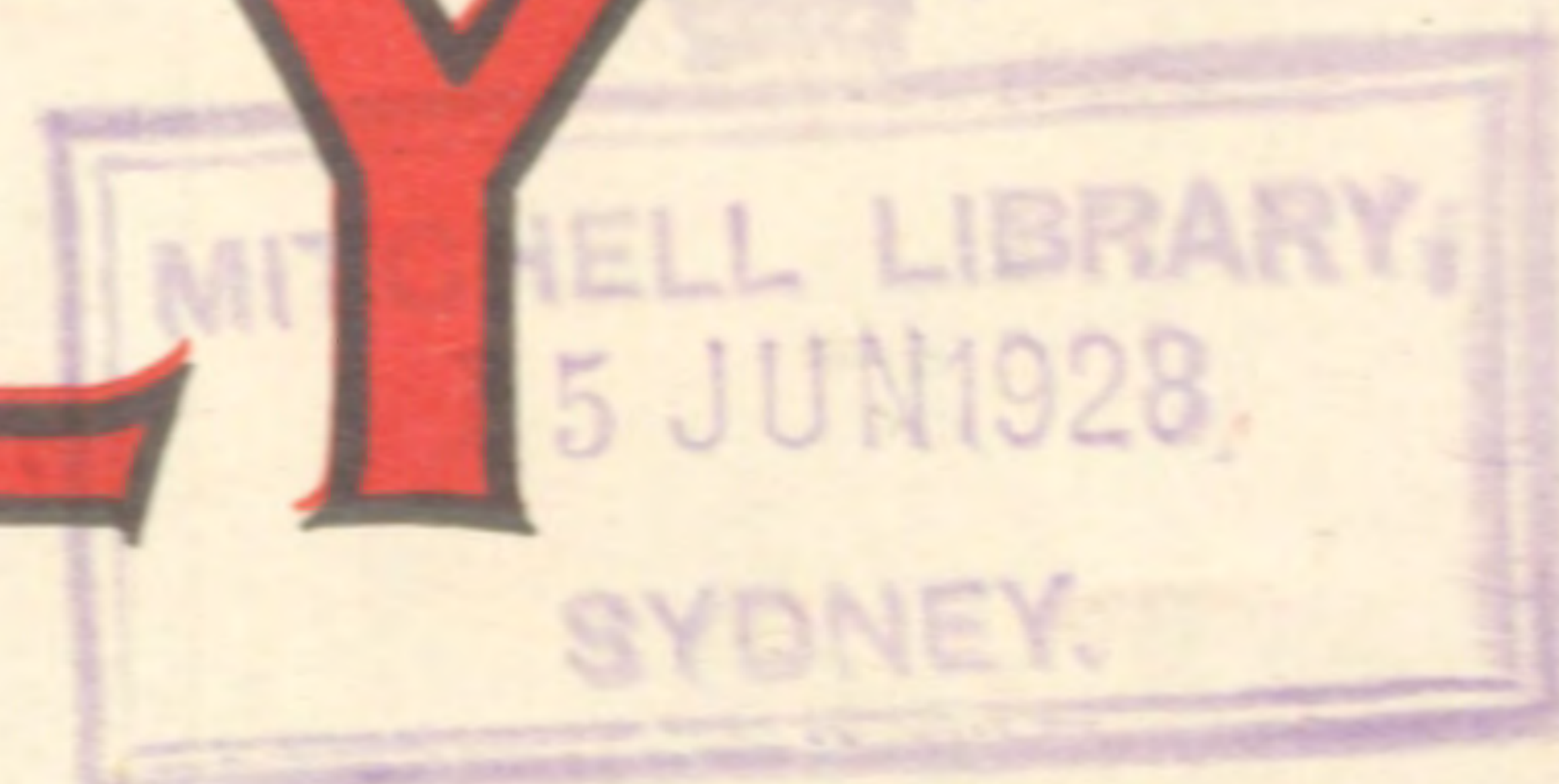


WIRELESS WEEKLY



Broadcast Programmes a Week in advance

VOLUME 12

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

NUMBER 8

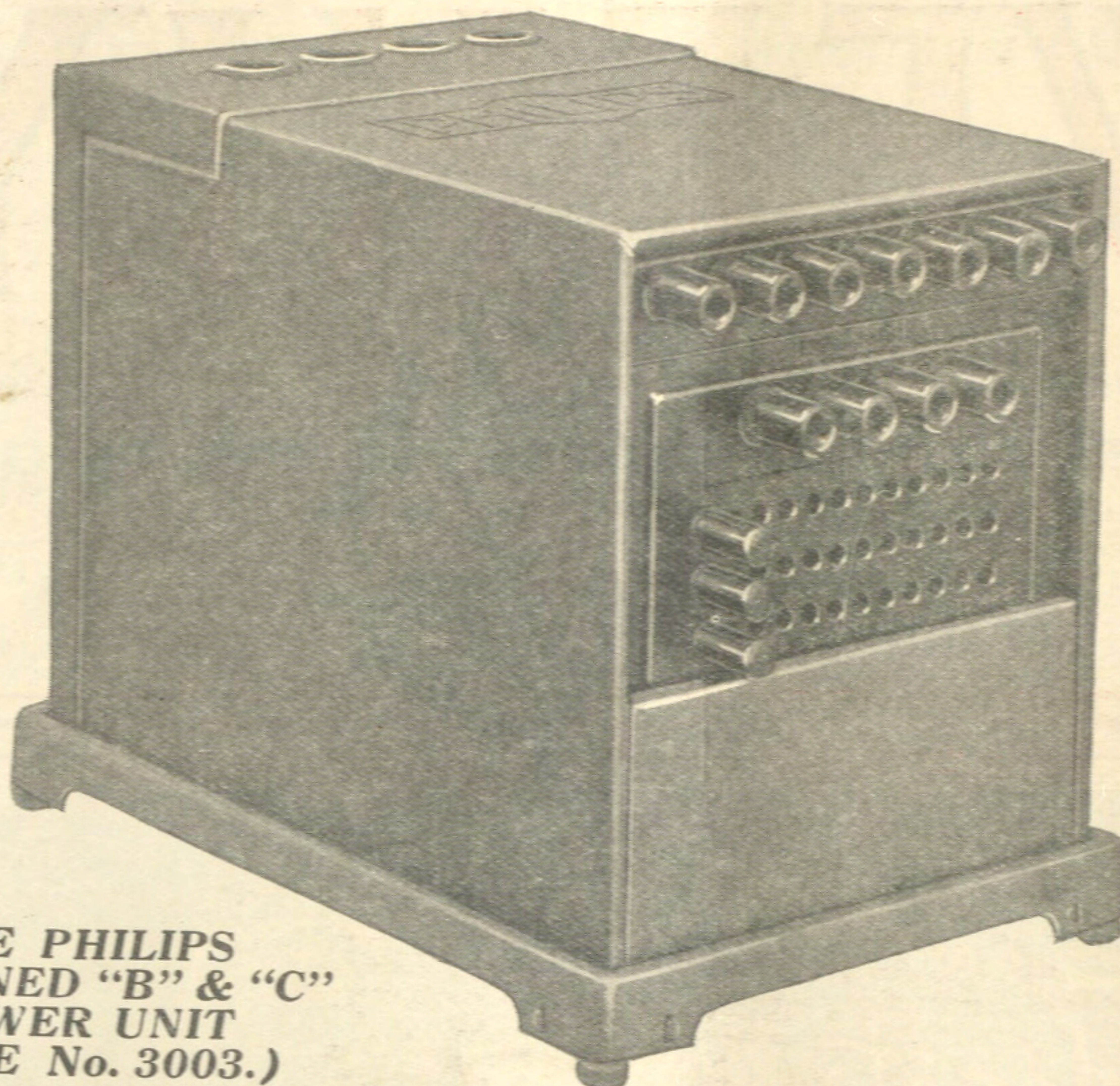
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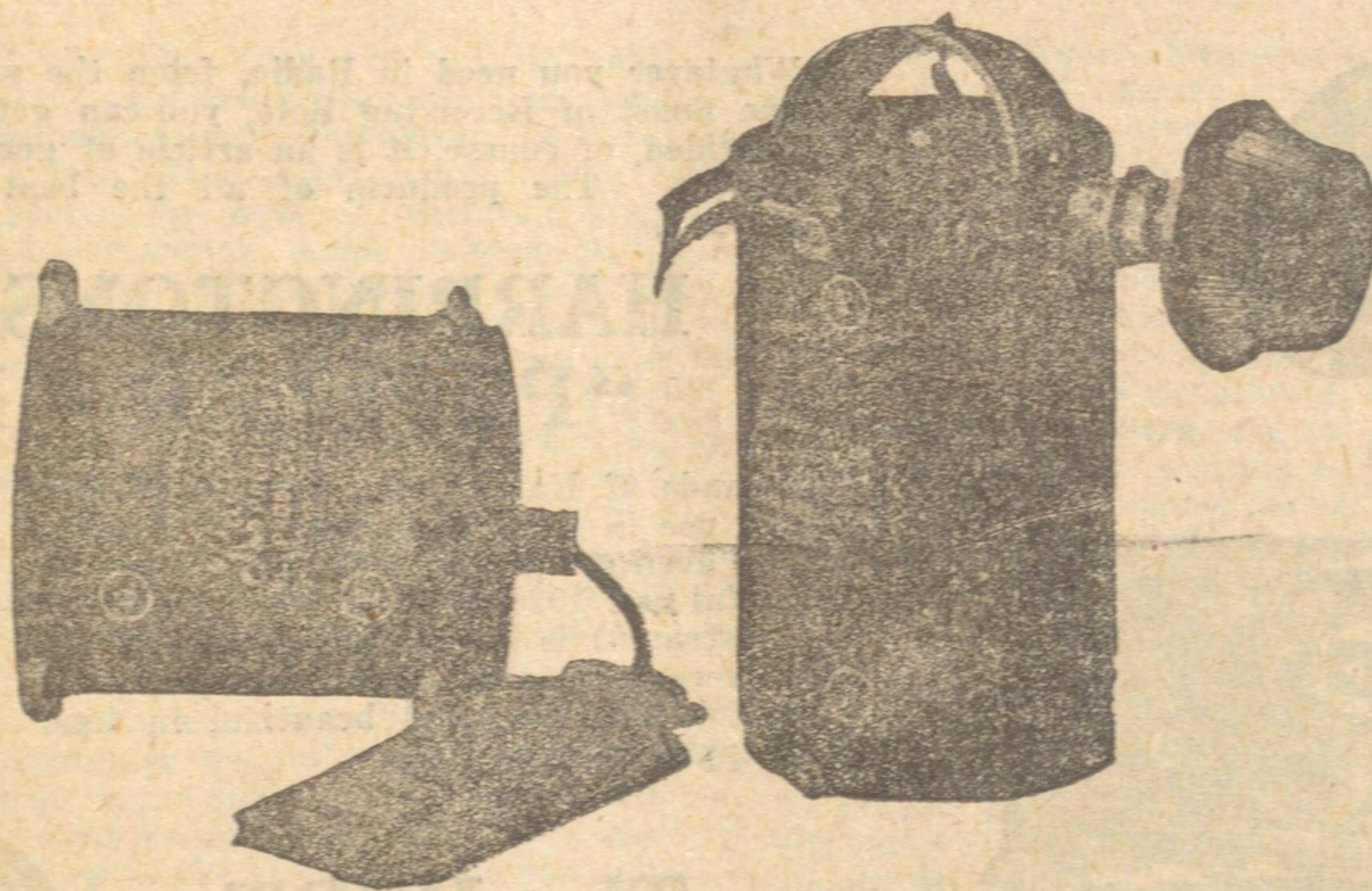
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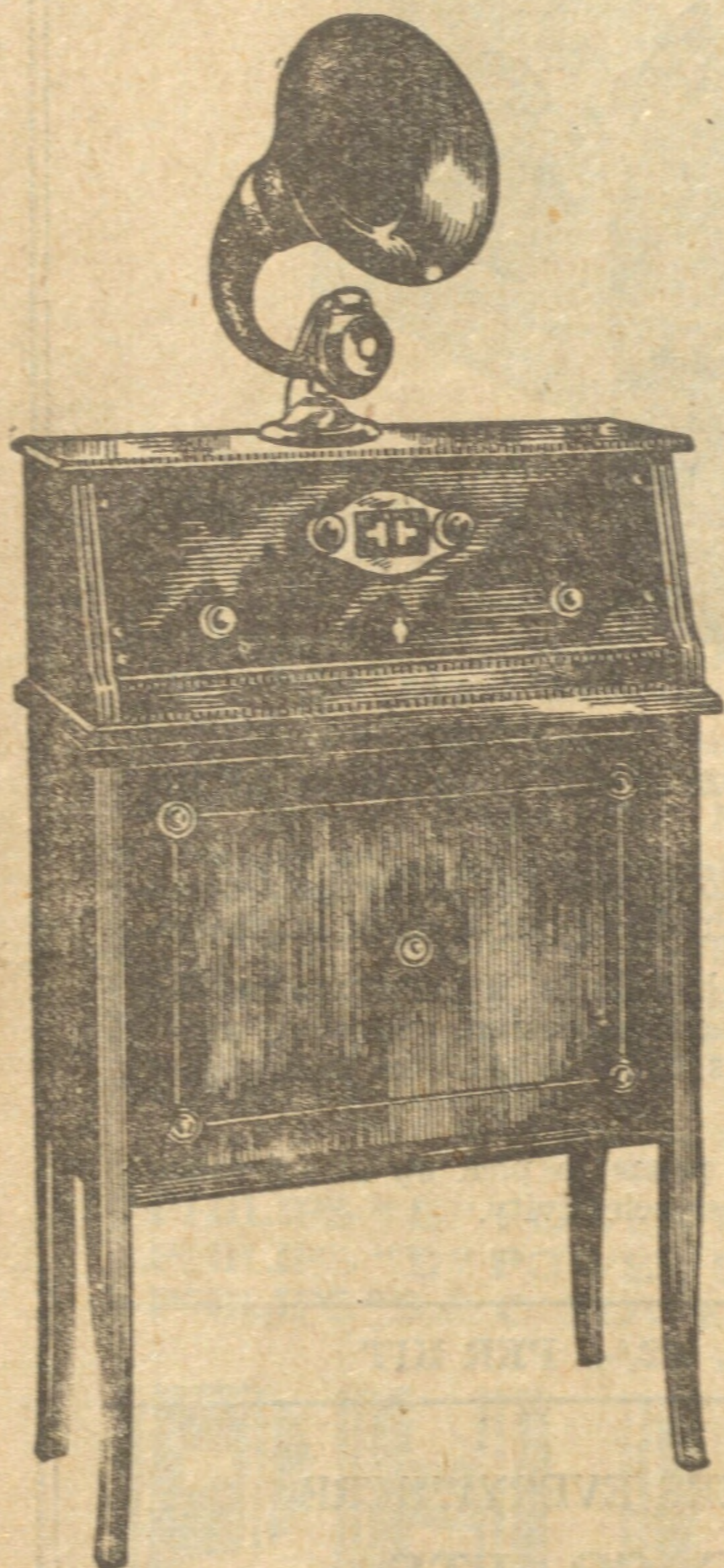
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WIRELESS WEEKLY

VOL. 12. No. 8.

FRIDAY, 15th JUNE, 1928.

Let's Talk About These Talkers

WHY shouldn't they talk? It really seems as if there were some personal animus against talkers over the Wireless. Letter after letter pours into the papers protesting against perfectly good talks and demanding music instead, as if Music were a sort of Barabbas to the Wireless Multitude. By all means let us have Music and still more Music, but as good almost to kill a man as kill a good Talk. What is wrong with the hour for Talks by good Talkers from 7 to 8 of an evening? Nobody ever goes to a concert before 8, and it is the very quintessence of selfishness to demand silence in the Parliament of Wireless before the Concert Session arrives.

Have you ever read Elbert Hubbard's notorious Essay on Silence? That loquacious philosopher naturally had very little to say on so vast a subject, so he says it in a daintily-bound booklet with gilt edges and gold lettering to the title, as befits the subject, and you open it very hopefully. But no matter to what page you turn you draw a blank. It is a leggarly array of empty pages. It is a Yankee "have." In very much the same way these Anti-Talkers demand a "Silent Hour" at 3LO, and will brook no Talks from Braybrook.

It is true that there have been, and no doubt will be, Talks so dreary that even Jazz would by comparison be joyful, and a football match full of method. It is not easy to put a Talk over the Wireless that will hold spell-bound a hundred thousand listeners. To be concise without being obscure; brilliant without verbosity; entertaining without shallowness; witty and yet wise, and yet not too wise! learned but not dull; these are qualities not every Talker can display within his allotted term of fifteen minutes at most. Some of the worst talks are those given by dreadfully eminent personages. Even a good Professor may be a perfectly flat Talker. Members of Parliament, of course, are as a rule deplorably hopeless. Clever men at their trades

can seldom impart cleverness to or by their talk. Nor are literary men by virtue of their calling any better. There are plenty of Oliver Goldsmiths besides the first: "who wrote like an angel and talked like poor Poll!" Nevertheless, the Talk has come to stay, or woe betide Wireless as a serious factor in civilisation. No self-respecting newspaper would omit its leading article or its occasional essay or technical notes merely because many flappers read only the fashion columns and many punters only the sporting pages. You cannot decide such questions by count of heads alone, for after all, so much depends on what is inside the heads.

In every community there is always a goodly proportion of Silent Listeners, who greatly value good Talks, and yet never bother to take pen in hand to say so. To be a Good Listener is to be one of the finest products of our civilisation. If I can persuade or get 3LO Melbourne to persuade any man or woman to talk freely to me of what they really love and understand, then I am of all men most fortunate. Even this music that you seem to prefer is only another kind of summarised talk. Could we but endure to sit at the feet of some good talker who knows how to make the best use of his Wireless opportunities, then we are attuning ourselves to a music beyond even Beethoven, Wagner or the latest Jazz. Perhaps Talks are a Test Question to decide whether we are the Sheep or the Goats of the Wireless World. More good is wrought by Talks than this world dreams of. The standard of Talk must undoubtedly be raised by Wireless, not lowered, not exterminated. Even you who talk against Talks, how can you get your will, unless you talk about it? But merely to denounce Talking because some folk are too talkative, is to go out at the same door as that in which you went. No Preacher, no Professor, no Parliament, no Press, can reach so great a world as the Wireless Talker, and is he alone to be dumb?

Catching Up with the Wireless World.

By R. E. CORDER.



THE faultless broadcasting of the act of the opera "Rigoletto" from His Majesty's Theatre on Tuesday night, May 29, by 3LO Melbourne, was made possible by the use of the station's electrostatic microphones. Four of these sensitive instruments were placed at different parts of the stage, and the sound co-ordinated so that it was possible to follow the performance clearly, irrespective of the positions of the artists on the stage.

THE INTRODUCTION of these electrostatic microphones by 3LO Melbourne heralds a new era in theatrical broadcasting. All extraneous noises are eliminated, and the artists' words, to the veriest whisper, are audible to listeners, whether spoken in mid-stage or far at the back. 3LO has replaced all its old microphones with these new instruments, and listeners can be assured of the nearest possible approach to perfection in the broadcasting of theatrical performances and studio items also.

THE ALTERNATE programmes promised listeners as a result of the merging of 3LO and 3AR, announced recently, have already begun. This should go far towards solving the problem of catering for the desires of every listener at the same time. The man who likes jazz can now get it at the same time as the man next door listens to a talk on gardening. The programmes from now on will be broadcast so that there will be no clashing of opera music, or talks with talks. Listeners hail the alteration with delight; the pleasure of listening-in is now doubled.

"I DON'T KNOW how people complain. We very much appreciate your programmes here," writes Mrs. G. L. Bayley, or Orange, to 2FC.

SOME OF THE English newspapers are prone to give the utmost publicity to any adverse criticism of the British Broadcasting Corporation, which provides probably the finest service in the world. A writer in the London "Modern Wireless" says: "If piffing Percy Puggins of Biggleswade, having invested in a three-and-sixpenny crystal set which he is mentally incapable of understanding, finds himself one evening totally unable to hear anything from London or Daventry, piffing Percy immediately writes to one of the newspapers and asserts that the B.B.C. is governed by persons of an unintelligence that is beyond belief. The newspaper immediately places piffing Percy's complaint in a prominent place, causing that fool to go about with a swelled head."

A CASE HAS just occurred where a number of listeners have vented their spite on acquaintances by writing to the station at which the artist performs, and saying all they can that may induce the programme manager to cancel further engagements. If the postmarks had not all been the same, and if programme managers were as dense as some of the persons referred to, then indeed, there would be trouble. Fortunately, however, in this case, the programme manager saw through the plot, and takes this opportunity of advising the plotters that their unkind ruse has failed.

HAD THE LINE not given trouble at the Lilydale Post Office, Victoria, on Wednesday night, 30th May, on the occasion of the rebroadcast of Dame Nellie Melba's concert, 2FC would have been rewarded with one of the most remarkable long distance transmissions ever carried out by them.

DAME NELLIE MELBA'S first two numbers were wonderfully clear, and those listeners who heard her must have been astounded at the freshness and buoyancy of tone, carried in all its gradations over six hundred miles of inanimate copper wire.

HALF THROUGH "By the Waters of Minnetonka," the line broke, somewhere between Lilydale and Melbourne. Lindley Evans' pianoforte solos, and part of John Lemmone's numbers were received with excellent strength and remarkable clarity. Norman Bennett's items were partially good, but were marred by line trouble. The announcement was made by a 3LO man who was also announcing his own station.

IN VIEW OF the recent controversy carried on in the daily press, it is interesting to quote from a letter, received by 2FC, one of hundreds of a similar type daily received from listeners. "You have broadcast an appeal for suggestions for the betterment of your programmes. Well, I, for one, am at a loss to oblige for, being on the sea, I have an opportunity of hearing all Australian stations, and comparing the programmes, and it is easily seen that the programmes from your station are far ahead of any the others as regards the quality of the talent that is provided." And that's that.

That's The Limit!

A Scotsman, holidaying at the seaside, could see the pier clock from his bedroom window. He stopped his watch.

Is that the limit in your opinion? If not, can you extend the limit? Beginning this week 2FC offers three prizes of 10/-, 5/-, and 2/6 respectively for the three best "Limit" jokes every week.

Watch for announcements from 2FC. The first entries close on June 19, and will be announced from 2FC and will appear in "Wireless Weekly" on June 28.

Radio and Aerial Navigation

Would the trans-Pacific flight have been successful without Radio? It is doubtful. What the flight had demonstrated above everything else is the value of radio in aerial navigation. In the following article the development of radio in this field is fully described and debated.

THE wide difference between sea and air travel cannot be compensated for by the few minor changes and developments of marine navigating instruments for aero purposes. Recent Atlantic and Pacific flights have demonstrated the shortcomings of marine navigation, and methods of forecasting oceanic weather conditions as applied to air travel.

The remedy is the application of the directorial property of short waves to solve problems of aerial navigation in fog and storm when compass and sextant fail. The establishment of radio beams, transmitting a regular signal with unerring accuracy in the path of the fliers would show the operator of the radio-equipped 'plane whether he was on his right course or not, regardless of existing weather conditions that may obscure from sight, not only guiding heavenly bodies, but also the face of the earth.

Under ideal conditions, with perfect visibility and a constant wind, it is possible to navigate a 'plane according to marine practices, but nothing can ever be taken as ideal in the air. In fact, it is almost impossible to have perfect weather conditions over the whole expanse of the Pacific. Just how far we are able, with our scientific data, to estimate oceanic weather conditions can be judged from the last two stages of Kingsford Smith's flight, when, instead of fair weather, promised him, he encountered large atmospheric disturbances, and wasted many gallons of precious petrol avoiding them.

Storms spring out of the north and the south, where no meteorological stations can be established, so that anyone's guess is as good as that of the expert, who has little or nothing to guide him in his forecasts.

Unlike the ocean liner, which reduces speed when fog and low clouds make navigation an uncertainty, the aeroplane must continue ahead. It cannot reduce speed and wait for a break in the weather to permit taking "shots" at the constellations, and lumber into port anywhere from six hours to three or four days late, as is often the case with ocean liners that meet adverse weather conditions. Six hours overdue, as time is figured in aeronautics, means only one thing—the 'plane is lost and down.

Drift of a ship can be measured at any time. Speed of the different currents and their directions are charted with accuracy, and the measurement of drift caused by the wind is easily calculated on a liner, irrespective of weather. In an aeroplane this is not the case, and if fog obscures the surface of the sea, and clouds curtain the heavens, the aero navigator has to fly a blind compass course. The direction and the force of the wind is an absolutely unknown quantity, and will determine the success or failure of the flight, depending on how long the unfavorable conditions last.

When wind blows with any appreciable force against the side of a liner, the ship will heel over, but it could be blowing at the rate of 100

miles an hour, and if the air navigator could not see the sea or sky, he would be absolutely oblivious to it all. It might be carrying him backward, and he would have no way of knowing it until some clear spot gave a point of relativity by which he might check his course.

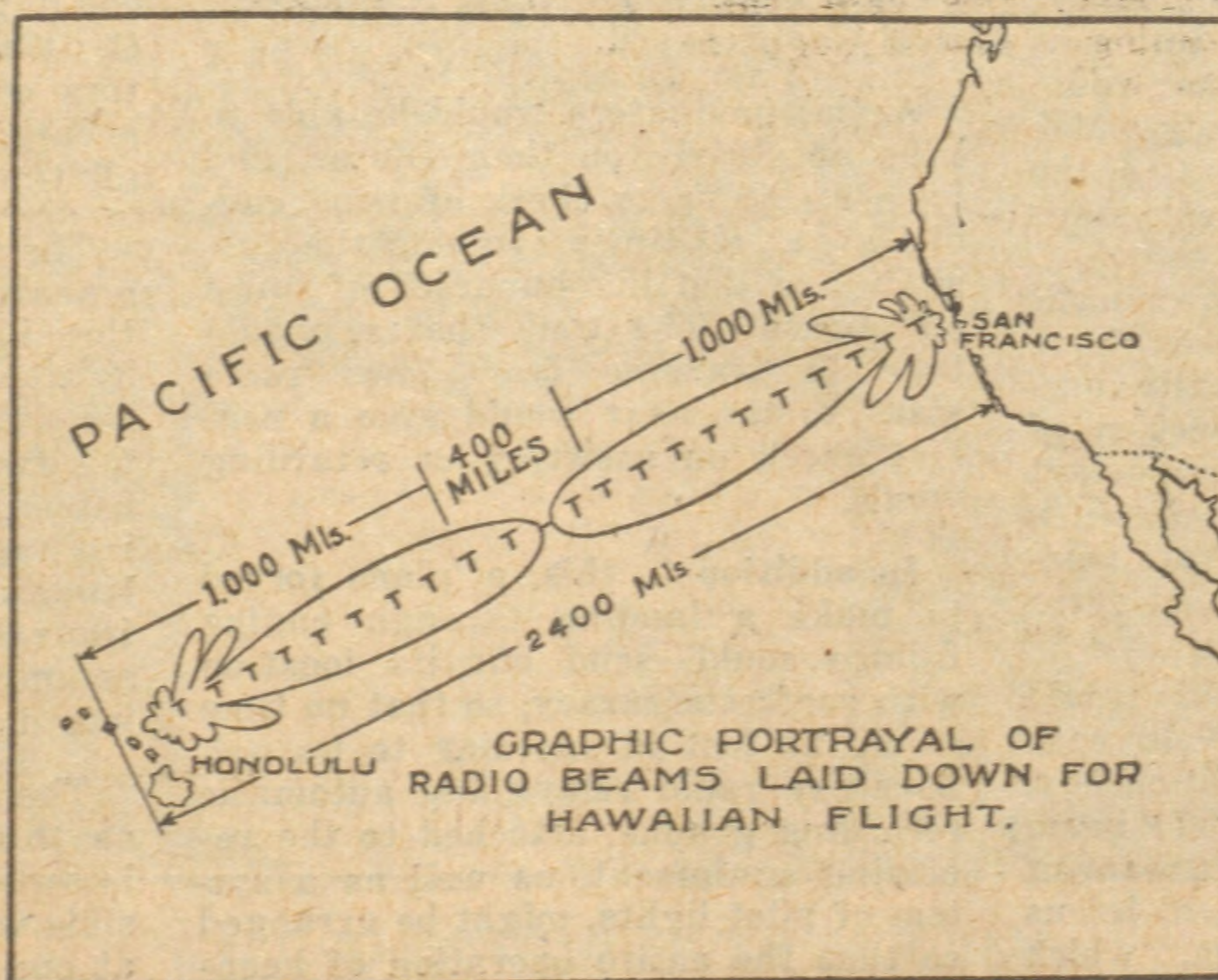
A thirty-mile wind, blowing south, at right angles, across the course of a 'plane, would in ten hours carry it 300 miles out of the way.

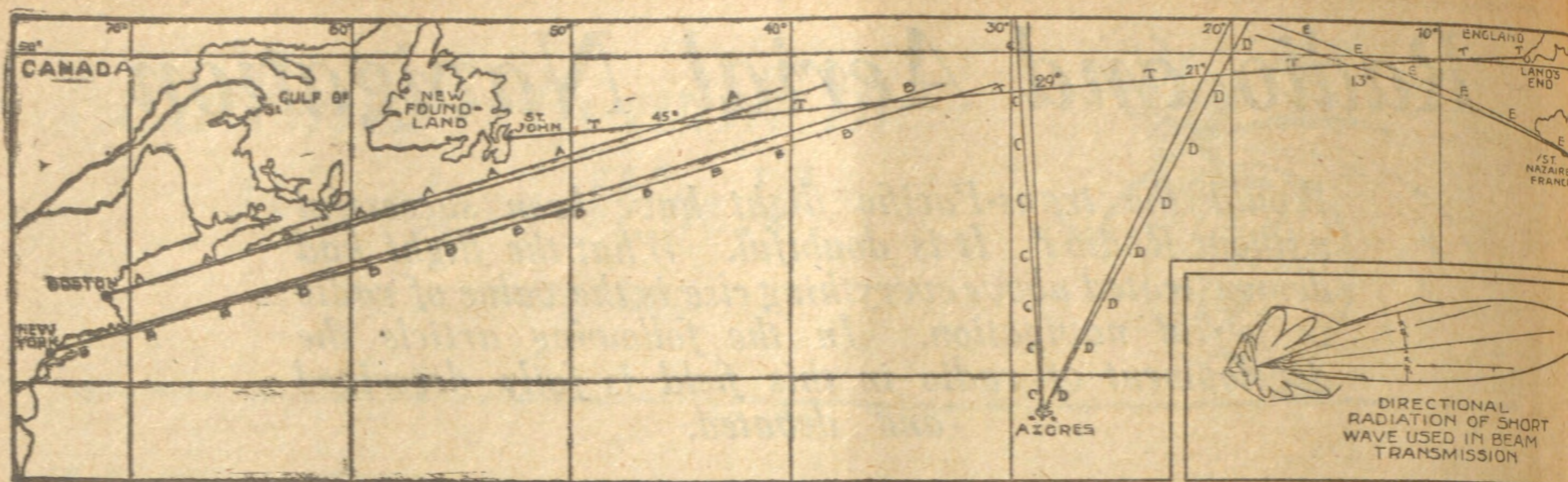
It is these very obvious reasons, to say nothing of the errors in navigation due to the speed of 'planes, that make it imperative that a more reliable means of navigation be devised. Speed and accuracy are the elements that must be considered as major premises, and at present there is only one element that offers a ready solution to the problems of aero navigation—a radio system, based upon the known actions of the short waves and their directional properties.

This has been recognised, and authorities, in readiness for the inauguration of a London-New York air service, which may eventuate any time, and will be the first trans-oceanic air service, have prepared plans for the operation of a system of beams across the Atlantic.

A beam of twenty metres, they calculate, could be projected across the Atlantic, from some point such as St. John's, Newfoundland, and directed to Land's End, the most westerly point of the British Isles. At this point another beam, aimed directly at St. John's, in the Western Hemisphere, would radiate its energy and identifying call letter, so that sufficient strength would be had at all points in the long flight to enable the pilot to easily keep on his course.

The idea of having two beams, instead of one, is to narrow the pos-





sible margin of error that would be caused by the divergence of the beam over a great distance. The power of both stations would be limited, so that no interference would develop, and the greatest width of the beam would be in mid-Atlantic, narrowing down at both ends until it became a needle point at the transmitting aeriels.

This system of radio beams was tried out during the first stage of Kingsford Smith's flight from San Francisco to Honolulu, with splendid success, and will, no doubt, influence the use of beams in all future flights.

Since the San Francisco-Honolulu hop must always be the first in any regular air service between here and America (a service which is certain to come in time), this system of radio beams is of some importance to Australia. No doubt, when such a service is established, there will be a complete system of radio beams across the Pacific. However, before that time comes, there will be a regular service across the Atlantic, and even now a beam highway is being established in preparation for that service.

This beam system, establishing a radio highway across the Atlantic, will be similar to that laid down for Kingsford Smith's flight with the difference that the North Atlantic radio beams will be cut at intervals of 300 miles, or less, by other radio beams of a different frequency which could be made to correspond to the accepted divisions of nautical maps and charts.

In the accompanying diagrammatic sketch, six transverse beams have been illustrated, to graphically portray the idea. The intersection of these beams, which run to important coastal cities, would locate within a matter of a few miles the exact position of a 'plane en route to or from Europe.

The main highway of the air would be dotted at regular intervals with invisible lighthouses of radio energy. The St. John's-Land's End beam would transmit a continual stream of Morse letters—for illustration, let us use T. The Boston beam, which

would cut the main trans-Atlantic artery exactly 300 miles off the coast of Newfoundland, would establish the first "radio star" and would be known by its Morse letter A, which, like the T's of the main line, would be transmitted in an endless flow. The point of intersection of the T and A beams falls on 45 degrees west longitude. The B beam from New York establishes the second invisible lighthouse 600 miles east of Newfoundland. The C and D beams emanating from the Azores cut the trans-oceanic radio path at 29 and 21 degrees, locating two more dead reckoning points that, like the others, would be available for aerial navigation, no matter what Dame Nature presents in the way of elemental disturbances.

The sixth invisible point would be maintained by the energy of the E beam, emanating at St. Nazaire, completing a series of "lightships" across the ocean. All of the intersecting beams should be of the same frequency, to minimise the radio equipment necessary for the plans to carry. The system would then only require two different receivers and antennae, one to receive the constant T signal, and the other to pick up the A, B, C, D and E shafts of invisible energy as they are successively approached.

Aerial navigators would be able to keep absolutely on their course, and have an accurate check of wind conditions, at all times avoiding the possibility of drifting hundreds of miles off course. The time that it would take to traverse from one "radio star" to the next would give a perfect check on assisting or retarding winds.

In addition to this, a 'plane forced to make a landing through engine failure could send out its location with perfect accuracy, so that no time would be lost in speeding to its aid. Sensitive radio relays and automatic recording graphs, attached to the receiving equipment, as well as a system of pilot lights, might be arranged so that the entire operation of keep-

ing on one's course would become as easy as driving up Pitt Street at noon.

The relay attached to the receiver, set to the frequency of the T beam, would show a green light when the 'plane was flying along the beam. If it veered to the port or starboard any appreciable degree, the energy of the radio beam diminishing, the relay automatically cuts out the main pilot light, and switches on a red light, showing that the 'plane is off its course.

At the same time, the constant flow of T's would cease to be heard in the pilot's earphones. Parallel beams actuating other relays might be arranged, to show whether the 'plane was to the port or starboard of the main highway. As the field of the transverse beams was entered, the other receiver and its relays would register, pin-pointing the machine's exact location. The transverse beams might be used as aerial highways, and the invisible lighthouses as turning points along which traffic to different cities of the Old and New Worlds would be diverted to the proper destinations.

Smaller and less powerful beams could be projected across the A, B, C, D and E beams, to assist navigators of the future to check off with accuracy their positions at any and all times.

The width of the beam, which, like a searchlight, grows broader the further it is predicted, can be regulated by the frequency used in establishing it. It might, as in the case of the two Pacific beams, be limited to fifteen miles at its widest point, giving an ideal highway, capable of handling all the aerial traffic of a trans-Atlantic nature, even, after steamships become archaic, and pass into disuse—if that time ever comes.

The development of a system such as this is not based upon some unknown power of radio, but is possible with the equipment we now have at our disposal.

Radio beams are in daily use between England and Canada and England and Australia, and could be used at the present moment for aerial navigating purposes.

In fogs, too, radio land beacons, or pilot cables, emitting a constant note, could be used to direct 'planes to the landing field. This system, of course, could be worked out to actuate a guiding relay, showing lights on the pilot's instrument board. Any deviation from the straight line to the aerodrome would immediately be shown by a light to the left or right of the main pilot lamp, showing a movement to the port or starboard of the direct line. Once the landing field had been located, regardless of fog, experienced pilots would have little or no trouble in negotiating a safe landing. Fortunately, wind and fog do not go hand in hand, and the radio cable would give the pilot sufficient landing information, so that a cross wind landing with a heavily-loaded 'plane would not present an additional hazard.

Another method of establishing trans-Atlantic aerial "light houses" may be developed when the "skip" distances of some of the higher frequencies of radio energy are understood. It may be possible to transmit from a common point five or six dif-

ferent waves, carrying individual signals, and have them interlock or dovetail, so as to lay down invisible but audible sign-posts across the Atlantic. However, this is just a possibility of the future—but the radio beam system is one that could be established within a few months if trans-Atlantic air traffic warranted the expense of maintaining such a system.

Marconi is responsible for the discovery of the directional properties of the short waves, and has, in addition to establishing the commercial service between Australia, Canada,

and England, made pilotage in the English Channel possible during any and all weather. The Marconi revolving beam at Dover is a special adaptation of the principle of directional wireless transmission. Signals are projected along the narrow beams, and different Morse signals transmitted at the successive points of the compass.

The pilot of a ship listens through the medium of a simple radio receiver and hears the five or more Morse letters, as the beam sweeps slowly past his ship. These letters tell him by

reference to his chart his relative position to the transmitting station. He is able to take any number of radio "soundings" in a short time, and, from these observations, and the known speed of his vessel, and other elements, plot a safe course.

This, of course, is a marine application of the directional properties of the beam, but shows the unlimited possibilities and the flexibility of the fundamentals of the system of directional wireless to meet any requirements. Aerial navigation of the future lies in the application of radio to the problems that cannot be solved by marine navigation instruments.



CAPT. KINGSFORD SMITH AND ULM.



The Safety Valve

Readers are urged to express their opinion on matters pertaining to broadcasting. If you have some grievance, if you have some constructive criticism to offer, here is your chance for expression—your safety valve. The editor assumes no responsibility for statements made by readers and published on this page, as opinions of correspondents do not represent our editorial policies or beliefs. Anonymous letters are not considered.

REDEMPTION.

Dear Sir,—I have been reading with great interest the letters that have appeared in your magazine, and there seems to my mind a great deal of dissatisfaction of broadcasting church services.

Personally, I am in favor of these services being broadcasted, with a suggestion to the A class stations to give a chance to other churches. There are plenty of suburban churches who have bright services and good choirs supplemented by soloists, that do not get an opportunity. The same routine exists Sunday after Sunday with particular churches who the stations broadcast, and they are so well known that one could enumerate them from memory. I don't wish to speak disparagingly of these churches, because some of their services are very beautiful, but when there are other churches of whom I have spoken of could give real good service to the community, they should be given the opportunity.

I am strongly against religious services being dispensed with. Listeners are provided with secular programmes on Sunday afternoons and again at night after 8.30 p.m., and religious services are restful to the ear after so much jazz and descriptive trash that is broadcasted during the week. I readily understand that it is impossible to please all, but, to my mind, the stations seem to think that fox trots, jazz, are the public taste, but many listeners whom I know enjoy the better class of music much better, but unfortunately they do not deem it worth while to expound their views through wireless magazines in the press, but live in hope that the proper authorities will make the stations put over better programmes.

It would be interesting to have a vote taken by listeners by proper authorised holder of a license, who would have to furnish his number to vote, then we would have a consensus of opinion as to what listeners require.

I sincerely hope that many of your listeners would be reasonable for two hours on Sunday for church services, for according to reports from city, suburban, country, and interstate stations, they are in accord with re-

ligious services being broadcasted. The present generation, I am sorry to say, think nothing about religion, but for dancing, and when matters have come to an organised dance in a boarding house on Easter Sunday, it is time that the churches be given the Sunday broadcast to help redeem the world.

Remember Sodom and Gomorrah. History always repeats itself. Drummoyne. AERIAL.

HARD TO PLEASE.

Dear Sir,—I should like to congratulate the Managers of Broadcasting Stations in all our States on the excellent programmes they provide. Those who are not satisfied are indeed hard to please—there are so many good things on the air that we can't hear and enjoy them all at once. The racing descriptions and resumes are eagerly looked forward to by the big majority of country listeners.

Gungal.

Yours, etc.,
S. B. PEABODY.

"B" BATTERY SUPPLY.

Dear Sir,—The following record of four 22.5 volt dry batteries of a well-known American make may be of interest to some of your readers. These batteries were used for the H.T. supply to a four valve tuned anode set which was in use most evenings. Battery No. In Service.

1	1/3/25 to 27/12/27
2	1/3/25 to 1/3/28
3	2/6/25 to 1/3/28
4	2/6/25 to 1/3/28

Batteries Nos. 3 and 4 were added to increase the voltage, and after No. 1 was discarded the set was run on the remaining three until March last, when all were discarded. Battery No. 2, which had been in use for over three years, and registered 20 volts at the end of that period, was then returned to the suppliers, who informed me that the battery was made during October, 1924. Needless to say, the replacements are of the same make.

Cremorne.

Yours, etc.,
J.D.H.

Result of Racing Ballot

Nearly a hundred votes have been received this week, in addition to the number published in last week's issue. The figures, however, remain much the same as a ratio toward one another, as will be seen from the following:—

	This Week.
VOTES RECEIVED	306
IN FAVOUR OF RACING BROADCASTS	279
IN FAVOUR OF 2FC	209
IN FAVOUR OF 2BL	39
IN FAVOUR OF ALTERNATE TRANSMISSIONS	31
NOT IN FAVOUR OF RACING BROADCASTS	24

In addition to the votes, we received scores of letters, from which we chose the following, as it expresses the opinion of the majority of voters.

"Dear Sir,—I have enclosed my vote in favour of broadcasting the races from 2FC as I think 2BL is better when announcing other sports. It will be a great pity if the racing is cut out of the programme, as it is one thing we country folks look forward to at week-ends. Where I am, we only get our papers three times a week, and they are a day or two old when we get them. In wet weather we are lucky to get any papers at all, so we look forward to the wireless for all sporting news. I can only pick the Sydney stations up on Saturday afternoon between 4 and 5 p.m. during the winter months. I will conclude by saying, 'Anyone who votes for the cutting out of races or any sport from our wireless programmes, is unthinking.'"

Yours, etc. (Sgd.) R. E. GRIFFITH, KYOGLE."

We are pleased to inform readers that the P.M.G.'s Department has now withdrawn objection to racing transmissions.

2FC Features

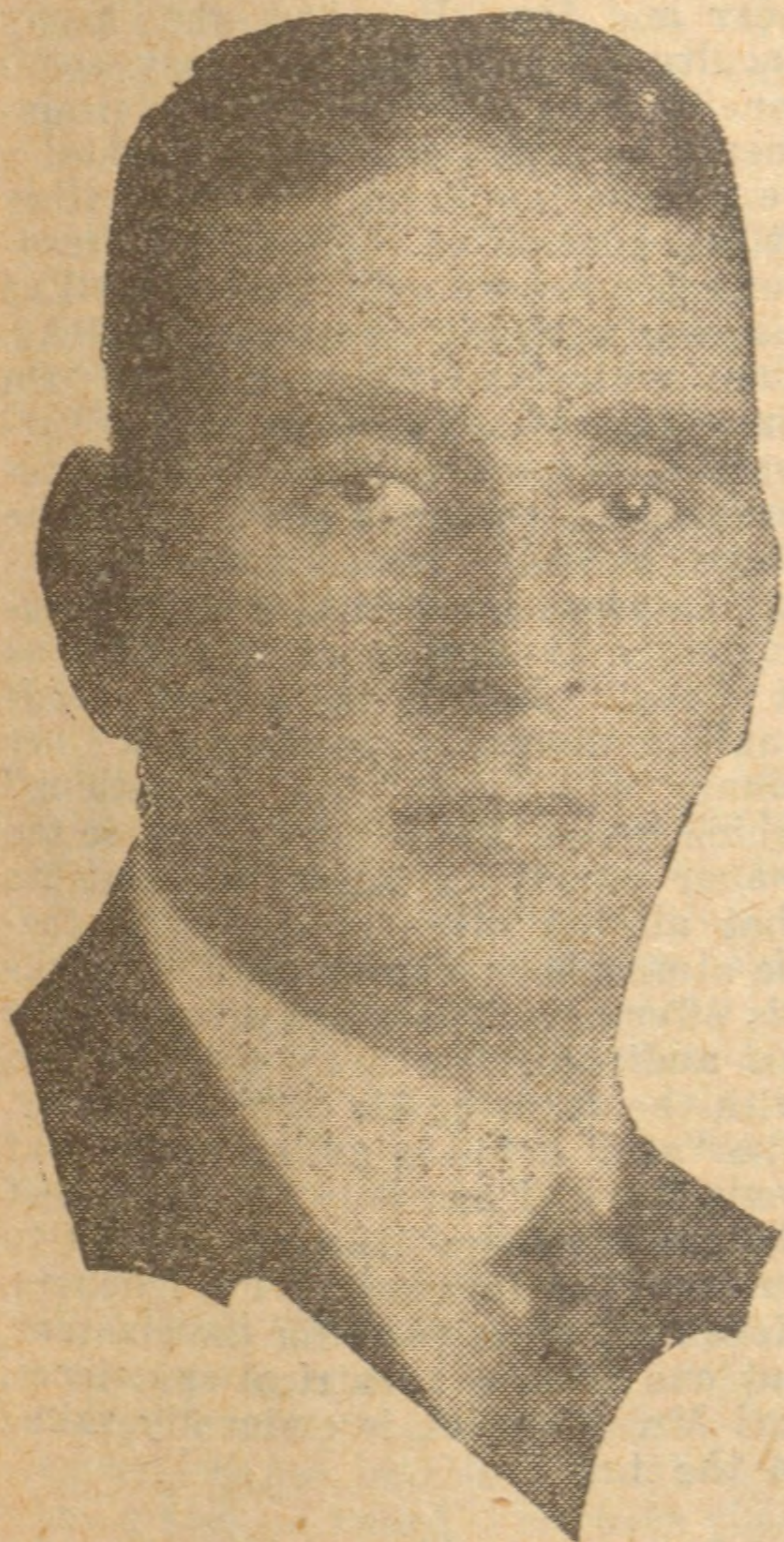
Madrigal Society — Grand Opera — Noel Allan "Aunt Eily."

C. N. BAEYERTZ, the well-known critic, will speak on the "Poetry of Shakespearian Blank Verse" at 2FC on Sunday, 17th June.

THE PERFORMANCE by the Sydney Madrigal Society will be broadcast by 2FC from Paling's Concert Hall, on Thursday, 21st June.

THE TITILLATING "Tittle Tattle Talks" by "Tessa" at 2FC are as attractive as their alliterative title. Airy, intimate little trifles which provide a refreshing departure from the cut-and-dried address.

CAPTAIN FRED AARONS will give another "Blunder Budget" talk at 2FC on Saturday, 16th June. Do YOU say: "Between you and I," or pronounce the second syllable in "futile" like the familiar red square used as roofing material? Then take heed of what the Captain has to say, for you too are numbered among the blunderers.



CLIFFORD LATHLEAN,
Bass Baritone,
who is now appearing at 2FC.

DAISY SWEET is before the public again, and will sing at 2FC on Tuesday, 19th June.

CARLTON AND SHAW, vocal and piano act, provide a sparkling interlude in the evening programme at 2FC. Their next appearance is set down for 19th June.

BRUNTON GIBB will give a series on "Personalities" at 2FC prior to his departure for New Zealand, where he will adjudicate at various elocutionary eisteddfods.

"MANNERISMS": No, not personal characteristics, but those of bridge players, on which Graham Kent will speak on Monday, 18th June, at 2FC.

W. F. KAY finishes his stage reminiscences at 2FC on Friday night, 15th June, with the apt subject, "Behind the Scenes." Of all the talks given on the air, Mr. Kay's are perhaps the most popular, redolent as they are with a fund of humorous anecdotes.

IN VIEW of the forthcoming Grand Opera Season, 2FC have given listeners every opportunity of becoming familiar with the lesser known works, such as "Turandot," the Puccini trilogy, "Thais," etc. These constituted the lecture-recital given by Roland Foster at the Studio last Wednesday. On Sunday, 17th June, the 2FC Operatic Trio, directed by Norman Janson, will take the old favorite "Trovatore" as their theme.

NOEL ALLAN is released for broadcasting by courtesy of J. C. Williamson, Ltd., during his stay in Sydney, and sang at 2FC last Saturday night. He is not quite familiar with the method of studio signalling, and despite the cunning owl on the announcer's table, which glowed intermittently at him through electrically brightened eyes, to draw his attention to the warning "Nearer" which had flashed on the Control Board, he sang blithely on. Fortunately his performance was not marred by the fact that he was not as near to the microphone as he might have been.



Constance Cooper, Soprano, who sings from 2FC.

"AUNT EILY" has found her way into the hearts of many little 2FC listeners. They look forward in happy anticipation to the "Hello Man's" promise: "There's someone coming to see you to-night," and her whimsical fairy stories call forth the surest form of appreciation—many letters "asking for more."

FAY AND FOSTER, a gladsome combination of violin and piano novelities, which is programmed at 2FC on Tuesday, 19th June. An act that makes no pretensions to the "high brow" of musical art, it will find favor with many listeners who make no secret of their preference for the frankly popular.

C. PRICE CONIGRAVE, the well-known lecturer, will commence a series of talks at 2FC on Friday, 15th June. He has taken for his subject the gate of the Northern Territory, from whence he has just come. The story he has to tell is colored with first-hand experience of the life and customs of the Northern Port, and will prove of more than ordinary interest to the many who somewhat casually dismiss Darwin as the unromantic jumping-off place to the mystic East.

F. H. J. TINKLER, of Merrygoen, N.S.W., gladdens 2FC's heart: "So you have been stirred up by the P.M.G.'s Department over the allegedly poor quality of your recent programmes. Well, here is one household far from being dissatisfied. You have an extremely difficult job catering for a multitude of taste—that I fully appreciate. But 'keep on keeping on' with your present type of programmes, as I'm quite certain that the Back Country folk at least are very satisfied."

ROYAL APOLLO CLUB: Departing from the usual procedure of transmitting the monthly practice of this well-known club, from Beale's Concert Salon, 2FC have arranged a Studio appearance on Monday night, 18th June. Choral music is always an attractive feature over the air, and the programme which has been arranged on this occasion should prove no exception.

MAUD ROYDEN'S address at the Lyceum on Sunday afternoon, 17th June, will be broadcast by 2FC. Miss Royden is the most brilliant woman preacher of the day, and listeners anticipate with no small degree of interest the transmission which has been arranged through the courtesy of the Central Methodist Mission.

VLADIMIR ELIN, the Russian baritone, returns to Sydney shortly after a successful season in Melbourne, and will appear at 2FC on Tuesday, 19th. In this artist we make up in some measure the loss sustained by the departure of Raymond Ellis, who was without doubt one of the finest artists on the air in Australia.

"UNCLE RUS AND JERRY" are presented with a bouquet from Mr. Percy G. Williams, of Eastwood: "You have a happy way of ALWAYS finding something new and attractive for the children—in fact, everybody. I think we 'grown-ups' look forward to Wednesday night as much as the children, to hear you and 'Jerry.' Your jokes are always clean, fresh and topical. Congratulations, 'Uncle Rus.'"

CARLTON FAY is back in Sydney again, after a successful tour of New Zealand with the "Tip Toes" Company, and is busy with rehearsals for the forthcoming revues at 2FC. He can drop from the Empyrean heights of Chopin to the prosaic level of de Sylva with breath-taking suddenness, yet his classics suffer not one whit thereby.

MEMORIES of the delightful French opera, "Le Cloches de Corneville," were revived for listeners of the previous generation on Monday last, when Hon. R. B. Orchard told the story of the opera at 2FC Studio. It is interesting to note he was assisted in the production of excerpts from the opera by Harry Sherlock, who was associated with him in many appearances with the Railway and Tramway Institute, which staged the full production on a number of occasions. Mr. Sherlock arranged a chorus which, in conjunction with the 2FC Studio Orchestra, rendered principal items. This class of work should prove popular with listeners, and opportunities will be taken arranging other old favorites in a similar manner.

FRED SCHOLL, the organist at the Capitol, has arranged an attractive programme to be broadcast by 2FC on Sunday, 17th June. These recitals of better class music are proving immensely popular with listeners, providing as they do the opportunity of hearing this artist and the powerful Wurlitzer he plays to the best advantage.

DRUMMOYNE BOYS' SCHOOL CHOIR: It is a generally accepted fact that children's voices do not broadcast well, but the choir at the Drummoyne School is an exceptionally well trained combination, and the items selected for their appearance at 2FC on Wednesday, 20th June, should give them an opportunity of proving the reputation they have already gained on the concert platform.

2FC—Coming features of the Week.

TALKS.

FRIDAY, 15th JUNE:

7.45 p.m.—W. F. KAY:
"Behind the Scenes."

SATURDAY, 16th JUNE:

11 a.m.—"Redgum": "Gardening."
8.40 p.m.—Rev. F. H. RAWARD:
"I'll Tell You a Curious Thing."

SUNDAY, 17th JUNE:

3 p.m.—MAUD ROYDEN.

MONDAY, 18th JUNE:

6.50 p.m.—"TESSA":
Tittle Tattle Talk.
8.30 p.m.—GRAHAM KENT:
Bridge Talk: "Mannerisms."

TUESDAY, 19th JUNE:

7.45 p.m.—ERIK LANGKER:
"Pictures in the National Art Gallery."

WEDNESDAY, 20th JUNE:

7.45 p.m.—ELLIOTT NAPIER:
"Walks Abroad."

THURSDAY, 21st JUNE:

7.45 p.m.—Rev. F. H. RAWARD:
"I'll Tell You a Curious Thing."

CHURCH SERVICES.

SUNDAY, 17th JUNE:

11 a.m.—S. Mark's Darling Point.
7 p.m.—Lyceum.

MUSIC, COMEDY, DRAMA.

FRIDAY, 15th JUNE:

8 p.m.—"Sunrise," Prologue from Prince Edward Theatre.

SATURDAY, 16th JUNE:

8 p.m.—EDGAR WARWICK REVUE COMPANY.

SUNDAY, 17th JUNE:

8.30 p.m.—FRED SCHOLL at the CAPITOL WURLITZER ORGAN.

MONDAY, 18th JUNE:

9 p.m.—DANCE NIGHT: THE ARTISTS' BALL.

TUESDAY, 19th JUNE:

8.50 p.m.—Second Act of "The Arcadians."

WEDNESDAY, 20th JUNE:

8.20 p.m.—CHARLES LAWRENCE COMPANY in Burlesque.

THURSDAY, 21st JUNE:

8.15 p.m.—SYDNEY MADRIGAL SOCIETY, from Paling's Concert Hall.

"NEW MUSIC MONTH": For the month commencing 18th June, 2FC are having what may be termed a "New Music Month." A special appeal is made to artists to contribute, as far as possible, numbers which have not been heard on the air, during that period. Listeners will appreciate this effort to infuse fresh interest into the broadcasting programmes.

ARTISTS' BALL: The Mad Hatters' Ball of 1928! And surely never was a function more aptly named, for a madder, merrier night has never been anticipated. If you don't want to dance, you can reserve a gallery seat, and go and look on. But the hats! 7,000—just imagine it—are required to decorate the Town Hall, and contributions are solicited, far and wide. Old, new, large, small, rakish, demure—it doesn't matter so long as it's a hat. Send it along to J. C. Williamson, Ltd., to help make up that 7,000. 2FC are broadcasting a description of the function of the year, and Cec Morrison's Band is supplying the music. Here is an opportunity for the stay-at-homes to arrange their own little individual dances, to radio music from the Artists' Gala Night.

REVUE NIGHT: Last year Laurence Halbert was the pioneer of this idea. His "Radio Revellers" were hailed with enthusiasm by listeners near and far. He had the happy faculty of infusing an easy spontaneity into the monthly entertainments he organised, which provided a very welcome break in the rather stilted routine of the orthodox broadcasting programme. Then came Rus Garling with his "Sparklers" and Ad. Cree with his "Merrymakers." On Saturday, 16th June, the Edgar Warwick Company will present a programme on the lines of the legitimate stage revue. Broadcasting artists are faced with a difficulty which paradoxically enough is as intangible as it is real. Just as the hostess spends anxious moments wondering if her dinner will lack that "something" which makes for social success, so the maker of revues strives to captivate that all too often elusive sympathetic atmosphere which makes or breaks his offering. The stage actor can see his audience, and draw them to him with the force of his own personality. The "air" actor is not only blind but invisible, and has only the medium of the microphone through which to quicken the interest of his listeners. Here then is no work for the amateur, but one of long theatrical experience, and Mr. Warwick is eminently suited to the task.

ERIK LANGKER'S second talk on 18th June, in the series he has arranged at 2FC, will deal with "Pictures in the National Art Gallery."

In the Air at 3LO

*Band Music—Sonora Concerts—Gypsy Players—Organ Recitals
Professor Bernard Heinze.*

3LO WILL be visited by the Prahran City Band on Tuesday night, June 19, when a specially selected programme will be broadcast.

THE FRENCH Brothers, banjoists, who were so popular when at 3LO before, will return to the station on Monday night, June 18. They sing as they play, and provide a good turn.

LOVERS OF organ music are always glad of an opportunity to listen-in to Mr. C. E. Monteath's recitals, broadcast by 3LO, Melbourne, from St. Peter's Church, Eastern Hill. Mr. Monteath will be on the air again on Monday, June 18.

THE SUNDAY AFTERNOON Sonora concerts are as popular as ever. The concert on Sunday, June 17, promises to be as interesting as its predecessors, as a careful selection of records has been made for it. They will be played from 2 till 3 p.m.

DURING THE WEEK beginning Sunday, June 17, several old favorites will be on the air from 3LO again. They include Senia Chostakoff, the celebrated Russian tenor, formerly soloist in the Don Cossack Choir; those popular entertainers, Rupert Hazell and Elsie Day; the Gypsy Players and Johnston's Studio Boys.

LISTENERS will be glad to learn that on June 18, without fail, Captain Donald MacLean, in a talk from 3LO, Melbourne, will endeavor to clear up the mystery surrounding the "Marie Celeste." Owing to unforeseen circumstances, which have arisen from time to time, this exciting talk has had to be postponed, but this date is now definitely fixed. For the benefit of those who may have forgotten the story, we would recall the fact that the "Marie Celeste" is the vessel that was discovered off the coast of Spain, in full "sailing capacity"—fires fully stoked, dinner laid in the cabin, but not a soul on board. Listeners should have a thrilling quarter of an hour whilst Captain MacLean is offering a solution of this extraordinary circumstance.

ENGLISH MUSIC will make up a programme, to be broadcast from 3LO on Tuesday afternoon, June 19. The Gypsy Players, and Miss Millie McCormick (mezzo-soprano), have been allotted prominent places on the programme.



W. A. Pride, to appear shortly at 3LO studio, in connection with the production of *Our Miss Gibbs*, by Bradshaw Collegians Operatic Society.

A MUSICAL TREAT is promised 3LO listeners on Sunday night, June 17, when Professor Bernard Heinze and his companions will broadcast a series of delightful selections. Professor Heinze is a most gifted violinist, and he will be assisted by Edward Goll, piano; Louis Hattenbach, 'cello; and Madame Gregor Wood, contralto. Such names ensure the quality of the programme.

ONE OF THE MOST popular features of Sunday broadcasting is the series of special talks given to the young folks during the children's hour from 3LO, Melbourne, by "Brother Bill," and which continue to grow in popularity week by week. The talks are full of interest and action, dealing with the little things of everyday life, the main object being to instil into the minds of the young listeners—boys and girls alike—the rules that will enable them to "play the game" to the very best of their ability as the years roll on.

THE COLLINGWOOD Citizens' Band will broadcast from 3LO on Friday, June 22, and the St. Kilda Brass Band will be heard on the following day.

MR. WILLIAM TAINSH, the folklore authority, will continue his talks from 3LO on Tuesday night, June 19. His subject will be "Irish Folk-Lore."

COMMUNITY SINGING, at the Assembly Hall, Collins Street, will be broadcast by 3LO on Monday, June 18. Features of the programme will be the appearance of the Gypsy Players, Marcelle Berardi (soprano) and Rupert Hazell and Elsie Day.

ARRANGEMENTS have been made by 3LO to broadcast, on Saturday evening, results of Tasmanian, Ballarat, and Bendigo football matches. This announcement will be hailed with satisfaction by hundreds of listeners.

3LO WILL broadcast, for football enthusiasts, a full account of the stirring game expected between South Melbourne and Melbourne, on the South Melbourne Oval, on Saturday, June 23. Rod McGregor, the former noted League footballer, and now 3LO'S football expert, will be behind the mike, and this always ensures a breezy account.

KEEN INTEREST is being taken in the song competition organised by 3LO, Melbourne, and already the budding poets and poetesses of Victoria are thoughtfully chewing the end of their lead pencils, whilst they rhyme "true" with "blue," and "sky" with "goodbye," in their endeavor to write words for the two verses and the chorus of the haunting refrain which is being broadcast daily from 3LO, Melbourne. There is a prize of fifteen guineas offered to the winner, who, in addition to receiving this, will at once enter into the somewhat exclusive ranks of successful song writers.

ON JUNE 21, Kathleen Sims, the young Melbourne soprano, is again to broadcast from 3LO, Melbourne, where she is becoming a great favorite with many listeners. It will be remembered that Miss Sims, who is still in her early 'teens, came second in the "Table Talk" Actress Quest which was conducted some little time ago, missing first place by three marks. However, the judges commented so highly upon her voice that she is continuing her studies, and is already making rapid headway in her chosen profession.

THE PUPILS of Mary Gumleaf, the ever-popular children's entertainer from 3LO, Melbourne, will produce a fairy playlet at the studio on June 21, when some clever juvenile performers will be introduced to listeners. Mary Gumleaf is already widely known, both for her skill in training the kiddies and as a producer. The young people have been in rehearsal for some time past, and have attained a very high standard. All the characters played by the children are culled from the pages of the Fairy Book, and the play is enacted in that delightful period "Once upon a time."

HAVE YOU EVER WONDERED how all the trains on the Victorian Railway System reach their destinations on time, and don't get lost in the maze of lines and platforms at Flinders and Spencer Street stations? Probably you have. Well, the man who sees to it that the trains DO NOT get lost is Mr. W. T. McConnell, chief train despatcher, at the control room, Spencer Street. He will explain to 3LO listeners at 9.30 p.m. on Wednesday, June 20, the intricacies of the control methods, and listeners will be able to hear for themselves the various messages concerning train movements reaching him. It should be a talk of absorbing interest, for there is something thrilling and romantic about the operation of a great railway system. 3LO listeners should be sure to tune in to this.

FOR SUNDAY, June 17, an excellent instrumental and vocal programme has been arranged at 3LO by Professor Bernard Heinze. Listeners are familiar with the artistic perfection of the Instrumental Trio—Bernard Heinze (violin), Louis Hattenbach ('cello), and Edward Goll (pianist)—and, in addition to trios and duets, these artists will be heard in solo numbers. The assisting vocalists will be Mr. and Madame Gregor Wood, who are already widely known in musical circles, and who, in addition to solo numbers, will be heard in several duets.

A NEWCOMER to 3LO, Melbourne, is Marcelle Beradi, the possessor of a soprano voice of rare purity and sweetness, which she uses to great advantage in delightful ballads and operatic arias. This will not be Miss Beradi's first bow before the microphone, as she has been broadcasting with considerable success from 5CL, Adelaide, and, judging from reports from the Sister State, listeners may rest assured that she is a vocalist of exceptional ability.

Outstanding Features in 3LO Programmes.

SUNDAY, JUNE 17.

2 p.m.—Sonora Recital.

7 p.m.—Scots' Church.

8.52 p.m.—Professor Bernard Heinze.

MONDAY, JUNE 18.

Eileen Starr, soprano, from "The Girl Friend Co."

Wm. Tainsh. Children's hour.

8.23 p.m.—Marcelli Berardi, soprano, from Adelaide.

8.48 p.m.—Captain Donald MacLean, final talk, "The Mystery of the Marie Celeste."

TUESDAY, JUNE 19.

Lunch hour, specially selected programme of English music.

2.41 p.m.—Valda Nicolay, contralto.

6.25 p.m.—Captain Donald MacLean, final talk to the children before embarking on another tour.

8.10 p.m.—Andrew Whitelaw, tenor.

8.55 p.m.—By special request. A repetition of Wm. Tainsh, "British Dream," "The Settling of the Verse."

WEDNESDAY, JUNE 20.

3.6 p.m.—First appearance Ralph Daly, baritone.

6.45 p.m.—Bobby Bluegum sing song with the children.

8.2 p.m.—First Act of "The Girl Friend."

9.30 p.m.—Transmission from Control Room, Spencer Street Station.

THURSDAY, JUNE 21.

12.15 p.m.—Community Singing, Assembly Hall.

6.25 p.m.—Play by the pupils of Mary Gumleaf.

8 p.m.—3LO Popular Dance Programme.

FRIDAY, JUNE 22.

CORONATION DAY.

Midday programme.—Boronica Cox, soprano; Esther Rofe, piano; M. J. Royle, baritone, as well as The Gypsy Players.

2.30 p.m.—Transmission from Tivoli Theatre.

8.45 p.m.—Ghost story.

Evening—Collingwood Band.

9 p.m.—University Conservatorium Symphony Orchestra.

SATURDAY, JUNE 23.

11.30 a.m.—Eric Welch, talk on today's races.

Afternoon.—Description League Football, South Melbourne v. Melbourne, by Rod McGregor.

Description Moonee Valley races, by Eric Welch.

6.40 p.m.—Programme for children provided by Miss Freda Northcote and her pupils.

8 p.m.—St. Kilda Brass Band.

Madame and J. Gregor Wood.

8.50 p.m.—Description of wrestling match from West Melbourne Stadium.

3LO, MELBOURNE, is making a special feature of band music. In the opinion of many people, this is the most stirring type of music from the listener's point of view, and one which has proved itself excellently adaptable to broadcasting. The bands which 3LO has engaged will provide a wide range of selections, and the particular characteristics of each one will give a pleasing variety, which will more than satisfy the listening music-lovers.

MISS SHELL PATERSON, the versatile artist, who is entertaining from 3AR, is rapidly establishing herself in the good graces of Listeners, with her charming personality, well trained soprano voice, and her choice of smart, catchy numbers. This popular vocalist is by no means a stranger to the Melbourne public, having been a great favourite for several seasons with the St. Kilda Pierrots, and, during her Season at 3AR, has received many letters of congratulation from old friends.

JOHN HOBBS, the English Bass-Baritone, who is broadcasting from 3AR, comes to Australia with a great overseas reputation, and, though a newcomer to Melbourne, he has rapidly come to the front rank of broadcasting artists. Mr. Hobbs has had much concert experience in England, and has appeared on the same programme as such distinguished artists as Harry Dearth, W. H. Squire, and Peter Dawson. This was Mr. Hobbs' first experience in broadcasting, but, possessing a well trained voice, and a wide range of excellent songs, he was on good terms with Listeners.

LILIAN PATON, the talented mezzo-soprano, who is broadcasting from 3AR, is one of the latest "discoveries" of the Australian Tenor, Walter Kirby, and has recently completed a most successful Tasmanian Concert Tour under his guidance. Miss Paton has had considerable experience in concert work throughout Australia, and, in addition to her vocal ability, is a pianist of exceptional merit. With the exception of Perth, she has broadcast from every State, and, as her repertoire ranges from popular and tuneful ballads to Operatic selections, sung in three languages, she is always able to please all classes of musical Listeners.

ONE OF THE most popular members of the Orchestra at 3AR is the trombone player, Ken Code, a member of a well known musical family, and cousin to Percy Code, the world famous cornet player, who adds so much to the strength of the Orchestra at 3LO Melbourne. Entering the profession at a very early age, Ken has done much good work in Band Competitions throughout the Commonwealth, and, as solo player, he has won the golden opinions of both Press and Public.

Women's Session

Conducted by Dorothy Jordan, 2BL

A VOICE FROM YASS: My correspondent says: "In last week's issue of the 'Wireless Weekly' you gave a recipe for Eggless Pudding. My family appreciated it very much. Now will you be so good as to give me a recipe for making kitchen soap?" For the benefit of other country friends I also enclose this:

Soap Recipe.

Put 9 quarts of water, 4-lb. of clarified fat, ½-lb. of borax, 1-lb. of caustic soda, ½-lb. of resin, into a kerosene tin, put on fire and stir till it comes to the boil, then keep stirring for four hours. Remove from fire, and add 2 tablespoonsful of kerosene and 2 tablespoonsful of cloudy ammonia. Cover closely with bags to keep steam in. This soap can be cut up next day if desired, or left a week or more. As there is no pouring out or moulding, it recompenses one for the time spent in stirring, and is specially recommended to the country woman who uses a fuel stove.

A RELIEF FOR CHILBLAINS: Mothers who have written in and requested a cure for chilblains on the children's hands, will be interested to learn that to bathe the hands and feet in a basin filled with fairly warm water in which has been placed one tablespoon of Cloudy Ammonia, will bring instant relief. This must be done before the skin is broken.

CARE OF THE CHILDREN'S FEET: Miss Jean Gordon says "that it is worth while for every child to have its feet thoroughly examined before it starts its school life, and again about the time when its school life is being finished with. Mothers should take care that the stockings which the child wears are not too short, nor too pointed in the toes, since much that is bone in the adult is gristle in the child, and can be moulded by pressure into unnatural shapes. The short shoe again is a danger which the mother must be always on her guard against. It is often forgotten that while a child is growing in height, its feet are also getting longer. The toes get bent and curved in short shoes and often the result in adult life is claw foot, or what is known as hammer toe. Endless pain and inconvenience is then the result.

DANCING POPULAR: Each Friday afternoon at 3 p.m. Mr. Carl Thomas is holding a Dancing Class for the members of our Women's Amateur Sports Association. Since the numbers of the Class have increased, it has been found possible to lower the fee, which is now 3/6 per lesson. The Dancing Class is open to any member of any of our different Sport Clubs.

Week's Features—4QG.

MONDAY.—Mr. Erich John's Party; Excelsior Band.

TUESDAY.—"The Varieties"; Radio Adaptation of Charles Dickens' "Christmas Carol."

WEDNESDAY.—A Dance Night.

THURSDAY.—St. Barnabas' Concert

FRIDAY.—Acacia Garden Concert.

SATURDAY.—Tivoli Theatre. Lennon's Ballroom and Studio Programme.

SUNDAY.—St. Paul's Presbyterian Church; and Band Concerts.

THE BACKWARD CHILD: Miss Marva Temple believes that the backward child can be helped by training its observation. When taking the child out walking, point out the different objects, such as the trees, the birds, even the tops of buildings, and endeavour to get the child to relate to you the different objects it has had pointed out to it. Games and dancing help the backward child very much, and by developing rhythm by movement, one can often at the same time help to establish rhythmic thinking. Mothers would be wise to write in and fully explain any difficulty they may be experiencing with a backward child, since Miss Temple is only too willing to help and advise. Each Wednesday at 11.30 Miss Temple discusses the subject of "The Backward Child."

ACCORDING TO Mr. Ronald Brearley, the popular orchestra conductor and Programme Director of 3AR, the average Listener will be surprised to learn that, to arrange a programme of Dance Music, it is often necessary to "try out" as many as a hundred tunes weekly. "Out of two or three dozen new numbers that are sent from the publisher," he says, "only one might be suitable for broadcasting, but, of course, everything must be gone through carefully, in case a brilliant gem might be inadvertently consigned to the waste paper basket! Then again, when we are giving a programme from the works of one of the great Masters, it takes hours to make selections, especially as we frequently have to write up our own orchestral settings. However, we all pull together, and feel that as long as Listeners appreciate our efforts nothing is too much trouble.

THE SOLODYNE.

It will be of interest to set constructors to know that the Lewcos Solodyne Kits, especially constructed in England for the famous Solodyne Circuit, which has proved so popular and so efficient throughout the Empire, are now available in Sydney. Those interested in the Solodyne should pay a visit to Messrs. Swain and Co., Ltd., Pitt Street, Sydney, where stocks are displayed.

Radio Movie Club

DRAWING OUT a graph the other day, the directors of the Radio Movie Club found that the club at present covers an area drawn between the following places: Sydney, Augathella, Rockhampton, Auckland, Ulverston, Tasmania, Melbourne, Adelaide, Emu Plains, and back to Sydney. Quite a number of new members from Canberra are also recruiting.

THE NEXT twenty members on the Metro-Goldwin-Mayer Radio Movie Club Rolls are: June White, Thomas White, Mollie Byron, Arthur Gardner, Lory Macinante, Marjorie Paton, George Downer, Iris Head, David Price, Jessie Pierce, Ronald Paton, John Logan, Mollie Rose, Lorne Gadd, Joseph Drennan, Alfred Brown, Allan Rider, Phillip Harrison, James Mahony.

REPLIES TO QUERIES.—Members of the club who do not own a radio set, should advise the manager of the club, who will then see that their queries are answered through these columns. H.D. asks about Vigoro, and where can he get a book of rules. Vigoro is a combination of cricket and baseball, which was invented to give the world a game, simple to interpret, interesting, and exciting, which would enable all to become efficient players. A complete set of rules has been posted you, Hazel, with our compliments. These rules are available to any others (members only), who are interested. G.C. asks: "Is Syd. Chaplin brother to Charlie Chaplin?" The answer is "yes." M.Q. wishes to know where Charlie Chaplin was born. He was born in Paris, France, of British parents. M.N. inquires as to the age of Marion Davies. Well, Marie, she was born on January 3rd, 1901.

THE TRACKLESS TRAIN will arrive in Sydney on Monday, June 25th, and its first day will be taken up in official calls, which will be as follows: Town Hall, Civic Commissioners, at 11 a.m. The Governor, at 12 noon, and thereafter all the newspaper offices will be visited, in addition to a number of theatres. The next day, the suburbs will be visited, and a wreath will be laid on the Cenotaph by the tourists. The Trackless Train is touring the world, and during its round of Australia, it will collect funds for the Picton Lakes Settlement. In Newcastle, alone, £50 was collected by means of charging 1/- per time for viewing the train. This does not include collection boxes that were passed round on behalf of the settlement. Members of the club will be able to view the train free of charge.

Those "Hard To Get" Parts WE HAVE THEM

PARTS FOR THE PERIDYNE AND GLOOMCHASER.

Free!

Given away with
every

ECONOMIC B'LIMITATOR KIT.

- 1 Little Bill Hand-drill.
- 1 Soldering Set.
- The Economic B'liminator Kit.
- Suits Sets up to 5 Valves.
- Parts and Diagram, 66/-.

Peridyne Kits £3/15/-
Advance Pantagraph Condensers, £3/-/-
Electrad Resistors, Type B. 10/-
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Genuine Carborundum Detectors . 11/-
Emmco Dials 7/6; 'De Luxe, 9/6
Karas Harmonik Transformers .. 34/9
PARTS FOR SHORT WAVE SETS.

Karas Orthometric Condensers, .00014.
Price 32/9
Karas Orthometric Condensers, .00025.
Price 32/9
Pilot Centraline Condensers, .00015.
Price 11/3
Pilot Centraline Condensers, .00025.
Price 12/-
Ripault's Short Wave Condensers, with
Vernier Dial 14/4
Ormond Vernier Dials 9/6
Radiokes Short Wave Kits ... £2/15/-

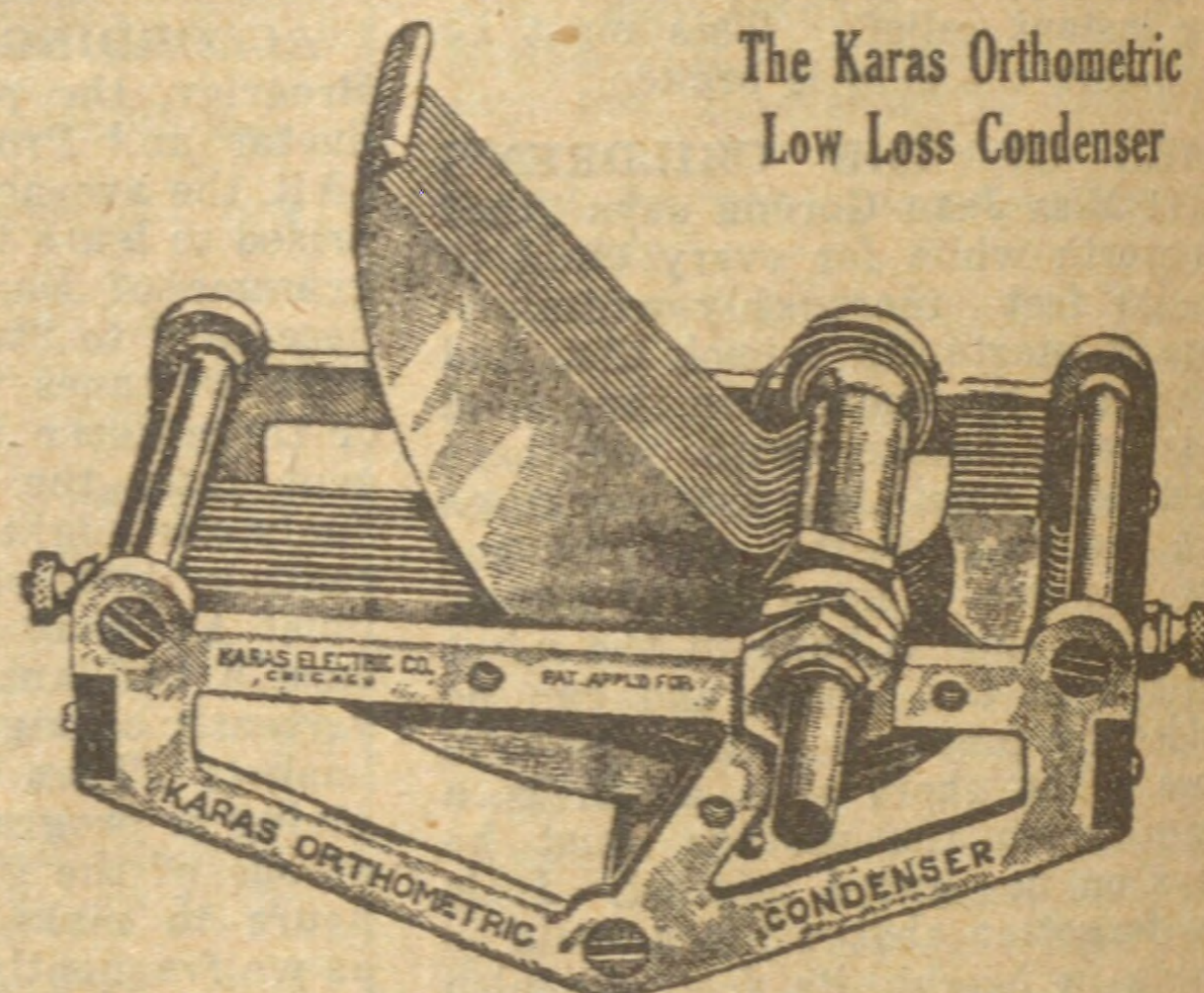
Service!

"I have purchased goods from your Stores, both personally and by mail, and have always derived perfect satisfaction. I built a Short Wave Set from parts I bought from you, and can receive America and others easily on one valve."

PARTS FOR THE 1928 BROWNING DRAKE AC2.

	£	s.	d.
1 Bakelite Panel, 18 x 7 x 1-8	0	5	3
1 Radiokes 1928 B.D. Kit	2	0	0
1 Quaker .0005 S.L.F. Condenser	9	9	6
1 Advance .00035 S.L.F. Condenser	0	10	0
2 Bakelite Moulded Condensers, .002, 2/9	0	5	6
1 Eco .5 Bypass Condenser	0	3	0
1 Bakelite Moulded Condenser, .001	0	2	9
1 Bakelite Moulded Condenser, .0001	0	2	3
1 Bakelite Grid Condenser, .00025	0	2	11
1 5 Meg. Leak and Holder	0	2	0
1 Midget Neutralising Condenser	0	4	3
1 Royalty Resistor, Type B	0	10	0
1 Osram KH1 Valve	1	15	0
1 Osram KL1 Valve	1	15	0
1 B.G.E. Power Transformer	2	15	0
2 Benjamin English Sockets, 4/3	0	8	6
6 Black Topped Terminals, 3d.	0	1	6
1 Radiokes R.F. Choke	0	8	6
4 Lengths best Spaghetti, 4d.	0	1	4
1 Doz. Round Buswire	0	0	11
Total	£12	2	10

The Karas Orthometric
Low Loss Condenser



Sizes:

.00014 and .00025.	Price	32/9
.00037.	Price	33/6
.0005.	Price	34/9

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For QUICK SERVICE address Mail Orders to ECONOMIC RADIO STORES, 492 George Street, SYDNEY.

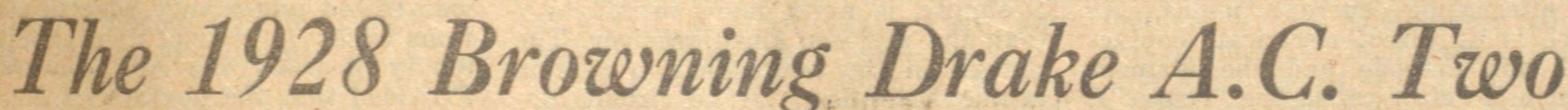
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THE ECONOMIC RADIO STORES

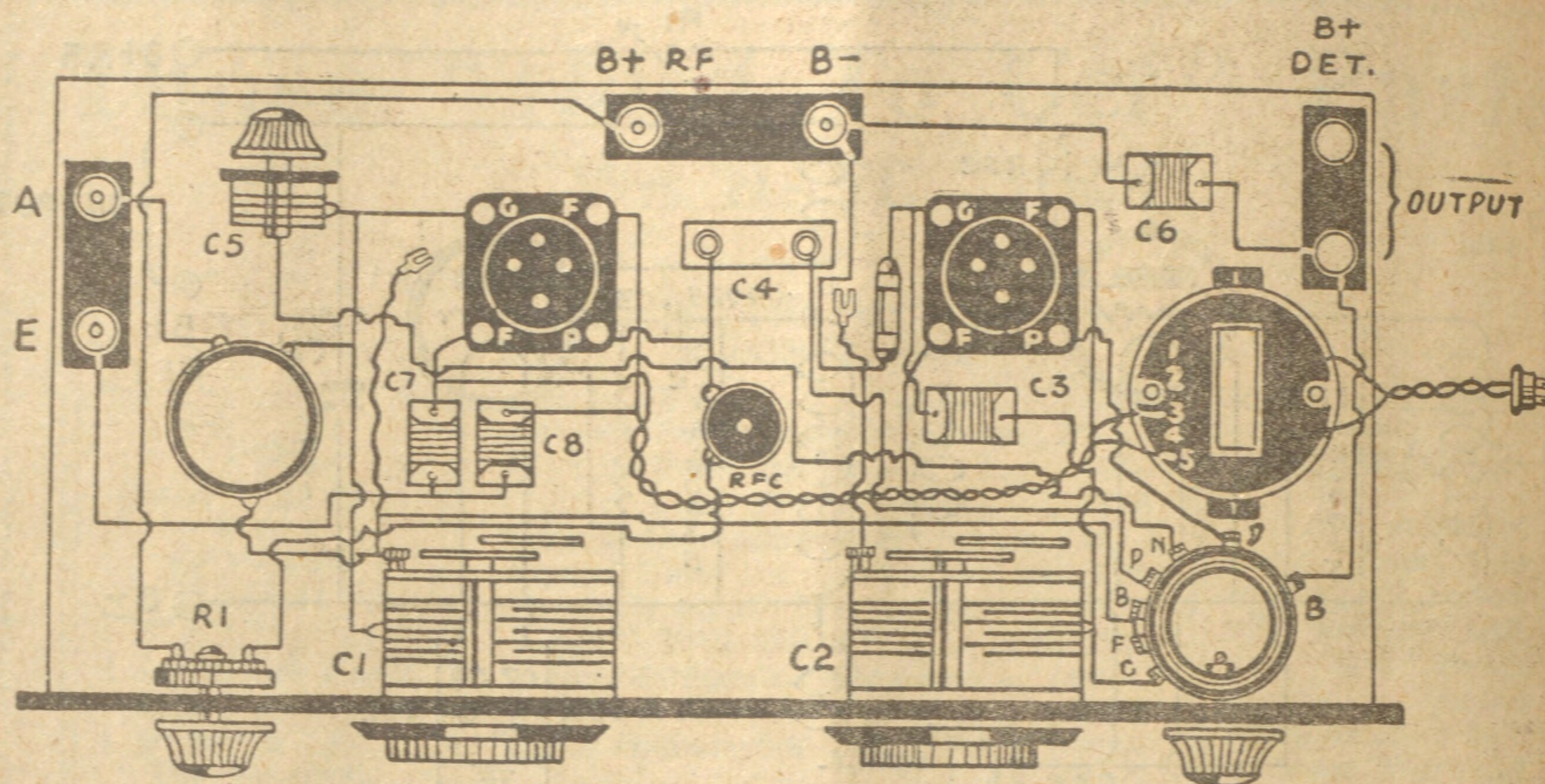
PARRAMATTA
Cor. Macquarie and Church Sts.
'Phone: UW 9601.

SYDNEY:
25 NEW ROYAL ARCADE,
'Phone: M 6138.

NEWCASTLE:
13 Union St.
'Phone: New. 1622.



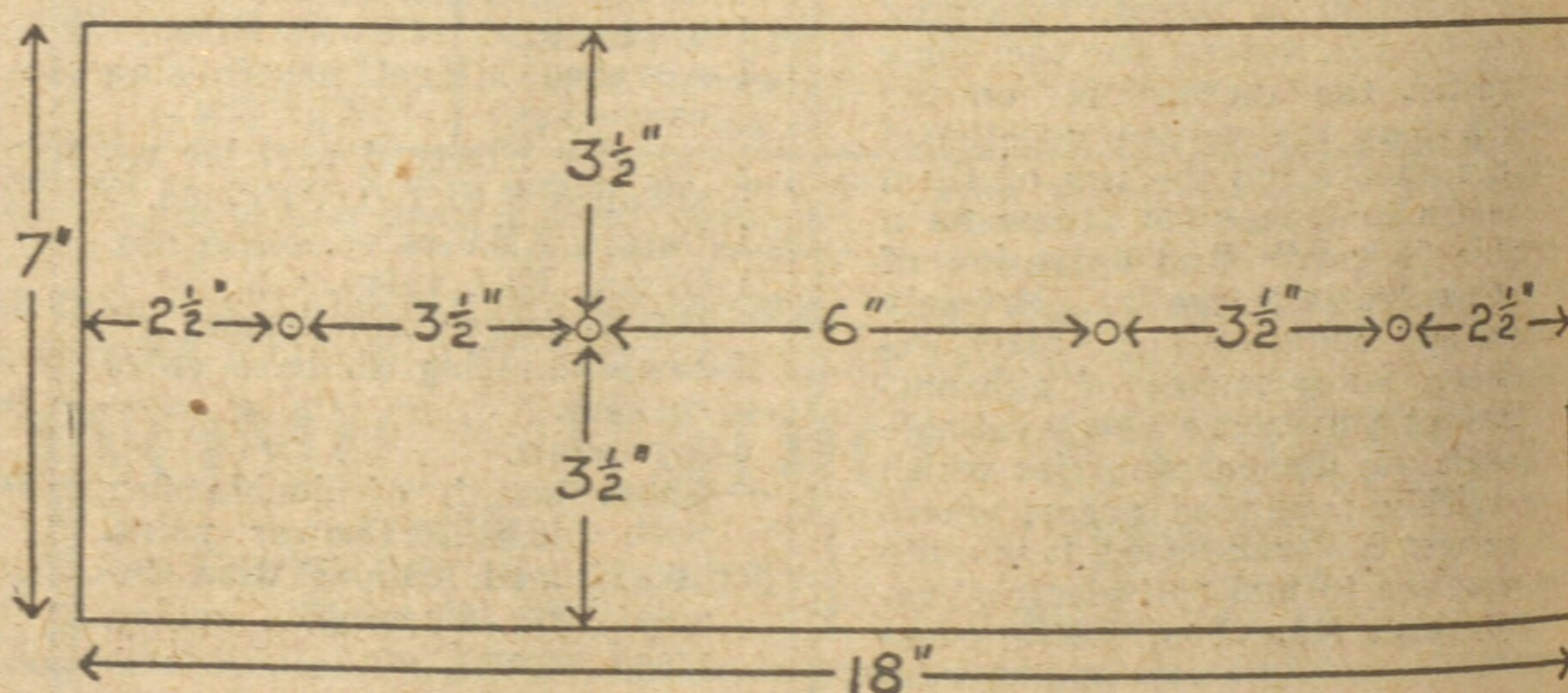
mean to imply for a moment that present receivers using D.C. valves are becoming obsolete. So far as Australia is concerned, this is far from the case, and where A.C. supply is available, the constructor will do well to install an all electric receiver. The valves dealt with in this article are the Osram, KL1 type. They are used in A circuit, which is admirably suitable for their application, i.e., the 1928 Browning Drake. In order that no confusion will arise, and to simplify the introduction, the fundamental of the receiver circuit alone is described; this consisting of the tuner proper, or the R.F. and detector stage. It will be quite an easy matter for the average reader to add his own audio amplifier, which may be of the A.C. or D.C. type, whether power or otherwise. The Osram KL1 type valve is specially designed for use with alternating current supply, which function it performs with a remarkable degree of efficiency, particularly in the new Browning Drake circuit given here. The Thermionic valve, as readers know it, has the filament (or to use the correct scientific term, the Cathode) heated by a current passed through it from a low tension D.C. supply. In the Osram KL1, the Cathode functions without the use of a low tension D.C. supply. This cathode is arranged separately from the actual filament, and takes the form of a metal cylinder, surrounding and heated by an element

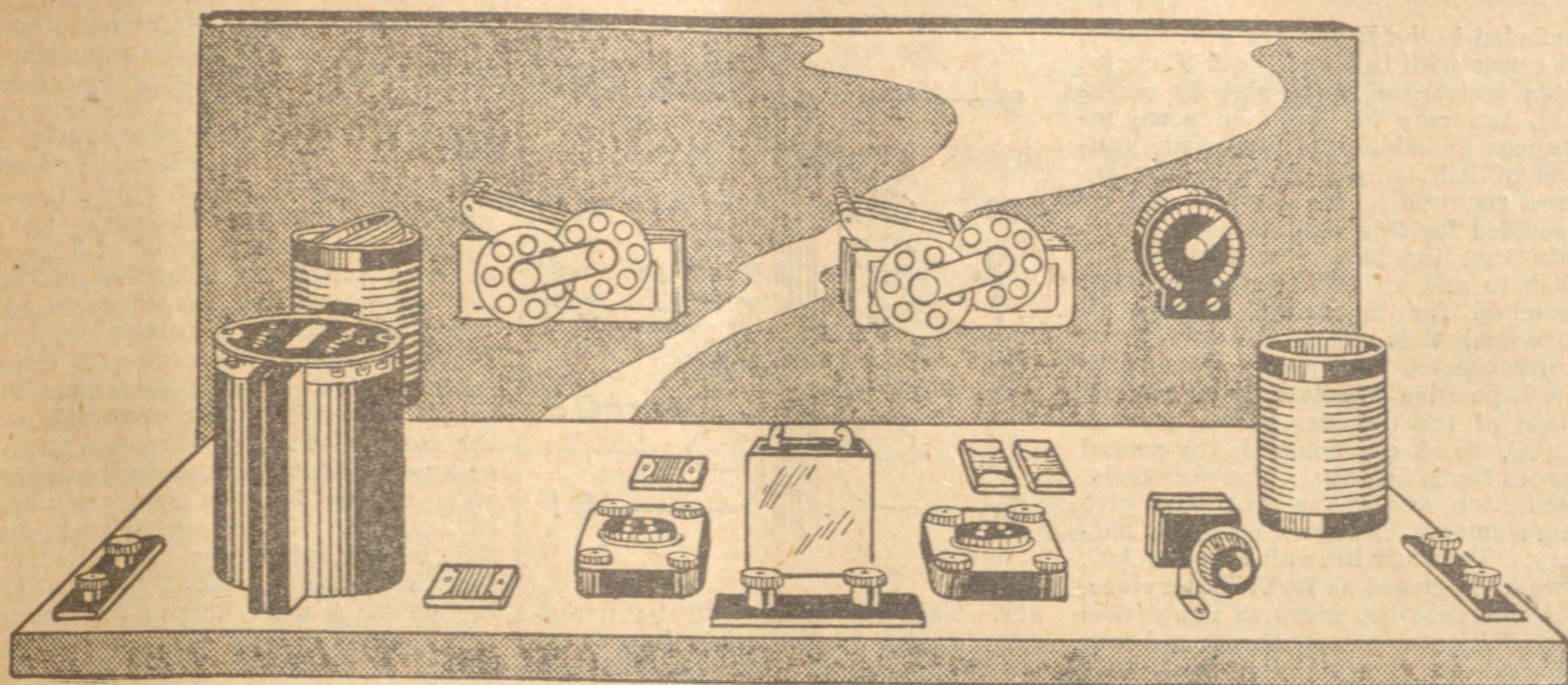


which obtains the necessary current from the secondary of a suitable transformer, taking its input from the alternating current mains. As there is no direct electrical contact with the cathode and the filament (which is better called the "heater"), any undesirable noises from the supply, or A.C. hum are eliminated. The cathode has a large area, with the result that the valve possesses characteristics which make it equally suitable as R.F. amplifier, detector, audio amplifier or power valve. The heater consumes a current of two amperes, at 3.5 volts, which is equal to 7 watts consumption. From this it will be seen that the KL1 valve is considerably more economical than the average house lighting lamp! Where new, or comparatively new, developments are to be described to readers, it is always more satisfactory to limit such description in as simple a manner as possible; otherwise many will merely glance at the pages and "wait for next week," for something more compatible to their requirements. In order to initiate all and sundry to the use of A.C. valves, the Browning Drake receiver is shown minus any audio amplifier. The circuit of the 1928 Browning Drake was fully described in the March issue of "RADIO." It differs somewhat from the original application, in that a slightly different method of neutralisation is used, together with other features. The public is fast realising that power amplification is the most reliable means of quality reproduction, and that power valves are necessary to deliver any volume with lack of distortion to the loud speaker. It is advantageous to have the audio amplifier separate from the receiver itself in one unit, as high voltage leads are thereby considerably

shortened. The consequent combination of a good tuner and detector, with a separate power amplifier and B supply, is much more satisfactory than the self contained receiver. The change in the neutralisation system of the Browning Drake circuit enables the use of a large valve of medium impedance for the R.F. stage. This neutralisation system consists of a number of extra turns, added to the secondary of the R.F. transformer and connected to the rotor plates of the neutralising condenser; with the stator plates to the grid of the R.F. valve. All R.F. currents must for best operation be kept out of the B supply, so that a .5mfd. T.C.C. condenser is placed in the line from the primary of the R.F. transformer with a parallel feed, employing an R.F. choke connected to the plate of the valve. This adaptation of the original Browning Drake circuit has proved itself so superior that the writer decided to give it first precedence in the matter of using A.C. valves, in a simple but efficient circuit. The result was the building and

testing of what is called "The 1928 Browning Drake A.C. Two," with a very excellent performance. The set was tested under very adverse conditions which, in view of its capabilities, amply justifies the A.C. conversion. Provided that the novice does not undertake the construction of his own heater transformer, no more experience than the building of a simple Reinartz receiver is necessary. For use with the Osram KL1 valves, the British General Electric Co., Ltd., market a special heater transformer, which is highly recommended, as the price is well within the average pocket, and the construction of a transformer no easy task to the beginner. With the B.G.E. transformer a constant output voltage is obtainable from the secondary, independent of fluctuations in the alternating current supply. From one to four KL or KH1 valves may be used by means of tapings for varying outputs according to the power supply. The primary has two terminals for the input from the house power-point, with five terminals for the secondary.





A table of voltages is given here which will assist the user in his application.

With a supply of 200 volts:

For 1 valve use terminals T3 and T5
 „ 2 valves „ „ T2 „ T4

With a supply of 230 volts:

For 1 valve use terminals T3 „ T4
 „ 2 valves „ „ T3 „ T5

With a supply of 240 volts:

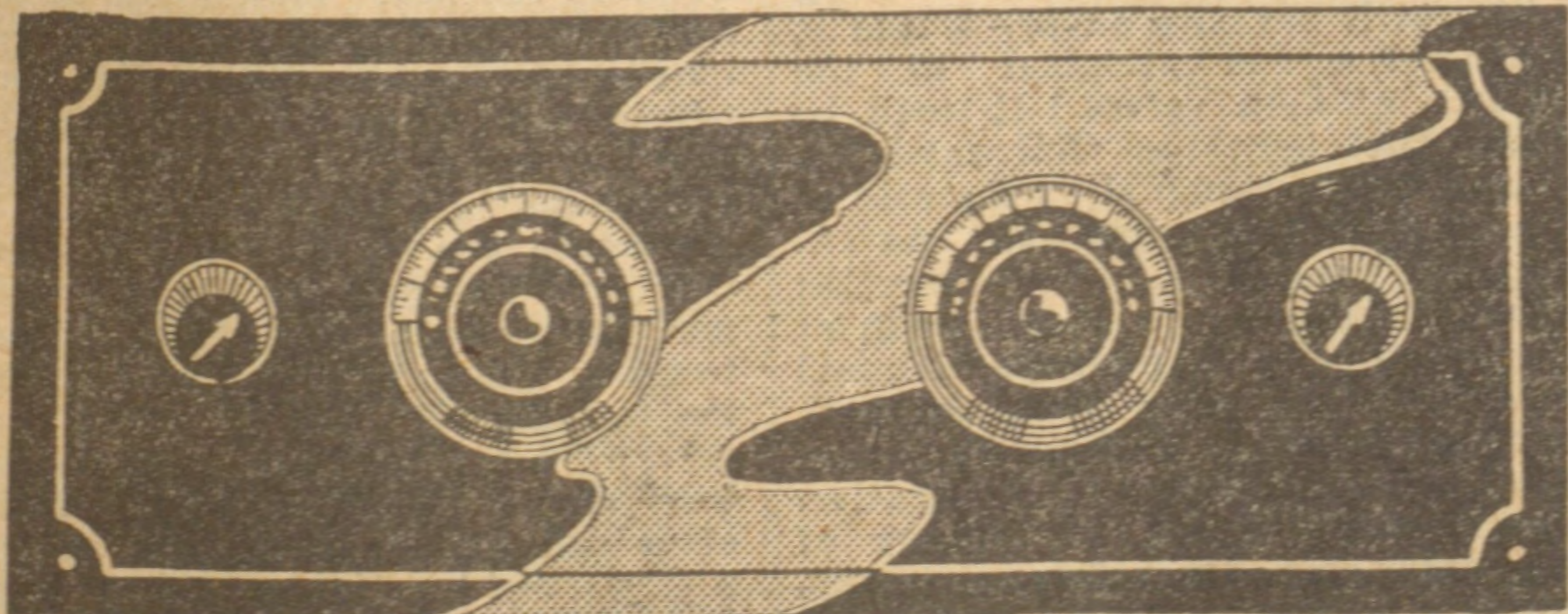
For 1 valve use terminals T3 „ T4
 „ 2 valves „ „ T3 „ T5

If the reader should have any doubt as to the voltage delivered, a simple test with a low reading A.C. volt meter will be convincing, but remember that this test should be taken under load, and not from the transformer itself without the valves in circuit for a correct reading. The B.G.E. transformer is entirely enclosed in a metal case and thus is rendered immune from magnetic interference with consequent silence of background in the reception. The Osram A.C. valves are supplied with the English type base, so that a corresponding socket will be necessary. Benjamin English type valve sockets are obtainable from the B.G.E. Co. or from Messrs. Colville Moore Wireless Supplies, Ltd., 10 Rowe Street, Syd-

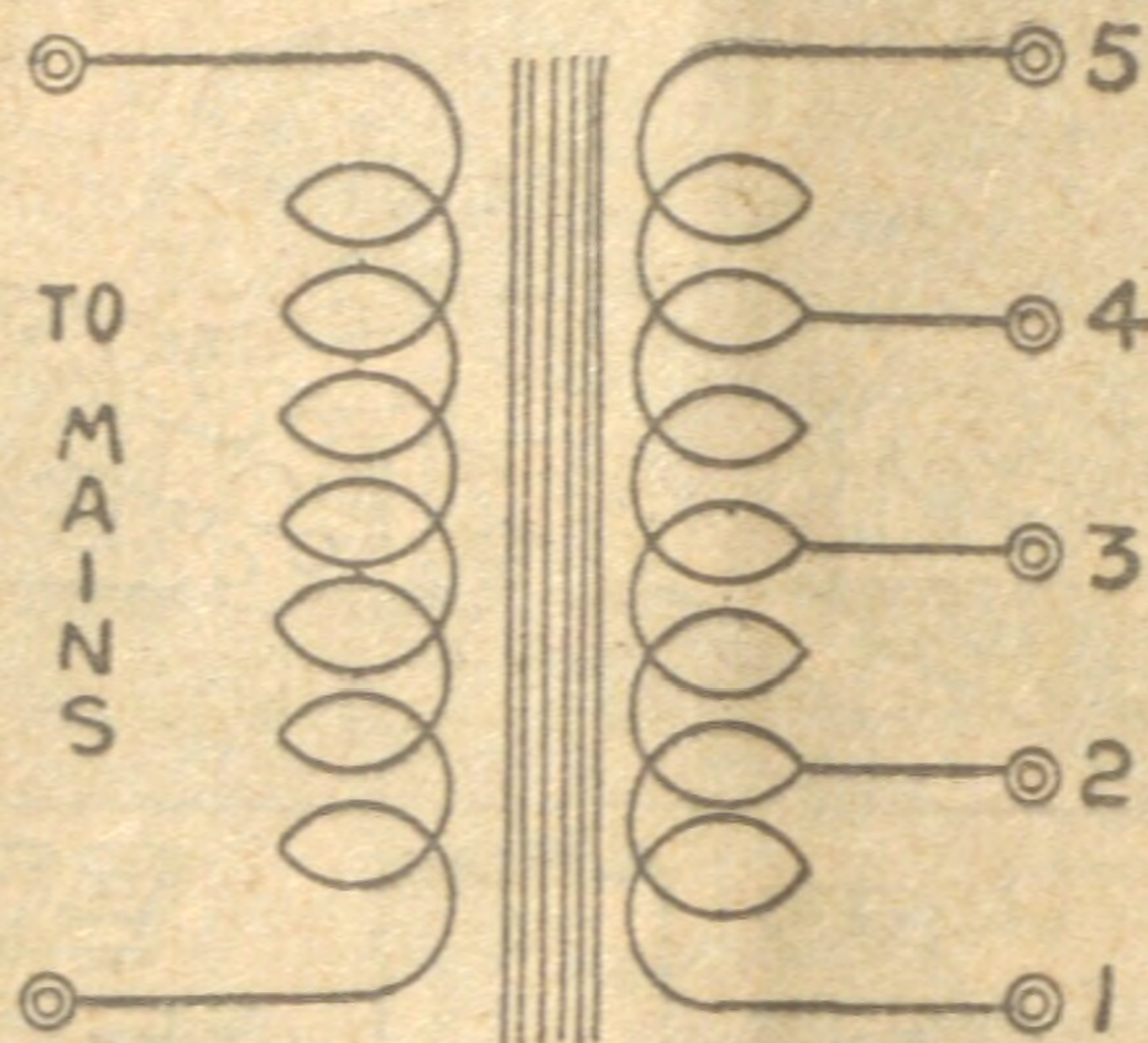
ney. These sockets are marked in the usual manner with filament positive and negative and grid and plate terminals, but with a different disposition to the American UX type. The filament terminals will be used for the heater connections to the valve which normally would be the filament of a D.C. English type valve. The cathode connection is taken from the metal base of the valve itself, and provision is made for this in the form of a terminal on the side. The subsequent connection is made by means of a short length of flexible wire with a spade terminal to facilitate the removal of the valve from the socket. The 1928 Browning Drake coil kit is obtainable from the Metropolitan Electric Co., Ltd., Sydney, and is a direct contrast to the previous Browning Drake coil kits. The coils are wound on 2in. formers which greatly reduces the possibility of magnetic interaction between the R.F. and detector stages.

The theoretical diagram will show that really the construction of this receiver entails no complication in any way. In fact, the wiring is actually simplified, as no variable or automatic resistances are required for filament control. Provided that the correct output terminals from the secondary of the B.G.E. transformer are used, the valves will function cor-

rectly without any danger of overloading the heater. It is important that reference is made to the supply terminal list given with this article, as the correct voltage for the heater element of these valves is regulated by the number of valves in use, in conjunction with the frequency and voltage of the alternating current supply mains. The terminals of the new Radiokes Browning Drake coil kit are marked for each connection, so that no confusion will arise in this respect. A .0005 SLF variable condenser tunes the aerial circuit with a .00035 SLF condenser for the detector or R.F. transformer. These condensers should be of the best possible engineering construction, and in the test receiver made for this article they are both of the Gecophone type. The Gecophone "slow motion" condenser is superb in quality and precision, and is highly recommended for circuits which are designed with a view to selectivity and accurate tuning. The heater supply from the power transformer is represented in the diagram by twisted flex wire. Both valve heaters are in parallel, and it will be seen that the detector heater circuit has two .002 T.C.C. condensers by-passed across. This naturally applies to the R.F. stage, as the wiring is in parallel. The centre-connection between these two by-pass condensers is taken to the B negative supply, which is also the earth and rotor plates of the two tuning condensers. The cathode of both valves is also connected to the B negative. The aerial is connected to a centre tapping on the aerial coil, with a .0001 fixed condenser in series. This series condenser, together with the centre tap, results in a high degree of selectivity, which is as near perfection as possible in the auto-coupled method of connecting the aerial system. A Royalty Electrad variable resistance, from 0 to 100,000 ohms, is



included in the B positive R.F. supply, in series with this and the R.F. choke. This resistance is not strictly essential, but may be found in some instances an additional and ready control of R.F. amplification to any degree required. No output jack is provided for this receiver as it is certain that the builder will ultimately wish to add an audio amplifier. The terminal for the telephones are so arranged that when the telephones are connected they are in series with the B positive detector supply and the plate of the detector valve. A .001 T.C.C. fixed condenser is by-passed across the B battery. This will assist oscillation, and at the same time give more smooth operation of the B battery. The 1928 Browning Drake A.C. Two is described as for B battery use, but this does not mean to imply that a B eliminator cannot be pressed into service! A B eliminator with this set gives you at once the All Electric simplicity receiver, which is a stepping stone for those who wish to become familiar with the use of A.C. valves. The construction of the set should not occupy more than an afternoon, with the prospect of an interesting batteryless evening before you. Obtain a panel measuring 18 x 7 x 3/16in. and mark this off to conform with the diagram, showing the positions for the controls. Here I will mention that it is always best to use a panel of Bakelite or similar compound composition. There are still to be found some of the ancient stocks of brittle "moulded mud" panels, and it is unfortunate that many beginners "spoil the ship for a pennorth of tar" by using such doubtful material. In the construction of wireless receivers, the best components should always definitely be used, otherwise certain trouble is sure to be near at hand. Apart from the dubious qualities of a panel of rubbishy material, it is very disconcerting to get half way through the drilling and then suddenly find the panel fall in two pieces in your hands! The layout of the panel shows that the two tuning controls are placed centrally with the regeneration control for the variable "tickler" coil to the right. The Royalty variable resistance is in the same position on the left. No filament switch or output jack are required, so that this keeps the panel more "clean" than usual. Mark off each position for these panel controls and centre punch lightly for drilling. Next attach the panel to the baseboard by means of nickel-headed wood screws, and carefully drill each hole required. The tuning condensers, resistance and Browning Drake R.F. transformer may then be mounted; this latter being secured by a one hole fixing. This R.F. transformer should be mounted in a vertical position, with the tickler to the top, thereby keeping clear of the variable condenser tuning the second-



ary. This procedure will be necessary owing to the dimensions and measurements of the panel layout. The baseboard components are secured by means of wood screws, and it will be noticed that the B.G.E. power transformer is mounted on the baseboard, thereby incorporating it in the set itself. It was thought at first that undesirable A.C. hum would be the immediate result of placing the transformer in this position, but the metal shielding proved completely effective. The aerial coil is mounted in a vertical position, brackets being provided for mountings in this manner, with the two Benjamin sockets in line along the baseboard. A strip of Bakelite carries the six terminals on the back edge of the board, for aerial, earth, B positive and negative, and 'phones. The Advance Midget neutralising condenser is arranged conveniently near the R.F. valve socket with the .5 mfd. T.C.C. condenser and Radiokes R.F. choke. The grid leak is mounted separately from the grid condenser and the return is taken to the cathode (or filament) of the detector valve, thereby to B negative and earth. It will be best to deal with the wiring of the heater circuits first, and this may be done by the use of 16's tinned copper wire from the secondary of the power transformer. Connect up the positive and negative filament terminals of both valve sockets in parallel from the transformer output, and shunt the two .002 T.C.C. fixed condensers in series close to the detector valve. Dealing with the B negative supply a lead is taken from this terminal to the cathode of both valves. It will be found that both the KH and KL valves have a terminal on the side of the base for this connection. As explained previously, this connection should be made by a short length of flexible wire with a spade terminal attached. The rotor plates of both tuning condensers and the earth are also common with the B negative. Join terminal B of the primary of the inter-stage transformer to terminal F of the secondary, continuing

this lead to the B negative. From terminal N connect to the rotor plate of the midget neutralising condenser with the stator plate to the grid of the R.F. valve. For best results a valve of the KH1 type should be used here, although the KL1 will be found very satisfactory. The grid leak, which should have a value of 5 megohms is connected from the grid of the detector valve to the cathode, thence to the B negative. Do not forget to connect the centre tap from the two .002 by-pass condensers to the B negative. The remainder of the connections are self explanatory, being carried out in the usual manner with regard to the grid circuits, tickler, etc. Having completed all the wiring, place the two valves in their sockets and connect the input of the power transformer to the household power or lighting supply by means of the usual plug. When the supply is switched on, do not be disappointed if nothing happens for quite a few seconds. Valves of this type do not become operative until the cathode has the required degree of heat from the heater. The cathode will be observed to glow quite red when the valve is ready for operation. The B positive R.F. supply should be in the neighbourhood of 60 volts for the first test, increasing this for maximum amplification later. The detector valve will also require a plate voltage of approximately 60 for average operation. No trouble should be experienced in obtaining ready oscillation, and when this state is present, the circuit may be correctly neutralised. This will be found a much easier procedure than is usually the case, with a D.C. General purpose valve. Used with an aerial, of approximately 70 feet total length, this receiver proved itself at Randwick surprisingly selective and sensitive. In the early evening no trouble was experienced in obtaining good head-phone reception from inter-State stations with a minimum of interference from 2BL. It was hard to believe that the valves were obtaining their temperature through the medium of an A.C. heater supply, as no A.C. hum whatsoever was in any way noticeable. It will be found that on switching off the power the receiver will continue to operate for quite 15 seconds. This is due to the fact that the heater retains the requisite temperature, and as this temperature drops so the valves gradually become "dead." The 1928 Browning Drake is an excellent circuit to commence the use of A.C. valves with, and its application in this manner will no doubt immediately appeal to many who have been contemplating the installation of an All Electric receiver. To the man who is conversant with circuit diagrams, the addition of a suitable amplifier, also to use A.C. valves, involves very little exercise of knowledge.

The New Osram "K" Type Valves

By Frank E. Buckell. Manager Osram Valve
Department, British General Electric Co. Ltd.

THE Indirectly Heated Cathode Valve is not a new idea, although it is only quite recently that the design has been put into practical use commercially. The advantages are two-fold:—

- (1) That it enables a receiver to obtain the low tension supply from raw A.C. mains without introducing undesirable "hum."
- (2) That the nature of its construction enables great improvements in its characteristics to be made when compared to ordinary 3-electrode valves.

The essential difference between standard valves and the Indirectly Heated Cathode type, lies in the fact that in the latter the cathode and filament are separated. The cathode consists of a nickel cylinder coated with oxides, which have the property of giving a copious emission at dull red heat. In the "Osram" "K" type valves, the actual filament or "heater" is a spiralised tungsten wire rated at 2 amps, 3.5 volts, fitting inside the nickel cathode, but not touching. The supply current raises the filament to a white heat, and the cathode thus becomes heated by radiation. The absence of an actual voltage drop along the cathode avoids the creation of a magnetic field to interfere with the electron emission, and very greatly minimises the chance of "hum."

The second advantage shown by the Indirectly-Heated Cathode valve is that of the much better mutual conductance figure made possible by the nature of its construction.

One of the most instructive features of this class of valve must not, however, be omitted—that of the maintenance of its high "mutual conductance," even at high "amplification factor." This is due to the equipotential properties of the cathode, which ensures that at whatever the "amplification factor," the whole of the cathode contributes to the anode current.

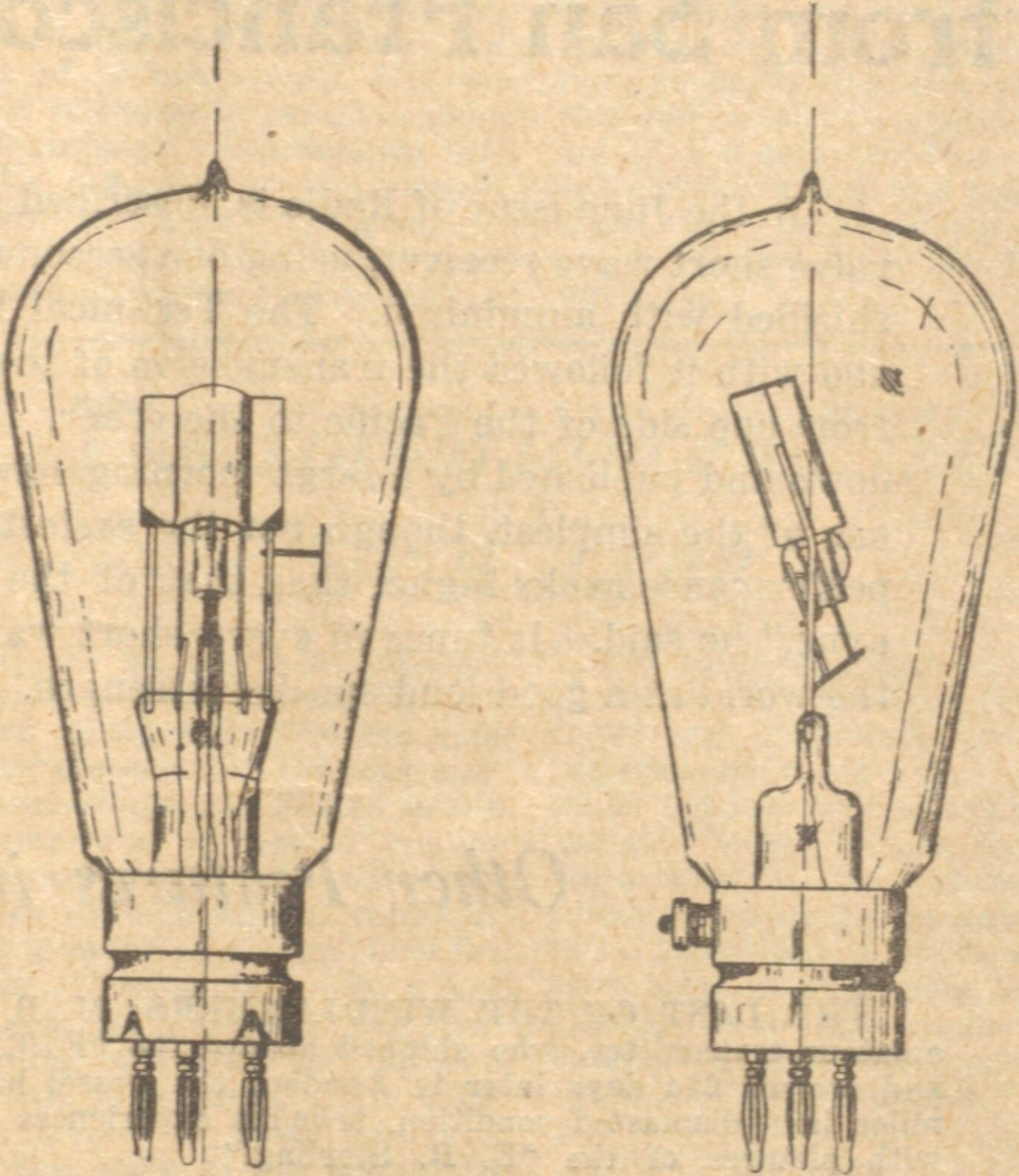
The grid-voltage-anode current curves are parallel throughout their extent, and contrary to experience with the ordinary filament emitting valves, high "amplification factor" valves show remarkably low internal resistance values. This is instanced by the "Osram" KH.1, which gives an internal resistance of 30,000 ohms., for an "amplification factor" of 40.

The Indirectly-Heated Cathode valves offer a very attractive solution to the problem of direct working from A.C. mains, and some very excellent results have been obtained with receivers using this type of valve.

Whilst dealing with the question of results, it will no doubt interest the reader to know that these A.C. valves may be used in practically any standard circuit without any alteration

except a little re-wiring. The filament supply comes from the mains through a Power Transformer, which is marketed to suit the "K" type valves.

E.98



SCALE. FULL SIZE

THE M O VALVE CO LTD OSRAM WORKS, BROOK GREEN HAMMERSMITH W6	
DRG NO	R.V.190
DATE	27/5/26
REF	
SIGNED.	G. I. P. Nash.
CHECKED	

Build the Receiver which Tuned in **The "Southern Cross" Transmissions**

from San Francisco to Brisbane

In the June issue of Radio is described the construction of a four valve short wave receiver, using one screen-grid valve, and completely shielded with aluminium. The Technical Editor built this receiver, and with it followed the transmission of the 'plane, "Southern Cross" from one side of the Pacific to the other. The messages were taken down and published by a large morning newspaper. "The receiver is one of the simplest, though not the easiest, I have built, and yet its performance ranks higher than that of the Short Wave Superheterodyne," he said. It tunes in every short wave broadcasting station in the world at a good loud speaker strength.

Other Features include

THE LAST OF THE WINDJAMMERS: M. B. Anderson, the plucky Adelaide amateur transmitter, who shipped aboard the "E. R. Sterling" as wireless operator, and arrived 224 days later in London, the vessel having sailed and drifted 25,000 miles in a dismantled condition, tells his experiences in an article, fully illustrated with pictures of the "E. R. Sterling."

THE MARTIN DUAL THREE: A three valve broadcast receiver, and a three valve amplifier of astonishing performance and selectivity. This receiver, which is a completely shielded job, tuned in all the interstate and New Zealand stations at loud-speaker strength within one mile of 2BL, and using a screw-driver for an aerial.

THE FUTURE OF THE PHONOGRAPH: A long article by T. P. Watson, giving full instructions how to convert your gramophone into an electrical reproducing unit.

WEATHER MAPS BY RADIO: A full description of the Jenkins picture transmitter, with its practical application to navigation at sea.

JUNE RADIO on Sale this week

Education and Broadcasting

THE popularity of musical and other items of entertainment in the broadcast programmes is apt to mislead us into the belief that broadcasting is almost entirely a medium of entertainment. Of course, when the programmes are analysed, it will be seen that there are many other sides to the service.

Most stations regularly include items of an informative and educational nature. News, market reports and talks on popular science, for instance, form regular parts of the service. It is so with other stations, too, and the service would not be complete without such items.

In one particular it may be said that broadcasting has not fulfilled its mission, that is in the field of education. Some there are who argue that the wonderful means of influencing thought should be utilised more extensively in educational work. Although such a criticism is not a condemnation of the company, as an examination of the evidence given last year to the Royal Commission on Wireless testifies, several stations endeavoured on several occasions to influence the education authorities to avail themselves more widely of the stations' services, and there is room for consideration of the suggestion that education by wireless could be extended. Both in providing special services for the schools and in giving more attention to adult education could the services be of more value to the community.

In England the British Broadcasting Corporation, Ltd., has given special attention to this matter. Many thousands of schools are equipped with receivers and lessons by wireless are catered for by the teachers. It is in the realm of adult education, however, that special concentration is shown. The Company appointed a committee about eighteen months ago to consider any desired improvements in the already generous service given for persons who had gone beyond their school days, but were still studying. The committee recently furnished a most informative report, which has been published. It contains matter of most enlightening information, and much food for thought. As stated in the Preface by Sir Henry Hadow: "With many of the uses of broadcasting we are not here concerned. They are too obvious, and too prevalent to need mention. Our task is restricted to the single, but very important, problem of utilising it for adult education; of bringing knowledge and interest to those who have

passed their period of formal training and have gained from it the best gift that it can bestow, the desire for enhanced interest and wider knowledge. We are in full sympathy with the use of broadcasting as entertainment—as "taking tired people to the islands of the Blest," but it has also other functions, and with one of these our present report is occupied.

The report deals most exhaustively and entertainingly with the growth of broadcasting, the programme, the difficulties of listeners and of lecturers, and incidentally contains some very valuable hints for broadcast lecturers. An organisation is proposed for the utilization of broadcasting for the greater benefit of clubs and other groups of adults, and in dealing

with the problems of wireless lessons for schools and clubs gives useful instruction concerning the types of receivers to use.

Arising out of the report it is likely that group-listening will be extended in the United Kingdom; that leaders of public bodies and other publicists will be encouraged to broadcast; that the educational authorities will actively co-operate in the movements; that debates and discussions on public questions will be conducted, and that generally the side of education will receive more attention. With the aid of the corresponding authorities, associations and public bodies in Australia, the broadcasting companies could improve their services in this direction.

The Importance of the Grid Leak

THERE are an enormous number of readers who are totally unaware of the utility of the grid leak. They assume that the leak may be of any value and just placed in the detector circuit as an aid to oscillation. The wise radio enthusiast will always have on hand several values of grid leaks in order to change them for best results. There is really a definite reason for changing the grid leak according to whether local or distant reception is required. It is quite a simple matter in most receivers, and only the work of an instant to change one leak for another. It is generally well known that the higher the resistance value of the grid leak the more sensitive is the functioning of the detector. Unfortunately, however, the tone quality when the detector valve is responsive to strong signals is inclined to become distorted. Another feature of the high resistance leak is that the tuning of the set is broadened considerably on strong signals. Conversely the strong signal is rendered sharply tuned by the use of a lower value of resistance. It should be interesting to readers to carry out a few tests with a notoriously broadly tuned set, by changing the values of grid leaks and noting the result on powerful signals. On distant signals the grid leak value may be as high as 8 or 10 megohms, and for local stations, as low as 100,000 ohms. The tendency in short wave reception is to use a much

higher value leak than was previously the case. In this case the increased sensitivity is valuable owing to the vagaries of short wave reception. Many readers will ask why it is a variable leak is not recommended. Unfortunately, the variable leak is prone to set up noises and is inclined to be inconstant in operation. Whatever type of fixed leak is used this should be of the highest quality obtainable, of which there are many available on the market.

THERE IS A wise old saying that tells us "you cannot judge a book by its cover," or a story by its title, for that matter, as the titles in these days of "up-to-dateness" are often decidedly misleading. The talks, "Books, Wise and Otherwise," given weekly from 3LO, by Captain Peters, should do much to assist country listeners in selecting their reading matter, both grave and gay. When country listeners are subscribers to a town library, and often have little else but the title of a book to guide them, they are frequently at a loss to know what to ask for, but, hearing Captain Peters' summary of the "Books of the Week," listeners will be able to fill in their "renewal forms" with confidence, knowing that they may expect something quite good.

Broadcasting Stations

AUSTRALIA.			NEW ZEALAND.			EUROPE.		
New South Wales.			Metres. Watts.			Metres. Watts.		
2FC—2FC Limited, Market St., Sydney	442	5000	1YA—Radio B'casting Co. of N.Z., 419 Queen St., Auckland	333	500	FL—Eiffel Tower, Paris, France	2650 & 82 5000	
2BL—Broadcasters, Ltd., Bligh St., Sydney	353	5000	1ZB—La Gloria Gramophone Co., Auckland	275	50	SOUTH AMERICA.		
2GB—Theosophical B'casting, 29 Bligh St., Sydney	316	3000	1ZQ—L. R. Leith, Auckland	330	50	LOS—Municipality of Buenos Aires, Buenos Aires, Argentine	291.2	
2KY—Trades and Labour Council, Goulburn St., Sydney	280	1500	1ZY—N. C. Shepherd, Whangarei	250	15	SQIA—Radio Sociedade de Rio de Janeiro, Rio de Janeiro, Brazil	400	
2UW—2UW Radio Ltd., 213 Elizabeth St., Sydney	267	500	2YA—Radio B'casting Co., Wellington	420	5000	HAWAII.		
2UE—Electrical Utilities, Ltd., 619 George St., Sydney	293	250	2YK—2YK Limited, Wellington	292	120	KGM—"Honolulu Advertiser," Honolulu	270	500
2MK—Mockler Bros., Hawick St., Bathurst	275	250	2YF—Radio Club, Palmerston North	200	5	JAPAN.		
2HD—H. A. Douglas, King St., Newcastle	288	100	3YA—Radio B'casting Co. of N.Z., Christchurch	306	500	JOAK—Tokyo Central B'casting Co., Tokyo, Japan	375	1000
2BE—Burgin Electric Co., Ltd., 340 Kent St., Sydney	316	100	4YA—Radio B'casting Co. of N.Z., Dunedin	463	750	JOBK—Osaka Central B'casting Co., Osaka, Japan	385	1000
Victoria.			4ZB—Otago Radio Association, Dunedin	300	50	JOCK—Nagoya Central B'casting Co., Nagoya, Japan	360	1000
3LO—B'casting Co. of Aust., Ltd., 120½ Russell St., Melb.	371	5000	GREAT BRITAIN.			JODK—Keijo B'casting Co., Keijo, Japan	345	1000
3AR—Associated Radio of Aust., Ltd., 44-46 Elizabeth St., Melb.	484	1600	2LO—British B'casting Co., Savoy Hill, London	361.4	3000	DUTCH EAST INDIES.		
3UZ—O. J. Nilson & Co., Bourke St., Melb.	319	100	2RN—Government Radio Station, Dublin, Ireland	319.1	1500	JFC—Bataviasche Radio, Jereen-inging, Batavia	220	40
3DB—Druleigh Business College, Melb.	255	500	5XX—British Broadcasting Co., Daventry	1604.3	5000	PHILIPPINE ISLANDS.		
Queensland.			UNITED STATES OF AMERICA.			KZRM—Radio Corp. of the Philippines, Manila, Philippine Islands	413	1000
4QG—Queensland Govt. Radio Service, Brisbane	385	5000	KDKA—Westinghouse Elec. and Mfg. Co., East Pittsburgh, Pa.	315.6	50000	KZRQ—Radio Corp. of the Philippines, Manila, Philippine Islands	400	1000
4GR—Gold Radio Service, Margaret St., Toowoomba	294	100	KFI—Earle C. Anthony Inc., 1000 So., Hope St., Los Angeles	468.5	5000	KZKZ—Radio Corp. of the Philippines, Manila, Philippine Islands	270	500
South Australia.			KGO—General Electric Co., Oakland, California	384.4	5000	KZIB—Radio Corp. of the Philippines, Manila, Philippine Islands	260	500
5CL—Central B'casters, Ltd., 59 Franklin St., Adelaide	395	5000	KOA—General Electric Co., 1370 Krameria St., Denver, Colo.	325.9	5000	INDIA.		
5DN—5DN Pty., Ltd., 2-4 Montperier St., Parkside	313	500	WBZ—Westinghouse Elec. Co., Hotel Kimball, Springfield, Mass.			5AF—Indian States and Eastern Agency, Calcutta, India	425	1500
5KA—Sport Radio Ltd., 51 Kintore Ave., Prospect	250	1000	WEAF—National B'casting Co., 195 Broadway, New York ..	491.5	50000	SOUTH AFRICA.		
Western Australia.			WGY—General Electric Co., So. Schenectady, N.Y.	379.5	50000	WAMG—African B'casting Assn., Cape Town, South Africa ..	375	1500
6WF—Western Farmers Ltd., 569 Wellington St., Perth ..	1250	5000	WJZ—National B'casting Co., 195 Broadway, New York ..	454.3	30000	JB—African B'casting Co., Johannesburg, South Africa, ..	450	500
Tasmania.			WGN—WGN Radio, Chicago, Ill.	305.9	15000			
7ZL—Tasmanian B'casters Ltd., 95 Elizabeth St., Hobart ...	535	3000	WLIB—WLIB Radio, Chicago, Ill.	305.9	15000			

Short Wave Stations

GREAT BRITAIN. Wavelengths		HOLLAND. Wavelengths.		SAMOA. Wavelengths	
5SW—Marconi Company, Chelmsford, England	24	PCJJ—Phillips' Experimental Station, Hilversum, Holland	30.2	VMC—Samoa	33
2YT—Poldhu, England,	25, 32, 92, 94	PCLL—Phillips Lamps, Ltd., Kootwijk, Holland	32.5, 46	JAVA.	
2NM—Gerald Marcuse, Queen's Park, Caterham, Surrey, England	32.5 and 28 metres	PCTT—Phillips' Lamps, Ltd., Kootwijk, Holland	21	ANF—Malabar, Java	56
UNITED STATES.		PCMM—Phillips' Lamps Ltd., The Hague, Holland	25	JFC—Bataviasche Radio Vereen-iging, Batavia, Java	220
2XAG—General Electric Co., New York, U.S.A.	14, 16, and 42	PCPP—Phillips' Lamps Ltd., Kootwijk, Holland	27	ANDIR—Bandoeng, Java	38.5
NXF—Bellevue, Annacosta D.C., 16, 17, 20.8, 84, 81.5, 71.3, 54.4, 50		PCUU—Phillips' Lamps Ltd., The Hague, Holland	42	ANE—ANE Radio, Malabar, Java	32, 31.26
2XAF—General Electric Co., Schenectady, New York, U.S.A.	32.77, 32.0	UNION OF SOVIET SOCIALIST REPUBLICS.		COMMERCIAL STATIONS.	
WCY—Schenectady, N.Y.	32.79	RFN—U.S.S.R., Moscow	29	VIA—Amalgamated Wireless (A/sia, Ltd.), Adelaide ...	21, 32, 50
NPG—San Francisco, Calif. ..	40, 43, 81	RFM—U.S.S.R., Khabarovsk, Siberia	60 and 30	VIB—Amalgamated Wireless (A/sia, Ltd.), Brisbane ...	21, 32, 50
2XAL—"Radio News," New York, U.S.A.	30.91	RFL—		VIT—Amalgamated Wireless (A/sia, Ltd.), Townsville ..	32
KFKX—Hastings, Nebr.	56	ITALY.		VJZ—Amalgamated Wireless (A/sia, Ltd.), Rabaul	17, 21, 32
WGN—Western Electric Co., Long Island, N.Y.	75	IMI—Unione Radiofonica Italiana, Milan	45 metres	VIM—Amalgamated Wireless (A/sia, Ltd.), Melbourne, ..	20, 21, 31.8, 49
WLW—Crossley Radio Co., Cincinnati, U.S.A.	52	IDO—Ido Radio, Italy	33.5	VIS—Amalgamated Wireless (A/sia, Ltd.), Sydney	20, 32, 50, 51
KDKA—Westinghouse Elec. and Mfg. Co., East Pittsburgh, U.S.A.	63.5, 42 and 14 (8XK and 8XP).	SOUTH AFRICA.		VIP—Amalgamated Wireless (A/sia, Ltd.), Perth	21, 32, 50
WJZ—WJZ Radio, Bound Brook, N.J., U.S.A.	Various wavelengths	JB—Johannesburg Broadcasting Co., Cape Town, South Africa	20 and 25	VIX—Amalgamated Wireless (A/sia, Ltd.), Melbourne ..	25
WGY—WGY Radio, Schenectady, N.Y., U.S.A.	15 to 100 metres	JAPAN.		VIZ—Amalgamated Wireless (A/sia, Ltd.), Melbourne ..	25.72
2XAC, 2XAD, 2XAF (as above) for WGY.		JIPP—JIPP, Tokyo, Japan	20	2ME—Amalgamated Wireless (A/sia, Ltd.), Sydney	23.5
WHAM and 8XAC, WHAM, Radio, Rochester, N.Y., U.S.A.	Various wavelengths	JIAA—Iwatsuki, Japan	79	3ME—Amalgamated Wireless (A/sia, Ltd.), Melbourne ..	31.5
2XG—Western Electric Co., New York, U.S.A.	16 and 23.	JKZB—JKZB, Tokio Electric Co., Tokio, Japan	20	SHIP STATIONS.	
INDO CHINA.		GERMANY.		GBE—S.S. "Niagara"	37, 23
HVA—Hanoi, Indo China	31.5	POX—POX, Nauen, Germany ..	70	GDZV—S.S. "Makura"	23, 37
		POZ—POZ Radio, Nauen, Germany	19 metres	MTN—S.S. "Tabiti"	37, 23
		SUVA.		GDVB—S.S. "Aorangi"	37, 23
		VPD—Suva Radio, Amalgamated Wireless (A/sia), Ltd.	37.5	VZDK—S.S. "Jervis Bay"	37
				PMZ—S.S. "Tasman"	29, 51
				ARCX—S.S. "Nielsen Alonso" ..	30.4

BROADCASTING PROGRAMMES

For the COMING WEEK

Friday, June 15

2FC, SYDNEY.

Farmer's Broadcasting Service.

Wave Length, 442 Metres.

EARLY MORNING SESSION.

- 7 a.m.—"Big Ben" and announcements.
- 7.5 a.m.—Studio Music.
- 7.20 a.m.—Country Session: Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
- 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 p.m.—"Sydney Morning Herald" summary.
- 7.50 a.m.—Studio Music.
- 8 a.m.—"Big Ben." Close down.

MORNING SESSION.

- 10 a.m.—"Big Ben" and announcements.
- 10.5 a.m.—Studio music.
- 10.15 a.m.—"Sydney Morning Herald" news service.
- 10.30 a.m.—Studio Music.
- 10.35 a.m.—A Reading.
- 10.45 a.m.—Studio Music.
- 11 a.m.—"Big Ben." Studio Music.
- 11.5 a.m.—A.P.A. and Reuter's Cable Services.
- 11.10 a.m.—Studio Music.
- 11.15 a.m.—A Talk on Home Cooking and Recipes by Miss Ruth Furst.
- 11.30 a.m.—Close down.

MIDDAY SESSION.

- 12 noon.—"Big Ben" and announcements.
- 12.2 p.m.—Stock Exchange, first call.
- 12.3 p.m.—Official weather forecast, rainfall.
- 12.5 p.m.—Studio Music.
- 12.10 p.m.—Summary of "Sydney Morning Herald" news services.
- 12.15 p.m.—Rugby Wireless News.
- 12.20 p.m.—Studio Music: Popular and Dance Records.
- 1 p.m.—"Big Ben." Weather intelligence.
- 1.3 p.m.—"Evening News" midday news service.
- Producers' Distributing Society's Report.
- 1.20 p.m.—Studio Music.
- 1.28 p.m.—Stock Exchange, second call.
- 1.30 p.m.—Ivy Dunstone, mezzo.
- 1.35 p.m.—Studio Music: Popular Records.
- 1.55 p.m.—Ivy Dunstone, mezzo.
- 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 3 p.m.—"Big Ben" and programme announcements.
- 3.5 p.m.—A Recital of "Parlophone" Records.
- 3.30 p.m.—Katherine Beverley, soprano: "I Love Thee" (Edward Grieg).
- 3.35 p.m.—Colin Ferret, basso.
- 3.40 p.m.—Kenneth Cumming, elocutionist.
- 3.48 p.m.—Josie Westaway, soprano: "I Love My Love" (Iran Caryl).

- 3.52 p.m.—Rene Rich, violinist:
 - (a) "Concerto"—1st Movement (Paganini).
 - (b) "The Canary" (Poliakin).
- 4.2 p.m.—A Reading.
- 4.15 p.m.—Katherine Beverley, soprano: "The Wind" (Spross).
- 4.20 p.m.—Kenneth Cumming, elocutionist.
- 4.25 p.m.—Rene Rich, violinist:
 - (a) "Mazurka" (Wienlawski).
 - (b) "In a Little Spanish Town" (Wayne).
- 4.35 p.m.—Colin Ferret, basso.
- 4.40 p.m.—Josie Westaway, soprano: "Prayer—La Tosca" (Puccini).
- 4.45 p.m.—Stock Exchange, third call.
- 4.47 p.m.—Studio Music.
- 5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

- 5.40 p.m.—The Chimes of 2FC.
- 5.45 p.m.—The "Hello Man" talks to the children.
- 6.25 p.m.—Children's music.
- 6.30 p.m.—Late sporting news.
- 6.35 p.m.—Dalgety's market reports (wheat and stock).
- 6.43 p.m.—Fruit and vegetable markets.
- 6.45 p.m.—Stock Exchange information.
- 6.48 p.m.—Weather and shipping news.
- 6.50 p.m.—The 2FC Racing Commissioner: Latest track work and racing news.
- 7 p.m.—From the Hotel Australia: Dinner music by the Hotel Australia Orchestra.
- 7.15 p.m.—Musical items from the Studio.
- 7.20 p.m.—"Evening News" late news service.

NIGHT SESSION.

- 7.28 p.m.—Programme announcements.
- 7.30 p.m.—From the lobby of the Prince Edward Theatre, Sydney: A notable theatrical person acting as host will interview people on their arrival at the theatre on the occasion of the first night of the filming of

"SUNRISE."

- 8 p.m.—The Prince Edward Theatre Orchestra conducted by Albert Cazabon. Eddie Horton at the Wurlitzer Organ.
- 8.50 p.m.—From the Studio: Laurence Macaulay, baritone:
 - (a) "Two Grenadiers" (Schumann).
 - (b) "The Bells of San Marie" (John Ireland).
- 8.58 p.m.—W. F. Kay will give the final of his series of theatrical talks, dealing this evening with "Behind the Scenes."
- 9.12 p.m.—Late weather forecast.
- 9.13 p.m.—Charles O'Mara and Anna Burke, in song and story:
 - (a) "I know my love" (Arr. Hughes).
 - Anna Burke:
 - (b) "The Darling Girl from Clare" (French)
- 9.20 p.m.—From the Prince Edward Theatre, Castlereagh Street: The Prince Edward Theatre Orchestra. Conductor, Albert Cazabon, with Eddie Horton at the orchestral organ.
- 9.30 p.m.—C. Price Coaigrave will commence a series of talks on Northern Australia. No. 1, Port Darwin.
- 9.40 p.m.—Laurence Macaulay, baritone:
 - (a) "The Golden Vanity" (Broadwood and Maitland).
 - (b) "Thy beaming eyes" (MacDowell).
- 9.48 p.m.—Rus Garling: Mirth and Melody.

- 9.56 p.m.—From the Studio: Charles O'Mara and Anna Burke, pater and song:
 - (a) Irish stories.
 - (b) "Mulligan" (Mannix).
 - (c) "Shanganagh Vale" (John Lamb).
 - (d) "Gilligan's Moving Day" (John Stanford).
- 10.5 p.m.—From the Studio: Rus Garling.
- 10.12 p.m.—From the Prince Edward Theatre, Sydney: The Prince Edward Theatre Orchestra. Conductor, Albert Cazabon.
- 10.30 p.m.—From the Ambassadors: The Ambassadors' Dance Orchestra.
- 10.40 p.m.—From the Studio: Late weather forecast. Charles O'Mara and Anna Burke:
 - (a) Recitation, "The Rocky Road" (Braynton), Charles O'Mara.
 - (b) "For the Green" (Herman Lohr), Charles O'Mara.
 - (c) Folk Song, "The Next Market Day" (arr. Hughes), Anna Burke.
 - (d) "Father O'Flynn" (Stanford), Charles O'Mara.
- 10.52 p.m.—The Ambassadors' Dance Orchestra.
- 10.57 p.m.—From the Studio: To-morrow's programme and late news.
- 11 p.m.—"Big Ben."
- The Ambassadors' Dance Orchestra.
- 11.45 p.m.—National Anthem.
- Close down.

2BL, SYDNEY.

Broadcasters' Ltd.

Wave Length, 353 Metres.

FRIDAY, 15th JUNE, 1928.

EARLY MORNING SESSION.

8 a.m. to 9 a.m.

MORNING SESSION.

- 10.30 a.m.—G.P.O. clock and chimes. Musical programme from the Studio.
- 11 a.m.—G.P.O. clock and chimes. Talk on "Croquet" by Miss Gwen Varley, Broadcasters' women's sports authority. Talk on "Feeding the Family" by Mrs. Jordan.
- 12 noon.—G.P.O. clock and chimes. Special ocean forecast and weather report.
- 12.3 p.m.—Musical programme from the Studio.
- 12.12 p.m.—Information, Mails, shipping and port directory.
- 12.15 p.m.—Boats in call by wireless.
- 12.17 p.m.—Fruit market report.
- 12.19 p.m.—Vegetable market report.
- 12.21 p.m.—London metal market report.
- 12.23 p.m.—Dairy farm and produce market report.
- 12.26 p.m.—Fish market report.
- 12.28 p.m.—Rabbit market report.
- 12.30 p.m.—H.M.V. gramophone recital.
- 1.30 p.m.—G.P.O. clock and chimes. Talk to children and special entertainment for children in hospital.
- 2 p.m.—G.P.O. clock and chimes. Close down.

AFTERNOON SESSION.

- Racing information broadcast immediately after each race, by courtesy of the "Sun."
- 3 p.m.—G.P.O. clock and chimes.
Talk by Mrs. Jordan.
- 3.15 p.m.—Civil Service Stores Trio. Direction, Miss De Courcey Bremer.
- 3.30 p.m.—G.P.O. clock and chimes.
Talk on "Sweets" by Miss Kathleen Jordan.
- 4 p.m.—G.P.O. clock and chimes.
Civil Service Stores Trio.
- 4.15 p.m.—News session.
- 4.35 p.m.—Musical programme from the Studio.
- 4.50 p.m.—News from the "Sun."
- 4.57 p.m.—Features of evening's programme.
- 4.59 p.m.—Racing resume.
- 5 p.m.—G.P.O. clock and chimes.
Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. clock and chimes.
Children's session.
- 6.30 p.m.—Gulbransen dinner music.

SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. clock and chimes.
Racing resume.
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.
Stock Exchange report.
Grain and fodder report ("Sun").
Dairy produce report ("Sun").
N.R.M.A. report.
- 7.15 p.m.—Country news from the "Sun."
- 7.30 p.m.—Talk on "Gardening Science" by Mr. Cooper, Park Superintendent, City Council.
- 8 p.m.—G.P.O. clock and chimes.
Broadcasters' Topical Chorus.
- 8.3 p.m.—Miss Dulcie Starkey, soprano.
- 8.10 p.m.—Broadcasters' Instrumental Trio.
- 8.17 p.m.—Mr. Lance Jeffree, tenor.
- 8.24 p.m.—Mr. G. Vern Barnett, pianist.
- 8.31 p.m.—Miss Dulcie Starkey
- 8.38 p.m.—Miss Norah Alexander will talk on modern English poetry.
- 8.48 p.m.—Mr. Lance Jeffree.
- 8.55 p.m.—Broadcasters' Instrumental Trio.
- 9.2 p.m.—Weather report and forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.
- 9.3 p.m.—Mr. C. Dexter, the "Sun's" turf expert, will talk on the prospects of Saturday's racing.
- 9.18 p.m.—The Hawaiian Harmony Girls (Misses Ailsa Lewis, Essie McNeill).
- 9.25 p.m.—Miss Grace Savierri, soubrette.
- 9.32 p.m.—Broadcasters' Instrumental Trio.
- 9.39 p.m.—Mr. Frank Ryan, entertainer.
- 9.46 p.m.—Miss Dulcie Blair, violinist.
- 9.53 p.m.—Miss Grace Savierri.
- 10 p.m.—G.P.O. clock and chimes.
- 10.1 p.m.—Mr. Frank Ryan
- 10.8 p.m.—The Hawaiian Harmony Girls.
- 10.15 p.m.—Resume of following day's programme.
- 10.20 p.m.—Romano's Restaurant Dance Orchestra, under the direction of Mr. Merv. Lyons. During intervals between dances, "Sun" news will be broadcast.
- 11.30 p.m.—G.P.O. clock and chimes.
National Anthem.

2GB, SYDNEY

Theosophical Broadcasting Service.
Wave Length, 316 Metres.

FRIDAY, 15th JUNE, 1928.

MORNING SESSION.

- 10 a.m.—Music.
- 10.10 a.m.—Happiness Talk.

- 10.20 a.m.—Music.
- 10.30 a.m.—Women's Session.
- 11.15 a.m.—Close down.

AFTERNOON SESSION.

- 2 p.m.—Music.
- 2.20 p.m.—Talk.
- 2.35 p.m.—Music.
- 3 p.m.—Close down.

EVENING SESSION.

- 5.30 p.m.—Children's Session by Uncle George.
- 7 p.m.—Stock Market reports by New Zealand Loan and Mercantile Agency, Ltd.
- 7.15 p.m.—Music.
- 8 p.m.—Opening Chorus.
- 8.2 p.m.—2GB Instrumental Trio, in Popular Dance Numbers.
- 8.15 p.m.—Address.
- 8.30 p.m.—Songs by Miss Maisie Wren.
- 8.37 p.m.—Violin Solos by Mr. Dan Scully.
- 8.45 p.m.—Songs by Mr. Cecil Houghton.
- 8.52 p.m.—Cello Solo by Miss Marjorie Kennedy.
- 9 p.m.—Humorous Recital by Mr. Heath Burdock.
- 9.20 p.m.—Songs by Miss Maisie Wren.
- 9.27 p.m.—2GB Instrumental Trio.
- 9.40 p.m.—Humorous Items by Mr. Heath Burdock.
- 9.50 p.m.—Songs by Mr. Cecil Houghton.
- 10 p.m.—Close down.

2 UW, SYDNEY

Sandel Radio, Ltd.

Wave Length, 267 Metres.

FRIDAY, 15th JUNE, 1928.

EVENING SESSION.

- 7 p.m.—Studio items.
- 7.10 p.m.—Where to go session.
- 7.15 p.m.—Dinner music.
- 7.45 p.m.—Dance music.
- 8 p.m.—"The Races" reviewed by Arty Powell.
- 8.15 p.m.—Vocal and instrumental items.
- 8.45 p.m.—Weather report.
- 8.48 p.m.—Request numbers and dance music.
- 9.30 p.m.—Orchestral music.
- 10 p.m.—Close down.

3LO, MELBOURNE.

Broadcasting Co. of Aust.

Wave Length, 371 Metres.

FRIDAY, 15th JUNE, 1928.

EARLY MORNING SESSION.

- 7.15 a.m.—Morning melodies.
- 7.20 a.m.—PHYSICAL CULTURE EXERCISES (to music).
- 7.27 a.m.—Morning melodies.
- 7.33 a.m.—FORECAST FOR ALL STATES.
- 7.40 a.m.—News.
- 8 a.m.—Melbourne Observatory time signal.
- 8.1 a.m.—Express train information.
- 8.5 a.m.—NEWS, Sporting information, Shipping, Stock Exchange fluctuations.
- 8.13 a.m.—Morning melodies.
- 8.15 a.m.—Close down.

MORNING SESSION.

- 11 a.m.—3LO's CULINARY COUNSELS, or How to Create Creature Comforts with a Minimum of Cash.

- 11.5 a.m.—C. W. DANVERS-WALKER, Secretary of the Alfred Hospital Auxiliaries, will speak on:

"The Work of the Auxiliaries."

- 11.20 a.m.—Musical interlude.

- 11.25 a.m.—"AU FAIT":

"Fashion's Fancies."

- 11.40 a.m.—Musical interlude.

- 11.45 a.m.—Under the auspices of the Public Health Department:

DR. FEATONBY, Health Officer of the Department, will speak on: "Serums and Vaccines."

MIDDAY SESSION.

- 12 noon.—Melbourne Observatory time signal.
- 12.1 p.m.—Metal prices received by the Australian Mines and Metals Association from the London Stock Exchange this day. British official wireless news from Rugby. Reuter's and the Australian Press Association cables. "Argus" news service.
- 12.20 p.m.—THE GYPSY PLAYERS:
"In a Rose Garden" (Acciani).
"Sweet Jasmine" (Besden).
- 12.30 p.m.—FREDA NORTHCOTE, soprano:
"Little Brown Cottage" (Dickson).
"Still Unexpressed" (Jacobs Bond).
- 12.37 p.m.—Stock Exchange information.
- 12.40 p.m.—THE GYPSY PLAYERS:
"A Memory Garden" (Farman).
"A Basket of Roses."
- 12.47 p.m.—SENIA CHOSTIAKOFF, tenor:
"Elegie" (Massenet).
With violin obligato by Bertha Jorgensen.
"The Love" (Zuboff).
- 12.54 p.m.—MARION LIGHTFOOT, steel guitar:
"Moorish Dance."
"Mahina Waltz."
- 1 p.m.—Melbourne Observatory time signal.
- 1.1 p.m.—THE GYPSY PLAYERS:
Trio, "Rondo alla Turca" (Mozart).
"Slow Waltz" (Carsa).
- 1.10 p.m.—Meteorological information. Weather forecast and rainfall for Victoria, Tasmania, South Australia, and New South Wales. River reports. Ocean forecast.
- 1.17 p.m.—FREDA NORTHCOTE, contralto:
"Thoughts" (Fisher).
"Lie There My Lute" (Maccann).
- 1.24 p.m.—MARION LIGHTFOOT, steel guitar:
"Tillha Waltz."
"Oft in the Stilly Night."
"Ye Banks and Braes."
- 1.30 p.m.—THE GYPSY PLAYERS:
"Hearts and Flowers"—a New Flower Song (Moses-Tobani).
- 1.35 p.m.—SENIA CHOSTIAKOFF, tenor:
"Come back to Sorrento" (E. de Curtis).
Selected.
- 1.43 p.m.—Announcements.
- 1.45 p.m.—Close down.

AFTERNOON SESSION.

- 2.15 p.m.—THE STATION ORCHESTRA:
Selected.
- 2.30 p.m.—Ernest Oram and the Tivoli Theatre Orchestra. Transmission from THE TIVOLI THEATRE, by permission Tivoli Theatres, Ltd.
- 3.30 p.m.—THE STATION ORCHESTRA:
"Andante Religioso" (Thome).
- 3.40 p.m.—FRANCES FRASER:
The Shrines of England—
"Yerk."
- 3.55 p.m.—THE STATION ORCHESTRA:
"Cloister Meditations" (Spialck).
"In the Great Beyond" (Broota).
- 4.5 p.m.—MADAME LAMBERT, soprano:
"Carminia Valse" (Wilson).
"Il Baccio" (Arditi).
- 4.12 p.m.—ONE ACT PLAY—
"THE ARTIST."
- He REX SINCLAIR
She LOUISE MOOREHEAD
- 4.27 p.m.—THE STATION ORCHESTRA:
"Elegie" (Massenet).
- 4.32 p.m.—PERCY CODE, trumpet:
Selected.

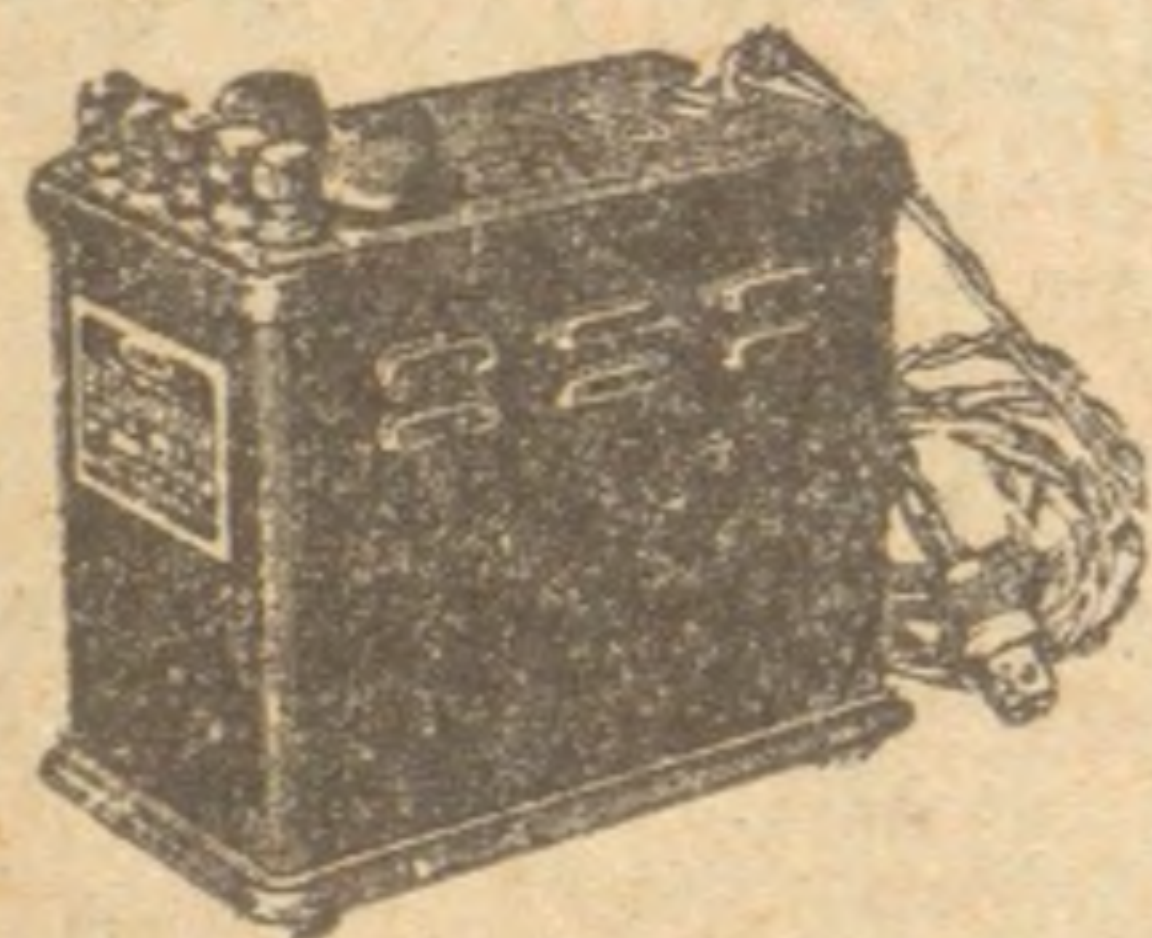
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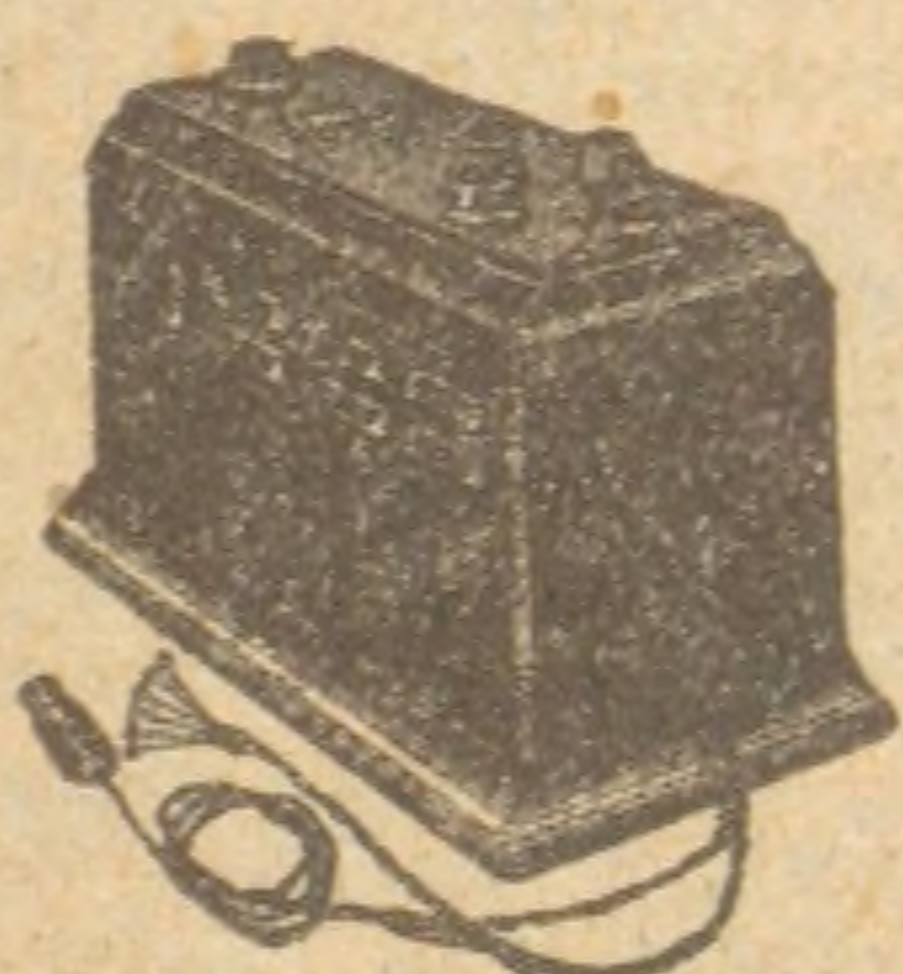
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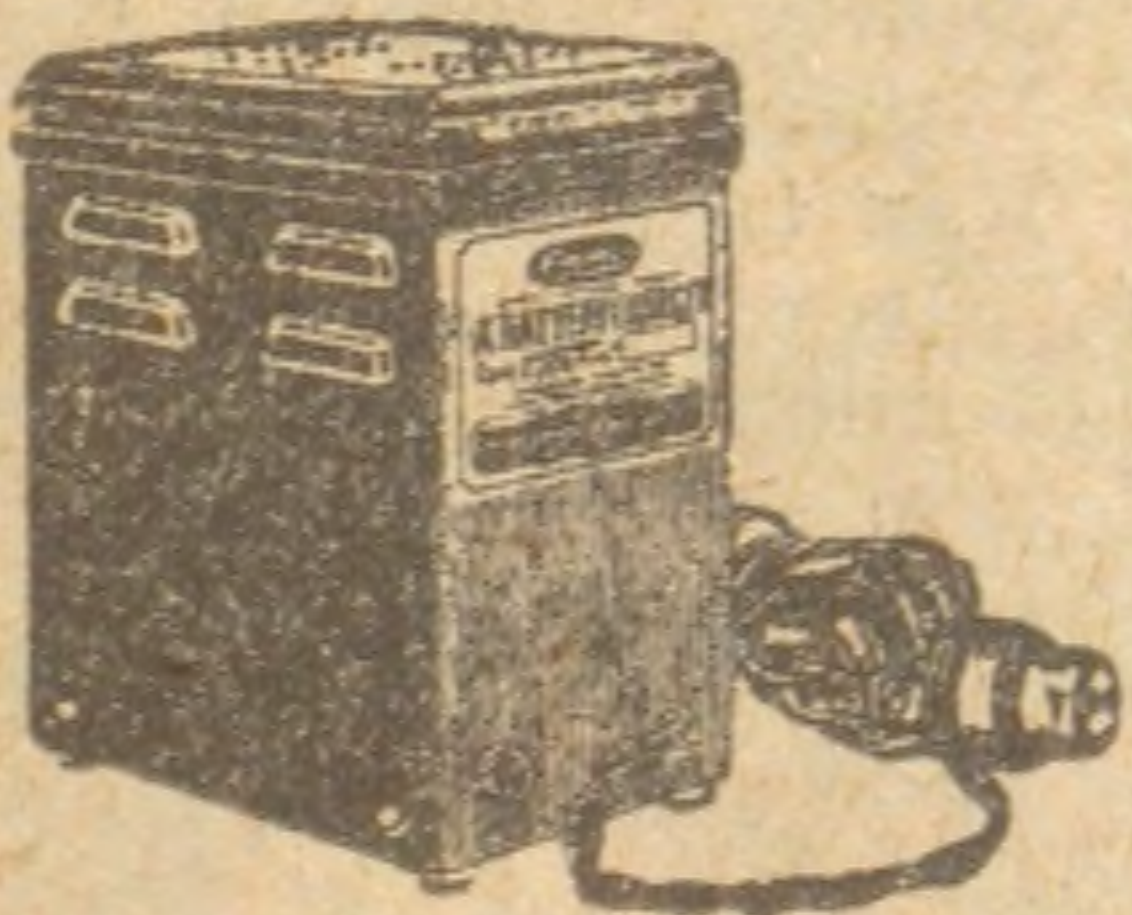
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Mfg. Co. Ltd.**

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4.37 p.m.—THE STATION TRIO (Chas. Taylor violin, Tasma Tiernan 'cello, Les Richmond piano):
"Toselli's Serenade."

4.42 p.m.—MADAME LAMBERT, soprano:
"Aime Moi" (Bomberry).
Air, "Aida" (Verdi).

4.49 p.m.—RUPERT HAZEL AND ELSIE DAY:
"Harmonylarity."

NEWS SESSION.

5 p.m.—"Herald" news service. Stock Exchange information.
5.15 p.m.—Close down.

EVENING SESSION.

6 p.m.—Answers to letters and birthday greeting by "Billy Bunny."

6.20 p.m.—CAPTAIN DONALD MACLEAN:
The Spanish Conquests. How the Dons discovered the Treasures of the World.

6.35 p.m.—Musical interlude.

6.40 p.m.—"BILLY BUNNY" has a story to tell.

NEWS AND MARKET REPORTS.

7 p.m.—Official report of Newmarket Stock Sales by the Associated Stock and Station Agents, Bourke Street, Melbourne.

7.5 p.m.—"Herald" news service. Weather synopsis. Shipping movements.

7.12 p.m.—Stock Exchange information.

7.17 p.m.—Fish market reports by J. R. Borette, Ltd. Rabbit prices.

7.19 p.m.—River reports.

7.21 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Poultry, grain, hay, straw, jute, dairy produce, potatoes and onions. Market reports of fruit by the Victorian Fruiterers' Association. Retail prices. Wholesale prices of fruit by the Wholesale Fruit Merchants' Association. Citrus fruits.

NIGHT SESSION.

7.30 p.m.—Under the auspices of the Department of Agriculture, J. BLAKE (Senior Inspector of Agriculture) will speak on "Wheat Growing—Following Methods."

7.45 p.m.—C. J. WILLIAMS will speak on tomorrow's Stadium Event.

8 p.m.—This is the anniversary of the signing of Magna Charta in 1215, also of the Battle of the Piave (Italian offensive), 1918, and of the disaster to the excursion steamer General Slocum, which caught fire in New York Harbor; 1000 lives lost.

8.1 p.m.—On June 15, 1896, D. JAMESON and his officers were committed for trial at Bow Street under the Foreign Enlistment Act.

AGNES FORTUNE, piano:
"Waltz" (Chopin).

8.7 p.m.—MADAME LAMBERT, soprano:
"Flower Song" (Faust).
Request item.

8.15 p.m.—Birthday greetings and programme announcements.

8.18 p.m.—H.K. LOVE:
"Technicalities." Mr. Love will be glad to attend to your wireless difficulties, and we ask you to write to him for any information you may require.

8.30 p.m.—Community singing, transmitted from 3LO Studio (conductor, G. J. MAC-KAY), assisted by:
THE GYPSY PLAYERS.

SOLOISTS—

RUPERT HAZELL AND ELSIE DAY.

"Harmonylarity."

SENIA CHOSTIAKOFF, tenor:

"Evening Bells" (Jaroff).

With organ accompaniment by Agnes Fortune.

10 p.m.—ERIC WELCH will speak on tomorrow's races.

10.10 p.m.—THE STATION ORCHESTRA:
"Looking Backward."

10.20 p.m.—JOHN D. FRASER, baritone:
"The Burning Hours" (Coningsby Clarke).
Request item.

10.27 p.m.—THE STATION ORCHESTRA:
"Three Dances from Henry VIII." (German).

10.39 p.m.—NEWS SESSION: "Argus" news service. Meteorological information. British official wireless news from Rugby. Road notes supplied by the Royal Automobile Club of Victoria. Announcements.

10.49 p.m.—THE STATION ORCHESTRA:
"Drink to me only with thine eyes" (Old English song).

10.53 p.m.—JOHN D. FRASER, baritone:
"Selection of Moore's Irish Melodies."

11 p.m.—Results of the Victorian Railways Institute amateur boxing and wrestling tournament.

11.1 p.m.—PACK CLOUDS AWAY, AND WELCOME DANCING TIME AT 3LO:
THE VAGABONDS—

"Breeze" (Haley).

"Oh, Maybe It's You" (Berlin).

"Lonely" (Yvian).

"If I Can't Have You" (Donaldson).

"Fidgets."

"Wouldn't That Be Too Bad."

"My China Man" (Byron).

"Should I Be Sorry."

"The Whisper Song" (Friend).

"The Song Is Ended" (Berlin).

"Together We Too" (Berlin).

11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

Associated Radio Co.

Wave Length, 484 Metres.

FRIDAY, 15th JUNE, 1928.

MORNING NEWS SESSION.

11 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

Transmitted from Panatrophe House, 252 Collins Street, (by exclusive permission of Wills and Paton Ltd.) the following luncheon-hour programme on the Brunswick Panatrophe.

12.1 p.m.—The B.B.C. Wireless Symphony Orchestra:

"Bridal Procession" from Le Coq D'Or (Rimsky Korsakov).

"Russian Dance" from Le Coq D'Or (Rimsky Korsakov).

12.9 p.m.—Theo Karle, tenor:
"Sometime you'll remember" (Wallace Head)

"The Kingdom within your Eyes" (Davis Nicholls).

12.15 p.m.—Carter's Orchestra:
"Beautiful Ohio" (Earl).

"Till we meet again" (Egan Whiting).

12.21 p.m.—Columbia Vocal Gem Company:
"Vocal Gems" in 2 parts (Day and Hunter).

12.29 p.m.—The J. H. Squire Celeste Octet:
"Angel's Serenade" from La Serenata (Braga).

"Serenade" (Titi).

12.37 p.m.—W. H. Ross, bell solo:
"Baby's Lullaby" (Whitlock).

"Can't Stop To-day" (Whitlock).

12.43 p.m.—Theo Karle, tenor:
"At Dawning" (Eberhart-Cadman).

"All through the night" (Boulton).

12.49 p.m.—Six Jumping Jacks:
"Ice Cream" (Johnson-Moll-King).

"Henry's made a lady out of Lizzie" (O'Keefe).

12.55 p.m.—John Bardsley, tenor:
"Queen of the Earth" (Pinsuti).

"I'll sing thee songs of Araby" (Clay).

1.1 p.m.—Newmarket Stock Sales. Special "Snap" Progress report direct from the Yards at Newmarket (by courtesy of John Macnamara and Co). Specially for our Country Listeners.

1.3 p.m.—Gleneagles Hotel Band:
"Fantasia on Scottish Airs" in 2 parts (Mulder).

1.11 p.m.—Eddie Dunstedter, Organ solo:
"Blue Heaven" (Donaldson).

"Are You Happy" (Yellen).

1.17 p.m.—Yacht Club Boys:
"You can't walk back from an aeroplane ride" (Bibo).

"I fell head over heels in love" (Parsons).

1.23 p.m.—Galla-Rini, Accordion solo:
"Blue Heaven" (Donaldson).

"Miss Annabella Lee" (Pollack).

1.29 p.m.—Hanapi and Kaleipua, Hawaiian Guitar duet:
"Hanalbi Bay" (Alehiken).

"Song of Hawaii" (Borles Corbell).

1.35 p.m.—Frederick Fradkin, violin solo:
"The Love Waltz" (Brennan Jacquet).

"I'm falling in love with someone" (Young Herbert).

1.49 p.m.—Nick Lucas:
"The Crooning Troubadour."

"Side by Side" (Woods).

"Why should I say that I'm Sorry" (Conley).

1.55 p.m.—National Military Band:
March, "Under the Double Eagle" (Wagner).

"Liberty Bell" (Sousa).

MATINEE SESSION.

ORCHESTRAL DANCE CONCERT.

2.1 p.m.—Ayarz Dansonians:
A half-hour Dance Session by Melbourne's favorite Dance Band. All the latest popular hits, each one announced prior to its presentation.

2.30 p.m.—Melbourne Concert Orchestra:
"Souvenir de Chopin" (Fetras).

2.46 p.m.—Mae Seaton, soubrette:
"Put your arms where they belong" (Ackman).

"Nothin" (Handman).

2.53 p.m.—Melbourne Concert Orchestra:
"By the Lake of Geneva" Pt. 1 (Bendel).

"Ballet Music" from Gioconda (Ponchielli).

"French Serenade" (Grieg).

3.9 p.m.—Mae Seaton, soubrette:
"Me and my shadow" (Tobias).

"The song is ended" (Berlin).

3.15 p.m.—Ayarz Dansonians:
Fox trot, "Are you happy" (Ager).

Waltz, "Ole Virginny's Lullaby" (Pollack).

Fox trot, "Coquette" (Green).

Waltz, "To-night you belong to me" (David).

Fox trot, "Half a Moon" (Hanley).

3.31 p.m.—Announcements.

3.35 p.m.—A talk by Miss Stephanie Taylor on "Everyday Art."

3.45 p.m.—Melbourne Concert Orchestra:
Selection, "Schumann Songs" (Roberts).

4 p.m.—G.P.O. Clock says "Four."

4.1 p.m.—Second Weather forecast.

4.3 p.m.—Bernard Thomas, tenor:
"Poet Song" from La Boheme (Puccini).

"Thank God for a Garden" (Del Riego).

4.11 p.m.—Melbourne Concert Orchestra:
Selection, "Andre Chenier" (Giordano).

4.27 p.m.—Donald McCalman, saxophone:
"Valse Vanite" (Wiedoeft).

4.31 p.m.—Bernard Thomas, tenor:
"La donna a mobile" (Verdi).

"I know of two bright eyes" (Clutsam).

4.39 p.m.—Ayarz Dansonians:
Fox trot, "Our Bungalow of Dreams" (Verges).

Fox trot, "In the Sing Song Syeamore Tree" (Woods).

Waltz, "Russian Lullaby" (Berlin).

Fox trot, "Yale Blues" (Henderson).

Fox trot, "Following you around" (Kahn).

4.55 p.m.—To-night's Entertainments.
Announcements.

5 p.m.—G.P.O. Clock says "Five."
God Save the King.

CHILDREN'S SESSION.

6.30 p.m.—3AR's Cousin Peter. Music, fun and story. Answers to letters and birthday greetings. Miss M. Shepherd will entertain the Children with strange and rare stories about our animals, insects and flowers.

8 p.m.—Melbourne Concert Orchestra:
Overture, "Caliph of Bagdad" (Boieldau).

"Norwegian Scenes" (Motl).

(a) "View of the Mountains."

(b) "Peasants Dance."

(c) "Sleigh Ride."

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- 8.16 p.m.—Dorothy Eyton-Jones, contralto:
"Punchinello" (Molloy).
"The Enchantress" (Hatten).
- 8.23 p.m.—Ayarz Dansonians:
Fox trot: "Miss Annabelle Lee" (Pollack).
Waltz, "Are you lonesome to-night" (Handman).
Fox trot, "So Long" (Burke).
Waltz, "Ole Virginny's Lubbaby" (Pollack).
Fox trot, "Dolores" (Bloom).
- 8.39 p.m.—Dorothy Eyton-Jones, contralto:
"Barbara Allen" (Old English).
"Wake Soul of Mine" (Jordan).
- 8.46 p.m.—Mr. Herbert Pettifer, violin:
"Bolero" (Bohm).
- 8.50 p.m.—Announcements.
- 9 p.m.—Melbourne Concert Orchestra:
"Fantasie Espagnole" (Hosmer).
"Prelude" (Rachmaninoff).
- 9.15 p.m.—Howard Andrews, baritone:
"Silent Moon" (Williams).
"Invictus" (Hahn).
- 9.22 p.m.—Ayarz Dansonians:
Fox trot, "Coquette" (Green).
Waltz, "Put your arms where they belong" (Ackman).
Fox trot, "A silver lining" (Donaldson).
- 9.31 p.m.—"Harlequin" Sports Results.
- 9.39 p.m.—Melbourne Concert Orchestra:
"Invitation of the Waltz" (Weber and Berlioz).
- 9.50 p.m.—Announcements.
- 10 p.m.—G.U.O. Clock says "Ten."
- 10.1 p.m.—Semi-final Weather Forecast specially for country listeners.
- 10.3 p.m.—Ayarz Dansonians:
Fox trot, "I'll be lonely" (Woods).
Waltz, "Ramona" (Wayne).
Fox trot, "Following you around" (Kahn).
Fox trot, "Our Bungalow of Dreams" (Veriges).
- 10.19 p.m.—Howard Andrews, baritone:
"Why Oh Why are the Roses" (Tschai-kowsky).
"Vale" (Kennedy Russell).
- 10.27 p.m.—Bert Lack, flute:
"Birds in the Forest" (Wetzler).
- 10.31 p.m.—Melbourne Concert Orchestra:
"Prayer and Temple Dance" (Grieg).
Suite, "Yashmak Land" (Thurban).
- 10.50 p.m.—"Age" news service exclusive to 3AR.
- 10.58 p.m.—Final Weather forecast.
- 10.59 p.m.—Our Australian Good-night quote is taken from the poem "The Hidden Garden" by Roderic Quinn.
"Pain paves the way for keener joy,
And wondrous thoughts uproll
When the large moon of Peace look down
On high tide in the Soul."
- 11 p.m.—G.P.O. Clock says "Eleven."
God Save the King.

4QG, BRISBANE.

Queensland Radio Service

Wave Length, 385 Metres.

FRIDAY, 15th JUNE, 1928.

MORNING SESSION.

An Hour For The Ladies.

- 10.30 a.m.—To-days social news.
10.45 a.m.—A Cookery and Household Talk by "The Etiquette Girl."
11 a.m.—Music.
11.10 a.m.—General news.
11.20 a.m.—Music.
11.30 a.m.—Close down.

MIDDAY SESSION.

- 1 p.m.—Market reports; weather information; "The Daily Mail" and "The Daily Standard" news.
1.30 p.m.—From the Paris Cafe:
Lunch Hour music.
1.58 p.m.—From The Observatory:
Standard time signal.
2 p.m.—Close down.

AFTERNOON SESSION.

- 3.30 p.m.—Mail train running times.
3.31 p.m.—A programme of music from the studio.
4.15 p.m.—"The Telegraph" news.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6 p.m.—Mail train running times.
6.2 p.m.—"Daily Standard" news.
6.8 p.m.—Stock Exchange information.
6.9 p.m.—Metal quotations.
6.10 p.m.—From the Paris Cafe:
Dinner music.
6.28 p.m.—From the studio.
Announcements.
6.30 p.m.—Bedtime stories by "The Sandman."
7 p.m.—Special news service.
7.3 p.m.—Market reports.
7.25 p.m.—Fenwick's stock report.
7.40 p.m.—Announcements.
7.43 p.m.—Standard time signals.
7.45 p.m.—To-morrow's racing reviewed.
7.55 p.m.—To-morrow's Rugby League matches

NIGHT SESSION.

A NAUTICAL NIGHT.

- "And the seven seas are jewelled with the deeds of men who sail in ships."
8 p.m.—From the Studio:
Topical Chorus.
8.4 p.m.—Overture:
"Plymouth Hoe" (Ansell).
The Studio Orchestra (conductor, Mr. A. R. Featherstone).
8.12 p.m.—Bass solo:
"The Bosun's Story" (Molloy).
Mr. Dick Pike.
8.17 p.m.—Monologue: "Cargoes."
Mr. Tom Muller.
8.21 p.m.—Soprano solo:
"When My Ships Come Sailing Home" (Dorel).
Miss Thelma Champion.
8.25 p.m.—Ballad:
"Bells of the Sea."
The Studio Orchestra.
8.31 p.m.—Male quartette:
"As Off the South'ard We Go" (Bartholemew).
The Anglo Male Quartette.
8.36 p.m.—Cornet solo:
"Down to the Sea in Ships"
Mr. H. Jackson (accompanied by the Studio Orchestra.)
8.45 p.m.—In response to requests, the radio interlude—"The Divine Spark," Episode No. 1: "The Story of the 'Helen B. Sterlin'," which was broadcast from 4QG last year, will be repeated.
9.12 p.m.—Metropolitan weather forecast.
9.15 p.m.—Week-end road, information for motorists officially supplied by the Royal Automobile Club of Queensland.
9.30 p.m.—Male quartette:
"Rocked in the Cradle of the Deep" (Parke).
The Anglo Male Quartette.
9.34 p.m.—Monologue: "R.N."
Mr. Tom Muller.
9.36 p.m.—Soprano solo:
"Bells of St. Mary's."
Miss Thelma Champion.
9.42 p.m.—Fantasia:
"A Life on the Ocean" (Binding).
The Studio Orchestra.
9.50 p.m.—Tenor Solo:
"Tom Bowling" (Dibain).
Mr. C. R. Kolb.
9.54 p.m.—Male Quartette:
"Away to Rio" (Bartholemew).
The Anglo Male Quartette.
10 p.m.—Baritone solos:
(a) "Three for Jack" (Squire).
(b) "Trade Winds" (Keel).
Mr. C. B. Astley.
10.8 p.m.—Monologue:
"The Ship That Never Sails" (Will Lawson).
Mr. Tom Muller.
10.15 p.m.—Vocal duet:
"Larboard Watch" (Williams).
Messrs. C. R. Kolb and Dick Pike.
10.20 p.m.—Suite:
"Nautical Scenes" (Fletcher):
(a) "All Aboard."
(b) "Sentimental Chantey."
(c) "Focsle Frolics."
The Studio Orchestra.

- 10.30 p.m.—Baritone solo:
"Sea Life" (Batten).
Mr. A. F. Stoddart.
10.35 p.m.—March:
"The Old Salt" (Hildreth).
The Studio Orchestra.
10.40 p.m.—"The Daily Mail" news.
Weather news.
Close down.

5CL, ADELAIDE.

Central Broadcasters, Ltd.

Wave Length, 395 Metres.

FRIDAY, 15th JUNE, 1928.

EARLY MORNING SESSION.

7.45 a.m. to 9 a.m.

MORNING SESSION.

- 10.30 a.m.—G.P.O. Chimes.
10.31 a.m.—Studio music.
10.55 a.m.—Hairdressing talk by "Bobette."
11 a.m.—G.P.O. Chimes.
11.1 a.m.—Kitchen Craft and Menu talks:
"What to prepare for to-day's dinner" by "Economist," Household Hints.
11.20 a.m.—Studio music.
11.30 a.m.—Close down.

MIDDAY SESSION.

- 1 p.m.—G.P.O. Chimes.
1.1 p.m.—Relay from Adelaide Town Hall, community singing, accompanied by the Town Hall Organ.
1.55 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence and meteorological information.
2 p.m.—Close down.

AFTERNOON SESSION.

- 3 p.m.—G.P.O. Chimes.
3.1 p.m.—Studio music, interspersed with vocal numbers.
3.45 p.m.—An educational talk.
4.1 p.m.—Studio music.
4.56 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
5 p.m.—Close down.

EVENING SESSION.

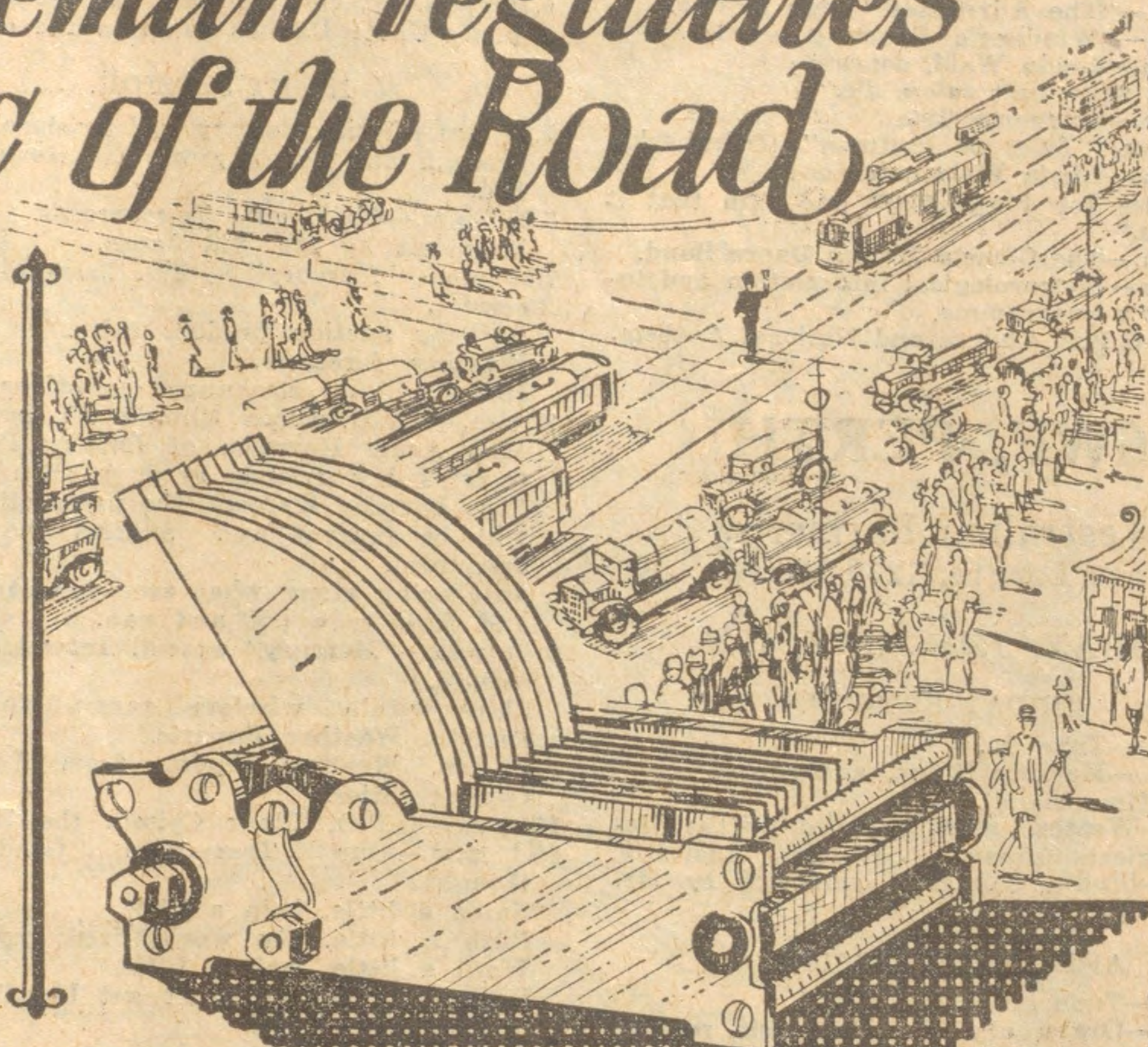
- 6 p.m.—G.P.O. Chimes.
6.1 p.m.—Children's entertainment:
Birthday greetings and correspondence.
6.10 p.m.—Music and songs for the children.
6.30 p.m.—Dinner Music.
7 p.m.—G.P.O. Chimes.
7.1 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
7.8 p.m.—General Market reports, Dairy Produce, Poultry, Fish, Fruit, Wheat, Hides and Skins, Stock, etc.
7.15 p.m.—"Windbag's" Sporting Service.
7.22 p.m.—Football talk by "High Mark."
7.35 p.m.—Relay from Malcolm, Reid and Co.'s showrooms, selections by Malcolm Reid and Co.'s Orchestra, interspersed with vocal numbers by:
Harold Durdin, basso:
"When Bright Eyes Glance."
"Gypsy Love Song."
"Less Than the Dust."
"Kashmiri Song."
W. F. Gill Evans, tenor:
"Thora."
"An Evening Song."
"Sigh no more, Ladies."
"Beauty's Eyes."
9.1 p.m.—Meteorological information.
9.2 p.m.—International News.
9.7 p.m.—Dalgety's Wheat report.
9.8 p.m.—Ernest and L. Ruge, mouthorgan.
Duet, "The Dying Soldier."
"Poor Old Joe."
9.14 p.m.—Hazel Whitford, contralto:
"His Lullaby."
"Lounging."
"Red Roofs."
9.20 p.m.—Harmony Trio:
"Three Four Suite" (Coleridge Taylor).
"Kol Nedre."
9.30 p.m.—Dick Bailey in humorous songs.

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9.37 p.m.—Hazel Whitford, contralto:
 "They Say" (Evans).
 "That's All" (Brahe).
 9.43 p.m.—Harmony Trio, selections:
 "Liebeslied."
 "Rustle, Spring."
 9.50 p.m.—Dick Bailey, comedian.
 9.57 p.m.—Ernest and L. Ruge,
 Mouthorgan duet, "Medley of Popular songs."
 10.1 p.m.—"The Advertiser" news service.
 10.8 p.m.—"Windbag's Sporting service."
 10.14 p.m.—Linda Wald, soprano:
 "Music when soft voices die."
 10.17 p.m.—Harmony Trio,
 Selection, "Tales of Hoffman" (Offenback).
 10.24 p.m.—Linda Wald, soprano:
 "Poppies for Forgetting" and "Oh that it
 were so."
 10.29 p.m.—The Glenelg Maison Dance Band.
 10.55 p.m.—Meteorological information and to-
 morrow's programme.
 11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH

Westralian Farmer's.
 Wave Length, 1250 Metres.

FRIDAY, 15th JUNE, 1928.

MIDDAY SESSION.

12.30 p.m.—Tune in.
 12.35 p.m.—Markets, News, and cables.
 1 p.m.—Time signal.
 1.1 p.m.—Weather notes supplied by the Me-
 teorological Bureau of Western Australia.
 1.2 p.m.—Studio Quintette, conducted by Mr.
 Val Smith.

AFTERNOON SESSION.

2.30 p.m.—Tune in.
 2.35 p.m.—Organ and Pianola music relayed
 from the Grand Theatre, Murray street.
 Vocal and instrumental numbers from the
 studio.

EVENING SESSION.

6.45 p.m.—Tune in.
 The evening transmission is broadcast on
 104.5 metres of programme as well as the
 usual wavelength.
 6.50 p.m.—Stories for the Kiddies by Uncles
 Henry, Percy and Duffy.
 7.20 p.m.—Stocks, Markets, News.
 7.45 p.m.—Racing talk by the Sporting editor
 of "Truth" Newspaper Co.
 8 p.m.—Time signal.
 8.1 p.m.—Weather notes supplied by the Me-
 teorological Bureau of Western Australia.
 Station announcements such as alterations
 to programmes, etc.
 8.3 p.m.—Popular Night.
 Musical programme, from the Studio, includ-
 ing vocal and instrumental artists.
 Items by the Misses Mason and De Boulay,
 Instrumental Duo, of the s.s. Katoomba.
 10 p.m.—Late News items by courtesy of "The
 Daily News." Newspaper Co.
 Ships within Range announcement.
 Weather report and forecast.
 10.30 p.m.—Close down.
 104.5 METRE TRANSMISSION.
 Simultaneous broadcast on 104.5 metres of
 Programme given on 1250 metres, commen-
 cing at 6.45 p.m.

7ZL, HOBART

Tasmanian Broadcasters, Ltd.
 Wave Length, 516 Metres.

FRIDAY, 15th JUNE, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

MATINEE SESSION.

3 p.m.—G.P.O. Clock Chimes the Hour.
 3.1 p.m.—Musical selection.
 3.5 p.m.—Hobart Stock Exchange Quotations.
 Weather information.
 Items of interest: Announcements.

3.15 p.m.—During this session Miss Edna
 Cameron will be heard in several request
 numbers.
 Selections by 7ZL Studio Trio.
 4.15 p.m.—Educational Talk.
 4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Uncle Hubert's half-hour.
 7 p.m.—Uncle David's talks to the children.

NIGHT SESSION.

7.30 p.m.—Fruit, Poultry and Produce Reports
 through the courtesy of Roberts and Co.,
 Ltd.
 7.35 p.m.—Chat on 'To-morrow's Football
 Prospects by Mr. Sid Jones.
 7.50 p.m.—"Mercury" special Tasmanian news
 service.
 Railway auction produce sales.
 Weather forecasts.
 Hobart Stock Exchange quotations.
 8 p.m.—G.P.O. Clock Chimes the hour.
 Miss Army Harrison of Battery Point en-
 tertains her friends at a kitchen tea for
 Miss Dorothy Hayes. The prospective bride
 will be present and address the friends
 assembled.
 Just bring along what ever you can: knife
 and fork or a pot and pan.
 9.50 p.m.—"Mercury" special Interstate news
 service.
 Ships within wireless range. Tasmanian
 District Weather Reports.
 9 p.m. Weather reports from Australian
 Capital Cities.
 10 p.m.—G.P.O. Clock Chimes the Hour.
 10.1 p.m.—Our Tasmanian Good - night
 thought:
 "Smile a little, help a little,
 Push a little, the world needs you.
 Work a little, wait a little,
 Hope a little—and don't get blue."
 10.2 p.m.—The King.
 10.3 p.m.—Close down.

Saturday, June 16 2FC, SYDNEY.

EARLY MORNING SESSION.

7 a.m.—"Big Ben" and announcements.
 7.5 a.m.—Studio Music.
 7.20 a.m.—Country Session: Official weather
 forecast, rainfall, temperatures, astronomi-
 cal memoranda, shipping intelligence, mail
 services.
 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.—"Sydney Morning Herald" sum-
 mary.
 7.50 a.m.—Studio Music.
 8 a.m.—"Big Ben." Close down.

MORNING SESSION.

10 a.m.—"Big Ben" and announcements.
 10.5 a.m.—Studio Music.
 10.15 a.m.—"Sydney Morning Herald" news
 service.
 10.30 a.m.—Studio Music.
 10.35 a.m.—A Talk on Racing by the 2FC
 Racing Commissioner.
 10.45 a.m.—Studio Music.
 11 a.m.—"Big Ben."
 A.P.A. and Reuter's Cable Services.
 11.5 a.m.—A Talk on Gardening by Mr. G.
 J. Lockley ("Redgum").
 11.30 a.m.—Close down.

MIDDAY AND AFTERNOON SESSIONS.

12 noon—"Big Ben" and announcements.
 12.2 p.m.—Stock Exchange information.
 12.3 p.m.—Studio Music.
 12.10 p.m.—"Sydney Morning Herald" news
 service.
 12.15 p.m.—Rugby Wireless News.

12.20 p.m.—Studio Music.

Note: Events of the Rosehill Racing Club's
 Meeting will be described by the 2FC Rac-
 ing Commissioner.
 During racing intervals musical items
 will be given from the Studio.

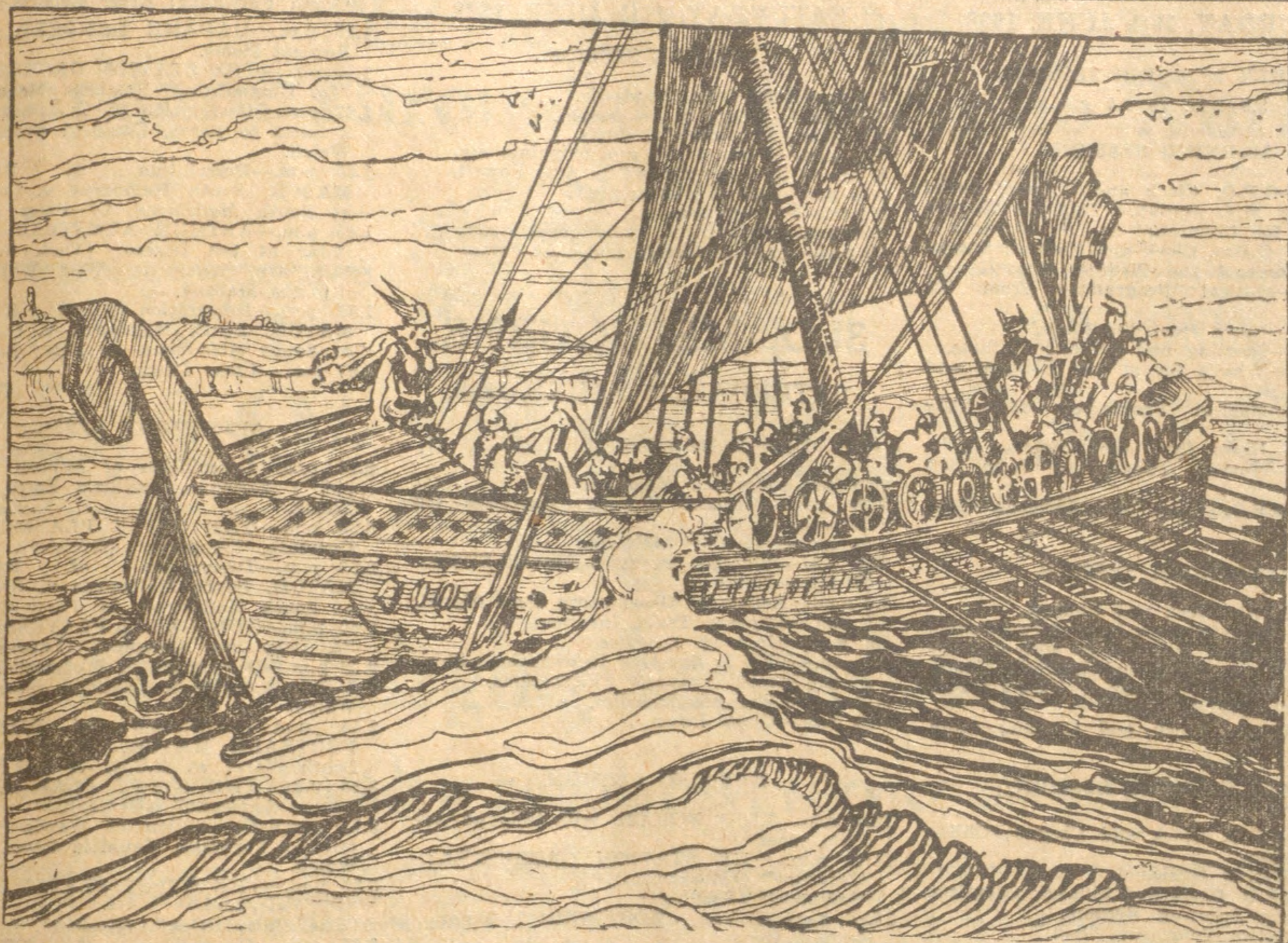
1 p.m.—"Big Ben." Weather intelligence.
 1.3 p.m.—"Evening News" midday news ser-
 vice.
 1.15 p.m.—Studio Music and Race Descrip-
 tions.
 2 p.m.—"Big Ben."
 Note: During intervals of Race Descriptions
 the following artists will be heard from
 the Studio:
 Edith Lovejoy, soprano:
 (a) "The Motherland is Calling" (Francis
 Bohr).
 (b) "Fiddle and I" (Mrs. Arthur Goodeve).
 The "Smart Set" Instrumental Trio:
 Popular numbers.
 Carlos Fakola, novelty pianist.
 4.45 p.m.—Complete sporting resume.
 5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

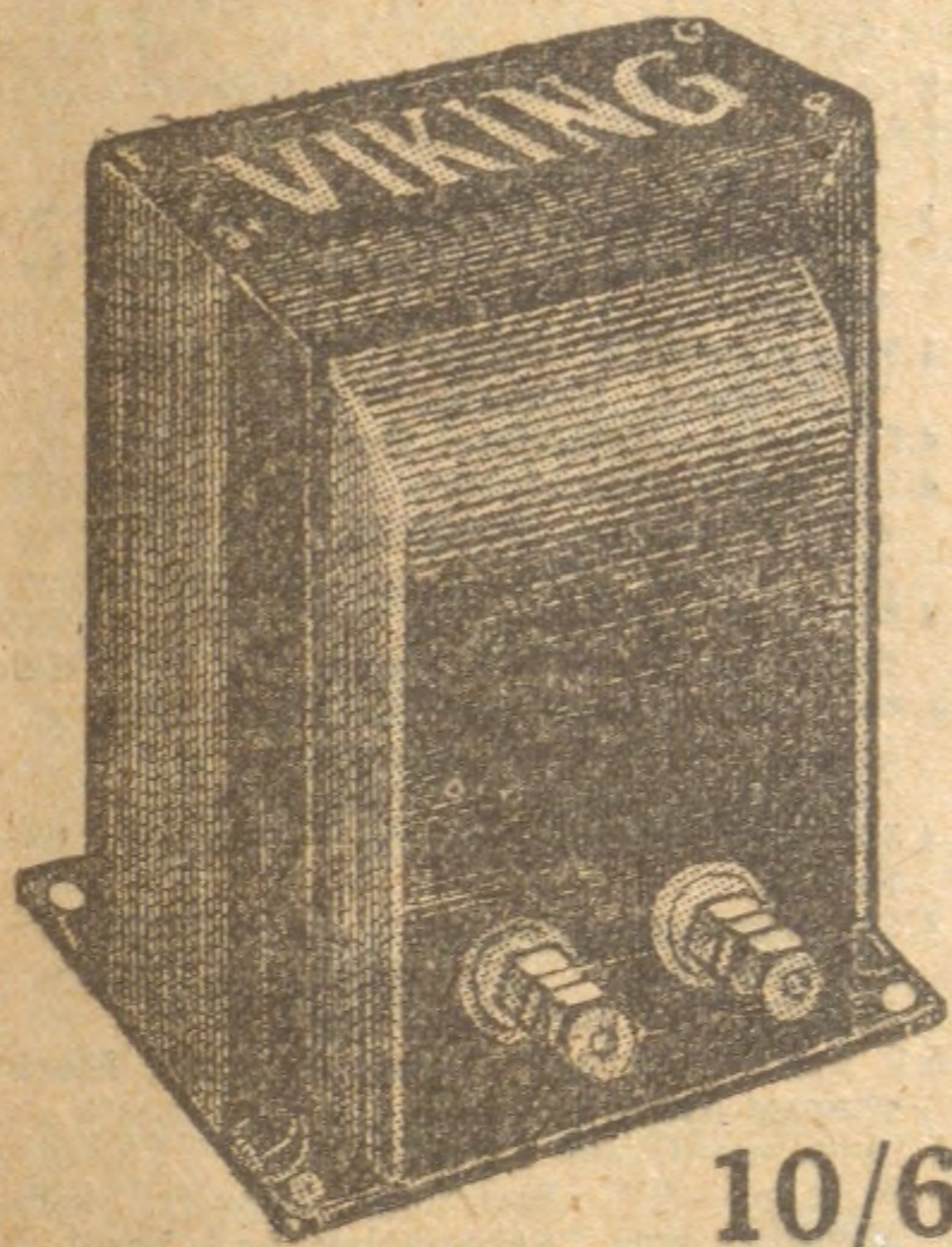
5.40 p.m.—The Chimes of 2FC.
 5.45 p.m.—The "Hello Man" talks to the chil-
 dren.
 6.45 p.m.—Weather intelligence, shipping
 Stock Exchange and Rugby wireless news.
 6.50 p.m.—From the Hotel Australia:
 Dinner Music by the Hotel Australia Or-
 chestra.
 7.15 p.m.—From the Studio:
 Musical items.
 7.25 p.m.—Late sporting news.
 7.35 p.m.—Late "Evening News" news ser-
 vice.

NIGHT SESSION.

7.40 p.m.—Programme announcements.
 7.45 p.m.—G. J. Lockley will give the first of
 a series of talks entitled, "I Remember."
 8 p.m.—"Big Ben." Mr. Medley and Mr.
 Motley.
 8.10 p.m.—Captain Fred Aarons, talk:
 "Blunder Budget."
 8.20 p.m.—Carlos Fakola, novelty pianist.
 8.30 p.m.—Edgar Warwick will present the
 second of his series of weekly "Ether"
 Reviews.
 Assisting artists: Eileen Dawn, Ann
 Palmerston, Wilfred Thomas, Carlton Fay.
 Late weather forecast.
 9.46 p.m.—The "Campbell Boys":
 Musical Act.
 9.54 p.m.—Sophie Lashmore:
 (a) Steel guitar solo: "The Undine"
 (Cramer).
 (b) Banjo solo: "Irish Airs" (Shevill).
 10 p.m.—"Big Ben." From the Ambassadors:
 The Ambassadors' Dance Orchestra, conduc-
 tor, Manuel Hyman.
 10.10 p.m.—From the Studio:
 The "Campbell Boys." Musical Act.
 10.18 p.m.—The Ambassadors' Dance Or-
 chestra.
 10.23 p.m.—From the Studio: Sophie Lash-
 more:
 (a) Steel guitar, "The Moorish Dance"
 (Cramer).
 (b) Banjo, "Medley of popular songs."
 10.30 p.m.—Late weather forecast.
 10.31 p.m.—The Ambassadors' Dance Or-
 chestra.
 10.42 p.m.—Studio music.
 10.47 p.m.—The Ambassadors' Dance Or-
 chestra.
 10.57 p.m.—From the Studio:
 To-morrow's programme and late news.
 11 p.m.—"Big Ben." The Ambassadors' Dance
 Orchestra in popular numbers until 11.45
 p.m.
 11.45 p.m.—National Anthem.
 Close down.



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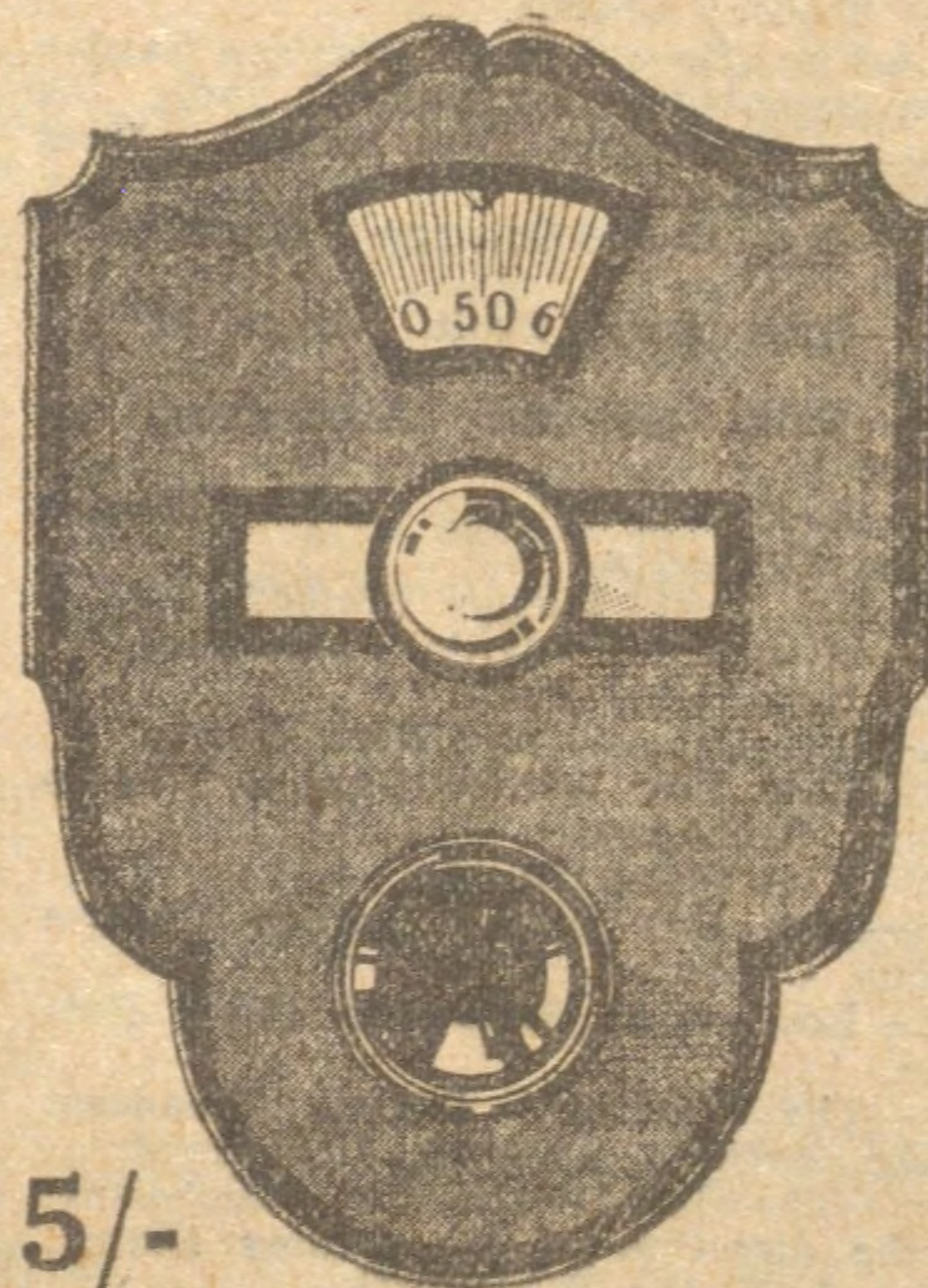


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2BL, SYDNEY.

SATURDAY, 16th JUNE, 1928.

EARLY MORNING SESSION.

8.0 a.m. to 9.0 a.m.

MORNING SESSION.

- 11.0 a.m.—G.P.O. Clock and Chimes; Social Notes by Mrs. Jordan. Talk on "Simple Cooking for Children," by Mrs. Jordan.
 12.0 noon.—G.P.O. Clock and Chimes; Special Ocean Forecast and Weather Report.
 12.3 p.m.—Musical Programme from the Studio.
 12.20 p.m.—News from the "Sun."
 12.25 p.m.—Sporting and Athletic Fixtures.
 12.27 p.m.—What's on at the Pictures and Theatres
 12.30 p.m.—Musical Programme from the Studio.
 12.40 p.m.—News from the "Sun."
 12.50 p.m.—Musical Programme from the Studio.
 1.0 p.m.—G.P.O. Clock and Chimes; Close Down.

AFTERNOON SESSION.

- 2.0 p.m.—G.P.O. Clock and Chimes.
 During the Afternoon Musical Programme from the Studio, interspersed with descriptions of the Rugby League Football Match, broadcast from the Sydney Cricket Ground.
 4.45 p.m.—Racing Resume.
 5.0 p.m.—G.P.O. Clock and Chimes; Close Down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. Clock and Chimes; Children's Session.
 6.30 p.m.—Dinner Music.
 7.0 p.m.—G.P.O. Clock and Chimes; Complete Racing and Sporting Resume.
 7.30 p.m.—News from the "Sun."
 8.0 p.m.—G.P.O. Clock and Chimes; Broadcasters' Topical Chorus.
 8.3 p.m.—The Rose Bay Winter Garden Theatre Symphony Orchestra, under the direction of Mr. Lionel Hart, broadcast from Rose Bay Theatre.
 8.20 p.m.—Mr. Dud Osborne (Descriptive Artist).
 8.27 p.m.—Miss Beryl Scott (Songs at the Piano).
 8.34 p.m.—Talk on the Aborigines, by "Bringa."
 8.54 p.m.—Rose Bay Winter Garden Theatre Symphony Orchestra.
 9.4 p.m.—Mr. Bert Warne (Comedian).
 9.11 p.m.—Miss Grace Saville (Contralto).
 9.18 p.m.—Miss Beryl Scott.
 9.25 p.m.—Dud Osborne and Bert Warne.
 9.35 p.m.—Rose Bay Winter Garden Theatre Symphony Orchestra.
 9.45 p.m.—Miss Grace Saville.
 9.52 p.m.—Rose Bay Winter Garden Theatre Symphony Orchestra.
 10.2 p.m.—Resume of Following Day's Programme.
 10.5 p.m.—The Wurlitzer Organ, broadcast from the Arcadia Theatre, Chatswood.
 10.25 p.m.—The Wentworth Cafe Orchestra, under the direction of Mr. Jimmy Elkins, broadcast from the Wentworth.
 During Intervals between Dances, "Sun" News will be broadcast.
 11.45 p.m.—G.P.O. Clock and Chimes; National Anthem.

2GB, SYDNEY

SATURDAY, 16th JUNE, 1928.

EVENING SESSION.

- 5.30 p.m.—Children's Session by Uncle George.
 7 p.m.—Music from studio.
 8 p.m.—Opening Chorus.
 8.2 p.m.—Request Evening.
 10 p.m.—Close down.

2 UW, SYDNEY

SATURDAY, 16th JUNE, 1928.

EVENING SESSION.

- 7 p.m.—Items from the studio.
 7.10 p.m.—Where to go session.
 7.15 p.m.—Instrumental items.
 7.45 p.m.—News, mails and shipping, etc.
 8 p.m.—"Racing reviews" by Arty Powell.
 8.15 p.m.—Dance programme.
 9 p.m.—Request numbers.
 9.30 p.m.—Instrumental and vocal items.
 10 p.m.—Announcements and close down.

3LO, MELBOURNE.

SATURDAY, 16th JUNE, 1928.

EARLY MORNING SESSION.

- 7.15 a.m.—Morning Melodies.
 7.20 a.m.—Physical Culture Exercises (to Music).
 7.27 a.m.—Morning Melodies.
 7.33 a.m.—Weather Forecast for all States.
 7.40 a.m.—News.
 8.0 a.m.—Melbourne Observatory Time Signal.
 8.1 a.m.—Express Train Information.
 8.2 a.m.—Morning Melodies.
 8.5 a.m.—NEWS; Sporting Information; Shipping; Stock Exchange Fluctuations.
 8.13 a.m.—Morning Melodies.
 8.15 a.m.—Close Down.

MORNING SESSION.

- 11.0 a.m.—ERIC WELCH will talk on today's races.
 11.15 a.m.—THE STATION ORCHESTRA: "Serenade" (Mozkowski).
 "Serenade" (Schubert).
 11.25 a.m.—SENIA CHOSTIAKOFF, Tenor: Request Items.
 11.32 a.m.—THE STATION ORCHESTRA: Selection, "The Geisha" (Jones).
 11.42 a.m.—MADAME LAMBERT, Soprano: "Les Lames" (Massenet).
 Selection, "Veronique" (Messenger).
 11.49 a.m.—THE STATION ORCHESTRA: "Tempo di Gavotte" (Soro).
 11.53 a.m.—WILL PAGE, Xylophone: Selection, "William Tell."

NEWS SESSION.

- 12.0 noon.—Melbourne Observatory Time Signal.
 12.1 p.m.—Metal Prices, received by the Australian Mines and Metals Association, from the London Stock Exchange this day; British Official Wireless News from Rugby; Reuter's and the Australian Press Association Cables; "Argus" News Service.

MIDDAY SESSION.

- 12.20 p.m.—THE STATION ORCHESTRA: "Parade of the Tin Soldiers."
 12.25 p.m.—RUPERT HAZELL AND ELSIE DAY: "Harmonylarity."
 12.38 p.m.—Stock Exchange Information.
 12.40 p.m.—THE STATION ORCHESTRA: "Valse Orientale—The Temple Dancer" (Leigh).
 12.43 p.m.—ARTHUR ARMSTEAD, Baritone: "Yeoman's Wedding Song" (Prince Pontiatowski).
 "The Devout Lover" (Maude V. White).
 12.50 p.m.—THE STATION ORCHESTRA: "The Boys of the Old Brigade" (Bevois).
 12.53 p.m.—SENIA CHOSTIAKOFF, Tenor: "Star Vicino" (Salvator Rosa).
 "Come un bel di maggio"—from the opera Andrea Chenier.
 1.0 p.m.—Melbourne Observatory Time Signal.
 1.1 p.m.—THE STATION ORCHESTRA: Selection from "Mary" (Hirsch).

- 1.8 p.m.—Meteorological Information: Weather Forecast for Victoria, Tasmania, South Australia and New South Wales; Ocean Forecasts; River Reports.

- 1.15 p.m.—MADAME LAMBERT, Soprano: Request Items.
 1.22 p.m.—THE STATION ORCHESTRA: "La Cinquantine" (Gabriel Marie).
 1.27 p.m.—Description of Toolambool Hurdle, 2 miles 65 yards, Caulfield Races, by Eric Welch.
 1.35 p.m.—Description of BASEBALL MATCH, South Melbourne v. Collingwood, at South Melbourne, by Percy Steel.
 1.45 p.m.—ARTHUR ARMSTEAD, Baritone: "Star of the Desert" (Theo. Bonheur).
 "Oh, Oh, Hear the Wild Winds Blow" (Titto Mattei).
 1.52 p.m.—Description of BASEBALL MATCH, South Melbourne v. Collingwood, at South Melbourne, by Percy Steel.
 1.57 p.m.—Close Down.

AFTERNOON SESSION.

- 2.13 p.m.—Description of Minook Two-year-old, 7 furlongs, Caulfield Races, by Eric Welch.
 2.20 p.m.—THE GYPSY PLAYERS: Overture, "Emperor" (Kreisler).
 2.30 p.m.—Description of BASEBALL MATCH, South Melbourne v. Collingwood, at South Melbourne, by Percy Steel.
 2.40 p.m.—THE GYPSY PLAYERS: "A Deep Sea Romance" (Lake).
 2.48 p.m.—Description of Richmond Handicap, 1 mile 3 furlongs, Caulfield Races, by Eric Welch.
 2.55 p.m.—Description of INTERSTATE FOOTBALL MATCH, Victoria v. New South Wales, at M.C.G., by Rod McGregor.
 3.15 p.m.—THE GYPSY PLAYERS: "Suite Ancienne" (Hadley).
 3.23 p.m.—Description of Wanda Steeple, 2 miles 3 furlongs, Caulfield Races, by Eric Welch.
 3.30 p.m.—THE GYPSY PLAYERS: "In Fairyland."
 "The Fairy Ring" (Hosmer).
 3.35 p.m.—Description of INTERSTATE FOOTBALL MATCH, Victoria v. New South Wales, at M.C.G., by Rod McGregor.
 3.50 p.m.—Quarter Time Scores—Football.
 3.53 p.m.—THE GYPSY PLAYERS: "Babylon" (Elie).
 3.58 p.m.—Description of Cambria Welter, 1 mile 1 furlong, Caulfield Races, by Eric Welch.
 4.5 p.m.—THE GYPSY PLAYERS: "Offenbach Selection" (Ansell).
 4.20 p.m.—Half-time Scores: Football.
 4.22 p.m.—Description of INTERSTATE FOOTBALL MATCH, VICTORIA v. N.S.W., at M.C.G., by Rod McGregor.
 4.34 p.m.—Description of Rosny Plate, 6 furlongs, Caulfield Races, by Eric Welch.
 4.40 p.m.—THE GYPSY PLAYERS: "Silver Bells" (Isaman).
 "Egyptian Parade" (Isaman).
 4.50 p.m.—Three-quarter Time Football Scores.
 4.52 p.m.—Description of INTERSTATE FOOTBALL, VICTORIA v. N.S.W., at M.C.G., by Rod McGregor.
 5.0 p.m.—"Herald" News Service; Stock Exchange Information.
 5.15 p.m.—Close Down.
 5.50 p.m.—All Sporting Results, including Final Scores, Association and Local, Interstate Football Matches.

EVENING SESSION.

- 6 p.m.—Answers to Letters and Birthday Greetings by "Little Miss Kookaburra."
 6.20 p.m.—CAPTAIN DONALD MACLEAN, The Spanish Conquest—How the Dons discovered the Treasures of the World.
 6.35 p.m.—Musical Interlude.
 6.40 p.m.—"LITTLE MISS KOOKABURRA" "The Princess who lost her Dimple—another story of Pickles and Prowl."
 7 p.m.—Sporting results and final interstate football scores.
 7.5 p.m.—"Herald" News Service. Weather synopsis. Shipping movements.
 7.12 p.m.—Stock Exchange information.
 7.17 p.m.—River reports.

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7.20 p.m.—Market reports by the Victorian Producers' Co-operative Co., Ltd. Poultry, Grain, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions. Market reports of Fruit by the Victorian Fruitgrowers' Association, Retail Prices. Wholesale prices of Fruit by the Wholesale Fruit Merchants' Association. Citrus Fruits.

NIGHT SESSION.

7.30 p.m.—FREDERICK CHAPMAN, A.L.S., F.G.S., Palaeontologist of the National Museum, will speak on:
"Fossil Horses."

7.45 p.m.—DR. J. A. LEACH, will speak on:
"Owlet-nightjar and Dollar-bird."

8 p.m.—To-day is the Anniversary of the Battles of Dettigen, 1743, and of Quatre Bras, 1815.
Birthday Greetings and Programme Announcements.

8.1 p.m.—On the 16th June, 1869, died CHARLES STUART, the Australian explorer, who during 1828-45 headed three important expeditions, from the last of which he returned blinded by hardships and exposure.

8.2 p.m.—W. J. G. TURNER, Secretary of the Austin Hospital for Chronic Diseases, will speak on the work of the Hospital.

8.15 p.m.—SOUTHERN CHORAL SOCIETY:
"Rose of My Heart" (Lohr).
"O Peaceful Night" (German).
Pianist, Olive McKillop.

8.22 p.m.—THE GYPSY PLAYERS:
Valse-Suite, "Southern Nights" (Guion).

8.29 p.m.—HELGA BRENNECKE, 'cello:
"Chant Sans Paroles" (Tschaiakowsky).

8.34 p.m.—SOUTHERN CHORAL SOCIETY:
"The Far Away Bells" (Gordon).
"London Town" (German).
Pianist, Olive McKillop.

8.41 p.m.—THE GYPSY PLAYERS:
"Quartet" (Haydi).

8.50 p.m.—THE EVENT OF THE EVENING
—THE STRUGGLE AT THE STADIUM.
Description by Eric Welch. Prior to this description, "Olympus" will give a short chat on the Tour de France.

10.15 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."
"Hot 'n Heavy."

10.27 p.m.—THE STATION ORCHESTRA:
Selection, "Mary" (Hirsch).

10.37 p.m.—MADAME LAMBERT, Soprano:
"Serenade Francaise" (Leoncavallo).
"Until."

10.44 p.m.—Sporting results.

10.56 p.m.—THE VAGABONDS:
"Baby Your Mother."
"Saxophone Waltz."
"Just a Little Cuter" (Alexander).
"Kiss Me, Curse You."
"Deep River Blues."
"Half a Moon" (Hanley).
"The Sunrise" (Santly).
"Hot 'n Heavy."
"Just another Day Wasted."
Selected.

11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

SATURDAY, 16th JUNE, 1928.

MORNING NEWS SESSION.

11 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

12 noon to 1.56 p.m.

Transmitted from Panatrophe House, 252 Collins Street (by exclusive permission of Wills and Paton, Ltd.), on the Brunswick Panatrophe.

MATINEE SESSION.

ORCHESTRAL DANCE CONCERT.

SPORT.—During the afternoon the results of the Caulfield Races, together with other information, will be broadcast immediately each race is run.

2 p.m.—Ayaz Dansonians.

A Half-Hour Dance Session by Melbourne's Favorite Dance Band. The latest popular hits, each one announced prior to its presentation.

2.30 p.m.—Melbourne Concert Orchestra:
Selection, "Gipsy Love" (Franz Lehar).

2.42 p.m.—Ronald Brearley, 'Cello and Bert Lack, Flute:
Duet, "Serenade" (Titl).

2.45 p.m.—Julia Russell, Soprano:
"Depuis le Jour" (Charpentier).
"Irish Folk Song" (Foote).

2.53 p.m.—Melbourne Concert Orchestra:
"The Eagle" (MacDowell).
"Moonshine" (MacDowell).

"Scandinavian Suite" (Juel-Frederiksen).

3.9 p.m.—Julia Russell, Soprano:
"Chant Inde" (Rimsky-Korsakov).
"I Will Await Thee" (R. Clarke).

3.16 p.m.—Melbourne Concert Orchestra:
"Introduction and Arie des Lenski," from
Eugen Onegin (Tschaiakowsky).
"Menuett" (Paderewski).

"Extase Melodieuse" (Littau).

3.30 p.m.—Announcements.

3.40 p.m.—Herbert Pettifer, Violin:
"Slumber Song" (Dolly Stewart).

3.44 p.m.—Melbourne Concert Orchestra:
Selection: "Puppets" (Ivor Novello).
"As once in Happier Days" (Popper).
"The Savoy English Medley" (Somers).

4 p.m.—G.P.O. Clock says, "Four."

4.1 p.m.—Second Weather Forecast.

4.3 p.m.—Alan Eddy, Bass Baritone:
"Sea Songs" (Paul-Corder).

4.11 p.m.—Melbourne Concert Orchestra:
"Pious Bach" (Urbach).
"Menuett" (Moart).

4.31 p.m.—Alan Eddy, Bass-Baritone:
"The Blind Ploughman" (Clarke).
"The Bandolero" (Stuart).

4.39 p.m.—Melbourne Concert Orchestra:
Suite, "From India" (Pozy).
"Violin Solo from Sylvia" (Delibes).

4.55 p.m.—To-night's Entertainment.
Announcements.

5 p.m.—G.P.O. Clock says "Five."

God Save the King.

CHILDREN'S SESSION.

6.30 p.m.—"Brer Rabbit's" Entertainment.

EVENING SESSION. DANCE CONCERT.

7.20 p.m.—Sport Session. "Harlequin" presents his budget of up-to-date news and comments on Sport of the Day.

7.45 p.m.—Everyman's Garden. Special week-end Talks by Mr. W. R. Warner, President of the Nurserymen's and Seedsmen's Association of Victoria.

8 p.m.—G.P.O. Clock says "Eight."

8.1 p.m.—Ayaz Dansonians.

8.16 p.m.—Tom Semple, Tenor:
"We'll know, we'll understand" (Henry).
"I'll Sing Thee Songs of Araby" (Clay).

8.24 p.m.—Ayaz Dansonians.

8.40 p.m.—The Sundowners Male Quartette:
"Nigger Moon" (Shelby).
"Silver Threads Among the Gold" (Anon).

8.47 p.m.—Don McCalman, Saxophone:
"Valse Erica" (Wiedoeft).

8.50 p.m.—Announcements.

9 p.m.—Ayaz Dansonians.

9.16 p.m.—Herbert Sanderson, Baritone:
"Mountain Lovers" (Squire).
"Out of the Mist" (Sanderson).

9.24 p.m.—Ayaz Dansonians.

9.43 p.m.—Robert Gillard, Bass:
"In Love with Love" (Lohr).
"Dr. McGinn" (Lohr).

9.50 p.m.—Announcements.

10 p.m.—G.P.O. Clock says "Ten."

10.1 p.m.—Semi-final Weather forecast, specially for our Country Listeners.

10.3 p.m.—Ayaz Dansonians.

10.19 p.m.—The Sundowners' Male Quartet:
"There's everything nice about you" (Wendling).

"So Blue" (Henderson).

10.26 p.m.—Ayaz Dansonians.

10.36 p.m.—Tom Semple, tenor, and Herbert Sanderson, baritone:
Duet, "The moon hath raised her lamp" (Benedict).

10.39 p.m.—Robert Allen, alto:
"Red Devon by the Sea" (Clarke).
"Vale of Dawn" (Wood).

10.45 p.m.—"Harlequin." Sport results.

10.52 p.m.—To-morrow's entertainment.

Announcements.

10.58 p.m.—Final weather forecast.

10.59 p.m.—Our Australian Good-night Quote is taken from the poem, "The Australian Bush," by Kenneth Mackay.

11 p.m.—G.P.O. clock says Eleven.

God Save the King.

4QG, BRISBANE

SATURDAY, 16th JUNE, 1928.

MORNING SESSION.

CHURCH SERVICE.

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

11 a.m.—From Buranda:
Church service.

12.30 p.m.—Close down.

NO MIDDAY TRANSMISSION.

AFTERNOON SESSION.

(Announcer: B. Wight.)

B.A.T.C. RACES.

The B.A.T.C. Race meeting will be relayed from Albion Park Course. Transmission will commence with the start of the first race.

From Albion Park:

B.A.T.C. Races.

5 p.m.—Close down.

EARLY EVENING SESSION.

Announcer: H. Humphreys.

6 p.m.—News bulletin for distant listeners supplied by courtesy of "The Queenslander."

6.30 p.m.—Bedtime stories by "Uncle Ben" and "Uncle Pete."

7.15 p.m.—Racing results.

7.20 p.m.—To-day's sporting news described.

7.30 p.m.—Sailing notes by Mr. Fred Smith.

NIGHT SESSION.

(Announcer: H. Humphreys.)

8 p.m.—From the Studio.

Hawaiian Instrumentalists in selected numbers.

The Kao Maole Duo.

8.4 p.m.—Contralto solos:

(a) "Less Than the Dust" (Woodforde-Finden).

(b) "Kashmiri Song" (Woodforde-Finden).
Miss Lorraine Lochner.

8.13 p.m.—"The Conquest of the Air"—Story No. 1, "Capt. W. J. Scott, the Man and His Work"—by "Propellor."

8.25 p.m.—The Hawaiian Instrumentalists:

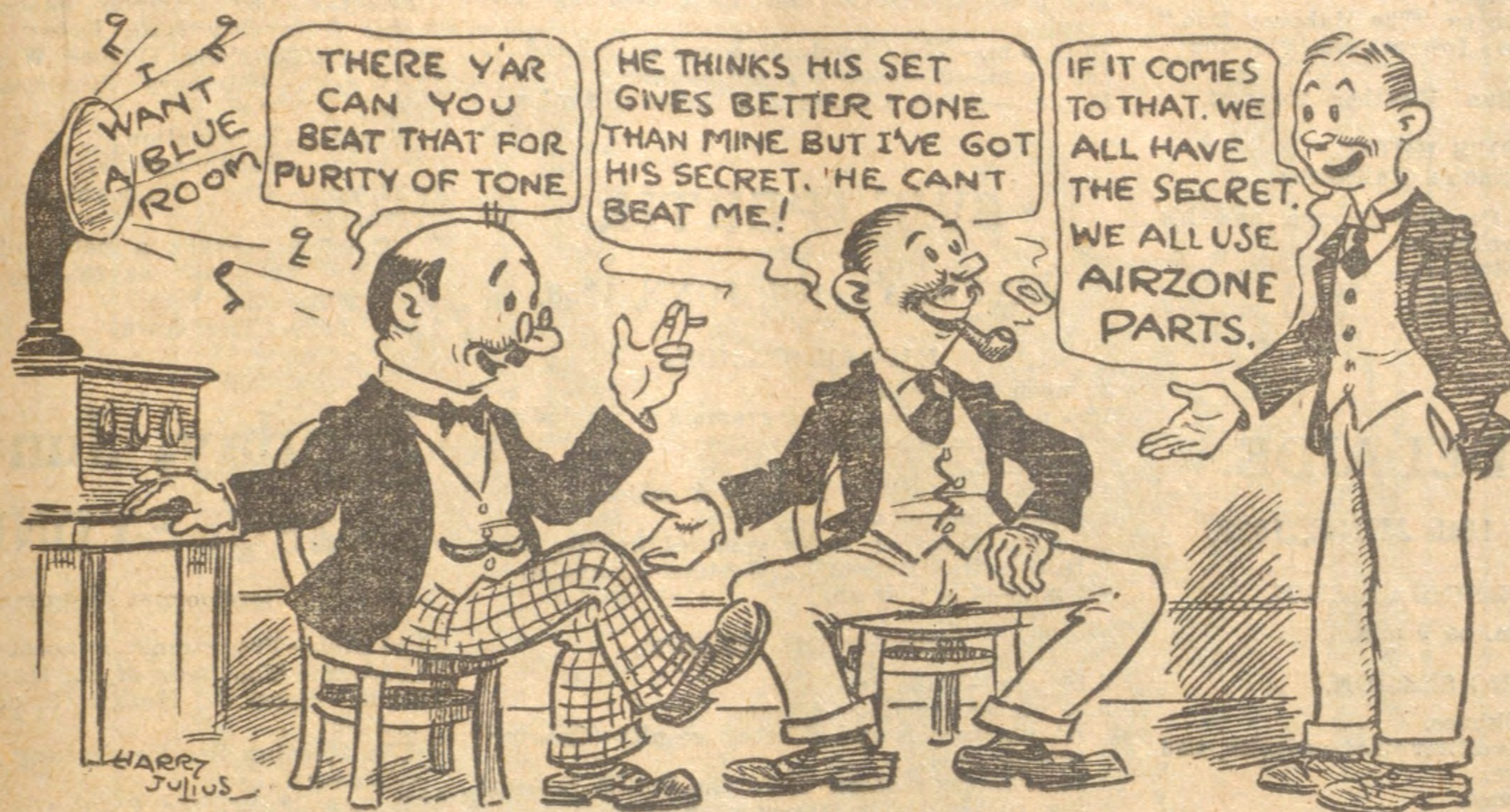
Kao Maole Duo.

3LO Melbourne

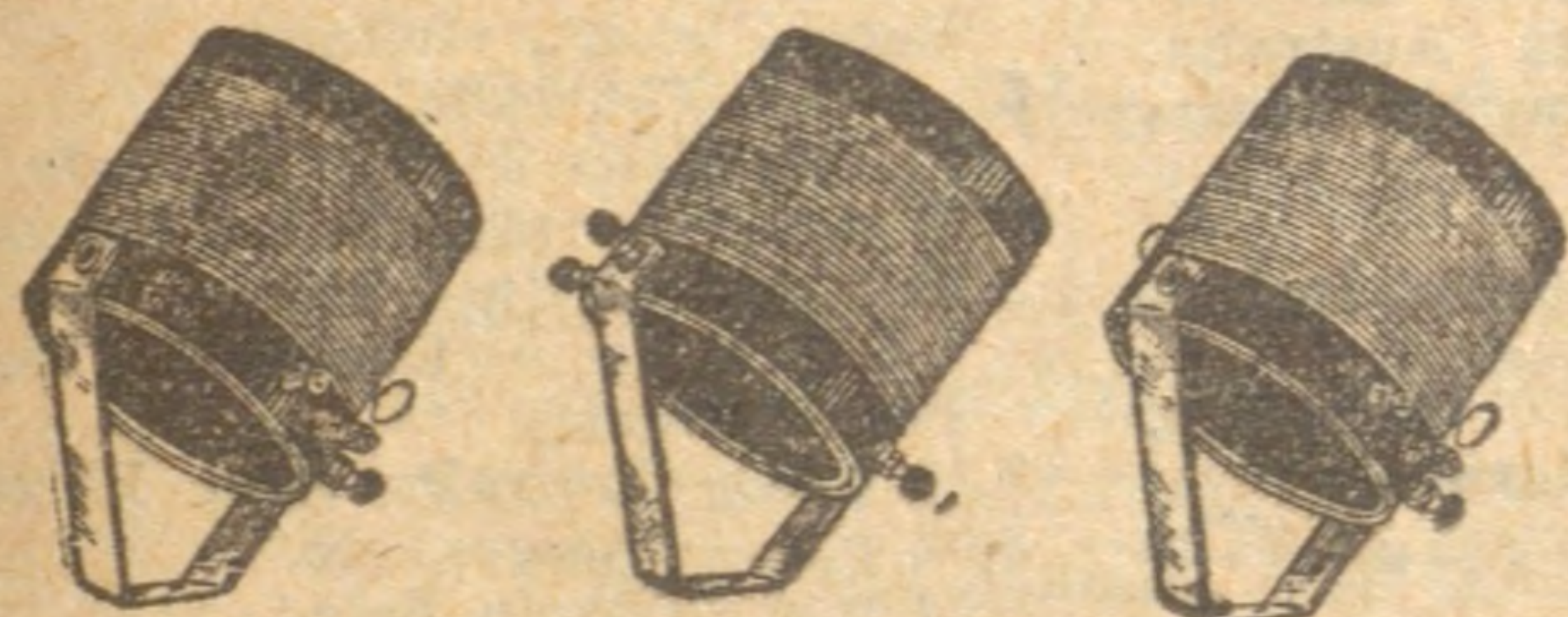
Owing to the balance of the copy for the above Station's programme being in advertent ly delayed we are reluctantly compelled to go to press without it.

The full programmes will appear next issue as usual.

Mr. LISTENER'S LITTLE SECRET!



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BRISBANE SKIFF CLUB.

The main speeches at the Brisbane Skiff Club's Annual Dinner will be relayed from the Country Press Cafe, Edward Street.
 8.30 p.m.—From the Country Press Cafe: Brisbane Skiff Club's Dinner.
 9 p.m.—From the Studio: Ten minutes of fun by "The Mahoney Duo."
 9.10 p.m.—Hawaiian Instrumentalists—the Kao Maole Duo.
 9.14 p.m.—Metropolitan Weather forecast.

LENNON'S HOTEL.

9.20 p.m.—From Lennon's Ballroom:
 Dance music by Douglas Drouyn and his Lennon's Hotel Orchestra.
 10 p.m.—From the Studio: "The Daily Mail" news.
 Weather news.
 Close down.

5CL, ADELAIDE.

SATURDAY, 16th JUNE, 1928.

EARLY MORNING SESSION.

7.45 a.m. to 9 a.m.

MORNING SESSION.

10.30 a.m.—G.P.O. Chimes.
 10.31 a.m.—"The Advertiser" news service, and International News.
 11 a.m.—G.P.O. Chimes.
 11.1 a.m.—Studio Music.
 11.30 a.m.—Close down.

MIDDAY SESSION.

1 p.m.—G.P.O. Chimes.
 1.1 p.m.—Studio Music, interspersed with Peterborough and interstate racing results.
 2 p.m.—Close down.

AFTERNOON SESSION.

3 p.m.—G.P.O. Chimes.
 3.1 p.m.—Studio Music, interspersed with local and interstate racing, and football results.
 5 p.m.—Close down.

EVENING SESSION.

6 p.m.—G.P.O. Chimes.
 6.1 p.m.—Sporting results.
 6.10 p.m.—Children's entertainment, birthday greetings and correspondence.
 6.20 p.m.—Children's songs, stories and music.
 6.40 p.m.—Dinner Music.
 7 p.m.—G.P.O. Chimes.
 7.1 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
 7.8 p.m.—Talk by Rev. G. E. Hale, B.A.: "Amateur Acting."
 7.23 p.m.—"Items of Interest" by C. G. Riley.
 7.38 p.m.—Resume of to-day's League Football results.
 7.45 p.m.—Summary of local and Interstate sporting results.
 8 p.m.—G.P.O. Chimes and Dance Night.
 8.1 p.m.—Windarra Male Quartette: "Down in the Depths."
 "The Pack."
 8.8 p.m.—Helen Magarey, violinist: "Pale Moon" (Logan).
 "Tambourin" (Kreisler).
 8.15 p.m.—Ken Hughes, tenor: "Parted."
 8.19 p.m.—Comedy by Don Parnell.
 8.24 p.m.—Blue Stomps Band in dance selections.
 8.30 p.m.—Eric Wickens, basso: "The Diver."
 8.34 p.m.—Helen Magarey, violinist: "Thais" (Massenet).
 8.38 p.m.—The Glenelg Maison Dance Band.
 8.52 p.m.—Ken Hughes, tenor: "Sprig of Boronia."
 8.55 p.m.—The Glenelg Maison Dance Band.
 9.1 p.m.—International News.
 9.6 p.m.—Windarra Male Quartette: "Mosquitoes."
 "Pussy's in the well."
 9.13 p.m.—Helen Magarey, violinist: "Schon Rosmarin."
 9.17 p.m.—The Glenelg Maison Dance Band.

9.27 p.m.—Eric Wickens, bass: "The Miner."
 9.31 p.m.—Don Parnell, comedian.
 9.35 p.m.—The Glenelg Maison Dance Band.
 9.45 p.m.—Madame Dorothy Back, in operatic selections.
 9.52 p.m.—The Glenelg Maison Dance Band.
 10.1 p.m.—Interstate and local sporting results.
 10.15 p.m.—The Glenelg Maison Dance Band.
 10.55 p.m.—To-morrow's programme.
 11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH.

SATURDAY, 16th JUNE, 1928.

MIDDAY SESSION.

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.—Markets News and cables.
 1 p.m.—Time signal.
 1.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
 1.2 p.m.—Close down.

AFTERNOON SESSION.

3.15 p.m.—Tune in.
 3.20 p.m.—Sporting Session.
 Racing results and Football results (Quarter time scores).
 Musical programme from the Studio including vocal and instrumental numbers.
 5.30 p.m.—Close down.

EVENING SESSION.

6.45 p.m.—Tune in.
 The evening transmission is broadcast on 104.5 metres as well as the usual wavelength.
 6.50 p.m.—Stories for the Kiddies by Uncle Henry Percy and Duffy.
 7.20 p.m.—Markets, News, and Cables, Sports results.
 7.45 p.m.—Talk.
 8 p.m.—Time signal.
 8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia. Station announcements such as alterations to programmes, etc.
 8.3 p.m.—Music and song.
 Musical programme from the studio, including vocal and instrumental artists.
 Dance music by Colin Smith's Orchestra, relayed from the Perth Palais Royal.
 10 p.m.—Late News items by courtesy of "The Daily News" Newspaper Co.
 Ships within range announcement.
 Weather report and forecast.
 Sports results.
 10.30 p.m.—Close down.

104.5 METRE TRANSMISSION.

Simultaneous broadcast on 104.5 metres of Programme given on 1250 metres, commencing at 6.45 p.m.

7ZL, HOBART

SATURDAY, 16th JUNE, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

MATINEE SESSION.

2.45 p.m.—Broadcast from York Park description of Football: Launceston (North) v. Hobart (South).

EARLY EVENING SESSION.

6.30 p.m.—Uncle David's Half-hour.
 7 p.m.—Uncle Hector's Corner.

NIGHT SESSION.

7.30 p.m.—Musical selections.
 7.35 p.m.—"Mercury" special Tasmanian news service.
 Weather forecasts.
 Hobart Stock Exchange Quotations.
 Sporting results.

8 p.m.—G.P.O. Clock Chimes the Hour.
 During the intervals of this Session Mr. Harry Crome, basso cantante, will sing: "I Passed by Your Window" (Brahe).
 "Until" (Sanderson).
 "An Old-Fashioned Town" (Brahe).
 "I Heard You Pass By" (Hall).
 Selections by Pavilion Dance Band broadcast from City Hall, Hobart.
 10.20 p.m.—British Official Wireless News.
 10.25 p.m.—"Mercury" Interstate news service.
 Weather information.
 Station announcements.
 10.30 p.m.—Our Tasmanian Good-night Thought:
 "There is always a patch of blue in the darkest sky—look at that—it will grow."
 10.31 p.m.—The King.
 10.32 p.m.—Close down.

Sunday, June 17
2FC, SYDNEY

MORNING SESSION.

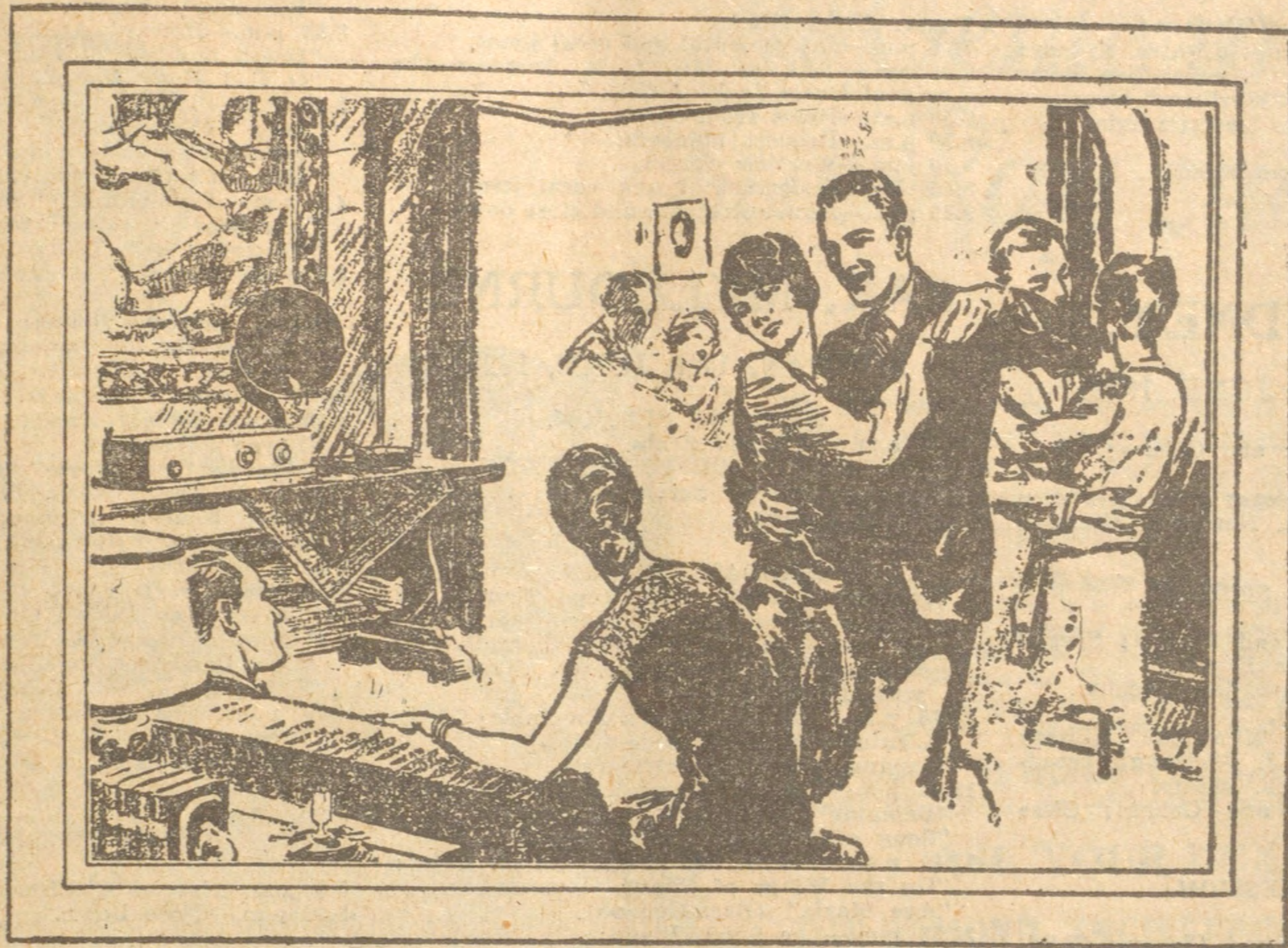
10.50 a.m.—Programme announcements.
 10.55 a.m.—The Bells of St. Mark's.
 11 a.m.—From St. Mark's (C. of E.), Darling Point.
 The Morning Service conducted by Canon E. Howard Lea.
 12.5 p.m.—From the Studio:
 Musical items and news service.
 12.30 p.m.—Close.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.
 3.2 p.m.—From the Lyceum Hall, Pitt-street, Sydney:
 Pleasant Sunday Afternoon Service.
 Speaker: Miss Maude Royden (London).
 Artists:—
 Dorothy Ewbank, soprano.
 Eileen Judkins, contralto.
 Leo Lewin, tenor.
 Rene Birkett, violinist.
 3.5 p.m.—Tenor Solo:
 "How Many Hired Servants," Leo Lewin.
 3.12 p.m.—Sourano Solo: Dorothy Ewbank.
 3.19 p.m.—Violin Solo, "Andante" in F Sharp from Concerto (Vieuxtemps).
 Rene Birkett.
 3.26 p.m.—Contralto Solo, Eileen Judkins.
 3.32 p.m.—Notices, etc.
 3.34 p.m.—Organ Solo:
 "Cradle Song" (Salmon).
 Constance Bardsley.
 3.40 p.m.—Address: Miss Maude Royden.
 Thanks to Speaker.
 4.30 p.m.—From the Studio: Mr. and Mrs. F. H. Faulkner (Blind artists).
 (a) Organ Selection from 1st Service (Haydn).
 Mr. F. H. Faulkner.
 (b) Contralto Solos:
 1. "Ora Pro Nobis" (Piccolomini).
 2. "Nearer My God to Thee" (Carey).
 Mrs. F. H. Faulkner.
 4.45 p.m.—Close down.

EVENING SESSION.

6 p.m.—"Big Ben" and programme announcements.
 6.2 p.m.—Iris de Cairos Rego, Pianforte Solos.
 6.15 p.m.—Dulcie Cherry, soprano.
 6.22 p.m.—C. N. Baeyertz: A Talk on the Poetry of Shakespeare's Blank Verse.
 6.37 p.m.—Iris de Cairos Rego, Pianforte Solos.
 6.47 p.m.—Dulcie Cherry, soprano.
 6.55 p.m.—From the Lyceum Hall, Pitt-street, Sydney:
 The Evening Service of the Central Methodist Mission.
 8.30 p.m.—From the Capitol Theatre, Sydney:
 An Organ Recital by Fred Scholl.
 8.50 p.m.—From the Studio:
 The Operatic Trio:
 Molly de Gunst, Soprano.
 Charles Stephens, tenor.
 Norman Janson, Baritone.
 Excerpts from "Il Trovatore" (Verdi).



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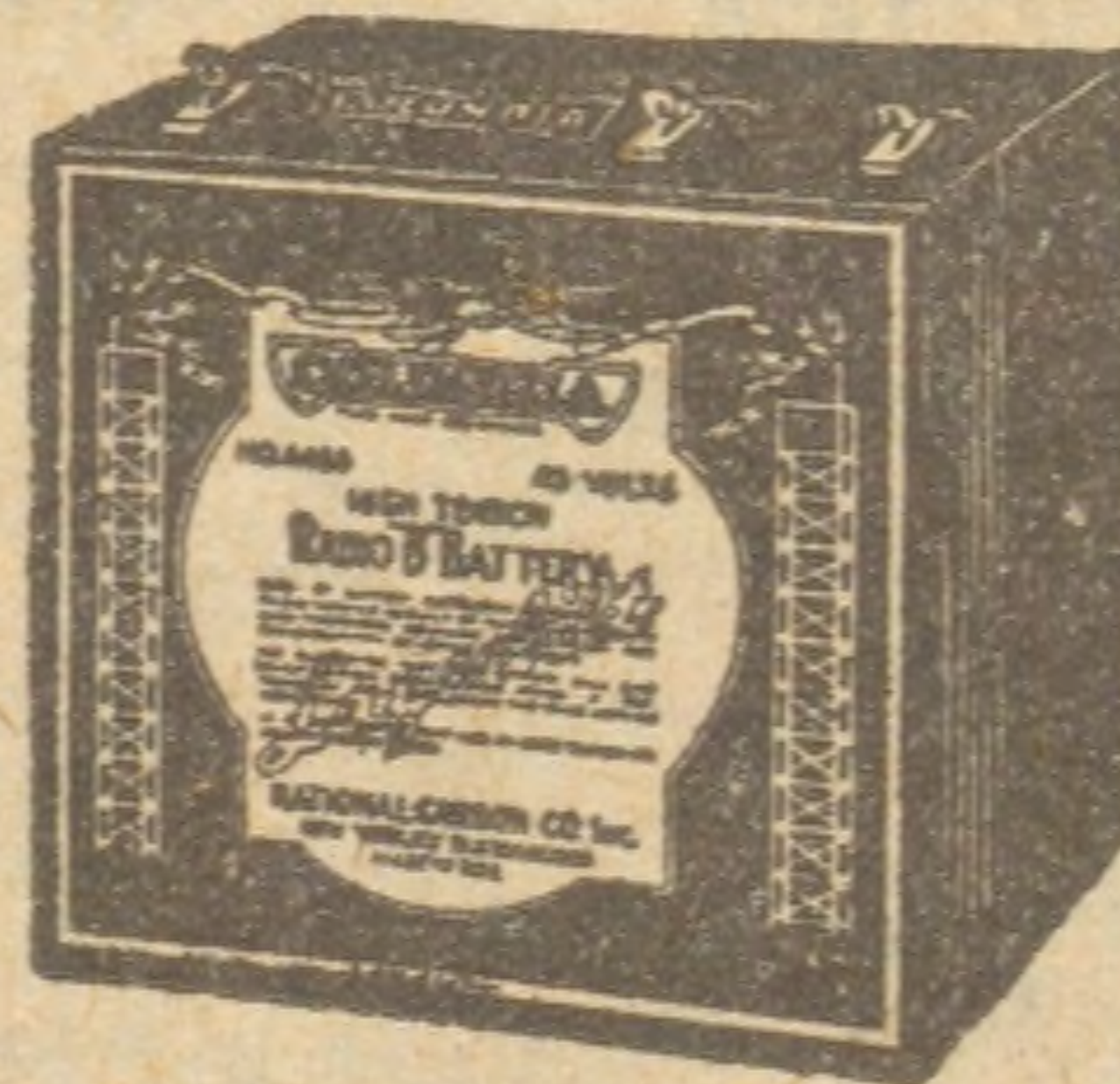
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9 p.m.—From the Capitol: Items on the "Wurlitzer" Organ by Fred. Scholl.
 9.20 p.m.—From the Studio:
 The Operatic Trio: Excerpts from "Il Trovatore" (Verdi).
 9.32 p.m.—Lionel Lawson, Violinist.
 9.40 p.m.—From the Capitol Theatre, Sydney: Fred Scholl will give the concluding items of his Recital on the "Wurlitzer" Organ.
 10 p.m.—"Big Ben." The Operatic Trio: English Numbers.
 10.12 p.m.—Lionel Lawson, violinist.
 10.20 p.m.—National Anthem.
 Close down.

2BL, SYDNEY.

SUNDAY, 17th JUNE, 1928.

10.45 a.m.—G.P.O. Clock and Chimes; "Sun" News Service.
 11.0 a.m.—Service broadcast from Newtown Congregational Church, Newtown. Minister, Rev. Mearns Massie.

AFTERNOON SESSION.

2.0 p.m.—G.P.O. Clock and Chimes; Special Session for Children in Hospital.
 2.15 p.m.—H.M.V. Gramophone Recital.
 2.30 p.m.—Organ Recital.
 3.30 p.m.—The Manly Municipal Military Band (conductor, Mr. J. Pheloung), broadcast from Ocean Beach, Manly.
 5.0 p.m.—G.P.O. Clock and Chimes; Close Down.

EVENING SESSION.

5.45 p.m.—G.P.O. Clock and Chimes; Children's Session.
 6.30 p.m.—Service Broadcast from Newtown Congregational Church.
 8.30 p.m.—The Manly Municipal Military Band, broadcast from the Olympia Theatre, Manly.
 9.30 p.m.—From the Studio: Mr. Cyril James (Baritone).
 9.37 p.m.—The British Music Society String Quartette.
 9.44 p.m.—Miss Bertha Waters (Soprano).
 9.51 p.m.—The British Music Society String Quartette.
 9.58 p.m.—Mr. Cyril James.
 10.3 p.m.—Resume of Following Day's Programme; Weather Report and Forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.
 10.7 p.m.—Miss Bertha Waters.
 10.14 p.m.—National Anthem.

2GB, SYDNEY

SUNDAY, 17th JUNE, 1928.

MORNING SESSION.

10 a.m.—Morning Service from St. Alban's Liberal Catholic Church.
 12 noon.—Close down.

EVENING SESSION.

4.30 p.m.—Service by Mr. H. Bradley.
 5.30 p.m.—Children's Session by Uncle George.
 7 p.m.—Lecture from Adyar Hall.
 8.15 p.m.—Sacred Concert arranged by Straube Piano Co.
 10 p.m.—Close down.

2UW, SYDNEY

SUNDAY, 17th JUNE, 1928.

MORNING SESSION.

10.30 a.m.—Studio items.
 10.45 a.m.—Special H.M.V. Recital by courtesy of the Gramophone Co., 163 Pitt St. Sydney.

11.30 a.m.—Vocal and instrumental selections.
 12 noon.—Request numbers.
 12.30 p.m.—Announcements and close down.

EVENING SESSION.

7 p.m.—Studio items.
 7.10 p.m.—Instrumental and vocal items.
 7.30 p.m.—Talk by Mr. J. M. Prentice—the original Uncle Jack of 2BL.
 7.50 p.m.—Items from studio.
 8.10 p.m.—Request numbers.
 8.50 p.m.—Weather forecast.
 8.55 p.m.—Instrumental and vocal items.
 9.30 p.m.—Announcements and close down.

3AR, MELBOURNE

SUNDAY, 17th JUNE, 1928.

MORNING SESSION.

10.45 a.m.—Announcements.
MORNING CHURCH SESSION.
 11.0 a.m.—Morning Service, from the Independent Church.

MIDDAY SESSION.

Transmitted from Panatrophe House, 252 Collins Street (by exclusive permission of Wills and Paton, Ltd.), the following luncheon-hour programme on the Brunswick Panatrophe:—
 12.15 p.m.—Jacques Jacob's Ensemble:
 "L'Estudiantina" (Waldteufel).
 "Espana Waltz" (Waldteufel).
 12.23 p.m.—Capiton Zaporozetz, Bass:
 "Drinking" (Traditional).
 "Song of the Flea" (Moussorgsky).
 12.31 p.m.—The J. H. Squire Celeste Octet:
 "On the Wings of Song" (Mendelssohn).
 "Ave Maria" (Bach-Gounod).
 12.39 p.m.—Lee Sims, Piano:
 "Meditation" (Sims).
 "Some of These Days" (Brooks).
 12.45 p.m.—Vernon Dalhart and Carson Robinson:
 "When the Moon Shines Upon the Mountain" (Austin).
 "Sing on, Brother, Sing" (Robinson).
 12.51 p.m.—The A. and P. Gypsies:
 "Dub Inuschika" (Hoflick).
 (a) "Old Forgotten Waltz."
 (b) "Bouran" (Uglitzki).
 12.57 p.m.—La Scala Chorus of Milan:
 "Festa E Pane," from La Gioconda (Ponchielli).
 "Humming Chorus," from "Madame Butterfly" (Puccini).
 1.3 p.m.—Rudy Wiedoeft, Saxophone:
 "Sax-O-Trix" (Wiedoeft).
 "In the Orient" (Wiedoeft).
 1.9 p.m.—Giacomo Lauri-Volpi, Tenor:
 "Quando nascestiu" from "Schiavo" (Gomez).
 "Racconto di Rodolfo," from "La Boheme" (Puccini).
 1.17 p.m.—Castlewood Marimba Band:
 "Path of Love" (Monteros).
 "The Enchanted Garden" (Clara).
 1.23 p.m.—Lew White, Organ:
 "Charmaine."
 "Doll Dance."
 1.29 p.m.—Allen McQuhae, Tenor:
 "Adelai" (Calleja).
 "After Long Absence" (Sanderson).
 1.35 p.m.—Raymond Band. (Accompanied by Q. M. MacLean, Compton Organ):
 "Diane" (Erno Rapee).
 1.38 p.m.—W. H. Squire, Cello:
 "Le Cygne" (Saint-Saens).
 "Berceuse de Jocelyn" (Godard).
 1.46 p.m.—Lois Katzman's Orchestra:
 "Kashmiri Song" (Cinden).
 "Allah's Holiday" (Friml).
 1.54 p.m.—Regimental Band of His Majesty's Grenadier Guards:
 March, "El Abanico"
 March, "Second to None."
 2.0 p.m.—Close Down.

AFTERNOON SESSION.

CHAMBER MUSIC CONCERT.

3.0 p.m.—The Melbourne Piano Quartette:
 "Quartette" (Schumann).
 3.15 p.m.—Julia Russell, Soprano:
 "Vissi D'Arte, Vissi D'Amore" (Puccini).
 "Trees" (Rasbach).
 "Thy Beaming Eyes" (McDowell).

3.23 p.m.—The Victoria Trio:
 "Menuetto from Trio Op. 33" (Beethoven).
 "Hungarian Dance No. 2" (Brahms).
 3.30 p.m.—Herbert Pettifer, Violin:
 "Allegretto" from F Major Sonata (Grieg).
 "Bizzarrie" (Elgar).
 3.38 p.m.—Howard Andrews, Baritone:
 "Death and the Maiden" (Schubert).
 "O God Have Mercy" (Mendelssohn).
 3.46 p.m.—The Melbourne Piano Quartette:
 "Song" (MacDowell).
 "Serenade" (Josef Haydn, Op. 3, No. 5).
 "Menuett" (Boccherini).
 4.2 p.m.—Julia Russell, Soprano:
 "Ave Maria" (Mascheroni).
 "Yesterday and To-day" (Spross).
 4.9 p.m.—Herbert Pettifer and William Whittingham:
 Duets for two violins:
 "Souvenir de Campagne" (Godard).
 "Minuet" (Godard).
 "Abandon" (Godard).
 4.19 p.m.—Ronald Brearley, Cello:
 "Largo" (Hardel).
 "Lied Ohne Worte" (Mendelssohn).
 4.26 p.m.—The Victoria Trio:
 "Salve Dimora" (Gounod).
 "Ave Maria" (Schubert).
 4.34 p.m.—Ethel Brearley, Piano:
 "Prelude in D Flat" (Chopin).
 "La dans de Puck" (Debussy).
 4.41 p.m.—Howard Andrews, Baritone:
 "Like Death's Grim Shadow" (Wagner).
 "I Murmur Not" (Schumann).
 4.49 p.m.—The Melbourne Piano Quartette:
 "Romance, Op. 50" (Beethoven).
 "Aria from Suite in D" (Bach).

CHILDREN'S SESSION.

5.0 p.m.—Special Children's Session.
 5.30 p.m.—Close Down.

EVENING SESSION.

THE FIRST OF A SERIES OF ORCHESTRAL CONCERTS.

7.0 p.m.—Melbourne Concert Orchestra:
 Overture, "William Tell" (Rossini).
 7.12 p.m.—Valerie Walsh, Contralto:
 "Down by the Sally Gardens" (Arr. Hughes).
 "Verdi Prati" (Handel).
 7.20 p.m.—Melbourne Concert Orchestra:
 Suite, "Petite Suite Moderne" (Fred Rosse).
 Suite, "Tales by Moonlight" (Vincent Thomas).
 7.38 p.m.—James Scott, Bass Baritone:
 "Within These Holy Portals" (Mozart).
 "Requiem" (Sydney Homer).
 7.46 p.m.—Herbert Pettifer, Violin:
 "Orientale" (Cui).
 "Andalouse" (Manen).
 7.51 p.m.—Melbourne Concert Orchestra:
 Suite, "The Merchant of Venice" (Fredk. Rosse).
 8.11 p.m.—Miss Valerie Walsh, Contralto:
 "The Organ Man" (Schubert).
 "A Little Coon's Prayer" (Neville-Hope).
 7.19 p.m.—Melbourne Concert Orchestra:
 "Four Selected Pieces" (Friml).
 "Venetian Serenade" (Luzzatti).
 8.34 p.m.—Announcements.
 8.44 p.m.—Freda Treweek, Mezzo Soprano, and James Scott, Bass Baritone (assisted by the Melbourne Concert Orchestra).
 Song Cycle, "On Jehlum River" (Amy Woodforde-Finden).
 8.58 p.m.—Melbourne Concert Orchestra:
 Selection from "Carmen" (Ar. Theo. M. Tobani).
 9.15 p.m.—Freda Treweek, Mezzo Soprano:
 "Song of Thanksgiving" (Allitsen).
 "Two Brown Eyes" (Grieg).
 9.22 p.m.—Melbourne Concert Orchestra:
 "Looking Backward" (Hermann Finck).
 9.40 p.m.—James Scott, Bass Baritone:
 "Inter Nos" (MacFayden).
 9.43 p.m.—Freda Treweek, Mezzo Soprano:
 "By the Waters of Babylon" (Dvorak).
 9.47 p.m.—Melbourne Concert Orchestra:
 "Berceuse Slave" (Neruda).
 9.52 p.m.—"Age" News Bulletin; exclusive to 3AR.
 9.58 p.m.—Weather Forecast.
 9.59 p.m.—Our Australian Good-Night Quote is taken from the poem, "When Wattle Bloom," by M. J. Tully.
 10.0 p.m.—God Save the King.

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4QG, BRISBANE.

SUNDAY, 17th JUNE, 1928.

EARLY MORNING SESSION.

ST. BARNABAS' CHURCH, ITHACA.

The Early Morning Service will be relayed from St. Barnabas' Church, Waterworks Road, Ithaca.

FORTIETH ANNIVERSARY SERVICES.

7.30 a.m.—The Holy Eucharist from the Book of Common Prayer. The Archbishop of Brisbane, Dr. Sharp, Celebrant. Epistle, Act, Chapt. II, from verse 22; Holy Gospel, St. John, Chapt. 15, verses 12 to 16; hymns, offertory, 192, "O Love Who Formedst Me to Wear," Communion No. 316, "Alleluia Sing to Jesus," ablutions No. 445, "Palms of Glory, Raiment Bright."

MORNING SESSION.

11 a.m.—The complete Morning Service will be relayed from St. Barnabas' Church: The Holy Eucharist, Introit 299, "Come Let us Join Our Cheerful Songs"; Epistle and Holy Gospel as above; hymns—after Epistle, (412) "Brightly Did the Light Divine," offertory (583) "The Call to Arms is Sounding," Communion (312) "Thee We Adore, O Hidden Saviour, Thee," ablutions (522) "O For a Thousand Tongues to Sing," Preacher, the Archbishop of Brisbane, Dr. Sharp.

AFTERNOON SESSION.

THE FEDERAL BAND.

The Concert by the Brisbane Federal Band (conductor, Mr. W. H. Davies) will be relayed from the Botanic Gardens.

3.15 p.m.—FROM THE BOTANIC GARDENS: Band Concert.

4.30 p.m.—Close down.

NIGHT SESSION.

ST. BARNABAS' CHURCH, ITHACA.

The complete Evening Service will be relayed from St. Barnabas' Church of England, Ithaca.

7 p.m.—Children's Session: Hymns—"Firmly I Believe and Truly," No. 242 "We Love the Place O God," No. 565 "Up in Heaven." Lesson, St. Luke, Chapt. 2, from verse 41.
7.30 p.m.—Evening service from Book of Common Prayer:—Psalm 132; lessons 1, "Chronicles, Chapt. 29 to verse 22; St. John, Chapt. 2, from verse 13. Hymns—161, "Bright the Vision that Delighted"; 242, "We Love the Place, O God"; 432, "Captains of the Sainly Band"; 215, "The Church's One Foundation." Sermon by Rev. Canon Garland. Hymns (Ancient and Modern) at all services.

BAND CONCERT.

At the conclusion of the Church Service the Concert by the Brisbane Municipal Concert Band (conductor, Mr. E. Jackson) will be relayed from Wickham Park.

FROM WICKHAM PARK:

Band Concert.

9.30 p.m.—Close down.

6WF, PERTH.

SUNDAY, 17th JUNE, 1928.

MORNING SESSION.

10.45 a.m.—Tune in.

11 a.m.—Morning church service relayed from Presbyterian Church, St. George's Terrace, Perth. Preacher, Rev. Geo. Tulloch.

12.15 p.m.—Close down.

AFTERNOON SESSION.

3.30 p.m.—Tune in.

3.35 p.m.—From the Studio.

Musical programme, including vocal and instrumental artists.

4.30 p.m.—Close down.

EVENING SESSION.

7 p.m.—Tune in.

The evening transmission is broadcast on 104.5 metres as well as the usual wavelength.

7.5 p.m.—Children's bedtime stories by Mr. Robert Edmondson.

7.30 p.m.—Evening service relayed from Museum Street Baptist Church, Perth.

8.45 p.m.—A Relay.

After-church service and concert by the Perth City Band, conducted by Mr. L. M. Price, relayed from Queen's Hall, Perth.

10.5 p.m.—Close down.

104.5 METRE TRANSMISSION.

Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 7 p.m.

7ZL, HOBART

SUNDAY, 17th JUNE, 1928.

MORNING SESSION.

11 a.m.—Church Service from Methodist Church, Melville Street, Hobart.
Close down.

AFTERNOON SESSION.

3.30 p.m.—Clock Chimes.

3.31 p.m.—"Beethoven's Quartette in F Major in Six Movements."

Titta Ruffo, baritone:

"But the Lord is Mindful."

"One Sweetly Solemn thought."

"Beethoven's Quartet in C Minor in Six Movements."

4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Children's Corner with Uncle Mac, late of 3AR Melbourne.

Biblical Stories and Sacred Music for all Uncle Mac's Nephews and Nieces.

NIGHT SESSION.

7 p.m.—Church Service from Chalmers Presbyterian Church, Hobart.

8.25 p.m.—"Beethoven's Sonata in A Major, Op. 47."

Uncle Mac, late of 3AR Melbourne, will give the "Death Scene of Little Nell" (Dickens).

"Kreutzer Sonata for Violin and Piano."

9.45 p.m.—"Mercury" special Interstate news service.

9 p.m.—Weather Reports.

Our Tasmanian Good-night thought:

"To serve men is to serve God."

The King.

Close down.

Monday June 18**2FC, SYDNEY**

EARLY MORNING SESSION.

7 a.m.—"Big Ben" and announcements.

7.5 a.m.—Studio Music.

7.20 a.m.—Country Session: Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.

7.25 a.m.—Investment market, mining share market, metal quotations.

7.35 a.m.—Wool sales, breadstuffs markets, Interstate markets, produce markets.

7.50 a.m.—Studio Music.

8 a.m.—"Big Ben." Close down.

MORNING SESSION.

10 a.m.—"Big Ben" and announcements.

10.15 a.m.—"Sydney Morning Herald" news service.

10.30 a.m.—Studio Music.

10.35 a.m.—Last minute racing information by the 2FC Commissioner.

10.45 a.m.—Studio Music.

11 a.m.—"Big Ben." Studio Music.

11.5 a.m.—A.P.A. and Reuter's Cable Services.

11.15 a.m.—A Talk on Home Cooking and Recipes by Miss Ruth Furst.

11.30 a.m.—Close down.

MIDDAY SESSION.

12 noon.—"Big Ben" and announcements.

12.2 p.m.—Stock Exchange, first call.

12.3 p.m.—Weather forecast, rainfall.

12.5 p.m.—Studio Music.

12.10 p.m.—Summary of "Sydney Morning Herald" news service.

12.15 p.m.—Rugby Wireless News.

12.20 p.m.—Studio Music. Dance Records.

1 p.m.—"Big Ben." Weather intelligence.

1.3 p.m.—"Evening News" midday news service.

Producers' Distributing Society's Report.

1.20 p.m.—Studio Music.

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

1.30 p.m.—Dorothy Rose, soprano.

1.34 p.m.—Studio Music.

1.55 p.m.—Dorothy Rose, soprano.

2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and programme announcements.

3.5 p.m.—A recital of "H.M.V." records.

3.30 p.m.—Daisy Tollis, soprano:

"Forest Echoes" (Montague Phillips).

3.34 p.m.—Pianoforte solos by a pupil of St. Quintin Downer.

3.45 p.m.—Eileen Moreau, soprano.

3.50 p.m.—John Adams, tenor.

3.55 p.m.—Harry Myers, mouth organ player: "Under the Double Eagle" (Wagner).

4 p.m.—"Big Ben."

Noel Allen, baritone (by permission of J. C. Williamson).

4.5 p.m.—Daisy Tollis, soprano:

"Little Lady of the Moon" (Eric Coates).

4.10 p.m.—Pianoforte solos by a pupil of St. Quintin Downer.

4.20 p.m.—John Adams, tenor.

4.25 p.m.—Harry Myers, mouth organ player: Selection of waltzes.

4.30 p.m.—Eileen Moreau, soprano.

4.34 p.m.—Noel Allen, baritone (by permission of J. C. Williamson, Ltd.).

4.42 p.m.—Studio music.

4.45 p.m.—Stock Exchange, third call.

4.47 p.m.—Studio Music: "H.M.V." Records.

5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

5.40 p.m.—The chimes of 2FC.

5.45 p.m.—The "Hello Man" talks to the children.

6.25 p.m.—Children's Music.

6.30 p.m.—Late sporting news.

6.35 p.m.—Dalgety's market reports (wool, wheat and stock).

6.43 p.m.—Fruit and vegetable markets.

6.45 p.m.—Stock Exchange information.

6.48 p.m.—Weather and shipping news.

6.50 p.m.—"Tittle Tattle" talk by "Tessa."

7 p.m.—"Big Ben."

Dinner music by the Hotel Australia Orchestra.

7.15 p.m.—From the Studio:

Musical items.

7.30 p.m.—"Evening News" late news service.

DANCE NIGHT.

7.40 p.m.—Programme announcements.

7.45 p.m.—From the Studio: Choral Programme by the Royal Sydney Apollo Club. Conductor, Mr. Arnold Mote.

(a) Choral, "The Bugle Song" (Buck).

(b) Choral, "Spin Spin" (Jugust).

Piano Solo, Mr. E. Arnold Mote.

Choral:

(a) "Honey Mine" (Lemmel).

(b) "Rita" (Underhill).

(c) "Laughing" (Abt).

Piano Solo, Mr. E. Arnold Mote.

Choral:

(a) "Lullaby" (Brahms).

(b) "In Absence" (Buck).

(c) "Chinese March" (Otto).



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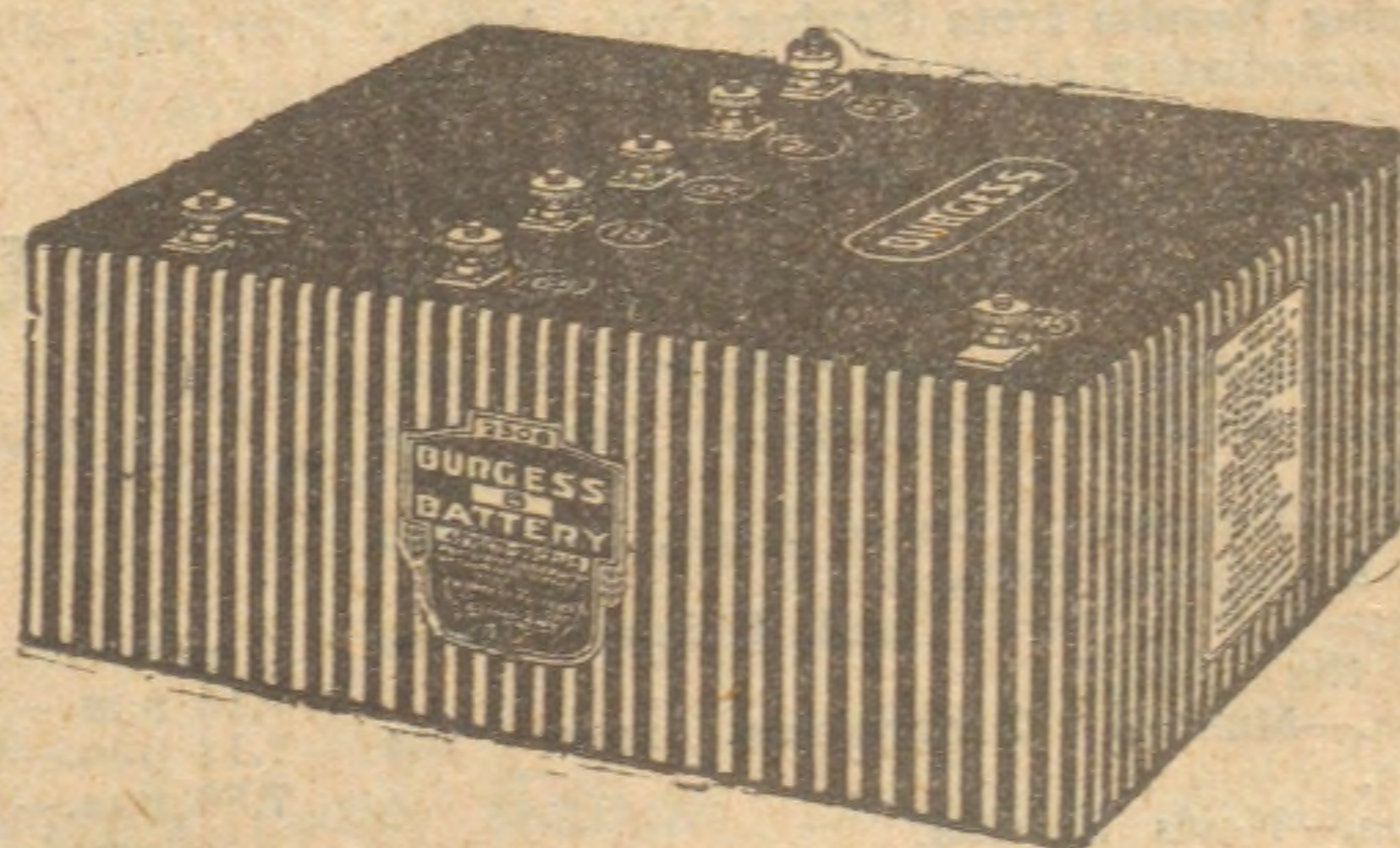
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BURGESS

CHROME-BUILT RADIO

BATTERIES

8.30 p.m.—From the Studio: Graham Kent, Bridge Talk.
 8.45 p.m.—Clifford Lathlean, Basso.
 8.53 p.m.—From the Sydney Town Hall: Descriptions of the Annual Artists' Ball.
 9.0 p.m.—"Big Ben." Late weather forecast, Clifford Lathlean, Basso.
 9.10 p.m.—From the Sydney Town Hall: Dance Music. Supplied by Cee, Morrison and his ten Synchoradios.
 9.18 p.m.—From the Studio: Charles O'Mara, Entertainer.
 9.26 p.m.—Dance Music from the Sydney Town Hall.
 9.36 p.m.—From the Studio: Len Maurice, Popular Choruses.
 9.44 p.m.—Dance Music from the Sydney Town Hall.
 9.55 p.m.—From the Studio: Charles O'Mara, Irish Entertainer.
 10.5 p.m.—Dance Music from the Sydney Town Hall.
 10.15 p.m.—From the Studio: Len Maurice, Popular Choruses.
 10.23 p.m.—Dance Music from the Sydney Town Hall.
 10.30 p.m.—Late Weather Forecast.
 10.31 p.m.—Dance Music from the Sydney Town Hall.
 10.57 p.m.—From the Studio. Late News and to-morrow's programme. Description of the Artists' Ball at intervals.
 11.0 p.m.—"Big Ben." Dance Music until 11.45 p.m.
 11.45 p.m.—"Big Ben." National Anthem. Close Down.

2BL, SYDNEY

MONDAY, 18th JUNE, 1928.

EARLY MORNING SESSION.

8.0 a.m. to 9.0 a.m.

MORNING SESSION.

10.30 a.m.—G.P.O. Clock and Chimes; Musical Programme from Studio.
 11.0 a.m.—G.P.O. Clock and Chimes; Talk on "Tennis," by Miss G. Varley, Broadcasters' Women's Sports Authority. Talk on "Menus," by Mrs. Jordan.
 12.0 noon.—G.P.O. Clock and Chimes; Special Ocean Forecast and Weather Report.
 12.3 p.m.—Musical Programme from the Studio.
 12.12 p.m.—Information; Mails, Shipping and Port Directory.
 12.16 p.m.—Boats in Call by Wireless.
 12.18 p.m.—Fruit Market Report.
 12.20 p.m.—Vegetable Market Report.
 12.22 p.m.—Dairy Farm and Produce Market Report.
 12.26 p.m.—Fish Market Report.
 12.28 p.m.—Rabbit Market Report.
 12.30 p.m.—H.M.V. Gramophone Recital.
 1.30 p.m.—G.P.O. Clock and Chimes. Talk to Children and Special Entertainment for Children in Hospital.
 2.0 p.m.—G.P.O. Clock and Chimes; Close Down.

AFTERNOON SESSION.

Racing Results from Epping Trots, broadcast immediately after each race by courtesy of the "Sun."
 3.0 p.m.—G.P.O. Clock and Chimes; News from the "Sun."
 3.10 p.m.—Musical Programme from the Studio.
 3.20 p.m.—News from the "Sun."
 3.30 p.m.—Musical Programme from the Studio.
 3.40 p.m.—Dungowan Dance Band, broadcast from Dungowan Cabaret.
 4.0 p.m.—G.P.O. Clock and Chimes; News from the "Sun."
 4.8 p.m.—Musical Programme from the Studio.
 4.15 p.m.—News Session.
 4.10 p.m.—Dungowan Dance Band.
 4.50 p.m.—News from the "Sun."

4.57 p.m.—Features of Evening's Programme.
 4.59 p.m.—Racing Resume.
 5.0 p.m.—G.P.O. Clock and Chimes; Close Down.

EARLY EVENING SESSION.

5.45 p.m.—G.P.O. Clock and Chimes; Children's Session.
 6.30 p.m.—Gulliksen Dinner Music.

SPECIAL COUNTRY SESSION.

7.0 p.m.—G.P.O. Clock and Chimes; Racing Resume; 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; Stock Exchange Report; Grain and Fodder Report ("Sun"); Dairy Produce Report ("Sun").
 7.15 p.m.—Country News from the "Sun."
 7.30 p.m.—News from the "Sun."

EVENING SESSION.

8.0 p.m.—G.P.O. Clock and Chimes.
 8.1 p.m.—Miss Dorrie Ward (Soprano).
 8.8 p.m.—The Wurlitzer Organ, broadcast from the Arcadia Theatre, Chatswood. Organist, Mr. N. Robins.
 8.20 p.m.—Mr. W. E. Lewis (Baritone).
 8.27 p.m.—The Mosman Municipal Band.
 8.45 p.m.—Broadcast from the Stadium: A Description of the Wrestling Contest, by Mr. Walter E. Withrow.
 9.45 p.m.—From the Studio: Miss Dorrie Ward.
 9.52 p.m.—The Mosman Municipal Band.
 10.12 p.m.—Mr. W. E. Lewis.
 10.19 p.m.—The Wurlitzer Organ, broadcast from the Arcadia Theatre, Chatswood.
 10.25 p.m.—Resume of Following Day's Programme.
 10.30 p.m.—Romano's Restaurant Dance Orchestra, under the Direction of Mr. Merv Lyons.
 During Intervals between Dances, "Sun" News will be broadcast.
 11.30 p.m.—G.P.O. Clock and Chimes; National Anthem.

2GB, SYDNEY

MONDAY, 18th JUNE, 1928.

EVENING SESSION.

5.30 p.m.—Children's Session by Uncle George.
 7 p.m.—Stock and Market reports by New Zealand Loan and Mercantile Agency Ltd.
 7.15 p.m.—Music.
 8 p.m.—Opening Chorus.
 8.2 p.m.—Sid and Molly Owen and Joyce Slatyer, Instrumentalists.
 8.15 p.m.—Songs by Miss Gwladys Edwards.
 8.30 p.m.—Pianoforte solos by Mr. Charles Webb.
 8.38 p.m.—Songs by Mr. Ernest McKeane.
 8.45 p.m.—Humorous Items by Miss Mollie Kirwan.
 8.53 p.m.—Sid and Molly Owen and Joyce Slatyer.
 9 p.m.—Talk by Mr. Stan Crittendon.
 9.20 p.m.—Songs by Miss Gwladys Edwards.
 9.27 p.m.—A One Act Play arranged by Miss Mollie Kirwan.
 9.50 p.m.—Songs by Mr. Ernest McKeane.
 10 p.m.—Close down.

2UW, SYDNEY

MONDAY, 18th JUNE, 1928.

EVENING SESSION.

7 p.m.—Studio items.
 7.10 p.m.—Where to go session.
 7.14 p.m.—Dinner music.
 7.50 p.m.—Miss Lilley, mezzo contralto. Selected.
 7.57 p.m.—Studio selection.
 8 p.m.—News items, mails and shipping.

8.15 p.m.—Mrs. A. Dalton, pianoforte solo. Selected.
 8.22 p.m.—Studio item.
 8.28 p.m.—Mrs. A. Pearce, violin solo. Selected.
 8.35 p.m.—Miss Lilley, mezzo contralto. Selected.
 8.42 p.m.—Instrumental items.
 8.52 p.m.—Mrs. A. Dalton, pianoforte solo. Selected.
 9 p.m.—Weather forecast.
 9.3 p.m.—Mrs. A. Pearce, violin solo. Selected.
 9.10 p.m.—Request numbers and dance music.
 10 p.m.—Announcements and close down.

3AR, MELBOURNE

MONDAY, 18th JUNE, 1928.

EARLY MORNING SESSION.

9 a.m. to 10 a.m.


MORNING MUSICAL SESSION.

10.1 a.m.—Melbourne Concert Orchestra: Suite, "Nautical Scenes" (Percy Fletcher).
 10.15 a.m.—Howard Andrews, baritone: "For you alone" (Geehl).
 "Drink to me only" (Arr. R. Quilter).
 10.22 a.m.—The Radio Ramblers.
 10.38 a.m.—Howard Andrews, baritone: "Dreams of the Dusk" (Guy d'Hardelot).
 "Sometimes when night is nigh" (Phillips).
 10.44 a.m.—Melbourne Concert Orchestra: Suite, "A Lover in Damascus" (A. Woodforde-Finden).
 10.59 a.m.—Don McCalman, saxophone: "Valse Yvonne" (Wiedoeft).
 11.3 a.m.—The Radio Ramblers.
 11.19 a.m.—Valerie Walsh, contralto: "Arietta" (Cyril Scott).
 "Western Wind" (Brahe).
 11.27 a.m.—Melbourne Concert Orchestra.
 11.42 a.m.—Robert Adams, cornet, an Ken Code, trombone: Duet, "Battle Eve."
 11.46 a.m.—The Radio Ramblers.
 11.59 a.m.—Announcements.
 12.9 p.m.—Melbourne Concert Orchestra: Ballet music from "King Manfred" (Carl Reinecke).
 12.22 p.m.—Ethel Brearley, piano: "Waltz: A Minor" (Chopin).
 12.26 p.m.—The Radio Ramblers.
 12.39 p.m.—Valerie Walsh, contralto: "Mighty lak a rose" (E. Nevin).
 "Such a lil fella" (Dichmont).
 12.46 p.m.—Melbourne Concert Orchestra:
 1 p.m.—Close down.
 3 p.m.—Trevor May's Australians, in: "Jazz and Jollity."
 3.15 p.m.—Jean Lewis, contralto. Selected.
 3.22 p.m.—More dance music by Trevor May's Australians.
 3.37 p.m.—Jean Lewis, contralto: Selected.
 3.44 p.m.—Trevor May's Australians: "Jazz and Jollity."

WOMEN'S HOUR.

"THE BEAUTY OF THE HOUSE IS ORDER."

Speakers: Miss Flora Pell, Miss Olga Parker, Mr. J. H. Lord.
 4 p.m.—Miss Flora Pell, inspector of schools, in a cookery talk.
 4.20 p.m.—Miss Olga Parker: "What to read to your children."
 "Dr. De Little," by Hugh Lefting.
 4.40 p.m.—Mr. J. H. Lord, secretary St. John's Ambulance Association: A talk on poisons and how to render first aid in case of poisoning.
 5 p.m.—Trevor May's Australians: "Jazz and Jollity."
 5.17 p.m.—Tom Sample, tenor: Selected.



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- 5.24 p.m.—Trevor May's Australians:
"Jazz and Jollity."
5.40 p.m.—Tom Semple, tenor:
Selected.
5.47 p.m.—More dance music by Trevor May's
Australians.

EARLY EVENING SESSION.

- 6 p.m.—The Gypsy Players:
Selection, "A Country Girl" (Godfrey).
6.15 p.m.—Shell Paterson, soprano:
"Love's a Merchant" (Molly Carew).
"The Lass with a Delicate Air" (Arne).
6.22 p.m.—Trio:
"Waltz" (Teresa Carreno).
"Habenera" (Bizet).
6.30 p.m.—Bessie Gaumson, violin:
"Traumerei" (Drdla).
"Shepherd's Dance" (German).
6.38 p.m.—The Gypsy Players:
"Passe-Pied" (Gillet).
"Humoreske" (Dvorak).
"Ave Verum" (Mozart).
6.48 p.m.—Shell Paterson, Soprano:
"Spring the Fiddler" (Baumer).
"Missy" (Fisher).
6.55 p.m.—The Gypsy Players:
Selection, "Betty" (Rubens).
"Star of the Orient" (Zamecnik).
7.10 p.m.—Helen Brennecke, Cello:
"Ave Maria" (Schubert).
"Abenlied" (Schumann).
7.18 p.m.—Bernard Thomas, Tenor:
"Look Down, Dear Eyes" (Fisher).
"I Hear You Calling Me" (Marshall).
7.25 p.m.—Quartet:
"The Mill" (Ponchon).
7.31 p.m.—Trio:
"Chanson Triste" (Tchaikowsky).
7.36 p.m.—Bernard Thomas, Tenor:
"At Dawning" (Cadman).
"Sally in Our Alley" (Carey).
7.44 p.m.—The Gypsy Players:
"Four Indian Love Lyrics" (A. Woodforde-
Finden).

EVENING NEWS SESSION.

NEWS AND MARKET REPORTS.

- 8 p.m.—Macnamara's stock reports.
8.10 p.m.—"Herald" News Service; Weather
Synopsis; Shipping Movements.
8.12 p.m.—Stock Exchange Information.
8.17 p.m.—Fish Market Reports by J. R.
Borrett, Ltd.; Rabbit Prices.
8.19 p.m.—River Reports.
8.21 p.m.—Market Reports by the Victorian
Producers' Co-operative Co., Ltd., Poultry,
Grain, Hay, Straw, Jute, Dairy Produce,
Potatoes and Onions.
Market Reports of Fruit by the Victorian
Fruitgrowers' Association; Retail Prices;
Wholesale Prices of Fruit by the Wholesale
Fruit Merchants' Association; Citrus
Fruits.

EVENING MUSICAL SESSION.

- 8.30 p.m.—Melbourne Concert Orchestra:
Fantasia Overture, "Three Days" (Adolf
Lottner).
"Romance" (Nevin).
8.43 p.m.—Lilian Paton, Mezzo Soprano:
"Arise, O Sun" (Maude Day).
"Wondering Why" (Clarke).
8.50 p.m.—The Radio Ramblers:
Fox Trot, "Waitin' for Katy" (Shapiro).
Fox Trot, "Guatemala Melody" (Wenrich).
Waltz, "Ole Virginny's Lullaby" (Pollack).
Fox Trot, "Coquette" (Green).
Fox Trot, "Indian Cradle Song" (Wayne).
9 p.m.—Robert Allen, Alto:
"Come to the Fair" (Martin).
"Lackaday" (Crampton).
9.13 p.m.—Mr. A. Ferman, a rapid review of:
Books, yesterday, to-day, and to-morrow.
9.28 p.m.—Melbourne Concert Orchestra:
"Zingaresca" (Baron).
Country Dance Tune, "The Irish Washer-
woman" (Sowerby).
"Valse Brillante" (Chopin).
9.42 p.m.—Lilian Paton, mezzo soprano:
Selected.

- 9.50 p.m.—Melbourne Concert Orchestra.
10.0 p.m.—G.P.O. Clock says "Ten."
10.1 p.m.—Semi-Final Weather Forecast,
specially for our Country Listeners.
10.3 p.m.—Ken Code, Trombone, and Robert
Adams, Cornet:
Duet, "Dreams of Devotion" (Langey).
10.7 p.m.—Melbourne Concert Orchestra:
"Second Movement from the Fifty Sym-
phony" (Tchaikowsky).
"Intermezzo" (Arensky).
"Love's Declaration" (Baron).
10.22 p.m.—Robert Allen, Alto:
"Friend O' Mine" (Sanderson).
"The Rosary" (Nevin).
10.30 p.m.—Herbert Pettifer, Violin:
"Slavische Dance" (Zimbalish).
"Schon Rosmarin" (Kreisler).
10.35 p.m.—The Radio Ramblers:
Fox Trot, "Are You Happy?" (Ager).
Fox Trot, "Following You Around" (Kahn).
Waltz, "Are You Lonesome To-night?"
(Handman).
Fox Trot, "Just Like the End of a Story"
(Pollack).
Fox Trot, "Half a Moon" (Hanley).
10.52 p.m.—"Age" News Bulletin, exclusive
to 3AR.
10.58 p.m.—Final Weather Forecast.
10.59 p.m.—Our Australian Good Night Quote
is taken from the poem, "The Old Bush
Track," by Gertrude Hart.
11.0 p.m.—G.P.O. Clock says "Eleven"; God
Save the King.

4QG, BRISBANE.

MONDAY, 18th JUNE, 1928.

MORNING SESSION.

10.30 a.m. to 11.30 a.m.

MIDDAY SESSION.

- 1 p.m.—Market reports; weather information;
"The Daily Mail" and "The Daily Standard"
news.
1.30 p.m.—Lunch hour music.
1.58 p.m.—Standard time signals.
2 p.m.—Close down.

AFTERNOON SESSION.

- 3.30 p.m.—Mail train running times.
3.31 p.m.—A programme of music from the
studio.
4.15 p.m.—"The Telegraph" news.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6 p.m.—Mail train running times.
6.2 p.m.—"Daily Standard" news.
6.8 p.m.—Stock Exchange information.
6.9 p.m.—Metal quotations.
6.10 p.m.—A science talk:
"Great Sea Reptiles"—by Mr. Inigo Jones.
6.28 p.m.—Announcements.
6.30 p.m.—Bedtime stories by "The Sand-
man."
7 p.m.—Special news service.
7.3 p.m.—Market reports.
7.25 p.m.—Fenwick's stock report.
7.30 p.m.—Weather information.
7.40 p.m.—Announcements.
7.43 p.m.—Standard time signals.
7.45 p.m.—Lecturette:
"The Children's Music Corner"—conducted
by the "Music Man."

NIGHT SESSION.

- 8 p.m.—From the studio:
A programme arranged by Mr. Erich John.
Topical Chorus.
Grand Opera:
Instrumental:
"Minuet" (from "Sampson"—Handel).
String Trio.
"The Boats Bound O'er the Bay" (from
"Masaniello"—Auber).
Double Quartette.
Solo:
"Vulcan Song" (from "Lilamona at
Bancio"—Gounod).
Mr. Tom Ryan (bass).

- Soprano solo:
"Roberto che Adore" (from "Robert the
Devil"—Meyerbeer).
Miss Mabel Malouf.
"With Fair Ceres" (from "Norma"—
Bellini).
Double Quartette.
Instrumental variation from Symphonic
Ballet, "Calirhoe" (Chaminade).
String Trio.
Folk Songs of Scandania:
Swedish songs:
(a) "Courting."
(b) "Brave of Heart and Warriors Bold."
Double Quartette.
Duet:
"Norwegian Shepherd Song."
Messrs Geo. Williamson and Jack
Lord (tenors).
Swedish song: "The Postillion."
Double Quartette.
"Norwegian Rhapsodie" (Svendsen).
String Trio.
Sacred:
Duet:
"Ave Maria" (Lambillotte).
Messrs Geo. Williamson (tenor) and
Stanley Tamblin (bass-baritone).
Contralto solo: "Te deum."
Miss Audrey Bell.
"O Power of Love" (Borthniansky).
Double Quartette.
Piano solo:
"Capriccio in B Minor" (Brahms).
Mr. Rees Morgan.
PART II.

- Classical:
"God in the Thunderstorm" (Schubert).
Double Quartette.
Duet:
"I Would That My Love" (Mendelssohn).
Misses Audrey Bell (contralto) and
Miss Elspeth Aitchison (contralto).
Soprano solo:
"Far Greater in His Lowly State"
(Gounod).
Miss Maye Hughes.
Instrumental:
"Chant sans Paroles" (Tchaikowsky).
String Trio.
Song Cycle:
"Porcelain and Pottery" (Arundale).
"Old Chelsea."
Double Quartette.
Bass solo: "A Set of Sovres."
Mr. Stanley Tamblin.
Contralto solo: "Deft Ware."
Miss Audrey Bell.
Tenor solo: "Egyptian Pottery."
Mr. Geo. Williamson.
Instrumental: "China Dolls."
String Trio.
Light Opera:
"If You Will Come to Tea" (from
"Geisha"—Jones).
Double Quartette.
Duet:
"Quarelling" (from "Country Girl"—
Monckton).
Miss Audrey Bell and Mr. Jack Lord.
"Lads and Lassies" (from "Florodora"
—Stuart).
Double Quartette.
"March Militaire" No. 2 (Schubert).
String Trio.
10 p.m.—"The Daily Mail" news.
Weather news.
Close down.

6WF, PERTH.

MONDAY, 18th JUNE, 1928.

MIDDAY SESSION.

- 12.30 p.m.—Tune in.
12.35 p.m.—Markets, News, and cables.
1 p.m.—Time signal.
1.1 p.m.—Weather notes supplied by the Me-
teorological Bureau of Western Australia.
1.2 p.m.—Lunch Hour Music.
Brunswick Panatope hour relayed from
Messrs. Musgrove's Limited Concert Hall,
Murray street.
2 p.m.—Close down.
3.30 p.m.—Tune in.
3.35 p.m.—Afternoon Tea Concert relayed
from the Carlton Cafe, Hay street.
Vocal and instrumental numbers from the
Studio.

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7ZL, HOBART

MONDAY, 18th JUNE, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

MATINEE SESSION.

- 3 p.m.—G.P.O. Clock Chimes the Hour.
 3.1 p.m.—Musical Selection.
 3.5 p.m.—Hobart Stock Exchange Quotations.
 Weather Information.
 Items of Interest: Announcements.
 3.15 p.m.—Selections by 7ZL Studio Trio.
 3.25 p.m.—Browning Mummery, tenor:
 "Elegie" (Massenet).
 3.29 p.m.—7ZL Studio Trio.
 3.39 p.m.—Hina Spani, soprano:
 "Balla in Maschera" (Verdi), "Ma dall' arido stilo."
 3.43 p.m.—7ZL Studio Trio.
 3.58 p.m.—Browning Mummery, tenor:
 "The Love Lily" (Thompson).
 4.2 p.m.—7ZL Studio Trio.
 4.7 p.m.—Hina Spani, soprano:
 "Trovatore" (Verdi), "Lacea la notte."
 4.15 p.m.—Fashion Talk by Aunt Edna of Brownells Ltd., Hobart.
 4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6.30 p.m.—Children's Corner with Uncle Hubert.
 7 p.m.—Uncle David's Half-hour.

NIGHT SESSION.

- 7.30 p.m.—Musical selections.
 7.50 p.m.—"Mercury" special news service.
 Weather forecasts.
 Hobart Stock Exchange quotations.
 Railway auction produce sales.
 8 p.m.—G.P.O. Clock chimes the hour.
 Band Concert by Risdon E. Z. Band. Conductor, Mr. A. Byrne.
 8.15 p.m.—Leonard Gowings, tenor:
 "The Sweet Little Girl I Love" (Hook air by Lane Wilson).
 8.20 p.m.—Risdon Band.
 8.35 p.m.—Four Aristocrats:
 "Voom, Voom" (Monden on the Gayden).
 8.40 p.m.—Risdon Band.
 8.55 p.m.—Alfredo Rode, violin:
 "Zigeunerweisen" (Gypsy Airs) (Sarasato).
 9 p.m.—Risdon Band.
 9.15 p.m.—Leonard Gowings, tenor:
 "To Mary" (White).
 9.20 p.m.—Risdon Band.
 9.30 p.m.—Alfredo Rode, violin:
 Variations on "A Carnival of Venice," (arranged by Rode).
 9.35 p.m.—Risdon Band.
 9.50 p.m.—"Mercury" special Interstate news service.
 Tasmanian District Weather Reports.
 9 p.m.—Weather reports from Australian Capital Cities.
 Station announcements: Tuesday's Programme.
 10 p.m.—G.P.O. Clock Chimes the Hour.
 10.1 p.m.—Our Tasmanian Good-night thought:
 "Many men owe the grandeurs of their lives to their tremendous difficulties."
 10.2 p.m.—The King.
 10.3 p.m.—Close down.

EVENING SESSION.

- 6.45 p.m.—Tune in.
 The evening transmission is broadcast on 104.5 metres as well as the usual wavelength.
 6.50 p.m.—Stories for the Kiddies by Uncles Henry, Percy and Duffy.
 7.20 p.m.—Stocks, Markets, News.
 7.45 p.m.—Talk by Lieut. Col. Le Souef, Director of the Zoological Gardens, South Perth.
 8 p.m.—Time signal.
 8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia. Station announcements such as alterations to programme, etc.
 8.3 p.m.—From the Studio.
 Musical programme, including vocal and instrumental artists.
 9 p.m.—From the Theatre.
 Second half of the Vaudeville programme by Pat Hanna's Diggers, relayed from the Theatre Royal.
 10 p.m.—Late news items by courtesy of "The Daily News" Newspaper Co.
 Ships within range announcement.
 Weather report and forecast.
 10.30 p.m.—Close down.
 104.5 METRE TRANSMISSION.
 Simultaneous broadcast on 104.5 metres, of Programme given on 1250 metres, commencing at 6.45 p.m.

- 7.20 a.m.—Country Session: Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
 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.—"Sydney Morning Herald" summary.
 7.50 a.m.—Studio Music.
 8 a.m.—"Big Ben." Close down.

MORNING SESSION.

- 10 a.m.—"Big Ben" and announcements.
 10.5 a.m.—Studio Music.
 10.15 a.m.—"Sydney Morning Herald" news service.
 10.30 a.m.—Studio Music.
 10.35 a.m.—Last minute racing information by the 2FC Racing Commissioner.
 10.45 a.m.—Studio Music.
 11 a.m.—"Big Ben." Studio Music.
 11.5 a.m.—A.P.A. and Reuter's Cable Services.
 11.30 a.m.—Close down.

MIDDAY SESSION.

- 12 noon.—"Big Ben" and announcements.
 12.2 p.m.—Stock Exchange, first call.
 12.3 p.m.—Official weather forecast, rainfall.
 12.5 p.m.—Studio Music.
 12.10 p.m.—Summary of "Sydney Morning Herald" news service.
 12.15 p.m.—Rugby Wireless News.
 12.20 p.m.—Studio Music. Dance Records.
 1 p.m.—"Big Ben." Weather intelligence.
 1.3 p.m.—"Evening News" midday news service.
 Producers' Distributing Society's Report.
 1.20 p.m.—Studio Music.
 1.28 p.m.—Stock Exchange, second call.
 1.30 p.m.—Jeanette Rooney, contralto.
 1.35 p.m.—Studio Music: Dance Records.
 1.55 p.m.—Jeanette Rooney, contralto.
 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 3 p.m.—"Big Ben" and announcements.
 3.5 p.m.—A recital of Columbia Records.
 3.30 p.m.—Mandley Haslam, tenor:
 "Because" (D'Hardelot).
 3.35 p.m.—Kathleen Roe, pianoforte solos:
 (a) "Le Coucou" (Daquin).
 (b) "Clair de lune" (Debussy).
 3.43 p.m.—Daisy Sweet, contralto.
 3.48 p.m.—Colin Ferret, basso.
 3.52 p.m.—Popular Dance Records.
 4 p.m.—"Big Ben." A Reading.
 4.10 p.m.—Ann Palmerston, soprano:
 "The Secret of the Stars" (Leon).
 4.15 p.m.—Mandley Haslam, tenor:
 "For You Alone" (Gechl).

- 4.20 p.m.—Kathleen Roe, pianoforte solos:
 (a) "Jeux d'eau" (Ravel).
 (b) "Chanson du Chasseur" (Crovlez).
 4.30 p.m.—Daisy Sweet, contralto.
 4.35 p.m.—Colin Ferret, basso.
 4.40 p.m.—Ann Palmerston, soprano:
 "Irish Folk Song" (Arthur Foote).
 4.45 p.m.—Stock Exchange, third call.
 4.47 p.m.—Popular "Columbia" Records.
 5 p.m.—Close down.

EARLY EVENING SESSION.

- 5.40 p.m.—The chimes of 2FC.
 5.45 p.m.—The "Hello Man" talks to the children, assisted by Aunt "Eily."
 6.25 p.m.—Children's music.
 6.30 p.m.—Late sporting news.
 6.35 p.m.—Dalgety's market reports (wheat and stock).
 6.43 p.m.—Fruit and vegetable markets.
 6.45 p.m.—Stock Exchange information.
 6.48 p.m.—Weather and shipping news.
 6.50 p.m.—"Tittle Tattle" talk by "Tessa."
 7 p.m.—Dinner music from the Hotel Australia.
 7.15 p.m.—From the Studio:
 Musical items.
 7.30 p.m.—"Evening News" late news service.

NIGHT SESSION.

- 7.40 p.m.—Programme announcements.
 7.45 p.m.—Erik Langker: Talk No. 3:
 "Pictures in the National Art Gallery."
 8.0 p.m.—"Big Ben." The 2FC Orchestra, conducted by Horace Keats:
 (a) "Potted Overtures" (Arr. Engleman).
 (b) "The Magic Book" (Niemann).
 8.14 p.m.—"To-night's Visitor."
 8.25 p.m.—Vladimir Elin, Russian Baritone.
 8.33 p.m.—The 2FC Studio Orchestra:
 (a) "T'Chaka" (Montague Ring).
 (b) Fourth Movement—"The New World Symphony" (Dvorak).
 8.52 p.m.—Vladimir Elin, Russian Baritone.
 9.0 p.m.—"Big Ben." Late Weather Forecast.
 From the Studio (by permission of J. C. Williamson, Ltd.), the second act of "The Arcadians," by Lionel Monckton, will be presented by members of the Sydney Operatic Society. Produced by Percy Ben-nison, who will play the well known part of Peter Doody.
 Other characters will include, Sombra, played by Violet Rogers, and Simplicitas, by Clarence Liddell.

MUSICAL NUMBERS:

ACT II.

- Opening Chorus.
 Song, "Back Your Fancy" Dick Hahn
 Song, "The Girl With a Brogue,"
 Peggy Walker.
 Shower Chorus.
 Song, "Arcadia is Ever Young,"
 Violet Rogers.
 Duet, "Somewhere,"
 Gwladys Rowling and Clarence Liddell
 Duet, "Charming Weather,"
 Peggy Walker and Dick Parry
 Finale.
 Scene: Askwood Racecourse.
 The production will be complete with Chorus and the 2FC Orchestra.
 10.20 p.m.—Foster and Fay:
 "Musical Memories."
 10.30 p.m.—Late Weather Forecast.
 10.31 p.m.—The Ambassadors' Dance Orchestra.
 10.40 p.m.—From the Studio: Foster and Fay:
 "Musical Memories."
 10.50 p.m.—The Ambassadors' Dance Orchestra.
 10.57 p.m.—From the Studio: To-morrow's programme and late news.
 11.0 p.m.—"Big Ben." The Ambassadors' Dance Orchestra.
 11.45 p.m.—National Anthem. Close Down.

Tuesday, June 19

2FC, SYDNEY

EARLY MORNING SESSION.

- Note: If satisfactory, 5SW (London) will be relayed at intervals throughout this session.
 7 a.m.—"Big Ben" and announcements.
 7.5 a.m.—Studio Music.

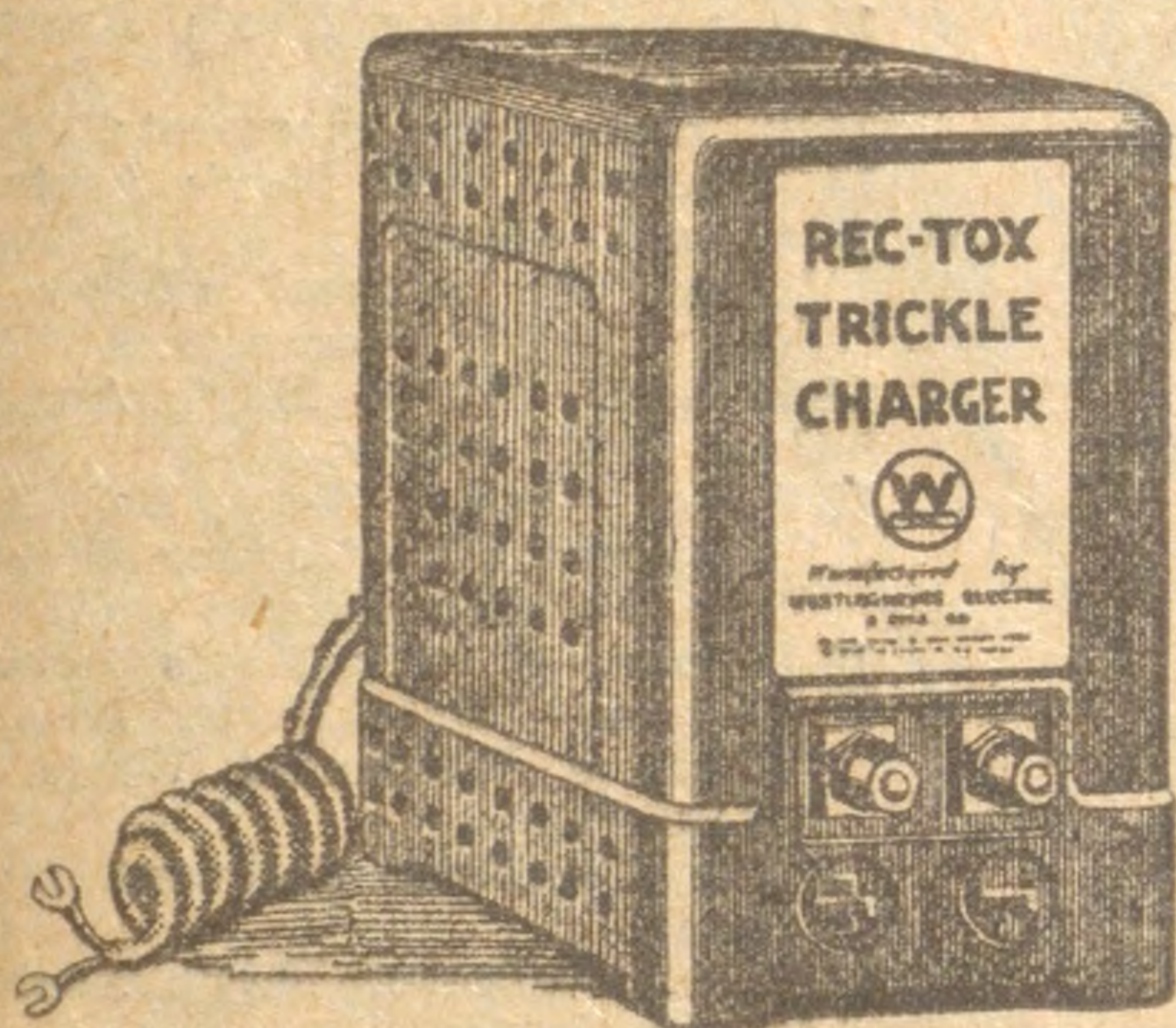
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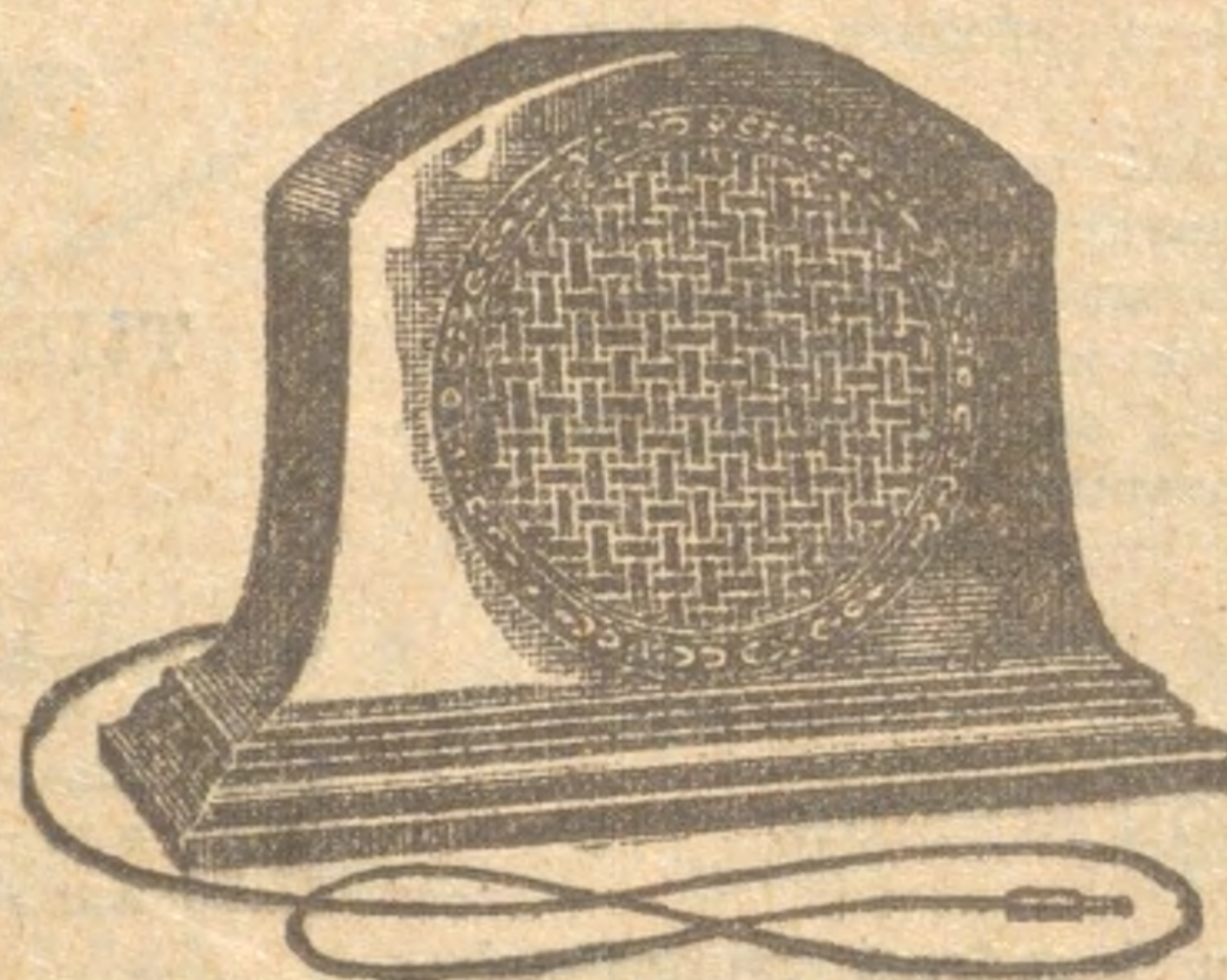
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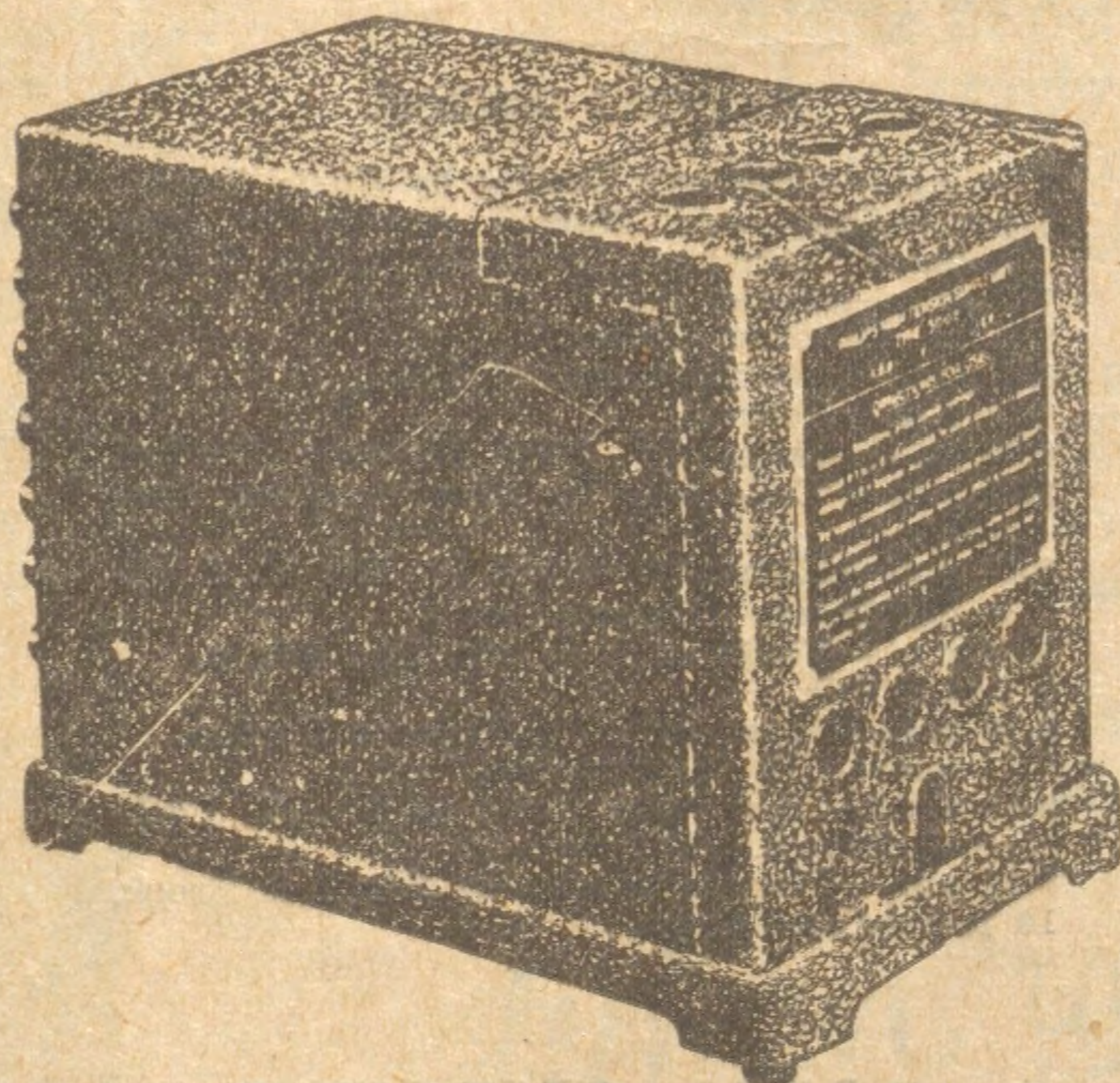


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2BL, SYDNEY.

TUESDAY, 19th JUNE, 1928.

EARLY MORNING SESSION.

8 a.m. to 9 a.m.

MORNING SESSION.

- 10.30 a.m.—G.P.O. clock and chimes.
Musical programme from the Studio.
11 a.m.—G.P.O. clock and chimes.
Talk on "Foot Troubles" by Miss Jean Gordon.
12 noon.—G.P.O. clock and chimes.
Special ocean forecast and weather report.
12.3 p.m.—Musical programme from the Studio.
12.12 p.m.—Information. Mails, shipping and port directory.
12.15 p.m.—Boats in call by wireless.
12.17 p.m.—Fruit market report.
12.19 p.m.—Vegetable market report.
12.21 p.m.—London metal market report.
12.23 p.m.—Dairy farm produce market report.
12.26 p.m.—Fish market report.
12.28 p.m.—Rabbit market report.
12.30 p.m.—H.M.V. Gramophone recital.
1.30 p.m.—G.P.O. clock and chimes.
Talk to children and special entertainment for children in hospital.
2 p.m.—G.P.O. clock and chimes.
Close down.

AFTERNOON SESSION.

- Racing information broadcast immediately after each race by courtesy of the "Sun."
3 p.m.—G.P.O. clock and chimes.
News from the "Sun."
3.15 p.m.—Civil Service Stores Trio. Direction, Miss D. Courcey Bremer.
3.30 p.m.—G.P.O. clock and chimes.
News from the "Sun."
3.40 p.m.—Pianoforte recital from Studio.
3.50 p.m.—News from the "Sun."
4 p.m.—G.P.O. clock and chimes.
Civil Service Stores Trio.
4.15 p.m.—News session.
4.35 p.m.—Musical programme from the Studio.
4.50 p.m.—News from the "Sun."
4.55 p.m.—Features of evening's programme.
4.57 p.m.—Producers' Distributing Society's poultry report.
4.59 p.m.—Racing resume.
5 p.m.—G.P.O. clock and chimes.
Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. clock and chimes.
Children's session.
6.30 p.m.—Dinner music.

SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. clock and chimes.
Racing resume.
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.
Stock Exchange report.
Grain and fodder report ("Sun").
Dairy produce report ("Sun").
N.R.M.A. report.
7.15 p.m.—News from the "Sun."
7.30 p.m.—Talk by a member of the St. John Ambulance Association on "First Aid."
8 p.m.—G.P.O. clock and chimes.
Broadcasters' Topical Chorus.
8.3 p.m.—Miss Helena Stewart, soprano.

- 8.10 p.m.—Broadcasters' Instrumental Trio.
8.17 p.m.—Mr. Stanley R. Catlett, tenor.
8.24 p.m.—Tooth's Brewery Band (conductor, Mr. H. Thomas).
8.44 p.m.—Mr. Peter Sutherland, basso.
8.51 p.m.—Mr. Robert Turner, elocutionist.
8.58 p.m.—Weather report and forecast by courtesy of Mr. Mares, Government Meteorologist.
9 p.m.—G.P.O. clock and chimes.
9.1 p.m.—Movie talk by Miss Iris Norton.
9.11 p.m.—Miss Helena Stewart.
9.18 p.m.—Broadcasters' Instrumental Trio.
9.25 p.m.—Mr. Stanley R. Catlett.
9.32 p.m.—Tooth's Brewery Band.
9.52 p.m.—Mr. Peter Sutherland.
9.59 p.m.—Broadcasters' Instrumental Trio.
10.6 p.m.—Mr. Robert Turner.
10.12 p.m.—Resume of following day's programme.
10.16 p.m.—The Wentworth Cafe Orchestra under the direction of Mr. Jimmy Elkins broadcast from the Wentworth. During intervals between dances, "Sun" news and Wentworth social notes will be broadcast.
11.30 p.m.—G.P.O. clock and chimes.
National Anthem.

2GB, SYDNEY

TUESDAY, 19th JUNE, 1928.

MORNING SESSION.

- 10 a.m.—Music.
10.10 a.m.—Happiness Talk.
10.20 a.m.—Music.
10.30 a.m.—Women's Session.
11.15 a.m.—Close down.

AFTERNOON SESSION.

- 2 p.m.—Music.
2.20 p.m.—Talk.
2.25 p.m.—Music.
3 p.m.—Close down.

EVENING SESSION.

- 5.30 p.m.—Children's Session by Uncle George.
7 p.m.—Stock and Market reports by New Zealand Loan and Mercantile Agency Ltd.
7.15 p.m.—Music.
8 p.m.—Opening Chorus.
8.2 p.m.—2GB Instrumental Trio.
8.15 p.m.—Address.
8.30 p.m.—Songs by Miss Florence Gordon.
8.37 p.m.—Cello solo by Miss Marjorie Kennedy.
9.40 p.m.—Humorous Items by Mr. H. Lockwood Brown, Entertainer.
8.52 p.m.—Violin solos by Mr. Dan Scully.
9 p.m.—Talk.
9.20 p.m.—Songs by Miss Florence Gordon.
9.27 p.m.—2GB Instrumental Trio.
9.40 p.m.—Humorous Items by Mr. H. Lockwood Brown, Entertainer.
9.48 p.m.—Pianoforte solos by Miss Ada Brook.
10 p.m.—Close down.

2 UW, SYDNEY

TUESDAY, 19th JUNE, 1928.

EVENING SESSION.

- 7 p.m.—Studio items.
7.10 p.m.—Where to go session.
7.15 p.m.—Dinner music.
7.45 p.m.—Vocal and instrumental items.
8.10 p.m.—News, mails and shipping.
8.30 p.m.—Selections from studio.
9 p.m.—Weather report.
9.3 p.m.—Instrumental items from studio.
9.20 p.m.—Dance selections and request numbers.
10 p.m.—Announcements and close down.

3AR, MELBOURNE

TUESDAY, 19th JUNE, 1928.

EARLY MORNING NEWS SESSION.

9 a.m. to 10 a.m.

MORNING MUSICAL SESSION.

- 10.1 a.m.—Trevor May's Australians.
10.16 a.m.—Vera Thomson, Soprano: "A Spring Morning" (Lane Wilson), "Flower Fetters" (Willouby).
10.24 a.m.—Trevor May's Australians: Jazz and Jollity.
10.38 a.m.—Vera Thomson, Soprano: "Waltz Song," from Tom Jones (Ed. German).
"Robins Song" (H. White).
10.46 a.m.—Trevor May's Australians.
11.2 a.m.—Dorothy Eyton-Jones, Contralto: "Blackbird Song" (Scott).
"O Lovely Night" (Landon Ronald).
11.9 a.m.—Trevor May's Australians: The Latest Hits.
11.23 a.m.—Announcements.
11.33 a.m.—Trevor May's Australians.
11.49 a.m.—Dorothy Eyton-Jones, Contralto: "The Fuchsia Tree" (Roger Quilter).
"My Ships" (Barratt).
11.56 a.m.—Trevor May's Australians: Jazz and Jollity.
12.9 p.m.—James Scott, Bass Baritone: "Kashmiri Song" (Amy Woodforde-Finden), "The Fortune Hunter" (Willeby).
12.16 p.m.—Trevor May's Australians.
12.35 p.m.—James Scott, Bass Baritone: "What a Wonderful World it Would Be" (Lohr).
"The Company Sergeant Major" (Sander-son).
12.43 p.m.—Trevor May's Australians: Dance Music.
1.0 p.m.—Newmarket Stock Sales; Special "Snap" Progress Reports direct from the yards, by courtesy of John MacNamara and Co.

AFTERNOON SESSION.

- 3.0 p.m.—Melbourne Concert Orchestra: "Finale Ballet Suite" (Vacsey). Suite, "Rebeville" (M. L. Lake).
3.14 p.m.—Freda Treweek, Soprano: Selected.
3.21 p.m.—Melbourne Concert Orchestra.
3.35 p.m.—Freda Treweek, Soprano: Selected.
3.42 p.m.—Melbourne Concert Orchestra.
3.55 p.m.—Announcements.

WOMEN'S HOUR.

- "Smiles of kindness habitually given, win and preserve the heart."
Speakers: Mrs. J. D. Silk.
Mr. Horace Jno. Book.
Miss Stephanie Taylor.
4 p.m.—Mrs. Dorothy Silk: A Talk on "Home-crafts."
4.20 p.m.—Mr. H. J. Book, Secretary of the National Safety Council.
4.40 p.m.—Miss Stephanie Taylor: A Talk on "Everyday Art."

PANATROPE SESSION.

- Transmitted from Panatrobe House, 252 Collins Street (by exclusive permission of Wills and Paton, Ltd.), on the Brunswick Panatrobe.
5.0 p.m.—Melbourne Concert Orchestra: Fantasia, "Lucia di Lammermoor" (Ar. Tobani-Roberts).
"Oriental" (Herbert).
5.17 p.m.—Howard Andrews, Baritone: Selected.
5.24 p.m.—Melbourne Concert Orchestra: Selected.
5.39 p.m.—Howard Andrews, Baritone: Selected.
5.46 p.m.—Melbourne Concert Orchestra: Selected.

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EARLY EVENING SESSION.

- 6 p.m.—The Gypsy Players:
"Petite Suite de Concert" (Coleridge-Taylor).
6.15 p.m.—Dorothy Roxburgh, violin:
"Adagio" (Haydn).
6.21 p.m.—Tom Semple, tenor:
"Come into the Garden, Maud" (Balfe).
"I Hear a Thrush at Eve" (Cadman).
6.28 p.m.—Trio:
"Piano Trio" (Haydn).
6.38 p.m.—Quartet:
"Molto Lento" (Rubenstein).
6.44 p.m.—Tom Semple, tenor:
"Lolita" (Buzzi Peccia).
"The Pixie Piper Man" (Elliott).

EVENING NEWS SESSION.

- 8.0 p.m.—MacNamara's Stock Reports.
8.10 p.m.—"Herald" News Service. Weather
Synopsis. Shipping Movements.
8.12 p.m.—Stock Exchange Information.
8.17 p.m.—Fish Market Reports by J. R.
Rorrett, Ltd.: Rabbit prices.
8.19 p.m.—River Reports.
8.21 p.m.—Market Reports by the Victorian
Producers' Co-operative Co., Ltd.: Poultry.
Grain, Hay, Straw, Jute, Dairy Produce,
Potatoes and Onions. Market reports of
Fruit by the Victorian Fruiterer's Associa-
tion: Retail prices Wholesale prices of
Fruit by the Wholesale Fruit Merchants'
Association: Citrus fruits.

EVENING MUSICAL SESSION.

- Special programme to be broadcast from the
Victorian Softgoods Association Club Rooms.
8.30 p.m.—Melbourne Concert Orchestra:
Selection, "The Girl Friend" (R. Rodgers).
8.42 p.m.—Robert Allen, alto:
"Vale" (Russell).
"A Brown Bird Singing" (Wood).
8.49 p.m.—The Radio Ramblers:
Fox Trot, "So Long" (Burke).
Waltz, "Ramona" (Wayne).
Fox Trot, "Dew, Dew, Dewy Day" (Sher-
man).
8.58 p.m.—The Sundowners' Male Quartet:
"Has Sorrow thy Young Days Shaded"
(Moore).
"Kitty Magee" (Parker).
9.6 p.m.—Melbourne Concert Orchestra:
Selection from "The Barber of Seville"
(Rossini).
"Serenade Tsigane" (Charles Veidez).
9.16 p.m.—Robert Gillard, bass.
"Asleep in the Deep" (Petrie).
"Requiem" (Homer).
9.24 p.m.—Announcements.
9.34 p.m.—The Radio Ramblers:
Fox Trot, "Following you around" (Kahn).
Fox Trot, "Are you happy?" (Ager).
Waltz, "The Song is Ended" (Berlin).
9.41 p.m.—The Sundowners' Male Quartet:
"Blue Skies" (Berlin).
"The Whisper Song" (Friend).
9.48 p.m.—Melbourne Concert Orchestra:
"Scalp Dance" (M. Lake).
"Indian Love Song" (M. Lake).
"Zuni Indian Suite, Part I." (Grunn).
10 p.m.—G.P.O. Clock says "Ten."
10.1 p.m.—Semi-Final Weather Forecast, speci-
ally for our Country Listeners.
10.3 p.m.—Tom Semple, tenor:
"Sing no more, Ladies" (Aiken).
"From the Land of the Sky Blue Water"
(Cadman).
10.10 p.m.—The Radio Ramblers:
Fox Trot, "A Silver Lining" (Donaldson).
Waltz, "Ole Virginny's Lullaby" (Pollack).
Fox Trot, "Half a Moon" (Hahley).
10.19 p.m.—Herbert Sanderson, baritone:
"The Trumpeter" (Airlie Dix).
"For you alone" (Geehl).
10.27 p.m.—Melbourne Concert Orchestra:
"Dutch Patrol" (Albert Stoessel).
10.34 p.m.—The Sundowners' Male Quartet:
"Negro Spirituals" (Burleigh).
10.41 p.m.—The Radio Ramblers:
Fox Trot, "I'll be lonely" (Woods).
Waltz, "Are you lonesome to-night" (Hand-
man).
Fox Trot, "Down in Old Havana Town"
(Friend).
Fox Trot, "Coquette" (Green).

- 10.52 p.m.—"Age" News Service, exclusive to
3AR.
10.58 p.m.—Final Weather Forecast.
10.59 p.m.—Our Australian Good-Night Quote is
taken from the poem, "Dreams Shall Come,"
by Mary Gilmore.
11 p.m.—G.P.O. Clock says "Eleven."
"God Save the King."

4QG, BRISBANE.

TUESDAY, 19th JUNE, 1928.

MORNING SESSION.

10.30 a.m. to 11.30 a.m.

MIDDAY SESSION.

- 1 p.m.—Market reports; weather information
supplied by the Commonwealth Weather
Bureau; news services supplied by "The
Daily Mail" and "The Daily Standard."
1.30 p.m.—Lunch hour music.
1.58 p.m.—Standard Time Signal.
2 p.m.—Close down.

AFTERNOON SESSION.

- 3.30 p.m.—Mail train running times.
3.31 p.m.—A programme of music from the
studio.
4.15 p.m.—"The Telegraph" news.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6 p.m.—Mail train running times.
6.2 p.m.—"Daily Standard" news.
6.8 p.m.—Stock Exchange information.
6.9 p.m.—Metal quotations.
6.10 p.m.—Dinner music.
6.28 p.m.—Announcements.
6.30 p.m.—Bedtime stories by "Uncles Ben and
Pete."
7 p.m.—Special news service.
7.3 p.m.—Market reports.
7.25 p.m.—Fenwick's stock report.
7.30 p.m.—Weather information.
7.40 p.m.—Announcements.
7.43 p.m.—Standard time signals.
7.45 p.m.—Lecturette.
"Poultry Talk" by Mr. P. Rumball (Poul-
try Instructor).

NIGHT SESSION.

- 8 p.m.—From the Studio.
"The Varieties" in song, instrumental and
sketch work.
8.30 p.m.—Radio adaptation of Charles
Dickens' "Christmas Carol." (On account of
many requests, this adaptation, presented to
the listeners last Christmas Eve, will be
repeated to-night.)
Radio adaptation "Christmas Carol." (Adap-
ted and produced by H. Humphreys.)
One Act; Six Scenes.

SYNOPSIS:

- Scene 1: Scrooge and Marley's Counting
House one Christmas Eve.
Scene 2: Scrooge's Chambers. The Visit of
Marley's Ghost.
Scene 3: Scrooge's Chambers at 1 o'clock in
the morning. The Visit of the ghost of
Scrooge's Past, Fezziwig's Party.
Scene 4: Scrooge's Chambers. Visit of the
Ghost of the Present. Christmas Party at
Scrooge's Nephew's Home.
Scene 5: Scrooge's Chambers. Visit of the
Ghost of the Future. Scrooge's Reclama-
tion.
Scene 6: All's Well that Ends Well.

CAST:

- Ebenezer Scrooge .. Mr. H. Humphreys.
Jacob Marley Mr. H. Humphreys.
Fred (Scrooge's Nephew) Mr. Charles Cowan
Fred's Wife Miss Eileen McLennan.
Ghost of the Past .. Mr. Stan Ballinger.
Ghost of the Present .. Mr. W. Farrell.
Ghost of the Future .. Mr. I. N. Visible.
Gentleman Collector Mr. H. Phillips.
Rob Cratchit (Scrooge's Clerk) .. Mr. W.
Farrell.

- Fezziwig Mr. Charles Cowan.
The Child Miss Eileen McLennan.
Incidental music to the radio adaptation
provided by the Studio Instrumental Quar-
tette (under the leadership of Mr. Fred
Smith).
10 p.m.—"The Daily Mail" news.
Weather news.
Close down.

6WF, PERTH.

TUESDAY, 19th JUNE, 1928.

MIDDAY SESSION.

- 12.30 p.m.—Tune in.
12.35 p.m.—Markets, News, and cables.
1 p.m.—Time signal.
1.1 p.m.—Weather notes supplied by the Me-
teorological Bureau of Western Australia.
1.2 p.m.—Studio Instrumental Trio, conducted
by Mr. Val Smith.
1.30 p.m.—Close down.

AFTERNOON SESSION.

- 3.30 p.m.—Tune in.
3.35 p.m.—Pianoforte selections by Miss Evelyn
Willis, A.R.C.M.
Vocal and instrumental numbers from the
studio.
4.30 p.m.—Close down.

EVENING SESSION.

- 6.45 p.m.—Tune in.
The evening transmission is broadcast on
104.5 metres as well as the usual wavelength.
6.50 p.m.—Stories for the Kiddies by Uncles
Henry, Percy and Duffy.
7.20 p.m.—Stocks, Markets, News.
7.45 p.m.—Talk: "Books of the Month" by
Mr. P. J. Bathgate.
8 p.m.—Time signal.
8.1 p.m.—Weather notes supplied by the Me-
teorological Bureau of Western Australia.
Station announcements such as alterations
to programmes, etc.
8.3 p.m.—Orchestral Night.
Items by 6WF's Station Orchestra, conducted
by Mr. Ronald E. Moyle, A.T.C.L.
(Music kindly supplied by Messrs. Bosworth
and Co. Ltd., 8 Heddon Street, Regent
Street, London, W.I.)
Compositions by A. W. Ketelbey.
Vocal assisting artist:
10 p.m.—Late News items by courtesy of "The
Daily News" Newspaper Co.
Ships within range announcement.
Weather report and forecast.
10.30 p.m.—Close down.
104.5 METRE TRANSMISSION.
Simultaneous broadcast on 1250 metres, commen-
cing at 6.45 p.m.

7ZL, HOBART

TUESDAY, 19th JUNE, 1928.

MORNING SESSION.

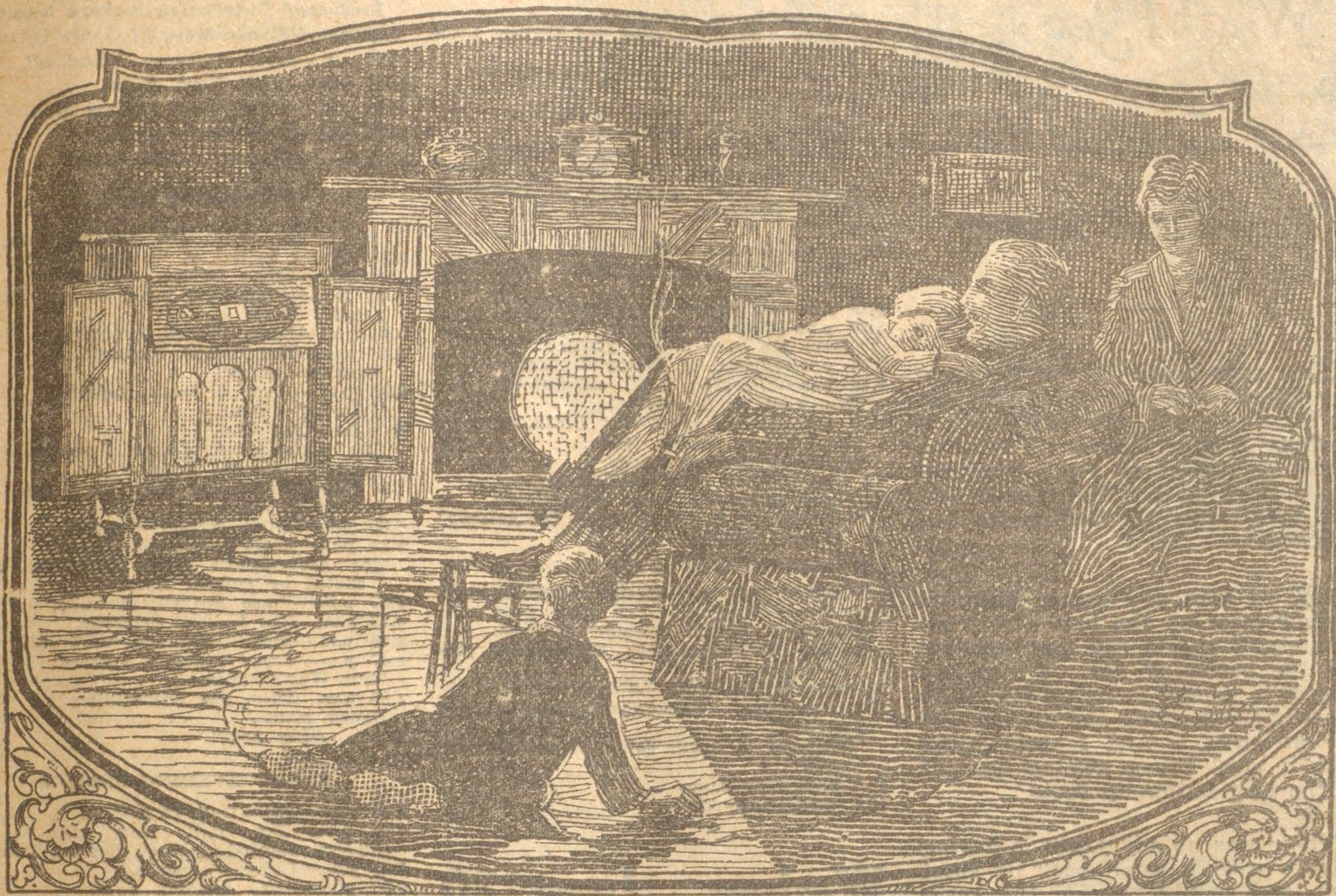
11 a.m. to 12 noon.

MATINEE SESSION.

- 3 p.m.—G.P.O. Clock Chimes the Hour.
3.1 p.m.—Musical selection.
3.5 p.m.—Robert Stock Exchange quotations.
Weather information.
3.15 p.m.—During this session Miss Edna
Cameron, soprano will be heard in several
request numbers.
Selections by 7ZL, Hobart.
4.15 p.m.—Educational Talk.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6.30 p.m.—Children's Corner: Uncle Hubert's
Half-hour.
7 p.m.—Uncle David talks to the children.



ENJOY YOUR WINTERS WITH A COLMOVOK

You want a Set which will pick up the right Broadcasting Station without a moment's notice—which will give clear reproduction instantly and always.

All these necessities are studied before a Colville-Moore Wireless Set is built. Each set created is assembled under our own expert's care.

It is with a great deal of pride that we recommend our Colmovox Receivers to you—beautiful instruments, faithfully constructed to render the greatest clarity of tone, free from any distortion effects—in fact, the absolute last word in radio.

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Deposit, £2/10/-, and 52 weekly payments of 5/4

MODEL 103.—3 Valves.

Deposit, £3/-/-, and 52 weekly payments of 6/2

MODEL 103A.—3 Valves.

Deposit, £4/-/-, and 52 weekly payments of 7/3

MODEL 104.—4 Valves.

Deposit, £5/-/-, and 52 weekly payments of 9/8

MODEL 105.—5 Valves.

Deposit, £6/-/-, and 52 weekly payments of 11/8

MODEL 105A.—5 Valves.

Deposit, £10/-/-, and 52 weekly payments of 13/9

MODEL 105B.—5 Valves.

Deposit, £12/10/-, and 52 weekly payments of 15/11

MODEL 106.—6 Valves.

Deposit, £15/-/-, and 52 weekly payments of 19/-

MODEL 108.—8 Valves.

Deposit, £15/-/-, and 52 weekly payments of 20/-

MODEL 108A.—8 Valves.

Deposit, £20/-/-, and 52 weekly payments of 27/-

DEMONSTRATIONS IN YOUR OWN HOME WITHOUT OBLIGATION.

COLVILLE MOORE WIRELESS SUPPLIES LTD.

10 Rowe Street (Next Hotel Australia), Sydney.



Women and Buttons

Hold a button in front of the average woman and she will forget the world! The age of the lady does not matter. A baby female will crow as loudly as one of 45 years—they recently X-rayed a three months old girl to discover the button she had swallowed.

Not so long ago women buttoned their dresses up the back—more accurately, I should say that someone did the buttoning up. I wore my fingers to stumps doing up my wife's dress in the morning and unbuttoning her at night. And I spent hours with a steel prong getting her out of the long button-up boots.

There was no advantage in having a wife with a small back or short legs—she simply reduced the space between buttons and used the full supply.

Fortunately, to-day, all the buttons have been moved round from back to front. The falling marriage rate probably forced women to reverse their buttons.

The only time my wife is not interested in buttons is when one comes off my shirt. If she loses one of the 98 buttons on the front side of her dress, she spends the day in town matching buttons. If I lose one of my five or six, I have to wear a broad tie for a week.

Do you know why my wife loves our new Acme Eliminator—the Light Socket Power which runs your radio from your electric light or power point by simply pressing a button?

You or I would rejoice in the fact that the Acme cuts out the costly "B" battery, delivers clearer tone and greater volume, and can be bought on easy terms. But not so my wife! She just revels in pressing the button!

If New System Telephones Pty., Ltd., put pearl buttons on their radio products, the crowd of female buyers at 280 Castlereagh Street would need police reserves to handle them.*

EVENING SESSION.

- 7.30 p.m.—Musical selections.
- 7.35 p.m.—Literary Lapses and Library Lists by Mr. W. E. Fuller.
- 7.50 p.m.—"Mercury" special news service. Weather forecasts. Hobart Stock Exchange quotations. Railway auction produce sales.
- 8 p.m.—G.P.O. Clock Chimes the Hour.
- 8.1 p.m.—Broadcast from Prince of Wales' Theatre, Hobart. Selections by Prince of Wales' Orchestra. Conductor, Mr. E. J. M'Cann.
- 8.15 p.m.—George Griffin, tenor: "When You Played the Organ and I Sang the Rosary."
- 8.20 p.m.—Prince of Wales' Orchestra.
- 8.30 p.m.—Shannon Quartet Party: "Carry Me Back to Old Viny.".
- 8.35 p.m.—Prince of Wales' Orchestra.
- 8.45 p.m.—Clarkson Rose, entertainer: "Ma, Look at Charlie."
- 8.50 p.m.—Prince of Wales' Orchestra.
- 9 p.m.—George Griffin, tenor: "My Irish Song of Songs."
- 9.5 p.m.—Prince of Wales' Orchestra.
- 9.20 p.m.—Clarkson Rose, entertainer: "I Wonder How I Look When I'm Asleep?" (Special request).
- 9.25 p.m.—Prince of Wales' Orchestra.
- 9.50 p.m.—"Mercury" special Interstate news service. Tasmanian District Weather Reports. Station Announcements: Wednesday's programme.
- 10 p.m.—G.P.O. Clock Chimes the Hour.
- 10.1 p.m.—Our Tasmanian Good - night thought: "Whatever is worth doing, is worth doing well."
- 10.2 p.m.—The King.
- 10.3 p.m.—Close down.

Wednes., June 20 2FC, SYDNEY.

EARLY MORNING SESSION.

- 7 a.m.—"Big Ben" and announcements.
- 7.5 a.m.—Studio Music.
- 7.20 a.m.—Country Session: Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
- 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.—"Sydney Morning Herald" summary.
- 7.50 a.m.—Studio Music.
- 8 a.m.—"Big Ben." Close down.

MORNING SESSION.

- 10 a.m.—"Big Ben" and announcements.
- 10.5 a.m.—Studio Music.
- 10.15 a.m.—"Sydney Morning Herald" news service.
- 10.30 a.m.—Studio Music.
- 10.35 a.m.—A Reading.
- 10.45 a.m.—Studio Music.
- 11 a.m.—"Big Ben." Studio music.
- 11.5 a.m.—A.P.A. and Reuter's Cable Services.
- 11.15 a.m.—A talk on Home Cooking and Recipes by Miss Ruth Furst.
- 11.30 a.m.—Close down.

MIDDAY SESSION.

- 12 noon.—"Big Ben" and announcements.
- 12.2 p.m.—Stock Exchange, first call.
- 12.3 p.m.—Official weather forecast, rainfall.
- 12.5 p.m.—Studio Music.
- 12.10 p.m.—Summary of "Sydney Morning Herald" news service.
- 12.15 p.m.—Rugby Wireless News.
- 12.20 p.m.—Studio Music: Dance Records.
- 1 p.m.—"Big Ben." Weather intelligence.

- 1.3 p.m.—"Evening News" midday news service.
- Producers' Distributing Society's Report.
- 1.20 p.m.—Studio Music.
- 1.28 p.m.—Stock Exchange, second call.
- 1.30 p.m.—Clara Hunt, mezzo.
- 1.35 p.m.—Studio Music: Dance items.
- 1.55 p.m.—Clara Hunt, mezzo.
- 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 3 p.m.—"Big Ben" and announcements.
- 3.5 p.m.—A recital of "Edison" Records.
- 3.30 p.m.—Hilda Nelson, soprano.
- 3.34 p.m.—Pianoforte solos by a pupil of Lindley Evans.
- 3.44 p.m.—Fosse Brakell, contralto.
- 3.48 p.m.—Nea Hallett, soubrette: Popular numbers.
- 3.56 p.m.—Joyce Gillespie, soprano: "Violets" (Roma).
- 4 p.m.—"Big Ben."
- The Ambassadors Dance Orchestra. Conductor, Manuel Hyman.
- 4.10 p.m.—Pianoforte solos by a pupil of Lindley Evans.
- 4.20 p.m.—Hilda Nelson, soprano.
- 4.25 p.m.—From the Ambassadors: The Ambassadors Dance Orchestra, conducted by Manuel Hyman.
- 4.35 p.m.—Fosse Brakell, contralto.
- 4.38 p.m.—Nea Hallett, soubrette.
- 4.45 p.m.—Stock Exchange, third call.
- 4.47 p.m.—Joyce Gillespie, soprano: "But Why?" (Logan).
- 4.50 p.m.—From the Ambassadors: Dance music.
- 5 p.m.—"Big Ben."

EARLY EVENING SESSION.

- 5.40 p.m.—The chimes of 2FC.
- 5.45 p.m.—The "Hello Man" talks to the children, assisted by Uncle Rus and "Jerry."
- 6.25 p.m.—Children's music.
- 6.30 p.m.—Late sporting news.
- 6.35 p.m.—Dalgety's market reports (wool, wheat and stock).
- 6.43 p.m.—Fruit and vegetable markets.
- 6.45 p.m.—Stock Exchange information.
- 6.48 p.m.—Weather and shipping news.
- 6.50 p.m.—"Tittle Tattle" talk by "Tessa."
- 7 p.m.—"Big Ben."
- Dinner music from the Hotel Australia.
- 7.15 p.m.—From the Studio: Musical items.
- 7.30 p.m.—"Evening News" late news service.

THEATRE AND CHORAL NIGHT.

- 7.45 p.m.—Elliott Napier will continue his talks: "Walks Abroad."
- 7.58 p.m.—Foreword to the next item.
- 8.0 p.m.—"Big Ben." Broadcast from the Capitol Theatre, Sydney: The Capitol Theatre Orchestra, under the baton of Ted Henkel. At the Wurlitzer Organ, Mr. Fred Scholl.
- 8.15 p.m.—Edgar Warwick and Eileen Dawn, Radio Sketches: "Nothing of Importance."
- 8.27 p.m.—The Drummoyne Boys' School Choir.
- 8.40 p.m.—From the Capitol Theatre, Sydney: Stage Presentation.
- 9.5 p.m.—Late Weather Forecast. Edgar Warwick and Eileen Dawn, Radio Sketch: "Passing the Time."
- 9.15 p.m.—Drummoyne Boys' School Choir.
- 9.30 p.m.—Con Drew Stories by Brunton Gibb.
- 9.40 p.m.—A Radio Revue of Songs, Sketches and Burlesque, arranged by Charles Lawrence, the well known entertainer.
- 10.25 p.m.—Fred Moore, Baritone.
- 10.32 p.m.—Foster and Fay: "Musical Memories."
- 10.42 p.m.—Fred Moore, Baritone.
- 10.50 p.m.—Foster and Fay: "Musical Memories."
- 11.0 p.m.—"Big Ben." National Anthem. Close Down.

2BL, SYDNEY.

WEDNESDAY, 20th JUNE, 1928.

EARLY MORNING SESSION.

8 a.m. to 9 a.m.

MORNING SESSION.

- 11 a.m.—G.P.O. clock and chimes.
Talk on "Basket Ball" by Miss Varley,
Broadcasters' women's sports authority.
Talk on "The Backward Child" by Mrs.
Jordan.

AFTERNOON SESSION.

- Racing information broadcast immediately
after each race, by courtesy of the "Sun."
12 noon.—G.P.O. clock and chimes.
Special ocean forecast and weather report.
12.3 p.m.—Musical programme from the
Studio.
12.12 p.m.—Information. Mails, shipping, and
port directory.
12.15 p.m.—Boats in call by wireless.
12.17 p.m.—Fruit market report.
12.19 p.m.—Vegetable market report.
12.21 p.m.—London metal market report.
12.23 p.m.—Dairy and farm produce market
report.
12.26 p.m.—Fish market report.
12.28 p.m.—Rabbit market report.
12.30 p.m.—H.M.V. Gramophone recital.
1.30 p.m.—G.P.O. clock and chimes.
Talk to children and special entertainment
for children in hospital.
2 p.m.—G.P.O. clock and chimes.
Musical programme from the Studio.
2.20 p.m.—News from the "Sun."
2.30 p.m.—Musical programme from the
Studio.
2.40 p.m.—News from the "Sun."
2.50 p.m.—Musical programme from the
Studio.
3 p.m.—G.P.O. clock and chimes.
News from the "Sun."
3.10 p.m.—Pianoforte recital from the Studio.
3.20 p.m.—News from the "Sun."
3.30 p.m.—Racing resume.
3.35 p.m.—Musical programme from the
Studio.
3.40 p.m.—Dungowan Dance Band broadcast
from Dungowan Cabaret.
4 p.m.—G.P.O. clock and chimes.
News from the "Sun."
4.8 p.m.—Musical programme from the
Studio.
4.15 p.m.—News session.
4.30 p.m.—Dungowan Dance Band.
4.50 p.m.—Features of evening's programme.
4.52 p.m.—Racing resume.
5 p.m.—G.P.O. clock and chimes.
Close down.

EARLY EVENING SESSION.

- 5.45 p.m.—G.P.O. clock and chimes.
Children's session.
6.30 p.m.—Gulbransen dinner music.

SPECIAL COUNTRY SESSION.

- 7 p.m.—G.P.O. clock and chimes.
Racing resume.
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.
Stock Exchange report.
Grain and fodder report ("Sun").
Dairy produce report ("Sun").
N.R.M.A. report.
7.15 p.m.—Country news from the "Sun."
7.45 p.m.—Talk on "Astrology" by Miss J.
Charlton-Smith.

MURDOCH'S

Great

WINTER

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In Full Swing!



Big Bargains in "B" Batteries

45 VOLT "B" BATTERIES.

Full capacity and in perfect
condition. Fully tested and
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16/6.

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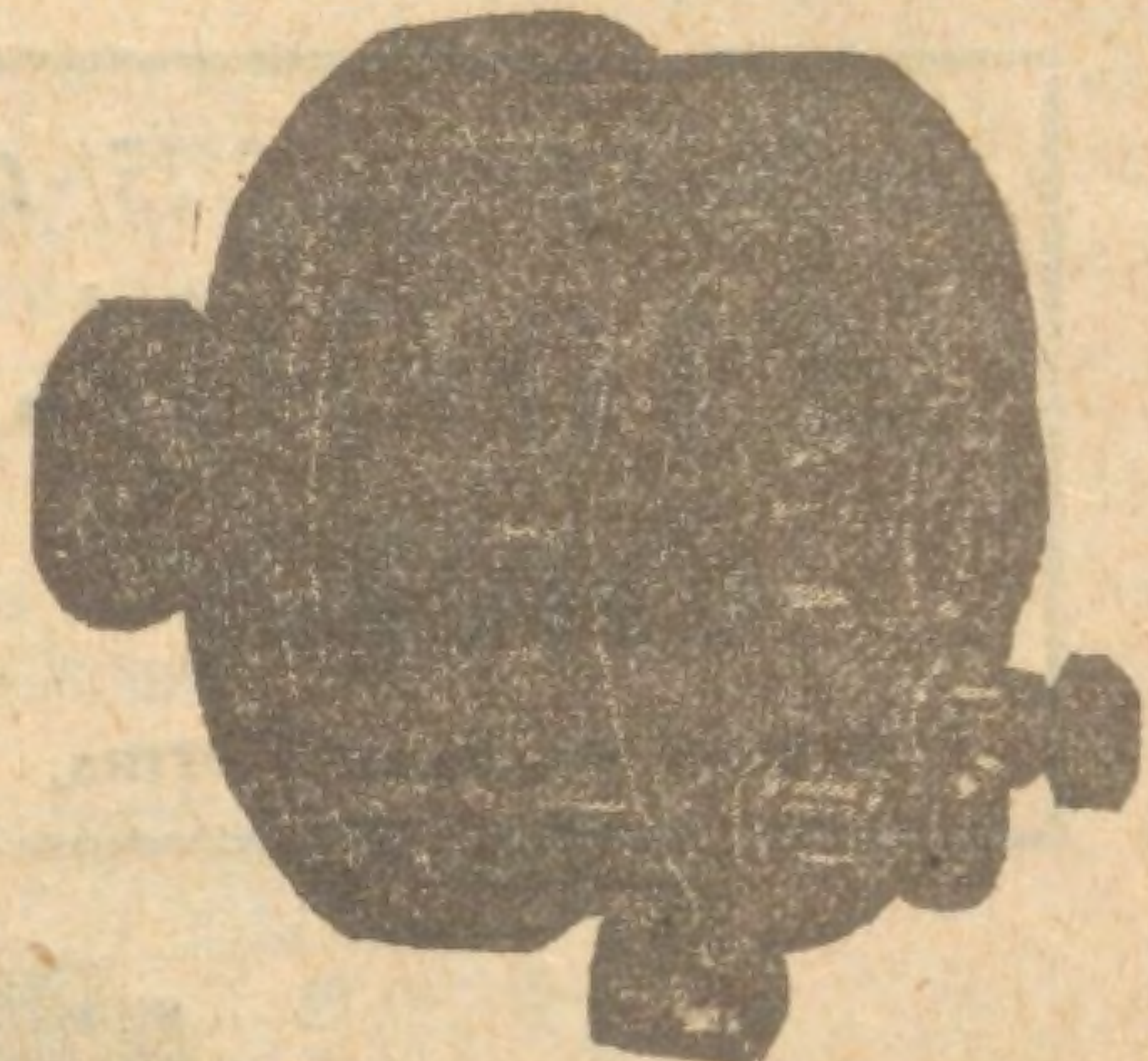
And NOW—

The "Lissen" Loud Speaker Unit for

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To those who derive pleasure
experimenting in the construc-
tion of their own speakers, the
"Lissenola" unit is invaluable.
It enables you to build a loud
speaker for less than the cost
of headphones; giving wonderful
tone and volume. Just try one!
Usually 15/-.

SALE PRICE **12/6**



"Lissen" Loud Speaker Unit



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Specially designed for
Reinartz and other capacity
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Usually 8/9.
SALE PRICE ... **6/-**

Accumulator Special!

Harts' 2-Volt Cells, in
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hours. An ideal substi-
tute while your battery
is being charged.

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When Writing, kindly address your letter to Desk A2, and ask for Big
Bargain Catalogue.

MURDOCH'S

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"SPECIALISTS IN ALL RADIO EQUIPMENT."

ACME Socket Power

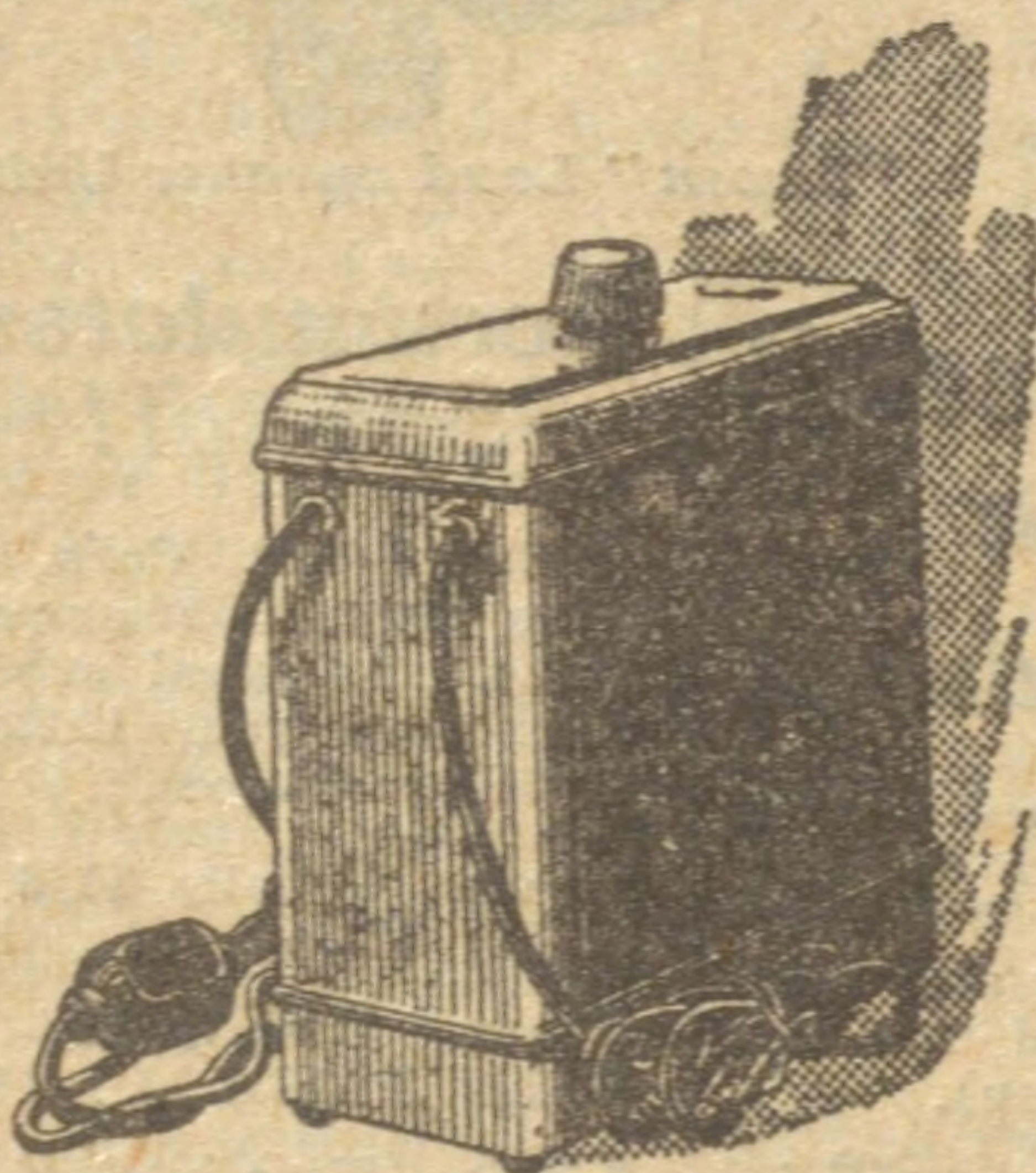
supplies uniform voltage up to 180 volts and has separate tapings for the detector and Radio Frequency.

The use of the Raytheon Tube—an idea first developed by Acme—makes this Eliminator permanent and dependable. The Tube rectifies ordinary house-lighting current to suit any set. Having no filament it cannot burn out.

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Wholesale Distributors:
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SK

8 p.m.—G.P.O. clock and chimes.
8.1 p.m.—Rose Bay Winter Garden Theatre Symphony Orchestra, under the direction of Mr. Lionel Hart, broadcast from Rose Bay Theatre.
8.20 p.m.—Talk by Mr. W. S. Reay, on "Edmund Burke."
8.40 p.m.—The Ashfield District Band.
9 p.m.—Mr. Claude Corbett, sporting editor of the "Sun," will talk on general sporting.
9.15 p.m.—Miss Iverna Kyle, soprano.
9.22 p.m.—Mr. Thomas King, novelty pianist.
9.29 p.m.—Mr. Will Clarke, basso.
9.36 p.m.—The Rose Bay Winter Garden Theatre Symphony Orchestra.
9.46 p.m.—Miss Iverna Kyle.
9.53 p.m.—The Ashfield District Band.
10.8 p.m.—Mr. Will Clarke.
10.15 p.m.—Mr. Thomas King.
10.22 p.m.—Resume of following day's programme.
10.25 p.m.—Romano's Restaurant Dance Orchestra, under the direction of Mr. Merv. Lyons. During intervals between dances, "Sun" news will be broadcast.
11.30 p.m.—G.P.O. clock and chimes.
National Anthem.

2GB, SYDNEY

WEDNESDAY, 20th JUNE, 1928.

MORNING SESSION.

10 a.m.—Music.
10.10 a.m.—Happiness Talk.
10.20 a.m.—Music.
10.30 a.m.—Women's Session.
11.15 a.m.—Close down.

AFTERNOON SESSION.

2 p.m.—Music.
2.20 p.m.—Talk.
2.35 p.m.—Music.
3 p.m.—Close down.

EVENING SESSION.

5.30 p.m.—Children's Session by Uncle George.
7 p.m.—Stock and Market reports by New Zealand Loan and Mercantile Agency Ltd.
7.15 p.m.—Music.
8 p.m.—Opening Chorus.
8.2 p.m.—Cornet solos by Mr. Phil Couchman.
8.9 p.m.—Songs by Miss Merle Miller.
8.15 p.m.—Address.
8.30 p.m.—Violin solos by Miss Phyllis Campbell.
8.38 p.m.—Humorous recital by Mr. Heath Burdock.
8.53 p.m.—Songs by Signor Mario Gustino.
9 p.m.—Talk.
9.20 p.m.—Concert solos by Mr. Phil Couchman.
9.28 p.m.—Songs by Miss Merle Miller.
9.35 p.m.—Violin solos by Miss Phyllis Campbell.
9.43 p.m.—A Humorous Reading.
9.50 p.m.—Songs by Signor Mario Gustino.
10 p.m.—Close down.

2 UW, SYDNEY

WEDNESDAY, 20th JUNE, 1928.

EVENING SESSION.

7 p.m.—Studio items.
7.10 p.m.—Where to go session.
7.14 p.m.—Dinner music.
7.50 p.m.—Miss Doris Fitzmaurice, elocutionist. Selected.
7.57 p.m.—Studio selections.
8.10 p.m.—News, items, mails, shipping, etc.
8.25 p.m.—Miss Tyerman, pianoforte solo: Selected.

8.32 p.m.—Studio item.
8.35 p.m.—Miss Doris Fitzmaurice, elocutionist. Selected.
8.42 p.m.—Weather forecast.
8.45 p.m.—Miss G. Tyerman, pianoforte solo. Selected.
8.52 p.m.—Studio selection.
9 p.m.—Talk by Mr. J. K. Powell.
9.20 p.m.—Dance music and request numbers.
10 p.m.—Close down.

3AR, MELBOURNE

WEDNESDAY, 20th JUNE, 1928.

EARLY MORNING NEWS SESSION.
9 a.m. to 10 a.m.

MORNING MUSICAL SESSION.

10.1 a.m.—Melbourne Concert Orchestra: "Valse Caprice" (Chenoweth).
"Cherry Blossoms" (Friml).
"Nocturne" (Chenoweth).
10.15 a.m.—Julia Russell, soprano: "Prelude" (Landon Ronald).
"A Night Idyll" (Loughborough).
10.23 a.m.—The Radio Ramblers.
10.39 a.m.—Julia Russell, soprano: "Mimi's Song" from "Le Boheme" (Puccini).
"Homing" (T. Del Riego).
10.47 a.m.—Melbourne Concert Orchestra: "Barchetta" (Nevin).
"Water Whispers" (Lange).
"A Babbling Brook" (Lange).
11.2 a.m.—William Mack, baritone: "Till Death" (Mascherini).
"Two Eyes of Grey" (Daisy McGeoch).
11.9 a.m.—The Radio Ramblers.
11.25 a.m.—Announcements.
11.35 a.m.—Melbourne Concert Orchestra: "Iris" (Friml).
Selection, "Betty in Mayfair" (Fraser-Simson).
11.50 a.m.—William Mack, baritone: "Three for Jack" (Squire).
"Lighterman Tom" (Squire).
11.58 a.m.—The Radio Ramblers.
12.14 p.m.—Jean Lewis, contralto: "John Anderson, my Jo" (M. White).
"Her Dream" (F. Walker).
12.22 p.m.—Melbourne Concert Orchestra: "Oh, that we two were Maying" (Nevin).
"Melody in G Flat" (Cadman).
"Mummers' March" (Martel).
12.37 p.m.—Jean Lewis, contralto: "Ouvre tes yeux Bleus" (Massenet).
"Connais tu le pays" (A. Thomas).
12.45 p.m.—The Radio Ramblers.
1 p.m.—Newmarket stock sales. Special "snap" progress reports direct from the yards, by courtesy of John Macnamara and Co.

WOMEN'S HOUR.

"Home is the Dearest Spot on Earth."
Speakers: Miss G. Hughes.
Dr. G. Payne Philpots.
Mrs. M. Calloway Mahood.

4 p.m.—A talk by Miss G. Hughes, of the Colonial Gas Association.
4.20 p.m.—A talk by Dr. George Payne Philpots, President of the Food Education Society and Editor of the "National Magazine of Health."
4.40 p.m.—Mrs. M. Calloway Mahood: A talk on The Use of Colour: "Colour Harmony."
3 p.m.—Trevor May's Australians.
3.15 p.m.—Mae Seaton, soubrette: Selected.
3.22 p.m.—Trevor May's Australians.
3.40 p.m.—Mae Seaton, soubrette: Selected.
3.47 p.m.—Trevor May's Australians.
5 p.m.—Trevor May's Australians.
5.15 p.m.—Ralph Thompson, baritone: Selected.
5.22 p.m.—Trevor May's Australians: Jazz and Jollity.
5.40 p.m.—Ralph Thompson, baritone.
5.47 p.m.—Trevor May's Australians.

EARLY EVENING SESSION.

- 6 p.m.—The Gypsy Players:
Selection, "Iolanthe" (Sullivan).
"Love Letters" (Jackson).
- 6.15 p.m.—Dorothy Roxburgh, viola:
"Romance" (Beethoven).
- 6.21 p.m.—Vera Thomson, soprano:
"Noble Signors" (Meyerbeer).
"The Lotus Flower" (Schumann).
- 6.29 p.m.—Quartette:
"Quartet" (Haydn).
- 6.39 p.m.—James Scott, bass-baritone:
"The Pirates' Song" (Chadwick).
"The Gallant Salamander" (Barnard).
- 6.47 p.m.—The Gypsy Players:
"In a Lovers' Garden" (Ketelbey).
"In a Canoe" (Zamecnik).
- 7.2 p.m.—Vera Thomson, soprano:
"Saper Vorreste" (Verdi).
"Gather ye Rosebuds" (Newton).
- 7.10 p.m.—The Gypsy Players:
"Ballet Music from Faust" (Gounod).
- 7.25 p.m.—Helga Brennecke, 'cello:
"Wings of Song" (Fiedelssohn).
"Herlebstblume" (Popper).
- 7.33 p.m.—Trio:
"Melody in F" (Rubenstein).
- 7.41 p.m.—James Scott, bass-baritone:
"The Little Fisherman" (Lane).
"Sally Horner" (Anon).
- 7.49 p.m.—The Gypsy Players:
"Henry VIII. Dances."

EVENING NEWS SESSION.

- 8 p.m.—Official report of Newmarket Stock Sales by the Associated Stock and Station Agents, Bourke Street, Melbourne.
- 8.5 p.m.—"Herald" News Service. Weather Synopsis. Shipping Movements.
- 8.12 p.m.—Stock Exchange Information.
- 8.17 p.m.—Fish Market reports by J. R. Borrett, Ltd.: Rabbit prices.
- 8.19 p.m.—River Reports.
- 8.21 p.m.—Market Reports by the Victorian Producers' Co-operative Co., Ltd.: Poultry, Grain, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions. Market Reports of Fruit by the Victorian Fruiterers' Association: Retail prices. Wholesale prices of Fruit from the Wholesale Fruit Merchants' Association. Citrus fruits. Results of Egg Laying.

EVENING MUSICAL SESSION.

From the Studio:

- 8.30 p.m.—Vida Lugg, piano:
"First Movement, Moonlight Sonata" (Beethoven).
"La Fileuse" (Raff).
- 8.40 p.m.—Shell Paterson, soprano:
"Bird of Love Divine" (Wood).
"Mister Bear" (Blanc).
- 8.47 p.m.—Valerie Walsh, contralto:
"Pleading" (Elgar).
"The Shepherd's Song" (Elgar).
- 8.55 p.m.—Vida Lugg, piano:
"Prelude in C Minor" (Chopin).
"Water Wag-Tail" (Cyril Scott).
- 9.2 p.m.—Shell Paterson, soprano:
"The Valley of Laughter" (Sanderson).
"The Pipes of Pan" (Monckton).
- 9.10 p.m.—Valerie Walsh, contralto:
"Like to the Damask Rose" (Elgar).
"Arietta" (Cyril Scott).

MUSICAL COMEDY.

- 9.20 p.m.—The Second Act of "The Girl Friend," transmitted from Theatre Royal, by permission of J. C. Williamson, Ltd.
A Musical Comedy, adapted from P. Bartholomae and Otto Harbach's "Kitty's Kisses," by R. P. Weston and Bert Lee.
Music and Lyrics by Con Conrad, Gus Kahn, Richard Rodgers and Lorenz Hart, with Annie Croft. Her first appearance in Australia. Produced by Frederick Blackman.
Musical Numbers:
Act II.—Scene I.
Intermission.
Open Chorus, Rowena Ronald and the Girls.
"I'm in Love," Annie Croft.
"Early in the Morning," Gus Bluett and Annie Croft.

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	0	1	6			2 00005
1			Reel d.c.c. wire, 24 gauge	2		Transformers, 1-3 1/2, 1-5
	0	4	0			1 30 Ohm Rheo
2			0005 "Emmco" Condensers			4 Amherites
	1	1	0			1 Filament Switch
2			"Emmco" Vernier de luxe Dials	10		Terminals
	0	15	0			1 "Jewell" Voltmeter, 135v
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"What's the Use of Crying," Gus Bluett and Annie Croft.
"Just Imagine It," Lorna Helms and Leo Franklin.
"I Don't Want Him," Annie Croft, Gus Bluett and Marie Le Varre.
"Mountain Greenery," Annie Croft and Reginald Sharland.
Scene II.
"Step on the Blues," Lorna Helms and Company.
Scene III.
Finale.
From the Studio:
10.40 p.m.—"Age" News Session, exclusive to 3AR.
10.58 p.m.—Final Weather Forecast.
10.59 p.m.—Our Australian Good-night Quote is taken from the poem, "Gum Leaves on the Fire," by E. S. Emerson.
11 p.m.—G.P.O. Clock says "Eleven."
"God Save the King."

4QG, BRISBANE

WEDNESDAY, 20th JUNE, 1928.

MORNING SESSION.

10.30 a.m. to 11.30 a.m.

MIDDAY SESSION.

1 p.m.—Market reports; weather information supplied by the Commonwealth Weather Bureau; news services supplied by "The Daily Mail" and "The Daily Standard."
1.20 p.m.—Lunch hour music.
1.58 p.m.—Standard time signal.
2 p.m.—Close down.

AFTERNOON SESSION.

3.30 p.m.—Mail train running times.
3.31 p.m.—A programme of music from the studio.
4.15 p.m.—"The Telegraph" news.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

6 p.m.—Mail train running times.
6.2 p.m.—"Daily Standard" news.
6.8 p.m.—Stock Exchange information.
6.9 p.m.—Metal quotations.
6.10 p.m.—Dinner music.
6.28 p.m.—Announcements.
6.30 p.m.—Bedtime stories by "Little Miss Brisbane."
7 p.m.—Special news service.
7.3 p.m.—Market reports.
7.25 p.m.—Fenwick's stock report.
7.30 p.m.—Weather information.
7.40 p.m.—Announcements.
7.43 p.m.—Standard time signals.
7.45 p.m.—Lecture: "Queensland's Agriculture"—by Professor J. K. Murray (Principal, Queensland Agricultural High School and College).

NIGHT SESSION.

A programme of dance music by Alf. Featherstone and his Studio Syncopators, including:

Fox trots:
(a) "Our Bungalow of Dreams" (Malie).
(b) "In the Sing Song Sycamore Tree" (Dixon).

Fox trots:
(a) "There Must be a Silver Lining" (Donaldson).
(b) "What Are You Waiting for, Mary" (Donaldson).

Jazz Waltz:
"A Shady Tree" (Donaldson).

Fox trots:
(a) "My Blue Heaven" (Donaldson).
(b) "Fifty Million Frenchmen" (Fisher).

Fox trot:
(a) "No One" (Ager).
(b) "I Like You Best of All" (Little).

Jazz waltz: "The Song is Ended" (Berlin).

Fox trots:
(a) "Kiss and Make Up" (Bogate).
(b) "Where is My Meyer" (Profes).

Fox trot: "Just Once Again" (Donaldson).
One step:
"Floating Down to Cotton Town" (Klickmann).
Between dances the following will be broadcast:
Contralto solos:
(a) "Lilacs" (Cadman).
(b) "I Think" (D'Hardelet).
Miss Irene Elphinstone.
Baritone solos:
(a) "The Border Ballad" (Cowen).
(b) "Sea Fever" (Ireland).
Mr. A. V. James.
Mr. J. Foy will discuss Australia's chances in the Olympic Games.
Soprano solos:
(a) "Nymphs and Fawns" (Bemberg).
(b) "Le Serenata" (Tosti).
Miss May Jordan.
10 p.m.—"The Daily Mail" news.
Weather news.
Close down.

6WF, PERTH

WEDNESDAY, 20th JUNE, 1928.

MIDDAY SESSION.

12.30 p.m.—Tune in.
12.35 p.m.—Markets, News, and cables.
1 p.m.—Time signal.
1.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
1.2 p.m.—Studio Quintette, conducted by Mr. Val Smith.
2 p.m.—Close down.

AFTERNOON SESSION.

3.30 p.m.—Tune in.
3.35 p.m.—Talk: "Fashions" by Junette.
3.55 p.m.—Organ and Pianola music relayed from the Grand Theatre, Murray street.
Vocal and instrumental numbers from the Studio.
4.30 p.m.—Close down.

EVENING SESSION.

6.45 p.m.—Tune in.
The evening transmission is broadcast on 104.5 metres as well as the usual wavelength.
6.50 p.m.—Stories for the Kiddies by Uncles Henry, Percy and Duffy.
7.20 p.m.—Stocks, Markets, News.
7.45 p.m.—Talk.
8 p.m.—Time signal.
8.1 p.m.—Weather notes supplied by the Meteorological Bureau of Western Australia.
Station announcements such as alterations to programmes, etc.
8.3 p.m.—Variety Night.
Musical programme from the Studio, including vocal and instrumental artists.
10 p.m.—Late News items by courtesy of "The Daily News" Newspaper Co.
Steps within Range announcement.
Weather report and forecast.
10.30 p.m.—Close down.
104.5 METRE TRANSMISSION.
Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 6.45 p.m.

Thursday, June 21 2FC, SYDNEY

EARLY MORNING SESSION.

7 a.m.—"Big Ben" and announcements.
7.5 a.m.—Studio Music.
7.15 a.m.—Country Session: Official weather forecast, rainfall, temperatures, astronomical memoranda, shipping intelligence, mail services.
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.—"Sydney Morning Herald" summary.
7.50 a.m.—Studio Music.
8 a.m.—"Big Ben." Close down.

MORNING SESSION.

10 a.m.—"Big Ben" and announcements.
 10.5 a.m.—Studio Music.
 10.15 a.m.—"Sydney Morning Herald" news service.
 10.30 a.m.—Studio Music.
 10.35 a.m.—Last minute sporting information by the 2FC Racing Commissioner.
 10.45 a.m.—Studio music.
 11 a.m.—"Big Ben." Studio Music.
 11.5 a.m.—A.P.A. and Reuter's Cable Services.
 11.10 a.m.—Studio Music.
 11.15 a.m.—A Reading.

MIDDAY SESSION.

12 noon.—"Big Ben" and announcements.
 12.2 p.m.—Stock Exchange, first call.
 12.3 p.m.—Official weather forecast, rainfall.
 12.5 p.m.—Studio Music.
 12.10 p.m.—Summary of "Sydney Morning Herald" news service.
 12.15 p.m.—Rugby Wireless News.
 12.20 p.m.—Studio Music: Dance Records.
 1 p.m.—"Big Ben." Weather intelligence.
 1.3 p.m.—"Evening News" midday news service.
 Producers' Distributing Society's Report.
 1.20 p.m.—Studio Music.
 1.28 p.m.—Stock Exchange, second call.
 1.30 p.m.—Lorraine Jarman, soprano.
 1.35 p.m.—Studio Music: Dance and popular items.
 1.47 p.m.—Lorraine Jarman, soprano.
 1.50 p.m.—The 2FC Racing Commissioner will give the latest track work.
 2 p.m.—"Big Ben." Close down.

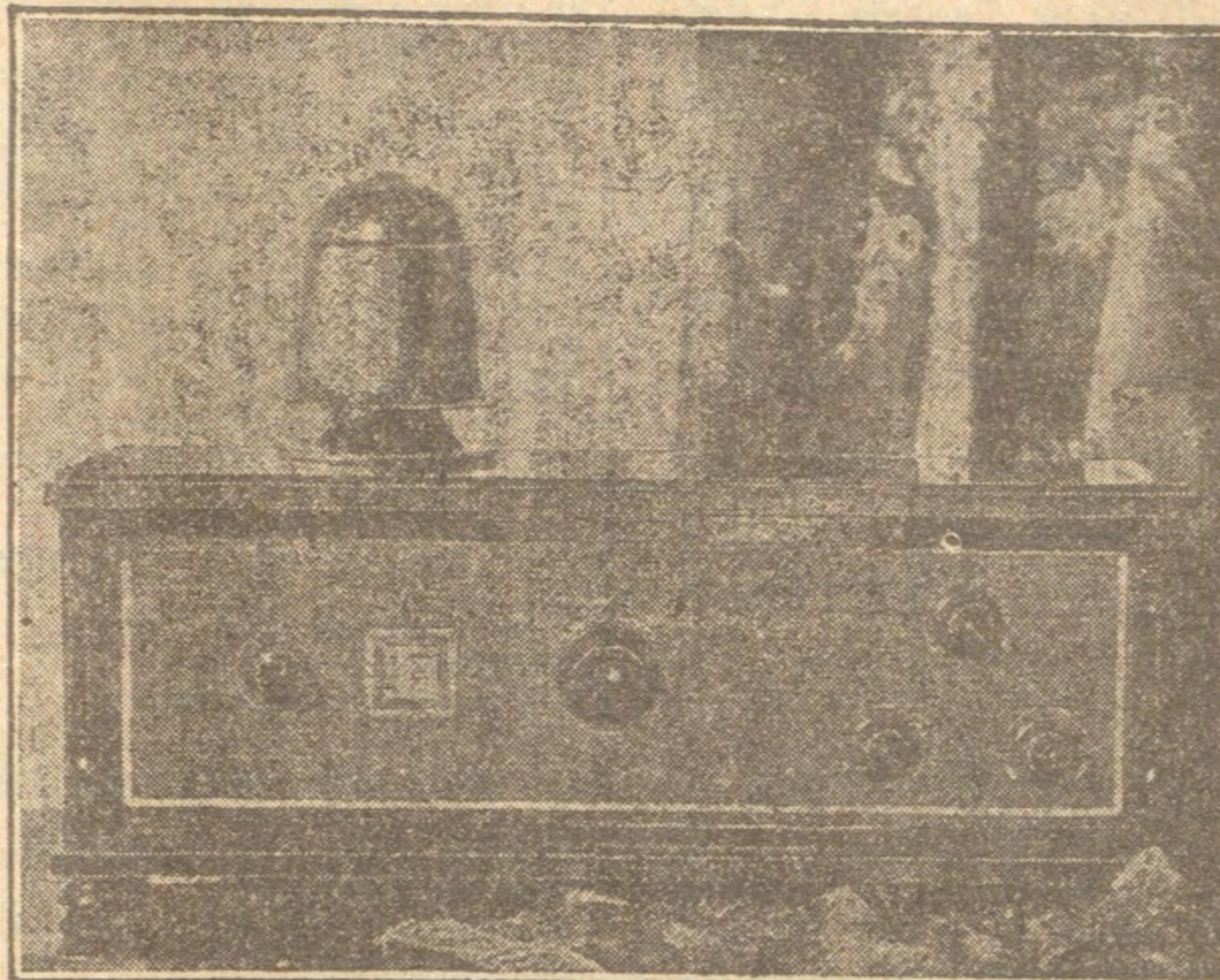
AFTERNOON SESSION.

3 p.m.—"Big Ben" and programme announcements.
 3.5 p.m.—From the Christ Church, St. Laurence:
 An Organ Recital by Christian Hellemann:
 (a) "Overture in D Minor" (Coleridge-Taylor).
 (b) "Melody in F" (Rubinstein).
 3.20 p.m.—From the Studio:
 Phillipa Alston, contralto.
 3.25 p.m.—From the Christ Church, St. Laurence:
 Further items from the Organ Recital by Christian Hellemann:
 (a) "Entr'acte" (Reinecke).
 (b) "Canzona" (Wolstenholme).
 3.40 p.m.—From the Studio:
 Phillipa Alston, contralto.
 3.45 p.m.—From the Christ Church, St. Laurence:
 Organ Solos by Christian Hellemann:
 (a) "Grand Offertoire" (Hellemann).
 (b) "Impromptu" (Hellemann).
 4 p.m.—"Big Ben."
 From the Studio:
 Florence Grant, soprano.
 4.5 p.m.—From the Christ Church, St. Laurence:
 Concluding items from the Organ Recital by Christian Hellemann:
 (a) "Cradle Song" (Salmon).
 (b) "Coronation March" (Meyerbeer).
 4.20 p.m.—From the Studio:
 Florence Grant, soprano.
 4.24 p.m.—From the Ambassadors:
 Dance music by the Ambassadors Orchestra, conducted by Manuel Hyman.
 4.35 p.m.—Studio Music.
 4.40 p.m.—The Ambassadors Dance Orchestra.
 4.45 p.m.—Stock Exchange, third call.
 4.47 p.m.—The Ambassadors Dance Orchestra.
 5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

5.40 p.m.—The chimes of 2FC.
 5.45 p.m.—The "Hello Man" talks to the children.
 6.25 p.m.—Children's Music.
 6.30 p.m.—Late sporting news.
 6.35 p.m.—Dalgety's market reports (wheat and stock).
 6.43 p.m.—Fruit and vegetable markets.
 6.48 p.m.—Weather and shipping news.
 6.50 p.m.—"Tittle Tattle" talk by "Tessa."
 7 p.m.—"Big Ben."
 From the Hotel Australia:
 Dinner music by the Hotel Australia Orchestra.

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DAVID JONES'

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7.15 p.m.—From the Studio:
Musical items.
7.30 p.m.—“Evening News” late news service.

NIGHT SESSION.

7.40 p.m.—Programme announcements.
7.45 p.m.—Talk by Rev. F. H. Raward:
“I’ll tell you a curious thing.”
8 p.m.—“Big Ben.” From Paling’s Concert
Salon: Sydney Madrigal Society’s Choir.
Conductor, Mr. Arnold Mote.

FROM THE STUDIO.

8.15 p.m.—2FC Studio Orchestra. Conductor,
Horace Keats.
(a) Overture, “A Night in Granada”
(Koentzer).
(b) “By the Blue Hawaiian Waters”
(Ketelby).
8.30 p.m.—From Paling’s Concert Salon: The
Sydney Madrigal Society’s Choir.
8.45 p.m.—2FC Studio Orchestra:
(a) “Andalusian Serenade” (Eilenberg).
(b) “Waiting” (Ancliffe).
(c) “A Japanese Carnival” (Basque).
9 p.m.—“Big Ben.” Weather intelligence.
9.1 p.m.—Frank Botham, baritone:
(a) “Ishtar” (an old love lilt) (Spross).
(b) “Gipsy Dan” (Russell).
9.8 p.m.—2FC Studio Orchestra:
(a) “Water Lilies” (Clarke).
(b) “Song of the Volga Boatman” (Lake).
9.18 p.m.—Frank Botham, baritone (with or-
chestral accompaniment):
(a) “Kashmiri Song” (Woodforde-Finden).
(b) “Till I Wake” (Woodforde-Finden).
9.25 p.m.—Roland Foster will give the final
of his series of grand opera lecture re-
citals, dealing this evening with “Tales
of Hoffman” (Offenbach). Vocalists:
Daisy Mangan, Florence Grant, Bryson
Taylor, H. Wagner, Philip Sallabank,
Herman Tremayne.
9.50 p.m.—2FC Studio Orchestra:
Selection, “Carmen” (Bizet).
10 p.m.—Continuation of Roland Foster’s
grand opera lecture recital, Part II.
Excerpts from “Tales of Hoffman” (Offen-
bach).
10.25 p.m.—Late weather forecast. The Am-
bassadors’ Dance Orchestra. Conductor,
Manuel Hyman.
10.38 p.m.—Studio music.
10.45 p.m.—The Ambassadors’ Dance Or-
chestra.
10.57 p.m.—Late news. To-morrow’s pro-
gramme.
11 p.m.—“Big Ben.”
National Anthem.
Close down.

2BL, SYDNEY.

THURSDAY, 21st JUNE, 1928.

EARLY MORNING SESSION.

8 a.m. to 9 a.m.

MORNING SESSION.

10.30 a.m.—G.P.O. Clock and chimes.
Musical programme from studio.
11 a.m.—G.P.O. Clock and chimes.
Talk on “Denison Craft” by Miss Hoyles.
12 noon.—G.P.O. Clock and chimes.
Special Ocean forecast and weather report.
12.3 p.m.—Musical programme from studio.
12.12 p.m.—Information, Mails, Shipping, and
port directory.
12.15 p.m.—Boats in call by wireless.
12.17 p.m.—Fruit Market report.
12.19 p.m.—Vegetable Market report.
12.21 p.m.—London Metal Market report.
12.23 p.m.—Dairy Farm and Produce Market
report.
12.26 p.m.—Fish Market report.
12.28 p.m.—Rabbit Market report.
12.30 p.m.—G.P.O. Clock and chimes.
H.M.V. Gramophone Recital.
1.30 p.m.—G.P.O. Clock and chimes.
Talk to children and special entertainment
for children in Hospital.
2 p.m.—G.P.O. Clock and chimes.
Close down.

AFTERNOON SESSION.

Racing information broadcast immediately
after each race by courtesy of the “Sun.”
3 p.m.—G.P.O. Clock and chimes.
News from the “Sun.”
3.10 p.m.—Musical programme from the studio
3.20 p.m.—News from the “Sun.”
3.30 p.m.—Musical programme from studio.
3.40 p.m.—Dungowan Dance Band, broadcast
from Dungowan Cabaret.
4 p.m.—G.P.O. Clock and chimes.
News from the “Sun.”
4.8 p.m.—Musical programme from the studio.
4.15 p.m.—News Session.
4.30 p.m.—Dungowan Dance Band.
4.50 p.m.—News from the “Sun.”
4.55 p.m.—Features of evenings programme.
4.57 p.m.—Producers Distributing Society’s
Poultry report.
4.59 p.m.—Racing resume.
5 p.m.—G.P.O. Clock and chimes.
Close down.

EARLY EVENING SESSION.

5.45 p.m.—Clock and chimes.
Children’s Session.
6.30 p.m.—Dinner Music.

SPECIAL COUNTRY SESSION.

7 p.m.—G.P.O. Clock and chimes.
Racing resume.
Australian Mercantile Land and Finance
Co.’s report.
Weather report and forecast by courtesy of
Govt. Meteorologist.
Producers Distributing Society’s Fruit and
Vegetable Market report.
Stock Exchange report.
Grain and Fodder report (“Sun.”)
Dairy Produce report (“Sun.”)
Weekly Traffic Bulletin.
7.15 p.m.—Country News from the “Sun.”
7.45 p.m.—Helpful Hints to Listeners by Mr.
Alan Burrows.
8 p.m.—G.P.O. Clock and chimes.
Broadcasters Topical Chorus.
8.3 p.m.—Mr. Alfred Wilmore, tenor.
from the Arcadia Theatre, Chatswood.
Organist, Mr. N. Robins.
8.22 p.m.—Miss Doris Orr, soprano.
8.29 p.m.—The British Music Society String
Quartette.
8.36 p.m.—Mr. Clement Q. Williams, baritone.
8.43 p.m.—The Leichhardt District Band.
9.3 p.m.—Weather report and forecast by cour-
tesy of Mr. C. J. Mares, Govt. Meteorologist.
9.4 p.m.—Mr. F. Stewart Jarbo, elocutionist.
9.11 p.m.—The British Music Society String
Quartette.
9.18 p.m.—Mr. Alfred Wilmore.
9.25 p.m.—The Leichhardt District Band.
9.45 p.m.—Miss Doris Orr.
9.52 p.m.—The British Music Society String
Quartette.
9.59 p.m.—Mr. F. Stewart Jarbo.
10.6 p.m.—Mr. Clement Q. Williams.
10.13 p.m.—Resume of following day’s pro-
gramme.
10.16 p.m.—The Wurlitzer Organ broadcast
from the Arcadia Theatre, Chatswood.
10.25 p.m.—The Wentworth Cafe Orchestra
under the direction of Mr. Jimmy Elkins
broadcast from the Wentworth. During in-
tervals between dances “Sun” news and
Wentworth Social notes will be broadcast.
11.30 p.m.—G.P.O. Clock and chimes.
National Anthem.

2GB, SYDNEY

THURSDAY, 21st JUNE, 1928.

MORNING SESSION.

10 a.m.—Music.
10.10 a.m.—Happiness Talk.
10.20 a.m.—Music.
10.30 a.m.—Women’s Session.
11.15 a.m.—Close down.

AFTERNOON SESSION.

2 p.m.—Music.
2.20 p.m.—Talk.
2.35 p.m.—Music.
3 p.m.—Close down.

EVENING SESSION.

5.30 p.m.—Children’s Session by Uncle George.
7 p.m.—Stock and Market reports.
7.15 p.m.—Music.
8 p.m.—Opening Chorus.
8.2 p.m.—Violin Solos by Mr. Dan Scully.
8.8 p.m.—Humorous Items by Mr. Reg Har-
rison, Comedian.
8.15 p.m.—Address.
8.30 p.m.—Songs by Miss Edith Allen Taylor.
8.37 p.m.—Bert Weston Steel Guitar Specialist.
8.45 p.m.—Humorous Items by Mr. Reg Har-
rison, Comedian.
8.53 p.m.—Songs by Miss Edith Allen Taylor.
9 p.m.—Talk.
9.20 p.m.—Bert Weston Steel Guitar Specialist.
9.27 p.m.—An Illustrated Talk on “Cesar
Franck” arranged by Miss Phyllis Camp-
bell A.R.C.M.

3AR, MELBOURNE

THURSDAY, 21st JUNE, 1928.

MIDDAY AND AFTERNOON SESSIONS.

12.24 p.m.—The Radio Ramblers:
Fox trot, “Are you happy” (Ager).
Fox trot, “Waitin’ for Katy” (Shapiro).
Waltz, “Russian Lullaby” (Berlin).
Fox trot, “Just another day wasted away”
(Turk).
Fox trot, “In the Sing Song Sycamore Tree”
(Woods).
12.39 p.m.—Mary Thirwall, contralto:
“Oh Shing Sun” (Schumann).
“The Fuschia Tree” (Quilter).
12.46 p.m.—Melbourne Concert Orchestra:
“Operatic Selection” from “Rigoletto”
(Verdi).
“Two Guitars” (Horlick).
“Scenes Infernales” (M. S. Lake).
1 p.m.—Close down.
1 p.m.—Newmarket stock sales. Special “snap”
progress reports direct from the yards, by
courtesy of John Macnamara and Co.

AFTERNOON SESSION.

3 p.m.—Trevor May’s Australians:
Fox trot, “So Long” (Burke).
Fox trot, “A silver lining” (Donaldson).
Waltz, “Romana” (Wayne).
Fox trot, “Coquette” (Green).
Waltz, “The song is ended” (Berlin).
3.10 p.m.—Phyllis Wiseman, soprano:
Selected.
3.17 p.m.—Trevor May’s Australians:
Fox trot, “Indian Cradle Song” (Wayne).
Fox trot, “I’m in Love Again” (Porter).
Waltz, “Falling in Love” (Meyer).
3.32 p.m.—Phyllis Wiseman, soprano:
Selected.
3.40 p.m.—Trevor May’s Australians:
Fox trot, “Mary” (Donaldson).
Fox trot, “Tell me little Daisy” (Miles).
Fox trot, “Are you lonesome to-night?”
(Handman).
Selected.
4 p.m.—Women’s Hour.
“Heaven is largely a matter of digestion.”
Sepakers, Matron Bartlett.
Sister Purcell.
Mrs. Henrietta C. Walker.
4 p.m.—Matron Bartlett.
“Vegetarian Cooking.”
4.20 p.m.—Sister Purcell.
“Infant Welfare.”
4.40 p.m.—Mrs. Henrietta C. Walker.
“The art of being a settler.”
“The Helpful hen—Simple Poultry Keeping.”
5 p.m.—Trevor May’s Australians:
Waltz, “Put your arms where they belong”
(Ackman).
Fox trot, “I told them all about you”
(Friend).
Fox trot, “Dream Kisses” (Jerome).
Fox trot, “Nothin’” (Handman).
Selected.
5.20 p.m.—Robert Allen, male alto:
Selected.
5.27 p.m.—Trevor May’s Australians:
Fox trot, “Are you happy?” (Ager).
Fox trot, “Waitin’ for Katy” (Shapiro).
Waltz, “Russian Lullaby” (Berlin).
Fox trot, “Just another day wasted away”
(Turk).

Fox trot, "In the Sing Song Sycamore Tree" (Wood's).
 5.42 p.m.—Robert Allen, male alto:
 Selected.
 5.50 p.m.—Trevor May's Australians:
 Jazz and Jollity.
 6 p.m.—As per programme.

EARLY EVENING SESSION.

6 p.m.—Gypsy Players:
 "A Little Dutch girl" (Kalman).
 6.15 p.m.—Wm. Mack, baritone:
 "Where my Caravan has rested" (Lohr).
 "My Beloved Queen" (Rose).
 6.22 p.m.—Trio:
 "O Star of Eve" (Wagner).
 "Slow Waltz" (Carson).
 6.32 p.m.—Quartette:
 "Drink to me only" (Arr. Ponchon).
 "Old Black Joe" (Ponchon).
 6.40 p.m.—Valerie Walsh, contralto:
 "Night Song" (Cyril Scott).
 "I be hopin' you remember" (Clarke).
 6.47 p.m.—Bertha Jorgensen, violin:
 "Souvenir" (Drdla).
 "Minuet" (Beethoven).
 6.55 p.m.—Gypsy Players:
 "Magic Flute" (Mozart).
 "Music Pictures" (Foulds).
 7.10 p.m.—Mack, baritone:
 "An Evening Song" (Blumenthal).
 "Ailsa Mine" (Newton).
 7.17 p.m.—Trio:
 "Little Suite" (Saint-Georgan).
 7.27 p.m.—Helga Brennick, cello:
 "Movement from Sonata" (Beethoven).
 7.33 p.m.—Valerie Walsh, contralto:
 "In Haven" (Elgar).
 "Spring Sorrow" (John Ireland).
 7.41 p.m.—The Gypsy Players:
 "Petite Suite Moderne" (Mosse).
 "Dancing Nymphs" (Braine).

EVENING NEWS SESSION.

8 p.m.—Macnamara's stock rep rts.
 8.10 p.m.—Herald News Service.
 Weather Synopsis.
 Shipping Movements.
 8.12 p.m.—Stock Exchange Information.
 8.17 p.m.—Fish Market reports by J. R. Borrett Ltd. Rabbit prices.
 8.21 p.m.—Market reports by the Victorian Producers' Co-operative Co. Ltd.: Poultry, Grain, Hay, Straw, Jute, Dairy Produce, Potatoes and Onions. Market reports of fruit, Wholesale prices of Fruit by the Wholesale Fruit Merchants' Association. Citrus Fruits.

EVENING MUSICAL SESSION.

8.30 p.m.—Melbourne Concert Orchestra:
 Overture, "Zampa" (Herold).
 "Liebesleid" (Kreisler).
 8.44 p.m.—Vera Thomson, soprano:
 "Charming Chloe" (Garman).
 "Over the Mountains" (Quilter).
 8.52 p.m.—Herbert Pettifer, violin:
 "Serenade" (Pergament).
 "Meditation" (Thais).
 9.21 p.m.—Vera Thompson, soprano:
 "Beauty Sleep" (Arditti).
 "The Green Hat" (Schumann).
 9.29 p.m.—Melbourne Concert Orchestra:
 "A Tone Journey" (Crofe).
 "Serenata" (Maurice Baron).
 9.44 p.m.—A. G. Kelson:
 A talk on stamps.
 9.54 p.m.—Melbourne Concert Orchestra:
 "Barcarolle" (Tchaikowsky).
 10.1 p.m.—Semi-Final Weather forecast, specially for our Country Listeners.
 10.3 p.m.—Jessie Shmith, contralto:
 "Sometimes in my Dreams" (D'Hardelot).
 "Stars of the East" (Lohr).
 10.11 p.m.—Ronald Brearley, cello:
 "Lullaby" (Bridges).
 10.15 p.m.—Melbourne Concert Orchestra:
 "Don Quixote" (Tafrank).
 "Canzonetta" (Tchaikowsky).
 10.30 p.m.—Jessie Shmith, contralto:
 "Bois Epais" (Tully).
 "Softly Awakes my Heart" (Saint-Saens).
 10.38 p.m.—Melbourne Concert Orchestra:
 "Rustic Revels" (Percy Fletcher).
 10.52 p.m.—"Age" News Bulletin, exclusive to 3AR.
 10.58 p.m.—Final Weather forecast.
 10.59 p.m.—Our Australian Good Night quote is taken from the poem "William Henry Groom" by George Essex Evans.
 11 p.m.—G.P.O. Clock says "Eleven."

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4QG, BRISBANE

THURSDAY, 21st JUNE, 1928.

MORNING SESSION.
10.30 a.m. to 11.30 a.m.

MIDDAY SESSION.

1 p.m.—Market reports; weather information;
"The Daily Mail" and "The Daily Standard"
news.1.20 p.m.—Lunch hour address.
1.58 p.m.—Standard time signal.

2 p.m.—Close down.

AFTERNOON SESSION.

3.30 p.m.—Mail train running times.
3.31 p.m.—A programme of music from the
Studio.4.15 p.m.—"The Telegraph" news.
4.30 p.m.—Close down.

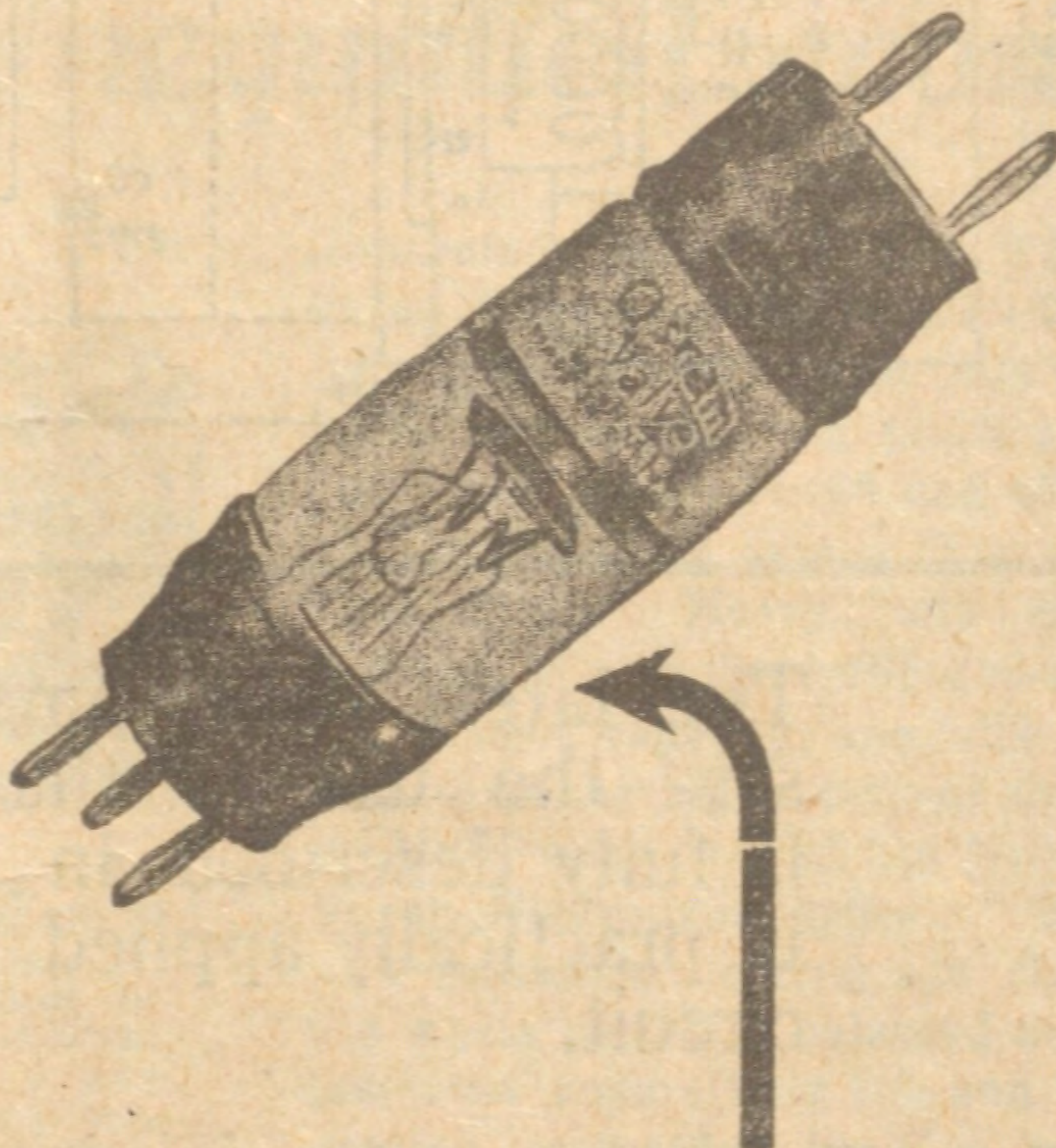
EARLY EVENING SESSION.

6 p.m.—Mail train running times.
6.2 p.m.—"Daily Standard" news.
6.8 p.m.—Stock Exchange information.
6.9 p.m.—Metal quotations.
6.10 p.m.—A talk to motorists: "Motor Cycle
Operation," by "Gargoyle."6.28 p.m.—Announcements.
6.30 p.m.—Bedtime stories by "The Sandman."
7 p.m.—Special news service.7.3 p.m.—Market reports.
7.25 p.m.—Fenwick's stock report.
7.30 p.m.—Weather information.7.40 p.m.—Announcements.
7.43 p.m.—Standard time signals.
7.45 p.m.—Lecture: A Talk on Books, by
Mr. Doyle (McLeods).

NIGHT SESSION.

The first portion of to-night's programme
will comprise a Concert, arranged by Miss
Jean Trundle, relayed from St. Barnabas'
Parish Hall, Ithaca.The second portion will comprise Dance
Music by the St. Barnabas' Orchestra.8 p.m.—Concert programme.
9 p.m.—Dance Music.
10 p.m.—From the Studio:
"The Daily Mail" news. Weather news.
Close down.

RADIO MOVIE CLUB programmes
to be broadcast over 2GB for the com-
ing week are as follows: Friday, June
15th, Trackless Train News, Health
Hints by Renee Adoree, Movie Know
All, Radio Movie Club News, Kiddies'
Session. Saturday, June 16th,
Trackless Train News, Radio-Movie
Club Weekly Meeting (to take place
at meeting hall, where movie pictures
will be shown), Kiddies' Session, A
Message from your favorite Star.
Monday, June 18th, Trackless Train
News, "A Stranger Sees Hollywood,"
Movie Know All, Radio Movie Club
News, Kiddies' Session. Tuesday,
June 19th, Trackless Train News,
Fashion Talk by Joan Crawford,
Movie Know All, Radio Movie Club
News, Kiddies' Session. Wednesday,
June 20th, Trackless Train News,
"Film Training" by Ermund Gould-
ing, Movie Know All, Radio Movie
Club News and Competition Corner.
Thursday, June 21st, M.G.M. Track-
less Train News, "A Survey of Stars,"
Movie Know All, Radio Movie Club
News, Kiddies' Session.

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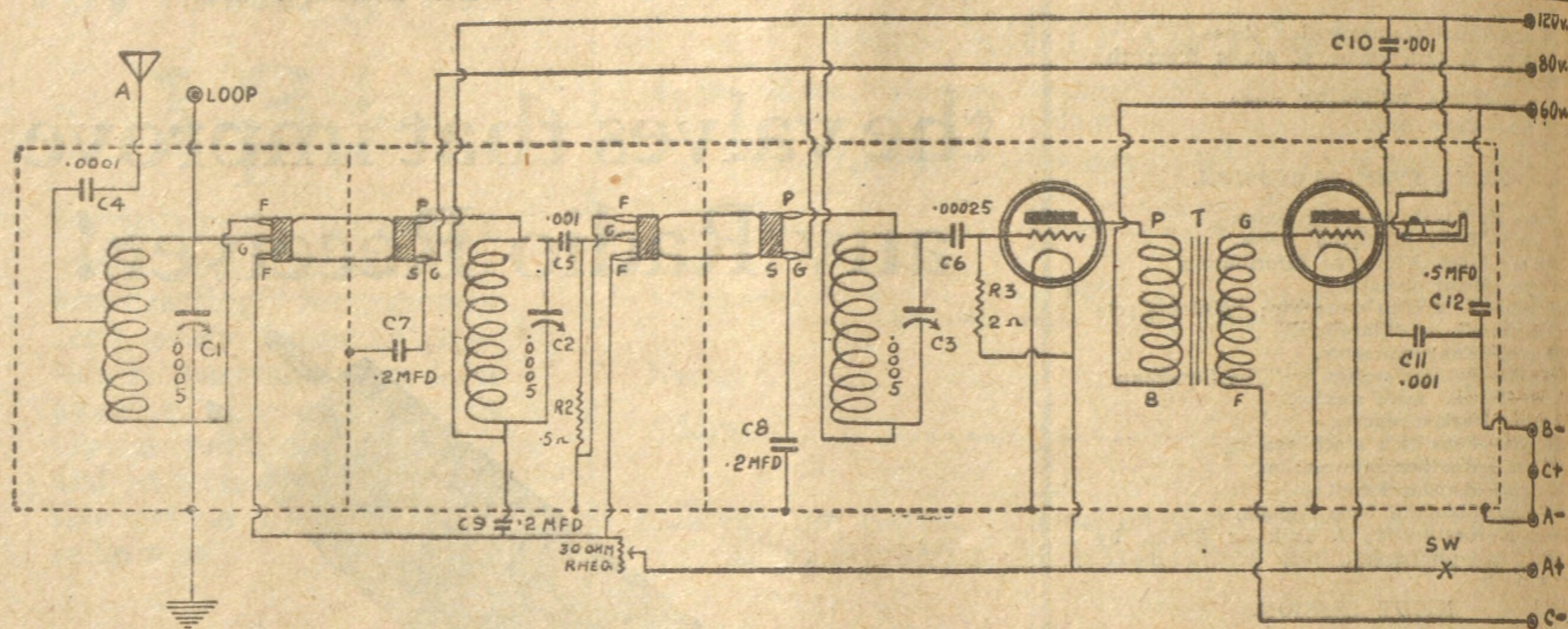
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MAY ISSUE OF RADIO

On Sale all Newsagents and Bookstalls 1/-

Queries.

G.W.T. (HAMILTON).—As you do not give enough details it is very difficult to suggest any remedy for your trouble without a full description of the symptoms.

C.C. (PIANZIE).—The circuit diagram you have enclosed with your query is the original Weagant method of oscillation control. This is similar to the Reinartz. To add a stage of Radio Frequency amplification to this circuit I refer you to the Marco Four receiver, which has been described in "W.W." in three instances.

M.J.L. (CONCORD).—It would appear that your Marco special does not function correctly as when the lead from coil L3 to B positive 45 is disconnected from the battery without any noticeable difference, this indicates that one section of the T.K.D. valve is faulty. This, of course, will comprise the plate and grid elements in the R.F. circuit in this case. I believe that very few of these valves are now obtainable, but, if possible, I advise you to try another VT126. If this is unobtainable it is very easy to convert your Marco special into the ordinary Marco Four by the use of separate valve sockets and valves.

E.C.H. (ARTARMON).—Your 2 valve Extraordinary is apparently giving trouble, due to internal high resistance from your B batteries. Sometimes a B battery will show a full voltage reading when tested with a high grade volt meter. If a cheaper type of meter is used with the property of including a certain amount of resistance in the circuit the voltage of the B battery rapidly finds its correct level, which is indicated by the meter.

E.W.S. (NIMBIN).—It is proposed to publish at an early date, either in "W.W." or "RADIO" a full constructional article dealing with the Browning Drake circuit, but utilising a screen grid R.F. amplifier.

J.J.H.S. (WAGGA).—The formula given by Mr. Young in his article for a home constructed accumulator B battery is quite correct. Many readers have constructed this with success. No doubt if you communicate with Mr. Young at Turramurra, he will be pleased to enlighten you on any points necessary.

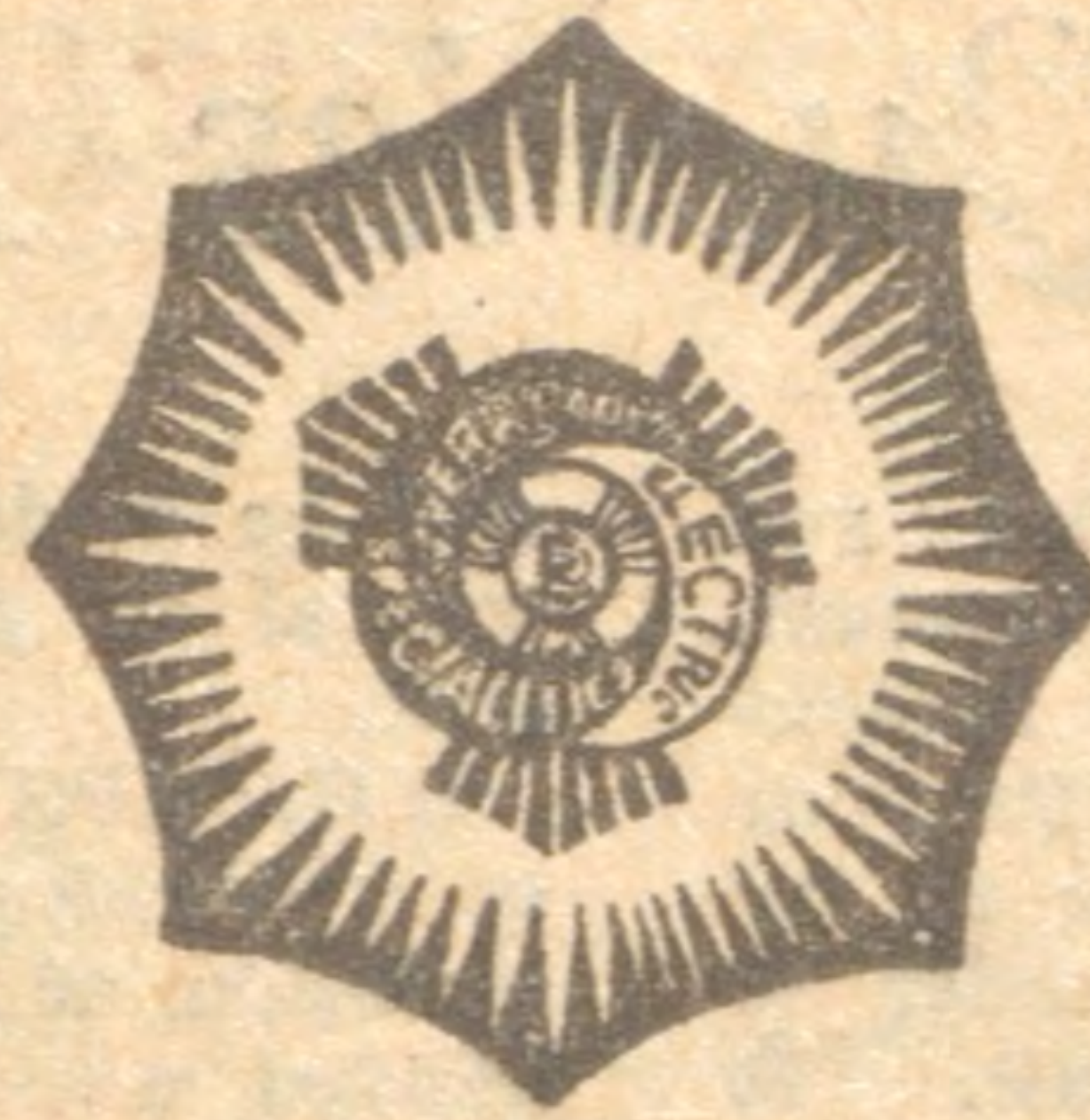
E.A.R. (NUNDAH).—I thank you for submitting details of the wave trap you are using. This is very interesting and I shall be pleased to place this before readers at an early opportunity.

S.W.W. (DRUMMOYNE).—The effect you notice in the regeneration control of your Selectrex Four is quite natural, but it is obvious that your radio frequency stage is not performing its duty, and is simply an idle passenger in the receiver circuit. First check over your wiring, and if this is correct, try a replacement of the R.F. valve. It is always best to remove the loud speaker plug from the jack when switching the receiver off for the night. A very slight leakage will take place through the valves themselves, and although this drain is very slight, yet it is better to avoid it, and thus obtain longer life from your B batteries.

W.J.B. (DUNGOG).—The combination of Philips valves you suggest will be excellent for use with your Toroidal coil 5 valve receiver. The best method of testing a defective valve is by means of a volt meter and milliammeter. Comparing the readings with the characteristic given by the manufacturer will show at once, whether the valve is faulty or not.

REFEREE AND CROSLY TWO.—You are both obtaining very fine results with the two valve Crosley receiver. No alteration you can make to the aerial system you are using will materially improve the reception, although a wave trap, as you suggest, will certainly be an advantage. In "W.W." for March 9th, you will find constructional details of the Acceptor wave trap. I do not think you will improve matters by using a Pentatron valve. It is feasible that the station you received at 12.45 a.m. was JOCK, but this is very exceptional reception, and can only be put down to freak conditions. A one stage audio amplifier may be added to this receiver in a purely straightforward manner without any difficulty.

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Readers' Queries Answered

PUNCH (BALMAIN): The sketches you have enclosed of your aerial-earth system, show that this is quite suitable for reasonably good interstate reception with your Marco Four receiver. It is advisable to try different combinations of valves in order to obtain the best results with this circuit. It may be of advantage to try tuning the aerial circuit and comparing this with the untuned system you are using at present.

F.B. (MT. VICTORIA): The Radiokes Split secondary coils are admirably suited for use in the Elstree Six circuit. The four dual condensers could be ganged together, but this would involve quite a lot of complication and is not to be recommended. This is mainly due to the fact that all the condensers would have to be insulated from each other.

R.J. (FIVE DOCK): The most effective modification you can make to your neutrodyne receiver is the inclusion of regeneration control for the detector circuit. This may be used in the usual Reinartz or Hartley way by the addition of a 25 turn coil in close relation to the secondary with a 50 micro microfarad midget variable condenser for oscillation control in the same circuit. No advantage

will be evident by the use of a carborundum crystal in place of the grid condenser and leak.

S.H. (IPSWICH): Your request for a copy of "Wireless Weekly" containing the description of the "Gloomchaser Five" has been handed to our circulation department. The home-constructed coil kit described for use with the "Go Getter" short wave receiver is quite suitable for use with any short wave adaptor. I strongly recommend the use of the Gecophone variable condenser for short wave reception. It seems evident that the Japanese station you refer to is JOCK.

W.R.M. (UNANDERRA):—The station you refer to is 2ME of Amalgamated Wireless A/sia Ltd., Sydney. This station transmits on various wavelengths and is mostly used for experimental purposes.

C.H.B. (BEXLEY):—There is no reason why your Ultra-Audion One should not function correctly with a stage of audio amplification if all connections, valves, and inter-valve transformer are in order. The valves you are using should be quite suitable, but it is advisable to try a change, particularly if these valves have been in use for some time.

R.A.W. (PORTLAND):—Yours is clearly a case for "blind" reception. We hear of many instances in which it is very difficult to receive one particular station in some localities. Atmospheric and terrestrial conditions account for this phenomenon. I am sorry that under the circumstances I cannot offer any solution.

R.E.D. (YEOVAL):—It will be quite a simple matter to utilise your 32 volt DC lighting plant to supply filament potential for your receiver. This may be done by the inclusion of a suitable resistance, or, on the other hand, a separate supply may be taken from two or three of your cells, comprising part of the bank of accumulators.

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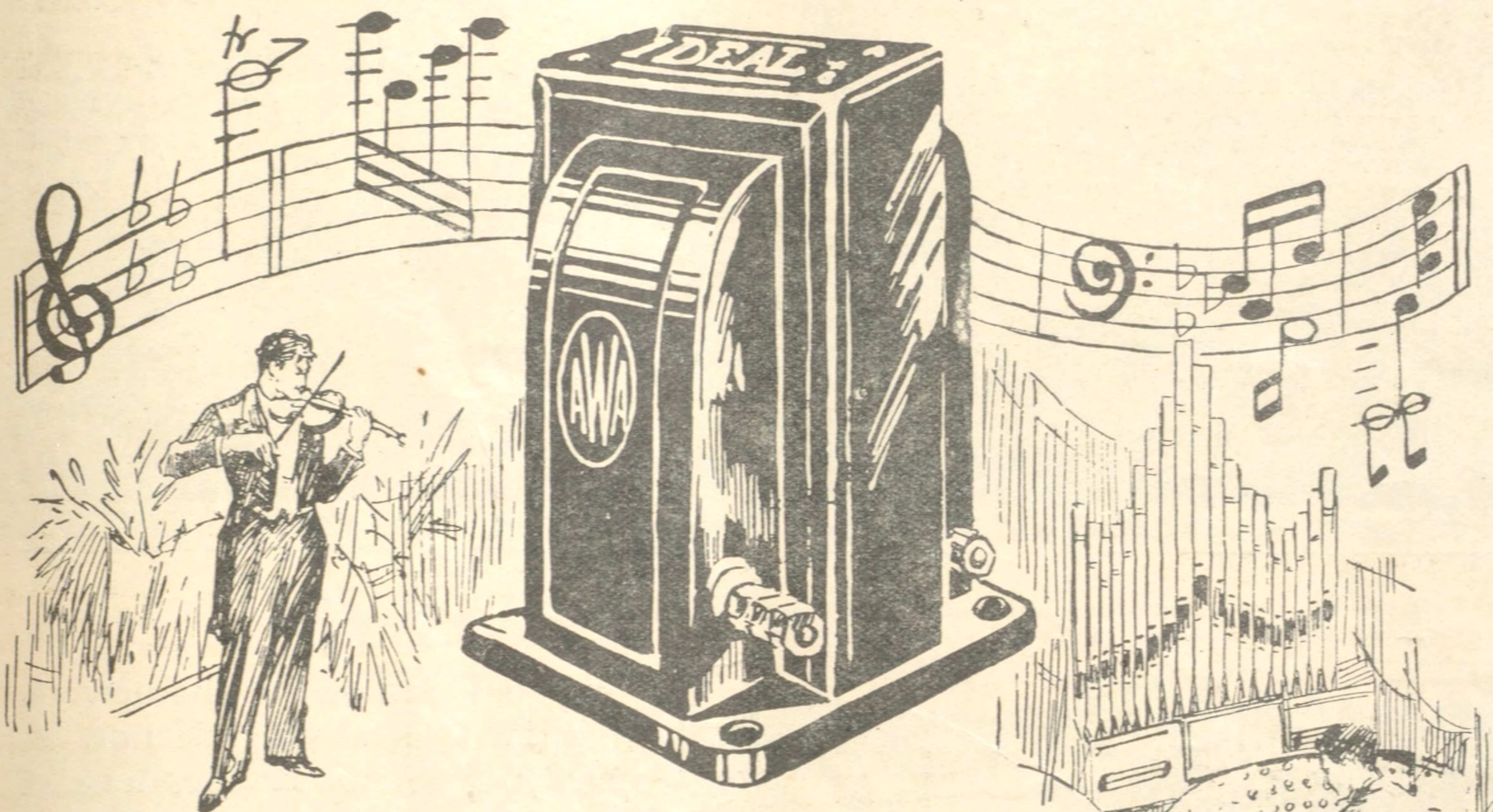
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Phone: F4184 Telegrams: "Strom"



The Tone of Your Receiver is Governed by the Transformer

Pure tone quality—the true reproduction of voice and music which distinguishes the best receivers—is largely dependent upon the transformer installed in the receiver.

The high, sweet notes of the violin—the low, rolling bass of the organ—come in clear and distortionless when your receiver is equipped with an A.W.A. "IDEAL" Transformer.

Designed by the research engineers of Amalgamated Wireless, the special features of the new A.W.A. "IDEAL" Transformer are increased size of iron core—more copper used in windings—minimum air gap—sturdy construction—attractive phosphor-bronze enamel finish—all conducting to make it the IDEAL TRANSFORMER.

Ask your Radio Dealer to show you the A.W.A. "IDEAL" Transformer. Install one in your receiver and you will be surprised and delighted at the wonderful reproduction.

Supplied in following ratios:

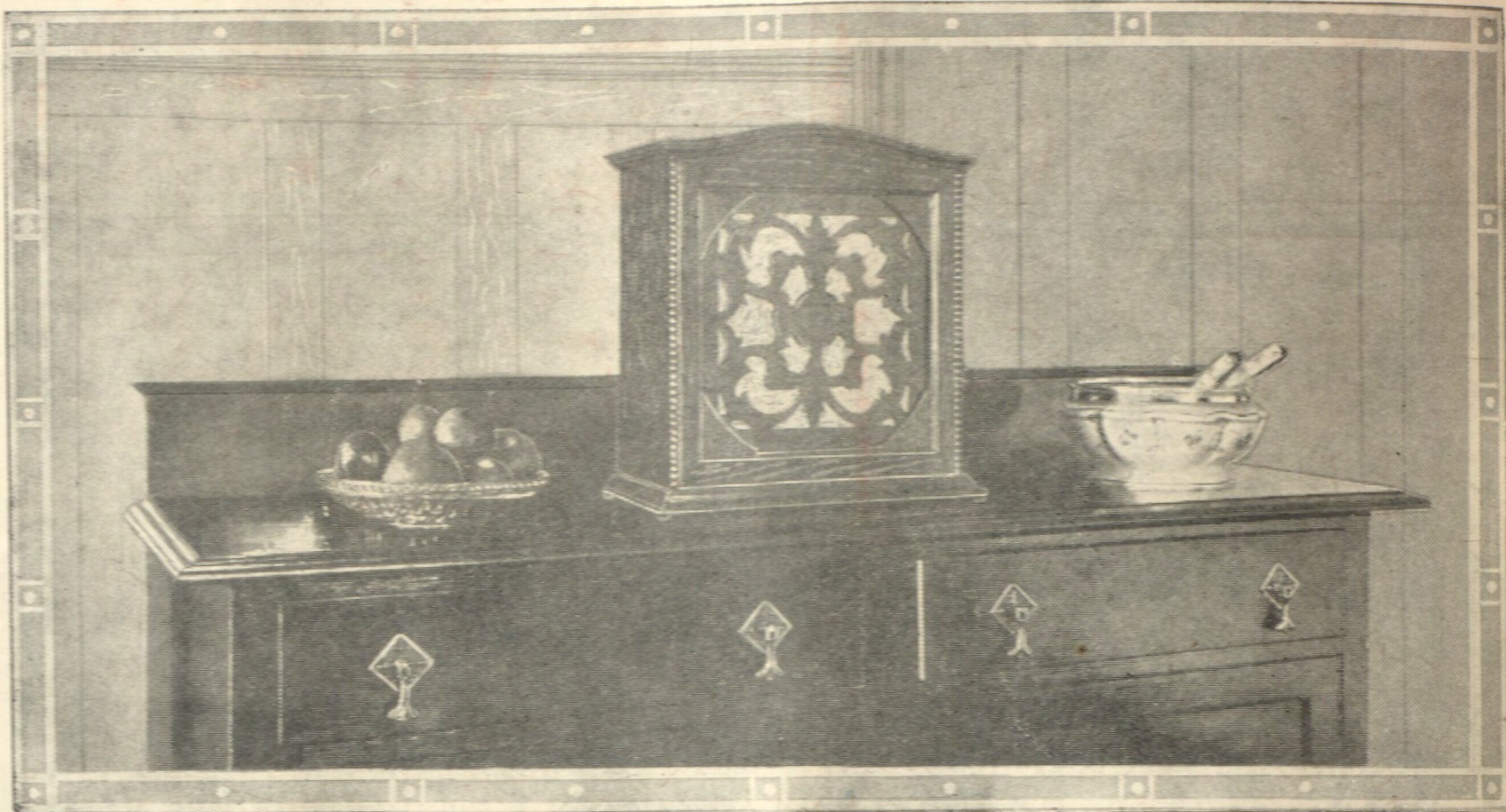
2—1, 3½—1, 5—1, and 9—1.

Output Transformer, 1—1 Ratio, 19/-.

AT ALL RADIO DEALERS.

Amalgamated  Wireless
(Australasia) Ltd

PRICE
18/-
EACH



AMPLION CONE SPEAKER Jacobean Oak

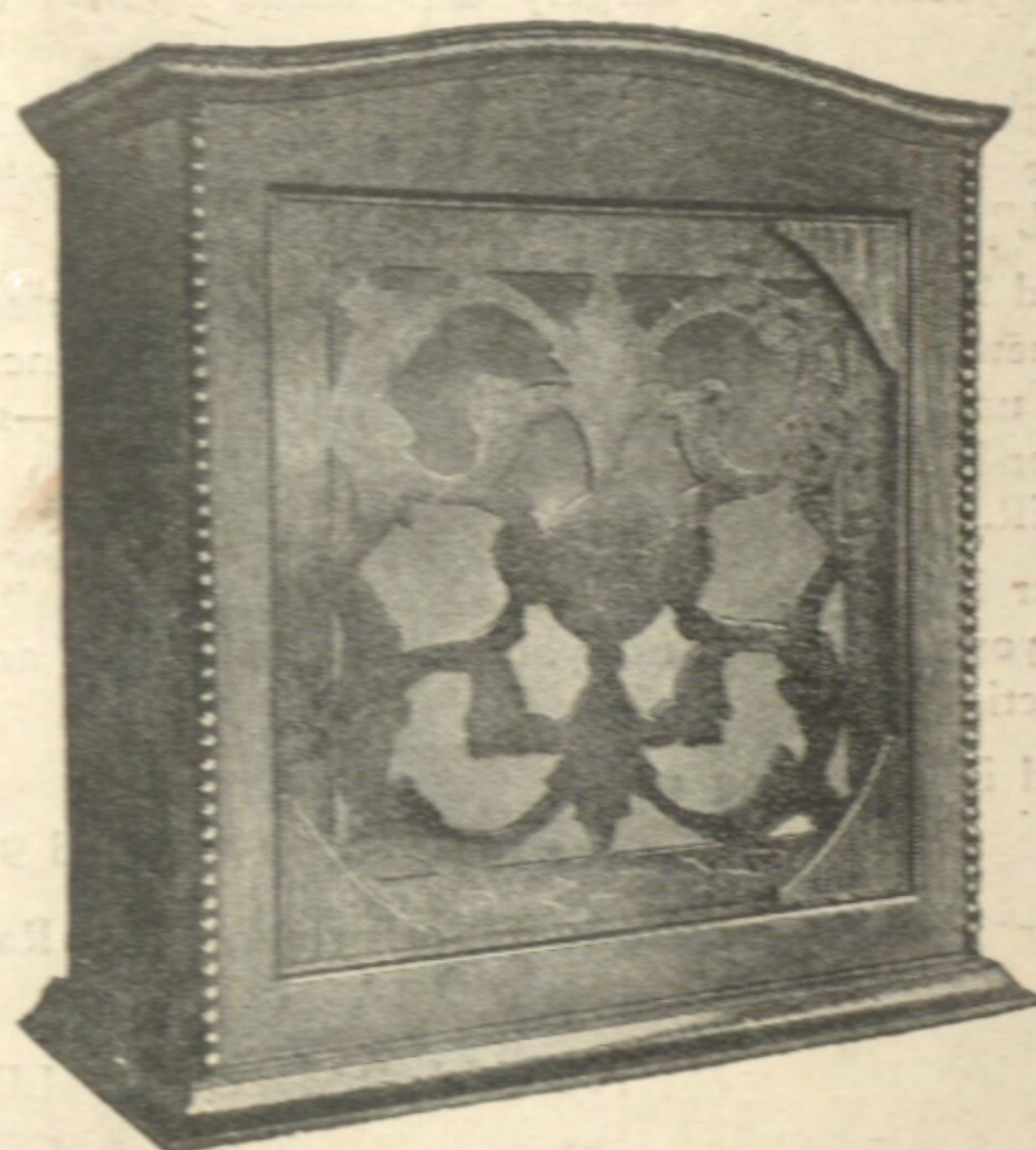
Type AC7 — £7 : 15 : 0
Other Amplion Cones
from £2 : 15 : 0

HAVE you heard one of the new Amplion Cones yet? If not, then you do not realise how delightfully natural radio reproduction can be. There is no artificial accentuation of the bass notes—no undue stress on the treble—it is just real.

AMPLION Cone Speakers are not merely put on the market to meet a sudden demand. They have to sustain a reputation built up in 40 years of manufacturing sound-reproducing devices.

THEY embody all the most recent improvements in Cone design, and are free from the defects so common to many Cone speakers. They utilise the finest type of electromagnetic unit, and a Cone made of seamless fabric, which is acoustically correct and unsusceptible to atmospheric changes.

THEY have been designed to be as pleasing in appearance as in performance, and each is backed by the famous Amplion guarantee of satisfaction and service.



The "Natural Tone" Speaker