

WIRELESS WEEKLY

Vol. 8. No. 20.

Registered at the G.P.O., Sydney, for transmission by post as a newspaper. Friday, Sept. 10, 1926.



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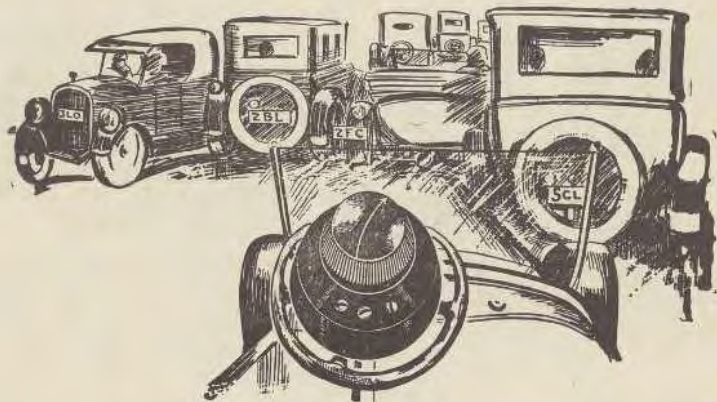
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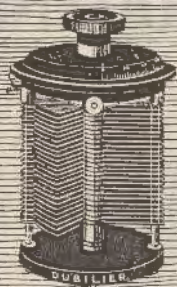
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WIRELESS WEEKLY

VOL. 8. No. 20.

SEPTEMBER 10, 1926.

An Easy Holiday

ON page 6 of this issue will be found the first announcement of our subscription competition in which the first prize is a free return trip to Java and Singapore with £50 incidental expenses.

Here is an opportunity a thousand schoolboys have been waiting for, a holiday and an education. Something to look back upon as an experience. And men, too, here is the chance for that long overdue vacation free from business worry.

Almost two full months' holiday travelling through new countries, seeing strange people and old customs, enjoying life calmly from a canvas chair in the cool shade of the first-class deck.

There is no reason, also, why a school girl, a business girl, or a married woman should not win this competition, the chances are equal. It would enable her to realise that long cherished dream of a holiday away from the cares of house-work. All for a few hours' spare time here and there over a period of three months.

Our aim is to place a copy of the new "Wireless Weekly" in the hands of every listener-in. Once there, we feel confident he will become a regular reader. There are many ways of doing this, but we feel that "Wireless Weekly" is

better introduced to the prospective reader by a friend and fellow listener-in.

This is the only paper in New South Wales publishing detailed broadcasting programmes a week in advance. On this score alone there should be a copy to every receiving set, but, in addition, there are many new features, making it an added attraction for the listener-in. It is essentially his paper.

Hitherto "Wireless Weekly" has been content to remain the amateur experimenters' journal. A wider policy has been adopted, however, including all broadcast listeners.

We have been faced with the difficulty of acquainting listeners with this fact, but, in this competition, we hope to overcome that. We feel sure that there will be no doubt about its success. Thousands of young men are earning their way through American colleges by selling subscriptions to magazines.

"Wireless Weekly," however, realises that no record of achievement is possible here without the hearty co-operation of its readers. We appreciate our readers' many courtesies and helpful criticism in the past, and ask that welcome be extended to the hundreds of young men and women who will compete for this holiday.

First Radio Conference Is Now History

THERE was a time when we spoke of history as something in the past, decades away, relegated to musty volumes in dusty libraries. But to-day history moves rapidly, and we sometimes feel a momentary shock when we realise that a development of yesterday is history to-day.

World-wide wireless did just that, leaving us prepared for any new wonder. But we have hardly yet realised that the first radio conference of Australia is now history.

Most listeners remember the sealed set experiment and the establishment of long wave stations. The story of our broadcasting experiments is a short and interesting one.

Prior to 1924, wireless—apart from naval and military wireless and the ship to shore commercial communication—was a very tame affair. Amateurs in various States had been dabbling in it for years—even before the War. But it was not until about 1920 that any radio telephony work was done. Some of the more skilled amateurs were experimenting with it and their efforts were not confined to the transmission of speech. Gramophone records were transmitted by wireless, from one amateur to another, interspersed with plentiful "hullos" and comments on the quality of the transmission, modulation, power used, etc.

"Test" Transmissions.

Some of those transmissions were truly frightful exhibitions, but the perfection we know nowadays was not known, and indifferent transmission was accepted and passed as successful amateur broadcasting. For some reason or another, it was always referred to as a "test" or "experiment":—"This is 3RV testing: The next record will be a Sonora record, 'O Sole Mio,' by Caruso." Presumably, the Postal Department only licensed the amateurs for experiments, and would not countenance any transmission that was not a "test" or "experiment."

There were comparatively few listeners, as the habit had not been developed, and the cost of component

parts was excessive. For instance, a valve—which now costs about 15/-—could not be bought under 40/-, and they were scarce at that. The listeners also had to make their own sets; there were very few if any radio traders who sold a complete set ready for use.

Credit for Amateurs.

In 1921 and 1922, the "concerts" given by those amateurs grew in number and attractiveness. The possessor of a receiving set proudly invited his friends to his home to listen to the wireless concert, and was not at all perturbed at any caustic comments on the quality of the music produced by the set. Too great credit cannot be given, however, to the amateurs whose efforts were the beginning of broadcasting in Australia. None of them foresaw the immense strides that would be made in the next few years, and no one dreamt of a station so powerful and so efficient as 2FC, 3LO, 5CL, or 4QG. There were a few large companies engaged in wireless business, but they left it to the amateur to sow the seed that was to produce a very rich harvest for them.

Early in 1923, the great interest in broadcasting that was taken in America, became known in Australian business circles, and men of vision began to see possibilities in the new form of entertainment. It was not regarded in any other light than that of an entertainment business, and the varied quality of the services now being given were not thought of. The interested parties communicated with

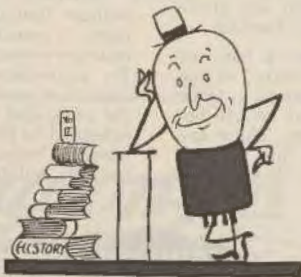
the Postmaster-General. Some were of the opinion that he should provide the broadcasting services, and another organisation thought they should do all of it as they already had a monopoly in other wireless activities. The Postmaster-General was wise in his determination not to regard broadcasting as a Government affair. He foresaw possibilities, however, and decided to bring all the interested parties together and see how best the new industry could be inaugurated.

The conference was held in Melbourne in May, 1923, and about 100 people attended. The Postmaster-General (Mr. Gibson) told the conference that the Government was anxious to see broadcasting inaugurated in Australia; and as it was an entirely new idea he desired to ascertain the wishes of the people who would be responsible for running it. Whatever proposals the Conference put up he would embody in the Regulations which would control the business. The conference sat for two or three days and drafted regulations.

Sealed Sets.

These were considered by the Post Office officials and the Commonwealth law officers, and it is known that the Government wireless officials were not in agreement with many of the proposals made. Some of these would appear very drastic and restricting to us to-day. For instance, any number of broadcasting companies were allowed to broadcast and to charge whatever they liked for their services. And each company would be empowered to arrange that its subscribers (listeners) would only receive what they paid for. The receiving sets were to be so constructed as to respond to one wave length only—the wave-length of the station to which the owner of the set was a subscriber. The set was to be sealed by Government inspectors to prevent fraud. A certain latitude was allowed, to the extent that a set could be designed to respond to two or more stations; in that case the owner had to contribute to all the stations that could be picked up.

(Continued on Page 13.)



INTER-EMPIRE BROADCASTING

Below we publish an article by Great Britain's leading radio engineer, specially written for Australian readers at the request of the Editor of *Wireless Weekly*.



By Capt. P. P. Eckersley

(Chief Engineer of the British Broadcasting Co.)

IT is a compliment to British broadcasting that an Australian periodical should ask me to write on something of topical interest connected with broadcasting. I feel I cannot do better than to discuss what must be a matter of great interest to the Empire, the possibility of linking the Dominions and Colonies to each other and to Great Britain, so that each may receive the other's programmes.

Broadcasting is a friendly thing, and yet it brings to bear a searchlight criticism upon programme conception and performance. These two reasons are responsible for the enormous influence that it carries, and for the impression, good or bad, that it may convey to its listeners.

One understands far more of a man by hearing and not seeing him, one understands far more of the culture of a country by its broadcast reflections than by its pictures, books and peoples.

It is this fact which leads me to believe that broadcasting at last gives us a means of annihilating those preconceived notions that nations get of one another, and which, becoming exaggerated, lead to misunderstanding, and which in some cases, in the end, lead to that greatest evil of human existence, war.

An understanding between peoples of all nations, races, and creeds will lead to a tolerance undreamed of today, and may once and for all eradicate that extraordinary notion that because one cannot agree with another one must perforce gain or lose one's point in the end either by killing him or being killed. Broadcasting, I repeat, in promoting a friendly contact has at least potentialities in bringing about a realisation of the insanity of world citizenship.

Captain Eckersley discusses the advantages of inter-Empire broadcasting. It is only a matter of time, he says, before Sydney will tune in London programmes.

same conversation by wire, we need but a ten thousandth of a kilowatt (a millionth of the wireless power) to achieve the same result.

Thus, in effect, wireless will come in over seas, over jungle, desert, and savage country, where the erection and maintenance of lines is impossible, but wherever wire is practicable we should use it.

These ideas, which are purely ideas and may not be even true, rely for their fulfilment upon the improvement of technical methods, so that a programme conceived and performed, for instance in Sydney, may yet be heard in undiminished clarity in London or other cities and countries.

It is a fact that telephone lines cannot be effective if laid under the sea over very long distances. Australia, for instance, could not adequately connect with Asia, just as no telephone line spans the Atlantic to link Canada or America with Europe. Wireless, however, does not suffer from the disadvantages of the cable, inasmuch as the same sort of fundamental distortions do not exist. The land telephone can, however, be effective wherever poles will carry it, and given a continuous, uninterrupted line, and amplifying points at every two or three hundred miles, there is no technical reason why the Easternmost point of Asia should not speak to the Westernmost point of Spain as clearly as you speak by telephone to a friend in your own city. Moreover, the wire has a great quality in that it does not interfere with other people—the energy is guided down a "pipe" not broadcast to every listening unit—the system is extremely economical. To achieve a satisfactory land conversation over 500 miles, a power of 100 kilowatts and more is needed for a wireless link; for the

Wireless, however, presents other troubles. While it is true that even the Antipodes have been communicated with by wire telegraphy and even whiffs of telephony, it still is practically impossible to span the Atlantic by the spoken word economically owing to the distortions which often arise. It is a common thing in this country for us to receive KDKA, Pittsburg, on 63 metres, Schenectady (WGY) on 32 metres, but so far the retransmission of what is received, while interesting, is not a regular and reliable affair, due to these same annoying distortions. Periodically the broadcast is so perfect as to make one believe it comes from our local studio, a few moments later and it is harsh, distorted and unintelligible. We know the reason for this, and are fighting hard to find a cure; perhaps soon we shall be able to guarantee American and Canadian programmes in this country.

Let us suppose, then, that the problems are solved, what should we do to link Australia? The simplest method would be a wireless relay to Egypt, re-transmission to India, and from thence on to Australia. Another way is by co-operation with America or Canada; wireless relay from Cornwall to Schenectady, shall we say, across America by wire, from the East coast then, in one long sweeping

(Continued on Page 10.)

A Free Return Passage to Java and Singapore



THE gateway of the East is open to you—free of all expense.

We offer you a first-class return passage to Java and Singapore, and £50 incidental expenses, in a new competition. The total value of the prize will be £150.

Java, the peerless gem in that magnificent Empire of Insulinde, winding about the equator like a garland of emeralds, is the ideal tropical island, the greenest, the most beautiful and the most exquisitely cultivated spot in the East. One lucky reader will spend a happy holiday there as a reward for his industry during spare time moments.

His will be an experience shared only with world travellers having visited the most picturesque land in the tropics, with its ancient, crumbling ruins of forgotten civilization and its present day Javanese, a friendly, happy race, with artistic instincts.

Its many volcanoes, still active, and its agreeable climate, make it a place of great attraction to the visitor. It is a favourite winter resort of wealthy Australians.

Its social life in the three big centres at which the mail boats call rivals that of Sydney. Its buildings bear the stamp of modern architect-

ture, but forcing its way through all this is that hidden force, the exotic glamor of the Orient, the subtle mystery which lurks behind the eyes of the natives, unknown, inexplicable.

But how to get there—free. To the reader, securing the greatest number of pre-paid subscriptions to "Wireless Weekly" within three months from this date, will this gateway be opened.

He will receive a single first class passage in one of Messrs. Burns Philp's mail steamers, and since such a trip cannot be made without incidental expenses, he will receive £50. All for inducing his friends to subscribe to "Wireless Weekly."

But Java is not all. He will visit Brisbane and Cairns. Thursday Island, remote outpost of civilization, and port of the pearl trader, will be his also for the seeing. Here Somerset Maugham found French Joe, descendant of the Huguenots, political outcast and pearl trader, whose once powerful, but now pitiful, character he pictures in "Another Man Without a Country."

And Darwin, too, decaying in its beautiful tropical setting, with its white men, its hybrids, its chinamen and blackmen. And, of course, the great meatworks.

Through the glassy, treacherous Arafura Sea, past Timor, Flores, right into the East India, the Spice Islands, Conrad's country. Thence to Sourabaya, Samarsang, and Batavia, where he will meet characters which might have stepped forth from the books of Louis Couperus.

This is the Garden of the East, offering scenery of unsurpassable beauty and grandeur, great mountains and low terraced hills and plains. Its early history fades into the mists of legend; but it seems to have been settled upon by the Hindu race from Ceylon before the beginning of the Christian Era. Imposing relics of this age are still seen at Boroboedoe and Urambanan. In the Middle Ages there was an Arab invasion, which left its mark on the buildings near the Straits of Sunda.

To-day this island, only 622 miles
(Continued with Coupon on Page 55.)



Native children in Central Java.



NOW is the TIME to TUNE IN 4QG

BY J. W. ROBINSON

(Director of the Queensland Radio Service.)

interested in his form of entertainment will attend. The radio manager however, is in a different position. His audience is mixed, one which it is almost impossible to wholly satisfy.

Most stations realise this cannot be avoided and attempt to surmount the difficulty by setting aside regular the nights when they will go out. On ment. This is splendid in one way—it enables listeners to choose the nights when they will listen-in and the nights when they will go out. On the other hand, it has the effect of making the programmes much the same week after week. Just what is best, then, becomes a problem.

in the most cordial and flattering of terms. It matters not which station is considered. Its distant listeners are always its most cordial correspondents.

This proves the truth of the old saying that "distant hills are greenest." It is safe to assume that if a vote of all listeners were taken, it would be found that in every state in Australia, a large majority would vote for the distant stations.

Most listeners seem to demand a variety of programmes, and consideration of the service provided in Queensland by 4QG, indicates that in the direction of variety they are well catered for.

RADIO progress in Queensland is greater than that made in New South Wales. A few days ago, the Director of Postal services said that the density of licenses in Queensland exceeded the density in N.S.W. By this he meant that, on a population basis, there was a greater number of listeners-in in the Northern State than in N.S.W.

The total number of licenses in Queensland is 15,000. The population of N.S.W. is roughly three times that of Queensland, and to equal Queensland's wireless figures, N.S.W. would have to show 45,000 licenses.

This surely constitutes a triumph for the Queensland Radio Service. It is our answer to the criticism which has been levelled at us in the past. Practical result is our best reply.

Our most difficult problem has been providing varied entertainment. Even in large cities this task is a colossal one, but in Brisbane, it becomes acute.

The broadcasting director must remember that he is catering for a large and widespread audience, and more important still, for an audience composed of people of all sorts and shades of beliefs and opinions. The usual concert manager planning an entertainment knows that only those



The broadcasting director aims to cater for the public. He is guided in his efforts mainly by the letters received at the station. And here again, the value of these comments is problematic. An examination of a morning's mail at a large broadcasting station is most interesting. Similar items are both praised and condemned by different listeners.

The outstanding feature is that without an exception, those coming from a distance are always couched

Glimpses of 4QG. Above, left, a corner of the reception hall; new left, the transmitting room; below, the aerial system on the roof of the Queensland Insurance building. It is a landmark for miles around Brisbane.



Station 4QG has been in operation for thirteen months, eight months in a temporary capacity, and five months on high power. During that time, more than 800 different artists have appeared in its programmes. These figures have not been arrived at by counting the number of artists in a choir or by counting quartettes as four items. In compiling the total, each band which has performed has been classed as one artist. The total means that during 4QG's short life it has placed before the public more than two new individual artists each day. When the population of Brisbane and the facilities it affords are considered, this fact becomes a creditable record.

Fifteen Churches.

There are more than 30 land lines to outside points. It broadcasts church services from fifteen churches and it has six bands regularly providing entertainments to its listeners.

Its farmers' sessions have included lecturettes by experts from all branches of Government Departments, and its ordinary lecture sessions have included science talks, talks on various hobbies, wireless and a host of miscellaneous subjects.

Prominent people who have been broadcast by station 4QG include, the Governor General, the State Governor, the Prime Minister, the Premier of Queensland, Archbishop Duhig, Archbishop Sharp, the Minister for Agriculture and Stock, the Minister for Education, the Minister for Public Works, and many others. Altogether the class of service which is being given Queensland both in quantity and quality compares very favourably with that given by stations in other states. We have found our feet, now is the time to tune-in 4QG.

But before you tune-in, perhaps you would like to know something about this station. It is unique in several respects. First, all the transmitting apparatus is housed under the same roof as the studios, thus reducing land line work and a consequent duplication of staff. Secondly, its control both technical and administrative is in the hands of one department.

4QG is the "A" grade station operated by the Government of Queensland under the only "A" grade license issued for the northern state. It is

situated on the roof of the State Insurance Building, a modern eight storied structure at the corner of George and Elizabeth Streets, Brisbane, and the two steel towers supporting its aerial system stand 100 feet above the roof of the building, and are a landmark for miles and miles around.

The whole of the roof of the State Insurance Building has been taken up by 4QG offices, reception halls, studios, station, laboratories, and workshops occupying a large area. The layout of station 4QG was decided only after the experiences of other stations had been considered.



The control room at 4QG.

From a handsome entrance in Elizabeth Street, an elevator lands callers at the roof of the building and a short flight of marble steps takes the visitor through swinging doors into the main vestibule. From this vestibule, general offices, and the Director's and Chief Engineer's offices open up, and a small inquiry office is situated quite close to the main doors. A large door leads from the centre of this vestibule into the main reception hall.

The main reception hall itself is built in the form of a double cross, each arm of which is fifty-six feet in length. A handsome moulded plaster dome, which is supported by eight fluted pillars caps the reception hall. The plaster work in the dome is panelled and illuminated with an invisible

light. The walls contain handsome metal lamp brackets and at night when the main hall is illuminated, the effect is most pleasing.

In the main reception hall, artists awaiting their turns to appear on the programme are accommodated, and the hall itself is furnished in a tasteful and simple manner, maintaining the quiet and dignified tone which the station at all times endeavours to keep in connection with its transmissions.

There are two studios, a large one and one smaller. The first studio is used when broadcasting bands, orchestras, choirs, etc., and is heavily draped with putty coloured material. The smaller of the two studios is used for solo work, bedtime stories, lectures and speeches, and is draped with a light and pretty blue poplin. It is relieved by a border or draping of brown poplin.

The main instrument room runs the full length at the rear of the two studios. Through glass windows in the walls, the operators on duty see just what is going on in either of the two rooms.

The main transmitting plant is housed in the instrument room. Here are the main switchboards handling the current supply received from the Brisbane City Electric Light Company, the drive panel, the main oscillator panel, the rectifier, the modulator, and the necessary tuning inductances.

More than 5 k.w.

The transmitter is rated officially at 5 kilowatts, but actually develops much greater power. It was manufactured in Sydney and is similar to the transmitting plant installed at station 3LO, Melbourne, and at the new 2FC at Pennant Hills. The total power input to all panels when the station is working is about 24 kilowatts, of which 8 kilowatts are used in the aerial circuit.

The workshops and laboratories are situated quite close to the station building, and a special room which houses fans, ventilators, blower motors and other auxiliary running machinery opens off from the workshops. The main battery room has been built in a corner of the station building proper.



CHEERIO OVER THE AIR.

"Cheerio Man speaking!" is a new salutation spreading from 2FC following the eight o'clock chimes. Many letters of appreciation received evidence the fact that this innovation supplies a definite and needed service. On the face of it, it seemed a daring thing to do, eight o'clock in the morning, when ordinary people are rushing and busy, to squeeze in a five minutes' "Talk." But Mr. J. K. Powell is not a man who fears to do original things. He believes in getting out of the rut and doing what he terms "different" things. "I believe," he says, "that thousands of lonely people everywhere, and thousands of tired and worried people, too, welcome some word-music early in the morning. Of course, eight o'clock is not early, except to really lazy people. Why, country people at that time are seriously thinking of dinner. What is the matter with us that we always try to push our joy-spreading efforts off until night-time? There should be music in every home long before breakfast time, and why should we not be glad to hear some of the cheerio word-music poems at eight o'clock? Mr. Powell is an enthusiastic and a practical psychologist. He must be practical, and he certainly is most enthusiastic to get into Sydney from his home at Cheltenham by eight o'clock, and he says he is quite prepared to go on doing it for a year, for the love of the service rendered, so long as it is appreciated.

BRIDGE BY RADIO.

Interest in the Radio Bridge Session is being maintained steadily, and in response to many requests from listeners, 2FC Studios are arranging to announce each Tuesday night, and also to publish in our Wednesday's

programme, correct hands which will be held by the four players in the studio when the game is played on Wednesday night. 2FC suggests to listeners that they arrange, in their own homes, parties where—for example—three or more tables could be arranged with the hands, as announced in advance, already dealt out. It will be found that various results are obtained, and interest will be maintained so that when the perfect hand is played in the Studio it will be possible to realise where the play has differed. 2FC will announce each time when the Bridge hand will be played in the Studio, giving an op-

portunity to personally play the hands in their own homes, in plenty of time so that the result of the games will be known before the perfect hand is broadcast.

TALKS TO THE OLDER CHILDREN

It has been the cry of the growing boy and girl, that when the "Bed-time Uncles" entertain the children, there is not enough time devoted to the older children, who scoff at the thought of listening to Fairy Tales. 2FC are going to remove this impression, and when the "Hello Man" returns from his holidays early in September, a section will be devoted every night to the older children. This will commence at 8.40, and will open with the reading in serial form, a delightful book for boys and girls, written by Mr. Gratten-Smith, an Australian, and dealing with scenes round Sydney Harbour, in which speed boats and spies predominate, and all sorts of exciting things happening. This book is called "Three Real Bricks," and when it finishes, other stories and competitions will be given, so that every night after the little ones have been sent to bed, the older ones can get to the set, and be thoroughly entertained.

DULCITONE ON THE AIR.

The dulcitone as a broadcasting instrument has proved to be a complete success at 2FC Studios. A combined dulcitone and vocal recital recently given by Madame Vera Tasma, and Madame Evelyn Greig, was so delightful to listeners, that a series of these Sunday night programmes has been arranged. Madame Greig gave quite a number of dulcitone recitals with various American broadcasting stations. The instrument, which is composed of tuning forks, is particularly adapted for broadcasting.



Dr. Sidney Morris, Director of Baby Welfare in N.S.W., who will talk from 2BL on Wednesdays.

NEW RADIO SONG FOR 2FC.

The Radio Fox Trot, "Hello Helen," which was composed by Mr. Jack Lumsdaine at the Studio in 30 minutes, at the request of a listener, who suggested this title, is to be put on the market. A piano roll is being made, and talking machine records will follow. This will be the first song written in Australia, dedicated to radio.

2GB NOTES.

Broadcasting temporarily on 1500 watts, 2GB, the Theosophical Station, announce that they will shortly open on their full official rating of 3000 watts. The station has arranged to broadcast band concerts from Adyar Hall every Sunday evening, as well as a series of lectures by Professor Ernest Wood, entitled "The Voice of the Silence." The lecture will start at 7 p.m., and the concert at 8.15 p.m.

Every Friday night the name of the winner in connection with Arthur Rickards Ltd's. Home Endowment Scheme will be broadcasted from 2GB.

DEEP MYSTERY.

A curious phenomenon was manifested on the occasion of the broadcasting by Station 2FC from Balmain Coal Mine recently. As the cage descended with the choir singing the voices died away. At length the announcer mentioned that the singing could no longer be heard. But for some time after, listeners-in could



Folly Barnes, laughter maker at 2FC.

hear the music. The reason, of course, lay in the fact that the microphone that picked up the singing for broadcasting was more sensitive than the human ear. Station 2FC has received reports from all over the State as to the excellence of their broadcasting. At one stage a choral party rendered music from a point 3000 feet below the surface and half a mile under Sydney Harbor.

EVERYBODY'S UNCLE.

Some of the young people who listen to the bed-time stories from the broadcasting stations have quaint ideas as to how the Radio Uncles send them presents by wireless. Little they know of the surreptitious visit of parent or friend, who drops in on Uncle George, Uncle Jack or the Hello Man and arrange for a box of chocolates, a star, or a doll, to be sent "over the air."

Uncle George, of Station 2BL, this week received a 10/- note by post from Orange. No letter accompanied the note, and Uncle George handed it over to St. Margaret's Hospital. A day or two later he received a letter stating that the writer had sent the 10/-, and inquiring when a present would arrive by radio. Uncle George's correspondent appeared to be cherishing the notion that not only do the Radio "Uncles" speak to the children over the air, but that they can also deliver presents by the same means.

The Radio "Uncles" receive many amusing letters from children, but Uncle George, who is still in the early thirties, was surprised a day or two ago to receive a letter from a small girl who stated that, although she knew he was a very old man, she hoped that he would be spared to tell the bedtime stories for many years to come.

BECOME BEAUTIFUL.

"How to become beautiful" is the subject of a series of special talks to women now being broadcast by the Sydney station, 2BL. The lecturer is Mrs. Jordan, who is well informed on the question. Another feature of the same radio station at the moment is a series of physical culture exercises, which are broadcast twice each morning. Listeners with loud speakers find it easy to follow the instructor; some even perform the exercises using headphones.



Mr. P. C. Spouse, Australian mouth organ champion, whose instrument registers well over the air from 2FC.

SPORTSMAN'S STATION.

In addition to the special racing features now broadcast from 2KY, Mr. W. M. Rutledge, sporting editor, will broadcast the latest criticism and information on all branches of sport. 2KY is likely to become the sportsman's station, and regular sports nights are to be held, when champions will talk.

2KY TOURIST SERVICE.

With the approach of the tourist season, 2KY has arranged to equip a fleet of 12 touring cars with receiving sets and loud speakers to add to the enjoyment of tourists. As the cars will work in fleet units transmitting apparatus will be installed on two of the cars.

Inter-Empire Broadcasting

(Continued from Page 5.)

curve, to Australia and New Zealand.

This is looking far ahead; there is much to be done, but if I have shown that problems exist and that all the world's wireless engineers are working hard to overcome them, I have at least done something.

It will be a great day indeed when such problems submit to treatment and the Empire becomes linked by something so intimate and personal as broadcasting—something to cement that spirit which makes us, in spite of distance, still the most wonderful commonwealth of nations the world has ever seen.

What's on the Air in Melbourne

3LO EXTENDING.

Although it is only a matter of a few months before the Broadcasting Company of Australia will have to vacate its present premises in Collins Street, Melbourne, 3LO is increasing its accommodation in the meantime, and studio concerts are now transmitted from a new room above those at present in use. The new studio is ideally suitable, measuring 60 by 35 feet, almost as large as the average concert hall. Echoes are obviated and 3LO's transmission should be even nearer perfection. The control room remains below, the signalling for the new room being by means of a clever system of lights. If the artist is required to move nearer the microphone he sees the word "nearer" flashed on the indicator board. The furnishings are the best procurable both from an acoustic and comfortable point of view, and there is every convenience for artists. It is possible that seating accommodation may be installed for spectators who will be admitted by presentation of tickets issued on request to the studio. Thus the atmosphere should be strengthened, for applause should increase the enthusiasm of both artists and listeners.

HEARD IN U.S.

American listeners seem to be neglecting their own studios in favour of Australian programmes. This week's mail brings further eulogies

to 3LO, Melbourne. Here are just a few excerpts: "I have picked up 3LO, and will say you have some sports news and some wonderful singers there," writes a Los Angeles man.

Mr. Moskovita, of San Pedro, has two or three itemised programmes in every mail, and judging from the amount he picks up from 3LO in the early hours of the morning, he must get very little sleep.

From Regina, Canada, comes a letter thanking the studio for acknowledging a previous letter. A lot of his friends would not believe he had picked up 3LO, Melbourne, until he received the confirmation.

Then from Alaska: "I heard a lot of your programmes at 3 o'clock this morning. Some band music came through very clearly." Another Alaskan says: "I heard you every time I have tried to get you. For a while I thought it was 2LO, London. Frequently I get you when I cannot get American Pacific Coast stations."

"Please put artists' names in letters when you confirm my reports," requests Mr. Donald Wright, of California, "I want to show all the 3LO letters I can at the Radio Exposition."

JESSIE SHMITH.

Having firmly established herself with her Melbourne public Jessie Shmith left Australia about three



Vera Spaul,
3LO artist.

months ago to seek further fame in New Zealand's wondrous isles. She secured a contract to broadcast from the Auckland studio, and quickly won such popularity on the air that engagements followed thick and fast, and she had just accepted an offer for a lengthy concert tour of the North Island when the illness of her mother caused her sudden recall to Melbourne, and although 3LO listeners-in sympathise with her in her bad news, they cannot fail to rejoice at the possibility of again hearing the popular contralto via wireless.

THRILLED NEW ZEALAND LISTENERS.

A word to all listeners-in who, from time to time have their "grouch" and complain that they cannot always catch what the speaker says. A kind friend has set 3LO a copy of the "Star," a Christchurch (N.Z.), paper, which contains a verbatim report of the famous wrestle between Ted Thye, the World Champion and Sam Clapham, the Champion of the British Empire, that was so realistically broadcasted by Mr. McCance. As an enthusiastic listener-in said, "Everything was there except the blood and sawdust." According to the "Star" report, everything—even the "hoots, yells, and terrific bursts of applause that rent the air" was heard distinctly and N.Z. listeners are anxiously awaiting the advent of the next bout.



Students at the Conservatorium, Melbourne, appearing at 3LO.



Two Valve Set

£12

Our standard 2-valve Set complete with all accessories—but not including loud speaker, ready to instal, thoroughly tested and guaranteed to give satisfaction. Price, complete £12/-/-

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

Accessories

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

Other Parts not Listed — Prices on Request

DAVID JONES'

For Service ————— Sydney



Associated with Australian Progress

MR. K. E. SCHULZ, Managing Director of Electricity Meter Mfg. Co. Ltd., was born at Vienna, in March 1883, and was educated in that State and also at the Technikum, Mittweida, Germany.

After spending ten years in European manufacturing organisation, and two years in the Telegraph Department, Vienna, he left that country and arrived in Australia in 1911, where, after two years in the Telegraph Department of the G.P.O., Sydney, he commenced business in partnership with Mr. J. S. Schartl, as a general engineering concern. This later developed into Electricity Meter Mfg. Co., Ltd., manufacturers of the famous Beta Electricity Meters, which are universally used all over Australia and are produced at the rate of 130,000 per annum.

This Company has also specialised in the manufacture of the Hammond Visible Petrol Measure, which was the invention of Mr. Hammond, an Australian. This invention, which has been greatly improved by Mr. Schulz, is a familiar sight to motorists. It has set a world wide standard as the first visible petrol measure, and since its inception it has been copied in all parts of the world. Fifteen hundred of these remarkable instruments have been produced to date. The name of the Company is probably more familiar to radio users through the high quality wireless products manufactured and marketed under the name of Emmeo.

MR. DEALER—

Can You Sell Radio Sets?

If so Write us NOW!

For years Wholesalers, Distributors, and Dealers have been endeavouring to make profit out of radio merchandising.

Some have made money, but quite a lot have lost it.

WHY—

- (1) Because they have wasted time experimenting and trying to make a commercial proposition out of an amateur and home-built set.
- (2) Because they have not appreciated the economic fact that it is not profitable to try to manufacture and sell at the same time.
- (3) Because their business is primarily, selling to the public, and they have not realised it.
- (4) Because radio must be taken to the public, and it does not pay to wait for the public to come to you.
- (5) Because of the absence of a standardised Australian radio set that will stand any test and can be easily sold.
- (6) Because the set business has only just begun, and the public are demanding an instrument they can rely on.

Your success as a radio dealer is now up to you. You must decide between haphazard methods and permanent profitable business-building.

Are you ready to advance your business along the lines of a sane, sensible, and constructive radio merchandising programme? If so, tell us who you are, what your business is, the territory you can cover profitably, your financial position and your sales policy. **This will be held in strictest confidence.** We will tell you then, through a visit or by letter, how we can stand behind you.

WRITE NOW

Mingay's Wireless Mfg. Co.

City Office: 302-3 Dalton House, 115 Pitt St., Sydney. (Phone B5463)

Factory: 56 Alona St., Darlington. (Phone Red. 1124)

First Radio Conference is now History

(Continued from Page 4.)

Despite objections raised by the postal technical officials as regards the impracticability of the proposals, the proposals were embodied in the regulations as promised by the P.M.G., and this remarkable scheme was commenced. Two stations were opened in Sydney in December, 1923, and one each in Perth and Melbourne shortly after. One Sydney station charged £3/- per annum in addition to the Post Office proportion of 10/-, making the listener's fee 73/- per year for the right to listen to one station only.

Another idea embodied in the regulations was to have the stations broadcast on long wavelengths. Thus, the stations in Sydney, Perth and later Melbourne, were designed for wavelength over 1000 metres. That meant that many receivers from overseas whose wavelength range was limited to 500 metres were useless for the reception of these main stations.

This scheme based on the sealed set and the long wavelengths proved unpopular within a few months. Agitations for the repeal of the regulations arose in all States. The result was the repeal of the regulations and the substitution therefor of the existing regulations giving the liberties enjoyed by listeners and the cheaper fees. The real development of broadcasting did not commence until the new regulations were gazetted.

However, regulations which may have suited conditions two or three years ago, may be out of date to-day, and that is why they are now under review by the Postmaster General. The usual slow and deliberate methods of Government departments leaves us in doubt as to whether any radical alteration is contemplated. Certainly there would be some revolutionary changes if various critics and self-appointed authorities and experts had their way. There would be no license fees, or, at all events, very much reduced fees. But how the services would be financed and what inducements would be held out to the broadcasting companies to improve their services is never clearly stated.

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Scientific Super Valves

The Supreme Valve in Service—to seller and buyer alike—is achieved when the need for it does not arise!

Radio Micro

The most improved type of low consumption valve. Highly efficient as either detector or amplifier.

Filament, 3.85 v., .06 amps.

PRICE 13/6

Super Ampli

The new 201A valve detector and medium power Amplifier.

Filament, 5 v., .25 amps.

PRICE 13/6

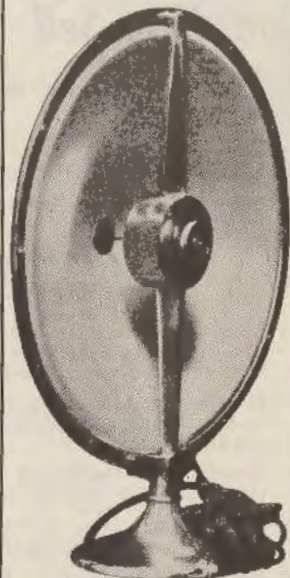
Obtainable in English or American Base

INSTAL THEM NOW!

Products of LA RADIO-TECHNIQUE, PARIS.

Makers of all types of receiving and transmitting valves. Used throughout the French Army and Navy broadcasting and Commercial stations.

SFERAVOX



CONE SPEAKER

**FAITHFUL, POWERFUL
DISTORTIONLESS**

PRICE **£5/5/-**

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Electrique, Paris**

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BROWN & DUREAU, Ltd. Broughton House
Clarence St., SYDNEY



A bedtime fantasia and Uncle Radio (Mr. W. Smallcombe) of 5CL.

September and October Radio Brides

MISS Thelma Crowther, of 196 Drummond Street, Carlton, Melbourne, the winner of the "September's Most Beautiful Bride" competition, whose photograph is reproduced on our cover, contradicted the old belief that women cannot keep a secret. Her fiancé, Mr. W. H. Dando, was unaware of her entry until after she had announced her success. Both Miss Crowther and Mr. Dando were employed at the office of J. Kitchen and Sons, North Port, but Miss Crowther had left about a week before the announcement of the result in order to make preparation for the wedding. "I didn't even know my fiancée had entered for the competition until last night," said Mr. Dando, as he sat at his desk answering telephone calls of congratulation. "I don't know which of us is more pleased."

Mr. George Bell, the artist who judged the entries stated that in all cases the head only was judged. He took into consideration first of all beauty of form, and then the condition

and color of the skin and the texture of the hair. "The girl who won," said Mr. Bell, "was blessed with beautiful color and hair of a lovely red, character and personality were also considered."

The gifts which Miss Crowther will receive through her success total about £500. The marriage took place at the Wesley Church, Melbourne, on September 1, the ceremony being officiated by the Rev. J. H. Cain. 3LO Melbourne broadcast the ceremony.

Radio enthusiasts in Sydney are wondering whether any objection will be raised to the broadcasting of the marriage service of the "October Bride." The Anglican Archbishop of Melbourne (Dr. H. Lees) refused to allow the "September Radio Bride" to have her wedding broadcast in Melbourne, holding that whereas the broadcasting of a sermon would do some good, there were good reasons against broadcasting a strictly domestic ceremony and turning it into an advertisement.

Carborundum —Detector—



The only
**TRULY FIXED
DETECTOR**
on the market.

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There is **NO NEED** to search for the **SENSITIVE POINT**, the Laboratories of the Carborundum Coy. have found and **FIXED IT** for you.

It's Permanent. No adjustments necessary. Truer Tones. Increased selectivity.

Beware of Imitations.

The Genuine retailed only by:
Economic Radio Stores.
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Harringtons Ltd.
E. R. Cullen.
Colville Moore Wireless Co.
Mick Simmons Ltd.
Keogh Radio Supplies.
Radio Wireless Mfg. Co.
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Who guarantee them fully

Sole Wholesale Agents:—
Eliza Tinsley, Pty. Ltd.

484 Kent Street, Sydney
644-652 Bourke St., Melbourne.

RADEX VALVES

6/9 NOW 6/9 at both

Economic Radio Stores, Sydney and Newcastle

The .06 Amp. or Dry Cell Type is fitted with either the 199, UX, or standard base, and have the characteristics of the standard 199 valve.

The .25 Amp. or Accumulator Type is fitted with either the standard or UX base, and have the characteristics of the standard 201A valve.

H. and H. Porcelain Pussyfoot Valve Sockets have arrived. Fit 201A or UX base valves 4/-

QUALITY RADIO GOODS AT QUANTITY PRICES

| | £ s. d. | | £ s. d. |
|---|---------|---|---------|
| Rheostats: Wire wound 6 or 30 ohms | 0 2 1 | Type DFG 45 A.H. 2 volts, 16/-; 4 volts, 32/-; 6 volts | 2 8 0 |
| Super Rheostats: Wire wound, all bakelite, 6 or 30 ohms | 0 3 6 | Browning Drake Kits: Aerial coil and regenerator | 1 5 0 |
| Valve Sockets: Metal Shell, 199, 1/6; 201A | 0 1 11 | Neutrodyne Kits: 3 neutroformers and 2 neutrodons | 1 12 6 |
| UX Valve Sockets: Brown Bakelite | 0 2 9 | Neutralising Condensers: Standard type | 0 3 6 |
| Bremer Tully Valve Sockets: Standard 201A | 0 3 0 | Karas Harmonic Transformers: Guaranteed distortionless | 1 19 6 |
| Midget Low Loss Condensers: 5 plates | 0 3 0 | Karas Orthometric Condensers: .00025, 36/6; .00037, 38/-; .0005 | 1 19 6 |
| Straight Line Frequency Condensers: Advance, .0005 | 0 14 0 | Potentiometers: Wire wound, 400 ohms | 0 3 0 |
| Accumulators: "Exide" Glass Containers: | | Sterling Variable Condensers: 21 brass plates | 0 13 6 |
| Type DTG 20 A.H. 2 volts, 8/6; 4 volts, 17/-; 6 volts | 1 5 6 | | |

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Reducing the Upkeep Cost of Broadcast Receivers

REALISING that quite a number of "Wireless Weekly" readers are more than satisfied with the results they are obtaining with their commercially built receivers, we are dealing with a non-technical article this week which should be both interesting and instructive. Every broadcast listener is faced with the all important problem of obtaining the best possible results with a minimum of cost.

Where the radio set is made up of reasonably good quality parts very few replacements are required, even after several years' service. If the power for operating the receiver is supplied by dry cells, it is, of course, necessary to replace worn out batteries periodically. On the other hand, if storage batteries are used, it is necessary only to have them recharged at various intervals. Regardless, therefore, of the medium of power used, there is necessarily some expense from time to time. But this expense is comparatively small or large, depending on several conditions, which may be summed up as follows.

- (1) Number and type of valves used.
- (2) Number of hours per day the receiver is used.
- (3) Type and size of "A" and "B" batteries used, dry cell or storage.
- (4) Care and maintenance of batteries.

We will deal with the above conditions in their numerical order:—

The most popular types of commercial receivers used in Australia to-day are without a doubt the high-powered ones, which are capable of receiving all the high power stations at night at distances up to 1,000 miles or more. The receivers that can do this consistently and satisfactorily invariably use from 4 to 8 valves. Naturally, such sets cause fairly heavy drain on the "A" and "B" batteries, and, in spite of the wonderful improvements which have been made in the manufacture of low consumption filament valves, the batteries run

An instructive article on the care and maintenance of A and B batteries couched in simple, non-technical terms. Readers' queries have indicated that such an article has been long in need.

down considerably quicker than in the earlier days of broadcasting, when only two or three valve sets were most commonly used.

If dry batteries are used, whether they be for filament or plate current, they must also be more frequently replaced than was the case with the smaller sets.

The number of hours a set is used determines the expense. Every car owner knows that if a car is constantly on the road day after day, the tyres wear out much quicker than if the car is only used week-ends.

The same is true about the "A" and "B" batteries of a wireless receiver. If the set is used every hour that the broadcasting stations are operating, it will, naturally, be necessary to replace dry cells more often, or to recharge storage batteries more frequently. No fixed rule can be made concerning the periods between charges which cover all storage batteries.

Every accumulator has a certain capacity, which is determined by the

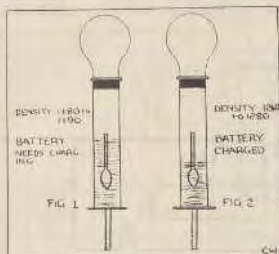
size and number of plates. Thus it will be seen that an accumulator which supplies sufficient current for the operation of a one-valve receiver for ten hours will only last half that time if two valves are used. When we say that an accumulator has a working capacity of 30 "ampere hours" we imply that the accumulator will supply current of 1 ampere for a period of 30 hours, or 5 amps. for a period of 60 hours, and so on.

Readers should note carefully that the capacity of an accumulator has nothing at all to do with the voltage or pressure of the current which the accumulator supplies. The voltage depends upon the number of accumulators. Thus a 6 volt accumulator has three separate units joined together in series (viz., positive of one connected to the negative of the other).

A Practical Conclusion.

Now that we have seen that accumulators supply definite quantities of electricity at definite electrical pressures over definite periods, let us see what size is necessary for our particular receivers. Now, suppose we are using a one-valve receiver which requires .25 amps at 8 volts. In the first place, we shall need a 6 volt battery accumulator (viz., three distinct cells). By purchasing a 20 ampere hour size, and using it four hours a day, the accumulator will be discharging at the rate of 1 amp. per day. To keep the battery in good condition, however, it is not advisable to discharge it dead flat each time, so that it would be necessary to have it recharged at least once a fortnight. By purchasing an accumulator with double the capacity, readers will readily see that it will last twice as long without recharging, if still used with a one-valve receiver. If, however, the number of valves is increased, the size of the accumulator should also be increased accordingly.

Take another example. We are using a three-valve receiver; each



HYDROMETERS.

Fig. 1 shows battery in need of charging, and Fig. 2 when charged.

valve requires .3 amps. at 2 volts. This means that we are discharging our 2 volt accumulator at the rate of .9 amps per hour. By placing in parallel two or three 2-volt accumulators, it is possible to double or treble the ampere hour capacity.

Hence we find that, with this arrangement, a 6 volt ampere battery is converted into a 2 volt 60 ampere size, which is particularly suitable for this type of three-valve receiver. (To place the cells of an accumulator in parallel it is necessary to link all the positive terminals together, and all the negative terminals together).

The Care and Maintenance of Batteries.

There are a few simple and easily understood rules which, if followed religiously, will ensure maximum results with very little upkeep expense:

(1) The level of the electrolyte should be always kept above the top of the plates in both "A" or "B" accumulators. To do this it is necessary to add periodically small quantities of distilled water only. Never add acid unless the battery is upset.

(2) No acid is ever lost from the battery unless it is accidentally spilled. It is the water only that evaporates and this may be easily replaced from time to time.

(3) They must not be left in a discharged state for any length of time.

Testing Instruments.

The hydrometer and voltmeter are two very useful instruments for testing the state of the "A" or "B" accumulators, and the following is the method of using them:—

(1) Remove vent plug from the "A" or "B" battery.

(2) Compress the rubber bulb.

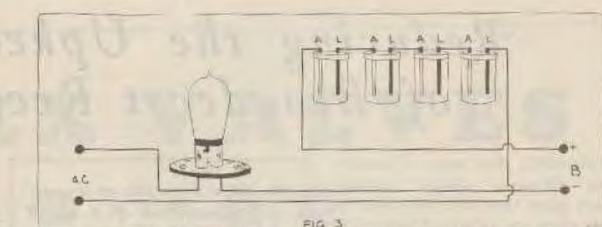


Fig. 3. A chemical rectifier which can be easily made by any broadcast listener.

(3) Insert the soft rubber tube into the vent hole until the end is below the level of the acid.

(4) Release bulb until sufficient acid is drawn up into the glass tube to cause the hydrometer float to rise.

Tantalum

The more advanced readers are without doubt aware of the high efficiency of Tantalum for rectifying purposes. "Wireless Weekly" has recently received a small quantity of this metal from England.

We are at present carrying out experiments with the object of passing along information to our readers concerning the constructional details of an "A" or "B" battery charger, which may be connected direct to the house lighting mains.

(5) With the hydrometer in a vertical position, so that the float does not touch the sides of the tube, the specific gravity of the acid is taken on scale at level of solution. See Figs. 1 and 2.

A fully charged "A" battery should show a reading between 1260 and

1280. To ensure long life with best results at all times an "A" battery should be recharged as soon as the density of the acid reads as low as 1190. A good "A" battery, well looked after, will last 10 years or more. It is fatal to run a battery down each time until the receiver refuses to function properly. Readers who have been in the habit of doing this will probably find that it is necessary to purchase a new one after 12 months' use.

The voltmeter. Although a quick method of testing the state of the accumulator "B" battery is not as reliable as the hydrometer, a 24 cell accumulator when fully charged may read as high as 52 volts. For maximum and continued good results with long life, it should be recharged when voltage drops to 45 volts.

Charging Accumulators.

When the test of the density of the "A" or "B" battery shows that it is low (1190) the battery should be immediately placed on charge, at the correct charging rate. There are many efficient types of rectifiers for both "A" and "B" battery charging, all of which are supplied with full working instructions. A golden rule to remember in charging any type of battery is that it is far better to charge too slowly than too fast.

For the benefit of readers who have already purchased an "A" battery charger which is not fitted for "B" battery charging, Figs. 3 or 4 should suit their requirements. Fig. 3 shows the usual connections for an electrolytic rectifier which may consist of four glass jam jars, filled with a saturated solution of borax and distilled water, one aluminium and one lead electrode, 4 inches x $\frac{1}{2}$ inch, being immersed in each jar. The lamp controls the charging rate

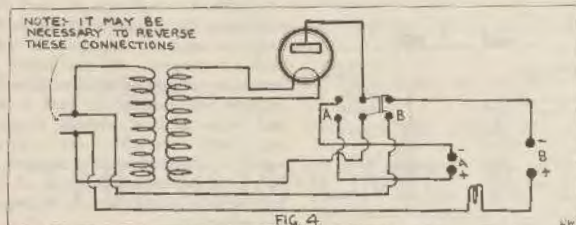


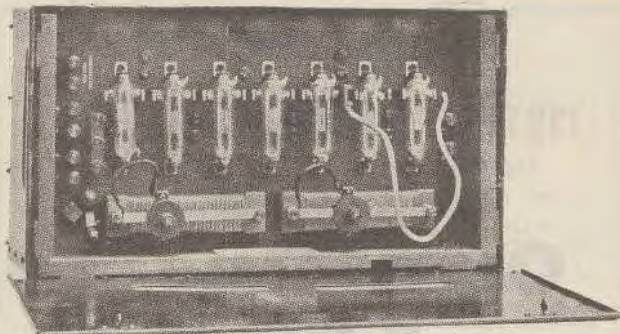
Fig. 4. The method of converting the old type tanger "A" battery charger into an "A" or "B" battery charger.

which should not exceed one-fifth of an amp. Fig. 4 shows the additions required to convert the old type of Tungar rectifier into an "A" or "B" battery charger. The double-pole double-throw switch automatically makes the necessary alterations.

A word or two of warning to the reader whose circumstances force him to use both "A" and "B" batteries of the dry cell type. It is false economy to use the small capacity batteries for receivers employing three or more valves. The small types will probably give good service on a one or two valve receiver, but where four or five valves are constantly used, it is far more economical and satisfying to use the largest capacity batteries obtainable. It should be distinctly understood that although the initial cost is heavier, with the larger types the cost per year is considerably reduced, owing to the increased life.

"Are "B" Battery Eliminators Satisfactory.

Many letters are received from "Wireless Weekly" readers asking our advice concerning "B" battery eliminators. We feel we cannot do better than quote what happened at a recent demonstration of a well-known type of "B" eliminator. A representative of "Wireless Weekly" was present and



A panel view of the portable receiving set used by the police night patrol, mentioned in last week's article. Several criminals have attempted to smash this set.

by means of a six point switch, automatic change-over from eliminator to batteries was provided. The audience was then asked which was being used, battery or eliminator. The comparisons were so perfect that invariably those present said the battery was used when actually the eliminator was operating or vice versa. It is necessary to state, however, that readers must be sure that their source of power available is suitable for the operation of "B" eliminators.

Trickle Chargers.

A new type of chemical rectifier which should find favour amongst city and suburban readers is the

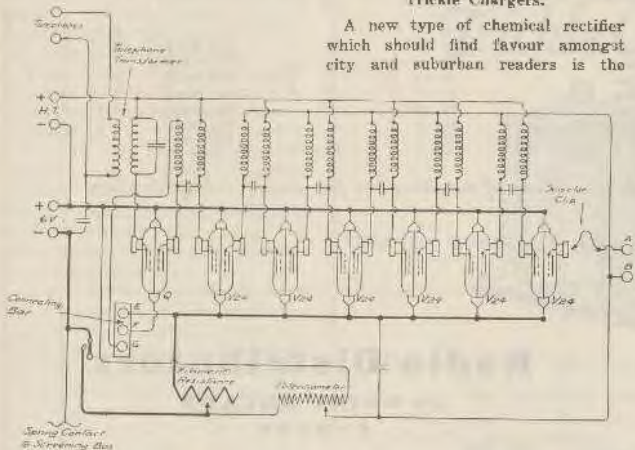
trickle charger. It charges at a very slow rate, so that after a battery has been discharging the whole evening it is only necessary to connect up the trickle charger which will put back the desired amount of current during the night, so that it is ready for immediate use the next morning.

LIKED WHISTLING.

"I particularly enjoyed the whistling, which came through beautifully," writes a resident of Epsom, Auckland, N.Z., to broadcasting Station 2FC, Sydney. "It is the first time I have heard whistling broadcast, and it is possible it was nicer than the original, but it certainly would be welcome again."

Quite a number of people have written to the station in similar terms. Evidently there is something about whistling which lends itself peculiarly to broadcasting. Similarly the mouth organ sounds particularly well after travelling a few hundred miles over the air.

By the same mail, 2FC received a letter from Mr. J. C. Nichol, of Auckland, who stated, "Some idea of the high appreciation of 2FC's New Zealand Night may be gained from the fact that an adjournment for supper was found to be impossible, so keen was everyone lest anything should be missed, and so supper was served at the fashionable hour of something to midnight N.Z. time when our visitors were about to depart."



At the request of a number of readers we reproduce above the circuit of the portable receiving set used by the police wireless patrol.



Own One Yourself 15/- Deposit

THERE is now no reason in the world why you cannot bring broadcast entertainment right into your own home at little cost—and on a receiver which is easy to operate, beautifully finished, technically efficient, and carries our two years' guarantee.

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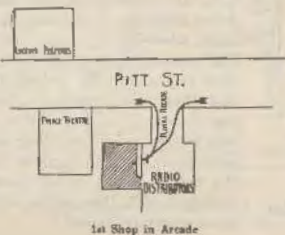
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| 2 Valve Sets, with all accessories | 13 | 5 | 0 | Per week .. | 0 | 5 | 0 |
| 3 Valve Sets, with all accessories | 18 | 10 | 0 | Per week .. | 0 | 7 | 0 |
| 4 Valve Sets, with all accessories | 23 | 17 | 0 | Per week .. | 0 | 9 | 3 |
| 5 Valve Sets, with all accessories | 29 | 10 | 0 | Per week .. | 0 | 11 | 6 |
| 5 Valve Sets (Super 5) with all accessories .. | 45 | 0 | 0 | Per week .. | 0 | 14 | 0 |
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CECILIA CHOIR.

Many enjoyable evenings are promised by members of the Cecilia Ladies' Choir, who made their debut at 3LO recently.

Composed of 60 voices, the choir specialises in English music, and their extensive repertoire covers works by the early English composers as well as compositions of the modern British schools. As far as possible, only works specially written for women's voices are included in their repertoire, and adaptations are not favoured. Good work has already been done by the Cecilia Choir in making the works of British composers more widely known, and the programme that will be broadcasted from the studio consists mainly of modern selections by Holst, Whitaker, and includes a Motet by Mendelssohn and a portion of the Stabat Mater (Pergolesi). Miss Minnie Bull, who organised the choir about two years ago, has worked hard to bring it to its present standard of perfection, and places the whole of her extensive musical knowledge at the disposal of the Society.

BARD OF AVON.

To those people who would be quite willing to learn if only they had the necessary amount of time to give to the study of a certain subject, the series of "Talks on Shakespeare," to be broadcasted from the 3LO Studio, will make an especial appeal.

These "talks" have been carefully arranged by Mr. C. R. Long, M.A., who is one of the finest authorities on Shakespeare in the Commonwealth, and whilst they have been primarily prepared with a view to assisting students who have possible exams. ahead of them, they will be delivered in such an entertaining fashion that every listener-in will be able to derive some benefit from them.

It will also be of great interest to get a few details of some of Shakespeare's "first nights," when the Shakespearean actor was certainly not received into society as he is to-day, but regarded very much in the light of a strolling vagabond—and to compare them with some of the very splendid productions of various Shakespearean plays we have seen in this Twentieth Century.

THE VERY LATEST The Balkite Trickle Charger

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The Balkite Trickle Charger may be connected to any 6 volt radio "A" battery of 30 ampere hour capacity or more and left permanently on charge. This is known as trickle charging. Used in this manner, it automatically keeps the "A" battery always at full charge. It converts your "A" battery into a permanent "A" power unit that operates from the light socket and furnishes full current to the "A" circuit at all times.

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economical installation for sets now using dry cells.

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When used as a trickle charger, as an added convenience, some owners add a switch, which cuts out the charger during operation. Switches of this type also turn on Balkite "B" when the set is turned on, thus providing an entirely automatic current supply for both circuits. The Balkite Trickle Charger is 5½ inches long, 2½ inches wide, 5 inches high. It may be put in the usual dry cell compartment. Charging rate, 4 to 5 amperes. Current consumption, 1/10c per hour. Operates from 220-240 AC 50 cycle current.

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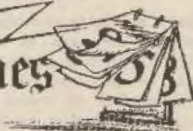
(LATE O'BRIEN AND NICHOLL)

37-39 PITT ST., SYDNEY

516 COLLINS ST., MELBOURNE



Broadcasting Programmes for the Coming Week



Friday, Sept. 10

2FC

Early Morning Session.

- 7.—Time Signals; The Chimes of 2FC and Announcements.
7.5.—Cricketer scores 2nd day's play of the match, Australia versus Thornton's XI.
7.10.—Weather Information, Commercial News, Shipping Intelligence and Rainfall.
7.25.—Investment Market, Mining Share Market, Metal Quotations.
7.35.—Wool Sales, Breadstuffs Market, Produce Markets.
7.45.—"Sydney Morning Herald" News Service.
8.—Time Signals, Music from the Studio, Cricket scores.
8.15.—Close down.

Morning Session.

- 0.15.—The Chimes of 2FC and Announcements.
0.20.—Cricketer Scores. Music from the Studio.
1.—Time signals, Music from the Studio.
10.5.—Late "Sydney Morning Herald" News service.
10.15.—Music from the Studio.
11.—Progress Ticket Scores, Cables.
Time signals, Cables.
11.35.—Cooking talk and Recipes by Miss Ruth Furet.
11.50.—Close down.

Midday Session.

- 12.—The Chimes of 2FC and Announcements.
12.5.—Stock Exchange, First Call.
12.10.—Music from the Studio.
12.50.—Rugby Wireless News.
1.—Time Signals, Weather Intelligence.
1.3.—"Evening News" midday services. Producer's Distributing Society's Report.
1.30.—Music from the Studio.
1.50.—Stock Exchange—Second Call.
1.55.—Music from the Studio.
2.—Time Signals, Close down.

Afternoon Session.

- 2.30.—The Chimes of 2FC and Announcements. Broadcast from the Haymarket Theatre, Sydney; Operatic Orchestra, under the baton of Mr. Stanley Porter.
3.30.—From Farmer's Tea Rooms, The Oak Hall Trio will play (leader, Mr. Horace Kent).
3.40.—Miss Joyce Gillespie, mezzo.
3.45.—The Oak Hall Trio.
3.55.—Music from the Studio.
4.—Miss Muriel Humphries, contralto.
4.5.—From Farmer's Tea Rooms—The Oak Hall Trio.
4.15.—Music from the Studio.
4.20.—Miss Joyce Gillespie, mezzo.
4.25.—Oak Hall Trio.
4.35.—Music from the Studio.
4.40.—Miss Muriel Humphries, contralto.
4.45.—Stock Exchange, Third Call.
4.46.—Music from the Studio.
5.—Close down.

Early Evening Session.

- 6.—Time Signals; The Chimes of 2FC and Announcements.
6.5.—"Jerry" talks to the children.
6.55.—The juvenile pupils of Madame Ada Baker.

- 6.45.—Broadcast from Farmer's Oak Dining Hall, vocal and instrumental items.
7.15.—From the Studio, "Evening News" Market reports.
7.30.—Dalgrey's market reports (wheat, stock), fruit and vegetable markets.
7.40.—A Film Talk.
7.5.—A talk by the 2FC Racing Commissioner.

Night Session.

- 7.55.—The Chimes of 2FC and Announcements.
8.—An Act from a J. C. Williamson Theatre.
8.50.—From the Studio, Signor Alberto Marini, tenor.
9.—Mr. Lionel Lawson, violin solo.
9.5.—Mr. Cyril Monk will give his third travel talk, with solos typical of the various countries visited.
9.23.—Mr. Harrison White, banjo solo.
9.32.—Signor Alberto Marini, tenor.
9.40.—Mr. Gladstone Bell, cello.
9.48.—Miss Virginia Bassetti, contralto.
9.54.—Mr. Lionel Lawson, violin.

Farmer's service, Sydney, call sign 2FC, wave length 1100 metres.
Broadcasters Ltd., Sydney, call sign 2BL, wave length 354 metres.

Broadcasting Co. of Australia, Melbourne, call sign 3LO, wave length 271 metres.

Associated Radio Co., Melbourne, call sign 8AR, wave length 454 metres.

Queensland Radio Service, Brisbane, call sign 4QC, wave length 386 metres.

Central Broadcasters Ltd., Adelaide, call sign 5UL, wave length 396 metres.

Radio Broadcasting Co. of N.Z., Auckland, call sign 1YA, wave length 450 metres.

Westralian Farmer's, Perth, call sign 6WF, wave length 1250 metres.

Tasmanian Broadcasting Pty. Ltd., Hobart, call sign 7ZL, wave

- 10.4.—Mr. Harrison White, banjo.
10.12.—Miss Virginia Bassetti, contralto.
10.20.—Mr. Gladstone Bell, cello.
10.30.—Announcements.
10.35.—Broadcast from the Wentworth Hotel, Sydney; Wentworth Cafe, Dance Orchestra.
12.—National Anthem. Close down.

2BL

Early Morning Session.

- 7.15.—Physical Training and Health Exercises.
7.30.—Talk on Health and Hygiene.
7.35.—Physical Training and Health Exercises.
7.45.—Broadcasters' Special News Service.
7.55.—Special News from Rugby.
8.—Musical Programme from the Studio.
8.—G.P.O. Clock and Chimes. Close down.

Morning Session.

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

- 10.45.—Music from the Studio.
11.—G.P.O. Clock and Chimes. Special Cricket Session.
11.5.—Musical Programme from the Studio.
11.15.—Markets.
11.20.—London Metal Quotations.
11.25.—Broadcasters' Information Service, including Mail, Shipping, Weather, Rain-fall, Social Features for the following day.
11.40.—Musical Programme from the Studio.
11.45.—News from "Sun" Cable Edition.
11.55.—Talks to Women, by Mrs. Jordan.
"Uses of Gelatine for Family Menus."
12.25.—"The Social Side of Sport," by Miss Helen J. Besking.
12.30.—Shopping Guide.
12.35.—Broadcasters' Turf Expert will discuss the training operations and horses' form from Randwick.
12.40.—Hillier's Instrumental Quartette, under the direction of Cyril Castling.
1.30.—Sydney Stock Exchange calls.
1.45.—Latest sporting information from the "Sun."
2.—G.P.O. Clock and Chimes. Close down.

Afternoon Session.

- During the afternoon, results of races broadcast immediately after each race, by courtesy of "Sun" Newspapers.
2.—G.P.O. Clock and Chimes, Weather Report and Social Notes from "The Sun."
3.10.—Resumé of Night's Programme.
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. Music from the studio; Civil Service Restaurant Trio, under the direction of Miss De Cury Bremer.
4.15.—Musical Programme from the studio.
4.30.—Serial Story, entitled, "The Scarlet Cockerel," by C. M. Sublette.
4.45.—Music from the Studio.
5.—G.P.O. Clock and Chimes; Producers Distributing Society's Market Report.
5.10.—Shipping information when available.
5.15.—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 6.—G.P.O. Clock and Chimes. The pupils of Miss Monica Scully will entertain the Kiddies.
6.45.—Broadcasters' Dinner Orchestra, Special Country Session.
7.15.—Australia Mercantile Land & Finance Co.'s Stock and Wool Report.
7.20.—Weather Reports.
7.24.—Talk on Land Subjects.
7.30.—Stock Exchange Reports.
7.37.—Producers' Distributing Society's fruit and vegetable report.
7.41.—Fruit and vegetable reports (Sun).
7.45.—Grain and Fodder Reports (Sun).
7.48.—Country news from "The Sun."
7.55.—Close down.

Evening Session.

- 8.—G.P.O. Clock and Chimes, Broadcasters' Old Time Concert Party.
9.—G.P.O. Clock and Chimes. Weather report and forecast, by courtesy of Mr. C. J. Mares; Government Meteorologist.
9.2.—Resumé of following day's programme.
9.5.—Talk concerning your valve set.
9.10.—Sporting Talk, by the Senior Sporting Expert of "The Sun," on "The Prospects of Football's Races."
9.40.—Interval.
9.45.—Miss Hilda Lane, soprano.
9.52.—Talk by Mr. J. M. Prentice.
10.15.—Cec. Morrison and The Gloomchasers, from the ballroom of the Bondi Casino.

During the intervals between dances, News Reports, by courtesy of the Sun will be broadcast.

11.—From the Studio: Jaxa Band.
12.—G.P.O. Clock and Chimes; National Anthem.

3LO

Midday Session.

12 noon—Time Signal; Latest cricket scores, by courtesy of Reuters Ltd., British Official Wireless News from Rugby; Reuters and the Australian Press Association Cables; "Argus" and "Herald" News Services.

12.45—Stock Exchange Information.
12.50—Meteorological Information; Weather Forecasts for Victoria, Tasmania, South Australia and New South Wales; Ocean Forecast.

1.—Time Signal.
1.1—Studio Orchestra.
1.10—Ernest Fitts, violin.
1.17—Marie Lethbridge, soprano.
1.24—Studio Orchestra.
1.34—Ernest Fitts, violin.
1.40—Marie Lethbridge, soprano.
1.47—Studio Orchestra.
2.—Close down.

Afternoon Session.

3.—Latest cricket scores, by courtesy of Reuters Ltd.
3.1—Studio Orchestra.
3.10—Miss Frances Fraser, "In William Tell's Country."

3.25—Dorothy Kucharuk, viola.
3.32—Ernest Fitts, baritone.
3.40—Clement May, the famous Dickensian, in selections from her repertoire.

3.50—Billie Lockwood, soubrette.
3.57—Station Trio.
4.7—Tasma Tiernan, cello solo.
4.12—Au Pair, of Messrs. Buckley and Nunn Ltd.; Fashion Talk.

4.27—Ernest Fitts, baritone.
4.34—Studio Orchestra.
4.45—Latest Cricket scores, by courtesy of Reuters Ltd.; "Herald" News Service; Stock Exchange Information.

5.—Close down.

Evening Session.

5.45—Children's Hour, answers to letters and Birthday Greetings.
6.—Billie Lockwood will sing "Sixpence to spend," "Little Red Schoolhouse."

6.10—Billie Bunny; "Littlest Fairy Story"; "Black Beauty"; "The Lost Trifles."
6.40—Latest Cricket scores, by courtesy of Reuters Ltd.; "Argus" and "Herald" News Services; Reuters and the Australian Press Association.

6.63—Weather synopsis. Shipping movements.
6.67—Stock Exchange information.

7.2—Fish Market Reports by J. R. Borrott
7.4—River Reports.

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

Night Session.

7.20—Under the auspices of the Department of Agriculture, Mr. A. Jones, Orchard Supervisor, "The Farm Garden."

7.40—On her return from abroad Miss Maud Fox will speak to you of her travels.
8.—Collingwood Citizens' Band.

8.10—"Magister" will speak on School Life and School Sports.
8.30—Organ Recital by Dr. Floyd, transmitted from St. Paul's Cathedral.

9.—Under the auspices of the Australian Commonwealth Engineering Standards Association, Mr. E. E. Bartlett, the price of individuality.
9.15—Collingwood Citizens' Band.

9.25—Ernest Fitts, baritone.

9.32—Mona Lisa Duo, Hawaiian instrumentalists.
9.42—Billie Lockwood, soubrette.

9.40—Clement May, famous Dickensian in selections from her repertoire.
10.4—Latest Cricket News, by courtesy of Reuters Ltd.; British Official Wireless News from Rugby; Announcements.

10.14—Mona Lisa Duo.
10.21—Ernest Fitts, baritone.
10.28—Collingwood Citizens' Band.

10.38—Billie Lockwood, soubrette.
10.43—"Argus" News Service; Meteorological Information; Road Reports, supplied by Automobile Club of Victoria.

10.49—J. Robinson, cornet solo.
10.58—Trombone Novelty.

11—God Save the King.

4QG

Midday Session.

12.55—Time Signal.
12.58—Time Signal.
1.—Market Reports. Weather Information. "The Daily Mail" news, the "Daily Standard" news.

1.20—From the Hotel Carlton, Lunch Hour Music by the Carlton Orchestra.
2.—Close down.

Afternoon Session.

3.30—A Programme of Music.
3.45—A description of Brisbane and District—given from the top of 4QG's aerial tower, by Mr. W. W. Stevens (Chief Engineer, Queensland Radio Service).

4.15—"The Telegraph" news.
4.30—Close down.

Early Evening Session.

6.25—June-in.
6.30—"The Children's Session. Stories by "The Sandman."

7—"The Farmers' Session: Market Reports; Lectures: "Dawson Valley Irrigation Scheme," first steps towards settlement, by Mr. A. F. Partridge (Commissioner for Irrigation and Water Supply).

Night Session.

7.45—Lecture Session: A talk arranged by the Workers' Educational Association.
8—Savoy Orchestra.

8—Week-end road information for motorists, officially supplied by the Royal Automobile Club of Queensland. Radio Voice Contest items. Savoy Orchestra. Mrs. Robt. Bell, soprano. Weather information, officially supplied by the Commonwealth Weather Bureau. Announcements. Miss Clarice Cox, contralto. Savoy Orchestra. "The Daily Mail" news service.

10.—Close down.

5CL

Morning Session.

11.30—G.P.O. Chimes.
11.31—Featuring a Stock Doo Art Number.
11.40—"Advertiser" News Service.

11.55—Vocalion number.
12—G.P.O. Chimes.
12.1—"Advertiser" News Service and Cricket scores.

12.16—Featuring a Stock Doo Art Number.
12.30—5CL Studio Orchestra will be heard in a series of classical numbers.

1.35 (approx.)—Ward & Co.'s Stock Exchange Intelligence; Weather Reports and Station Announcements.
2—G.P.O. Chimes.

Afternoon Session.

3—G.P.O. Chimes.
3.1—Relay from "Maple Leaf" Cafe—Orchestral numbers.

3.45—From Studio—Serial Story.
4—G.P.O. Chimes.
4.1—Broadcast from "Arcadia" Cafe—Orchestral numbers.

5.55—Stock Exchange Reports, General Information, and Station Announcements.
6—G.P.O. Chimes.

Evening Session.

6.50—G.P.O. Chimes.
6.51—Bedtime stories by "Annie Peggy."

7.30—Market reports.
7.40—Sporting Talk, by "Old Timer."

8—G.P.O. Chimes.
8.1—The Merry-makers Orchestra, interspersed with vocal items by Mona, Jaxa Riley, M. Skinner, and Miss R. Miller, H. Wheeler, and Mrs. Davies.

9—G.P.O. Chimes.
9.1—Weather reports.
9.3—Studio concert continued.

10.15—"Advertiser" news service and ships within wireless range.
10.30—Studio Concert, continued.

10.55—Station announcements.
11—G.P.O. clock and chimes.

7ZL

Morning Session.

11—"The Mercury" news, stock market, shipping, commercial intelligence, weather information. Records from the Studio.
G.P.O. clock and chimes.

12—Selections on the Salmos, G.P.O. clock and chimes. Close down.

Afternoon Session.

3.30—Hobart Stock Exchange quotations.
3.55—Weather information.

4—G.P.O. Clock Chimes. Close down.
5—Early Evening Session.

7—Children's Corner, "Big Brother" chats to his 'n'als.

Evening Session.

8—G.P.O. Clock Chimes. "The Mercury" special Tasmanian news service. Railway auction produce sales. Weather information.

8.5—Hobart Stock Exchange quotations.
8.10—Weekly gardening chat, by Mr. George Nation.

8.20—"Sports Budget," supplied by Mr. T. W. Newton, of Hobart Sports Dept.
Miss Ruby Plesse, accompanist.

8.30—Miss Kathleen Pearce, mezzo contralto; Miss Nora Shirley, contralto; Miss Ruby Wallace, soprano; Mr. Hugh Taylor, cellist; Mr. William B. Harwood, oboist; Mr. S. J. Hall, baritone; Master Victor Plessoch, banjo.

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



Saturday, Sept. 11

2FC

Early Morning Session.

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

7.6—Cricket Scores: 3rd day's play of the match, Australia versus Thornton XI.

7.10—Weather Information, Commercial News, Shipping Intelligence and Market Reports. Mail services, Rainfall, Temperatures. Astronomical memoranda.

7.25—Investment Market, Mining Share Market, Metal Quotations.

7.35—Wool Sales, Broadstuffs Markets, Interstate Markets, Produce Markets.
7.45—"Spring Morning Herald" News Service.

8—Time Signals; Music from the studio.
8.15—Close down.

Morning Session.

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

BURGESS—"Standard of Comparison"—BATTERIES.

- 8.20—Music from the Studio.
 9.45—A Talk by the ZFC Racing Commissioner.
 10—Time Signals; Cricket scores.
 10.5—Late Sydney Morning Herald news service.
 10.15—Music from the Studio.
 11—Australian Press Association and Reuters Cable Service.
 11.15—A Talk on Gardening by "Red Gem."
 11.30—Close down.

Midday Session.

- 12.55—The Chimes of ZFC and Announcements.
 1—Time Signals; "Evening News" Midday Service and Weather Information; The whole of the racing at Randwick, on the occasion of the "Paternal's" Meeting, will be described by the ZFC Racing Commissioner, giving riders and positions at the post prior to each race, and describing the race in running.

Afternoon Session.

- 2.55—The Chimes of ZFC and Announcements.
 3—Time Signals; Musical items will be transmitted from the studio during the intervals between race and sporting results.
 4.30—A complete resume of the afternoon's sporting events.
 5—Time Signals. Close down.

Early Evening Session.

- 6—The Chimes of ZFC and Announcements. Broadcast from the Burnside Homes, Parramatta, evening concert, attended by 600 children. "Jerry" will entertain the children there on the air.
 7.15—"Evening News" late news service and weather information.
 7.40—A Motor-Talk.

Night Session.

- 7.55—The Chimes of ZFC and Announcements.
 8—First appearance at ZFC of Mr. Russell Callow, tenor.
 8.5—Miss Regina Bannan, soprano, first appearance at this Station.
 8.15—One Act Drama, by Mr. Walter Hunt and Miss Eve Warhurst.
 8.25—Mr. Wally Baynes, comedian.
 8.45—Mr. Laurence Halbert, baritone.
 8.54—Sporting Talk on "Golf," by Captain Fred Aarons.
 9.10—Broadcast from the Crystal Palace Theatre, incidental music to the Picture, "The Sea Hawk," played by the Crystal Palace Orchestra, Mr. R. H. Stone, conductor.
 9.25—From the Studio, Mr. Russell Callow, tenor.
 9.35—Mr. Walter Hunt and Miss Eve Warhurst in a one act play.
 9.45—Miss Regina Bannan, soprano.
 9.55—Mr. Wally Baynes, comedian.
 10.4—ZFC Dance Band. Mr. Eric Pearce, conductor.
 10.15—Crystal Palace Orchestra.
 10.40—ZFC Dance Band.
 10.55—Late Sporting and Announcements.
 11—ZFC Dance Band.
 11.30—Broadcast from the Wentworth Hotel, Sydney; Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
 12—National Anthem; Close down.

2BL

Early Morning Session.

- 7.15—Physical Training and Health Exercises.
 7.30—Talk on Health and Hygiene.
 7.35—Physical Training and Health Exercises.
 7.45—Broadcasters Special News Service.
 7.52—Special News from Rugby.
 7.55—Musical Programme from the Studio.
 8—G.P.O. Clock and Chimes. Broadcasters' Turf Expert will discuss the training operations and horses' form from Randwick.
 8.15—G.P.O. Clock and close down.

Morning Session.

- 10—G.P.O. Clock and Chimes. Special news service from the "Daily Telegraph."
 11.10—Musical programme from the Studio.
 11.15—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. Mrs. Jordan will talk on simple cooking for children.
 12.30—London Metal quotations.
 12.35—Broadcasters' information service, including Mails, Shipping, Weather, Rainfall, Social fixtures for the following day.
 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.

- 6—G.P.O. Clock and Chimes. Uncle George and the Kiddies.
 6.45—Pavilion Dinner Orchestra, under the direction of Mr. Cec. Morrison.

Evening Session.

- 8—The Hordernian Musical Society will present Edward German's "Merrie England."
 10.15—Merv. Lyon's Dance Band, broadcast from the ballroom of the Drungowan, Manly. During the intervals between dances, news reports by courtesy of "The Sun" will be broadcast.
 12—G.P.O. Clock and Chimes; National Anthem.

3LO

Morning Session.

- 11—Sonora Recital.
 11.10—Harold Rodgers, organ selections.
 11.20—Billie Lockwood, cabrette.
 11.30—Sonora Recital.
 11.40—Harold Rogers, piano.
 11.50—Billie Lockwood, cabrette.
 12—Time signal. Latest cricket news, by courtesy of Reuters Ltd.; British Official Wireless News from Rugby; Reuters and the Australian Press Association cables. "Argus" and "Herald" news services. Shipping intelligence.
 12.45—Stock Exchange information.
 12.50—Meteorological information. Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.
 1—Time signal.
 1.1—Studio Orchestra.
 1.10—Billie Lockwood, violin.
 1.17—Rosa Darcy and Inez Vianard, entertainers.
 1.24—Studio Orchestra.
 1.31—Billie Lockwood, violin.
 1.40—Rosa Darcy and Inez Vianard, entertainers.
 1.47—Studio Orchestra.
 2—Result of Harbri Race, Moonee Valley.
 2.30—Result of Cooco Handicap, Moonee Valley.

Afternoon Session.

- 3—Latest cricket news, by courtesy of Reuters Ltd.; Result of the Steeplechase, Moonee Valley.
 3.5—Studio Orchestra.
 3.45—Result of Badgerce Handicap, Moonee Valley.
 3.41—Studio Orchestra.
 3.40—Result of Corrohoroe Handicap, Moonee Valley.
 4.21—Studio Orchestra.
 4.45—"Herald" News Service; Latest Cricket News, by courtesy of Reuters Ltd.
 4.50—Result of Welter Handicap, Moonee Valley.
 5—Close down.

Evening Session.

- 6.45—Sporting Results.
 6—Billie Lockwood will sing to the children: "We've got a new baby at our place" and "Knee deep in Daisies."
 6.10—Mary Gemlett; Poems, "Farewell to the Farm" and "The Unseen Playmate"; Story for the Littlest ones: "As happy as a King"; Songs by the Wattle Girl and Mary Gemlett; For the boys and girls: "The Story of Oberon."
 6.40—Latest Australian Cricket Eleven scores, by courtesy of Reuters Ltd.; Sporting results. Reuters and Australian Press Association cables.
 6.53—Weather synopsis. Shipping movements.
 6.57—Stock Exchange information.
 7.5—Fish Market Reports by J. R. Borrett Ltd.
 7.4—River Reports.
 7.5—Market Reports by Victorian Producers' Co-operative Co. Ltd.: Grain, chaff, hay, straw, jute, dairy produce, potatoes and onions.
 Night Session.
 7.20—Mr. Hugh Egan, draughts.
 7.40—Rev. Kenneth Henderson: Christianity and other Religions.
 8—Studio Orchestra.
 8.10—John Hobbs, baritone.
 8.17—Reginald Bradley, violin.
 8.25—Studio Orchestra.
 8.35—John Hobbs, baritone.
 8.42—Reginald Bradley, violin.
 8.50—Studio Orchestra.
 9—A Special programme has been arranged.
 10.45—British Official Wireless News from Rugby; Latest Cricket News, by courtesy of Reuters Ltd.; Meteorological information; Sporting Results: Races, Football, Metropolitan Soccer League; Metropolitan Amateur Association Lacrosse; "Argus" News Service; Announcements.
 11—God Save the King.

3AR

Morning Session.

- 11.30—The British Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's Operator; Express Train Information; The Age News Bulletin.
 12—Time Signal Chime from G.P.O.; Studio Barometer and Outdoor Thermometer Readings; 1st Weather Forecast; Events of the day.
 12.5—Musical Selections, relayed from Hoyt's de Luxe, Bourke Street.
 12.30—Stock Exchange News; Foreign Exchanges of the world, supplied by Messrs. Thos Cook & Sons.
 12.25—Market Reports.
 12.40—Musical Selections.
 12.55—Mail Notices; Shipping Movements.
 1—Close down.
 Afternoon Session.
 Moonee Valley Races.
 2—Description of the Boomerang Handicap Hurdle.
 2.30—Result of the Cooco Handicap.
 2.30—Hoyt's Premier Orchestra, under the direction of Miss Kils Brien.
 3—Result of the Moonee Valley Handicap Steeple.
 3.40—Result of Badgerce Handicap. Hoyt's Premier Orchestra.
 4—Time Signal Chime; 2nd Weather Report; Hoyt's Theatre.
 4.20—Result of Corrohoroe Handicap.
 4.30—Result of the Nulla-Nulla Welter Handicap.

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 —BATTERIES.**

4.35—Evening Amusement Guide.
5—Close down.

Early Evening Session.

6.45—The Children's Corner, by Uncle Peter.
Evening Session.

8—Time Signal Chime from G.P.O.; Studio Barometer and Outdoor Thermometer Readings; The British Official Wireless Press; Sporting Results; Local News.
8.15—Dance Night: The Rhythmic Dance Orchestra, relayed from the Maison-de-Luxe, Broadway, St. Kilda, under the leadership of Mr. George Lewis.
9.30—Week-end Travellers Information, supplied by the Victorian Railways Department, and the Melbourne Tramways Board.
9.50—The Maison-de-Luxe Dance Orchestra.
10—Time Signal Chime from G.P.O., Melbourne; Studio Barometer and Outdoor Thermometer Readings; "Age" News Service, exclusive to 3AR.
10.5—The Maison-de-Luxe Dance Orchestra.
11—Time Signal Chime; Close down.

4QQ

No Midday Transmission.

Afternoon Session.

3.25—Tune-in.
3.30—A Matinee for Little Listeners.
4.30—Close down.
Early Evening Session.
8.25—Tune in.
8.30—The Children's Session. Bedtime Stories by "Uncle Ben" and "Uncle Jim," assisted by "Mabel Sunshine."
7.15—Sporting News.
7.50—Close down.

Night Session.

7.45—A sporting talk, by Rugby League Officials.
8—From the Gaiety Theatre, Toowong; Quarter of an hour's music by the orchestra.
8.45—Miss Ettie Berry, soprano; The Kalua Trio, Hawaiian Instrumentalists; Mr. J. P. Geruwell, bass solo; Miss Peggy Adams, violin solo; Miss Irene Elphinstone and Mr. A. N. Falk, duet; The Kalua Trio; Miss Ettie Berry, soprano; Miss Peggy Adams, violin; Miss Irene Elphinstone and Mr. A. N. Falk, vocal; The Kalua Trio; Mr. J. P. Geruwell, bass solo.
9.50—Weather information, officially supplied by the Commonwealth Weather Bureau.
Announcements.
0—From Lennon's Ballroom, by courtesy of the proprietors of Lennon's Hotel, a programme of music will be relayed from Lennon's Ballroom.
10—From the Studio, "The Daily Mail" news service. Close down.

5CL

Morning Session.

10.30—G.P.O. Chimes.
10.31—Studio Orchestra.
11.45—"Advertiser" News Service.
Afternoon Session.
1—Relay from Chellenham Racecourse—Running description of the racing programme by Mr. Arnold Treloar.
2—From the Studio: Interstate sporting results and "A" grade football results as available.
Evening Session.
6.50—G.P.O. chimes.
6.51—Bedtime stories by "Auntie Sybil."
7.30—Market reports.
7.40—Resume of the chief sporting results throughout the Commonwealth.
8—G.P.O. chimes.
8.1—A programme of dances, music, relayed from Palais Royal, interspersed with vocal items by Miss Valda Harvey, T. Baulderstone, Mr. J. Glennon, and quartets by the Heyden Quartette Party.
9—G.P.O. chimes.

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 and close down.

7ZL

Morning Session.

11—G.P.O. Clock Chimes. "The Mercury" news, Stock Market, Shipping, Commercial Intelligence. Weather information and Sporting anticipations.
11.45—Selections on the Salonola, Hobart Stock Exchange quotations.
12—G.P.O. Clock Chimes. Close down.
Early Evening Session.
7—Children's Corner, "Big Brother" chats to his Pals.
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—"Coming to Tasmania Movement," by Clive E. Lurd, F.I.S., Director of Tasmanian Museum, and Secretary to the Royal Society of Tasmania. Subject, "The Highlands of Tasmania."
8.20—Palais de Dance Band, City Hall, Hobart.
9.45—British Official Wireless news, copied direct from Rugby by our own operator. Weather synopsis. Station announcements. Close down.

Sunday, Sept. 12

2FC

Early Morning Session.

8—Time Signals; The Chimes of 2FC and Announcements.
9.3—Cricket scores of the First Day's play of the match, Australia v. England XI. These scores will be repeated at 10 and 11 a.m.
11—Broadcast from St. Andrew's Cathedral, Sydney, Morning Service.
12.15—From the Studio—News Session.
12.30—Close down.

Afternoon Session.

2.55—The Chimes of 2FC and Announcements.
3—Broadcast from the Lyceum Hall, Pitt Street. Pleasant Sunday Afternoon Service arranged by the Central Methodist Mission.
4.30—A talk on Hymns, by Mr. William Adams, from the Studio.
4.45—Close down.

Night Session.

6—The Chimes of 2FC and Announcements.
6.5—Broadcast from the Pitt Street Congregational Church, an organ recital, by Miss Lilian Frost.
8.20—From the Studio—The first appearance of Mr. Lobban Hodgins, baritone.
8.30—Broadcast from Pitt Street Congregational Church, evening service. Preacher, Rev. C. E. Rath.
8.50—Mr. Lobban Hodgins, baritone, continuation of evening service, from the Pitt Street Congregational Church.
8.55—Broadcast from the Strand Theatre, Leichhardt. Items by the Leichhardt District Band, under the baton of Mr. E. F. Kerry.
10—National Anthem; Close down.

2BL

11—Service broadcast from Baptist Church, Petersham.

Afternoon Session.

3.30—Bible Class, conducted by Mr. W. (Cairo) Bradley.
4—Organ recital from Baptist Church, Petersham.

Evening Session.

7.15—Service, broadcast from Chalmers Presbyterian Church, City.
8.30—Masly Municipal Military Band, broadcast from the Kluis Theatre, Masly.
9.30—Music from the Studio.

3LO

Morning Session.

10.30—Express Train Information.
10.35—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool.
11—Service from Baptist Church, Collis St., Melbourne.
12.15—Latest cricket scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool. British Official Wireless News from Rugby; Close down.

Afternoon Session.

2.55—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool.
3—Pleasant Sunday Afternoon Service from Wesley Church, Lonsdale Street, Chairman, Rev. J. H. Cain.
4.30—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool.

Evening Session.

6.45—Children's Hour. Answers to letters and Birthday Greetings. "Billy Bunny" and his "Bree Rabbits" will sing to the children. Stories will be "Mimosa" and "Loveliest Life." Close down.

Night Session.

7—Service from Toorak Presbyterian Church, Minister, Rt. Rev. James Crookston, organist and chorists, Mr. James W. Hudson.
8.30—Brunswick City Band.
8.35—Maud Fane, soprano (by permission of J. C. Williamson Ltd.).
8.45—Brunswick City Band.
8.53—J. Howlett Ross, Stories of the Great Hymns, illustrated by choruses by Madame Ashton's pupils.
9.40—Quartette chorus.
9.47—Maud Fane, soprano.
9.54—Brunswick City Band.
9.57—"Argus" News Service; Announcements; Latest cricket scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool.
10—God Save the King.

3AR

Morning Session.

10.30—The Bells of St. James' Old Cathedral.
11—Service from St. John's Church, Latrobe Street. Preacher: Archbishop Loea.

Afternoon Session.

3—Mr. R. Gordenov, baritone.
3.7—Miss A. M. Kuring, soprano.
3.14—Mr. Lal Kuring (celist).
3.20—Mr. James A. Colenzo (tenor).
3.27—Miss A. Pitt (soprano).
3.34—Mr. R. Gordenov (baritone).
3.41—Miss A. M. Kuring (soprano).
3.45—Mr. J. A. Colenzo (tenor).
3.48—Mr. Lal Kuring (celist).

Evening Session.

6.30—The Bells from St. James' Old Cathedral.
7—Service from St. James' Old Cathedral. Preacher: Canon Lambie.
8.30—Studio Concert; Mr. Dudley Thorpe (baritone).
8.37—Miss Sheila Marfie (celist).
8.43—Mrs. E. Brine (soprano).
8.50—Mr. S. Cox (clarinet).
8.56—Miss Bronnie Fairhall (soprano).
9.3—Trustone Mouth Organ Band.

9.13—Miss S. Macfar, solo solo.
9.26—Mrs. E. Irvine (soprano).
9.27—Mr. S. Cox (clarinet).
9.34—Miss Bronnie Fairhall (soprano).
9.41—Frances Mouth Organ Band.
9.47—Mr. Dudley Thorpe (baritone).
9.50—"Age" News Bulletin, Exclusive to 3AL.
9.55—Close down.

4QG

Morning Session.

11—The complete morning service, will be relayed from All Saints Church of England.
12.30—Close down.

Afternoon Session.

The Band Concert provided in the Brisbane Botanical Gardens by the Excelsior Band, Mr. G. Holmes, conductor.
3.10—Tune-in.
3.15—Band Concert.
4.30—Close down.

Night Session.

The complete Evening Service will be relayed from All Saints Church of England.
7.15—Organ voluntary.
7.30—Church Service.
At the conclusion of the Church Service, the concert provided by the Greater Brisbane Municipal Concert Band (under the leadership of Mr. E. Jackson) will be relayed.
8.30—Special Operatic Programme.
9.30—Close down.

5CL

Morning Session.

11—Relay from Black Forest Church—Divine Service.

Evening Session.

6.50—G.P.O. Chimes.
6.51—Sunday Stories for the children.
7—G.P.O. chimes.
7.1—Relay from the Parkside Baptist Church. Divine service.
8.15—Holden's band in a programme of music.
9—G.P.O. Chimes.
9.1—Weather reports.
9.3—Holden's Band continued.
10—G.P.O. Chimes, National Anthem, Close down.

7ZL

7—Divine Service from St. David's Cathedral, Macquarie Street, Hobart.
8.45—Concert from the Studio—Miss Frances Evans, contralto; Miss Ruby Piesse, accompanist; Mr. W. E. Fuller, dramatic recital; Mr. Andley Jones, baritone; Mr. C. G. Tennant, baritone; Mr. L. M. Barnett, cornet solo.
9.15—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.



Monday, Sept. 13

2FC

Early Morning Session.

7—The Chimes of 2FC and Announcements. Time signals.
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, markets, produce markets.

7.45—"Sydney Morning Herald" news service.
8—Time signals. A Chorus Talk, by Mr. J. K. Powell.
8.15—Close down.

Morning Session.

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

Midday Session.

12—Time Signals. The Chimes of 2FC and Announcements.
12.5—Stock Exchange, first call.
12.10—Music from the Studio.
12.50—Rugby Wireless News.
1—Time Signals. Weather Intelligence.
1.5—"Evening News" Midday News Service. Producer's Distributing Society's Report.
1.20—Music from the Studio.
1.30—Stock Exchange—second call.
1.35—Music from the Studio.
2—Time Signals; Close down.

Afternoon Session.

2.30—The Chimes of 2FC and Announcements.
2.35—A Recital on the Behning Player Piano.
3.30—From Farmer's Tea Rooms: The Oak Hall Trio will play (leader, Mr. Horace Keats).
3.40—Miss Dorothy Bushow, contralto.
3.45—From Farmer's Tea Rooms: Oak Hall Trio.
3.55—Music from the Studio.
4.15—Miss Marjorie Cole, soprano.
4.5—From Farmer's Tea Rooms: The Oak Hall Trio.
4.15—Music from the Studio.
4.20—Miss Dorothy Bushow, contralto.
4.25—From Farmer's Tea Rooms: The Oak Hall Trio.
4.35—Music from the Studio.
4.40—Miss Marjorie Cole, soprano.
4.45—Stock Exchange, Third Call.
4.46—Music from the Studio.
5—Close down.

Early Evening Session.

6—Time Signals; The Chimes of 2FC.
6.5—"The Hello Man" talks to the children.
6.45—Broadcast from the Hotel Australia, Sydney, Orchestral Items.
7.15—From the Studio: "Evening News" late news service, weather information.
7.35—Dalgety's Market Reports (wool, wheat, stock), fruit and vegetable markets.
7.40—"A talk on 'Esperanto'."

Night Session.

7.55—The Chimes of 2FC and Announcements.
8—Broadcast from the Haymarket Theatre. Sydney: Operatic Orchestra, under the baton of Mr. Stanley Porter.
8.25—Broadcast from the Baptist Hall, choral programme by the Sydney Harmonic Society. Mr. William Rotz, conductor.
9—From the Studio, posted directly by radio, by Mr. Nevin Tosseau.
9.10—Broadcast from the Haymarket Theatre. Sydney, vocal act.
9.25—From the Studio, Madame Vera Taams, soprano.
9.34—Miss Gertrude Mack will commence a series of Travel Talks, subject to-night being: "A Glimpse of Mexico City."
9.54—Mr. Jack Lumsdaine, well-known entertainer, Steeplechase Series No. 3.
10.5—2FC Dance Band.
10.35—Madame Vera Taams, soprano.
10.24—Mr. Jack Lumsdaine, songs at the piano.
10.35—Haymarket Orchestra.
10.45—2FC Dance Band.
11.30—Broadcast from the Wentworth Hotel, Sydney, Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12—National Anthem; Close down.

2BL

Early Morning Session.

7.15—Physical Training and Health Exercises.
7.30—Talk on Health and Hygiene.
7.35—Physical Training and Health Exercises.
7.45—Broadcasters' Special News Service.
7.52—Special News from Rugby.
7.55—Musical programme from the studio.
8—G.P.O. Clock and Chimes. Close down.

Morning Session.

10—G.P.O. Clock and Chimes. Special News Service from the "Daily Telegraph."
10.15—Music from the Studio.
10.25—Special news from the "Daily Telegraph."
10.45—Music from the Studio.
11—G.P.O. Clock and Chimes. Special Cricket Session.
11.5—Musical Programme from the Studio.
11.15—Markets.
11.20—Music from the Studio.
11.25—Broadcasters' Information Service.
11.45—News from "Sun" Cable edition.
11.58—A talk on "Toilet Hints," by Mrs. Jordan.

12.05—A talk on Tennis, by Miss Helen J. Beeping.
12.30—Shopping Guide.
12.35—Broadcasters' Turf Expert will discuss the training operations and horses' form from Sandringham.
12.45—Hilliery's Instrumental Quartette, under the direction of Caryl Castling.
1.15—From the Studio: Palmgrove Orchestra, under the direction of Mr. Stan Featheringham.
1.30—Sydney Stock Exchange call.
1.45—Latest sporting information from the "Sun."
2—G.P.O. Clock and Chimes. Close down.

Afternoon Session.

During the afternoon results of races will be broadcast immediately after each race.
4—G.P.O. Clock and Chimes. Weather report and Social Notes from the "Sun."
3.10—Resume of night's programme.
3.15—David Jones' Tea Room Trio.
3.30—"A Course in Philosophic Thought," by Mr. J. M. Franklin.
3.45—Musical Programme 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 entitled "The Scarlet Cockerel," by C. M. Sublette.
4.45—Music from the Studio.
5—G.P.O. Clock and Chimes; Producer's Distributing Society's Market Report.
5.10—Shipping information when available.
5.15—G.P.O. Clock and Chimes. Close down.

Night Session.

5—Newtown Band.
8.20—Mary New, contralto solo.
8.27—Lecture by Madame Henri.
8.47—Broadcasters' Old Time Party.
8.57—Resume of Programme.
9—G.P.O. Clock and Chimes.
9.15—Al. Hammett and The Ambassadors' Dance Band, broadcast from the ballroom of the Ambassadors. During the intervals between dances, description of frocks and social notes will be broadcast by Mrs. Fotts.
9.30—Lecture by Mr. A. L. Ferrett.
9.53—Newtown Band.
10.15—Al. Hammett and The Ambassadors' Dance Band, broadcast from the ballroom of the Ambassadors. During the intervals between dances news reports by courtesy of "The Sun" Newspapers will be broadcast.
12—G.P.O. Clock and Chimes. National Anthem.

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BATTERIES.

3 L O

Midday Session.

- 12—Time Signal. Latest cricket news, by courtesy of Reuters Ltd. British Official Wireless news from Rugby. Reuters and the Australian Press Association cables. "Arms" and "Herald" news services.
- 13.45—Shipping Intelligence. Stock Exchange information.
- 12.59—Meteorological Information. Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports.
- 1—Time signal.
- 11—Studio Orchestra.
- 1.10—Jack O'Hagan, baritone.
- 1.17—Tasna Tiernan, 'cello.
- 1.24—Jack O'Hagan, baritone.
- 1.31—Studio Orchestra.
- 1.41—C. Richard Chung, flute solo.
- 1.49—Studio Orchestra.
- 2—Close down.

Afternoon Session.

- 3—Latest cricket scores, by courtesy of Reuters Ltd.
- 3.1—Studio Orchestra.
- 3.10—Mrs. Silk will talk on handicrafts.
- 3.25—A. C. Morrison, basso.
- 3.40—Clément May, famous Dickensian.
- 4—Studio Orchestra.
- 4.10—A. C. Morrison, basso.
- 4.17—Miss Flora Pell, Supervisor of Arts. Education Department, Melbourne; Domestic Economy.
- 4.27—Studio Orchestra.
- 4.35—"Herald" news service. Latest cricket news, by courtesy of Reuters Ltd. Stock Exchange Information.
- 5—Close down.

Evening Session.

- 5.45—Children's Hour. Answers to letters and birthday greetings. Jessie Batchelor will sing: "Babe O' Mine," "Irish Folk Song", Little Miss Kookaburra's tiny tot story will be about "The Nona's Fairy Flight," and for the bigger children, the sixth instalment of "The girl who played with the sun".
- 6.40—Latest cricket news, by courtesy of Reuters Ltd. "Arms" and "Herald" news services. Reuters and the Australian Press Association cables.
- 6.53—Weather synopsis. Shipping movements.
- 7—Stock Exchange information.
- 7.2—Fish Market Reports, by J. R. Burrott Ltd.
- 7.6—River reports. Aerial mail information by Australian Aerial Services.
- 7.8—Market reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket sheep sales, poultry, grain, chaff, hay, straw, jute, dairy produce, potatoes, and onions. Market prices of oranges and lemons, by the Victorian Central Citrus Association Pty. Ltd.

Night Session.

- 7.20—Under the auspices of the Develop Australia League, Major F. E. Forrest, "On Guard, Australia."
- 7.40—Under the auspices of the Department of Agriculture, Mr. N. A. Bowman, sheep and wool expert, "Preparation for shearing and dipping."
- 8—Music incidental to the prologue to the picture, "Phantom of the Opera," transmitted from the Auditorium.
- 8.30—Rev. E. H. Faulkner: "St. Paul's Home for Delinquent Boys."
- 8.45—Studio Orchestra.
- 8.50—Leslie & Scott, entertainers.
- 9—Len Gibson & his Neapolitan Quintette.
- 9.15—Madame Zelman, soprano.
- 9.32—Irish Musical Society Quartette.
- 9.42—Alberto Zelman, violin.
- 9.53—Madame Zelman, soprano.
- 10—Under the auspices of the Sporting Dog Club of Victoria, Mr. L. Neuenhofer, "The Sporting Dog Club of Victoria and the Sport of Field Shooting."
- 10.10—Leslie & Scott, in Harmony Numbers.
- 10.17—Studio Orchestra.

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SYDNEY

- 10.24—Latest Cricket News, by courtesy of Reuters Ltd. British Official Wireless news from Rugby. Announcements.
 10.34—Len Gibson & his Neapolitan Quintette.
 10.44—"Argus" News Service. Announcements. Weather forecast.
 10.55—Studio Orchestra.
 11—God Save the King.

3AR

Morning Session.

- 11.30—The British Official Wireless Press, received from Rugby Super wireless station, England, by 3AR's operator. Events of the day; the "Arg" News Bulletin, exclusive to 3AR.
 12—Time Signal Chime from G.P.O.; 1st Weather Forecast; Studio Barometer and Outdoor Thermometer Readings.
 12.5—Musical Selections relayed from Hoyt's de Luxe, Bourke Street.
 12.30—Stock Exchange News; Market Reports.
 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.
 3—A matinee for the children in the Hospitals; Signor Cellini, cello.
 3.7—Eva Kitchener will sing.
 3.14—The True Tone Mouth Organ Band.
 3.24—Little Myrtle Kimpston will tell you how to enjoy yourself at Brighton.
 3.30—Iris Shaw, funny stories.
 3.35—Signor Cellini will play again.
 3.42—Eva Kitchener will tell you about her doll who had a pain in her stomach, and Miss Bella.
 3.49—Iris Shaw is a scatty old governess and Myrtle Kimpston is her little pupil.
 4—Time Signal Chime from G.P.O.
 Hoyt's Orchestra.
 4—Time Signal; Close down.

Early Evening Session.

- 6.45—The Children's Corner, by Uncle Rad.

Evening Session.

- 8—Time signal Chime from G.P.O.
 8.2—Miss Mabel Nelson (piano).
 8.5—Miss Isabel Austin-James, mezzo soprano.
 8.15—Mr. Les McKeanie (humorous entertainer).
 9.23—Miss Mabel Nelson and Miss Isabel Austin-James, pianoforte duet.
 9.30—Mr. A. Sullivan, Talk: Lost in the Australian Bush.
 8.45—The Harmony Trio (violin, cello and piano).
 9.55—Miss Cammie Barton, soprano.
 9.2—Miss Eileen O'Donnell (contralto).
 9.8—Dialogue, Miss Alma Josephs, Mr. Les McKeanie.
 9.23—Miss Elizabeth Lester (cellist).
 9.30—Mr. Walter S. Binks (character analyst) 2nd series. Talk on Analyzing Character.
 9.45—Miss Cammie Barton, soprano.
 9.53—The Harmony Trio.
 10—Time Signal Chime from G.P.O.; Studio Barometer and Thermometer Readings; Are News Service, exclusive to 3AR.
 10.10—Hoyt's Premier Orchestra, Birthday.
 10.40—Close down.

4QG

Midday Session.

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

Afternoon Session.

- 3.30—A programme of Music from the Studio.

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

Early Evening Session.

- 6.25—Tune-in.
 6.30—The Children's Session—Stories by "The Sandman."
 7—The Farmers' Session. Market Reports supplied by the Council of Agriculture, Lecturette: "Duroc Jersey Pig," by Mr. E. S. Shelton (Pig Instructor).
 7.30—News Service supplied by "The Standard." Stock Exchange Information supplied by the Committee of the Brisbane Stock Exchange.
 7.30—From the Studio of 4QG.
 7.40—Announcements.

Night Session.

- 7.45—Lecture Session: Y.M.C.A. talk on Boy Life, "A Boy and His Leisure Hours."
 8—The Carwin Orchestra.
 9.20—Weather information, officially supplied by the Commonwealth Weather Bureau. Announcements.
 9.30—From the Band Praelexe Bona. A programme of music by the South Brisbane Orchestra, under the leadership of Mr. J. W. Ferguson.
 10—From the Studio. "The Daily Mail" News Service. Close down.

5CL

Morning Session.

- 11.30—G.P.O. Chimes.
 11.31—Featuring a Stock Duo Art Number.
 11.40—"Advertiser" News Service.
 11.55—Vocation number.
 12—G.P.O. Chimes.
 12.1—"Advertiser" News Service and Cricket scores.
 12.16—Featuring a Stock Duo Art Number; 12.30—5CL Studio Orchestra will be heard in a series of classical numbers.
 1.53 (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—Radio from "Maple Leaf" Cafe—Orchestra numbers.
 3.45—From Studio—Serial Story.
 4—G.P.O. Chimes.
 4.1—Broadcast from "Arcadia" Cafe—Orchestra numbers.
 4.55—Stock Exchange Reports, General Information, and Station Announcements.
 5—G.P.O. Chimes.

Evening Session.

- 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories.
 7.30—Market Reports.
 7.40—Mr. W. W. Fredrickson, automotive engineer, of Vacuum Oil Co., will give his weekly motor talk.
 7.50—Songs of the Teeth, by Mr. A. E. Dunsey.
 8—G.P.O. Chimes.
 8.1—Programme by the Christian Bros. Choir, interspersed with solos by Mr. A. Robertson, Miss L. Wald, and pianoforte solos by Miss M. Messan.
 8.30—"Tinkler's Boys" Club.
 8.40—Concert, continued.
 9.1—Weather Reports.
 9.3—Concert, continued.
 10.15—"Advertiser" news service and ships within wireless range.
 10.55—Station Announcements.
 11—G.P.O. Chimes; Close down.

7ZL

Morning Session.

- 11—G.P.O. Clock Chimes. "The Mercury" news, Stock Market, Shipping, Commercial Intelligence. Weather information and Sporting predictions.
 Selections on the Salons.
 12—G.P.O. Clock Chimes. Close down.

- Afternoon Session.
 2—G.P.O. Clock Chimes. Musical items from the Studio.
 3.30—Hobart Stock Exchange quotations.
 3.55—Weather information.
 4—G.P.O. Clock Chimes. Close down.

Early Evening Session.

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

Evening Session.

- 8—G.P.O. Clock Chimes. "The Mercury" special Tasmanian news service. Railway aviation program sales. Weather information.
 8.5—Hobart Stock Exchange quotations.
 8.10—Talk by Mr. P. Hysten, B.A., Lecturer in Economics. "The Riddle of the Franc."
 8.30—Concert in the Studio, under the direction of Mrs. E. W. Dalley, L.A.B.
 8.55—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.



Tuesday, Sept. 14

2FC

Early Morning Session.

- 7—The Chimes of 2FC and Announcements. Time Signals.
 7.5—Cricket Scores of the second day's play, Australia v. England XI.
 7.10—Weather information, commercial news, shipping intelligence, rainfall, temperatures, astronomical announcements.
 7.25—Investment market, mining share market, metal quotations.
 7.35—Wool signals, breadstuffs markets, produce markets.
 8—Time signals, Cricket scores. A Chorus Talk, by Mr. J. K. Powell.
 8.15—Close down.

Morning Session.

- 9.15—The Chimes of 2FC and Announcements; Cricket Scores.
 9.20—Music from the studio.
 9.35—Facing talk.
 10—Cricket scores.
 10.5—Late "Sydney Morning Herald" News Service.
 10.15—Music from the Studio.
 11—Time signals. Progress cricket talk on to-day's cricket match in England.
 11.10—Cables.
 11.16—A talk on Home Cooking and Recipes, by Miss Ruth Furst.
 11.30—Close down.

Midday Session.

- 12—Time Signals; The Chimes of 2FC and Announcements.
 12.5—Stock Exchange—First Call.
 12.10—Music from the Studio.
 12.40—Rugby Wireless News.
 1—Time Signals; Weather Intelligence.
 1.5—Cricket scores.
 1.7—"Evening News" midday news service. Producer's Distributing Society's Report.
 1.30—Music from the Studio.
 1.30—Stock Exchange, Second Call.
 1.36—Music from the Studio.
 2—Time Signals; Close down.

Afternoon Session.

- 2.30—The Chimes of 2FC and Announcements.
 2.35—A Vocal Recital.

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

- 3.10.—From Farmer's Tea Rooms; The Oak Hall Trio will play (leader, Mr. Horace Kente).
- 3.40.—Miss Peggy Dunbar, mezzo.
- 3.45.—From Farmer's Tea Rooms; The Oak Hall Trio.
- 3.55.—Music from the Studio.
- 4.—Mr. Frank Donelan, tenor.
- 4.15.—Music from the Studio.
- 4.20.—Miss Peggy Dunbar, mezzo.
- 4.25.—The Oak Hall Trio.
- 4.35.—Mr. Frank Donelan, tenor.
- 4.45.—Music from the Studio.
- 4.45.—Stock Exchange, Third Call.
- 4.45.—Music from the Studio.
- 5.—Time Signals: Close down.

Early Evening Session.

- 5.—The Chimes of 2FC and Announcements.
- 5.10.—Time signals.
- 5.5.—"Hello Man" talks to the children.
- 5.45.—Broadcast from the Hotel Australia, orchestral items.
- 7.15.—From the Studio; "Evening News" late news service, weather information, Dalziel's Market Reports.
- 7.44.—A talk on "French," by Mons. Maurice Byrn.

Night Session.

- 7.55.—The Chimes of 2FC and Announcements.
- 8.—Broadcast from the Darlington Town Hall; Items by the Metropolitan Band, conducted by Mr. John Palmer.
- 8.20.—From the Studio; A Song Cycle, "By Jeholm Ribber," by Amy Woodford-Findon, to be sung by Miss Elsie Brown and Mr. Russell Rix.
- 8.32.—Metropolitan Band items.
- 8.52.—Mr. Lionel Lawson, violin solos.
- 9.—The Clement Hosking Quartette.
- 9.5.—Metropolitan Band items.
- 9.28.—From the Studio, Quartette, "Goodnight Beloved."
- 9.32.—Mr. Frederick Turrell, tenor.
- 9.36.—Mr. Lionel Lawson, violin solos.
- 9.45.—Miss Bunty Stuart, contralto, at the Westworth.
- 9.52.—Mr. Russell Rix, bass.
- 9.56.—Miss Bunty Stuart, contralto, in the Blue Sea.
- 10.—Hosking Quartette, "See how lightly o'er the Blue Sea."
- 10.4.—Duet, Miss Elsie Brown and Miss Bunty Stuart, "Barcarole."
- 10.8.—A talk by Mr. W. F. Jackson.
- 10.24.—Dance music and descriptions of the Gilbert and Sullivan ball.
- 12.—National Anthem. Close down.

2 BL

Early Morning Session.

- 7.15.—Physical Training and Health Exercises.
- 7.30.—Talk on Health and Hygiene.
- 7.35.—Physical Training and Health Exercises.
- 7.45.—Broadcasters' Special News Service.
- 7.52.—Special News from Rugby.
- 7.56.—Musical Programme from the Studio.
- 8.—G.P.O. Clock and Chimes. Broadcasters' Surf Expert.
- 8.15.—Close down.

Morning Session.

- 10.—G.P.O. Clock and Chimes. Special news service from the "Daily Telegraph."
- 10.10.—Music from the Studio.
- 10.25.—Special news from "Daily Telegraph."
- 10.45.—Musical programme from the Studio.
- 11.—G.P.O. Clock and Chimes. Special cricket session.
- 11.5.—Musical programme from the Studio.
- 11.15.—Markets.
- 11.20.—London Metal Quotations.
- 11.25.—Broadcasters' Special Information Service, including music, shipping, weather, rainfall, social features for the following day.
- 11.40.—Musical programme from the Studio.
- 11.45.—News from "Sun" cable edition.
- 11.55.—Talk to Women, by Mrs. Jordan, "Labour Saving Devices and Hints."

- 12.35.—Miss Beegling will talk on "The Sun and Health."
- 12.38.—Shopping Guide.
- 12.35.—Sydney Stock Exchange calls.
- 12.45.—Billie's Instrumental Quartette, direction "Carey" casting.
- 1.15.—Musical social, under direction of Frederick Mewton, broadcast from the Fine Art Gallery, Anthony Horderna's.
- 2.—G.P.O. Clock and Chimes. Close down.

Afternoon Session.

- During the Afternoon results of races will be broadcast immediately after such race by courtesy of The Sun Newspapers.
- 6.—G.P.O. Clock and Chimes; Weather Report and Social Notes from "The Sun."
- 9.15.—Civil Service Restaurant Trio.
- 9.35.—"Talk on Modern Psychology" by Mr. J. M. Prentice.
- 5.45.—Musical Programme from the Studio.
- 4.—G.P.O. Clock and Chimes; Civil Service Restaurant Trio.
- 4.15.—Musical Programme from the Studio.
- 4.30.—Serial Story, entitled, "The Scarlet Cock-ore," by C. M. Sublette.
- 4.45.—Musical programme from the studio
- 5.—G.P.O. Clock and Chimes. Producers' Distributing Society's Market Report.
- 5.10.—Shipping information, when available.
- 5.15.—G.P.O. Clock and Chimes. Close down.

Evening Session.

- 8.—Broadcasters' Miniature Orchestra, under the direction of Mr. J. Knight Barnett.
- 5.15.—Mr. Reg. Harrison, comedian.
- 8.23.—Mr. Gerald Walens, violin solos.
- 8.32.—Lecture.
- 8.54.—Resume of Programme.
- 8.55.—Weather forecast.
- 8.57.—Announcements.
- 9.—G.P.O. Clock and Chimes. Broadcasters' Miniature Orchestra.
- 9.15.—Miss Thelma Houston, contralto.
- 9.22.—Broadcasters' Miniature Orchestra.
- 9.30.—Interval.
- 9.35.—Lecture.
- 10.15.—Miss Thelma Houston, contralto.
- 10.22.—Mr. Gerald Walens, violin.
- 10.30.—Reg. Harrison, comedian.
- 10.37.—Elite Old Time Dance, broadcast from the Marrickville Town Hall, during intervals between dances, news reports by courtesy of "Sun" Newspapers, will be broadcast.
- 11.—From the Studio; Paragon Dance Band.
- 12.—G.P.O. Clock and Chimes. National Anthem.

3 LO

Midday Session.

- 12.—Time Signal. Latest cricket, Australia v. North of England, played at Blackpool, British Official Wireless news from Rugby, Reuters and the Australian Press Association cables, "Argus" and "Herald" news services, Shipping Intelligence.
- 12.45.—Stock Exchange Information.
- 12.50.—Meteorological information. Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast. River reports.
- 1.—Time Signal.
- 1.—Studio Orchestra.
- 1.10.—Reginald Bradley, violin.
- 1.17.—Clement May, famous Dickensian.
- 1.35.—Studio Orchestra.
- 1.45.—Reginald Bradley, violin.
- 1.52.—Studio Trio.
- 2.—Close down.

Afternoon Session.

- 3.—Latest Cricket Scores, by Courtesy of Reuters Ltd.
- 3.—Studio Orchestra.
- 3.10.—Jack O'Hagan, baritone.
- 3.17.—Tasma Tiernan, cello.
- 3.24.—An Pair, of Messrs. Buckley & Nunn Ltd. will give a Fashion Talk.
- 3.30.—Connie Courtney, soprano.
- 3.45.—Studio Orchestra.
- 3.56.—Jack O'Hagan, baritone.
- 4.—Mairon Moreland, Infant Welfare.

- 4.18.—Connie Courtney, soprano.
- 4.25.—Mr. C. R. Long, M.A., will give a talk on Plays of Shakespeare.
- 4.46.—Latest Test Cricket Scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool, "Herald" News Service; Stock Exchange Information.
- 5.—Close down.

Evening Session.

- 6.45.—Children's Hour. Answers to letters and Birthday Greetings. Jessie Batchelor will sing, "A Little Brown Owl," "Tweckumh Ferry," "Mary Gulliver's Poems," "A Day at School"; "A game of 1, 2, 3"; Story for the Littlest ones, "The Fairy Queen's Ball"; boys and girls, "More about Oberon."
- 5.45.—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia v. North of England, played at Blackpool; Reuters and the Australian Press Association cables.
- 5.53.—Weather synopsis, Aerial mail information by the Australian Aerial Services Ltd.
- 5.58.—Stock Exchange Information.
- 6.—Fish Market Reports by J. R. Borrett Ltd.
- 7.—River Reports.
- 7.6.—Market Reports by the Victorian Producers' Co-operative Co. Ltd.: Haymarket sales, poultry, grain, chaff, hay, straw, tallow, dairy produce, potatoes, and onions.

Night Session.

- 7.20.—Madame Soward, will give a French talk, "Tout Argument."
- 7.45.—Under the auspices of the University Extension Board, Mr. P. D. Phil, M.A., LL.B., "The League and Disarmament."
- 5.—Lecture by Mr. Fritz Hart on Clock and his opera "Orpheus."
- 9.—Dr. Loftus Hills, Popular Science.
- 9.15.—Under the auspices of the Sporting Dog Club of Victoria, Mr. M. Gaven, "Field Trials."
- 9.30.—Bert Howell and his Concert Orchestra, transmitted from the Victory Theatre, St. Kilda.
- 10.45.—Latest Cricket Scores, by courtesy of Reuters Ltd., Australia versus North of England, played at Blackpool. British

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Official Wireless News from Rugby. Announcements. "Argus" News Service. Weather Forecast.

11—God Save the King.

3 AR

Morning Session.

- 11.30—British Official Wireless Press, received from Rugby Super Wireless Station, England, by SAE's operator. Express Train Information. "Argus" News Bulletin.
- 12—Time Signal Chime from G.P.O. Studio Barometer and Outdoor Thermometer Readings. First Weather Forecast. Events of the day.
- 12.30—Musical selections, relayed from Hoyt's de Luxe, Bourke Street. Mr. T. L. Campbell at the Wurlitzer.
- 12.30—Stock Exchange news.
- 12.35—Market Reports.
- 12.40—Musical selections.
- 12.51—Mail notices. Shipping movements.
- 1—Close down.

Afternoon Session.

- 2.30—Hoyt's Premier Orchestra. Under the direction of Miss Ella Brien.
- 2.35—Miss Minnie Merle (soprano).
- 3.7—Miss Bona Seeger (soprano).
- 3.14—Madame Rowse (mezzo).
- 3.21—Mr. and Mrs. Edward Kinley (Hawaiian Duo).
- 3.30—Miss Minnie Merle (soprano).
- 3.37—Miss Bona Seeger (soprano).
- 3.43—Mr. and Mrs. Edward Kinley, Hawaiian music.
- 3.53—Madame Rowse (mezzo).
- 4—Time Signal Chime. Second Weather Forecast. Hoyt's Premier Orchestra.
- 4.55—Evening Amusement Light.
- 5—Time Signal Chime. Studio Barometer Readings. Close.

Early Evening Session.

- 6.40—The Children's Corner, by Uncle Peter.

Evening Session.

- 7.45—British Official Wireless Press; Studio Barometer Readings; Fat Sheep and Cattle Report, supplied by Messrs J. McNamara & Co. Ltd.
- 8—Time Signal Chime.
- 8.2—Miss Elma Sutherland (cellist).
- 8.5—Mr. Clive Fordham (baritone).
- 8.15—Miss Irene Hussey (violinist).
- 8.22—Mr. Potts (Melbourne Manager of Burn's Philp & Co. Ltd., will describe a Trip to Java and Singapore in the Motor Vessel Malabar).
- 8.37—Miss Rene Mason (contralto).
- 8.44—Miss Lillian Furlong (soprano).
- 8.51—Miss Isabel Harris (lyric soprano).
- 8.58—Miss Elma Sutherland (cellist).
- 9.5—Mrs. Francis Drake, The Mountain.
- 9.16—Misses Doris and Rene Mason (soprano and contralto) duets.
- 9.26—Miss Rene Hussey (violinist).
- 9.32—Mr. Clive Fordham (baritone).
- 9.40—Miss Lillian Furlong (soprano).
- 9.47—Miss Isabel Harris (lyric soprano).
- 9.54—Miss Mary Simpson (soprano).
- 10—Time Signal Chime from G.P.O.
- 10.16—Leggretta's Ballroom Orchestra, relayed from Prahran.
- 11—Time signal chime from G.P.O. Close down.

4 QQ

Midday Session.

- 12.55—Tune-in Signal.
- 12.55—Tune Signal.
- 1—Market Reports, Stock Exchange, Weather, "The Daily Mail" News, the "Daily Standard" News.
- 1.20—Lunch Hour Music by the Carlton Orchestra.
- 2—Close down.

Afternoon Session.

- 3.50—A programme of music from the Studio.
- 4.15—"The Telegraph" News.
- 4.30—Close down.

Early Evening Session.

- 6.25—Tune-in.
- 6.30—The Children's Session. Stories by "Uncle Ben" and "Uncle Jim."
- 7—Lecturette: "The Organized Marketing of Meat," No. 3, by Mr. G. Sheehy, Assistant Secretary, Council of Agriculture.
- 7.30—"The Daily Standard" News. Stock Exchange information.
- 7.40—Announcements.

Night Session.

- 7.45—Lecture Session: "A Gardening talk by Teoma."
- 8—Briabane Apollo Club, from the Briabane School of Arts.
- 8—From the Studio, Hawaiian Instrumentalists. The Bleek and Gardiner Trio. Mr. R. J. Robinson, tenor solo.
- 8—The Excelsior Band.
- 9.20—Weather information, officially supplied by the Commonwealth Weather Bureau. Announcements.
- 9.30—One Stop, by Excelsior Band; Radio voice recital items; Hawaiian Instrumentalists: Miss Irene Gibbon, soprano; Miss Hilin Cooper, contralto; Hawaiian Instrumentalists.
- 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 Stock Duo Art Number.
- 11.40—"Advertiser" News Service.
- 11.55—Vacation number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" News Service and Cricket score.
- 12.16—5CL Studio Orchestra will be heard in a series of classical numbers.
- 1.55 (approx.)—Ward & Co.'s Stock Exchange Intelligence, Weather Reports and Station Announcements.
- 2—G.P.O. Chimes.

Afternoon Session.

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

Evening Session.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories.
- 7.80—Market Reports.
- 7.40—Milling talk by Mr. Jackett.
- 8—G.P.O. Chimes.
- 8.1—Studio Orchestra, in a programme of instrumental numbers, interspersed with vocal items by Miss G. Minchin, E. Besanko, and Messrs F. Williamson, D. Reilly.
- 9—G.P.O. Chimes.
- 9.1—Weather Reports.
- 9.3—Studio Concert, continued.
- 9.16—"Advertiser" news service, and ships within wireless range.
- 10.30—Studio Concert, continued.
- 10.35—Station Announcements.
- 11—G.P.O. Chimes. National Anthem.

7 ZL

Morning Session.

- 11—G.P.O. Clock Chimes. "The Mercury" commercial intelligence. Weather Information and Shipping.
- 12—Selections on the Salomona.
- 1.1—G.P.O. Clock Chimes. Close down.

Afternoon Session.

- 3—G.P.O. Clock Chimes. Musical items from the Studio.
- 4.30—Hobart Stock Exchange quotations.
- 4—G.P.O. Clock Chimes. Close down.

Early Evening Session.

- 7.—Children's Corner. "His Brother" chats to his pals.
- 7.15—The adventures of George the Book-shelf Cat; "The Departure of Nancy and Nugget," by "Aunt Stella."
- Evening Session.
- 8.—G.P.O. Clock Chimes. "The Mercury" special Transmanian news service. Railway inspection program. Police Weather information.
- 8.5—Hobart Stock Exchange quotations.
- 9.10—Literary Lapses and Library Lists, by Mr. W. E. Fuller.
- 9.30—Musical items from the Studio—special request numbers.
- 9.50—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. Close down.



Wednesday, Sept. 15
2FC

Early Morning Session.

- 7.—Time Signals. The Chimes of 2FC and Announcements.
- 7.5—Cricket Scores of the third day's play, Australia v. English XI.
- 7.10—Commercial news, rainfall, temperatures, Astronomical memoranda, Mail Services.
- 7.25—Investment Market, Mining Share Market, Metal Quotations.
- 7.35—Wool sales, breadstuffs markets, produce markets.
- 8.—Time Signals. Cricket scores. A Chorus Talk, by Mr. J. K. Powell.
- 8.15—Close down.
- Morning Session.
- 9.15—The Chimes of 2FC and Programme Announcements.
- 9.20—Music from the Studio.
- 9.45—A Morning Reading.
- 10.—Cricket scores.
- 10.5—Late "Sydney Morning Herald" news service.
- 10.15—Music from the Studio.
- 11.—Time signals. Progress Cricket Talk on to-day's cricket match in England. Cabinet.
- 11.15—Cooking Talk and Recipes by Miss Ruth Furst.
- 11.30—Close down.

Midday Session.

- 12.—Time Signals. The Chimes of 2FC and Announcements.
- 12.5—Stock Exchange, first call.
- 1.5—Music from the Studio.
- 12.50—Rusby Wireless News.
- 1.—Time Signals. Weather Intelligence.
- 1.5—Cricket scores.
- 1.7—"Evening News" midday news service. "Producer's Distributing Society's Report."
- 1.20—Music from the Studio.
- 1.30—Stock Exchange, Second Call.
- 1.35—Music from the Studio.
- 2.—Time Signals. Close down.

Afternoon Session.

- 2.30—The Chimes of 2FC and Announcements.
- 2.35—A Recital of Some New Records.
- 3.30—From Farmer's Tea Rooms; The Oak Hall Trio (leader, Mr. Horace Kewin).
- 3.40—Miss Katherine Beverley, soprano.
- 3.45—From Farmer's Tea Rooms: The Oak Hall Trio.
- 3.55—Music from the Studio.
- 4.—Miss Kathleen Fletcher, mezzo.
- 4.5—A Dickens' reading.
- 4.15—Music from the Studio.
- 4.20—Miss Katherine Beverley, soprano.
- 4.25—The Oak Hall Trio.
- 4.35—Miss Kathleen Fletcher, mezzo.
- 4.40—Music from the Studio.
- 4.45—Stock Exchange, Third Call.

- 4.45—Music from the Studio.
- 5.—Close down.

Early Evening Session.

- 6.—Time Signals. The Chimes of 2FC. Announcements.
- 6.5—The "Hello Man" talks to the children.
- 6.45—Broadcast from The Hotel Australia, Sydney; Orchestral items.
- 7.10—Dalgely's Market Reports.
- 7.30—"Evening News" news service. Weather information.
- 7.40—A session on Esperanto, by Mr. J. D. Edmonds.
- 7.45—Results of the Commonwealth Radio Photographic Competition.

Night Session.

- 7.55—The Chimes of 2FC and Announcements.
- 8.—Broadcast from Lyceum Orchestra, Items by Orchestra under baton of Mr. Emanuel Axness.
- 8.30—The ninth series of the Radio Auction Bridge Session, in which four players, led by Mr. P. H. Master, will play through a selected hand of Bridge. The complete play will be broadcast. Mr. Master, who alone has the key to the perfect playing of this hand, will answer on the phone, and broadcast. Simultaneously, enquiries by listeners concerning the game played. The perfect hand, as played in the Studios, will be available to Bridge enthusiasts each week.
- 8.—A Musical Play, specially written by Mr. James Donnelly, for 2FC. Assisting artists, Miss Gwladys Finister, soprano; Miss Kitty Elliott, comedienne; and Mr. Laurence Halbert, baritone.
- 9.45—2FC Dance Band.
- 9.50—Miss Gwladys Finister, soprano.
- 9.55—Miss Kitty Elliott, songs at the piano.
- 10.5—Lyceum Orchestra.
- 10.10—2FC Dance Band.
- 10.55—Announcements.
- 11.—2FC Dance Band.
- 11.20—Broadcast from the Wentworth Hotel, Sydney, Westworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 12.—National Anthem; Close down.

2BL

- Early Morning Session.
- 7.15—Usual Early Morning Session.
- Morning Session.
- 10.—Usual programme.

Afternoon Session.

- During the afternoon Race Results will be broadcasted immediately after the race.
- 3.—G.P.O. Clock and Chimes; Weather Report and Social Notes from "The Sun."
- 3.10—Resume of night's programme.
- 3.15—Special Operatic Session with explanatory talk by Mr. J. M. Prentice.
- 3.25—Music from the Studio.
- 4.—G.P.O. Clock and Chimes; Music from the Studio.
- 4.30—Serial Story, entitled "The Scarlet Cockerel" by C. M. Schulte.
- 4.45—Music from the Studio.
- 5.—G.P.O. Clock and Chimes; Producers' Distributing Society's Market Report.
- 5.10—Shipping Information.
- 5.15—G.P.O. Clock and Chimes. Close down.

Early Evening Session.

- 6.—G.P.O. Clock and Chimes; Uncle George and the Eldon, by C. M. Schulte.
- 6.45—Pavilion Dinner Orchestra, under the direction of Cec. Morrison.

Special Country Session.

- 7.15—Australian Mercantile Land & Finance Co.'s Stock and Wool Report.
- 7.20—Weather reports.
- 7.24—Special Country session: Talk on Land Subjects.
- 7.30—Stock Exchange Reports.
- 7.35—Producers' Distributing Society's Fruit and Vegetable Report.
- 7.40—Fruit and Vegetable Reports (Sun).
- 7.45—Grain and Fodder Reports.



POLAR EXPEDITIONS.
NORTH AMERICAN NEWSPAPER

ALLIANCE
65 Park Row, New York,
May 6th, 1926.

Loring Pickering, General Manager,
Mc. W. B. Schulte,
Business Laboratories,
Madison, Wisconsin.

Dear Mr. Schulte,

I suppose you noted in the news dispatches that Capt. Wilkins is taking the Burgess airplane set on the Detroit when she flies to Point Barrow. Also that Burgess batteries have saved the day for Capt. Wilkins on the Alaskan. He burned out his generator, and while he had a spare, he does not seem to have used it, using the Burgess airplane batteries instead.

Mason has been using the Burgess airplane set for his base station at Fairbanks, and all of the traffic between Capt. Wilkins' airplane and Waskey's portable set has been handled by the Burgess set at Fairbanks. In short, all the news that we have received has come via that set. It is interesting to note also that Waskey's portable, which has been the most important link between the field party and the outside world, was operated on Burgess dry cells.

GPJ:W. Sincerely,
GUY P. JONES (Signed).

NOTE.—These were Burgess "A" and "B" batteries purchased in Seattle, according to information from Palmer Hutchinson, of the N.A.N.A.

The above letter was written by Guy P. Jones, the representative of a large group of American newspapers to W. B. Schulte, Chief Engineer of the Burgess Battery Company. It acknowledges the part that Burgess batteries have played in this Polar Expedition.

Captain Wilkins, as we all know, is an Australian, and his attempts to reach the North Pole have been followed by Australians with considerable interest. He had had luck in Alaska, but if he had not had Burgess batteries with his radio equipment, he would have been in deeper. Burgess "A" and "B" batteries supplied the only link of communication between Fairbanks and Point Barrow.

In last week's "Wireless Weekly" was shown illustrations of the portable transmitter and receivers which were used and operated by Burgess batteries.

A complete description of this radio equipment is contained in the Burgess Engineering Circular, No. 10, and a copy can be obtained by writing to the Burgess Battery Coy., whose address is Harris Trust Building, Chicago. *

Mr. Pimple's Dream of Happiness



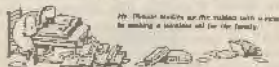
Mr. Pimple's dream of happiness.



Mr. Pimple begins with the world - not impeding a road of mine.



Taking the food in convenient method.



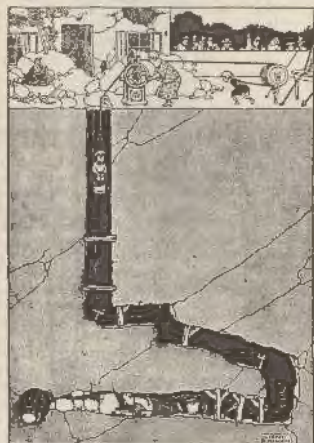
Mr. Pimple decides on the matter with a view to making a hole in the wall for the family.



Mr. Pimple is surprised and finds a use for everything.



Mining carbon mines.



Mr. Pimple now carefully mines the earth side.



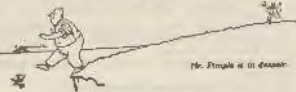
At last everything is ready, but alas, no road is obtained.



Mr. Pimple now buys Philips' Revolving Valve every three and discovers that they give the very best results.



Pimple making a hole in the wall for the earth wire presents no difficulty to Mr. Pimple.



Mr. Pimple is ill disposed.



- BUT it most fitted to need service and presents them with a road toward the big revolution.

7.48—Country News from the Sun.

7.56—Close down.

Evening Session.

4—G.P.O. Clock and Chimes; City of Sydney Band broadcast from Harlow Chambers.

8.20—Lecture from the Studio.

8.40—City of Sydney Band.

Resume of following day's programme.

9.3—Weather Forecast.

9.5—Announcements.

9.10—City of Sydney Band.

9.50—Interval.

9.55—Foreign Affairs, by Mr. J. M. Prentice.

10—G.P.O. Clock and Chimes.

Cec. Morrison and the Gloomhesaru. Broadcast from the ballroom of the Bondi Casino. During the intervals between dances, news reports by courtesy of "The Sun" Newspapers will be broadcast.

11.5—From the Studio: The Palacgrove Orchestra, under the direction of Stan Fotheringham.

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

3 L O

Midday Session.

12—Time Signal. Latest cricket news, by courtesy of Reuters Ltd. Reuters and Australian Press Association cables. "Argus" and "Herald" news services. Shipping intelligence.

12.45—Stock Exchange information.

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

1—Time Signal.

1.1—Jessie Smith, contralto.

1.7—Hans Johnson's Monte Carlo Orchestra.

1.53—Jessie Smith, contralto.

2—Close down.

2.15—Result of Handicap Hurdle, Sandown Park Races.

2.40—Result of Trial Welter, Sandown Park Races.

Afternoon Session.

2—Studio Orchestra.

3.10—A. C. Morrison, basso.

3.17—Result of Sandown Plate, Sandown Park Races.

3.31—Mrs. M. Callaway Mahood, Interior Decoration.

3.35—"Tell Me More," Second Act, Musical comedy. Transmitted from His Majesty's Theatre, by permission of J. C. Williamson Ltd.

4.0—"Herald" News Service; Stock Exchange Information; Result of Sandown Park Handicap; Result of Sandown Purse; Result of Jumper's Flat Race, Sandown Park Races.

5—Close down.

Evening Session.

5.45—Children's hour. "Bobby Bluzum" will answer letters and give birthday greetings.

6—A musical programme arranged by Mr. Fritz Hart.

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

6.53—Weather Synopsis; Shipping Movements; Overseas Shipping News.

7—Stock Exchange Information.

7.4—Flah Market Reports by J. R. Borrett Ltd.

7.45—River Reports.

7.8—Market Reports by the Victorian Producers' Co-operative Co. Ltd.; Haymarket Sheep sales; poultry, grain, chaff, hay, straw, fute, dairy produce, potatoes and onions. Market Prices of oranges and lemons by the Victorian Central Citrus Association Pty. Ltd.

Night Session.

7.20—Under the auspices of the Department of Agriculture, Mr. R. Crowe, Export Superintendent, "The Department Exhibit—Royal Show."

7.40—Mr. H. G. Bloombe; "High Speed

Photography."

4—Concert transmitted from Preston Town Hall.

8.5—Preston Citizens' Band.

8.10—Vivian McGraw, songs.

8.20—Lilian Booth, songs.

8.37—Preston Citizens' Band.

8.57—Noel Bunler, songs.

9.15—Master Eric Chaloner, violin solo.

9.25—Preston Citizens' Band.

9.7—St. George Male Quartette.

9.17—Community Singing.

9.25—Preston City Band.

9.35—Captain Peters, Books, Wise and Otherwise.

9.40—Preston Citizens' Band.

9.54—Vivian McGraw, lyric tenor.

9.57—Lilian Booth, soprano.

10.3—Preston Citizens' Band.

10.19—Master Eric Chaloner, violin solo.

10.17—Noel Bunler, soprano.

10.24—St. George Male Quartette.

10.31—Community Singing.

10.41—Preston Citizens' Band.

10.51—Preston Citizens' Band.

10.55—"Argus" News Service; Announcements; British Official Wireless News from Rugby; Weather Synopsis.

11—God Save the King.

3 A R

Morning Session.

11.30—The British Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's operator.

12—Time Signal Chime from G.P.O. Studio barometer and outdoor thermometer readings. First weather forecast. Events of the day. "Age" news service, exclusive to 3AR.

12.35—Musical selections, relayed from Hoyt's de Luxe, Bourke Street. Mr. T. L. Campbell as the Wurlitzer.

12.30—Stock Exchange news.

12.35—Market reports.

12.40—Musical selections.

12.45—Mail notices. Shipping movements.

1—Close down.

Afternoon Session.

Sandown Park Racing Club.

2.15—Result of Hurdle Handicap.

2.30—Hoyt's Premier Orchestra, special Birthday Month Programme, under direction of Miss Ella Brier.

2.45—Result of Trial Welter.

3—The Melbourne Piano Trio.

3.15—Result of Sandown Plate.

3.16—Mr. George Buckley (baritone).

3.23—Mr. Bert Pettifer (violinist).

3.30—Mr. George Buckley (baritone).

3.37—Mr. Ronald Breakley (cellist).

3.43—Result of the Sandown Park Handicap.

3.47—The Melbourne Piano Trio.

4—Time Signal Chime. Hoyt's Premier Orchestra; 2nd Weather Forecast.

4.15—Result of the Sandown Purse.

4.44—Result of the Jumper Flat.

4.55—Evening Amusement Guide.

5—Time Signal Chime from G.P.O. Studio barometer and outdoor thermometer readings. Second weather forecast. Close down.

Early Evening Session.

6.45—The Children's Corner, by Uncle Rad.

7.50—The British Official Wireless Press; Studio Barometer and Outdoor Thermometer Readings.

8—Time Signal Chime from G.P.O.

8.2—The Boomerang Mouth Organ Band.

8.17—Mr. Charles Crisp (baritone).

8.25—Miss Gwen Loreley (humorous entertainer at the piano).

8.32—Mr. Edgar Mayne, the well-known cricketer, Talk Cricketer.

8.47—Mr. J. J. Mayer (mouth organ soloist).

8.55—Burgoyne Bros. duet.

9.2—Mr. Charles Crisp (baritone).

9.5—Miss Lexie Watt (soprano).

9.16—Mr. Les Shanley (tenor).

9.23—Miss Gwen Loreley (humorous entertainer at the piano).

9.30—Miss Una Greene (humorous recitation).

9.37—Mr. Les Shanley (tenor).

9.44—Miss Lexie Watt (soprano).

9.51—Mr. W. E. Burgoyne (mouth organ soloist); The Boomerang Mouth Organ Band (selection).

10—Time Signal Chime from G.P.O. Studio barometer and outdoor thermometer readings. "Age" news bulletin, exclusive to 2AR.

10.10—Hoyt's Premier Orchestra.

11—Time Signal from G.P.O. Close down.

4 Q G

Midday Session.

12.55—Time-in Signal.

12.58—Time Signal.

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

1.20—From Hotel Carlton, lunch hour music, by Carlton Orchestra.

2—Close down.

Afternoon Session.

3.25—Time-in.

3.30—A musical programme.

4.15—"The Telegraph" News.

4.50—Close down.

Early Evening Session.

5.25—Time-in.

6.30—The Children's Session; Stories by Little Miss Brialoue.

7—The Farmers' Session. Market Reports. Lecture: "A Queenslander's Impression of Scottish Stock Breeding," No. 3 of a Series, by Mr. J. Reid, Editor "Queensland Agricultural Journal."

7.30—"The Standard," news. Stock Exchange Information.

7.40—Announcements.

Night Session.

7.45—Lecture Session: Traveller's Talk No. 6, "Paris," by Mr. U. V. Woodland.

8—Popular Concert.

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

9.30—Popular numbers.

10—"The Daily Mail" news service.

11—Close down.

5 C L

Morning Session.

11.30—G.P.O. Chimes.

11.31—Featuring a Stock Duo Art Number.

11.40—"Advertiser" News Service.

11.55—Vocalist number.

12—G.P.O. Chimes.

12.1—"Advertiser" News Service and Cricket scores.

12.16—Featuring a Stock Duo Art Number.

12.20—5 C L Studio Orchestra will be heard in a series of classical numbers.

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

2—G.P.O. Chimes.

Afternoon Session.

3—G.P.O. Chimes.

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

3.45—From Studio—Serial Story.

4—G.P.O. Chimes.

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

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

5—G.P.O. Chimes.

Evening Session.

6.30—G.P.O. Chimes.

6.31—Bedtime Stories.

6.36—Market Reports.

7.45—Boy Scouts' corner.

8—G.P.O. Chimes.

PHILCO—"Experience teaches"—BATTERIES.

- 8.1—Relay from the S.A.R. Institute—S.A.R. Glee Club under the conductship of Mr. Mr. Rawdon R. Robinson. A.T.C.L. Overture. "Tanevedl." S.A.I.L. Orchestra.
8.30—Science lectures by Messrs. F. H. Paulding and Co.
8.40—Band Concert, continued.
9—G.P.O. Chimes.
9.1—Weather Reports.
9.3—Band Concert, continued.
10.15—"Advertiser" news service, and ships within wireless range.
10.35—Band Concert, continued.
10.55—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 and Sporting Intelligence.
12—Selections on the Salonola.
4—G.P.O. Clock Chimes. Close down.

Afternoon Session.

- 8—G.P.O. Clock and Chimes: Musical items from the Studio.
3.30—Hobart Stock Exchange quotations.
3.55—Weather Information.
4—G.P.O. Clock Chimes. Close down.

Early Evening Session.

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

Evening Session.

- 6—G.P.O. Clock Chimes: "The Mercury" special Tasmanian news service; Railway auction produce sales; Weather information and sporting news.
8.5—Hobart Stock Exchange quotations.
8.10—Physical Culture talk, by Mr. George Collis.
9.20—Palais de Danse Band. City Hall, Hobart.
9.50—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem. Close down.



Thursday, Sept. 16

2 F C

Early Morning Session.

- 7—The Chimes of 2FC and Announcements.
7.15—Cricket scores, 1st day's play, Australia v. Palmer's XI.
7.40—Weather Information, Commercial News, Shipping Intelligence, and Markets, Rainfall, Temperatures, Astronomical Memoranda. Mail services.
7.25—Investment Market, Mining Share Market, Metal Quotations.
7.35—Wool sales, breadstuffs markets, produce markets.
8—"A Chatter" Talk," by Mr. J. K. Powell.
8.15—Close down.

Morning Session.

- 9.15—The Chimes of 2FC and Programme Announcements.
9.20—Music from the Studio.
9.45—Last minute racing information, by the 2FC Racing Commissioner.
10—Cricket scores.
10.5—Late "Sydney Morning Herald" news service.
10.15—Music from the Studio.
11—Time signals. Freeress cricket talk, Cables.
11.15—Musical Items from the Studio.
11.30—Close down.

Midday Session.

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

- 12.5—Stock Exchange, first call.
12.10—Music from the Studio.
12.40—Rugby Wireless News.
1—Time Signals. Weather Intelligence.
1.5—Cricket Scores.
1.7—"Evening News" midday news service.
Market reports.
1.20—Music from the Studio.
1.30—Stock Exchange. Second call.
1.35—Music from the Studio.
2—Time Signals. Close down.

Afternoon Session.

- 2.30—The Chimes of 2FC and Announcements.
2.35—Some new records.
2.40—From Farmer's Tea Rooms: The Oak Hall Trio will play (leader, Mr. Horace Keats).
3.40—Mr. Robert Wellard, baritone, "Friend of Mine."
3.45—From Farmer's Tea Rooms: The Oak Hall Trio.
3.55—Music from the Studio.
4—Miss Gladys Finister, soprano.
4.15—Music from the Studio.
4.20—Mr. Robert Wellard, baritone.
4.25—The Oak Hall Trio.
4.35—Miss Gladys Finister, soprano.
4.40—Music from the Studio.
4.45—Stock Exchange. Third Call.
4.48—Music from the Studio.
5—Time signals. Close down.

Early Evening Session.

- 6—Time Signals. The Chimes of 2FC and Announcements.
6.5—"The Hello Man" talks to the children.
6.45—Broadcast from the Hotel Australia.
Orchestra Items.
7.15—From the Studio: "Evening News" late news service, weather information.
7.30—Dulcey's Market Reports (wool, wheat, stock), fruit and vegetable markets.
7.40—Mr. Walter Hunt will talk on "The Art of Speech," No. 7. "The Art of Speaking Verse."

Night Session.

- 7.55—The Chimes of 2FC and Announcements.
8—Broadcast from the Lyric Watergardens Theatre, Sydney. Orchestra under the baton of Mr. Alfred Moolton.
8.30—Items by the Leichhardt District Band.
Mr. E. P. Kerry, conductor.
8.41—Mr. Ernest Archer, tenor.
8.56—Mr. Andre Navarre, baritone.
9.4—Leichhardt District Band.
9.25—A talk on "Old Fynant," by Mr. J. G. Lockley.
9.35—Leichhardt District Band.
9.55—Miss Ina Turnbull, mezzo.
10.3—Leichhardt District Band.
10.20—Mr. Ernest Archer, tenor.
10.30—Mr. Andre Navarre, baritone.
10.40—Broadcast from the Wentworth Hotel, Sydney, Wentworth Cafe Dance Orchestra, under the baton of Mr. Sydney Simpson.
12—National Anthem. Close down.

2 B L

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

Afternoon Session.

- During the afternoon, results of races will be immediately after each race, by courtesy of the Sun Newspapers.
8—G.P.O. Clock and Chimes: Weather Report and "Daily Notes from 'The Sun'."
3.10—Resume of night's programme.
3.15—De-la Jones' Tea Room Trio.
3.20—Music 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 Cockatoo," by C. M. Sablette.
4.45—Music from the Studio.
5—G.P.O. Clock and Chimes: Producers Distributing Society's Market Report.
5.10—Shipping Information, when available.
5.15—G.P.O. Clock and Chimes: Close down.

Early Evening Session.

- 6—G.P.O. Clock and Chimes: Uncle Jack and the Kiddies.
6.45—Broadcasters' Dinner Orchestra.

Special Country Session.

- 7.15—Australian Mercantile Land & Finance Co's Stock and Wool Report.
7.20—Weather Reports.
7.24—Stock Exchange reports.
7.30—Producers' Distributing Society's Fruit and Vegetable Report.
7.35—Fruit and Vegetable Report ("Sun").
7.38—Grain and Fodder Report ("Sun").
7.40—Sporting Talk by Broadcasters' Sporting Representative.

Evening Session.

- 8—Mr. W. E. Lewis, baritone.
8.10—"Ambassadors" Instrumental Salon Quartette, under the direction of Mr. Claude McElynn.
8.30—A talk on music by Roland Foeter, of the State Conservatorium of Music.
9—G.P.O. Clock and Chimes. Resume of the following day's programme.
9.3—Weather report and forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
9.5—Announcements.
9.10—Sid and Mully Owen in a Musical Act.
9.30—Interval.
9.35—Duet—Miss Dorrie Ward and Mr. W. E. Lewis.
9.39—Miss Dulcie Blair, violin solos.
9.47—Miss Dorrie Ward.
9.55—Mr. Les. Shippe, comedian.
10.3—A. L. 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.

3 L O

Midday Session.

- 12—Time Signal. Latest cricket scores, by courtesy of Reuters Ltd. British Official Wireless news from Rugby. Reuters and the Australian Press Association cables. "Argus" and "Herald" news service.
12.10—Community Singing, under the auspices of Community Singers and Concert Goers' Association, transmitted from the Assembly Hall, Collins St., Melbourne.
1.45—Stock Exchange information, Meteorological information, Weather forecast for Victoria, Tasmania, South Australia, and New South Wales.
2—Close down.

Afternoon Session.

- 3—Studio Orchestra.
3.10—Raymond Ellis, baritone (by permission of J. C. Williamson Ltd.).
3.17—Beak Gausson, violin.
3.24—Clement May, famous Dickensian.
3.44—Studio Orchestra.
3.54—Raymond Ellis, baritone.
4.1—C. Richard Chung, flute.
4.8—Mary Gurnea; Fragments from "The Hill of Contentment."
4.28—Studio Orchestra.
4.35—"Herald" News Service; Stock Exchange Information.
4.45—Evensong, transmitted from St. Paul's Cathedral.
5.30—Close down.

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Evening Session.

- 6.45—Children's Hour. Answers to letters and Birthday Greetings; Songs by Jessie Batchelor; "Little Brown Cottage," "Home Sweet Home"; Mary furnished; Poems, Selections from "Kidposites" by "Dad" woman; "Blossom time and Tommy's guinea pig; for the Littlest ones; The Budgetary Zep; for the bigger boys and girls; "Oheron Still has Admirers."
- 8.40—Latest cricket scores, by courtesy of Reuters Ltd. "Argus" and "Herald" news services. Reuters and the Australian Press Association raffles.
- 6.63—Weather synopsis. Shipping movements. Aerial mail information, by the Australian Aerial Services Ltd.; Overseas Shipping News.
- 7.—Stock Exchange information.
- 7.4—Fish market reports by J. R. Borrett, Ltd.
- 7.6—River reports.
- 7.3—Market Reports, by the Victorian Producers' Co-operative Co., Ltd. Haymarket Sales, Poultry, Grain, Chaff, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions.

Night Session.

- 7.20—Mr. A. S. White, publicity officer, Melbourne and Metropolitan Tramway Board, "Where Trams run to."
- 7.40—Mr. J. Howlett Ross, Romance of Rings, 8.—31.0 Dance Orchestra.
- 8.10—Mr. Tod Collins, Football talk.
- 8.30—ELO Dance Orchestra.
- 8.40—Rosa Darcy and Inez Vinnard, entertainers.
- 8.47—ELO Dance Orchestra.
- 8.55—Raymond Ellis, baritone.
- 9.3—Lectures from Jubilo Sharland; "Australian Cricketers in England."
- 9.12—ELO Dance Orchestra.
- 9.17—Kathleen Rochfort, soprano.
- 9.24—ELO Dance Orchestra.
- 9.29—British Official Wireless News from Rugby; Announcements.
- 9.39—ELO Dance Orchestra.
- 9.45—Rosa Darcy and Inez Vinnard, entertainers.
- 9.50—ELO Dance Orchestra.
- 10.3—Raymond Ellis, baritone.
- 10.12—ELO Dance Orchestra.
- 10.19—"Argus" News Service; Meteorological Information.
- 10.40—Kathleen Rochfort, soprano.
- 10.50—ELO Dance Orchestra.
- 11—God Save the King.

3 AR

Morning Session.

- 11.30—The British Official Wireless Press, received from Rugby Super Wireless Station, England, by 3AR's operator. Express Train Information. "The Age" news service.
- 12—Time Signal Chime from G.P.O. Studio barometer and outdoor thermometer readings. First weather forecast. Events of the day.
- 12.35—Musical Selections, relayed from Hoyt's De-Luxe, Bourke Street. Mr. T. L. Campbell at the organ.
- 12.50—Stock Exchange News.
- 12.55—Market Reports.
- 12.46—Musical Selections.
- 12.55—Mail notices. Shipping movements.
- 1—Close down.

Afternoon Session.

- 2.30—Hoyt's Premier Orchestra (Birthday month programme).
- 3—The Erics Trio.
- 4—Time Signal from G.P.O. Second Weather Forecasts.
- 4.5—Hoyt's Premier Orchestra.
- 4.55—Amusement Guide.
- 5—Time Signal from G.P.O. Close down. Studio Barometer Readings.

Early Evening Session.

- 6.45—Children's Corner, by "Uncle Peter."
- Evening Session.
- 7.45—The British Official Wireless Press; Special Fig and Calf Report, supplied by Messrs McPhail Anderson & Co.; Fat Sheep and cattle report, supplied by Messrs. John

McNamara & Co. Pty. Ltd.

- 8.—Time Signal Chime from G.P.O.
- 8.2—The Jays Orchestra will play popular dances.
- 8.15—Miss Louise Sterling (mezzo).
- 8.23—Capt. Dettman, V.D., will speak on Stamps.
- 8.27—Miss Mary Lilley (contralto).
- 8.44—Miss Nancy Sarsfield (violinist).
- 8.51—Arthur Shaw (baritone).
- 8.58—Miss Mary Lilley (contralto).
- 9.—Dr. Phillips, Hon. Secretary of the Food Education Society of Victoria will speak on "The Feeding of Babies and Mothers for Health."
- 9.29—Miss Jean Ellum (lyric soprano).
- 9.26—Miss Nancy Sarsfield (violinist).
- 9.38—Mr. Arthur Shaw (baritone).
- 9.40—Miss Jean Ellum (lyric soprano).
- 9.47—The Jays Orchestra.
- 10—Time Signal Chime from G.P.O. Studio barometer readings. "Age" news bulletin, exclusive to 3AR.
- 10.10—Hoyt's Premier Orchestra.
- 10.40—Close down.

4 QG

Midday Session.

- 12.55—Tune-in Signal.
- 12.58—Time Signal.
- 1—Market Reports; Weather Information; "The Daily Mail" News; the "Daily Standard" News.
- 1.20—From the Hotel Carlton, lunch hour music by the Carlton Orchestra.
- 2—Close down.

Afternoon Session.

- 4.—A programme of music from the Studio.
- 3.15—"The Telegraph" News.
- 4.50—Close down.

Early Evening Session.

- 6.25—Tune-in.
- 6.30—The Children's Session; Stories by "The Sandman."
- 7—The Farmers' Session; Market Reports; Lecture: Talks on Plant Breeding No. 3, "Hybridisation" (cross breeding) as a means of improving plants, by Mr. J. M. McMillan (plant breeder, Queensland Agricultural High School and College).
- 7.30—"The Daily Standard" news. Stock Exchange information.
- 7.40—Announcements.

Night Session.

- 7.45—Lecture Session: A talk on Beeds, by Mr. W. A. Braiden (McLeod's Book Store).
- 8—Holy Cross Choir.
- 9.20—Weather information officially supplied by the Commonwealth Weather Bureau. Announcements.
- 9.30—From the Band Practice Room. An impromptu programme of music by the Greater Brisbane Municipal Concert Band, under the leadership of Mr. E. Jackson.
- 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 Stock Duo Art Number.
- 11.40—"Advertiser" News Service.
- 11.55—Vocalion number.
- 12—G.P.O. Chimes.
- 12.1—"Advertiser" News Service and Cricket scores.
- 12.16—Featuring a Stock Duo Art Number; 12.30—5CL Studio Orchestra will be heard in a series of classical numbers.
- 1.65 (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 "Muple Leaf" Cafe—Orchestral numbers.
- 3.45—From Studio—Serial Story.
- 4—G.P.O. Chimes.

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

Evening Session.

- 6.30—G.P.O. Chimes.
- 6.31—Bedtime Stories.
- 7.15—Health talk, by Mr. A. M. Whittenbury.
- 7.30—Market Reports.
- 7.40—Poultry talk, by Mr. A. M. Whittenbury.
- 8—G.P.O. Chimes.
- 8.1—Instrumental numbers by the Studio Orchestra, interspersed with vocal items.
- 8.1—Weather reports.
- 8.3—Studio Concert, continued.
- 10.15—"Advertiser" news service, and ships within wireless range.
- 10.30—Studio Concert, Continued.
- 10.55—Station Announcements.
- 11—G.P.O. Chimes. National Anthem.

7 ZL

Morning Session.

- 11—G.P.O. Clock Chimes. "The Mercury" news. Stock market. Shipping. Commercial Intelligence. Weather information. Selections on the Salonica.
- 12—G.P.O. Clock Chimes. Close down. Afternoon Session.
- 3—G.P.O. Clock Chimes. Musical items from the Studio.
- 3.30—Hobart Stock Exchange Quotations.
- 3.55—Weather information.
- 4—G.P.O. Clock Chimes. Close down. Evening Session.
- 7—Children's Corner. "Big Brother" chats in his Palm.
- 7.15—The adventures of George, the Hook-shelf Cat. "Fred, the Picture Framer, joins another firm," by Axel Stella."

Night Session.

- 5—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—"Camp Fire Entertainment," by "Gird Guides."
- 8.30—Miss Bertha Marchall, soprano; Miss Dulcie Tail, alto; Mr. J. Taylor, flautist; Mr. G. T. Lowe, tenor; Miss Maurvyn Jones, contralto; Miss Ruby Fleese, pianist.
- 9.30—"The Mercury" special Interstate news service. Weather synopsis. Station announcements. National Anthem.

2 BE

- Wavelength, 316 metres. Power, 100 watts. Every Tuesday and Thursday evening, from 7.15 to 8.30 p.m. to 9 p.m.
- 6.30 to 7.30—Mealtime Music, consisting of vocal and orchestral items.
- 7.30 to 9—Lectures, orchestral and vocal items.

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

N.Z. Broadcasters.

The transmissions from IYA, the Auckland station, which recently went on the air, are as follows:—

Tuesdays and Fridays.—Afternoon sessions, 3 to 4.30; children's session, 6.30 to 7; news and market session, 7.15 to 7.45; evening session, 8 to 10.

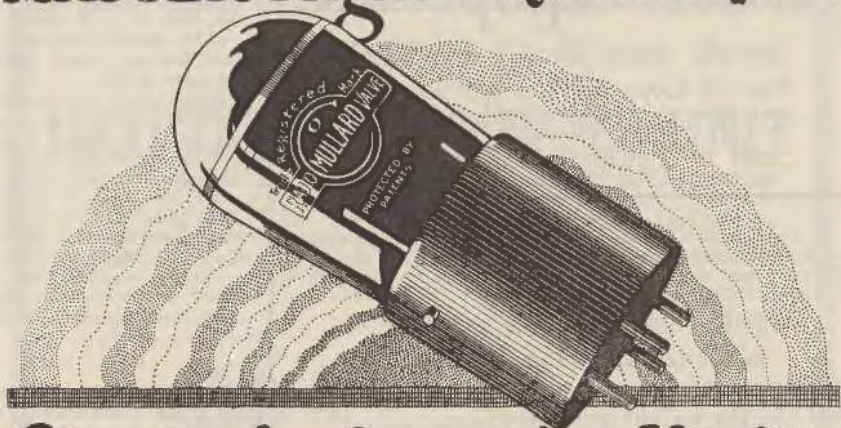
Wednesdays and Thursdays.—Afternoon session, 3 to 4.30; news and market session, 7.15 to 7.45; evening session, 8 to 10.

Saturdays.—Afternoon session, 3 to 4.30; news and market session, 7.15 to 7.45; evening session, 8 to 11.

Sundays.—Evening session, 7 to 9.

There will be no transmissions from the Auckland station on Mondays. The new Christchurch station will be completed about August 21, and its time table will be so arranged that it will be working on full power on Mondays.

MASTER Bright Filament Valves



Giants for Strength & Vitality

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

MULLARD SINGLE RING VALVES

Red Ring for H.F. amplification 7/- each
 Green Ring for L.F. amplification

These valves only require a 4-volt accumulator

| HF Amplification. | | | | LF Amplification. | | | | Power Valves. | | | | Detectors. |
|-------------------|------------|-----------|-------|-------------------|------------|-----------|-------|---------------|------------|-----------|-------|---|
| Type | Fil. Volts | Fil. Cent | Price | Type | Fil. Volts | Fil. Cent | Price | Type | Fil. Volts | Fil. Cent | Price | |
| HF | 3.8 | 0.1 | 7/- | LF | 3.8 | 0.1 | 7/- | DEA.1 | 5.0 | 0.25 | 15/6 | When valve is followed by an Intervalve Transformer or telephone, use an LF Amplifier or Power Valve. When valve is followed by a Resistance Coupled Intervalve system, use an HF Amplifying Valve. |
| D.40 | 5.0 | 0.50 | 32/6 | D.40 | 5.0 | 0.50 | 32/6 | DEA.5 | 5.0 | 0.10 | 17/6 | |
| D.5 | 3.8 | 0.5 | 17/6 | D.5 | 3.8 | 0.5 | 17/6 | PM.4 | 3.7 | 0.1 | 12/6 | |
| DEA.2 | 5.0 | 0.25 | 15/6 | DEA.2 | 5.0 | 0.25 | 15/6 | DEA.8 | 5.0 | 0.25 | 15/6 | |
| PM.3 | 3.10 | 0.1 | 12/6 | DEA.3 | 5.0 | 0.40 | 17/6 | DEA.4 | 5.0 | 0.45 | 15/6 | |
| | | | | PM.4 | 3.7 | 0.1 | 12/6 | | | | | |

All Mullard Valves are manufactured at Mullard Works, London, England.
 OBTAINABLE FROM EVERY RADIO DEALER IN AUSTRALIA.

Mullard

THE MASTER VALVE (ARKS 6)

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

Aerial Equipment

Specially drawn 7/22 (7 strands of No. 22) Copper Wire, 3/3 per 100 ft. While it lasts. With 6 Egg Shell or Emerald Insulators, 3/7

Your present aerial won't last forever; secure this equipment, even if you have no immediate use for it, for your next renewal—with this outfit you'll never need another.

Compare the price and see if it isn't worth it!

Do you know of our 2/- line of valves?

GENUINE COSSOR OR MULLARD ORA BRIGHT VALVES (for use with accumulator) 2/-

To replace our famous "Metal" valves which have all been sold. With American base, or complete with English socket 3/-

Something to protect your filaments from the high-tension—

Celatsite Battery Cable. Formerly . . 7/6 without lugs. Our Special Offer 5/3, complete with lugs.

And other lines equally startling.
Postage Paid.

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Under the management of ALAN BURROWS.

The guarantee of 5 years' reputation and service stands behind every article sold in this shop—and we sell everything for wireless.

HEARD IN ALASKA.

Two letters have reached 4QG reporting reception in Alaska. From Andrafsky, Mr. G. A. Shepherd has reported clear and consistent reception, while Mr. R. D. Kelsey, of Valdez, has reported hearing the Lyric Male Quartette render items from the Studio of 4QG.

Other letters indicate that the Queensland station is now regularly received in the United States. Mr. J. Moskovita, of San Pedro, California, states that he regularly listens in to Station 4QG. Mr. Moskovita enclosed in his letter a list of items heard on certain nights, and examination of the official log of 4QG confirmed his reception. Mr. Donald Wright, of Terminus Island, has heard the Brisbane Austral Choir singing.

DRY? NO!

Perhaps the most educational portion of 4QG's programme is the lecture session between 7.45 p.m. and 8 p.m., each evening. No complaints have been received at 4QG that the lectures are "dry." On the contrary, listeners seem appreciative. For geography students, the travelogue talk, which is now a regular feature from 4QG, is always interesting and instructive.

W.E. (Braidwood), writes: "I have just completed the 'All Australian' Receiver, as described in 'Wireless Weekly,' of February 19th, for a friend of mine in this district, who has had no previous experience in tuning. As you ask for reports from builders of the various sets described in 'Wireless Weekly,' I thought the following may be of interest to you."

"The following stations can be received all at full loud speaker strength:—2BL, 2FC, 2KY, 3LO, 4QG, and 5CL. I might add that other three valvers in this district are only fair on the loud speaker, whilst in some cases they cannot receive 2BL at all."

**BURGESS—"Used by
American Navy"
—BATTERIES.**

PHILIPS HIGH TENSION SUPPLY UNIT

A Real "B" Battery Eliminator

Separate terminals for detector and Low Frequency circuits, with a Rheostat on each circuit.

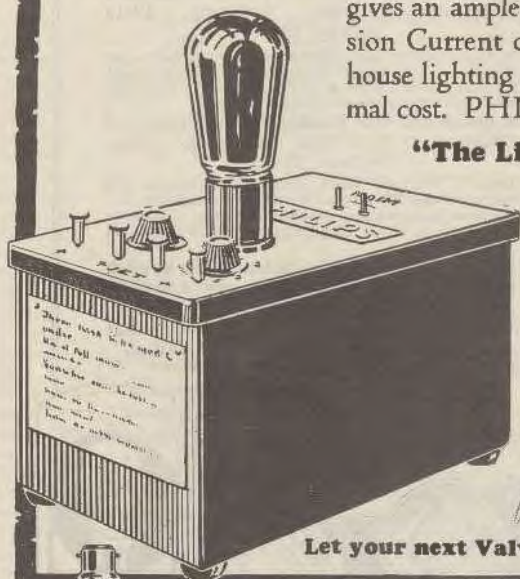
THIS unit will eliminate "B" battery worries entirely. No more faulty reception — no more disappointment or spoilt programmes. Philips Unit gives an ample supply of High Tension Current direct from your A.C. house lighting circuit at an infinitesimal cost. PHILIPS is

"The Lifetime Unit"

Ask your dealer for a demonstration.

**Obtainable at all
Radio Dealers.**

£9/15/-
each,
complete.



Let your next Valve be a PHILIPS



PHILIPS

LAMPS AND RADIO



PHILIPS VALVES

Years of patient research and the enormous resources of the famous PHILIPS LAMP WORKS have combined to produce radio valves of unrivalled quality. The following series are specially recommended for Australasian broadcast reception.

A.109—"The One-Dry-Cell Valve." Price 13/6
Filament, 1.0-1.3 volts. 0.06 amp. Plate voltage, 20/100

A.109 consumes less current than any valve yet introduced and makes it possible to operate a set for many weeks with a single dry cell. It is the ideal valve for portable work.

B.406—"The New Wonder Valve." Price 13/6
Filament, 3½ to 4 volts. 0.1 amp. Plate voltage, 20/120.

Truly a "Wonder" Valve, gives all the volume and range of the 201A types with the remarkably low filament consumption of only 0.1 amp. Can be used with a 4-volt accumulator or 2 dry cells in series.

Obtainable at all radio dealers, with English or American, as well as the new American Cap.

When you order a receiving set, specify that it must be fitted with Philips Valves.

Let your next valve be a
PHILIPS





Radio Auction Bridge

Game No. 8—Broadcast by 2 F C

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

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

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

THE complete hands held by each of the players of the Radio Auction Bridge, played on September 8th, were as follows:

"South" deals and holds:—

Spades: Q, 7, 2.

Hearts: Q, 6.

Diamonds: A, K, Q, 6.

Clubs: 9, 8, 4, 3.

"West" holds:—

Spades: K, J, 9, 8, 4, 3.

Hearts: 8, 7, 4, 3.

Diamonds: 10, 7.

Clubs: 10.

"North" holds:—

Spades: 6.

Hearts: A, 9.

Diamonds: J, 9, 8, 4, 3, 2.

Clubs: A, K, Q, 7.

"East" holds:—

Spades: A, 10, 5.

Hearts: K, J, 10, 5, 2.

Diamonds: 5.

Clubs: J, 8, 5, 2.

South (the Dealer) opens the bidding with one diamond. This original bid of a four-card suit to the ace, king, queen, is a good example of advanced bidding. American authorities agree that such a suit without side cards is a sound original bid.

It must be understood, as has been shown in these Radio Games, that an original bid, unless pre-emptive, is simply informative. That is, it tells your partner that you have certain high card strength. You do not make an original bid of one with the ex-

pectation of its being left in, because original bids of one average to be left undisturbed only once in twenty times. Therefore, when you are dealer or second hand, and hold four cards of a suit headed by the ace, king, queen, you are justified in bidding one in that suit.

West passes. Although holding six spades to the king, knave, his hand is lacking quick trick strength required for a first round bid, even a following bid. A following bid is a first round bid made after an opponent has bid and before partner has bid. West figures that he has no chance to make game at spades unless his partner is strong enough to make a free bid, after which he would then bid his spades.

North has a hand that her partner's diamond bid has made very powerful if played at diamonds. From the fact that neither of the major suits have yet been mentioned, it would appear that East probably holds a bid in either one or the other, possibly both. Of course, South may hold a secondary bid in one of them. Inasmuch as North's hand will not support a secondary major suit bid by partner, and as a major bid by East seems imminent, her proper bid in this situation is to bid the full strength of her hand at once. When trying to shut out an adverse bid it is advisable to go the limit. She, therefore, jumps the bid to five diamonds.

East fully realises that North's five diamond bid was made for the purpose of shutting out a bid by him. He considers whether it would be wise to take a chance with a bid of five hearts, but is not strong enough to do so. He, therefore, passes. Consequently, the object of North's jump bid has been accomplished. Had she jumped to two or three diamonds, East would surely have shown his hearts and while he might not have felt strong enough to do so over four diamonds, she did not wish to risk that chance.

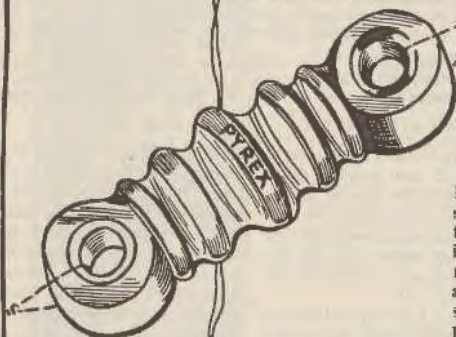
South was rather staggered that his mild bid of one diamond should be raised to five by his partner, but is satisfied that his partner's hand must warrant her bid; so he passes—in fact, he has no recourse.

West's hand, of course, does not justify an overcall, so he passes.

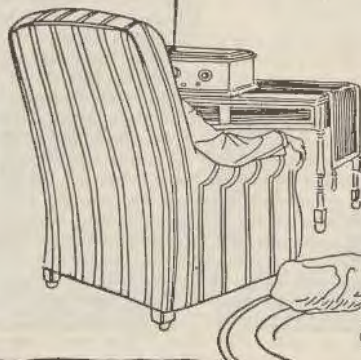
Therefore, South is the Declarer, with his contract at five diamonds.

West leads the 10 of clubs. While the opening lead of a singleton when partner has not bid is a shot in the dark and frequently of benefit to the Declarer, West considers that in view of the bidding it offers the best chance to save game. North's bid of five diamonds has created a situation that demands desperate measures. The singleton may result unfortunately, but if East should happen to win the first trick, the return of a club would allow West to make one of his

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

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

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The transmitting and receiving antennae of the McMillan Arctic Expedition are PYREX insulated. 34 Broadcasting Stations in the U.S.A. have recently replaced other insulators with PYREX. The U.S.A. Navy and Coast Guard Lighthouses and Air Mail Services specify and use genuine PYREX.

trumps, so that the singleton lead seems to present the best chance of defeating the contract.

North is Dummy; Dummy plays the ace of clubs; East plays the 2, and South the 3.

South takes stock of the situation. Of course, he will not lose a diamond trick, but from the character of Dummy's hand, one, or maybe both, of his opponents' hands may be a freak, and when freaks are held, one of the opponents is apt to be short of a suit and the other long. West's lead of the 10 of clubs is very enlightening. He does not hold the knave, for he would not have led the 10 from knave, 10; nor could it have been from the top of a sequence, because South has the 9 in his hand. If West had held four clubs to the 10, he would not have opened his fourth best card, as experts nowadays do not use the antiquated and out-of-date "top of nothing" opening from a four-card suit. Therefore, South knows that West's clubs are short, and infers that the 10 is probably a singleton, as experts are more apt to lead singletons than doubletons or triplets. So Declarer sees he is apt to lose three tricks, that is, a spade, a heart and a club, which will result in the defeat of his contract. How can this be avoided? He judges that East's hand is much stronger than West's, as the latter was not able to bid over a one diamond on his right; and had it not been for North's shut-out bid, East undoubtedly would have mentioned either spades or hearts. South decides that the only possible way to make eleven tricks, five odd, is to exhaust adversaries' trumps, eliminate the spades and hearts from his and Dummy's hands, and then place the lead.

Dummy leads the 2 of Trumps; East plays the 5; South the ace, as false-carding by Closed Hand is an approved practice; and West plays the 7. South was pleased to find that all three of the outstanding trumps were not in one hand.

He leads the king of diamonds; West follows with the 10; Dummy with the 3; and East discards the 2 of hearts.

East has analyzed the situation. He, too, realizes that West's 10 of clubs was probably a singleton,

so that South probably held four clubs to the 9, so he (East) must not part with a club. He sees the probability of three tricks in his hand, that is, the ace of spades, the king of hearts, and the knave of clubs. He does not, however, intend to give any intimation to Declarer as to his high card holdings, even in order to convey information to his partner. He doubts whether West will ever be able to secure the lead, but if the unexpected does happen, he knows that West would of necessity lead a heart. Hence, East's discard of the 2 instead of a higher heart, because a higher card would inform his partner that he desired a heart lead, and would allow Declarer to locate the king.

South now leads the 4 of clubs; West discards the 3 of hearts, thus discouraging a heart lead by partner; Dummy wins with the king of clubs; and East follows with the 5 of clubs.

South led the club in order to enter Dummy so as to lead the spade from Dummy up to his queen and through the stronger hand on his right.

Dummy leads the 6 of spades; East plays the ace, as it is his only chance to make it; South follows with the 2; and West with the 9. By his play of the spade 9, West informed his partner that he held command of the spade suit, as the 9 can easily be read as a card higher than his lowest of the suit.

East, now in the lead, is confronted by a problem. Of course, he should not lead a club, as it would prevent him from making a club trick. His partner has discouraged a heart lead, so South probably holds the queen of hearts; thus the lead of a heart would allow Declarer to make two tricks in the suit. The only lead left for consideration is the spade, and as Declarer will undoubtedly ruff spades in Dummy at his first opportunity, and as West has encouraged a spade lead if necessary, East makes the best of a bad situation and leads the 10 of spades. South plays the queen; West covers with the king; and Dummy trumps with the 4 of diamonds.

Pursuing the plan he has mapped out, South leads the 8 of diamonds from Dummy, so as to overtake and lead his last spade; East discards the 5 of hearts; South wins with the

queen of diamonds; and West discards the 3 of spades.

South leads the 7 of spades; West plays the 8; Dummy trumps with the 9 of diamonds; and East follows suit with the 5 of spades.

Now, Dummy leads the ace of hearts; East plays the 10; South the 6; and West the 4.

Dummy leads the remaining heart; East wins with the king; South plays the queen; and West the 7.

Now East must lead a club or a heart, either of which he knows is fatal. He is perfectly aware that the three cards South holds are two clubs and a trump. On a heart lead, South will discard a club from one hand and trump in the other; while a club lead will allow Declarer to win both club tricks. Therefore, East concedes the remainder of the tricks so that South makes five odd, his contract and game.

The important features are as follows:—

The reason for South's original diamond bid has already been given to you. While such a four-card suit bid is sound and is common practice with advanced players, care must be taken that partner understands the handling of such bids. If your partner knows that you bid four-card suits, as original bids, he must be particularly careful, at all times, to deny your bid when holding denying strength and less than normal assistance in the suit. He must have it constantly in his mind that the original bid may have been made with only a four-card suit and, therefore, that when he holds but two cards of the suit, that the opponents may hold the majority of the suit. In other words, in such cases, it is always best, instead of assisting partner, to bid a suit of your own, if possible, in order to allow partner, if able, to re-bid his suit, or to bid another suit. Very frequently it happens that a four-card suit bidder has a good secondary bid of greater length than his original bid. As an example, if South had held five hearts to the queen, together with his ace, king, queen and 6 of diamonds, his correct original bid would have been one diamond, holding his hearts in reserve to show on a subsequent round of bidding, if advisable to do so.



Another man who had never known really good Broadcasting

"NOW that's what I call a good Set," exclaimed Simpson enthusiastically, after he had heard Chopin's beautiful Mazurka to a Minor. "And yet here a note of doubt creeps into his voice, 'it seems very much like the Set you were using before Christmas.'" "It is the same Set," I contended, "but with different valves. You'll remember Clarke, who was with our crowd in Muespet?" "Yes, rather good old Nobby!" "Well, I dropped across him in the City the other day, and as he mentioned that he now had a job with a wireless firm I asked him to come over and look at my Set. He said the Set was fine, but that I was using the wrong valves."

"But I thought all valves were very much alike," cut in Simpson. "And so did I until Clarke enlightened me," I replied. "First of all he gave me an explanation as to how my Set worked. He showed me how the first valve had to set as a high frequency amplifier, the second as a detector, whilst the third valve, he explained, was responsible for obtaining good volume and pure tone from the

Loud Speaker. And then he proved to me why these three different jobs required three different types of valve. He had brought with him three COSSOR WUNCCELL DULL EMITTERS. Taking out the first two valves from my Set and inserting in their places a WUNCCELL W2 and a W1, he asked me to compare the difference. It was startling. But the most amazing thing was still to come. He substituted a COSSOR W3 for the third valve, increased the H.T. voltage, and literally the Loud Speaker leapt into life. I remember a piece called 'In a Monastery Garden' was being broadcast at the time."

"Oh, yes, I know it," interrupted Simpson. "It has lots of little birds among the high notes to imitate the birds in the garden." "That's the piece," said I, going on with my story. "The moment he put in that third valve I realised that I had never really known how good Broadcasting could be. All the time I had been blaming the makers of my Set when it was the valves which had been at fault."

"There certainly is a tremendous difference," admitted Simpson. "Turn the Set round and let's have a look at these remarkable valves." I did so. "Why," he said, in amazement, "you can't see any glow from them!" "No," I answered, "that is another advantage. They consume so little current and work at so low a temperature that Clarke swears that they will last longer than any other valve on the market. He says that the filament which the COSSOR people use is quite different—being made of wire having a very thin coating of some special substance which produces lots of electrons at a very low temperature."

"That must be an advantage," suggested Simpson. "FOR THE EXTRA COATING MUST MAKE THE FILAMENT STRONGER AND THICKER." "Yes," I agreed, "even when one rolled off the table last night it came to no harm. Quite frankly, I'm very much indebted to Nobby Clarke for the good advice he gave me." "You can include me in that," said Simpson with a smile, "for it is a long time since I spent such an enjoyable evening."

THE WUNCCELL DULL EMITTER.

Voltage, 1.8 volts.

Consumption, .3 amp.

W1 for Detector and Audio, 13/6 each

W2 for Radio Frequency, 13/6 each.

COSSOR LOUD SPEAKER VALVES.

W3. Voltage, 1.8 volts. Consumption, .5 amp. Price, 17/6. P3. Voltage, 4.5 volts. Consumption, .175 amp. Price, 24/- each.

All types available. Standard American or English Bases.

Coscor Valves

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UNITED DISTRIBUTORS LIMITED

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"ALL BRITISH."

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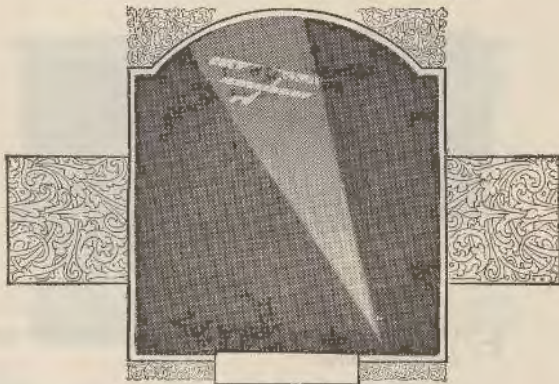
Holding six spades to the king, knave, and nothing else in his hand, West could not figure that he might have even a remote chance for game. With this holding, he can offer no support for a bid by partner and consequently must pass and bid his spades, if at all, upon the second round of bidding. Holdings that do not warrant being bid upon first round of bidding, but may warrant a bid upon the second round are termed secondary bids.

North showed great wisdom in jumping the bid to five diamonds. Had she passed or bid less than five, she had reason to expect that East would overcall with hearts or spades, which might enable him to go game or to save game at small cost. You can see, by analyzing the hand, that if West and East play it with either hearts or spades as trump, they can make four odd. It would have been better for them to "flag fly" by bidding five spades and going down one and save the game, but the shut-out bid prevented them from finding out about each other's hands. From East's viewpoint to bid five might cost many hundred points. Of course, East's actual holding did not justify this chance.

Jump bids and pre-emptive bids are made with the same purpose in view, that is, to shut out further bidding; but the two bids vary in definition. A jump bid is a unnecessarily high overcall of a suit or No Trump already bid by partner. A pre-emptive bid is a bid of two or more No Trumps, or three or more in a major suit or four or more in a minor suit, and is made either as an original bid, or, if partner has already bid, in a different declaration from that of partner. So-called pre-emptive bids of less than those I have just given do not as a rule stop opponents from bidding—on the contrary, they usually act as an incentive to opponents to bid. They do, however, usually shut-out partner. So the effect of insufficient pre-emptive bids is detrimental to a partnership, as they often prevent partners from arriving at the best bid in their combined hands. Both jump bids and pre-emptive bids are seldom of value if an opponent has bid, and in such situations are rarely used by experts.

I have already told you why West

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COLMOVOK 4-VALVE SET

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EVEN if you have never built a RADIO SET before in your life, you can build one now.

The COLMOVOK Ready-to-wire Set with a fine, polished maple cabinet, equipment already mounted on a panel of pure bakelite, is accompanied by a detailed wiring diagram showing how to fit up the receiver, *wire for wire*.

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, Philips, Geco or De Forest | 1 | 7 | 0 |
| 5 Mounted coils, covering 200-1300 metres | 1 | 1 | 0 |
| 2 1.5 Columbia dry cells | 0 | 5 | 6 |
| 1 Pair Headphones | 0 | 15 | 0 |
| 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 |

THREE VALVE SET.

| | £ | s. | d. |
|--|---|----|----|
| With polished maple cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils | 6 | 5 | 0 |
| Accessories required to fully equip this set are as follows:— | | | |
| 3 Valves, Radiotron, Philips, Geco or De Forest | 2 | 0 | 6 |
| 5 Mounted coils, covering 200-1300 metres | 1 | 1 | 0 |
| 3 1.5 Columbia dry cells | 0 | 8 | 3 |
| 1 Pair Headphones | 0 | 15 | 0 |
| 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 |



THE RADIOLUX AMPLION, the latest addition to the famous Amplion range of loud speakers.

FOUR VALVE SET.

| | £ | s. | d. |
|--|---|----|----|
| With polished maple cabinet and all panel equipment, wiring diagram, wire, solder, flex, etc., but without coils | 8 | 0 | 0 |
| Accessories required to fully equip this set are as follows:— | | | |
| 4 Valves, Radiotron, Philips, Geco, or De Forest .. | 2 | 14 | 0 |
| 7 Mounted coils, covering 200-1300 metres | 1 | 9 | 8 |
| 3 1.5 Columbia dry cells | 0 | 8 | 3 |
| 1 Pair Headphones | 0 | 15 | 0 |
| 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 |



THE RADIOLUX AMPLION, the latest addition to the famous Amplion range of loud speakers.

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led his singleton club. In a desperate situation, every possible chance should be taken to save game. I also explained East's first discard of the 2 of hearts. During the play of a deal, the adversaries, as the opponents of Declarer are called, endeavour to convey to each other all the information that is advisable in regard to their holdings. By the word "advisable," I mean when such information would be of more value to partner than to Declarer. This information is given by the size of the cards they play or discard. This procedure was well illustrated by East's discard of the 2 of hearts, and by West's play of the 3 of hearts, and the 9 of spades, as has been described.

The value of an Exit Card is not generally appreciated outside of expert circles. It is defined in the Auction Bridge Bulletin, as follows:—"A 'Card of Exit' is a losing card, retained for the express purpose of placing the lead or of throwing the lead, at an opportune time, to accomplish the desired end." The occasion to employ an Exit Card frequently arises at the Bridge table, as its use is not confined to the Declarer. It is often of great value in the defensive play; an expert adversary frequently throws the lead to either Dummy or Declarer's hand so as to force the lead of a card or suit that will defeat the contract. Advanced players when Declarer frequently avoid taking finesses by placing the lead and thus force one of the adversaries either to lead up to tenace, or lead a suit on which a discard from Closed Hand or Dummy will make it necessary to try the finesse. It is not a difficult play to master, but it requires the employment of deduction and observation.

You can see the value of the "Card of Exit" in this instance, as it allowed South to throw the lead into East's hand, and thus make a contract impossible for him to obtain in any other way.

I suggest that you play this deal over just as it was played by these four experts. It illustrates the advantage of the proper use of four-card bids and jump bids; the former have grown amazingly in popularity in the last few years.

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

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"Sterling" Shock-absorbing Sockets affixed throughout the receiver entirely eliminate microphone noises. Price 5/9



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"De Forest" DV5 and DV3 valves; may be used either as detector or amplifier. Price, each 13/6

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FACTS

ABOUT

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BRITISH MADE

TRANSFORMER

TYPE AF 3

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AT 500 PERIODS - - - 410,000 OHMS.

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55 Charlotta Street, Brisbane.

- (a) Amplification with any valve and transformer depends greatly on the transformer impedance; the higher the transformer impedance the better the reproduction, particularly of the lower notes.

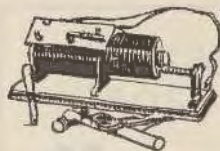
HENCE IT IS UNNECESSARY TO VARY THE IMPEDANCE OF THE TRANSFORMER TO MATCH THAT OF THE VALVE USED; ON THE CONTRARY, THE HIGHEST POSSIBLE TRANSFORMER IMPEDANCE SHOULD BE USED AT EVERY STAGE.

- (b) IMPEDANCE DEPENDS ON FREQUENCY, AND TO STATE TRANSFORMER IMPEDANCE WITHOUT STATING THE FREQUENCY AT WHICH IT IS MEASURED CONVEYS NOTHING.

A good transformer has a high impedance even at low frequencies to reproduce low notes satisfactorily. A transformer may have a high impedance at a comparatively high frequency, say, 500, and yet be a bad transformer because the whole range of male and female speaking voices, as well as most of the fundamental musical notes are at frequencies below 500.



C.T.P. 285



Beginners' Problems



E.B.B. (Marrickville) writes: "I have followed your instructions re neutralization to the letter, but cannot neutralize the two H.F. amplifiers of my Neurodyne. Can you advise me?"

A.: Owners of Neurodyne receivers are constantly complaining that they have found it impossible to neutralize their receivers satisfactorily, without decreasing the plate voltage considerably and thereby reducing the efficiency. With the object of finding out the cause of complaints made against various neurodyne kits, "Wireless Weekly" recently carried out some interesting experiments which conclusively proved that the fault is often due to the improved changes in valve construction. It was found that, whilst an old valve which was some two years old, would neutralize perfectly, the new ones of the same type would positively not neutralize when used with the same neuroformers unless the plate voltage was reduced to 22½ volts, or the tapping point changed on each of the secondary coils.

In the commercial Neurodyne kits three transformers are supplied, two of which are provided with a tapping point which, together with the small neutralizing condenser, should balance the H.F. circuits and prevent oscillation.

The difference in capacity between the old metal base and the new Bakelite base, while apparently very slight, appears to be sufficient to throw some of the present types of Neurodyne kits out of balance. Readers who have experienced the above-mentioned difficulty will, therefore, be wise to carefully experiment with various positions of the tapping point, and when the best position has been found, to suit a certain valve, it should not be altered whilst that valve is used.

There is absolutely no object in using a Neurodyne which is not neu-

tralised; one may as well go back to the P.1 days.

E.M.F. (Abbotsford): We will not publish the first part of your letter, as it deals with the details of your own receiver. Q.: "Why is it that two 45 volt "B" batteries that have run down to about 35 volts will read that voltage separately, but when connected in series the voltage shows about 25 volts below what they should when adding the voltage of each battery?"

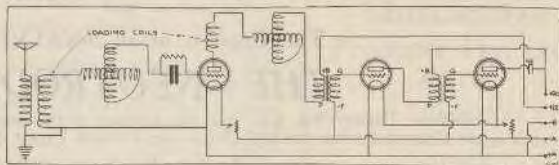
A.: With reference to any suggested improvements to your receiver, we find that none are necessary, nor are there any changes that you can make to improve it without going to large expense. We fear you have a defective voltmeter, or it is calibrated incorrectly. We suggest that you purchase a good one, such as a Jewell or Weston. The cheap types are not reliable, apart from the fact that they require quite an appreciable amount of current to operate them.

Ryan (Punchbowl): "Will you kindly send me at your earliest convenience the hook-up of a three-valve regenerative receiver employing two variometers suitable for the reception

valve will, however, not take more than 6 volts bias. As soon as I put on 9 volts it has a peculiar choking effect. The two megohm grid leak across the grid condenser has a tendency to sound like a rapid fire machine gun when one places his finger on same, instead of a high pitched whistle I usually get on other sets I have made."

A.: If your "B" battery is up to 135 volts, and you cannot get the grid voltage higher than 6 volts, it would appear that there is a feed-back in the audio amplifier. The action of your grid leak when touched leads me to believe that you have no by-pass condenser across the primary windings of the first transformer. A .001 fixed condenser should be connected between the P and positive B terminals. The grid leak should be connected between the grid and positive A connection.

J.W. (Neutral Bay): "In your issue of 'Radio,' dated September 30th, 1925, you gave very explicit instructions



of both the low and high wavelengths?"

A.: Most of the variometers at present on the Australian market are only suitable for wavelengths between 200 and 600 metres. We are, however, showing a suitable diagram which may be loaded with honeycomb coils to suit any wavelength.

P.B. (Nowra) writes: "I have the four-valve receiver, described in "Wireless Weekly," dated April 3rd, 1925. As I require an increased volume to fill a large hall, I have recently purchased a special power valve for the last audio stage. The

for building a valve rectifier for "A" and "B" battery charging. I beg to state I have tried all the radio and electrical shops in Sydney, but cannot purchase the transformer iron you mention. Will you kindly inform me where I can procure it?"

A.: Monarch Motor Works, Redfern.

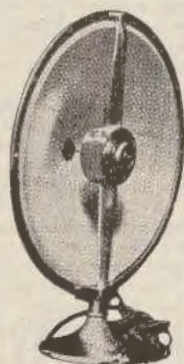
H. (Dorrigo) writes: "Will you kindly inform me, through the columns of 'Wireless Weekly,' if a 'B' battery run down to 4½ volts could be still used as a 'C' battery or an 'A' battery for dull-emitter valves?"

A.: A "B" battery that reads as low as 4½ volts is worn out.

Incomparable !

The "Sferavox"

FOR PURITY
OF TONE
AND POWER



THE LATEST
FRENCH CONE
SPEAKER

Representing the Acme of Perfection in Wireless Reproduction.

Complete with Cord, **£5/5/-**

The Greatest of all 5-VALVE SETS

THE "NEUTRODYNE"

Complete IMPROVED Kits for the building of the superlative "Neutrodyne" **£13**
(Special loading for 2FC. Write our Wireless Expert for all particulars)

| | £ | s. | d. | | £ | s. | d. |
|---|---|----|----|--|---|----|----|
| Neutroformers (wound on bakelite) | | | | Burndept Micrometer Crystal Detectors, each | 0 | 7 | 6 |
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OUR SPECIAL SUPERTONE 3-VALVE SET (complete)

with Loud Speaker and All Accessories, in
handsome Cabinet.

PRICE, £19/10/-.



This Beautiful and
Efficient Set may
be purchased on
very Easy Terms,
by arrangement
with "the Workers"
Cash Order Co.

Also 4 and 5 valve sets.
The best value ever offered in 3-Valve Sets
Call in and see 4, hear it, buy it.
Easy Terms. Easy Terms.

TOO LATE.

A striking instance of the efficiency and advantages of wireless was demonstrated at Blayney a few days ago. Mr. A. O'Neill picked up a message from Brisbane on his set at the Exchange asking the whereabouts of a man named South, whose brother was dangerously ill. South was believed to be in the Canowindra district, and to try to locate him Mr. Jim Bulloch telephoned to that town. The inquiry drew a blank, but Mr. Ollie Fogarty had the message put on the screen at the picture show, and, strangely enough, South was in the hall. He left for Brisbane as soon as possible, but we learn the brother was dead before his arrival.

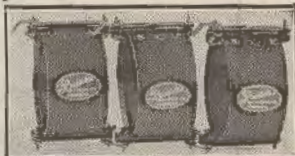
DR. SIDNEY MORRIS.

Recently recruited to 2BL's staff, Mrs. D. Jordan has spent much time and trouble perfecting the midday session over which she has charge. Her latest engagement is Dr. E. Sidney Morris, M.D., whose talks on Infant Welfare will be featured each Wednesday.

Dr. E. Sidney Morris had a most brilliant scholastic career, which, commencing with the winning of a scholarship tenable at Sydney Grammar school for three years, at the end of which term he won another scholarship tenable for three years in the University of Sydney. Graduated in medicine, M.B.Ch.M. in 1910, took honours each year through his course, being awarded the Scot Skirving prize for clinical medicine. On his return from the war, Dr. Morris obtained the Diploma for Public Health. After serving a very useful five years as Director of Public Health in Tasmania, he resigned to take up his present position as Director of Maternal and Baby Welfare in N.S.W. In 1925 Dr. Morris won the prize of 150 guineas offered by the Melbourne "Permanent Committee for Post Graduate work" for the best essay on "The Causes and Prevention of Maternal Morbidity and Mortality." The Sydney University awarded Dr. Morris the degree of Doctor of Medicine, M.D., quite recently. He is now attempting to establish many more Baby Health centres with greater administrative facilities.

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Neutrodyne Circuit



The Coils you will eventually buy
At all leading Radio Dealers.

32/6 per set

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YOUR radio reception is essentially a direct reflection of the parts you use. That is why the name behind the parts is so important. The wrong parts give indifferent results—the right parts give you improved reception and lasting satisfaction.

Developed by the highest engineering skill to meet the widespread demand for technical precision and constructional perfection, Emmco Radio Products now offer a complete and final fulfilment to the desire of thousands of radio users, for better radio reception at a lower cost.

The Emmco Transformer and Rheostat shown above are fitting examples of the superior quality that modern engineering methods can produce. Sturdily built—electrically and mechanically right—and more than reasonably priced.

TRANSFORMER 21/- **RHEOSTAT** 4/6

AT ALL DEALERS.

Emmco Products manufactured by
Electricity Meter Manufacturing Co. Ltd.
 SYDNEY, N.S.W.



The Gilbert and Sullivan Double Male Quartette, which has delighted large audiences by recitals from Station 4QG (Brisbane). Standing (left to right): Mr. Frank Tarrant, Mr. Alva Penrose, Mr. Thos. Broderick, Mr. Moran Hilford. Seated (left to right): Mr. Gordon Ramsay, Mr. Edward Beachcroft, Mrs. Hilda Woolmer (Accompanist, 4QG), Mr. Vernon Robertson, Mr. John Byrne.

News from the North

LOOKING AHEAD.

The Queensland Radio Service (4QG) claims to prepare its programmes further ahead than any other Australian Station.

A few days ago, the Government of Queensland announced the appointment of Mr. L. Pike as official organiser in connection with the visit to Queensland of the Duke and Duchess of York. The visit will not eventuate until May or June of 1927, and yet, the first caller on Mr. Pike was the Director of 4QG, who made a request that facilities for the broadcasting of speeches be made during all functions arranged in Brisbane.

It was recently announced that the Bishop of London would visit Australia, and would be in Brisbane during February, 1927. The Director of 4QG was again quickly off the mark, and as a result of a conference with Rev. Canon Garland, who is in charge of the arrangements for the Bishop's visit to Queensland, definite arrangements have been made to broadcast the civic reception to him, the service conducted by him in St. John's Cathedral, the second Sunday in February, and an address by him at the Exhibition Hall.

NEW 4QG FEATURES.

A new feature on the programme of 4QG will be the Hotel Carlton Orchestra. Arrangements have now been completed for the linking up of the Hotel Carlton with the station,

and lunch hour music as well as afternoon music will shortly be relayed. On Friday afternoon, September 10, a novel stunt transmission will be broadcast by station 4QG. On that date Mr. F. W. Stevens (chief engineer will climb one of the towers and will broadcast a description of Brisbane and districts from the cross arm.

A state-wide dance will be broadcast by 4QG on Friday, September 17. A special dance orchestra has been engaged and will play at 4QG from 8 p.m. until midnight. Considerable publicity has been given to the entertainment, with the result that wireless dances for that night have been arranged in all parts of the State. A number of old time dances have been included in the programme, and the announcer at 4QG will act as M.C. for the evening.

A member of the first RLO Whatnot Company cabled to a friend in Vancouver just for fun, and asked her to listen in to the programme. To her surprise and delight she learned by the last mail that every item had been clearly received and thoroughly enjoyed by her admirer overseas.

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

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DYNAMIC RADIO
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The New Eighty-three X



The World's Finest B Battery

Rechargeable storage "B" Batteries are absolutely the only means of obtaining strong uniform non-rippling current, without hum, roar or buzz—an absolute essential for clear unbroken long distance reception.

Exclusive Philco Features:

Glass cells with acid tight sealed covers. Safe for use anywhere in your home.

Mahogany Finished Cabinet. Beautiful and decorative.

Charge Indicators. Tells at a glance all conditions of charge and discharge. No more bothering with old fashioned hydrometer or guess work charging.

Tremendous Capacity. Double that of the ordinary "B" Battery. Needs recharging only once every 3 or 4 months or longer.

Dynamic features. Ensures your getting a fresh, new battery.

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Your crystal set will operate a **LOUD SPEAKER** with a Neutron Crystal.



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Columbia 22½ Volt

"B" Battery No. 4766



ESPECIALLY adapted for use with soft detector tubes. Large size cells make it the most economical. Six Fahnestock spring clip connectors with a range of 16½ to 22½ volts.

Factory Representatives: **ELLIS & COMPANY (Aust.), Ltd.**, 516 Kent Street, Sydney, N. S. W.

Use only

Columbia Radio Batteries

Made by the manufacturers of the Famous Columbia Dry Cell

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).

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Address

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

A Free Trip to Java and Singapore

(Continued from Page 6.)

long, and only 121 miles wide at its broadest point, with its forty million people and native aristocracy offers an experience for some lucky Australian.

Then there is Singapore—dominating the approach and exit to the East—also to be seen. Most cosmopolitan of cities, Singapore is where East meets West. It handles a larger volume of business than any other Eastern city, and has 10,000 Europeans.

All the sights of the Orient are there for the tourist, and for he who collects the greatest number of subscriptions to "Wireless Weekly" in three months. Subscription orders may be secured on "Wireless Weekly" forms. Books of 25 will be supplied to anyone filling in the following contract and sending it to Wireless Newspapers Limited.

To the Director,

Wireless Newspapers Limited,
51 Castlereagh Street,
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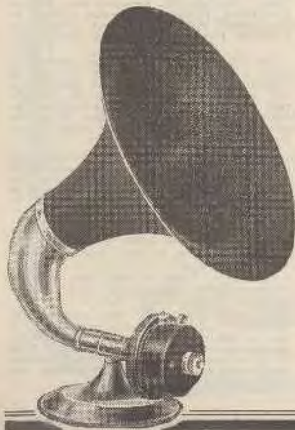
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