

WIRELESS WEEKLY

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VOLUME 9

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NUMBER 15



Friday, February 4, 1927.

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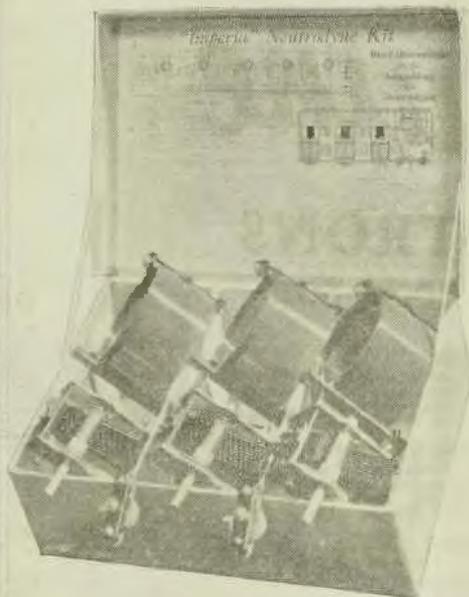
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WIRELESS WEEKLY

VOL. 2, No. 15.

FRIDAY, FEB. 4, 1927.

More Country Licenses.

THE slump in radio which came as the reaction to the first boom is at an end. Most novelties which attain widespread popularity die during this period and the proof that radio has come to stay is shown by the fact that, but for a momentary pause, the slump did not affect the stride of broadcast development. The steady rise of radio in public favour which may be expected henceforth will be helped also by improved reception, for the coming winter will be the first during which 2FC will broadcast on the short wavelength. The country districts which will benefit from the alteration are now due for the attention of the traders for the easy city market for radio goods is almost exhausted.

There is every indication that a great revival of interest in broadcasting will take place if the natural tendency in this direction is accelerated and not retarded. Only co-operation between the traders and the broadcasters can make a success of relay broadcasting stations.

The arguments surrounding this fact are rather obscure. A handful of country listeners-in have demanded relay stations. The broadcasting stations have replied that they cannot erect costly relay stations unless there is a sufficient number of licenses to guarantee a return on their outlay. The traders state that they cannot sell sets in large numbers

in the country unless there are relay stations.

In Switzerland and Denmark any small town or hamlet having three hundred radio sets in its midst has the right to demand a small low power relay station, generally operated by the postmaster. This system would not be practicable in Australia, a land of long distances and a scattered population, but there is no reason why a similar scheme could not be adopted.

Assuming that constant, uninterrupted radio reception on moderately priced sets is only to be had within a hundred miles of a station, a chain of three stations, say at Hay, Dubbo, and Armidale, would reach almost every listener within two or three hundred miles of the coast.

Suppose these three stations each cost £3,000 to erect and maintain for one year. To return the broadcasting companies their outlay each district would have to produce 3,000 new licenses. It should not be difficult to sell that number of sets within 3,000 square miles, roughly the area within one hundred miles of the station, especially since many of these would be crystal sets.

The figures given here are based on the roughest of estimates but right or wrong they serve to indicate that the relay station is practicable. Only one thing is certain, however, nothing will be done before the Royal Commission on Wireless makes its report.



Between You And Me And The Microphone

Conducted by Jack Plugge



SINCE THE OPENING OF 4QG, lecturers on agricultural subjects have had a prominent place in its programmes. Over 200 such lectures have been broadcast, the subjects covering a very wide range.

QUEENSLAND is about to add her first contribution to the ever-expanding lists of important radio inventions, by giving the world a synthetic crystal. The inventor of this new crystal is Mr. J. Peberdy, of Greenlopes, Brisbane, who has studied and experimented with crystals and their characteristics for over two years.

AT THE OFFICIAL OPENING of the radio installation of the Royal Prince Alfred Hospital recently Mr. Lull, the electrical engineer who carried out the contract, said the radio equipment was the third largest of any hospital in the world. Guy's Hospital, London, was the largest and the second was a Canadian hospital.

HE EXPLAINED that there were 700 pairs of head phones at as many beds in the hospital, so that every patient could listen in whenever he chose without interference with the comfort of any other. There were also 10 loud speakers in different parts of the institution, including the patients' sitting room and the nurses' quarters. The installation, which cost £1100, comprises a 19 valve super-heterodyne receiving set and includes five miles of cable reaching to every part of the hospital.

A CHANDLER car equipped with a radio set attracted attention at the cinema show. No one seemed to be in charge of the set, which was hidden away under the cowl in such a position which would be between the feet of a passenger in the front seat. The speaker was under the bonnet, and could not be seen. There was no sign whatever of aerial or earth. During the whole of the evening the set was heard giving out the programme from a broadcasting station. It was evidently tuned in and then left to take care of itself.

THE BROADCASTING station of Cork is to be installed in a disused gaol. The use of this building will foster a cheerful spirit among listeners, who will enjoy the comforting reflection that they are outside it.

AMONG HIS LARGE mail, Billy Bunny—the beloved of the kiddies at 3LO—gets some charming and delightful letters. Most of them enclosed donations to the Melbourne Hospital Birthday League, that have often been collected through sheer self denial on the part of the youthful giver. Occasionally, however, a bright youngster hits on an original plan for collecting the sixpences, as was the case when a letter came to hand containing five shillings, with the announcement that this sum represented the three penny pieces collected from the Christmas and New Year puddings and cakes. What an appetite!

THE ANNUAL DINNER and reunion of the Waverley Radio Club will take place at "Almont," Macpherson Street, Waverley, on February 8.

UNCLE BEN'S "Book o' Fun," the delightful volume for kiddies, which was produced by the bedtime story telling staff at 4QG, has met with a wonderful reception, and the first edition has been almost sold out within six weeks. During the next few weeks it is expected that the second edition will be published.

WRITING in the January issue of the American Radio News, Mr. J. Moskowitz, of San Pedro, California, says: "I have been fairly successful during the past year in picking up quite a number of foreign stations. My best reception of any foreign station is from 4QG, Brisbane. I have tuned in 4QG for twenty-seven consecutive mornings, and it is the most consistent of any foreign station."

SPARKS.

Written by George E. Chamberlain shortly before his Death on a Torpedo Transport.

*We lie through the night
To our comrades afar,
On the tropical seas
Or beneath the North Star,
We flash our glad tidings—
Some of sorrow and hate,
Or of tempers arising
Or a ship warned, too late,
Now we're hearing a ship,
And her cries of appeal,
On the wave-wrecked coast
That is clutching her keel.
Ah! Her net is now still;
Not a spark rends the air,
And we dream of the story
Of death and despair.
We think of a face—
He—a pal to my death;
It is hard to believe
He has breathed his last
Breath.
He's a man among men,
E'en the Devil's defied;
He has now met his God
As the wireless man died.*

3LO recently broadcast an appeal for volunteers willing to undergo an operation for transfusion of blood to aid a patient in the Alfred Hospital, who was suffering from a loss of that precious fluid. Exactly four minutes after the appeal a volunteer had stepped forward and the operation had been entered upon. There is something reminiscent of Sherlock's pound of flesh, here, with a wonderful difference in its humanising touch.

"UNCLE GEORGE," of 2BL, is considerably in demand for naming pet animals belonging to his youthful listeners. The children write to him and make all sorts of requests. This week a boy asked Uncle George to name his two tortoises. The names bestowed upon the poor creatures were "Lightning" and "Windbag." Two kittens born on Boxing Day he called Boxer and Mary; Mary, said Uncle George, the wife of Santa Claus, her full name being Mary (Merry) Christmas.

Imgak, and the Rock that Split

By M. B. LEVICK

A story, stranger than fiction, of an incident which took place in Greenland, and was heard in Sydney.

IMGAK, the son of Kamtook, sat on the edge of Greenland and thought of the good times to come when Winter settled down. There were things to see in Summer, of course, and it was then that the fireship came—or was supposed to come. But even the fireship was best of all when it had gone away and become only something to talk about in the igloo, when men told tales and a small boy might dream of the time when he should be big enough to hunt the great white bear.

Summer was the time of sunlight. The flowers came out with stems no longer than the depth of shallow snow. But as Imgak watched the big bergs float by and the little growlers jostling against them, he wished for the Winter, now almost at hand. Then the water would be all solid. In the Winter there is no work to do, even for a boy. Feasting and warmth bring charm to the igloo. The men go on a journey of days in the dusk and come back again. In the smug, smoky igloo they tell how they leaned on the jagged edge of ice holes and watched with the spear for fat fish; how the great tusked walrus gave battle, or fed with his head when he was wounded, leaving a red trail in the patch of open water.

When a boy is old enough to sleep in the open in Winter without a cover he is old enough to ask how soon he may help drive the dogs on a hunt.

Little Imgak sat wishing on his rock. He threw a pebble at a little berg drifting by in Disko Bay and shouted, pretending it was the kayak of an enemy and that he was a renowned marksman. Then nature loosed primordial powers, and in a moment the boy became a symbol in the war of his people against the Arctic.

Through generations his tribe had fought snow, famine, plagues, cataclysms, clinging to the rocks where little flowers bloomed in brief respite of sunlight, and where nature battled with them, holding them down century after century to a nation of 300 souls.

The little auks swarmed up with their shrieks that were like the shrieks of madmen. They filled the sky, swirling. A crack sharper than thunder, a splintering crack such as one of the rods might make if he smote with an axe, seemed to rend the grey sky. Little Imgak sprang up on his rock. But it was too late.

In Australia a young man in shirt sleeves looked down past the fronds of a palm and swore briefly at the

electric tram for making such a racket under his window; less briefly at the men in work clothes who were arguing on the pavement. How can a fellow put his attention to the radio with that going on?

He was not angry, though, for the first languor of Spring was in the September air, and the little leaves were burgeoning on the oaks and elms, very bright against the tall, silvered eucalyptus.

The rains were about done and all through Sydney the Spring was bursting—even here in Woolloomooloo.

The hum and clatter of a million people shut him in; but his mind went out, past St. Peter's Church and the museum and the botanical gardens—far off in the Outer Domain, and further yet into the currents of the air blowing from the other side of the world.

He counted a moment, deciding; it was such and such o'clock in London now, and, this in Cape Town, and thirteen hours different in New York. He tapped a moment with his pencil. Then he turned to the radio.

"All comfortable here in the dining saloon," said the air, "Greenland is not such a bad place, though there are hundreds of icebergs around us and some weigh as much as a skyscraper."

There was a pause. The voices of the men on the street came in little leaps of sound, arguing the worth of two prizefighters.

"The ship was screened," said the air.

"She's pulling at her lines. May-be—"

The young man in shirt sleeves bent over, his eyes motionless on the little affair of metal through which the air spoke.

It began again.

"Man overboard!"

The Sydney lad hitched his chair closer.

"It's a boy. Tidal wave swept him off a rock. An iceberg split and made a wave. It's like a mountain falling into the sea. The boy was sitting high and dry on a rock. Wait a minute. . . . The wave made his rock an island and a second wave has drawn him into deep water. We're getting the news from the deck. Can't see much here in the saloon."

The Sydney man locked out toward the docks and in his mind pictured a face at a porthole.

"His mother is on the shore. She's trying to jump in. Must be his mother. A man is holding her back. Husband, likely. He's waving his hand. . . . The boat is over the side."

Sydney waited while swift ones gleamed over the slaty waters of Disko Bay, thirteen hours distant, as the world turns.

"They've reached the spot where he went down."

Again Sydney waited.

"They've got him!"

The men arguing on the Woolloomooloo sidewalk paused and looked up at the open window under the antenna. "Sounds like some bloke cheers' all to himself," said one. And they went on with their prizefighters.

"Poor kid! Looks like a little limp walrus. . . . Here they are. Artificial respiration. Tough job."

And long, long after that: "He's opened his eyes."

On the east coast of Australia a radio fan murmured: "Well, I'll be—"

On the west coast of Greenland a little brown boy didn't even smile politely, when they asked him why he had tried to drink up all Disko Bay, but merely wished to himself that it was Winter, when there would be no open water to splash into a great wave, and he could sit by the fire and listen to the tales of great deeds.

But suddenly he grinned the barest trifle. It occurred to him that now he would have something to talk about himself!

The story of the wave and the little boy was told into the microphone while it was taking place. It was told from the Bowdoin, Arctic flagship of the Donald B. MacMillan expedition, which, at the moment the berg split, was in radio communication with Australia and New Zealand, as she had been for several weeks.

Bush Wireless

By REV. JOHN FLYNN

(Superintendent of Australian Inland Mission.)

How Radio is penetrating millions of square miles in Central Australia, as the bushman's S.O.S.

RAILWAY tracks do not penetrate far into the interior of Australia and telegraph lines but a short distance further. A handful of people inhabit some millions of square miles towards the centre of the continent, far out of reach of either. Sometimes children are born here and often there is accident and disease, but the bush people have learnt to bear these things stoically, for assistance is far out of reach.

That is, unless they are within easy distance of one of the half score of nursing homes established on the edges of beyond by the Australian Inland Mission. For these bush people far away even from the nursing homes there is being organised an aerial medical service of about 10 doctors equipped with planes and pilots. Under present circumstances, however, the aerial medical services would be almost useless to the pioneers, who are most in need, for they lack means of sounding their S.O.S. Radio is to step into the breach at this point. The A.I.M. aims to establish large radio stations at

each nursing centre and smaller receiving and transmitting stations in each outback home.

Between Marree and Boulia, about 600 miles by trail—we have no "roads"—there is one township only (Birdsville) and not one inch of telegraph wire. From Farina to Quilpie, over 600 miles by trail, there is one township only (Innaminka, which has almost faded away since it was surveyed, and given the official title of "Hopetoun," since forgotten), and only a private telephone wire for 130 miles to what is aptly termed Mount Hopeless. From Camooweal to Newcastle Waters, over 400 miles by trail; thence to Wave Hill, nearly 300 miles; and on nearly to Hall's Creek, by trail about 300 miles; in all, 1000 miles of cross-country travel without any telegraph facilities except where one passes under the north-south wire. In all those 1000 miles one fails to find a single township!

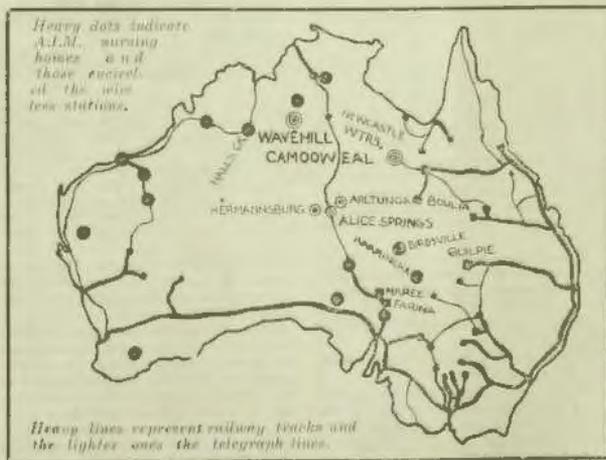
It is along this last, and longest, gap in cross-country wire-communication that the Postmaster General's



Rev. John Flynn, our contributor.

Department has recently spent a large amount of money in an experiment with wireless. At Camooweal, alongside the terminus of the wire, a radio station has been erected, and another official radio station functions out in the wilderness at Wave Hill. The hope was that many pastoral stations in between would immediately instal private radio phone-stations, but up till now there is only one private transmission set, at Brunette Downs. This one private effort has, after some initial difficulties, been functioning very satisfactorily on phone, with Camooweal only, but the average frontier pastoralist is unable to afford such a fine equipment as Brunette enjoys; Brunette, by the way, is regarded as the engineering wonder of Australia's frontiers.

The need for some kind of "hurry up" in bush wireless had been obvious to us for years, especially after we began to work for an aerial medical service. Search was begun for an inexpensive and simple transmitter, by which wireless telephony could be carried on without frequent failures, over distances up to 100 miles. Early in 1925, Mr. George Towns, of Sydney, came to know of our aspirations, and he immediately offered his services, gratuitously, for six months, in order that some field experiments might be carried out. I was just then fitting out a car for some long journeys in the interior, so the offer was gladly accepted, and we began

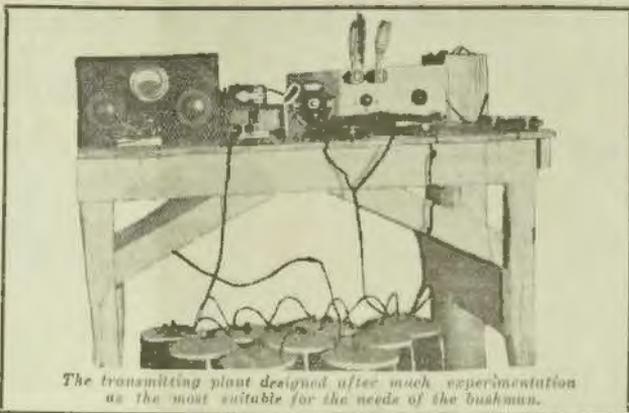


our collection of wireless gear. Amalgamated Wireless Officials, the Government Radio Department, and amateurs of Sydney, Melbourne, and Adelaide, have given us much assistance from the outset, including some gifts of apparatus.

But bush conditions created many special problems, and worries dragged us about cruelly before we found our feet. At last we had assembled a car outfit (S.A.C.), so we started out for final field tests at Beltana, over 300 miles north of Adelaide, then proceeded to Innaminka, Cordillo Downs, Birdsville, thence back to Marree, whence we trucked the car to Oodnadatta.

At the outset we had a definite objective, viz., to investigate the difficulties of wireless in the bush. Humbly we may claim to have attained that objective! Still, we did prove that it was practicable for one to keep in touch with places up to 1000 miles away, using Morse, and to phone over the air up to 300 miles—with a car and a long purse to assist. We used to jack up one back wheel, on which a special pulley had been mounted; thus we drove the belt for a generator mounted on the specially strong spashboard which had been substituted for the ordinary mudguard, and secured ample high-tension current for four U.V.202 tubes in our transmitter. We carried extra accumulators, two short wave receivers, and a four-valve broadcast receiver. The last instrument gave us heaps of encouragement and many problems.

From Oodnadatta we proceeded to Alice Springs, where the nursing home was under construction. We had hoped to use the electrical equipment of this home, and a 50-watt transmitter kindly presented to us by A.W.A., in more extended tests; but in that part of the world man merely proposes! Mr. Towns' time expired long before the extra gear could be installed, and my attention



The transmitting plant designed after much experimentation as the most suitable for the needs of the bushman.

had to be concentrated on day-to-day difficulties in building, etc.

Meantime, however, we were prosecuting our search for the ideal transmitting set for bush use, i.e., something independent of a car, and inexpensive; but in this search we were far from satisfied. Finally, I decided to try a compromise, viz., crude "I.C.W." transmitters, capable of Morse signals only, for our bush friends round about a centre which would be equipped with a fairly powerful 'phone set. Under this arrangement, all outgoing messages could be sent by voice, obviating any difficulty in reception by inexperienced listeners; the bush folk would have to Morse inward messages, but these could be called back by voice for them to check, which seemed to promise reasonable freedom from errors.

The "I.C.W." transmitter draws its high-tension current from a spark coil provided with the usual make-and-break. The wave is not truly

continuous—hence the name, short for "interrupted continuous wave"—and is of no use for telephone purposes. But the advantage of driving the whole transmitter from a six-volt battery was irresistible. I now set out to find a suitable primary battery, and decided eventually to test out Edison cells as used extensively in automatic railway signalling. These have a low voltage, only 65-volt per cell, but their duration of 500 amp-hours, with absolute "rest" when not actually in use, makes them most attractive.

The Radio Department kindly extended the original permit issued to me, and last October, in company with Mr. A. Treasurer, of Adelaide, I set out again from Oodnadatta for a test of bush wireless on above lines.

We were now able to make ourselves comfortable in the engine room of the nursing home at Alice Springs, so we set up the 5 horse-power Lister engine, and 32-volt house-lighting outfit, and assembled the 50-watt transmitter on the opposite side of the room (13 x 15, ample for an experimental wireless station). After various tests, the 50 wattier was tuned to 89 metres, on which Mr. Harry Knuper (our Adelaide Wireless Foster-father) was able to hear clearly both voices and music. A spare spark set was tuned to 89 metres, for use in case of a hitch, and another small transmitter, tuned to 30 metres, and with separate aerial, was provided for work with distant amateurs. Thus 8 A.B. was born.

One of the crude "field" transmitters was installed at Hermannsburg, 80 miles west (8 A.D.), the other at Arltunga, 70 miles east (8 A.E.) From the latter, we worked the former direct on both mornings while we were installing the station. A third had been intended for a station



The bush ambulance Aeroplanes summoned by Radio may be used in the future.

(8 A.F.) in another direction, but we find it advisable to keep that outfit for use as a standby in 8 A.B.

Unfortunately, our friend at Arlington had to leave for a long journey just after the station was set up. But from the completion of our system until our departure, messages were exchanged daily between Alice Springs and Hermannsburg. Signals were always clear about sunrise, generally more or less satisfactorily except between 9 a.m. and 3 p.m. Some evenings were hopeless, but we were operating in the worst time of the year—late November—before everything was going properly. We had to leave this happy experimental ground early in December. We realise that nothing is yet definitely attained, but feel confident that, in one way or another, the day is drawing near when the bushman of modest means will be able to send messages over the air, to be relayed anywhere on the planet. Meantime, he is beginning to listen-in, and thus increase the joy of life.

It was in 1912 that the Australian Inland Mission was founded by the Presbyterian Federal Assembly. Prior to that date, the various State Assemblies had been conducting some mission work in the isolated regions of our island continent, and this work included one Nursing Home at Oodnadatta, the then terminus of the North-South Railway line—which commenced to move forward another stage only on January 21st of this year. A special feature of all the early mission efforts was the distribution of literature.

The revenue to keep our beneficent wheels turning is provided almost entirely by what we call our "Inland Legion" of backers, who make a habit of sending along a cheque once a year. Originally Presbyterians, for the most part, the Legion now comprises many hundreds "of other creeds or none"; all sorts and conditions of Australians whose battle cry is **THE BEST FOR THE BUSH!**

At the moment, with strong assistance from the H. V. McKay Charitable Trust, we are organising an experiment with one Flying Doctor for the interior. Since 1917 we have advocated an Aerial Medical Service of about 10 doctors equipped with aeroplanes and pilots (by arrangement, preferably, with existing aerial mail organisations, thus ensuring continuity), and it is a great joy to us that at last the scheme is to be given an actual test. It has been calculated that the test, with one doctor and equipment for one year, will cost anything up to £7,000; this amount is being provided without any appeal to the general public; but, in the event of success in this demonstration, we hope to see a big drive to launch the complete scheme next year.



THE BISHOP OF LONDON will arrive in Sydney during February. 2FC hopes to broadcast his speech at Sydney Town Hall on the occasion of his welcome.

MR. E. J. VAN DE VELDE will give a further proof of his versatility by dispensing some Q. Henry humor on Thursday night, February 10.

MRS. JORDAN will talk on "Simple Cooking for Children" at 2BL on Saturday, February 5, during the morning session. Following the usual day features, there will be a talk at night by Mr. Howard O'Hagan on "Trapping in Canada."

THE SWEET TONED DULCITONE, so suitable for broadcasting, will be heard on Friday, February 11, when Mr. Ewart Chapple, who selects numbers specially suitable for this delicately toned instrument, will provide a group of solos during the afternoon programme.

NEW ARTISTS at 2BL include Miss Eily Dalgleish, Sourette; the Tripoli Duo Steel Guitars; R. Elwood Aray, Tenor; Dick Matthews, Comedian; David Smith, Baritone; Herman Tremayne, Basso, and Stan Hudson, English Light Comedian.

A FEATURE of the programme at 2BL on Sunday, February 6, will be the broadcasting of the Railways and Tramways United Choirs from Manly Beach, in connection with the Manly Jubilee Carnival. The night programme will open with the broadcasting of the service at the Baptist Church, Petersham.

IN CONJUNCTION with Miss Annie Hughes, 2FC is preparing a humorous sketch dealing with the trials and tribulations of Mary, who visits Paris. Her adventures will be given on Saturday night, February 12, when her experiences in a French Restaurant will be described. Assisting artists will be Mr. James Donnelly, Mdlle. Marie Segur, Mr. Ewart Chapple and the 2FC Dance Band.

MR. W. F. JACKSON, Headmaster of Sydney Grammar School, is continuing a series of talks commenced last year, dealing with Rome, the Eternal City.

A NEW DANCE BAND will be heard from 2FC on Tuesday, February 8, when Alf. Tremain will bring his music makers to the Studio. He will also play on Thursday night, February 10.

CLEMENT MAY, the well known Dickens' character actor, popular alike with theatre goers and listeners, is in Sydney at the moment, and will appear at the Studio on Monday, February 7.

2FC HOSPITAL CONCERT PARTY will visit the N.S.W. Industrial Blind Institution on Thursday, February 10. Now that all the hospitals have radio sets, those patients who cannot come to the ward where the concert is being held, can listen in and enjoy it, from their beds.

RACES DESCRIBED IN RUNNING: The 2FC Racing Commissioner will describe Canterbury Park races on the afternoon of February 5. There will be a very full sporting programme transmitted from the studio, interspersed with musical items between races.

ARTHUR MASSEY, the well known Sydney organist and musician, has been giving regular organ recitals from St. Clement's, Mosman. 2FC have arranged to broadcast his recital on Monday evening, February 7. Associated with him will be Mr. Bryson Taylor, the well known tenor, and Mrs. A. Newton, violinist.

THE MUSICAL GARDINERS: The engagement of the "Musical Gardeners," who are shortly to broadcast from 3LO, will introduce listeners to a talented family, and to some unusual instrumental selections. Each member of the family is a finished performer on his particular instrument, and quartettes and duets figure largely upon their programmes.



**Lively Jack
Kookaburra
who will
broadcast
from 2FC on
February 8.**

HE laughs best who laughs last, according to an old proverb, but when Jack Kookaburra, a new artist at 2FC, and Corporal Phillips, the famous bird imitator, get together at the Studio next Tuesday, February 8, not even the wisest sage will be able to tell who laughs best, for how will he know who laughs last?

This novelty programme has already been rehearsed, as our cover picture shows, and it promises to be one of the most amusing broadcasts from that station for a long time. Mr. Oswald Anderson, manager of 2FC, having heard both Jack and Imito, defies any listener-in to tell one from the other over the air. A contest between the two will take place and listeners will be invited to guess which is which. Prizes will be given for correct answers.

This will not be the first time the laugh of a Kookaburra has been broadcast, that honor belongs to JQG, but it will be the first time that a Kookaburra has been mentioned in the programmes, as an artist scheduled to broadcast at a certain time. That is the real secret of this programme, the discovery of a real bird that will laugh to order.

The find is due to Mr. Thomas Holms, of Little Elswick Street, Greenwich, who, reading in "Wireless Weekly" that 2FC was looking for a Kookaburra, wrote explaining that his daughter had a pet bird that would

He Laughs, and the World Laughs with Him

laugh whenever she gave the signal. To demonstrate its remarkable talents Mr. Holms and his daughter visited 2FC. Jack—he couldn't have had any other name—proved to be a brown active Australian, spirited and independent. Perched on his mistress' hand, he surveyed the world with suspicion through beady black eyes; he refused with pointed beak to be handled in an undignified manner; his well-shaped head was cocked defiantly on one side and his whole attitude seemed to say in the very best Australian: "Cut it out, or I'll go the lot of you."

The microphone troubled him not a whit—he just laughed at it. A throaty laugh, with a touch of scorn in it. To say that he was devoted to his mistress would not be strictly correct, for he was singularly reserved in this direction and did not display his affection openly, as does a dog or a horse. Perhaps his attachment may be best described by stating that he did not resist her touch, nor did he gaze on her with that cold, questioning eye. However, Miss Holms, who is just 16, was not so reticent.

"Jack and I are the greatest of coppers," she said. "It is just 15 months since Dad found him at Liverpool in a nest in a fallen tree. He brought him home and Jack has remained around the house ever since."

"He has taken a pride in the place, and the mouse or lizard that ventures out of its hole while he is about is unlucky indeed. He is very brave, too, for I have seen him defy much larger animals than himself. He has always been tame, and has never shown the slightest fear of any member of the family, although he is strange and aloof in the presence of visitors."

"He is almost vain in some things, and always keeps himself spruced up—in fact, he is the cleanest bird I have ever known. Every morning he hops voluntarily into his basin of water, and gives himself a real

shower bath, sending the water splashing everywhere in great enjoyment."

"One remarkable thing is that I have never known him to laugh when there were other Kookaburras about. He just eyes them as they go past and seems to say: 'Come down into my yard and see what you get.'

"However, Jack will always laugh when I give a little gurgle at the back of my throat; I trained him to do so every time, I fed him when he was a baby, and I do not think he will fail me when he broadcasts."

Corporal Phillips, who will give laugh for laugh with Jack, is a well-known imitator of birds and animals, and has appeared on the Tivoli and Union Theatre circuits. His powers of mimicry are remarkable, and he is a regular broadcaster. Responding to requests from listeners, he gave 35 different calls from birds and animals, from the Studio recently, even imitating for the benefit of one small tot who wrote in, a bird with a wooden head and rubber feet.



**Corporal Phillips,
the bird imitator.**

The Safety Valve

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



IS THIS AN "S.O.S."?

Dear Sir,—Would it be convenient for you to arrange to broadcast from 2FC and 2BL for me? I am a lonely bushman, and wish to meet a lonely girl with a view to matrimony. She should be between twenty-one and thirty years of age, good-looking, cheerful, and loving.

I am twenty-eight years of age, 5-ft. 11-in. in height, a total abstainer, and a very moderate smoker.

Yours, etc.,

D.O.B.

[The broadcasting companies prefer to confine their S.O.S.'s to cases of the life and death order. We hope this one is not regarded by the writer as coming within this category.]

TOO MUCH SPORT.

Dear Sir,—I submit that in this country, particularly in Sydney, too much time is taken up in broadcasting sport. What is more monotonous than a whole afternoon spent listening to a so-called description of a cricket match: "Malley is bowling from the Southern end"; three minutes' pause; "The score is now 122 for 4"; three minutes' pause, and so on from 1 p.m. to 6 p.m.

Many people have only a Saturday afternoon to enjoy their wireless hobby, and one station notably broadcasts nothing but racing news, skaters, colors, etc., etc. in the most monotonous voice I have ever heard over the air. And with best imagination one cannot get a thrill from such a description. Later in the evening over comes "News Session." It comprises another half hour spent in racing, cricket and tennis, and three to five minutes only for real news items. What interest can be found in hearing the occasional whirr of engines in a Speedway contest is beyond my imagination.

I am very fond of cricket, and other sport, and look forward to hearing first figures, but this running description is really cheap broadcasting. A whole day and sometimes two or three spent in this manner no doubt reduces fees for artists and copyright, but really it is most unfair on the average listener.

Yours, etc.,

"REFLEX."

Exeter.

WHO PAYS FOR BROADCASTING?

Dear Sir,—Why wonder why radio is not more popular in the country? In the first place, the average country man is an early riser, and, therefore, cannot sit up late every night. He can spare an hour, however, during the day, but since the adoption of short waves, daylight reception is nil.

Then there is the cost of the sets. The majority of city and suburban fans can manage O.K. with a crystal or one or two valves; the country man must have at least three valves for decent reception, plus an accumulator. Compare the expense of the cost of radio sets to the country man.

I have a three valve accumulator set, and generally pay about 3/- to 5/- to have the A. battery recharged at the local power house, and have paid 8/6, 9/6 and 12/6 to other charging stations when the power house has not been recharging batteries. When recharged, my battery works about 60 hours, then I have to take it 17 miles to the power house again, and if I send it by train it costs 1/6 each way; therefore, you see the country man has to pay much more than the city man to enjoy radio. Besides, when one is 300 miles or more from B.C. stations, consider the interference, X's, etc., that the country man has to contend with, which the city man knows nothing of. Why, sometimes we go a whole week without getting a decent listen in, so I contend that the country man is deserving of as much if not more consideration than the city man. I can safely say that the cost of radio to the country man is on an average about 10/- per month that is practically battery costs, only add to this part licence fees 2/6 you have 12/6 per month. Now, who pays most for the privilege of listening-in?

I am not condemning the B.C. stations, the majority of which have, and are, putting on splendidly arranged programmes, but it "gets my goat" to read such letters as "Hard on the city man" ("Wireless Weekly," 21/1/27), and to hear the city man assert that the country people are studied too much in radio.

Yours, etc.,

"LONG RANGE."

Mount Russell.

WANTS WALTZ MUSIC.

Dear Sir,—The vogue of the waltz has given to us many captivating tunes, and made some enviable reputations. One great musician has expressed the opinion that he would be far prouder to have given to the world Strauss's "Blue Danube Waltz" than his own more academic conceptions. A writer who has stepped to fame by medium of the waltz is Waldteufel. Why do we not hear more of him?

Yours, etc.,

G.J.M.

Punchbowl.

[Waldteufel's compositions have been broadcast from almost all the Australian broadcasting stations.]

IN PRAISE OF 3LO.

Dear Sir,—Not until the Sydney stations can give a better daylight service will there be a big percentage of country listeners, providing they cater extensively for the farmer. Why is it there is such a vast difference in the transmissions from 3LO as compared with 2FC and 2BL. Undoubtedly, 3LO is the most popular station in the country. In my estimation this is because 3LO is studying the listeners, while the Sydney stations seem to be trying to outdo each other, much to the detriment of listeners in general. I was not surprised at the licence figures, and if I had my way 3LO would get my fee, for if 3LO was off the air radio in the country would go flat.

Yours, etc.,

A.W.P.

Yenda.

ON THE OTHER HAND.

Dear Sir,—My friends in this district all report that 2FC is coming in well here now, daylight is very good. I am absolutely converted to the low wave. The other night statics were bad, so I had a go at 2BL first for the stock exchange as I was very anxious to get the call that night, static blurred 2BL right out, but with 2FC, the strength was so great that I got everything, in fact the static was hardly noticeable.

Yours, etc.,

RAWDON H. SUTTOR.

Tamworth.

Melba's Views on Radio, She May Broadcast

This week our 3LO correspondent analyses the views of Dame Nellie Melba on the subject of Broadcasting.

It is almost certain that she intends to sing over the air, he says.

I WAS interested in noting Dame Nellie Melba's remarks on the broadcasting of great singers.

Many of these rare birds have refused to broadcast, on the ground that to do so would mean the death of concert music. It has been said by certain interested parties, notably by Sir Thomas Beecham, who has already been bankrupted by his obsession for music, that broadcasting will mean the decay of music and the starvation of singers.

Melba does not agree with this dictum. Provided that the artist gets a suitable recompense for broadcasting, she can see no reason against it. She herself refused the offer of £1000 for a single night's broadcasting, but her reason lay in her doubt of whether the practice was tending, rather than to her definite decision that it was evil in itself.

Her views may be summarised thus: If the small artist, the singer with a reputation as an ordinary concert performer, accepts such a small fee as to set a standard for broadcasting, the result will be disastrous. Concert work will be doomed. Reasonable fees, on the contrary, will help the artist, and concert music will not suffer in consequence.

If what Melba says she will do, it is possible that money will not be a great factor in inducing her to sing through the microphone herself. She has expressed her desire that the people in the Outback shall hear her voice, before she gives up singing. She has said that she regards wireless as an enormous boon to these lonely lives, the deprivation of such necessities as music being their chief cross. It is almost certain, then, that she intends to broadcast. This will possibly occur only after the conclusion of her concert tour throughout Australia, which begins on March 2 in Tasmania.

It will be a truly historic occasion when the voice of the world's greatest singer is heard through the microphone in Australia for the first time. With the constant development in wireless, it is probable that it may yet be heard by the world, through the 3LO studio in Melbourne.



Takahiro Saito and Katsuo Takahashi, the Japanese swimmers broadcasting from 3LO during their visit to Melbourne.

MUSICAL TASTE.

It was an extraordinary outburst in England the other day that declared wireless to be a curse to music and to be degrading public taste. The occasion was the speaker's lament over the falling off in attendances at the Albert Hall concerts.

To blame wireless for decadence in taste is sheer stupidity. Musical taste consists of two things. The first is acquaintance with the best in music; the second is recognition that they are the best. If Broadcasting for three years was shown to have been followed by an ever-increasing demand for wretched, paltry stuff, the indictment would lie. But it is far otherwise. A study of programmes for the last three years, both in England and America, and it may be added, in Australia, shows that there has been an increasing improvement in the class of music provided. This improvement is not due to the taste of the director of programmes. It comes as the result of a demand on the part of the public for better things. I have known many instances—personally of people who did not know of the existence of certain fine pieces of music hearing them on the wireless, first admiring, then liking, then loving them with consequent distaste for the "Pretty-melty" Ping "bits" of the dancehall and the musical comedy, which stale in a few hearings. Observers like Dr. Flood, the organist at the Cathedral, tell the same tale. In their voluminous correspondence is ample evidence of im-

proved taste. Working-men, clerks, professional men and women, are developing a sympathetic understanding of music of good class, which previously they had not shown, because they had not heard it.

To take one example, 3LO Broadcast the Messiah recently. Few people not of a musical bent would go across the road to hear an oratorio. They think it "high-brow," "wishy-washy," church music without the excuse of church. Through the wireless they are induced to listen to some of it without realising what it is. Instantly, it grips them, and their first impulse to tune out becomes a determination to hear it through. Numerous people have expressed, in letters and verbally, their appreciation of music like this. Does not all this show a developing taste, an ability to separate the chaff from the wheat? Only blind prejudices could come to any other conclusion.

WHILST VICTORIA gasped for breath in the grip of its recent heat wave, the mind of the studio manager of 3LO Melbourne was taken off his own discomfort by the receipt of a letter from the Mallee district. "The temperature has been gradually rising from 110 degrees on Monday to 116 degrees on Thursday," wrote the correspondent. "To-day, it must be 120 degrees. A sand storm is just blowing up—our drinking water is just on boiling point, and what wouldn't we give for an ice cream. Thank heaven for the biggest blessing to us—the wireless."



Miss Eileen Boyd, broadcasting from 2FC on February 5.

WESLEY CHURCH CHOIR. Arrangements are being made with Mr. William James and the Wesley Church Choir to contribute to the Sunday night programme from 3LO. Nothing definite has yet been decided upon, as to how often we may expect to hear them, but it is hoped they will often pay a visit to the Studio, as Choral music of such a high order is all too infrequently broadcasted.

THE METROPOLITAN QUARTETTE Consisting of Mr. A. L. Champion (tenor), Mr. A. G. Ellis (baritone), Miss Marie Cook (soprano), and Miss Mary Bourke (contralto), has been associated with 2FC for the past two years, during which time they have prepared and broadcast—in many cases for the first time in Australia—a great number of remarkably good song cycles. On Monday evening, February 7, they will give Liza Lehmann's "Songs of Britain." Their work is always consistent and shows evidence of much rehearsal, and attention to blending and quality of the voices on the air.

MISS EILEEN BOYD. Listeners generally will not recognise in the singing of Miss Eileen Boyd, now appearing at 2FC, the little personality very much before the Australian public some years ago. Miss Boyd in those days was billed as the little girl with the big voice, and appeared for J. C. Williamson in various pantomimes and variety shows. Her sojourn in the Old Country turned out to be a very successful one, and her powerful voice was frequently heard in the principal London concert halls, and in association with many of the well known musical Societies in Great Britain. Miss Boyd, who has been in retirement for two or three years, has been attracted by the lure of the microphone, and is a happy addition to 2FC singers.

IT'S ALL IN THE AIR

Coming Features in the
Broadcasting Programs

ON FRIDAY, FEBRUARY 4, there will be much of interest in the morning session at 2BL, including a talk by Miss Varley on "Walking Tours," and one by Mrs. Jordan on "Feeding the Family," in which many useful hints for the mother will be given. In the evening, Mr. Cooper will talk on "Gardening Science," this will be followed by a musical programme.

ALTHOUGH the City Organ at Brisbane has been dismantled, and is being sent to England for overhaul, the monthly organ recitals which are given by the City Organist (Mr. George Sampson, F.R.C.O.) will go on as usual. The use of the organ in St. John's Cathedral has been secured and Station 4GG will broadcast the excellent recitals which Mr. Sampson provides as usual.

MR. HERBERT OPPERMAN: Cycling fans will welcome the news that 3LO has made special arrangements with Mr. Herbert Opperman, the well known record breaking cyclist, to give a series of short talks on this particular sport. Descriptions of the six day cycle races, which are to take place at the Melbourne Exhibition, commencing on February 21, are also to be broadcast.

ON WEDNESDAY, February 9, 2FC energies will be bent in one direction; from 9.30 p.m. until 11.30 p.m., listeners will be taken through every stage and phase of a trip from Sydney to London, aboard a palatial liner. As the shores of Australia fade away in the distance, life on shipboard will be faithfully carried out. Realism of a storm at sea (and it is even rumored a special mal de mer sketch is being written), then the arrival at Colombo, with all the noise and bustle of this busy place—there is no end to the possibilities of such an idea. The liberties taken in a sketch like this would make the average stage producer tear his hair in disgust, but there are no limits in the radio world, and listeners who enter into the spirit of this adventure simply give themselves up wholeheartedly to the enjoyment of it.



Miss Suffro Arnot, wife of famous Australian pianist, William James, who sings from 3LO.

RADIO CARTOONS AS A NOVELTY ITEM: On Monday, February 7, Kerwin Macgrath, the young Adelaide cartoonist, who has successfully drawn a number of radio personalities as well as commercial people in Sydney, will attempt to get over the air with humorous radio cartoons. This development will be watched with interest. Nevin Tosseau, the well known "Poster King," successfully held the interest of listeners for ten weeks with poster drawings.

MRS. BUNNY'S TRAVELOGUES: The army of child listeners to 3LO are at present being conducted on a tour to England and back through the medium of Billy Bunny's Sunday night talks. Mrs. Billy Bunny (Mrs. Horace Book) is on her way to London, and from every port she writes a letter describing the voyage and its incidents, together with instructive descriptions of the various places visited. All the letters are addressed to the 3LO children, to whom they are delivered all in one breath by Billy Bunny at the conclusion of his birthday messages and stories.

BANDS MORE POPULAR THAN EVER: A representative of 2FC travelling through various districts of N.S.W., proved that band items are firm favorites. The Studio management of 2FC were wondering whether band music was being overdone, but when such combinations as the Mauly Band, consisting of, from thirty to forty first class musicians, the N.S.W. State Military Band, Leichhardt Band (Champion of N.S.W. for 1926), the Metropolitan Band, and the Congress Band are heard over the air, it is realised that the music from these bands is of such a high order, they are very welcome in broadcasting programmes.

NOW what has gone wrong with my set? This is a question which one asks oneself at times. It is disconcerting in the extreme when a radio receiver which has been functioning satisfactorily, suddenly refuses to work, or perhaps loses volume or develops mushiness. Things like this always happen when you have invited some friends to come and listen in. It puts one in an awkward position, but it must be faced.

One of the most difficult faults to trace is the total absence of signals when the set is put on for the first time. If the receiver has been purchased ready built from a reliable trader you may depend on it having been thoroughly tested before being sent to you, so the fault will invariably be found in the external connections. Check over all the battery (a wrong connection will be found. Often this wrong connection takes the form of the B. battery minus being connected to the B. battery positive terminal.

Adjust this external fault and try again. If nothing happens, make sure that the local station is broadcasting. Many a fruitless half hour has been spent in frenzied efforts to tune in a station, which is not on the air. We laugh—afterwards.

Perhaps, in transit, some wire inside may have become disconnected. In a case like this, refer back to the dealer who sold you the set. He will fix it.

But the person who has built his own set will have to check over all connections. It is a very easy matter to miss one wire. In a Neutrodyne, for example, a common fault lies in forgetting to connect the moving plates of the detector coil condenser to the positive A. battery. Still, after checking and after being satisfied that the wiring has been carried out satisfactorily, look to the valves. See that every valve lights up correctly, or if of the cold emitter type (such as B406 and Cossar Point One, valves which don't light up), test the fila-



Fault Finding

By W.L.H.

ments for continuity. If a B406 valve link a pair of phones and a 44 volt C. battery in series, and test. Now, understand this clearly. Place a C. battery on the table and connect one phone tip to one terminal of the battery, say the positive terminal, for argument's sake. The negative terminal of this battery should have a length of flexible wire, say 6 inches long, connected to it. To test the valve, attach to one leg of the valve filament pin the remaining end of the flexible wire, and tip the remaining filament pin with the remaining phone tip. If the filament is intact, a click should be heard on the phones when this contact has been made. No click, of course, indicates that the filament is broken and the valve should be discarded.

Another common fault lies in the filament of the valve leaning on the grid. Test for this by connecting up as mentioned in the above paragraph, but this time touch the remaining phone tip to the grid pin of the valve. If a click is heard, discard the valve. It is proof that the filament is leaning on the grid, thus rendering the valve useless. Of course, if no click is heard, the valve should be quite alright.

Another annoying trouble is found in the receiver working very nicely

for a few moments, then going on altogether. This is often produced by the filament when heated falling across the grid. It will seldom be detected by the test described in the preceding paragraph.

Battery trouble is a constant source of annoyance. Run Down A. batteries and worn-out B. batteries are easily detected. A good voltmeter, with a double reading scale, with a top scale reading up to 8 volts and a bottom scale reading up to 60 volts, is a handy acquisition. Test the B. batteries frequently, under load, of course, that is to say, when they are connected to the receiver which is working. If the voltage is too low, weak signals are the result.

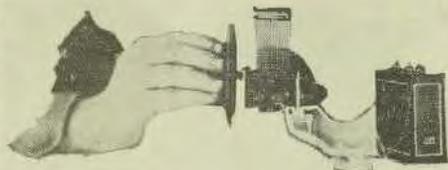
If the A. battery comprises dry cells, the voltmeter test is quite good. A sure indication that both A. and B. battery dry cells have outlived their usefulness, is a bulging or blistering through the cardboard pointing out that the zinc container has worn through. The life of dry cells is dependant on the life of the zinc containers, which when punctured or eaten away, place the battery beyond further use. This applies to all types of dry cells, both for A. and B. batteries.

To prove that the B. battery is being correctly applied to the plates of the valves an uncomfortable "plonk" should be heard on the phones or registered in the speaker when either of these parts are connected. The absence of this should cause you to look around the B. battery circuit for something wrong. Perhaps the contact to the jack is disconnected. Look closely for this, as it is frequently very difficult to locate a disconnection of the busbar at this point. Sometimes again a double circuit jack is faulty, thus precluding the B. battery from reaching the plate of the valve governed by that jack. If the two inside springs don't make correct contact with the two outside springs no B. battery will flow. Look to this. Again, fluxite or some other foreign material, may be smeared across the insulating

materials at the end of the jack, or a drop of solder may be shorting all. In the latter event, the B. battery will flow to the valve alright, but from the point of view of listening in on that particular jack it will be useless.

Reverting back, remember if the "plonk" is heard when the phone or speaker is connected, the fault lies in the wiring. A broken connection, or a faulty component, may be the cause. Look for the broken connection, then if the trouble is not sure, seek the fault in a component. If audio frequency transformers are used, it may be that the trouble lies here. Perhaps a primary has broken down. Test for continuity. Connect the phones and C. battery as described earlier in this article, and connect one side of the flexible wire to the P terminal of the audio frequency transformer and touch the B. terminal of this transformer with the remaining phone tip. If the primary is intact, a loud click will be heard, but on the other hand, if it is faulty, only a faint scratching noise will be heard on the phones. If the click is present, the primary winding is O.K., so leaving the flexible wire connected to the P. terminal of the primary tip, the phone tip on one of the secondary terminals, either the G. or F. If a click is now heard the trouble has

An A battery and a torch lamp will be found useful for testing variable or fixed condensers.



been traced. The fault lies in the insulation between the primary and secondary winding, showing that the transformer is faulty. Test the secondary of the transformer for continuity also, by joining the flexible wire to the G. terminal and touching the phone tip on the F. terminal. A click should now be heard, perhaps not as loud as the registration on the primary winding, but loud enough to be heard comfortably. The absence

(To be continued next week.) of this click proves that the secondary winding has broken down—a very rare fault, indeed.

In these days of battery switches the primary windings of many transformers go as soon as the battery switch is pressed to the on position. The surge of the B. battery is too great to be applied instantaneously with the effect that the primary winding—carrying the B. battery—breaks

down under the strain. While on the subject of transformer faults, always remember that if a high pitched untunable whistle results, one of two things is wrong. Firstly, the transformers may be too close together, and mounted parallel to one another. Keep A.F. transformers at right angles to each other always, unless a distance of 4 to 6 inches separate them.

Also when two different makes of transformers are used in one set it often happens that a whistle results, although each is at right angles to the other. This is a usual occurrence, and can be traced to the fact that all manufacturers don't brand the connections the same. Overcome it by transferring the P. connection of one transformer to the Bx connection, and the Bx connection to the P. terminal. Heigh! presto! everything is right again.

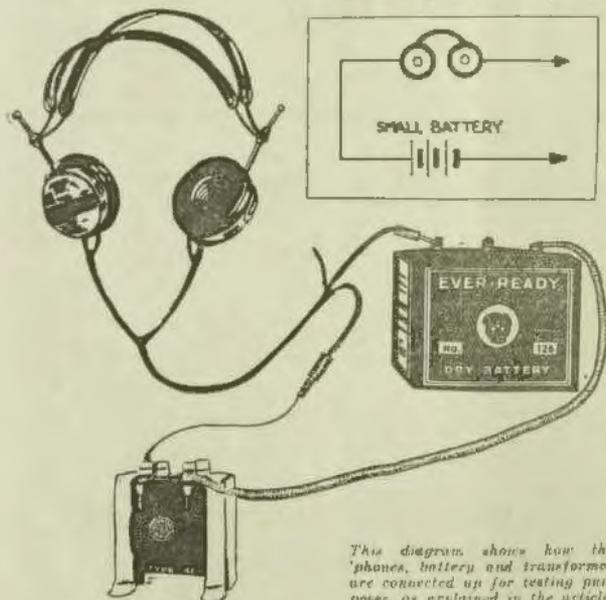
While on the subject, remember that English and American manufacturers employ a different method of describing connections in transformers. Compare these here:—

American.	English.
G.	O.S.
F.	I.S.
P.	O.P.
Bx.	I.P.

This will solve many a problem.

Frequently, a harsh scraping noise spoils reception. This is apparent when the condensers are turned and results from the moving plates touching at intervals the fixed plates. Prove this by obtaining a torch lamp and a C. battery. Connect one side of the torch lamp to one terminal of the C. battery, and join a short length of flexible wire to the remaining terminal of the battery. The other end of this flex join to the moving plates of the condenser in question. From the remaining side of the lamp join another short length of wire and connect to the fixed plates of the condenser. Slowly, rotate the dial, and if the lamp lights up the plates of the condenser are touching or shorting. Rectify this with the use of a table knife by separating that one, two or three moving plates, as the case may be, from the fixed plates. Simple to adjust, yet troublesome when not adjusted.

(To be continued next week.)



This diagram shows how the phones, battery and transformer are connected up for testing purposes, as explained in the article.

Wavelength Watch-dog for 2LO.

Check Lamp Lit by Waste Energy.

I WAS allowed a privileged peep recently at the wave-meter regulating 2LO's wavelength under the new European scheme, which came into operation this month (writes a London wireless correspondent). It is one of the first to be delivered from Brussels, the technical centre in sorting out the ether, and it represents the most perfect instrument of precision which radio science can produce. Captain Ecklesley, whom I found almost gloating over it, said the designers were to be congratulated on their work.

The wave-meter, the case of which is about big enough to enclose a typewriter, was brought to London with some care. It has been fixed in position in 2LO's transmitting room, and will not be moved. All the other British and Continental stations are to receive similar wave-meters, designed for their particular wavelengths.

"It is impossible to make a meter which would be accurate over more than a band of a few metres," Captain Ecklesley explained. "This one has been adjusted to the vibrations of a tuning-fork, whose movements were checked by the clock. It is designed for registering London's wavelength of 361.4 metres, which is equivalent to 830,000 vibrations a second. It is variable to the extent of 10 kilocycles either way, so that we can check a station which may be interfering with 2LO.

"Also it provides for any small change of wave which may be found necessary. Beyond this we cannot go and maintain exactitude. If we find that Gratz or Breslau is interfering with us, we can inform the International Bureau at Geneva of its exact error. And, of course, they can do the same with us. In this way the successful working of the plan can be largely assured by every station co-operating.

"The wave-meter shows by the glowing of a tiny lamp, or alternatively the heating of two tiny wires and the measuring of a current set up by their contact with two cold wires, exactly how a transmitter is behaving with regard to its wavelength. The lamp or the wires are heated by the energy set free in the transmitting room, and the former burns most brightly, or the latter gives the biggest reading on a measuring device when the circuit in which it is connected is tuned to the exact wavelength being transmitted."

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1 Polished Bakelite Panel, 14 x 7 x 1-8	0	0	3	1 Terminal Strip and 2 Black Terminals	0	1	0
2 000 μ New Quaker S.L.F. Condensers, at 2/9	0	19	8	1 5in. length of 3-in. diam. Dilecto Tube,	0	3	9
2 4in. Black Engraved Dials, at 2/4	0	4	8	1 3in. length of 24-in. diam. Dilecto Tube,	0	2	3
1 Ajax 30 ohm Rheostat	0	2	1	2 Mica Fixed Condensers, .0003, .0005, .001, at 1/6	0	4	6
1 Harle Adjustable Crystal Detector	0	7	6	1 Doz. Square Buswire	0	0	10
1 Ajax Valve Socket (199 type)	0	1	0	1 4-lb. Reel 20 D.C.C. Wire	0	1	0
1 Ajax Single Circuit Jack	0	1	6	1 4-lb. Reel 24 D.C.C. Wire	0	1	7
1 Pilot Neutralising Condenser	0	5	2	1 4-lb. Reel 30 S.S.C. Wire	0	2	7
1 Crescent 6 to 1 Audio Transformer	0	13	6				
2 Dubilier Mansbridge 1 M.F.D. Condensers	0	13	0				
1 Ajax Engraved Terminal Board	0	2	6				
				Total		£4	15 5

(Send for this list of guaranteed parts.)

You can substitute any of the following guaranteed parts with perfect satisfaction:—

	£	s.	d.		£	s.	d.
Advance S.L.F. Condensers, low loss .0005	0	10	6	Valve Sockets, for 201A or standard American base valves 1/11, 2/7, 4/- and	0	5	0
Dials, 3in., 1/5; 4in. Real Bakelite	0	3	9	Audio Transformers, Jefferson 41, 17/6; "Econotron"	0	8	6
Glass Enclosed Detectors, Catwhisker type	0	2	6	Radion Tubing, 3in. diam., polished, per in.	0	0	10
Argentite Crystals, highly sensitive	0	1	6				

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Of Extremely Sensitive Construction

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Phone U.W. 9601.

The Marvel Reflex Set

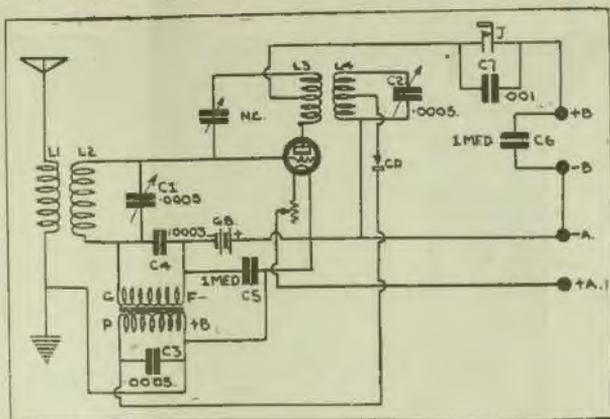
WITHIN half an hour of the completion of the Marvel reflex, all the local A, and B, class broadcasting stations were tuned in on a loud speaker. Marvel indeed, and this, mark you, with only 45 volts on the plate of a B406 valve.

The volume of sound was sufficient not only for the room, but for the whole house, and when 30 volts were applied to the plate, with 7 volts on the grid, you would have declared that a three valve receiver was operating. We are enthusiastic—we heard it, and we know that once you build and hear yours, you also will be enthusiastic.

Like all sets equipped with a crystal detector, the quality of music was of a very high order. Sweetness of tone is one of its splendid features. No background, no whistles, no grumblings, only good clear wireless reception, on the speaker and with one valve only. We cannot coin a word with sufficient superlativa to describe it. But we will leave it to you.

Circuits.

Let us analyse the circuit diagram to see just where this wonderful volume comes from. The energy from the aerial-earth system is conveyed from L1 to L2, and is tuned by means of C1 and impressed on the grid of the valve. So far we have radio frequency. The valve amplifies at this frequency, and the energy is passed on via the plate to L3, which, being inductively coupled to L4, transfers its energy there. Condenser C2 tunes this circuit (L4, C2) and the oscillations are passed to the crystal detector, where they are detected and alter in their characteristics from now on to audio frequency. After detection, the energy is now passed to the primary of the audio frequency transformer. The primary being inductively coupled to the secondary of this transformer, and as the transformer has from 3 to



The circuit diagram.

6 times the winding on the secondary as is on the primary, the voltage, plus energy, is stepped up in the secondary and passed on to the valve a second time, this time at audio frequency. The valve once again amplifies it, but being at audio frequency, it won't actuate the crystal detector again, but is sent straight through to the jack for the loud speaker. The fixed condensers across the primary and secondary of the audio frequency transformer play a most important part but we won't discuss the theory of

this. Still, understand that although one valve only is employed, we have one radio, a detector and one audio stage of amplification—surely enough.

Look now at the front panel view and view the neatness of layout. The two big dials are for the variable condensers, while the Lien Maxtone Detector is seen between these dials. That knob below the Maxtone is the rheostat which controls the valve filament. Excepting the jack for the loud speaker, nothing else is on the panel, all the terminals being behind, and on the baseboard. Thus, we have symmetry and neatness, which is of interest to many.

Construction.

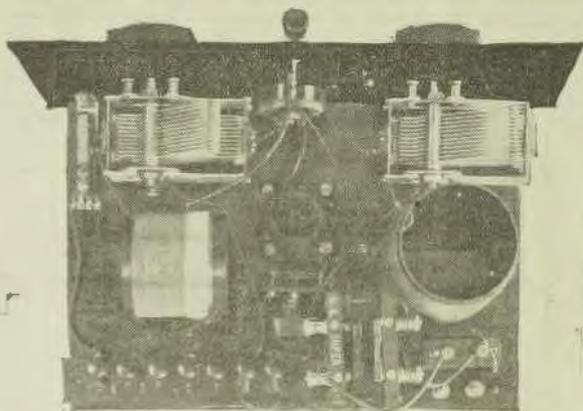
Now the construction of this receiver will prove very simple. Procure the list of parts specified and build this little "Marvel." The audio transformer should be a good one, preferably one of a well known brand, such as Ranland Lyric, Emmeo, Jefferson or Crescent, as quite a lot depends on this. If 1-8 of an inch panel is used, don't forget to obtain 6 washers of 1-8-inch thick to fit between the panel and the condensers, as these condensers are made for a 3-16 inch panel. Or if preferred, cut off each fixing screw a small portion, approximately 1-8 of an inch in length.

Coils.

Coil winding is an easy and interesting job. Here's the specification of the two coils used in the Marvel. Aerial—grid coil (L1 and L2)—Secondary—70 turns of No. 20 D.C.C. wire. Primary—12 turns of No. 25 D.C.C. wire. Primary wound over the "filament" end of secondary, Valve—Crystal transformer (L3 and L4)—

LIST OF PARTS FOR THE "MARVEL REFLEX."

- 1—Panel, Dilecto or Radion, 14in. x 7in. x 3/16in. or 4in.
- 2—.0005 Advance S.L.F. Condensers 2-4in. Dials.
- 1—Ajaz 30 ohms. Rheostat.
- 1—Lien Maxtone Crystal Detector.
- 1—S.C. Jack.
- 1—All-American Valve Socket.
- 1—Advance Neutralizing Condenser
- 1—Audio Transformer.
- 2—Dubilier Mansbridge, 1 mfd. Condensers.
- 1—Terminal Board with 6 terminals.
- 1—Terminal Board with 2 terminals.
- 1—Dilecto Tube, 5in. long by 3in. in diameter.
- 1—Dilecto Tube, 5in. long by 2in. in diameter.
- 1—.0003 Fixed Condenser.
- 1—.0005 Fixed Condenser.
- 1—.001 Fixed Condenser.
- 1—Baseboard, 13in. x 9in. x 4in. Quantity of Fort (Beldenmetal) Wiring Wire.
- Sundry Screws, etc.
- 4 ozs. of No. 20 D.C.C. Wire.
- 4 ozs. of No. 24 D.C.C. Wire.
- 1 oz. of No. 30 to 36 D.C.C. Wire.



The relative positions of component parts can be seen from this illustration

Secondary—65 turns of No. 24 D.C.C. wire, tapped at the 45 turn.

Primary—40 turns of No. 30 to 30 D.C.C. wire wound over "plate" end, tapped at the 20th turn.

Wound on the 2 1/2 in. former.

To go into details, pick up the 5 inches of 3-inch diameter Dilco tubing and half an inch from one end, drill two small holes and thread the beginning of the No. 20 gauge wire through each hole to hold it secure. Then wind on each turn close to the other 70 turns, finishing off in a similar manner to the beginning. Next pick up the 2 1/2 in. Dilco tubing and 3-8 of an inch from one end drill two small holes as you did with the 3-inch tubing, and thread through as before, this time using the 24 gauge wire. Wind on 65 turns, tapping at the 45 turn, i.e., the 20th turn from the bottom, then finish off as previously.

Now wind the primary over this. At the end of the secondary, below the tap, wrap around the secondary wire, a few turns of varnished cloth or good stiff paper, such as imitation parchment. This wrapping should be just slightly over half an inch in width. A wipe of gum or paste will hold this wrapping in position.

Right on the edge of the last turn in the secondary, drill two holes in the dilco to hold the primary wire in position, and then proceed to wind over the wrapping 40 turns of the No. 30 or 36 gauge D.C.C. wire, tapping off this winding and hold into place by applying a dab of sealing wax.

The aerial coil or primary of the aerial-grid coil (L1 and L2), comprises of 12 turns of No. 24 D.C.C.

wire, and is wound over a wrapping similar to that just described, but this time over the "filament" end of the secondary. All windings must run in the same direction. Sealing wax is a useful adjunct to the tool kit.

Panel Layout.

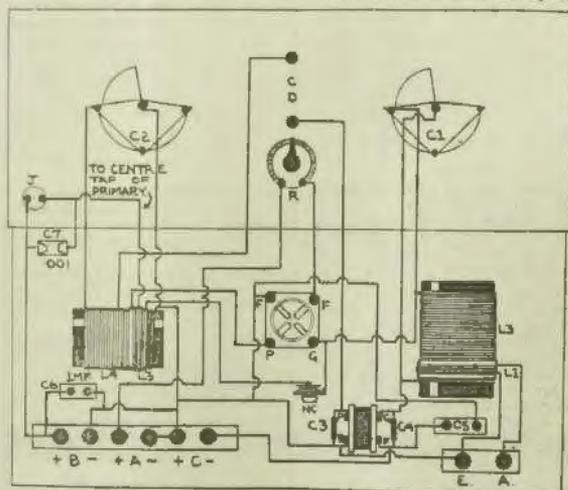
Now prepare a template for your variable condensers and mark out the panel in accordance with the diagram found elsewhere in this article. Centre punch all positions, first using

the template for the condensers and following the directions given in the box containing the Maxtone crystal detector to determine the holes for this splendid article. Drill the panel, taking care that the drill doesn't slip, and, providing three holes for fixing the panel to the baseboard. Mount the panel components and pay attention to the baseboard layout.

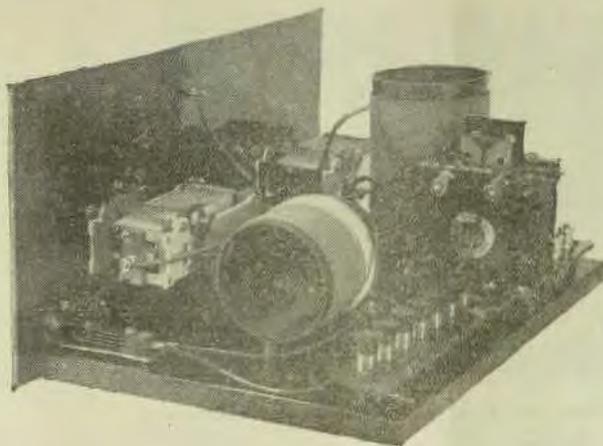
Baseboard Layout.

The plan view and the back of panel wiring diagram will assist the construction greatly in this matter. Still, a word of explanation won't be out of order here.

Temporarily fix the panel to the baseboard, and as close as possible to the first condenser (C1) place the aerial-grid coil (L1, L2), with the wire running horizontally, that is, with the circular portion of the primary end on the baseboard. Cut a small fillet of 1-inch wood, just big enough to fit tightly inside the dilco, and tack this fillet in position on the baseboard and fit the coil over it in position. At a distance of 1 1/2 inches away behind from the rheostat, screw down the valve socket with the filament terminals facing the panel. Close behind condenser C2 fix in position the radio frequency transformer L3, L4, this time mounting it at right angles to the aerial grid coil. Raise it off the baseboard with short pillars made from gin. fibre tubing or small blocks of wood, say, 1-1/2 in. high. Arrange this coil in such a way that the primary is at the end close to the valve socket. Immediately behind



The back of panel wiring diagram.

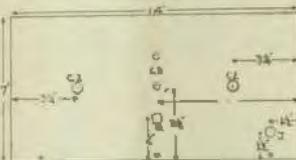


Another view of completed set.

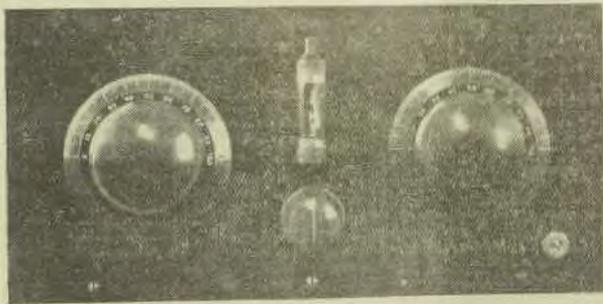
the valve socket fix the neutralising condenser with the plates facing the valve socket and the knob behind. Room for the audio transformer will be found behind the aerial grid coil—behind, yet close to the neutralising condenser. One of the Dubilier Manabridge condensers will be conveniently situated at the back of the aerial-grid coil—between it and the aerial and earth terminals. The remaining 1-mfd. condenser should be placed in front of the battery terminal board.

Fix all these parts to the baseboard and then proceed to wire up. Belden Fort insulated wire will prove very useful in this direction, as it is soft and pliable, and lends itself admirably to point to point wiring. The back of panel wiring diagram, to-

gether with the wiring instructions, will be most invaluable, so wire up from these, bearing in mind that the circuit diagram should be reconciled with both.



When all the wiring has been completed, check over to ascertain that everything is in perfect order, then hook on the aerial, and earth, A.B.



The front panel.

and C, batteries, plug valve into socket and attach the loud speaker. The rheostat when turned on supplies the filament with the power of emission. On turning both dials of the variable condensers C1 to 52 degrees on a 100 graduated dial, and C2 to 61 degrees on a similar dial, 2BL should be heard. These settings are approximate. Farmers 2FC should surprise you in volume. All other local stations are of particular interest, as will be proved.

The neutralising condenser is of some good use. Adjust this if an oscillation is present. A slight movement will lose all the squeals and whistles, and once set it need never be troubled again. But its inclusion is essential. The crystal detector is trouble proof, a slight adjustment being required now and again. Tested at Murrickville, the results mentioned at the beginning of this article were received. Splendid they were, and we are certain that all who build this will find they possess and wonder. It is worth owning.

4QG IN CANADA.

Each American mail brings dozens of letters to 4QG reporting excellent reception. Mr. P. G. Cox, of Cape Bamfield, Canada, writes as follows:—

"At the risk of becoming a nuisance, I must again write to let you know how much I am enjoying your nightly programmes, and at the moment of writing am listening to a particularly good one. That is of the above date at 3 a.m. that is, 9 p.m. same date with you. You are probably being flooded with notices of reception from this coast by this time, as I rashly published my experiences in the "Daily Colonist" of Victoria (Canada), and notice in that paper that several other listeners are now picking you up. In reference to your programmes, however, I would say the more I hear them the better I like them, in fact, they are the best we get from any station. Most of our stations flood the air with jazz and it is a pleasure to know we only have to wait a few hours to get a really well balanced, enjoyable programme from you. I consider your bands are the best I have heard on or off the air for very many years, and I notice your cornet players are artists at 'triple tonguing.'

"I am enclosing the programme of to-night's concert as I received it. It will be noticed that although I missed many of the names of the items and their performers, I did not miss any single item, naturally, the announcement is harder to hear than the selection itself, and I am "making it easy" some little way from the loud speaker. In fact, I am listening to and enjoying a good concert, not 'straining for DX' with headphones."



Atmospherics and Your Aerial

This photograph shows very clearly the composition of a thunderstorm. The advancing dark cumulus-nimbus clouds are loaded with rain and accompanying static is severe.

IN the early days of broadcasting—two or three years ago—fears were often expressed that it would not be a success in summer. In those days transmission had not reached the present-day standard. Since then, however, the transmission has improved both in methods of modulation and in the extent of energy radiated. The result has been that the volume picked up by the receiver is greater and clearer.

When the volume was weak, it was not unusual to find loud speakers in the summer months emitting more noise than music. The atmospherics were stronger than the signals everything sent out from a station on the carrier wave is conveniently termed a signal or signals, and the average listener, finding he was not getting a reasonably good reproduction of what he knew to be good music, lost his enthusiasm for radio in the summer. With autumn, the atmospherics generally die down; they are overcast when the atmosphere is hot and thundery. Certainly some enthusiasts kept at it; the novelty of the thing appealed to them, and the novelty of picking up music from a distance allowed them to overlook musical imperfections. As the charm of the novelty wore off with time, there was a real danger of radio under those conditions and with those drawbacks, losing its popularity.

The improvements in transmission and the design of receiving equipment has counteracted that tendency. A broadcasting station can now be expected to howl down the noise. It does this in metropolitan areas, at all events. The power of S.L.O., Melbourne, when that station is sent out a signal sufficiently

strong to drown the noise caused by erects its relay stations, will be sufficient in most country districts if the receiver is a reasonably good one, and the aerial system not too big.

A large aerial, that is, one with too much wire either by having too many wires or wire too long, should be avoided, if the signal is to be louder than the atmospherics. This is a somewhat relative statement, however. The larger the aerial the more it will absorb of the energy of the electro-magnetic wave that is floating about. From that it would appear desirable to have a large aerial in order to get more volume. That is true enough of such inefficient receivers as crystal sets and single valve sets. But we must also remember that the large aerial absorbs more static or atmospherics. We must, therefore, effect some sort of compromise.

The desirable condition for satisfactory and pleasing reception is to have as small an aerial as the receiver can handle. If we have a set that has good amplification—three or more valves—a large aerial is not needed. The small amount of energy that is absorbed by a small aerial can be amplified or boosted up to satisfactory volume in the loud speaker. Thus a set such as a 7 or 8 valve super-heterodyne does not need any outside aerial at all for reception from a long way off. It must have an aerial—a pick-up system or absorbing medium—of course, and this usually consists of an all frame of wire attached to the set.

For the average receiver a single wire aerial up to 60 feet long will give all the volume that may be de-

sired. Apart from the fact that a short aerial is not so apt to absorb such a quantity of atmospherics, it has also the quality of selectivity—a feature much desired by all.

The crystal set, on the other hand, cannot work on a small aerial unless it is very close to the transmitting station. There is no boosting or amplifying device in a crystal set. Thus a fairly large aerial system is unavoidable. But it should not be too large. There is no need to have more than one wire in the aerial, and its length should not normally exceed about one hundred feet. The crystal set owner must expect some trouble from atmospherics.

Fortunately, there is only a small percentage of crystal set owners in Australia—certainly not nearly so many as there are in Great Britain. In Great Britain crystal receivers are very much in evidence, but static is not so prevalent in that country as it is here.

Owners of valve receivers who are accustomed to interstate reception in autumn and winter will find some trouble in summer, unless they attend to the aerial and the set. There are some methods of minimising very effectively the static troubles.

But the best thing to do really is to leave the interstate stations alone and concentrate on receiving the local station. Its service will be good enough in any case, and a good deal better than the music-cum-noise received from the station in the other capital. Be satisfied with your local station or stations. You do not pay for any more, anyhow, when you get your license from the Post Office; the money paid for the licence goes to the local station or stations only.

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PILOT ISOGRAD MOULDED CONDENSERS.

	s.	d.
.001	3	0
.002	3	0
.006	3	9
.0005	2	9
.00025	2	9
.00025 with clips	2	9



This fixed Condenser is unique, inasmuch as it has screw holes for mounting by wood screws apart from the usual holes for terminals and connections.

Method of construction adopted completely protects the Condenser from moisture and the pressure of the securing screws does not affect the capacity of the Condenser.

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Straight Line Wavelength.

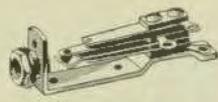
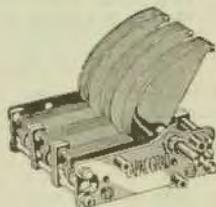
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No. 8123, 23 plate, 0 17 3
No. 8117-2, 17 plate, double Condenser, 1 14 6
No. 8117-3, 17 plate triple Condenser, 2 1 3



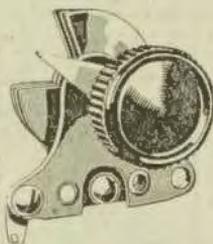
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Pilot Single Circuit Jack, No. 1161 ..	£0	2	3
Pilot Double Circuit Jack, No. 1182 ..	0	2	6
Pilot Single Filament Control Jack, No. 1163 ..	0	2	9
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The Pilot Kilogram vernier dial — calibrated both clockwise and anti-clockwise on the one dial — moulded in pure bakelite — with friction control — absolutely no backlash, and only



No. M.7. Midget condensers, 7 plate ..	5/9
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No. 910, 10 ohm Rheostat	0	3	9	No. 200 ohm Potentiometer	0	5	6
No. 920, 20 ohm Rheostat	0	3	9	No. 400 ohm Potentiometer	0	6	6

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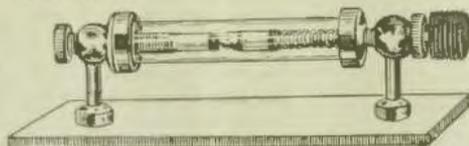
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Illustration of "Lion Micro" Detector.
Actual size.

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BROADCASTING PROGRAMMES

for the COMING WEEK



Friday, February 4
2FC, SYDNEY
 Farmer's Broadcasting Service.

Wave Length, 442 Metres.

EARLY MORNING SESSION.

- 7 a.m.—"Big Ben" and announcements.
- 7.5 a.m.—Music from the Studio.
- 8.10 a.m.—Official Weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, commercial news, mail services.
- 8.25 a.m.—Investment market, mining share market, metal quotations.
- 8.35 a.m.—Wool sales, breadstuffs markets, inter-State markets, produce markets.
- 8.45 a.m.—"Sydney Morning Herald" news service.
- 8 a.m.—"Big Ben." Music from the Studio.
- 8.15 a.m.—Close down.

MORNING SESSION.

- 9.15 a.m.—The Chimes of 2FC. Musical items from the Studio.
- 10 a.m.—"Big Ben" and announcements.
- 10.5 a.m.—Late "Sydney Morning Herald" news service.
- 10.15 a.m.—Music from the Studio.
- 10.45 a.m.—A Morning Reading.
- 11 a.m.—"Big Ben" Australian Press Association and Reuters's Cable Services.
- 11.10 a.m.—Music from the Studio.
- 11.25 a.m.—A Talk on Home Cooking and Recipes by Miss Ruth Finet.
- 11.50 a.m.—Close down.

MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.
- 12.5 p.m.—Stock Exchange, first call.
- 12.10 p.m.—Music from the Studio.
- 12.45 p.m.—FROM FARMER'S OAK HALL—Instrumental items by the Oak Hall Trio.
- 12.55 p.m.—Hasty wireless news.
- 1.05 p.m.—Miss Margaret Lescaut, soprano—"Vilna" (Lehar).
- 1 p.m.—"Big Ben." Weather Intelligence.
- 1.20 p.m.—FROM FARMER'S OAK HALL—The Oak Hall Trio (Leader, Mr. Horace Keats).
- 1.25 p.m.—Studio music.
- 1.30 p.m.—Stock Exchange, second call.
- 1.35 p.m.—Studio Music.
- 1.45 p.m.—Miss Margaret Lescaut, soprano—"Two Eyes of Grey" (McGeoch).
- 1.50 p.m.—FROM FARMER'S OAK HALL—The Instrumental Oak Hall Trio.
- 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 2.30 p.m.—The Chimes of 2FC. Music from the Studio.
- 3 p.m.—"Big Ben" FROM THE WENTWORTH CAFE—Items by the New South Symphonic Dance Orchestra, conducted by Mr. Hedley Simpson.
- 3.10 p.m.—FROM FARMER'S TEA ROOMS—The Oak Hall Trio.
- 3.40 p.m.—Miss Peggy Dunbar, contralto.

- 3.40 p.m.—The Oak Hall Trio.
- 3.55 p.m.—Studio Music.
- 4 p.m.—FROM FARMER'S TEA ROOMS—Miss Chris Hawkeford, soprano.
- 4.5 p.m.—From the Studio—A Music Talk by Mr. Kewar Chapple.
- 4.55 p.m.—FROM FARMER'S TEA ROOMS—Miss Peggy Dunbar, contralto.
- 4.55 p.m.—The Oak Hall Trio.
- 4.55 p.m.—Studio Music.
- 4.40 p.m.—FROM FARMER'S TEA ROOMS—Miss Chris Hawkeford, soprano.
- 4.45 p.m.—Stock Exchange Information (third call).
- 4.45 p.m.—Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—Chimes of 2FC.
- 5.50 p.m.—The "Hello Man" Talks to the Children.
- 6.30 p.m.—A Story for the older ones.
- 6.45 p.m.—FROM FARMER'S OAK DINING HALL—Vocal and instrumental items.
- 7 p.m.—"Big Ben" From the Studio—Last minute sporting information by the 2FC Racing Commissioner.
- 7.10 p.m.—Late "Evening News" news service and weather information.
- 7.25 p.m.—Balgate's Market Reports (Wool, Wharf, Stock), Fruit and Vegetable markets.
- 7.45 p.m.—Miss Vinda de Lotte—"Reminiscences of Gilbert and Sullivan Operas."

NIGHT SESSION.

- 7.55 p.m.—Announcements.
- 8 p.m.—"Big Ben." Broadcast for the first time, the famous Mexican Pianist, Don Alphonso Zelaya, in collaboration with Madame Elsa Strain, dramatic soprano, and Maxin Brodi, tenor. These artists will give a diversified programme.
- 8.15 p.m.—FROM THE LYCEUM THEATRE—"The Union Master Attraction."
- 8.25 p.m.—FROM THE STUDIO: Don Alphonso Zelaya, Franzel.
- 8.35 p.m.—Madame Rias Strain, dramatic soprano.
- 8.45 p.m.—Maxin Brodi, tenor.
- 8.55 p.m.—Don Alphonso Zelaya, Pianist.
- 10 a.m.—FROM THE LYCEUM THEATRE, SYDNEY—Items by the Orchestra, under the baton of Mr. Emanuel Axelson.
- 10.15 p.m.—FROM THE GRAND OPERA HOUSE—Items from the final scene of the Pantomime "ALADDIN" featuring Miss Dorothy Lena and Mr. Bruce Green.

MUSICAL NUMBERS:

- Song—"Waiting for the Moon" Billie Lockwood.
- Song—"Hong-Kong Dress" Andrew Hutchinson.
- Solo Dances—Eda Moorcroft, Fred McKay and Ballot.
- Duet—"Sunlight Bells" Dorothy Lena and Bruce Green.
- Specialty—Munroe Brothers.
- Specialty—Nells Harrison.
- Song—"Sweet Hawaiian Samis" Dorothy Lena and Chorus.
- Finale—Dorothy Lena and Chorus.
- 11 p.m.—"Big Ben."
- FROM THE WENTWORTH CAFE—The new Wentworth Symphonic Dance Orchestra, under the baton of Mr. Hedley Simpson, will play until midnight.
- 12 midnight—"Big Ben." National Anthem. Close down.

2BL, SYDNEY
 Broadcaster's, Ltd.

Wave Length, 353 Metres.

EARLY MORNING SESSION.

- 7.15 a.m.—G.P.O. Clock and chimes.
- 7.10 a.m.—Musical programme from studio.
- 7.18 a.m.—Physical training and health exercises.
- 7.25 a.m.—Hints on health.
- 7.30 a.m.—Physical training and health exercises.
- 7.45 a.m.—G.P.O. Clock and chimes.
- 7.45 a.m.—Weather report.
- 7.45 a.m.—Sporting information.
- 7.50 a.m.—Broadcaster's special news service.
- 8 a.m.—G.P.O. Clock & Chimes. Close down.

MORNING SESSION.

- 10 a.m.—G.P.O. Clock and chimes.
- 10.1 a.m.—Weather report.
- 10.3 a.m.—Musical programme from the studio.
- 10.20 a.m.—News service from the Daily Telegraph.
- 10.30 a.m.—Musical programme from the studio.
- 10.45 a.m.—G.P.O. Clock and chimes.
- 11.1 a.m.—News from the Daily Telegraph.
- 11.15 a.m.—Rabbit Market report.
- 11.17 a.m.—Fish Market report.
- 11.19 a.m.—Vegetable Market report.
- 11.21 a.m.—Fruit Market report.
- 11.23 a.m.—London Dairy Farm, Egg and Poultry Market report.
- 11.29 a.m.—Hints on call by wireless.
- 11.31 a.m.—Information re inter-State and overseas mails.
- 11.35 a.m.—Shipping information—arrivals and departures.
- 11.57 a.m.—Weather report.
- 12.40 a.m.—Women's Section conducted by Mrs. Jordan—Social Notes.
- 11.50 a.m.—Mrs. Jordan replies to correspondents.
- 12 noon—Talk on "Feeding the Family" by Mrs. Jordan.
- 12.25 a.m.—News from the Sun.
- 12.30 G.P.O. Clock and chimes.
- 12.35 p.m.—Sydney Stock Exchange Call.
- 12.38 p.m.—Sun Newspaper's news service.
- 12.40 p.m.—Munroe's Instrumental Quartet—direction, Caryl Cuffling.
- 1.20 p.m.—G.P.O. Clock and chimes.
- 1.31 p.m.—Weather report.
- 1.33 p.m.—Sydney Stock Exchange Cafe.
- 1.45 p.m.—Musical programme from studio.
- 1.50 p.m.—News from the "Sun."
- 2 p.m.—G.P.O. Clock and chimes. Close down.

AFTERNOON SESSION.

- Racing information broadcasted by courtesy of the "Sun."
- 3 p.m.—G.P.O. Clock and chimes.
- 3.1 p.m.—Weather report.
- 3.5 p.m.—Social Notes from the "Sun."
- 3.10 p.m.—News from the "Sun."
- 3.15 p.m.—Bell Service Stores Trio.
- 3.20 p.m.—G.P.O. Clock and Chimes.
- 3.31 p.m.—News from the "Sun."
- 3.45 p.m.—Musical programme from the studio.
- 4 p.m.—G.P.O. Clock and Chimes.
- 4.1 p.m.—Civil Service Stores Trio.
- 4.15 p.m.—Serial Story.
- 4.30 p.m.—Musical programme from the studio.
- 4.45 p.m.—Producers Distributing Society's Vegetable and Fruit Market report.



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4.50 p.m.—Shipping information when available.
 4.52 p.m.—Day's racing resume on race days.
 4.55 p.m.—News from the "Sun."
 4.58 p.m.—Resume of night's programme.
 5 p.m.—G.P.O. Clock and chimes. Close down.

EARLY EVENING SESSION.

5.45 p.m.—G.P.O. Clock and chimes.
 5.46 p.m.—Uncle George and the Kiddies.
 5.52 p.m.—The Pupils of Miss Monica Scully will entertain the Kiddies.
 6.10 p.m.—Musical programme from the studio.

SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. Clock and chimes.
 Australian Mercantile Land and Finance Co.'s Report.
 Weather report and forecast by courtesy of Col. Meteorologist.
 Stock Exchange Reports.
 Producers Distributing Society's Vegetable and Fruit Market report.
 Grain and Fodder report. "Sun."
 Dairy Produce Report. "Sun."
 7.15 p.m.—Country News from the "Sun."
 7.50 p.m.—A talk on "Gardening Science" by Mr. Conger.
 8 p.m.—G.P.O. Clock and Chimes. Broadcasters' Topical Hour.
 8.1 p.m.—Mr. Albert Carlisle, tenor.
 8.10 p.m.—Miss Hilda Walker, soprano.
 8.17 p.m.—Mr. Walter Champany, comedian.
 8.24 p.m.—The senior Sporting Expert of the "Sun" will talk on the prospects of Saturday's racing.
 8.44 p.m.—Broadcasters' Trio.
 8.54 p.m.—Resume of following day's programme. Weather report and forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist.

9 p.m.—G.P.O. Clock and Chimes.
 9.1 p.m.—Mr. Bruce Clarke, comedian.
 9.8 p.m.—Mr. Roger Jones, baritone.
 9.18 p.m.—Broadcasters' Trio.
 9.25 p.m.—Interval.
 9.40 p.m.—Mr. Albert Carlisle.
 9.57 p.m.—Mr. Walter Champany.
 10.11 p.m.—Broadcasters' Trio.
 9.54 p.m.—Miss Hilda Walker.
 10.18 p.m.—Mr. Bruce Clarke.
 10.25 p.m.—Mr. Roger Jones.
 10.45 p.m.—The Ambassadors Dance Band Broadcast from the Ballroom of the Ambassadors. During the intervals between dances news reports by courtesy of the "Sun" correspondents will be broadcast.
 12 midnight—G.P.O. Clock and Chimes.
 National Anthem.

2KY, SYDNEY

Trades Hall Broadcasting Station.

Wave Length, 280 Metres.

LUNCHEON HOUR SESSION.

12.15 p.m.—Tune in to the ticking of the clock.
 12.18 p.m.—Popular fox-trot, "Orpheus" Gramophone.
 12.25 p.m.—Musical Interlude.
 12.40 p.m.—News items.
 1.0 p.m.—Vocal items.
 1.16 p.m.—Hawaiian Steel Guitar Selections.
 1.25 p.m.—Union News and Meetings.
 1.50 p.m.—Lincoln Records.
 1.40 p.m.—Where to go to-night.
 1.48 p.m.—Closing Announcements.
CHILDREN'S HOUR
 5.30 p.m.—The Storyman, Mr. Thompson.

EVENING SESSION.

7.8 p.m.—Sporting features, Turf Topics; Review of candidates and their prospects for tomorrow, Mr. A. E. Powell.
 7.40 p.m.—Lecturers' Informal notes of the week, Mr. J. Ryan (Director Labor Research and Information Bureau).
 8.0 p.m.—Talk on motor cycle racing, Mr. J. S. Hooking.
 8.10 p.m.—Piano-forte Solos, Miss Monica Lacombe.
 8.20 p.m.—Soprano solos, Miss Edith Welsh

8.30 p.m.—Monologue, Mr. David Edelstein.
 8.40 p.m.—Musical interlude, Glaxierium Dance Orchestra; Billy Romaline, leader (by kind permission of Geo. Irving).
 9.0 p.m.—Soprano solos, Miss Lilla Stephen.
 9.10 p.m.—Sporting feature, Runside description of main contest from McHugh's Leichhardt Stadium.
 9.55 p.m.—Result of fight.
 9.56 p.m.—Music from the studio.
 10.0 p.m.—Closing Announcements.

2GB, SYDNEY

Theosophical Broadcasting Service.

Wave Length, 316 Metres.

MORNING SESSION.

"Cherrie Hour," conducted by the "Cherrie" Man.
 6.54 a.m.—Music.
 7.25 a.m.—Gladness Chat.
 7.50 a.m.—Music.
 10 a.m.—Home Betterment Topics.
 10.15 a.m.—Music.
 10.20 p.m.—Five minutes with Children at Home.
 10.25 a.m.—Announcements. Close down.
WOMEN'S NEWS SESSION.
 8.20 p.m.—Music.
 8.40 p.m.—Humanitarian Movements in Series.
 8.55 p.m.—Music.
 4.5 p.m.—News from Everywhere for Women.
 4.20 p.m.—Music.
 4.50 p.m.—Close down.
 6.45 p.m.—The Children's Session, conducted by the "Cherrie" Man.
 7.15 p.m.—Music.
 7.30 p.m.—Music from Studio.
 7.55 p.m.—Vocal solos by Dan Scully.
 8.3 p.m.—"Travel," by J. J. Van der Leuw.
 8.15 p.m.—Songs by Margaret Best:
 1. "Good Morning, Brother Sunshin'" (Lilla Lehmann).
 2. "The Little Dark Wood" (H. Oliver).
 8.25 p.m.—Instrumental Quartette (Dan Scully, Monica Border, Muriel Lang, Ada Brook).

8.35 p.m.—Address by Rev. Ernest Wood.
 8.40 p.m.—Violin Solos by Lloyd Davies.
 8.57 p.m.—Songs by Margaret Best:
 1. "The Violet" (Mazart).
 2. "A Little Birdie" (Fencial).
 9.5 p.m.—Announcements.
 9.15 p.m.—Instrumental Trio: Lloyd Davies, Muriel Lang, Ada Brook.
 9.23 p.m.—Selections from Opera with Short Talk: Ariadne: Hilda Boyd, Miss Francis, Mr. Wm. Green and E. E. Patterson.
 9.50 p.m.—"Cherrie" Talk.
 10 p.m.—"Great Thoughts from Great Minds"—GOD SAVE THE KING.

3LO, MELBOURNE

Broadcasting Co. of Aust.

Wave Length, 371 Metres.

MIDDAY SESSION

12 noon—Time Signal, British Official Wireless news from Rugby. Reuters and the Australian Press Association Cables, "Argus" and "Herald" news services.
 12.20 p.m.—STUDIO ORCHESTRA:
 "La Fousse de Novermber" (Adam).
 12.40 p.m.—Dr. ARNOLDO-BARTOLINI, Bari. (Italy).
 "Aria" from "Africana of Neluiki" (Meyerbeer).
 12.47 p.m.—Meteorological information, Stock Exchange information, Weather forecasts for Victoria, Tasmania, South Australia and New South Wales. Ocean forecast.
 1 p.m.—STUDIO ORCHESTRA:
 "Serenata" (Moskowski).

1.5 p.m.—THE MUSICAL GARDINERS, Instrumental Quartet: Percy Banjo and Mandolin Concerto, French Horn Solo (Mr. Geo. Gardiner), Steel Guitar, French Horn and Mandolin, Xylophone Duets.
 Greats Chimes Selection.
 1.20 p.m.—C. RICHARD CHUGG, Flute Solo:
 "Pastorale and Burres" (German).
 1.28 p.m.—Dr. ARNOLDO-BARTOLINI:
 "Si mes vives avaient des ailes" (Hab.).
 "Il Mio Pensiero" (Rotali).
 1.35 p.m.—STUDIO ORCHESTRA:
 "Berceuse de Jocelyn" (Godard).
 1.42 p.m.—THE ESTELLE MARK TRIO:
 Estelle Mark: "Here in the Quiet Hills" (Caran).
 Margaret Sheehan: "Value in A Major" (Levitich).
 Estelle Mark: "Bird Songs at Eveside" (Oester).
 Gella Kiduff: "Londolerry Air" (Old Irish).
 2 p.m.—Close down.
 Description will be given of the Ballarat Mines Races, the times of which will be announced.

AFTERNOON SESSION.

2 p.m.—THE STUDIO ORCHESTRA:
 "A Halloween Follies" (Lalor).
 2.5 p.m.—"Au Fall" of Buckley and Nunn, Ltd., in a Fashion Talk.
 2.20 p.m.—THE PREMIER FOURS:
 Little Irish Girl (Lansberg).
 "Inter Nati" (MacFadden).
 3.17 p.m.—STUDIO ORCHESTRA:
 "La Mamma" (Blenharn).
 3.22 p.m.—THE ROYAL SOITS:
 "My English Jack" (Lansberg).
 "Cam Ye by Athol" (Jas. Hugg).
 3.10 p.m.—THE AUSTRALIAN LAODIES' PIPE BAND, under the direction of: Drum Major W. FARWIN, F.R.G.S., Pipe Solo: Sergt. Eddie Buchanan, Song Drummer: Miss Jones, Pipe Solo: Pipe Major Dolly McPherson, Execution: Drum Captain, Lewis Bell, Australian Ladies' Pipe Band.
 4 p.m.—THE PREMIER FOURS:
 "All for You"
 "Bow Row, Bowin"
 4.7 p.m.—STUDIO ORCHESTRA:
 "Selection, "Old Dutch" (Herbert).
 4.21 p.m.—THE ROYAL SOITS:
 "The Killy Boys" (Walker).
 "The Rosebud Flower that Blows" (Hawley).
 "Boodle Mary" (Walker).
 4.27 p.m.—Mrs. M. CALLAWAY MAHOOD:
 "The Art of Metal Engraving."
 4.45 p.m.—"Herald" news service. Stock Exchange information.
 5 p.m.—Close down.

EVENING SESSION.

6.40 p.m.—CHILDREN'S HOUR. Answers to letters and Birthday Greetings by "BILLY BUNNY".
 6.50 p.m.—A Story for the little ones, by "BILLY BUNNY".
 6.5 p.m.—THE ESTELLE MARK TRIO, in Song and Music.
 6.20 p.m.—Songs for the bigger children, by "BILLY BUNNY":
 "The Queen Bee."
 "The Black Princess."
 6.45 p.m.—"Argus" and "Herald" news services. Weather synopsis. Shipping movements.
 6.47 p.m.—Stock Exchange information.
 6.57 p.m.—Fish Market reports, by J. R. Barrett Pty. Ltd.
 6.55 p.m.—River reports.
 6.58 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Hay-market sheep sales, Poultry, Grain, Straw, Hops, Lute, Dairy Produce, Potatoes and Onions.
 8 p.m.—Market prices of Oranges and Lemons by the Victorian Central Citrus Association.
 7.15 p.m.—Under the auspices of the Department of Agriculture, Mr. H. C. WILSON, Manager of the State Research Farm, Werribee, "Lucerne Hay Making"

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29 ROYAL ARCADE

NIGHT SESSION.

"CARDIGAN."

Mr. H. K. LOVE.

- Announcer ALFRED ANDREW
Accompanist AGNES FORTUNE
- 7.30 p.m.—STUDIO ORCHESTRA:
Overture.
"Yingala's Cave" (Mendelssohn).
7.40 p.m.—THE ROYAL SCOTS:
"Alma Oe."
"Will Ye No Come Back Again."
"Loch Lomond."
- 7.50 p.m.—LEN GIBSON'S NEAPOLITAN
SEXTETTE:
"Old time Melodies" (arr. L. Gibson).
Solo:
"Gaianna Waltz."
"Tosca Mio."
- 8 p.m.—Dr. ARNOLDO BARTOLINI, baritone,
"Vecchia Zimara" (Ducchi).
"Ho Sognato" (Bottoli).
- 8.1 p.m.—COLLINGWOOD CITIZENS' BAND,
March: "London's Pride."
Fox Trot: "Pleasant."
- 8.17 p.m.—ESTELLE MARK TRIO:
English Waltz: "The Greatest Wish in the
World" (del Riego).
March: "Sardinia."
"Battle of Britain"
(Sinding).
Fiddle Melody: "A Hundred"
Celia Kilham, "Rosine" (Hessmann-Kremer)
- 8.22 p.m.—STUDIO ORCHESTRA:
"Reve Angelique" (Rubinowitch).
- 8.42 p.m.—THE AUSTRALIAN LADIES'
PIPE BAND:
Pipe Solo: "Piper Galtie Oliver."
Waltz: "Piper Flora Ash."
Pipe Solo: "Piper Major Dilly McPherson."
Execution: Ironm Corp. Laura Hale.
Australian Ladies' Pipe Band.
- 9.6 p.m.—"CARDIGAN" Burlesque Edition of
"The Arpa" and "Australian" on "In-
morrow's promise."
- 9.15 p.m.—Dr. ARNOLDO BARTOLINI:
"Serenata" (Tosti).
"O Sole Mio" (di Capua).
- 9.23 p.m.—COLLINGWOOD CITIZENS' BAND
Waltz: "Cerebrosos and Poppies."
- 9.30 p.m.—THE ROYAL SCOTS:
"Santa Lucia."
John Peel.
"Some Folks."
- 9.40 p.m.—DON ALFONSO ZELAYA:
"Paraphrase—Blue Danube" (Strauss-Zelaya).
"Naughty Marietta" (Victor Herbert).
- 9.55 a.m.—Mr. H. K. LOVE, in a Technical
Talk.
- 10.5 p.m.—COLLINGWOOD CITIZENS' BAND
Waltz: "Four Nights."
Tombone Trio: "Three Jolly Sailors."
- 10.15 p.m.—"Argus" and "Herald" news ser-
vices. British official news from Rugby.
- 10.25 p.m.—LEN GIBSON'S NEAPOLITAN
SEXTETTE:
"La Serenata" (Bracci).
"Rigonette" (Mikael).
"Moon River" (David).
- 10.45 p.m.—Announcements, etc.
- 10.45 p.m.—BLO MELODY MASTERS:
"Hi, Ho the Merrin."
"Blinky Moon Day."
"Twilight."
"Honeybunch."
"Pleasant."
"Prisoner's Song."
"Mind is the great ever of all things;
human thought is the process by which
it runs."
- 11 p.m.—OUR GREAT THOUGHT:
Business ends are alternately announced.
—DANIEL WEBSTER.
- 11.1 p.m.—BLO MELODY MASTERS:
"I'd Climb the Highest Mountain."
"Pleasant."
"When the Red, Red Robin"
"Eleganza."
"Walking round in Circles."
"Silver Moon."
- 11.40 p.m.—GOD SAVE THE KING.

4QG, BRISBANE

Queensland Radio Service.

Wave Length, 386 Metres.

MIDDAY SESSION.

- 12.55 p.m.—Tune in.
12.58 p.m.—Time signal.
1 p.m.—Market reports, weather information
supplied by the Commonwealth Weather
Bureau; news service supplied by "The
Daily Mail" and "The Daily Standard."
1.35 p.m.—From Hotel Carlton: Lunch music
from the lounge, Hotel Carlton, played by
Hotel Carlton Symphony Orchestra.
1.58 p.m.—From the Observatory: Standard
time signal.
2 p.m.—Close down.

AFTERNOON SESSION.

- 3.30 p.m.—From Hotel Carlton: Afternoon
Tea Music, played by Hotel Carlton Sym-
phony Orchestra.
4.15 p.m.—From the Studio: News service
supplied by "The Telegraph."
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 5 p.m.—"Daily Standard" news Announce-
ments.
6.30 p.m.—The Children's Session—Stories by
"The Sandman." Market reports, Lechiffette,
"Agriculture in Germany—A Queensland-
Intrusion"—No. 2 of a series—Mr. J. R.
F. Reid, editor "Queensland Agricultural
Journal."
7 p.m.—Market reports, Lechiffette, "Mar-
riage Show in Queensland" No. 1 of a series
by Mr. W. G. Brown (Instructor in
Shew and Wool).
7.30 p.m.—Stock reports, Weather news, Announ-
cements.
7.48 p.m.—Standard time signal.

NIGHT SESSION.

- 8.40 p.m.—Lecture Session—A talk by J. Scott
MacDonald, M.A., arranged by the Workers'
Educational Association.

STUDIO PROGRAMME.

- 8 p.m.—Overture—"Nobiscumdomine" (Verdi),
the Studio Orchestra conducted by Mr. A. K.
Fothergill, tenor solo, "The Rosary You
Gave to Me" (Bali), Mr. Gerald Cashman,
Hawaiian Instrumentalists, the Honolulu
Singers—contralto solo, "For You Alone"
(Gersh), Miss Winifred Anderson.
- 8.30 p.m.—Interlude—"The Divine Spark"
—Episodio No. 1—"The Story of the Helen B.
Stirling."
- 8.45 p.m.—Valse, "Luna Valse" (Lizner), the
Studio Orchestra, soprano solo unaccom-
panied, Miss Rita Allen; baritone solo, "Sea
Power" (Ireland), Mr. James Goides;
Hawaiian Instrumentalists, the Honolulu
Singers.
- 9 p.m.—Metropolitan weather forecast, Week-
end and information for motorists, offici-
ally supplied by the Royal Automobile Club
of Queensland.
- 9.15 p.m.—Operatic Fantasia, "Les Huguenots"
(Meyerbeer), the Studio Orchestra; tenor
solo, "I Wonder What has become of Nell"
—Mr. Gerald Cashman; cornet solo, "Circus
Polka" (Banley), Mr. J. Jackson (accom-
panied by the Studio Orchestra), contralto
solo, "Easter Song" (Woodford-Finden),
Miss Winifred Anderson; Hawaiian In-
strumentalists, the Honolulu Singers; har-
monium solo, "The Great Awakening" (Cramer),
Mr. James Goides; characteristic march
"General Hissou" (Alben), the Studio
Orchestra.
- 10 p.m.—"The Daily Mail" news. Close down.

5CL, ADELAIDE

Central Broadcasters, Ltd.

Wave Length, 395 Metres.

MORNING SESSION.

- 11.30 a.m.—G.P.O. Chimes.
11.51 a.m.—Block Duo Art number.
11.59 a.m.—"Advertiser" news service.
12.55 a.m.—Vocalion number.
12 noon.—G.P.O. Chimes.
12.1 p.m.—"Advertiser" news service.
12.16 p.m.—Stock Duo Art number.
12.30 p.m.—Studio Orchestra Selection, "The
O'Brien Girl"; fox trot, "My pal Jerry";
waltz, "Meet me at twilight"; song, "Time
pays," "Memento," "Merry-makers dance";
Oriental, "Petruška"; violin solo, "Eve-
ning"; finale, "Tschakowkiana."
1.25 p.m.—Ward and Co.'s Stock Exchange
reports, Official weather synopsis and
station announcements.
2 p.m.—G.P.O. Chimes.

AFTERNOON SESSION.

- 3 p.m.—G.P.O. Chimes.
3.1 p.m.—Relay from Maple Leaf Cafe—
Orchestral numbers.
3.45 p.m.—From Studio—Talk by Mr. Coghill.
4 p.m.—G.P.O. Chimes.
4.1 p.m.—Relay from Arcadia Cafe—Orchestral
numbers.
4.55 p.m.—Stock Exchange reports, general
information and station announcements.
5 p.m.—L.P.O. Chimes—close down.

EVENING SESSION.

- 6.30 p.m.—L.P.O. Chimes.
6.31 p.m.—Stock Duo Art number.
6.34 p.m.—Children's Hour, Bedtime stories.
7.00 p.m.—Market reports.
7.40 p.m.—Sporting talk by 5CL's Sporting
Commissioners.
8 p.m.—G.P.O. Chimes.
8.1 p.m.—Relay from Messrs. Malcolm Reid
and Co.'s Orchestra.
8.15 p.m.—Song, Mrs. J. L. Davy.
8.19 p.m.—Relay from Messrs. Malcolm Reid
and Co.'s Orchestra.
8.30 p.m.—Song, Miss Joy Watson.
8.34 p.m.—Relay from Messrs. Malcolm Reid
and Co.'s Orchestra.
8.45 p.m.—Baritone solo.
9 p.m.—G.P.O. Chimes.
9.1 p.m.—Weather report.
9.2 p.m.—Studio concert by Madame Waltons
party of artists, Mrs. J. L. Davy, contralto,
assisted by 5CL Orchestra.
10 p.m.—"Advertiser" news service.
10.15 p.m.—Selection by 5CL Orchestra.
10.20 p.m.—Madame Watson's Party.
10.28 p.m.—Station announcements.
11 p.m.—G.P.O. Chimes, National Anthem and
close down.

6WF, PERTH

Westralian Farmer's.

Wave Length, 1250 Metres.

- 12.30 p.m.—Tune in.
12.35 p.m.—First local news bulletin.
Market reports.
Cables.
1 p.m.—Time signal from the Perth Observa-
tory.
1.1 p.m.—Weather Notes supplied by the
Meteorological Bureau of Western Austra-
lia.
1.3 p.m.—STUDIO QUINTETTE:
March—
"Law and Order" (Cobb).
"Swing Song" (Ellen).
Overture:
"Impressario" (Bracci).
10.28 p.m.—"The Spanish Dances" (Monkowiak).
Selection:
"Martina" (Wallace).
"Moment Musical" (Schubert).
March:
"Big Ben" (Alben).

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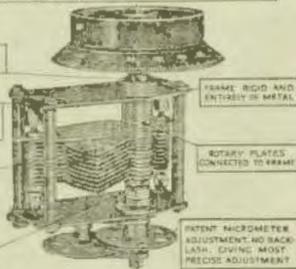
LARGE DIAMETER WIND WOUND IN SAME DIRECTION AS DIAL THIS
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ONE HOLE FIXING
FOR 16 1/2" WINDS

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FRAME BRASS AND
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PATENT MICROMETER
ADJUSTMENT NO BACK-
LASH, GIVING MOST
PRECISE ADJUSTMENT

Slow Motion Condenser

.00025, 35/-; .0003, 37/-; .0005, 39/-



Transformers:

Ratio 2-1 32/6

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The 2-1 Ratio type is specially suitable for use after a general purpose detector valve.

The 4-1 Ratio type will give maximum amplification without distortion, when used after a low impedance.

Obtainable from all Licensed Radio Dealers.

British General Electric Co., Ltd.,
Magnet House,
154-6 Clarence Street, Sydney.

- 2 p.m.—Close down.
- 3.30 p.m.—Tune in.
- 3.35 p.m.—Musical programme.
- 4 p.m.—STUDIO TRIO.
- 4.45 p.m.—Close down.
- 7 p.m.—Tune in.
- 7.5 p.m.—Musical evening for the kiddies by Aunt Evelyn and Uncle Henry, Leslie, Perry, Duffy and Baz.
- 7.35 p.m.—Stock and Share intelligence.
- Market reports.
- Cables, News supplied by courtesy of "The West Australian" Newspaper Co.
- 8 p.m.—Time signal from the Perth Observatory.
- 8.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.

EVERYBODY'S NIGHT.

- 8.2 p.m.—Short acts and plays by Mr. and Mrs. Herbert Millard.
- Mr. Geo. S. Mellor, concert solo:
- "Air Variés" (Waverlet House).
- "Liebestraum" (Lilbratt).
- "Cata" (Grant Jones).
- "El Divo" (Geric).
- Miss Evelyn Willis, A.R.C.M., pianiste.
- 9 p.m.—Talk: "A Few Facts about Piano Manufacturing" by Mr. D. S. Seymour.
- 10 p.m.—Second news bulletin supplied by courtesy of "The Daily News" Newspaper Co.
- 10.30 p.m.—Close down.

7ZL, HOBART

Tasmanian Broadcasters, Ltd.

Wave Length, 468 Metres.

- 12.30 p.m.—Tune in.
- 12.75 p.m.—First local news bulletin.
- Market reports.
- CABLES.
- 1 p.m.—Time signal from the Perth Observatory.
- 1.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
- 1.2 p.m.—Studio Quartette.
- 2 p.m.—Close down.
- 3.30 p.m.—Tune in.
- 3.35 p.m.—Musical programme.
- 4.45 p.m.—Close down.
- 7 p.m.—Tune in.
- 7.5 p.m.—Musical evening for the kiddies by Aunt Evelyn and Uncle Henry, Leslie, Perry, Baz and Duffy.
- 7.35 p.m.—Stock and Share intelligence.
- Market reports.
- Cables, News supplied by courtesy of "The West Australian" Newspaper Co.
- 8 p.m.—Time signal from the Perth Observatory.
- 8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
- 8.2 p.m.—Everybody's Night.
- Musical programme including artistes:
- Concert solo by Mr. Geo. S. Mellor.
- Miss Evelyn Willis, A.R.C.M., pianiste.
- 9 p.m.—Talk: "A Few Facts About Piano Manufacturing" by Mr. D. S. Seymour.
- 10 p.m.—Second news bulletin supplied by courtesy of "The Daily News" Newspaper Co.
- 10.30 p.m.—Close down.

Sat., February 5

2FC, SYDNEY

EARLY MORNING SESSION.

- 7.0 a.m.—"Big Ben" and announcements.
- 7.5 a.m.—Music from the Studio.

- 8.0 a.m.—Official weather forecast, rainfall, temperatures, astronomical, memoranda, shipping intelligence, stock exchange.
- 8.25 a.m.—Investment market, mining share market, metal quotations.
- 8.35 a.m.—Wool and eggs, breadstuffs markets.
- Inter-State markets, produce notices.
- 7.45 a.m.—"Sydney Morning Herald" news service.
- 8.0 a.m.—"Big Ben." Music from the Studio.
- 8.15 a.m.—Close down.

MORNING SESSION.

- 9.15 a.m.—Music from the Studio.
- 9.45 a.m.—Last minute sporting information by the 2FC Racing Commentator.
- 10.0 a.m.—"Big Ben" and announcements.
- 10.5 a.m.—Late "Sydney Morning Herald" news service.
- 10.10 a.m.—Music from the Studio.
- 10.45 a.m.—A marvellous recording.
- 11.0 a.m.—"Big Ben." Australian Press Association and Reuters Cable Services.
- 11.10 a.m.—Dance and chimes.
- 11.15 a.m.—A surprising talk by Mr. G. J. Lockey, U.T.C.
- 11.30 a.m.—Close down.

MIDDAY AND AFTERNOON SESSION.

- 12.55 p.m.—Announcements.
- 1.0 p.m.—"Big Ben." Stock Exchange information.
- 1.1 p.m.—"Evening News" midday news service. Weather intelligence.
- 1.20 p.m.—Music from the Studio.
- NOTE.—DIRECT FROM CANTERBURY PARK. Races will be described in the running, interspersed with dance music from the Wentworth Cafe, Sydney, and musical items from the Studio.
- 4.00 p.m.—Full sporting resume of racing, cricket, tennis, golf, etc.
- 5.0 a.m.—"Big Ben." Close down.
- EARLY EVENING SESSION.
- 6.45 p.m.—The chimes of 2FC.
- 6.50 p.m.—The "Hello Man" talks to the children.
- 6.55 p.m.—A serial story for the older ones.
- 7.05 p.m.—Dinner music.
- 7.10 p.m.—"Evening News" late news service. Weather intelligence.
- 7.30 p.m.—Sporting information.
- 7.40 p.m.—Close down.

NIGHT SESSION.

- 7.55 p.m.—Announcements.
- 8.0 p.m.—"Big Ben." FROM THE CRYSTAL PALACE THEATRE, SYDNEY. Items by the Orchestra, conducted by Mr. Harry Stone.
- 8.15 p.m.—From the Studio:
- Mr. Ernest Archer, tenor.
- 8.26 p.m.—Mr. Ad. Uzzo, Comedian.
- 8.30 p.m.—Miss Gladys Fimister, soprano.
- 8.34 p.m.—Mr. Louis Lawson, violinist.
- 8.42 p.m.—Mr. Ad. Uzzo, Scotch Comedian.
- 8.47 p.m.—Miss Gladys Fimister, soprano.
- 8.50 p.m.—FROM THE CRYSTAL PALACE THEATRE. Items by the Orchestra, conducted by Mr. Harry Stone.
- 2.10 p.m.—FROM THE STUDIO:
- Mr. Wally Bates, Comedian.
- 9.14 p.m.—Mr. Harrison White, Banjo solo.
- 9.18 p.m.—"Big Ben" tenor.
- 9.22 p.m.—"A Radio 'Eek'."
- 9.25 p.m.—The 2FC Studio Dance Band, conducted by Mr. Eric Pearce, in the popular ballad, "Mr. Leo Murray, in the latest number."
- 9.32 p.m.—Mrs. Gladys Fimister, soprano.
- 9.40 p.m.—Mr. Ad. Uzzo, Scotch Comedian.
- 9.45 p.m.—Mr. Ernest Archer, violinist.
- 9.50 p.m.—"Big Ben" tenor.
- 9.58 p.m.—FROM THE CRYSTAL PALACE THEATRE. Items by the Orchestra.
- 10.0 p.m.—FROM THE STUDIO
- Mr. George Hollingsworth, in popular number.
- 10.5 p.m.—The 2FC Studio Dance Band.
- 10.9 p.m.—Miss Gladys Fimister, soprano.

- 10.15 p.m.—Mr. Lionel Lawson, violinist.
- 10.17 p.m.—Mr. Ernest Archer, tenor.
- 10.21 p.m.—FROM THE CRYSTAL PALACE THEATRE. Orchestral items.
- 10.40 p.m.—FROM THE STUDIO:
- Mr. Wally Bates, Comedian. "I Do Like an Egg for My Tea" (Duo).
- 10.55 p.m.—The 2FC Dance Band, and Mr. Leo Murray, popular ballad.
- 10.44 p.m.—Mr. George Hollingsworth, in a popular number.
- 10.60 p.m.—Mr. Elizabeth White, Banjo solo.
- Section of Irish Melodica, (Mrs. White).
- 10.75 p.m.—The 2FC Studio Dance Band, and Mr. Leo Murray, popular ballad.
- 11.0 a.m.—"Big Ben" and announcements.
- 11.5 p.m.—The 2FC Studio Dance Band.
- 11.25 p.m.—Late news and sporting information.
- 11.00 p.m.—The 2FC Dance Band, and Mr. Leo Murray, popular ballad, will be heard until midnight.
- 12.0 midnight.—"Big Ben." National anthem. Close down.

2ZL, SYDNEY

EARLY MORNING SESSION.

- 7.15 a.m.—G.P.O. Clock and chimes.
- 7.18 a.m.—Musical programme from the studio.
- 7.19 a.m.—Physical training and health exercises.
- 7.23 a.m.—Hints on health.
- 7.30 a.m.—Physical training and health exercises.
- 7.35 a.m.—G.P.O. Clock and chimes.
- 7.40 a.m.—Weather report.
- 7.45 a.m.—Sporting information.
- 7.50 a.m.—Broadcasters special news service.
- 8 a.m.—G.P.O. Clock and chimes. Close down.

MORNING SESSION.

- Racing information broadcast by courtesy of the "Sun."
- 11 a.m.—G.P.O. Clock and chimes.
- 11.3 a.m.—Weather report, broadcast by courtesy of Mr. C. J. Mares, Government Meteorologist.
- 11.5 a.m.—Sydney Daily Telegraph News Service.
- 11.20 a.m.—Women's Session conducted by Mrs. Jordan—Social Notes.
- 11.00 a.m.—Mrs. Jordan replies to correspondence.
- 11.40 a.m.—A talk on "Simple cooking" for children by Mrs. Appleton.
- 12.3 p.m.—Musical programme from the studio.
- 10.15 p.m.—"Sun" Newspaper news service.
- 12.30 p.m.—G.P.O. Clock and chimes.
- 12.41 p.m.—London Metal quotations.
- 12.45 p.m.—Rush to call by wireless.
- 12.58 p.m.—Weather report and forecast.
- 12.40 p.m.—Shipping information—arrivals and departures.
- 12.43 p.m.—Information re Inter-State and overseas mails.
- 12.45 p.m.—Sydney Stock Exchange calls.
- 12.50 p.m.—News from the "Sun" Cable Edition.
- 1 p.m.—G.P.O. Clock and chimes.
- 1.1 p.m.—Musical programme from the studio.
- 1.15 p.m.—News from the "Sun."
- 1.30 p.m.—G.P.O. Clock and chimes.
- 1.31 p.m.—Musical programme from the studio.
- 1.45 p.m.—Talk on sporting and athletic fixtures for the day. Lacrosse, hockey, golf, bowls, tennis, baseball. During his afternoon sporting information will be broadcast by courtesy of the "Sun" newspapers.
- Racing resume will be broadcast every half-hour.
- Musical programme from the studio during the afternoon.
- 5 p.m.—G.P.O. Clock and chimes. Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. Clock and chimes.
- 5.50 p.m.—"The Kiddies and the Kiddles."
- 6.00 p.m.—Musical programme from the studio.
- 6.15 p.m.—Results of all sporting information including racing, bowls, tennis, swimming, and athletic by courtesy of the "Sun."
- 6.30 p.m.—Country news from the "Sun" and results of all sporting and athletic fixtures.
- 6.45 p.m.—Mr. Howard O'Hagan, Guide in the Northern Canadian Rocky Mountains, will talk on "Trapping in Canada."

Announcement

Jefferson Transformers

No matter what circuit you wish to complete, there is a JEFFERSON Transformer that will bring you the highest possible degree of amplification. Right from the start put JEFFERSONS in your set—don't experiment—expert Radio Engineers after careful and exhaustive tests have found them perfect in every detail of construction. Distant stations are tuned in with ease, and you will be highly pleased with the extreme sensitivity, quietness and the freedom from distortion.

18/6

Ratio:
3.75 to 1



18/6

Ratio:
3.75 to 1

ELECTRICAL CHARACTERISTICS.

No. 41—Ratio 3.75 to 1.

Designed for operation with all standard tubes.

1. Ratio of secondary to primary turns, 3.75 to 1.
2. Useful tone frequency range, 60/5000 cycles.
3. Allowable current on each winding, 10 milli-amperes.
4. Test voltage between primary and secondary; between primary, secondary and ground, 500 volts.
5. Maximum operating voltage in conjunction with tube, 300 volts.
6. D.C. Resistance of windings:
Primary, 1800 ohms. (approx.)
Secondary, 6000 ohms. (approx.)
7. Primary and secondary wound with No. 40 enamel-covered copper wire.

Obtainable from all Reputable Radio Dealers.

SOLE AUSTRALASIAN AGENTS:

Fox & MacGillycuddy Ltd.

Daily Telegraph Buildings, King Street

8 p.m.—G.P.O. Clock and Chimes.
 Broadcasters' Vocal Chorus.
 8.5 p.m.—King's Mandolin Orchestra.
 8.10 p.m.—Mr. Herbert Hitchcliffe, harpist.
 8.17 p.m.—Mr. Dick Matthews, light baritone.
 8.24 p.m.—Miss Marjorie Skill, soprano.
 8.31 p.m.—Mr. W.H. Gilbert, comedian.
 8.38 p.m.—Mr. Stanley R. Catlett, tenor.
 8.45 p.m.—Miss Maizie Barnett, contralto.
 8.52 p.m.—Duet, Messrs. S. Catlett, and H. Hitchcliffe.
 8.54 p.m.—Resume of following day's programme. Weather report and forecast by courtesy of Mr. C. J. Mars, Govt. Meteorologist.
 9 p.m.—G.P.O. Clock and Chimes.
 9.1 p.m.—King's Mandolin Orchestra.
 9.8 p.m.—Mr. H. Hitchcliffe.
 9.15 p.m.—Brings talk on the Aborigines.
 9.25 p.m.—Mr. S. R. Catlett.
 9.42 p.m.—Interval.
 9.47 p.m.—Miss Marjorie Skill.
 9.54 p.m.—Mr. Dick Matthews.
 10.1 p.m.—Miss Maizie Barnett.
 10.8 p.m.—Mr. W.H. Gilbert.
 10.15 p.m.—The Dugwoon. Modern Dances Band broadcast from the cabaret, The Dugwoon, Manly. During the intervals between dances news-reports by courtesy of the "Star" will be broadcast.
 12 midnight—G.P.O. Clock and Chimes.
 National Anthem.

2KY, SYDNEY

EVENING SESSION.

7.15 p.m.—Sporting feature: complete review of to-day's racing, Mr. A. E. Powell.
 7.30 p.m.—News items and late sporting results.
 8.0 p.m.—Pianoforte solos, Miss Alma Haughey.
 8.10 p.m.—Sketch, Miss Voslakow and Mr. Corben.
 8.30 p.m.—Musical Interlude: Glaciarium Dance Orchestra; Billy Romaine, leader (by kind permission of G. Irving).
 8.0 p.m.—Recital, Mr. Bob Corben.
 9.15 p.m.—Labor Legislation Series, Mr. J. C. Eldridge.
 9.30 p.m.—Sporting feature. From the track of the Speedway Royal. Description and results of motor cycle racing.
 9.40 p.m.—Humorous odds and ends, Mr. Herbert Beaver.
 9.50 p.m.—From the Speedway Royal.
 10.0 p.m.—Glaciarium Dance Orchestra, Billy Romaine, leader. (By kind permission of Geo. C. Irving).
 10.30 p.m.—Closing Announcements.

3LO, MELBOURNE

MORNING SESSION.

11 a.m.—STUDIO ORCHESTRA.
 Selection: "Judy Peretz" (Silvio Hain).
 11.10 a.m.—THE PREMIER FOUR.
 "That's Why I Love You"
 "Mother O' Mine"
 11.17 a.m.—REGINALD BRADLEY, Violin.
 "The old refrain" (Kreutzer).
 11.24 a.m.—THE ESTELLE MARK TRIO.
 E. Mark, soprano, "Nero Sordani."
 M. Sheridan, piano, "Polish Dance" (Sharpwinks).
 E. Mark, soprano, "If I Have You Recall Me."
 C. Kilduff, Violin, "La zanzouche."
 11.40 a.m.—STUDIO ORCHESTRA.
 "Soldiers' Chorus," Faust.
 11.50 a.m.—THE PREMIER FOUR.
 "Just a Song at Twilight."
 12 noon.—Time Signal. British Official Wireless news from Rugby. Reuters and the Australian Press Association Cables, "Argus" and "Herald" news services. Shipping Intelligence.
 12.10 p.m.—STUDIO ORCHESTRA.
 Selection, "The Vireony" (Herbert).
 12.40 p.m.—THE ROYAL SCOTS.
 "Sound The Pibroch."
 "Mary of Argyll."
 "Night de Linn."
 12.50 p.m.—Weather reports and Stock Exchange Information.
 1.0 p.m.—STUDIO ORCHESTRA.
 "La voix des cloches" (Lingini).
 1.8 p.m.—DR. ARNOLD BARTOLINI, baritone.
 "Radiani" (Tosti).
 "Perdutamente" (Tosti).
 1.15 p.m.—C. RICHARD CHUOQ, Flute.
 "March Men of Harlech" (Collard).
 1.21 p.m.—THE ROYAL SCOTS.
 "The Old Rustic Bridges by the MIR."
 "Come Here the Lilies."
 "Camptown Races."
 1.31 p.m.—STUDIO ORCHESTRA.
 Selection, "The Primavera" (Berbert).
 1.41 p.m.—DR. ARNOLD BARTOLINI, baritone.
 "Sogna" (Tosti).
 "Aria from Macbeth" (Verdi).
 1.48 p.m.—STUDIO ORCHESTRA.
 "It Happened in Nordland" (Herbert).
 2.0 p.m.—Description of Summer Handicap—Williamstown Races, by "Muskiet" of the Sporting Globe.
 Close down.
 2.35 p.m.—Description of C. F. Orr Stakes—Williamstown Races, by "Muskiet" of the Sporting Globe.
 Close down.
 Progress Scores will be given of the Crickets Match Victoria v. Queensland, at Brisbane, as they come to hand.
 AFTERNOON SESSION.
 THE 3LO MELODY MASTERS.
 Musical Director, REGINALD BRADLEY.
 3.0 p.m.—3LO MELODY MASTERS.
 Foxford, Honey Bush.
 3.10 p.m.—Description of Electric Handicap—Williamstown Races, by "Muskiet" of the Sporting Globe.
 3.15 p.m.—3LO MELODY MASTERS.
 "I've Got the Mezzio."
 "There's a Boston on the Voigt."
 "Twilight."
 "My Girl Has Eye Trouble."
 "Hinky moon lay."
 "There Never Was a Pal Like You."
 "H. E. G. the Merrie."
 3.30 p.m.—Description of Wyndham Handicap—Williamstown Races, by "Muskiet" of the Sporting Globe.
 3.35 p.m.—3LO MELODY MASTERS.
 Paradise Alley.
 "While the Yea's go DRIVING Ho."
 "Callin'."
 "Kee to-morrow Dawna."
 "Honey bunch."
 "Back Where the Daffodils Grow."
 "Twilight."
 "Sunday."
 3.45 p.m.—Description of Marine Handicap, Williamstown Races, by "Muskiet" of the Sporting Globe.
 3.50 p.m.—3LO MELODY MASTERS.
 "The Me to Your Apron Strings Again."
 "Why Do I Love You."
 "Day Dreaming."
 "Ran of Japan."
 4.0 p.m.—"Evening" news service. Stock Exchange information.
 4.30 p.m.—Description of February Weight—Williamstown Races, by "Muskiet" of the Sporting Globe.
 Close down.
 EVENING SESSION.
 5.0 p.m.—Sporting Results.
 5.30 p.m.—CHILDREN'S HOUR. Answers to letters and birthday greetings by "Bobby Huggins."
 5.55 p.m.—Musical programme by "The Sunshine Singers," pupils of Miss Eileen Paason-Wells, as well as solos by Zoe Harrison, violin, and Gwen Hazlett, piano.
 8.35 p.m.—"Argus" and "Herald" news services. Weather information. Aerial information by the Australian Aerial Services Ltd.
 8.47 p.m.—Stock Exchange information. Overseas Shipping.
 8.52 p.m.—Fish market reports by J. R. Burnett Ltd.

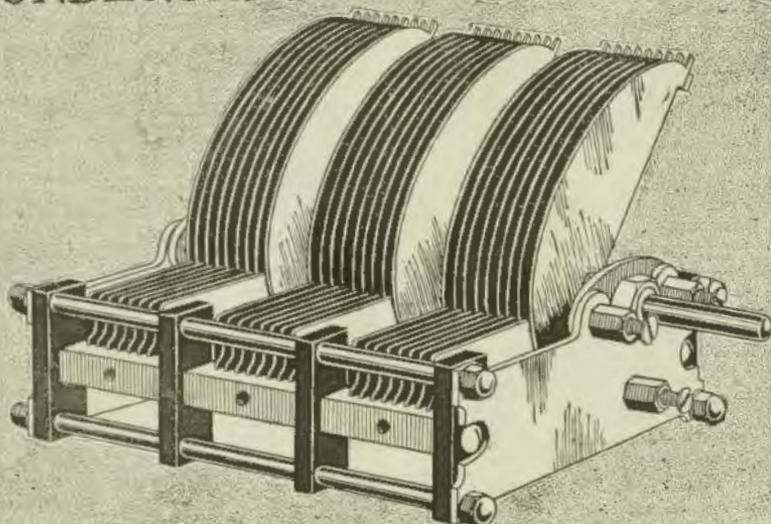
8.55 p.m.—River reports.
 8.58 p.m.—Market reports by the Victorian Producers' Co-operative Co. Ltd. Haymarket sheep sales. Poultry, Grain, Cattle, Hay, Straw, Jute, Dairy Produce, Potatoes and Lardons. Market prices of oranges and Lemons by the Victorian Citrus Association Pty. Ltd.
 NIGHT SESSION.
 Announcement MAURICE DUDLEY.
 Accompanist AGNES FORTUNE.
 7.15 p.m.—Mr. B. RAWSON, a talk on "Securities."
 7.30 p.m.—Mr. F. CHAPMAN.
 "Sea-Interferes."
 7.45 p.m.—Dr. LEACH, will speak on "Saline Buns and Water Buns."
 8.0 p.m.—BRUNSWICK CITY BAND.
 March "Postman's Parade" (Bauch).
 "Waico" (Lilgoug).
 8.10 p.m.—THE ROYAL SCOTS. Snaps of old-time songs.
 "When the Hills are White with Heather" (Grove).
 "O'ay the Hill o'er the Dale" (Molloy).
 8.17 p.m.—STUDIO ORCHESTRA.
 Quadrille, "Domie Dundie" (Albert).
 8.21 p.m.—ESTELLE BATHCHELOR, contralto.
 "The Minister Joy."
 "Wather Natchee."
 8.34 p.m.—GRTRUDE ARMSTRONG, the Girl from Glasgow.
 "As Fanciful as Almonds."
 Stralingsho, "Shepherd's Crook."
 "Reel."
 "Break-up."
 8.41 p.m.—ESTELLE MARK TRIO.
 E. Mark, Soprano, "Bird Songs at Evening" (Grove).
 M. Sheridan, Piano, "Romance" (Bibbino).
 E. Mark, "O' Primavera."
 C. Kilduff, "Variations on Theme of Caroll" (Furlin-Knight).
 8.55 p.m.—AUSTRALIAN LADIES' PIPE BAND.
 Address by Drum Major Wm. Jarman, F.R.G.S.
 Song by Drummer Molly Innes, "Hurrah for Australia."
 Pipe Solo, Pipe Major Dolly McPherson.
 Flotation, Drum Corp. Lena Dale, "Answer of the Appas."
 Australian Ladies' Pipe Band.
 9.15 p.m.—JESSIE BATHCHELOR, Contralto.
 "Oh! Folks at Home."
 "Oh! Folks at Home."
 9.22 p.m.—STUDIO ORCHESTRA.
 Waltz, "Blue Danube."
 Waltz, "H. H. Band."
 9.35 p.m.—JOE DELANEY, Tenor.
 "Alto, Where Art Thou?"
 "Your Kiss Have Told Me So" (O'Hara).
 9.40 p.m.—BRUNSWICK CITY BAND.
 March, "Asailon" (Furlin).
 Variations, "Mabel" (Parker).
 9.45 p.m.—Written Official Wireless news. Sporting results.
 10.0 p.m.—GRTRUDE ARMSTRONG, The Girl from Glasgow.
 "Jennie's Dances."
 "My Love Nby's but a Lasse Yel."
 "Gemin' thro' the Eye."
 10.3 p.m.—THE ROYAL SCOTS.
 "Romie in the Ulanite."
 "Adebrable."
 10.15 p.m.—STUDIO ORCHESTRA.
 Variations, "The Silver Lake."
 10.25 p.m.—JOE DELANEY, Tenor.
 "Oh! So Far from the Land" (Lambert).
 "Bobby Huggins."
 10.32 p.m.—BRUNSWICK CITY BAND.
 March, "Army and Navy."
 10.47 p.m.—Meteorological information.
 "Argus" news service. Announcements.
 11.0 p.m.—GUY GREAT THUGHT.
 "A great man is one who affects the mind of his generation"—Reconforted.
 11.1 p.m.—3LO MELODY MASTERS.
 "You Ought to Know."
 "Why do I Love You."
 "Night de Linn."
 "Marette."
 "Just a Cottage Small."
 11.10 p.m.—GOD SAVE THE KING.

The World's Flyers carried Burgess.

The Best Sets Deserve The Best Parts

TRIPLE GANG
CONDENSERS

-ADVANCE-



For the Latest Single Control Sets

This Triple Condenser

is of the Straight Line Tuning Type, and is so designed that it makes the Single Control Receiver practical.

The individual condensers of each gang are perfectly matched at maximum capacity values.

PRICE—**30!**
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17 Plate

-ADVANCE-

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"Daily Telegraph" Buildings, King St.
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Other Advance Lines

Straight Line Frequency
Condensers •

.00025; .00035; .0005.

Square Law Condensers

.00025; .0005

Midget Condensers

.000005

Combined Knife Switch and
Lightning Arresters.

4QG, BRISBANE

No Midday Transmission.

AFTERNOON SESSION.

CHURCH SERVICE.

The complete service will be relayed from the Seventh Day Adventist Church at Eumunda.

3.30 p.m.—Opening hymn, "We Would See Jesus" (Baldein); invocation, Pastor A. C. Chesson; Offertory and Organ Solo; Scripture reading, 15th Psalm; hymn, "He Leadeth Me" (Broadburg); sermon, "Happiness for the New Year," Pastor A. C. Chesson; hymn, "Winning Precious Souls" (Hoffman); solo, selected; hymn, "Just a Ray of Sunshine" (Bilbourn); Benediction.

4.30 p.m.—Close down.

EARLY EVENING SESSION.

8.25 p.m.—Tune in.
8.50 p.m.—Children's Session—Bedtime Stories by "Uncle Ben" and "Uncle Jim."

7.15 p.m.—Sporting news.

7.45 p.m.—Standard Time Signal.

NIGHT SESSION.

7.45 p.m.—Lecture Session—A Gardening Talk, "Winter Flowering Annuals"—by "Tecoma."

GAIETY THEATRE—NATIONAL SPEEDWAY.

8 p.m.—From the Gaiety Theatre, Toowoong: Orchestral Music.

8.15 p.m.—From the National Speedway: Motor Cycle Races.

8.45 p.m.—From the Gaiety Theatre, Toowoong: Orchestral Music.

9 p.m.—From the National Speedway: Motor Cycle Races.

9.15 p.m.—From Lennon's Ballroom: Dance Music.

9.45 p.m.—From the National Speedway: Motor Cycle Races.

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

5CL, ADELAIDE

MORNING SESSION.

10.30 a.m.—G.P.O. chimes.

10.31 a.m.—Studio Orchestra: Overture, "Queen of autumn"; waltz, "Nothing seems the same"; fox trot, "Smiling eyes"; waltz, "Cobweb Candles"; novelty, "Yellow Jasmine"; cornet solo, "H. Becco's" selection, "Katsja"; "Moments musical"; finale, "Pot Luck."

11.55 a.m.—Ward and Co.'s market reports, weather synopsis and station announcements.

12 noon.—G.P.O. Chimes and close down.

AFTERNOON SESSION.

12.45 p.m.—Relay from Victoria Park—Humorous description of races by Mr. Arnold Treloar.

3 p.m.—(approx.)—Station announcements and close down.

EVENING SESSION.

6.30 p.m.—G.P.O. Chimes.

8.31 p.m.—"Stock Duo Art number.

6.36 p.m.—Children's Hour. Bedtime stories.

7.30 p.m.—Market reports.

7.40 p.m.—Sporting results.

8 p.m.—G.P.O. Chimes.

8.1 p.m.—Song, Mr. Broadland Rock.

8.5 p.m.—Instrumental item, Mr. J. Leethall.

9.8 p.m.—Song, Mrs. Hobbs James.

8.13 p.m.—Cello solo, Mr. G. Goldsworthy.

8.17 p.m.—Song, Miss Aileen Newlyn.

8.21 p.m.—Cello solo, Mr. G. Goldsworthy.

8.25 p.m.—Floating Palms Dance Orchestra—Dance programme.

8.30 p.m.—Song, Mr. Broadland Rock.

8.54 p.m.—Instrumental number, Mr. J. Leethall.

8.59 p.m.—Song, Mrs. Hubert James.

9 p.m.—G.P.O. chimes.

9.1 p.m.—Daily's wheat report.

9.3 p.m.—Relay from Floating Palms.

9.39 p.m.—Song, Miss Aileen Newlyn.

9.44 p.m.—Cello solo, Mr. G. Goldsworthy.

9.48 p.m.—Song, Mr. Broadland Rock.

9.48 p.m.—Relay from Floating Palms.

10 p.m.—G.P.O. Chimes.

10.1 p.m.—Relay from Floating Palms.

10.11 p.m.—Sporting results.

10.49 p.m.—Studio concert and dance programme.

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

6WF, PERTH

12 noon—Tune in.

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

12.47 p.m.—First local news bulletin.

Market reports.

Cables.

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

1.1 p.m.—Wheat Notes supplied by the Meteorological Bureau of Western Australia.

1.2 p.m.—Close down.

7 p.m.—Tune in.

7.5 p.m.—Auntie Evelyn will tell short stories to the children.

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

7.35 p.m.—Stock and Shares intelligence.

Market reports.

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

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

8.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.

8.2 p.m.—IN THE STUDIO:

Mr. Kenneth Talbot, contraltos:

"Some-times in Summer" (Sberdale Bennett).

"Rio Grande's Last Race."

"The Groom's Story" (Sir A. Conan Doyle).

"My Wishes for You" (Marah Little).

Miss R. Irlan, contralto:

"A Bowl of Roses" (Coringby Ward).

"Bird of Love Divine" (Hedra Wood).

"Just Awearyin' for You" (Jacobie Bond).

"Now Sleeps the Crimson Petal" (Roger Quilter).

Mr. Frank Toner, on the Ukulele and guitar.

Miss Evelyn Willis, A.R.C.M., pianist.

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

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

10.30 p.m.—Close down.

7ZL, HOBART

MORNING SESSION.

11 a.m.—G.P.O. Clock Chimes. The "MER-CURY" news. Shipping. Commercial intelligence. Weather information and sporting anticipation. Ships within wireless range. Mail advice.

11.45 a.m.—Hobart Stock Exchange quotations.

11.50 a.m.—Blast Express information.

12 noon.—G.P.O. Clock Chimes, close down.

EVENING SESSION.

7 p.m.—CHILDREN'S CORNER. "Big Brother" chats to his pals.

NIGHT SESSION.

8 p.m.—G.P.O. Clock Chimes. The "MER-CURY" special Tasmanian news service.

Railway auction, produce sales. Weather information and sporting results.

8.5 p.m.—Hobart Stock Exchange quotations.

8.15 p.m.—Penny Numbers from the Studio.

9.4 p.m.—British official wireless news, copied direct from Ruby by our own operators.

Weather synopsis. Station announcements.

Ships within wireless range.

God Save the King.

Sunday, February 6 2FC, SYDNEY

MORNING SESSION.

10.55 a.m.—Announcements from the Studio.

11.0 a.m.—FROM THE LYCEUM HALL, FITT STREET, SYDNEY.

The Morning Service from the Central Methodist Mission, conducted by the Rev. F. H. Raward.

12.15 p.m.—FROM THE STUDIO. News service.

12.30 p.m.—Close down.

AFTERNOON SESSION.

2.0 p.m.—"Big Ben" and announcements.

2.5 p.m.—Musical items from the Studio.

3.15 p.m.—The Rev. R. F. Butcher, F.R.G.S., London, who is passing through Sydney on route to New Guinea, will talk of his travels in Western Papua.

3.30 p.m.—FROM THE BAND ROTUNDA, MARLY BEACH.—A musical programme arranged by the Manly Municipal Band, conducted by Mr. J. Pheloung.

3.9 p.m.—"Big Ben." Close down.

EVENING SESSION.

6.10 p.m.—The chimes of 2FC.

6.12 p.m.—FROM THE STUDIO. A programme of violin solos and concerted music arranged by Mr. S. Voet Jaansen.

6.39 p.m.—Miss Marjorie Cole, soprano.

(a) "As Thru the Streets" (Puccini).

(b) "Starlight" (Lohr).

6.38 p.m.—Violin music.

6.50 p.m.—Miss Marjorie Cole, soprano.

6.53 p.m.—Items arranged by Mr. S. Voet Jaansen.

7.10 p.m.—A talk by Mr. William Adams on "Hymns" with illustrations on the Studio organ.

7.25 p.m.—The bells of St. Mark's.

7.25 p.m.—FROM ST. MARK'S, Church of England, Darling Point. The Evening Service, conducted by the Rev. W. Howard Lee.

8.7 p.m.—Intermission.

8.30 p.m.—FROM THE STUDIO. The Leichhardt District Band, conductor Mr. E. P. Kerry.

8.36 p.m.—Mr. Lobban Hodgins, baritone.

8.42 p.m.—The Leichhardt District Band.

8.58 p.m.—Miss Ellen Boyd, contralto.

9.2 p.m.—The Leichhardt District Band.

9.16 p.m.—Mr. Lobban Hodgins, baritone.

9.26 p.m.—The Leichhardt District Band.

9.52 p.m.—Miss Ellen Boyd, contralto.

9.40 p.m.—The Leichhardt District Band.

9.52 p.m.—Mr. Lobban Hodgins, baritone.

10.0 p.m.—The Leichhardt District Band.

10.15 p.m.—Close down.

2BL, SYDNEY

10.45 a.m.—Special news service.

11 a.m.—Service broadcast from Church of Christ Scientist, Sydney.

8 p.m.—Railway and Tramways United Choir broadcast from Manly Beach.

5 p.m.—Close down.

8.45 p.m.—Children's Service conducted by Uncle George.

7 p.m.—Service broadcast from Petersham Baptist Church.

8.50 p.m.—From the Studio, Madame Phyllis Howe, soprano.

8.17 p.m.—Broadcasters Trio.

8.47 p.m.—Mr. David Smith, baritone.

8.51 p.m.—Resume of following day's programme, weather report and forecast by courtesy of Mr. C. J. Hayes, Govt. Meteorologist.

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PHILIPS

LAMPS AND RADIO



- 9 p.m.—G.P.O. Clock and Chimes.
- 9.11 p.m.—Mr. G. Vera Barnett, piano solo.
- 9.14 p.m.—Broadcasters Trio.
- 9.18 p.m.—Miss Beattie Cooke, contralto.
- 9.25 p.m.—Tenor Solo.
- 9.32 p.m.—Madame Phyllis Hues.
- 9.39 p.m.—Broadcasters Trio.
- 9.49 p.m.—Mr. David Smith.
- 9.56 p.m.—Miss Beattie Cooke.
- 10.3 p.m.—Tenor solo.
- 10.10 p.m.—National Anthem.

2GB, SYDNEY

- 10.20 a.m.—Organ Music from St. Alban's.
- 10.30 a.m.—Morning Service from St. Alban's Liberal Catholic Church; Celebration of the Holy Eucharist; Celebrant, the Rt. Rev. J. Tormey.
- 12 noon—Close down.
- 8.45 p.m.—Music.
- 7 p.m.—Lecture from Adyar Hall.
- 8 p.m.—Music.
- 8.15 p.m.—GRAND CONCERT BY THE CANTERBURY DISTRICT BAND (Conductor, J. M. Heron).
- 8.45 p.m.—Close down.

3LO, MELBOURNE

- MORNING SESSION.
- 10.30 a.m.—St. Paul's Cathedral Bells.
- 10.45 a.m.—Express Train information, British Official Wireless news from Rugby.
- 11 a.m.—SERVICE from SCOT'S CHURCH, Collins Street, Melbourne. Preacher: REV. DR. BORIAND.
- Psalm (Metrical Version), 69: 15-19.
- Prayer.
- From Psalm 95: "O Sing unto the Lord a new song."
- Old Testament Lesson.
- Hymn 26: "Praise ye Jehovah"
- New Testament Lesson.
- Prayer of Intercession.
- ANTHEM.
- The Lord's Prayer.
- SERMON: "Australia Falls"
- Prayer.
- Intimations.
- Offering.
- Hymn 113: "Lord, while for all mankind we pray."
- BENEDICTION.
- 12.15 p.m.—Close down.

AFTERNOON SESSION

- 2 p.m.—PLEASANT SUNDAY AFTERNOON SERVICE, from WESLEY CHURCH, Lonsdale Street, Melbourne. Chairman: REV. J. H. CAIN.
- Orchestral Selection (Conductor, Mr. L. M. Williams).
- Hymn, "Nearer My God, to Thee"
- Prayer, Rev. J. H. CAIN.
- Hymn, "Master, speak, Thy Servant heareth"
- Solo: Miss MUREL CREEK.
- Orchestral selection.
- Solo: Miss MUREL CREEK.
- Notice, Offering and Orchestral Selections.
- Address: Professor H. A. WOODRUFF.
- SOME IMPRESSIONS OF THE FAR EAST.

- National Anthem.
- BENEDICTION.
- 4.30 p.m.—Close down.

EVENING SESSION

- 6.40 p.m.—CHILDREN'S HOUR. Hymns by the "Fied Pipers"
- Organ.
- Hymn: "The Children's Angel."
- Chorus: "Hark, While Voices Raise"
- 6.50 p.m.—"BILLY BUNNY" will continue the story of the "Christmas Carol."
- 7 p.m.—Musical Programme by the "Fied Pipers."
- Chorus: "Glory of the Cross."
- Duet: "The Living"
- Piano: "The Waterlily."

- Two School songs:
- "Lightly Row,"
- "I Love the Supper-time."
- Song: "The Cuckoo Clock."
- Chorus: "Sleep, My Darling."
- 6.25 p.m.—Answers to letters and Birthday Greetings by "Billy Bunny."
- 6.30 p.m.—More about "David Livingstone."

NIGHT SESSION

SERVICE FROM TOORAK PRESBYTERIAN CHURCH

- ST. VINCENT DE PAUL'S BAND.
- ADELE INMAN, soprano.
- AUBURN METHODIST CHURCH CHOIR.
- Speaker: J. HOWLETT ROSS.
- Antiphon: "GATHER, GATHER, GATHER."
- Accompanist: KATHERINE DUDLEY.
- 6.25 p.m.—Bells from St. Paul's Cathedral.
- 7 p.m.—SERVICE FROM TOORAK PRESBYTERIAN CHURCH. Minister: Rev. KIRKENZIE.

- Introit.
- Invocation.
- Hymn (Psalm 100): "All people that on earth do dwell."
- Old Testament Lesson.
- Prayer.
- Prayer Chant 24.
- New Testament Lesson.
- Solo: "Now Praise in Fullest Glory Shout" (Hymn: Mr. ROY WARREN).
- Lord's Prayer.
- Hymn 21: "Nearer My God."
- Intimations.
- Offerings and ANTHEM.
- "Agnus Dei, that Sleepest" (Allied).
- SERMON.
- Prayer.
- Hymn 303: "Abide with Me."
- Benediction.
- Vesper Hymn.

8.40 a.m.—FROM THE STUDIO—ST VINCENT DE PAUL'S BAND. Conductor, Mr. LES HOFFMAN.

- "Military Church Parade"
- 8.40 p.m.—ADELE INMAN, soprano.
- "Bird of Love Divine" (Havin Wood).
- "Wake Up" (Montague Phillips).
- 8.47 p.m.—ST. VINCENT DE PAUL'S BAND.
- "Jamb's" Patrol.
- Concert Folks: "Australia."

- 8.49 p.m.—Mr. J. HOWLETT ROSS, the store of some great Hymns, illustrated by the AUBURN METHODIST CHOIR under the direction of Mr. J. BUTTON CROW.
- "Call me the old, old story."
- "Just as I am without one plea."
- "Ban of my Soul."
- "I think when I read that sweet story"
- "Battle Hymn of the Republic."

8.57 p.m.—St. VINCENT DE PAUL'S BAND.

- "Mallinda's Fairy Bower."
- "Old Comrades."
- 9.17 p.m.—ADELE INMAN, soprano.
- "Bard Song" (Havin Wood).
- "Chanson de Florian" (Godard).
- 9.45 p.m.—"Argus" News service. Announcements.
- 10 p.m.—OUR GREAT THOUGHT.
- "O day most calm, most bright, the fruit of all the next world's bud."—George Herbert.
- GOD SAVE THE KING.

4QG, BRISBANE

MORNING SESSION.

- CHURCH SERVICE.
- The complete Morning Service will be relayed from All Saints' Church of England.
- 11 a.m.—The Holy Eucharist. Hymns for Intention No. 101. Gradual, Creed (Crutch-shank) Sermon, Offertory Hymn No. 216. Sanctus and Gloria (Crutch-shank), Hymn after Blessing No. 413.
- Close down.

AFTERNOON SESSION

- BAND CONCERT.
- The concert provided by the Federal Band (conductor, Mr. W. H. Davis) will be relayed from the Brisbane Botanical Gardens.

- 3.15 p.m.—March, "Song of the Wild" (Rimsky-Korsakov), "Olympia" (Herauld); concert, "Elegiac" (Laurand); suite, "Debut" (Laurand); selection, "Verde's Works" (Rimsky); soprano, "Love's Enchantment" (Laurand); trombone, "Zacharias" (Hummel); hymn, "Bright the Good Fight" (Hymn); hymn, "All Hail to Power."
- 4.30 p.m.—Close down.

NIGHT SESSION.

CHURCH SERVICE.

- The complete Evening Service will be relayed from All Saints' Church of England.
- 7 p.m.—Evening service according to the Book of Common Prayer, Psalm 37, First Lesson, Office Hymn No. 113, Magnificat, Second Lesson, Sanctus, Epistle, Anthem: "Song of Penitence" (Beechey), Intercession, hymn No. 112, Sermon, hymn No. 113, Blessing. The hymns are all taken from the English Hymnal.

BAND CONCERT

- At the conclusion of the Church Service, the concert provided by the Brisbane Municipal Council Band will be relayed from Wickham Park. The programme will include: Overture, "Die Fledermaus" (Wagner), selection, "H.M.S. Pinareo" (Walling), "Gaitana, 'Le Desert'" (Paderewski).
- 8.30 p.m.—Close down.

5CL, ADELAIDE

MORNING SESSION.

- 11 a.m.—G.P.O. chimes.
- 11.1 a.m.—Relay of divine service—First Street Methodist Church, Res. J. G. Junkin.
- 12 noon.—Close down.

EVENING SESSION.

- 4.30 p.m.—G.P.O. chimes.
- 4.31 p.m.—Children's Sunday Stories.
- 7 p.m.—G.P.O. chimes.
- 7.5 p.m.—Relay from Black Forest Baptist Church. Preacher, Rev. K. Steward.
- 8 p.m.—Relay from S.A.R. Institute—Band concert by S.A.R. Band, interspersed with vocal numbers by Madame Marcelle Bevard and Mr. Cyril Bevard.
- 8 p.m.—Mr. P. H. Nicholls will talk on "Swedish boy."
- 9.15 p.m.—Band and instrumental concert continued.
- 10 p.m.—G.P.O. chimes. National Anthem and close down.

6WF, PERTH

- 10.45 a.m.—Tune in.
- 11 a.m.—Morning service relayed from the Salvation Army Citadel, Pier Street, Perth.
- 5.30 p.m.—Tune in.
- 5.45 p.m.—R.S.L. Band and Vocal Concert relayed from the Zoological Gardens, South Perth. Conductor, Mr. Geo. S. Mellor. Conductor, Mr. W. A. Halverson. Major Le Souff will give a ten minutes' talk on the Animals of the Zoo.
- 7 p.m.—Close down.
- 7 p.m.—Tune in.
- 7.5 p.m.—Children's bedtime stories.
- 7.50 p.m.—Evening Service relayed from the Lake Street Church of Christ, Perth. Preacher, Pastor Theo. Hager.
- 8.45 p.m.—Perth City Band and Vocal Concert relayed from the Government Gardens, Perth. Conductor, Mr. W. A. Halverson.

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THE ELECTRON WAY



Mon., February 7

2FC, SYDNEY

EARLY MORNING SESSION

- 7.8 a.m.—"Big Ben" and announcements.
- 7.9 a.m.—Music from the Studio.
- 7.10 a.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
- 7.25 a.m.—Investment market, mining share market, metal quotations.
- 7.45 a.m.—Wool sales, breadstuffs markets, Inter-state markets, produce markets.
- 7.45 a.m.—"Sydney Morning Herald" news service.
- 8.0 a.m.—"Big Ben" Music from the Studio.
- 8.15 a.m.—Close down.

MORNING SESSION

- 9.15 a.m.—Music from the Studio.
- 9.30 a.m.—Marching music for school children.
- 9.40 a.m.—Some popular records.
- 10.5 a.m.—"Big Ben" and announcements.
- 10.5 a.m.—Late "Sydney Morning Herald" news service.
- 10.15 a.m.—Studio music.
- 10.25 a.m.—Last minute sporting information by the JFC Racing Commissioner.
- 11.0 a.m.—"Big Ben" Australian Press Association and Reuters Cable Services.
- 11.0 a.m.—Music from the Studio.
- 11.30 a.m.—Marching music for school children.
- 11.30 a.m.—Close down.

MIDDAY SESSION

- 12 noon—"Big Ben" and announcements.
- 12.3 p.m.—Stock Exchange, first call.
- 12.5 p.m.—Studio music.
- 1.45 p.m.—FROM FARMER'S OAK HALL. Instrumental items by the Oak Hall Trio (Leader, Mr. Horace Keats).
- 12.50 p.m.—Rugby Wireless news.
- 12.55 p.m.—Miss Muriel Walker, mezzo.
- 1.0 p.m.—"Big Ben" Weather Intelligence.
- 1.4 p.m.—"Evening News" midday news service. Producers Distributing Society's Record.
- 1.20 p.m.—FROM FARMER'S OAK HALL. The Oak Hall Trio.
- 1.28 p.m.—Stock Exchange, second call.
- 1.30 p.m.—Marching Music for school children.
- 1.40 p.m.—Miss Muriel Walker, mezzo.
- 1.45 p.m.—Studio music.
- 1.50 p.m.—FROM FARMER'S OAK HALL. The Oak Hall Trio.
- 2.0 p.m.—"Big Ben." Close down.

AFTERNOON SESSION

- 2.30 p.m.—Announcements. Music from the Studio.
- 3.0 p.m.—"Big Ben." A zealand.
- 3.15 p.m.—Pianoforte solo on the "Behnia".
- 3.22 p.m.—Mr. Rex Greenwood, baritone.
- 3.30 p.m.—Marching music for school children.
- 3.40 p.m.—FROM FARMER'S TEA ROOMS. Miss Belle Simmons, soprano.
- 3.45 p.m.—FROM THE WENTWORTH CAVE. The New Wentworth Symphonic Dance Orchestra.
- 4.0 p.m.—"Big Ben." FROM FARMER'S TEA ROOMS. Mr. Frank Botham, baritone.
- 4.5 p.m.—The Oak Hall Instrumental Trio.
- 4.15 p.m.—Studio music.
- 4.20 p.m.—FROM FARMER'S TEA ROOMS. Miss Belle Simmons, soprano.
- 4.25 p.m.—The New Wentworth Symphonic Dance Orchestra, conducted by Mr. Sydney Simpson, FROM THE WENTWORTH CAVE.
- 4.40 p.m.—FROM FARMER'S TEA ROOMS. Mr. Frank Botham, baritone.
- 4.45 p.m.—Stock Exchange, third call.
- 4.48 p.m.—Close down.

EARLY EVENING SESSION

- 5.15 p.m.—The Chimes of 2FC.
- 5.30 p.m.—The "Hello Man" Talks to the Children.

- 5.30 p.m.—A Serial story for the older ones.
- 5.45 p.m.—Dinner music.
- 7.10 p.m.—"Evening News" late news service. Serial information.
- 7.30 p.m.—Dagerty's Market reports (wool, wheat, stock), fruit and vegetable markets.
- 7.40 p.m.—Mr. W. Y. Jackson: "Rome—the Eternal City" (the first of his 1927 Series).

NIGHT SESSION.

- 7.55 p.m.—Announcements.
- 8 p.m.—"Big Ben." FROM ST. CLEMENT'S CHURCH. MOZART: A Grand Organ Recital by Mr. Arthur Massey, assisted by Mrs. Frederick Newton (violin) and Mr. Bryson Taylor (tenor). Organ solo: (a) Selections from "Hymn of Praise"; (b) "Evangelium in E" ... (Eastrop-Martin) (or "Grand March Militaire" (Liszt); (c) "Sighs"; (d) "Andante in G" (Liszt); (e) "Serenade" (Pierini). Mrs. Frederick Newton (violin); Mr. Bryson Taylor, tenor.
- 8.12 p.m.—Recital and Aria: "Serenade in A-flat" (Hummel). Mr. Bryson Taylor, tenor.
- 8.17 p.m.—Violin Solos: (a) "Andante in G-flat" (Liszt); (b) "Serenade" (Pierini). Mrs. Frederick Newton (violin); Mr. Bryson Taylor, tenor.
- 8.22 p.m.—Organ: (a) Prayer from "Renaissance" (Wagner); (b) March—"The Turkish Patrol" (Mendelssohn); (c) "Angel Voices" (Waly).
- 8.32 p.m.—Announcements from the Studio during a short interval in the Organ Recital.
- 8.35 p.m.—FROM ST. CLEMENT'S CHURCH. MOZART: Continuation of the programme arranged by Mr. Arthur Massey— Organ solo: (a) "Valse Brillante" (by request) (Rising Folk Song); Mr. Arthur Massey.
- 8.45 p.m.—Tenor Solo: "How Many Hired Servants" (Lulloway). Mr. Bryson Taylor.
- 8.50 p.m.—Organ: (a) "Grand Concerto in F" (Mozart); (b) Gavotte—"Cassida"; (c) "Grand Fugal March" (Caldini).
- 9 p.m.—FROM THE STUDIO—The Metropolitan Quartette (Miss Marie Cooke, soprano); Miss Mary Bourke, contralto; Mr. Arthur Champion, tenor; and Mr. A. G. Ellis, baritone), presenting its first programme for the year, introduces on the air, Boston Folk Songs by Lisa Lehmann. (PART I— (a) Quartet: "Sir Fench and the Fairy"; (b) Contralto: "I Dream My Love was Slipping"; (c) Tenor: "The Ruby Necklace"; (d) Tenor: "The Nightingale" (soprano, tenor and baritone). 9.15 p.m.—Some radio cartoons by Mr. Kerwin MacGraith.
- 9.25 p.m.—The Metropolitan Quartette: Part II of the "Bretton" Folk Song Recital: (a) Contralto: "No Gaudle was there and no Fire"; Miss Mary Bourke. (b) Quartet: "The Spinning Wheel"; (c) Soprano: "L'Annon"; Miss Marie Cooke. 9.34 p.m.—Mr. Clement May, Entertainer: "Orange Rhapsody" (Rohrer).
- 9.42 p.m.—The Metropolitan Quartette: Part II of the "Bretton" Folk Song Recital by Lisa Lehmann: (a) Bass solo: "King Galon's Daughter"; (b) Quartet: "St. Peter's Night"; (c) Quartet: "The Spinning Wheel", conducted by Mr. Eric Pearce, with Mr. Len Maurice, popular baritone.
- 9.55 p.m.—Miss Nera Hallott, soloist: "That's Why I Love You" (Donaldson).
- 10 p.m.—"Big Ben" Miss Marie Cooke, soprano, and Mr. A. G. Ellis, baritone; Duo, "The Dawn" (Lewes).
- 10.5 p.m.—Mr. Clement May, Entertainer: "The Difference".
- 10.15 p.m.—The 2FC Dance Band and Mr. Len Maurice, popular baritone.
- 10.30 p.m.—Miss Mary Bourke, contralto: "When Love Abides" (Clough-Lightner); (b) Quartet—Mr. Arthur Champion, tenor; "The Messenger" (Himmelsblau).
- 10.35 p.m.—The 2FC Studio Dance Band and Mr. Len Maurice, popular baritone.

- 10.35 p.m.—Miss Nera Hallott, soloist: "Hawaiian Serenade" (D'Hagen).
- 10.55 p.m.—The 2FC Dance Band.
- 10.45 p.m.—Mr. A. G. Ellis, baritone: "Dawn Skies" (Brabe).
- 10.49 p.m.—Miss Marie Cooke, soprano: "Come for the June" (Forster); (b) Quartet—The 2FC Studio Dance Band and the popular baritone, Mr. Len Maurice.
- 11 p.m.—"Big Ben" and announcements.
- 11.5 p.m.—The 2FC Dance Band in popular numbers until midnight.
- 12 midnight—"Big Ben."
- 12 National Anthem. Close down.

2BL, SYDNEY

EARLY MORNING SESSION.

- 7.15 a.m.—G.P.O. clock and chimes. 7.15 Musical programme from Studio.
- 7.19 a.m.—Physical training and health exercises.
- 7.25 a.m.—Hints on health.
- 7.30 a.m.—Physical training and health exercises.
- 7.45 a.m.—G.P.O. clock and chimes. 7.45 Weather report.
- 7.48 a.m.—Sporting information.
- 7.50 a.m.—Broadcasters' special news service.
- 8 a.m.—G.P.O. clock and chimes. Close down.

MORNING SESSION.

- 10 a.m.—G.P.O. clock and chimes. 10.1 Weather report.
- 10.3 a.m.—Musical programme from the Studio.
- 10.30 a.m.—News service from the "Daily Telegraph".
- 10.35 a.m.—Musical programme from the Studio.
- 11 a.m.—G.P.O. clock and chimes. 11.1 News from "Daily Telegraph".
- 11.10 a.m.—Habbit market report. 11.1 Fish market report.
- 11.10 a.m.—Vegetable market report. 11.21 Fruit market report.
- 11.25 a.m.—London Daily, farm and egg and poultry market report.
- 11.29 a.m.—Ships in call by wireless.
- 11.30 a.m.—Information on interstate and overseas mails.
- 11.32 a.m.—Shipping information—arrivals and departures.
- 11.35 a.m.—Talk on "Golf" by Miss Gwen Vardie. Broadcasters' Women's Sports Authority.
- 11.40 a.m.—Women's Session, conducted by Mrs. Jordan, Social Notes.
- 11.50 a.m.—Mrs. Jordan replies to correspondents.
- 12 noon—Talk on "Preserves" by Mrs. Jordan.
- 12.25 p.m.—News from the "Sun".
- 12.30 p.m.—G.P.O. clock and chimes. 12.31 Sydney Stock Exchange Calls.
- 12.33 p.m.—"Sun" Newspaper news service.
- 12.45 p.m.—Hillier's Instrumental Quartet—direction, Cary, Cudling.
- 1.30 p.m.—G.P.O. clock and chimes.
- 1.31 p.m.—Weather report and forecast.
- 1.35 p.m.—Sydney Stock Exchange Calls.
- 1.38 p.m.—News from the "Sun". 1.48 Musical programme from the Studio.
- 2 p.m.—G.P.O. clock and chimes. Close down.

AFTERNOON SESSION.

- Racing information broadcast by courtesy of the "Sun".
- 3 p.m.—G.P.O. clock and chimes. 3.1 Weather report.
- 3.5 p.m.—Social notes from the "Sun".
- 3.10 p.m.—Musical programme from the Studio, supplied by the Women's Christian Temperance Union of N.S.W.
- 4 p.m.—G.P.O. clock and chimes.
- 4.15 p.m.—News from the "Sun".
- 4.8 p.m.—Musical programme from Studio. 4.23 Serial Story.

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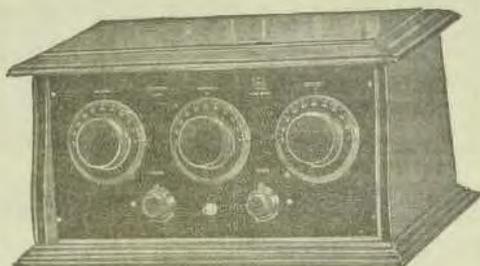
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4.40 p.m.—G.P.O. clock and chimes. 4.41 News from the "Sun".
 4.45 p.m.—Musical programme from the Studio.
 4.45 p.m.—Producers' Distributing Society's vegetable and fruit market report.
 4.50 p.m.—Shipping information on available.
 4.52 p.m.—Day's racing resume on race days.
 4.55 p.m.—News from the "Sun" 4.52 Resume of night's programme.
 5 p.m.—G.P.O. clock and chimes. Close down.

EARLY EVENING SESSION.

5.45 p.m.—G.P.O. clock and chimes. 5.46 Uncle George and the Kiddies.
 6.10 p.m.—Musical programme from the Studio.

SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. clock and chimes. Australian Mercantile, Land, and Finance Co.'s report.
 Weather reports and forecast by courtesy of Government Meteorologist.
 Stock Exchange reports.
 Producers' Distributing Society's fruit and vegetable market report.
 Grain and fodder report ("Sun"). Dairy produce report ("Sun").
 Primary Producers' newspaper report on London butter market.
 7.15 p.m.—Country news from the "Sun".
 7.40 p.m.—Talk on "Metric Progress in America," by Mr. Rupert Macchiani.

EVENING SESSION.

8 p.m.—G.P.O. clock and chimes. Broadcasters' Topical Chorus.
 8.5 p.m.—Newtown Band broadcast from Industrial Hall, Newtown.
 8.55 p.m.—Miss Gladys Hart, soprano.
 9.0 p.m.—Miss Billie Davis, contralto.
 9.07 p.m.—Miss Madge Beumeloh, contralto.
 9.44 p.m.—Mr. Bobby Watson, comedian.
 9.51 p.m.—The Abad Duo, steel gullys.
 9.55 p.m.—Resume of following day's programme.
 9.58 p.m.—G.P.O. clock and chimes.
 Weather report and forecast, by courtesy of Mr. C. J. Mason, Government Meteorologist.
 9.8 p.m.—Mr. Macready Wilson, basso.
 9.10 p.m.—Mr. Bobby Watson, comedian.
 9.17 p.m.—Newtown Band.
 9.21 p.m.—Miss Gladys Hart, soprano.
 9.44 p.m.—The Abad Duo.
 9.51 p.m.—Miss Billie Davis.
 9.58 p.m.—Miss Madge Beumeloh.
 10.0 p.m.—Mr. Bobby Watson.
 10.11 p.m.—Mr. Macready Wilson.
 10.19 p.m.—The Ambassadors' Dance Band broadcast from the ballroom of the Ambassadors. During the intervals between dances, news reports by courtesy of the "Sun" will be broadcast.
 12 midnight.—G.P.O. clock and chimes. National Anthem.

2KY, SYDNEY

LUNCHEON HOUR SESSION.
 12.15 p.m.—Tune in to the ticking of the clock.
 12.18 p.m.—Popular fox-trots, "Orphans" (Gramophone).
 12.25 p.m.—Musical interlude.
 12.40 p.m.—News items.
 1.0 p.m.—Vocal items.
 1.12 p.m.—Hawalan Steel Guitar Selections.
 1.25 p.m.—Union news and meetings.
 1.30 p.m.—Lincoln Records.
 1.40 p.m.—Where to go tonight.
 1.45 p.m.—Closing Announcements.

CHILDREN'S HOUR.

4.40 p.m.—The Storyman, Mr. Thompson.
 EVENING SESSION.
 7.50 p.m.—Tune in to the ticking of the clock.
 7.53 p.m.—Latest news items.

7.55 p.m.—Industrial and political topics. Mr. J. B. Garden.
 7.58 p.m.—Shipping log.
 8.0 p.m.—Mexico Soprano solos, Miss Nellie Graves.
 8.20 p.m.—Monologue, Miss Amy Rowald.
 8.30 p.m.—Musical Interlude, Glaciarium Dance Orchestra, Billy Bomaine, Leader. (By kind permission of Geo. Irving).
 8.55 p.m.—Contralto solos, Miss Amy Rowald.
 9.0 p.m.—Tenor solo, Mr. Taylor.
 9.12 p.m.—Soprano solos, Miss Mitchell.
 9.20 p.m.—Baritone solos, Mr. H. Webster.
 9.30 p.m.—Musical interlude from the Studio, Mac's Melody Makers, W. J. McMillan (Leader).
 10.0 p.m.—Closing Announcements.
 2KY—

2GB, SYDNEY

MORNING SESSION.
 "Cheerio Hour," conducted by the "Cheerio" Man.
 9.30 a.m.—Music.
 9.35 a.m.—Gladness Chai.
 9.40 a.m.—Music.
 10.0 a.m.—Home Betterment Topics.
 10.15 a.m.—Musical interlude from the Studio.
 10.20 a.m.—Five Minutes with the Children at Home.
 10.25 a.m.—Announcements; close down.

WOMEN'S NEWS SESSION.

3.30 p.m.—Music.
 3.40 p.m.—Humanitarian Movement in Series.
 3.50 p.m.—Music.
 4.5 p.m.—News from Everywhere for Women.
 4.50 p.m.—Music.
 4.55 p.m.—Close down.
 4.55 p.m.—The Children's Section, conducted by the "Cheerio" Man.
 7.30 p.m.—Music.
 7.55 p.m.—Instrumental Trio: Lloyd Davie, Muriel Lang, Ada Brook.
 8.2 p.m.—Address by Prof. E. Wood.
 8.25 p.m.—S.G.H. Quartette:
 1. "Love is Meant to Make us Glad" (Merrie England).
 2. "Sweet and Low" (Barbary).
 Margaret Beal, Eva Croft, Thomas Hall, Clement Hosking.
 8.28 p.m.—Violin Solos by Lloyd Davie.
 8.36 p.m.—Instrumental Quartette: Dan Scully, Monica Border, Muriel Lang, Ada Brook.
 8.50 p.m.—Announcements.
 9 p.m.—Vocal Duets:
 1. "La si Parera" (Mozart).
 Margaret Beal and Clement Hosking.
 9.5 p.m.—Piano Solos by Ada Brook.
 9.12 p.m.—Talk on Radio.
 9.22 p.m.—S.G.H. Vocal Quartette:
 1. "Twilight" (Rozzetti).
 2. "See How Lightly O'er the Blue Sea" (Donzetti).
 3. "A Spring Song" (Pisanti).
 Margaret Beal, Eva Croft, Thos. Hall, Clement Hosking.
 9.32 p.m.—Cello Solos by Muriel Lang.
 9.40 p.m.—Duets for Two Violins, with piano accompaniment.
 Dan Scully, Monica Border, Ada Brook.
 9.50 p.m.—"Cheerio" Talk.
 10 p.m.—"Great Thoughts from Great Minds" GOD SAVE THE KING.

3LO, MELBOURNE

THE STUDIO ORCHESTRA.
 Musical Director, REGINALD BRADLEY.
 SUPERPHONIC SONORA:
 JACK DUNNE, baritone.
 ADELE INMAN, soprano.
 THE MUSICAL GARDINERS:
 THE ESTELLE MARK TRIO.
 Accompanist: ALFRED ANDREW.
 Accompanist: AGNES FORTUNE.
 "A MUSICAL SALAD."
 12 noon.—Time Signal British Official Wire.

less news from Rugby.
 Reuters and the Australian Press Association Cables. "Argus" and "Herald" news services.
 12.15 p.m.—Stock Exchange information.
 12.30 p.m.—SUPERPHONIC SONORA RECITAL.
 12.30 p.m.—STUDIO ORCHESTRA:
 "Jubel Overture" (C. M. V. Weber).
 12.40 p.m.—JACK DUNNE, baritone (by permission of G. Williamson, Ltd.):
 "Sleepy Hollow Tune" (Kountz).
 "Just a Wearyin' for you" (Bond).
 12.47 p.m.—THE MUSICAL GARDINERS:
 "Duo" and "Mandolin Duo".
 French Horn Solo.
 Steel Guitar, French Horn, and Mandolin.
 Organ Chimes Selection.
 Xylophone.
 1.0 p.m.—STUDIO ORCHESTRA:
 "Ballet of the Flowers" Part 1 (Meady).
 1.15 p.m.—Meteorological information, Shipping intelligence, Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.
 1.25 p.m.—ADELE INMAN, soprano:
 "O'z Fashione'd Wife" (Jerome Kern).
 "Absent" (Metzler).
 1.30 p.m.—ESTELLE MARK TRIO:
 ESTELLE MARK, soprano.
 "Songs my Mother Sang."
 MARGOT BERRIDAN, piano.
 "Valse Suite" (Coleridge-Taylor).
 ESTELLE MARK, soprano: "The Swan."
 CECILIA KILDEFF, violin, solo.
 1.45 p.m.—JACK DUNNE, baritone:
 "To-night's my night with Baby" (Butterfield).
 "Billy Ace" (Leigh).
 1.52 p.m.—STUDIO ORCHESTRA:
 "In a Rose Garden" (Acosta).
 2 p.m.—Results of Cricket, VICTORIA v. QUEENSLAND at Brisbane. Luncheon adjournment scores.
 2.5 p.m.—Close down.

AFTERNOON SESSION. }
 Speakers: Miss FLORA FELL, }
 Mrs. DOROTHY SICK. }
 THE STUDIO ORCHESTRA.
 Musical Director, REGINALD BRADLEY.
 MAGGIE FOSTER, violin.
 JESSIE BATCHELOR, contralto.
 HARRY WOTTON, baritone.
 TASHA TIERNAN, solo.
 Accompanist: AGNES FORTUNE.
 Announcer: ALFRED ANDREW.
 "TO INTEREST AND AMUSE."
 3 p.m.—STUDIO ORCHESTRA:
 "St. Agnes' Eve" Suite (Coleridge-Taylor).
 4.10 p.m.—Miss FLORA FELL, Inspector of Schools, Education Department:
 "Domestic Economy."
 4.25 p.m.—MAGGIE FOSTER, violin:
 "Lullabyland" (Kuntzler).
 "Traumens" (Schumann).
 4.31 p.m.—JESSIE BATCHELOR, contralto:
 "Castles Lament."
 "The Fishes Tree."
 4.41 p.m.—STUDIO ORCHESTRA:
 "The Elbow" (Czechoslovakia) (Lohmann).
 4.52 p.m.—HARRY WOTTON, baritone (by permission of J. C. Williamson, Ltd.):
 "Ouvre tes yeux bleu" (Massenet).
 "Hungarian Song" (Korhay).
 4 p.m.—TASHA TIERNAN, solo:
 "Caprice" (Mozzart).
 4.7 p.m.—JESSIE BATCHELOR, contralto:
 "Twickenham Ferry."
 "Garden of Sleep."
 5.14 p.m.—STUDIO ORCHESTRA:
 "The Cobweb Castle," Part 2 (Lohmann).
 4.21 p.m.—HARRY WOTTON, baritone:
 "She alone Charmeth my sadness" (Goosend).
 "Country Churchyard" (Lisa Lohmann).
 4.30 p.m.—Mrs. DOROTHY SICK:
 Homecrafts.
 4.45 p.m.—"Herald" news service. Stock Exchange information.
 5 p.m.—TALK. Adjournment scores, Cricket Match, VICTORIA v. QUEENSLAND, at Brisbane.
 Close down.



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EVENING SESSION.

5.40 p.m.—CHILDREN'S HOUR. Answers to letters and Birthday Greetings by "Miss Kookaburra".
 5.50 p.m.—VICTORIA WILSON, soprano, will sing two little songs for the children.
 6.2 p.m.—"LITTLE MISS KOOKABURRA" will tell a humorous original story, entitled, "The Adventures of four little boys."
 6.12 p.m.—JOE and OWEN HARRISON will give Violin and Piano Solos.
 6.20 p.m.—VICTORIA WILSON has just two more little songs.
 6.27 p.m.—"Little Miss Kookaburra" will tell another story about King Arthur. Watch out for a new Serial Story, full of mischief and adventure.
 6.35 p.m.—"Argus" and "Herald" news services. Weather and Aerial Mail information by the Australian Aerial Services, Ltd.
 6.42 p.m.—Stock Exchange information. Overseas shipping.
 6.45 p.m.—Fish Market reports, by J. R. Borrett, Ltd.
 6.51 p.m.—River reports.
 6.54 p.m.—Market reports by the Victorian Producers Co-operative Co., Ltd. Hay-market sheep sales. Poultry, Grain, Cattle, Hoz, Straw, Jute, Dairy Produce, Fats, Oils and Onions.
 7.5 p.m.—Market prices of Oranges and Lemons, by the Victorian Central Citrus Association Pty, Ltd.

NIGHT SESSION.

Speakers: Dr. C. GORDON McADAM, E. C. H. TAYLOR, Mr. F. De CASTELLA, Mr. K. H. BAILEY.

VICTORIAN RAILWAYS MILITARY BAND.

JACK DENNE, baritone.
 MAGGIE FOSTER, violin.
 JESSIE BATCHELOR, contralto.
 DON ALFONSO ZELAYA, piano.
 THE MUSICAL GARDINERS.
 BOB MOLYNEUX, baritone.

ONE ACT PLAY.

Accompanist AGNES FORTUNE
 Announcer MAURICE DUDLEY
 JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

7.15 p.m.—Under the auspices of The Boy Scouts' Association, Dr. C. GORDON McADAM:

"The Great Principles of the Scout Law."
 7.30 p.m.—Mr. E. C. H. TAYLOR:
 "School Life and School Sport."
 7.45 p.m.—Under the auspices of the Department of Agriculture, Mr. F. de CASTELLA, Viticulturist: "Table Grapes."
 "FAIRIES and PEANUTSIES."

8 p.m.—VICTORIAN RAILWAYS MILITARY BAND:
 Overture: "William Tell" (Rossini).

8.15 p.m.—JACK DENNE, baritone (by permission of J. C. Williamson, Ltd.):
 "I Sometimes Wander" (Woodford-Finden),
 "There are Maidens in Japan" (Woodford-Finden)

8.15 p.m.—MAGGIE FOSTER, violin:
 "Cavatina" (Raf.).
 "Eileen Aikanah" (Raf.).

8.28 p.m.—JESSIE BATCHELOR, contralto:
 "The Touched the Rose."
 "Three Green Bonnets"

8.36 p.m.—VICTORIAN RAILWAYS MILITARY BAND:
 "Hallelujah Chorus" Messiah.

8.44 p.m.—ONE ACT PLAY:
 "A HONEYMOON KISS"
 Mrs. Goldie ... Mrs. MAURICE DUDLEY
 Mr. Goldie ... Mr. CHAS. R. DYSON

9.4 p.m.—DON ALFONSO ZELAYA, Famous South American Pianist:
 "Dance Spanola" (Granados),
 "Nocturne E Flat" (Chopin).

9.15 p.m.—A Talk under the auspices of the Institute of Pacific relations, Mr. K. H. BAILEY: "A Tour of the Pacific"—outlining Marie Dore reports and work.

9.35 p.m.—VICTORIAN RAILWAYS MILITARY BAND:
 Fersphrase: "Lorley" (Nevadale).
 March: "Frisco de Fashion" (E. J. Lincoln)

9.45 p.m.—JACK DENNE, baritone:
 "Dear Little Garden I Love" (Tannent).
 "In Your Eyes" (Billiam).

9.52 p.m.—British Official Wireless news from Rugby. Announcements.
 10.2 p.m.—THE MUSICAL GARDINERS:
 Hanjo and Mandolin Duets.
 French Horn Solo.
 Steel Guitar, French Horn, and Mandolin.
 Organ Chimes Selection.

Xylophone Solo.
 10.17 p.m.—JESSIE BATCHELOR, contralto:
 "The Enchantress."
 "Farewell" (Lamble).

10.24 p.m.—"Argus" news service. Announcements. Weather forecast.
 10.34 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:
 "Idolling" (West).
 "Nobody but You" (O'Hagan).

10.44 p.m.—BOB MOLYNEUX, baritone, will sing a popular song or two.
 10.51 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:
 "Arabique" (Rimsky-Korsakow).
 "Crazy Quilt" (Denman).

11 p.m.—OUR GREAT THOUGHT:
 "If you wish to reach the highest, begin at the lowest."—Syrus.

11.1 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS:
 "Lonesome and Sorry" (Doris Conrad).
 "Crying for the Moon" (Conley).

"There Never was a Pal Like You" (O'Hagan).
 "Pleador" (Nichols).
 "Sweet Hawaiian Sands" (O'Hagan).

"Oh, Miss Hannah" (Deppen).
 "Lone Bound" (Ruppi).
 "That's Why I Love You" (Donaldson).

"Good-night, I'll see you in the Mornin'" (Small).
 11.45 p.m.—GOD SAVE THE KING. (Small)

4QG, BRISBANE

MIDDAY SESSION.

12.55 p.m.—Tune in.
 12.58 p.m.—Time Signal.

1.9 p.m.—Market Reports; Weather information supplied by the Commonwealth Weather Bureau; News Service supplied by "The Daily Mail" and "The Daily Standard."
 1.20 p.m.—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.

1.58 p.m.—From the Observatory: Standard Time Signal.
 2.0 p.m.—Close Down.

AFTERNOON SESSION.

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

4.15 p.m.—From the Studio: News Service supplied by "The Telegraph."
 4.30 p.m.—Close Down.

EARLY EVENING SESSION.

5.0 p.m.—News Service supplied by the "Daily Standard."
 6.30 p.m.—Bedtime Stories by "The Sandman."
 7.0 p.m.—Market Reports; Lecture: "Consequences of the Pig. No. 1 of a series by Mr. E. J. Shelton (Instructor in Pig Raising).

7.30 p.m.—Stock Reports; Announcements; Weather News.
 7.43 p.m.—Standard Time Signal.

NIGHT SESSION.

7.45 p.m.—Lecture Session—"The Children's Music Corner" conducted by "The Music Master."
 8.0 p.m.—GAIETY ORCHESTRA: Persian Fox-trot, "On the Riviera," the Gaiety Orchestra (conductor, Miss Jean Taylor); soprano solo, "I Did Not Know" (Frotere); Miss Annie Adams; overture, "Berlin in Smiles and Tears," the Gaiety Orchestra; bass solo, "Close Props" (Charles), Mr. Stanley Tamblin; cornet solo, "Beccassine" (Hendel); Mr. F. Flowers (accompaniment on Studio organ by Miss Jean Taylor); tenor solo, "Honnie Mary of Argyle" (Nelson); Mr. Gerald Cashman; fox-trot, "When the Red, Red Robin Comes Bobbin' Along,"

the Gaiety Orchestra; soprano solo, "When Song is Sweet," Miss Annie Adams; march, "Captain in Command," the Gaiety Orchestra; bass solo, "The Admiral's Bloom" (Reven), Mr. Stanley Tamblin; fox-trot, "When Autumn Leaves are Falling," the Gaiety Orchestra.

9.0 p.m.—Metropolitan Weather Forecast. One-act, "Pleador," the Gaiety Orchestra; tenor solo, "Sally Horner," Mr. Gerald Cashman; fox-trot, "No Polka," the Gaiety Orchestra.

9.15 p.m.—From the Centennial Hall: Dance Music.

10.0 p.m.—From the Studio: "The Daily Mail" News; Weather News. Close Down.
 4QG—

5CL, ADELAIDE

MORNING SESSION.

11.50 a.m.—G.P.O. chimes.
 11.51 a.m.—Stock Duo Art number.
 11.50 a.m.—"Advertiser" news service.
 11.55 a.m.—Vocalion number.

12 noon.—G.P.O. chimes.
 12.1 p.m.—"Advertiser" news service.
 12.16 p.m.—Stock Duo Art numbers.
 12.50 p.m.—Studio Orchestra: Selection, "The Buhesian Girl"; waltz, "Hus-a-bye";

"Three dances"; tango solo, "Winged"; waltz, "Ballot of roses"; Polish dance, "Polka"; cornet solo, "Sweet memories"; finale, "War march of the priests."

1.55 p.m.—Ward and Co.'s Stock Exchange reports, official weather synopsis and station announcements.

2 p.m.—G.P.O. chimes.

AFTERNOON SESSION.

3 p.m.—G.P.O. chimes.
 3.1 p.m.—Relay from Maple Leaf Cafe—Orchestral numbers.

3.45 p.m.—From Studio: Vocalion and Stock Duo Art numbers.
 4 p.m.—G.P.O. chimes.

4.1 p.m.—Relay from Arcadia Cafe—Orchestral numbers.

4.55 p.m.—Stock Exchange reports. Station announcements.

5 p.m.—G.P.O. chimes and close down.

EVENING SESSION.

6.30 p.m.—G.P.O. chimes.
 6.31 p.m.—Stock Duo Art number.
 6.36 p.m.—Bedtime stories.

7.20 p.m.—Market reports, E. C. Ward and Co., Dalpey and Co., A. W. Sandford and Co., A. E. Hall and Co., S. A. Farmers' Union.

7.40 p.m.—Motor technical talk by Mr. van Smeden, under the supervision of Mr. Fredrickson, automotive engineer of the Vacuum Oil Co.
 8 p.m.—G.P.O. chimes.

8.1 p.m.—Quartette, Harmony Male Quartette.
 8.4 p.m.—Violin solo, Mr. Eric McLaughlin.
 8.9 p.m.—Song, Mr. Herbert King.
 8.15 p.m.—Pianoforte solo, Miss Coralia Godfrey.

8.17 p.m.—Song.
 8.21 p.m.—Request—Dancer programme from Floating Palms.

8.40 p.m.—Quartette, Harmony Male Quartette.
 8.45 p.m.—Violin solo, Mr. Eric McLaughlin.
 8.53 p.m.—Song, Mr. Herbert King.

8.56 p.m.—Relay from Floating Palms.
 9.20 p.m.—Quartette, Harmony Male Quartette.
 9.34 p.m.—Violin solo, Mr. Eric McLaughlin.

9.38 p.m.—Relay from Floating Palms.
 10 p.m.—G.P.O. chimes.
 10.1 p.m.—"Advertiser" news service.

10.20 p.m.—Relay from Floating Palms.
 10.35 p.m.—Quartette, Harmony Male Quartette.
 10.58 p.m.—Violin solo, Mr. Eric McLaughlin.

10.42 p.m.—Relay from Floating Palms.
 10.43 p.m.—Song, Mr. Herbert King.
 11 p.m.—G.P.O. chimes. National Anthem, and close down.

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Cut Prices, Slander, Hearsay, Habit, may cause you to buy other Valves, BUT—
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12/—



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Filament 3 volts
.06 amp.
12/6

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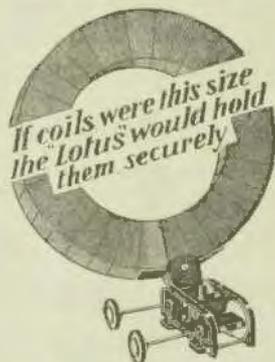
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91-93 Courtenay Place, Wellington, N.Z.

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The vernier movement comprises three sets of enclosed precision machine-cut gears, and reduces the speed of the moving block by eight times. Side plates, coil blocks, and knobs in artistic bakelite mouldings. All metal parts heavily nickel plated. Made for left as well as right hand.



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For outside panel mounting two-way, 12", and three-way, 18".

6 inch handle, two-way, 12", and three-way, 18".

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COIL HOLDERS

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Garnett, Whiteley & Co. Ltd.
Lotus Works, Broadgreen Rd.,
Liverpool, England.

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Degraves Buildings, Degraves
Street, Melbourne.

6WF, PERTH

- 12.30 p.m.—Tune in.
- 12.35 p.m.—First local news bulletin.
- Market reports.
- Cables.
- 1 p.m.—Time signal from the Perth Observatory.
- 1.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
- 1.3 p.m.—STUDIO QUINTETTET.
- 2 p.m.—Close down.
- 2.30 p.m.—Tune in.
- 3.35 p.m.—Musical programme.
- 4 p.m.—STUDIO TALK.
- 4.30 p.m.—Close down.
- 5 p.m.—Tune in.
- 5.45 p.m.—Stories for Tiny Tots by Annie Kate.
- 7.20 p.m.—Uncle Duffy will talk to the kiddies.
- 7.35 p.m.—Stock and Share intelligence.
- Market reports.
- Cables. News supplied by courtesy of "The West Australian" Newsman Co.
- 8 p.m.—Time signal from the Perth Observatory.
- 8.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
- 8.3 p.m.—Bee Keeping Talk by Mr. C. Walsh, under auspices of the Bee Keepers' Association.

RAND NIGHT.

- 8.15 p.m.—Concert by the B.S.L. Band. Conductor, Mr. Goss, S. Melior.
- 9.50 p.m.—Health talk by Mr. H. S. Hutton, of the Hutton School of Physical Culture.
- 10 p.m.—Second news bulletin supplied by courtesy of "The Daily News" Newsman Co.
- 10.57 p.m.—Close down.

Tues., February 8
2FC, SYDNEY

EARLY EVENING SESSION.

- 5.45 p.m.—The Chimes of 2FC.
- 6.50 p.m.—"The Hello Man" Talks to the Children.
- 8.30 p.m.—"Imito" entertains the children.
- 8.45 p.m.—Dinner Music.
- 7.10 p.m.—"Evening News" late news service.
- Weather information.
- 7.35 p.m.—Dalgety's Market Reports (Wool, Wheat, Stock, Fruit and Vegetable Market).
- 7.40 p.m.—Mr. Joe Pearson, in impressions of Early Sydney and its methods of transportation.

NIGHT SESSION.

- 7.55 p.m.—Announcements.
- 8 p.m.—"The Hen." FROM THE DARLINGTON TOWN HALL. The Metropolitan Band, conducted by Mr. John Palmer.
- 8 p.m.—FROM THE STUDIO: Mr. Norman Janson, baritone: "You and I Alone" (Smith).
- 8.12 p.m.—FROM THE DARLINGTON TOWN HALL: The Metropolitan Band.
- 8.25 p.m.—FROM THE STUDIO: Miss Violet Rogers, soprano.
- 8.25 p.m.—A Novelty Broadcast in which a real Kookaburra in the Studio will laugh in competition with "Imito" (Corporal Phil Hart), the well-known bird imitator. (Listeners will be asked to decide which is the imitation and which is the genuine laugh.)
- 8.35 p.m.—FROM THE DARLINGTON TOWN HALL: The Metropolitan Band.

- 8.40 p.m.—FROM THE STUDIO: Mr. Norman Janson, baritone: "Bibb Love Soze."
- 8.45 p.m.—FROM THE DARLINGTON TOWN HALL: The Metropolitan Band, conductor, Mr. John Palmer.
- 9 p.m.—"The Hen." FROM THE STUDIO: Mr. Walter Hunt and Miss Eve Warburton in a Character Sketch.
- 9.10 p.m.—Mr. Norman Janson, baritone: "A Sergeant of the Line" (Sauter).
- 9.14 p.m.—Mr. Lionel Lawson, violinist.
- 9.18 p.m.—FROM THE DARLINGTON TOWN HALL: The Metropolitan Band.
- 9.25 p.m.—FROM THE STUDIO: Miss Violet Rogers, soprano.
- 9.35 p.m.—Mr. Walter Hunt and Miss Eve Warburton in a Play in one act.
- 9.40 p.m.—Mr. Norman Janson, baritone: "Over the Mountains" (Quiller).
- 9.45 p.m.—Mr. Lionel Lawson, violinist.
- 10 p.m.—"The Hen." Mr. Alf Tremain and his Dance Orchestra, in popular numbers.
- 10.10 p.m.—Miss Violet Rogers, soprano.
- 10.14 p.m.—Mr. Walter Hunt and Miss Eve Warburton, in a Play in one act.
- 10.24 p.m.—Mr. Alf Tremain and his Dance Orchestra.
- 10.30 p.m.—Mr. Lionel Lawson, violinist.
- 10.35 p.m.—Announcements.
- 10.37 p.m.—Mr. Alf Tremain and his Dance Orchestra.
- 11 p.m.—"The Hen." Popular dance numbers until midnight, played by Mr. Alf Tremain and his Orchestra.
- 12 midnight—"Big Ben." National Anthem. Close down.

- 12.45 p.m.—Hillier's Instrumental Quartet—Direction, Carl Costling.
- 1.30 p.m.—G.P.O. clock and chimes.
- 1.31 p.m.—Weather report and forecast.
- 1.33 p.m.—Sydney Stock Exchange calls.
- 1.36 p.m.—News from the "Sun." 1.45 Musical programme from Studio.
- 2 p.m.—G.P.O. clock and chimes. Close down.

AFTERNOON SESSION.

- Racing information broadcast by courtesy of the "Sun."
- 2 p.m.—G.P.O. clock and chimes. 2.1 Weather report.
- 2.5 p.m.—Social Notes from "Sun." 2.10 News from the "Sun."
- 3.10 p.m.—Civil Service Stores' Tric. 3.30 News from the "Sun."
- 3.45 p.m.—Musical programme from the Studio.
- 4 p.m.—G.P.O. clock and chimes.
- 4.1 p.m.—Civil Service Stores' Tric.
- 4.15 p.m.—Serial Story.
- 4.30 p.m.—Musical programme from the Studio.
- 4.45 p.m.—Producers' Distributing Society's vegetable and fruit market report.
- 4.50 p.m.—Shipping information when available.
- 4.52 p.m.—Day's racing resume on race days.
- 4.56 News from the "Sun."
- 4.59 p.m.—Resume of night's programme.
- 5 p.m.—G.P.O. clock and chimes. Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. clock and chimes. 5.10 Uncle George and the Kiddies.
- 6.40 p.m.—Musical programme from the Studio.

SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. clock and chimes.
- Australian Mercantile, Land and Finance Co.'s report.
- Weather report and forecast.
- Stock Exchange reports.
- Producers' Distributing Society's fruit and vegetable market report.
- Dairy produce report ("Sun"). Grain and fodder report ("Sun").
- 7.15 p.m.—Country news from the "Sun."
- 7.30 p.m.—A talk on the "Motor Car." by Mr. Martin.
- 7.45 p.m.—News from the "Sun."
- 8 p.m.—G.P.O. clock and chimes.
- Broadcasters' Tiptical Chorus.
- 8.3 p.m.—Broadcasters' Miniature Orchestra, under the direction of Mr. J. Kluhst Barnett.
- 8.13 p.m.—Mr. David Smith, baritone.
- 8.20 p.m.—Miss Molly Raynor, comedienne.
- 8.27 p.m.—Miss Mary Neal, mezzo-contralto.
- 8.34 p.m.—Miss Gladys Duvall, harpist.
- 8.41 p.m.—Mr. Stan Hudson, English light comedian.
- 8.48 p.m.—Mr. J. Crosby Browne, clarinet solo.
- 8.55 p.m.—Resume of following day's programme.
- 9 p.m.—G.P.O. clock and chimes.
- 9.1 p.m.—Broadcasters' Miniature Orchestra.
- 9.11 p.m.—Miss Gladys Verona, soprano.
- 9.31 p.m.—Interval.
- 9.34 p.m.—Mr. David Smith.
- 9.41 p.m.—Broadcasters' Miniature Orchestra.
- 9.52 p.m.—Miss Molly Raynor.
- 10 p.m.—G.P.O. clock and chimes.
- 10.1 p.m.—Miss Mary Neal.
- 10.6 p.m.—Mr. Stan Hudson.
- 10.10 p.m.—The Ambassadors' Dance Band broadcast from the ballroom of the Ambassadors. During the intervals between dances, news reports by courtesy of the "Sun" will be broadcast.
- 12 midnight.—G.P.O. clock and chimes. National Anthem.

2BL, SYDNEY

EARLY MORNING SESSION.

- 7.10 a.m.—G.P.O. clock and chimes. 7.16 Musical programme from Studio.
- 7.19 a.m.—Physical training and health exercises.
- 7.25 a.m.—Hints on health.
- 7.30 a.m.—Physical training and health exercises.
- 7.45 a.m.—G.P.O. clock and chimes. 7.46 Weather report and forecast.
- 7.48 a.m.—Sporting information.
- 7.50 a.m.—Broadcasters' special news service.
- 8 a.m.—G.P.O. clock and chimes. Close down.

MORNING SESSION.

- 8 a.m.—G.P.O. clock and chimes. 10.1 Weather report and forecast.
- 10.4 a.m.—Musical programme from the Studio.
- 10.50 a.m.—News service from the "Daily Telegraph."
- 10.55 a.m.—Musical programme from the Studio.
- 11 a.m.—G.P.O. clock and chimes. 11.1 News from "Daily Telegraph."
- 11.15 a.m.—Rabbit market report. 11.17 Fish market report.
- 11.19 a.m.—Vegetable market report. 11.21 Fruit market report.
- 11.23 a.m.—Report on London dairy, farm, egg and poultry market.
- 11.29 a.m.—London metal quotations.
- 11.30 a.m.—Bbps in call by wireless.
- 11.51 a.m.—Information to interstate and overseas mails.
- 11.53 a.m.—Shipping information—arrivals and departures.
- 11.55 a.m.—Talk on Sport, by Miss C. Varley.
- Broadcasters' Women's Sports Authority.
- 11.40 a.m.—"Women's Session," conducted by Mrs. Jordan. Serial Notes.
- 11.50 a.m.—Mrs. Jordan replies to correspondents.
- 12 noon.—G.P.O. clock and chimes.
- 12.1 p.m.—Talk on "Hygiene," by Mrs. Jordan.
- 12.25 p.m.—News from the "Sun." 12.30 G.P.O. clock and chimes.
- 12.31 p.m.—Sydney Stock Exchange calls.
- 12.33 News from "Sun."



WHICH IS THE BEST?

A trusting reader of "Wireless Weekly" wants me to settle a bet by stating which is the world's best battery!

My dear chap, I must refer you to our advertising columns. How can I answer such a question? Besides, there are so many kinds of batteries—"A," "B," "C," dry and rechargeable, etc.

But if I must give you some answer, then I advise that if you are prepared to pay for a first class battery,—one which will last for years,—you cannot go wrong in buying the new 83X Philco Rechargeable B. Battery.

Here are a few reasons why I like the Philco:

In the first place it will give trouble-free service for years with strong pure reception, banishing hum, buzz and crackle.

Instead of throwing the battery away when it does run down,—say in three to four months if worked 2 hours a day,—any garage will recharge it for a couple of shillings or the new Noiseless Charger will do it at home for you from 2/6. to 6d.

This battery is "dynamic"—that is, it starts its life only when the dealer pours in the electrolyte. Thus you get an absolutely fresh live battery.

The glass cells have acid-tight sealed covers which make the Philco safe anywhere in the home, and the mahogany-finished cabinet is beautiful and decorative.

An exclusive Philco feature is the visible Charge Indicators. These show the exact condition of the battery at any moment without bothering to use the old-fashioned hydrometer.

The Philco 83X has a tremendous capacity—double that of an ordinary "B" battery.

If I were writing a straight-out advertisement for my friend Philco, I could add a lot to this list, but you can get any further particulars from New System Telephones Pty., Ltd., 280 Castlereagh Street, Sydney, also at Melbourne and Adelaide.

May I hope, in closing, that my optimistic correspondent will not drag me into trouble with the Managing Editor by asking any more leading questions of the same kind! I may get away with it this time, but—

Does this answer your question?

Owner: Personally I prefer the Philco "A" and "B" Accumulator Batteries, but a smart salesman persuaded me to buy an Eliminator. Now my results are not as good, yet my yearly costs are higher. Why?

Expert: Eliminators are always more or less noisy, and it is often difficult to cut out the A.C. hum, with roar and buzz. Buyers, too, are frequently disappointed because Eliminators, especially the cheaper sort, do not deliver sufficiently high voltage.

Owner: What about Philco batteries?

Expert: There you have absolutely pure D.C. current without variation, giving the finest reception. You can be certain of Life, Distance, Volume and Clarity.

Owner: That was my own experience with Philcos. Now get on to the costs.

Expert: In using an Eliminator you are working with electric light current, which fluctuates. Fluctuating current plays havoc with valves—and you cannot blow out costly valves and look pleasant. Of course Eliminators which use the new Raytheon tube for rectification are more economical than Eliminators employing ordinary valves.

Owner: That's a good tip anyhow. Now what about a saving in charging?

Expert: Even with an Eliminator you have to buy a Charger for your A battery. With the A and B Philco Batteries you also need a Charger, but the cost of recharging is only a few pence every three or four months. Where does the Eliminator save anything?

Owner: Well, if by using the A and B Philcos I can get better results and save money as well, why on earth did I buy an expensive Eliminator?

Expert: Ask that smart salesman! I can't tell you.

All High-class Dealers sell Philco Batteries.

Wholesale Distributors:

New System Telephones Pty. Ltd.

280 Castlereagh Street, Sydney.

27 Queen's Bridge St., Melbourne.

Charles St., Adelaide

S.B.

2KY, SYDNEY

LUNCHEON HOUR SESSION

- 12.15 p.m.—Tune in to the ticking of the clock.
- 12.17 p.m.—Popular Favorites. "Orpheus" Gramophone.
- 12.22 p.m.—Pianoforte solos.
- 12.30 p.m.—News Items.
- 1.0 p.m.—Vocal Items.
- 1.15 p.m.—Raphael Steel Guitar Selections.
- 1.27 p.m.—Piano solos and medleys.
- 1.30 p.m.—Musical and vocal items, closing down at 1.45 p.m.

CHILDREN'S HOUR

6.30 p.m.—The Storyman, Mr. Thompson.

EVENING SESSION

- 7.30 p.m.—Tune in to the ticking of the clock.
- 7.35 p.m.—Latest news items.
- 7.45 p.m.—Tonal talk, Herborn Reaver.
- 8.0 p.m.—Pianoforte solos, Miss Mary Dunn.
- 8.10 p.m.—Mouth organ selections, Mr. Reuben Fletcher.
- 8.14 p.m.—Tense solos, Mr. A.H. Shaw.
- 8.25 p.m.—Mezzo Soprano solos, Miss Helen Cameron.
- 8.35 p.m.—Musical interlude, Glastonbury Dance Orchestra, Billy Romaine, Leader. (By kind permission of Geo. Irving.)
- 8.49 p.m.—Banjo solos, Mr. Murrell.
- 8.59 p.m.—Soprano solos, Miss Zara Neilson.
- 9.14 p.m.—Glastonbury Dance Orchestra.
- 9.35 p.m.—Theatre talk.
- 9.40 p.m.—Recital of latest releases Lincoln records.
- 10.0 p.m.—Closing Announcements.

3LO, MELBOURNE

MORNING SESSION

FROM BALLADS TO OPERA.

- THE STUDIO ORCHESTRA**
(Musical Director, Reginald Bradley.)
- ADELLE INMAN, Soprano.
- HARRY WOTTON, Baritone.
- MAGGIE FOSTER, Violinist.
- Announcer, ALFRED ANDREW, Accompanist, AGNES FORTUNE.
- 12 noon.—Time Signal: British Official Wireless News From Rugby; Reuter's and Australian Press Association Cables; "Argus" and "Herald" News Services.
- 12.16 p.m.—Stock Exchange Information.
- 12.30 p.m.—A SONORA RECITAL.
- 12.30 p.m.—STUDIO ORCHESTRA.
- "Oleho" (Verdi-Tasso).
- 12.45 p.m.—ADELLE INMAN, Soprano, "O lovely night" (Landon Ronald).
- 12.52 p.m.—C. RICHARD CHUGG, Flute solo, "Spirale" (Dopfen).
- 12.59 p.m.—HARRY WOTTON, Baritone (permission J. C. Williamson, Ltd.), "Eleanore" (Coleridge Taylor).
- "In summer fields" (J. Brahms).
- 1.0 p.m.—STUDIO ORCHESTRA, "Good Night" (Haince).
- 1.11 p.m.—ADELLE INMAN, Soprano, "Now Sleeps the Crimson Petal" (Quilter). "Coming Home" (Wallby).
- 1.18 p.m.—Meteorological Reports: Weather forecasts for Victoria, Tasmania, South Australia and New South Wales; River reports.
- 1.28 p.m.—MAGGIE FOSTER, Violin Solo, "Scotch Selections" ("Minuet" (Paderewski).
- 1.36 p.m.—HARRY WOTTON, Baritone, "My heart is in the Bloom" (J. Brahms).
- "Morning" (Landon Ronald).
- 1.43 p.m.—STUDIO ORCHESTRA, "Gipsy Love" Selection (Lohar).
- 1.53 p.m.—Luncheon Adjournment Scores of Cricket Match, Victoria v. Queensland, played at Brisbane.
- 2.0 p.m.—Close Down.

AFTERNOON SESSION

"DANCE AND BE MERRY"

- JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- BOB MOLYNEUX, Baritone.
- VICTORIA WILSON, Soprano.

"AU FAIT"

- Announcer, ALFRED ANDREW, Accompanist, AGNES FORTUNE.
- 8.0 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "Where did you get those Kisses" (Donaldson).
- "I Climb the Highest Mountain" (Brown).
- 11.0 p.m.—"AU FAIT" of Messrs. Buckley and Nunn, Ltd. in a Fashion Talk.
- 2.25 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "Give Me 'Tuday" (Bell).
- "The Annual Fair" (Gripus Days) (Forrest).
- 3.35 p.m.—BOB MOLYNEUX, Baritone, "Thinking of You" (Nimblet, Sinatra, Simon).
- 5.12 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "Say That You Love Me" (Moulin Nichols).
- "How Could Red Riding Hood" (Randolph).
- 2.25 p.m.—VICTORIA WILSON, Soprano, "Solving's Song" (Grieg).
- "Over the Mountains" (Quilter).
- 4.0 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "Precious" (Whiting Regan).
- "St. Louis Blues" (Handy).
- 4.10 p.m.—BOB MOLYNEUX, Baritone, "What do you Say we Get Together."
- 4.17 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "Moonlight on the Ganges" (Wallace Myers).
- "Barcelona" (Krumpholt).
- 4.21 p.m.—VICTORIA WILSON, Soprano, "If You Have Naught to Say to Me" (Frita Hart).
- "Autumn Thoughts" (Grieg).
- 4.24 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- Piano Solo, "Laughing at the Ivories," Leo Richmond.
- "No Fossil" (Buck-Sander).
- 4.45 p.m.—"Herald" News Service. Stock Exchange Information.
- 5.0 p.m.—Two Adjournment Scores; Cricket Match between Victoria and Queensland, played at Brisbane.
- 5.4 p.m.—Close Down.

EVENING SESSION

- 5.40 p.m.—CHILDREN'S HOUR: Answers to letters and Birthday Greetings.
- 5.55 p.m.—THE STUDIO ORCHESTRA, under Reginald Bradley.
- "The Children's Corner—Jumbo's Lullaby" (Mozart).
- 6.0 p.m.—"MARY GUMLEAF," in Poems for the children.
- "Tug of War"
- "Peter's Acroliana"
- Waltzes for the littlest ones—
- "More about Edward."
- "The Red Teddy Bear"
- 6.18 p.m.—STUDIO ORCHESTRA.
- "De Gradus and Paragon."
- "Serenade for the Doll."
- 6.23 p.m.—"MARY GUMLEAF," A Story for the Boys, "The Little White Hen."
- A Story for the Girls—"The Was Wonderful and the River King."
- 6.35 p.m.—"Argus" and "Herald" News Service; Weather symbols; Shipping movements.
- 6.41 p.m.—Stock Exchange Information.
- 6.52 p.m.—Fish Market Reports by J. R. Barrett, Ltd.
- 6.55 p.m.—River Reports.
- 6.58 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd., Dairy produce; Potatoes and Onions; Haymarket; Sheep sales; Poultry; Grain; Straw; Hay and Jute.
- 7.0 p.m.—Market prices of Oranges and Lemons by the Victorian Central Citrus Association.

NIGHT SESSION

ROUND THE TOWN

- ERNEST C. GRAM AND THE TIVOLI ORCHESTRA.
- THE STUDIO ORCHESTRA.
- Musical Director, Reginald Bradley.

THE MUSICAL GARDINERS.

- DREW AND ROMAINE, Two Boys and a Piano.
- JESSIE BATCHELOR, Contralto.
- FRANCES LEA, Soprano.
- MAGGIE FOSTER, Violinist.
- Speakers: Mr. R. H. WILMOT, Mr. C. R. LONG, M.A., Mr. E. DYASON, HERBERT "Oppy" OPPERMAN.
- Announcer, MAURICE DUDLEY.
- Accompanist, AGNES FORTUNE.
- 7.15 p.m.—Mr. R. H. WILMOT, "Feery-day Chemistry—Pearls."
- 7.30 p.m.—Under the auspices of the University Extension Board, Mr. C. R. LONG, M.A., "The story of the first wreck on the Australian Coast."
- 7.45 p.m.—Under the auspices of the Institute of Pacific Relations, Mr. E. DYASON, "Industrialization of the Far East," outlining his own trip.
- 8.0 p.m.—VAUDEVILLE—THE TIVOLI ORCHESTRA, under the baton of Mr. Ernest C. Gram, transmitted from the Tivoli Theatre by permission of J. C. Williamson, Ltd.
- 8.30 p.m.—GRAND OPERA: JESSIE BATCHELOR, Contralto, "Softly Awake My Heart" (Sanzon et Dollé) (St. Saens).
- "Fair Spring is Returning" (St. Saens).
- 8.35 p.m.—STUDIO ORCHESTRA, Selection, "Carmen" (Bizet).
- 8.45 p.m.—SPORT—HERBERT "Oppy" OPPERMAN, Australia's All Round Champion, will speak on "Cycling as a Pastime."
- 8.50 p.m.—VARIETY: THE MUSICAL GARDINERS, Banjo and Mandolin Duet, French Horn Solo, Steel Guitar, French Horn and Mandolin, Xylophone Duet, Organ Chimes Selection.
- 9.10 p.m.—LIGHT COMEDY: FRANCES LEA, Soprano, "Tines of Pan" ("Arcadians" (Monckton).
- "Miere to Love" ("Suzanne Girl").
- 9.20 p.m.—STUDIO ORCHESTRA, Selection, "The Arcadians" (Monckton).
- 9.35 p.m.—VAUDEVILLE: DREW AND ROMAINE, Two Boys and a Piano, to "Originalities."
- 9.50 p.m.—British Official Wireless News from Rugby, Sporting notes by "Olympus," "Argus" News Service.
- 10.0 p.m.—A BALLAD CONCERT: STUDIO ORCHESTRA, Descriptive, "Vision of Salome" (Lampe).
- 10.10 p.m.—JESSIE BATCHELOR, Contralto, "An Old Fashioned Town."
- "A Bowl of Roses."
- 10.17 p.m.—MAGGIE FOSTER, Violinist, "Le Canot" (Polaicin).
- "Selections from Popular Choruses"
- 10.27 p.m.—FRANCES LEA, Soprano, "Still as the Night" (Brahm).
- "Ole Dutch Ties" (Sharpe).
- 10.54 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "A Cup of Coffee, a Sandwich, and You" (Mayer).
- "Don't-morrow" (Van Alstyne).
- 10.44 p.m.—Weather forecast; Announcements.
- 10.54 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "My Cutie is Due at Two to Two."
- 11.0 p.m.—OLE GREAT THOUGHT, "Euphuistic is the invention of wise men to keep 'sols at a distance" (Steele).
- 11.1 p.m.—JOE ARONSON AND HIS SYNCO-SYMPHONISTS.
- "Somebody's Lonely" (Davis).
- "He Diddle Diddle" (Coon).
- "Nonpotion, Nibbit, Waltz" (Zanzucchi).
- "I Climb the Highest Mountain" (Brown).
- "Kalinka" (Russell).
- "Fire! Fire! Fire! Turn the Hoe on Me" (Whiting).
- "You'll be Happy" (Friend).
- "Firey"
- "The Good Night Song"
- 11.40 p.m.—GOD SAVE THE KING.

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4QG, BRISBANE

MIDDAY SESSION.

- 12.55 p.m.—Tune In.
 12.58 p.m.—Time Signal.
 1.0 p.m.—Market Reports; Weather Information; "The Daily Mail" and "The Daily Standard" news.
 1.30 p.m.—From Hotel Carlton Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphonic Orchestra.
 1.52 p.m.—From the Observatory: Standard Time Signal.
 2.0 p.m.—Close Down.

AFTERNOON SESSION.

- 2.30 a.m.—From the Studio: MUSICAL PROGRAMME: Duo Art Selection, "El Dorado" (Barlett); Aeolian Vocalion selections: (a) vocal duet, "Without You" (Goward), Miss Kitty Reilly (soprano), and Mr. Howard Wagstaff (baritone); (b) orchestral, "A Hunt in the Black Forest" (Voeller), Albany Concert Orchestra. Duo Art selection, "Rudians" (Hercules), Aeolian Vocalion selections: (a) song, "Hi Ho Ho Merrie" (Brown), Mr. Jack Kaufmann; (b) mandolin "Serenade" (Pierini), Mr. Mario di Pietra. Duo Art selection, "Follies in C Sharp Minor" (Rachmaninoff); Aeolian Vocalion selections:—(a) bass solo, "Bells of the Sea" (Solman), Mr. Malcolm McEskern; (b) "Golden Tones Girl," Harry Bidgood's Orchestra. Duo Art selection, "Frauenrei" (Schumann), Aeolian Vocalion selections:—(a) orchestral, "Poem Symphonique" (St. Saens), Aeolian Orchestra; (b) bass solo, "The Orefield" (Mr. Malcolm McEskern, Duo Art selection—"Chanson Triste" (Tschakowsky).
 4.35 p.m.—"The Telegraph" News.
 4.50 p.m.—Close Down.

EARLY EVENING SESSION.

- 6.9 p.m.—"Daily Standard" News; Announcements.
 6.30 p.m.—Bedtime Stories by "Uncle Ben" and "Uncle Jim."
 7.9 p.m.—Market Reports; Lecturette A talk on dairying by Mr. C. McGrath (Chief Dairy Supervisor).
 7.30 p.m.—Stock Reports; Announcements; Weather News.
 7.45 p.m.—Standard Time Signal.

NIGHT SESSION.

- 7.45 p.m.—Lecture Session—"Photography" by Mr. F. L. South (Manager Kodak, Ltd.).
 HOLY CROSS CHORUS: The whole of tonight's programme will be provided by the Holy Cross Church Choir.
 8.0 p.m.—Chorus, "Kathleen Mavourneen" (Crouch); Holy Cross Choir; tenor solo, selected, Mr. F. M. Fritz; chorus, "Alton Water," Holy Cross Choir; recitation, "Australia," Miss E. McMillin; chorus, "Advantage Australia" (Adams); Holy Cross Choir; duet, selected, Miss E. Keane and Mr. J. Keane; soprano solo, "A String of Pearls" (Phillips); Miss Mollie Moran; male quartette, "In Advance" (Huck); Mr. F. M. Fritz, J. Keane, R. Wade and K. Dooley; musical monologue, "The 11-89 Express" (Bagnall), Mr. L. H. Cannon.
 9.0 p.m.—Metropolitan Women's Forenoon Soprano solo, selected, Miss E. Keane; bass solo, "Roses" (Adams), Mr. F. Henry; selection, selected, Miss M. Kelly; duet, "Maying" (Smith), Miss Mollie Moran and Mr. F. M. Fritz; solo and chorus, "Bonnie the Prairie Flower" (Wurand), Holy Cross Choir; soprano solo, selected; Miss R. Connolly; chorus, "Home Sweet Home" (Vinson); Holy Cross Choir; chorus, solo, selected, Mr. Virgil Fahn; chorus, "Good-bys," Holy Cross Choir. COMMUNITY SINGING: The latter portion of the programme will be given in the lounge using from 4QG's reception hall, by members of the Holy Cross Choir.
 10.0 p.m.—"The Daily Mail" News; Weather News. Close Down.

5CL, ADELAIDE

MORNING SESSION.

- 11.00 a.m.—G.P.O. chimes.
 11.01 a.m.—Stock Duo Art number.
 11.40 a.m.—"Advertiser" news service.
 11.55 a.m.—Vocalion number.
 12 noon.—G.P.O. chimes.
 12.10 p.m.—"Advertiser" news service.
 12.18 p.m.—Stock Duo Art number.
 12.20 p.m.—Studio Orchestra: Overture, "The midnight dream"; waltz, "Calling"; fox trot, "Paradise Alley"; novelty, "Bird of paradise"; violin solo, "Gavotte for King"; fox trot, "Jim across Charleston"; Rhaps. "Gems from Beethoven".
 1.55 p.m.—S. C. Ward and Co.'s Stock Exchange report; official weather synopsis and station announcements.
 2 p.m.—G.P.O. chimes and close down.

AFTERNOON SESSION.

- 3 p.m.—G.P.O. chimes.
 3.1 p.m.—Relay from Maple Leaf Cafe—Orchestral numbers.
 3.20 p.m.—From the Studio. Talk by Mrs. Conhill.
 4 p.m.—G.P.O. chimes.
 4.1 p.m.—Relay from Arcadia Cafe. Orchestral numbers.
 4.35 p.m.—Stock Exchange report; general information and station announcements.
 5 p.m.—G.P.O. chimes and close down.

EVENING SESSION.

- 6.30 p.m.—G.P.O. chimes.
 6.51 p.m.—Stock Duo Art.
 6.56 p.m.—Bedtime stories.
 7.30 p.m.—Market reports.
 7.40 p.m.—Mailing talk by Mr. Juckett.
 8 p.m.—G.P.O. chimes.
 8.3 p.m.—Comic Opera Evening. Opera and casts to be advertised later.
 10 p.m.—G.P.O. chimes.
 10.1 p.m.—"Advertiser" news service.
 10.2 p.m.—Studio concert, continued by 5CL Orchestra, led Linda Chaplin, Mr. Leo Boyce.
 10.58 p.m.—Station announcements.
 11 p.m.—G.P.O. chimes, National Anthem and close down.

6WF, PERTH

- 12.30 p.m.—Tune In.
 12.35 p.m.—First local news bulletin.
 Market reports.
 Cables.
 1 p.m.—Time signal from the Perth Observatory.
 1.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
 1.2 p.m.—STUDIO TRIO.
 1.30 p.m.—Close down.
 3.00 p.m.—Tune In.
 3.35 p.m.—Musical programme, including pianoforte selections by Miss Evelyn Willis, A.R.C.M.
 4 p.m.—STUDIO TRIO.
 4.30 p.m.—Close down.
 7 p.m.—Tune In.
 7.5 p.m.—Stories for Tiny Tots by Auntie Kate.
 7.50 p.m.—Uncles Henry and Perry will talk to the kiddies.
 7.55 p.m.—Stock and Share intelligence.
 Market reports.
 Cables. News compiled by courtesy of "The Daily News" Newspaper Co.
 8 p.m.—Time signal from the Perth Observatory.
 8.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.

8.2 p.m.—A QUARTETTE.

- Items by the Specialty Four:
 Mr. Billy Edwards, At the Piano.
 Mr. David Lyle, Tenor.
 Mr. Percy Hill, Entertainer.
 Mr. Lionel Carter, Bass.
 10 p.m.—Second news bulletin supplied by courtesy of "The Daily News" Newspaper Co.
 10.30 p.m.—Close down.

Wed, February 9
2FC, SYDNEY

EARLY MORNING SESSION.

- 9 a.m.—"Big Ben" and announcements.
 9.10 a.m.—Music from the Studio.
 9.10 a.m.—Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services, commercial news.
 9.25 a.m.—Investment market, mining share market, metal quotations.
 9.35 a.m.—Wool sales, breadstuffs market, interstate markets, produce markets.
 9.45 a.m.—"Sydney Morning Herald" news service.
 9.50 a.m.—"Big Ben" Music from the Studio.
 10.15 a.m.—Close down.

MORNING SESSION.

- 9.15 a.m.—Music from the Studio.
 9.20 a.m.—Marching Music for school children.
 10 a.m.—"Big Ben" and announcements.
 10.5 a.m.—Late "Sydney Morning Herald" news service.
 10.45 a.m.—A morning reading.
 11 a.m.—"Big Ben," Australian Press Association and Reader's Cable Services.
 11.20 a.m.—Music from the Studio.
 11.45 a.m.—A Talk on Home Cooking and Recipes by Miss Ruth Furest.
 11.55 a.m.—Marching Music for school children.
 11.55 a.m.—Close down.

MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.
 12.10 p.m.—Stock Exchange, first call.
 12.10 p.m.—Studio Music.
 12.45 p.m.—FROM FARMER'S OAK HALL—Instrumental item by the Oak Hall Trio.
 12.50 p.m.—Hugby wireless news.
 12.55 p.m.—Studio Music.
 2 p.m.—"Big Ben." Weather intelligence.
 1.5 p.m.—"Evening News" midday news service. Producers' Distributing Society's report.
 1.29 p.m.—FROM FARMER'S OAK HALL—The Oak Hall Trio (Leader, Mr. Horace Keats).
 1.35 p.m.—Studio Music.
 1.39 p.m.—Stock Exchange, second call.
 1.40 p.m.—Marching Music for school children.
 1.40 p.m.—Some popular records.
 1.50 p.m.—FROM FARMER'S OAK HALL—The Oak Hall Trio.
 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 2.30 p.m.—The Chimes of 2FC and announcements.
 2.35 p.m.—Some new records.
 2.40 p.m.—A Reading.
 2.49 p.m.—Pianoforte reproductions on the "Behning" Player Piano.
 2.50 p.m.—FROM THE WENTWORTH CAFE; The New Wentworth Symphonic Dance Orchestra.
 3.40 p.m.—FROM FARMER'S TEA ROOMS—Miss Jessie Hutchison, soprano.
 3.45 p.m.—The Oak Hall Trio.
 3.55 p.m.—Studio Music.
 4 p.m.—"Big Ben." FROM FARMER'S TEA ROOMS—Miss Alison Bear, contralto.
 4.5 p.m.—The Oak Hall Trio (Leader, Mr. Horace Keats).
 4.15 p.m.—Studio Music.
 4.20 p.m.—FROM FARMER'S TEA ROOMS—Miss Jessie Hutchison, soprano.



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2BL, SYDNEY

EARLY MORNING SESSION.

- 4.25 p.m.—The Oak Hall Trio.
- 4.35 p.m.—Studio Music.
- 4.40 p.m.—FROM FARMER'S TEA ROOMS—Miss Aileen Bear, contralto.
- 4.45 p.m.—Studio Music
- 4.46 p.m.—Close down.

EARLY EVENING SESSION.

- 8.45 p.m.—The Chimes of 2FC.
- 9.00 p.m.—The "Hello Man" Talks to the children.
- 9.50 p.m.—A Serial Story for the older ones.
- 6.45 p.m.—Dinner Music.
- 7.10 p.m.—"Evening News" late news service, Weather intelligence.
- 7.25 p.m.—Dalgety's Market Reports (Wool, Wheat, Stock), Fruit and Vegetable markets.
- 7.40 p.m.—Close down.

NIGHT SESSION.

- 7.55 p.m.—Announcements.
- 8 p.m.—"Big Ben," FROM THE HAYMARKET THEATRE; Item by the Haymarket Operatic Orchestra, under the baton of Mr. Stanley Porter.
- 8.15 p.m.—FROM THE STUDIO: Mr. Tom Lamond, tenor.
- 8.19 p.m.—Miss Leslie Elliott, Entertainer: "Sing here for the life of a "Huterea" (Elliott).
- 8.23 p.m.—Madame Emily Marks, soprano: "Daphne" (Conroy Clarke).
- 8.25 p.m.—Mr. Scott Alexander re-appears at the Studio in a Radio Trifle.
- 8.35 p.m.—FROM THE HAYMARKET THEATRE—The Haymarket Operatic Orchestra of 20 members, conducted by Mr. Stanley Porter.
- 8.45 p.m.—FROM THE STUDIO: Mr. Joe Cahill, Entertainer.
- 8.50 p.m.—Madame Emily Marks, soprano.
- 8.54 p.m.—Miss Leslie Elliott, Entertainer: "Listen in for Happiness" (Elliott).
- 8.59 p.m.—Mr. Tom Lamond, tenor.
- 9.5 p.m.—FROM THE HAYMARKET THEATRE—Vocal Act: Fred Hlutt and Roy Boye, the well-known Comedians.
- 9.20 p.m.—FROM THE STUDIO—A Travel Story taking listeners in an imaginary trip on an ocean liner from Sydney to London. The Studio staff of 25 members will visit the various ports en route, and all the atmosphere and story of ship life will be transmitted. The Play will be produced by Mr. Scott Alexander and Mr. Laurence Halbert. Character Sketches by Miss Annie Hughes. The 2FC Dances Band, conducted by Mr. Eric Pearse, with Mr. Len Maurice, popular baritone.
- Mr. Tom Lamond, tenor.
- Madame Emily Marks, soprano: "I am not fair" (Toot).
- Miss Leslie Elliott, contralto: (a) "At the Fancy-dress Ball Parade" (Elliott). (b) "Three Cheers for the Dustman" (Weston & Lee). (c) "Three Little Hairs" (Rutler).
- Mr. Len Maurice in popular numbers.
- Mr. Joe Cahill, Entertainer.
- Mr. Robert Knox, violinist.
- A realistic storm at sea will be included in the effects.
- The party will land at Marseilles, go by train to Paris, and thence by aeroplane to London.
- At a later date the return trip will be broadcast and following on the success of the "Christmas Night in London," transmitted by 2FC on Christmas Eve, it is hoped that listeners will derive even more pleasure from this imaginary trip.
- 11.30 p.m. (approx.)—FROM THE WENTWORTH CAFE—The New Wentworth Symphonic Dance Orchestra, under the baton of Mr. Sydney Simpson, will play until midnight.
- 12.—midnight—"Big Ben." National Anthem. Close down.

SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. clock and chimes.
- Australian Mercantile, Land and Finance Co's report.
- Weather report and forecast by courtesy of Government Meteorologist.
- Producers Distributing Society's fruit and vegetable market report.
- Sydney Stock Exchange reports.
- Grain and fodder report ("Sun").
- Dairy produce report ("Sun").
- 7.15 p.m.—Country reports from the "Sun."
- 7.50 p.m.—A talk on "Bucks, Wise and Others wild."
- 7.40 p.m.—A talk on "The Tour of the Renown" by Mr. J. Holmes.
- 8 p.m.—G.P.O. clock and chimes.
- Broadcasters' Topical Chorus.
- 8.3 p.m.—Broadcasters' Trio.
- 8.25 p.m.—Miss Jean Whatmore, soprano.
- 8.30 p.m.—Mr. Dud Osborne, descriptive vocalist.
- 8.37 p.m.—Mr. S. Cotterden will talk on building a Vator Set.
- 8.47 p.m.—Mr. Glen, Williams, baritone.
- 8.54 p.m.—Resume of following day's programme. Weather report and forecast by courtesy of Mr. C. J. Bares, Government Meteorologist.
- 9 p.m.—G.P.O. clock and chimes.
- 9.1 p.m.—Mr. Bert Warne, comedian.
- 9.9 p.m.—Mr. E. M. Baxter, tenor.
- 9.10 p.m.—Broadcasters' Trio.
- 9.24 p.m.—Idyllic.
- 9.31 p.m.—Miss Jean Whatmore.
- 9.38 p.m.—Osborne and Warne.
- 9.50 p.m.—Broadcasters' Trio.
- 10 p.m.—G.P.O. clock and chimes.
- 10.1 p.m.—Mr. Clem Williams.
- 10.5 p.m.—Mr. E. M. Baxter.
- 11.15 p.m.—The Ambassadors' Dance Band broadcast from the ballroom of the Ambassadors. During the intervals between dances, news reports by courtesy of the "Sun" will be broadcast.
- 12 midnight—G.P.O. clock and chimes. National Anthem.

MORNING SESSION.

- Racing information broadcast by courtesy of the "Sun."
- 11 a.m.—G.P.O. clock and chimes.
- 11.1 Weather report.
- 11.3 a.m.—Musical programme from the studio.
- 11.17 a.m.—Sydney "Daily Telegraph" news service.
- 11.30 a.m.—Women's Session. Sporting Talk by Mr. J. Varley.
- 11.35 a.m.—Social Notes by Mrs. Jordan.
- 11.40 a.m.—Mrs. Jordan replies to correspondents.
- 11.50 a.m.—Talk on "Infant Welfare," by Dr. Morris.
- 12.15 p.m.—Rabbit market report.
- 12.16 p.m.—Market report.
- 12.19 p.m.—Vegetable market report.
- 12.21 Fruit market report.
- 12.23 p.m.—London dairy, farm, egg and poultry market report.
- 12.25 p.m.—London metal quotations.
- 12.30 p.m.—G.P.O. clock and chimes.
- 12.31 p.m.—Bosta in call by wireless.
- 12.39 a.m.—Report.
- 12.54 p.m.—Shipping information—arrivals and departures.
- 12.55 p.m.—Sydney Stock Exchange calls.
- 12.43 p.m.—News service by courtesy of the "Sun."
- 1 p.m.—G.P.O. clock and chimes.
- 1.1 p.m.—Pianoforte lecture recital by Mr. R. A. Mote, B.A., broadcast from the Fine Art Gallery, Anthony Hordern.
- 1.40 p.m.—Weather report.
- 1.43 Sydney Stock Exchange calls.
- 1.45 p.m.—Musical programme from the Studio.
- 2 p.m.—G.P.O. clock and chimes.
- 2.1 Racing resume.
- 2.5 p.m.—News from the "Sun."
- 2.20 Musical programme from Studio.
- 2.40 p.m.—Weather report and forecast.
- 2.43 p.m.—Social Notes from the "Sun."
- 2.48 News from the "Sun."
- 3 p.m.—G.P.O. clock and chimes.
- 3.1 Racing resume.
- 3.5 p.m.—Musical programme from the Studio.
- 3.20 p.m.—News from the "Sun."
- 3.40 Musical programme from Studio.
- 4 p.m.—G.P.O. clock and chimes.
- 4.1 Racing resume.
- 4.5 p.m.—News from the "Sun."
- 4.18 Social Story.
- 4.30 p.m.—Producers' Distributing Society's fruit and vegetable market report.
- 4.35 p.m.—Racing resume.
- 4.39 Musical programme from Studio.
- 4.51 p.m.—Shipping information when available.
- 4.53 p.m.—Racing resume.
- 4.59 Resume of night's programme.
- 5 p.m.—G.P.O. clock and chimes.
- 5.1 Resume of day's racing.
- 5.5 p.m.—Close down.

EARLY EVENING SESSION.

- 8.45 p.m.—G.P.O. clock and chimes.
- 8.48 Uncle George and the Kiddies.
- 8.50 p.m.—Musical programme from the Studio.

2GB, SYDNEY

MORNING SESSION.

- "Cheerio Hour" conducted by the Cheerio Man.
- 9.30 a.m.—Music.
- 9.35 a.m.—Gladness chat.
- 9.50 a.m.—Music.
- 10 a.m.—Home betterment topics.
- 10.15 a.m.—Music.
- 10.20 a.m.—Five minutes with children at Home.
- 10.25 a.m.—Announcements. Close down.

WOMEN'S NEWS SESSION.

- 3.30 p.m.—Music.
- 3.40 p.m.—Humanitarian Movements in 6 series.
- 3.55 p.m.—Music.
- 4.5 p.m.—News from everywhere for women.
- 4.20 p.m.—Music.
- 4.30 p.m.—Close down.
- 6.45 p.m.—The children's session, conducted by the Cheerio Man.
- 7.30 p.m.—Music.
- 7.55 p.m.—Violin solos by Murieta Horden.
- 8.3 p.m.—Address by J. J. Van der Leeuw.
- 8.15 p.m.—Duets for two violins by Dan Scully and Monica Horden.
- 8.24 p.m.—Songs by Clement Hoeking.
- 8.32 p.m.—Violin solos by Lloyd Davies.
- 8.40 p.m.—2GB vocal quartette: Ethel Jones, Shyl Bovan, Thomas Hall, Clement Hoeking.
- 8.50 p.m.—Announcements.
- 9 p.m.—Violin solos by Dan Scully.
- 9.3 p.m.—Address by Prof. E. Wood.
- 9.15 p.m.—Duets for two violins with piano accompaniment. Dan Scully, Monica Horden, Ada Brook.
- 9.28 p.m.—Talk on radio.

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9.38 p.m.—25th Vocal Quartette: Ethel Jonas, Nigri Bevan, Thomas Hall, Clement Hosking.
 9.45 p.m.—"Cheerful Talk."
 "Great Thoughts from Great Minds."
 God Save the King.

9.50 p.m.—THE MUSICAL GARDINERS.
 Italian and Spanish Duets.
 French Horn Solo.
 Steel Guitar, French Horn, and Mandolin.
 Organ Chimes, Selected.
 Xylophone.

7.15 p.m.—Under the auspices of the Department of Agriculture, Mr. E. A. KENDALL, Chief Veterinary Inspector.
 "Care of Milk in the Home."
 7.30 p.m.—Under the auspices of the Institute of Pacific Exhibitions, Miss M. BEAGNEY.
 "Women's Problems in Pacific Countries."
 7.45 p.m.—Capt. PETERS.
 Books wise and otherwise.

3LO, MELBOURNE

MID-DAY SESSION

SOPEPHONIC SONORA RECITAL.
 JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

BOB MOLYNEUX, baritone.
 FRANCES LEA, soprano.
 Accompanist AGNES FORTUNE

Announcer ALFRED ANDREW
 "AS HOUR OF MELODY."

12 noon.—Time Signal, Repeater, and the Australian Press Association Cables.
 "Argus" and "Herald" news service. Shipping intelligence.

12.15 p.m.—Stock Exchange information.
 12.20 p.m.—SUPERPHONIC SONORA RECITAL.

12.30 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

"Hi, Ho, the Merry" (Sara Comrad).
 "You Need Someone to Love" (Oblon).

12.40 p.m.—BOB MOLYNEUX, baritone.
 "Sittin' Around."

"The Maid."
 12.47 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

"Some Other Bird Whistled a Tune."
 "That's Why I Love You" (Donaldson).

12.57 p.m.—FRANCES LEA, soprano.
 "I Want You to Want Me" (Kibbey).

"Close Your Eyes" (Vineson).
 1.1 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

"Homes" (Batt).
 "I Want a Parlor for Daddy."

1.14 p.m.—Meteorological information.
 Weather forecasts for Victoria, Tasmania, South Australia and New South Wales.

1.24 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

"Eye, Eye, Blackbird" (Dixon Henderson).
 "Zed" (Powers).

1.34 p.m.—BOB MOLYNEUX, baritone.
 "Somebody's Lonely."

"Sunday."
 1.41 p.m.—JOE ARONSON and HIS SYNCOPATING SYMPHONISTS.

"Sidewalk Blues" (Morton).
 "Dakimo Shivers" (Laverie).

1.51 p.m.—FRANCES LEA, soprano.
 "Little Hill" (Johnson).

"Gray Days" (Johnson).
 1.58 p.m.—Luncheon Adjournment scores.

(Checklist Match, VICTORIA v. QUEENSLAND, played at Brisbane.)

2 p.m.—Description of HURDLE RACE, Bendigo Races, by "Musket," of the "Sporting Globe."

2.10 p.m.—Description of HENDIGO PLATE, Bendigo Races, by "Musket," of the "Sporting Globe."

AFTERNOON SESSION

THE STUDIO ORCHESTRA.
 Musical Director, REGINALD BRADLEY.

ADELE INMAN, soprano.
 HARRY WOTTON, baritone.

THE MUSICAL GARDINERS.
 WALTER SMITH, organist.

THE ESTELLE MARK TRIO.
 Announcer ALFRED ANDREW

Accompanist AGNES FORTUNE
 "MUSIC—THE LANGUAGE OF THE ANGELS."

8 p.m.—STUDIO ORCHESTRA:
 "In Love" (Primm).

10 p.m.—ADELE INMAN, soprano:
 "Frenzied" (Toni).

"Ineffably from My Garden" (Clifton Bonnett)

8.18 p.m.—Description of HOSPITAL, MAN-
 DICAP, Bendigo Races, by "Musket," of the "Sporting Globe."

4.0 p.m.—ADELE INMAN, soprano:
 "Haven of Tenderness" (Gordon).

"Foolish Your Feet" (Kendub & Brookman)

5.07 p.m.—WALTER SMITH, organist:
 "In My Cottage" (Round).

5.10 p.m.—HARRY WOTTON, baritone:
 "O Mistress Mine" (Guller).

5.15 p.m.—STUDIO ORCHESTRA:
 "Bibbitts" (Hadley).

4.15 p.m.—Description of DISTANCE HAN-
 DICAP, Bendigo Races, by "Musket," of the "Sporting Globe."

4.18 p.m.—AGNES FORTUNE, piano:
 "Water Wraith" (Cyril Scott).

4.21 p.m.—ESTELLE MARK TRIO:
 "Kiss Me, Mark, soprano: "Love will Find a Way."

Margot Sheridan, piano:
 "Wedding Day" (Grieg).

Estelle Mark, soprano: "Lament of Ibsen"
 Cecilia Kiduff, violin: "Lamento" (Wieniawski)

4.42 p.m.—"Herald" news service.
 4.45 p.m.—Description of JUMPER'S FLAT
 RACE, Bendigo Races, by "Musket," of the "Sporting Globe."

4.48 p.m.—Stock Exchange information.
 4.50 p.m.—Tex adjournment scores. Cricket
 Match, VICTORIA v. QUEENSLAND
 played at Brisbane.

EVENING SESSION

7.40 p.m.—CHILDREN'S HOUR. Answers to
 letters and Birthday greetings by "Mary,
 Mary, Quite Contrary."

7.58 p.m.—ADELE INMAN has two little
 children to introduce.

8.2 p.m.—"Mary, Mary, Quite Contrary" will
 tell the story of "The Little Boy who
 always remembered what he was told."

8.10 p.m.—THE STUDIO ORCHESTRA:
 "Round the Christmas Tree."

8.13 p.m.—ADELE INMAN will sing just one
 note.

8.21 p.m.—"MARY, MARY" will tell a story
 older than Cinderella, entitled, "The
 Pyramids."

8.35 p.m.—"Argus" and "Herald" news ser-
 vice. Reuter's and the Australian Press
 Association Cables. Shipping movements.

8.40 p.m.—Stock Exchange information.
 8.47 p.m.—Stock exchange information.

8.52 p.m.—Fish Market reports by J. R. Bor-
 rett, Ltd.

8.58 p.m.—River reports.
 8.58 p.m.—Market reports by the Victorian
 Producers' Co-operative Co., Ltd. Hay-
 market sheep sales. Poultry, Grain, Calf,
 Hops, Straw, Juice, Dairy Produce, Potatoes
 and Onions.

7.6 p.m.—Market prices of Oranges and
 Lemons, by the Victorian Central Citrus
 Association.

NIGHT SESSION

Speakers: Mr. E. A. KENDALL, Miss M
 BEAGNEY, Capt. PETERS.

THE STUDIO ORCHESTRA
 Musical Director, REGINALD BRADLEY.

ADELE INMAN, soprano.
 JACK DUNNE, baritone.

MARGIE FOSTER, violin.
 THE ESTELLE MARK TRIO.

ONE ACT PLAY

THE VICTORY THEATRE ORCHESTRA
 JOE ARONSON and HIS SYNCOPATING
 SYMPHONISTS.

Announcer MATRICE DUDLEY
 Accompanist AGNES FORTUNE

"SNAPS AND SNATCHER"
 IN THE GLOAMING

8 p.m.—Scene 1.—Stately Measure: A Ball
 and a Love Scene, showing that hearts
 could be young ever so long ago.

STUDIO ORCHESTRA:
 "Might" (Old English).

"Barabande" (Old German).
 8.10 p.m.—Scene 2—A Victorian Drawing
 Room.

ADELE INMAN, soprano:
 "Love's Old Sweet Song."

"Oho Wags a Wreath of Roses."
 8.17 p.m.—STATION TRIO, Two old French
 Dances.

"L'Antienne JACKIE"—1st and 2nd rates.
 8.27 p.m.—RAG, DUNNE, baritone, in two
 old fashioned songs.

8.34 p.m.—MAGGIE FOSTER, violin:
 "Ave Maria" (Schubert).

"When You and I Were Young, Maggie"
 Popular Choruses.

8.50 p.m.—TEN MINUTES OF OLD TIME
 DANCES.
 STUDIO ORCHESTRA:

Lancers.
 Mazurka.

Waltz.
 9 p.m.—A SKETCH ENTITLED "THE
 YAMP."

Timothy Bolger FRANK PEARSON
 Hannan Bolger YETTY LANDAU

Stella DILLICE HALL.
 9.15 p.m.—A CONCERT IN MINIATURE.

THE ESTELLE MARK TRIO:
 Estelle Mark, soprano:

"A Song of the Seventeenth Century"
 Margot Sheridan, piano:

"Country Gardens" (Grieg).
 Estelle Mark, soprano:

"Romance—Catalina, Builtoana"
 Cecilia Kiduff, violin: "Gavotte."

9.30 p.m.—THE VICTORY THEATRE OR-
 CHESTRA, under direction of M. BARRILE,
 transmitted from the Victory Theatre, St.
 Kilda.

10.15 p.m.—British Official Wireless news from
 Rugby. "Argus" news service. Weather
 forecast. Announcements.

11 p.m.—OUR GREAT THOUGHT:
 "Charitableness is an offshoot of goodness
 and of wisdom"—Bacon.

11.1 p.m.—JOE ARONSON and HIS SYNCO-
 PATING SYMPHONISTS:
 "Fool of Malak" (Nicola).

"After I Say I'm Sorry" (Donaldson).
 "In a Little Spanish Town" (Lewis Young)

"Speech" (Clare-Friend).
 "While the Years go Drifting By" (Kahn-Burke)

"When the Red, Red Robin" (Woods).
 "Just a Cottage Street" (Stanley).

"Let's Talk About My Sweetie"
 "The Goodnight Song" (Kahn-Donaldson)

11.45 p.m.—GOD SAVE THE KING.

4QG, BRISBANE

EARLY MORNING SESSION

6.20 a.m.—Physical Culture Session.
 7.0 a.m.—Close Down.

MORNING

SPECIAL TRANSMISSION—RECEPTION
 TO BISHOP OF LONDON. The civic re-
 ception tendered to the Right Honourable
 and Right Reverend The Lord Bishop of
 London, A. E. Wainington Ingram, D.D.,
 P.C., will be relayed.

11.0 a.m.—From the Town Hall Civic Re-
 ception.

11.40 a.m.—Close Down.

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MIDDAY SESSION.

- 12.55 p.m.—Tune in.
- 12.58 p.m.—Time Signal.
- 1.00 p.m.—Market Reports; Weather Information; "The Daily Mail" news; "The Daily Standard" news.
- 1.10 p.m.—From Hotel Carlton: Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 1.18 p.m.—From the Observatory: Standard Time Signal.
- 2.0 p.m.—Close Down.

AFTERNOON SESSION.

- 3.00 p.m.—From Hotel Carlton: Afternoon Tea Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
- 4.15 p.m.—From the Studio: "The Telegraph" news.
- 4.50 p.m.—Close Down.

EARLY EVENING SESSION.

- 6.0 p.m.—"Daily Standard" News; Announcements.
- 6.50 p.m.—Belmont Stories by "Little Miss Brisbane."
- 7.0 p.m.—Market Reports; Lecture: "Common Diseases of Dairy Stock," by Mr. A. J. McKenzie (Lecturer in Animal Husbandry, Qld. Agricultural High School and Vevey).
- 7.30 p.m.—Qld. Reports; Announcements; Weather News.
- 7.43 p.m.—Standard Time Signal.

NIGHT SESSION.

- 7.45 p.m.—Lecture Session: "A French Talk," the third of a series by Comte de Turinoger.
- 8.0 p.m.—STUDIO ENTERTAINMENT: Opera selection, "Il Pirata" (Bellini), the Studio Orchestra (conductor, Mr. A. R. Featherstone); tenor solo, "Mata of Mine" (Elliot), Mr. Gerald Cushman; ten minutes with Henry Lawson, Mr. Claude Walker; voice Egyptian, "Jewel of the East" (Joyce), the Studio Orchestra; contralto solo, "A Summer Song" (Thomas), Mrs. W. J. Hooker; group of barjo numbers by Mr. X. Gould; bass solo, "The Floral Dance" (Katie Miss), Mr. J. P. Cornwell; orchestra—(a) melodie "A Tender Thicket" (Grandjean); (b) intermezzo, "A Fabian Romance" (Tyers), the Studio Orchestra; soprano solo, "Ma Little Hanji" (Diebmont), Miss Phyllis Verner; selection, "The Maid of the Mountains" (Moran), the Studio Orchestra.
- 8.6 p.m.—Metropolitan Weather Forecast. Tenor solo, "The Pal That I Loved" (Nelson), Mr. Gerald Cushman; group of barjo numbers by Mr. X. Gould; contralto solo, "My Task" (Ashford), Mrs. W. J. Hooker; one-step, "Bavay English Medley" (Somers), the Studio Orchestra; soprano solo, "My Dear Soul" (Sanderson), Miss Phyllis Verner; organ solo, selected, Mrs. Hilja Woolmer; tenor solo—(a) "The Last Waltz" (Finatti); (b) "Your Eyes Have Told Me So" (George Williamson); saxophone solo, "The Butterfly" (Verweker); Mr. C. Hansen (accompanied by the Studio Orchestra); lute solo, "The Pearl Cove" (Marshall); Mr. J. P. Cornwell; rag-step, "Grizzly Bear" (Hotford), the Studio Orchestra.
- 10.0 p.m.—"The Daily Mail" News; Weather News. Close Down.

5CL, ADELAIDE

- 11.30 a.m.—G.P.O. chimes.
- 11.31—Stock Duo Art number.
- 11.40 a.m.—"Advertiser" news service.
- 11.56 a.m.—Vocalion number.
- 12 noon—G.P.O. chimes.
- 12.1 p.m.—"Advertiser" news service continued.
- 12.16 p.m.—Stock Duo Art number.
- 12.30 p.m.—Studio' Orchestra Selection, "Tina"; fox trot, "Honeybunch"; waltz, "June brought this rose"; "Air to ballet"; caprice, "Queen of the room"; selection, "Carman"; serenade "Indian Swan"; concert solo, "White moon"; Stride, "High Jinks."

- 1.55 p.m.—Ward and Co.'s Stock Exchange reports, official weather forecasts and station announcements.
- 2 p.m.—G.P.O. chimes and close down.

AFTERNOON SESSION.

- 3 p.m.—G.P.O. chimes.
- 3.1 p.m.—Relay from Maple Leaf Cafe—Orchestra numbers.
- 3.41 p.m.—From the Studio: Stock Duo Art number.
- 4 p.m.—G.P.O. chimes.
- 4.1—Relay from Arvad's Cafe—Orchestra numbers. Soloist, Mr. Broadland Hooker.
- 4.50 p.m.—Stock Exchange reports, general information and station announcements.
- 5 p.m.—G.P.O. chimes and close down.

EVENING SESSION.

- 6.00 p.m.—G.P.O. chimes.
- 6.21 p.m.—Stock Duo Art number.
- 6.36 p.m.—Bedtime stories.
- 7.00 p.m.—Market reports by Messrs. A. C. Ward and Co., A. Hall and Co., A. W. Sandford and Co., Daley and Co., S.A. Farmers' Co-operative U.M.
- 7.40 p.m.—Boy Scouts corner.
- 7.50 p.m.—Faulding's scientific talk.
- 8 p.m.—G.P.O. chimes.
- 8.1—Relay from Wondergraph Operatic Orchestra.
- 8.15 p.m.—Song, Mr. Lionel Clarke.
- 8.19 p.m.—Recitation, Mr. Charles Carter.
- 8.24 p.m.—Relay from Wondergraph Operatic Orchestra.
- 8.40 p.m.—Song, Miss M. Donaghue.
- 8.43 p.m.—Relay from Wondergraph Operatic Orchestra.
- 9 p.m.—G.P.O. chimes.
- 9.1 p.m.—Weather report.
- 9.3 p.m.—Daligay's wheat report.
- 9.5 p.m.—Song, Mr. Lionel Carter.
- 9.9 p.m.—Recitation, Mr. Chas. Carter.
- 9.15 p.m.—Relay from Wondergraph Operatic Orchestra.
- 9.35 p.m.—Song, Miss M. Donaghue.
- 9.59 p.m.—Recitation, Mr. Chas. Carter.
- 9.42 p.m.—Relay from Wondergraph Operatic Orchestra.
- 10 p.m.—G.P.O. chimes.
- 10.15 p.m.—"Advertiser" news service.
- 10.15 p.m.—Relay from Wondergraph Operatic Orchestra.
- 10.30 p.m.—(approx.)—Song, Mr. Lionel Clarke.
- 10.34 p.m.—Recitation, Mr. Chas. Carter.
- 10.42 p.m.—Pianoforte solo.
- 10.46 p.m.—Song, Miss M. Donaghue.
- 10.49 p.m.—Recitation, Mr. Chas. Carter.
- 10.54 p.m.—Song, Mr. Lionel Clarke.
- 10.58 p.m.—Station announcements.
- 11 p.m.—G.P.O. chimes, National Anthem and close down.

6WF, PERTH

- 12.50 p.m.—Tune in.
- 12.55 p.m.—First local news bulletin.
- Market reports.
- Cables.
- 1 p.m.—Time signal from the Perth Observatory.
- 1.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
- 1.2 p.m.—STUDIO SELETTE.
- 2 p.m.—Close down.
- 3.00 p.m.—Tune in.
- 3.25 p.m.—Musical programme.
- 4 p.m.—STUDIO TRIO.
- 4.30 p.m.—Close down.
- 7 p.m.—Tune in.
- 7.5 p.m.—A playette for the Kiddies, by Uncle Duffy with Aunties Kate and Evelyn and Uncles Henry, Leslie, Perry, and Thuffy.
- 7.55 p.m.—Stock and Shares intelligence. Market reports.
- Cables. News supplied by courtesy of "The West Australian" Newspaper Co.

- 8 p.m.—Time signal from the Perth Observatory.
- 8.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
- 8.2 p.m.—MUSICAL PROGRAMME. Selections by the Studio String Trio: Miss E. Willis, A.R.C.M., piano. Mr. H. G. Haslam, 'cello. Mr. H. T. Newton, violin. Miss Irene Standfield, soprano.
- 10 p.m.—Second local news bulletin supplied by courtesy of "The Daily News" Newspaper Co.
- 10.20 p.m.—Close down.

Thur., February 10
2FC, SYDNEY

EARLY MORNING SESSION.

- 7.0 a.m.—"Big Ben" and announcements.
- 7.5 a.m.—Music from the Studio.
- 7.10 a.m.—Official weather forecast, rainfall, temperature, astronomical memoranda, shipping intelligence, mail services, commercial news.
- 7.25 a.m.—Investment market; mining share market, metal quotations.
- 7.35 a.m.—Wool sales, breadstuffs markets; Interstate markets; produce markets.
- 7.45 a.m.—"Spine" Morning Herald' news service.
- 8.0 a.m.—"Big Ben"; Studio music.
- 8.15 a.m.—Close Down.

MORNING SESSION.

- 9.15 a.m.—The chimes of 2FC; Music from the studio.
- 9.30 a.m.—Marching music for school children.
- 9.45 a.m.—Last minute sporting information by the 2FC Racing Commissioner.
- 10.0 a.m.—"Big Ben" and announcements.
- 10.5 a.m.—Late "Sydney Morning Herald" news service.
- 10.15 a.m.—Studio music.
- 10.45 a.m.—A morning reading, by Mr. A. E. Cochrane, "Dickens" Australian Press Association and Reuter's Cables Services.
- 11.0 a.m.—Studio music.
- 11.30 a.m.—Marching music for school children.
- 11.36 a.m.—Close down.

MIDDAY SESSION.

- 12 noon—"Big Ben" and announcements.
- 12.15 p.m.—Stock Exchange, first call.
- 12.30 p.m.—Musical items from the studio.
- 12.45 p.m.—From Farmer's Oak Hall, Instrumental item by the Oak Hall Trio.
- 12.50 p.m.—Rugby wireless news.
- 12.55 p.m.—Miss Lily Hancock, soprano, "A hour that's free" (Rehly).
- 1.0 p.m.—"Big Ben" Weather intelligence.
- 1.3 p.m.—"Evening News" midday news service. Producers' Distributing Society's Report.
- 1.20 p.m.—From Farmer's Oak Hall, The Oak Hall Trio.
- 1.28 p.m.—Stock Exchange, second call.
- 1.30 p.m.—Marching Music for school children.
- 1.40 p.m.—Miss Lily Hancock, soprano, "Carmina" (Wilson).
- 1.45 p.m.—Studio music.
- 1.50 p.m.—From Farmer's Oak Hall—Instrumental item by the Oak Hall Trio.
- 2.0 p.m.—"Big Ben." Last minute sporting information by the 2FC Racing Commissioner.
- 2.19 p.m.—Close Down.

AFTERNOON SESSION.

- 2.30 p.m.—The chimes of 2FC.
- 2.35 p.m.—Pianoforte reproductions on the "Behning" Player Piano.
- 3.0 p.m.—A Reading.
- 3.15 p.m.—Some new records.
- 3.30 p.m.—From the Westworth Cafe—The new Westworth Symphonic Dance Orchestra, under the baton of Mr. Sydney Simpson.
- 3.40 p.m.—From Farmer's Tea Rooms—Miss Kathleen Stollery, mezzo-soprano.

- 8.45 p.m.—The Oak Hall Trio (Leader, Mr. Horace Keate).
 9.05 p.m.—Studio Music.
 9.10 p.m.—"Big Ben" From Farmer's Tea Rooms.
 9.20 p.m.—Miss Jeanette Rooney, contralto.
 9.30 p.m.—The Oak Hall Trio, instrumental item.
 9.45 p.m.—Studio music.
 9.50 p.m.—From Farmer's Tea Rooms, Miss Kathleen Stollery, Mezzo-soprano.
 9.55 p.m.—Instrumental item by the Oak Hall Trio.
 1.00 p.m.—Studio music.
 1.10 p.m.—From Farmer's Tea Rooms, Miss Jeanette Rooney, contralto.
 1.45 p.m.—Block Exchange, third call.
 1.46 p.m.—Close Down.

EARLY EVENING SESSION

- 7.45 p.m.—The times of 1P.C.
 7.50 p.m.—The "Hello Ma!" talks to the children.
 7.55 p.m.—A story for the older ones.
 8.05 p.m.—Dinner music.
 7.15 p.m.—Late "Evening News" news service, Weather Intelligence.
 7.25 p.m.—Daily's Market Reports (wheat, sheep, grain, fruit and vegetable markets).
 7.45 p.m.—Close Down.

EVENING SESSION.

- 7.55 p.m.—Announcing the 2FC Hospital Concert Party items from the Blind Institute.
 8.0 p.m.—"Big Ben!" Mr. Ben Garding introduces the Party.
 8.5 p.m.—Miss Katherine Beverly, soprano, "Good Morning, Brother Sunshiner" (Lohman).
 8.9 p.m.—Miss Daisy Richards, Violinist, "Melodie" (Gluck-Kreidler).
 8.15 p.m.—Mr. E. M. Baxter, tenor.
 8.17 p.m.—Mr. Percival Spence, Mouth Organ soloist.
 8.22 p.m.—Miss Barbara Briscoe, contralto.
 8.28 p.m.—Mr. Wally Daines, Comedian.
 8.30 p.m.—Miss Katherine Beverly, soprano, "Butterfly Wings" (Phillips).
 8.34 p.m.—Miss Daisy Richards, Violinist, "Dance Orientale" (Hinsky-Kersakoff).
 8.38 p.m.—Mr. E. M. Baxter, tenor.
 8.45 p.m.—Mr. Ben Garding and "Jerry" in sectional song and story.
 8.50 p.m.—Miss Barbara Briscoe, contralto.
 8.54 p.m.—Mr. Percival Spence, Mouth Organ soloist.
 9.0 p.m.—"Big Ben," Mr. E. M. Baxter, tenor.
 9.4 p.m.—Miss Edith Hayes, pianoforte solo.
 9.8 p.m.—Miss Katherine Beverly, soprano.
 9.12 p.m.—Mr. Wally Daines, Comedian.
 9.16 p.m.—Miss Barbara Briscoe, contralto.
 9.20 p.m.—Miss Daisy Richards, violinist, "The Blue Lagoon" (Mandelst).
 9.24 p.m.—Mr. Percival Spence, Mouth Organ.
 9.28 p.m.—Mr. E. M. Baxter, tenor.
 9.32 p.m.—Miss Katherine Beverly, soprano.
 9.35 p.m.—From the Studio, Mr. E. J. Van de Veldt will discuss some O'Henry humor.
 9.48 p.m.—Miss Nea Hallett, Ballerette, "It made you happy" (Danzon).
 9.52 p.m.—Mr. W. Nott, Concert solo.
 10.0 p.m.—"Big Ben!" Mr. Alf Teeman and his Dance Orchestra.
 10.10 p.m.—Hints to listeners by the Technical Editor of "Wireless Weekly."
 10.25 p.m.—Mr. Alf Teeman and his Dance Orchestra.
 10.30 p.m.—Miss Nea Hallett, ballerette, "Smiling Eyes" (Howard).
 10.37 p.m.—Mr. Alf Teeman and his Dance Orchestra.
 10.45 p.m.—Mr. W. Nott, Concert solo.
 10.54 p.m.—Celebrity records.
 1.10 p.m.—"Big Ben" and announcements.
 1.15 p.m.—Mr. Alf Teeman and his Dance Orchestra in popular numbers, until midnight.
 12 midnight—"Big Ben!" National Anthem. Close Down.

2BL, SYDNEY

EARLY MORNING SESSION.

- 9.15 a.m.—G.P.O. clock and chimes. 1.10
 Musical programme from Studio.
 7.19 a.m.—Physical training and health exercises.
 7.26 a.m.—Hints on health.
 7.30 a.m.—Physical training and health exercises.



EXAMINE this new Oldham at your local Wireless shop. Compare its handsome appearance—its air of quality. Note the transparency and sturdiness of its cellulose case—its large coloured terminals—its screw-fitting, non-splash vent—its generous stimp. And finally compare its plates. Full size, stout, buckle-proof sulphation-resisting plates capable of holding a charge over long periods. But they are not ordinary plates—the process under which they are made and which is capable of astonishing results is an exclusive Oldham feature. You can get it in no other Accumulator. It was

developed over a long period of years during which Oldham accumulators have now a unique reputation for extreme dependability in coal mines.*

When you choose an Oldham you obtain an Accumulator which for length of life and ability to retain a charge has yet to be equalled. Be sure your next Accumulator is an Oldham—and you'll start saving money in re-charging costs.

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and LAUNCESTON; also from J. R. W. Gardam, PERTH.

7.45 a.m.—G.P.O. clock and chimes. 7.45
Weather report.
7.48 a.m.—Sporting information.
7.59 a.m.—Bromasters' special news service.
8 a.m.—G.P.O. clock and chimes. Close down.
MORNING SESSION.
10 a.m.—G.P.O. clock and chimes. 10.1
Weather report.
10.1 a.m.—Musical programme from the
Studio.
10.20 a.m.—News service from the "Daily
Telegraph."
10.35 a.m.—Musical programme from the
Studio.
10.40 a.m.—Ten minutes' talk supplied by the
N.R.M.A.
11 a.m.—G.P.O. clock and chimes. 11.1 News
from the "Daily Telegraph."
11.15 a.m.—Rabbit market report.
11.17 a.m.—Fish market report.
11.19 a.m.—Vegetable market report. 11.21
Fruit market report.
11.23 a.m.—London dairy, farm, egg and
poultry market report.
11.28 a.m.—London metal quotations.
11.59 a.m.—Ships in sail by wireless.
11.31 a.m.—Information re. inter-rail and
over-sea mails.
11.33 a.m.—Shipping information—arrivals
and departures.
11.35 a.m.—Sporting talk by Miss Gwen
Varley.
11.40 a.m.—Women's Session, conducted by
Mrs. Jordan. Social Notes.
11.50 a.m.—Mrs. Jordan's replies to corre-
spondents.
12 noon—G.P.O. clock and chimes.
12.1 p.m.—Talk on "Arts and Crafts" by
Miss McLennan.
12.25 p.m.—News from the "Sun."
12.30 p.m.—G.P.O. clock and chimes. 12.32
Sydney Stock Exchange calls.
12.33 p.m.—"Sun" Newspapers' news service.
12.45 p.m.—Hillier's Instrumental Quartet—
direction, Caryl Casting.
1.30 p.m.—G.P.O. clock and chimes. 1.31
Weather report.
1.33 p.m.—Sydney Stock Exchange calls. 1.45
Musical programme from Studio.
2 p.m.—G.P.O. clock and chimes. Close down.
AFTERNOON SESSION.
Basing information broadcast by courtesy of
the "Sun."
2 p.m.—G.P.O. clock and chimes. 3.1
Weather report and forecast.
3.5 p.m.—Social Notes from the "Sun" 3.10
News from the "Sun."
3.15 p.m.—Musical programme from the
Studio.
3.30 p.m.—G.P.O. clock and chimes. 3.31
Country Women's Session.
3.45 p.m.—Musical programme from the
Studio.
4 p.m.—G.P.O. clock and chimes. 4.1 News
from the "Sun."
4.15 p.m.—Social Story. 4.30 Musical
programme from the Studio.
4.45 p.m.—Producers' Distributing Society's
vegetable and fruit market report.
4.50 p.m.—Shipping information when avail-
able.
4.52 p.m.—Day's racing resume on race days.
4.55 p.m.—News from the "Sun." 4.58 Re-
sume of night's programme.
5 p.m.—G.P.O. clock and chimes. Close down.
EARLY EVENING SESSION.
5.45 p.m.—G.P.O. clock and chimes. 5.49
Uncle George to the Riddles.
6.40 p.m.—Musical programme from the
Studio.
SPECIAL COUNTRY SESSION.
7 p.m.—G.P.O. clock and chimes.
Australian Mercantile, Land and Finance
Co.'s report.
Weather report and forecast by courtesy
of the Government Meteorologist.
Stock Exchange report.
Producers' Distributing Society's vegetable
and fruit market report.
Grain and fodder report ("Sun"). Dairy
produce report ("Sun").

THE Resco Neutrodyne

This excellent receiver has been tested by the Technical Staff of "Wireless Weekly," and the report is found elsewhere in this issue. We need not add to this in any way beyond quoting prices.

Table Model	£19/10/-
Floor Model	£27/10/-
(Polished Maple or Oak.)	
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(Polished Rosewood.)	
Complete, excepting Loud Speaker.	

AN UNIQUE PORTABLE RECEIVER.

We have built the Resco Neutrodyne into a very compact portable receiver. The frame aerial is self-contained, as are all the Batteries and the Loud Speaker. Provision is made for change over from frame to outdoor aerial in one operation.

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Ask any Ever-Ready User.

Would you like to ask the man who uses Ever-Ready Radio Batteries just what makes his clock tick? He'll tell you they're always fresh, combining both long life and absolute reliability. He'll make a special point of telling you that their extra life means economy, and that there is a type for every need. These are just four reasons for Ever-Ready popularity.



"WANDA" PLUG RADIO BATTERY.

This illustrates the new Radio High tension "W" Battery, which can be obtained 21½, 42 or 43 volts—fitted with a "Wanda" Plug, and 2 screw terminals.

PRICE:

Small size, type WE 21½ volt	9/4
Small size, type WP, 42 volt	12/6
Small size, type WY, 43 volt	18/-
Large size, type XW, 31½ volt	16/-
Large size, type XP, 42 volt	21/-
Large size, type XZ, 43 volt	25/6



NEW EVER-READY No. 114 OR "A," "B," OR "C" BATTERY

Price

One of a group of radio batteries. Useful in wireless, lighting, and amplification. Size, 2½ x 4 x 1½. Most useful for bells, telephones, burglar alarms, medical cells, etc. With three brass terminals. Voltage 1.5, 2 or 4½ volts. Useful for all wireless purposes as well as general utility.

If unsatisfactory locally write for address of nearest source of supply to

The Ever-Ready Co. (Gt. Britain) Ltd.
163 Pitt Street SYDNEY

THE "STANDARD" DRY CELL RADIO BATTERY.

Price

The Ever-Ready Radio Cell, as illustrated, is fitted with two screw terminals and since its introduction has met with great success, users recognizing its immense superiority over any imported cell. Size, 2½ x 4½. Weight, 2 lbs. Also for bells, telephones, signaling and electric-medical apparatus, &c.



"STANDARD" "A" BATTERY.

Price

The Ever-Ready "Standard" "A" Battery is fitted with 4½ volt, specially designed for economical operation of 1, 2, or 3 valves, taking 56 amperes at 2 volt. For sets with four or more valves, the most economical service is obtained by using two "Standard" "A" batteries connected in parallel.

- 7.15 p.m.—Country news from the "Sun."
8 p.m.—G.P.O. clock and chimes.
Broadcasters' Topical Chorus.
8.5 p.m.—The Tripoli Duo, steel guitar.
8.10 p.m.—Miss Gwendoline Davey, soprano.
8.15 p.m.—Fashion and Social Notes broadcast from the ballroom of the Ambassadors.
8.22 p.m.—Miss Amy Oatings, contralto.
8.23 p.m.—Mr. Douglas Graham, Scottish comedian.
8.26 p.m.—Lecture by a member of the Australasian Astrological Association.
8.31 p.m.—The Lyric Male Quartet.
9 p.m.—G.P.O. clock and chimes.
9.12 p.m.—Following day's programme.
Weather report and forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.
9.5 p.m.—Mr. Peter Sutherland, basso.
9.12 p.m.—Mr. Dick Matthews, light baritone.
9.15 p.m.—Fashion and Social Notes from the ballroom of the Ambassadors.
9.24 p.m.—The Tripoli Duo.
9.24 p.m.—Miss Amy Oatings, contralto.
9.28 p.m.—Duet: Miss Amy Oatings and Mr. Peter Sutherland.
9.43 p.m.—Mr. Douglas Graham.
9.48 p.m.—Miss Amy Oatings.
9.56 p.m.—Mr. Peter Sutherland.
10 p.m.—G.P.O. clock and chimes.
10.1 p.m.—Mr. Dick Matthews.
10.8 p.m.—The Lyric Male Quartet.
10.18 p.m.—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 midnight.—G.P.O. clock and chimes.
National Anthem.

3LO, MELBOURNE

MIDDAY SESSION.

A MUSICAL TREAT.

THE STUDIO ORCHESTRA.

- JESSIE BATCHELOR, contralto.
THE MUSICAL GARDINERS.
HARRY WOTTON, baritone.
MAGGIE FOSTER, violin.
SUPERPHONIC-SONORA RECITAL.
Announcer

ALFRED ANDREW.
Accompanist

AGNES FORTUNE
12 noon.—Time Signal. British official wireless news from Rugby.

Reuter's and the Australian Press Association Cables.

"Argus" and "Herald" news services.

12.15 p.m.—Stock Exchange information.

12.20 p.m.—SUPERPHONIC-SONORA RECITAL.

12.30 p.m.—STUDIO ORCHESTRA.

Selection: "Madam Butterfly" (Puccini); "Lackadaisy."

"Daffodil Gold."

12.45 p.m.—THE MUSICAL GARDINERS will entertain you with solos and duet on numerous musical instruments.

1.2 p.m.—HARRY WOTTON, baritone (by permission of J. C. Williamson, Ltd.).

"Ouvre ton yeux, blonde" (Massenet).

"Hungarian Song" (Koroly).

1.9 p.m.—STUDIO ORCHESTRA:

"The Mouse and the Clock" (Wibitney).

Selection: "Chinese Honeymoon" (Talbot).

1.15 p.m.—Meteorological information.

1.25 p.m.—JESSIE BATCHELOR, contralto:

"Dove's Lullaby."

"Hushen."

1.35 p.m.—MAGGIE FOSTER, violin:

"Humoreske" (Dvorak).

"Minuet" (Beethoven).

For Sale.

One Dutho 90 volt B
Accumulator, good
order. Trial, £3.
Ring BW 6139

- 1.40 p.m.—HARRY WOTTON, baritone:
"She Alone Charmeth My Sadness"
(Gounod).
- Country Courtship" (Lehman).
- 1.47 p.m.—STUDIO ORCHESTRA:
"Madame Butterfly"—Part 2.
- 2 p.m.—Description of Trial Handicap—Bendigo Races, by "Musket" of the "Sporting Globe."
Close down.
- 2.40 p.m.—Description of the Asylum Handicap—Bendigo Races, by "Musket" of the "Sporting Globe."
Close down.

AFTERNOON SESSION.
MUSIC AND TRAVEL.

- Speaker: MISS FRANCES FRASER.
- THE STUDIO ORCHESTRA.
Musical Director, REG. BRADLEY.
- HARRY WOTTON, baritone.
- THE MUSICAL GARDINERS.
- JESSIE BATCHELOR, contralto.
- THE ESTELLE MARK TRIO.
- Announcer ALFRED ANDREW.
- Accompanist AGNES FORTUNE.
- 3 p.m.—STUDIO ORCHESTRA:
"Peer Gynt Suite"—Part 1.
- 3.5 p.m.—HARRY WOTTON, baritone:
"Eleanore" (Coleridge-Taylor).
"In Summer Fields" (J. Brahms).
- 3.16 p.m.—Description of the Handicap Brush Steeple, Bendigo Races, by "Musket" of the "Sporting Globe."
- 3.20 p.m.—THE MUSICAL GARDINERS:
Banjo and mandolin duet.
French horn solo.
Steel guitar, French horn and mandolin.
Organ chimes, selection.
Cylphonic duet.
- 3.35 p.m.—JESSIE BATCHELOR, contralto:
"The Bitterness of Love."
"I Heard You Go By."
- 3.45 p.m.—Description of the Encourage Handicap, Bendigo Races, by "Musket" of the "Sporting Globe."
- 3.50 p.m.—STUDIO ORCHESTRA:
"Peer Gynt Suite"—Part 2.
- 3.57 p.m.—THE ESTELLE MARK TRIO:
E. Mark, soprano, "Song of Love and Death."
Margot Sheridan, "To a Wild Rose" (Macdowell).
E. Mark, soprano, "Peach."
Celia Kidduff, "Mimmi" (Beethoven).
- 4 p.m.—HARRY WOTTON, baritone:
"My Heart is in Bloom" (J. Brahms).
"Love Song of Hov Dyal" (Batten).
- 4.14 p.m.—Description of Flying Handicap, Bendigo Races, by "Musket" of the "Sporting Globe."
- 4.21 p.m.—MISS FRANCES FRASER:
"Around Bath Abbey."
- 4.35 p.m.—"Herald" news service. Stock Exchange information. Acceptances for V.A.T.C. Caulfield Races, Saturday, February 12th.
- 4.45 p.m.—EVENBONG, transmitted from St. Paul's Cathedral.
- 5.30 p.m.—Result of Welter Handicap, Bendigo by "Musket" of the "Sporting Globe."
Close down.

EVENING SESSION.

- 5.40 p.m.—CHILDREN'S HOUR. Answers to letters and birthday greetings.
- 5.55 p.m.—"Mary Gumleaf," poem:
"Why Freddie was Sent to Bed."
"The Alarm Clock."
Story for the littler ones: "The End of the Teddy Bear."
- 6.3 p.m.—"THE ESTELLE MARK TRIO" will play and sing for the children, just the songs and pieces they love to hear.
- 6.20 p.m.—"Mary Gumleaf," Story for the boys and girls: "Dante—a patriot who suffered."
- 6.35 p.m.—"Argus" and "Herald" news services. Weather synopsis. Shipping movements.
- 6.47 p.m.—Stock Exchange information.

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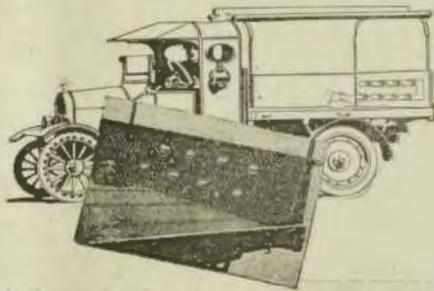
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EIGHT "LOTUS" Valve Holders fitted with large power valves and fixed to tailboard of Ford Motor Lorry, driven over rough roads for 30 miles, survived the test.

At the finish, each spring was as it started—perfect. No damage or looseness at connection of leg socket and spring—no valve loose from the holder. Both were electrically perfect all the way.

Fit the "LOTUS" to your set, and protect your valves.

Valveholder with terminals	4/6
Valveholder without terminals	6/-
Combination Grid Leak and Valveholder ..	6/-



John Arnold, P.O. Box 121, Deodar Street, Melbourne.

Garnett, Whiteley & Co. Ltd., Liverpool, Eng.

Analogy of Bath Cistern

The main difference between a full and a half empty bath cistern is that the first gives twice as much water. Actually the volume flowing is governed by the size of the pipe. Call the cistern a battery, and the amount of water the service hours, then you will understand that a 45 volt battery which is twice the weight and size of a second will have twice the life—it has twice the service hours.

Does your set draw heavily on current—more than 20 milliamps? Then the over-size 14 lb. 45 volt Burgess B Battery will last longer than any other made. Insist on having the

Burgess B 10308

"How many miles per gallon?" is a question often exchanged between car owners. "How long does your B battery last?" is almost as frequent when radio enthusiasts meet.

In the first case, no sensible motor-ists would compare the miles per gallon obtained by a light Ford with the mileage of a heavy powerful Packard. Yet comparisons almost as ridiculous are made by owners of sets using little current and those whose sets draw heavily on current. To estimate the expected service life of a "B" battery it is necessary to know (a) exactly how much "B" current is taken by the receiver and (b) about how many hours a week the set is used.

The current can easily be measured by using an ammeter which reads in thousandths of an ampere and is therefore called a milliammeter.

Your current drain is not necessarily in proportion to the number of valves. An ammeter test made recently by us showed that one 6-valve set operated with 6.5 milliamperes, while another, a 5-valve set, with the same voltage, drew 21.0 milliamperes.

With a set drawing heavily on current, you must use a heavy over-size battery for life, power and economy. The Burgess Company has designed its 10308 over-size battery for just such sets, and it has the longest life of any B Battery made.

This vertical type battery gives 45 volts. It has 30 extra large cells and weighs 14-lbs., yet is built to fit easily into a set. It has brass posts and contacts with insulated end terminals to give 22.5 and 45 volts from the negative. This battery is specially built to meet all requirements of heavy current drains.

Obtainable only from High-class Dealers, or Wholesale from—

New System Telephones

Pty., Ltd.

280 Castlereagh St., Sydney.
27 Queen's Bridge St., Melbourne.
Charles Street, Adelaide.



S.B.

6.52 a.m.—Fish market reports, by J. R. Borratt, Ltd.

6.53 a.m.—River reports.

6.55 a.m.—Market reports by the Victorian "Producers" Co-operative Co., Ltd., Bag-market above sales. Poultry, grain, straw, hay, fats, dairy produce, potatoes and onions.

7.7 p.m.—Market prices of oranges and lemons by the Victorian Central Citrus Association.

NIGHT SESSION.

TO DRIVE AWAY DULL CARE

Speakers: MR. J. HOWLETT ROSS.

MR. E. M. PARCOE

MISS MARGARET DALMER

JOE ARONSON AND HIS SYMPONISTS

THE ESTELLE MARK TRIO.

JESSIE BATCHELOR, contralto.

DREW AND ROMAINE.

Accompanied by MAURICE BUDLEY.

Accompanied by KINGS FORTUNE.

7.15 p.m.—MR. J. HOWLETT ROSS:

"Happy Moment—Husband and Business."

With recitals of poems.

7.30 p.m.—Mr. E. M. Parcoe will speak on "Boats."

7.45 p.m.—Miss Margaret Dalmier, of the House Kelly Co., will speak to you from the King's Theatre, by permission of J. C. Williamson, Ltd.

8 p.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Dreaming of Castles in the Air" (Ward).

"To-night's My Night with You" (Meyer).

8.10 a.m.—JESSIE BATCHELOR, contralto:

"Melancholy"

8.15 a.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Angry" (Brant).

"I Wish I had My Old Gal Back Again" (Yellow).

8.24 a.m.—DREW AND ROMAINE:

"Two Boys and a Piano"

"That's What You Are"

8.29 a.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Smiley" (Kroner).

"Rose Colored Glasses" (Mable Steger).

8.33 p.m.—ESTELLE MARK, soprano:

"Love's Triumph"

8.40 a.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Calling Me Home" (Gilbert).

"The Village Blacksmith Owns the Village Now" (Moore).

8.50 a.m.—MARGOT SHERIDAN, piano:

"Air de Ballet" (Jadassohn).

8.55 a.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Be the Sign of the Rose" (Whiting).

"What's Way I Love You" (Donaldson).

8.6 a.m.—JESSIE BATCHELOR, contralto:

"Let There Be Light"

9.12 a.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Am I Waiting My Time on You" (Bibo).

"Snat SC" (Oliver).

9.22 p.m.—ELLA KILDUFF, violin:

"Landscape"

9.27 p.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Just a Bird's Eye View" (Kahn).

"Beside a Garden Wall" (Kahn).

9.24 p.m.—DREW AND ROMAINE:

"The Farmer Rhyms"

8.59 a.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"Schultz is back again with his Boom Boom" (Press).

"Don't be Angry with Me" (Donaldson).

8.49 a.m.—ESTELLE MARK, soprano:

"Sings My Mother Taught Me"

8.52 p.m.—JOE ARONSON AND HIS SYNCOPATED SYMPONISTS:

"The Boatman in the Volga" (Grope).

"I Don't Want Nobody but You" (Kahn).

10.2 a.m.—British official wireless news from Rugby. Sporting notes by "Olympia" Announcements.

- 10.18 p.m.—**JOE ARGONSON AND HIS SYMCO-SYMPHONISTS:**
 "Jollying" (West).
 "Nobody But You" (O'Hagan).
 10.28 p.m.—**MARGOT SHERIDAN, piano:**
 "Caliban" (Hammond).
 10.32 p.m.—**JOE ARGONSON AND HIS SYMCO-SYMPHONISTS:**
 "Where did you get those Eyes?"
 "I'll climb the highest Mountain" (Brown).
 10.41 p.m.—**DREW AND BOWMAN:**
 "Pigs on your old Back" (Small).
 10.46 p.m.—**JOE ARGONSON AND HIS SYMCO-SYMPHONISTS:**
 "Give Me Today" (Bell).
 "The Animal Fair" (Circus Days).
 11 p.m.—**GOD GREAT THOUGHT:**
 "Christian is easy, and art is difficult."
 (P. S. Desjardins).
 11.1 p.m.—**JOE ARGONSON AND HIS SYMCO-SYMPHONISTS:**
 "Lonesome and Sorry" (Conrad).
 "Crying for the Moon" (Conley).
 "There never was a Pal like You" (O'Hagan).
 "Picador" (Nichols).
 "Sweet Hawaiian Bands" (O'Hagan).
 "Oh! Miss Hannah" (Deppon).
 "Love Bound" (Rupp).
 "Good Night, I'll See You in the Morning" (Small).
 11.40 p.m.—**GOD SAVE THE KING.**

4QG, BRISBANE

THURSDAY, FEBRUARY 10, 1927.

MIDDAY SESSION.

- 12.55 p.m.—Tune in.
 12.58 p.m.—Time Signal.
 1.0 p.m.—Market Reports; Weather information; "The Daily Mail" news; "The Daily Standard" news.
 1.20 p.m.—From Hotel Carlton; Lunch Music from the Lounge, Hotel Carlton, played by Hotel Carlton Symphony Orchestra.
 1.28 p.m.—From the Observatory; Standard Time Signal.
 2.0 p.m.—Close Down.

AFTERNOON SESSION.

- 2.30 p.m.—**MUSICAL PROGRAMME:** Duo Art selection—"Aval Chorus" from "Il Trovatore" (Verdi); Aeolian Vocalion selections—(a) bass solo, "The Rolling Stone" (Hamblen); Mr. Malcolm McEachern; (b) "Concerto in B-Flat Major" (Tchaikowsky); Sapienthoff and Aeolian Orchestra. Duo Art selection—"Valse Brillante" (Zutou); Aeolian Vocalion selections: (a) choir and organ, "Advance Australia Fair" (Amicus); mass choir and Aeolian Pipe Organ; (b) fox-trot, "Keep on Grooving a Tune" (Fain); Ben Selvin's Orchestra. Duo Art selection—"Moment Musical" (Schubert); Aeolian Vocalion selections: (a) baritone solo, "Parson and Me" (Arundale); Mr. Ernest Butcher; (b) violin, "Indian Love Lyrics" (Woodford-Finden); Miss Peggy Cochran. Duo Art selections—"Romanian" (Kolintzain); Aeolian Vocalion selections: (a) Hawaiian, "Dreamy Nights in Honolulu" (Hampton); Palala's Hawaiians; (b) fox-trot, "Thanks for the Honey Bide" (Buffalo); Royal Truandlers; Duo Art selection, "Soviet" (Dreda).
 4.45 p.m.—"The Telegraph" News.
 4.50 p.m.—Close Down.

EARLY EVENING SESSION.

- 6.0 p.m.—"Daily Standard" News; Announcements.
 6.30 p.m.—Bedtime Stories by "The Sandman."
 7.0 p.m.—Market Reports; Lecturette, "Merino Sheep in Queensland," No. 1 of a series by Mr. G. Brown (Instructor in Sheep and Wool).
 7.30 p.m.—Stock Reports; Weather news; Announcements.
 7.45 p.m.—Standard Time Signal.

NIGHT SESSION.

- 7.45 p.m.—Lecture Session—A talk on books by Mr. W. A. Braiden (McLeod's Bookstore). **McLEOD'S BOOKSTORE, CUNCIERD,** To-night's programme will be provided by McLeod's Bookstore. The programme has been arranged by Mr. W. A. Braiden, Manager of the Technical and General Department of the Store, and Miss

- Nell Douglas Graham, A.T.C.L. Accompanist; Miss Hazel Sirling.
 8.0 p.m.—Overlays, "Paul and Peasant" (Gambel); McLeod's String Quartette; scene from "Homo and Juliet" (Shakespeare); Juliet: Miss Patricia McGressor, Nurse, Miss Nancy Neill; contralto solo, "The Lass with the Delicate Air" (Arnet); Miss Doreen Morgan; baritone solo, "Love's Old Sweet Song" (McBry); Mr. Ernest Norton; male quartette, "The Soldiers' Barrow" (Kinkel); McLeod's Main Quartette; orchestral—(a) "Harmony Rag" (Nichols); (b) fox-trot "Sabara" (Nichols); McLeod's String Quartette; humorous interlude by "Lauri" (inspired by Mr. W. A. Braiden); piano-forte solo, "Mittens" (Paderewski); Miss Hissi Stirling; dramatic recital—(a) "Tichenberg" (Kipling); (b) "Apple Blossoms" (Martin); Miss Nell Douglas Graham; violin solo, "Hungarian Idiom" (Hanssen); Miss G. Fagg.
 9.0 p.m.—Metropolitan Weather Forecast, Overlays, "Arlon" (Walker); McLeod's

- String Quartette; a one-act play—"The Bits" (Smeaton); cast—Lady Windish (Miss Estelle Derry); Miss Dove; Miss Conde Springhill); scene—Miss Dove's Dravine Room; plantation melody, "Nellie was a Lady" (McLeod's Male Quartette); Dickens sketch, "Joe the Groaning Sweep" (from "Black Baggage"); Miss Agnes Finney; soprano solo, "So Sorrow Rose" (Arbilly); Miss Doreen Morgan; dramatic recital, selected; Miss Nell Douglas Graham; baritone solo, "Sweet Goodnight" (Adams); Mr. Ernest Norton; humorous interlude by "Lauri" (inspired by Mr. W. A. Braiden); clarinet solo, "Showers of Gold" (Bradford); Mr. E. Gagnon; humorous recital from "The Sentimental Hike" (C. J. Dennis); Miss Rose Hall.
 10.0 p.m.—"The Daily Mail" News; Weather News; Close Down.

(Programme continued on page 63.)

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All Readers' Queries Answered Here

J.F.S. (RYDE)—Q.: My four valve tuned Anode receiver which during last winter yielded inter-State reception, now doesn't do so. Why is this?

A.: Since last winter, station 2FC has lowered its wavelengths so there is one reason. Again, summer conditions are different to winter conditions, winter time being more favorable for long distance reception. Again your present receiver is not as selective as many another type. The Neutrodyne would be better for example.

W.C.T.—Q.: (1) I am thinking of making in Browning-Drake recently described in "Wireless Weekly." I have two Kellogg Transformers, 45 to 75, would these be suitable to use in the Browning-Drake?

A.: (1) Yes.
Q.: (2) I have 3 Philips B400 Valves, would you recommend me to use these, or would I use 3 B100's, and one of some of type with it?

A.: (2) Use B400.
W.G.H. (RANDWICK)—Q.: Being within 500 yards of 2BL station, would you inform me through your esteemed paper, which would be the best valve set to make, so that I could cut out the above station, a three valve for preference, and also where I could get the parts for same?

A.: I will deal with this in some future issue.

G.H. (LESTON)—Paper forwarded.
N.B. (PUNSDOWN)—Paper forwarded.
The particulars you seek are covered in the article. Range cannot be guaranteed.

BEGINNER (ARNCLIFFE)—I haven't heard of your set, so I can't help you. Why not see the dealer who sold it to you. American conditions are different to local conditions and you should have ascertained that the receiver was a capable one before purchasing. Without seeing the receiver, I can do nothing for you.

W.H.G. (SINGLETON)—The arrester is connected O.K. Clean off the enamel coating at the point where the aerial makes contact with the arrester and re-solder it.
A. (LOWER SOUTHGATE)—Why worry if you get the good results?

P.E. (MAYFIELD)—It doesn't matter.
W.H.W. (RIVERVIEW, Q.)—The layout is obviously wrong. Stick to specifications and then you will get results.

R.L.P. (BATHURST)—All amateurs are down about 60 metres, no matter set will respond to this wavelength. That eternal old question of who broadcasted "Antic Laurie" or something like that at 2 a.m. is entirely beyond me. I haven't any idea of who these people are. Very sorry.

R.W.P. (ROSEBURY)—You should have left the coils as specified, and also the aerial, and used a Harle Detector. Try again, and let us hear from you.

A.L.M. (DARLEIGH)—Either your second transformer is broken down in the primary or the A.C. Jack is defective.

V.P. (GORDON)—There is either an open circuit in the filament main lead of the aerial or a broken down transformer. The grid leak may be faulty or one of the valves may be defective, such a filament leading on #10.

R.C.E. (NADIAC)—The crystal detector is faulty.
F.W.E. (SMITHFIELD)—See "Wireless Weekly" 7/1/37. Forget about the extra valve.

E.R. (ST. PETERS)—Dear me! I didn't want you to buy B batteries. Now did I. Easly speaking, I can also be sarcastic, but I have better manners. Why don't you read the article right through and exercise mentality in understanding it, instead of being facetious. You seemingly don't know the difference between the voltage of U.S.A. and the voltage of Australia with regard to A.C. mains. Forget sarcasm, old man, and learn to be wise. I use the Scotch to pay the same price as you for batteries. I have built the accumulator B battery, and it has rendered meoman service for four years, and is only charged once a week. It is not the

In conjunction with Farmer's Broadcasting Service the Technical Editor of "Wireless Weekly" broadcasts answers to all listeners' queries from 2FC each Thursday night. Replies will also appear in these columns.

policy of "Wireless Weekly" to make claims which cannot be substantiated, hence I always under-estimate rather than exaggerate—that's sense, not sarcasm. You take exception to charging your B battery accumulator every second night for ten minutes, yet in the next breath ask for trickle charger information. Sit up! Listen. Borne was not built in a day—be patient, all your wants will be fulfilled in good time. But be reasonable.

C.J. (SCONE)—See Mr. T. Kingsmill Abbott, of "Mirrural" Scone.

G.L.C. (COOBER)—Install a Filokostat or A. Bradley's Annoying Inset.

E.F. (BRISBANE)—The circuit diagram is quite O.K. but you must use .001 condensers, not .0005. The receiver should be selective.
E.A. (MELBOURNE)—Look to the detector. Are you sure that there are no high power coils passing the door.

S.P. (BANGALOO)—The paper has been forwarded to you. All parts are O.K.

H.M. (KING'S CROSS)—It is very difficult to advise without viewing the receiver. Is your layout in accordance with the instructions. So many things may happen that perhaps you would be best advised to run along to a qualified radio dealer showing him the set.

M.M.A. (KURRI KURRI)—See reply to A.B. (Borelli).

D.B. (SOUTH ISMORRE)—Build the Neutrodyne. Don't allow the crows to feed on the carbons in a straggling receiver. The cloth wrapping around the certain is simple protection.

G.R. (STH. RANDWICK)—Rheostat must be in the negative lead. Test first coil for continuity and see that your condenser is not shorting.

J.T. (ISMORRE)—Q.: (1) I intend building the Extraordinary One Valve. What length and height of aerial is required?

A.: In your district 190 ft. overall, with the average height of 35 ft.

Q.: (2) Would Electron wire be suitable here?

A.: Yes. Electron wire is suitable anywhere.

Q.: (3) Should cardboard formers be treated with shellac before winding?

A.: Always. Otherwise they may be affected by moisture.

RADIO (SYDNEY)—Q.: Would transformed A.C. current stepped down to 5 volts then rectified, be suitable for a 5 valve Neutrodyne?

A.: You would still get a pronounced A.C. hum. Stick to Accumulator yet awhile.

J.P.F. (NEWCASTLE)—You had better take your set to your dealer. It is awkward to test what is wrong without viewing the receiver.

V.B. (ABERDEEN)—The aerial you suggest should be suitable, but install a counterpoise instead of an earth.

E.T. (ROCKDALE)—Q.: Re the Remononiac B battery described in "Wireless Weekly" 1/4/36, is it necessary to thoroughly clean the canvas wrapping of the positive element?

A.: Clean off as much as possible.
Q.: (2) How can I tell when an saturation point is reached with the electroplate?

A.: Dissolve as much sal ammoniac as the water will absorb. Then pour off the saturated water content and discard the crystals remaining at the bottom of the jar. Your friend didn't follow instructions properly.

BRIEF REPLIES.

R.L.L. (WELLINGTON)—I am afraid this is out of our domain.

A.W. (RANDWICK)—You will have to learn how to tune the receiver, particularly in your locality. No, don't use a 5 volt accumulator for B400 valves. The makers specify 4 volts, and they should know. Look for 400 round about 47 on all three dials. Use the 50 ft. aerial.

A.T. (HANKSTOWN)—Write Australian General Electric Co. Ltd., Box 2517 G.P.O., Sydney, for this information.

"LICENSE 4480" (ROGARA)—I can't discuss the merits of different apparatus. The aerial mentioned will be described shortly in "Wireless Weekly," but your own aerial is quite O.K. The frame aerial is certainly selective, but I question if your present receiver is quite powerful enough. The other questions have been forwarded to the agents for the article in question.

P.F. (GORDON)—Get Coaster Point One's. The other matter will shortly be dealt with.

W.B.H. (WAGGA)—Forget all about it. Don't construct an amateur of a milliwatt permanently in the circuit. It is too risky.

T.A. (DARLINGHURST)—The receiver is not sufficiently selective for inter-State reception. It would be too costly to convert it.

SUPER (BRISBANE, Q.)—The Extraordinary One Valve was described in "Wireless Weekly" 22/10/36. Build it.

AMATEUR (HAMILTON)—I cannot discuss the merits of different apparatus. The "Wireless Weekly" wave trap would be better than your present system. Nothing would be gained by substituting fixed for inductance coils.

W.L.C. (ARNCLIFFE)—Tuning is your main trouble.

C.A. (W. BRUNSWICK)—Perhaps.
F.W. (KENNINGTON)—You will have to decide this matter for yourself.

B.W.T. (GORDONVILLE, S.Q.)—See "Radio" 7/1/37.

F.R.P. (DUBBO)—The high tension mains are a nuisance. Erect aerial at right angles to the power wires. Perhaps a valve is dead, test it. Look for open circuit.

J.H. (INDOOROOPILLA, Q.)—This result is typical of all valve receivers. Don't worry. See the Newletter.

E.B. (PIVE DOCK)—Master tubing. Call in a more experienced friend.

T.N.T. (TOOWONG, Q.)—Seemingly the detector valve is defective. The grid may be resting on the filament.

H.E. (BRISBANE)—Be content with what you have.

H.P. (NAMBOUR)—Your first letter must have been killed with static. Write again.

A.W. (BALMAIN)—Your B batteries are worn out. Look to the A battery also.

W.H.P. (SYDNEY)—Your main trouble lies in tuning. Install a Bradlestat in the detector circuit.

W.Z. (MILLERS PT.)—Interview Radio and Electrical Co., 40 Pitt-st., mentioning "Wireless Weekly."

E.A.S. (GLEEN INNES)—See "Radio" 30/9/35.

R.J.Y. (Manly)—(1) Possibly, but I used a Harlin (2) Forget it. (3) Best out. (4) Yes. (5) The Newletter; (6)

(a) Yes.
(b) 1 of No. 20.
(c) Every 30 inches.
(d) All together at the ends of the two last rings.

(e) 2-inch solid curtain rings of brass.
R.H. (MOSSMAN)—Stick to the specifications.

R.J.W. (NEUTRAL HAY)—I am afraid you will be too close to 2BL.

J.O.C. (MANTLEY)—I am afraid your new set would require too much alteration.

P.G.M. (BURSVILLE, Q.)—(1) I have constructed the low wave receiver (No. 2 of "Wireless Weekly" 30/7/36), and the diagram shows how. (2) Batteries are required. I am using B400 valves, what is the correct voltage?

A.: Use two batteries exactly as suggested.

6WF, PERTH

- 12.30 p.m.—Tune in.
 12.05 p.m.—First local news bulletin.
 Market reports.
 Cables.
 1 p.m.—Time signal from the Perth Observatory.
 1.15 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
 1.2 p.m.—STUDIO QUINETTE.
 2 p.m.—Close Down.
 2.30 p.m.—Tune in.
 2.35 p.m.—Musical programme, including pianoforte selections by Miss Evelyn Willis, A.R.C.M.
 4 p.m.—STUDIO TRIO.
 4.30 p.m.—Close down.
 7 p.m.—Tune in.
 7.5 p.m.—Stories for the Tiny Tots by Auntie Kate.
 7.55 p.m.—Uncle Duffy will talk to the Kiddies.
 7.55 p.m.—Stocks and Share Intelligence.
 Market reports.
 Cables. News supplied by courtesy of "The West Australian" Newspaper Co.
 8 p.m.—Time signal from the Perth Observatory.
 8.1 p.m.—Weather Notes supplied by the Meteorological Bureau of Western Australia.
 ORCHESTRAL NIGHT.
 8.2 p.m.—SWP's Station Orchestra: Conductor, Mr. Ronald E. Moyle, A.T.C.L.
 Mr. David J. Lyle, tenor.
 "The Myrles of Damascus" (Woodforde-Finlay).
 "Maiden Mine" (Bennett).
 "The Maid of Malabar" (Adams).
 "Love's Valley" (Dorothy Foster).
 10 p.m.—Second news bulletin supplied by courtesy of "The Daily News" Newspaper Co.
 10.50 p.m.—Close down.



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Crosley Musiconi Speakers	£4/3/6
Raytheon Tubes for "B" Battery Eliminators	£1/9/6
Colmovox "A" Battery Charger, 2½-amps.	£4/17/6
Colmovox "A" and "B" Battery Charger	£5/5/-
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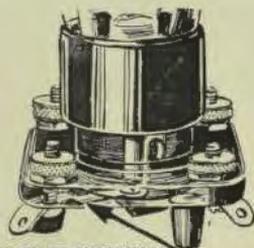
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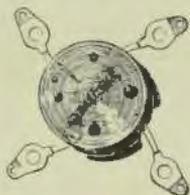
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