

11.—Mr. Frank Peterson, entertainer.

12.—Mr. Allan Bailey, pianist.

13.—H. James Meldrum, tenor.

14.—Dr. Geo. Pierre Phillips, President of First Education Society of Victoria, will talk on "How to Choose Tooth Brush and Tooth Paste."

15.—Mr. Arthur Shaw, baritone.

16.—Miss Nancy Satchell, volunteer.

17.—Miss Mary Liffey, contralto.

18.—Mr. Frank Peterson, entertainer.

19.—Mr. James Meldrum, tenor.

20.—Mr. Allan Bailey, pianist.

21.—Time Signal Chime from G.P.O. Studio

Barometer and Outside Thermometer Readings. "Age" news bulletin, exclusive to I.A.R.

10.—Hoy's Premier Orchestra.

10.10.—Close down.

4QG

MIDDAY SESSION.

12.55.—Time in.

12.56.—Time Signal.

1.—Market Reports, Weather Information, "The Daily Mail" and "The Daily Standard" news.

2.—From Hotel Carlton, Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.

2.—Close down.

AFTERNOON SESSION.

3.50.—A performance of Music from the Studio.

4.15.—"The Telegraph" news.

4.30.—Close down.

EARLY EVENING SESSION.

6.25.—Time in.

6.30.—The Children's Session, Studies by Samlet and Pete.

7.—From the Council of Agriculture, Studio; The Farmers' Session, Market Reports, Lectures, "Talk on Live Stock Feeding," No. 8, Mr. J. K. Murray, Principal, Agricultural High School and College.

7.30.—From the Studio of 4QG, "The Daily Standard" news, Stock Exchange information.

7.40.—Announcements.

NIGHT SESSION.

7.45.—Lectures: "A Talk on Books," Mr. W. A. Bratton.

8.—The complete complete programme will be provided in the Reception Hall and Studio of 4QG by the Sanitary Methodist Choir, Radio Voice Contest Item.

8.15.—Weather information, officially supplied by the Commonwealth Weather Bureau.

8.25.—Continuation of Sanitary Methodist Choir.

8.30.—From the Studio, "The Daily Mail" news service. Close down.

5CL

MORNING SESSION.

11.30.—G.P.O. Chimes.

11.31.—Featuring a Stock Duo Art number.

11.40.—"Advertiser" News Service.

11.55.—Variation Number.

12.—G.P.O. Chimes.

12.1.—"Advertiser" News Service.

12.15.—Featuring a Stock Duo Art number.

12.50.—G.L. Studio Orchestra.

1.15.—His Excellency the Governor, Sir Tom Bridges.

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The Ever-Ready Radio "Standard" Dry Cell, as illustrated is fitted with two screw terminals, and since the introduction has met with great success, more recognizing its immense superiority over any imported cell, Size 2 1/2 x 6 1/2. Weights, 2 1/2. Also for Bells, Telephones, Signalling, and Electro-medical Apparatus, etc.



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The Ever-Ready "Standard" "A" Battery (2 cells), is specially designed for economical operation of 1, 2, or 3 valves, taking .06 amperes at 1 v. For sets with four or more valves, the most economical service is obtained by using two "Standard" "A" Batteries connected in parallel.

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11

SYDNEY

3.52—Ward & Co's. Stock Exchange Intelligence; Official Weather Synopsis and Station Announcements.
2.—G.P.O. Chimes.

AFTERNOON SESSION

3.—G.P.O. Chimes.
3.5.—Bobby from "Maple Leaf" Cafe—Orchestral Numbers.
3.15.—From the Studio—Stock-Duo Art numbers.
4.—G.P.O. Chimes.
4.1.—Solo from Arcadia Cafe—Orchestral numbers.
5.—G.P.O. Chimes.

EVENING SESSION.

6.30.—G.P.O. Chimes.
6.35.—Hilltop Station.
7.—Mr. F. J. Mills ("Twinkler"), "The Value of Cheerfulness in a Career."
7.15.—Health talk, arranged by Mr. Whittonbury.
7.30.—Market Reports.
7.45.—Poultry Talk arranged by Mr. Whittonbury.
8.—G.P.O. Chimes.
8.1.—Studio Orchestra, interspersed with vocal items.
9.—G.P.O. Chimes.
9.1.—Weather Reports.
9.2.—Concert Concluded.
10.15.—"Advertiser" News Service.
10.55.—Station Announcements.
11.—G.P.O. Chimes; National Anthem.

7 ZL

MORNING SESSION.

11.—G.P.O. Clock Chimes; the "Mercury" News; Stock Market, Shipyard; Commercial Intelligence; Weather information; Salonola selections.
12.—G.P.O. Clock Chimes; Close Down.

AFTERNOON SESSION.

2.—G.P.O. Clock Chimes.
2.4.—Musical Items from the Studio.
3.30.—Hobart Stock Exchange Quotations.
3.55.—Weather Information.
4.—G.P.O. Clock Chimes; Close Down.

EVENING SESSION.

7.—Children's Corner, "His Brother" chais to his tale.
7.15.—The Adventures of George, the Book-shelf Out, by "Aunt Stella."

NIGHT SESSION.

8.—G.P.O. Clock Chimes; the "Mercury" Special Tasmanian News Service; Railway Auction Produce Sales; Weather Information.
8.5.—Hobart Stock Exchange Quotations.
9.10.—Mr. W. R. Johnson, Technical Master Chorus College; subject: "What education has done for the Nations."
9.30.—Studio Concert: Mrs. W. E. Bailey, L.L.M. contralto; Miss Dorothy Newton, contralto; Miss Berzi, Soprano, soprano; Miss Elsie Lamplin, soprano; Mr. George Muir, tenor; Mr. J. R. McCann, pianist.
9.50.—The "Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements; National Anthem.

New 3L0 Artist.

Mr. Roderique is a leading Welsh tenor, who came to this country with a big reputation, and has since had the opinion expressed of him in England, the United States and Canada endorsed. While Mr. Roderique has a preference for opera, he likes the more popular melodies as a relaxation and is a great success in both.

Radio Diseases

"Microphobia" is the new word to describe the disenselike fear of the microphone experienced by many amateur and some professional broadcasters. The originator also contributes another new word—"microphonia," describing the insidious disease from which some announcers seem to suffer. The last complaint appears to be a chronic infection which so expands the ego that one is never content except when talking through the "mike," a symptom which he "bollosis."

Realizing that the microphone has succeeded the pen, which long ago seems to have vanquished the sword, we beg to assert that this same mighty microphone is often abused and through it many otherwise happy listeners. Announcers and those who broadcast should realize by this time that listeners have rights, mentality and feelings and govern their vocal efforts through the ether in accordance.

Some new diseases affect the fans, too—"radio ear" developed a couple of years ago, when headphones were more popular and were worn for hours at a time. "Diato-mania" followed, accompanied by "audio-toxication" and "nocturnal radiophasia."

How to Cure the "Radio Ear"

A new affection of the ear is being reported by some listeners, who sit for long periods at their receiving sets. It is called the "radio ear"; it is accompanied by noticeable pains in the auditory appendages even when not listening-in. What it is and how to cure it is told as follows:—

Sometimes the "radio ear" takes the form of sharp, shooting pains in the head near the ears; this causes fears of possible abscesses or other serious afflictions. Upon consultation, ear specialists usually say that the remedy is easy and fairly sure.

"You are a radio fan?" they ask. "You spend a good portion of your time with your headphones on?"

Upon receiving replies in the affirmative, the doctors say: "When you go home loosen up on your headphones; the spring is too tight and presses on some of the nerves of your

ear." "Just like some forms of spectacles," they will tell you. "Your head set is undoubtedly causing the pains; relieve the excessive pressure and it will disappear."

One assurance is given of a benefit from radio head sets, however; youths of this generation are not so likely to have as protruding ears as some of their older brothers. All youngsters who sit for as much as three hours a day with their headphones clamped over their ears will grow up with close-fitting ears—at least so some experts believe. Mothers who formerly tied back their offspring's ears to prevent protruding will be saved that worry if they provide their children with radio receiving sets and headphones.

Free Booklets

AN interesting little booklet, the "Burgess Index of Radio Broadcasting Stations," is offered to anyone who applies to the New Systems Telephones Pty. Ltd., 280 Castlereagh Street, Sydney, or to one of their Interstate offices. Crammed full of useful information, it is worth having.

Another excellent informative booklet is offered by the Amalgamated Wireless (Australia) Ltd., 97 Clarence Street, Sydney. "Genuine Radiotrons," is its title, and it will be happily forwarded to interested people.

Messrs. Philips Glow Lamp Works of Kembla Buildings, Margaret St., Sydney, have a few of their excellent catalogue No. 38 left. Mind you, only a few is left, so apply early.

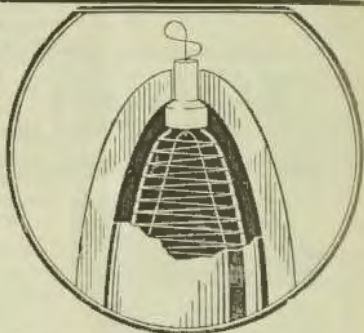
Each one of these booklets should be kept in a drawer near the radio set for reference. Write for them!

On Thursday, October 28, special arrangements have been made by 3L0 for a description of the Combined Public School Sports to be broadcast from the St. Kilda Cricket Ground. On this occasion, Mr. A. F. Marshall will be the announcer. Mr. Marshall is attached to Geelong Grammar School, and as he is a well known athlete and an authority on all sports, a particular breezy and racy description of the sports may be anticipated.

Only the new Cossor Point One can give you these three advantages

When a man buys a valve, three questions flash through his mind. The first is: "Will it be cheap to run? I cannot afford to use a valve that consumes a lot of current." Then follows: "Is its filament strong? A valve that becomes useless after the first slight blow is expensive at any price." And finally, "Can I be sure that it will give as good results after twelve months as on the first day I use it?"

These are the three essential needs of every wireless enthusiast. In this new low consumption valve, Cossor is enabled to offer a Dull Emitter which utilises principles of construction so strikingly new that the whole future trend of valve design is likely to be influenced. Read below how this wonderful new valve, consuming only 1 of an ampere (hence its name) will satisfy your most exacting requirements.



1 Current consumption cut to one-third

Ever since the dawn of the bright emitter the whole resources of science have been enlisted in ceaseless efforts to reduce current consumption. In the new COSSOR POINT ONE, a further tremendous cut has been made. This new valve now requires only one-third of an ampere at a voltage of 1.8. That means that a 3-ampere-tetrode using seven of these new valves would still consume less current than a one-valve set using one bright emitter. Or to make the comparison,

will more striking, the same accumulator which served the one-valve set for, say, one week, would—with its cells connected in parallel to give two volts only—last longer than two months on a charge. Even then it would only need re-charge to prevent sulphation of its plates. This phenomenally low current consumption renders the COSSOR POINT ONE quite suitable for use with dry cells when required.

Observe how the neonite insulator securely aligns and holds in their correct relative positions, the filament, the grid and the anode. Through the centre of the insulator will be seen the fine wire which supports the filament and safeguards it against shocks.

2 A shockproof filament suspension system

The system now evolved by COSSOR offers outstanding advantages and automatically ensures for the valve a greatly increased life. Whereas in many valves the filament, being straight, is held under tension and that in the new valve is arched and retained in position by a fine wire which is secured to a neonite insulator situated immediately above it.

It is not held under tension. The fine wire provides exactly the degree of elasticity required to enable the filament to withstand harmlessly the sharp concussion caused by an accidental blow. A knock which would shatter the filament in an ordinary valve is easily absorbed by this amazingly efficient shockproof suspension system.

Cossor Point One.

Red Top: For H.F. use, consuming .1 amp. at 1.8 volts 13/6.

Plain Top: For Detector, consuming .1 amp. at 1.8 volts 13/6

3 Long life uniformity due to Co-axial Mounting

If a number of valves were made with identical filaments, grids and anodes without due regard to the exact spacing between these elements, all the valves would show very considerable variations in performance. Absolute uniformity in results can only be obtained among valves of the same class when the relative positions of their elements are identical. In the new COSSOR POINT ONE the system of mounting infallibly aligns the filament, the grid and the anode at the top as well as at the bottom. Even the

hardest shock will fail to displace their exact relative positions. Frequently the working characteristics of a valve will change as time goes on—perhaps due to filament sag or to the grid or anode being moved out of position through an accidental blow. This cannot possibly happen in a COSSOR POINT ONE. THREE OF NEUTRIBIENE RECEIVERS EMPLOYING TWO OR MORE STAGES OF MATCHED H.F. AMPLIFICATION WILL APPRECIATE THE IMMENSE IMPORTANCE OF THIS EXCLUSIVE COSSOR FEATURE.

Cossor Stentor Two.

Green Top: For Power Valve consuming .15 amp. at 1.8 volts, 17/6.

Cossor Valves

OBTAINABLE FROM ALL RADIO AND ELECTRICAL DEALERS.

The Best Crystal! The Best Results!!
Now The Best Price!!!

REDUCED TO

1/6



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*Even the poorest Receiver with its harsh reproduction
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TONE PURIFIER AND STATIC REDUCER

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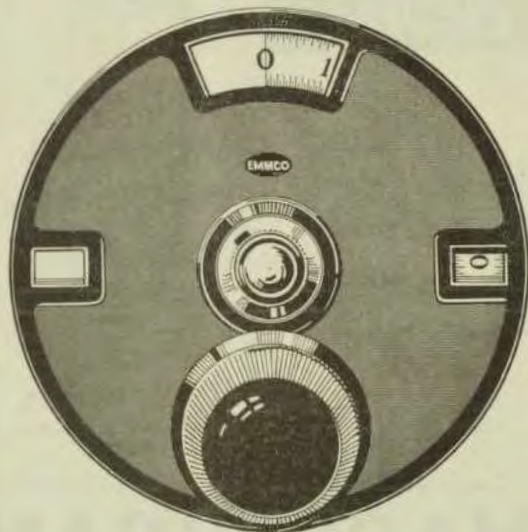
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Bakelite frame 9/6---Metal frame 6/9

Made in Mahogany or Maroon finish

Obtainable with Clockwise
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Scrap those old Dials, and put in Emmeo Verniers.

You'll be amazed at the difference.

Selectivity such as you've never had before—hair-breadth tuning that gets between those crowded stations—easy control, that makes tuning-in the work of a moment—and last but not least a wonderful lustrous finish that makes your old Set look like new.

If you are not already familiar with the merits of Emmeo investigate NOW.

Remember that it has the advantage of hair-line adjustment and a special logging window. Remember, also, there is no back-lash, no slipping, and it makes tuning easy and absolutely positive.

Outback Radio

By A.H.

In common with other city dwellers, I thought the outback still held civilization at bay. But on a recent journey by motor from the Queensland border, I was forced to revise my ideas. Calling at a station near Hungerford, I was amazed to find that a dance was being held in the homestead with music which was actually being played in a broadcasting studio in Sydney, 500 miles away. A loud speaker was attached to a powerful set, and jazz was being indulged in by a number of people in a large room.

Later I visited the quarters of the station hands. I expected to hear the wheezy notes from an accordion; but I was disappointed. On a table stood a wireless set, with loud speaker attached. In the bunks reclined the station hands. I thought of the old-timers, and fully expected to see their shades start up with horror at this sacrilege. But there was nothing in the faces of the men to indicate that anything out of the ordinary was being done.

In conversation, I learned that many of the shearers carry sets with them, and when forced to camp out between stations, they sling an aerial between a pair of convenient gumtrees or bind a couple of saplings upright to a fence. After the evening meal, they recline in their blankets and listen in to any station they can pick up.

Once I actually came across a "swuggie" camped beside the track. In a small tent was parked a motor bike, on the carrier of which stood a valve set. An aerial was stretched between two trees. With the usual outback hospitality he greeted me. He was preparing a meal of bacon and eggs. He put in a couple of eggs and a slice of bacon for me, which, with bread and butter and coffee, made a satisfying meal.

After cleaning up, he took down his headphones, and we affixed one apiece to our ears. Sydney came in finely. Then he tried for Melbourne, and got 3LO. I was amazed, but he merely smiled and said that radio was a necessity. It kept him au fait with the world.



DESIGNED specially for powerful long distance radio reception. Gives you the means to pick up those weak elusive signals and amplify them to reality.

You can add the programmes of distant stations to your reception by securing the valves that are associated with all the great trans-world records.

MULLARD
Double Red Ring
VALVES

Type D.3 for 2-volt PRICE
accumulator.

Type D.06 for 2 or 3
dry cells or 4-volt accu-
mulator.

13/6

GET ONE FROM YOUR
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E A C H

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THE MASTER VALVE

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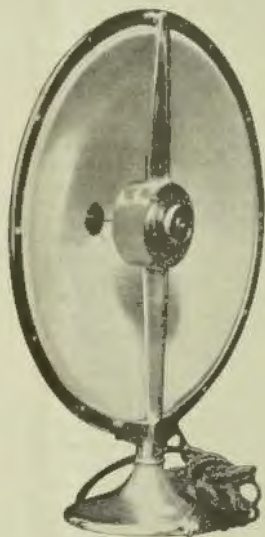
OBTAINABLE FROM EVERY RADIO
DEALER IN AUSTRALIA

Advertisement of the Mullard Wireless Ser-
vice Co. Ltd., "Mullard House," Denmark St.,
London, W.C.2, England.

"SPERAVOX"



For
Faithful and
Distortionless
Reproduction



£5-5-0

THE INCOMPARABLE CONE SPEAKER

In most existing instruments of a similar nature the design is such that distortion cannot be avoided and in this respect we would refer particularly to the differences arising in the forces acting either by attraction or by repulsion in the magnetic circuit and the magnitude of the current required to obtain sufficient volume, such differences resulting in very unfavourable conditions for the valves and the low frequency transformers of the receiver. Furthermore, diaphragm of an excessive size induce sound reverberations and this coupled with the causes quoted above, are all contributory to distortion and disagreeable tone reproduction.

The "SPERAVOX" Loud Speaker is an example of how these difficulties have been overcome.

Australasian Representatives:

And at Melbourne, Perth, Brisbane
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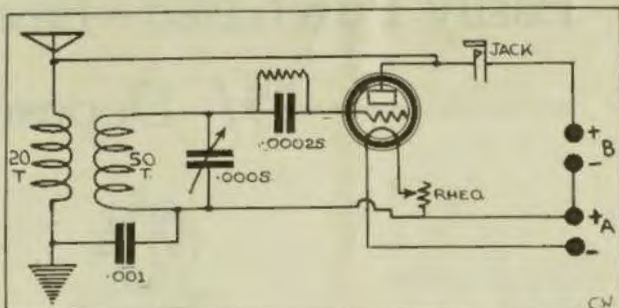
BROWN & DUREAU, Ltd.

Broughton House
Clarence St., SYDNEY

An Extraordinary One Valve Receiver

ONE may be pardoned for stating that the most popular single valve receiver published in "Wireless Weekly" was the Marnikay. Certainly it lived up to its reputation as a selective distance getter, and to this day we receive reports of its excellence. The one-valver illustrated here will no doubt supersede the Marnikay, as it has all the good qualities of the Marnikay, without the ticklishness of filament control.

The main features of this receiver are ease of operation, maximum strength of broadcasting, and ability to bring in the distant stations. When tested at Dulwich Hill, 3LO and 4QG were nicely heard without any background of 2BL or 2FC. Both local stations could be heard nicely on the loud speaker, although you must not be disappointed if your speaker won't answer too well, as the valve used was out of the ordinary run. Nevertheless remarkable volume for one valve is assured, and the clarity of reception is admirable. Another good feature of this little receiver is the



The circuit. The plate is fed back to the aerial.



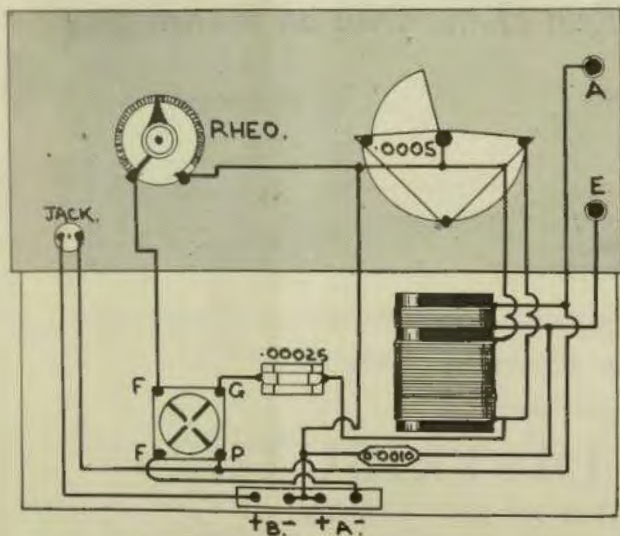
Here's the view of the panel. Drill yours accordingly.

cheapness of the parts. No expensive honeycomb coils and coil mounts to buy, simply a small piece of cardboard tubing and a few pence worth of wire instead.

And it is very easy to construct. Start off with the winding of the coils. At a distance of $\frac{1}{2}$ an inch from one end, drill two small holes, through which thread one end of your 24 gauge wire, making it secure. Wind on 20 turns of wire, finishing off in a manner similar to the start. Leave a space of quarter of an inch, and wind in the same direction 50 turns of wire, securing at the beginning and end as before. The finished coil should resemble that one seen in the back of panel view.

Leave this coil on the one side and drill your panel. A panel layout is not given, as we feel sure that the front view will suffice in this direction. The variable condenser and rheostat are on the same level, midway up the panel and spaced apart 5 inches. The rheostat is $3\frac{1}{2}$ inches from the edge of the panel. Jack and Ecs are easily provided for.

Drill your panel and mount your components, then temporarily fix the panel to the baseboard and plot positions for your valve socket and coil. The coil should be stood on end immediately behind the condenser, the socket just behind the rheostat.



An explicit diagram showing the wiring.

(Continued on Page 49.)

Easily Purchased—Easily Paid for

15/- Deposit



THINK it over. For 15/- deposit you can become the immediate possessor of a guaranteed, efficient radio receiver which will give you results you cannot appreciate until you actually tune it for yourself.

Don't waste time and money monkeying about with parts, but get a set constructed and tested throughout by specialists—men who understand radio sets inside and out.

An R.D.A. receiver is at once an entertainment bringer and an attractive article of furniture in the home.

Make it a Real Home with an R.D.A.

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

1 Valve Sets, with all accessories	Per week ..	0 2 6
2 Valve Sets, with all accessories	Per week ..	0 5 0
3 Valve Sets, with all accessories	Per week ..	0 7 0
4 Valve Sets, with all accessories	Per week ..	0 9 3
5 Valve Sets, with all accessories	Per week ..	0 11 6
5 Valve Sets (Super 5) with all accessories	Per week ..	0 14 0
0 Valve Sets (Super-het.) with all accessories	Per week ..	2 0 0

Come to our Salesroom and tune in any of the above Sets for yourself. No obligation.

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Wavelength Queries Answered Here

In conjunction with Farmer's Broadcasting Service the Technical Editor of "Wireless Weekly" will answer all listeners' queries arising from the wavelength change. Answers will appear in these columns and will be broadcast from 2FC each Thursday night. Below is the first series of questions answered.

FARMER'S QUERIES.

G.B.S. (Whitton):—

Q1: Please advise what books are the best to start off with to gain a knowledge of radio. I am an absolute beginner.

A1: Messrs. Smith & Co., of Pitt Street, will provide you with these two books for a few shillings: "Wireless Simply Explained," "Wiring for All." Both these books are by John Scott Tunstall, an eminent authority on all wireless matters, and they are good.

T. S. (Dialy, Q7) asks:—

Q1: Has the third coil in a 3-coil receiver anything to do with the volume of a receiver?

A1: No; the third coil is used to ensure selectivity.

Q2: Do you consider a detector with one stage of audio (Power Valve) sufficient to work a loud speaker?

A2: Yes, within 25 miles of an A class broadcasting station. You would require two audio valves.

Q3: Would it be better off if I installed honeycomb coils, instead of my variocoupler?

A3: No, provided you do not suffer from interference. Your variocoupler is O.K. from what you say.

H. J. (Hylton):—

Q1: Please provide a formula to arrive at the correct size of coils for any given wavelength.

A2: We are afraid this is not practicable. Wavelength depends on inductance plus capacity. There are so many contributing factors such as size and position of condensers, that we really couldn't give you any definite lines to go along. Write again, telling us the stations you want, and we will give you the right sizes of coils to use.

K.L. (Kilobaud):—

Q1: I have built a Brownina-Drake receiver, but I am not too pleased with it. I have my own Regenerative with the primary wound over the middle of the secondary. Is this as good as the primary wound in the spread dir and fitted underneath the secondary in such a way that the primary winding is opposite the bottom turn of the Regenerative?

A1: No. The secret of success of the Brownina-Drake is the primary wound in the latter fashion. Your present method is wrong. After it, using 24 turns wound in the dotted line. The secondary should comprise 77 turns tapped at the 15th from the bottom, 30 turns of 50 D.C.C. will suit the tickler.

H.C. (Newcastle):—

Q1: Please tell me where I can find particulars of a transformer suitable for a chemical rectifier, to hold 3 amps.

A1: We would not advise you to yolk a chemical rectifier to a transformer with an output of 3 amps. The chemical rectifier would heat up and become useless. A valve rectifier is necessary, so see "Radio," September 30, 1925. We will forward you this back copy on receipt of 7d. in stamps.

L.C.W. (Hockhampton, Q1):—

Q1: What amount of wire (lbs.) approximately would be required to build a valve rectifier for A and B battery charging, as described in "Radio," 10/9/25?

Primary, 1000 turns, 22 D.C.C.

Secondary, 300 turns, 10 D.C.C.

A1: 3lbs, 22 D.C.C. and 1lb. 15 D.C.C.

Q2: As the detector valve UV280 is a "gas content" valve, would it not be more suitable for use in a battery charger, instead of the 201A.

V.P. (Gordon):—A single slider coil set is not selective. Why not build that crystal receiver in "W.W.," 4/10/26.

A.A.R. (Urralla):—Use 50, 75, and 75, in that order. Short waves do not travel so well in daylight as after dark.

E.D. (Alexandria):—Your receiver is new of little use. Build the crystal receiver described in "W.W.," 6/19/25.

A.G.R. (Kensington) and L.P.R. (Lane Cove):—See reply to E.D. (Alexandria).

H.G.F. (Wyes):—Add a third coil, see "W.W.," 19/2/26.

A.R. (Manly):—Remove half the turns from each of your primary and secondary coils.

E.M. (Beverly):—Install the wave trap described in "W.W.," 1/10/26.

R.J. (Medway):—Use slightly larger coil than for 2BL and 3LO.

W.R.D. (Orange):—Use 50, 75, 75 turns coils.

F.S.H. (Ashfield):—See reply to W.R.D. (Orange).

J.M. (Condalwin):—See reply to W.R.D. (Orange).

G.B. (Turramurra):—Remove the 100 and 150 turn coils, and substitute two 75-turn coils in their places.

(Orange):—

(Condalwin):—

(Turramurra):—

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Q1: I intend installing a 50 volt dynamo, and wish to charge my A and B batteries from it.

A1: Write us again, telling us the brand of each battery, and will advise you accordingly. Also tell us the amperage output of your dynamo.

R.C. (Ashfield):—

Q1: Please tell me the best and most selective single valve receiver you know?

A2: Build the one valver in this week's "W.W."

A.C. (Arncliffe):—

Q1: Please tell me how to make the Crystodyne Receiver more selective?

A2: We regret to advise you that the Crystodyne is now out of date, on account of the drop in wavelength of 2FC. Build the crystal receiver in "W.W.," 8/10/26.

D.C. (Hillside):—

Q1: I have a standard 3-coil 5-valve receiver, and find difficulty in bringing in Southern stations at loud speaker strength, only phone strength resulting. I changed my valves to B406 valves, using a 6 volt accumulator with no better results.

A1: Your circuit is quite O.K.; but we are afraid you are within the shock excitation area of 404, which will make it hard to reach out for the distant stations. Never, under any circumstances, use a 6 volt accumulator with B406 valves. Use a 6 volt accumulator only, otherwise you will damage your valves.

T. J. (Row May):—

Q1: I have a 5 amp. Tinsley Charnier. I would like to know if I charge my battery before or after cleaning or refilling?

A1: Clean thoroughly with distilled water first, and fill afterwards with new electrolyte then charge.

Q2: If after cleaning and charging, how do I determine when battery is fully charged?

A2: Use a hydrometer. Still you had better see a good battery service station, and let them clean and charge your battery.

V.J.T. (Dulwich Hill) encloses a copy of a two-valve Regenerative Interlex, and asks:—

Q1: Is the 2 valve circuit O.K.

A1: Quite O.K.

Q2: To this set as selective as the 3-coil Regenerative Receiver?

A2: Yes.

Q3: Can intermediate reception be enjoyed at good phone strength?

A3: The original receiver produced loud speaker strength.

Q4: Where can I purchase the parts for this receiver?

A4: Consult any advertiser in "W.W."

(Newcastle):—

W.J.H. (Newcastle):—You are quite right, only one coil is required.

W.P. (Hillsborough):—We would take 30 a full issue of "W.W." to give you the required addresses, all of which may be obtained from J. W. Robinson's book on "Wireless."

Write N.S.W. Bookstall, or Swain & Co. Ltd., of Pitt Street, enclosing 3/6, and this book will be forwarded to you. No. 2ZW has ceased Morse transmission. "Wireless Weekly" will be brought to your door for 13/- per annum.

A.K. (Crow's Nest):—See "W.W.," 19/2/26.

(Continued on Page 49.)

MAKE YOUR SET the best you have ever heard!

MAKE IT WITH

CENTRALAB PARTS



The Centralab Radiohm represents the latest established and best way of controlling oscillation and volume, superseding the old Neurodyne method. For every type of Resistance Control, they have been pronounced by experts unequalled in efficiency.

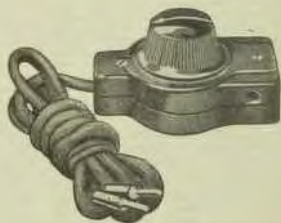
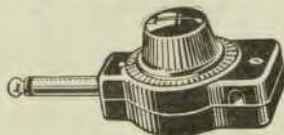


	£ s. d.
No. 2 M. Radiohms	0 14 6
No. 50 M. Radiohms	0 14 6
No. 100 M. Radiohms	0 14 6
No. 200 M. Radiohms	0 14 6
No. 500 Modulators	0 14 6
No. 106 Variable Grid Leaks, without condensers	0 9 0
No. 107 Variable Grid Leaks, with No. 2035 condensers	0 10 6
No. 206 6 ohm Rheostat	0 9 0
No. 230 ohm Rheostat	0 9 0
No. 110 200 ohm Potentiometer	0 12 0
No. 111 400 ohm Potentiometer	0 14 6
Centralab Push Pull Battery Switch	0 3 6
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The Centralab Modulator Plug combines the control of the wonderful Centralab Modulator with the ordinary 'phone plug. It is a unique device designed to control the volume and tone without in any way affecting the tuning. It is also a remarkable eliminator of static effects.

Try one in your set.

N.B.; It will bring the reproduction of the speaker down to a whisper in places where music is not allowed.



No. 1419, RESISTANCE.
2 stage Amplifier . . . £2/5/-

No. 1490 RESISTANCE.
3 stage Amplifier . . . £3/3/-

No. 1450 RESISTANCE.
Amplifier Kit . . . £2/14/-

IF YOUR DEALER DOES NOT YET STOCK THESE PARTS, WRITE TO US
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UNITED DISTRIBUTORS LIMITED

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66 Charles St., LAUNCESTON, Tas.

B.C.A. Entertains*(Continued from Page 9.)*

shorter leg, of course, runs back. At present it is all a bustle of carpenters and painters and decorators and electricians and wireless engineers. The floor has to be planed down by a machine into a ballroom smoothness. Carpets are to be laid. The walls will be tinted. The ceiling, at present broken by skylights, will have to be subjected to acoustical correction. The inner angle of the L it is proposed to fit up to receive an audience of about fifty favoured visitors who will give an "atmosphere" suitable for performers who like to see someone before them while they perform. The smaller leg of the L will be the band-stand recess, and the longer leg will accommodate the orchestra, and individual performers. The old original studio is not by any means to be dismantled, and the control room, on the second floor, will still remain. The man at the modulator will possibly have a periscopic arrangement of mirrors poked up through the floor. A system of electric flash signals to tell those concerned "full speed ahead!" "back her!" "stop her!" or, as the case may be, has been installed. But there is no doubt that this new and larger studio will effect considerable improvement in the studio transmissions of G.L.O., Melbourne.

Before that happy time arrives, however, there are grey hairs in store for the station engineers. The problem of acoustics is not an easy one, particularly in an L-shaped room with inverted V skylights.

Mary Gumleaf, and her correspondence, would simply fill a book. It ranges from grave to gay, but the following is quite delightful. A teacher writing from a truly way-back school, who is fortunate enough to possess a crystal set of her own, mentioned that the children had constructed one for themselves. "You really should see it," she writes, "it is made out of an old tea tin, with cotton reels for dials, and binder twine for aerials. The kiddies inform me that it is a super-heterodyne set, and they can get through to Mars on it."

The Crosley Musicone

New speaker principles end common "loud speaker" faults.

Now you can get the full joy of radio. Those thin, tinny piano notes, those muffled, nose-holding singers' voices—mere shadows of the living, thrilling originals—are gone forever.

Now, by the incorporation of new acoustic principles, the Musicone gives you volume reproduction of human voice and ALL musical instruments with faithful exactness. It fills and rounds out, puts life, fire, reality, into the shadowy phantom voices you have been so accustomed to hearing.

£4-17-6

From all
Good
Radio Dealers



Wholesale only
**Metropolitan
Electric
Co., Ltd.,**
27-29 King St.,
Sydney

Copy of our well known guarantee, which accompanies every speaker.

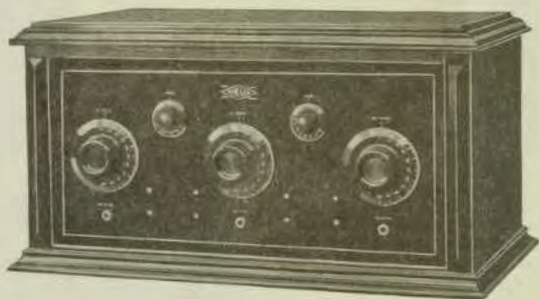
:: **Guarantee** ::

Purchase this Crosley Musicone. Take it home and try it for five days. Test it in comparison with any loud speaker made. If you are not satisfied, return it to the dealer from whom you purchased it. He will promptly refund your money without argument, delay, or question. There will be no annoying red tape to go through.

Metropolitan Electric Company, Ltd., Sydney

When at the Technical College Radio Exhibition, look for our display of "Radiokes" and "Gowradio" Products.

COLMOVOX SUPER FIVE MODELS 1926



Price, £49/10/-

FULFILS YOUR UTMOST DESIRE IN BEAUTY AND PERFORMANCE

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

COLVILLE MOORE WIRELESS SUPPLIES LIMITED

10 ROWE ST., Near Hotel Australia, SYDNEY

New Observation Reports of Fading Expedition

(Continued from Page 10.)

and steady throughout the evening, and the volume was remarkably good, being quite equal to that of 3LO, although the distance was about four times greater.

Signals from 2BL behaved similarly to those of 3LO. 2FC was steady, but the strength was not as great as was anticipated. Observations by local listeners go to show that this is generally the case with 2FC. 5CL showed slight signs of fading, and throughout his signals were muffled in character. It was not possible to determine whether this was due to transmission or to atmospheric phenomena.

WAGGA.

The receiver was set up in a spare room at the post office, but so great was the interference from automatic telegraph machines that it was immediately decided to make the observations in some more suitable location. Since Wagga is almost halfway between Melbourne and Sydney, it was particularly desirable that reliable observations should be made, and with the co-operation of one of the P.O. engineers, the receiver was placed in a car and set up on the outskirts of the town, away from all electrical machinery. After a very few minutes, however, heavy rain set in, and this idea had to be abandoned, and the experiments were continued in a private house some distance from the centre of the town. 3LO was heard with excellent strength and purity, there being no sign whatever of fading or distortion. This condition held right through the period of the observations. Daylight signals from 3LO were reported to be satisfactory at all times. 3AR was very weak and signals were badly distorted and subject to fading—conditions being similar to those noticed on 3LO in parts of Gippsland. Both Sydney stations were weak and faded badly at regular intervals. 2FC was muffled but local observers stated that this was not a usual condition. 4QG was particularly clear, and the volume was almost as great as 3LO's. Sig-

nals from 5CL were weak on the whole, and slight fading was noticed but no distortion.

COOTAMUNDRA.

Daylight signals from 3LO were just audible on the loud speaker, but were perfectly steady and of good quality. From about 4 p.m., 3LO's signals increased in strength, reaching a maximum shortly after sunset, but very little fading was apparent. At no time did the signals entirely disappear, but at long intervals they would fall slowly away to half strength, remain so for about 30 seconds, and then gradually rise again. 4QG was heard with good volume, and for the most part the signals were steady, but at irregular intervals (say, 1 to 2 hour) they would disappear completely for about one minute, then slowly build up to full strength again. 2BL and 2FC could both be heard during the day, although the former was fairly weak. Both these stations were received at constant strength and were free from distortion. At night, however, it was found impossible to follow 2BL, owing to extremely bad fading—similar to that noticed on 3LO in Gippsland. While distortion was not particularly noticeable, the fading was of such a character that the signals would disappear completely for several minutes. At no time during the period of the evening observations did the strength of this station rise to what it had been during daylight. 2FC came through with good volume and clarity, but throughout the whole evening was interrupted by atmospherics more than any of the other stations. Adelaide—5CL—was clear and strong, but subject to irregular fading to about half strength somewhat similar to that on 3LO.

GOULBURN.

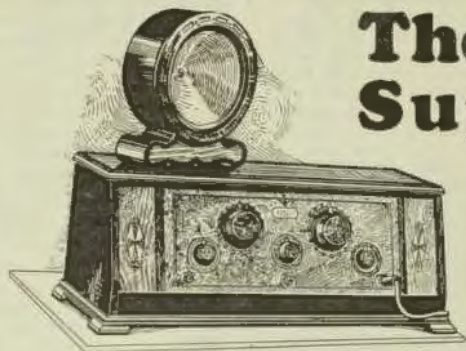
The apparatus was first installed at the Post Office, but so great was the electrical interference, that it was decided immediately to remove it to the hotel. Matters here, however, showed little improvement, and finally a private house on a hill overlooking the town was made use of. 3LO is not heard here in daylight, but several local listeners advised

that 3ME is often heard during the day speaking to the trawlers (3ME being the call used for the Braybrook station when being modulated direct from the station). Daylight reception from both Sydney stations was clear and steady, 2FC giving the greater volume. Immediately after sunset, however, the shortwave station became very unsteady, and it was often impossible to follow what was being said, and the music lost all its quality. Speech and music from 2FC at night were steady, but inclined to be muffled in character. The volume was good. Atmospherics were stronger on this station than the short wave stations. On 3LO no distortion was in evidence, although slight fading was apparent. The strength was equal to that of 2FC. 4QG was perfectly steady and clear throughout the period of observations. 5CL and 3AR were weak but generally clear and steady, atmospheric conditions, however, made it impossible to make accurate observations on these stations. At approximately 8.30 the atmospheric discharges became so strong—even using the frame aerial—that all stations were obliterated.

MOSS VALE.

During the afternoon 2FC and 2BL were heard clearly, the latter being somewhat the stronger. Both remained steady and clear until sunset when 2BL became very erratic and no pleasure could be derived from listening to the programme. 2FC remained steady, but the transmission again seemed muffled. 3LO commenced to gain strength shortly after 4 p.m., and was heard clearly by 5 o'clock. The advent of darkness did not have much effect on this station as regards clarity—hardly any fading being noticed. The signals did not decline in strength for more than 30 to 45 seconds every half hour. The strength was greater than any of the other stations heard including Sydney, and for a time it was the only one that could be understood through the static. 4QG was sturdier than 3LO, but the signals were somewhat weaker, and, therefore, suffered greater interference from atmospherics.

America's Latest 6-Valve Receiver—and undoubtedly the finest Radio proposition in the wireless world to-day



The "Eclipse Super-Six"

Here is the most powerful and selective of all Sets, a Super Six-valve, within the reach of the man of moderate means

at the unequalled price of **£18/18/-** without accessories

or complete with first quality accessories **£37/10/-**

THE COMPLETE SET INCLUDES — Latest Magnavox Cone Speaker
 Clyde Guaranteed Accumulator 6 201A Valves (Radiotron)
 3 Large Capacity Winchester B Batteries Aerial Equipment.
 Complete with cheaper quality accessories . . . **£30**

Cash or Terms

To those who are desirous of possessing a Set embodying only the most advanced attainments in Radio, the "ECLIPSE" can be bought with the absolute assurance of giving the finest results possible in Broadcast receiving.

3 Salient Points of the "Eclipse"

1. The latest method of amplification used ensures the most wonderful tonal quality.
2. Simplified tuning—Two dials only used.
3. Beauty of design in Cabinet.

Hear the "ECLIPSE" demonstrated in our Audition Room or in your own home, and be convinced of the superlative qualities of this remarkably low-priced Receiver.

Value in Valves

Genuine 201A Valves 6/9 each

(Postage Extra).

Every one tested in our Jewel Valve Tester.

A SUPREME OFFER IN LOUD SPEAKERS

The "MANHATTAN Junior Adjustable"

Height 22 in., 10 in. Bell

Usually priced at 75/-, a Special Big Purchase enables us to offer this efficient speaker at the astounding price of 32/6. (Post free anywhere in Australia).

Mick Simmons Ltd

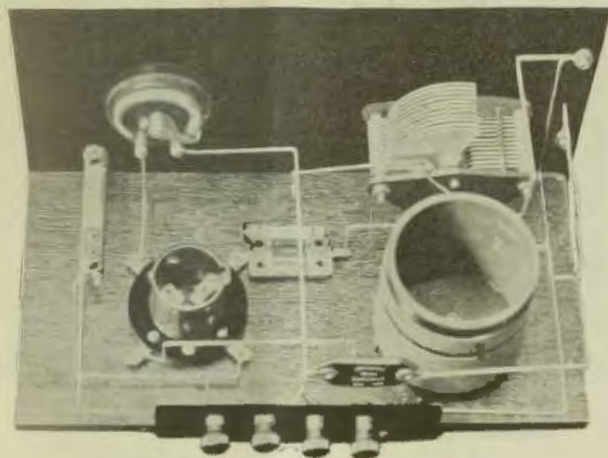
"The World's Greatest Sports Store"

Headquarters: 720 G HAYMARKET, SYDNEY

And at BRISBANE

An Extraordinary One Valve Receiver

(Continued from Page 41.)



Looking down on the back of the receiver.

Two small brackets will hold the coil in position; or cut a piece of 1 in. wood, say 1 in. wide, and with a penknife carve off the square corners so that it fits just snugly inside the bottom of the coil former.

Screw this carved piece of wood to your baseboard, and fit your coil over it, screwing through your tube to make things firm.

You are now ready to wire up. Follow closely the back of panel wiring diagram and the circuit, and this little job will be easily mastered. The back of panel view will prove of value to you in any doubtful connection.

Test out by connecting your batteries, aerial and earth, and plug in your 'phones. Don't put too much "B" Battery on your valve for a start. Start with 22 or 25 volts, and tune in your station. If poor results accrue increase your "B" Battery, step by step until best results are obtained. Perhaps even then you may find difficulty. If so, reverse the connections of your 50 turn portion of your inductance. This will fix it. The substitution of a smaller fixed condenser for the 001 may prove of value.

This little receiver will astonish

you, but bear in mind, don't depart from the size of variable condenser or number of turns quoted here for the inductance. If you do, you might be disappointed. And if you add a stage of audio, separate "B" batteries will be required. Adding a stage of radio is not practicable.

Parts Required:

- 1 Panel, 12in. x 7in. x 3/16in.
- 1 .0005 Variable Condenser.
- 1 Rheostat (to suit valve).
- 1 Valve Socket.
- 1 S.C. Jack.
- 1 .00025 Grid Condenser.
- 1 2 megohm Leak.
- 4 inches Sin. diameter Bakelite or Cardboard Tubing.
- 4 O.S.S. No. 24 D.C.C. Wire.
- 2 Ecs.
- 4 Terminals on Board.
- 1 Baseboard, 10in. x 7in. x 1/2in.
- 6 Busbars.

Is Your Problem Here?

(Continued from Page 43.)

N.W.R. (Huntor's Hill):—The Browning-Drake receiver will suit you admirably.

M.E. (Lohhardt): Reverse the primary of one transformer and the whistling will disappear.

J.B. (Yarraville, Vic.):—The wavetramp will be found in "W.W." 1/10/26. The wiring of a Burnet audio frequency transformer is similar to any other make. Decide on one terminal as the grid on the secondary. The terminal on the primary side immediately opposite is the P terminal. B+ and F—can now be determined.

E.J.M. (Armidale):—Your 'phones touched the earth, which would apply the whole of your "B" battery through your rheostat and burned out your filament at the same time, ruining your rheostat. Replace new rheostat and discard old "A" batteries, leaving only the three new ones.

A.W.M. (Murrumbidgee):—See "W.W." 23/7/26.

J.F. (—):—Build the Meinarts receiver in last week's "W.W." Your present set is not selective. Or build the 2-valve receiver in "W.W." of 19/2/26.

F.H.C. (Cessnock):—It appears that one of your transformers has broken down. If not reverse your transformer secondary leads. They are wrong.

E.W. (Innisfail, N.Q.):—This should not be necessary.

A.C. (Chatswood):—Simply connect up as you suggest. The one set of batteries being sufficient, provided you take separate connections to each unit.

K.B. (Barragatta):—This would be impracticable.

T.B. (Thallon):—Connect up according to back of panel wiring diagram.

N.S.B. (—):—See today's issue for a Neutrodyne.

M.J. (Croydon):—The best advice we can give you is just the same as the dealers have already told you—purchase a new rheostat. Nobody enters for a spare arm of rheostats. We feel sure you didn't buy your rheostat in sections, such as resistance wire, knob, spindle and arm; therefore, why expect to be able to purchase a spare arm. Rheostats are cheap enough—be fair. Reputable radio dealers—like we do—are anxious to help you.

W.P. (Brookvale):—Try it for yourself.

E.A.P. (Victoria):—Thanks for suggestion. A receiver of this type will appear shortly.

F.W.E. (Adamstown):—Wait a while. Everything will be right in time.

T.L.B. (Five Dock):—Test your fixed condensers on your first transformer, and be sure the plate pin of your first valve is making contact with the spring of the valve socket.

G.F.G. (Auburn):—Wind ten turns of No. 24 D.C.C. wire over the bottom of your variocoupler stator and join the aerial to the beginning and your earth to the end. Let the top of your coupler stator wire go to the grid of your valve and the bottom to your filament. Try reversing your aerial and earth leads on your new 10 turn coil (primary).

S.K. (Stuart Town):—The unit, which is described as "Make your Set a Super Net," is quite suitable for your present receiver. Read over the article carefully.

R.H.S. (Tamworth):—Very high and very long aerials are not advisable, as too much static is brought in. A low short aerial, irrespective of locality, is always best.

E.A.S. (Hracumbe, Q.):—A MacLaurin Tone Purifier, connected as shown in the diagram accompanying each one, will assist in reducing static. See last week's "W.W." for a 2-valve receiver.

A.B. (South Brisbane):—This is not advisable. See your radio dealer about the Flexo coupler.

"BEE-BATS"

The popular rechargeable-at-home accumulator B Battery, sold assembled in Victoria at 1/- per volt; N.S.W. and Queensland orders are sent out unassembled (assembling is a simple matter, taking half an hour), and until we arrange for Interstate agents, we will sell at:-

8 pence per volt

Order yours while this price lasts

We want to sell BEE-BATS to radio amateurs who have direct current in their homes, for they will be able to give their BEE-BATS a small charge at negligible cost and trouble every week or fortnight, and their B Battery trouble will be over.

If you know how to charge at home from A.C. you can also order BEE-BATS, and we will send you parts of a rectifier for 5/-.

Read this letter received by us:-

"Dear Mr. Wynne,

"Thank you for prompt delivery of BEE-BATS. I can now log Interstate stations that I could not get using dry B batteries; the reception is free of much of that crackling noise that I used to think was 'static'.

"I get best results by charging my BEE-BATS once a week and I estimate that this costs me about a penny.

"I am etc., W.H."

60 Volts unassembled, with instructions 40/-
80 volts, ditto, 60/-

Price includes packing
F.O.R. Geelong.

Any other voltages, 8 pence per volt. We only supply battery cases for 60 and 80 volts units.

Send your money-order direct to the factory,

E. WYNNE

6 Williams St., Geelong, Vic.
Circular on request.

Reliability in Radio

FARMER'S

Finest Wireless Accessories

ensure very best Results
under all conditions



Crystal Detectors

An efficient Crystal Detector which will give the utmost satisfaction in the Crystal Receiver. Price 2/3

"Ever-Ready" Batteries

WP40. Price	12/6
WP60. Price	18/-
XP40. Price	21/-
XP60. Price	31/6
No. 126. "C" Price	2/9



"Beede" Volt Meters

A "Beede" pocket type Volt Meter is a necessity for the owner of a wireless receiver, for with it he can at all times determine the state of his "B" Batteries. Price 4/9



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.25 MF. Price	5/9
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No set owner should be without an "Ayanbee" Hydrometer, for with it the condition of the accumulator can at once be determined. Price 4/6

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"Emmco" Transformers	Price	21/-
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Radio Crystals

"Tungstallite" Price ..	2/-
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RADIO SUPPLIES: GROUND FLOOR



A striking Emco window display.

THE ORIGIN OF S.O.S.

Although in most cases it is commonly stated that the significance of the above three letters is "Save our Souls," or "Save our Ships," this definition did not occur to the minds of the members of the Wireless Telegraphy Conference held at Berlin in 1906 when the well-known distress signal was adopted. The first suggestion that a special combination of letters should be used by any ship in need of assistance was put forward by the Italian delegates to the preliminary Wireless Conference held at Berlin in 1903. It was then proposed to adopt: S S S D D D, and instructions were to be given to all ships that, in the event of such a signal being received, telegraphic traffic should be immediately stopped. "C Q D"

The other delegates present at this conference agreed to the proposal, in principle, and the final decision was to be left to a special Conference. Shortly afterwards, however, the Marconi Co. recognised the necessity of the immediate adoption of some special signal to meet the case, and on February 1, 1904, definitely instructed their staff to use the famous C Q D, the last letter, coupled with the signal C Q, to indicate danger.

In 1906, in Berlin, the German Government suggested that ships in dis-

tress should broadcast the letters S O S, and this was immediately accepted by the Wireless Telegraphy Conference.

The letters were not chosen at random, but on account of the ease by which they could be transmitted, the simplicity of the signal presenting the least possibility of errors.

EMMCO VERNIER DIAL

We have been shown a sample of the Emco vernier dial which is manufactured by the Electricity Meter Mfg. Co. Ltd., Sydney. There are several features which recommend it especially to radio users quite aside from its excellent manufacture and appearance. The hair line adjustment is a particularly good feature since it undoubtedly allows of the most minute tuning and accurate adjustment. Of particular appeal is the "logging" window on one side of the dial which makes it possible to mark the call sign of each station in pencil so that the listener can return to any particular station immediately. The finish of the dial is particularly good and apart from its easy movement it is unquestionably an ornament to any set. The dial is manufactured both in bakelite and in metal and is obtainable with a clockwise or anti-clockwise movement.

The Advice of Experts will Assist You

to build this amazingly
Selective

2-VALVE REINARTZ DUAL CONTROL RECEIVER

described in
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1 Bakelite Panel ..	5	0	
2 Rheostats	2	1	
Battery Switch ..	2	3	
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1 .00025 Grid Con- denser & Leak ..	3	0	
2 Bakelite Valve Sockets	4	6	
1 S.C. Jack	1	0	
1 Pival 5-1 Trans- former	13	6	
1 Terminal Strip ..	2	9	
1 6" Former, 3in. in diameter	0	6	
1 lb. No. 22DCC ..	2	3	

TOTAL £2 18 7

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Mr. O. F. Mingo, managing director of Mingo's Wireless Manufacturing Ltd. Until recently Mr. Mingo was radio manager at Harringtons Ltd.

A Neutrodyne

(Continued from Page 19.)

slight re-adjustment of your condenser dials on their spindles may now be required to give the even reading.

This neutrodyne is a receiver that one will enjoy using. Static, during the summer months, may prove a nuisance, but a short aerial assists greatly in reducing this. A short is best with a neutrodyne, as it assists greatly in selectivity as well. The writer of this article uses a single wire type of aerial 30 feet long and with an average height of 28 to 30 feet. Glorious evenings have been spent at home with a neut., and it has always been a pleasure to listen. When static has been bad, the aerial is disconnected from the set altogether, leaving the earth wire only connected to the set. Another improvement recently installed is the inclusion of a 1mf. condenser right across the B battery.

WANTED.—All kinds secondhand Wireless Sets, Parts, Speakers, etc. Best prices given. JACK RAPKEN, 16 George Street West. MA 1193.



RADIO ADVENTURES.

Adventurers All.

Adventurers all — and radio is many times the life line.

From the broadcasting station 2BL, on Monday, Wednesday, and Friday of each week will be given an interesting short talk on the adventures in which Burgess Radio Batteries have participated.

These magnificent triumphs of exploration add new and inspiring pages to the world's history, and no one will deny that radio played a vital part in the success of each expedition.

It was the good fortune of the Burgess Battery Company to be called upon for equipment which, under extreme and unprecedented conditions, served faithfully and guarded and guided the lives of the daring adventurers.

Commander Byrd carried Burgess Batteries in his daring 1,500 mile dash over the Pole.

Radio Operator Waskey, of the Detroit Arctic Expedition at Point Barrow, using Burgess Batteries on both receiver and short wave transmitter was the first man to sight the dirigible, Norge, after its successful flight over the Pole, from Spitzbergen. He flashed the news to the waiting world many hours before Anauden was again seen hovering over Teller, Alaska, the landing place of the Norge.

Another famous explorer, Capt. Donald MacMillan is again using Burgess Batteries in his exploration and scientific voyage into the Arctic. Capt. Wilkins relied on them. Captain Frank Hurley used them, too. Hobbs has them in Greenland. Lieut. Hinton carried them on the Rice expedition through and over the never-before-chartered Brazilian jungles.

Only the best radio batteries—only the tried and true—such as Burgess, go along to share the glory of disaster that Fate has in store for them. The test of men and their equipment is the test of the survival of the fittest.

The Burgess Battery Company, in presenting these talks, feels a deep sense of pride in having earned, through the quality and performance of their products, the respect and friendly good will of experienced engineers, leading scientists and amateurs.

We feel we are justified in recommending Burgess Batteries to every battery user, with the assurance that their service under all conditions will

consistently prove their higher and more uniform equality.

Should there be any "listener-in" who desires further information concerning these adventures, it will be gladly furnished by the Burgess Distributors, New System Telephones Pty. Limited, 280 Castlereagh Street, Sydney. *

BOOK REVIEW.

The August number of the "Radio Mail," which has just reached us from Messrs. A. C. Cosser, contains some articles of especial interest.

A particular feature is a well-illustrated article entitled "Radio in Switzerland," while a short technical description of a two stage amplifier which may be added to a crystal set is more than interesting.

For the radio dealer, there is much that will prove of great value in the marketing of Cosser valves.

These little papers are edited most efficiently—their popularity can, perhaps, best be judged by the increasing interest of the matter contained in them.

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Trade Notes

COSSOR POINT ONE.

A distinct advance in valve design is shown in the new Cossor point one, just placed on the Australian market. The first illustration shows a section of the anode cut away in order to expose the grid and the filament. Note the Seonite insulator, which securely holds in position the grid and the anode. To all intents and purposes this insulator becomes an integral portion of the two elements—the slightest individual movement of either of them is quite impossible. Through the centre of the insulator is passed the fine wire which retains the filament in position. Thus, even the hardest shock cannot disturb the exact relative positions of the filament, grid and anode.

AMPLION DEMONSTRATOR.

Realising the difficulties the radio dealer experiences in demonstrating various types of loud speakers to the public, the well known house of Graham has placed on the market a Demonstration Panel arranged to switch into circuit any one of six loud speakers, thus enabling a quick change over from one to another. In addition, the circuit is arranged to permit of either one of two receivers being switched over to the loud speakers.

This arrangement is invaluable to the dealer who is desirous of demonstrating his different lines in a quick and simple manner.

The well known Amplion Siftron circuit is embodied in the Demonstrator and can be connected in the main circuit at will by the operation of a switch on the panel. This arrangement consists of an inductive winding and condenser of definite values, so arranged as to permit of the direct current from the plate of the valve being by-passed through the winding, at the same time checking any oscillatory currents which will pass via the condenser and loud speaker windings.

This arrangement, in addition to improving the tonal qualities, prevents demagnetisation in the event of the windings being connected the wrong way round, and reduces to a minimum the possibility of the loud speaker winding breaking down.



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Get rid of those distracting microphonic noises—prevent the danger of breakage from shock. Ask your dealer for the new improved Lotus Ruotancy Valve Holder which absorbs shock and protects your valves.

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From all Radio Dealers.

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with Loud Speaker and All Accessories, in handsome Cabinet.

PRICE, £19/10/-



"Supertone" Home Assembly Set.
3 valve £8 10 0
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With panel drilled and handsome cabinet.

Also 4 and 5 valve sets.
The best value ever offered in 3-Valve Sets
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For use in the Famous

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The Coils you will eventually buy
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A uniform output at 150 to 650 meters.
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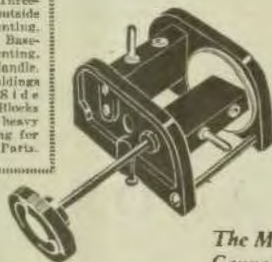
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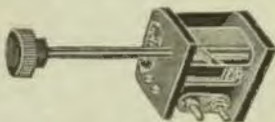
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