

WIRELESS WEEKLY

Vol. 9. No. 1.

Registered at the G.P.O., Sydney, for transmission by post as a newspaper.

Friday, Oct. 29, 1926.

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FRIDAY, OCTOBER 29, 1926.

What of Research?

IF an international radio research conference was called who could we send as Australia's official representative? If an Australian did leave, what could he contribute towards the conference? Would he have at his command authoritative information representing the work of Australian scientists, engineers and amateurs? And suppose he was asked some questions.

What is known about radio phenomena peculiar to Australia? Nothing.

Is there radio phenomena peculiar to Australia? It has not been disproved.

If the delegate was something of a diplomat he would no doubt have more evasive answers, but they would not help the conference nor Australian broadcasting. He would have to face the fact that all we know about radio has been obtained from countries on the other side of the world. We have let England and America do our research work for us, and as a result, are out of step with the latest radio developments.

Because of the geographical position of our broadcasting stations, and because of the geological formation of Australia, there is probably information here which, in conjunction with the

discoveries of other countries, would solve many of the World's radio problems.

There is a pressing need for a board of radio research and review composed of scientific men devoting themselves to the study of radio problems in Australia. Officially recognised by the Government and the broadcasting companies, and uninfluenced by the trade, they could do immense good to broadcasting here.

There are a hundred avenues of work to begin upon. A thorough investigation of fading phenomena is needed. One broadcasting station has led the way. The static problem calls for attention, and puzzled listeners are demanding an explanation of "dead" areas where reception is always bad. To such a body would the broadcasting companies turn for advice on the wavelength question, on interference, on radiating receivers.

There should be no difficulty in persuading Australia's most distinguished scientists to join such a board. Whether membership should be honorary or not is a matter for later consideration. In any case, the finance of the board should be drawn from the broadcast revenue.

Our cover picture this week is Alfred O'Shea, acknowledged Australia's greatest tenor. He was heard from 2FC during the October Bride festival yesterday.

Between You and Me and the Microphone

AN AMERICAN professor at KGO is going to talk on the chief animals that are hunted in his country. Here, of course, they are known as taxpayers.

THERE IS a probability of a shortage of jazz musicians for broadcasting. This should be good news for unemployed riveters, tinplate workers and other noise merchants.

WITHIN the last month the number of licensed listeners in N.S.W. has increased by more than 4,000, making a total of 44,962. Broadcasting in New South Wales seems to have entered upon a steady boom following on the reduction of the wavelength of 2FC.

TO KEEP the 3LO control engineer in touch with artists in the new studio, one floor above him, an electric sign has been installed:—"Come nearer," "Get further away," it reads, as the case may require. It would be possible for an operator to chase a bad singer right out of the studio by flashing the latter sign at him long enough.

"Why do you call this a railway radio?"

"Because it whistles at every station."

DETAILED to describe from the top of a building the busy life of Sydney, at noon, a 2FC announcer recently faced dilemma. The microphone was placed on the top floor of a building, where the announcer, instead of having an uninterrupted view of Sydney's busy streets, was faced with four blank walls. However, rising to the occasion, he gave a most graphic fifteen-minute description of Sydney's busy life, drawing on his imagination for what unfortunately, the "view" withheld from him.

S. W. SMITS, listening-in at East Transvaal, South Africa, heard the tiny peep of a short-wave radio station, one night last April. Half way round the world, members of the Wilkins Expedition, mashing their way from Fairbanks to Point Barrow, had stopped to camp for the night. The radio operator had set up his little portable B battery powered transmitter, in order to report the day's progress to expedition headquarters at Fairbanks and Point Barrow, not more than 250 miles distant. In spite of minute power and distance, Mr. Smits overheard the little transmitter at the other end of the world.

Conducted by
R. E. CORDER

SUMMER STATIC; New South Wales.

THIS year is the twenty-fifth anniversary of the first wireless signal sent across the Atlantic.

2GB is the official call sign (or name) of the new Theosophical broadcasting station at Sydney, but a listener at South Richmond, Victoria, writing to the manager of the station, suggests that the call sign be given occasionally as 2G Beer, because occasionally as 2G Beer, because 2GB sounds too much like 2GD.



OUR FRIEND, the oscillating valve, will look less cheerful now that the non-radiating receiver is made possible by the smaller wave length range. He should have less to sing and whistle about, with Browning Drakes and Neutrodynes in popular favour.

NEWS that he had inherited a fortune of 24,000,000 francs came to Roger Matter, a French wireless operator, while he sat at his instruments recently. He declares that, at the end of his service, he will devote himself and his fortune to wireless research.

ACCORDING to Madame Gallucci, broadcasting is in such an undeveloped condition that it cannot do justice to the voice of a prima donna. She is reported as having stated she did not want her voice affected by atmospherics, and expressed her surprise that any great artistes should have consented to risk the dangers of broadcasting their voices by means of an instrument that "is in the experimental stage."

AN EXPERT at 3AR is going to lecture on "How we get our food." If he gets it from the same restaurant as we do, he will get it cold.

ALTHOUGH there is considerable interest in broadcasting in Spain 95 per cent. of the receiving sets in that country are said to be imported.

CZECHO-SLOVAKIA has just held its Fourth Radio Fair at Prague. At the end of June, 108,844 wireless receiving licenses had been issued in Czecho-Slovakia, including 74,008 at Prague, 23,522 at Brno, 5,218 at Pardubice, and 3,017 at Bratislava.

IN A weak moment at the conclusion of the last talk by Captain Frank Hurley, 2FC announced that if listeners would drop a line to the studio, a photograph of Captain Hurley would be sent to them until the supply was exhausted. More than 1,000 asked for photographs.

CABLES from London report that a chemist at Birmingham sold a man a box of strychnine pills in error. He thought about it during the night but could not find out the man's address to warn him. In desperation he rushed to a broadcasting station from which a warning was sent out. Luckily, the pill buyer, who was a regular listener, heard the warning and took the pills back to the chemist.

SAID a man to a friend, "When I listen,

"I hear splutters and crackles and hiss'n'."

Said his friend, "Not surprised, it is as I surmised,

Your 'phone cords, I find, there's a dis' in."

THE LOSSES of the Johannesburg radio station and the other two stations in the Union of South Africa have become so burdensome, and "pirating" so widespread, that a special inspector has just been appointed and other methods devised to enforce more strictly the provisions of the Radio Act.

IT IS estimated locally that there are upward of 20,000 unlicensed sets in use in Johannesburg and near-by centres. The radio tariff is £1/15/- a year for subscribers within 50 miles of the central station, £1/13/- if between 50 and 100 miles, 15/- between 100 and 250 miles, and 7/6 if beyond this area. The greatest number of unlicensed sets are said to be within the 50-mile radius. The deficit of the local station last year totalled £4,000.

Radio Cinema will follow Talking Movies

Don Juan, a Lionel Barrymore picture in which the characters speak, has created a sensation in New York. It is predicted that the vitaphone enabling perfect synchronization between sound and picture will revolutionise the screen, culminating in the broadcast cinema.

TO see Frank Hurley on the screen before you and hear him tell of his experiences while his lips form the very words he is saying; to hear Alfred O'Shea sing, and to watch every expression of emotion in his face is thrilling to say the least. And yet this is now possible, for the talking movies are an accomplished fact. They are truly the day's new marvel.

Despite the fact that it has been known for some time that work was being carried on to perfect the apparatus which would synchronize speech with moving images on the screen, the announcement that the Western Electric Company, in conjunction with the Warner Bros. Pictures, have brought this idea to a commercially successful stage will doubtless come as a surprise. These scientific developments will revolutionize the presentation of motion pictures in the largest metropolitan theatres, as well as the smallest theatres in the little towns.

What it Means.

This invention, the result of years of research in the Bell Telephone laboratories, brings to audiences in every corner of the world the music of the greatest symphony orchestras and the vocal entertainment of the most popular stars of the operatic, vaudeville and theatrical fields. The system is available to all motion picture producers for synchronization for the presentation of any film that they produce. Its use is not confined by any means to the presentation of pictures. It will be available for use in the educational, commercial, and religious fields as well as that of amusement.

This system is considered by scien-

DE FOREST ON THE VITAPHONE

FOR some time I have been fairly familiar with the methods used in recording and reproducing the phonograph records used with the Vitaphone and in the methods of synchronizing both to the camera and projection machine in the theatre. I have witnessed several public exhibitions and can say without hesitation that on the whole they represent by far the nearest approach to perfection of recording and reproducing voice and music which has ever been reached in the phonograph art. The effects which have been obtained in recording a large orchestra are truly magnificent. The Vitaphone represents the culmination of a long series of endeavours on the part of many to synchronize the phonograph with motion picture machine, dating back as far as the earliest work of Edison in this direction. Every step of the process has been engineered by the Western Electric experts in a masterly manner.

It is a distinct advance not only in the motion picture field but in that of voice communication as well. Experiments which proved the practicability of the invention have been conducted for many months at the studio and laboratories of Warner Brothers. The invention will make it possible for every performance in a motion picture theatre to have full orchestration accompaniment to the picture, regardless of the size or character of the house. A corporation has been formed to record the synchronization of music for motion picture producers all over the world and to distribute the invention among theatre owners.

The apparatus by which combined films and sound records will be reproduced in motion picture theatres is no more complicated from the standpoint of operation than an ordinary motion picture projector. No special skill or technique are required of the operator. If the film breaks there is no interference with the accuracy of synchronization. The sound record is not controlled by the film itself.

The system represents successful combination and conversion to motion picture use of three major research developments.

The first of these is the electrical system of recording. This method employs a high quality microphone of an improved type, electrical amplifying apparatus and a record cutting mechanism. Recording may be carried on at considerable distance from the source of sound so that the actors may be grouped naturally in any scene and need not be crowded before a microphone.

The second essential feature is a remarkable electrical producer which converts the movements of a needle in the grooves of a sound record into electrical vibrations. The electrical currents from this device pass into an amplifier and then operate a high quality loud speaker of an improved type, capable of filling practically any motion picture auditorium.

Public Address System.

The third development is the link between the reproducer and the audience in a theatre. An "adaptation" of the public address system makes it possible to pick up electrical vibrations from the reproducer, amplify them, and by means of properly located loud speaking telephones transform them into sound. The loudness is so regulated as to give the illusion that the source is the actors whose pictures appear on the screen. In the case of musical programmes, a specially constructed loud speaking telephone insures the correct volume and naturalness.

The combination of those three factors in a complete and effective system required the development of mechanism for keeping the film and sound producing instrument in absolute synchronism both during recording and during reproduction.

It was essential that the system be capable of easy operation in a theatre, without requiring special skill. To meet these requirements, both the film and the sound device are set in their respective machines with a given marker in the proper place, and the two machines are then speeded up from rest, together, by the simple device of having them coupled to the opposite ends of the same motor.

Always in Unison.

The mechanism for taking the pictures with these markers on the original film and record could not be accomplished in so simple a manner, since the camera had to be left free to be moved about on its tripod to change the angle of view. In this case two motors are used, one to drive the camera and one to drive the sound recording machine. An ingenious electrical gearing device has been developed whereby the two machines can be started from rest and maintained in synchronism not only after they are up to speed but during the period while they are speeding up.

It was necessary in developing the system to perfect a method of making sound records which will run at least fifteen minutes without distortions either of the high or of the low notes. Through the use of reproducing machines alternately, interruption in the accompaniment will be avoided. Reproduction in the theatre preserves the correct relationship of each sound to the others, the intensity varying in the same proportion as in the enacted scene or musical programme.

When the first picture, "Don Juan," employing the Vitaphone method of synchronising speech and pictures was shown in New York, it created a sensation.

It requires little imagination to realise the possibilities of this development of the communication engineers' art which can bring to music-hungry audiences even in small towns, great vocal and instrumental artists, not in person actually, but in a form which most nearly approximates a personal appearance. In addition, the original musical settings of feature films which have hitherto been possible only in large

cities where adequate orchestras can be organised, will be retained for presentation through the medium of the Vitaphone.

The achievement of successful talking moving pictures exemplified in the brilliant performance of the Vitaphone marks the attainment of a goal which men have long sought for.

As the several arts of the telephone, the phonograph and the motion picture have advanced and developed, many men who have followed Bell and Edison in the field of speech transmission have striven to realise this ideal form of entertainment and historical recording. Thousands of others witnessing the remarkable achievements of the individual arts in their separate fields have speculated as to why the successful talking motion picture should be so long delayed of realisation.

Dr. Lee De Forest, who was present at the release of the picture, expressed his opinion as follows:—

"To say that the audiences who attended Vitaphone premiere performances at Warner Theatre were thrilled and electrified would be but trite reiteration.

Better than Phonograph.

"I have been spending the last six years almost entirely on the problem of recording sound photographically upon motion picture film and reproducing same in connection with the motion picture. In solving this problem, we did not have the background of intensive development of the phonograph art to aid us. The difficulties encountered have been largely of a different and novel nature. We have, however, gone far enough to prove that the Phonofilm method is capable of every perfection which has been achieved in the latest development of the phonograph art. I can in all candour go further and state that the best Phonofilm productions have revealed a nearer approach to complete naturalness in tone reproduction, especially as regards certain instruments and voice effects, than the best of the phonograph reproduction. I do not think this statement should cause surprise among scientists who have given the matter of the principles involved in the two methods—phono-

graph and phonofilm—careful consideration.

"In the first place, the phonofilm method operates almost entirely through inertialess matter. The mechanical motions involved in recording and reproducing are limited to the diaphragm of the recording microphone, and to the mechanism of the loud speaker reproducers. The rest of the process is electrical, electronic, light, or chemical. It seems reasonable to expect that a nearer approach to absolute perfection will be obtained along these lines than when working with mechanical devices for wax cutting, shellac, stamping and needle tracking. And I repeat that the best results phonofilm have thus far revealed demonstrate that the above conclusion is soundly based on facts.

Synchronization Absolute.

"From a manipulative standpoint there can be little question that the phonofilm method lends itself much more easily to the requirements of the motion picture art than does the phonograph. In the first place, synchronization is invariable and absolute. The apparatus both for recording and for projecting is therefore inherently more simple. The motion picture limitations of phonofilm are but little greater than for the silent picture. With phonofilm we can cut in and out long-shots to close-ups, eliminate undesirable portions of a picture or insert others, titles, extraneous matter which may be later desired, etc., etc., with almost as much freedom as when the voice itself is not photographed upon the film. Then, of course, it is obvious that if the film breaks, the torn portion can be cut out without in any way affecting synchronism thereafter.

"The operator has only one medium to think about—the single standard celluloid film. And I believe also that the apparatus which the operator must manipulate and care for is necessarily simpler with Phonofilm. It is undeniably very much cheaper.

"From strictly commercial considerations, therefore, having in mind the practical and money-making side

(Continued on Page 49.)

Wireless Alters Fisherman's Luck

Because the fishing Company's Agent can communicate with trawlers at sea Radio has revolutionized the industry

THERE was a time, many years ago, when poets wrote about fishermen. Romance and risk entered daily into a fisherman's life, and stoical patience and often tragedy into that of his wife.

But a material age came, and fishing became an industry. Romance fled, and modern business demanded the elimination of risk.

Instead of a white sailed fishing fleet and the fisherman who proudly owned his own yawl, there appeared on the seas a business-like trawler, with its crew of 11, systematically sweeping the fishing grounds.

Once each three days the little vessels returned to port, placing their catch on the market. Sometimes they were lucky and struck a shoal, filling their ice-packed holds with all they could carry, and returned earlier than expected. Sometimes

they were unlucky, and returned with little or no fish. Gluts and falls occurred with equal frequency on the market. The unexpected arrival of a laden trawler followed by the regular vessel would upset the market, for fish, unlike fruit and vegetables, cannot be kept for the next market.



Typical members of the trawler's crew. There are eleven, including the cook. All assist in the actual fishing operations, except the engineering staff. (Below): The catch drawn up.



(Top right): The bridge of the fishing trawler. The powerful steam winches for drawing in the net are seen below. (Above): All manner of animals are caught in the net. This is a stingray.

heard the stations communicate with one another:

"2DU, 2DU, I have something for you."

Or, "If you have anything come in at once," and the answer:

"I have nothing for you."

Thus the fishing agent has control of the market. He knows exactly what fish his boats have caught, and what is on the way to port. He can take orders, knowing that they will be executed.

The fishing industry now runs as smoothly as any other. At first the companies were handicapped through having to employ a wireless operator, but the skippers of the trawlers entered the Marconi course, and now operate their own transmitter and receiver.

Despite the highly commercialised side of the fishing industry there is still another intensely interesting side to the newcomers, for Father Neptune holds many secrets.

Likewise a vessel lightly laden with fish would throw the market into confusion, even though another trawler with a full hold might be waiting its allotted three days before entering port. Orders could not be taken before the arrival of the fish.

It remained for science, at the command of modern business, to eliminate the uncertainty of the fishing industry. Amalgamated Wireless were called upon to instal radio receiving and transmitting sets on all traw-

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(Continued on Page 53.)



Exciting the Listener's Imagination

The secrets of the broadcasting studio are revealed in this article written by a visitor to 2FC who helped to produce the effects transmitted during Capt. Hurley's talks.

By Will Lambert

I WAS a whisky bottle. I was also a thunder, a duck, a frog, a tom-tom beater, a night bird, a blind native, and a Jew's harpist.

All within an hour, it was an amazing, breath-taking, experience for a mild technical man, revealing powers which I could never have believed I possessed. It all happened in the 2FC studio during one of Captain Frank Hurley's stories of adventure in Papuan.

Visiting the station as an unsuspecting speaker on a technical subject I was hailed with a cheery greeting and pressed into service as an assistant with the effects. Those folks who listened in that night will remember the entrancing story of adventure told by the well known explorer, and they will also recollect that his story was attended with effects which added zest and which I have since understood were well received.

I am going to let you in on a secret; I am going to tell you how these effects are produced. I am going to tell you how 2FC made the sea crash on the beach, how the windstorm was created, how the thunder was made to roar and also of the many other interesting noises sounding so natural, were rendered.

It required no second invitation from the studio manager for me to enter and help the work behind the scenes. The novelty of the idea was upon me, and I strolled in boldly.

I stood within *The Presence*. It was there alright, on a stand all to itself—this god—this microphone—which registers all sounds from heart beats to cannonading. Not a sound did it utter itself, not a sound did it miss. Ah! what a tale could it tell if Mike could only speak.

But Mike was not the only occupant of this room—there were other things

equally curious, yet not so impressive. In one corner stood a trestle supporting an enclosed drum similar but smaller than those drums frequently seen in the streets, and from which roll the electric cables. By the construction of this studio drum it seemed that it was intended to revolve, and I was debating this point in my mind when my attraction was taken by a similarly sized trestle, around which, extending from the cross piece at the top almost to the floor, was an old piece of carpet runner with the well worn pattern outside. Gifted with an insatiable curiosity, I tip-toed across to examine this strange thing, and I found that inside the carpet were two rollers, the smaller geared to the larger one at the bottom, this larger one having eight or nine puddles along its length just resting on the carpet. A handle with which to turn the rollers or beaters was protruding from the edge. Peculiar thing, indeed! An organ and a piano were not far away, and a table on which were some strange things indeed took my attention.

A popgun, a bottle containing some liquid, a glass, an electric fan and some cardboard, a Jew's harp and a few strips of calico—surely a motley collection for a broadcasting station. Scattered around the floor were several island Tom Toms, some decorated with shells and others just plain. The emblems of South Sea romance mingled with prosaic commercialism. Strange indeed.

As I was pondering these things over in my mind a buzzer rang, a scatter of hurried feet, and men rushed to different stations. The round drum and the carpet beater each was manned, someone rushed to the organ, another took a seat in front of the piano, others took charge of a Tom Tom each, the electric fan

was confronted by an assistant who held the piece of cardboard in his hand and wearing a menacing look, a concertina player appeared as if from nowhere, carrying his instrument. All stood quietly for a few moments, while the familiar voice of the announcer with his "2FC Station, Farmer's Broadcasting Service," broke the stillness of the room.

Presently Captain Hurley took charge of the microphone. He gave a short resume of his previous night's story, and started off that evening's story by recounting a trip in an old worn out aeroplane across to Thursday Island. The electric fan was turned on, and a man with the cardboard pressed it to the revolving blades and listeners heard the roar of the aeroplane engine while the lecturer spoke. A rainstorm was encountered on the way across, and the drum was revolved very slowly, and in revolving several thousands of small shot rolled inside, giving an excellent effect of soft pattering rain. Presently, the old bus landed on a beach and the drum was rocked violently and the crashing of the surf on the beach was portrayed.

Later on in the story the explorers encountered a swamp, and all present set about imitating the sounds of frogs. Many and varied were the different weird Quark, Quark bur Quark noises all producing a realistic effect. A heavy thunder, wind and rain storm held up the Captain's party, and the bass notes of the organ and the piano realistically produced thunder while our old friend the "rain and sea drum" worked overtime. The handle of the carpet beater was turned vigorously and the wind storm was created. So realistic was the effect that one unconsciously turned up one's coat collar and thought of water-

(Continued on Page 15.)

The 'Bankers'
Operatic
Society Ballet
for "Our
Miss Gibbs"



THE opera, "Our Miss Gibbs," which was so popular in Sydney 17 years ago, is to be broadcast on Melbourne Cup night by the Sydney Station 2FC. The opera will be performed by the Bankers' Operatic Society at the Conservatorium Hall, and the whole of it will be given by radio for the entertainment of listeners. It has not been the practice in the past for broadcasting stations to give the whole of a play on one evening, partly because listeners have shown a preference for a change of programme, and partly (it is understood) because of reluctance on the part of the holders of the copyrights to release a whole play at one performance.

The part of Mary Gibbs, the lovable girl from Yorkshire, who obtains a position in Harrod's Stores in London, will be taken by Miss Cecily Audibert, who has been chosen by the Society out of 52 applicants for the part. Miss Audibert is an ideal type and the possessor of a soprano voice of rare quality. She is a pupil of the Andrew McCunn School of Singing and Dramatic Art. Miss Enid Hayton, as Lottie Far-

"Our Miss Gibbs"

quhar, Miss "Jacky" Miley, as the aristocratic duchess, Miss Phyl Basclein, as Madame Jeanne, the French-Scottish modiste, and Miss Eleanor Cross, as Lady Betty, form a cast of girls whom it would be impossible to improve upon at the present time.

Mr. William Howard has not had a



Miss Cecily Audibert, who will take the part of Miss Gibbs in the popular opera to be broadcast from the Conservatorium by 2FC, on Melbourne Cup night.

part in his long career as an entertainer which has suited him better than the part of "The Hon. Hughie Pierrepoint," and Mr. Herb McDonald as "Slithers, the light fingered gent," who will persist in calling Tim (Mr. Jack Roff) "Cocky-my-boy," will linger in the minds of the audience long after the play has again been shelved.

The musical comedy was originally introduced to the public of Australia by J. C. Willimsson Ltd., with Blanche Browne in the name role; Bertie Wright as Tim, and Mr. Langford Kirby (afterwards Mr. Leslie Holland) as Hughie. Included in the cast also were C. R. Bantock, Fred. Leslie, Frank Stirling, Andrew Higginson, and Alma Barber, Nellie Wilson, Fitzmaurice Gill and Florence Vie.

So popular was the play that in every capital in Australia it had a record run to capacity houses. Included in the minor roles were also Misses Ivy Schilling and Vera Pearce, who, at that time, were winners of the Siren of the Surf Competition, and the Most Beautiful Girl Competition, respectively.



Kerwin Maegraith visited 3LO with his sketch book last week. He drew one member of the staff in between*trips to the microphone, but forgot to ask his name. He is seen in the lower right hand corner. Can you guess who it is?

Strays from the Studios

*News and Notes from the Studio
about programmes to be broadcast*

SOLOS by John Lemmone will be included in a recital by members of the Sydney Flute Club.

ON FRIDAY, October 29, the Royal Scotch Kilties will present a special Halloween programme through 2FC. On that evening the well-known comedian, Mr. Herbert Walton, will appear at the studio.

AMONG other artists, on Saturday, October 30, 2BL will feature Broadcasters' Brass Quartette, comprising soprano and tenor cornets, trombone and euphonium. These clever instrumentalists promise a programme of exceptional merit.

"SAMBO" and "Pete," the two popular coon impersonators at 4QG, have been added permanently to the ranks of the bedtime story-tellers. In future, they will have the Thursday night bedtime story session at 4QG to themselves.



Mr. Sidney Laue,
General Manager of 7ZL.

MR. STEPHEN McDONALD, 3AR's new announcer, is conducting a series of lectures on voice production for that station.

ONCE a month, Mr. Eric John, Brisbane's gifted pianist, will organise a feature entertainment from 4QG. These will include "A Night for the Old Folks at Home," "A Musical Soirée at the Court of King Louis the Sixteenth," and "An Eastern Night."

MOST people will find it hard to realise that twenty years have gone by since "Our Miss Gibbs" took Australia by storm. The Bankers' Operatic Society have chosen "Our Miss Gibbs" for their next production, and 2FC will, on Melbourne Cup night, Tuesday, November 2, give over the whole night to this production.

OTHER comic operas in course of preparation for broadcasting include Katinka, by the Roseville Musical Society, on November 10 and 11; The Orchid, by the Kuring-gai Operatic Society, on November 24 and 25; High Jinks, by the Parramatta Operatic Society, on November 27 and December 1; and Very Good Eddie, by the Railway and Tramway Institute, on Saturday, December 4.

2BL HAS framed a new policy for evening programmes. As far as possible all lectures and items involving speeches will be cut down to provide a complete entertainment of musical items. A number of old artistes who have not been heard in programmes for some considerable time have been re-engaged, and new artistes are being introduced for the listening-in public. These include Mr. Peter Sutherland (baritone), Mr. Herbert Hinchcliffe (baritone), Mr. William Everard (tenor), Mr. Tom Angus (comedian), Miss Hilda Walker (soprano), Miss Elsie Findlay (soprano), and Miss C. L. Robinson (elocutionist).



The Sandman and his mouth organ. A 4QG favorite.

EX-AMATEUR tennis champion of Victoria, Mr. S. P. England, will begin a series of tennis lectures at 3AR shortly.

ON SUNDAY, October 31, the religious services to be broadcast by 2BL cover a wide range. The morning services will be from Saint Jude's Church of England, Randwick. The afternoon service will be from the First Church of Christ, Scientist, while the night service will be from the Palmer Street Presbyterian Church.

THE November programmes from 4QG will contain the names of many artistes who have not yet made their appearance before the microphone. Included in the programme are: The Francis Sisters (Hawaiian entertainers), Mr. G. L. Horn (baritone), The Studio Instrumental Quartette (piano, violin, cornet, and flute), Mr. A. W. Crane (baritone), Mr. F. Bowers (cornet), Mr. J. D. Abrahams (baritone), Miss Alice Gill (contralto), Miss Beatrice Pugh (soprano), Mrs. R. C. Henley (soprano), The Piccadilly Orchestra, The Jose Sisters (Music Novelty Act), Mr. J. Newton (bass), Miss Fonda Ingram (soprano), Mr. W. May (tenor), Mr. J. Watson (bass), Miss Donna Toppin (elocutionist), The West End Salvation Army Silver Band, and the pupils of Miss Florence Makin.

Jottings from the 3LO Studios

By "Hello"

I HAVE noted an interesting development of broadcasting in Holland. It is proposed there to use the telephone service to carry the broadcast programmes into every home that has the telephone. An ingenious device has been perfected, by which, when a telephone is left off the hook, the programmes come through with loud speaker strength, and are cut off automatically whenever anyone calls the particular number. By this means the telephone service is not interfered with.

I don't know how this would act here, when the matter of license fees has to be considered. The P.M.G. might have to make a flat rate for broadcasting, in addition to that now collected for the use of the telephone itself. Subscribers might loathe music with heart-felt hatred, but would still have to pay for the privilege of listening to it, since there would be no way of finding out whether he were "pinching" the service or not.

On the whole, I am inclined to think that telephone broadcasting would create more problems than it would solve. I have yet to find a better system than that under which 3LO operates.

By the way, a man in the lonely Malloo has written to say that he is on a party line, and frequently gives his friends on the same line a treat by ringing them up, and having opened their lines places the loud speaker of his wireless as near the mouthpiece as possible. Splendid concerts from 3LO are enjoyed by them all from the one set. He writes, however, that he has been told the practice renders him liable to a heavy penalty from the Department. I can find nothing in the regulations against it, but I suppose one can be sure that if a practice is enjoyable there must be some concealed kick lying in wait for those daring enough to have a good time from their own invention.

I was interested to hear a new speaker on the air a week or so ago.

This was Mr. Theodore Fink, of whom I wrote in earlier notes. Mr. Fink, spoke of 66 years of Victorian history, and I happened to be listening



Miss Estelle Mlang, whose voice, flexible and sweet and with a high soprano range, has been heard regularly from 3LO.

to him in a friend's house. The friend knew nothing of Mr. Fink save what all the world knows, and he listened to the rich, fruity tones with a chuckle in them as though he hardly knew what to make of him. It was a new experience in broadcasting, for there was no evidence that the speaker was reading his lecture. He seemed to be speaking impromptu, and there is a world of difference between the two methods. One is spontaneous; thought comes easily, and sentences may trip a bit, but they ring true. It is as though the speaker were actually chatting in the room. The minutes succeeded each other, and we chuckled when Mr. Fink chuckled, and grinned at his stories of the "roaring fifties." We were astonished when we found that the talk had lasted nearly three-quarters of an hour. With calm nonchalance this elderly historian had pinched over a quarter of an hour's

extra time, and thrown 3LO's programme out of gear. Now 3LO prides itself above all Australian stations on keeping an exact schedule and I could just imagine the announcer and the studio manager dancing with impatience as the stories went on and on. They might have cut him off, but their hearts smote them. Besides it was topping stuff, so they let him be. It is rather a feather in the cap of 3LO to have persuaded this doughty veteran to give advance information of a period he is, I believe about to put into a book of memoirs. It was the broadcasting invitation that turned his mind to this possibility, and the fascination of digging among his buried memories was so great that I have been told he means to go on with the healthy exercise, and publish the results.

We are getting so used to conferences on every conceivable topic that it is surprising that there has not been a conference on broadcasting called in Australia. There are several interesting questions that would be all the better for a little ventilation and light. True, there have been sectional gatherings, like that which met to discuss the fees demanded by the Performing Rights Association, but a week of general conference, such as that held by Science Congresses, by doctors, by commercial travellers, by Empire Parliamentarians, would bring to solution a number of problems. It would serve, too, to co-ordinate interests, to remove misunderstandings, and be mutually beneficial. Such a conference might be made an annual affair. A company of the importance and standing of 3LO could easily organise such a meeting. It would be a wide advertisement of the value of wireless, and would give some indication to the careless of the tremendous benefits accruing everywhere from the services rendered by the broadcasting companies. How about it, Major Conder.

One of these benefits is being exploited much more in England than

in Australia, and such a conference as I am suggesting which would have delegates from educational bodies, would do much to bring about an extension of the idea to these shores. This is the use of wireless in the schools. Of course, 3LO has arranged many educational talks from men of the highest standing, but in England they go further and have a lesson hour in which teachers of standing broadcast talks on such things as nature study, geography, popular science, and the like.

Australia has frequently experienced a shortage of teachers. In Melbourne, it has been shown that too large classes are under the care of single teachers. This shortage could be cheaply compensated for, if at a definite time each week a broadcaster of proven skill and ability spoke to whole classes on special subjects. It is well known that there is no better way of learning foreign languages than hearing them actually spoken by natives. I have observed that in our schools foreign languages are the worst taught of all subjects.



Mr. Frederick Chapman, A.I.S., F.R.M.S., who has delivered a long series of lectures on Geology from 3LO.

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BURGESS RADIO BATTERIES



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(Continued from Page 8.)

proofs and shelter. The storm over the raconteur's party sought comfort in the whisky bottle. The pop-gun gave the effect of the cork pulling, and some one poured from the bottle. The gurgling of an emptying bottle made me feel thirsty, but, alas, the liquid was not of the right colour. I thirsted with pleasure.

Evidently this was a time for rejoicing, as the night birds warbled their greeting to the calm. It so happened that I can mimic many birds, so my services were availed of once more. The concertina player waved his instrument in the air, playing the same tunes as a member of the expedition, and all was joy in the camp.

The aeroplane set off again, the fan was set in motion only to cease when the party had landed near a farmyard. Someone whispered "cow" to the person next to me, "Duck" I was told, "Dog" the next man, "Hen" to a big burly fellow. This someone seemed to be insulting, but still we all understood when a signal from the story-teller released a whole live farmyard of sounds. The rooster crowed, the dog barked, the hens clucked and I "quacked" myself hoarse—all the sounds of the farmyard which were heard on your loud speaker.

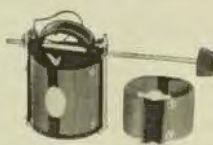
Later a native village was entered, and as one old blind native passed away his time producing music from a bamboo strip the Jew's harp was passed to me, and the jabbering of the natives were taken up by all inside the studio. A native song was sung—at least I was led to believe it was a song, although it sounded more like a funeral dirge. More flying, more storms, more rain, a branch of a tree falling—tearing cadico rendering this—and encounter with hostile natives. A warning rifle shot—two pieces of wood clapped together, a beating of Tom Toms, further adventures of a similar nature, and back to Aussie again to the strains of "Home, Sweet Home" on the concertina.

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The "Quaker" .0005	0	12	6	Ux Sockets—Radion low loss	0	3	9
Loss Loss Condensers—				Porcelain Sockets— H. & H., for 201A			
The "Certified" .0005	0	12	0	Valves	0	4	0
The "Aircraft" (brass plates) .0005	0	12	6	Electron Valves— Type 201A, .25 amp.	0	5	0
Variable Condensers, with brown ends—				Radex Valves— .06 Type, in Standard			
.001, 10/9; .0005	0	8	6	199 or UX base	0	6	9
Dials, for Variable Condensers—				Radex Valves— .25 type, 201A	0	8	9
3in., Black	0	1	6	Radion Tubing— polished, 3in. dia., for			
4in. Black or Mahogany	0	2	4	winding coils, per inch	0	0	10
4in. Black Bakelite de Luxe	0	3	9	Bakelite Panelling— 3in., cut to size,			
Slow Motion Vernier Dials—				polished both sides; per sq. inch ..	0	0	04
The "Walbert Universnier"	0	9	0	Ebonite Panelling— 3/16, cut to size,			
The "Emmco," bakelite	0	9	0	per sq. inch	0	0	04
The "Emmco," black metal	0	6	9	Fixed Condensers— Mica insulation			
The "Pilot Kilograd," black bakelite	0	7	6	.0001, .00025, .001, .002	0	1	6
The "Mydar Accuratone," with log-				Grid Condensers— Mica insulation,			
ging window	0	10	11	.00025, with leak clips	0	1	9
"Sterling" Variable Condensers—				Grid Leaks— Ajax, $\frac{1}{2}$ to $\frac{3}{4}$ megohms ..	0	1	0
Brass Plates, .00025	0	13	6	Terminals— Nickel plated, each, 2d. and	0	0	3
"Crescent" Audio Transformers—				Binding Posts— Engraved sets on cards	0	1	9
6 to 1, or 3 $\frac{1}{2}$ to 1	0	13	6	Terminal Boards— Engraved with 7			
Ediswan Transformers—				posts	0	2	6
As used in the W.W. Browning Drake	0	13	6	"C" Batteries— Volton or Ever-Ready,			
Browning Drake Kits—				44 volts	0	2	9
The "Airzone," with blue print ..	1	5	0	"B" Batteries— Ever-Ready 30v., 9/6;			
Neurodyne Kits—				42v., 12/6; 60v.	0	18	0
The "Airzone," with blue print ..	1	5	0	Cone Speakers— The wonderful Far-			
Neutralising Condensers— "Renrade"	0	3	0	rand Perfect Tone	4	0	0
Sliding type, 3/6; Pilot, 5/9; Walbert	0	7	3	Brown's Speakers— £4/2/6 and	2	0	0
Midget Low Loss Condensers, 5 plates	0	3	0	Amplion Speakers— 25/-, 60/-, 75/- ..	6	10	0
Battery Switches—				Sterling Speakers— Dinkie, 38/6; Baby	3	7	9
Ajax, 1/8; Tiffany, 1/9; Saturn ..	0	3	0	Busbar— Tinned copper, per dozen 24			
Earthing Switches, SPDT, porcelain	0	2	0	inch lengths, square, 10d.; round ..	0	0	11
Aerial Wire, per 100ft—				Sub-Panel Brackets— "Benjamin," per			
7/22, enamelled 4/9; 3/20 bare ..	0	2	6	pair	0	4	6
Loop Wire, per 100ft—				Vernier Adjusters— Friction type ..	0	1	2
50 strands, phosphor bronze	0	3	0	Jacks— Double circuit fantail, 2/4; non-			
Rheostats— Ajax, 30 or 6 ohms	0	2	1	solder	0	2	6
Airzone, 2/6; De Jur	0	3	9	Jacks— Double circuit fantail, 1/9; non-			
Super Rheostats—				solder	0	4	3
Ajax, wire wound, 30 ohms	0	3	6	Spring Aerials— Fine for indoor use	0	5	9
Potentiometers— Ajax, 400 ohms ..	0	3	0	Phone Plugs— Double type	0	1	9

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The Old Reliable



What receiver has served listeners-in more faithfully than the 3-valve? Constructional data for this set is given below. By substituting a vario-coupler for plug-in honeycomb coils and other improvements it is brought up-to-date.

THE title of this article is most appropriate. Who is there to-day who can deny that the good old three coil three valve receiver is unreliable? It tends to overcome the interference problem inasmuch as it has a loosely coupled aerial coil which is a step in the right direction as far as selectivity is concerned. As is explained in another article in this week's issue, many owners of two coil or PI sets are chafing under the interference problem now that 2FC has come down in wavelength. Here is a means whereby much interference may be overcome, assuring of selective results which is the aim and object of every radio man.

The circuit employed is well known to most and invariably has taken the form of honeycomb coils. This time a vario coupler serves the purpose admirably, and a vario coupler assembly set is cheap, and is easily wound. Although this is so, it doesn't follow that this receiver is not as efficient as the honeycomb coil type; rather is the boot on the other foot. Mind you, it is not suggested that honeycomb coils are not good—they are, and they have their uses, but for our purpose this week we are going to forget them.

No doubt you will ask what is the feature of this receiver. Well, it mainly is ease of control and this must be admitted to be an outstanding feature. When one recalls the multi control receivers of a few years ago, and compares them to this one to-day, who shall say we are

not progressing in receiver design? Pick up one of the many large American publications, and you will find advertised many multivalve sets with only one, two, or sometimes three controls. Why, years ago, we would have laughed at the possibility. This one control type of Yankee receiver is made possible by modernised components—we might be pardoned for saying, ultra modernised.

The receiver we have in front of us now does not call for any particular modernised components, although we don't wish you to use any extremely old fashioned and worn out parts, and expect to achieve maxi-

quality materials; so be warned to use only good quality parts. The object of every set constructor should be to see how efficient can be made his receiver, not how cheaply can he build it. In our list of parts, we do not specify any particular brand of apparatus, leaving it to the constructor to use his own discretion.

Before approaching the constructional details, we draw your attention to the two different backs-of-panel wiring diagrams. This has been done purposely this week, with a view to assisting those who are desirous of remodelling their present receiver, and this article should be read in conjunction with the second article at the back of the paper. The receiver we built has a jack after the detector valve, whereas the alternative scheme provides for a jack after the first audio stage. Again, the relative positions of the vario coupler and condenser are worth noting. The alternative scheme does not provide for a C battery, but in the receiver pictured here a C battery is catered for. The C battery is a useful adjunct inasmuch as it prolongs the life of your B batteries, increases strength, and often assists as a purifying medium.

Construction.

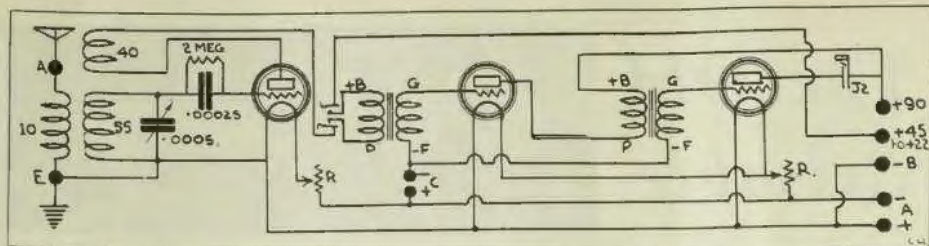
The vario coupler used in this receiver is one of a well-known locally made brand, and is ideal for the purpose. These are obtainable at any of the advertisers in this paper, but if you wish to construct one for

THE OLD RELIABLE.

Shopping list for the Old Reliable:

- 1 Dilecto Panel, 18 x 7 x 3/16.
- 1 .0005 Variable Condenser.
- 2 30 ohms Rheostats.
- 1 D.C. Jack.
- 1 S.C. Jack.
- 1 Vario Coupler.
- Kit—3 1/2" Diameter.
- 1 .00025 Condenser and Clips.
- 1 2 Meg. Leak.
- 3 Sockets.
- 2 A.F. Transformers.
- 1 Terminal Board.
- 1 Baseboard, 17 x 9 x 3.

your own results. At this stage, we would like to stress that good quality apparatus is essential to the success of this or any other receiver. Most of our queries on different sets we have described are traceable to poor



The circuit diagram. The number of turns are opposite the coils.

yourself, it will be found quite an easy matter. You will require for this purpose some 4 inches of tubing, cardboard, Dilecto or Radion, with an inside diameter of approximately three and one-quarter inches. A rotor to rotate within this tube, and a vario coupler shaft assembly completes the materials required. The rotor on which is wound the reaction coil, is fitted to the top of the tubing or stator, as it is now called. This can be seen in the photograph.

However, the 24 gauge wire is used for winding the coils. Begin with the stator. Approximately $\frac{1}{2}$ an inch from the bottom, drill or pierce two holes, through which thread the end of the wire to hold it securely. Wind on neatly 10 turns and secure. This is your primary coil. The secondary coil consists of 50 turns of the same gauge wire wound on the same former. Commence this winding $\frac{1}{2}$ an inch from the end of the primary winding, and continue winding turn for turn until 55 turns are wound. Secure in the manner already mentioned. The secondary winding should finish about one inch from the top of the stator. Watch carefully that you wind both

these coils in the one direction.

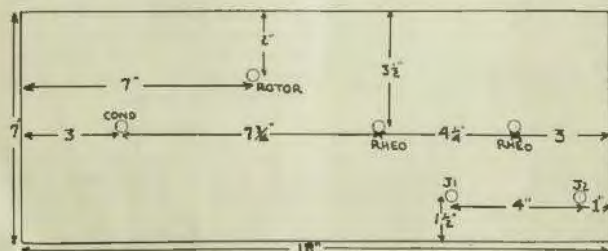
The rotor winding is the next consideration. On the edge of the rotor drill two small holes, and thread your wire through as before, but this time leave about three inches free. Now wind on the one side 20 turns; drill one hole at the termination of this winding, and thread about $\frac{1}{8}$ inches of wire through to the inside. Be careful this winding doesn't spring off. The other side of your rotor also has 20 turns wound on in a manner similar, but watch carefully the direction of this second half of the winding. The completed winding, that is the two halves together, make one complete winding, and must run in the same direction. To explain this, imagine that there is no break in the winding, and that you continued your winding in the one direction over the top and down the other side. This unidirectional effect is most important. By the way, the set won't work if the two ends of these windings—that is the ends nearest the top—are not connected together. Solder them. Assemble your rotor on your stator in the manner prescribed by the manufacturer—the vario coupler shaft

assembly renders this a very simple matter. You now have your coupler completed, but for two wires, the beginning and end of your rotor winding. Connect one of these wires to one side of your shaft assembly within the rotor, and the other end to the remaining side of the shaft assembly inside the rotor. This completes this job.

Panel Layout.

The layout of the panel calls for little skill, as may be gathered from the diagram herewith. Mark out, using a centre punch, a small indentation to allow your drill to start easily without slipping. Always keep your panel on a flat surface when drilling, and countersink the condenser fixing holes evenly. If a rosebit is not found in your tool kit, a larger sized drill will countersink these holes quite nicely. Don't forget to drill three holes for the wood screws which hold your panel to the baseboard. These are not shown on the diagram. Polish your panel now; brasso is quite suitable for the purpose. Next mount your rheostats, jacks, and condenser, and then using a short piece of busbar connect one side of one rheostat to one side of the other.

Temporarily fix your panel to your baseboard, and lay out your baseboard components. Remember that the bottoms of your jacks should be $\frac{1}{2}$ an inch above your baseboard. This is to allow room for the filament negative wire which links up one filament terminal of each socket. Still follow the photograph as closely as possible for a layout. It's a good one. Notice that the first transformer, 5 to 1 ratio, is at right angles



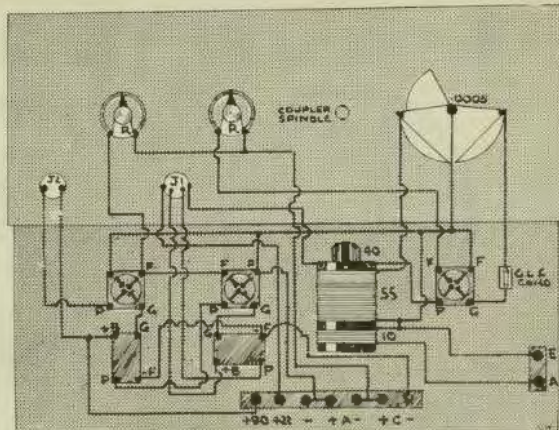
Panel layout. Keep the jacks at the height specified.

to the $3\frac{1}{2}$ to 1 or second transformer, and that the audio valve sockets are placed one each in front of the transformers, and close to the rheostats, the D.C. jack coming just in between. The vario coupler used by ourselves had in the shaft assembly a means of supporting it on the panel and just $\frac{1}{2}$ inch above the baseboard. If you are not catered for in this way, place a small wooden block on the baseboard beneath the vario coupler and attach this instrument to this block. The detector socket is seen to the right of the vario coupler, and immediately behind the variable condenser. See the position of the grid condenser and grid leak? Don't fix your terminal board until you have completed all your wiring excepting your battery wiring.

Everything being screwed down tightly, put away your drill and collect together pliers, round noses for making neat loops, to fit under the various terminals, nuts, etc., square-nose pliers to make right angled bends in your busbar, a soldering iron, small type preferred, flux, and soft solder.

This is the equipment necessary for wiring, which can now be proceeded with.

Don't permanently screw your panel to the baseboard until you insert the F— wire already referred to. Now continue with the rest of the wiring. It's a good plan to wire from your audios to your detector stage, taking a short lead from the plate of your last valve to your S.C. jack. Now link the remaining two fila-



The back of panel wiring diagram of this particular receiver described here.

ments of your audio sockets and connect to the one rheostat which controls your two audio valves. Next

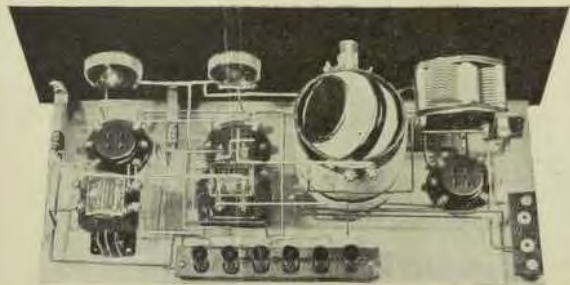
from your detector rheostat to your remaining filament terminal of your detector socket. Now the grid of the last valve to the G terminal of your $3\frac{1}{2}$ to 1 transformer. This completes the wiring of your last valve socket. Proceed with the wiring in this fashion, bit by bit, checking off carefully with the back-of-panel and circuit diagram. The last job of all is to insert your battery wiring from your terminal board, and the aerial and earth terminals. Ees are very handy for aerial and earth—

quick plugging in renders them simple.

Testing.

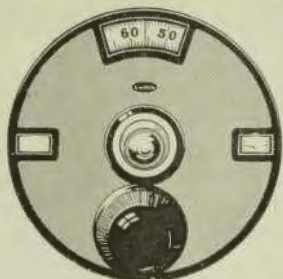
Before putting your set on the air, check over every connection, tighten up every nut and screw, and wipe off all the residue of the flux which may still remain on your busbar. To make sure that the B battery is not reaching the filaments of your valves, test by connecting your A battery to your B battery terminals. Turn up your rheostats and if the valves light up then something is wrong with your filament wiring. Search and locate the fault before doing anything else. It must be clearly understood that if you allow your B battery to flow on to the filaments of your valves, these useful little adjuncts are rendered useless—the filaments burn out. Still, if you feel like living at the rate of £1,000-000 a year, a few valves to burn out will assist you to this end.

But it is hoped that everything is wired O.K., so hook on your A and B and C batteries to their respective terminals, and your aerial wire and earth wire to the Ees, plug your rhones into the first jack, light up the first valve, and listen-in. Slowly tune with your condenser, keeping your rotor or reaction coil at right



Back view of receiver showing layout of parts.

Once turn this dial



*and you'll know the reasons
for its sensational popularity*

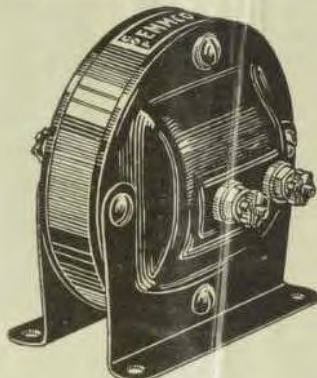
Only by actually USING Emcco dials can you appreciate the amazing DIFFERENCE that a perfect vernier dial can make to an ordinary radio receiver.

ONE reason why these dials have been accorded the immediate and wholesale approval of radio users lies in the fact that they offer the advantages of HAIR-LINE ADJUSTMENT and a SPECIAL LOGGING WINDOW that makes tuning-in EASY and PRECISE.

Have your dealer show you this amazing improvement in tuning controls. See, for yourself, its fine, strong finish. Feel, for yourself, its responsiveness—its supreme accuracy. Notice the entire absence of back-lash and slipping. Try it on your set—you'll quickly decide no other dial will do.

Made in Mahogany
Bakelite and Maroon Finish Metal
Frame Obtainable with clockwise Frame
9/6 or anti-clockwise movement. 6/9

Tune-in with this trans- former in circuit



PRICE .. 21/-

*and you'll know the meaning
of "perfect audio amplification"*

You'll THEN know the secret of pure musical tone at all volumes lies in the amplification of the current. The audio transformer is the actual HEART of the receiver; therefore, it must be strong, sturdy, and super-efficient.

The new Emcco transformer meets EVERY DEMAND. There is no muffling of sounds, no thin, squeaky, distorted tones with Emcco transformers in circuit. Every tone is clean cut, separated, and distinct from every other tone. . . . NATURAL !

YOU CAN GET THEM AT ALL DEALERS

EMMCO RHEOSTAT :

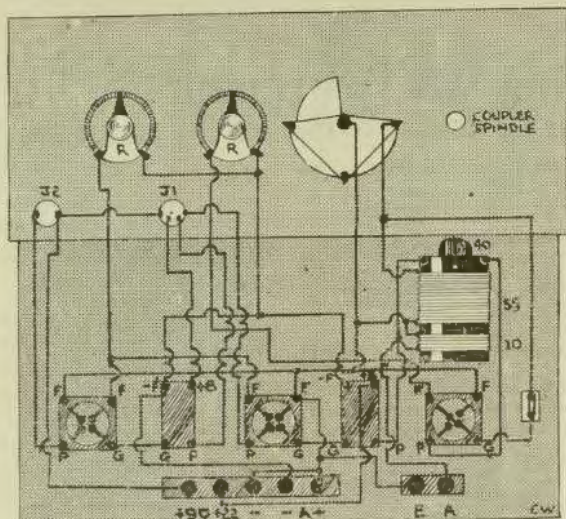
6, 10, 20 and 30 ohms 4/6

EMMCO JACKS :

Open Circuit 2/6
Double Circuit 3/-
Jack Switch 4/6

Manufactured by

Electricity Meter Manufacturing Company Ltd.
SYDNEY



An illustrative wiring diagram. Read the text for particulars.

angles to your stator or secondary coil. The station will soon be heard. Bring it up to its loudest pitch by adjusting your reaction coil. As this coil is turned one way the volume decreases, increasing as it is turned in the opposite direction. If, of course, you turn this coil too far a squeal or perhaps a hissing sound will be heard in the earphones, and the quality of reception will be greatly impaired. Bring the coil back until this action ceases, as this hissing or squealing is to be avoided at all times. This is the howling so often coupled with valve receivers, and interferes with all other listeners for miles around. Listen-in yourself, and you will hear the whistling and howling. Older hands refer to them as "Joys" or "canaries." To be a good radio neighbour, don't allow your set to oscillate, just keep below this point. On different settings of your condenser, you will find different stations, and each should be separate from one another. If you are treated to a background of two stations at the one time and judicious use of your reaction, rheostat and condenser doesn't assist you, push

your primary turns a little further down the former, and away from your secondary coil. This increases your selectivity. Still the actual receiver depicted herewith was very selective. On test all local stations were received splendidly on the speaker by plugging into second jack thereby using all three valves. Interstate 4QG we did receive excellently, but don't you expect to do this the first week or so, perhaps month or two. You must thoroughly familiarise yourself with any receiver before you can get the best from it. It is common logic. No one can get the best from a car or a bike when he first owns it. Familiarity is essential.

After almost every article is written in any technical paper, hosts of inquiries come in requesting information on the distance getting properties of the receiver. The sets themselves may be capable of responding to Interstate stations, providing the owner is capable of handling the set, and it is only after using the set for some time will this be possible.

Free Trip to Java for "W. W." Reader

What about a holiday in Java this summer? An interesting trip through the Spice Islands, via Queensland and Northern Australia.

No, not expensive, that is if you are willing to devote a little of your spare time to "Wireless Weekly."

There is a free return passage to Java and Singapore on one of Messrs. Burns Philps' mail steamers and incidental expenses amounting to £50 for the reader securing the greatest number of pre-paid subscriptions to "Wireless Weekly."

It's not hard to sell a good proposition to any wide-awake listener-in. You are a reader yourself, and know why you are buying the paper. Do your neighbour a good turn, and introduce him to us.

In addition to a trip to Java as first prize, we offer a special prize to the youth between 15 and 18 securing the greatest number of subscriptions. By special arrangement with Amalgamated Wireless, we will present a full course through the Marconi School of Wireless to the winner in this section.

Here is a career which in the ordinary course of events would cost £50 to begin, free to any youth willing to devote his spare time and energy in an attempt to grasp this opportunity.

To the Director,
Wireless Newspapers Limited,
51 Castlereagh Street,
Sydney.

Sir,—

In consideration of your allowing me to enter the "Wireless Weekly" Subscription Competition of Wireless Newspapers Limited, and supply me with a book of subscription forms, I undertake to remit to you within 24 hours after receiving same any signed subscription orders received and the amount of money received by me as represented on the order. I also undertake to account to you for all subscription order forms which you supply to me.

Signed

Address

Broadcasting Programmes for the Coming Week

Friday, Oct. 29

2FC

EARLY MORNING SESSION

- 7.—The Chimes of "Big Ben"
Announcements.
7.5.—Weather information, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
7.25.—Investment Market, Mining Share Markets, Metal quotations.
7.35.—Wool Sales, Broadcasts Markets, Intermediate Markets, Produce Markets.
7.45.—"Sydney Morning Herald" News Service.
8.—Chimes of "Big Ben." A "Cheerio" Talk by Mr. J. K. Powell.
8.15.—Close down.

MORNING SESSION

- 9.15.—The Chimes of 2FC and Announcements.
9.30.—Music from the Studio.
9.30.—Marching Music for the School Children.
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." Australian Press Association and Reuter's Cable service.
11.10.—Music from the Studio.
11.15.—Cooking talk and recipes, by Miss Ruth Furst.
11.30.—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 for the Children.
12.45.—From Farmer's Tea Rooms: The Oak Hall Trio.
12.50.—Rugby Wireless News.
12.55.—Miss Alison Bent, mezzo.
1.—The Chimes of "Big Ben."
Weather intelligence.
1.3.—"Evening News" midday services. Producers' Distributing Society's Report.
1.35.—Music from the Studio.
1.45.—From Farmer's Tea Rooms: The Oak Hall Trio.
1.50.—Stock Exchange—Second Call.
1.55.—Miss Alison Bent, mezzo.
1.55.—From Farmer's Oak Hall: The Oak Hall Trio.
1.55.—Last Minute Sporting information, by the 2FC Racing Commissioner.
2.—The Chimes of "Big Ben." Close down.

AFTERNOON SESSION

- 2.30.—The Chimes of 2FC and Announcements.
2.35.—Broadcast from the Haymarket Theatre Orchestra under the baton of Mr. Stanley Porter.
3.—Marching Music for the School Children.
3.45.—From Farmer's Oak Hall: The Beeds Vocal Trio.

- 3.45.—From Farmer's Tea Rooms: The Oak Hall Trio.
3.55.—Music from the Studio.
4.—Miss Jeanne Slapoffski, soprano.
4.5.—A Serial Story: "When the Devil was Sick" (Rady).
4.20.—The Beeds Trio.
4.25.—From Farmer's Tea Rooms: The Oak Hall Trio.
4.55.—Music from the Studio.
4.40.—Miss Jeanne Slapoffski, soprano.
4.45.—Stock Exchange, Third Call.
4.45.—Close down.

NIGHT SESSION

- 8.—Time Signals. The Chimes of "Big Ben." Broadcast from the Lyceum Theatre: Items by the Theatre orchestra, under the baton of Mr. Emanuel Aarons.

- Farmer's Service, Sydney, call sign 2FT, wave length 442 metres.
Broadcasters Ltd., Sydney, call sign 2BL, wave length 353 metres.
Trades Hall Broadcasting Station, call sign 2KY, wavelength, 250 metres.
Theosophical Broadcasting Service, call sign, 2GB, wavelength, 315 metres.
Burgin Electric Coy. Ltd., Sydney, call sign, 2DE, wavelength, 315 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 315 metres.
Central Broadcasters Ltd., Adelaide, call sign 5CL, wave length 395 metres.
Radio Broadcasting Co. of N.Z., Auckland, call sign 1YA, wave length 429 metres.
Westralian Farmer's, Perth, call sign 5WF, wave length 1250 metres.
Tasmanian Broadcasting Pty. Ltd., Hobart, call sign 7ZL, wave length, 595 metres.

- 6.15.—Broadcast from Studio: A Halloween Night, given by the Royal Scotch Kilnies, directed by Mr. James Brash.
9.—From the Studio: Mr. Herbert Walton, comedian (by permission of Messrs. J. C. Williamson Ltd.).
6.15.—Continuation of programme from the Scotch concert.
10.—Broadcast from the Lyceum Theatre: Items by the Theatre orchestra, under the baton of Mr. Emanuel Aarons. During the playing of this music, and taking advantage of the 2FC method of dual transmission, Mr. J. H. Bahion, the well-known critic, will, from the projection room of the Film House, describe the principal reels of the new film releases.
11.—Broadcast from the Wentworth Hotel, items by the Wentworth Cafe Orchestra, conductor, Mr. Sydney Simpson.
10.45.—A Film Talk.
11.—Items by the Wentworth Cafe Orchestra.
12.—Close down; National Anthem.

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 and London Metal Quotations.
11.10.—Musical programme from the studio.
11.25.—Broadcasters' Information Service, including Mail, Shipping, Weather, Rain-fall.
11.40.—Women's Session: 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 Beagley.
12.30.—Sydney Stock Exchange Calls.
12.45.—Hilber's Instrumental Quartette, under the direction of Caryl Castling.
1.30.—Sydney Stock Exchange calls.
1.45.—Latest sporting information from the "Star".
2.—G.P.O. Clock. Close down.

AFTERNOON SESSION

- Racing information broadcast by courtesy of I.
4.—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 Cury Bremer.
3.30.—A talk on English Literature and Poetry by Mr. J. M. Prentice.
3.45.—Music from the Studio.
4.—G.P.O. Clock and Chimes; Civil Service String Trio.
4.15.—Musical Programme from the Studio.
4.30.—Serial story, entitled, "The Scarlet Cockerel".
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.—Resumé 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 Scully will entertain 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 Hide Report.
7.5.—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
7.5.—Stock Exchange Reports.
7.15.—Producers' Distributing Society's fruit and vegetable report.
7.20.—Fruit and Vegetable Report (Sun).
7.24.—Fruit and Poultry Report (Sun).
7.27.—Rice and Poultry Report (Sun).
7.30.—Country News from the Sun.
7.50.—Country Women's Session.

NIGHT SESSION.

- 5—Concert from the studio, including Miss C. L. Robinson, pianist; Mr. Clem Williams, baritone; Miss Beatrice Skill, soprano; Mr. Victor McMahon, tenorist; Miss Heather Kinnaird, contralto; Broadcaster 26.
- 10.35—Al. Hannett 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.

2 KY

LUNCHEON HOUR SESSION.

- 12.15—Popular fox trots; Orpheus Gramophone.
- 12.25—Musical Interludes.
- 12.40—News Items.
- 1—Vocal Items.
- 1.15—Hawaiian steel guitar selections.
- 1.25—Union news and melodies.
- 1.30—Vocal and musical items closing down at 1.45 p.m.

CHILDREN'S HOUR

- 6.58—The Storyman, Mr. Thompson.

EVENING SESSION

- 7—Sporting feature, Turf Topics, Review of Candidates and their Prospects for Tomorrow, Mr. G. Hopkins.
- 7.40—Lectures: Industrial History, Mr. J. Ryan (Director, Labor Research and Information Bureau).
- 8—A talk on Motor Cycling, by Mr. J. K. Hopkins.
- 8.10—Piano-forte solos, Miss Gwen Aaron.
- 8.18—Soprano solo, Miss Edith Welsh.
- 8.25—Monologue, Miss David Edelstein.
- 8.35—Musical interlude by Palais Royal Call-Formers, Mr. Walter Beebas, leader (by kind permission of J. C. Bendroit, Ltd.).
- 9—Sporting Feature: Full description of main points from results of Mr. Hugh's Leicester Stadium.
- 9.25—Music from Studio.
- 10—Closing Announcements.

2 GB

NIGHT SESSION

- 6.45—Talks to children by "The Man from Dreamland."
- 7.15—Inter-lud.
- 7.30—Music from Studio.
- 7.45—Announcements.
- 7.55—Songs by Mr. William Green.
- 8.10—Address by Lord Ernest Wood.
- 8.20—Instrumental Trio.
- 8.25—Songs by Miss Hilda Beyle.
- 8.45—Violin Solo, by Monica Haerter.
- 8.55—Talk on "Domestic System," by Mary E. Moss.
- 8.55—Songs by Mr. Wm. Geccu.
- 9.5—Lloyd Davies, violin solos.
- 9.12—Announcement.
- 9.17—Ada Brown, piano solos.
- 9.25—Talk on Radio, by Mr. E. G. Beard, Constructional Engineer 2GB.
- 9.35—Instrumental Trio: Lloyd Davies, Muriel Lane, Ada Brown.
- 9.47—Songs by Miss Hilda Beyle.
- 9.55—God Save the King.

3 LO

MIDDAY SESSION

- 12—British Official Wireless News from Rugby; Reuters and the Australian Press Association cables.
- 12.45—Stock Exchange Information, Meteorological Information, Weather Forecast for Victoria, Tasmania, South Australia and New South Wales.
- 1—Studio Orchestra.
- 1.15—Keith Desmond, pianofortist.
- 1.27—Dorothy Birchburgh, viola.
- 1.34—String Quartet.
- 1.40—Keith Desmond, pianofortist.

- 1.45—Public Schools Sports, St. Kilda Cricket Ground, descriptions by Mr. A. F. Marshall, of the Geelong Grammar School; Mrs. M. Callaway, of the Interior Decoration, "The Art of Water Color Painting."

EARLY EVENING SESSION.

- 6.45—Children's hour, answers to letters and birthday greetings.
- 6—Sylvia Van Asche songs.
- 6.17—Dilly Dunny will tell the littlest's Fairy story.
- 6.17—Sylvia Van Asche.
- 6.24—Dilly Dunny.
- 6.40—"Argus" and "Herald" News Services; Reuters 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.
- 7.4—River Reports.
- 7.6—Market Report, by the Victorian Producers Co-operative Co. Ltd., Haymarket sheep sales, Poultry, Grain, Chaff, Straw, Jute, Dried Potatoes, Potatoes, and Oils and 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. R. C. Wilson, Manager of the State Research Farm, Werribee, "Hay Growing, Harvesting and Stacking."
- 7.40—Miss Thelma Burgess, now playing in "Kismet" at His Majesty's Theatre, will speak to you from her dressing-room, by permission of J. C. Williamson Ltd.
- 8—Reginald Bradley and his Studio Orchestra.
- 8.10—Mr. E. C. H. Taylor, talk, "School and school Sport."
- 8.30—Collin Thomson, tenor.
- 8.37—Thelma Burgess.
- 8.41—Francis Lark, soprano.
- 8.47—The Studio Orchestra.
- 9—Mr. R. A. Wolfe, "Caroban," Sporting Editor of "The Argus" and "The Australasian" will speak on the Derby and other races.
- 9.14—Collingwood Citizen's Band.
- 9.15—Eddie Day and Rupert Hazel.
- 9.25—The Mounts Leo Duo.
- 9.42—Mr. Leslie Brunning, talk, "Summer Vegetable Garden, No. 2, Sweet Corn and Lettuce."
- 9.50—Collin Thomson.
- 10.8—"Argus" announcements.
- 10.16—Collingwood Citizen's Band.
- 10.26—Eddie Day and Rupert Hazel.
- 10.34—More news, British Official Wireless from Rugby; Weather Forecast.
- 10.40—The Mounts Leo Duo.
- 10.50—Frances Lea.
- 10.57—Collingwood Citizen's Band.
- 11.15—Our Great Thought for To-night: "He that wrestles with us strengthens our nerves, and sharpens our skill. Our antagonist is our helper."
- 11.4—SLO Dance Orchestra.
- 11.40—God Save the King.

3 AR

MORNING SESSION

- 11.30—The British Official Wireless Press, received by 3AR's operator from Rugby Wireless Station, England; Express train information; "Arg" 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. L. Campbell at the organ.
- 12.30—Stock Exchange News.
- 12.40—Musical Selections.
- 12.55—Mail Notices, Shipping Movements.
- 1—Close down.

AFTERNOON SESSION.

- 2.30—Hoyt's Premier Orchestra, under the

direction of Miss Ella Brien, special Birthday music programme.

- 4—Time Signal, Chime from G.P.O.
- 4.5—Miss Emily Noble, reading lectures, by courtesy of Metropolitan Gas Co.
- 4.55—Gardening 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 Uncle Bud.

EVENING SESSION.

- 7.45—The British Official Wireless Press, Studio Barometer and Out-door Thermometer Readings.
- 8—Time Signal Chime from G.P.O.; Miss Phyllis Shattock, pianist.
- 8.7—Mr. Wilton Coe, baritone.
- 8.14—Mr. Anthony Lucas, tenorist.
- 8.19—Mr. Will Jealous, tenor.
- 8.21—Vocal duet, Miss Dorothy Adams, soprano and Mr. Wilton Coe, baritone.
- 8.24—Mr. B. Stanley Haines, weekly Gardening Talk.
- 8.46—Miss Dorothy Adams, soprano.
- 8.56—Miss Phyllis Shattock, pianist.
- 9.5—Vocal duet, Miss Dorothy Adams and Mr. Wilton Coe.
- 9.15—Miss Rose Allen, soprano.
- 9.20—Mr. Anthony Lucas, tenorist.
- 9.25—Miss Dorothy Adams, soprano.
- 9.32—Mr. Jack Carbutt, dramatic tenorist.
- 9.40—Mr. Will Jealous, tenor.
- 9.47—Mr. Wilton Coe, baritone.
- 9.54—Miss Rose Allen, soprano.
- 11—Close down.

4 QG

MIDDAY SESSION.

- 12.25—Tune-in.
- 12.34—"The Standard" Market Reports, Weather information, "The Daily Mail" news, "The Daily Standard" news.
- 1.20—From the Hotel Carlton Lunch Menu from the Lounge Hotel Carlton, by Hotel Carlton Symphony Orchestra.
- 1—Close down.

AFTERNOON SESSION.

- 3.30—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.
- 4.30—Close down.

EARLY EVENING SESSION.

- 6.25—Tansin.
- 6.30—"The Children's Season-Stories by 'The Standard'."
- 6.40—Thought for the Council of Agriculture Studies, The Farmer's Session, Market reports, Lectures: "Among Scottish Herds," by Mr. J. F. Reid, editor "Queensland Agricultural Journal."
- 7.10—Lecture Reunion: A talk, arranged by the Workers' Educational Association, Mr. R. V. Smith, Librarian, "The Standard" news, Stock Exchange.
- 7.40—Announcements.

NIGHT SESSION.

- 7.45—"The Preserving and Beautifying of Buildings," No. 1, by Mr. E. J. Chilton.
- 8—Selections, Conductor Mr. W. H. Davis: Baritone solo, Mr. J. D. Abraham; tenor solo, Mr. N. Gould; soprano solo, Miss Tilly Brozman; march, the Federal Band; tenor solo, Signor Corbi; contralto solo, Miss Nancy Smith; march, Federal Band; bass solo, Mr. Roy Best; selection, the Federal Band; soprano solo, Miss Dorothy Stewart; band number, the Federal Band; bass solo, Mr. J. D. Abraham; march, the Federal Band; a short address by Mr. H. Frazer East (State President Returned Sailors and Soldiers' Imperial League).

There's a size in Burgess for every Cabinet.

- 9.15—Radio Voice Contest items. Weather information, officially supplied by the Commonwealth Weather Bureau Announcements.
- 9.30—Selection of marches, the Studio Orchestra (conductor Mr. A. R. Featherstone); soprano solo, Miss Tiny Freeman; vocal duet, Mr. Steve Beck and Mr. Rex Best; selection, the Studio Orchestra; tenor solo, Signor Corti; bass solo, Mr. Rex Best; selection, the Studio Orchestra; contralto solo, Miss Nancy Smith; vocal duet, Miss Dorothy Stewart and Signor Corti; overture, the Studio Orchestra; soprano solo, Miss Dorothy Stewart; march, the Studio Orchestra.

5 CL

MORNING SESSION

- 11.30—G.P.O. Chimes.
- 11.31—Stock Duo Art.
- 11.40—"Advertiser" News Service.
- 11.55—Vocalion number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" news service.
- 12.16—Stock Duo Art number.
- 12.20—PCL Studio Orchestra will be heard in a series of classical numbers.
- 1.55 (approx.)—Ward & Co's. Stock Exchange Intelligence. Weather Reports and Station Announcements.
- 2—G.P.O. Chimes.

AFTERNOON SESSION

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

EVENING SESSION

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories, by "Auntie Peggy."
- 7.15—Mr. W. P. Burpee, J.P. (see O.B.I., "Hiding the game").
- 7.30—Market Reports.
- 7.40—Sporting Talk, by "Old Timer."
- 8—Relay from Victoria Hall—Special programme of vocal and instrumental items.
- 8—G.P.O. Chimes.
- 8.15—Weather reports.
- 9.3—Relay from Victoria Hall.
- 10.15—"Advertiser" News Service.
- 10.55—Station announcements.
- Ships within wireless range.
- 11—G.P.O. Chimes National Anthem. Close down.

7 ZL

MORNING SESSION

- 11—The Mercury" news, stock market, shipping, commercial intelligence, weather information. Discords from the Studio.
- 12—Selections on the Salonola. G.P.O. Clock and Chimes. Close down.

AFTERNOON SESSION

- 3—G.P.O. Clock and Chimes.
- 8.30—Bohart Stock Exchange quotations.
- 8.45—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—Bohart Stock Exchange quotations.
- 8.10—Weekly Gardening chat, by Mr. George Nation.
- 8.20—Sports Budget, supplied by Mr. T. W. Newton, of Bohart Sports Depot.
- 8.30—Studio Concert: Miss Bertha Marshall, soprano; Miss Jessie Kite, mezzo soprano; Miss Daleia Tait, alto; pianist: Mr. S. J.

- Hall, baritone; Mr. Hubert Large, baritone; Mr. H. Williams, mouth organ.
- 9.30—"The Mercury" special interstate news service. Weather synopsis, Station announcements. National Anthem.



Saturday, Oct. 30

2 FC

EARLY MORNING SESSION

- 7—Chimes of "Big Ben" and Announcements.
- 7.6—Music from the Studio.
- 7.10—Official Weather Forecast; Rainfall; temperature; Astronomical Memoranda; Shipping Intelligence; Mail Services.
- 7.20—Investment Market, Mining Share Market, Metal Quotations.
- 7.35—Wool Sales, Broadstairs Markets, Interstate Markets, Produce Markets.
- 7.45—"Sydney Morning Herald" News Service.
- 8—The Chimes of "Big Ben," & Cheerio Talk by Mr. J. K. Powell.
- 8.15—Close down.

MORNING SESSION

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

MIDDAY SESSION

- 12.55—The Chimes of 2FC and Announcements.
- 1—The Chimes of "Big Ben" and Announcements.
- "Evening News" Midday News Service. Weather information. Music from the Studio.

AFTERNOON SESSION

- 1—The Chimes of "Big Ben" and Announcements.
- 1.5—During the interval of sporting results musical items will be given from the Studio.
- 4.40—Resume of the afternoon's sporting events.
- 5—Close down.

EARLY EVENING SESSION

- 5.45—The Chimes of 2FC and Announcements.
- 5.55—The "Hello Man" talks to the Children.
- 6.30—A Story for the older children.
- 6.45—Broadcast from the Hotel Australia, Orchestral Items.
- 7.10—"Evening News" news service.
- 7.40—A Motor Talk by Mr. J. L. Austin, "Fancy" Trips, and Real Ones" (several useful suggestions for making your holiday tour as joyful in accomplishment as it has been in anticipation).

NIGHT SESSION

- 8—The Chimes of "Big Ben" Announcements.
- 8.5—Broadcast from the Soldiers' Recreation Hall in the Royal Prince Alfred Hospital, a concert by the SFC Hospital Party, under the direction of Mr. James Donnelly.
- 8.5—Mr. Wilfrid Thomas, basso.
- 8.10—Miss Sybil Atholwood, mezzo.
- 8.15—Mr. James Donnelly, tenor.
- 8.20—Miss Jeanne Slapoffski, soprano.
- 8.24—Mr. Archie Seamour, songs at the piano.
- 8.30—Mr. Wilfrid Thomas, basso.
- 8.34—Some Honour.
- 8.40—Miss Jeanne Slapoffski, and Miss Sybil Atholwood, duet.

- 8.45—From the Studio: Madame Vera Tasma, soprano.
- 8.53—From the Hospital: Mr. Wilfrid Thomas basso.
- 8.57—Miss Donnelly, solo.
- 9.2—Mr. Archie Seamour, songs at the piano.
- 9.10—Miss Daisy Richards, violin solo.
- 9.18—Duet: Miss Jeanne Slapoffski and Miss Sybil Atholwood.
- 9.23—Mr. Wilfrid Thomas, basso.
- 9.28—From the Studio: Madame Vera Tasma, soprano.
- 9.35—Back to the Hospital: Mr. James Donnelly, tenor.
- 9.44—Miss Daisy Richards, violin solo.
- 9.52—Mr. Archie Seamour, songs at piano.
- 10—Mr. Wilfrid Thomas, basso.
- 10.4—Duet: Miss Sybil Atholwood and Miss Jeanne Slapoffski.
- 10.8—Finale.
- 10.10—From the Studio: A talk on Cricket, by Captain Fred. Aarons.
- 10.22—Mayo Hunter, special steel guitar items.
- 10.32—Broadcast from the Wentworth Hotel, Sydney: Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 11—Chimes of "Big Ben."
- 11.2—Late Sporting Information.
- 11.5—Broadcast from the Wentworth Hotel, Sydney: Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 12—National Anthem. Close down.

2 BL

EARLY MORNING SESSION

- 7.15—Physical Training and Health Exercises.
- 7.30—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—Municipal programme from the Studio.
- 11.25—Special news from the "Daily Telegraph."
- 11.45—Musical programme from the Studio.
- 12—G.P.O. Clock and Chimes. Race results will be broadcast immediately after each race, by courtesy of "The Sun" Newspapers. Social notes and a talk on "Simple Cooking for Children," by Mrs. Jordan.
- 12.50—London Metal quotations.
- 12.55—Broadcasters' Information Service, including Mail, Shipping, Weather Rainfall.
- 12.50—News from "Sun" Cable Edition.

AFTERNOON SESSION

- 1—G.P.O. Clock and Chimes. Music from the Studio.
- 1.10—Talk on Sporting and Athletic Fixtures for the day—Lacrosse, Hockey, Tennis, Rugby League all fixtures. Rugby Union all fixtures, Soccer, Australian Rules, Baseball, Racing, Trotting, Coursing, Bowls. During the afternoon sporting information will be broadcast by courtesy of "The Sun" Newspapers.
- 5.15—G.P.O. Clock. Close down.

EARLY EVENING SESSION

- 8—G.P.O. Clock and Chimes; Uncle Jack and the Kiddies.
- 8.45—Favillon. Dinner Orchestra under the direction of Mr. Cee Morrison.
- 7.15—Results of all sporting information, including Sailing, Swimming, Racing, Coursing, Bowls, by courtesy of Sun Newspapers.
- 7.30—Country News from the Sun and results of all sporting and athletic fixtures.
- 7.45—Close down.

NIGHT SESSION

- 8—Programme from the Studio, including: Brass Quartette; Miss Elsie Findlay, soprano; Mr. Bobby Watson, comedian; Burke and O'Mara.
- 10.15—Merv, Lyons and his orchestra, broadcast from the Denzang, Manly.
- 12—G.P.O. Clock and Chimes. National Anthem.

2 KY

EVENING SESSION:

- 7.15—Sporting Feature: Complete review of to-day's racing by Mr. T. G. Hopkins.
- 7.30—News Items.
- 8—Contralto solo, by Miss Jean Walsh.
- 8.10—Sketch, "Packing up," Miss Uplakow and Mr. Bob Corbett.
- 8.20—Soprano solo, Miss Letitia Brighton.
- 8.30—Musical Interlude: Pinaud Royal Californians, Mr. Wallace Beahan, leader (by kind permission of J. C. Hendrick Ltd.).
- 9—Sketch, by Mr. Bob Corbett.
- 9.15—Labor Legislation Service, Mr. J. C. Eldridge.
- 9.30—Sporting Feature: From the track at the Speedway Royal: Results of early events and description of motor cycle racing.
- 9.40—Music from the Studio.
- 9.50—Description and results of semi-finals from Speedway Royal.
- 10.0—Music from the Studio.
- 10.15—Description and results of finals from Speedway Royal.
- 10.25—Music from Studio.
- 10.30—Closing Announcements.

3 LO

MORNING SESSION.

- 11—Harold Rodgers, organ.
- 11.10—A few minutes' fun with Bruce Green
- 11.17—Sonora Recital.
- 11.24—Harold Rodgers, piano.
- 11.34—Bruce Green.
- 11.42—Sonora Recital.
- 11.49—Harold Rodgers, organ.
- 12—Time Signal: British Official Wireless news from Rugby; Reuter's and the Australian Press Association cables. "Arcus" 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. Green forecast. River reports.
- 1—Time signal.
- 1.1—Result of Maiden Plate, Flemington.
- 1.2—Studio Orchestra.
- 1.15—Eliate Davies, soprano.
- 1.17—Reinold Bradley, violin.
- 1.24—Keith Desmond, pianoforte.
- 1.31—Studio Orchestra.
- 1.35—Result of Merchants' Plate.
- 1.41—Eliate Davies, soprano.
- 1.47—Franklyn Stobham, clarinet.
- 1.52—Keith Desmond.
- 2—Close down.

AFTERNOON SESSION.

- 2.46—Result Melbourne Stakes.
- 3—3 LO Dance Orchestra.
- 3.30—Result of Victorian Derby, Flemington.
- 3.35—3 LO Dance Orchestra.
- 4.20—Result of Cantata Stakes.
- 4.23—3 LO Dance Orchestra.
- 4.35—"Herald" News Service: Stock Exchange information.
- 5—Result of the Rotham Handicap, close down.
- 5.30—Sporting Results.

EARLY EVENING SESSION.

- 5.45—Children's Hour: Answers to letters and birthday greetings.
- 6—Sylvia Van Ascho.
- 6.7—Mary Gunnick, poem.
- 6.12—Music, by Betty Borwick.
- 6.35—Sylvia Van Ascho.
- 6.40—"Arcus" and "Herald" News Service: Sporting results. Reuter's and Australian Press Association cables.
- 6.53—Weather synopses. Shipping movements.
- 6.57—Stock Exchange information.
- 7.2—Full Market Reports, by J. R. Borritt Ltd.
- 7.4—River reports.
- 7.6—Market Reports, by Victorian Producers' Co-operative Co. Ltd.: Grain, chaff, hay, straw, jute, dairy produce, potatoes and onions.

NIGHT SESSION.

- 7.20—Mr. Frederick Chapman, "Spouses as rock builders and destroyers."
- 7.40—Mr. Ed. E. Prescott, "Australian Plains."
- 8—First set of "Karin," transmitted from Theatre Royal, by permission of J. C. Williamson Ltd.
- 9—Dr. Norman McArthur, "Preservation of Game."
- 8.10—Victorian Railway's Institute Orchestra.
- 8.20—Bobby Pearce, baritone.
- 8.35—Len Gibson's Nonopolitan Quintette.
- 9.40—Burrer, Hazel and Elsie Day.
- 9.50—Victorian Railway's Institute Orchestra
- 9.55—Original sketch, written by Barleley Turner, "Murder in Order."
- 10.25—British Official Wireless news from Rugby: Announcements: "Arcus" News Service.
- 10.28—Len Gibson's Nonopolitan Quintette.
- 10.28—Bobby Pearce, baritone.
- 10.45—Victorian Railway's Institute Orchestra
- 10.64—Burrer, Hazel and Elsie Day.
- 11—Meteorological information: Sporting results. Races, Football, Metropolitan Soccer League, Metropolitan Amateur Association. Announcements.
- 11.55—Our Great Thought: "The most manifest sign of wisdom in continued cheerfulness."—Mistralque.
- 11.6—3 LO Dance Orchestra.
- 11.6—God Save the King.

4 QG

NO MIDDAY TRANSMISSION.

AFTERNOON SESSION.

- 3.25—Tune-in.
- 3.55—A Matinee for Little Listeners, by "Miss Warshaw."
- 4.10—Close down.

EARLY EVENING SESSION.

- 6.35—Tune-in.
- 6.35—Children's Hour:in Bedtime Stories by "Uncle Jim," assisted by "Mabel Bonshins."
- 7.15—Sporting news.
- 7.25—Close down.

NIGHT SESSION.

- 7.45—A Sporting Talk.
- 8—From the Gaiety Theatre, Toowoong—a quarter of an hour's music by the orchestra.
- 8.15—From the Studio: Radio Voice contest items: Cornet duet, Messrs. S. Piper and T. Roach; bass solo, Mr. Norman A. Cooling; pianoforte solo, Miss Rae Phillips; contralto solo, Mrs. Stanley Smallwood. From the Reception Hall: Organ solo by Mrs. Hilba Woolmer.
- 8.15—From the Studio: soprano, Mrs. T. Thornton; cornet duet, Messrs. S. Piper and T. Roach; bass solo, Mr. Norman A. Cooling; contralto, Miss Alice Raven; pianoforte solo, Miss Rae Phillips; baritone, Mr. Standwood; soprano, Miss Fonda Ingram.
- 9.10—Weather information.
- 9.15—Ajax Novelty Band.
- 10—From the Studio: "The Daily Mail" news service. Close down.

5 CL

MORNING SESSION.

- 10.00—G.P.O. Chimes.
- 10.31—A.C.L. Studio Orchestra, Selections.
- 11.40—"Advertiser" news service.
- 12—G.P.O. Chimes.

AFTERNOON SESSION.

- From the Studio—Interstate and local sporting, interspersed with Vocalion and Stock Exchange news.

EVENING SESSION.

- 8.30—G.P.O. Chimes.
- 8.31—Folkins stores.
- 7.30—Market reports.

- 7.40—Resume of the chief sporting results throughout the Commonwealth.
- 8—Programme of Instrumental and vocal items.
- 10.15—Sporting results.
- 10.30—Studio concert continued.
- 10.35—Station announcements.
- 11—G.P.O. chimes. National Anthem, and close down.

7 ZL

MORNING SESSION.

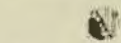
- 11—G.P.O. Clock Chimes. The "Mercury" stock market, shipping, commercial, intelligence. Weather information and sporting announcements.
- "Selenia" selections.
- 11.45—Robert Stock Exchange quotations.
- 12—G.P.O. chimes. Close down.

EVENING SESSION.

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

NIGHT SESSION.

- 8—G.P.O. Clock Chimes. The "Mercury" special Tasmanian news service. Railway auction produce sales; Weather information and sporting results.
- 8.5—Robert Stock Exchange quotations.
- 8.10—"Come to Tasmania" movement by Mr. G. G. Becker, Hon. Minister, "Tasmania as a Tourist Resort."
- 8.30—Dance Numbers from the Studio.
- 9.45—British Official Wireless News, copied direct from Rugby by our own operator. Weather synopses. Station Announcements.



Sunday, Oct. 31

2 FC

MORNING SESSION.

- 10.45—Chimes of 2FC and Announcements.
- 11—Broadcast from the Presbyterian Congregational Church: Anniversary Service.
- 12.14—News from the Studio.
- 12.50—Close down.

AFTERNOON SESSION.

- 2.10—The Chimes of 2FC and Announcements.
- 2.15—Broadcast from the Returned, on the Ocean Beach at Manly in the afternoon, a Band serial by the Manly Municipal Band. Mr. J. Perkins, conductor.
- 4—Close down.

EVENING SESSION.

- 6—The Chimes of "Big Ben" and Announcements. Talk by Madame Grog. "Grand Opera in New York."
- 6.15—Broadcast from the Peterham Congregational Church: Organ recital, by Mr. Christian Hallenman.
- 7.15—Broadcast from the Peterham Congregational Church: Evening Anniversary Service, conducted by Rev. A. P. Doran.
- 8.10—Broadcast from the Grand Opera House: Final Band Concert, by the N.S.W. State Military Band.
- 10—National Anthem; Close down.

2 BL

MORNING SESSION.

- 11—Service broadcast from St. Jude's, Randwick.

AFTERNOON SESSION.

- 8—Lecture, broadcast from First Church of Christ, Scientific, Sydney.
- 6—Musical programme from the Studio.

EVENING SESSION.

- 7—Service broadcast from Palmer Street Presbyterian Church.
- 8.30—Broadcasters' Trio.
- 8.45—Miss Nora Mack, soprano.
- 8.52—Miss Dulcie Blair, violin solo.
- 9—G.P.O. Clock and Chimes; Resume of following day's programme; Weather Report by courtesy of Mr. C. J. Marco, Govt. Meteorologist.
- 9.1—Mr. Leslie Herford, baritone.
- 9.11—Miss Mary Neale, mezzo soprano.
- 9.18—Broadcasters' Trio.
- 9.33—Interval.
- 9.38—Miss Dulcie Blair violin solo.
- 9.45—Miss Nora Mack, soprano.
- 9.52—Mr. Les. Herford.
- 9.59—Miss Mary Neale.
- 10—G.P.O. Clock and Chimes.
- 10.1—Broadcasters' Trio.
- 10.15—National Anthem.

2GB

MORNING SERVICE.

- 10.55—Organ music from St. Alban's Church, Redfern.
- 10.59—Morning Service from St. Alban's Liberal Catholic Church, Celebration of the Holy Eucharist. Sermon.
- 12—Close down.

EVENING SESSION.

- 8.45—Music from Studio.
- 7—Lecture from Adyar Hall by Professor Ernest Wood, "The Unseen World, and Life after Death."
- 8—Music from Studio.
- 8.15—Canterbury Band. Mr. J. M. Hyem, conductor.
- 8.40—Mr. Walter Farmer, songs.
- 8.50—Canterbury Band.
- 9.10—Mr. Walter Farmer, songs.
- 9.20—Canterbury Band.

3LO

MORNING SERVICE.

- 10.55—Express Train Information.
- 11—Service from Scots' Church, Collins St., Melbourne.
- 12.15—British Official Wireless News from Rugby. Announcements; Close down.

AFTERNOON SESSION.

- 1—Pleasant Sunday Afternoon Service; Central Mission, Wesley Church, Chesham. Rev. J. H. Cain, Pastor.
- 4.30—Announcements; Close down.

EARLY EVENING SESSION.

- 5.45—Children's Hour; Chorus by Billy Bunny and his Brer Rabbits.
- 6—Answers to letters and birthday greetings.
- 6.15—Another Hymn by Billy Bunny and his Brer Rabbits.
- 6.25—Stories by Billy Bunny; Minnie and Loveland's Life.
- 6.45—Close down.

NIGHT SESSION.

- 7—Service from Toorak Presbyterian Church, Praeger. Rev. J. A. Crockett.
- 8.30—Brunswick City Band.
- 8.42—E. Hocking, tenor.
- 8.49—Stanislaus Tarzynski, violin.
- 8.59—Auburn Methodist Choir, under the direction of Mr. Sutton Crow.
- 9.6—Brunswick City Band.
- 9.11—Stanislaus Tarzynski, violin.
- 9.21—Auburn Methodist Choir.
- 9.28—Brunswick City Band.
- 9.40—G. Milgrew, cornet.
- 9.45—"Argus" News Service; Meteorological Information; Announcements.
- 9.58—Our Great Thought for to-night is: "Joy in one's work is the consummate goal." Phillips Brooks.
- 10—God save the King.

4QG

MORNING SESSION.

- 10.55—Tune-in.
- 11—The complete morning service will be relayed from St. John's Anglican Cathedral, Brisbane; Sung Eucharist; solemn

melody for full orchestra and organ; the sermon will be preached by His Grace the Archbishop of Brisbane.

AFTERNOON SESSION.

- 3.15—The concert provided by the Brisbane Metropolitan Band will be relayed from Botanical Gardens.

NIGHT SESSION.

- 7.20—Organ music from St. Andrew's, South Brisbane.
- 7.30—The complete evening service will be relayed from St. John's Anglican Cathedral; the sermon will be preached by His Grace the Archbishop of Brisbane.
- At the conclusion of the Church service the concert provided by the Greater Brisbane Municipal Band will be relayed from Wickham Park.
- 9.30—Close down.

5CL

MORNING SESSION.

- 11—Relay from Pirie Street Methodist Church—Divine Service.

EVENING SESSION.

- 6.30—G.P.O. Chimes.
- 6.41—Sunday stories for the children.
- 7—Relay from Rose Park Congregational Church—Divine Service.
- 8.15—Venetian Trio, interspersed with vocal items from Studio.
- 9—G.P.O. Chimes.
- 9.1—Weather reports.
- 9.3—Studio concert, continued.
- 10—G.P.O. Chimes. National Anthem. Close down.

7ZL

EVENING SESSION.

- 7—Service from St. David's Cathedral, Macquarie Street. Robert, Preacher, The Dean. Psalms 132, 234; Hymns 19, 422; Organ Music, "D. Major Fugue"
- 8.45—Concert from the Studio; Miss Amy Butterworth, pianist; Mr. Roy Lyons, baritone; Mr. William P. Harwood, cellist; Mr. Joseph Blight, sax soloist; Mr. C. C. Tennant, baritone.
- 9.45—"The Mercury" Special Interstate news service; Weather Synopsis; Station Announcements; National Anthem.



Monday, Nov. 1

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; Temperature; Astronomical Memoranda.
- 7.25—Investment Market. Mining Share Market; Metal Quotations.
- 7.35—Wool Sales, Broadstuffs Markets; Interstate Markets; Produce Markets.
- 7.45—"Sydney Morning Herald" News Service.
- 8—"The Chimes of 'Big Ben.'" Music from the Studio.
- 8.15—Close down.

MORNING SESSION.

- 9.15—"The Chimes of 2FC" and Programme Announcements.
- 9.20—Music from the Studio.
- 9.30—Marching music for school children.
- 10—"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 Reader's Cable Service.
 - 11.10—Music from the Studio.
 - 11.30—Marching Music for School Children.
 - 11.55—Close down.

MIDDAY SESSION.

- 12—"The Chimes of 'Big Ben.'"
 - 12.5—Stock Exchange, First Call.
 - 12.10—Music from the Studio.
 - 12.30—Marching Music from the Studio for School Children.
 - 12.40—Musical Items.
 - 12.45—From Farmer's Oak Hall: The Oak Hall Trio.
 - 12.50—Rugby Wireless News.
 - 12.55—Miss Ruby Swaddling, soprano.
 - 1—"Chimes of 'Big Ben.'" Announcements.
 - 1.3—"Evening News" midday news service; Producers' Distributing Society's Reports.
 - 1.35—"The Oak Hall Trio."
 - 1.24—Stock Exchange, Second call.
 - 1.30—Marching Music for School Children.
 - 1.40—Miss Ruby Swaddling, soprano.
 - 1.45—Music from the Studio.
 - 1.50—"The Oak Hall Trio."
 - 2—Time Signals. Close down.

AFTERNOON SESSION.

- 2.30—Music from Studio.
- 2.40—Talk by Mr. S. H. Bowdon: "Bees—Holy City of Islam."
- 3.00—Marching Music for the School Children.
- 3.40—Miss Gwladys Fimister, 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—Serial Story: "When the Devil was Sick" (by Mr. N. J. Rath).
- 4.15—Music from the Studio.
- 4.25—Miss Gwladys Fimister, 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.
- 4.45—Close down.

EARLY EVENING SESSION.

- 5.45—"The Chimes of 2FC."
- 5.50—"The Hello Story" to the Children.
- 6.30—A Serial Story for the Older Children.
- 6.45—Broadcast from the Hotel Australia, Sydney; Orchestral Items.
- 7.15—From the Studio: "Evening News" Late News Service and Weather Information.
- 7.30—Dalgety's Market Reports (wool, wheat, stock), fruit and vegetable markets.
- 7.45—Rev. F. H. Roward will continue his Natural History Talks, dealing with "Moths, Mites and Miscellaneous Goats."

NIGHT SESSION.

- 8—"The Chimes of 'Big Ben'" and Announcements.
- 8.3—Broadcast from the Haymarket Theatre, Sydney; Operatic Orchestra, under the baton of Mr. Stanley Porter.
- 8.25—Broadcast from the Adyar Hall, and heard for the first time, a programme by the Sydney Flute Club, including vocal items by Miss Mabel Batchelor, cello solos by Mr. Gladstone Bell, and flute solos by Mr. Lemmon and concerted solos. Flute items by members of the Club.
- 9.6—Broadcast from Haymarket Theatre; Vocal Act.
- 9.20—From the Studio; Mr. Murray Gibbs, baritone.
- 9.24—From Adyar Hall: Continuation of the Dinner.
- 10—From Studio; Harry Thomas, entertainer.
- 10.10—Mr. Murray Gibbs, baritone.
- 10.15—Haymarket Operatic Orchestra.
- 10.30—From Studio; Mr. Harry Thomas, entertainer.
- 10.40—Mr. Murray Gibbs, baritone.

- 10.45—JFC Dance Band. Mr. Eric Pearce, conductor.
- 11—Chimes of "Big Ben." Announcements.
- 11.15—JFC Dance Band.
- 11.30—Broadcast from the Wentworth Hotel. Sydney; Wentworth Cafe Dance Orchestra under the baton of Mr. Spence Simpson.
- 12—National Anthem; Close down.

2BL

EARLY MORNING SESSION.

- 7.10—Physical Training and Health exercises.
- 7.15—Broadcaster's 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.
- 10.45—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—Broadcaster's Information Service, including Mail, Bonds, to call by wireless.
- 11.50—Shipping; Weather and Rainfall.
- 11.55—Women's Session; Social Notes by Mrs. Jordan.
- 12—Mrs. Jordan answering correspondents.
- 12—G.P.O. Clock and Chimes; A Talk by Mrs. Jordan.
- 12.25—A Talk by Miss Helen Jean; Beijing.
- 12.30—Sydney Stock Exchange Calls.
- 12.35—Hillier's Instrumental Quartette, direction Cyril Catling.
- 12.45—Sydney Stock Exchange Calls.
- 1.15—Latest Sporting Information and News from the Sun.
- 2—G.P.O. Clock and Chimes; Close down.

AFTERNOON SESSION.

- Rating Information broadcast by courtesy of The Sun.
- 3—G.P.O. Clock and Chimes; Weather Report.
- 3.15—Shipping by courtesy of Mr. G. J. Murray, Govt. Meteorologist; Social Notes from the Sun.
- 3.30—David Jones' Tea Room Trio.
- 3.45—A Course in Philanthropic Thought, by Mr. J. M. Prentice.
- 3.45—Musical programme from the studio.
- 4—G.P.O. Clock and Chimes; David Jones' Tea Room Trio.
- 4.15—Musical Programme from the Studio.
- 4.30—Serial Story entitled, "The Scarlet Carduel" (Edelstein).
- 5—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Reports.
- 5.15—Shipping information when available.
- 5.15—Resume of night's programme.
- 5.15—G.P.O. Clock and Close down.

EARLY EVENING SESSION.

- 6—G.P.O. Clock and Chimes; Uncle George and the Kiddies.
- 6.10—Pavilion Dinner Orchestra under the direction of Mr. C. Morison.
- Special Country Session.
- 7—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co's Stock Wool and Hide Report.
- 7.5—Weather Report and Forecast by courtesy of Mr. G. J. Murray, Govt. Meteorologist.
- 7.15—Stock Exchange Reports.
- 7.45—Producers' Distributing Society's Fruit and Vegetable Report.
- 7.55—Fruit and Vegetable Reports (Sun).
- 7.55—Grain and Fodder Reports (Sun).
- 7.55—Egg and Poultry Reports (Sun).
- 7.55—Country News from the Sun.
- 7.55—Country Women's Session.

NIGHT SESSION.

- 6—Sydney Welsh Choral Society, under the direction of Mr. E. H. Jones, will perform Mendelssohn's "Elijah." The performance will be broadcast from a hall specially engaged, and 2BL claim that this is the largest engagement yet.

2KY

LUNCHEON HOUR SESSION:

- 12.10—Popular Fox Trots. Musical Interlude.
- News Items, Hawaiian Steel Guitar Selections, Union News and Meetings. Vocal Items. Closing down at 1.45 p.m.

CHILDREN'S HOUR:

- 4.30—The Storyman, Mr. Thompson.

EVENING SESSION.

- 7.30—Topics in the ticking of the clock.
- 7.35—Latest news items.
- 7.40—Industrial and political topics, by Mr. J. S. Jordan.
- 7.55—Shipping Log.
- 8—Bunjo solos, by Mr. W. Thompson.
- 8.10—Muzza soprano solos by Miss Nellie Grant.
- 8.20—Monologue, by Miss Amy Rowald.
- 8.30—Musical interlude: Palais Royal Calibriettes, Mrs. Walter Berbau, leader (by kind permission of J. C. Bradford Ltd.).
- 8.35—Soprano solos, Miss Ethel Mitchell.
- 9.5—Tenor solos, Mr. Tom O'Connor.
- 9.15—Music Interlude.
- 9.30—Contralto solos, by Miss Amy Rowald.
- 9.40—Bass solos, by Mr. W. Ward.
- 9.50—Dance music.
- 10—Closing Announcements.

2GB

EVENING SESSION.

- 6.45—Talks to Children by The Man from Dreamland.
- 7.10—Tales.
- 7.30—Music from the Studio.
- 7.45—Announcements.
- 7.55—Instrumental Trio.
- 8.5—Address by Dr. van der Lestuw.
- 8.20—Songs by Miss Cecile Adkins.
- 8.25—String Quartette: Lloyd Davies, Monica Herder, Charles Bouch, Muriel Lane.
- 8.30—Announcements.
- 9.4—Vocal solos by Dan Scully.
- 9.13—Talk on Wireless, by E. G. Beard.
- 9.30—Songs by Miss Cecile Adkins.
- 9.35—Vocal solos by Dan Scully.
- 9.42—Instrumental Quartette: Dan Scully, Monica Herder, Muriel Lane, Ada Brook.
- 9.52—God Save the King.

3LO

MIDDAY SESSION.

- 11 noon—Time Signal; British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables; "Arrows" and "Herald" News Service.
- 12.15—Stock Exchange Information; Shipping Intelligence.
- 12.30—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South Australia, and New South Wales; Ocean Forecast; River Reports.
- 1—Time Signal.
- 1.10—Studio Orchestra.
- 1.15—Sylvia Van Asche, soprano.
- 1.17—Instrumental Trio.
- 1.20—Reginald Bradley, violin, Agnes Fortune piano.
- 1.30—Sylvia Van Asche, soprano.
- 1.37—Walter Smith, cornet.
- 1.44—Studio Orchestra.
- Close down.
- Results of the Richmond Trotting will be given after each race.

AFTERNOON SESSION.

- 4—Studio Orchestra.
- 5.15—Mrs. Dorothy Silk will give a talk on "Homocentrism."
- 8.20—Tasma Tiernan, cello.
- 8.30—Colin Crane, baritone.
- 8.35—An original sketch written by Stanley "Turkey" Taylor.
- 8.55—String Quartette.
- 4.5—Miss Flora Pell, Supervisor of Domestic Arts, Education Department; Domestic Economy.

- 4.50—Colin Crane, baritone.
- 4.50—Studio Orchestra.
- 4.55—C. Richard Cling, flute.
- 4.55—"Herald" News Service; Stock Exchange Information; Results of Richmond Trotting Races will be given as they come to hand.
- 5—Close down.

EVENING SESSION.

- 5.45—Children's Hour; Answers to letters and Birthday Greetings.
- 6—Rita Hilton will sing you a very funny song. Miss Ethel Bradshaw, accompanist.
- 6.7—"Little Miss Koskularra" will tell (by special request) the story of "Little Red Riding Hood."
- 6.17—Rita Hilton has got just one more little song for you to hear.
- 6.44—"Little Miss Koskularra" will give the last instalment of The Girl who Played the game. Watch out for a new story next week. It's full of fun.
- 6.46—"Arrows" and "Herald" News Service; Reuters and the Australian Press Association Cables.
- 6.53—Walter Berbau; Shipping Movements; Overseas Shipping.
- 7—Stock Exchange Information.
- 7.2—Fish Market Reports by J. R. Borrell Ltd.
- 7.8—River Reports; Aerial Mail Information by the Australian Aerial Services Ltd.
- 7.8—Market Reports by the Victorian Producers' Cooperative Co. Ltd.; Haymarket Sheep Sales; Cattle, grain, chaff, hay, straw, etc.; daily produce, potatoes and onions; Market prices of oranges and lemons; by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

- 7.20—Under the auspices of the New Settlers' League, Mr. H. H. Jellicoe will speak: "Archeron Valley."
- 7.50—Under the auspices of the Department of Agriculture, Mr. H. W. Davey, Chief Orchard Supervisor, "Current Orchard Work."
- 8—Studio Orchestra, "William Tell."
- 8.10—Colin Crane, baritone.
- 8.17—"Cardimann" Mr. H. A. Walfra Sporting Editor of the "Arrows" and "Australia" will speak on the "Melbourne Cup and other Races."
- 8.30—Harold Elving, pianoforte recital.
- 9.17—Dr. Norman MacArthur, "Preservation of Game."
- 9.32—Rupert Hesel and Elio Duo in "Marmosettaria."
- 9.35—Some Hawaiian melodies—Mona Lu Duo in some haunting island Melodies.
- 9.45—Colin Crane, baritone.
- 9.56—British Official Wireless news from Rugby; Announcements.
- 10.06—Some Old-time Waltzes; Studio Orchestra.
- 10.16—Rupert Hesel and his cello cello.
- 10.25—"Arrows" news service. Weather forecast.
- 10.35—From the South Pacific Islands: The Mona Lu Duo, in Huia Huia strains.
- 10.44—Elio Duo, soprano.
- 10.45—Studio Orchestra, "Like Time" selection.
- 11—"Our Great Thought for To-night is:—'No good book or good thing of any sort, shows its best face at 6.31.'"—Carlyle.
- 11.1—3LO Dance Orchestra.
- 11.40—God Save the King.

4QG

MIDDAY SESSION.

- 12.15—Time-Signal.
- 1—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."
- 1.20—From Hotel Carlton; Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 2—Close down.

AFTERNOON SESSION.

- 3.30—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.

- 6.20—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: Pig Club Essays (boys and girls' talk), Mr. E. J. Shelton, Instructor in Pig Raising.
- 7.30—From the Studio of 4GG: 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; Mr. Phillip O'Brien Hoare, in his Problem Poems and Stories.
- 8.—The Organ Recital by Mr. George Sampson, F.R.C.O. (City Organist), will be relayed from the Exhibition Hall.
- 9.—Weather Information, officially supplied by the Commonwealth Weather Bureau.
- 9.10—Studio Concert.
- 10.—"The Daily Mail" News Service; Close now.

5 CL

MORNING SESSION.

- 11.30—G.P.O. Chimes.
- 11.51—Featuring a Steek Duo Art number.
- 11.40—"Advertiser" news service.
- 11.55—Vocalion number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" news service.
- 12.16—Featuring a Steek Duo Art number.
- 12.36—5CL Studio Orchestra in concert numbers.
- 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; Steek Duo-Art and Vocalion numbers.
- 4—G.P.O. Chimes.
- 4.1—Relay from "Arealia" Cafe—Orchestral numbers.
- 4—G.P.O. Chimes.

EVENING SESSION.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime stories.
- 7.30—Market reports.
- 8—G.P.O. Chimes.
- 8.1—Programme of hand music relayed from Hainey's Institute, interspersed with vocal items from Studio, by Misses I. Wald and Jean Sinclair; Messrs. Rowley and Clark; Miss M. Morgan at the piano.
- 9.20—"Twinkler's" original humorous talk.
- 9—G.P.O. Chimes.
- 9.1—Weather reports.
- 9.3—Band concert continued.
- 10.15—"Advertiser" news service and ships within wireless range.
- 10.20—Vocal items from the Studio.
- 10.35—Station announcements.
- 11—G.P.O. Chimes; National Anthem; Close down.

7 ZL

MORNING SESSION.

- 11—G.P.O. Clock Chimes; The "Mercury" news; Stock Market; Shipping; Commercial

Intelligence; Weather information; "Subnola" selections.
12—G.P.O. Clock Chimes; Close down.

AFTERNOON SESSION.

- 2—G.P.O. Clock Chimes; Musical items from the Studio.
- 3.40—Hobart Stock Exchange quotations.
- 3.55—Weather Information.
- 4—G.P.O. Clock Chimes; Close down.

EVENING SESSION.

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

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.
- 8.10—Talk by Professor T. Thomas Flynn, D.Sc. subject, "Whales."
- 8.50—Selections on the Gulbransen Regulating Piano, broadcasted by direct wire from Findlay's Showroom, Elizabeth St., Hobart.
- 9.15—Tasmanian District Weather Reports.
- 9.50—"The Mercury" special interstate news service; Weather synopsis; Station announcements; National Anthem.



Tuesday, Nov. 2

2 FC

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; Interstate Markets; Produce Markets.
- 7.45—"Sydney Morning Herald" News Service
- 8.—The Chimes of Big Ben; Music from the Studio.
- 8.15—Close down.
- 9.15—The Chimes of 2FC and Programme Announcements.
- 9.30—Music from the Studio.
- 9.45—Marching Music for School Children.
- 9.45—Last-minute Racing Information by the 2FC Racing Commissioner.
- 10.—The Chimes of Big Ben.
- 10.—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; Music from the Studio; Australian Press Association and Reader's Cables.
- 11.15—A Talk on Home Cooking and Recipes by Miss Ruth Forest.
- 11.20—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
- 12.45—Music from Studio; Oak Hall Trio
- 12.50—Buddy Wireless News.
- 12.55—From Studio; Musical items.
- 1.—Chimes of "Big Ben" Weather intelligence.
- 1.—"Evening News" midday news service.
- 1.20—Oak Hall Trio.

- 1.30—Marching Music for School Children.
- 1.40—Music from Studio.
- 1.50—The Oak Hall Trio.
- 2.—The Chimes of Big Ben; Close Down.

AFTERNOON SESSION.

- 2.30—Chimes of 2FC and Announcements.
- 2.35—From the Studio; Recital by the children from the Studio of Miss M. Porter.
- 3.—Music from Studio.
- 3.30—Description of the running of the Melbourne Cup.
- 3.45—Miss Ferns Butler, soprano.
- 3.50—Oak Hall Trio.
- 3.55—Music from the Studio.
- 4.—Miss Maribel Humphries, contralto.
- 4.5—Serial Story: "When the Devil was Sick."
- 4.20—Miss Ferns Butler, soprano.
- 4.25—From Farmer's Tea Rooms, the Oak Hall Trio.
- 4.36—Music from the Studio.
- 4.40—Miss Maribel Humphries, contralto.
- 4.45—Stock Exchange; Third Call.
- 4.48—Close down.

EARLY EVENING SESSION.

- 5.45—The Chimes of 2FC and Announcements.
- 6.—The "Hello Man" talks to the Children
- 6.30—A talk to the Older Children.
- 6.45—Broadcast from the Hotel Australia—Orchestral Items.
- 7.15—From the Studio, "Evening News" Service.
- 7.30—Market Reports (Wool, Wheat, Stock Fruit, and Vegetable Markets).
- 7.40—Close Down.

NIGHT SESSION.

- 8.—The Chimes of Big Ben; and Announcements. Broadcast from the Conservatorium Hall, by arrangements with J. C. Williamson, the first broadcast performance of the ever-popular musical comedy, "Our Miss Gibbs," the whole performance will be given by the Bankers' Operatic Society.
- 8.30—During the interval between the 1st and 2nd acts, Mr. Lionel Lawson will play from the Studio.
- 9.50—Mr. Lionel Lawson, violin solo.
- 10.—Chimes of "Big Ben" and Announcements.
- 10.5—Broadcast from the Wentworth Hotel, Sydney; Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 12.—National Anthem; Close Down.

2 BL

EARLY MORNING SESSION.

- 7.15—Physical Training and Health Exercises.
- 7.30—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 and London Metal Quotations.
- 11.30—Musical programme from the Studio.
- 11.25—Broadcasters' Information Service, including Mails, Boats 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 by Mrs. Jordan.
- 12.25—Talk by Miss Helen Jean Reuling.
- 12.30—Sydney Stock Exchange Calls.
- 12.45—Hillier's Instrumental Quartette, direction Cyril Cauffman.
- 1.10—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. T. Mace, Govt. Meteorologist; Social Notes from the Sun.
- 2.15—Civil Service Stores Trio, direction, Miss de Cury Bremer.
- 3.40—A Talk in Modern Psychology, by Mr. J. M. Promite.
- 3.45—Musical Programme from the Studio.
- 4.00—Clock and Chimes; Civil Service Stores Trio.
- 4.15—Musical Programme from the Studio.
- 4.30—Serial Story, entitled "The Scarlet Cockerel." (Shelley).
- 4.45—Musical Programme from the Studio.
- 4.50—G.P.O. Clock and Chimes; Producers' Distributing Society's Market and Fruit Report.
- 5.—Shipping Information when available.
- 5.10—Resume of Night's Programme.
- 5.15—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 Sessions.
- 7.—G.P.O. Clock and Chimes; Australian Mercantile, Land and Finance Co's Report.
- 7.15—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
- 7.30—Stock Exchange Reports.
- 7.45—Producers' Distributing Society's Fruit and Vegetable Report.
- 7.50—Fruit and Vegetable Reports (Sun).
- 7.55—Eggs and Poultry Report (Sun).
- 7.58—Country News from the Sun.
- 7.59—Country Women's Session.

NIGHT SESSION.

- 8.—Classical Concert from the Studio, including Mr. Roger Jones, harpist; Nell Crane and Alf J. Lawrence; Miss Maizie Barnett, contralto; Mr. Richard McClelland, basso; Miss Gladys Verona, soprano; Paterson Dance Orchestra, under direction of Mr. S. Bennett.

2 K Y

LUNCHEON HOUR SESSION.

- 12.15—Popular Fox Tots; Musical Interlude; News Items; Hawaiian Steel Guitar Selections; Union News and Motions; Vocal Items; Closing down at 1.45 p.m.

AFTERNOON SESSION.

- 2.15—Tune in to the ticking of the clock.
- 2.18—Popular Fox Tots.
- 2.30—Short Story.
- 2.35—Musical Interlude.
- 4.—Popular Science Talk.
- 4.15—Hawaiian Steel Guitar Selections.
- 4.25—Musical and Vocal Items.
- 4.40—Where to go To-night.
- 4.45—Closing Announcements.

CHILDREN'S HOUR.

- 6.30—The Storyman, Mr. Thomson.

EVENING SESSION.

- 7.30—Tune in to the ticking of the clock.
- 7.35—News Items.
- 7.45—Publishing a Newspaper, Mr. E. Cross.
- 7.55—Shipping Log.
- 8.—Pianoforte solos, Miss Mary Dean.
- 8.10—Tennet Solos, Mr. A. Jamieson.
- 8.20—Mazzu Soprano Solos, Miss Helen Cameron.
- 8.30—Musical Interlude, Palais Royal Callifortians, Mr. Walter Newham, leader (by kind permission of J. C. Hendrad Ltd.).
- 8.55—Special Announcements.
- 9.—Pianoforte solos, Miss Zara Neilsson.
- 9.10—Items from McHugh's Leichhardt Stadium.
- 9.30—Request Interlude Records.
- 9.55—Musical Interlude, Palais Royal Callifortians.
- 10.—Closing Announcements.

3 L O

MIDDAY SESSION.

- 12 noon—Time Signal; British Official Wireless News, from Rugby; Reuters and the Australian Press Association Cables; "Argus" and "Herald" News Services.
- 12.35—Stock Exchange Information; Shipping Intelligence.
- 1.25—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South Australia and New South Wales; Ocean Forecast; River Reports.
- 1.—Time Signal.
- 1.1—Description of the Cup Hurdle, transmitted from the Course (Flemington).
- 1.25—Meteochestra.
- 1.31—Keith Desmond, elocutionist.
- 1.35—Walter Smith, cornet.
- 1.50—Studio Orchestra.
- 1.55—Description of the High Weight Handicap, transmitted from Flemington Racecourse.
- 1.58—Keith Desmond, elocutionist.
- 1.52—Studio Orchestra.
- 2.—Close down.
- 2.40—Description of November Nursery, transmitted from the Flemington Racecourse.

AFTERNOON SESSION.

- 3.—Studio Orchestra, "Sally" selection.
- 3.10—Walter Smith, cornet.
- 3.15—Studio Orchestra, selection, "Mary," transmitted from Flemington Racecourse.
- 3.30—Studio Orchestra.
- 3.41—Station Trio.
- 4.—Tasma Troupe, "ella."
- 4.7—Studio Orchestra.
- 4.15—Description of Cup Steeple, transmitted from the Flemington Racecourse.
- 4.18—Franklin Statham, clarinet.
- 4.25—Studio Orchestra.
- 4.40—"Herald" News Service; Stock Exchange Information.
- 4.—Description of Van Year Stakes, transmitted from Flemington Racecourse.
- Close down.

EVENING SESSION.

- 5.45—Children's Hour: Answers to letters and Birthday Greetings.
- 6.—Alf Collier will play the mouth organ for the children.
- 6.7—"Mary Gumbal": Poems: "Mother and Baby" and "Home for Little Boys." Story for the littlest ones, "The Ostrich."
- 6.20—Alf Collier says he has "one more little tune he wants you to hear."
- 6.25—Mary Gumbal: For the bigger children: "The Magic Necklace."
- 6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association Cables.
- 6.55—Weather Synopses. Aerial Mail Information by the Australian Aerial Mail Services Ltd.
- 7.—Stock Exchange Information.
- 7.55—Fish Market Reports by J. R. Borrett Ltd.
- 7.—River Reports.
- 7.8—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Show Sales; Poultry, grain, chaff, hay, straw, etc.; dairy produce, potatoes and onions; Market prices of oranges and lemons, by the Victorian Central Crops Association Pty. Ltd.

NIGHT SESSION.

- 7.30—Mr. Chas. J. P. Hodges, Secretary of the Royal Automobile Club of Victoria, will speak on "What Organised Motorists Mean for the Public."
- 7.40—Under the auspices of the University Extension Board, Professor W. A. Osborne, "The Naval Gloom Chasers," the Jazz Band of H.M.A.S. "Adelaide"
- 8.10—Collin Crans, baritone.
- 8.14—Dr. Loftin Hill, "Popular Science."
- 8.20—The Naval Gloom Chasers, "Then I'll be Bappy."

- 8.40—Rita Hilton, entertainer.
- 8.44—The Naval Gloom Chasers.
- 8.54—R. F. Loft, banjo.
- 9.—The Naval Gloom Chasers.
- 9.10—Collin Crans, baritone.
- 9.14—The Naval Gloom Chasers.
- 9.24—Rita Hilton, entertainer.
- 9.28—The Naval Gloom Chasers.
- 9.35—R. F. Loft, banjo.
- 9.40—The Naval Gloom Chasers.
- 9.52—Airtily Official Wireless news from Reply Announcements.
- 10.2—The Naval Gloom Chasers.
- 10.10—Collin Crans, baritone.
- 10.16—MLO Dance Orchestra.
- 10.25—"Argus" news service. Announcements; Meteorological Information.
- 10.30—MLO Dance Orchestra.
- 10.40—Collin Crans, baritone.
- 10.50—MLO Dance Orchestra.
- 11.—Our Great Thought To-night is: "You find yourself refreshed by the presence of cheerful people. Why not make others feel so comfortable with pleasure on a different?"—L. M. Child.
- 11.1—MLO Dance Orchestra.
- 11.40—God Save the King.

4 Q G

MIDDAY SESSION.

- 12.55—Tune in.
- 1.25—Time Signal.
- 1.35—Market Reports. Weather Information. "The Daily Mail" and "The Daily Standard" news.
- 1.50—From Hotel Carlisle: Lunch Made from the Lounge, Hotel Carlisle, played by Hotel Carlisle Symphony Orchestra.
- 2.—Close down.

AFTERNOON SESSION.

- 2.40—A programme of Music from the Studio.
- 4.—A French Talk, by Mlle. Amelie Ringard.
- 4.15—"The Telegraph" news.
- 4.50—Close down.

EARLY EVENING SESSION.

- 6.25—Tune in.
- 6.30—The Children's Session, Stories by "Uncle Ben" and "Uncle Jim."
- 7.—From the Council of Agriculture, Studio: "The Farmers' Session, Market Reports, Lectures: "Leaflets as they affect the Primary Producer, Mr. C. Shesby, Assistant Secretary, Council of Agriculture."
- 7.30—From the Studio of 4QG: "The 'Daily Standard' news, Stock Exchange information."
- 7.40—Announcements.

NIGHT SESSION.

- 7.45—Lectures: Photography, by Mr. F. L. South.
- 8.—Concert, including The Metropolitan Band.
- 9.—Radio Voice Contest Semi-Finalists.
- 9.20—Weather information officially supplied by the Commonwealth Weather Bureau, Announcements.
- 9.30—The Studio Instrumental Quartet.
- 10.—From the Studio: "The Daily Mail" news service. Close down.

5 C L

MORNING SESSION.

- 11.30—G.P.O. Chimes.
- 11.51—Featuring a Steek Duo Art number.
- 11.40—"Advertiser" news service.
- 11.55—Vocalion number.
- 12.—G.P.O. Chimes.
- 12.1—"Advertiser" news service.
- 12.16—Featuring a Steek Duo Art number.
- 12.10—5CL Studio Orchestra.
- 1.55—Ward & Co. Stock Exchange intelligence.
- 2.—Weather synopses and station announcements.
- 2.—G.P.O. Chimes.

AFTERNOON SESSION.

- 3.—G.P.O. Chimes.
- 3.1—Relay from the "Maple Leaf" Cafe—Orchestra numbers.

- 3.45—From the Studio: Steck Duo-Art and Vocalion numbers.
4.—G.P.O. Chimes.
4.1—Relay from the "Areadia" Cafe—Orchestral numbers.
5.—G.P.O. Chimes.

EVENING SESSION.

- 6.30—G.P.O. Chimes.
6.31—Bedtime stories.
7.30—Market reports.
7.40—Milling talk by Mr. Jackett.
8.—G.P.O. Chimes.
8.1—Cadenza Quartette interspersed with vocal items from Studio.
8.20—"Twinklers" original humorous talk.
8.40—Studio Concert, continued.
9.—G.P.O. Chimes.
9.1—Weather reports.
9.3—Studio concert continued.
10.15—"Advertiser" news service.
10.30—Studio concert continued.
10.55—Station announcements.
11.—G.P.O. Chimes. National Anthem.

7 Z L

MORNING SESSION.

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

AFTERNOON SESSION.

- 3.—G.P.O. Clock Chimes.
3.45—Musical Items from the Studio.
3.50—Hobart Stock Exchange Quotations.
2.55—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 Bookshelf Cat, 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.
8.10—Literary Lapses and Library Lads by Mr. W. E. Fuller.
8.30—Musical items from the studio—special request numbers.
9.10—Tasmanian District Weather Reports.
9.30—"The Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements; National Anthem.



Wednesday, Nov. 3

2 F C

EARLY MORNING SESSION.

- 7.—The Chimes of Big Ben; and Announcement.
7.5—Music from the Studio.
7.10—Weather information, astronomical memorandum.
7.25—Investment Market; Mining Share Market; Metal Quotations.
7.35—Wool Sales; Broadcasters' Market; Interstate Markets; Produce Markets.
7.45—"Sydney Morning Herald" News Service.
8.—Chimes of Big Ben. Music from the Studio.
8.15—Close down.

MORNING SESSION.

- 9.15—The Chimes of 2FC and Programme Announcements.

- 9.30—Marching music for the School Children.
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 Reader's Cable Service.
11.15—A Talk on Home Cooking and Recipes by Miss Ruth Furst.
11.30—Marching Music for the School Children.
11.55—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; Oak Hall Trio.
12.50—Rugby Wireless News.
12.55—Music from the Studio.
1.—The Chimes of Big Ben; Weather Intelligence.
1.10—"Evening News" Mid-day Service; Producers' Distributing Society's Report.
1.30—Oak Hall Trio.
1.35—Stock Exchange—Second Call.
1.50—Marching Music for the School Children.
1.55—Music from Studio.
1.59—From Farmer's Oak Hall; The Oak Hall Trio.
2.—Chimes of "Big Ben." Close down.
2.30—Chimes of 2FC and Announcements.
2.35—From Studio: A recital by pupils of Mrs. Stuart Doyle.
2.50—From Studio: Miss Eild D'Arzey, lyric soprano.
3.10—Marching Music for School Children.
3.15—The Oak Hall Trio.
3.40—Miss Jeanne Slapoffski, soprano.
3.45—Music from Studio.
4.—Miss Phyllis Rayner, mezzo.
4.5—Serial: "When the Devil was Sick" (by E. J. Rath, read by Miss Annie Hughes).
4.15—Music from the Studio.
4.25—Miss Jeanne Slapoffski, soprano.
4.35—From Farmer's Tea Rooms, the Oak Hall Trio.
4.55—Music from the Studio.
4.40—Miss Phyllis Rayner, mezzo.
4.45—Afternoon Call, Stock Exchange.
4.55—Close down.

EARLY EVENING SESSION.

- 5.15—Chimes of 2FC.
5.20—"The Hello Man" talks to the Children assisted by "Jerry."
5.30—A serial story for the older children.
5.45—Broadcast from the Hotel Australia—orchestral items, directress, Miss A. J. Egan.
7.15—From the Studio, "Evening News" Service; and Weather Information.
7.20—Delight's Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).
7.40—Final Esperanto Talk "Word Building in Esperanto."

NIGHT SESSION.

- 8.—The Chimes of Big Ben.
8.5—Broadcast from the Strathfield Home for Children; Musical Items.
8.50—From the King's Hall, Sydney; Vocal items from the concert arranged by Mr. Bennett-North.
9.—From Studio: 2FC vocal quartette, conducted by Mr. W. Bourne.
9.10—Miss Leslie Elliott, entertainer, from 210 London, makes her first appearance broadcasting in Australia.
9.20—Farewell appearance of Mr. Andre Navarro, baritone.
9.30—From Conservatorium Hall: Instrumental items.
10.—From the Studio: 2FC Vocal Quartette.
10.10—Miss Leslie Elliott, entertainer.
10.15—Mr. Andre Navarro, baritone.

- 10.24—2FC Dance Band.
10.32—Miss Leslie Elliott, entertainer.
10.40—2FC Dance Band.
11.30—From the Wentworth Hotel, Sydney. Items by the Wentworth Cafe Orchestra, under the baton of Mr. Sydney Simpson.
12.—National Anthem; Close down.

2 B L

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."
10.45—Musical programme from the Studio.
10.55—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 Mail, Items 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 by Mrs. Jordan.
12.25—A Talk by Miss Helen Jean Bowling.
12.45—Musical Programme from the Studio.
1.—Pianoforte Lecture-Recital by Mr. Arnold R. Mote, B.A., in the Fine Art Gallery, Anthony Hardern's.
1.40—Sydney Stock Exchange Calls.
1.50—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—Special Operatic Session with explanatory talk by Mr. J. M. Prentice, 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.
4.30—Serial Story.
4.45—Musical Programme 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; Close Down.

EARLY EVENING SESSION.

- 6.—G.P.O. Clock and Chimes; Uncle George and the Kiddies.
6.40—Pavilion Dinner Orchestra under the direction of Mr. C. C. Morrison.
Special Country Sessions.
7.—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co's. Stock, Wool and Hilo Report.
7.5—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
7.5—Stock Exchange Reports.
7.15—Producers' Distributing Society's Fruit and Vegetable Report.
7.20—Fruit and Vegetable Reports (Sun).
7.24—Grain and Fodder Reports (Sun).
7.27—Egg and Poultry Reports (Sun).
7.30—Country News from the Sun.
7.50—Country Women's Session.

NIGHT SESSION.

- 8.—Ely's Concert, broadcast from Ely's Concert Hall.
8.15—From the Studio: Mr. Lance Jeffree, tenor.
8.20—Mr. Raymond Beatty, basso.
8.30—Resume of following day's programme.

- 4.—G. P. O. Clock and Chimes; Weather Report by courtesy of Mr. C. J. Mares.
 9.5.—Sydney Orpheus Society, under the direction of Mr. Pennan.
 9.25.—Miss Mable Hughes, soprano.
 9.57.—Mr. Tom Angus, comedian.
 9.54.—Interval.
 9.59.—Mr. Lance Jeffree.
 9.46.—Sydney Orpheus Society.
 10.—Missie Hughes.
 10.3.—Ray Beatty.
 10.13.—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.

2 KY

LUNCHEON HOUR SESSION.

- 12.15.—Popular Fox Trot, Musical Interlude; News Items; Hawaiian Steel Guitar Selections; Union News and Meetings; Vocal Turns; Closing down at 1.45 p.m.

EVENING SESSION.

- 7.—Sporting Feature: Turf Tug—A complete review of to-day's racing. Mr. T. G. Hopkins.
 7.36.—News Items.
 7.40.—Lecturette, Miss Irwin.
 8.—Pianoforte Solos.
 8.10.—Tenor solos, Billy Thom.
 8.15.—Recall of Lawn Cigarette Competition.
 8.26.—Baritone Solos, Mr. Alf James.
 8.30.—Musical Interlude, Palais Royal Californians. Mr. Walter Beahan, leader (by kind permission of J. C. Bendish, Ltd.).
 8.55.—Announcements.
 9.—Selections, Hawaiian Steel Guitars.
 9.10.—Theatre Critique.
 9.15.—Special Feature from Palais Royal: Description presented at the October Bride Ball and presentation of 50 novelties by J. C. Bendish Ltd.
 9.45.—Special October Bride music.
 10.—Closing Announcements.

2 GB

AFTERNOON SESSION.

- 11.00.—Music from Studio.

EVENING SESSION.

- 8.45.—"Talks from Dreamland," Talks to Children.
 1.15.—Interval.
 7.50.—Music from Studio.
 7.40.—Announcements.
 7.53.—Viola Solos, by Monica Hooper.
 8.5.—Address by Prof. Ernest Wood.
 8.30.—Vocal Quartette.
 9.25.—Talk on "Ocean Piers," by Commander Bollaert.
 8.50.—Piano solos, by Miss Ada Bewick.
 8.45.—Dramatic Reading—Oscar Kussel, Enid Larimer.
 9.5.—Songs by Miss Ethel Jones.
 8.13.—Announcements.
 9.17.—Songs by Clement Hooking.
 9.30.—Talk on Wireless, by Mr. K. G. Beard, Constructional Engineer, 247B.
 9.35.—Viola solos by Lloyd Davies.
 9.45.—Vocal Quartette.

3 LO

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.
 12.50.—Meteorological information, Weather forecast for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast, River reports.
 1.—Time Signal.
 1.1.—Elsie Day and Rupert Hazel in Harmony.
 1.10.—Ham Johnson's Monte Carlo Band.

- 1.50.—Rupert Hazel and Elsie Day are here once again to entertain you.
 2.—Results of the Ascot Horse Races will be given immediately after each race. Close down.

AFTERNOON SESSION.

- 3.—Studio Orchestra.
 3.10.—Colin Crane, baritone.
 3.17.—Miss Frances Fraser, travolta.
 3.22.—Bernald Bradby, violin.
 3.42.—Keith Desmond, elocutionist.
 3.50.—Pipe Major Cunningham.
 3.57.—Studio Orchestra.
 4.—Colin Crane, baritone.
 4.14.—Hester Peck will give a talk on Mothercraft.
 4.23.—Pipe Major Cunningham, reminiscence.
 4.31.—Studio Orchestra.
 4.42.—"Herald" News Service; Stock Exchange Information.
 5.—Close down.

EVENING SESSION.

- 6.45.—Children's Hour; Answers to letters and Birthday Greetings.
 6.—Musical Programme for Children by Mr. Fritz Hill.
 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.

READ THIS IN NEXT WEEK'S ISSUE.

A four-valve Reinartz Receiver, with one stage of radio, will be described in next week's issue. Super-selective and simple to operate, this receiver is the result of much experimenting and will fill a long-felt want.

- 7.5.—River Reports by the Victorian Producers' Cooperative Co. Ltd.; Maymarket Sheep Sales; Poultry, Grains, Chaff, Hay, straw, pigs, 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. C. French, Government Entomologist, "Garden Insect Pests."
 7.40.—Mr. P. W. Pearce, "Physical Culture Talk."
 8.—Frehahn City Band. Mr. Percy Cole, conductor.
 8.10.—Rupert Hazel and Elsie Day, in "Harmony-articles."
 8.17.—Frehahn City Band.
 8.25.—"Round the Campfire." Music, story, and verse—grave and gay, by the writers and poets of Australasia. Mr. V. Upton Brown, narrator.
 8.50.—Frehahn City Band.
 8.57.—"Cardigan"—Mr. H. A. Wolfe, sporting editor of the "Argus"; "Oaks Stakes and Other Races."
 9.12.—Colin Crane, baritone.
 9.19.—Frehahn City Band.
 9.27.—Capt. Peters. Books, wise and otherwise.
 9.42.—Rupert Hazel and Elsie Day will entertain you for another few minutes.
 9.50.—Frehahn City Band.
 9.57.—Mr. N. P. Le Conteur, B.A., Din. Ld., will talk to you on "Lilydale."
 10.10.—Third act of "Katie" will now be transmitted from His Majesty's Theatre, by permission of J. C. Williamson Ltd.

- 10.50.—"Argus" news service. British official wireless news from Rugby. Announcements. Weather forecast.
 11.—Our Great Thought for Tonight is—"I hate to see a thing done by halves; if it be right, do it boldly; if it be wrong, leave it undone."—(Gilpin).
 11.1.—"ALO's" Dance Orchestra.
 11.40.—God Save the King.

4 QG

MIDDAY SESSION.

- 12.55.—Time In.
 12.58.—Time Signal.
 2.—Market Reports. Weather information. "The Daily Mail" and "The Daily Standard" news.
 1.20.—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
 2.—Close down.

AFTERNOON SESSION.

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

EARLY EVENING SESSION.

- 6.55.—Time In.
 6.58.—The Children's Reader Stories by "Little Miss Brinsford."
 7.—From the Council of Agriculture Studio: The Farmers' Session. Market reports. Livestock. "Farmers' Sheep in Queensland—What returns may be expected." Mr. W. G. Brown, instructor in sheep and wool.
 7.30.—From the Studio of 4QG: "The Daily Standard" news. Stock Exchange information.
 7.48.—Announcements.

NIGHT SESSION.

- 7.40.—Lecture Session: "Around the World Telephone," by Mr. C. V. Woodland.
 8.—Studio Concert, including Radio Voice Song-Finalists.
 8.20.—Weather Information officially supplied by the Commonwealth Weather Bureau, Announcements.
 8.30.—Percy Leconte's Ballroom. Dance music by the Ajax Novelty Band.
 10.—"The Daily Mail" news. Close down.

5 CL

MORNING SESSION.

- 11.00.—G. P. O. Chimes.
 11.31.—Entertaining a Steek Duo Art number.
 11.40.—"Advertiser" News Service.
 11.55.—Vocalion Number.
 12.10.—G. P. O. Chimes.
 12.17.—Advertiser News Service.
 12.18.—Featuring a Steek Duo Art number.
 12.30.—4CL Studio Orchestra.
 1.52.—Ward & Co's. Stock Exchange Intelligence; Official Weather Synopsis and Station Announcements.
 2.—G. P. O. Chimes.

AFTERNOON SESSION.

- 3.—G. P. O. Chimes.
 3.1.—Relax from "Maple Leaf" Cafe—Orchestral Number.
 3.45.—From the Studio—Steek Duo Art number.
 4.—G. P. O. Chimes.
 4.1.—Relax from Arcadia Cafe—Orchestral and vocal numbers.
 5.—G. P. O. Chimes.

EVENING SESSION.

- 6.30.—G. P. O. Chimes.
 6.31.—Bedtime Stories.
 7.50.—Market Reports.
 7.40.—Boy Scouts' Corner.
 8.—G. P. O. Chimes.

- 8.1—Programme of instrumental and vocal items from the Studio.
 9.1—Weather Reports.
 9.3—Canter 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.

- 1.—G.P.O. Clock and Chimes: the "Mercury" News; "Stock Market"; Shipping; Commercial Intelligence; Weather information, and Sporting Anticipations; Saloon Selections
 12—G.P.O. Clock Chimes; Close 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.
 3.35—Weather Information.
 4—G.P.O. Clock Chimes; Close Down.

EVENING SESSION.

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

NIGHT SESSION.

- 8—G.P.O. Clock Chimes; the "Mercury" Special Tasmanian News Service; Railway Auction Produce Sales; Weather Information and Sporting Results.
 8.5—Hobart Stock Exchange Quotations.
 8.10—Abstracts and Stock Market Reports from Roberts and Co. Ltd., Murray St., Hobart.
 8.15—Physical Culture talk by Mr. George Collins.
 8.30—Concert from the Studio.
 8.16—Tasmanian District Weather Reports.
 8.50—"The Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements. National Anthem.

Thursday, Nov. 4

2FC

EARLY MORNING SESSION.

- 5—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; Broadstairs Market; Interstate Markets; Produce Markets.
 7.45—"Sydney Morning Herald" News Service.
 8—Chimes of "Big Ben." Music from the Studio.
 8.15—Close down.

MORNING SESSION.

- 9.15—The Chimes of 2FC and Programme Announcements.
 9.20—Music from the Studio.
 9.30—Marching Music for the School Children.
 9.45—Last minute sporting information, by the 2FC Racing Commissioner.
 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—Australian Press Association and Reporter's cables.
 11.5—A Dickon's Reading, by Mr. A. S. Cockrane.
 11.25—Music from the Studio.
 11.30—Marching Music for the 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—Rugby Wireless News.
 12.55—Music from the Studio.
 1—The Chimes of Big Ben; Weather Intelligence.
 1.3—"Evening News" mid-day News Service; Producers Distributing Society's Report. From Farmer's Oak Hall; The Oak Hall Trio. Stock Exchange, second call. Marching Music for the School Children. Music from the Studio.
 1.50—The Oak Hall Trio.
 1.55—Last Minute Sporting Information.
 2.10—Close down.

AFTERNOON SESSION.

- 2.30—The Chimes of 2FC; and Announcements. Broadcast from the P.M. Street Congregation Church, an organ recital by the pupils of Miss Lillian Frost.
 2.30—Music from the Studio.
 2.30—Marching Music for the school children.
 2.40—The Hedda Trio in vocal items.
 3.45—From Farmer's Tea Rooms, the Oak Hall Trio.
 3.55—Music from the Studio.
 4—The Hedda Trio.
 4.5—Serial story.
 4.15—Music from the Studio.
 4.20—Hedda Trio.
 4.25—The Oak Hall Trio; From Farmer's Tea Rooms.
 4.35—Music from the Studio.
 4.40—The Hedda Trio.
 4.45—Stock Exchange. Third Call.
 4.45—Close down.

EARLY EVENING SESSION.

- 4.45—Chimes of "Big Ben" and Announcements.
 5.0—"The Hello Man" talks to the Children
 5.30—Serial Story for Older Children.
 6.40—Brusleat from the Hotel Australia. Orchestral items, under the direction of Miss A. J. Egan.
 7.15—From the Studio, "Evening News" Service; and Weather Information.
 7.30—Dalgety's Market Reports (Wool, Wheat, Stock, Fruit, and Vegetable Markets).
 7.40—A Talk, by Mr. E. J. Van-de-Velde, on "How to Take Photos at the Zoo."

NIGHT SESSION.

- 8—The Chimes of Big Ben and Announcements. Miss Mary McCormick, soprano.
 8.5—Broadcast from the Adyar Hall, a vocal recital by Mr. Francis Hall and Miss A. Malaly, soprano.
 8.35—Broadcast from Paling's Concert Hall, a programme submitted by the Sydney Madrigal Society, conducted by Mr. Arnold Mote.
 9.5—From the Studio: A Talk on Wireless masters.
 9.15—Miss Mary McCormick, soprano.
 9.30—From the Studio: Captain Frank Hurley will continue his adventure talk, taking as his subject "My Greatest Adventure," with a background of efforts in the hands of Mr. Laurence Halbert, with musical items typical of the scenes described. Captain Hurley will take listeners through the rigors of the famous Shackleton South Pole Expedition, of which he was a member.

- 10.45—From the Maxine Hall, Woollahra, (items by the Glander's Old Time Maxine Orchestra, until midnight.
 12—Close down.

2BL

EARLY MORNING SESSION.

- 7.10—Physical Training and Health exercises.
 7.40—Broadcasters Special News 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.
 10.10—Special News Service from the "Daily Telegraph."
 10.25—Musical programme from the Studio.
 10.40—Special News Service from the "Daily Telegraph."
 10.55—"Five Minutes" Talk supplied by the N.R.M.A.
 11—G.P.O. Clock and Chimes; Market Reports.
 11.10—Musical programme from the Studio.
 11.25—Broadcasters Information Service, including Mail, Boats 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 by Mrs. Jordan.
 12.20—A Talk by Miss Helen Jean Beecleg.
 12.30—Sydney Stock Exchange Calls.
 12.45—Hillier's Instrumental Quartette, including Carl Castling.
 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 Report and Forecast, by courtesy of Mr. C. J. Mares, Govt. Meteorologist; Social Notes from the Sun.
 3.15—David Jones' Tea Room Trio; Pianist Miss Caspers, violinist, Mr. Acheson, cellist, Mr. Cleaver.
 3.30—Country Women's Session.
 3.45—Music from the Studio.
 4—G.P.O. Clock and Chimes; David Jones' Tea Room Trio.
 4.15—Music from the Studio.
 4.30—Serial Story.
 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—Resumé of Nights Programme.
 5.15—G.P.O. Clock; Close Down.

EARLY EVENING SESSION.

- 6—G.P.O. Clock and Chimes; Uncle Jack and the Kiddies.
 6.40—Pettiflow. Dinner Orchestra, under the direction of Mr. Cec. Morrisou, Australian Special Country Session.
 7—G.P.O. Clock and Chimes; Australian Mercantile Land and Finance Co's. Stock, Wool and Hide Report.
 7.5—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Govt. Meteorologist.
 7.5—Stock Exchange Reports.
 7.15—Producers' Distributing Society's Fruit and Vegetable Report.
 7.15—Fruit and Vegetable (Sun).
 7.20—Grain and Fodder Reports (Sun).
 7.50—Country Women's Session.

NIGHT SESSION.

- 8—G.P.O. Clock and Chimes; Broadcasters' Topical Chorus.
 8.3—Ambassadors' Instrumental Saloon Quartette, under the direction of Mr. Claude McClean.
 8.30—Mrs. Grace Saville, contralto.
 8.37—Mr. Cyril James, baritone.
 8.44—Broadcasters' Trio.

- 8.34—Resume of following day's programme; Weather Report by courtesy of Mr. C. J. Mann, Govt. Meteorologist.
 9.—G.P.O. Clock and Chimes.
 9.1—Mr. Reg Harrison, comedian.
 9.8—Miss Helena Stewart, soprano.
 9.15—Interval.
 9.20—Broadcasters Trio.
 9.35—Mr. Cyril James.
 9.42—Miss Greta Saville.
 9.49—Mr. Reg. Harrison.
 9.56—Miss Helena Stewart.
 10.3—Broadcasters Trio.
 10.12—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.

2 KY

LUNCHEON HOUR SESSION.

- 12.15—Popular Fox Trot; Musical Interlude; News Items; Hawaiian Steel Guitar Solos; Union News and Machine; Vocal Home; Closing down at 1.45 p.m.

AFTERNOON SESSION.

- 3.15—Tune in to the ticking of the clock.
 3.18—Popular Fox Trot.
 3.25—News Items.
 3.45—Musical Interlude.
 4.—Topical Talks.
 4.10—Baritone Solo.
 4.20—Vocal and Musical Items.
 4.40—Where to go to-night.
 4.45—Close Down.

CHILDREN'S HOUR.

- 6.10—The Antak of Taronga Park, Mr. Geo. P. Manuel.

EVENING SESSION.

- 7.30—News Items.
 7.40—Sporting Feature; Scientific Training Series; Mr. E. H. Violet (Olympic Games Champion, 1908-1911).
 8.—The immediate part of the Labor Party, Mr. R. Hefferon.
 8.10—Special Feature: Items from Revival of Misch Goffus pupils at King's Hall.
 8.15—Special Feature: Items from Revival of Misch Goffus pupils at King's Hall.
 8.30—Musical Interlude, Palais Royal, California, Mr. Walter Bosban, leader (by kind permission of J. C. Hendrick Ltd.).
 8.55—Announcements.
 9.—Items from Misch Goffus' Revival.
 9.15—Lecturette: Social Science Series, Mr. J. C. Ehrlicher.
 9.30—Items from Revival of Misch Goffus.
 10.20—Closing Announcements.

3 LO

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.
 12.15—Community Singing, under the auspices of the Community Singers and Composers' Glee Association, transmitted from the Assembly Hall, Collins St., Melbourne.
 1.10—Result of November Hurdle; Description of Byron Moore Stakes, transmission from the Course.
 1.15—Stock Exchange Information; Meteorological Information; Weather Forecast for Victoria, Tasmania, South Australia, and New South Wales.
 2.—Close Down.
 2.40—Description of Lillithwaik Stakes, transmitted from the Course.
 AFTERNOON SESSION.
 2.—Studio Orchestra.
 3.10—Mr. C. R. Lunn: A Talk on Shakespeare's Plays.
 3.40—Description of the Cervical Handicap, transmitted from the Course.
 3.50—Ewen Barham, contralto.
 4.45—Tanna Norman, solo.

- 3.47—Studio Orchestra.
 3.57—Mary Gumleaf: The Dignity of Ave.
 4.17—Description of Oaks Steeple, transmitted from the Course.
 4.23—Bertha Jorgensen, violin.
 4.30—"Herald" News Service; Stock Exchange Information.
 5.—Close down.

EVENING SESSION.

- 5.15—Children's Hour: Answers to letters and birthday greetings.
 6.—Rita Johnson will entertain the children for a few minutes.
 6.17—"Mary Gumleaf" will recite.
 6.27—Songs by the Pink Heath Girl and Mary Gumleaf.
 6.34—"Mary Gumleaf" story for the bigger ones: The House of Love.
 6.40—"Argus" and "Herald" News Services; Reuters and the Australian Press Association Cables.
 6.55—Weather Synopsis; Shipping Movement; Overseas Shipping.
 7.—Stock Exchange Information.
 7.2—Fish Market Reports by J. H. Barrett Ltd.
 7.6—River Reports.
 7.8—Market reports by the Victorian Producers' Cooperative Co. Ltd.; Haymarket Sheep Sales; Poultry, grain, staff, hay, straw, etc.; daily produce, potatoes and onions; Market prices of oranges and lemons; by the Victorian Central Citrus Association Pty. Ltd.

NIGHT SESSION.

- 7.29—Mr. C. H. Holmes, Chairman of the Railways Bettesment and Publicity Board: Know your Country.
 7.46—Mr. H. Webb: The West Coast of Tasmania.
 8.—11.0 Dance Orchestra.
 8.10—Mr. E. M. Parnoc: Work of the Victorian Bowling Association.
 8.20—Community Singing by the Students of the Swinburne Technical College, transmitted from the College, Hawthorn.
 8.30—11.0 Dance Orchestra.
 8.45—Rupert Hazel in some Fun and Frolics.
 8.50—11.0 Dance Orchestra.
 9.—Community Singing.
 9.15—11.0 Dance Orchestra.
 9.18—Frances Lea, soprano.
 9.30—Community Singing.
 9.47—Colin Crane, baritone.
 9.41—11.0 Dance Orchestra.
 9.51—British Official Wireless News, from Rugby; Announcements, etc.
 10.1—11.0 Dance Orchestra.
 10.11—Frances Lea, soprano.
 10.15—11.0 Dance Orchestra.
 10.25—"Argus" News Service; Weather Forecast; Announcements.
 10.35—11.0 Dance Orchestra.
 10.45—Rupert Hazel and Solo Day: will try to be serious.
 10.50—11.0 Dance Orchestra.
 1.1—Our Great Thought: "Belief should never be a source of disagreement, but rather a fresh stimulus."—South.
 1.10—11.0 Dance Orchestra.
 1.15—11.0 Dance Orchestra.
 1.40—God Save the King.

4 QG

MIDDAY SESSION.

- 12.55—Time in.
 12.58—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.
 1.—Close down.

AFTERNOON SESSION.

- 2.30—A programme of Music from the Studio.
 4.—A French Talk, by Mollie, Amelia Rinquet.
 4.15—"The Telegraph" news.
 4.30—Close down.

EARLY EVENING SESSION.

- 6.25—Tune in.
 6.30—The Children's Session: Stories by Sambo and Pete.
 7.—From the Council of Agriculture, Studio: The Farmers' Session. Market Reports. Lecturette: "Talk on Live Stock Feeding" (Inst. Mr. J. K. Murray, Principal, Agricultural High School and College.
 7.30—From the Studio of 4QQ: "The Daily Standard" news. Stock Exchange information.
 7.40—Announcements.

NIGHT SESSION.

- 7.47—Lecturette: "A Talk on Books," Mr. W. A. Bradden.
 8.—The St. Mary's Choir; Radio Voice Concert Solo, Finland.
 8.15—Weather Information, officially supplied by the Commonwealth Weather Bureau. Announcements; Band Music.
 10.—From the Studio: "The Daily Mail" news service. Close down.

5 CL

MORNING SESSION.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Beach Day Art number.
 11.40—"Advertiser" News Service.
 11.55—Vocalion Number.
 12.—G.P.O. Chimes.
 12.1—"Advertiser" News Service.
 12.15—Featuring a Street Day Art number.
 12.30—5CL Studio Orchestra.
 1.25—Ward & Co.'s Stock Exchange Intelligence; Official Weather Synopsis and Station Announcements.
 2.—G.P.O. Chimes.

Significant Announcement!

BEE-BATS

A SOUND ACCUMULATOR
B BATTERY

50 Volts, 65/-, 80 Volts, 97/6
 You can get power out of
 your set by putting power into it

BEE-BATS

can be re-charged at home from the
 electric light at negligible cost.
 Circular on request.

SEND YOUR ORDER TO-DAY
CASH WITH ORDER

From the country, send your
 Cheque or Money Order
 Your Battery comes to you charged,
 complete with clips, instructions, and
 in a strong acid-proof box with
 Leather Handle, from:

A. PATCHING

Mary St., Hunter's Hill

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Ever-Ready Radio Batteries are made for every day service. Their reliability is the result of care and skill in manufacture allied to the very best selected materials. Batteries bearing the Ever-Ready Trade-mark are thoroughly dependable, and win the appreciation of all who use them.

Your Dealer has the Type you want.



"Wanda" Plug Radio Battery.

This illustrates the New Radio High-tension "B" Battery, which can be obtained 31½, 42 or 62 volts—fitted with a Wanda Plug, and 2 Screw Terminals.

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Small size, type WP, 31½ volt .. 9/6
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 Large size, type XP, 31½ volt .. 16/-
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The "Standard" "A" Battery.

Price .. 9/.

The Ever-Ready "Standard" "A" Battery (8 cell) 4.5v, specially designed for economical operation of 1, 2 or 3 valves, taking .06 amperes at 3v. Five 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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163 Pitt Street

11

SYDNEY

The "Standard" Dry Cell Radio Battery.
 Price .. 3/4.

The Ever-Ready Radio "Standard" Dry Cell, as illustrated, is fitted with two screw terminals, and since its introduction has met with great success, wars recognizing its immense superiority over any imported cell. Size 2½ x 6½. Weight, 2½lb. Also for Bells, Telephones, Signalling and Electro-medical apparatus. &c.



New Ever-Ready No. 124, or A, B, or C Batteries.

Price .. 2/6.

One of a group of Radio Batteries. Useful in Wireless Lighting, and Amplification. Size, 3½ x 4 x 1½. Most useful for Bells, Telephones, Burglar Alarms, Medical Cells, etc. With Three Brass Terminals. Voltages 1.5, 3, or 4.5 volts. Useful for all Wireless purposes, as well as general utility.

AFTERNOON SESSION.

- 3—G.P.O. Chimes.
- 3.1—Relay from the "Maple Leaf" Cafe—Orchestral Numbers.
- 3.45—From the Studio—Suek-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.
- 6.31—Bedtime Stories.
- 7.15—Health talk, arranged by Mr. Whittierbury.
- 7.30—Market Reports.
- 7.40—Poultry Talk arranged by Mr. Whittierbury.
- 8—G.P.O. Chimes.
- 8.1—Studio Orchestra, interspersed with vocal items.
- 9—G.P.O. Chimes.
- 9.1—Weather Reports.
- 9.3—Concert Continued.
- 10.15—"Advertiser" News Service.
- 10.35—Station Announcements.
- 11—G.P.O. Chimes; National Anthem.

7 Z L

MORNING SESSION.

- 11—G.P.O. Clock Chimes; the "Mercury" News; Stock Market; Shipping; Commercial intelligence; Weather information; Salubrious selections.
- 12—G.P.O. Clock Chimes; Close Down.

AFTERNOON SESSION.

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

EVENING SESSION.

- 7—Children's Corner, "Big Brother" chats in his cubs.
- 7.15—The Adventures of George, the Book-shelf Cat, by "Aunt Golla."

NIGHT SESSION.

- 8—G.P.O. Clock Chimes; the "Mercury" Special Tasmanian News Service; Railway Auction Produce Sales; Weather Information.
- 8.6—Holbert Stock Exchange Quotations.
- 8.10—Selections by James' L.N.L. Band; conductor L. M. Barnett.
- 9.00—The "Mercury" Special Interstate News Service; Weather Synopsis; Station Announcements; National Anthem.

LECTURES ON MUSICAL INSTRUMENTS.

Mr. Sutton Crow, of the University Conservatorium of Music, is probably the doyen of Melbourne Broadcasters in the musical field, he having been keenly interested even before 3LO, Melbourne gave him the opportunities he so enjoyably avails himself of. There are those of us who can remember when Mr. Sutton Crow's voice was heard over the ether direct from Melba Hall, when the amateur transmitter 3DP broadcast a very successful concert in the early days. Mr. Sutton Crow handles his subject in a most enthusiastic as well as a pleasing style, and he has begun a series of talks on musical instruments.

New Zealand Broadcasting

ENTRY to that select body of broadcast enthusiasts, the long distance fans, demands the reception of a New Zealand station. One's importance increases several degrees when you are able to say casually to a friend:—

"New Zealand put a good programme on the air last night, did you hear it?"

New Zealand means 1YA, and since the reduction of 2FC's wavelength, it is indeed a feat to tune in the 500 watt station on the usual broadcast receiver. To the successful listener, however, it presents excellent programmes, worthy of New Zealand's principal broadcasting station.

Erected only last August as the first of four, by the Radio Broadcasting Company of New Zealand, it marked the inception of a new era of

radio in the Dominion since in the past broadcasting had been of an amateur nature.

Four years ago the first experimental wireless transmissions of speech were carried out in New Zealand, and at that time the Dominion was not so very far behind the foremost countries of the world in the matter of radio telephony. Broadcasting was successfully started in New Zealand towards the end of 1922, when engineers all over the world were feeling their way along the new and wonderful road of broadcasting without wires, speech and music; and it was soon being carried out in the chief centres of the Dominion, both by wireless traders, radio societies and interested amateurs. Some of these efforts, when the nature of the apparatus used is taken into consid-

eration, were commendable; and undoubtedly N.Z. listeners owe a real debt of gratitude to the pioneers for their worthy efforts.

With the first large shipment of radio apparatus to arrive in New Zealand a 5-watt transmitter set was included.

The first efforts to use this transmitter were fraught with great difficulties, because even in the United States radio-telephony was still in its experimental stages, and it was difficult to find anyone in New Zealand who had the necessary knowledge to operate a broadcasting station.

The pioneers of the movement realised how the small power limited the scope of development and decided to install a $\frac{1}{2}$ -kilowatt set. This is the station that was registered as the original 1YA, and which operated until the taking over of the station by the Radio Broadcasting Company of New Zealand. Only towards the

RADIOTRON CHARACTERISTICS

Model	Use	Base	Grid Condenser MF	Grid Leak Symbol	Detector Grid Return Lead	A Battery Volts (Supply)	Flament Terminal Volts	A Battery Current Amperes	B Battery Volts Detector	B Battery Volts Amplifier	Negative V. Battery Volts	Plate Current Milliamperes Normal operating See Note 1 & 2	Output Resistance Ohms See Note 1	Mutual Conductance Micro-Mhos See Note 1	Voltage Amplification Factor See Note 1
RADIOTRON UV-199	Detector Amplifier	UV 199 Base	00025	2-9	+F	4.5	3.0	0.06	45	90	4.5	2.5	15,000	415	6.25
RADIOTRON UX-199	Detector Amplifier	R.C.A. Small Std UX Base	00025	2-9	+F	4.5	3.0	0.06	45	90	4.5	2.5	15,000	415	6.25
RADIOTRON UV-200	Detector only	Standard UV 20A	00025	$\frac{1}{2}$ -2	-F	6	5	1.0	15-25	—	—	—	—	—	—
RADIOTRON UX-20A	Detector Amplifier	R.C.A. Large Std UX Base	00025	2-9	+F	6	5	.25	45	90 135	4.5 9.0	3 4	12,000 11,000	675 725	8 8
RADIOTRON UX-112	Detector Amplifier	R.C.A. Large Std UX Base	00025	3-5	+F	6	5	.5	22 $\frac{1}{2}$ to 45	135 90	9 6	5.8 2.4	5,500 8,800	1435 890	7.9 7.9
RADIOTRON UX-120	Audio Amplifier Last stage only	R.C.A. Small Std UX Base	—	—	—	4.5	3.0	.125	—	135	22.5	6.5	6,600	500	3.3
RADIOTRON UX-200A	Detector only	R.C.A. Large Std UX Base	—	—	—	6	5	.25	45	—	—	—	—	—	—
RADIOTRON UX-210	Amplifier Oscillator	R.C.A. Large Std UX Base	—	—	—	8 6	7.5 6	1.25 1.1	—	425 135	35 9	22 4.5	5000 8000	1550 940	7.75 7.5

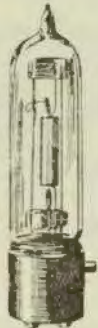
Note 1. At normal operating Grid Voltage (Not at zero Grid)

Note 2. The plate current values given are less than those obtained with zero grid, but are the currents actually obtained when the tube is operated at indicated values of plate voltage and grid bias voltage.

Note 3. The symbol $\text{—} \bigcirc \text{—}$ = megohms

Why the new Weco valves will improve your set!

GREATER sensitivity is assured from Weco valves, for when operated at a dull red heat, the new patented Weco filament used in the improved Weco valve gives fourteen times the electron emission of thoriated tungsten filaments operating at a bright red heat.



The new Weco valves are now available from regular radio dealers at

17/6

Owing to the unique rigidity of their construction and the special method of supporting the valve elements, Weco valves are positively free from the parasitic noises common to other valves of the dull emitter type.

The extremely low temperature at which Weco valves operate, due to the special oxide coated filament used, ensures longer life than that usually obtainable from ordinary dull emitter valves.

Weco valves are specially graded as detectors and as radio or audio frequency amplifiers.

Standard Telephones and Cables (Australasia) Limited

INCORPORATED IN ENGLAND

Western Electric Company (Australia) Ltd.

192-4 CASTLEREAGH STREET, SYDNEY

end of the operations of the old station IYA was any income derived in order to carry on the station. This was secured by the co-operation of the radio dealers to subscribe varying amounts according to the size of their radio trade. This amount was not sufficient to pay the running expenses and the enthusiasts who in-

stalled the station footed the bill for the differences.

The services rendered by Mr. Leslie White over a period of two years were given free, although he operated the station technically and conducted all the announcing and arrangement of programmes.

From being one of the foremost

countries in the world with regard to broadcasting, New Zealand dropped to a position near the tail. This was due to the protracted negotiations of the Government with intending broadcasters. Since the present Company contracted with the Government, further delays have been occasioned by the non-arrival of the necessary apparatus.

Broadcasting from an efficient modern station is now a happy fact, however, and soon the erection also of a duplicate station in Christchurch will ensure better reception for a large number of listeners.

Although seldom heard here, local listeners also receive Dunedin by 4YA, and the installation of the former IYA plant at Wellington, which is reported to be projected, should promise good results to listeners with crystal receivers in and around Wellington.

There is no transmission from IYA on Mondays, but local listeners are catered for by Mr. C. H. Pearson, who transmits on a wavelength of 275 metres under the call-sign 1ZB. The new Christchurch station, 3YA, when completed, will be "on the air" on Mondays on a wavelength of 400 metres.

CHURCH IS AN INN.

The village inn at Longstanton, Cambridgeshire, is equipped with a three valve radio set on which each Sunday the innkeeper receives a church service broadcast from London. All the labourers in the village attend regularly and are delighted with the service. A writer in the "Radio Times" says: "On Monday I hear the most quaint opinions on the sermon, always in praise, and as the average Cambridgeshire agricultural labourer never attends church after arriving at working age, I feel sure that this is a very good work you are doing." "Village Inns" as known in England are unknown in Australia, but many a country home picks up a church service on Sundays, and thus many persons who live in isolated places are enabled to hear the singing and preaching in a Sydney, Brisbane, or Melbourne church.

ELECTRON WIRE

THE PERFECT AERIAL

Made Broadcasting Popular in Great Britain



You could not obtain better results than those given by ELECTRON WIRE—the aerial which popularised broadcasting in Great Britain.

It is the only aerial which gives long-distance reception with volume and clearness.

ELECTRON WIRE is reliable—it brings in signals when other aerials would fail. That is why ELECTRON WIRE is so popular in Great Britain.

Electron Wire brings Wireless Within the Reach of Everybody

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| It Abolishes Masts. | It Saves Money. |
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Fool-proof — Storm-proof — Trouble-proof

Price **2/6** retail

IT'S SO EASY TO FIX, TOO!!

You can simply fling it over a tree, over the roof, round a chimney, run it along the fence, around the picture rail, across the room, hang it out of the window, or where and how you like, and the results are there. Connect one end to your set, let the other be free, use a short piece as an earth and—there you are. Perfect reception and immediate satisfaction.

THE ELECTROLEON CO., LTD.

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Proprietors: The New London Electron Works Ltd., London, England

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Full particulars from

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BRIDGE STREET, SYDNEY

GELSTON S. GOW

GELSTON S. Gow, sometimes "Bon," is the shining light behind the "Radiokes and Gow Radio," products of the Metropolitan Electric Co. Ltd., with headquarters at King Street, Sydney. Mr. Gow first gazed on the world in the middle '90's, and soon afterward attempted to listen-in on other worlds, per medium of an iron filing coherer—those days when radio music was broadcast from spark coils. His next set embraced electrolytic—crystal detectors in conjunction with tuning coils, which brought in tramcar noises with very good volume, and he stirred up the ether around Sydney about 1912, with a rather weird conglomeration of spark apparatus.

At the age of 18, he was a member on the Executive Council of Wireless Institute of New South Wales, and in 1915-1919, he saw continuous service with the A.I.F. in various radio and telegraphic units, also a period in the Royal Engineer Laboratories designing and improving Army radio apparatus. Then a beneficial experience in various workshops around Britain was followed by his return home, and three years as engineer of a well-known electrical business.

Another year of concentrated research on receiver development preceded three years of successful radio manufacturing under his own name in Market Street, Sydney, which business has recently been amalgamated with Messrs Keith Stokes Pty. Ltd., and of the combined firms he is now Technical Director.

His worthy ambition is to improve radio for all, and that is already reflected in the high state of perfection to which he has brought the products of the new firm.

He says "radio has an enormous future and is rapidly becoming a necessity." The troublesome radiating receiver must be replaced by more sensitive sets of the neutralized type; and quality of reproduction the first consideration—the original broadcaster shall be re-created in every household, thereby resulting in a better educated, more contented, home-loving nation.



King Quality

NEUTRODYNE KITS

For those who prefer to make their own sets.

The King Quality Neutrodyne Kit with complete set of parts, drilled panel and all wiring bent to shape together with book of instruction for assembling.

No knowledge beyond the use of pliers, screw driver, and soldering iron is necessary.

The set when complete has an approximate wavelength range of 200 to 600 metres; and will receive all Australian stations with exception of Perth at loud speaker strength. Price, complete 18 guineas.

DEFERRED PAYMENTS

Under David Jones' convenient Deferred Payment Schedule you will be able to accept the immediate delivery of a complete kit on payment of £1/18/- deposit. Balance to be paid, at rate of 7/6 per week.

DAVID JONES'

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

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Thousands of Authentic
 Testimonials prove its
EFFICIENCY

LOUD SPEAKER can be operated with
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EVERYWHERE

Carried in stock and distributed in
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NO
 MORE
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 MUSIC

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

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Particulars from

CHAS. D. MACLURCAN
 PRATTEN BUILDING, JAMIESON STREET, SYDNEY
 Manufactured by Electricity Meter Manufacturing Co. Ltd., Sydney

Tracking Trouble in Your Aerial

OFTEN trouble is met with in radio receivers and the cause cannot be traced. Look to your aerial, then. I have seen some aerials which made me blush, and all because minor details had not been watched in the erection stage. Don't expect maximum efficiency if your lead-in rests on the gutting. You will not get it as there is usually a leakage to earth. Keep away from the gutting as well as from the walls and you'll find a great difference in signal strength and selectivity.

AN aerial which is too long is not conducive to selectivity. Some months ago, I met a ham—he looked more like an egg—who proudly boasted that his aerial was 200 feet long over all. Poor fish! He listened to my advice, and shortened it, and now he proudly boasts of 17A on the speaker. The ideal aerial, I contend, should be between 30 and 40 feet high, and 75 feet long between the masts. About a 25 feet lead-in is ample.

THE earth, of course, is equally important. Keep it short.

Country residents are advised also to keep it moist as a dry earth is a high resistance earth and gives rise to squeals and loss of volume.

NEVER USE A GASPIPE AS EARTH.—Your aerial may become charged with static electricity, which should leak to earth. I leave you to imagine what may happen to the home if the gas pipe acts as the earth. "Wireless Weekly" does not ask for "In Memoriam" notices. The water pipe is most satisfactory for the earth connections, but clean around the portion to which you clamp your earth clip. To this should be soldered the earth wire from your receiver. The clip should be screwed tightly to the water pipe to ensure good contact.

COUNTRY set owners will find that two kerosene tins buried in the ground makes an efficient earth. The earth wire should be soldered to these tins, and, as men-

tioned before, if the earth around the tins be kept moist better reception will be the result.

REVERTING back to aerials, a word about insulation won't be out of place. A single wire aerial is, perhaps, the best type to erect and three insulators each end forms a good insulation medium. Should you prefer a double wire, for goodness sake, space each wire between 4 and 7 ft. apart. You'll notice a difference.

THE halyard calls for attention.

Ordinary rope should never be used, as the action of the weather causes it to perish, particularly that portion which passes through the pulley. Europe rope is to be preferred, as it will last for years with slight attention. Europe rope is, perhaps, better known as tarred roped, the tar resisting the action of the weather. Steel halyard—well vaselined—is more expensive, but is very good. Occasionally lower your aerial and look to the portion of your halyard that rests on the pulley and if it shows any sign of perishing cut out that bit and rejoice.

IT is often a good plan to have two aerials, one long, up to 70 feet including lead in, and one short, about 20 to 30 feet overall. A switch on the wall to switch over to either at will is a distinct advantage where radio frequency is employed in the circuit. Such receivers as Browning Drakes, Neutrodynes, Super-Heterodynes do not need any aerial at all on local stations. The distant station is best received on the short aerial, as selectivity is assured.

A PLUMBER fan has a 16 foot length of 3/4 inch copper pipe as an aerial. This is well insulated from the ground, the base is in a glass jar, and the piping is erected in the air like a mast. His Neutrodyne receives all Interstate stations at loud speaker strength, and static is never too bad in summer time. For two years he has had it. Try it.

T.C.C. CONDENSERS

The Telegraph Condenser Company Limited, London, secured the Mansbridge Patents in 1909, and have been manufacturing Mansbridge Condensers ever since. They manufacture the GENUINE MANSBRIDGE—not merely "Mansbridge type" Condensers.



The Duplex Terminals fitted to all T.C.C. Mansbridge and Mica Condensers are the only Terminals that enable either a screwed or soldered joint to be made.

T.C.C. Genuine Mansbridge Condensers may be obtained in all capacities from 2 mf. to .005 mf.; T.C.C. Moulded Mica Condensers in all capacities from .004 to .0001, all intermediate sizes being obtainable from stock. All Moulded Condensers from .0009 to .0001 are fitted with Grid Leak Clips.

If it's a T.C.C. Green Condenser, you can rely on it.

T.C.C. Condensers are obtainable from

ALL RADIO DEALERS
Wholesale from

Lawrence & Hanson
Electrical Co. Ltd.

Sole Agents: N.S.W. & Q'land.

33 YORK ST., SYDNEY

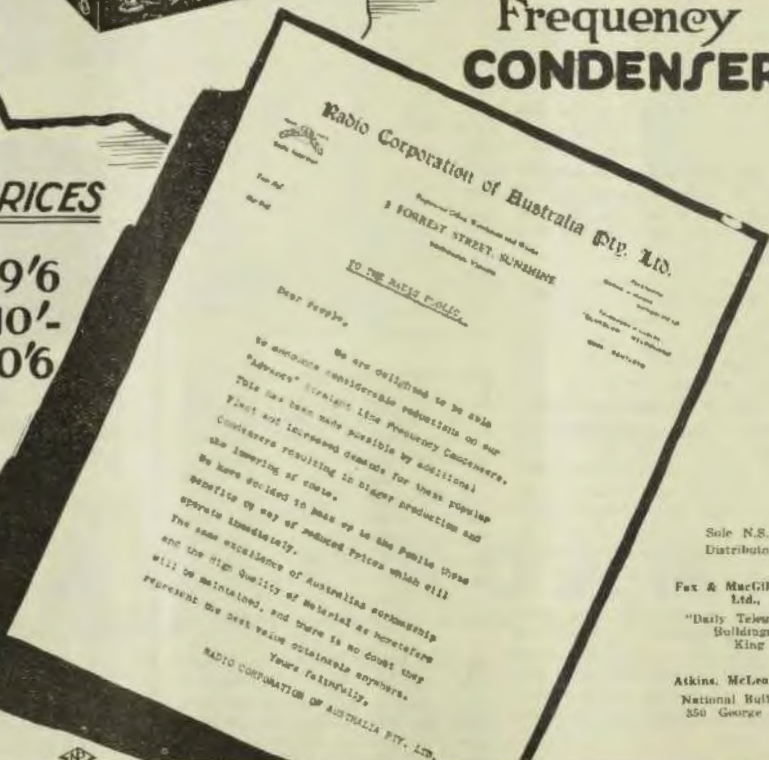
Announcement



Straight Line Frequency CONDENSER

NEW PRICES

- 00025 ~ 9'6
- 00035 ~ 10'-
- 0005 ~ 10'6



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Distributors:

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ADVANCE
 All Australian

**RADIO
 PRODUCTS**

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.

B.B. (Hfracombe, Q.)—

Q. 1: Is a UV1114 Transformer necessary in radio frequency now that 2FC has dropped its wavelength?

A. 1: No, not unless you wish to receive 6WE. It can still be employed if you keep the links closed. Any type of radio frequency transformers is O.K. for wave lengths between 200 and 600 metres.

Q. 2: I have a 46-plate condenser, 3 plates being variable. What is the capacity?

A. 2: Approximately .001 mfd.

Q. 3: Does a dull emitter power valve in the last stage require a separate "A" battery.

A. 3: Not necessarily, provided the voltage is the same as the other valves in the set.

H.P.D. (Cocharaba, Q.)—

Q. 1: How many turns of wire are necessary on a frame aerial with 2FL added to receive 300-500 metres.

A. 1: 10 turns of No. 22 gauge wire tuned with a .0010 mfd. condenser will suit.

Q. 2: Would the primary wire from a Ford spark coil be suitable for a R.F. choke.

A. 2: Yes.

Q. 3: Give circuit of a short wave receiver employing two stages of tuned anodes.

A. 3: For ultra short waves this is not to be recommended. For broadcast wave band you can't do better than build a Neutrodyne.

L.W. (Graville)—

Q. 1: Please give me particulars of a good frame aerial.

A. 1: See "W.W." 28/4/26.

T.A.E. (Dartley)—

Q. 1: Please give me a circuit which will enable me to tune in all Australian stations.

A. 1: See the Neutrodyne in last week's paper.

J.D.X. (Newtown)—

Q. 1: I desire to build the Harkness Reflex. Would vernier dials be an improvement? also would S.L.F. condensers be advisable.

A. 1: Vernier dials are O.K. We used S.L.F. condensers ourselves.

Q. 2: I have a 5 to 1 audio transformer. Could I use it?

A. 2: Yes, but use 1½ to 1, second stage.

Q. 3: What should be the resistance for a UX201A valve, and what "B" battery is best.

A. 3: A 20 to 30 ohm resistor is quite right. Both valves being amplifiers, give up to 50 volts "B" battery.

R.G.C. (Epping)—

Q. 1: What is the length of aerial for a Browning Drake which will give maximum selectivity?

A. 1: Between 30 and 60 feet.

Q. 2: Please describe how to make a "3" battery (not accumulator type).

A. 2: Watch this paper within the next few weeks.

Cumens (Terahiti)—

Q. 1: In the Selective Crystal Receiver, described in "W.W." 8/10/26, can a carbonium crystal be used. If so please show connections.

A. 1: The carbonium is quite suitable. Connect up as shown for the ordinary crystal.

Q. 2: What is the range of this crystal receiver?

A. 2: It is impossible to give ranges of a receiver so many factors having to be considered.

Texas (Burwood)—

Q. 1: What is the ration of transformers used in the Harkness Reflex?

A. 1: We used 2.75 to 1, but 5 to 1 in first and 3½ to 1 in the second is quite O.K.

Q. 2: What rheostat is required?

A. 2: It depends on the valves used. For DV 201A, UV199, R466, Cosmar Point One, all new type Mullards, etc., use 20 to 30 ohms. For old style bright emitters a 4 ohms is required.

Q. 3: What type of valves would be suitable for an A battery of 3 dry cells?

A. 3: Any valve taking 65 amps on the filament.

Q. 4: Can a C battery of 4.5 volts be used instead of 3 dry cells?

A. 4: Yes, but it wouldn't last long. The capacity is too small.

S.S. (Middle Tarwin, V.)—

Q. 1: Could Edwison's A.R.66 valve be used in all stages of the Browning-Drake?

A. 1: Yes.

Q. 2: I have two 6005 Square Law condensers; will they do?

A. 2: I am 70 miles from 3L.O. What stations should I receive on this receiver?

A. 3: All Australian stations excepting UV.

A. M. L. (Vaucluse) refers to the Harkness Reflex.

Q. 1: Could 6005 condensers be used instead of 6001's?

A. 1: Yes; but we would like you to follow the correct specification.

Q. 2: For Interstate work, does the Harkness Reflex favourably with the Reflex of "W.W." 25/7/26?

A. 2: We cannot draw comparisons between sets. This privilege belongs to you as one man may be prejudiced to a certain receiver. You are the judge.

E. K. N. (Crosbwell)—

Q. 1: I wish to have my four valve set altered. Would you recommend a Neutrodyne or Browning-Drake?

A. 2: For your purpose, a neutrodyne as it would be simpler for any help to tune all the dials being matched and easily changed. See "W.W." 22/10/26.

Q. 2: Could my transformers 4 to 1 and 5 to 1 be used?

A. 2: Yes; 6 to 1 first stage, 2 to 1 second stage.

G. P. F. (Rockdale)—

Q. 1: Will the Helinks 2 valve receiver, of "W.W." 15/10/26, bring in Interstate stations?

A. 1: This depends on you. The one actually constructed, tested at Marrickville brought in 3L.O. and 4Q.G. comfortably. The Harkness Reflex again only brought in 4Q.G. in the presence of 10 people, but at loud speaker strength 3L.O. was a bit difficult. The receivers are capable of responding to the weak distant stations, but everything depends on the person who handles the set.

Q. 2: Can Interstate stations be received on valves with a 100ft. aerial 40ft. high?

A. 2: You should receive them on this aerial. Read Aerial Hints by Trouble Shooter in this issue.

R. C. (Sydney) is making a head plate B battery?

Q. 1: Please tell me the specific gravity of the electrolyte?

A. 1: 1.250 sp. gr.

Q. 2: Also what amperage is required to form positive plates?

A. 2: One quarter of an amp.

Q. 3: How long should I leave it on charge each time?

A. 3: Twenty minutes to half an hour will suffice.

A. J. B. (Caiano)—

Q. 1: Can you tell me what books would help me as a beginner?

A. 1: "Wires for All," by John Scott Tappart; "Wireless," by J. W. Robinson. Write your book agent.

C. E. M. (Hallerfeld) asks with the Reprints of "W.W." 15/10/26—

Q. 1: Is it correct for the A plus to go to the battery switch?

A. 1: Yes.

Q. 2: What is the diameter of the coil former?

A. 2: Three inches.

Q. 3: What wavelength will it cover?

A. 3: 200 to 600 metres.

Q. 4: Would a C battery improve this set?

A. 4: Yes; break the lead from transformer E— to A— and insert C battery. The negative C is joined to E— and plus C to A—.

P. N. M. (Barnesman)—

Q. 1: I wish to make up the Browning Drake. Would a panel 35 x 7 x 1.10 be suitable?

A. 2: Yes; provided you don't cram your components.

Q. 2: Would Fernon transformers, Emmen variable condensers, and Pilot dials be adaptable?

A. 2: Yes.

Q. 3: What capacity A and B batteries would be required for 4 Cosmar point one valves?

A. 3: Large capacity B batteries are best. Using a 30 ohm rheostat two dry cells in series will function. Don't turn your rheostat full on.

Q. 4: What length of aerial (including 20ft. lead in) would be required?

A. 4: Don't make your aerial too long. Being in the country, an aerial of 100ft. overall will be ideal.

C. V. R. (Martin's Creek)—

Q. 1: Can the Browning Drake be adjusted to tune in 72L on 535 metres?

A. 2: Yes; use a Radloff Regenerator.

Q. 2: Would the set equipped with dry cell A battery and 199 type valves be as efficient as a 6 volt accumulator with 20's type valves?

A. 2: We prefer you to use the accumulator.

Q. 3: If I use an accumulator could I control the set?

A. 3: Certainly.

C. V. R. (Martin's Creek)—

Q. 1: I am enclosing a sketch of a layout for the Browning Drake. Is it suitable?

A. 1: Perfectly.

Q. 2: Are there any laces which would guide me in wiring?

A. 2: Yes; always keep your grid and plate wires far apart or at right angles. Of course, never allow your B battery bushes to touch your A battery wire. Your A battery switch is all right.

Q. 3: What resistance should the rheostat be?

A. 3: 20 to 30 ohms.

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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 0
5 Valve Sets (Super 5) with all accessories	Per week ..	0 14 0
9 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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MA 1790

MA 1744



MR. W. HARRY WILES.

One unconsciously associates the name of W. Harry Wiles with the wireless industry in Australia, because he was the founder of one of the pioneering establishments in this country. The organisation which has been built up under the leadership of Mr. Wiles has expanded to a great extent, and the firm now controls, in addition to the Head Office, at 81 Goulburn Street, another well-fitted radio store in Pitt Street, Sydney.

Beginners' Problems

BRIEF REPLIES

- F. C. (Warren's Bay):—
Build "W.W." Reflex or one stage Mark-
ess Reflex.
- J. H. D. (Hurstville):—
Your transformer is broken down.
- R. K. (East Maitland):—
See "W.W." 6/8/26.
- Numerals (Gileandra):—
Particulars are too meagre. Tell us how
many coils you have in the set.
- R. M. C. (Karlwood):—
Get in touch with Radio House, George
Street, Sydney. Your other questions can
best be answered by following closely all
the technical matter appearing in this paper.
- H. S. (Surry Hills):—
See last week's "W.W." and use a short
serial 30ft. long for selectivity.
- J. T. (Parker):—
See "Radio," 17.5.26.
- Reflex (Ashfield):—
See reply to A. M. L. (Vaucluse).
- J. V. T. (Strathfield):—
See reply to A. M. L. (Vaucluse).
- A. K. (Petersham):—
Build the crystal set in "W.W." of 7/10/26.
- J. H. M. (Sydney):—
See answer in this week's paper.
- C. W. (Fairford):—
You were receiving 2FC on a harmonic.

A Vario Coupler for Selectivity

THAT many receivers are equipped with vario couplers is true and that much dissatisfaction exists amongst the owners of these receivers is also true. Since 2FC dropped its wavelength this high powered station is heard all round the dial, thus precluding the reception of other stations. The broadcasting station is not to blame for this, the receiver is at fault, as it is non-selective. It can be made selective sufficiently so as to be able all local stations to be heard without interference.

The average vario coupler set comprise two coils, a primary and a tickler. The primary is wound on a stator on the top of which the tickler is mounted, taking the form of a round ball or rotor on which is wound about 40 turns of wire. Oftimes a series parallel switch is used to throw the tuning condenser, generally .001 mfd. capacity, into series for the lower wave band, and into parallel for the higher wave band.

When 2FC was on 1100 metres, this arrangement was quite satisfactory, but now is quite useless. Again the primary or stator coil usually had 70 to 80 turns of wire.

For the new wavelengths this is altogether too much wire, as owners know too well.

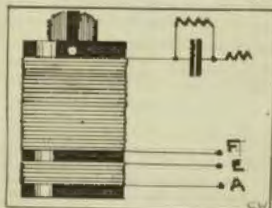
To rectify this state of affairs, firstly, discard the series parallel switch. It need not be removed from the panel, simply disconnect it entirely. Next remove your vario coupler from the set, and, starting from the bottom, unwind all turns of wire in excess of 56 turns. This spare wire is now rewound on the stator, but only ten turns are needed. Start winding sufficiently low enough to allow the last turn to finish about half an inch from the secondary winding. If, of course, this is not possible, wind this ten turns or primary winding over the top of the secondary winding, as shown in the sketch alongside. To simplify this matter, wind a strip of good, strong paper or tracing cloth, one inch wide, around the secondary and paste to hold securely. Double over a piece

of tape 2½ inches long, by ½ an inch thick, so that it now takes the length of 11 inches. Slip the beginning of your ten turns through the loop in the fold and wind on your primary over this tape. Keep this primary winding secure by dabbing some sealing wax over the last turn. This process was described in the Harkness Reflex Receiver, described in the paper on the 22nd inst.

These alternative methods of altering your vario coupler will cover nearly all vario couplers in use today, and the improvement will be noted.

If possible, substitute a 6005 or 23 plate variable condenser instead of the .001 or 43 plate condenser. The smaller condenser is the better of the two, so if one is not on hand procure one sooner or later, and include it in the circuit.

Next rewire your receiver. The article entitled "The Old Reliable" in this week's paper will show you how to wire. The detector stage is all that requires alteration, so don't



The Vario Coupler.

worry with the audio stages. This simple alteration will eliminate the interference you are chafing under. The cost is practically nil, and the time required is only one hour. Go to it!

FOR SALE: One set of R.E.L. transmitting inductances as described in "QST," complete with clips and glass rods. Nickelled copper strip wound on Pyrex glass. Beautiful job and cost £4 to land. Brand new; best offer takes them. JAMES K. HERD, Main St., Bacchus Marsh, Victoria.

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- 6.—Made in AUSTRALIA.
- 7.—Cheapest and BEST.

PRICE LIST, RADIO BATTERIES.

	£ s. d.
6 volt, 7 plate, 45 amps.	4 15 0
6 volt, 9 plate, 60 amps.	5 5 0
6 volt, 11 plate, 75 amps.	6 15 0
6 volt, 13 plate, 90 amps.	7 5 0

There is one more Quality Product we sell, "MINGAY'S UNIQUE 5" Valve wireless sets—and truly "UNIQUE" in every possible way—Tone—Selectivity—Construction—Appearance—Price. Let us demonstrate—having heard you can't resist.

Complete in every way. Easy Terms £34/0/0
Deposit £4/0/0

In conclusion, there is just one thing more—our BATTERY CHARGING RATES must interest you.

6 volt Radio battery	1/3
6 volt Car battery	3/-
12 volt Car battery	3/6

Liverpool Battery Service Station

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Opposite Kent Street

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BOOK REVIEW.

We have just received from Harringtons Ltd. a copy of their latest catalogue, featuring the radio equipment and sales handled by that company. This is a production which should be in the hands of every wireless enthusiast, because it describes and illustrates many well-known standard lines on the market to-day. An index on the last page enables the reader to turn to any particular item in which he might be interested. Amongst other things illustrated are the Imperia receivers, manufactured by Harringtons Ltd., which are so well and favourably known in radio circles.

The contents include practically everything for radio, such as wet and dry batteries, "B" battery eliminators, battery chargers, vernier dials, neutrodyne kits and loud speakers, etc.

GOOD RECEPTION AT COOGEE.

Using a Stromberg-Carlson six-valve Neutrodyne receiver, Mr. John Hamilton, of 141 Brook Street, Coogee, reports excellent reception of Interstate and New Zealand stations. Mr. Hamilton is a Neutrodyne enthusiast, and mentions that if any readers would like technical details of his receiver, he would be glad to pass them on. On week nights between 5.45 and 6.30 p.m. (during the winter months) certain Pacific Coast stations may be tuned on. On Sunday, from 5.45 till about 9 p.m., there are several stations operating, among these being KFI. About 6 p.m. this latter station announces that it is midnight, and that they are changing over to the Midnight Folies. KFI ceases transmission at 3 in the morning. JOAK, JOBK, and JOCK transmit on the same wavelength as 2BL (353 metres). Sunday is the best night for reception of both the American and Japanese stations, and our correspondent considers that some of the latter station's items are very good, especially the orchestral selections.

"In conclusion," writes Mr. Hamilton, "I would like to advise readers that, with the experience I have had, it is essential that the aerial for use with a Neutrodyne must be short, as a long aerial—when working distance stations—means plenty of static."

3LO Amateur Competition

When 3LO and the Wireless Institute decided to organise a competition among the wireless amateurs of Melbourne holding transmitting licenses, it was known that amateurs took a great deal of interest in the transmission of concert programmes as part of their experimental work.

No fewer than 17 different amateur transmitting stations have entered for the competition. Several are building special broadcasting stations to enable them to enter for the competition, and as a result listeners may receive the pleasant surprise of hearing some new, and fairly high-powered amateur transmitting station "on the air" about the time the competition begins.

At the conclusion of the competition the three most successful stations will transmit one special programme each to give listeners another opportunity of hearing the winning stations. The competition will begin on November 1, and the last transmission will take place on November 17. Then, on November 19, November 20, and November 21, the three best stations will each send a programme. Throughout the competition, transmissions will begin at 11 p.m., and continue for half an hour.

Mr. George Sutherland will act as the musical judge for the competition. The technical judge for the competition will be Mr. Howard Love, president of the Victorian Division of the Wireless Institute.

Below is the schedule of transmissions:—

J. R. Alsop, 28 Molesworth St., Kew, 3MI—Mon., Nov. 1.

Sunshine Radio Club, Hampshire Rd., Sunshine, 3HB—Tues., Nov. 2.

R. Bryson, 149 Eglinton St., Kew, 3JM—Wed., Nov. 3.

W. Cavanagh, 22 Mary St., St. Kilda, 3WC—Thurs., Nov. 4.

D. Connelly, Balanclava Rd., East St. Kilda, 3BU—Fri., Nov. 5.

M. Chaffer, 41 Norwood Crescent Moonee Ponds, 3XF—Sat., Nov. 6.

S. W. Gadsden, Miller Grove, Kew, 3SW—Sun., Nov. 7.

L. Glew, 22 Alphin St., Newport, 3LG—Mon., Nov. 8.

B. Hardie, 22 Missouri Avenue, Gardenvale, 3YX—Tues., Nov. 9.

H. J. Holst, 27 Bambra Rd., Caulfield, 3BY—Wed., Nov. 10.

H. Jones, 99 Moreland Rd., Brunswick, 3JG—Thurs., Nov. 11.

K. R. Rankin, Boundary St., Kerang, 3KR—Fri., Nov. 12.

E. Mitchell, 13 Keon St., Caulfield, 3JP—Sat., Nov. 13.

G. J. Minon, Argyle St., St. Kilda, 3OG—Sun., Nov. 14.

R. C. Shortell, 421 Inkerman Rd., East St. Kilda, 3RS—Mon., Nov. 15.

G. Steane, Earl St., Mont Albert, 3UX—Tues., Nov. 16.

Elsternwick Radio Club, Rusden St., Elsternwick, 3LR—Wed., Nov. 17.

MISTAKEN IDENTITY.

An amusing incident took place whilst Mr. W. Blogg, Managing Director of Amplion (Australasia) Ltd, was visiting Adelaide recently. While present in a radio store one day listening to loud speaker demonstrations of 5CL, Mr. Blogg was engaged in conversation by a stranger, who, not knowing his identity, unburdened his soul about Amplion loud speakers.

"Of course," said the stranger, "it is not generally known that Amplions are made in Germany, although they are sold as British made. You can easily tell by the finish of the cabinets which could not possibly be executed outside Germany."

Whether or not this was intended as a compliment will never be known, but that it was a gross mis-statement due to crass ignorance is very sure, for the famous Amplion loud speakers are, and always have been, British-made throughout. Lately, the company have incorporated speakers of British and Australian manufacture in their stocks.

UNIVERSAL and critical condemnation—a new experience for George Bernard Shaw in recent years—graced the best performance of a Shaw play on the radio recently, when a melodramatic skit, "The Fatal Gasoline," was broadcast. The skit, which has for a climax the death of the hero through swallowing a plaster, which swells inside, was graced as the world's worst play, made worse by radio. Shaw wrote it thirty years ago for a garden party, and his offering it to broadcasters was probably another Shawian hoax.

THE RADIO KEY BOOK.

Messrs. O. H. O'Brien advise that due to the tremendous number of requests for copies of the Radio Key Book their stocks of this handy little publication have completely run out. They announce, however, that fresh supplies should be available some time within the next eight weeks, and they will then be glad to fulfil orders.

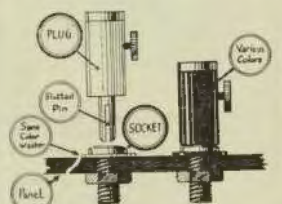
This little publication is very valuable, and contains a great deal of useful information to the experimenter and the broadcast listener.

MELBOURNE CUP BROADCAST.

Station 2FC will broadcast a running description of the Melbourne Cup. A land line direct from the course at Flemington to the Studios in Sydney will be used.

A special Racing Commissioner will attend the course, describing the event from the time the horses leave the saddling paddock for the barrier, during the running of the race, and will also talk for a few minutes after the event, on the result. The cheering and noises of the crowd will also be clearly transmitted over the air. This transmission will break all world's records in long land line racing broadcasts. The race will be run on Tuesday, November 2. Listeners are asked to tune in at 3.25 p.m.

WANTED.—All kinds secondhand Wireless Sets, Parts, Speakers, etc. Best prices given. JACK RAPKEN, 16 George Street West, MA 1198.



There's a use for "Ecu" in every set. Plug and socket obtainable at all the principal Radio Stores, or from

GROSE & DANIEL
Halden St., Redfern, Sydney.
Phone: Red. 373.

Junior Ready-to-Wire Sets

You will like it Better when you Build it Yourself



THREE VALVE SET.

£ s. d.		£ s. d.	
With Polished Maple Cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils	6 5 0	4 Mounted Coils	0 15 6
Accessories required to fully equip this set are as follows:—		3 1.5 Columbia Dry Cells	0 12 8
3 Valves, Radiotron, Phillips, Geco or De Forest	2 0 6	1 Pair Headphones	0 12 8
		1 60-volt High Tension Battery	0 18 0
		100 ft. Aerial Wire	0 2 6
		15 ft. Lead-in Wire and 4 Insulators	0 1 7

Building a Radio Receiver is a happy event in any boy's life; there is nothing so satisfies the natural creative ability of boys YOUNG and OLD as the building of the Radio Set; for when a Radio is finished it brings the world's best entertainment and education from far and near.

Many of the achievements of modern Radio Reception have been made by young men, who, a few years ago, built their own Radio Sets.

ONE VALVE SET.

£ s. d.	
With Polished Maple Cabinet, and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils	2 15 0
Accessories required to fully equip this set are as follows:—	
1 Valve, Radiotron, Phillips, Geco or De Forest	0 13 6
4 Mounted Coils	0 15 6
2 1.5 Columbia Dry Cells	0 5 6
1 Pair Headphones	0 17 6
1 32-volt High Tension Battery	0 9 0
100ft. Aerial Wire	0 2 6
15 ft. Lead-in Wire and 4 Insulators	0 1 7

TWO VALVE SET.

£ s. d.	
With Polished Maple Cabinet, and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils	4 10 0
Accessories required to fully equip this set are as follows:—	
2 Valves, Radiotron, Phillips, Geco or De Forest	1 7 0
4 Mounted Coils	0 15 6
2 1.5 Columbia Dry Cells	0 5 6
1 Pair Headphones	0 17 6
1 60-volt High Tension Battery	0 18 0
100ft. Aerial Wire	0 2 6
15 ft. Lead-in Wire and 4 Insulators	0 1 7

FOUR VALVE SET.

£ s. d.		£ s. d.	
With Polished Maple Cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils	8 0 0	4 Valves, Radiotron, Phillips, Geco or De Forest	2 14 0
Accessories required to fully equip this set are as follows:—		3 1.5 Columbia Dry Cells	0 8 3
5 Mounted Coils	0 19 9	1 Pair Headphones	0 17 8
		1 84-volt High Tension Battery	1 5 0
		100 ft. Aerial Wire	0 2 6
		15 ft. Lead-in Wire and 4 Insulators	0 1 7

Colville Moore Wireless Supplies Ltd.
10 Rowe Street (next Hotel Australia), Sydney, N.S.W.

Radio Cinema will follow Talking Movies.

(Continued from Page 6.)

of the business, I find myself—even after the magnificent premiere performance of Vitaphone—more than ever firmly convinced that the right way to solve the problem of the talking motion picture, and the musically accompanied feature pictures, is that of photographing the sound waves rather than by means of synchronized phonograph.

"In any event, I am glad to note that the industry for the first time since the inception of the art is ready to welcome the so-called 'talking pictures,' and am convinced that in a very short time they will prove a most important part of every programme.

"Warner Brothers deserve great credit for having the necessary imagination and courage to awaken the industry to these possibilities."

BOOK REVIEW.

An interesting booklet has reached us from Messrs. Amalgamated Wireless (A'asia.) Ltd., giving a full description of genuine radiotrons, together with illustrations of all types of radiotrons handled by that concern.

The booklet commences with a very simply written description of the electrical action of the valve, and then proceeds to give full particulars concerning the U.V. and U.X. types of valves which have proved so popular in Australia. For those who want a ready reference regarding the correct type of valve to use in various circuits this book will prove extremely valuable. Copies may be had free from Messrs. Amalgamated Wireless (A'asia.) Ltd., 97 Clarence Street, Sydney.

RADIO CABINETS

Any design and style built to order. We invite you to inspect our fine stock.

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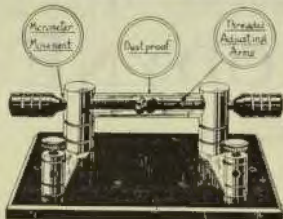
Tel.: Wav. 2328.

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GRODAN NEUTRODYNE KITS

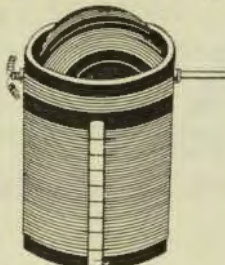
compare with the world's best. Owing to the enormous demand we cannot supply orders for two weeks until supplies of genuine Deleto. Tubing is landed from America.

We ask our customers to wait until our stocks are replenished. The best is always worth waiting for.



PERICON DETECTOR

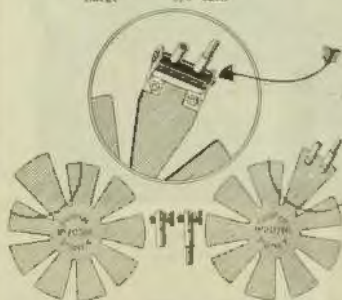
can be attached in any set in a few moments
With tested crystals ... 3/9 each
Refile ... 1/6 each



Vario and Tuner Coupler Parts, comprising Stator, Rotor, and our latest Single hold Mount.

Vario Couplers, Variometers, Reaction Tuners, of every description, can be made from these parts.

Small 7/9 each
Large 8/6 each



Grodan Neutrodyne Kits wound on Bakelite formers. Each kit carefully tested before leaving factory and guaranteed. Insist on Grodan Brand, and get the best results.

Three Neutroformers, two neutralizing Condensers — £17/16 each



NEUTRALIZING CONDENSERS

The only Neutroton to mount on the grid terminal of the Valve holder.

4/3 Each.

Easy to wind. Fits all standard sockets; cheapest and best Inductance device on the market.

Hinge ... 1/8
Ordinary ... 1/3
Plug and ... 2d.
Coiled ... 2d.
Plain Former 6d.

Obtainable at all the principal Radio Stores, or from

GROSE & DANIELL
HOLDEN STREET, REDFERN, SYDNEY

Phone—Red. 373

WRITE FOR CATALOGUE.

BUILD YOURSELF A NEUTRODYNE

As described in this paper last week

Call or write for our complete Price List.

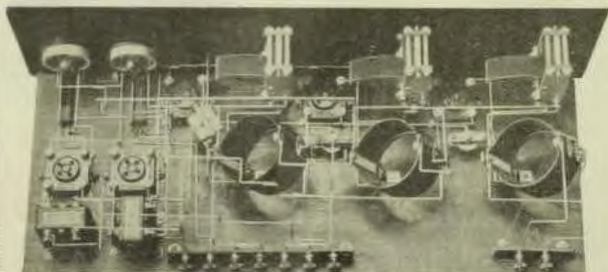
We stock all the parts required—

	£	s.	d.
NEUTROFORMERS—			
Radiokes, 32/6; Grodan, 37/6; Airzone	1	5	0
NEUTRALISING CONDENSERS—3/6; 4/6	0	6	9
VARIABLE CONDENSER—.0005, 10/6; 13/6	0	16	6
VERNIER DIALS—6/9; 7/6 and	0	9	6

King Quality Complete Kit, £18/18/0

AND ALL OTHER PARTS AT LOWEST RATES

See this Set in our Window



This is the photograph of the actual receiver described in last week's "Wireless Weekly."

SWAINS

119-123 PITT STREET

PIONEER DEALERS IN RADIO

Radio Dealers

City, Country, and Interstate.
Write for our Catalogue and Prices of
The Latest in Radio.

BRANSTON

Super Heterodyne Kits.

(Radio's Rolls Royce.)

Long Distance Without Aerial.

HEATH CONDENSERS.

The non-dielectric and strictly
Low-Loss distance getter.
All Sizes in Stock.

HEATH RESISTANCE COUPLED AMPLIFIER.

3 stages, completely wired and
assembled.

REACTONE

LOW LOSS COILS.

The very latest invention.
Sharper Tuning, Lowest Loss, and
Better Reaction.

TRUE BLUE

POWER PLUS VALVES.

The only full power 6-volt tube,
to fit 100 Sockets.

TUNGSTALITE CRYSTALS.

England's best.

CROSLY RADIO SETS.

CROSLY MUSICONES.

HETROLA.

7-Valve Portable Set.

Cut This Out

W. MALING & CO.

30 Market St., Sydney.

Please send particulars of:—

Name and Address.....

.....

Performance



TELEVOX
2000 Ohms

This fact is more important than PRICE. In the production of the EDISWAN "TELEVOX" Loud Speaker performance has received first consideration.

The TELEVOX is the MASTER amongst BRITISH made Loud Speakers, and is not excelled in any part of the WORLD. Its REPRODUCTION is perfect, adjustment to meet the volume of your set is easily made, and a MODULATOR control is fitted. Listening to a "TELEVOX" is different. Ask your dealer for a DEMONSTRATION.

PRICE: £4/3/- in BLACK,
£6/7/6 in BROWN,
or BLACK and GOLD.

A SPEAKER of excellence in a smaller type. Like the TELEVOX, its younger brother, the DULCIVOX, is wonderful in reproduction, and for value, stands alone. Its control is simple. The turning of a small knob adjusts the speaker to the volume of your set, or modulates to your requirements. Your dealer will be pleased to demonstrate the DULCIVOX. The Master in its class.

PRICE: £2/18/- in BLACK,
£2/12/6 in BROWN,
or BLACK and GOLD.



DULCIVOX
2000 Ohms

EDISWAN

THE EDISON SWAN ELECTRIC CO. LTD

368 LITTLE COLLINS ST., MELBOURNE 58 CLARENCE STREET, SYDNEY.
102 GAWLER PLACE, ADELAIDE 156 CREEK STREET, BRISBANE.

An Extraordinary Single Valver

Here are the Parts you require:-

	£	s.	d.
1 Ebonite Panel, 12 x 7 x 3/16	0	3	6
1 .0005 R.C.C. Condenser	0	8	6
1 3in. Dial, black, engraved	0	1	5
1 30 ohm Rheostat, "Ajax"	0	2	1
1 Valve Socket (for 199 Valve)	0	1	6
1 Single Circuit Jack, "Ajax"	0	1	9
1 Wetless .00025 Condenser, with Clips	0	1	9
1 2 megohm Gridleak, "Philmore"	0	1	0
4in. of 3in. diameter polished Radion Tube	0	3	4
4oz. No. 24 Green Double Cotton Wire	0	1	7
2 E.C.S. Plugs, and Sockets, 9d.	0	1	6
4 Terminals, N.P. Phone type, 2d.	0	0	8
1 Baseboard, 11 x 7	0	1	0
6 lengths Square Buswire	0	0	6

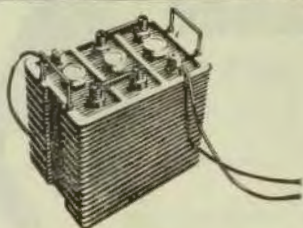
Send for this Quality Outfit Now £1 10 1

Yours for Lower Prices:

THE ECONOMIC RADIO STORES

25 Royal Arcade, SYDNEY.
Phone: M 3049.

569 Hunter St. West, NEWCASTLE
Phone: New 1622.



It's a limpet

We can say only this about a P. & R. Battery. It sticks to its job. There are many reasons why. Here are a few:

The P. & R.'s case is "Dagenite" (the secret of P. & R. acid-proof and heat-proof, which looks like ebonite, but is tougher and not so brittle). Paste is "keyed" in place by a special grid section. You don't need any expensive, always-rotting crate. Terminals are protected by special petroleum-jelly glands. Vents are spill-proof and spray-proof. Carrying handles are part of the battery. And—also all note this—the stated capacity is real, steady discharge, valve burning, working capacity.

Here's a battery worth thinking about. Since it costs no more than the other kind, it's worth asking about. Ask your dealer.

P AND R
 PETO & RADFORD
ACCUMULATORS
The beginning and the end in
POWER

DIRECT FACTORY REPRESENTATIVE

JOHN ARNOLD
 DELGAVES BUILDING
 DELGAVES STREET, MELBOURNE

Gives you more programmes



The **REAL**
Long Distance Valve

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 Accumulator. **PRICE**

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

GET ONE FROM YOUR RADIO DEALER

13/6
 EACH

Mullard
THE MASTER VALVE

All Mullard Valves are manufactured at Mullard Works, London, England.

OBTAINABLE FROM EVERY RADIO DEALER IN AUSTRALIA

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



Miracle of Modern Advertising Methods

In an advertising portfolio just to hand from the Burgess Battery Company, we are let into the secret of the modern methods of how a big manufacturer tells the story of their products to millions of prospective buyers.

To illustrate the scope and power of the Burgess advertising plan for the coming season, just imagine that you were to start to-morrow to call on 20 homes a day, and to tell each one of these homes something of the famous Burgess Batteries. Suppose you work every day—Sunday included. When you had done this for 3287 years, you might be a bit tired, but you would still have almost a year's work ahead of you.

Now, contrast this with the work their advertising does. Every 30 days Burgess advertising goes into 24 of the 26 million homes in the United States. In other words, in 30 days it does the work that one man would require 3287 years to do. This seems unbelievable, but it is a miracle of modern business.

Special attention is given the amateur, and no company can make such an enviable showing with them as Burgess. To start with, the amateur has been a tremendous factor in the growth of radio, and will continue to be. Burgess have been working with and for them from the very beginning of wireless—long before the present broadcasting as we know of to-day, was dreamed of.

From the "way-back-when" days of radio, the Burgess Battery Company has maintained a friendly and valuable contact with the radio amateur. At almost any hour of the day or night, you will find some one of the Burgess staff on the air at 9EK or 4DM.

Co-operation with the amateur in solving many of the mysteries and difficulties of radio transmission and reception has earned a deep and lasting respect for the engineers and products of the Burgess organization, and no greater asset to any manufacturer of radio equipment exists than the universal endorsement of these highly intelligent and long-experienced pioneers of radio.

The services of F. H. Schnell, whose short wave work with the Pacific Fleet was a sensation. Don Mix—the operator with MacMillan in the Arctic, to say nothing of Hoffman and Zurian, are available to help the

amateur movement. Burgess laboratories are also operated at a heavy cost for the advancement of radio in general.

Who hasn't read of the adventures of Burgess Batteries? Why, even in Australia, where they have only been sold a few months, we see they went with Capt. Hurley and party into the wilds.

Can you imagine any finer endorsement for the quality of any battery as is shown in these Adventure Advertisements?

What factory would not feel a thrill of pride at such endorsement by scientific men who absolutely know and demand Burgess?

There must be a reason why Lieut. Byrd carried them over the North Pole—why Captain Hurley took them with him to tropical climes. These same reasons must have prompted Captain Wilkins, another Australian, to use them.

MacMillan has them again in the Arctic—Hobbs has them in Greenland—Commander Rodgers used them in his attempted flight to Honolulu—Lieut. Hilton carried them on the Rice Expedition through and over the never-before-chartered Brazilian jungles.

Sales story? Advertising story? ask yourself. Can any competitor approach this story of quality—of dependability—under the most extreme conditions—of length of service?

These Adventures—these triumphs of courage—and Burgess equipment will go down to history.

Such is the story of Burgess Batteries, which, commencing next month, will reach 96 per cent. of all homes in the United States. The story will be told in 30 of the leading national magazines, such as "The Saturday Evening Post," 13,182,408 are the number of readers of these magazines; 14 leading metropolitan dailies, with a circulation of 6,251,930; most radio and engineering journals; farm newspapers; boy publications; trade journals, altogether having a circulation of many millions.

Burgess advertisements will be printed no less than 274,261,307 times. Every one must see them, and so it is by these means that the public see the unique position of esteem and confidence occupied by Burgess Radio Batteries.

Burgess has come to Australia, and their story of achievements will be told here, too; so watch for — "BURGESS ADVENTURES."

Who knows in how short a time, before a Burgess plant and factory has its home in Australia. Burgess himself says: "Some will build a shack with good tools, and some will build skyscrapers—we'll build skyscrapers."

Wireless Alters Fisherman's Luck

(Continued from Page 7.)

Recently, a crew drew up a sea lion in the net. A mottled, grey creature, not unlike the seal. It fought with the fury of its name—snake, and the whole crew, including the cook, could not keep it aboard. Sea snakes are frequently brought up. Even more venomous than land snakes, they resemble an eel. Sting-rays, sharks, and octopi have all been drawn aboard. The vessels themselves have histories. Many of them served their time as mine sweepers during the war, and one of them was a "mystery ship."

In winter months, the trawlers fish in Southern waters, gradually working their way northwards as summer approaches. They are now at the Botany fishing grounds, and 2FC, taking advantage of their proximity, will broadcast a description of trawling at the end of this month.

MISS GLADYS VERONA, the famous Australian soprano, recently returned from abroad, continues to delight the listeners-in with a magnificent selection of operatic arias and modern songs, from 2BL. Her next appearance will be on Tuesday, November 2, when a particularly choice offering will be presented.

OF SPECIAL interest to lovers of sport is the announcement that 3LO have had microphones installed on all the racecourses, and a graphic description of all Melbourne races will be broadcast from the course. "Musket," the turf expert of the "Sporting Globe" will have charge of the descriptive broadcasting.

FOR THOSE listeners whose horses behave in a perverse manner on Cup day, and simply will not "romp home" the jazz band of H.M.A.S. Adelaide popularly known as the Naval Gloam Chasers, which is to broadcast from 3LO, will dispel all disgruntled feelings. Their repertoire is up to the last minute, and even ahead of time, as a good many of their selections are original numbers and have been composed by members of the band.

— THE —
Carborundum
 —Detector—



For all reflex and
 Crystal Receiving Sets

Brings True, Real Tones

Increases Selectivity

You can improve any reflex or crystal radio set by installing **THE CARBORUNDUM DETECTOR UNIT.**

It is a fixed, permanent Detector unit, that retains its sensitivity indefinitely. It will not burn out. There are no adjustments to be made—no need to go searching for a sensitive spot.

This Detector Unit is made and assembled in the Carborundum Laboratories, and goes to you carefully tested and absolutely guaranteed by its makers.

Be certain to get the Genuine **CARBORUNDUM Detector Unit.**

Sole Wholesale Agents:—

Eliza Tinsley, Pty. Ltd.

484 Kent Street, Sydney

644-652 Bourke St., Melbourne.

REDUCED

Was £10-5-0

Now £9-5-0

LOG THE WORLD
Build your SUPER with
ALL-AMERICAN

SUPER-FINE PARTS

LONG WAVE TRANSFORMER
(Intermediate Frequency)
 For Amplification as
 4,000 to 10,000 meters
 (75 to 15 Kilocycles)

R-110 .. Each £2/2/6

10,000 METER TRANSFORMER
(Filter or Input)
 High selectivity and no
 side band distortion.

R-120 .. Each £2/2/-

RADIO FREQUENCY COUPLER
(Oscillator Coupler)
 A uniform output at 150
 to 650 meters.

R-130 .. Each £1/15/6

SUPER-FINE PARTS:

3 R-110's } Price
 1 R-120 } £9/5/-
 1 R-130 }

Maximum amplification at
 intermediate frequencies, with
 absolute quietness of operation.

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

The Super-Fine Parts represent the highest expression of **ALL-AMERICAN** Reliability through Precision Manufacturing.

RADIO KEY BOOK.
 So great has been the demand for this excellent little publication that every copy has been sold.

It is intended to re-new stocks within the next eight weeks.

Watch our advertisements for further particulars.

LARGEST SELLING TRANSFORMERS IN THE WORLD.

ALL-AMERICAN

Sole Agent:

O. H. O'BRIEN (LATE O'BRIEN AND NICHOLL)

37-39 PITT STREET, SYDNEY

516 COLLINS STREET, MELBOURNE

W. E. PETERMAN, PERRY HOUSE, BRISBANE

Subscription Form

The demand for copies of "Wireless Weekly" has so far exceeded the supply from the printing presses, despite increased output each week, that many listeners-in have complained that news-dealers were sold out before they could obtain their copy. In order to ensure delivery, fill in this subscription form and forward to the Editor, "Wireless Weekly," 51 Castlereagh Street, Sydney.

Please forward "Wireless Weekly" for a period of
for which I enclose for (add exchange
to country cheques).

Name

Address

Subscription Rates: 12 months (52 issues), 13/- post free; 6 months (26 issues), 6/6 post free.

3LO "AT HOME"

The new studio at 3LO Melbourne is more than just a retreat for orchestras, singers, bands and speakers far from the maddening crowd of Collins Street. In fact, the maddening crowd, or rather a fair (very fair) portion of it, has found out that the new studio offers very fine facilities for listening-in direct to the varied programme 3LO provides. Any night now, after 11 p.m., there may be seen one or two couples at least rising to the strains of Le Gassick's Dance Quartet, while on Dance Night (Thursdays) it has become a policy of this popular broadcasting station to invite some particular firm to organize a dance on the spacious floor provided. Messrs. Allan & Co., first broke the ice, or polished the wax, of the new floor, a few weeks ago, and they were followed by Messrs. Robertson and Mullen the week later, while this week the Railways Institute and next week Messrs. Kodak

are to furnish the artistic background to the 3LO Dance Orchestra.

At these functions a most enjoyable evening is spent in refined surroundings, and between the dance items one of the finest concerts provided in Melbourne may be enjoyed in comfort, although the numbers in attendance are strictly limited, and it is more in the nature of an "At Home" than of a public ballroom.

Owing to the introduction of this novel feature, listeners-in may have noticed with some surprise that applause follows many of the items, and it is also noticeable that the performers appreciate this to the full, and indeed rise to the occasion, putting more sparkle and personality into their performance, so that the idea is a happy one from every aspect.

The adventures of Burgess butteries on sea, land, and air will be the subject of a series of radio talks from 2BL on Monday, Wednesday and Friday.



Registered Trade Mark.

Published by Arthur William Watt, of "Folbrounne," Lavender St., Lavender Bay, for the Proprietors, Wireless Newspapers Limited, 51 Castlereagh St., Sydney; and printed by Publicity Press Limited, 71-73 Regent St., Sydney.

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

Subscription rates.—Twelve months (52 issues), 13/- post free. Six months (26 issues), 6/6 post free. Single copies 3d. each, or post free 4d. Subscriptions should be addressed to Wireless Newspapers Ltd, 51 Castlereagh Street, Sydney.

Advertising.—Our advertising representative keeps in close touch with advertisers, and he is ready at all times to supply information concerning advertising.

Agents in Great Britain.—The Colonial Technical Press Ltd., Dudley House, Southamption Street, Strand, W.C. 5.

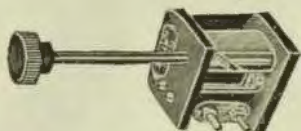
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BRITISH
AND
GUARANTEED

CLARKE'S
ATLAS

BRITISH
AND
GUARANTEED

COIL STANDS



Accuracy of Tuning.

Coils can't Fall Over.

Mechanically and Electrically
Sound in Design.

The "Atlas" horizontal Coil Stand is fitted with our Patented Micrometric Adjustment, yielding perfectly even slow movement and preventing the falling over of the moving coils. No fear of missing carrier-waves owing to a too quick movement of the Coil.

Both 2 and 3 way types give an accuracy of tuning which is a delight, and are suitable for panel mounting.

All fittings heavily nickel-plated. Plug inserts set at standard centres.

PRICES: 2-way 13/3 each 3-way 16/6 each

Ask your Dealer for "Atlas" Components, or communicate with:—

THE GENERAL TRADING COMPANY

"Wingello House," Martin Lane (near Martin Place) SYDNEY.

Telephones: BW 6938; B 4917.

Sole Australian Distributors.

SLINGSBY & COLES Limited

Under Central Station,
482 PITT STREET.

OUR SPECIAL SUPERTONE 3-VALVE SET (complete)

with Loud Speaker and All Accessories, in
handsome Cabinet.

PRICE, £19/10/-



Also 4 and 5 valve sets.

The best value ever offered in 3-Valve Sets

Call in and see it, hear it, buy it.

Easy Terms. Easy Terms.

The New

RADIOKES COIL KIT

For use in the Famous

Neutrodyne Circuit



The Coils you will eventually buy
At all leading Radio Dealers

32/6 per set

Wholesale only

Metropolitan Electric Co., Ltd.

27-9 King Street, SYDNEY.

Late

Keith Stokes Pty., Ltd.

Manufacturers Products Pty. Ltd. (M.P.)

(H. J. HAPGOOD)

Challis House, Martin Place
SYDNEY

Tel: HW 1328

Agents for all styles of Radio Products,
including Clyde Batteries.

Elec. Meter Mfg. Co., "Emtaco."

Bronze Condensers, Leaks and
Fixed Rheos

Arizona Rheos, Pot., Special Coils
and Loops.

Neutron Crystals, Brunst Phones,
Prompt Shipments from Sydney.

We represent 34 Foreign Radio
Manufacturers

Write for Indent List.

Surplus Stocks sold Interstate.

B.M.S. PRODUCTS



B.M.S. FAN-TAIL-JACK

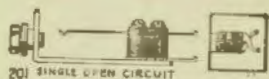
PAT. APPLIED FOR

Connections cupped and spread apart.



JERO QUICK CHANGE PLUG

A good sturdy automatic change plug. Requires no pushing of levers or other manipulation to insert or release the phone cord tips. Price 2/9



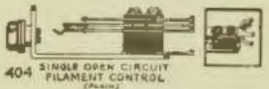
201 SINGLE OPEN CIRCUIT

2/9



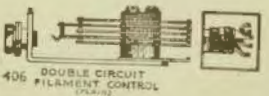
204 DOUBLE CIRCUIT CLOSED

3/-



404 SINGLE OPEN CIRCUIT FILAMENT CONTROL (SLIDING)

3/9



406 DOUBLE CIRCUIT FILAMENT CONTROL (SLIDING)

4/6



B.M.S. CONNECTORS

For Extension Cords

B.M.S. connectors are handy devices for set owners who desire extension cords on the loud speaker. Beautifully moulded and equipped with automatic contacts that require no levers. Price 3/6



No. 317

B.M.S. SWITCH

They have made good in every respect—easy in soldering and inspection, quality of materials and a moderate price. B.M.S. Pantail Jacks are without a fault.

The B.M.S. switch is constructed with the lanted cupped lens for easy soldering. Silver contacts, bakelite-insulators polished nickel-plated panel and positive snap. Price 1/9

OBTAINABLE AT ALL RADIO DEALERS

167-9 Queen Street,
Melbourne

Amalgamated Wireless
Australasian Ltd.

King and King Building,
Queen Street, Brisbane

97 Clarence Street, Sydney



Heralding a New Radio Voice

The voice of *genius*, singing, speaking, playing, leaves a breathless silence in its wake.

The voice of the *Radiolux Amplion*, likewise, amazes you with its mellow, silvery tone, and life-like reproduction.

For this distinctive new type of radio

loud speaker sets an entirely new standard both in radio reception, and in artistic design.

As you listen in with a *Radiolux Amplion*, it becomes increasingly difficult to tell the difference between the actual performance and the *new radio voice*.

Made in two sizes and five distinctive finishes.

RADIOLUX AMPLION

Obtainable at all radio dealers and manufacturers.

British and Australian-made.

Sole distributors for A/sia:
(Wholesale only),

Amalgamated WIRELESS Wireless
Australasia Ltd.

Adet. of Amplion (Australia):
36 Margaret Street, Sydney.