

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 1



Friday, April 27, 1928

Price Threepence

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them critical—*

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Junior Loudspeaker
£5/5/-**



**Philips
"PCJJ"
Loudspeaker
£6/10/-**

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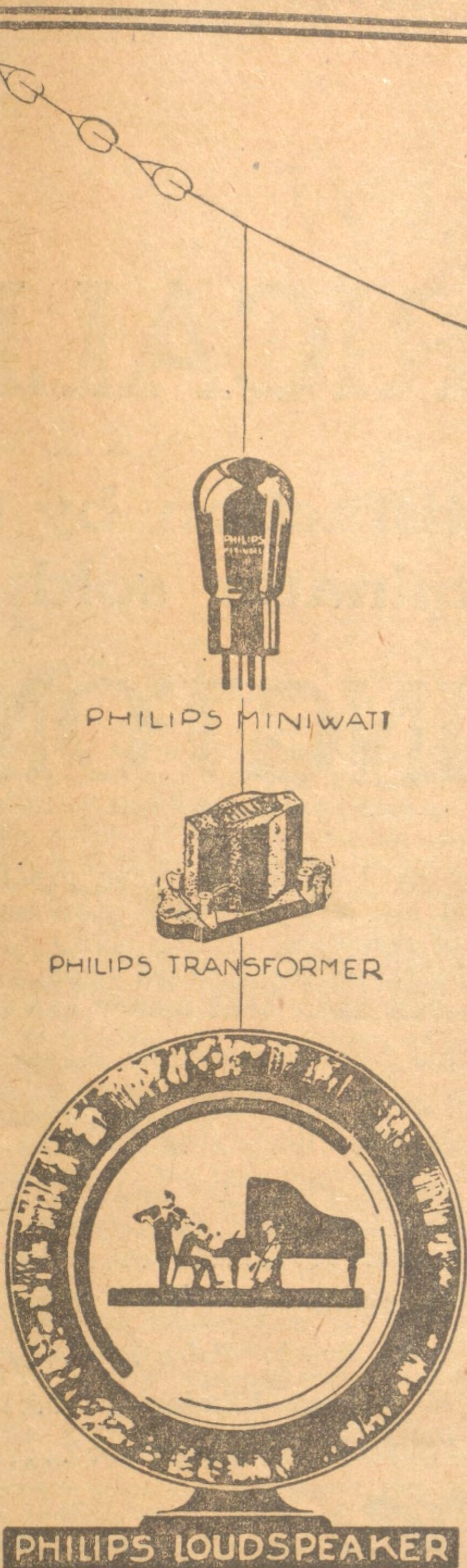
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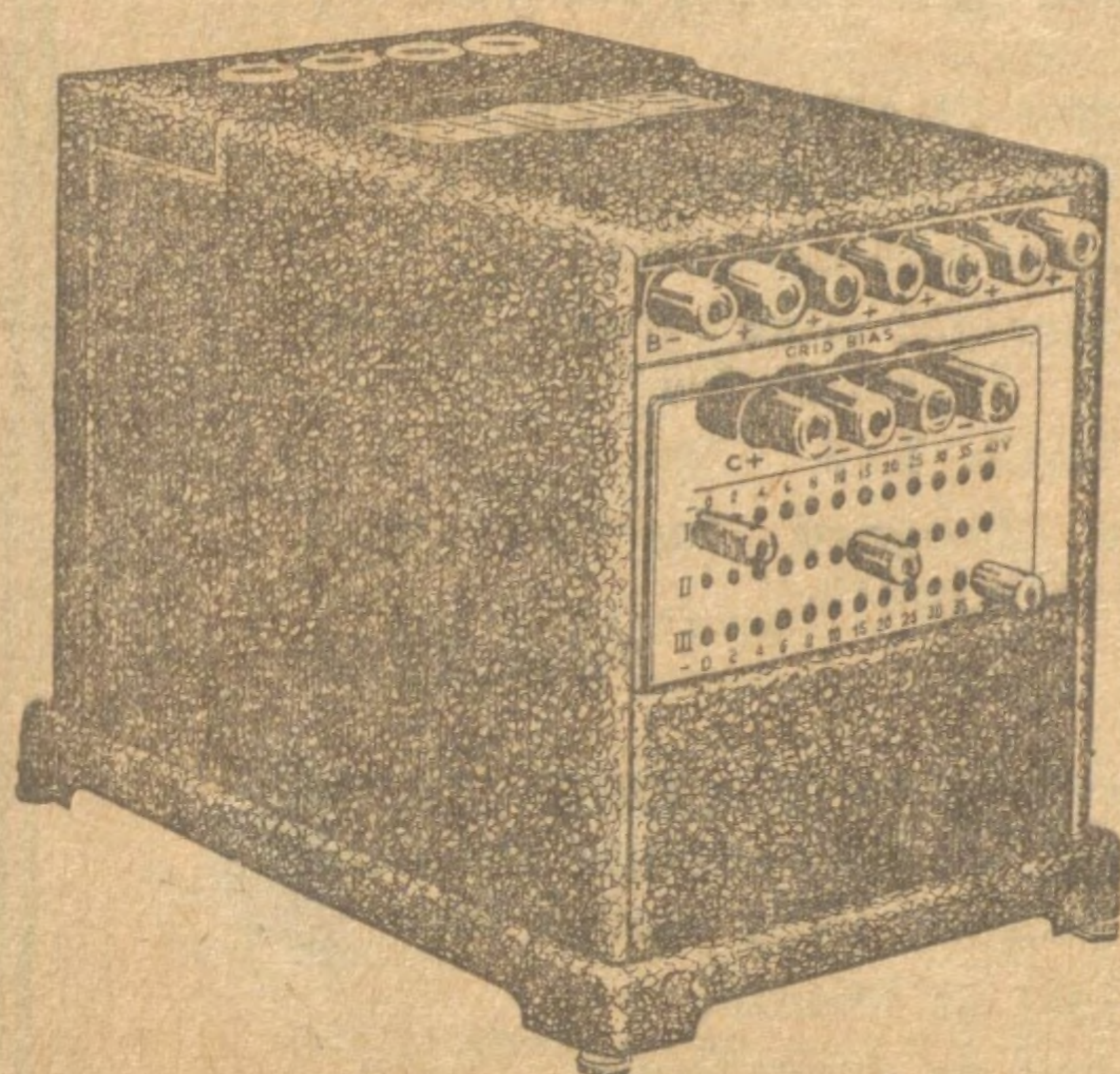
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WIRELESS WEEKLY

VOL. 12. No. 1.

FRIDAY, 27th APRIL, 1928.

Wireless Dead Areas.

"**B** LANKVILLE is a dead area for wireless." One frequently hears an expression like this as he travels around the country. It is intended to convey the information that the reception of 3LO or any other station is out of the question, or, at all events, is not worth the effort of tuning in. The informant usually indicates that there is something at Blankville which of a physical or geological nature peculiar to certain localities which are described owing to those peculiarities as wireless "dead areas."

Upon investigation it will invariably be found that the simple explanation of the absence of satisfactory reception in terms of its earning the reputation of a "dead area" is not justified. It is not dead; and the failure of some owners of sets to tune in satisfactorily is due to causes removable or to conditions that are remediable. The conditions at the typical Blankville district can be found in many localities. But the stigmatising of the district as hopeless for reception does wireless a lot of harm.

One of the greatest bars to satisfactory progress in broadcasting is the publicity that is given to ill-chosen or rash and partly correct expressions of a semi-technical nature. It only needs some one who is better known than his neighbors in wireless to speak of the revolutionary change in wireless receiving equipments that is coming shortly; or the statement that such and such a place is quite unlike all other places in the behavior of electro-magnetic waves in their neighborhood when immediately he is believed. Not only that, but the story goes round and grows, until it is probably unrecognisable by the original perpetrator when next he hears it! One needs to be careful of his comments in such circumstances.

But let us return to Blankville; what has given rise to the reputation given to it by its critics? There are some Blankvilles where no indigenous trouble or local difficulty exists whatever, and the failure of

one or a few owners of sets to get good reception is due to the sets themselves or the owners of the sets. Those cases are, of course, few, although they may be given undue publicity.

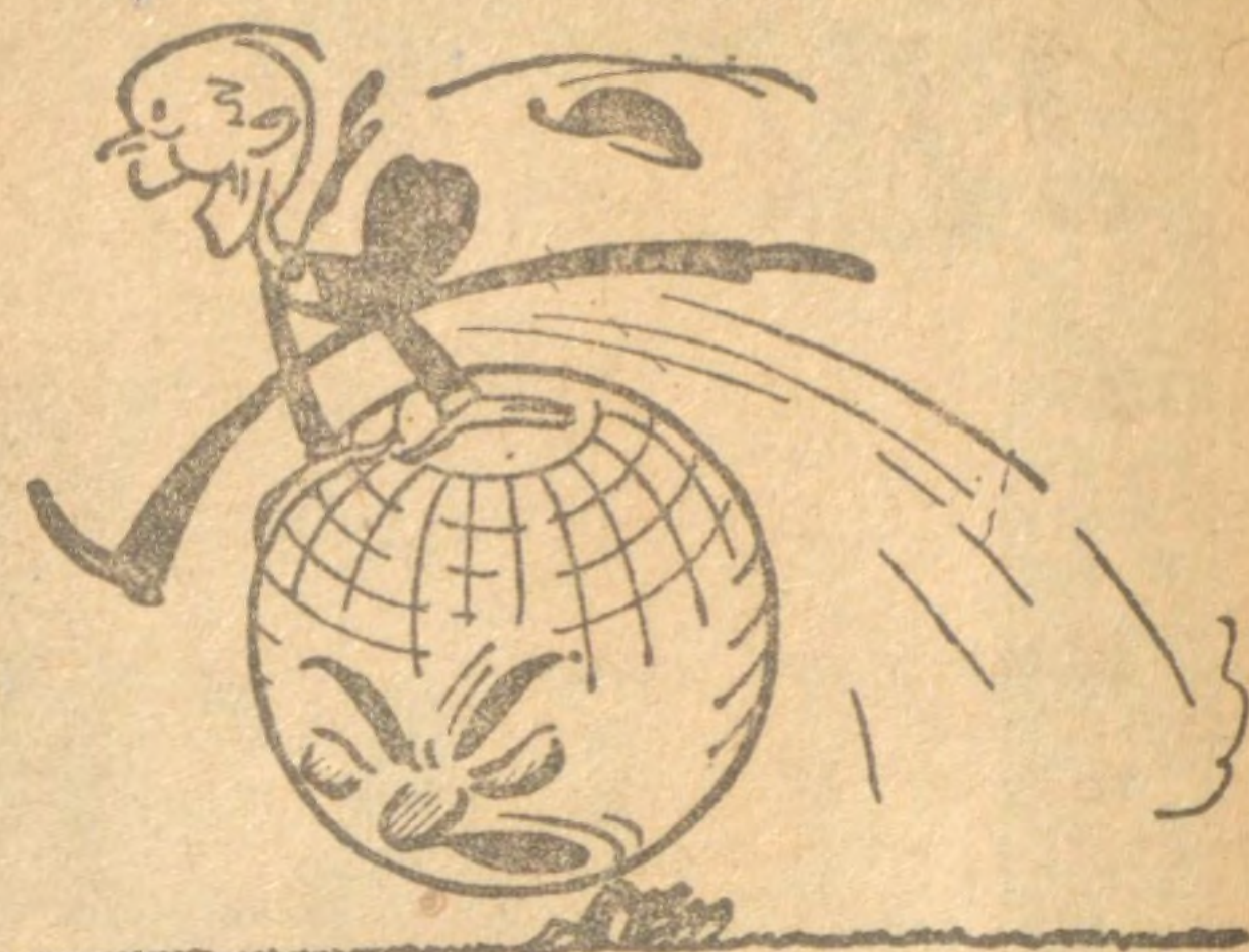
There are many instances, however, of localities where interference with broadcast reception undoubtedly exists; interference, annoying and puzzling which causes many listeners to give up the service or alternatively to carry on under conditions that are far from satisfactory. The causes of such interference do not justify the application of the reputation of a "dead area," but the interference may be so severe as to have a deadening effect on efforts of reception.

The most prevalent form of man-made interference as distinct from natural interference, such as atmospherics, etc., is that caused by electric machinery or supply systems. It is possible, of course, to obtain perfect reception near electric systems, but if they are not designed or maintained with any consideration of their influence as generators of radio interference, the listeners within the sphere of influence have a bad time. Some country residents know too well how suddenly and completely their enjoyment of broadcasting ceases for the night immediately a picture show opens up; while others know that every night is spoiled for reception when a medical man with his electro-therapy apparatus starts his high frequencies oscillating. There are towns where the supply system is the cause of continual "static," as it is frequently called locally, and listeners' efforts at obtaining satisfaction from their sets are practically nil.

This form of interference is one that should be tackled by the authorities responsible for broadcasting. It seems wrong to collect a fee for listening when the enjoyment of the listening is ruined or very considerably lessened by causes quite capable of prompt removal.

Catching Up with the Wireless World.

By R. E. CORDER.



THE MAYOR of Andorra (Spain), on failing to pay his license fee for 1928, was fined a couple of goats, with an option of fourteen strings of onions.

MARCONI HAS PREDICTED the abolition of the Morse Code. He says that original typed or written documents will be sent across the air by Television, thus saving a great amount of time.

THE NETHERLANDS GOVERNMENT has passed a Bill providing for the regulation of broadcasting. The hours of transmission are to be divided equally between the various stations, and there is to be no license fee for listeners.

THE COMMONWEALTH MOTOR SHIPS "Ferndale" and "Fordsdale" have been equipped with the new automatic SOS receiver. The instrument picks up distress signals within a distance of 300 miles, and immediately rings alarm bells to call the operator.

A WELL KNOWN BRITISH Radio Journal has challenged Mr. J. L. Baird, television inventor, to reproduce by means of television three or four simple geometrical figures. The paper in question has put up a sum of £1,000, and Mr. Baird has been given seven days to accept. Several newspaper reporters say that Mr. Baird refuses to take any notice of the challenge, as "he has formed himself into a company."

MISS MASIE OTTEY, who has just arrived from America to act as pianist in the Dungowan Dance Band (which is to be broadcast by 2BL), has received a letter from an American friend who is enthusiastic over 2FC's wonderful programmes. Her correspondent says 2FC was picked up by 2LO and rebroadcast to America, where it was picked up by WMAK at Buffalo, and again rebroadcast, so that three different continents were listening to the same programme emanating from their local station.

Anzac Day, 1928.

By C.E.

A misty April morning on a distant Turkish bay
Has given us a memory that will not pass away,
A memory of kindred flesh that triumphed over fears
And set a shining beacon light for all Australia's years.
A misty April morning; it was thirteen years ago.
To-day we offer tribute on the air from 3LO.

To-night we bridge the years again and view the darkened scene,
The shadowed ships, the phantom hills, the spectres in between.
We hear the first sharp fusillade that bids the furies rise,
And as the tinge of morning steals into the Turkish skies
We see the khaki figures fighting upward to the crest;
They conquer; but the hill is strewn with heroes laid at rest.
In full, we see the story of that misty April morn
That bade the nations wonder at the newest nation born.
A hundred other stories did the diggers write as well,
But Anzac, first and greatest, stands for all there is to tell.

We build a Shrine of memory; its simple lines and grand
Will bear unending witness in an unforgetful land,
Should ever clouds of trouble blot our happy southern skies
Our later southern legions like the Anzacs will arise,
And guided by the story of that misty April morn
Will guard Australia's freedom till the great eternal dawn.

Our peaceful hopes, should they not be by future years belied,
The profit even greater of our memory and pride,
For peace will bring its battles though of quite another kind,
We'll fight them all the better with the story well in mind.

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And set a shining beacon light for all Australia's years.
A misty April morning; it was thirteen years ago;—
To-night we offer tribute on the air from 3LO.

PRETTY SALESWOMAN: "Don't you want a loud-speaker in the home?"

He: "My dear—this is so sudden!"

JOHNNY: "Dad, what is 'status quo'?"

Dad: "Fancy not knowing that. It's those weird noises that come over the radio."

THE B.B.C., after their transmission of a description of the Oxford and Cambridge boat race, declared that for the first time in the world a short-wave transmitter had been installed on a launch for the purpose of sport description. They forget that Australia was the first country to use this method three years ago. Incidentally, Australia was the first country to broadcast descriptions of any sport; other countries were not in favor of it at the time, as they were of the opinion that "gate-money" would be affected. However, as Tex Rickard, the famous boxing promoter, says: "Broadcasting has done more for sport than can be imagined. Thousands of people have become interested in sport which before the advent of radio aroused no enthusiasm in them."

H. R. (BOBBY) PEARCE, who will represent Australia against the world's best amateur scullers at the 1928 Olympic Games, is considered the best sculler this country has ever produced. Pearce's time in the 2,000 metres Olympic test was 7 min. 23 sec. This compares with winners' trials at past Olympic Games as follows:—1912, Kinnear (England), 7 min. 37 sec., 14 sec. slower; 1920, Kelly, U.S.A., 7 min. 46 sec., 23 sec. slower; 1924, Beresford (England), 7 min. 49 sec. Send in your subscription for the Olympic Fund, so that Australia will be adequately represented. 3LO, Melbourne, will be pleased to receive donations and will forward same on to the Treasurer of the Lord Mayor's Olympic Fund.

2FC Moves to New Studios

Station to be located in Her Majesty's Building

2FC Limited has changed its address. It is no longer situated on the roof of Farmer and Company at the north western corner of Market and Pitt Streets, but has moved across Pitt Street to Her Majesty's Building. The change has been dictated by the considerable enlargement of the station's activities and the building alterations of Farmer and Co. In the new quarters 2FC occupies a large portion of two floors with special large studios specially constructed in the light of past experience for radio work.

On the second floor of Her Majesty's building are situated the filing room, general office, Mr. Anderson's (Studio Manager) office, Mr. Williams' (Publicity Manager) office, Accountant's office, Board room, and No. 3 Studio.

The Rehearsal room, Control room, and Nos. 1 and 2 Studios are on the third floor.

Five microphones will be used in each studio, though provision is made for the use of nine microphones in each studio should this become necessary. It is worth while mentioning here, that each microphone will be capable of separate adjustment without interfering in any way with the others. This is an important factor in the rendition of band, orchestral, or choir music, and even more important in the transmission of radio plays, because some artists speak louder than others, and so that a general volume can be obtained, the individual microphone can now be adjusted. Formerly one resistance only was used, and this meant that if the volume from one microphone was reduced, that of the other microphone would be reduced accordingly.

The Control Board is a splendid piece of work, and was installed by Amalgamated Wireless (A/sia) Limited under the direction of Mr. Burbury, Chief Mechanic to 2FC. On this board, which stands 5ft. high, and is 9ft. in length, are mounted controls for both reception and transmission. A four valve receiver which gives perfect reproduction of all that is transmitted from the studio is also capable of picking up other transmissions from the various stations, and this will help to save a great deal of the duplication in programmes, which, however, is not so prevalent since the amalgamation of the two "A" class stations, 2FC and 2BL.

No. 1 studio is spaciouly large, measuring 55 x 22 feet. It is also high (22 feet), this being the result of experiments by Mr. Burbury, who has found that a high roof is essen-



An advance photograph of the largest of the new studios. Note the absence of the old fashioned drapings and the more cheerful aspect. Bands and large orchestral bodies will play here.

tial to good transmission. The heavy drapings that once were carried around the walls of the studio, are now conspicuous by their absence, and blue drapings are placed only in front of the windows, which are of the double type in order to exclude street noises from the studio.

At one time, it was thought that heavy drapings were essential, but now it has been found that with these arrangements, music seems very dead, and a certain liveliness is infused when the drapings are removed. The walls and ceiling have been covered with "Celotex," which has the property of damping out objec-

tionable echo without losing the "life" of the studio.

Walking across the floor, one is struck by the silence of the studio. External noises are reduced to a minimum by the use of double windows, and even one's footsteps are deadened by the thick floor covering of carpet linoleum (which is 1/4 in. thick) under which is a layer of rubberoid, and finally, concrete. Ordinarily timber would have been beneath the rubberoid, but it has been found that the dull echo that could be noticed when walking on floor boards was absent when solid concrete was used as a base.

In the matter of lighting, the studio is well outfitted. On each side of the wall, five large electric torches have been installed, whilst five huge chandeliers are suspended from the ceiling.

Whilst the writer was looking round the new studios, a visitor arrived, and catching sight of the beautiful piano in No. 1 studio, his face beamed. It was Len Maurice, the famous pianist-entertainer.

Passing out of No. 1 studio, we see the control room. In addition to the four valve receiver, and the microphone controls already mentioned, a two valve amplifier for short-wave rebroadcasts has been mounted. It is to be distinctly understood that all these installations are made on the one panel. To the right, a complete telephone exchange has been mounted. Here are 200 lines, about 100 of which are used as land lines between various important points of transmission. The power for all this gear is supplied from the mains, from which a line is also taken to another smaller control board which is used for charging the batteries, which are placed in a tiny

room just behind the control room. The batteries housed here are permanent, and are duplicated fixtures. To charge them, one merely has to pull over a small switch on the charging board. The battery room is treated with a special acid resisting paint, and the floor is covered with lead.

As there is no exit from the battery room, other than that which leads back into the control room, we pass out that way, and in doing so, notice that windows on each side of the control room allow the operator to see what is going on, not only in No. 1 studio, but also in No. 2 studio, which is on the other side.

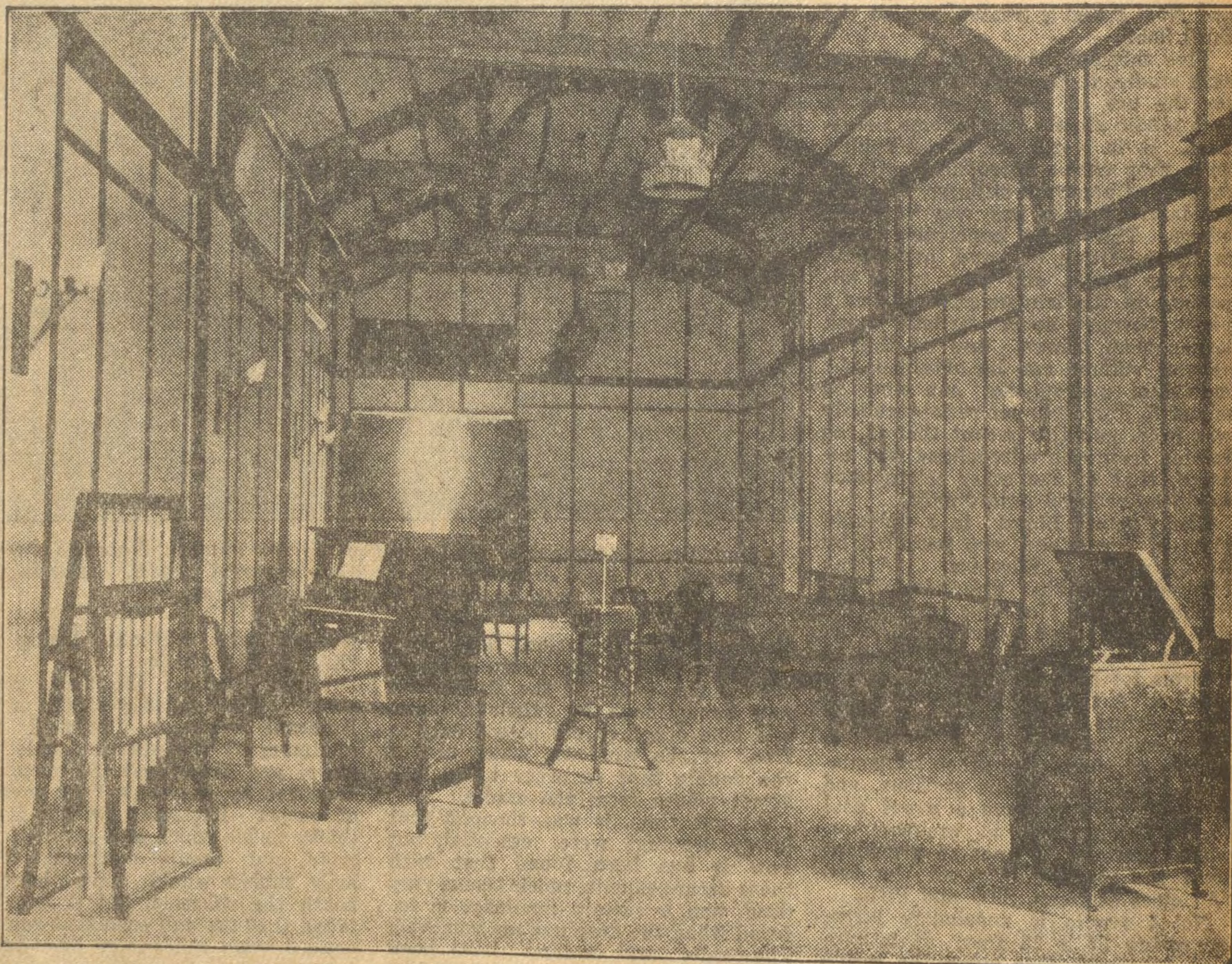
Once in No. 2 studio, we see the same care and precautions taken against external noises. We wonder for a moment how it is possible for ventilation to be effective when the windows are closed, and at that moment our eyes are drawn upward, and we see several gauze squares. Behind these, and out of our view, are draw fans, which automatically suck away the exhausted air (which always rises) and causes a draught of pure air to replace it.

This studio, though not quite so large as Studio No. 1, is furnished and finished after the same plan. Studio No. 2 measures 50 x 22 feet, and is 18 feet high. Both studios 1 and 2 are capable of accommodating bands or choirs, etc., and both are provided with a gramophone and piano. Studio No. 3 is used mainly for news, talks, etc.

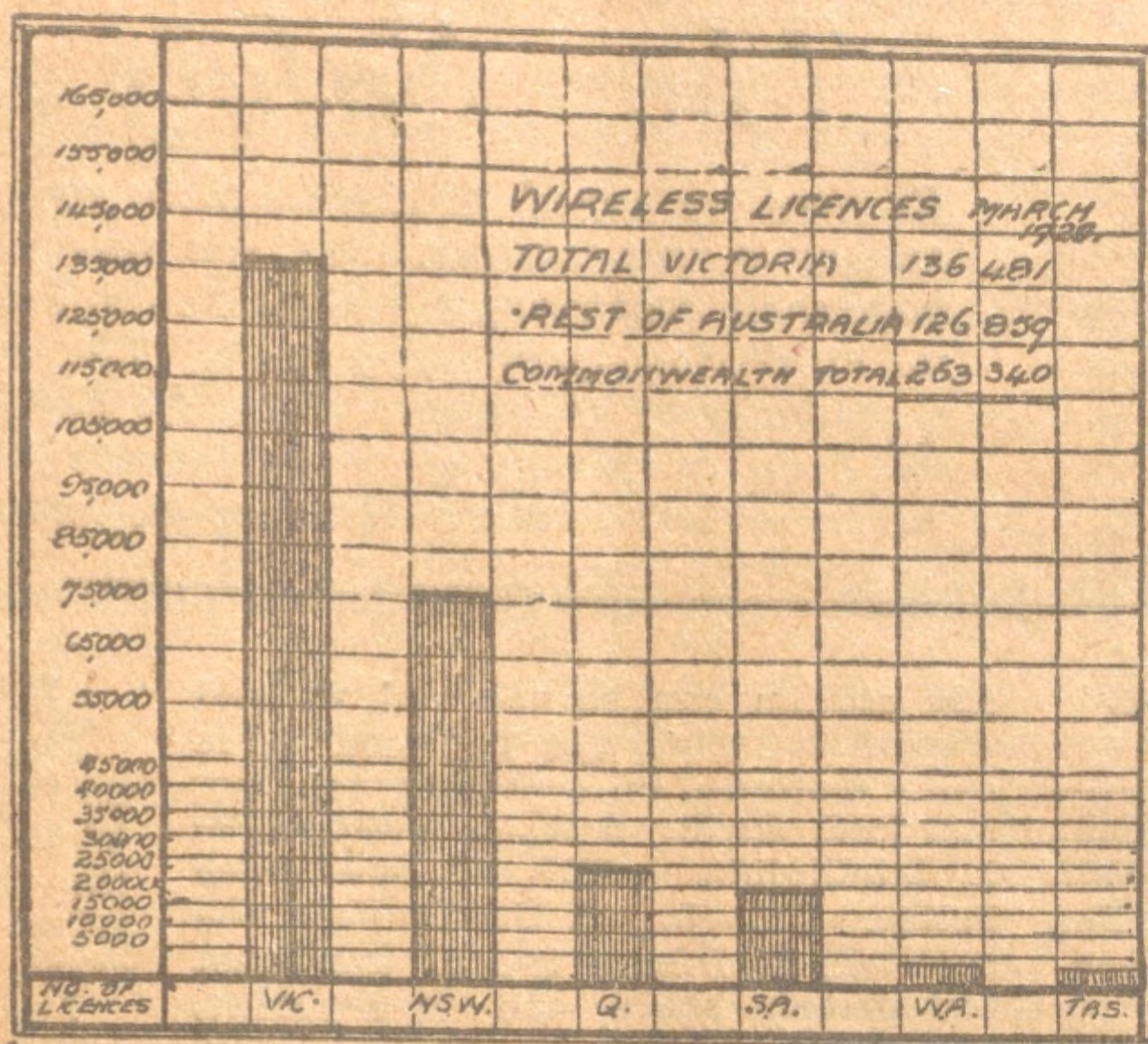
We now make our exit, and walk a few yards down the passage to the rehearsal room. Here a piano is to be installed, in order that artists may rehearse their pieces before putting them on the air.

Almost opposite us, a lift bell invites us to ring, and this done, we ascend to the second floor, where we see a busy staff.

The old gas installations that were in use have been removed from each office, and electric light now serves to show up the glittering furniture. Though there is still a certain air of newness about 2FC's new studios and offices (some of the painters haven't gone yet), already photographers and pictures are being hung, and the place is beginning to look very comfortable.



The general studio at 2FC's new quarters. The room is only partially furnished as yet. Further photographs will be published next week.



Victoria has more Licenses than there are in the Rest of Australia

ACCORDING to the latest figures supplied by the Postmaster-General's Department, Victoria is still in the ascendancy, and has more wireless receiving licenses than the whole of the other States of the Commonwealth together. The following were the respective numbers of licenses in force in the States of Australia at the end of March:—

Victoria	136,481
Rest of Australia	126,859
New South Wales	75,869
Queensland	24,920
South Australia	19,452
West Australia	3,780
Tasmania	2,838

The Victorian total is estimated to be proportionately the world's record, being equal to approximately 78 licenses to every one thousand of the population.

Many theories have been advanced for this extraordinary position, and psychological and physiographical reasons have been urged. It is significant, however, that the Wireless Royal Commission, after hearing exhaustive evidence in every State last year, in their findings, reported as follows:—

"The position of 3LO, Melbourne, is unique amongst the broadcasting stations in Australia. It is almost universally admitted to give the most satisfactory service in the Commonwealth. . . ."

The natural inference, therefore, is that the excellence of the service of 3LO, Melbourne, is responsible for the preponderance of licenses in Victoria.

BILLY TEA LISTENS IN.

The Bigness of Broadcasting.

RECENT rumors as to the requirement of the less payable broadcasting stations by the more so, are evidently based on a tacit recognition of the fact that no State, however large, can be quite big enough and populous enough to absorb all the energies, whether wireless or financial, of a really big broadcasting station. After all, there is really no reason why people in New South Wales should expect different programmes from those in Victoria, West Australia, or Queensland. Local news and events, of course, are different, but these are a very small part of broadcasting. When Hinkler arrived in Bundaberg, all State boundaries disappeared, and 3LO, Melbourne, became a Commonwealth, instead of a State, broadcaster.

Relays.

This is not, of course, to say that we are to scrap the capital stations in favor of one central depot for transmission, but certainly wavelengths and programmes would be far better co-ordinated if the Commonwealth really came into its own, and ignored State boundaries. The question of relay stations became a bugbear as soon as it was found that what was best for the one State clashed with the interests of other interstate broadcasting companies. The case of Western Australia, too, is due largely to its scattered population, and not to its high wave-length, as many people suppose. If companies were not limited to State

boundaries, and were allotted such territories as they could manage, solely with respect to Australia as a whole, then wireless would come out of its parochial shell, and solve for itself the problems that the Commission found so knotty.

Getting Pot-bound.

The support given to 3LO, Melbourne, not only by those who pay to listen to its programmes, but also by thousands who pay fees into other coffers, is so evident that 3LO has actually been accused of amassing wealth unduly! As a matter of fact, this has been forced on it by the system of State boundaries in vogue. 3LO's transmissions are not to be landlocked, like the Mediterranean or our Hobsons Bay, but are really boundless as the blue Pacific, and if you put new wine into old vessels, or a quart into a pint bottle, you know that what happens out not to be unexpected.

The Conclusion.

Once you pool fees, as the Commission suggests, you practically wipe out State boundaries, but you still prevent broadcasters from overleaping their boundaries, and that is the whole cause of such confusion as at present exists, or looms on the horizon. It really seems as if the Commonwealth must wipe out State boundaries in broadcasting affairs, and deal with every station on its larger merits, without respect to politico-geographical limitations. How that is to be done, let us not presume at present to forecast. When the hour arrives, the man will undoubtedly be there.



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.

UNNECESSARY ANNOUNCEMENTS.

Dear Sir,—Only a few years ago the writer, then in England, remembers well the long announcements that were made before each item. For instance, 2LO, the well-known London station, used to come on the air with the same announcement every time, "This is station 2LO—the British Station of the London Broadcasting Company—calling." Now they just say, "2LO calling," as do other stations. 3LO, for instance, says "3LO, Melbourne," whilst other typical calls are "2FC, Sydney," "This is 7ZL," and "4QG, Brisbane." Only 2BL seem to linger on the long call sign; they still announce, "This is station 2BL, Sydney, transmitting from the Australian Mercantile, Land and Finance Company's Building, Bligh Street, Sydney," etc. Though this is not done before each item, it is totally unnecessary, since all "A" class stations are now well enough established and need no long descriptive announcements.

Yours, etc.,

ROY MANNERS.

Watson's Bay.

NEW WAVELENGTHS.

Dear Sir,—When the Wireless Commission issued its report, it recommended inter alia, re-allotment of wavelengths. The P.M.G. then informed us that this matter could not be considered until Mr. H. P. Brown came home from U.S.A. in January. Now the said gentleman having been back for the last four months, we naturally expect something to be done. According to the Press the Commonwealth Government has led one to believe that new wavelengths were to be allotted some weeks ago, also increased power permitted, or alternatively relay stations erected. At present no effort is being made to cater for the country listener or to increase the number of licences in the country districts, either by the Government or the transmitting people. Manufacturers of receivers had done their share by producing instruments of great selectivity and sensitivity, but the best receiver cannot make fundamental faults at the transmitting end good. 70 miles from Sydney and up to perhaps 150 miles, no Syd-

ney station can be received without distortion. 2FC, for instance, is so badly distorted on occasions, that not one item during a whole programme is intelligible. 2BL is not much better. This is not the fault of the receiver, as I have two of the finest instruments made, one a superhet, and further, I am no novice. It is admitted that with 5 kilowatts power only, transmission is reliable within a radius of 50 miles or so.

There are two cures, viz.: (1) Increase the aerial power, which pushes the area of distortion further back, and is, strictly speaking, not a cure. This method serves the purpose in England, where the area to be covered is limited. (2) Erect at suitable distances of about 75 miles from the Main Station North West and South West thereof. Landline Relay stations of at least 3 kilowatts, programmes being sent to all three stations from a Central Studio simultaneously. This method would also help to minimise the static interference. Owing to the series of tropical and southern low pressure systems during the whole summer not a single night has been absolutely free from static, simply because our receivers must be tuned sensitively, whereas with stations in closer proximity the music, etc., will break through static and drown it.

Only when something like this is done, will there be a really good response from country people to install receivers, and in this land of distance and space it is the people in the remote areas who are the mainstay and backbone of Australia, and who live in loneliness from one year to another, who should receive the first consideration. City folk care nothing for market reports and news, but the farmer may be made or broken because he knows or does not know the markets. City people can go to entertainments to suit their various tastes and pockets, but the outback folk have at best the same old gramophone records, and never hear a lecture, or the "living" voice of a speaker or singer.

In conclusion, I hope the P.M.G. takes "Wireless Weekly" and considers these points when he reads them.

COUNTRY LAD.

Exeter.

HARKNESS CRYSTAL SPOT.

Dear Sir,—From time to time I have noticed in the columns of "Wireless Weekly" that some constructors of the "Harkness Reflex" two valve receiver have struck trouble with the crystal.

I constructed "Harkness" twelve months ago, and met the same trouble with the crystal howling and squealing, and at times it took half an hour to find the "spot" on the crystal, and it was absolutely useless to rely on tuning in a station at a minute's notice for any special item. The volume and tone of this receiver was all that could be desired once the crystal was set and I felt certain that a remedy could be found if one experimented a little, and this is what I did to eliminate the trouble.

I connected the fixed plates of a "Pilot" midget condenser to the P terminal of the first valve and the moving plates to the moving plates of the first tuning condenser. By using this condenser like a reaction condenser the oscillations in the first valve can be controlled quite easily, and the whole receiver becomes stable. By the way, a place will be found on the panel to accommodate this midget condenser.

I used Philips' B406 valves with a 90 volts "B" battery.

I would advise any users of the "Harkness Reflex" two valve receiver to try this experiment if they have trouble with the crystal, as it is really worth while.

Yours, etc.,

Channon.

W. H. CLARKE.

U.S. AND U.K.

Dear Sir,—I am rather surprised to find that though Australia grudgingly admits the superiority of America and Great Britain in matters appertaining to radio, the ideas and mannerisms of these two countries are not carried out. The differences in cost of license fees, the use of electrically operated sets, and many other items which have made the two previously-mentioned countries famous should have been considered long ago by this country whilst opportunity offered.

Yours, etc.

Roseville.

J. MALLOW.

New Features at 2FC and 2BL

*Special Anzac Day Programmes—University Carillon
Henry Penn Recital—Opening New Studio.*

2FC and 2BL co-operated in the descriptions of the heats of the G.P.S. Annual River Regatta, which were rowed on Wednesday 18th. A short wave transmitter was used on a launch that followed the competitors, and the transmissions were rebroadcast on the usual wavelength.

SYDNEY UNIVERSITY WAR MEMORIAL CARILLON: On the night of April 30th, Mr. Bryan Barker will give a full carillon recital from 9 till 9.50 p.m. It has been arranged that 2FC will broadcast the recital from 9 till 9.20, and as this will be the first night performance from the carillon, it is hoped to make arrangements for relay by interstate stations.

RAYMOND ELLIS: On Thursday, 3rd May, the Masonic Club have arranged a special farewell concert to the eminent English baritone, who is returning to England via America after an extended visit to Australia. 2FC will broadcast the function, and the 2FC Studio Orchestra has arranged a very attractive programme for the occasion. Artists assisting are Margaret James, Peggy Dunbar, Ellis Price and the Sydney Harmonic Choir.

HENRY ENN RECITAL, to be held at the Conservatorium on Friday, 27th April, is rich with unusual music. Rachmaninoff's Sonata No. 2 will be performed for the first time in Australia. Mr. Penn's interpretation of this stirring work, particularly the war-like theme in the last movement, is anticipated with more than ordinary pleasure by lovers of the classics. The assisting artist is Vladimir Elin, who will sing the Prologue and Aria from Tschaikowsky's little known "Eugen Onegin," and Scena from "Boris Godounow" (Moussargsky). The Prelude to "Eugen Onegin," and also to the Coronation Scene in "Boris Godounow" will be played as pianoforte solos. "Boris Godounow" is considered to be Russia's greatest opera. It is a national music-drama, depicting the Coronation of Boris, his remorse, and finally his death. It was first performed in 1874. Rimsky-Korsakov, who ranks with the first of to do with the revision and orchestration of this work. The recital will be broadcast by 2FC.

DURING the past six weeks Mr. Ray Allsop, chief engineer at 2BL, has been conducting a series of short wave tests on his transmitter at Roseville. Satisfactory reports have been received from all over the world, and it is gratifying to note that two-way communication was established with amateurs in England.

PCJJ, the Dutch station at Eindhoven, Holland, is to broadcast on short waves a description of the Olympic Sports. In order that Australian listeners may follow their favorites, these transmissions will be picked up by 2BL and rebroadcast on their usual wavelength. Incidentally, PCJJ was the first European station to be rebroadcast in Australia. This feat was accomplished fifteen months ago.

FOLLOWING A REQUEST by 2BL for reports on transmission, a great number of letters from the Country and Interstate districts were received, which showed that 2BL is received all over Australia. Only a few districts have proved dead-spots, though a great number of letters from authentic persons from these districts show that with a good set, excellent reception is possible. A great deal of trouble is caused by the use of cheap sets which are only capable of receiving the Sydney stations at night time.



Miss Elsie Findlay, soprano, one of 2BL's regular artists.

2BL ARE BEING CONGRATULATED from all quarters following their recent successful Irish and Scotch Nights, and it has been suggested that a series of National Concerts be broadcast, the next probably being an English Night. 2BL had no idea there were so many Flahertys, McDonalds, O'Donnovans and McTavishs in Australia!

ON the evening of April 30th a star programme is to be broadcast by 2FC in order to celebrate the official opening of the new studios. The leading Melbourne Choir (The Southern Choral Society) will make their first appearance in Sydney from 2FC on this special night, and it is hoped the Governor may be present to perform the opening ceremony.

"J. C. WILLIAMSON," one of the most famous theatrical identities in the world, is the subject of W. F. Kay's talk on Friday night, 27th April, from 2FC. Ordinarily talks are not attractive on the air. When the tired mind seeks relaxation through broadcasting, it reaches out to a soothing medium which requires no mental activity. But there is a subtle difference about Mr. Kay's work, which probably lies in the fact that he is telling of personal experiences, and even those who may not be particularly interested in the stage respond with quickened sympathy to the laughter and pathos of his stories.

DURING the week ending May 5th several special nights have been arranged by 5CL. The first of these to be heard will be a studio rendition of the grand opera, "Il Pagliacci" (Leoncavallo), by a company practically identical with that associated with 5CL's recent grand opera successes: "La Traviata" and "Cavalleria Rusticana." A special accompaniment will be given by the Studio Orchestra. This grand opera entertainment will be heard on Monday, April 30th, and on Tuesday, May 1st., listeners will be entertained with a Shakespearian night, when the immortal works of the Bard of Avon, together with incidental music, will be combined in an excellent programme. A Scotch night will be the feature of the programme on Thursday, May 3rd, when the charm of Scottish melodies and poems is sure to be appreciated by not only Caledonians but all listeners-in.



Mr. Moore MacMahon, popular violinist, at 2BL.

JAMES DONNELLY left on Monday last for the Northern State, and will probably find time to do some broadcasting while he is in Brisbane. The greater part of Mr. Donnelly's career as a freelance journalist was spent in America, and he has put to good use the wealth of material he has gathered from all sources. His pleasing tenor voice is heard to best advantage in the pathetically beautiful negro spirituals, but his versatility finds other mediums of expression, and the unusual lecture-recital on Red Indian melodies, which he has arranged for his return to 2FC on Tuesday, 1st May, should prove of interest to listeners.

ONE OF THE LISTENERS' favorites is the Silver Quartette, who are playing regularly from 2BL. This combination is unique, as each member is a soloist of note. J. Loughland, who plays second cornet, is one of the finest triple-tonguers in Australia; R. Meadows, euphoniumist, is also well known to the Australian public, having been "on the air" for some considerable time now, and his solos are well performed. S. Makin, tenor horn, has five medals to his credit, and A. Kenny, solo cornetist, possesses fifteen medals for cornet playing. With this combination, it is no wonder that the Silver Quartette is able to delight listeners.

2FC'S new studios, which are to be opened officially by the Governor-General at the end of this month, have been completely outfitted with musical instruments. Messrs. Palings, Ltd., have supplied four pianos, which are tuned to various pitches, suitable for solo work, orchestral accompaniment, voice accompaniment, and for electrical reproduction. This firm also supplied the chimes, drums, xylophone, organ and other musical instruments which are used for descriptive purposes during the transmission of playlets.

"CAPTAIN APPLEJACK'S ADVENTURE": On Wednesday night, 2nd May, the H. W. Varna Company will produce the sparkling play, made famous in Australia by Laurence Grossmith, at 2FC Studio. H. W. Varna takes the part of Ambrose Applejack. The scene in Part 1 is the well-ordered home of the typical Englishman. Part 2 is the Dream on the Pirate Ship. Who can relate the weird fantasy of a dream? Captain Applejack does more—he lives every minute of his glorious piracy, and surely a fiercer autocrat never sailed beneath the "Skull and Crossbones." Part 3 finds him home again, but, alas! the quiet atmosphere is entirely destroyed by the disturbing influence of his dream.

3LO'S Short Wave Service

THERE are fourteen different extensions in 2FC's new telephone system which has been specially installed in their new offices at Her Majesty's Building. In addition to this, special telephonettes between the studios and the manager's office have been connected in order that the manager may get into touch with the announcer and give him instructions without causing either himself or the announcer any inconvenience.

THE HOSPITAL Saturday Fund Committee have obtained the enthusiastic co-operation of the broadcasting stations in arranging a special dance night on Saturday, 28th April, for the benefit of the fund in N.S.W. 2FC will commence their programme for trippers of the light fantastic at 8.45 p.m., continuing until midnight. The worthy cause deserves every support, and an appeal is made to listeners to organise a home dance on that night. It is not a case of the guests bringing their entrance fee, but just a small monetary recognition of the great work the committee does. Each year the money collected is distributed according to the amount of service rendered by institutions to the public—the more beds occupied in a hospital the more money it receives from the fund. The hospital's efficiency and its economy in management are also taken into account.

THE short-wave service, on 32 metres, of 3LO, Melbourne, every Monday morning, between 4.30 and 6.30 (corresponding to 18.30 to 20.30 G.M.T., Sunday), is now listened to regularly in almost every country in the world. It is rebroadcast by some of the most important overseas stations, and many of the world's leading experimenters of every nationality keep regular logs of the transmissions.

When the service was commenced, it was intended only as an experiment, but it has been attended with such marked success that the directors of 3LO are loth to discontinue it, especially as it is universally recognised as being not only the best short-wave broadcasting from Australia so far, but one of the most successful in the world.

An eminent and enthusiastic scientist, who listens regularly to 3LO, is Prince Purachatra, of Siam. As Minister of Communications, he has directed his officers in the post-office laboratories to conduct extensive research, for the purpose of perfecting the reception of the short-wave transmissions. This is more significant than it might appear, because, if satisfactory reception can be maintained in tropical Siam, which, during a considerable portion of the year is static-bound, then something important will have been achieved in

defeating one of the greatest bugbears in wireless broadcasting.

3LO, Melbourne, is dependent upon the Commonwealth Government's special license to continue this short-wave service, but, no doubt, now that it has developed into such an excellent medium of publicity for Australia, the service will be encouraged. As a matter of fact, it should be subsidised by the Government, and extended, so that the world might hear of Australia every day in the week, instead of only once a week.

WE ARE always glad to welcome Thelma Ready and her banjo at 3LO, where, with her wide range of melodies, ranging from the operatic to the strictly popular, she makes a wide appeal to listeners. It is not generally known that Thelma, who is a Tasmanian by birth, would never have had the opportunity of learning the banjo had not her father paid a visit to the United States, where he heard this instrument most skilfully played, took a great fancy to it, and, when he returned to Tasmania, he had a miniature banjo for his small daughter packed away in his trunk. And that was the beginning of this gifted young musician's successful career. Now she has a band of her own—all ladies—the first to be organised in Australia.

New Melbourne Programmes

Old Favourites Back — Special Sporting Features — New Banjoist Musical Series by William James

THERE will be another programme of community singing broadcast by 3LO, from the Assembly Hall, Collins Street, on Thursday, May 3rd. Helping in the programme will be the Gypsy Players (string quartet—Rupert Hazell and Elsie Day (entertainers), and Gordon James (baritone)).

SHORTLY after midnight on Monday, April 30, 3LO will broadcast community singing from the Assembly Hall, Collins Street. The conductor of the singing will be Mr. G. J. Mackay, and an enjoyable time is promised. Assisting in the programmes will be the Gypsy players—a well-known string quartette.

OF GREAT interest, especially to the "younger generation," will be the series of instructive talks on dancing, which is being arranged by Miss K. Lascelles, from Studio 3LO. Having studied her art in London, Paris and New York, and by keeping in constant touch with these centres, few people are more competent to give instruction in the very latest ballroom steps than this popular Melbourne dancing teacher. This series will continue through the dancing season, and the first lessons, which have been carefully prepared with a view to appealing to the beginner, or even non-dancer, should be of great assistance to those listeners living in the backblocks, and who have no possible opportunity of taking lessons in the gentle art of the "light fantastic."

WHEN META RODNEY, the young South African artist, who, with her banjo ukulele, is making many friends at 3LO, was travelling in her native country, she was once appearing in a small township, and, just after sunset, was taking a walk on the outskirts of the jungle, with her sister, when suddenly, a peculiar silence seemed to fall upon them. Feeling that something eventful was about to happen, they both came to a dead standstill, and through the "bush," caught sight of two glowing red lamps, afterwards turned out to be the eyes of a leopardess, who, contrary to the wild tales of the South African jungle, merely took a good look at the two girls, and walked quietly away!

ALL AUSTRALIA will be anxious to learn the result of the big eight-oared rowing championship of Australia, to take place in Sydney on Saturday, May 5th. If they listen in to 3LO in the evening of the race, enthusiasts will hear full details of the event.

ON SUNDAY night, April 29, the Brunswick City Band, in conjunction with the three Lamberts, will broadcast a concert from 3LO. The Lambert trio is composed of Edouard Lambert (violin), Madame Lambert (soprano), and Raymond Lambert (piano).

THE WEEK beginning Sunday, April 29, will be one of singing, music, and fun for 3LO listeners. This is nothing extraordinary, but the programmes during this week will be especially fine.

Such artists as Miss Frances Lea (soprano), J. Alexander Browne (baritone), Rupert Hazell and Elsie Day (comedians and entertainers), Mina Heseleva (soprano), Henri Penn (distinguished pianist), and others, promise programmes of exceptional worth. Listeners should watch for announcements of engagements.



Miss Meta Rodney, clever entertainer from South Africa (see paragraph at left).

THE ASPENDALE Park races will be described for 3LO on Saturday, May 5, by one of the station's racing experts.

3LO will broadcast results of races at Benalla on Saturday.

EVERY Thursday night throughout the football season, Rod McGregor, held by many to be the finest exponent of the Australian game ever produced, will give a chatty discourse on the prospects of the teams playing in the matches on Saturday.

ANOTHER bracing football story will be broadcast by Rod McGregor on Saturday, May 5, when he will describe for 3LO the meeting of Richmond and Collingwood, at Richmond. This match promises to be one of the most thrilling of the early fixtures of the League.

THE BASEBALL match, between Richmond and Collingwood, at Richmond, on Saturday, May 5, will be described for 3LO by Percy Steele. Baseball is earning more followers each season, and the broadcast details are playing their part in increasing interest.

3LO IS MAKING arrangements to keep Australians fully supplied with the latest news of the movements and doings of the Olympic games team. When the team leaves for Melbourne, next week, messages will be broadcast from Sydney. 3LO has played a very prominent part in raising Victoria's quota of the expenses of the team—just another instance of the practical value this popular station has proved to Australian sport.

EVERY SUNDAY afternoon, from 2 till 3, 3LO broadcasts a Sonora concert, and the quality of the programme has been of such uniform excellence as to ensconce this item as one of the station's most popular features. Sunday, April 29, will be no exception, for a splendid programme has been arranged. Now that the cold days are approaching, and firesides are coming into their own again, the Sunday afternoon concerts are becoming still more in demand. There is no better way of passing a pleasant hour on Sunday afternoon than tuning in to this 3LO Sonora concert.

A MUSICAL series of rather unusual interest will shortly be introduced from 3LO by William G. James, the distinguished Australian pianist and composer, who is now so well known to listeners. This series, under the title of "Face to Face with the Great Masters," will bring before listeners in a unique way the actual personalities of the celebrated musicians, Chopin, Schumann, Mendelssohn, Schubert, and many others, by describing their home life, method of composition, and the many influences that guided them in the working out of their masterpieces, and other little intimate touches, all of which will help listeners to a better understanding and appreciation of classical music. The series will be "illustrated" by various selections from the works of the master "under discussion," and will include both vocal and instrumental items.

HAVE YOU ever thought what a lot of odds and ends there are in the world, especially in the daily round of the housewife? "Odds and ends" of time, of material, and of food, for even the best manager often fails to exactly judge the appetites of the family, hence the "left overs"—or odds and ends. Since 3LO has introduced the Woman's Hour, every morning, from 11 to 12, various methods of dealing with these odds and ends have been discussed, and, under the expert advice of the speakers (each one of whom is an authority in her own particular department), listeners are told how to use oddments to the best advantage. Mrs. Dorothy Silk finds all sorts of artistic uses for oddments of material; the various cooking experts discover many toothsome delicacies that can be concocted from "left overs," whilst the odds and ends of time may be most profitably employed in listening to a travelogue or book talk.

SINCE 3LO began broadcasting League matches, interest and patronage has increased wonderfully. The big crowds this season are evidence of this. To miss a match was, until a few years ago, a real hardship for Australian fans, but with wireless, and an ounce of imagination, to fill the gap, hundreds of listeners who, from circumstances, are prevented from watching their team do battle, are able to follow the fortunes of the play as closely as if they were actually watching it. This 3LO has done for Australia's national game. It has accentuated interest in it, increased public support, and has thus played its part in building up Australia's manhood. Football in Victoria owes 3LO something!

MUSIC LOVERS will welcome the news that the distinguished Lambert Trio is again included in the programme from 3LO on April 29th. These three fine artists are too well known to listeners to need any further praise in these columns, but, for the benefit of newcomers, we might mention that Madame Lambert is a distinguished soprano, who, after having carried off many scholarships at the Brussels Conservatorium, appeared successfully in the great musical centres of Europe. Monsieur Lambert is a violinist, and recognised throughout the musical world as an artist of much distinction, and their gifted son, Raymond, who came to Australia a little more than two years ago, and was a pupil of De Greef, the world renowned pianist, in spite of his youthful nineteen years, has won for himself an enviable place in musical Melbourne.



Grace and Radio—a picture posed at 3LO.

THE BROADCASTING of the Church service, every Sunday, from Studio 3LO, has done more in Australia to make the appeal of the Church "universal" than any other movement could possibly have achieved. Country people are often rather shy of a travelling missionary, whose visit to a bush township is often too brief to allow him to visit the outlying districts; but the radio knows no limitations; distance is no object, and the "message" is broadcast to all, the simplicity and beauty of the service strongly appealing to all sects, who, under the mellowing influence of the wireless, forget any distinction, and become members of the universal brotherhood.

THAT EXCELLENT combination of male voices, the Elsternwick Male Voice Choir, is again broadcasting from 3LO, to the great delight of thousands of listeners, for few vocal contributions are more pleasing than glees and part songs, rendered by male choristers. The Elsternwick Male Voice Choir is not only familiar to Melbourne audiences, but is deservedly popular throughout country districts, and their repertoire, which comprises folk songs, ballads, humorous rounds and glees, contains "something for everybody," and all tastes are catered for. Lately the choir have added some negro spirituals to their repertoire, and listeners will have an opportunity of hearing the ever-popular "Carry Me Back to Old Virginny" rendered, with much artistic perception and finish.

THERE is a boon in piano music at present in Melbourne, and for this reason the series of recitals set down for Henri Penn, the Australian pianist, during the week beginning Sunday, April 29, will be especially appreciated.

A recital of Chopin's works will be broadcast from 3LO, by Henri Penn, on Monday, April 30, and compositions of other artists on subsequent days, as announced in 3LO programmes. Penn is from the University Conservatorium of Sydney, and earned renown in several musical comedies for his playing, notable among them being "Tip Toes" and "Queen High," both of which had long runs in Melbourne. Penn has now returned to the University Conservatorium, and has been engaged for a season by 3LO.

On Wednesday afternoon, May 2, Mr. Penn will give another of his recitals, featuring Mendelssohn's "Prelude" and "Fuge" and Macdowell's "Wild Rose," "Shadow Dance," and "Witches' Dance."

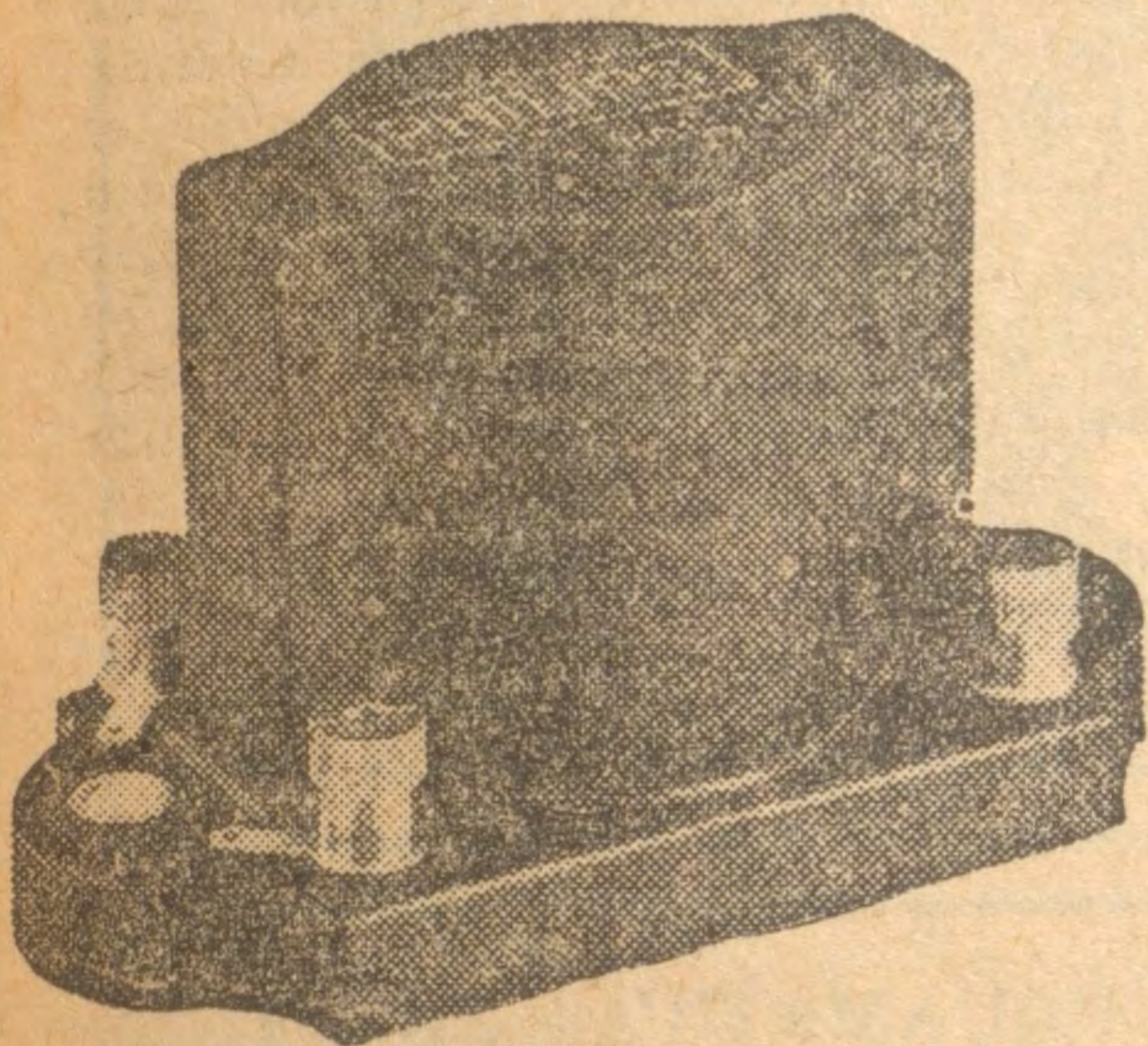
At night, he will play Liszt's "Consolation," "Tarantelle," and "Liebestraume." Music-lovers should not miss this treat.

With the Traders

A NEW TRANSFORMER.

When a valve manufacturing company of established reputation produces a component directly associated with the use of their valves, then it is apparent that one component will be designed to suit the other to a high degree of efficiency. Philips' valves have now been long known on the Australian market and are used extensively with gratifying results by many thousands of listeners.

A prevalent idea has been that in order to be efficient an inter-valve transformer must be of large construction. The new Philips' type 4003



transformer comes as a rude shock to that theory. It is probably one of the most diminutive marketed and yet on actual test proves itself to be equal, if not better than the largest size transformer made. A special type of core iron has been perfected by the Philips' laboratories which results in a transformer which is impervious to saturation, even when used with the largest types of power valves. The acid test of any transformer is its curve, plotting amplification against frequencies and the type 4003 is exceptional, as the amplification is almost even from 200 to 10,000 cycles. At a frequency as low as 50 cycles a transfer of 50 per cent. is still effected. This means that over practically the whole audio range every note of music and syllable of speech is reproduced exactly as received. The volume delivered by the Philips' type 4003 is exceptional, especially when used with the Philips' "Miniwatts," for which it is designed. When used with the popular "Four-Fifteen" an amplification of 45 is the result. The transformer is enclosed in a crystalline finished housing and the disposition of the four terminals ensures short and direct leads when placed between valve sockets. There are two screw

holes provided for baseboard or sub-panel mounting and the casing may be earthed in the usual manner. The design of sets is tending more and more to compactness, and with the growing popularity of the portable set the coming of this "diminutive in size," "gigantic in result" transformer seems to be most opportune.

LECTURE AT B.G.E.

On Thursday, April 12th, a very interesting and instructive lecture was delivered by Mr. Frank E. Buckell, of the British General Electric Co., Ltd., Magnet House, Clarence Street, Sydney. The subject of the lecture was the manufacture of valves and took the form of a very concise and illustrative explanation of the intricacies of the processes involved. The audience were taken through the valve manufacturing works of the British General Electric Co., at Wembley, in England, by means of lantern slides. Mr. Buckell so simplified his lecture that no one in the audience could fail to understand any of the essential points. A large audience was present, consisting of most prominent authorities in the radio trade in Sydney, and at the conclusion an interesting demonstration of a receiver using the new Osram screened grid valves was given. Refreshments were served and all present felt that Mr. Buckell is to be heartily congratulated on the instigation in Sydney of such lectures by manufacturing companies. Mr. Buckell arrived in Australia on the 9th February by the R.M.S. Cathay, to take up an appointment as manager of the Osram valve department with the British General Electric Co., Ltd., Sydney.

He joined the Sopwith Aviation Co., Kingston on Thames, in London, as a premium pupil in 1914, intending to go into the aeronautical engineering business. It will be of interest to Australian readers to know that the late Mr. Harry Hawker, the well-known Australian airman, was then the chief test pilot of the Sopwith Aviation Co. Mr. Buckell served during the Great European War with the 14th County of London Regiment of the London Scottish and later with the Royal Air Force.

Upon demobilisation he rejoined the Sopwith Aviation Co., and was for some time engaged upon the construction of aircraft and later the A.B.C. Air Cooled Motor Cycle, subsequently the General Electric Co.,

Ltd., of England, at Osram G.E.C. Lamp Works, and was later transferred to the production side of the Osram valve works. He later held the position of chief of Osram valve inspection staff at the valve works, acting for the General Electric Co.

GRAHAM AMPLION.

Mr. William Blogg, managing director, Amplion (Australasia), Limited, has left Sydney for Perth, W.A., where he will meet Mr. W. J. Rickets, chief engineer of Graham Amplion, Limited, the parent British organisation. Mr. Rickets intends making an investigation of broadcasting conditions and requirements in the Commonwealth, and after leaving Perth will proceed eastward, arriving at Adelaide on April 28th.

HIGH UP AGAIN.

Burgess batteries are again in the air—this time with W. T. Van Orman in his famous "Goodyear V." It will be remembered this daring balloonist was the winner, with the "Goodyear III.," of the National Balloon Race of 1925, covering 585 miles in 37 hours 46 minutes.

Van Orman carries Radio equipment, and his old favorites, Burgess Radio Batteries, which proved so dependable on his previous flights; their waterproof construction makes them safe against moisture in the high and cold atmosphere.



Mr. Frank E. Buckell.

Out with the Old—In with the New

"KARAS HAS IT"

Here is a Low Loss Condenser, by which all others are judged.

New KARAS Orthometric Straight Frequency Line Variable Condensers.

Positively eliminate any crowding of stations on any portion of the dial.

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63 to 1 VERNIER ANTI-
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THE IMPROVED SINGLE VALVE SET

Described in This Issue.

	s.	d.		s.	d.
1 Radion Panel, 12 x 7 x 3-16	5	3	2 Wetless .00025 Condensers, with clips, at 1/9	3	6
1 Quaker S.L.F. Condenser, .0005	9	6	1 Gridleak	1	0
1 Advance S.L.F. Condenser, .00025	9	6	1 Standard Terminal Board	2	3
2 B.M.S. Bakelite Vernier Dials, at 6/6 ..	13	0	1 Doz. Sq. Buswire	0	10
1 30 ohm. Certified Rheostat	2	0	20 Plugs for Short Wave Coils, at 2d.	3	4
1 Reinartz Tuner	3	9	5 Sockets, for Short Wave Coils, at 2d. ...	0	10
1 B.M.S. Battery Switch	1	6	1 Bakelite Former, 3 x 3	1	0
1 Pewi Battery Clip	0	4	1 lb. 16 D.C.C. Wire	3	0
1 Kelford Cushioned Socket	3	0			
1 Single Circuit Jack	1	7			
1 Radio-frequency Choke	5	6			
			TOTAL	£3/10/8.	

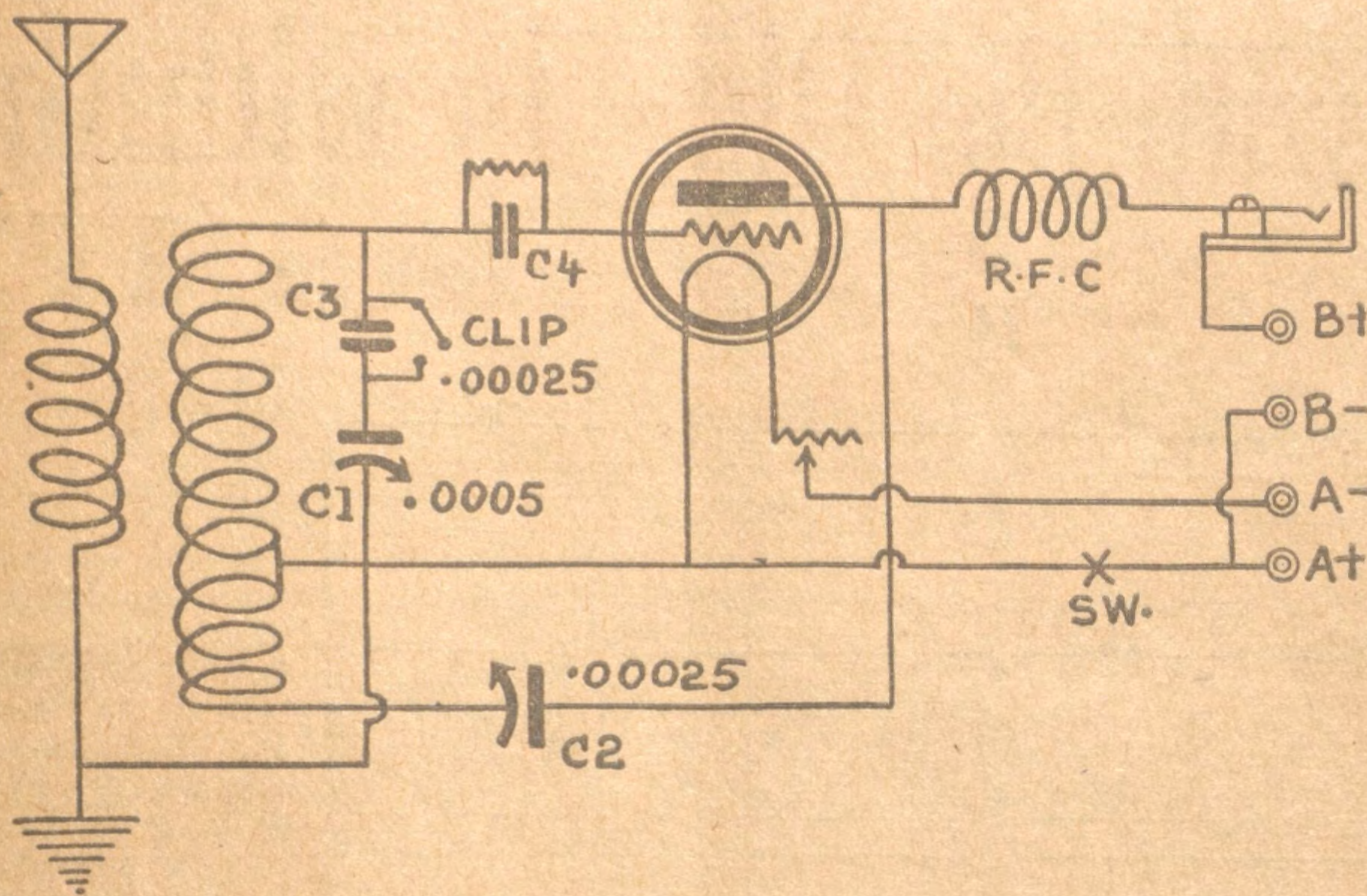
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An Improved Single Valve Receiver

It is really hard to exploit the single-valve receiver, as it is more difficult to evolve new single valve circuits which are worth consideration than to improve any other type of wireless receiver. The opportunities for originality are so limited that any novelty must prove its worth before being incorporated in the single-valve job. Good results are obtainable by the use of a lone valve in devious ways, but my opinion is that in the capacity controlled straight out regenerative set we have a single-valve circuit which gives results as good as we are likely to get for a long time. One must cater for the needs of all, and so I must vary from the apparently insignificant single-valver to the formidable multi-valve job. My correspondence shows me that a great majority of readers are inclined toward the simple circuit, thus involving less expense, but by no means sacrificing enjoyment. A single-valve receiver is an interesting "break" for the beginner. Radio science is advancing so rapidly that it is apt to become confusing to the comparatively recent initiate, but we will always have the beginner who wishes to enter the fascinating field of radio, broadcast or otherwise. There are many who will be inclined to speak disdainfully of the modest "single" job, but they are apt to overlook the fact that they themselves have passed through this all-absorbing stage. City man or country man, it matters not; an enormous amount of experience may be gained by the construction and operation of such a receiver. It is the stepping-stone to the use of more imposing and ultimate apparatus. In

Australia, we differ considerably from Great Britain, where thousands

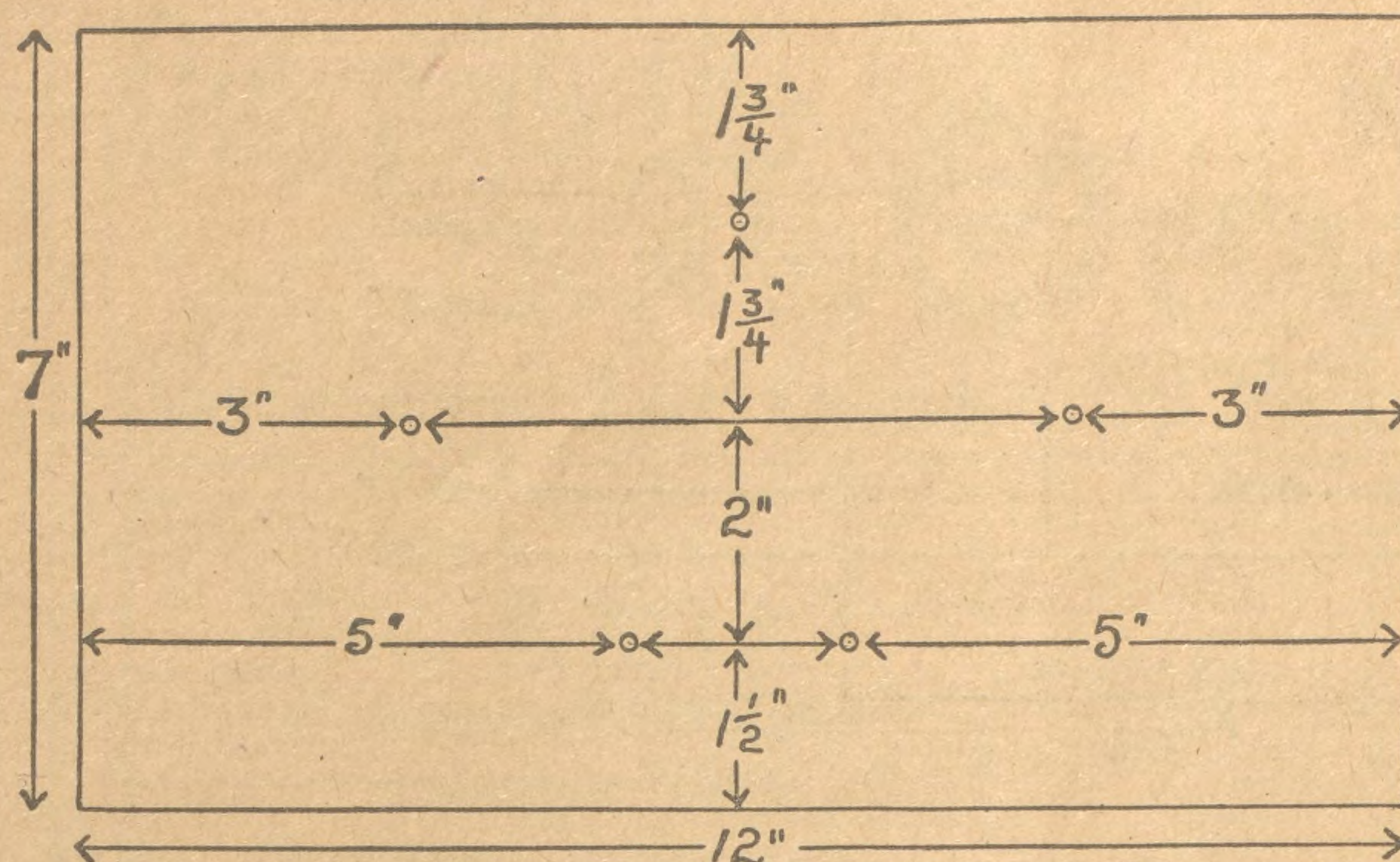
LIST OF PARTS FOR THE IMPROVED SINGLE-VALVE RECEIVER.

Although the parts listed below and mentioned throughout the articles were those actually used by us in the receiver described, it must be pointed out that it is not absolutely essential that they be rigidly adhered to.

Other parts of similar quality and technical values should function quite satisfactorily.

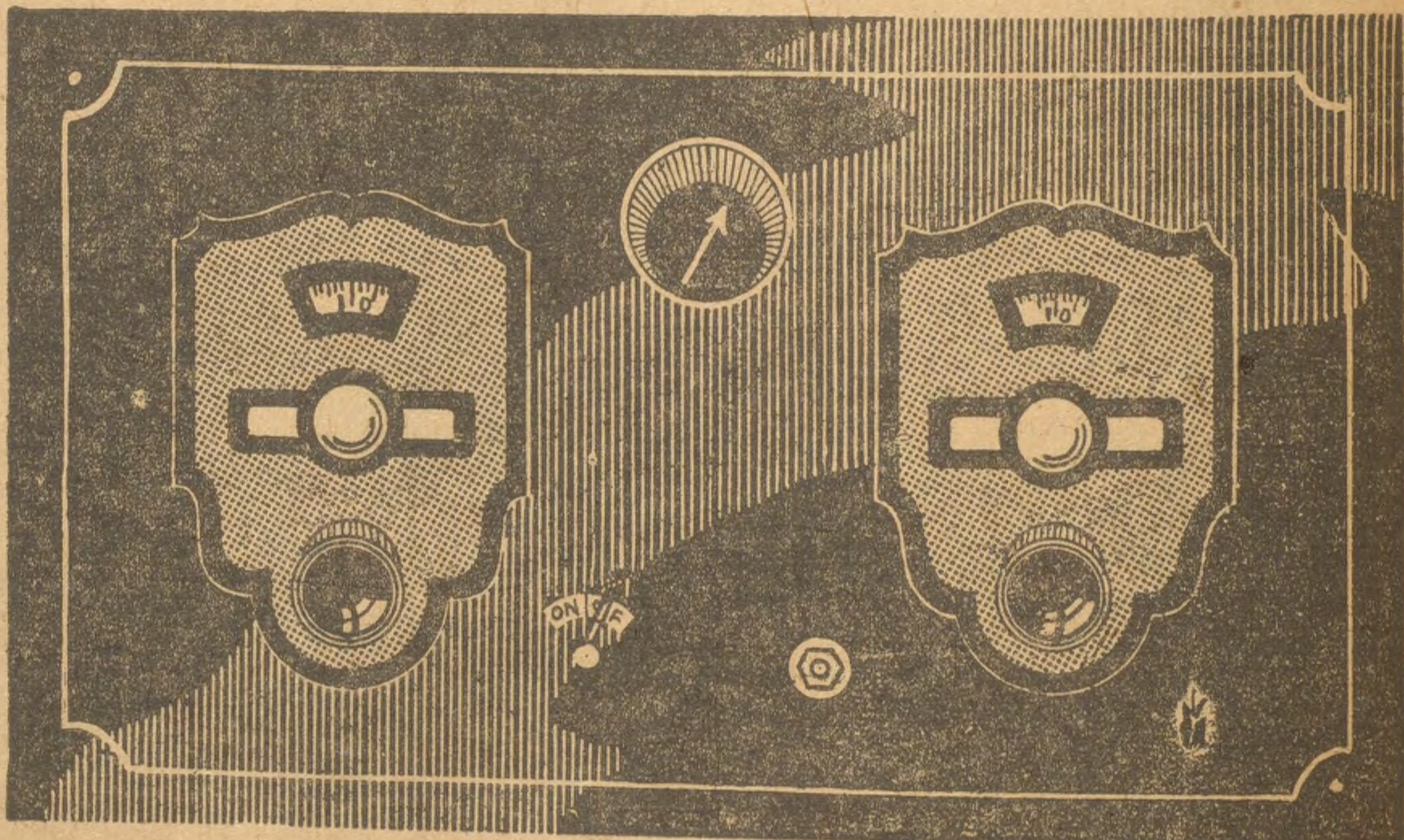
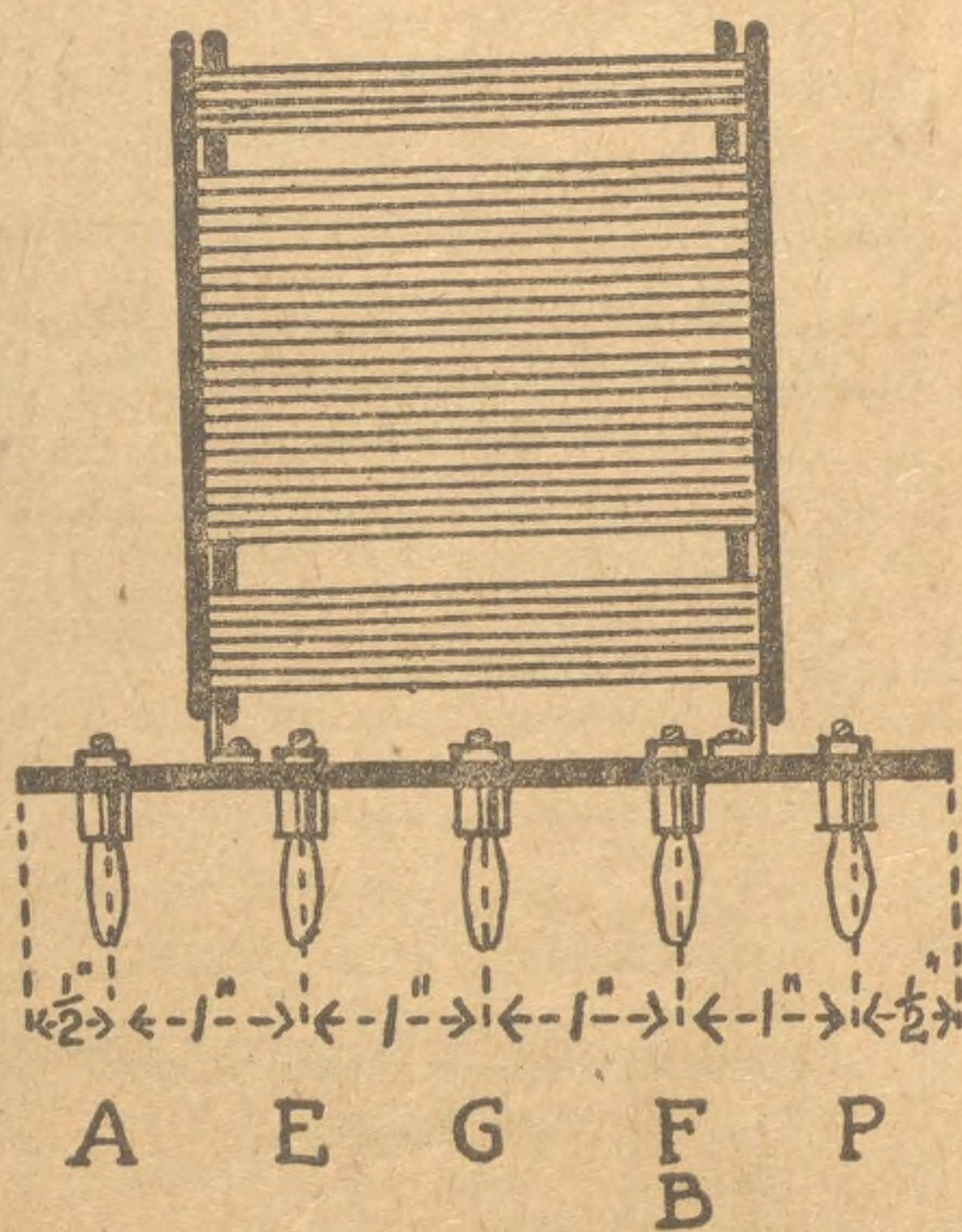
- 1-Dilecto, Formica, or hard rubber panel, 12 x 7 x 3-16-in.
- 1-Baseboard, 11½ x 9 x ½-in.
- 1-0005 Emmco or Advance SLF variable condenser.
- 1-00025 Emmco or Advance SLF variable condenser.
- 2-Viking Vernier Art Dials.
- 1-30 ohm rheostat.
- 1-Radiokes Reinartz tuner (for broadcast band).
- 1-Battery switch.
- 1-Spring clip.
- 1-Single circuit jack.
- 1-UX Anti-vibration valve socket.
- 1-Radiokes R.F. choke.
- 1-00025 Grid condenser and leak.
- 1-0025 Grid condenser (with clips).
- 6--Terminals and mounting strip.
- 5-Strips, 5 x 1 x 3-16-in.
- 5-Sockets.
- 20-Plugs for coil mountings.
- Wood screws, 16's tinned copper wire, solder, etc.

of listeners clamp the earphones nightly on their heads, and appreciate their local programmes via the medium of a crystal set. Australia has her main stations in the cities giving programmes which compare with the rest of the world, but those main cities have hundreds of intervening miles between them, which call for something more than the comparatively insensitive crystal set. The single-valver does the job for many—some better than others, and this article is meant to supply the need for a better point of view. In 1924, we were content to sit back with any old collection of junk, and what is more forcibly impressed on my mind to-day—get excellent results! At least, we thought so, in those days! Now, in 1928, we have reached an era in which almost every listener is discriminating to a degree. We have super-excellent valves, increased power, and improved quality from our broadcasting stations, and, most interesting of all, the introduction of long-distance broadcasting through the medium of short waves. International broadcasting by this means brings the world to your home, and there is no reason why the diligent user of a modest instrument should not enjoy the fascination of such reception, in common with the owner of a "Rolls Royce" receiver. Although the local broadcasting station transmits excellent relays from Europe or America, yet there are programmes which demand attention apart from this, so that our listener is otherwise debarred from enjoying the thrill of "distance" from 5SW England or PCJJ Holland. That is, of course, if his receiver is not flexibly

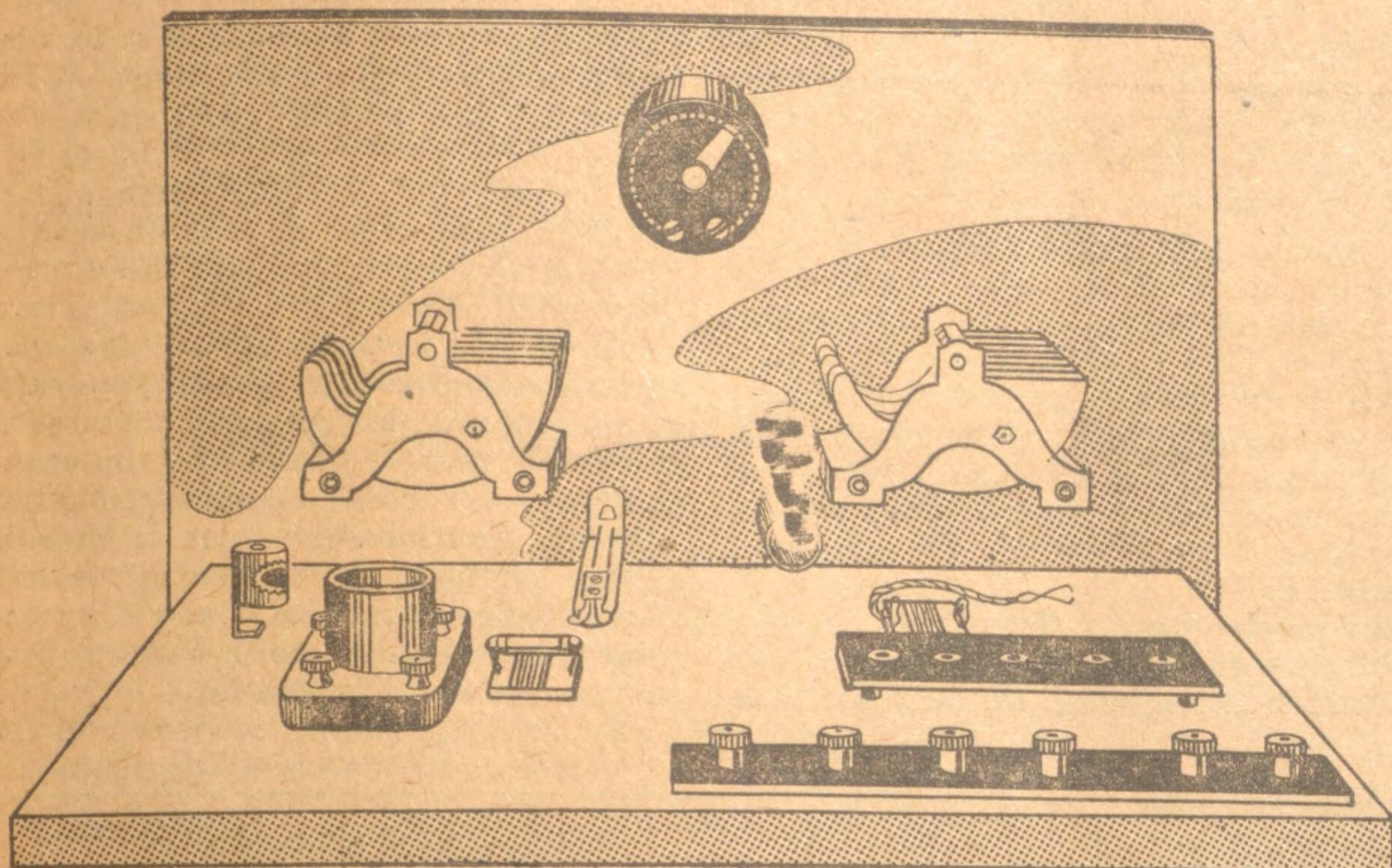


designed, and is limited to the broadcast band of wave-lengths. There is no reason why this should be so, and this article is meant to provide for the man who requires "a universal" type of receiver, which is cheap to build, and which is not confined to one band of wave-lengths. The variable capacity method of regeneration is the most adaptable for a receiver which is to be a combination job, to cover both normal and short-wave broadcast bands. To be equally efficient for use on all bands, attention must be scrupulously paid to detail. For instance, the improvement obtainable from altering the value of a grid leak is often so slight as to be almost unnoticeable at first, but, when other improvements are made, the result is a direct increase in efficiency which is unmistakable. The circuit diagram of this improved single-valve receiver will show that the Reinartz arrangement is used. There are no "floppy" coils used, and the important part to note is that all couplings are fixed. The number of controls is two. The well-known Radiokes Reinartz tuner is used on the broadcast band with this receiver, and as the control is not "single," it will be necessary in this circuit to bridge the terminals marked "F" and "B" on the tuner. To enable a quick change from one wave band to another, a special plug mounting is provided, to take both the Reinartz unit and short wave units. This will be seen in the diagrams clearly, and consists of a strip of Dilecto, one inch wide and five inches long. The five sockets are for aerial, earth, grid, filament, and plate connections, and are spaced one inch apart. This will be seen in the diagram illustrating the Reinartz tuner, mounted with plugs. The strip is mounted on the baseboard, by means of wood screws and small dis-

tance pieces. These distance pieces are best made by obtaining some wander-plugs, and using the insulating top by drilling through. Correspond-



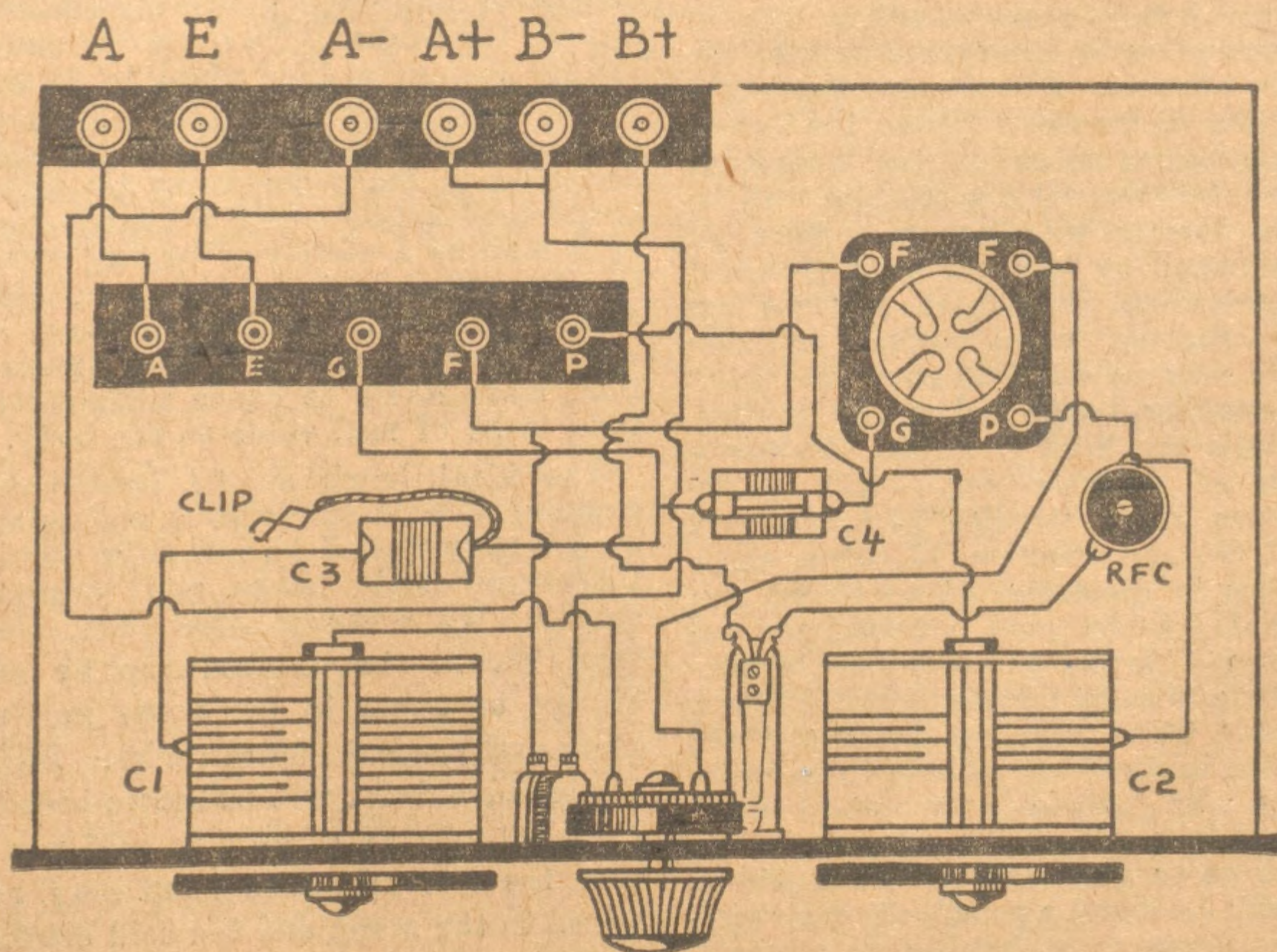
ing with this mounting is a strip with five plugs for the coil unit. The Radiokes Reinartz unit has two brackets provided for baseboard mounting, and these are arranged so that the unit is mounted in a vertical position. Mount the unit on the strip by small nuts and bolts, as shown, with the five pins. These pins may well be the old English type valve pins, obtainable from many stores in Sydney, and the sockets those intended for front of panel mounting for English base valves in bygone days. A more solid job will result if the pins and sockets are of the type made by Colville Moore Wireless Supplies, Sydney, Ltd. Many will wonder how the 0005 tuning condenser in this receiver is to be used for tuning on the short wave-bands. A glance at the theoretical circuit diagram will show how. In series with the stator of C1 and the 00025 grid condenser C4, is placed another 00025 condenser, C3. This is also a condenser of the "grid" type, and has clips for bridging by a grid leak in the usual way. A short length of flex wire, with a spring clip attached, is provided, and the wire is soldered to one clip of the condenser. By gripping the other condenser clip by means of the spring clip, the condenser is shorted out when the receiver is used on the broadcast band. When a short-wave coil unit (details of which are given later) is in use, the capacity of the tuning condenser C1 is reduced by the removal of the spring clip across C3, thus putting C1 and C3 in series. This has the effect of reducing the total capacity of C1, and thus enabling tuning on the shorter wave bands to be carried out with greater ease than would normally be the case. To proceed with the construction, it is always advisable, when building a receiver of this type, to keep the components, although few in number, well spaced from each other. This does not mean that the construction must be unduly bulky,



thus necessitating abnormally long leads. To keep within reasonable limits, and at the same time to avoid crowding, a panel, measuring 12 x 7 inches, with a baseboard 11½ x 9-in., is used. First, attach the panel to the baseboard, in the usual manner, by means of four nickel-headed wood screws. It is an advantage to do this first, as the drilling is more easily carried out by laying the panel flat on the bench, with the baseboard over the front edge. There are two main controls on the front panel, consisting of vernier dials of the Viking type. The left-hand vernier dial controls the tuning condenser C1, and the right-hand dial the regeneration condenser C2. A 30-ohm rheostat is mounted in between the two dials and above. Below this are mounted the battery switch and the single circuit jack. The template drilling diagram gives the measurements for the layout of the front panel. Drill the panel, exercising the usual necessary care, and mount the two condensers, the rheostat, battery, switch and jack. The back of panel view shows that six terminals are required, for aerial, earth, and battery connections. These are mounted on a strip of Dilecto, arranged on the back edge of the panel, and to the left. The mounting strip for the plug-in coil units is arranged in front of this. Behind the regeneration control condenser are arranged the valve socket, radio frequency choke, and grid condenser C4. Condenser C3, with the spring clip arrangement, is mounted behind the tuning condenser, C1. Although a home-made R.F. choke will serve the purpose quite well, the reader is advised to use the Radiokes R.F. choke, which is equally efficient on both broadcast and short-wave bands. The wiring of the set will be found extremely simple, and, although

the back of panel diagram, of necessity, shows many right angle bends, it is best to sacrifice these, in order to keep the wiring as short as possible. In fact, hardly any wire at all is necessary. Start by wiring the filament circuits first, commencing by linking together on the terminal strip A positive and B negative. Take a lead from these two to one side of the battery switch on the front panel, and through this to the positive filament terminal of the valve socket. Next, run a connection from here to the terminal F of the socket mounting. This is also connected to the rotor plates of the tuning condenser C1, and also to the earth terminals. It may be found an advantage in some cases to leave out this connection from terminal F to the

earth when using the receiver for short-wave reception; so that in the point to point wiring diagram, this connection is shown omitted. Next, wire up from the A negative terminal to one side of the 30-ohm rheostat on the front panel, and through this rheostat to the negative filament terminal of the valve socket. From the grid terminal, connect through the grid condenser and leak, C4, to terminal G on the socket mounting, and also to one side of the capacity-reducing condenser C3, the other side of this condenser being connected to the stator plates of condenser C1. From terminal P of the socket mounting, take a lead to the rotor plates of the regeneration condenser C2, and from the stator to the plate of the valve socket. This also connects to one side of the radio frequency choke, and thence to the single circuit jack. The other side of the jack is connected to the B positive terminal on the terminal strip. Next, connect up the aerial terminal to terminal A on the socket mounting. Having completed the wiring, check over the set by applying a volt-meter across the filament terminals, with the B battery connected up. It is not, of course, usual to make a serious mistake in the wiring of a simple set such as this, but the constructor's motto is usually "Safety first," particularly after one has burnt out a batch of new valves! Insert the plug-in unit with the Reinartz tuner into the socket mounting, and connect up the B battery, A battery, and telephones, attaching the aerial and earth to their respective terminals. It is not really possible to stipulate any particular valve for use in such a receiver, as there are so



many which are excellent for the purpose. The Philips A415, the Osram DEL410, the Cossor 410 L.F., and the UX201A will all be found suitable. Do not forget to use a 4-volt accumulator or battery when using 4-volt valves. It will be found possible to tune in a continuous wave station with the receiver in an oscillating state, and to use it right on the edge of oscillation, by means of the regeneration condenser, without having to alter the setting of the tuning condenser more than very slightly. This is a very great advantage. No hand capacity effect should be noticeable, and if this is experienced, it is worth while in some cases to try connecting the moving plates, instead of the fixed plates, of the regeneration condenser to the plate of the valve. Different values of grid leaks should be tried, and every constructor will do well to provide himself with a complete range of reliable grid leaks, with values from one to 10 megohms. Using the receiver on the broadcast band, it will be best to set the regeneration condenser at zero, and tuning to the local station by rotating the dial of C1. The regeneration control should then be brought up slowly to its maximum. After having tuned in the local station, set the tuning control a degree or two off, and observe whether the set glides smoothly into oscillation, as it should. There should not be any necessity to tap the grid or aerial terminal, to find out whether oscillation is taking place or not, as the slight hiss obtainable on the edge of oscillation should be sufficient indication. Adjust the filament voltage whilst using about 45 volts B battery. In many cases it will be found that a small power valve will give excellent results in this receiver. No difficulty should be experienced in tuning in many distant stations fairly late in the evening by the correct use of the two controls. All the foregoing remarks, of course, apply to the use of the receiver on the normal broadcast band, but the set might quite well be used for the reception of telegraphy and telephony from the more powerful international broadcast stations on the shorter wave-bands. Suitable coils may be made to cover the most interesting bands below 250 metres. Details are here given for the windings of suitable coils:—150 to 200 metres, aerial winding 20 turns, grid coil 30, and reaction 15 turns, three inches in diameter, 32 to 60 metres, aerial 4 turns, grid 5 turns, and reaction 4 turns, three inches in diameter; 15 to 32 metres, aerial 3 turns, grid 4 turns, reaction 3 turns, three inches in diameter. These three units may be made up and tried separately, and, if the receiver is correct as to grid and plate potentials, it will be found a relatively easy matter to tune in at intelligible strength

two or more of the powerful short-wave stations. Do not forget that it is necessary to remove the clip connection from across condenser C3 when using the receiver on the shorter wave lengths.

Should the reader desire to construct his own Reinartz tuner unit, for use in place of the commercial product, this is quite an easy matter. Obtain a length of 3-inch former, $3\frac{1}{2}$ inches in length, and wind this with 25 turns of No. 26 D.C.C. wire, for the aerial coil. Space this about a quarter of an inch from the grid coil, which is one continuous winding, with the reaction coil. The total number of turns for these two will be about 70, with the tapping at the 50th turn

for the filament circuit. The completed unit may be mounted, as described, by small angle brackets on the strip with the pins. The construction of the short-wave coils is similar, except that for 32-60 and 15-32 the wire should be of a heavier gauge, and the turns slightly spaced. A suitable gauge is 16 D.C.C.

If, when this simple little instrument is completed, it is desired to add an amplifier, this presents no difficulty, and will prove added interest to what is an already interesting little "break" for the beginner. It should appeal particularly to country readers, where consistent long-distance reception on one valve is in many locations the order of the day.

The Women's Session

(Conducted by Dorothy Jordan, 2BL)

DR. HARVEY SUTTON, who lectures each Wednesday from the Women's Session at 2BL, says: The ideal school lunch is one of the problems of present day education and exercises the minds of teachers and parents alike. In connection with our day schools, whether secondary or primary, a considerable number of children bring to school lunch or are given by their parents money with which to buy lunch either from the school tuck shop in the High Schools, or from some small shop nearby the public school, the choice being left entirely to the child. It is true that in the High Schools supervision is exercised over the contents of the tuck shop, but otherwise instinct, often misguided, decides the matter. To leave the matter of choice to the child is disastrous. The appetite of the modern city child has already been grossly distorted in many instances by irrational food habits or by sheer caprice, or it may be a matter of buying what is cheapest and most filling at the price the lunch selection forming a strange and mysterious conglomeration, more likely to cause indigestion than to be of real value to the body.

The ideal lunch should consist in summer of cold sandwiches and milk, occasionally varied on hot days with ice cream and lemon and orange drinks. Wherever possible, too, the meal should be finished up by an orange or apple to leave the mouth clean and prevent dental caries. Half the bread at least will be brown bread. No meat will be given. In cold weather the hot vegetable soup may be added to the menu and the cold drinks and ice cream left out.

HER HUSBAND'S LUNCH: A letter comes from Campsie: "I thought perhaps you may be able to give a little information that would be useful to working-man's wife as to what would be most nourishing to put in their luncheon sandwiches, suitable for a man who does manual labour."

BABY'S DIET: A mother writes: "Is my baby six months' old too young to be given biscuits?" The mother is strongly advised to continue with Nature's food if she expects the child to be healthy and happy.

A NURSE FROM STRATHFIELD says: "Would you send me a diet chart (not for reducing). I have lost so very much weight that I would try and gain it. It is rather hard to keep one's weight when one is not allowed much in the way of starchy food."

RADIO SET PART OF THE HOLIDAY OUTFIT: "I have just returned from a tour along the South Coast with friends, and we took our set with us, and enjoyed the programme splendidly. We are at the moment very interested in Miss Kathleen Jordan's sweets talks, and they came through quite clearly. We had a week at Sussex Inlet, and the listening-in was no small feature of our enjoyment."

ANOTHER WRITER says: "We have American visitors staying with us at present, and they tell us how delicious 'fudge' is. Will you, some day, tell us how to make this sweet?"

A BOX of home-made sweets makes a very acceptable gift for a party or birthday. Listen-in on Friday afternoon at 3.30 and you will learn how to make sweets.

The Function of the Thermionic Valve

By F. E. BUCKELL

Manager, Osram Valve
Dept., British General
Electric Co., Ltd., 104-
114 Clarence St., Sydney.

In the early days of broadcasting, the listening public were not so critical as they are at the present time, as to the quality of the speech or music received on their wireless set. Unfortunately the loud speaker was blamed for the harsh and distorted reception which was received.

This state of affairs was not, in the majority of cases, the fault of the loud speaker, but was due to the fact that the only type of valve available to work in the audio side of the set was the "general-purpose" valve. If we take the most modern and up-to-date set and fit the audio side of the set with a "general-purpose" valve, bad distortion will occur if we attempt to handle any volume, but let us insert a "power" valve in the last stage, and note the great improvement in the reproduction.

Too much attention and thought cannot be given to the selection of the right valve for each position in the set, "any type of valve will not do." There is a valve available for every position, and to get the best results obtainable, the reader is advised to pay great attention to the valves. The valve is the heart of any wireless set, and however perfect in design the set may be, the reproduction depends on the selection of valves made.

To revert to our "power" valve again, what is the secret of this "power" valve, that it will deal with more volume without distortion than a valve designed more for R.F. amplification, or as a detector? Briefly, the secret lies in the nature of its "characteristic curve."

Let us see how this "characteristic curve" is obtained, and what it really is.

If a common bar magnet is brought near to a compass needle, its North Pole will repel the North Pole of the needle and will attract its South Pole. Now, if we consider this in terms of electrical energy instead of magnetic energy, a positively charged body will attract a particle charged with negative electricity, and repel if charged with positive electricity.

In a valve, in its simplest form, we have an evacuated bulb containing a piece of metal, called the "plate" or "anode," and a wire through which an electric current can pass, called the "filament." When this filament is heated to a certain temperature by the current, it gives off what might be described as an invisible vapor, consisting of tens of thousands of indescribably minute particles of electricity, called "electrons," and each of these tiny particles carries a charge of negative electricity. If we now give

the anode a charge positive electricity by means of a suitable battery, it is obvious that it will attract to it swarms of these tiny negative elec-

second magnet of less strength between the first and the needle, it will have an effect on the force of attraction of the stronger magnet. To return to terms of electrical energy, and again to consider our simple two-electrode valve with its stream of negative electrons, we see that to interpose between the filament and the anode a positively charged body will help the anode to pull the electrons across, and the anode current will increase, whereas a negative charge will oppose the flow of

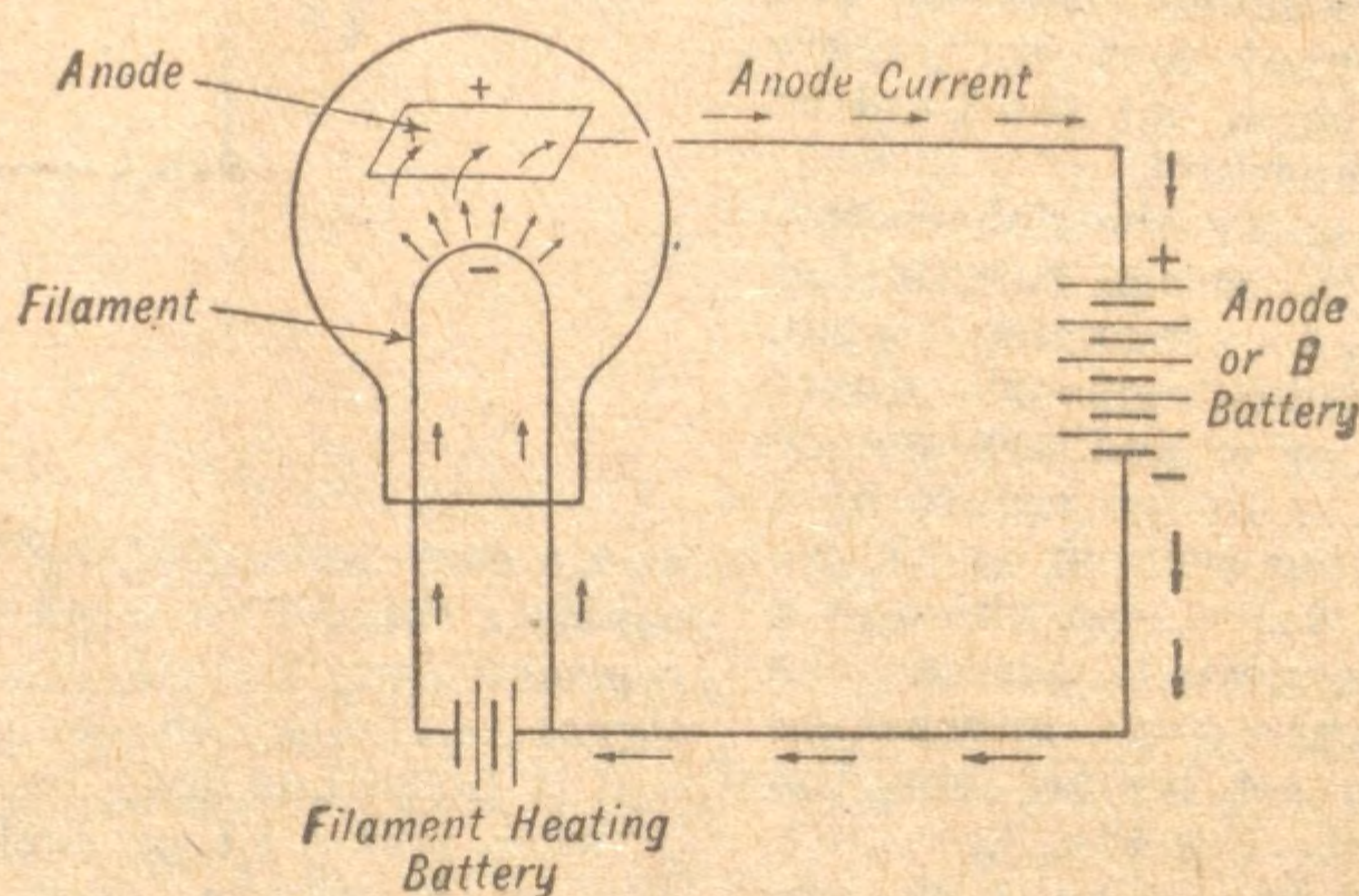


Figure 1.

trons, which are being "boiled off" the filament, so to speak, and thus a continuous stream of electrons will be flowing from filament to anode and will continue to do so, giving rise to a small, steady current; this current is known as the anode current. See Fig. 1.

Let us now go back again to the magnet and needle. We saw that the positive or North Pole of the magnet attracted the negative or South Pole of the needle, but if we interpose a

electrons and the anode current will decrease.

This third electrode is called the "grid," and is the control member of the valve. It is always found between the "filament" and the "anode" in a valve, and is used to control the flow of electrons from the "filament" to the "anode."

Now, if by means of a small battery the grid is given varying charges of electricity, both positive and negative, it will be seen that the flow of

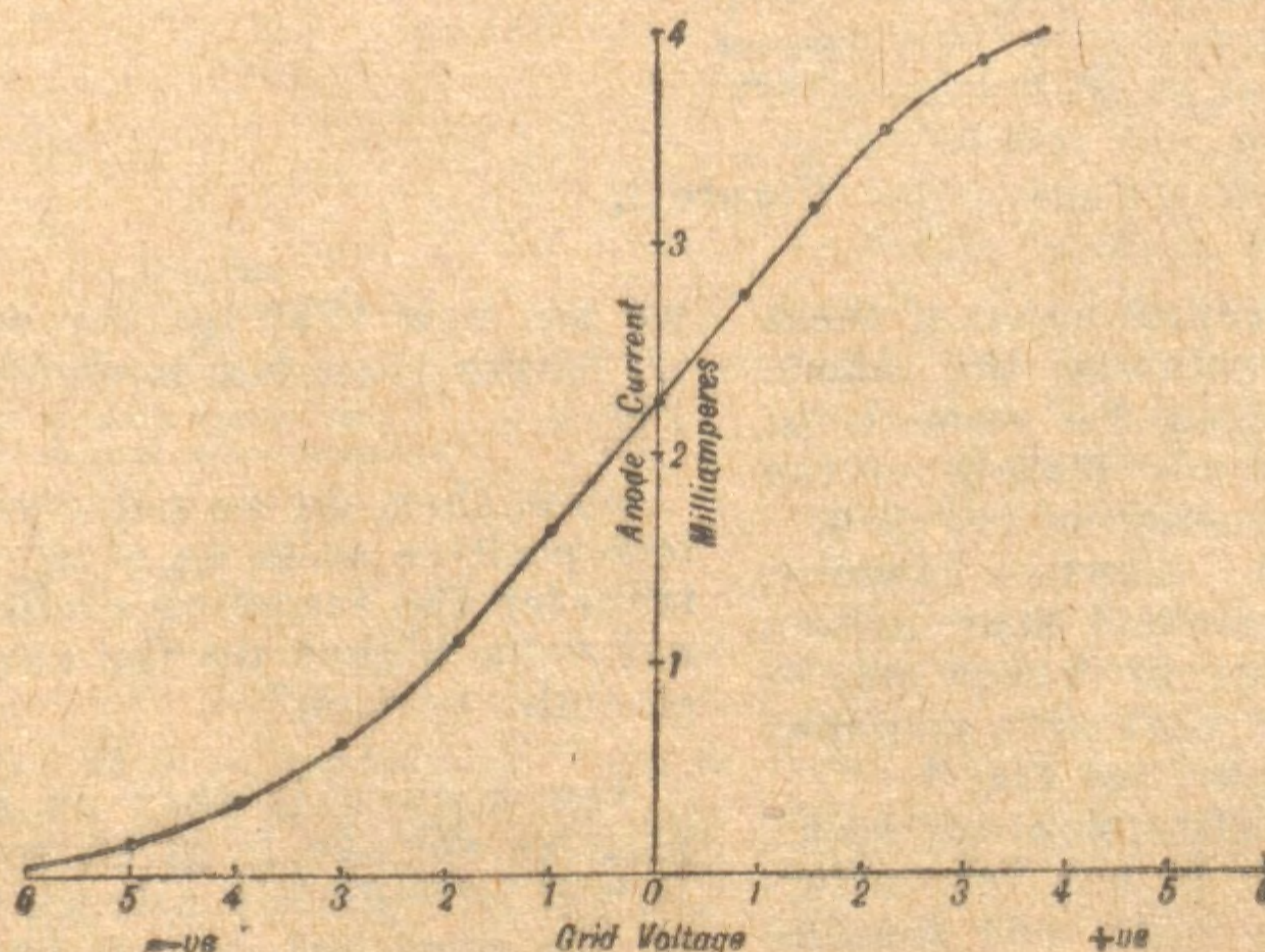


Figure 2.

anode current will vary, being greater the greater the positive grid volts, and less the greater the negative grid volts.

By connecting up a circuit, as shown in Fig. 1, with a meter reading thousandths of an ampere (milli-amperes) in the anode circuit, a number of different values of anode current can be obtained for different values of grid volts, and from these readings a graph, or chart, can be plotted, as in Fig. 2.

This graph is called the "characteristic curve" for that particular valve at the particular values of anode and filament voltage at which the readings were taken.

It will be noticed that this curve is not straight all the way along, but has a distinct bend near the top and bottom. We need not worry here about the top bend, but the bend at the bottom is important.

Let us now apply the "characteristic curve" to the actual functioning of the valve. An incoming signal, whether of radio-frequency direct from the aerial, or of audio-frequency after detection, is in the nature of a rapidly alternating current, and if we apply this to a valve, say, through a transformer connected across the grid and filament, an alternating voltage will be set up between the grid and filament. See Fig. 3.

If the grid were originally at zero voltage, this applied signal will make the grid alternately positive and negative, increasing and decreasing the flow of anode current in the way that we have seen above.

along the curve on each side of a definite grid voltage, say, two volts. With a weak signal the oscillating voltage is very small, indicated by SS on Fig. 5, and the increase in

current will commence to flow in the grid circuit. This current is called grid current. Now this grid current interferes with the incoming signal, and so must be avoided at all costs when

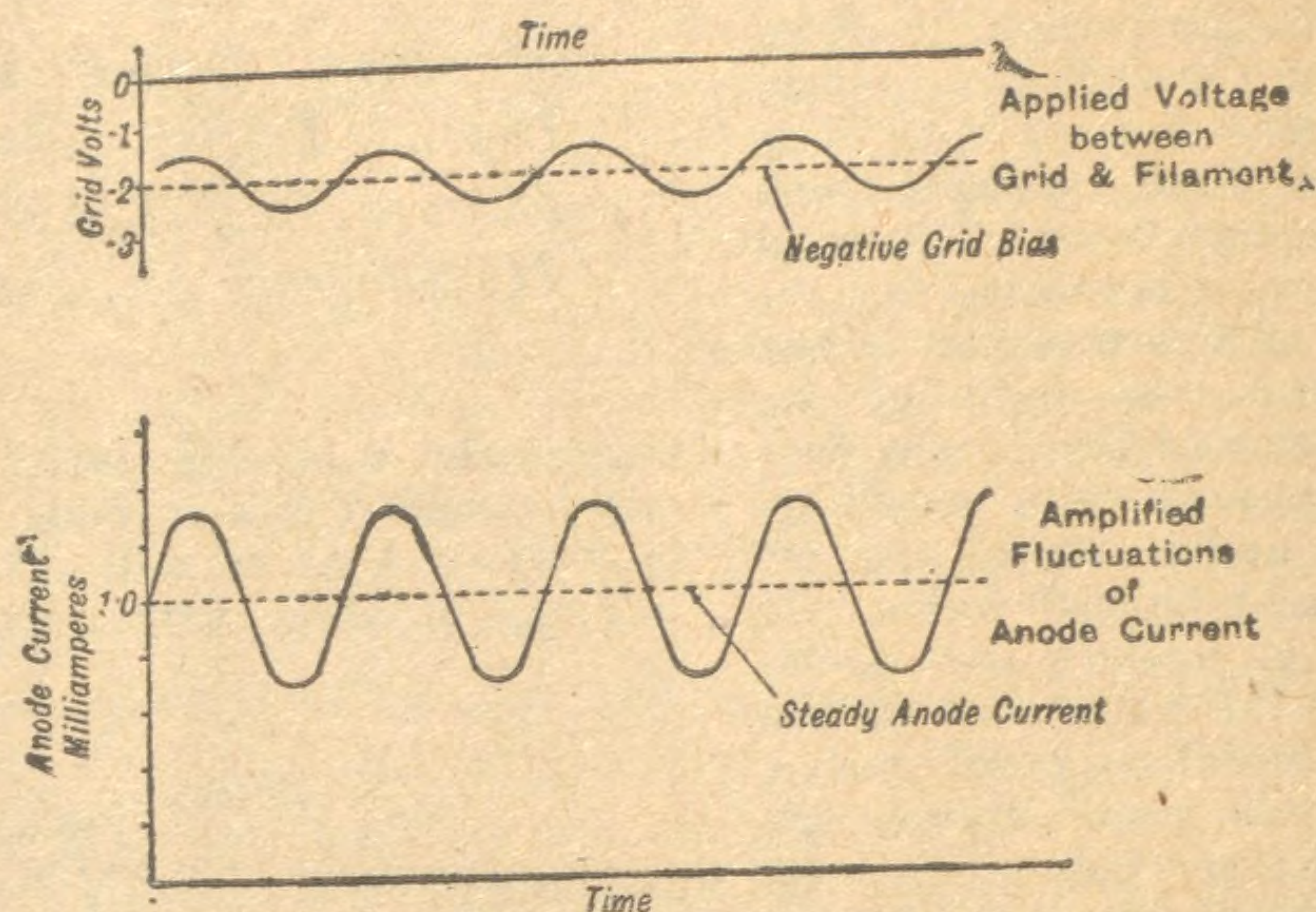


Figure 4.

anode current caused by it is exactly equal to the decrease, giving an exact reproduction; but if the incoming signal is strong, the oscillating voltage is large and may be indicated as between points LL on each side of our fixed grid voltage. See Fig. 5. It will be seen now that the negative swing is no longer on the straight portion of the characteristic curve, and that the increase in anode current is greater than the decrease, and

the valve is to work as an amplifier. If the signal were applied to the grid when it had no negative voltage already applied, each half-wave would make the grid positive and cause these undesirable grid-currents.

We therefore give the grid a definite bias, about which the incoming signal oscillates. In Figs. 4, 5 and 6 this grid bias is shown as 2 volts.

This negative bias must not be too small, otherwise grid current distortion will occur; it must not be too large, otherwise the signal will be operating on the bend of the curve. To deal with strong signals, therefore, it will be seen that a valve possessing a long straight characteristic curve to the negative side of zero grid volts is necessary. We can then apply a large value of negative bias to avoid grid current distortion, and still retain plenty of straight portion for the lower half of the oscillating signal. A good plan is to fix the grid bias value two thirds of the way down the straight portion of the curve, negative of zero grid volts; for a power valve, dealing with strong signal, always allow for a voltage swing of at least 10 volts, all of which must lie on the straight portion of the curve, negative of zero grid volts. This means a grid bias of about 6 volts. With weaker signals, such as in the first stage of an amplifier, the grid swing will not be so great.

A Power Valve is always found to have a long straight characteristic, and this why, to deal with strong signals without distortion, it must be employed in the last stage of an amplifier, and it is essential, if the best results are to be obtained, to use the correct value of grid bias.

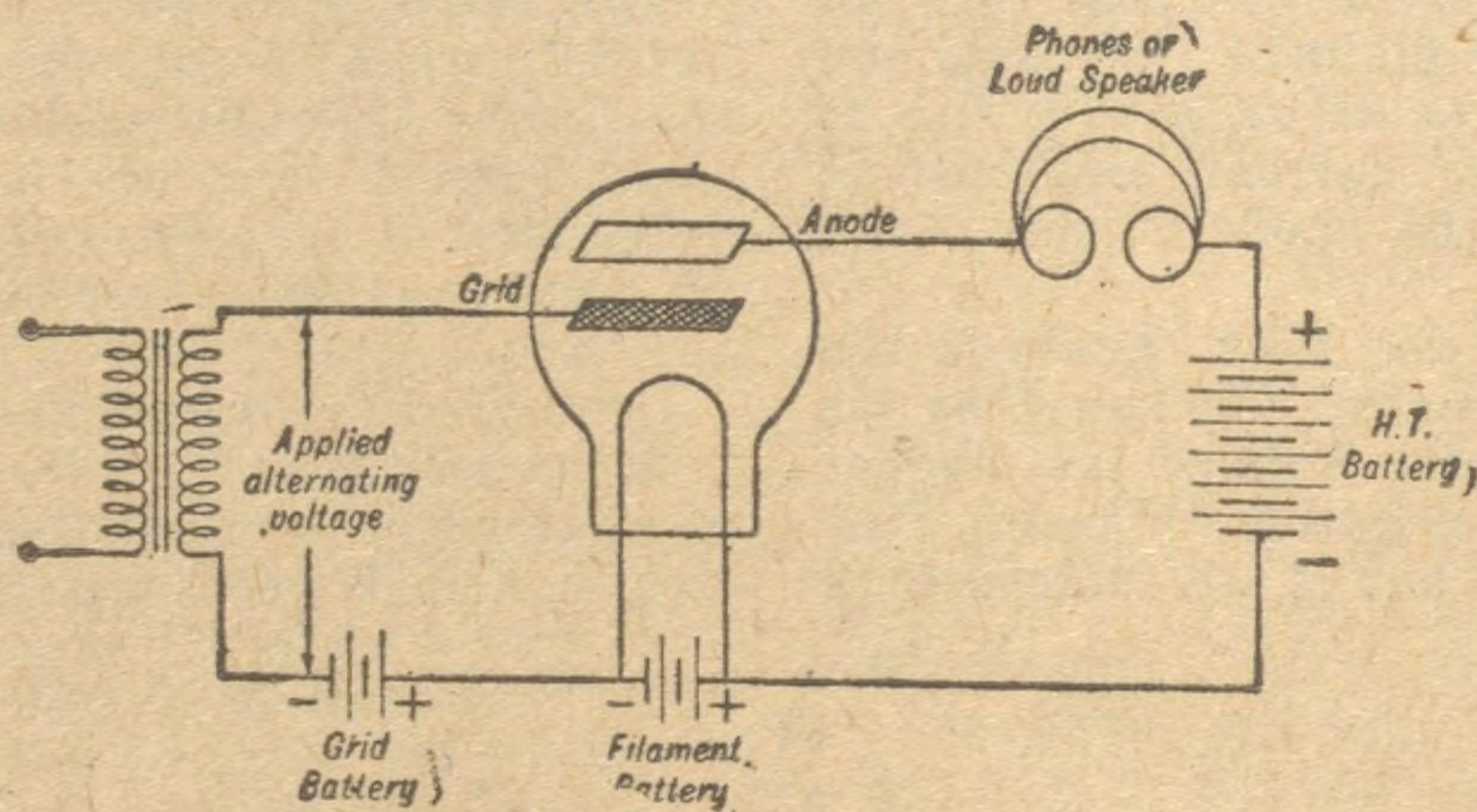


Figure 3.

With an exact reproduction of these alternating currents in the anode circuit, but amplified, the amount of amplification depends mainly on the nature and construction of the grid.

The amplified signal, however, would only be an exact reproduction of the incoming signal if each half of the alternating current were amplified to the same extent. See Fig. 4.

This is where distortion can occur.

Let us go back to our "characteristic curve" once more, and consider the incoming signal to be oscillating

we see now that the reproduction is no longer true, but is distorted. See Fig. 6.

Why, then, do we not give the grid less positive volts to start with, and transfer the incoming oscillating signal volts higher up the curve to the straight portion?

The answer is that as soon as a positive voltage is given to the grid, it will immediately attract to it some of the electrons, which should have been flowing to the anode, and a

There are two terms which are used in connection with valves which are important, and which should be ascertained by the prospective purchaser before selecting a valve.—These are the "Amplification Factor," and the "Impedance" of a valve, and these are

"Impedance," and A.C. valves. The Screened-Grid valve is so constructed that inter-electrode capacity, which is so detrimental to R.F. work, is practically eliminated. Some wonderful results have been obtained in sets using these valves.

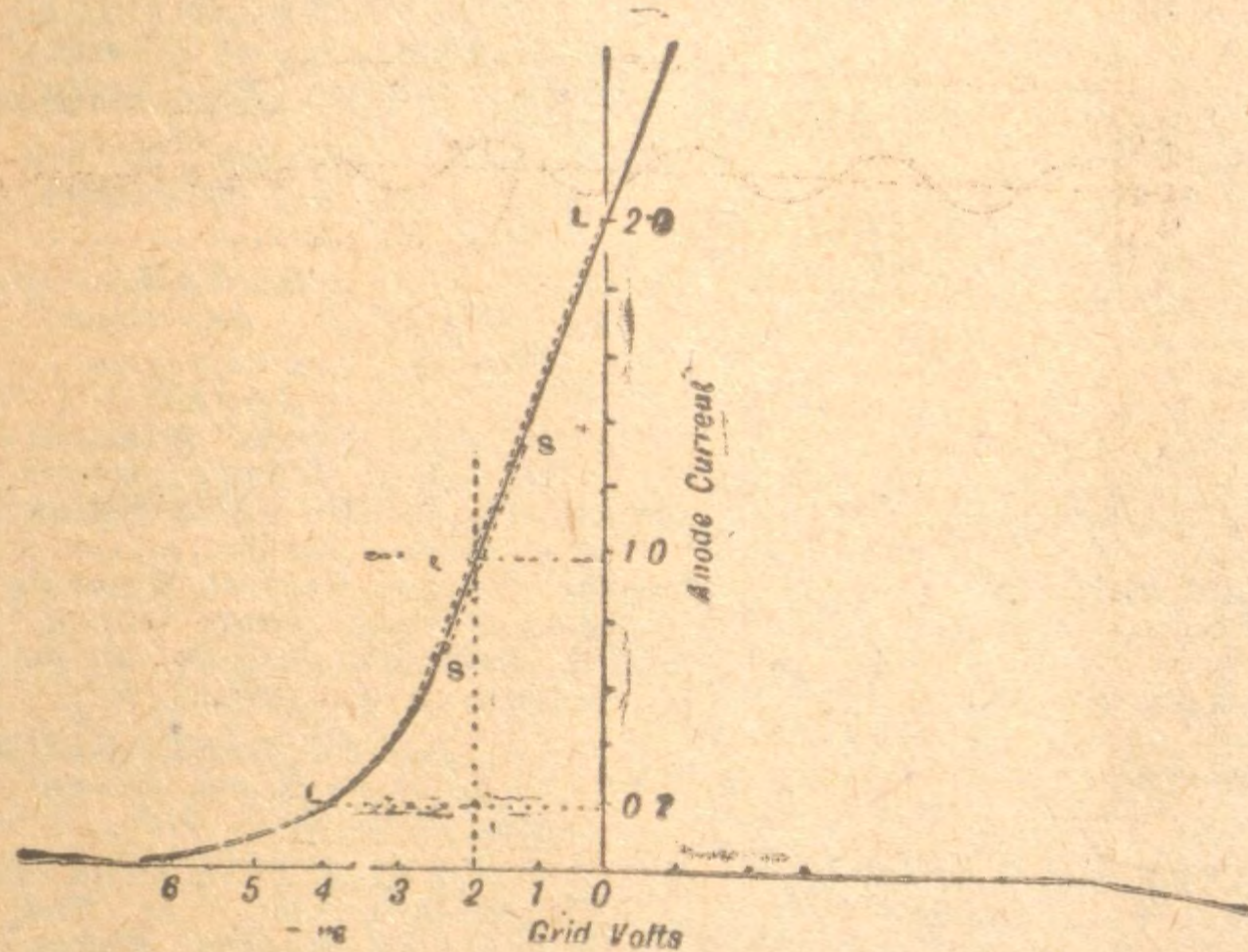


Fig. 5.

to be found either on the carton containing the valve, or on a leaflet which will be found inside the carton.

It is not intended here to describe how these two terms are obtained, but broadly speaking, there are three types of valves which will cover the average user's requirements. These are as follows:—

- (1) Radio-Frequency valves, having a high "Amplification Factor," and a high "Impedance."
- (2) Detector, or first stage audio valves, having a moderately high "Amplification Factor" and "Impedance."
- (3) Power valves having a low "Amplification Factor," and a low "Impedance."

To revert again to our power valve. It should be remembered that a power valve is not a valve which will make signals louder, but which will deal with louder signals without distortion. Any greater volume required must be obtained by adding a further stage of amplification in front of the power valve, making sure that all the amplifying valves are operating only on the straight portion of their characteristic curves.

Everybody owning a wireless set wants to get the best results from it, both as far as range and quality of reproduction are concerned, but once again, I would say that, however good the set may be, without the right

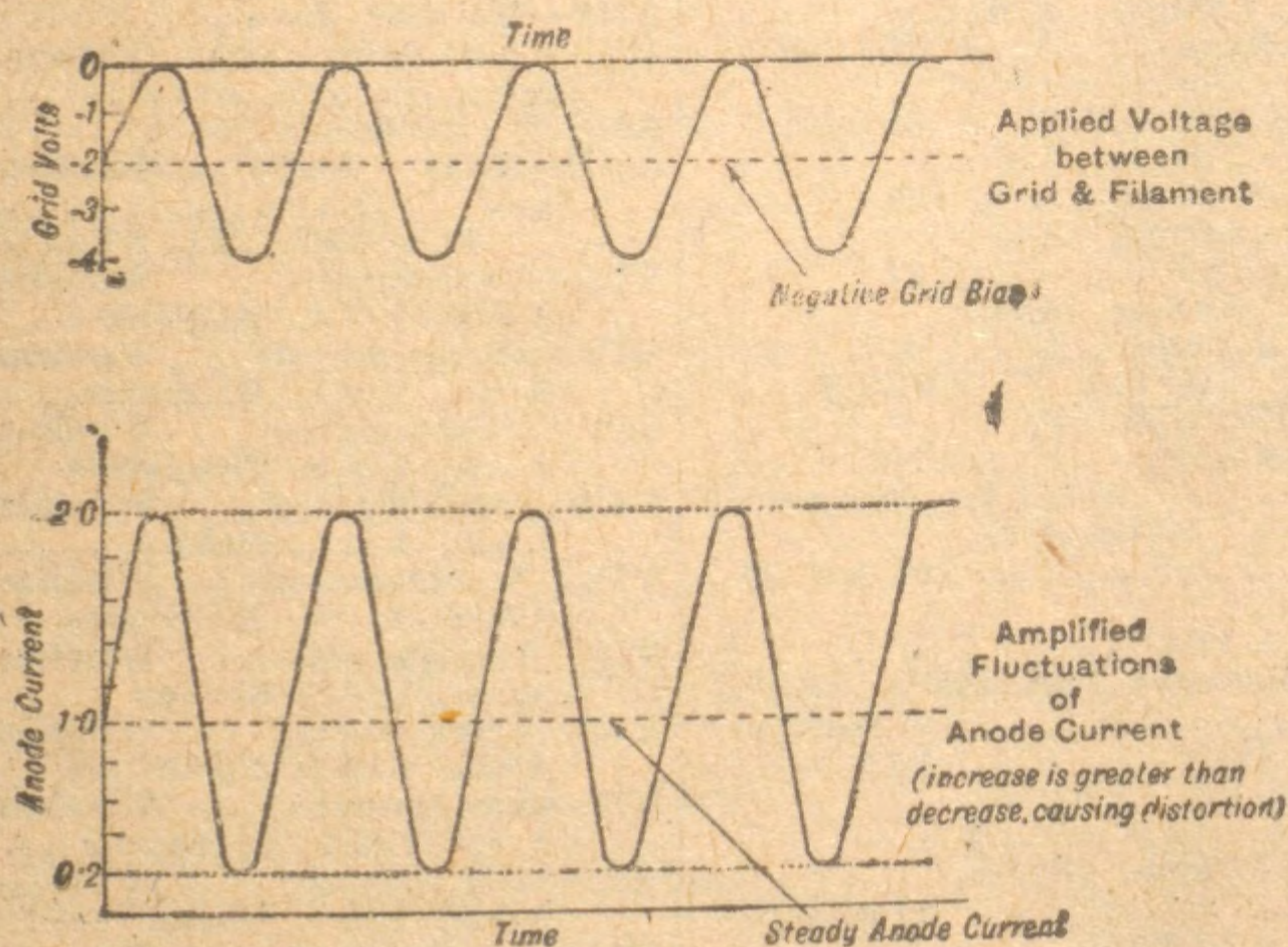


Figure 6.

There are, of course, other types having special characteristics, such as the Screened Grid valves, Radio Frequency amplifying valves, having a very high "Amplification Factor," and

valves faithful reproduction cannot be obtained, so I suggest to Radio enthusiasts the slogan "The right valve in the right place" for perfect reception.

News Bulletin.

For Distant Listeners.

In many of the far country districts of Australia mails are few and far between. Settlers, therefore, have, in the past, been compelled to wait for some days before receiving either letters or newspapers and the news when it has reached them has been quite old.

Broadcasting has, however, changed this state of affairs and nowadays the distant country dweller, thanks to the wonders of radio, is no longer isolated as far as news services are concerned.

All broadcasting stations in the Commonwealth devote a good deal of their transmission time to the providing of news items for listeners, and 4QG, Brisbane, is by no means an exception to the rule. Each day at regular intervals latest news is broadcast and apparently is much appreciated by numerous listeners.

Recently a number of listeners in the distant parts of Western Queensland made a request that a further news session be included and also that fuller weather notes be given each night. These requests were readily agreed to by the management of the station and an additional news service was immediately provided.

Now, however, many distant listeners have communicated with 4QG and have asked that special bi-weekly news bulletins be provided for their benefit. In one case a listener is situated in a spot to which mails are delivered only once every fourteen days.

The needs of distant dwellers are at all times given ready consideration at 4QG, and immediately the request for a bi-weekly news bulletin was made to the station, it was granted. Station 4QG is now providing half an hour's special news each Wednesday night from ten o'clock until half-past ten, and half an hour's special news from six o'clock until half-past six on Saturdays. Items of interest from the news services already given during preceding days are collected and grouped into the special session which is being eagerly listened to by those to whom radio is a godsend.

* * * * *

At the Chicago Radio Show last year the following story of a man who demanded Burgess Batteries went the rounds of the various stands:

"I bought a radio set that had been in pawn a year. The batteries were with it, and when I tested them they were still O.K. Burgess Batteries that can stay in pawn for twelve months and still work are good enough for me. I will have nothing else but Burgess."

Broadcasting Stations

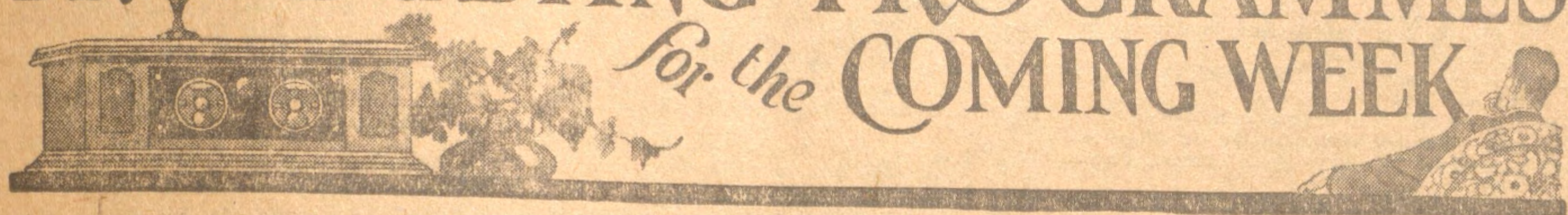
AUSTRALIA.			NEW ZEALAND.			EUROPE.		
New South Wales.			Metres. Watts.			Metres. Watts.		
2FC—2FC Limited, Market St., Sydney	442	5000	1YA—Radio B'casting Co. of N.Z., 419 Queen St., Auck.,	333	500	FL—Eiffel Tower, Paris, France	2650 & 32 5000	
2BL—Broadcasters, Ltd., Bligh St., Sydney	353	5000	1ZB—La Gloria Gramophone Co., Auckland	275	50	SOUTH AMERICA.		
2GB—Theosophical B'casting, 29 Bligh St., Sydney	316	3000	1ZQ—L. R. Leith, Auckland ...	530	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., 120a 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 Pittsburg, 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—Westralian 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	VMG—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- inging, 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 Pittsburg, 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	VIY—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, Tokio, Japan	20	2ME—Amalgamated Wireless (A/sia, Ltd.), Sydney	28.5
WHAM and 8XAC, WHAM, Radio, Rochester, N.Y., U.S.A.	Various wavelengths	JKZB—JKZB, Tokio Electric Co., Tokio, Japan	20	3ME—Amalgamated Wireless (A/sia, Ltd.), Melbourne ..	31.5
2XG—Western Electric Co., New York, U.S.A.	16 and 23.	GERMANY.		SHIP STATIONS.	
INDO CHINA.		POX—POX, Nauen, Germany ..	70	GBE—S.S. "Niagara"	37, 23
HVA—Hanoi, Indo China	31.5	POZ—POZ Radio, Nauen, Germany	19 metres	GDZV—S.S. "Makura"	23, 37
		SUVA.		MTN—S.S. "Tahiti"	37, 23
		VPD—Suva Radio, Amalgamated Wireless (A/sia), Ltd.	37.5	GDVB—S.S. "Aorangi"	37, 23
				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



2FC—Coming Features of the Week

Talks

FRIDAY, 27th APRIL:

6.50 p.m.—W. F. KAY: "J. C. WILLIAMSON."

7.45 p.m.—REV. F. H. RAWARD: "Let's Go Round the World."

SATURDAY, 28th APRIL:

11 a.m.—"Redgum": Gardening.

Church Services

SUNDAY, 29th APRIL:

11 a.m.—All Saints' Church of England, Woollahra.

7.15 p.m.—Petersham Congregational.

Talks (continued)

SUNDAY, 29th APRIL:

6.5 p.m.—CAPT. FRED AARONS: "Pursuing the Philippines."

TUESDAY, 1st MAY:

7.45 p.m.—HENRY SILVER: "Graphology."

WEDNESDAY, 2nd MAY:

6.50 p.m.—E. G. JACOBS: "Botany."

7.45 p.m.—ELLIOTT NAPIER: "The Great Barrier Reef."

Music, &c.

FRIDAY, 27th APRIL:

3.45 p.m.—"THE ART OF LISTENING TO MUSIC." Lecture recital by MADAME EVELYN GRIEG.

8 p.m.—HENRY PENN: Pianoforte recital from Conservatorium.

SATURDAY, 28th APRIL:

8 p.m.—Prologue and incidental music to "His Lady," from CAPITOL THEATRE.

8.45 p.m.—Commencement of special dance music in co-operation with Dance Night, organised by Hospital Saturday Fund.

SUNDAY, 29th APRIL:

8 p.m.—Organ and vocal recital by the blind Musicians, Mr. and Mrs. H. Faulkner.

9.30 p.m.—ERNEST MCKINLAY, tenor (FAREWELL APPEARANCE).

MONDAY, 30th APRIL:

9 p.m.—CARILLON RECITAL by the University Carillonneur, BRYAN BARKER.

TUESDAY, 1st MAY:

8.5 p.m.—SYDNEY MADRIGAL SOCIETY: Choral programme from Conservatorium Hall.

WEDNESDAY, 2nd MAY:

8.15 p.m.—LIONEL LAWSON, violinist.

THURSDAY, 3rd MAY:

9.20 p.m.—RAYMOND ELLIS, baritone

Plays, Sketches, &c.

SATURDAY, 28th APRIL:

9 p.m.—CHARLES O'MARA, entertainer.

MONDAY, 30th APRIL:

8.20 p.m.—EDGAR WARWICK AND EILEEN DAWN, sketches.

WEDNESDAY, 2nd MAY:

9 p.m.—H. W. VARNA COMPANY: "Captain Applejack's Great Adventure."

THURSDAY, 3rd MAY:

9.15 p.m.—ELLIS PRICE, entertainer.

Friday, April 27

2FC, SYDNEY.

Farmer's Broadcasting Service.

Wave Length, 442 Metres.

EARLY MORNING SESSION.

7 a.m. to 8 a.m.

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 service.

12.15 p.m.—Rugby wireless news.

12.20 p.m.—Studio music.

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.—Studio music.

1.35 p.m.—Miss Lorraine Jarman, soprano.

1.40 p.m.—Studio music.

1.55 p.m.—Lorraine Jarman, soprano.

2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.

3.3 p.m.—Popular records.

3.16 p.m.—Ian Iredale, tenor.

3.20 p.m.—Pianoforte solo by Pupil of Mr. Lindley Evans.

3.30 p.m.—Miss Persia Rutter, soprano.

3.35 p.m.—Madame Evelyn Greig will commence a series of talks on "The Art of Listening to Music":

No. 1, "The Song and the Singer."

3.50 p.m.—From the Ambassadors:

The Ambassadors Dance Orchestra.

Conductor, Mr. Al. Hammett.

4 p.m.—"Big Ben."

Ian Iredale, tenor.

4.5 p.m.—Pianoforte solo by Pupil of Mr. Lindley Evans.

4.15 p.m.—Persia Rutter, soprano:

4.20 p.m.—From the Ambassadors:

The Ambassadors Dance Band.

Conducted by Mr. A. Hammett.

4.35 p.m.—Thelma Lansdowne, mezzo.

4.40 p.m.—Studio music.

4.45 p.m.—Stock Exchange, third call.

4.47 p.m.—Thelma Lansdowne, mezzo.

4.50 p.m.—The Ambassadors Dance Band.

Conductor, Mr. Al. Hammett.

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.

- 6.15 p.m.—A Programme by the Juvenile Pupils of Madame Ada Baker.
 6.30 p.m.—Dinner Music.
 7 p.m.—"Big Ben."
 The 2FC Racing Commissioner will give the latest Sporting news.
 7.10 p.m.—Dalgety's Market Reports (wool, wheat, stock).
 7.18 p.m.—Fruit and vegetable markets.
 7.22 p.m.—Weather and shipping intelligence.
 7.26 p.m.—Late "Evening News" news service.

NIGHT SESSION.

- 7.40 p.m.—Programme announcements.
 7.45 p.m.—W. F. Kay will continue his series of Theatrical talks:
 No. 3. J. C. Williamson, Ltd.
 8 p.m.—"Big Ben."
 From Her Majesty's Theatre, Sydney (by permission of J. C. Williamson, Ltd.):
 The First Act of the Musical Play
 "ROSE MARIE,"
 featuring Harriet Bennet and Frederick Bentley.
 Act One:
 Introduction.
 Song, "Hard-boiled Herman," Frederick Bentley and Chorus.
 Song, "Rose Marie," Reginald Dandy and James Hughes.
 Song, "The Mounties," James Hughes and Chorus.
 Song, "Lak Jeem," Harriet Bennet and Chorus.
 Duet, "Indian Love Call," Harriet Bennet and Reg. Dandy.
 Song, "Pretty Things," Harriet Bennet and Chorus.
 Ballet Eccentric, Frederick Bentley and Chorus.
 Duet, "Why Shouldn't We," Yvonne Banvard and Frederick Bentley.
 Song, "Totem Tom Tom," Stephanie Deste and Chorus.
 9.40 p.m.—From the Studio:
 Henri Penn, pianist.
 9.50 p.m.—David Craven, baritone:
 (a) "Hear Me! ye Winds and Waves" (Handel).
 (b) "The Diver" (McMillan).
 9.58 p.m.—Suzanne Ennis, contralto.
 10.5 p.m.—Rev. F. H. Raward:
 Talk, "Let's Go Round the World."
 10.20 p.m.—Henri Penn, pianist.
 10.30 p.m.—Late weather forecast.
 10.31 p.m.—Suzanne Ennis, contralto.
 10.38 p.m.—David Craven, baritone.
 10.46 p.m.—Ambassadors Dance Orchestra.
 10.57 p.m.—To-morrow's Programme and late news.
 11 p.m. approx.—"Big Ben."
 From Her Majesty's Theatre, Sydney:
 The Speeches by Principals of the "Rose Marie" Company on the occasion of their farewell appearance in Sydney.
 Note: At the conclusion of this play (approx. 11 p.m.) the farewell speeches by Principals of the "Rose Marie" Company will be broadcast.
 11.10 p.m.—From the Ambassadors:
 The Ambassadors Dance Orchestra.
 Conducted by Al. Hammet.
 11.45 p.m.—National Anthem.
 Close down.

2BL, SYDNEY.

Broadcaster's Ltd.

Wave Length, 353 Metres.

FRIDAY, 27th APRIL, 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 "Athletics" by Miss Gwen Varley, Broadcasters' Women's Sports Authority.
 Social Notes: Replies to correspondents.
 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.
 12.8 p.m.—Information, Mails, Shipping, and Port Directory.
 12.11 p.m.—Boats in call by wireless.
 12.13 p.m.—Fruit Market Report.
 12.15 p.m.—Vegetable Market Report.
 12.17 p.m.—London Metal Market Report.
 12.19 p.m.—Dairy Farm and Produce Market Report.
 12.22 p.m.—Forage Market Report.
 12.24 p.m.—Fish Market Report.
 12.26 p.m.—Rabbit Market Report.
 12.28 p.m.—Stock Exchange Report.
 12.30 p.m.—H.M.V. Gramophone Recital.
 1.27 p.m.—Stock Exchange Report.
 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.—Talk on "The Women of Ancient Rome."
 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.

SPECIAL COUNTRY SESSION.

- 6.30 p.m.—G.P.O. Clock and Chimes.
 Australian Mercantile, Land and Finance Co.'s Report.
 Weather Report and Forecast, by courtesy of Government Meteorologist.
 Producers' Distributing Society's Fruit and Vegetable Market Report.
 Stock Exchange Report.
 Grain and Fodder Report ("Sun").
 Dairy Produce Report ("Sun").
 N.R.M.A. Talk.
 6.45 p.m.—Country News from the "Sun."
 7 p.m.—G.P.O. Clock and Chimes.
 Gulbransen Dinner Music.
 7.30 p.m.—Talk on "Gardening Science," by Mr. Cooper, Park Superintendent, City Council.

EVENING SESSION.

- 8 p.m.—G.P.O. Clock and Chimes.
 Broadcasters' Topical Chorus.
 8.3 p.m.—The Rose Bay Winter Garden Orchestra, under the direction of Mr. Lionel Hart.
 8.13 p.m.—Miss Lotys Lescaut (soprano).
 8.20 p.m.—Rose Bay Winter Garden Orchestra.
 8.26 p.m.—Mr. Robert Vawdrey (elocutionist).
 8.33 p.m.—Instrumental solo.
 8.40 p.m.—Rose Bay Winter Garden Orchestra.
 8.47 p.m.—Mr. Clement Williams (baritone).
 8.54 p.m.—Rose Bay Winter Garden orchestra.
 9.1 p.m.—Miss Nell Crane (comediienne).
 9.8 p.m.—Weather Report and Forecast, by courtesy of Mr. C. J. Mares, Government Meteorologist.
 9.9 p.m.—The Sporting Editor of the "Sun" will talk on the Prospects of Saturday's Racing.
 9.24 p.m.—Rose Bay Winter Garden Orchestra.
 9.31 p.m.—Miss Lotys Lescaut.
 9.38 p.m.—Rose Bay Winter Garden Orchestra.
 Close down.

- 9.45 p.m.—Instrumental solo.
 9.52 p.m.—Mr. Clement Q. Williams.
 9.59 p.m.—Rose Bay Winter Garden Orchestra.
 10.6 p.m.—Mr. Robert Vawdrey.
 10.13 p.m.—Miss Nell Crane.
 10.20 p.m.—Rose Bay Winter Garden Orchestra.
 10.27 p.m.—Resume of Following Day's Programme.
 10.30 p.m.—Romano's Restaurant Dance Orchestra under 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, 27th APRIL, 1928.

MORNING SESSION.

- 10 a.m.—Music.
 10.10 a.m.—Happiness Talk by Alfred E. Bennett.
 10.20 a.m.—Music.
 10.30 a.m.—Women's Session by Miss Helen J. Beegling.
 11 a.m.—Close down.

AFTERNOON SESSION.

- 2 p.m.—Music.
 2.20 p.m.—Address.
 2.35 p.m.—Music.
 3 p.m.—Close down.
 5.30 p.m.—Children's Session by Uncle George

EVENING SESSION.

- 7 p.m.—Stock and Market report by New Zealand Loan and Mercantile Agency Co., Ltd.
 7.15 p.m.—Music.
 7.30 p.m.—Talk by F. Houstone, B.A.
 7.45 p.m.—Music.
 8 p.m.—Opening Chorus.
 8.2 p.m.—Violin Solos by Mr. Leonard Brewer.
 8.8 p.m.—Songs by Mr. Harold Cobb.
 8.15 p.m.—Address.
 8.30 p.m.—Songs by Miss Maesmore Morris.
 8.37 p.m.—Clarinet Solos.
 8.44 p.m.—Songs by Miss Ethel Francis.
 8.51 p.m.—Humorous items by Mr. Heath Burdock.
 9.1 p.m.—Songs by Mr. Harold Cobb.
 9.8 p.m.—Clarinet Solos.
 9.15 p.m.—Songs by Miss Maesmore Morris.
 9.22 p.m.—Recital by Mr. Heath Burdock.
 9.42 p.m.—Violin Solos by Mr. Leonard Brewer.
 9.50 p.m.—Songs by Miss Ethel Francis.
 10 p.m.—Close down.

2 UW, SYDNEY

Sandel Radio, Ltd.

Wave Length, 267 Metres.

FRIDAY, 27th APRIL, 1928.

EVENING SESSION.

- 7 p.m.—Studio item.
 7.10 p.m.—Where to go.
 7.15 p.m.—Dinner music.
 7.45 p.m.—Request numbers.
 8 p.m.—News, mails and shipping intelligence.
 8.15 p.m.—Vocal and instrumental items.
 8.45 p.m.—Weather forecast.
 8.48 p.m.—Dance music supplied by courtesy of Morley Johnsons Ltd.
 9.30 p.m.—Request numbers.
 9.45 p.m.—Dance music.
 9.58 p.m.—Announcements.
 10 p.m.—Close down.

3LO, MELBOURNE

Broadcasting Co. of Aust.
Wave Length, 371 Metres.

FRIDAY, 27th APRIL, 1928.

EARLY MORNING SESSION.
7.15 a.m. to 8.15 a.m.

MORNING SESSION.

11.0 a.m.—3LO's CULINARY COUNSELS, or how to create creature comforts with a minimum of cash.

LONDON BUNS.

½lb. flour.
1 teaspoon baking powder.
2oz. butter.
2oz. sugar.
1 egg.
½ gill milk.
A little candied peel.
2oz. sultanas.
Grated lemon rind.

METHOD.—(1) Attend to oven and grease oven shelf. (2) Sift flour and baking powder. (3) Rub in butter till it looks like crumbs. (4) Add sugar, grated lemon rind and cleaned sultanas. (5) Beat egg and add milk—keep a little aside to glaze. (6) Pour this into dry ingredients and mix into a dough. (7) Turn on to floured board and cut into 12 pieces. (8) Knead into rounds; glaze top with egg and put strips of lemon peel on top and any sugar from the candied peel. (9) Place on oven shelf and bake in moderate oven 15 minutes. (10) Put on sieve to cool.

THE GLORY OF THE GARDEN:

"A garden from the beginning of time, and with all peoples, has been a refreshment to the spirit and a repose to the flesh; a delight in the spring of life and of the year; a refuge in the autumn from the winds that sweep over us; a spot full of hope and peace, where nothing dies that may not be born again."

—C. Hamilton Aide.

DO YOU REALISE THE CHARM OF WINDOW BOXES—Keep your windows ablaze with the twinkling blue of the little lobelia.

11.5 a.m.—VEGETARIAN COOKING.

MATRON BARTLETT will give you hints on the preparation of vegetarian dishes.

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.—A Talk under the auspices of the Health Department.

MIDDAY 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; Reuter's and the Australian Press Association Cables; British Official Wireless News from Rugby; "Argus" News Service.

NOONTIDE MELODIES.

12.20 p.m.—THE GYPSY PLAYERS:

"Indian Summer" (Lake).

12.30 p.m.—MOLLY MACKAY, Soprano:

"Happy Song" (Del Riego).

"By the Waters of Minnetonka" (Lieurance)

12.37 p.m.—Stock Exchange Information.

12.40 p.m.—THE GYPSY PLAYERS:

"Hawaiian Selection" (Lake).

12.50 p.m.—DOROTHY ROXBURGH, Viola:

Selected.

12.57 p.m.—EDWARD HOCKING, Tenor:

"Serenade" (Schubert).

"Trees" (Rasbach).

1.4 p.m.—THE GYPSY PLAYERS:

"Among the Roses" (Lake).

"Rubeville Suite" (Lake).

1.14 p.m.—Meteorological Information; Weather Forecast and Rainfall for Victoria, Tasmania, South Australia and New South Wales; Ocean Forecast; River Reports Stock Exchange Information.

1.20 p.m.—MOLLY MACKAY, Soprano:

"The Kerry Dance" (Molloy).

"Castles in the Air" (Scottish Song).

1.27 p.m.—THE GYPSY PLAYERS:

"The Town Clown" (Lake).

1.37 p.m.—EDWARD HOCKING, Tenor:

"Ah! Moon of My Delight" (Lehmann).

"Songtime and Dawning" (Bayton Power).

1.45 p.m.—Close Down.

2.0 p.m.—Description of First Hurdle Race, about 2 miles 62 yards, from WAGGA RACES, by Eric Welch.

2.5 p.m.—Close Down.

AFTERNOON SESSION.

2.15 p.m.—THE STATION ORCHESTRA:

"Nautical Selection" (Binding).

2.25 p.m.—OLIVER PEACOCK, Baritone:

"Lighterman Tom" (Squire).

"Rose of the Volga" (Kahn).

2.32 p.m.—Announcements.

2.35 p.m.—Description of the Maiden Plate, WAGGA RACES, by Eric Welch.

2.40 p.m.—THE STATION ORCHESTRA:

"All Aboard" (Fletcher).

"A Sentimental Shanty" (Fletcher).

"Forecastle Frolic" (Fletcher).

2.50 p.m.—FRANK AND FRANCIS LUIZ:

Song, "Tell Me, Little Gipsy."

Duet, "Moonlight Hawaiian Blues."

Steel Guitar, "Isles of Paradise."

Duet, "Drifting and Dreaming."

3.3 p.m.—THE STATION ORCHESTRA:

Selection, "Hawaiian Melodies,"

"Selected."

ON TERRA FIRMA AGAIN.

3.15 p.m.—Description of Wagga Gold Cup, WAGGA RACES, by Eric Welch.

3.20 p.m.—FRANCES FRASER:

"Travels with Dante, Real and Imaginary."

3.35 p.m.—THE STATION ORCHESTRA:

Selection, "Little Nelly Kelly."

3.45 p.m.—RUPERT HAZELL AND ELSIE DAY:

"Harmonylarity."

3.50 p.m.—Description of Chairman's Handicap, 6 furlongs, WAGGA RACES, by Eric Welch.

3.55 p.m.—RUPERT HAZELL AND ELSIE DAY think there are sure to be a few unhappy ones after that last race, and have returned especially to beseech you to be happy.

4.5 p.m.—CHARLES TAYLOR, Violin:

Selected.

4.12 p.m.—JULIA RUSSELL, Soprano:

"Sylvellin" (Sinding).

"Yellow Slippers."

4.19 p.m.—THE STATION ORCHESTRA:

"Three O'clock in the Morning."

"Selected."

4.25 p.m.—Description of Wagga Sires' Produce Stakes, 5 furlongs, WAGGA RACES, by Eric Welch.

4.30 p.m.—INTERLUDE.

COLONEL POTTINGER: Asiatic Problems Affecting Australia.

White Australia Policy.

4.45 p.m.—Special Weather Reports.

4.46 p.m.—JULIA RUSSELL, Soprano:

"I Know a Lovely Garden" (Guy D'Hardelot).

"Rumanian Night Song."

4.53 p.m.—OLIVER PEACOCK, Baritone:

"Fallen Leaf" (Logan).

"Colinette" (Coningsby Clarke).

5.0 p.m.—Description of Highweight Handicap, 7 furlongs, WAGGA RACES, by Eric Welch.

5.5 p.m.—"Herald" News Service; Stock Exchange Information.

5.20 p.m.—Close Down.

Results of Ballarat Miners' Turf Club Races will be given hourly.

EVENING SESSION.

6.0 p.m.—Answers to Letters and Birthday Greetings by "Billy Bunny."

6.20 p.m.—CAPT. DONALD MACLEAN:

The Spanish Conquests of America.

How the Dons discovered the Treasures of the World.

6.35 p.m.—Musical Interlude.

6.40 p.m.—"BILLY BUNNP:":

More Stories of the Australian Bush.

NEWS AND MARKET REPORTS.

7.0 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.

7.21 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 Fruiterers' Association; Citrus Fruit.

NIGHT SESSION.

7.30 p.m.—Under the auspices of the Department of Agriculture, J. BRAKE, Senior Inspector of Agriculture, will speak on "Wheat Cultivation in the Older Mallee." AERIALS, WAVELENGTHS AND ATMOSPHERICS.

7.45 p.m.—COLLINGWOOD CITIZENS' BAND:

Intermezzo, "Sunset."

7.55 p.m.—GORDON JAMES, Baritone:

"Drake's Drum" (Henry Newbolt).

"Yesteryear" (Bainbridge Crest).

8.2 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.

8.12 p.m.—COLLINGWOOD CITIZENS' BAND:

Flugel Solo, "At Dawn."

8.19 p.m.—MOLLY MACKAY, Soprano:

"The Wind Song" (James Rodgers).

"Bells" (Hurlstone).

"Darkness" (Hurlstone).

8.26 p.m.—A Talk on the Aerial Derby, by Captain Keith Gardiner.

8.36 p.m.—COLLINGWOOD CITIZENS' BAND:

"Over the Waves."

8.43 p.m.—GORDON JAMES, Baritone:

"The Two Grenadiers" (Schumann).

"The Sentinel" (Herbert Oliver).

ORGAN RECITAL.

8.50 p.m.—C. E. MONTEATH, organ transmitted from St. Peter's Church, Melbourne:

"A Solemn Festival" (Rheinberger).

"La Carita" (Rossini).

"Prelude in B Minor" (Chopin).

"Fantasie in E Flat" (Saint-Saens).

FROM THE STUDIO.

EASTERN ECHOES.

9.10 p.m.—THE GYPSY PLAYERS:

Suite, "Antony and Cleopatra" (Gruenwald)

9.20 p.m.—ERNEST SAGE, Baritone:

"How Many a Lonely Caravan" (Aylward)

"Allah Be With Us" (Aylward).

9.27 p.m.—AGNES FORTUNE, Piano:

"To the Spring" (Grieg).

Selected.

9.37 p.m.—MOLLY MACKAY, Soprano:

"The Rose Enslaves the Nightingale" (Rimsky-Korsakof).

"Chanson Indoue" (Korsakof).

9.44 p.m.—THE GYPSY PLAYERS:

"Dance of the Desert Girl" (Hadley).

9.54 p.m.—ERNEST SAGE, Baritone:

"The Garden of Allah" (Charles Marshall).

"Far Across the Desert Sands" (Aylward).

10.1 p.m.—THE GYPSY PLAYERS:

"Chinese Dance" (Crist).

INTERLUDE.

10.10 p.m.—ERIC WELCH will speak on:

"To-morrow's Races."

MIXOLOGY.

10.20 p.m.—COLLINGWOOD CITIZENS' BAND:

"Moonlight and Roses."

10.30 p.m.—RUPERT HAZELL AND ELSIE DAY:

"Harmonylarity."

INTERLUDE.

10.42 p.m.—"Argus" News Service; Meteorological Information; British Official Wireless News from Rugby; Road Notes, supplied by the Royal Automobile Club of Victoria; Announcements.

The Royal Automobile Club of Victoria's SAFETY MESSAGE for to-day is:

"Cutting in" is one of the greatest dangers on the road. It is generally due to unnecessary and selfish haste, which is proof of bad manners and poor driving, and is discountenanced by every careful driver.

10.54 p.m.—OLIVER PEACOCK, Baritone:

"Tally-Ho" (Leoni).

"Rounded Up in Glory" (Fox).

11.0 p.m.—OUR GREAT THOUGHT:

"A strong life is like that of a ship of war, which has its own place in the fleet, and can share in its strength and discipline, but can also go forth alone, in the solitude of the infinite sea. We ought to belong to society, to have our place in it, and yet be capable of a complete individual existence outside of it."

—Hamerton.

THE SHRINE OF REMEMBRANCE:

"No easy hopes or lies
Shall bring us to our goal,
But iron sacrifice
Of body, will, and soul.
There is, but one task for all—
For each one life to give.
Who stands if freedom fall?
Who dies if England live?"

—Rudyard Kipling.

Have you sent your contribution yet to the WAR MEMORIAL?

DANCE MUSIC.

11.1 p.m.—THE VAGABONDS:

"Put Your Arms Where They Belong" (Davis).
"Keep a Little Sunshine in Your Heart" (Von Tilger).
"Chloe" (Moret).
"Dance of the Tinker Toys" (Schobel).
"Me and My Shadow" (Jolson).
"A Night in June" (Friend).
"Slow River" (Myers).
"How Long Must I Wait for You?" (Stillwell).
"Wondering Why" (Halle).
"Night Time is Love Time" (Davis).
"Golden Memories of Hawaii" (Stevens).
"Fifty Million Frenchmen" (Rose).
"My Regular Girl" (Warren).

11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

Associated Radio Co.
Wave Length, 484 Metres.

FRIDAY, 27th APRIL, 1928.

MORNING NEWS SESSION.
11.0 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

11.1 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 results of the Ballarat Miners' Races, together with other information, will be broadcast immediately each race is run.

2.0 p.m.—Ayaz 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:
"A Love Suite" (Lake).
Selection, "Bombo" (Rcmberg).

2.50 p.m.—Miss Ethel Newman, Entertainer:
In Recitations and Monologues.

2.58 p.m.—Melbourne Concert Orchestra:
"Romanze" (Tschalkowsky).
"Dreams of Yesterday" (Humphries).
"Chant D'Amour" (Frommel).

3.12 p.m.—Miss Ethel Newman, Entertainer:
In Monologues.

3.19 p.m.—Ayaz Dansonians.

3.30 p.m.—Interval Announcements.

3.35 p.m.—Mademoiselle Jeunesse. Interval talk on timely topics for Our Lady Listeners.

3.45 p.m.—Melbourne Concert Orchestra:
Suite, "The Shoe Ballet" (Ansell).

4.0 p.m.—G.P.O. Clock says "Four."

4.1 p.m.—Second Weather Forecast.

4.3 p.m.—Miss Julia Russell, Soprano:
"Vissi d'Arte" from La Tosca (Puccini).
"The Robins Song" (White).

4.11 p.m.—Ayaz Dansonians.

4.27 p.m.—Miss Julia Russell, Soprano:
"Ave Maria" (Mascheroni).

"If I Had Wings to Fly" (Phillips).

4.35 p.m.—Melbourne Concert Orchestra:
"Pas des fleurs" (Delibes).

"Three Cuban Dances" (Vervantes).
"The Merry-makers" (Coates).

4.50 p.m.—To-night's Entertainment; Announcements.

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

CHILDREN'S SESSION.

6.30 p.m.—3AR's Cousin Peter.

EVENING SESSION.

BALL ROOM AND CONCERT HALL.

7.15 p.m.—Health Session: Mr. George Beattie, Principal of the Beattie College of Physical Culture, on "Physical Fitness."

7.30 p.m.—Sport Session: "Harlequin" presents his budget of news and comments on Sport of the Day.

7.50 p.m.—MacNamara's Stock Reports.

8.0 p.m.—G.P.O. Clock says "Eight."

8.1 p.m.—Melbourne Concert Orchestra:
Overture, "To an Irish Comedy" (Ansell).
"Berceuse" (Jarnfelt).

8.12 p.m.—Miss Shell Paterson, Soprano:
"Break O' Day" (Sanderson).

"A Heart That's Free" (Robyn).

8.20 p.m.—Ayaz Dansonians.

8.36 p.m.—Mr. Ernie Pettifer, Saxophone:
"Dans L'Orient" (Wiedoeft-Savino).

8.40 p.m.—Miss Snell Paterson, Soprano:
"Fat li'l feller" (Gordon).
"Jest Her Way" (Aitken).

8.48 p.m.—Announcements.

9.0 p.m.—Melbourne Concert Orchestra.

"Delibes Fantasie" (Urbach).

9.16 p.m.—Mr. C. Richard Chugg, Flute:
"Bagatelle" (Flashman).

9.20 p.m.—Ayaz Dansonians:

Fox Trot, "Just a Memory" (Henderson).

Waltz, "What Does it Matter" (Berlin).
Fox Trot, "Yale Blues" (Ellis).

9.30 p.m.—"Harlequin"; Sport Results.

9.38 p.m.—Mr. Michel Connelly, Irish Baritone:

"Oft in the Stilly Night" (Moore).

"The Smoking Room" (Arundale).

9.46 p.m.—Mr. Ronald Brearley, 'Cello:
"La Cinquantine" (Gabriel-Marie).

9.50 p.m.—Announcements.

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.—Melbourne Concert Orchestra:
"Four Dances from the Rebel Maid" (Phillips).

Selection, "The Maid of the East" (Neale).

10.25 p.m.—Mr. Michel Connelly, Irish Baritone:

"A Pearl for Every Tear" (Liddle).

"The Night Nursery" (Arundale).

10.33 p.m.—Ayaz Dansonians.

10.45 p.m.—"Harlequin"; Sport Results.

10.50 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, "Currajong," by John O'Brien.

11.0 p.m.—G.P.O. Clock says "Eleven"; God Save the King.

4QG, BRISBANE.

Queensland Radio Service.

Wave Length, 385 Metres.

FRIDAY, 27th APRIL, 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 service 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.

"The Telegraph News."

4.30 p.m.—Close down.

EARLY EVENING SESSION.

6 p.m.—Mail train running times, Daily Standard news, Weather Information announcements.

6.15 p.m.—Dinner music.

6.30 p.m.—Bedtime stories by "The Sandman."

7 p.m.—Market reports; stock reports.

7.30 p.m.—Weather news; "Daily Standard" news; announcements.

7.43 p.m.—Standard time signals.

7.45 p.m.—To-morrow's racing reviewed.

NIGHT SESSION.

A programme of dance music by Alf. Featherstone and shi Studio S. operators, relayed (by arrangement) from Hotel Carlton.

8 p.m.—Dance music, including:

Fox-trots:
(a) "Look in the Mirror" (Stept).
(b) "Who-oo, You-oo, That's Who" (Ager).

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

One step:
(a) "Here Comes Springtime" (O'Hagan).

Fox-trot:
(a) "I'm in Love Again" (Porter).

Jazz Waltz:
"A Dream of You" (Hate).

Rhythmic Paraphrase:
(a) "Tannhauser" (arr. Lange).
(b) "Aida" (Black).

Fox-trots:
(a) "Dainty Miss" (Barnes).
(b) "Down Kentucky Way" (Hall).

Jazz Waltz:
"Nevada" (Nicholls).

Fox-trots:
(a) "Himazazs" (Austin).
(b) "Tinker, Tailor, Soldier, Sailor" (Danerell).

Fox-trots:
(a) "My Best Girl" (Donaldson).
(b) "All I Want is You" (Davis).

Between dances the following will be broadcast from the studio:

Tenor Solos:
(a) "Caring for the Rose" (Sharp).
(b) "Little Brown Cottage" (Dickson).

Soprano Solos:
(a) "I Hear a Thrush at Eve" (Cadman).
(b) "Long Ago" (Elliot).

Humor by "Graham and Wattie."

A Thought for To-night:
"The Book of Job."

Some music from Cow Bells.
Mr. W. J. Barker.

Baritone Solos: Selected.
Mr. J. McLeod.

10 p.m.—Week-end road information officially supplied by the Royal Automobile Club of Queensland.

10.15 p.m.—"The Daily Mail" news.

Weather news.

5CL, ADELAIDE.

Central Broadcasters, Ltd.

Wave Length, 395 Metres.

FRIDAY, 27th APRIL, 1928.

MIDDAY SESSION.

12 noon to 2 p.m.

AFTERNOON SESSION.

3 p.m.—G.P.O. Chimes.

3.1 p.m.—Musical numbers on the Studio "Recreator."

3.30 p.m.—Menu talk.

3.45 p.m.—Musical numbers on the Studio "Recreator."

4.57 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.

5 p.m.—G.P.O. Chimes and close down.

EVENING SESSION.

6 p.m.—G.P.O. Chimes.

6.1 p.m.—Children's entertainment by the 5CL Radio Family.

6.30 p.m.—Dinner Music on the Studio "Recreator."

7 p.m.—G.P.O. Chimes.

7.1 p.m.—General Market reports by A. W. Sandford and Co., A. E. Hall and Co., Dalgety and Co., S.A. Farmers Co-operative Union Ltd., Taylor Bros., Retail Grocers' Association, Interstate Fruit and Produce Market Co. Ltd.

7.10 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
 7.14 p.m.—"Windbag's" Sporting Service.
 7.21 p.m.—Football talk by "High Mark."
 7.29 p.m.—Solomon Sisters, Instrumental Trio for Pianoforte, Cello and Violin.
 7.35 p.m.—Alice Burke, soprano:
 "Five little piccaninnies" (Anthony).
 "When Irish eyes are smiling" (Ball).
 7.42 p.m.—Solomon Sisters, Instrumental Trio.
 7.50 p.m.—Alice Burke, soprano:
 "Poor Butterfly" (Hubbell).
 7.54 p.m.—Solomon Sisters, Instrumental Trio.
 8 p.m.—G.P.O. Chimes.
 8.1 p.m.—Relayed from Malcolm Reid and Co.'s showrooms, orchestral selections by Malcolm Reid and Co.'s Orchestra.
 8.16 p.m.—Mrs. J. L. Davey, contralto:
 "Queen Mary's Songs" (Elgar).
 "A Memory" (Davey).
 8.23 p.m.—Malcolm Reid's Orchestra, selections.
 8.36 p.m.—Les Crispe, tenor:
 "Una Furtiva Lugima", from the opera:
 "L'Elisir D'Amore" Donizetti).
 "Mother Machree"
 8.44 p.m.—Malcolm Reid's Orchestra, selections
 8.53 p.m.—Mrs. J. L. Davey, contralto:
 "A bowl of roses" (Clarke).
 8.57 p.m.—Station Announcements.
 9 p.m.—G.P.O. Chimes.
 9.1 p.m.—Meteorological information, weather forecast, Dalgety's wheat report.
 9.2 p.m.—International News.
 9.10 p.m.—Relay from Glenelg, The Maison Dance Band.
 9.25 p.m.—Les Crispe, tenor:
 "Song of Sleep" (Somerset).
 9.29 p.m.—Jas. Glennon, violinist:
 "Canto Amoroso" (Sammartini-Elman).
 "Cradle Story" (Ivanoff).
 9.38 p.m.—Alfred Warren, The Pom-Yank in popular songs at the piano.
 9.44 p.m.—Relay from Glenelg, The Maison Dance Band.
 10 p.m.—G.P.O. Chimes.
 10.1 p.m.—"Advertiser" News Service.
 Interstate and local sporting.
 10.12 p.m.—"Windbag's" Sporting Service.
 10.19 p.m.—Jas. Glennon, violinist:
 "African Dance" (Nash).
 10.24 p.m.—Relay from Glenelg, The Maison Dance Band.
 10.55 p.m.—Weather forecast, Station announcements, to-morrow's programme.
 11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH

Westralian Farmer's.
 Wave Length, 1250 Metres.

FRIDAY, 27th APRIL, 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:
 2 p.m.—Close down.

AFTERNOON SESSION.

3.30 p.m.—Tune in.
 3.35 p.m.—Organ and Pianola selections relayed from the Grand Theatre, Murray street.
 Vocal and instrumental numbers from the Studio.
 4.30 p.m.—Close down.
 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, Bertie, Duffy, and Percy.
 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 Meteorological Bureau of Western Australia.
 Station announcements such as alterations to programmes, etc.
 8.3 p.m.—Popular Night.
 Musical programme from the studio, including vocal and instrumental artists.
 9.35 p.m.—Health talk by Mr. H. S. Hatton, Principal of Hatton's Physical Culture School.

10 p.m.—Late News item 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.

7ZL, HOBART

Tasmanian Broadcasters, Ltd.
 Wave Length, 516 Metres.

FRIDAY, 27th APRIL, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

AFTERNOON 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:
 "Joys of Innocence" (Fletcher).
 Suite, "Merchant of Venice" (Rosse).
 "Andante" (Mozart).
 Violin Solo. Selected. Mr. E. J. McCann.
 "Moonbeams" (Drigo).
 Clarinet Solo. Selected. Mr. A. Young.
 Selection, "Madam Pompadour" (Fall).
 Pianoforte Solo. Selected. Mr. A. Roberts.
 4.15 p.m.—Educational Talk.
 4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Children's Corner with the Radio Lday.
 7 p.m.—Uncle Hector's fifteen minutes.
 7.15 p.m.—"Big Brother" will bid farewell to his Pals.

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.
 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.
 8.1 p.m.—Broadcast by Direct wire.
 Weekly Lecture at Lyceum Club Hobart.
 Lecture at Lyceum Club Hobart.
 Concert from the Studio.
 Miss Norah Freney soprano.
 Mr. G. Hook, tenor.
 Miss Ruby Piesse, accompanist.
 Mr. E. Brooker, Aeola selections.
 9.40 p.m.—British Official Wireless news.
 9.50 p.m.—Mercury special Interstate news service.
 Ships within wireless range.
 Tasmanian District weather reports.
 9 p.m. Weather forecasts.
 Weather reports from Australian Capital cities.
 Travellers week-end information.
 Station announcements.
 Saturday's programme.
 10 p.m.—Close down.

Saturday, April 28

2FC, SYDNEY.

EARLY MORNING SESSION.
 7 a.m. to 8 a.m.

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 SESSION.

12 noon—"Big Ben" and announcements.
 12.2 p.m.—Stock Exchange, first call.
 12.3 p.m.—Studio music.
 12.20 p.m.—"Sydney Morning Herald" news service.
 12.25 p.m.—Rugby wireless news.
 12.30 p.m.—Studio music.
 12.45 p.m.—The Smart Set Instrumental Trio.
 Leader, Molly Gant:
 (a) "When Day is Done" (Katscher).
 (b) "Just a Little Lady" (Crocker).
 (c) "Spring Song" (Mendelssohn).
 1 p.m.—"Big Ben." Weather intelligence.
 1.3 p.m.—"Evening News" midday news service.
 1.18 p.m.—The Smart Set Instrumental Trio.
 Leader, Molly Gant:
 (a) "On Wings of Song" (Mendelssohn).
 (b) "A Garden is a Lovesome Thing" (de Reigo).
 (c) "I Travel the Road" (Thayer).
 1.28 p.m.—Dorothy Dewar, soubrette:
 1.36 p.m.—The Smart Set Instrumental Trio.
 Leader, Molly Gant:
 (a) "Where is My Meyer" (Profes).
 (b) "Julius" (Conrad).
 (c) "Sweet, Wonderful You" (Bushway).
 1.46 p.m.—Dorothy Dewar, soubrette.
 1.53 p.m.—The Smart Set Instrumental Trio.
 Leader, Molly Gant:
 (a) "Ciribirilum" (Petalozza).
 (b) "Kiss and Make Up" (Bogate).
 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.
 3.3 p.m.—From the Sydney Sports Ground:
 Description of the Football Match,
 Waratahs versus The Rest of N.S.W.
 3.50 p.m.—From the Studio:
 Jack Wright, novelty pianist.
 4.5 p.m.—From the Sydney Sports Ground,
 continuation of the Football Match,
 Waratahs versus The Rest of N.S.W.
 4.45 p.m.—From the Studio:
 Sporting Resume and 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.
 6.15 p.m.—Story time for the young folk.
 6.30 p.m.—Dinner music.
 7 p.m.—"Big Ben." Late sporting news.
 7.15 p.m.—Weather intelligence.
 7.18 p.m.—"Evening News" late news service.
 7.28 p.m.—Studio music.

NIGHT SESSION.

7.30 p.m.—Announcing a Special Dance Night programme.
 By arrangement with the Hospital Saturday Fund, 2FC will give a continuous programme of dance music from 9 p.m. to 11.45 p.m., and it is the wish of the Hospital Saturday Fund that Radio Set Owners should organize Dance Parties in their homes on this evening and remit the proceeds to this Fund.
 7.35 p.m.—Studio music.
 7.40 p.m.—Ernest Archer.
 7.52 p.m.—Gwladys Fimister, soprano.
 8 p.m.—"Big Ben."
 From the Capitol Theatre:
 The Capitol Symphony Orchestra.
 Fred Scholl at the Wurlitzer Organ.
 Ted Henkel and his Stage Band.
 Vocal Quartette.
 8.45 p.m.—From the Studio:
 2FC Dance Band, conducted by Cec Morrison.
 8.56 p.m.—Gwladys Fimister, soprano.
 9 p.m.—"Big Ben." Late weather forecast.
 9.1 p.m.—The 2FC Dance Band, conducted by Cec Morrison.
 9.10 p.m.—Ubaldo Russo, baritone, and Linda Bradford, soprano:
 Duet.

9.14 p.m.—2FC Dance Band.
 9.24 p.m.—Ernest Archer, tenor.
 9.27 p.m.—2FC Dance Band, conducted by Cec Morrison.
 9.37 p.m.—Linda Bradford, soprano.
 9.40 p.m.—2FC Dance Band.
 9.50 p.m.—Charles O'Mara, entertainer.
 9.54 p.m.—2FC Dance Band, conducted by Cec Morrison.
 10.4 p.m.—Ubaldo Russo, baritone.
 10.8 p.m.—2FC Dance Band.
 10.18 p.m.—Ubaldo Russo and Linda Bradford, soprano:
 Duet.
 10.22 p.m.—2FC Dance Band, conducted by Cec Morrison.
 10.30 p.m.—Late weather forecast.
 10.31 p.m.—Charles O'Mara, entertainer.
 10.35 p.m.—2FC Dance Band.
 10.42 p.m.—Charles O'Mara, entertainer.
 10.46 p.m.—2FC Dance Band, conducted by Cec Morrison.
 10.54 p.m.—Charles O'Mara, entertainer.
 10.58 p.m.—Late news.
 11 p.m.—"Big Ben."
 2FC Dance Band.
 11.45 p.m.—National Anthem.
 Close down.

2BL, SYDNEY

SATURDAY, 28th APRIL, 1928.

EARLY MORNING SESSION.
 8 a.m. to 9 a.m.

MORNING SESSION.

11 a.m.—G.P.O. Clock and chimes.
 Social notes by Mrs. Jordan.
 Talk on "Simple Cooking for Children," 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.
 12.20 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 p.m.—G.P.O. Clock and chimes.
 During the afternoon descriptions of each race at Moorefield Races will be broadcast interspersed with musical items from the Studio.
 4.55 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.—Racing resume.
 Sporting resume.
 7 p.m.—G.P.O. Clock and chimes.
 Dinner Music.
 7.30 p.m.—Talk on "Aborigines," by "Bringa."
 8 p.m.—G.P.O. Clock and chimes.
 Broadcasters' Topical chorus.
 8.3 p.m.—Miscellaneous programme and description of the Boxing Contest broadcast from the Stadium.
 10.15 p.m.—The Wentworth Cafe Orchestra, under the direction of Mr. S. Simpson.
 During intervals between dances, "Sun" news will be broadcast.
 11.45 p.m.—G.P.O. Clock and chimes.
 National Anthem.

2 UW, SYDNEY

SATURDAY, 28th APRIL, 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 p.m.—News, mails and shipping intelligence.
 8.15 p.m.—Studio items.
 8.30 p.m.—Sporting results.
 8.40 p.m.—Dance programme by courtesy of Morley Johnsons Ltd.
 9.30 p.m.—Request numbers.
 9.45 p.m.—Dance music.
 9.58 p.m.—Announcements.
 10 p.m.—Close down.

3LO, MELBOURNE

SATURDAY, 28th APRIL, 1928.

EARLY MORNING SESSION.

7.15 a.m. to 8.15 a.m.

MORNING SESSION.

11 a.m.—THE STATION ORCHESTRA:
 "Finlandia" (Sibelius).
 Selected.
 11.10 a.m.—FRANK AND FRANCIS LUIZ:
 Duet, "Honeymoon Isles."
 Steel Guitar, "Hawaiian Hotel."
 Duet, "On the Beach at Waikiki."
 Solo, "Hawaii Across the Sea."
 11.22 a.m.—THE STATION ORCHESTRA:
 Suite, "From Bohemia" (Hume).
 11.32 a.m.—OLIVER PEACOCK, baritone:
 "The Irish Immigrant" (Moore).
 "Journey's End" (Russell).
 11.40 a.m.—THE STATION ORCHESTRA:
 "Dance of the Egyptian Maidens" (Shelley).
 11.50 a.m.—MOLLY MACKAY, soprano:
 "I've Been Roaming" (by request), (Old English).
 "By the Waters of Minnetonka" (Lieurance).
 11.57 a.m.—Announcements.

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:
 "By Desert Ways" (Loughborough).
 12.30 p.m.—BERTHA JORGENSEN, violin:
 "Negro Love Song" (Coleridge-Taylor).
 12.40 p.m.—Stock Exchange information.
 12.43 p.m.—MOLLY MACKAY, soprano:
 "Boat Song" (Harriet Ware).
 "The Silver Ring" (Chaminade).
 12.50 p.m.—THE GYPSY PLAYERS:
 "On the Nile" (Hilsa).
 1 p.m.—Melbourne Observatory time signal.
 The Royal Automobile Club of Victoria's SAFETY MESSAGE for to-day is: Road sense demands imagination, courtesy and commonsense, a spirit of "Give and Take and True Sportsmanship."

1.1 p.m.—OLIVER PEACOCK, baritone:
 "Hills of Home" (Fox).
 "She is Far from the Land" (Lambert).
 1.8 p.m.—Meteorological information. Weather report and rainfall for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.
 1.15 p.m.—THE STATION ORCHESTRA:
 "Spanish Moon."
 Selected.
 1.30 p.m.—Description of Khartoum Hurdle, V.A.T.C. RACES CAULFIELD, by Eric Welch.
 1.35 p.m.—RUPERT HAZELL AND ELSIE DAY are right back from Over the Hills and Far Away. They have been here listening to the Station Orchestra broadcasting "Spanish Moon," and will now give you their description of:
 "Har-moon-y-larity."
 1.48 p.m.—Description of BASEBALL match, Carlton v. Richmond, by Percy Steel.

AFTERNOON SESSION.

2.15 p.m.—HARRY SHUGG'S BAND:
 Selection, "Fox Trots."
 2.30 p.m.—Description of Katandra Race, 2 years old, 7 furlongs, V.A.T.C. RACES, at CAULFIELD, by Eric Welch.

2.35 p.m.—Description of BASEBALL match, Carlton v. Richmond, by Percy Steel.
 2.40 p.m.—HARRY SHUGG'S BAND:
 Selection, "Waltzes."
 2.50 p.m.—Description of LEAGUE FOOTBALL MATCH, Carlton v. Richmond, at Carlton, by Rod McGregor.
 3.5 p.m.—Description of Glenhuntly Handicap, 1 miles 3 furlongs, V.A.T.C. RACES, CAULFIELD, by Eric Welch.
 3.10 p.m.—HARRY SHUGG'S BAND:
 Selection, "Marches."
 3.15 p.m.—Description of LEAGUE FOOTBALL MATCH, Carlton v. Richmond, at Carlton, by Rod McGregor.
 3.30 p.m.—HARRY SHUGG'S BAND:
 Selection, "Comic Opera."
 3.40 p.m.—Description of Herrin Steeple, 2 miles 3 furlongs, V.A.T.C. RACES, CAULFIELD, by Eric Welch.
 3.45 p.m.—Results of LEAGUE and ASSOCIATION FOOTBALL, 1/4-time.
 3.46 p.m.—Description of LEAGUE FOOTBALL MATCH, Carlton v. Richmond, at Carlton, by Rod McGregor.
 4 p.m.—Description of Aerial Derby at Essendon, by Capt. Keith Gardiner.
 4.15 p.m.—Description of Glenferrie Handicap, 1 mile, V.A.T.C., CAULFIELD, by Eric Welch.
 4.20 p.m.—Results of LEAGUE AND ASSOCIATION FOOTBALL.
 4.21 p.m.—HARRY SHUGG'S BAND:
 Selection, "Irish Airs."
 4.35 p.m.—Description of LEAGUE FOOTBALL MATCH, Carlton v. Richmond, at Carlton, by Rod McGregor.
 4.50 p.m.—Description of Brighton Handicap, 6 furlongs, V.A.T.C., CAULFIELD, by Eric Welch.
 4.55 p.m.—HARRY SHUGG'S BAND:
 Request Item.
 5 p.m.—Results of LEAGUE AND ASSOCIATION FOOTBALL MATCH.
 5.1 p.m.—"Herald" news service. Stock Exchange information. Late Sporting.
 5.13 p.m.—Description of LEAGUE FOOTBALL, Carlton v. Richmond, at Carlton, by Rod McGregor.
 5.30 p.m.—Close down.
 5.50 p.m.—Final scores of LEAGUE AND ASSOCIATION FOOTBALL.
 During the afternoon results of NATIONAL FOOTBALL LEAGUE MATCH at Hobart and of WAGGA RACES will be given hourly.

EVENING SESSION.

6 p.m.—Answers to letters and birthday greetings. "LITTLE MISS KOOKABURRA."
 6.20 p.m.—DICKSON GREGORY.
 Celebrated auxiliary ship, "The Great Britain."
 6.35 p.m.—Musical interlude.
 6.40 p.m.—"LITTLE MISS KOOKABURRA," Listen and hear.
 "What Tommy did on the Farm," and the next instalment of "Pickles and Prowl." News and Market Reports.
 7 p.m.—Sporting results.
 7.5 p.m.—"Herald" news service. Weather synopsis. Shipping movements.
 7.12 p.m.—Stock Exchange information.
 7.17 p.m.—River reports.
 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 Wholesale Fruiterers' 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:
 "Whales."
 7.45 p.m.—J. A. LEACH will speak on "Rosellas."
 8 p.m.—COLONEL POTTINGER:
 "Asiatic problems Affecting Australia—Summary and Conclusions."
 8.15 p.m.—Birthday greetings and programme announcements.
 A HOUR WITH THE HEROES.
 "But to the hero, when his sword Has won the battle for the free."

Thy voice sounds like a prophet's word
And in its hollow tones are heard
The thanks of millions yet to be."

—Fitzz—Greene Halleck.

- 8.16 p.m.—PRAHRAN CITY BAND:
March, "Heroes All" (Bidgood).
Chorus, "Comrades in Arms" (Adam).
8.26 p.m.—FRANK and FRANCIS LUIZ:
Duet, "Calm Hawaiian Seas."
"Ukulele, "Ukulele Solo Medley."
Song, "Pua Mohaia."
Duet, "Since Ukulele Lady had a Ukulele Baby."
8.38 p.m.—PRAHRAN CITY BAND:
"Hustling Hinkler" (Baer).
March, "Wellington" (Zehle).
8.46 p.m.—OLIVER PEACOCK, baritone:
"The Drum Major" (Newton).
"Rounded up in Glory" (Fox).
8.53 p.m.—PRAHRAN CITY BAND:
"Fantasia, "In Honor of the Brave."
(Greenwood).
9.3 p.m.—RUPERT HAZELL and ELSIE DAY:
"Harmonylarity."
9.18 p.m.—THE STATION ORCHESTRA:
"Intermezzo" (Caludi).
9.22 p.m.—MOLLY MACKAY, soprano:
"May Morning."
"Bird Song at Eventide" (Coates).
FROM THE STADIUM.
9.30 p.m.—Description of to-night's Stadium event by Eric Welch.
FROM THE STUDIO.
10 p.m.—PRAHRAN CITY BAND:
Overture, "Napoleon" (Billon).
10.8 p.m.—OLIVER PEACOCK, baritone:
"Give a Man a Horse He Can Ride"
(Liddle).
"Journey's End" (Russell).
10.15 p.m.—WILL PAGE, Xylophone solo:
"Sparks."
10.19 p.m.—THE STATION ORCHESTRA:
"Three O'clock in the Morning" (Robledo).
"Two Lips" (duet for two trumpets).
Percy Code and Ken Hallam.
Selected.
10.27 p.m.—MOLLY MACKAY, soprano:
"He of All True Men the Noblest" (Schumann).
"When at Mom" (Schumann).
10.34 p.m.—PRAHRAN CITY BAND:
March: "Viscount Nelson."
LATE SPORTING.
10.40 p.m.—Late sporting results. Results of Brighton by-election.
Result of Ladies' Four Rowing Championship of Australia, held in Sydney.
The Royal Automobile Club of Victoria's SAFETY MESSAGE for to-day is for MOTORISTS.
"Always carry your driving license, and be sure it is current."
10.52 p.m.—THE PRAHRAN CITY BAND:
Selected.
11 p.m.—OUR GREAT THOUGHT:
"Heroes are not known by the loftiness of their carriage, as the greatest braggards are generally the merest cowards."
—Rousseau.
DANCE MUSIC.
11.1 p.m.—THE VAGABONDS:
11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

SATURDAY, 28th APRIL, 1928.

MORNING NEWS SESSION.

11 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

12 noon to 1 p.m.

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

MATINEE SESSION.

ORCHESTRAL DANCE CONCERT.

Sport Results: During the afternoon the results of the V.A.T.C. Meeting at Caulfield will be broadcast, together with other information, 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:
"L'Arlesienne, Part 2" (Bizet).
2.48 p.m.—Miss Freda Treweek, mezzo-soprano:
"The Wood Pigeon" (Liza Lehmann).
"The Starling" (Liza Lehmann).
2.55 p.m.—Melbourne Concert Orchestra:
"A Godard Cycle" (arr. Urbach).
3.13 p.m.—Mr. Herbert Pettifer, violin,
"Mazourka" (Berghaus).
3.17 p.m.—Miss Freda Treweek, mezzo-soprano:
"The Violet" (Brahms).
"The Princess" (Grieg).
3.24 p.m.—Melbourne Concert Orchestra:
"Intermezzo Lirico" (Becce).
"Toreador et Andalouse" (Rubenstein).
3.30 p.m.—Interval announcements.
3.40 p.m.—Melbourne Concert Orchestra:
"Three Arabian Dances" (Ring).
"Wilfred Sanderson's Songs" (arr. Baynes).
4 p.m.—G.P.O. Clock says "Four."
4.1 p.m.—Second weather forecast.
4.3 p.m.—Mr. James Scott, bass-baritone:
"The Rani's Messenger" (Martin).
"The Jolly Sailor" (Squire).
4.11 p.m.—Mr. Ken Code, trombone:
"Wendouree" (Percy Code).
4.15 p.m.—Melbourne Concert Orchestra:
Suite, "On the Nile" (Hilse).
Selection from "L'Enfant Prodigue" (Andre Wordser).
4.33 p.m.—Mr. James Scott, bass-baritone:
"The Ballad Monger" (Martin).
"Langby Fair" (Martin).
4.41 p.m.—Melbourne Concert Orchestra:
Selection, "The Cabaret Girl" (Kern).
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.—Uncle Mac's Entertainment.

EVENING SESSION.

DANCE SESSION.

- 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 weekend 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.—Mr. Tom Semple, baritone:
"O Flower of all the World" (Findon).
"The Devon Maid" (Bridge).
8.23 p.m.—Ayaz Dansonians.
8.39 p.m.—Mr. Ernie Pettifer, saxophone:
"Valse Vanite" (Wiedoeft).
8.43 p.m.—The Sundowners' Male Quartet:
"Songs my Mother Taught Me" (Dvorak).
"The Spider and the Fly" (O'Hara).
8.50 p.m.—Interval announcements.
9.2 p.m.—Ayaz Dansonians.
9.18 p.m.—Mr. Robert Gillard, bass:
"Blow, Blow, thou Winter Wind" (Sargent).
"The Little Irish Girl" (Lohr).
9.25 p.m.—Ayaz Dansonians.
9.41 p.m.—The Sundowners' Male Quartet:
"Honolulu Moon" (Lawrence).
"Hello Swanee" (Coslow).
9.49 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.—Mr. Robert Allen, alto:
"The Harp that Once" (Old Irish).
"Uncle Rome" (Homer).
10.10 p.m.—Ayaz Dansonians.
10.26 p.m.—Mr. Herbert Sanderson, baritone:
"Here's to Ships" (Ireland).
"Mulateer of Malaga" (Trotiere).
10.33 p.m.—Ayaz Dansonians.
10.41 p.m.—Mr. Tom Semple, tenor, and Mr. Herbert Sanderson, baritone:
Duet, "Rose of My Heart" (Lohr).
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, "After the Flood," by Dora Wilcox.
11 p.m.—G.P.O. Clock says "Eleven."

4QG, BRISBANE

SATURDAY, 28th APRIL, 1928.

NO MORNING SESSION.

NO MIDDAY TRANSMISSION. AFTERNOON SESSION.

The B.A.T.C. Race Meeting will be described direct from the Albion Park Race-course.

5 p.m.—Close down.

EARLY EVENING SESSION.

- 6 p.m.—News bulletin for distant listeners.
6.30 p.m.—Bedtime stories by "Uncle Ben."
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.

- Miss Lucy Baker (pianiste); Mrs. M. L. Spanjer (contralto); Mr. Basil Stirling (baritone).
8 p.m.—Duet (Contralto and baritone):
"O Lovely Night" (Landon Ronald).
Piano Solo:
"Rigoletto" (Verdi-Liszt).
Contralto Solo:
"Parted" (Tosti).
Baritone Solo:
"Le Cor a Flegier" (G. Schirner).
Piano Solos:
"Nocturne" (Bowdin).
"Berceuse" (Delbias).
"Humoresque" (Tschaiakowsky).
Contralto Solo:
"Angus Macdonald" (Roedel).
Baritone Solo:
"Drake Goes West" (Sanderson).
Piano solos:
"Valse Triste" (Sibelius).
"Valse in D" (Chopin).
Duet:
"Allah be With Us" (Woodforde-Finden).
SPEEDWAY.
9 p.m.—Motor cycle races.
LENNON'S BALLROOM.
9.30 p.m.—Dance music.
10 p.m.—"The Sunday Mail" news.
Weather news.
Close down.

5CL, ADELAIDE

SATURDAY, 28th APRIL, 1928.

MORNING SESSION.

- 11 a.m.—G.P.O. Chimes.
11.1 a.m.—"Advertiser" news service and International News.
11.30 a.m.—Musical numbers on the Studio "Recreator."
12 noon.—G.P.O. Chimes and close down.

AFTERNOON SESSION.

- 1 p.m. (Approx).—Relayed from the Cheltenham racecourse, a running description of events of the Port Adelaide Racing Club's April meeting, by Mr. Arnold Treloar, interspersed with interstate results and musical numbers from the studio.

EVENING SESSION.

- 6 p.m.—G.P.O. Chimes.
6.1 p.m.—Children's entertainment.
6.30 p.m.—Dinner Music on the Studio "Recreator."
7 p.m.—G.P.O. Chimes.
7.1 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
7.10 p.m.—Resume of to-day's League Football matches by "High Mark."
7.30 p.m.—Summary of local and interstate sporting results.
8 p.m.—G.P.O. Chimes.
8.1 p.m.—Hazel Fuller, soprano:
"Ramanza, I am accursed" from "Cavalleria Rusticana" (Mascagni).
8.6 p.m.—Regal Orchestra:
Fox trots, "Gonna get a girl" (Simon).
"My Blue Heaven" (Donaldson).
8.16 p.m.—Mrs. Hubert James:
"My prayer" (Squire).
"Meadowsweet" (May Brahe).
8.23 p.m.—Regal Orchestra:
Waltz, "Spanish Moon" (Terese).
One step, "Hustling Hinkler" (Baer).

- 8.33 p.m.—Hazel Fuller, soprano:
"Gingham Gown" (Penn).
"Amarella" (Newton).
- 8.40 p.m.—Regal Orchestra:
Waltz "Song of Hawaii" (Bories).
One step: "Here comes Springtime" (O'Hagan).
- 8.50 p.m.—Broadland Rooke, tenor:
"For all Eternity" (Piccolimini).
"In your dear eyes" (Trotter).
- 8.57 p.m.—Station announcements.
- 9 p.m.—G.P.O. Chimes.
- 9.1 p.m.—Meteorological information, weather forecast, and Dalgety's wheat report.
- 9.2 p.m.—International news.
- 9.11 p.m.—Regal Orchestra:
"I'm Gonna Dance wit de guy" (Archer).
- 9.16 p.m.—Mrs. Hubert James, contralto:
"I'm a longin for you" (Hathaway).
- 9.20 p.m.—Regal Orchestra:
Fox trot, "Where is my meyer" (Profes).
Waltz, "A Shady Tree" (Donaldson).
- 9.30 p.m.—Broadland Rooke, tenor:
"Songs of Araby" (Clay).
- 9.34 p.m.—Regal Orchestra:
Fox trot: "Just once again" (Donaldson).
Waltz, "Love is just a little bit of Heaven" (Baer).
- 9.44 p.m.—Resume of to-day's League football matches.
- 9.54 p.m.—Regal Orchestra:
"Don't sing Aloha when I go" (Smith).
- 10 p.m.—G.P.O. Chimes.
- 10.1 p.m.—Results of local and Interstate Sporting.
- 10.10 p.m.—Relay from Glenelg, the Maison Dance Band.
- 10.55 p.m.—Station Announcements and to-morrow's programme.
- 11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH.

SATURDAY, 28th APRIL, 1928.

MIDDAY SESSION.

- 12 p.m.—Tune in.
- 12.5 p.m.—Musical programme, including piano-forte 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.
Musical programme from the Studio, including vocal and instrumental numbers.
Racing results and Sports news.
- 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.
- 7.10 p.m.—Sports results.
- 7.20 p.m.—Markets, News, and Cables.
- 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.
Old time dance music relayed from the Unity Theatre, Beaufort street.
- 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.

7ZL, HOBART

SATURDAY, 28th APRIL, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

- AFTERNOON SESSION.
- 3 p.m.—G.P.O. Clock chimes the hour.
Broadcast by Direct wire from North Hobart Oval description of the Football Match, New Town v. North Hobart. Progress racing and sporting events, musical items from the studio.
- 5 p.m.—Close down.

EARLY EVENING SESSION.

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

NIGHT SESSION.

- 7.30 p.m.—Musical selections.
- 7.50 p.m.—Mercury special Tasmanian news service.
Sporting results.
Hobart Stock Exchange quotations.
- 8 p.m.—G.P.O. Clock chimes the hour.
- 8.15 p.m.—Dance numbers by the Pavillion Dance Band from the City Hall, Hobart, interspersed with items from the studio.
- 10.12 p.m.—British Official Wireless news.
Ships within wireless range.
Weather information.
Station announcements.
Sunday's programme.

Sunday, April 29 2FC, SYDNEY.

MORNING SESSION.

- 10.55 a.m.—Announcements.
- 11 a.m.—"Big Ben."
From All Saints', Church of England, Woollahra:
Morning Service:
Preacher, Canon W. Langley.
- 12.10 p.m.—From the Studio:
News and musical items.
- 12.30 p.m.—Close down.

AFTERNOON SESSION.

- 3 p.m.—"Big Ben" and announcements.
- 3.3 p.m.—Studio music.
- 3.15 p.m.—Mr. and Mrs. H. Faulkner, blind artists:
Organ solos, Mr. H. Faulkner.
Contralto solos, Mrs. H. Faulkner.
- 3.30 p.m.—From the Band Rotunda, Manly Beach:
The Manly Municipal Band.
Conductor, James Pheloung.
- 5 p.m.—"Big Ben." Close down.

EVENING SESSION.

- 6 p.m.—"Big Ben" and announcements.
- 6.5 p.m.—Capt. Fred Aarons will continue his series of talks: "Roaming the Papua":
"Pur Phillipines," No. 3.
- 6.20 p.m.—From the Petersham Congregational Church:
Organ Recital by Ambrose Gibbs.
- 7.15 p.m.—Evening Services from Petersham Congregational Church.
Preacher, Rev. A. P. Doran.
- 8.30 p.m.—From the Band Rotunda, Manly Beach:
The Manly Municipal Band.
Conductor, James Pheloung.
- 9.30 p.m.—From the Studio:
Ernest McKinlay, tenor:
(Final broadcast appearance prior to his departure for an extended tour abroad).
- 9.40 p.m.—Mischa Dobrinski, violinist.
- 9.46 p.m.—Jill Manners, soprano.
- 9.54 p.m.—Ernest McKinlay, tenor.
- 10.4 p.m.—Mischa Dobrinski, violinist.
- 10.10 p.m.—Jill Manners, soprano.
- 10.18 p.m.—Mischa Dobrinski, violinist.
- 10.25 p.m.—National Anthem.
- Close down.

2BL, SYDNEY

SUNDAY, 29th APRIL, 1928.

MORNING SESSION.

- 10.45 a.m.—Special news service.
- 11 a.m.—Service broadcast from Randwick Presbyterian Church.

- AFTERNOON SESSION.
- 2 p.m.—G.P.O. Clock and chimes.
Special session for Children in Hospitals.
- 2.15 p.m.—H.M.V. Gramophone recital.
- 3 p.m.—G.P.O. Clock and chimes.
United Anzac Memorial Service broadcast from the Arcadia Theatre, Chatswood.
Chairman: Rev. Geo. Laverty.
Speaker: Rev. Canon H. S. Begbie.
Organist: Mr. Nicholas Robins.
- 5 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.

- 7 p.m.—Service broadcast from Randwick Presbyterian Church.
- 8.30 p.m.—The North Sydney Tramway Band
Broadcast from Manresa Hall, North Sydney.
- 9.15 p.m.—Broadcasters instrumental trio.
- 9.22 p.m.—Miss Ella Goodman, soprano.
- 9.29 p.m.—Mr. Bryce Carter, cellist.
- 9.36 p.m.—Mr. Lance Jeffree, tenor.
- 9.43 p.m.—Broadcasters instrumental trio.
- 9.50 p.m.—Miss Ella Goodman.
- 9.57 p.m.—Resume of following day's programme.
- 10 p.m.—G.P.O. Clock and chimes.
- 10.1 p.m.—Mr. Bryce Carter.
- 10.8 p.m.—Mr. Lance Jeffree.
- 10.15 p.m.—G.P.O. Clock and chimes
National Anthem.

2 UW, SYDNEY

SUNDAY, 29th APRIL, 1928.

MORNING SESSION.

- 10.30 a.m.—Studio item.
- 10.35 a.m.—Special H.M.V. Recital by courtesy of Gramophone Company of 163 Pitt St.
- 11.30 a.m.—Studio items.
Vocal and instrumental items.
- 11.45 a.m.—Request numbers.
- 12.30 p.m.—Close down.

EVENING SESSION.

- 7 p.m.—Studio items.
- 7.15 p.m.—Vocal and instrumental items.
- 8 p.m.—Request numbers.
- 8.46 p.m.—Weather forecast.
- 8.50 p.m.—Items from Studio,
Orchestral, vocal, and instrumental.
- 9.28 p.m.—Announcements.
- 9.30 p.m.—Close down.

3LO, MELBOURNE.

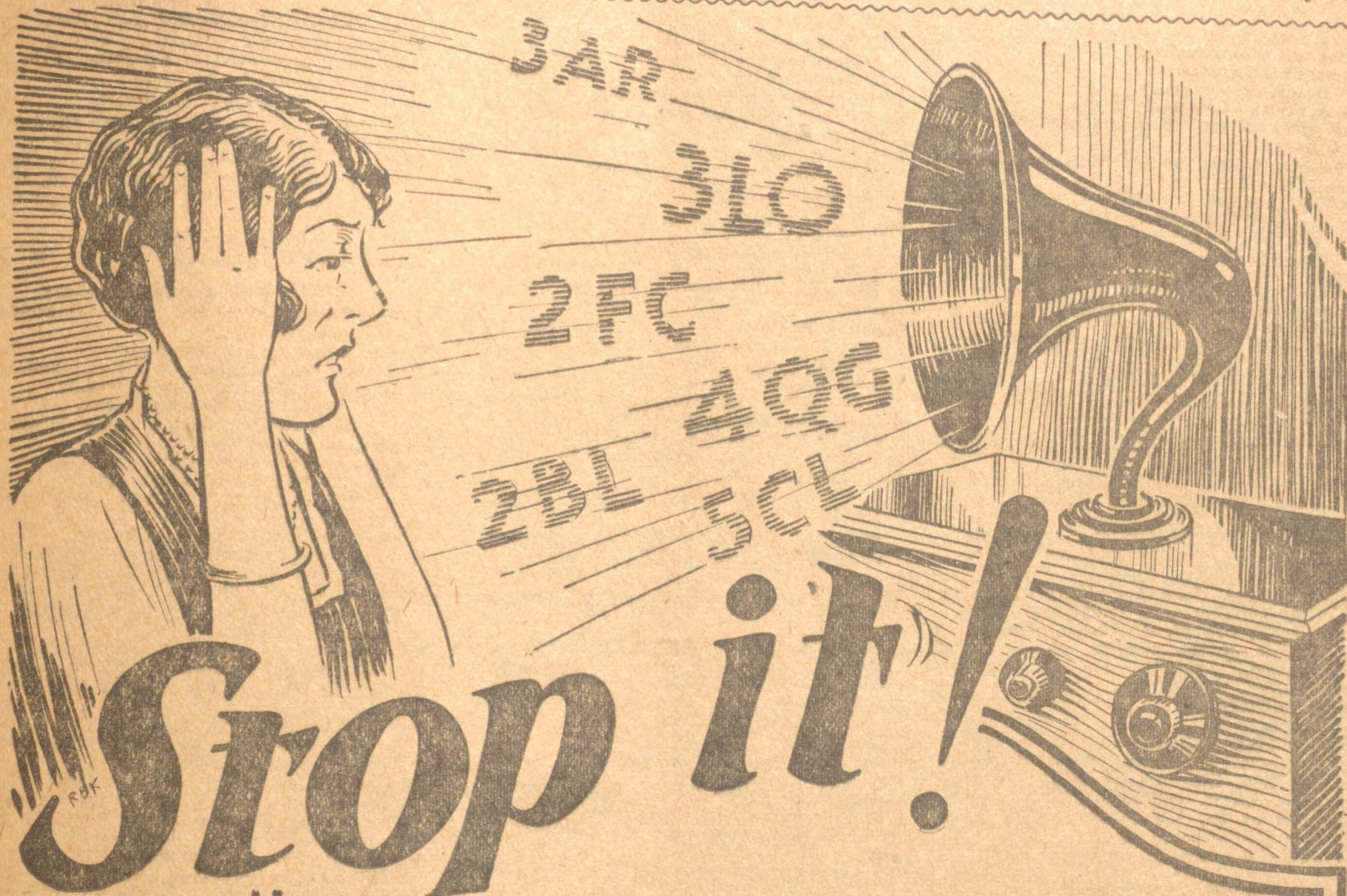
SUNDAY, 29th APRIL, 1928.

MORNING SESSION.

- 10.30 a.m.—Bells from St. Paul's Cathedral.
- 10.45 a.m.—Express Train information.
British Official Wireless News from Rugby.
News from Yesterday's papers.
- 11 a.m.—MORNING SERVICE FROM SCOTS CHURCH, COLLINS STREET, MELBOURNE.
PREACHER, REV. D. MACRAE STEWART.
- 12.15 p.m.—Close down.

AFTERNOON SESSION.

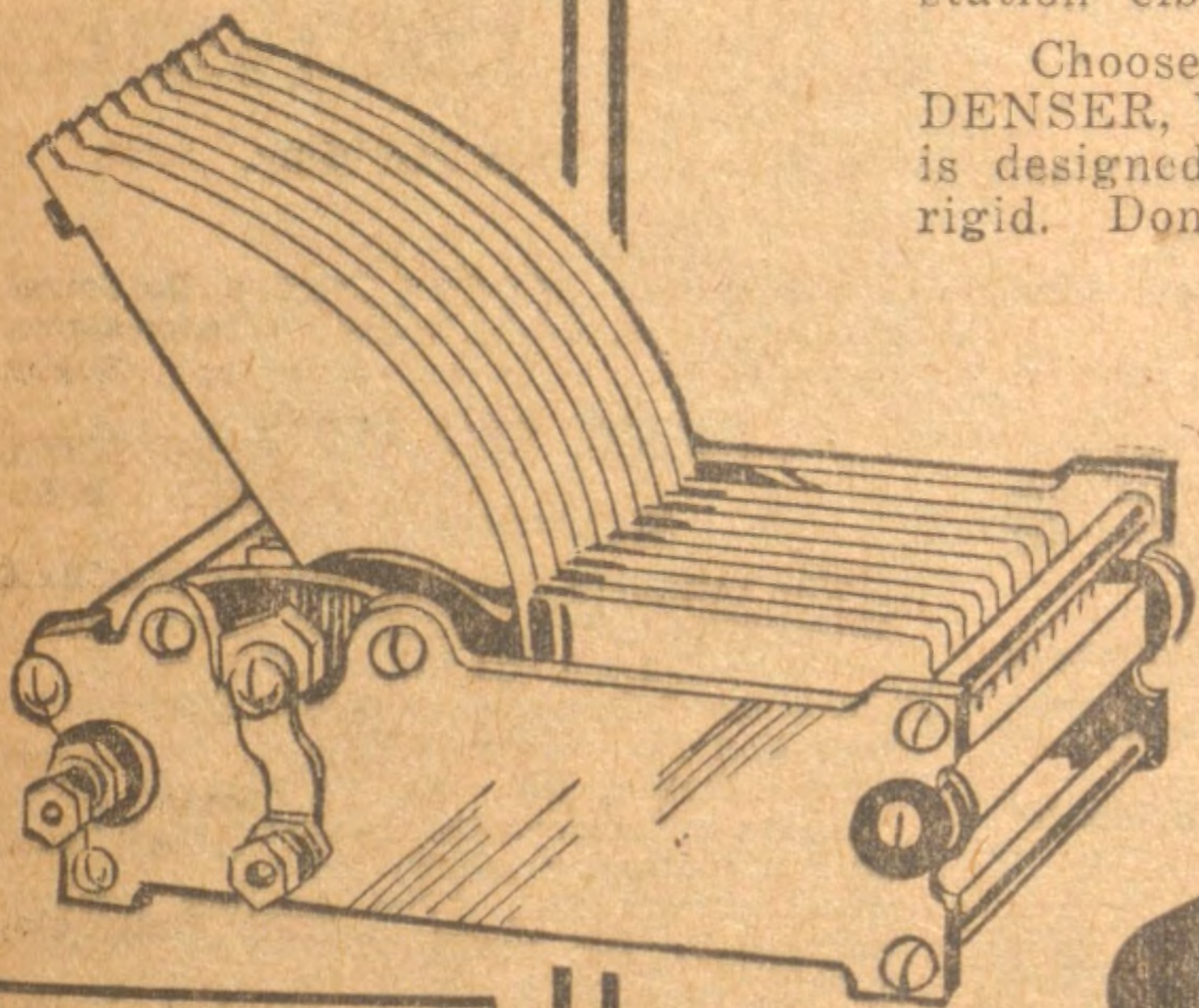
- 2 p.m.—PIANO AND VIOLIN, "Kreutzer Sonata" in A Major, Op. 47 (Beethoven).
William Murdoch (Piano), and Albert Sammons (Violin).
- Part 1: Introduction (Adagio Sostenuto)
First Movement Presto.
- Part 2: First Movement (Presto, continued).
- Part 3: First Movement (Presto) continued).
- Part 4: First Movement (Presto, concluded).
- Part 5: Andante Con Variazioni (continued).
- Part 6: Andante Con Variazioni (continued).
- Part 7: Andante Con Variazioni (continued).
- Part 8: Andante Con Variazioni (continued).
- Part 9: Finale (Presto, continued).
- Part 10: Finale (Presto, concluded).



THE ability to choose your own programme from the various stations is a great boon! It means that if you do not care for the jazz from here, or the lecture from there, you can tune in elsewhere—WITHOUT INTERFERENCE.

Selectivity depends primarily upon the kind of condenser your set possesses. Any condenser may permit you to tune in 3LO, 4QG, 2FC, 5CL, and other stations, but if your logging of them is all crowded on one small section of the dial, you are apt to have the lecture from this station elbowing its way into the concert programme from that.

Choose the "ADVANCE" STRAIGHT LINE FREQUENCY CONDENSER, WHICH DOES AWAY WITH ALL STATION-BUNCHING. It is designed for multiple mounting, is in a one piece frame, and is most rigid. Don't forget the name—"Advance." Your dealer has it.



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MELBOURNE : SYDNEY : ADELAIDE : BRISBANE

SONG: "Nocturne" (from the Song-Cycle, "Over the Rim of the Moon") (Ledwidge-Head).

Sung by Alfred O'Shea, tenor.

ORCHESTRAL: "Homage March," Parts 1 and 2 (Wagner).

Sir Dan Godfrey and Symphony Orchestra.

SACRED ARIA:

"Comfort Sweet, My Jesus Comes," Parts 1 and 2 (J. S. Bach).

With Flute Obligato by Robert Murchie.

Sung by Dora Labbette, soprano.

VIOLA SOLO:

"Slavonic Dance Theme, No. 1 in G Minor (Dvorak, arr. Kreisler).

Lionel Tertis.

3 p.m.—PLEASANT SUNDAY AFTERNOON SERVICE FROM CENTRAL MISSION, WESLEY CHURCH, LONSDALE STREET, MELBOURNE.

Chairman, REV. J. H. CAIN.

Hymn No. 68, "Sing we the King Who is Coming to Reign."

Prayer, Rev. C. Irving Benson.

Orchestral Selection, Mr. G. M. Williams, Conductor.

Hymn No. 81, "There's Not a Friend."

Duet, Messrs. John and Percy Godfrey, Orchestra.

Duet, Messrs. John and Percy Godfrey.

Notice, Offering and Orchestra.

ADDRESS, DR. W. C. POOLE, London.

(President of the World's Sunday School Association.)

NATIONAL ANTHEM.

BENEDICTION.

Orchestra.

FROM THE STUDIO:

4.30 p.m.—The Right Rev. G. A. Chambers, M.A., B.Ec., D.D., Bishop of Central Tanganyika, Africa, will give a most interesting talk on the remarkable transformation that is taking place in Africa.

4.45 p.m.—Close down.

EVENING SESSION.

6 p.m.—Answer to Letters and Birthday Greetings by "BILLY BUNNY."

6.25 p.m.—"ROTHER BILL"—a new version of "The Ugly Duckling."

6.45 p.m.—Bells from St. Paul's Cathedral.

NIGHT SESSION.

7 p.m.—EVENING SERVICE FROM ST. PAUL'S CATHEDRAL, MELBOURNE:

Hymn (A. and M.) 292, "Praise the Lord, ye Heavens, Adore Him."

Sentence.

Exhortation.

General Confession.

Absolution.

The Lord's Prayer.

Versicles and Responses (Festal)

Psalm 84 and 85.

1st Lesson.

Magnificat.

2nd Lesson.

Nunc Dimittis.

The Apostles' Creed.

Collect for the Day.

The Collects.

Anthem, "For us the Christ is Made a Victim Availing" (Gounod).

Prayers.

Hymn 276, "O Lord, How Happy Should I be."

SERMON: Preacher, BISHOP STEPHEN. Hymn 132, "The Day of Resurrection."

The Benediction.

FROM THE STUDIO:

8.30 p.m.—Birthday greetings and programme announcements. Island shipping movements.

8.32 p.m.—Song feature of the week.

8.35 p.m.—BRUNSWICK CITY BAND:

Overture, "Fra Diavolo" (Auber).

8.45 p.m.—RAYMOND LAMBERT, Piano:

"Pastorale varice" (Mozart).

"Toccata" (Debussy).

"Country Gardens" (Percy Grainger).

8.55 p.m.—BRUNSWICK CITY BAND:

Idyll, "My Syrian Maid" (Friml).

9 p.m.—MADAME LAMBERT, soprano:

"Mimi" (Puccini).

"Flower Song" (Gounod).

9.7 p.m.—EDOUARD LAMBERT, violin:

"Adagio from the Concerto" (Vieuxtemps).

"Canzonetta" (d'Embrozio).

9.17 p.m.—BRUNSWICK CITY BAND:

Romance, "The Strolling Minstrel."

9.24 p.m.—MADAME LAMBERT, soprano:

"Mauvais accueil" (Brahms).

"Serenade inutile" (Brahms).

"Bergerettes" (Wakerlin).

9.31 p.m.—EDOUARD AND RAYMOND

LAMBERT, violin and piano:

"Sonata for Piano and Violin" (Leken).

9.41 p.m.—BRUNSWICK CITY BAND:

Selection, "Gems of Hady" (Hume).

9.51 p.m.—"Argus" news service.

Announcements.

The Royal Automobile Club of Victoria's

SAFETY MESSAGE for to-day is:

"Accident prevention is not only good morals and good ethics, but also good business."

OUR GREAT THOUGHT:

The Athenians erected a large statue to Aesop and placed him, though a Slave, on a lasting pedestal; to show that the way to Honor lies open indifferently to all.

10 p.m.—"GOD SAVE THE KING."

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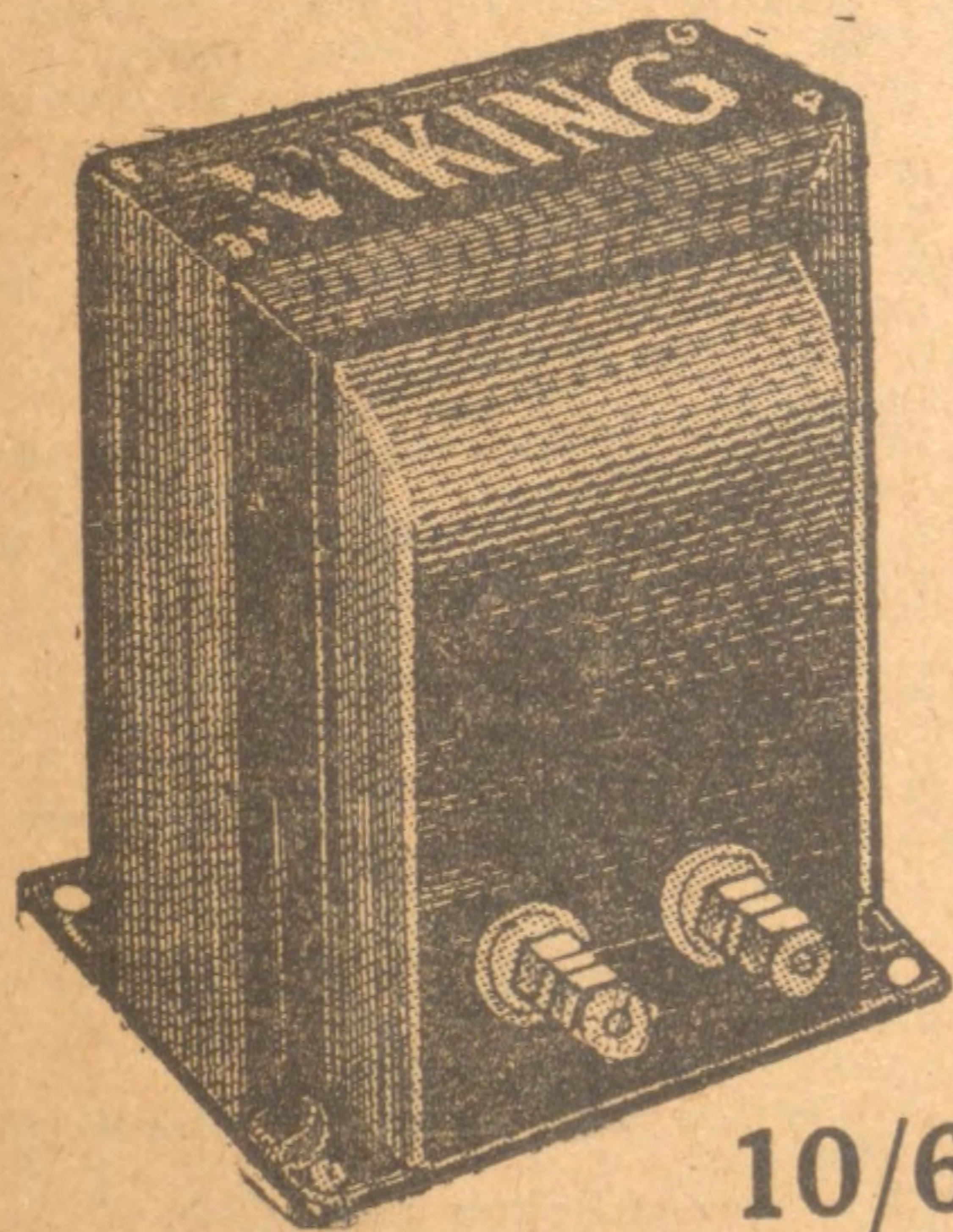
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VIKING
arrives in
Australia!

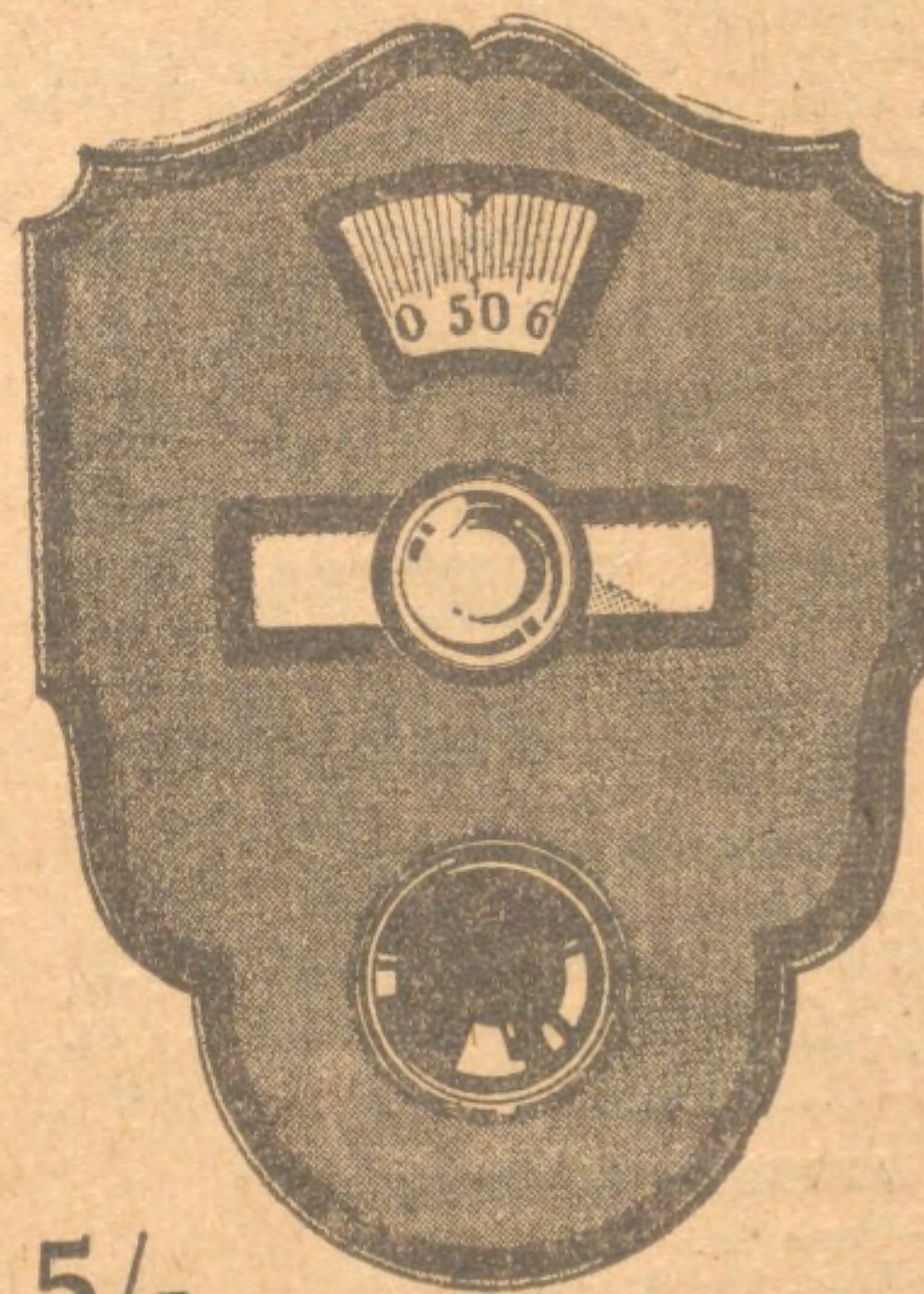


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Sydney

— Nothing Better! "

ments; solo by Mrs. D. Taylor; Scripture reading, "Gen. chap. 1, Chap. 2, V., 1.3; choir anthem, "Arise, Shine, for Thy Light is Come" (Elvey); address by Mr. L. R. Macgregor, "The Origin of Earth: Can the Scriptural and Scientific Views be Harmonised"; children's choir, No. 21, "Hark the Song of Jubilee"; hymn, No. 55, "From All That Dwell"; Benediction.

At the conclusion of the church service the concert by the Brisbane Municipal Concert Band will be relayed from Wickham Park.
9.30 p.m.—Close down.

5CL, ADELAIDE.

SUNDAY, 29th APRIL, 1928.

MORNING SESSION.

10.45 a.m.—Carillon of Bells from St. Andrew's Church, Walkerville.
11 a.m.—G.P.O. Chimes.
11.1 a.m.—Divine Service relayed from St. Cuthbert's Church of England.
12.10 p.m. (Approx.)—International News, time announcement, and close down.

AFTERNOON SESSION.

3 p.m.—G.P.O. Chimes.
3.1 p.m.—Relayed from St. Cuthbert's Church, Sunday afternoon concert.
4 p.m.—G.P.O. Chimes and close down.

EVENING SESSION.

6.30 p.m.—G.P.O. Chimes.
6.31 p.m.—Carillon of Bells from St. Andrew's Church.
6.36 p.m.—Running Time of East-West Express.
6.37 p.m.—Sunday stories for the children by the "Bird Lady."
7 p.m.—G.P.O. Chimes.
7.1 p.m.—Evening Divine Service relayed from Archer Street, Methodist Church.
8.15 p.m.—Sacred concert by Archer Street Church Choir.
9.30 p.m.—A talk by Mr. P. H. Nicholls: "Mrs. Josephine Butler."
9.50 p.m.—To-morrow's programme and meteorological information.
9.55 p.m.—International News station announcements and close down.

6WF, PERTH.

SUNDAY, 29th APRIL, 1928.

MORNING SESSION.

10.45 a.m.—Tune in.
11 a.m.—Morning church service relayed from the Trinity Congregational Church, St. George's Terrace, Perth.
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 Miss Elsie Wilson.
7.50 p.m.—Evening church service relayed from St. George's Cathedral, Perth.
8.45 p.m.—A relay.
Concert by the Perth City Band, conducted by Mr. L. M. Price, and items by vocal assisting artists, relayed from the Government Gardens, 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, 29th APRIL, 1928.

MORNING SESSION.

11 a.m.—Divine Service from St. Davids Cathedral Hobart.
Close down.

AFTERNOON SESSION.

3.30 p.m.—G.P.O. Clock chimes the hour.
Concert from the studio.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Children's Corner with the Sunday Lady.

NIGHT SESSION.

7 p.m.—Church Service from Melville Street Methodist Church, Hobart. At conclusion of Church Service Concert from the studio or Band Concert from St. Davids Park.
9.40 p.m.—Mercury special Interstate news service.
British Official Wireless news.
Ships within wireless range.
9 p.m. Weather forecasts.
Station announcements.
Monday's programme.
Close down.

Monday, April 30 2FC, SYDNEY

EARLY MORNING SESSION.

7 a.m. to 8 a.m.

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.—Late 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 reading.
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.
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.—Ruth Vincent, mezzo:
"A Bowl of Roses" (Henley).
1.35 p.m.—Studio music.
1.55 p.m.—Ruth Vincent, mezzo:
"Melisande in the Wood" (Goetz).
2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.
3.5 p.m.—May Craven, mezzo:
"A Thrush's Love Song" (Alison Travers).
3.10 p.m.—Lilian Smeal, pianoforte solos:
(a) "Ballads op. 10" (Brahms).
(b) "Danse de Clochettes" (Regikoff).
3.20 p.m.—P. Manley, baritone.
3.24 p.m.—Cliff Hanney, violinist:
"Un-Peu-D'Amour" (Silesu).
3.29 p.m.—Thelma Mitchell, soprano.
3.33 p.m.—A reading.
3.46 p.m.—May Craven, mezzo:
"Secrecy" (Huzo Wolf).
3.50 p.m.—Cliff Hanney, violinist:
"Aragones" (Herrmann).
3.55 p.m.—P. Manley, baritone.
4 p.m.—Lilian Smeal, pupil of S. Gordon Lavers, pianoforte solos:
(a) "Moonlight Sonata," 1st Movement (Beethoven).
(b) "Water Wagtail" (Cyril Scott).

4.9 p.m.—Popular Records.
4.16 p.m.—Thelma Mitchell, soprano.
4.20 p.m.—Cliff Hanney, violinist:
(a) "Gipsy Serenade" (Valdez).
(b) "Berceuse" (Townsend).
4.30 p.m.—Lilian Smeal, pianoforte solos:
"Wedding Day" (Grieg)
4.35 p.m.—Studio music.
4.45 p.m.—Stock Exchange, third call.
4.47 p.m.—Studio music.
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.
6.25 p.m.—Children's music.
6.35 p.m.—Full descriptions of the day's racing by the 2FC Racing Commissioner.
7 p.m.—Dinner music.
7.15 p.m.—Late "Evening News" news service.

NIGHT SESSION.

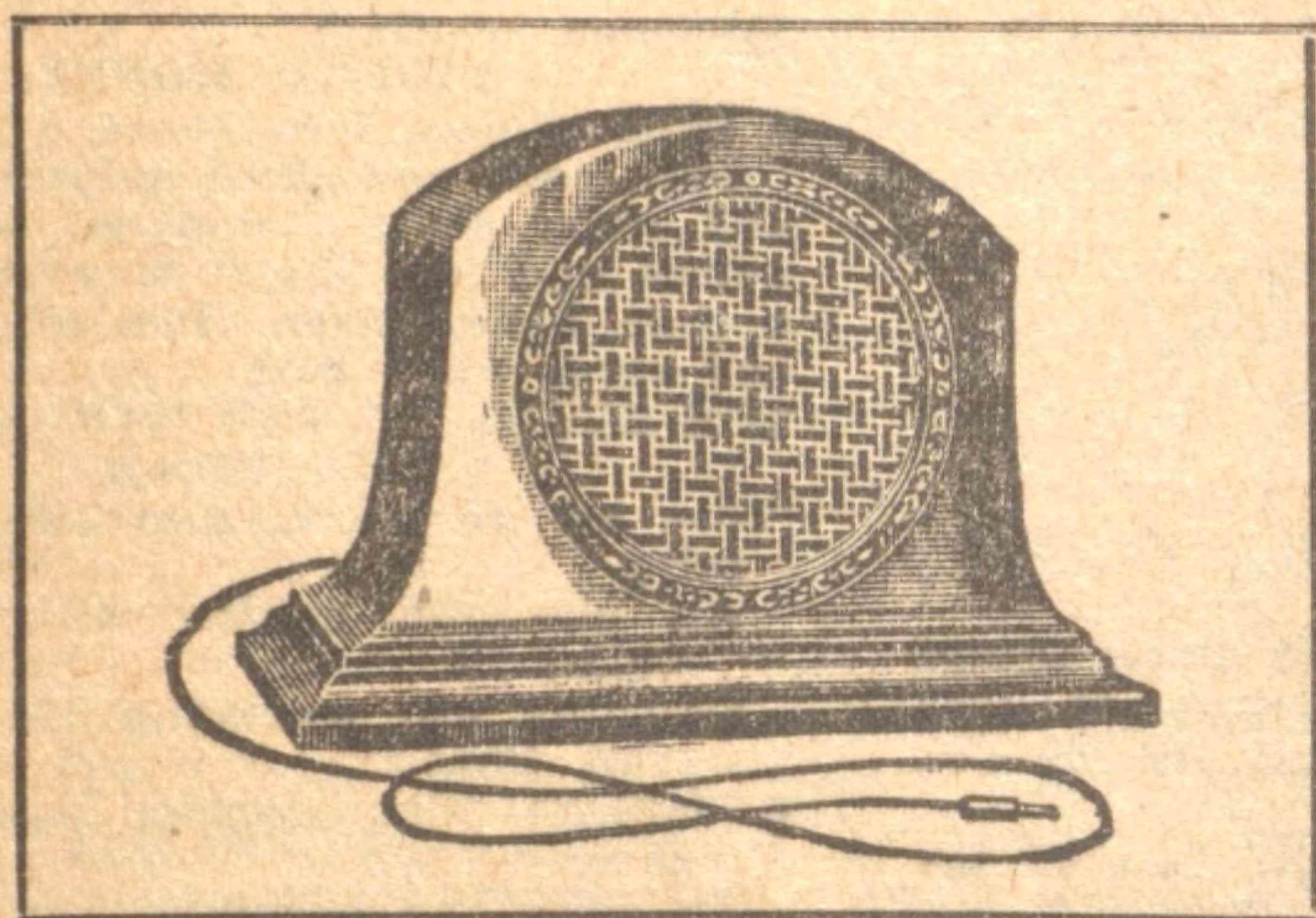
7.22 p.m.—A description of the 2FC new studios.
7.40 p.m.—The Southern Choral Society (Melbourne). Conductor, Graham Burgin.
7.50 p.m.—Edgar Warwick and Eileen Dawn: Radio Sketch.
8 p.m.—"Big Ben."
From the Carillon Tower of the Sydney University: The first night recital on the University War Memorial Carillon by Bryan Barker (Carillionist from England).
8.15 p.m.—From the Studio:
The Southern Choral Society (Melbourne). Conductor, Graham Burgin.
8.25 p.m.—The 2FC Studio Orchestra.
Conductor, Horace Keats.
8.35 p.m.—Charles Lawrence, entertainer.
8.40 p.m.—Mrs. Graham Burgin, soprano:
"Nightingales of Lincoln's Inn" (Quilter).
8.45 p.m.—Lionel Lawson, violinist.
8.49 p.m.—Edgar Warwick and Eileen Dawn: Radio Sketch.
8.56 p.m.—Mr. Graham Burgin, baritone:
"The Arrow and the Song" (Balfe).
9 p.m.—"Big Ben." Late weather forecast.
9.1 p.m.—The 2FC Studio Orchestra.
9.13 p.m.—The Southern Choral Society (Melbourne).
9.22 p.m.—Lawrence Godfrey Smith, piano solos.
9.32 p.m.—The Sydney Flute Club.
Conductor, A. W. Arlom:
Ensemble: Allegro, Maestoso and Adagio (from "Furstenau's Quartette").
9.42 p.m.—Duets, Mr. and Mrs. Graham Burgin, baritone and soprano:
(a) "Spirit of the Wood" (Parker).
(b) "A Summer Night" (Thomas).
9.50 p.m.—Ewart Chapple:
Organ solo.
9.54 p.m.—Charles Lawrence, entertainer.
10 p.m.—"Big Ben."
The 2FC Studio Orchestra.
Conductor, Horace Keats.
10.10 p.m.—The Southern Choral Society (Melbourne):
(a) "Go down, Moses."
(b) Soprano solo, "Buy my Strawberries" (Quilter).
10.17 p.m.—The Sydney Flute Club.
Conductor, A. W. Arlom:
(a) Trio, "Ti Prego."
P. W. Swain, L. White, E. W. Garside (at the piano, Miss Lottie Bennett).
(b) Flute solo: Selected.
R. Callahan.
(c) Ensemble, "Notturmo," Opus 37 (V. de Michelis).
10.30 p.m.—Late weather forecast.
10.31 p.m.—The Ambassadors Dance Orchestra.
Conductor, Al Hammet.
10.40 p.m.—From the Studio:
Studio items.
10.47 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." Dance music.
11.5 p.m.—Leading Theatrical Stars Visit the Studio.
11.25 p.m.—The Ambassadors Dance Band.
11.45 p.m.—National Anthem.
Close down.

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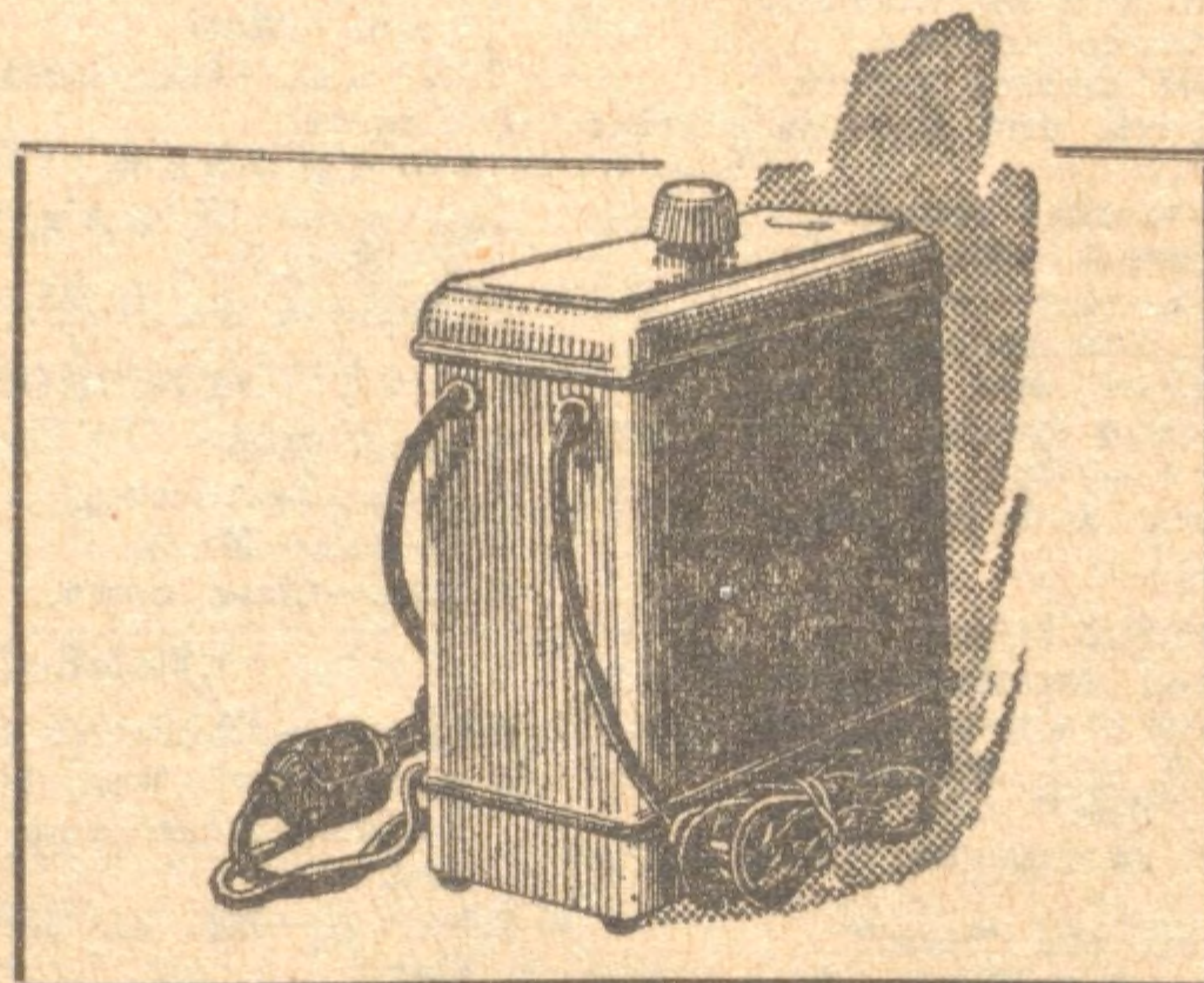
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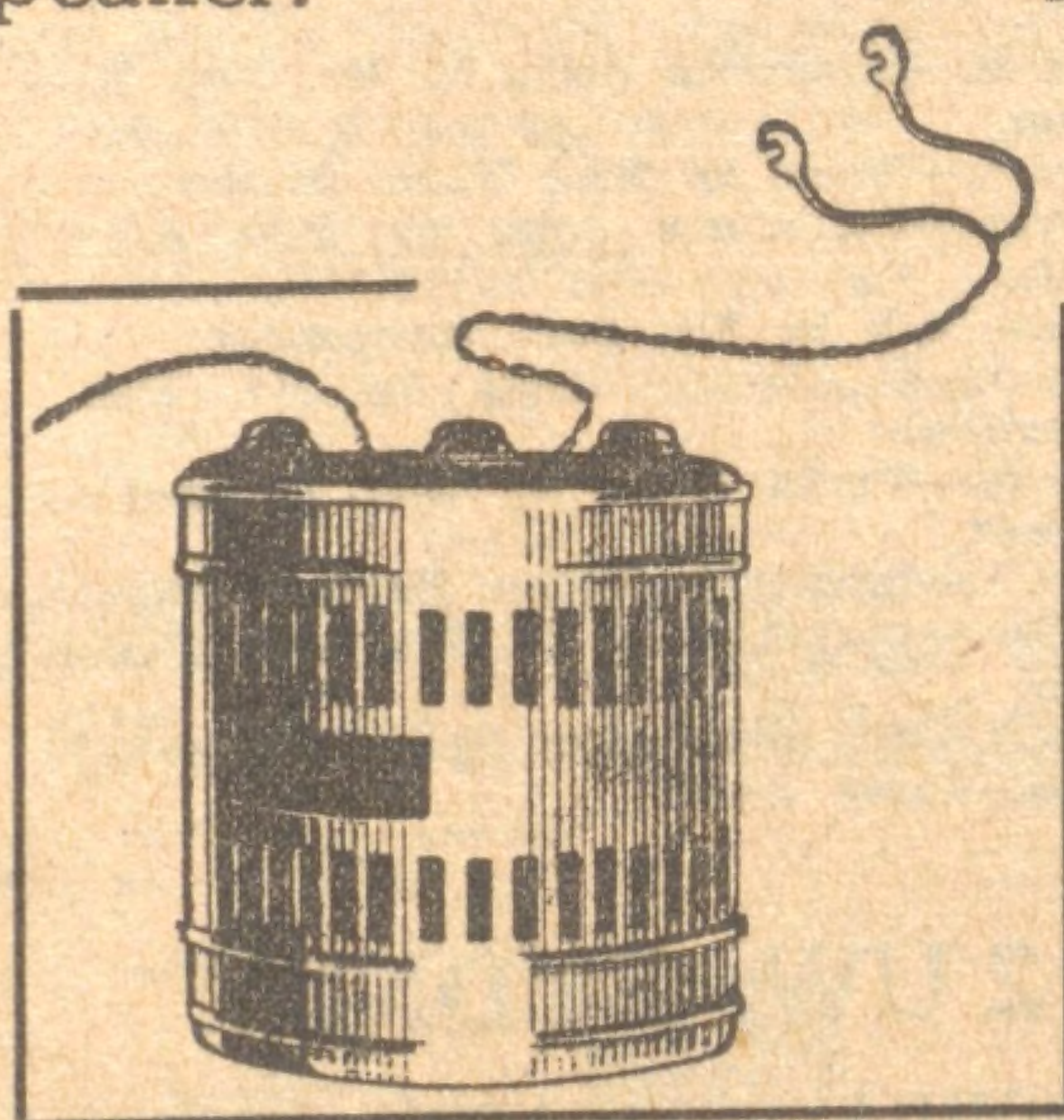


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388 George Street Opp. Beard Watson's SYDNEY

2BL, SYDNEY.

MONDAY, 30th APRIL, 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 "Tennis," by Miss Gwen Varley,
Broadcasters Womens' Sports Authority.
Talk on "Preserves," 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.
12.10 p.m.—Information, mails, shipping, and
port directory.
12.14 p.m.—Boats in call by wireless.
12.16 p.m.—Fruit market report.
12.18 p.m.—Vegetable market report.
12.20 p.m.—Dairy Farm and Produce market
report.
12.24 p.m.—Forage market report.
12.26 p.m.—Fish market report.
12.28 p.m.—Rabibt 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."
3.10 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 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.—Talk on "The Women of Ancient
Rome."
4.30 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 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 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.—Talk on "The Motor Car and its
Idiosyncrasies," by Mr. Martin, Manager
of Central Motor Agencies, Hurstville.

EVENING SESSION.

- 8 p.m.—G.P.O. Clock and chimes.
8.1 p.m.—Miss Elsie Findley, soprano.
8.8 p.m.—The Wurlitzer organ broadcast from
the Arcadia Theatre, Chatswood. Organist:
Mr. N. Robins.
8.15 p.m.—Mr. Herbert C. Hinchcliffe, bari-
tone.
8.22 p.m.—Mr. Marcus Burkett, pianist.
8.29 p.m.—Miss Elsie Findley.
8.36 p.m.—Miss Myra Leard, elocutionist.
9.43 p.m.—Mr. Herbert C. Hinchcliffe.
8.50 p.m.—Mr. Marcus Burkett.
8.57 p.m.—Weather report and forecast by
courtesy of Mr. C. J. Mares, Government
Meteorologist.
8.58 p.m.—Miss Myra Leard.
9.5 p.m.—The Cheero Girls under the direction
of Mrs. Bennett White.

- 10.5 p.m.—The Wurlitzer organ broadcast from
the Arcadia Theatre, Chatswood.
10.20 p.m.—Resume of following day's pro-
gramme.
10.24 p.m.—Talk on "Ceylon"—The Gem of
the East, by Mr. Basil Kirke (courtesy of
P. & O. Co.).
10.30 p.m.—Romano's restaurant dance orches-
tra 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, 30th APRIL, 1928.

MORNING SESSION.

- 10 a.m.—Music.
10.10 a.m.—Happiness Talk by Alfred E.
Bennett.
10.20 a.m.—Music.
10.30 a.m.—Women's Session by Miss Helen
J. Beegling.
11 a.m.—Close down.

AFTERNOON SESSION.

- 2 p.m.—Music.
2.20 p.m.—Address.
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 report by New
Zealand Loan and Mercantile Agency Co.,
Ltd.
7.30 p.m.—Mr. H. Kesby, "The Care of the
Car."
7.45 p.m.—Music.
8 p.m.—Opening Chorus.
8.2 p.m.—Violin Solos by (Mr. Leonard
Brewer.
8.8 p.m.—Songs by Signor Marie Gustino.
8.15 p.m.—Address by F. Houstone, B.A.
8.30 p.m.—Cornet Solos by Mr. Phil Couch-
man.
8.37 p.m.—Humorous items by Mr. Reg. Har-
rison.
8.44 p.m.—Songs by Miss Nance Marley.
8.51 p.m.—Pianoforte Solos by Miss Amy
Cobb.
9 p.m.—Talk by Mr. Stan. Crittendon.
9.20 p.m.—Humorous items by Mr. Reg.
Harrison.
9.27 p.m.—Violin Solos by Mr. Leonard
Brewer.
9.35 p.m.—Songs by Signor Mario Gustino.
9.42 p.m.—Cornet Solos by Mr. Phil. Couch-
man.
9.50 p.m.—Songs by Miss Nance Marley.
10 p.m.—Close down.

2 UW, SYDNEY

MONDAY, 30th APRIL, 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.—Mrs. A. Dalton.
Pianoforte solo. Selected.
7.52 p.m.—Studio items.
8 p.m.—News, Mails and shipping intelligence.
8.15 p.m.—Mrs. A. Pearce.
Violin solo. Selected.
8.22 p.m.—Studio item.
8.26 p.m.—Mrs. A. Dalton:
Pianoforte solo. Selected.
8.33 p.m.—Studio item.
8.37 p.m.—Mrs. A. Pearce.
Violin solo. Selected.
8.44 p.m.—Weather forecast.
8.48 p.m.—Vocal and instrumental items.
9 p.m.—Dance music.
9.30 p.m.—Request numbers.
9.45 p.m.—Dance music.
9.58 p.m.—Announcements.
10 p.m.—Close down.

3LO, MELBOURNE.

MONDAY, 30th APRIL, 1928.

EARLY MORNING SESSION.

- 7.15 a.m.—Morning Melodies.
7.20 a.m.—PHYSICAL CULTURE EXER-
CISES (to music).
7.27 a.m.—Morning Melodies.
7.33 a.m.—WEATHER FORECAST for all
States. Mails.
7.40 a.m.—NEWS.
8 a.m.—Melbourne Observatory Time Signal.
8.1 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 a.m.—3LO's CULINARY COUNSELS, or
How to Create Creature Comforts with a
Minimum of Cash.

QUINCE HONEY.

6 large quinces, 5lbs. sugar, 1 pint water.
Peel, core, and shred quinces. Boil sugar
and water about 7 minutes. Add shredded
quince and boil about 20 minutes or until
a deep honey color. Put into warm jars
and cover when cold.

THE GLORY OF THE GARDEN—AND OF
THE HOME.

"Give me an house, convenient, clean and
fair;

An old-world garden with its fruitful
walls;

Orchards and spreading vines; and few
tried thralls;

A faithful wife, unspent with children's
care,

No debts, no quarrels, lust, or lawyer's
snare;

No irksome sharing of ancestral halls;
Desiring little, deaf to ambitious calls,

Or aught beside that simple folk forswear.
Grant me to live in low estate at ease,

In true devotion telling out my days;
Give me a soul at peace from passionate

ways,
A fearless mind, unmoved by man or fate

So, praising God, I'll graft and prune my
trees

Till death comes softly to my garden gate."
—From the French of Aristoppe, XVI.

Century.

- 11.5 a.m.—FLORA PELL, Inspector of
Schools, will talk on the all-important sub-
ject of:

"Cooking."

- 11.20 a.m.—Musical Interlude.

- 11.25 a.m.—Under the Auspices of the Royal
Victorian Institute of Architects, MISS C.

TEAGUE will speak on:

"Saving the Time of the Housewife."

- 11.40 a.m.—Musical Interlude.

- 11.45 a.m.—MISS K. LASCELLES will speak
on:

"The Advantages of Dancing Lessons to
Growing Children."

MIDDAY SESSION.

- 12 noon.—Melbourne Observatory time signal.

- 12.1 p.m.—British Official Wireless from
Rugby. Reuter's and the Australian Press
Association Cables. "Argus" news service.

COMMUNITY SINGING.

- 12.15 p.m.—Community Singing, transmitted
from the ASSEMBLY HALL, Collins Street,

- Melbourne. Conductor, G. J. MACKAY,
assisted by THE GYPSY PLAYERS.

- Soloists: MINI HESELEVA, soprano. Two
Russian Songs by Dargomishski.

- OLIVER PEACOCK, baritone:
"The Little White House" (Hawley).

- "Life" (Curran).

FROM THE STUDIO.

- 1.45 p.m.—Stock Exchange information.
Meteorological information. Weather fore-
cast and rainfall for Victoria, Tasmania,

- South Australia and New South Wales.
Ocean forecasts, river reports, announce-
ments.

- 1.55 p.m.—Close down.

- The Results of Ascot Pony Races will be
given hourly during the afternoon.

Velvet Tuning at a touch

Here's localised control, perfect and more simple than you have ever known before. Compact and attractive in design, made to the Emmco standard. Ensures precise ultra-vernier control of your tuning — instant separation of stations. For all circuits.

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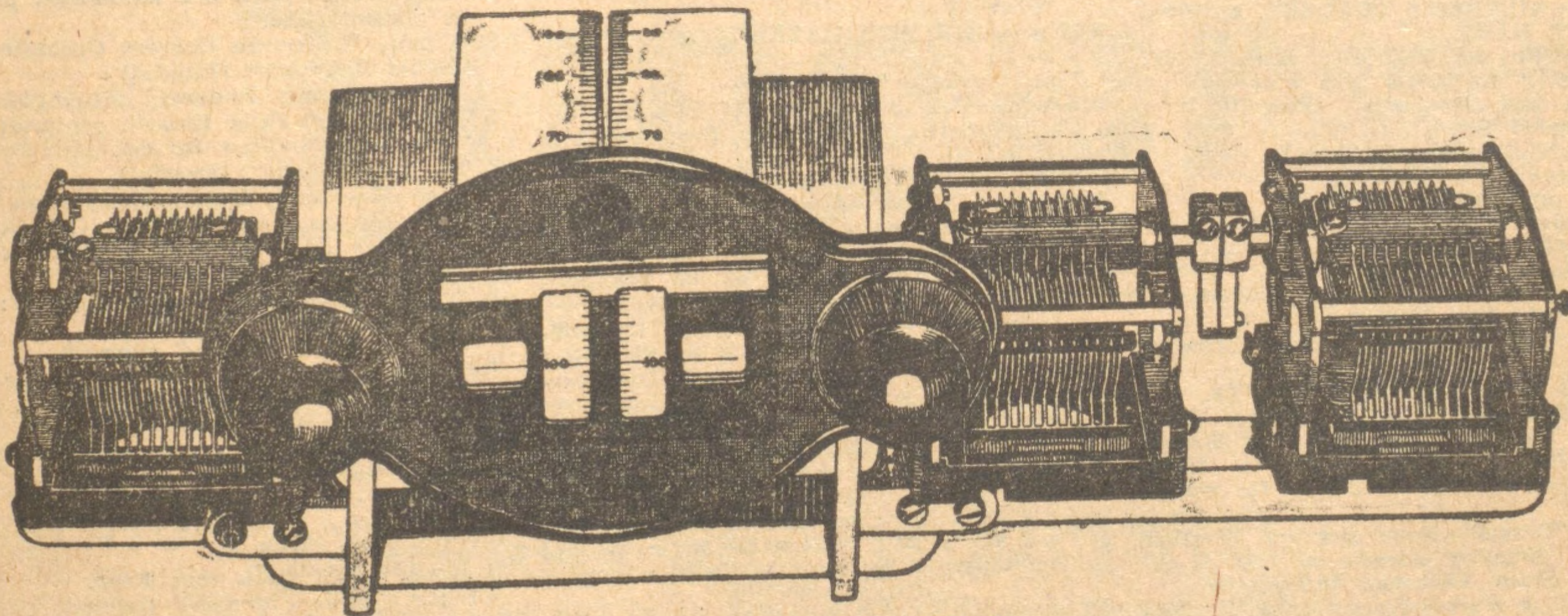
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Bakelite Dials for Single Controls, complete £4 10 0
For Double Control, including above, complete £4 10 0

EMMCO SUPER STRATELYNE CONDENSERS. Bakelite base, straight line frequency; minimum panel space.

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AFTERNOON SESSION.

- 2.15 p.m.—THE STATION ORCHESTRA:
Selection, "Dorothy" (Cellier).
- 2.30 p.m.—FRANCES LEA, soprano:
"No, No, Nanette."
"Follow Yvette."
- 2.37 p.m.—THE STATION ORCHESTRA:
Selection, "Our Miss Gibbs."
- 2.47 p.m.—J. ALEXANDER BROWNE, baritone:
"Josephine—The Sunshine Girl" (Rubens).
"Irene" (Montgomery).
- 2.54 p.m.—THE STATION ORCHESTRA:
Selection, "Sybil."
- 3.4 p.m.—FRANCES LEA, soprano:
"Vilia."
"La Belle Parisienne."
- 3.11 p.m.—THE STATION ORCHESTRA:
Selection, "Irene."
- 3.21 p.m.—J. ALEXANDER BROWNE, baritone:
"Star of My Soul"—"The Geisha Girl."
"Sally" (Jones).
- 3.28 p.m.—THE STATION ORCHESTRA:
Selection, "Poppy."
- ORGAN RECITAL.
- 3.38 p.m.—C. E. MONTEATH, transmitted from ST. PETER'S CHURCH, Melbourne:
"Cujus Animam" (Stabert Mater) (Rossini).
"March in B Minor" (Schubert).
"Moment Musical" (Moskowsky).
"Gavotte" (Otho) (Handel).
- FROM THE STUDIO.
- 3.58 p.m.—THE STATION ORCHESTRA:
"Prelude in C Minor" (Drummer).
- 4.5 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."
- 4.20 p.m.—THE STATION ORCHESTRA:
"Ballet Music" from "Sylvia."
- 4.27 p.m.—OLIVER PEACOCK, baritone:
"I'm Waiting for Ships that Never Come In" (Olman).
"The Dust of Egypt" (Broughton).
- 4.34 p.m.—THE STATION ORCHESTRA:
"Overture to Masanello" (Auber).
- 4.44 p.m.—Special weather reports from Adelaide. Special weather forecast for Melbourne district.
- 4.45 p.m.—OLIVER PEACOCK, baritone:
"Just an Ivy-covered Shack" (Rupp).
"Little Town in County Down" (Sanders).
- 4.52 p.m.—THE STATION ORCHESTRA:
"Follow Me 'Ome" (W. Ward Higgs).
"Pale Moon" (Logan).
"The Boy and the Bird" (Hagan).
- 5 p.m.—"Herald" news service. Stock Exchange information. Sporting results.
- 5.15 p.m.—Close down.
- During the afternoon the Results of the Ascot Pony Races will be given hourly.

EVENING SESSION.

- 6 p.m.—Answers to Letters and Birthday Greetings by "BILLY BUNNY."
- 6.20 p.m.—CHILDREN'S CONCERT, arranged by FRITZ HART.
SOME MUSIC BY PURCELL AND ARNE.
MILICENT OSMOND will sing:
"Nymphs and Shepherds" (Purcell).
"By Dimpled Brook" (Arne).
"Where the Bee Sucks" (Arne).
MARY GASKIN, violinist:
"Sonata in G Minor" (Purcell).
"Sarabande" (Purcell).
IDA SCOTT, piano:
"Dance in D" (Purcell).
"Sonata in A Major" (Arne).
Accompanist: IDA SCOTT.
- 6.50 p.m.—"BILLY BUNNY" has a Story to tell you.
- NEWS AND MARKET REPORTS.
- 7 p.m.—Official Report of Newmarket Stock Sales by the Associated Stock and Station Agents, Bourke Street, Melbourne. Number of sheep and cattle drawn for week's sales.
- 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. Borrett, 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 Boy Scouts' Association,
DR. C. GORDON McADAM will speak on:
"Scouting News."
- 7.45 p.m.—Under the auspices of the Royal Victorian Institute of Architects,
W. A. M. BLACKETT, President, R.V.I.A., will speak on:
"The Architectural Exhibition."
- 8 p.m.—Under the auspices of the Department of Agriculture,
S. A. COCK, Citri-culturist, will speak on:
"Citrus Culture—Subsoiling."
- 8.15 p.m.—Birthday Greetings and Programme Announcements.
CHAMBER MUSIC AND CHORAL ITEMS.
- 8.16 p.m.—THE GYPSY PLAYERS:
"String Quartet in D"—First Movement (Mozart).
The First Movement is pleasant, light, and delicately expressive.
"String Quartet in D"—2nd Movement (Mozart).
This is a courtly Minuet.
- 8.26 p.m.—THE ELSTERNWICK MALE CHOIR:
"Song of the Northmen" (Maunder).
"Star of the Summer Night" (Hatton).
- 8.33 p.m.—THE GYPSY PLAYERS:
"String Quartet in D"—3rd (slow) Movement (Mozart).
The Third Movement is, perhaps, a little more staid—but it is very easy-going.
- 8.43 p.m.—THE ELSTERNWICK MALE CHOIR:
"Carry Me Back to Old Virginny" (Bland).
"Mulligan Musketeers" (Atkinson).
- 8.50 p.m.—THE GYPSY PLAYERS:
"String Quartet in B"—4th Movement (Mozart).
The Fourth is the gayest and most sparkling of Finales.
- 9 p.m.—MINA HESELEVA, soprano:
"Nightingale" (Aliabioff).
"Mazurka" (Chopin).
- PIANO RECITAL.
- 9.7 p.m.—HENRI PENN: Recital of Chopin's Works:
"Scherzo No. 1" (Chopin).
"Prelude—No. 24" (Chopin).
"Fantasie Impromptu" (Chopin).
- SMUGGLERS AND MERMAIDS.
- 9.29 p.m.—ERNEST SAGE, baritone:
"Maxwellton braes are bonnie."
"The De'il's Awa' wi' th' Exciseman."
- 9.36 p.m.—THE STATION ORCHESTRA:
"Mermaid of the Nile—an Egyptian Intermezzo" (Hein).
WILL PAGE—Xylophone Solo:
"Sparks."
- 9.43 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."
- 9.55 p.m.—THE STATION ORCHESTRA:
Characteristic: "The Teddy Bears' Picnic" (Bratton).
Novelty—"Birthday Serenade" (Lincke).
- 10.10 p.m.—"Argus" news service. Meteorological information. British official Wireless news from Rugby.
- The Royal Automobile Club of Victoria's SAFETY MESSAGE for To-day is:
"Production, without safety, is inefficient. Accident prevention is absolutely an essential part of the industrial programme."
- THE OLYMPIC GAMES:
The Mecca of all amateur sportsmen—The Olympic Games—Have you contributed to the Lord Mayor's Fund to enable Australia to be represented at Amsterdam this year? 3LO Melbourne—will be pleased to receive donations towards the Fund.
- JOCULARITIES.
- 10.20 p.m.—MINA HESELEVA, soprano:
"Ah! fors e lui" (Verdi).
"Pierrot" (Rybnér).
- 10.27 p.m.—THE STATION ORCHESTRA:
"Humoresque—The Lightning Switch."
How rarely we hear an air which in some way is reminiscent of another? This

"Humoresque" offers an interesting example of the difficulties encountered by composers in their search for original melody. Various airs are welded together in a continuous blend of harmony and merriment, illustrating the similarity of one tune to the other."

- 10.37 p.m.—GORDON JAMES, baritone:
"Don Juan's Serenade" (Tschaiakowsky).
"Mandalay" (Cobb).
- 10.44 p.m.—THE STATION ORCHESTRA:
"Largo from the New World Symphony" (Dvorak).
- 10.54 p.m.—GORDON JAMES, baritone:
"Droop Not, Young Lover" (Handel).
"Selected."
- 11 p.m.—OUR GREAT THOUGHT.
THE SHRINE OF REMEMBRANCE:
The Noble Monument to be built, with the aid of your gifts, may I think, be viewed as possessing four outstanding features. It will be:—
Massive to indicate the greatness of war.
Beautiful as the sacrifice of our gallant men
Dignified as our Sorrow for those we lost and
As Enduring as our remembrance of them and all they did for us.
—E. H. Wreford.
- DANCE MUSIC.
- 11.1 p.m.—THE VAGABONDS.
- 11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

MONDAY, 30th APRIL, 1928.

EARLY MORNING SESSION.

- 9.15 a.m.—Description of the arrival of the mail liner from overseas at Princes Pier, Port Melbourne, by Mr. J. D. Porter, of the "Graphic."

MORNING NEWS SESSION.

11 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

12 noon to 1 p.m.

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

MATINEE SESSION.

ORCHESTRAL DANCE CONCERT.

- Sport.—During the afternoon the results of the Ascot Ponies, together with other information, will be broadcast immediately each race is run.
- 2 p.m.—Ayarz Dansonians:
A half-hour dance session of the latest popular dance hits by Melbourne's favorite dance band. Each one announced prior to its presentation.
- 2.30 p.m.—Melbourne Concert Orchestra:
"Ballet Egyptien" (Luigini).
"Suite of Gipsy Pictures" (Hugh Mallory).
- 2.52 p.m.—Miss Julia Russell, soprano:
"Ave Maria" (Max Bruch).
"A Little Birdie" (Puccini).
- 3 p.m.—Melbourne Concert Orchestra:
"Selection on Popular Song" (Lohr).
"Romance Sans Paroles" (Rebikoff).
"Scherzo" (Mendelssohn).
- 3.19 p.m.—Miss Julia Russell, soprano:
"Chant Veniten" (Bemberg).
"Yesterday and To-day" (Spross).
- 3.26 p.m.—Mr. Herbert Pettifer, violin:
"Indian Lament" (Dvorak-Kreisler).
- 3.30 p.m.—Interval announcements.
- 3.35 p.m.—Audio, will talk on the "Pioneers of Wireless."
- 3.45 p.m.—Ayarz Dansonians.
- 3.57 p.m.—Mr. C. Richard Chugg, flute:
"Andante" (Mozart).
- 4 p.m.—G.P.O. clock says Four.
- 4.1 p.m.—Second weather forecast.
- 4.3 p.m.—Melbourne Concert Orchestra:
"The Savoy Welsh Medley" (Somers).
- 4.7 p.m.—Mr. Robert Allen, alto:
"Over the Waters Blue" (Clarke).
"I heard you go by" (Wood).
- 4.15 p.m.—Melbourne Concert Orchestra:
Ballet Suite, "Sylvia" (Delibes).



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- 4.35 p.m.—Mr. Robert Allen, alto:
"Ma little banjo" (Dichmont).
"Friend o' Mine" (Sanderson).
4.42 p.m.—Ayarz Dansonians.
4.50 p.m.—To-night's entertainment.
4.55 p.m.—Special racing report, acceptances and barrier positions for the Warrnambool Races, by "Daybreak."
5 p.m.—G.P.O. clock says Five.
God Save the King.

CHILDREN'S HOUR.

- 6.30 p.m.—3AR's Cousin Peter.

EVENING SESSION.

- Municipal Band Concert to be broadcast from the Town Hall, Warrnambool.
7.15 p.m.—Hobby session. "Snapshot" of the listener-in will speak on photography for beginners.
7.25 p.m.—Sport session. "Harlequin" presents his budget of up-to-date news and comments on sport of the day.
7.45 p.m.—Mr. Rayson Cousens, playing in "Mr. What's his Name," will talk from his dressing room at the Athenaeum Theatre.
7.50 p.m.—Macnamara's stock report.
8 p.m.—G.P.O. clocks says Eight.
8.1 p.m.—Concert from Warrnambool.
Warrnambool Civic Orchestra (conductor, Mr. Rhys Evans):
Overture, "The Bohemian Girl" (Balfe).
Warrnambool Choral Society (conductor, Mr. Edward Bright, B.A., Dip. Ed.):
Part songs, "In this hour of softened splendor" (Pinsutti).
"The song of the Vikings" (Panning).
Mrs. Bessie McKinnon, mezzo-soprano, and Mr. Arthur Wilkinson, tenor:
Duet, "Your eyes have told me so."
Miss Kath Henderson, soprano:
"Open thy blue eyes, beloved" (Massenet).
Miss Gertie Newman, recitation:
"The Old Mass Shandrydan" (John O'Brien).
Mr. John Hood Hardie, bass:
"The Lute Player" (Allitsen).
Miss Nellie Carmody, L.A.B., violin:
"Le Cygne," The Swan (Saint Saens).
Miss Molly Hayres, soprano:
"Beyond the Sunset" (Clutsam).
"Ma Curly Headed Baby" (Arnold).
Accompanied by Mrs. Gertrude Ramsey, steel guitar.
Warrnambool Municipal Band (conductor, Mr. George Davis):
Brass setette, "Samuel Webbe's Works" (Ar. Ord Hume).
Miss Alice O'Grady, soprano:
"Break o' Day" (Wilfred Sanderson).
Mr. David Davidson, tenor:
"Twilight Memories" (A. J. Bates).
Violin obligato by Professor Jenkinson.
Warrnambool Choral Society (conductor, Mr. Edward Bright, B.A., Dip. Ed.):
Chorus, "The stars that above us are shining" (Weber).
Anthem, "By Babylon's Wave" (Gounod).
Mr. A. Rope and Mr. Rhys Evans, banjo and piano:
Duet, "Baby's feet go pitter, patter" (Kahn).
Mrs. Bessie McKinnon-Ryan, mezzo-soprano:
"Less than the dust" (Woodforde Finden).
"When I go home" (Earle Towner).
Mr. Arthur Grace, baritone:
"The Bedouin Love Song" (Pinsutti).
Miss Elsie Jackson, lyric soprano:
"The Waters of Minnetonka" (Lieurance).
Violin obligato by Miss Nellie Carmody, L.A.B.
Mr. George Davis, cornet (accompanied by the Warrnambool Municipal Band):
"The Bostonian" (Rimmer).
Miss Jean Cameron, contralto, and Miss Alice O'Grady, soprano:
Duet, "Just for awhile" (Kinya).
Warrnambool Quartette Party: Miss V. Hoatson, Miss Bertrand, Mr. Joe Low, and Mr. W. Hedrick:
Selected.

- Warrnambool Civic Orchestra (conductor, Mr. Rhys Evans):
Fox trot, "When red lips drive my blues away" (Bryan).
10.45 p.m.—"Harlequin." Sports results.
10.52 p.m.—The "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 Bellbird Rung Her home," by Randolph Bedford.
11 p.m.—G.P.O. clock says Eleven.
God Save the King.

4QG, BRISBANE.

MONDAY, 30th APRIL, 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 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.—FROM THE STUDIO:
"The Telegraph News."
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6 p.m.—Mail Train running time; Daily Standard news; weather information; announcements.
6.10 p.m.—A Science Talk: "The Manure Heap" by Mr. Inigo Jones.
6.30 p.m.—Bedtime stories by "The Sandman."
7 p.m.—Special news service; market reports; stock reports.
7.30 p.m.—Weather news; announcements.
7.43 p.m.—Standard time signal.
7.45 p.m.—Lecturette: "The Ideal Breakfast" by Mr. E. J. Shelton (Instructor in Pig Raising.)

NIGHT SESSION.

PART I.

"THE CALL OF THE WEST."

- 8 p.m.—FROM THE STUDIO:

An Interlude:

"The Call of the West."

PART II.—STUDIO CONCERT.

- 9 p.m.—Metropolitan weather forecast.
9.1 p.m.—Selection:
"Lucia di Lammermoor" (Donizetti).
The Studio Orchestra (conductor, Mr. A. R. Featherstone).
9.11 p.m.—A Thought for To-night:
"Always a Gentleman."
Will H. Lister.
9.12 p.m.—Contralto Solo:
(a) "The Sweetest Flower That Blows" (Hawley).
(b) "Before the Dawn" (Lang).
Miss Vera Parker.
9.18 p.m.—Pianoforte Solo:
"Shepard's Hey" (Grainger).
Miss Thelma Sanderson.
9.22 p.m.—Tenor Solo:
"Dream Once Again" (Squire).
Mr. C. T. Birkbeck.
9.26 p.m.—Valse:
"L'Estudiantina" (Waldtenfel).
The Studio Orchestra.
9.32 p.m.—Soprano Solos:
(a) "Santuzza's Romance."
(b) "My Blue Heaven" (Donaldson).
Mrs. Robt. Bell.
9.40 p.m.—Pianoforte Solo:
"Duetto, Songs Without Words" (Mendelssohn).
Miss Thelma Sanderson.
9.45 p.m.—Romance.
"Tender Memories" (Rappee).
The Studio Orchestra.
9.50 p.m.—Tenor Solo:
"Bid Me to Love" (Barnard).
Mr. C. T. Birkbeck.
9.54 p.m.—March:
"Brass Buttons" (Cobb).
The Studio Orchestra.
10 p.m.—"The Daily Mail" news; weather

5CL, ADELAIDE

MONDAY, 30th APRIL, 1928.

MIDDAY SESSION.

12 noon to 2 p.m.

AFTERNOON SESSION.

- 3 p.m.—G.P.O. Chimes.
3.1 p.m.—Musical numbers on the Studio "Recreator."
3.30 p.m.—Menu talk by "Homelover."
3.45 p.m.—Musical numbers on the Studio "Recreator."
4.57 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
5 p.m.—G.P.O. Chimes and close down.

EVENING SESSION.

- 6 p.m.—G.P.O. Chimes.
6.1 p.m.—Children's entertainment.
6.30 p.m.—Dinner Music on the Studio "Recreator."
7 p.m.—G.P.O. Chimes.
7.1 p.m.—General Market reports by A. W. Sandford and Co., A. E. Hall and Co., Dalgety and Co., S.A. Farmers Co-operative Union, Taylor Bros., Retail Grocers Association, Interstate Fruit and Produce Market Co. Ltd.
7.10 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
7.15 p.m.—Resume of the previous Saturday's sporting.
7.30 p.m.—"The care of the Clothes" by Ford Bros.
7.45 p.m.—Studio Orchestra in selections.
8 p.m.—G.P.O. Chimes.
Accompanist, Tom King.
8.1 p.m.—Entertainment by "The Twinkler" and his 5CL Boys Club.
8.20 p.m.—A Rendition of Leoncavallo's immortal opera:
"Il Pagliacci."
Characters sustained by:
Signor Antonio Molinari.
Marcella Berardi.
Ugo Mina.
Katie Checkett.
and Bert Woolley, with accompaniment by the Studio Orchestra.
9 p.m.—G.P.O. Chimes and interval in opera for fifteen minutes for Meteorological information, Dalgety's wheat report, and International News.
9.15 p.m.—Continuation of the opera:
"Il Pagliacci."
10 p.m.—G.P.O. Chimes.
10.1 p.m.—"Advertiser" news service.
10.15 p.m.—Relayed from Glenelg, The Maison Dance Band.
10.55 p.m.—Meteorological information, station announcements.
To-morrow's programme.
11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH.

MONDAY, 30th APRIL, 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.—Lunch Hour Music.
Brunswick Panatrophe Hour relayed from Messrs. Musgrove's Limited, Concert Hall.
2 p.m.—Close down.

AFTERNOON SESSION.

- 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.
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 Uncle Henry, Bertie and Duffy.
7.20 p.m.—Stocks, Markets, News.

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			5 Plugs, for Coil Mountings	0	5
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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 programmes, etc.
 8.3 p.m.—Band Night.
 Concert by the R.S.L. Band, conducted by Mr. W. A. Halvorsen, relayed from the R.A.L. Institute.
 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 Programmes given on 1250 metres, commencing at 6.45 p.m.

7ZL, HOBART

MONDAY, 30th APRIL, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

AFTERNOON SESSION.

3 p.m.—G.P.O. Clock chimes the hour.
 3.1 p.m.—Musical selections.
 3.5 p.m.—Hobart Stock Exchange Quotations.
 Weather information.
 Items of interest—announcements.
 3.15 p.m.—Selections by 7ZL Studio Trio.
 Overture, "Queen of Autumn" (Bigge).
 Valse, "Vision of Salome" (Joyce).
 "Romance" (Fletcher).
 Violin Solo. Selected. Mr. E. J. McCann.
 March, "Gladiators" (Finck).
 Suite, "My Lady Dragonfly" (Finck).
 Clarinet Solo. Selected. Mr. Arthur Young.
 "Dreaming" (Wood).
 Pianoforte Solo. Selected. Mr. Arthur Roberts.
 March, "Scouts Parade" (Jones).
 4.15 p.m.—Fashion talk by Aunt Edna of Brownells Ltd.
 4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Uncle Hector's half hour.
 7 p.m.—Funny Man talks to the children.

NIGHT SESSION.

7.30 p.m.—Musical selection.
 7.35 p.m.—Cooking talk by "Regulo."
 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.
 8.1 p.m.—Concert by Derwent Concert Band.
 Conductor, Mr. T. W. Hopkins.
 9.40 p.m.—British Official Wireless News.
 9.50 p.m.—Mercury special Interstate news service.
 Ships within wireless range.
 Tasmanian District Weather reports.
 9 p.m. weather forecasts.
 Weather reports from Australian Capital cities.
 Station announcements.
 Tuesday's programme.
 10 p.m.—Close down.

Tuesday, May 1

2FC, SYDNEY

EARLY MORNING SESSION.
 7 a.m. to 8 a.m.

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 Cables.
 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.
 12.3 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.
 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.—Elsie Roling, soprano.
 1.35 p.m.—Studio music.
 1.55 p.m.—Elsie Roling, soprano.
 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.
 3.3 p.m.—Studio music.
 3.15 p.m.—A reading.
 3.30 p.m.—Rita Graham, violinist:
 "Souvenir" (Drdla).
 3.35 p.m.—Margaret Butterworth, contralto:
 "Un Peu d'Amour" (Lao Sile's).
 3.40 p.m.—Popular records.
 3.50 p.m.—Forrest Pearson, Irish tenor:
 "Oft in the Stilly Night" (Thomas Moore).
 3.55 p.m.—Rita Graham, violinist:
 "Cavatina" (Raff).
 4 p.m.—"Big Ben."
 Margaret Butterworth, contralto:
 "Somewhere" (Arthur Neale).
 4.5 p.m.—A Talk.
 4.15 p.m.—Agnes MacDiarmid, soprano.
 4.20 p.m.—Studio music.
 4.35 p.m.—Forrest Pearson, Irish tenor:
 "You in a Gondola" (Robert Clarke).
 4.40 p.m.—Studio music.
 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 (wool, wheat, stock).
 6.43 p.m.—Fruit and vegetable markets.
 6.47 p.m.—Weather and shipping news.
 6.50 p.m.—Studio talk.
 7 p.m.—Dinner music.
 7.30 p.m.—Late "Evening News" news service.

NIGHT SESSION.

CHORAL PROGRAMME.

7.40 p.m.—Programme announcements.
 7.45 p.m.—Henry Silver, Graphology Talk.
 8 p.m.—From the Conservatorium Hall, Sydney: A programme by the Sydney Madrigal Society, conducted by Arnold Mote.
 9.5 p.m.—From the Studio:
 Late weather forecast.
 9.6 p.m.—James Donnelly, Musical Talk:
 "Red Indian Melodies," Part 1.
 9.15 p.m.—From the Conservatorium Hall:
 Continuation of the programme by the Sydney Madrigal Society.
 10.10 p.m.—From the Studio:
 James Donnelly:
 "Red Indian Melodies," Part 2.
 10.20 p.m.—From the Ambassadors:
 The Ambassadors Dance Orchestra.
 Conducted by Al Hammet.
 10.30 p.m.—From the Studio:
 Late weather forecast.
 10.31 p.m.—From the Ambassadors:
 The Ambassadors Dance Orchestra.
 10.40 p.m.—Studio music.
 10.47 p.m.—The Ambassadors Dance Orchestra.
 Conducted by Al Hammet.
 10.57 p.m.—From the Studio:
 To-morrow's programme and late news.
 11 p.m.—"Big Ben."
 The Ambassadors Dance Orchestra.
 Conducted by Al Hammet.
 11.45 p.m.—National Anthem.
 Close down.

2BL, SYDNEY.

TUESDAY, 1st MAY, 1928.

EARLY MORNING SESSION.

5 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.
 Women's Session.
 Talk on "Toilet Hints," by Mamselle Vitkowski.
 12 noon.—G.P.O. Clock and chimes.
 Special ocean forecast and weather report.
 12.3 p.m.—Musical programme from the Studio.
 12.10 p.m.—Information, mails, shipping, and port directory.
 12.13 p.m.—Boats in call by wireless.
 12.15 p.m.—Fruit market report.
 12.17 p.m.—Vegetable market report.
 12.19 p.m.—London metal market report.
 12.21 p.m.—Dairy Farm Produce market report.
 12.24 p.m.—Forage 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 de Courcey Bremer.
 3.30 p.m.—G.P.O. Clock and chimes.
 News from the "Sun."
 3.40 p.m.—Pianoforte Recital from the 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.—Talk on "Women of Ancient Rome."
 4.35 p.m.—Musical programme from the Studio.
 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.—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 Govt. 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 on "First Aid" by a member of the St. John Ambulance Assoc.
 8 p.m.—G.P.O. Clock and chimes.
 Broadcasters Topical Chorus.
 8.3 p.m.—Miss Grace Saville, contralto.
 8.10 p.m.—Broadcasters Instrumental Trio.
 8.17 p.m.—Mr. Phil Mountain, comedian.
 8.24 p.m.—Miss Lola Estelle, songs at the piano.
 8.31 p.m.—The Sydney Welsh Male Voice Party.
 8.38 p.m.—Miss Nell Crane, comedienne.
 8.45 p.m.—Broadcasters Instrumental Trio.
 8.52 p.m.—Miss Grace Saville.
 8.59 p.m.—Weather report and forecast by courtesy of Mr. C. J. Mares, Govt. Meteorologist.
 9 p.m.—G.P.O. Clock and chimes.
 9.1 p.m.—Mr. Phil Mountain.
 9.8 p.m.—Tooth's Brewery Band.
 9.28 p.m.—Miss Lola Estelle.
 9.35 p.m.—The Sydney Welsh Male Voice Party.
 9.42 p.m.—Tooth's Brewery Band.

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Anode voltage ..	30—90	30—90	.06	0.3	0.3
Total emission, m/a.	5	5	50—125	50—125	20—100
Impedance, ohms.	90,000	30,000	8.0	8.0	8
Purpose	Radio, also Resistance Coupling	Audio	60,000	60,000	16,000
	6/-	6/-	7/6	7/6	7/6
	D3	MD3	DFA1	DFA3	DFA4
	L.F.				
Filament voltage.	1.8—2.0	1.8—2.0	5.5	5.5—6.0	5.5
Filament current, amps.	0.3	0.3	0.2	.06	0.2
Anode voltage ..	30—100	30—100	50—100	50—100	75—125
Total emission, m/a.	8.0	8.0	25.0	15.0	15.0
Impedance, ohms.	16,000	16,000	8,300	13,000	27,000
Purpose	Audio	Audio	Power Amplifier	Audio	Resistance Coupling

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- 10.2 p.m.—Miss Nell Crane.
 10.9 p.m.—Resume of following day's programme.
 10.14 p.m.—The Wentworth Cafe Orchestra under the direction of Mr. S. Simpson broadcast from the Wentworth. During intervals between dances "Sun" news will be broadcast.
 11.30 p.m.—G.P.O. Clock and chimes.
 National Anthem.

2GB, SYDNEY

TUESDAY, 1st MAY, 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 by Miss Helen J. Beegling.
 11 a.m.—Close down.

AFTERNOON SESSION.

- 2 p.m.—Music.
 2.20 p.m.—Address.
 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 report by New Zealand Loan and Mercantile Agency Co., Ltd.
 7.15 p.m.—Music.
 8 p.m.—Opening Chorus.
 8.2 p.m.—Violin Solos by Mr. Dan Scully.
 8.8 p.m.—Songs by Miss Maisie Dyet.
 8.15 p.m.—Address by Dr. P. K. Roest.
 8.30 p.m.—Instrumental Music.
 9 p.m.—Talk by Mr. A. Beaufoy.
 9.20 p.m.—Violin Solos by Mr. Dan Scully.
 9.28 p.m.—Songs by Miss Maisie Dyet.
 9.30 p.m.—Instrumental Music.
 10 p.m.—Close down.

2 UW, SYDNEY

TUESDAY, 1st MAY, 1928.

EVENING SESSION.

- 7 p.m.—Studio items.
 7.10 p.m.—Where to Go session.
 7.15 p.m.—Dinner music.
 7.40 p.m.—Mr. and Mrs. J. Campbell: Steel guitar duets.
 7.47 p.m.—Studio item.
 7.52 p.m.—Mrs. J. Campbell: Pianoforte solo. Selected.
 8 p.m.—News, Mails and shipping intelligence.
 8.15 p.m.—Mr. and Mrs. Campbell: Steel guitar duets.
 8.22 p.m.—Studio item.
 8.26 p.m.—Gems of the Opera, arranged and presented by G. F. Manuel.
 9.30 p.m.—Dance music.
 9.58 p.m.—Announcements.
 10 p.m.—Close down.

3LO, MELBOURNE

TUESDAY, 1st MAY, 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. Mails.
 7.40 a.m.—News.
 8 a.m.—Melbourne Observatory Time Signal.
 8.1 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 a.m.—3LO'S CULINARY COUNSELS, or How to Create Creature Comforts with a Minimum of Cash.
 LINOLEUM CREAM.

1-lb. beeswax.
 2-oz. potassium carbonate.
 9 cups water.
 1 quart turpentine.
 Shred beeswax, put with water and potassium carbonate into an old saucepan. Heat till wax has melted (do not allow it to boil). Pour into a basin and when slightly cool add turpentine (keep away from the fire). Stir occasionally till thick and creamy.
 THE GLORY OF THE GARDEN—AND OF THE GARDENER.

"Your mind is not at all a machine—all ready-made and automatic. Ask any doctor and he will make this plain to you. No, your mind is more like a garden. It is the use you make of it that counts. You can grow these fine plants in your Mind-garden: Courage, initiative, imagination, will-power, kindness, knowledge. You can have a garden of ideas and skills and efficiencies. What a garden Newton must have had! Or Darwin, or Huxley, or Leverhulme, or Pasteur, or Carnegie! If you let your garden alone it will go to weeds and grass. That is the usual crop."

- 11.5 a.m.—MISS E. NOBLE, Gas Cooking:

"Small Cakes."

- 11.20 a.m.—Musical interlude.

- 11.25 a.m.—MRS. DOROTHY SILK:

"Homecrafts."

- 11.40 a.m.—Musical interlude.

- 11.45 a.m.—MISS R. G. HARRIS, Publicity Officer of the Free Kindergarten Union, will speak on the School for Crippled Children in connection with the Free Kindergartens.

MIDDAY SESSION.

- 12 noon.—Melbourne Observatory Time Signal.
 12.1 p.m.—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:

"Jevington Suite" (Loughborough).

- 12.30 p.m.—T. JAMES LLOYD, tenor:

"Oh, Miss Hannah" (Deppa).

"Love is Just a Little Bit of Heaven" (Abel Baer).

- 12.37 p.m.—Stock Exchange information.

- 12.40 p.m.—THE GYPSY PLAYERS:

"Incidental Music to 'The Maid of Orleans'" (Rawlinson).

- 12.47 p.m.—MINA HESELEVA, Soprano:

"April Morn Waltz" (Batten).

"Koo-Koo" (Arenski).

- 12.54 p.m.—AGNES FORTUNE, Piano:

"Melody in F" (Rubenstein).

- 1 p.m.—Description of Trial Hurdle, WARRNAMBOOL RACES, by Eric Welch.

- 1.5 p.m.—T. JAMES LLOYD, Tenor:

"My Blue Heaven" (Donaldson).

"Song of the Wanderer" (Moret).

- 1.12 p.m.—Meteorological information.

Weather forecast and rainfall for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecast. River reports.

FOUNDATIONS OF MUSIC.

- 1.19 p.m.—BESSIE GAUNSON, Violin, will give interpretations this week of the works of MOZART. To-day she has selected.

"Sonata No. 6" (Mozart).

- 1.25 p.m.—MINA HESELEVA, Soprano:

Two Ballads by Gretchaninoff.

- 1.32 p.m.—THE GYPSY PLAYERS:

"Star Blossoms" (Logan).

"Contra Dances" (Beethoven).

- 1.45 p.m.—Close down.

- 1.55 p.m.—Description of Trial Handicap, 6 fur., WARRNAMBOOL RACES, by ERIC WELCH.

- 2 p.m.—Close down.

AFTERNOON SESSION.

- 2.15 p.m.—THE VAGABONDS:

"I'm Lonely Without You" (Warren).

"My Blue Heaven" (Donaldson).

"Just Around the Corner" (Hayes).

- 2.24 p.m.—VERONICA COX, Soprano:

"Japanese Love Song" (Brahe).

"Forget-me-Not" (Hull).

- 2.31 p.m.—THE VAGABONDS:

"Sweet Yvette" (Davis).

"C'est Vous" (Silver).

"Desert Isle" (Archer).

- 2.40 p.m.—OLIVER PEACOCK, Baritone:

"I Live for You" (Jack Thompson).

- 2.43 p.m.—Announcements.

- 2.45 p.m.—Description of Briery Handicap Steeple, 2 miles, WARRNAMBOOL RACES, by ERIC WELCH.

- 2.50 p.m.—OLIVER PEACOCK, Baritone:

"I'm a Wantin' You" (Fowler).

- 2.53 p.m.—THE VAGABONDS:

"A Shady Tree" (Donaldson).

"I Wonder How I Look When I'm Asleep" (Brown).

"Ciribiribin" (Pestanzozza).

- 3 p.m.—BERYL HOLT, Contralto:

"The Carpet" (Wilf. Sanderson).

"The Star" (Rogers).

- 3.7 p.m.—THE VAGABONDS:

"Mountain Greenery" (Rogers).

"Chloe" (Moret).

- 3.13 p.m.—RUPERT HAZELL AND ELSIE DAY:

"Harmonylarity."

- 3.26 p.m.—THE VAGABONDS:

"Dancing Tambourine" (Polla).
 Selected.

- 3.30 p.m.—Description of Wangoon Handicap, 7 fur., WARRNAMBOOL RACES, by ERIC WELCH.

- 3.35 p.m.—VERONICA COX, Soprano:

"Boat Song" (Ware).

"Dainty Little Maiden" (Dunhill).

INTERLUDE.

- 3.42 p.m.—J. HOWLETT ROSS:

"May Day."

Shakespeare makes many allusions to the merry-making on May Day. In "Henry the Eighth" he says:

"Pray, sir, be patient, 'tis as much impossible—

Unless we sweep 'em from the door with cannons

To scatter 'em, as 'tis to make 'em sleep. On May Day morning, which will never be."

ON WITH THE DANCE AND THE RACES.

- 3.56 p.m.—THE VAGABONDS:

"Me and My Shadow" (Jolson).

"A Night in June" (Friend).

"Dream Kisses" (Yellen).

- 4.5 p.m.—THELMA READY, Banjo:

"The Old Log Cabin in the Dell" (Adelai).
 Selected.

- 4.12 p.m.—THE VAGABONDS:

"I Told Them All About You" (Davis).

"Wondering Why" (Malie).
 Selected.

- 4.20 p.m.—Description of Merri Handicap Hurdle Race, 2 miles 58 yards, WARRNAMBOOL RACES, by ERIC WELCH.

- 4.25 p.m.—BERYL HOLT, Contralto:

"A Castilian Lament" (T. del Riego).

"Down Here" (Brahe).

- 4.32 p.m.—THE VAGABONDS:

"Night Time is Love Time" (Davis).

"The Merry Widow" (Lehar).

- 4.38 p.m.—OLIVER PEACOCK, Baritone:

"If You Should Meet Me" (Delmore).

"I'll Forget You" (Ball).

- 4.45 p.m.—Special Weather report from Adelaide. Weather forecast for Mildura districts.

- 4.46 p.m.—THE VAGABONDS:

"Fifty Million Frenchmen" (Rose).

"My Regular Girl" (Warren).
 Selected.

- 4.54 p.m.—THELMA READY, Banjo:

"Popular Hits."

NEWS SERVICE.

- 5 p.m.—Stock Exchange information.

THE LAST RACE.

- 5.5 p.m.—Description of Tozer Welter Handicap, one mile, WARRNAMBOOL RACES, by ERIC WELCH.

- 5.10 p.m.—"Herald" News service.

- 5.15 p.m.—Close down.

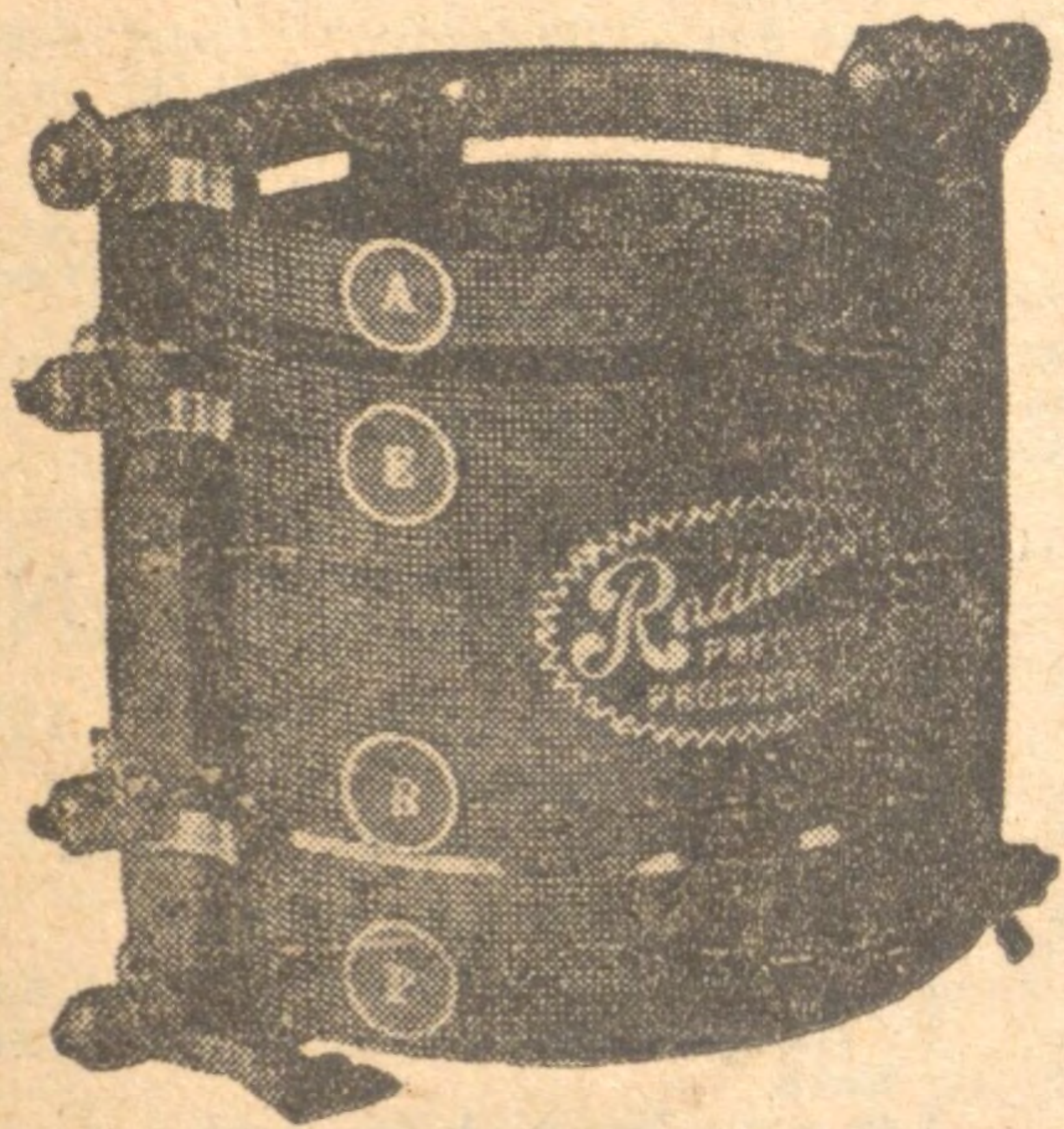
EVENING SESSION.

- 6 p.m.—Answers to Letters and Birthday Greetings by "BILLY BUNNY."
 6.20 p.m.—Musical interlude.

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 "IMPROVED ONE VALVE" W.W. RECEIVER



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is possibly one of the most popular of the Radiokes series and is also called for in this Improved One Valve Receiver.

You will always find a Radiokes Super R.F. Choke specified in Receivers which are designed to cover the broadcast bands as well as the ultra short waves.

Because of its excellent construction this is the only choke capable of 100% performance on both the high and low frequencies and for that reason truly deserves the title of "Universal."

Price 8/6 each



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 27-29 KING STREET, CITY

6.25 p.m.—CAPTAIN DONALD MacLEAN.
The Spanish Conquests of America: "How the Dons Discovered the Treasures of the World."

6.40 p.m.—Musical interlude.

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

NEWS AND MARKET REPORTS.

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

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

7.17 p.m.—Fish Market reports by J. R. Borrett, 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, Onions and Potatoes. 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.—MADAME SOWARD will speak to Students of French:—
"Le Poete et Le Chien Parasite."

7.45 p.m.—Under the Auspices of the University of Melbourne Extension Board, R. J. A. BARNARD, M.A., Lecturer in Mathematics to the University, will speak on
"Can a Star Explode?"

8 p.m.—Under the Auspices of the Royal Victorian Institute of Architects, R. H. Alsop, F.R.B.I.A., F.R.V.I.A., will speak on
"Suitable Types of Design for Australian Homes."

8.15 p.m.—Birthday Greetings and Programme Announcements.

OLD TIME DANCE PROGRAMME.

"When time who steals our years away
Shall steal our pleasures too;
The memory of the past will stay
And half our joys renew."

—Moore.

8.16 p.m.—HOFFMAN'S DANCE BAND:
Waltz, "Merry Widow" (Lehar).

8.23 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."

8.26 p.m.—HOFFMAN'S DANCE BAND:
Quadrilles, "The Mikado" (Gilbert and Sullivan).

8.41 p.m.—SYD. L. EXTON, Tenor:
"Nita Gitana."

8.45 p.m.—HOFFMAN'S DANCE BAND:
One Step, "Stars and Stripes."

8.49 p.m.—OLIVER PEACOCK, Baritone:
"Silver Threads Among the Gold."

8.52 p.m.—CHORUSES. Mrs. Campbell is at the Piano. Are you all ready? Now for some old-time choruses.

8.58 p.m.—HOFFMAN'S DANCE BAND:
Barn Dance, "Careless Cuckoo."

9.3 p.m.—MADOLINE KNIGHT, contralto:
"The Song that Reached My Heart."

9.6 p.m.—HOFFMAN'S DANCE BAND:
Alberts. Selected.

9.21 p.m.—SYD. L. EXTON, Tenor:
"Come into the Garden, Maude."

9.24 p.m.—HOFFMAN'S DANCE BAND:
Schottische, "Coster Girl."

9.27 p.m.—RUPERT HAZELL:
"Harmonylarity."

9.30 p.m.—HOFFMAN'S DANCE BAND:
Waltz, "Blue Danube."

9.37 p.m.—SYD. L. EXTON, Tenor:
"Oft in the Silly Night" (Irish).

9.40 p.m.—HOFFMAN'S DANCE BAND:
Lancers, "The Arcadians."

9.55 p.m.—CHORUSES. We have a few more songs to sing-o!

10 p.m.—HOFFMAN'S DANCE BAND:
Polka Mazurka, "Chummy Chums" (by request).

10.5 p.m.—MADOLINE KNIGHT, Contralto:
"The Dear Homeland."

10.8 p.m.—HOFFMAN'S DANCE BAND:
Barn Dance, "Chickabiddy."

10.13 p.m.—OLIVER PEACOCK, Baritone:
"The Hallowed Hair" (Bartlett).

10.16 p.m.—HOFFMAN'S DANCE BAND:
Valette, "La Paloma."

10.21 p.m.—ELSIE DAY, Soprano:
"Melodious Memories."

10.24 p.m.—CHORUSES—And now for some special request items. Are you ready, Mrs. Campbell?

10.30 p.m.—HOFFMAN'S DANCE BAND:
Royal Irish, Selected.

10.45 p.m.—RUPERT HAZELL and ELSIE DAY:
"Harmonylarity."

10.50 p.m.—"Argus" news service. British Official wireless news from Rugby. Meteorological information. Announcements. Shipping information. Sporting notes by "Olympus."

The Royal Automobile Club of Victoria's SAFETY MESSAGE for To-day is:—

"Safety pays dividends in human happiness and industrial efficiency."

THE OLYMPIC GAMES—

Australia will be there. See that Australia's splendid young manhood is represented at the Olympic Games at Amsterdam in July. Send your donation to the Lord Mayor's Olympic Fund. 3LO Melbourne will be pleased to receive donations towards the Fund.

11 p.m.—OUR GREAT THOUGHT:

True Joy is a serene and sober motion; and they are miserably out, that take laughing for rejoicing; the seat of it is within, and there is no cheerfulness like the resolutions of a brave mind."—Seneca.

AND NOW FOR SOME MODERN DANCES!

11.1 p.m.—THE VAGABONDS.

11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

TUESDAY, 1st MAY, 1928.

MORNING NEWS SESSION.

11 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

12.1 p.m. to 1.45 p.m.

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

MATTINEE SESSION.

ORCHESTRAL DANCE CONCERT.

During the afternoon a description of the departure of mail liner for London, half an hour before leaving Princes Pier by Mr. J. D. Porter of the "Graphic."

Sport. During the afternoon the results of the Warrnambool Races, together with other information will be given immediately each race is run.

2 p.m.—Ayaz Danonians.

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:
Suite, "In Arcady" (E. Nevin).

"Notturmo" (Bece).

2.46 p.m.—Miss Jean Lewis, contralto:
"I be hopin'" (Clarke).

"My Girl and I" (Clarke).

2.53 p.m.—Melbourne Concert Orchestra:
"Woodland Sketches" (MacDowell).

3.13 p.m.—Mr. William Whittingham, violin:
"Slavonic Dance" (Dvorak-Kreisler).

3.17 p.m.—Miss Jean Lewis, contralto:
"Tired Hands" (Sanderson).

"Memory Song" (Oliver).

3.25 p.m.—Melbourne Concert Orchestra:
"Adagio Cantabile" (Beethoven).

3.30 p.m.—Interval Announcements.

3.35 p.m.—Mademoiselle Jeunesse.

Interval Talks on Timely Topics of Interest to our Lady Listeners.

3.45 p.m.—Ayaz Danonians.

4.1 p.m.—Second Weather forecast.

4.3 p.m.—Mr. Bernard Thomas, tenor:
"Oft in the silly night" (Moore).

"Mother O' Mine" (Tours).

4.11 p.m.—Melbourne Concert Orchestra:
"Schubert's Songs" (Ar. Roberts).

4.29 p.m.—Mr. Ernie Pettifer, saxophone:
"Sax Serene" (Wiedoeft).

"Questa A' Quella" (Verdi).

"Macushla" (Macmurrrough).

4.41 p.m.—Ayaz Danonians:
4.55 p.m.—Announcements.

To-night's Entertainment.

5 p.m.—G.P.O. Clock says "Five."

CHILDREN'S SESSION.

6.30 p.m.—Uncle Mac's Entertainment.

EVENING SESSION.

Announcer, Mr. Stephen McDonald.

7.20 p.m.—Dr. Floyd, Organist and Choirmaster at St. Paul's Cathedral, Melbourne, will talk on "The Art of Listening."

7.30 p.m.—A Broadminded and up-to-date short talk by "Friar Tuck," "Invisible Men."

7.35 p.m.—Sport Session.

"Harlequin presents his budget of up-to-date news and comments on Sport of the day."

7.50 p.m.—MacNamarra's Stock Reports.

8 p.m.—G.P.O. Clock says "Eight."

8.1 p.m.—A special programme will be broadcast from the Victorian Soft Goods Association's Rooms. The event being one of their annual Ladies' Concerts.

10.30 p.m.—Mr. W. Martin, A.R.V.I.A., will talk on "What the Architect does for his Client."

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

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, "God loveth Strength" by Mary Gilmore.

11 p.m.—G.P.O. Clock says "Eleven."
God Save the King.

4QG, BRISBANE.

TUESDAY, 1st MAY, 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 signal.

2 p.m.—Close down.

AFTERNOON SESSION.

3.30 p.m.—Mail train running times.

3.31 p.m.—Afternoon tea music.

4.15 p.m.—"The Telegraph" news.

4.30 p.m.—Close down.

EARLY EVENING SESSION.

6 p.m.—Mail train running times; "Daily Standard" news; announcements.

6.15 p.m.—From The Paris Cafe;
Dinner music.

6.30 p.m.—The children's session: Stories by "The Sandman."

7 p.m.—Special news service; market reports; stock reports.

7.30 p.m.—Weather news; announcements.

7.43 p.m.—Standard time signal.

7.45 p.m.—Lecturette:

"A Talk on Photography" by Mr. F. L. South (Manager Kodak Ltd.).

NIGHT SESSION.

8 p.m.—From the School of Arts:

A short recital by the Brisbane Apollo Club, including:—Topical Chorus.

"Freely Blow" (T. Cooke).

"Eventide" (F. H. Shephard).

"Twilight" (Dudley Buck).

MR. ERICH JOHN'S PARTY.

8.20 p.m.—From the Studio:

A programme arranged by Mr. Erich John: Grand Opera—

Instrumental:

"March of the Dwarfs" (from "Lyric Suite"—Frieg).

String Trio.

"The Harvest Home" (from "Marriage of Figaro"—Mozart).

Double Quartette.

Duet:

"Give Me Your Hand, My Fairest" (from "Don Juan"—Mozart).

Miss Audrey Bell, contralto, and Mr. Jack Lord, tenor.

Soprano Solo:

"One Fine Day" (from "Madam Butterfly"—Puccini).

Miss Mabel Malouf.

Instrumental:

"Scarf Dance" from the Symphonic Ballet, "Callirhoe"—Chaminade).

String Trio.

Folksongs of Denmark:
 "Denmark."
 Double Quartette.

Duet:
 "Fly Birdie, Fly."
 Miss Mabel Malouf, soprano, and Mr.
 Geo. Williamson, tenor.

Baritone Solo:
 "The Knight's Courtship."
 Mr. Albert Falk.

"Farewell, Little Greta."
 Double Quartette.

Piano Solos:
 (a) "Barron Waters" (Julia Nixon).
 (b) "Butterfly Dance" (Julia Nixon).
 Mr. Rees Morgan.

Sacred—
 Tenor Solo:
 "Ave Maria" (Cooper).
 Mr. Geo. Williamson.

Trio:
 "Lift Thine Eyes," from the oratorio
 "Elijah" (Mendelssohn).
 Misses Mabel Malouf, Mildred Bell and
 Audrey Bell.

"Benedictus" (Erich John).
 Double Quartette.

Instrumental:
 "War March of the Priests" (from the
 oratorio "Athalia" (Mendelssohn).
 String Trio.

9 p.m.—Metropolitan weather forecast.

9.1 p.m.—A thought for To-night:
 "The Big Things."
 Will H. Lister.

9.4 p.m.—Classical:
 "Venetian Boatmen's Evening Song"
 (Bach).
 Double Quartette.

Bass Solo:
 "On Wings of Song" (Mendelssohn).
 Mr. Tom Ryan.

Duet:
 "On the Blue Wave" (Panoffka).
 Miss Mildred Bell and Audrey Bell
 contraltos.

"The Victor's Return" (Mendelssohn).
 Double Quartette.

Piano Solo:
 "First Movement" of "Sonata, Opus 10,
 No. 3" (Beethoven).
 Mr. Rees Morgan.

Characteristic:
 "Seafarers' Songs."

Duet:
 "The Larboard Watch" (Williams).
 Messrs George Williamson (tenor), and
 Albert Falk, baritone.

Solo:
 "A Dance for Jack" (Monckton).
 Miss Mildred Bell, contralto, and Male
 Quartette.

Solo:
 "When Eight Bells Toll" (A. Brand-Julia
 Nixon).
 Mr. Albert Falk, baritone.

"The Sailor's Life" (Wilson).
 Male Quartette.

Instrumental:
 "Pastoral Dance" (from "Nell Gwyn"—
 Ed. German).
 String Trio.

Light Opera—
 Solo:
 "A Quaker Girl" (from "The Quaker Girl"
 —Monckton).
 Miss Mildred Bell, contralto.

"In England, Merrie England" (from
 "Merrie England"—Ed. German).
 Double Quartette.

Instrumental:
 "Merry Maker's Dance" (from "Nell
 Gwyn"—Ed. German).
 String Trio.

10.15 p.m.—"Daily Mail" news.
 Weather news. Close down.

5CL, ADELAIDE.

TUESDAY, 1st MAY, 1928.

MIDDAY SESSION,
12 noon to 2 p.m.

AFTERNOON SESSION.

3 p.m.—G.P.O. Chimes, and Warrambeel rac-
ing results.3.1 p.m.—Musical numbers on the studio "Rec-
reator."

Drive your set to greater distance—
 greater volume—with Burgess Radio
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- 3.45 p.m.—Talk by Rev. G. E. Hale, B.A.
"The Lamplighters."
4 p.m.—G.P.O. Chimes.
4.1 p.m.—Musical numbers on the Studio "Recreator."
4.57 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
5 p.m.—G.P.O. Chimes and close down.

EVENING SESSION.

- 6 p.m.—G.P.O. Chimes.
6.1 p.m.—Children's entertainment.
6.30 p.m.—Dinner Music on the Studio "Recreator."
7 p.m.—General Market reports by A. W. Sandford and Co., A. E. Hall and Co., Dalgety and Co., S.A. Farmers Co-operative Union, Taylor Bros., Retail Grocer's Association, Interstate Fruit and Produce Market Co. Ltd.
7.10 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
7.15 p.m.—Extracts from News Bulletin.
7.30 p.m.—Gardening talk by Lasscocks Nurseries, Lockleys.
7.42 p.m.—Interstate and Local sporting results and "Windbag's" Sporting Service.
8 p.m.—G.P.O. Chimes.
8.1 p.m.—Shakespearian Night:
Direction, E. J. W. Gunner.
9 p.m.—G.P.O. Chimes and interval for meteorological information, Dalgety's wheat report and International news.
9.15 p.m.—Shakespearian programme continued
10.1 p.m.—"Advertiser" news service and "Windbag's" sporting service.
10.16 p.m.—Relayed from Glenelg, The Maison Dance Band.
10.55 p.m.—Meteorological information, station announcements, and to-morrow's programme.
11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH.

TUESDAY, 1st MAY, 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 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.—Vocal and instrumental numbers from the Studio.
4.30 p.m.—Close down.
6.45 p.m.—Tune in.

EVENING SESSION.

- 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, Bertie, and Duffy.
7.20 p.m.—Stocks, Markets, News.
7.45 p.m.—Talk by Dr. J. S. Battye, B.A., LL.B.
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.—From the Studio.
Musical programme, including vocal and instrumental artists.
10 p.m.—Late news items by courtesy of "The Daily News" Newspaper Co.
Ships within range announcements.
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.—

7ZL, HOBART

TUESDAY, 1st MAY, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

AFTERNOON SESSION.

- 8 p.m.—G.P.O. Clock chimes the hour.
8.1 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:
Overture, "Magic Flute" (Mozart).
"Two Old French Dances" (Rosse).
Selection, "Lilac Time" (Schubert).
Valse, "Gipsy Love" (Lehar).
Violin Solo. Selected. Mr. E. J. McCann.
Pianoforte Solo. Selected. Mr. A. Roberts.
"Moonbeams" (Drigo).
Clarinet Solo. Selected. Mr. A. Young.
4.15 p.m.—Educational Talk.
4.30 p.m.—Close down.

EARLY EVENING SESSION.

- 6.30 p.m.—Cousin Mac's half hour.
7 p.m.—Uncle Hector's corner.

NIGHT SESSION.

- 7.30 p.m.—Musical selection.
7.35 p.m.—Literary Lapses and Library Lists by Mr. W. E. Fuller.
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.
8.1 p.m.—Broadcast by Direct wire from Prince of Wales Theatre, Hobart.
Selections by Prince of Wales Orchestra.
Conductor, Mr. E. J. McCann.
9.50 p.m.—British Official Wireless news.
Mercury special Interstate news service.
Tasmanian District Weather reports.
9 p.m. Weather forecasts.
Weather reports from Australian Capital cities.
Station announcements.
Wednesday's programme.
10 p.m.—Close down.

Wednes., May 2
2FC, SYDNEY

EARLY MORNING SESSION.

7 a.m. to 8 a.m.

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.
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.—Doris Orr, soprano.
1.34 p.m.—Studio music.
1.55 p.m.—Doris Orr, soprano.
2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

- 3 p.m.—"Big Ben" and announcements.
3.5 p.m.—Margaret Grimshaw, mezzo.
3.9 p.m.—Pianoforte solo.
Pupil of St. Quintin Downer.
3.18 p.m.—Phillipa Alston, contralto.
3.22 p.m.—Popular records.
3.30 p.m.—Daisy Tollis, soprano.
3.34 p.m.—A Reading.
3.45 p.m.—Ruby Lesley, soprano.
3.50 p.m.—Studio music.
4 p.m.—"Big Ben."
Margaret Grimshaw, mezzo.

- 4.5 p.m.—Pianoforte solos:
Pupil of St. Quintin Downer.
4.15 p.m.—Phillipa Alston, contralto.
4.20 p.m.—Studio music.
4.30 p.m.—Daisy Tollis, soprano.
4.35 p.m.—A Talk.
4.45 p.m.—Stock Exchange, third call.
4.47 p.m.—Ruby Lesley, soprano.
4.50 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.
6.35 p.m.—Dalgety's market reports (wool, wheat, stock).
6.43 p.m.—Fruit and vegetable markets.
6.47 p.m.—Weather and shipping.
6.50 p.m.—Late sporting news by the 2FC Racing Commissioner.
7.5 p.m.—Dinner music.
7.30 p.m.—Late "Evening News" news service.

NIGHT SESSION.

A NIGHT OF DRAMA AND HUMOUR.

- 7.40 p.m.—Programme announcements.
7.45 p.m.—F. G. Jacobs, on behalf of the Workers' Educational Association, will give a talk on Botany.
8 p.m.—"Big Ben."
Sydney Calland, baritone.
8.8 p.m.—Lionel Lawson, violinist.
8.16 p.m.—Keith Desmond: Excerpts from the Third Act from "The Christian" (Hall Caine).
8.24 p.m.—Sadie Grainger Broad, soprano.
8.32 p.m.—Joe Cahill, entertainer.
8.40 p.m.—Lionel Lawson, violinist.
8.48 p.m.—Keith Desmond, entertainer:
(a) "Gimme the Ground" (Dryblower).
(b) "The Little Bottom Drawer" (James Hunter).
8.56 p.m.—Sydney Calland, baritone.
9.4 p.m.—Late weather forecast.
9.5 p.m.—Elliott Napier will continue his series of talks on "The Great Barrier Reef."
9.20 p.m.—Sadie Grainger Broad, soprano.
9.28 p.m.—Joe Cahill, entertainer.
9.36 p.m.—H. W. Varna and Company will produce the play,
"Captain Applejack's Adventure,"
By arrangement with J. C. Williamson, Ltd.
The play made famous in Australia by Laurence Grossmith.
10 p.m.—"Big Ben."
Incidental Music to Part two.
10.2 p.m.—Part 2: "Captain Applejack's Adventure."
Scene: The Dream on the Pirate Ship.
10.18 p.m.—Incidental music to Part Three.
10.20 p.m.—Part Three: "Captain Applejack's Adventure."
Scene: Ambrose Home Again.
10.38 p.m.—Late weather forecast.
10.39 p.m.—Len Maurice, popular baritone.
10.45 p.m.—Dance Session, arranged by Len Maurice.
10.58 p.m.—To-morrow's programme and late news.
11 p.m.—"Big Ben."
National Anthem.
Close down.

2BL, SYDNEY.

WEDNESDAY, 2nd MAY, 1928.

EARLY MORNING SESSION.

8 a.m. to 9 a.m.

MORNING SESSION.

- 11 a.m.—G.P.O. Clock and chimes.
Talk on "Hockey," by Miss Gwen Varley.
Broadcasters Women's Sports Authority.
Welfare Talk by Dr. Harvey Sutton.

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.

12.10 p.m.—Information, mails, shipping, and port directory.
 12.13 p.m.—Boats in call by wireless.
 12.15 p.m.—Fruit market report.
 12.17 p.m.—Vegetable market report.
 12.19 p.m.—London Metal market report.
 12.21 p.m.—Dairy and Farm Produce market report.
 12.24 p.m.—Forage 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.
 2.45 p.m.—Talk on "Celtic Mythology."
 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.
 Exercises on Health, by Mr. Walter Withrow.
 4.15 p.m.—Talk on "The Women of Ancient Rome."
 4.0 p.m.—Dungowan Dance band.
 4.48 p.m.—Features of evening's programme.
 4.50 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 "Astrology," by Miss J. Charlton Smith.
 8 p.m.—G.P.O. Clock and chimes.
 An hour's programme arranged by Messrs. E. F. Wilk's and Vo., Limited.
 9 p.m.—G.P.O. Clock and chimes.
 Weather report and forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.
 9.1 p.m.—The Railway and Tramway Symphony orchestra.
 9.11 p.m.—Dorothy Manning and Harry Graham in Song and Story.
 9.21 p.m.—The Railway and Tramway symphony orchestra.
 9.31 p.m.—Sketch by Miss May Nancarrow and Mr. William Collins.
 9.41 p.m.—The Railway and Tramway symphony orchestra.
 9.51 p.m.—Dorothy Manning and Harry Graham.
 10.1 p.m.—The Railway and Tramway symphony orchestra.
 10.11 p.m.—Broadcasters all sports expert will talk on General Sporting.
 10.26 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

WEDNESDAY, 2nd MAY, 1928.

MORNING SESSION.

10 a.m.—Music.
 10.10 a.m.—Happiness Talk by Alfred E. Bennett.

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The "TEFAG"

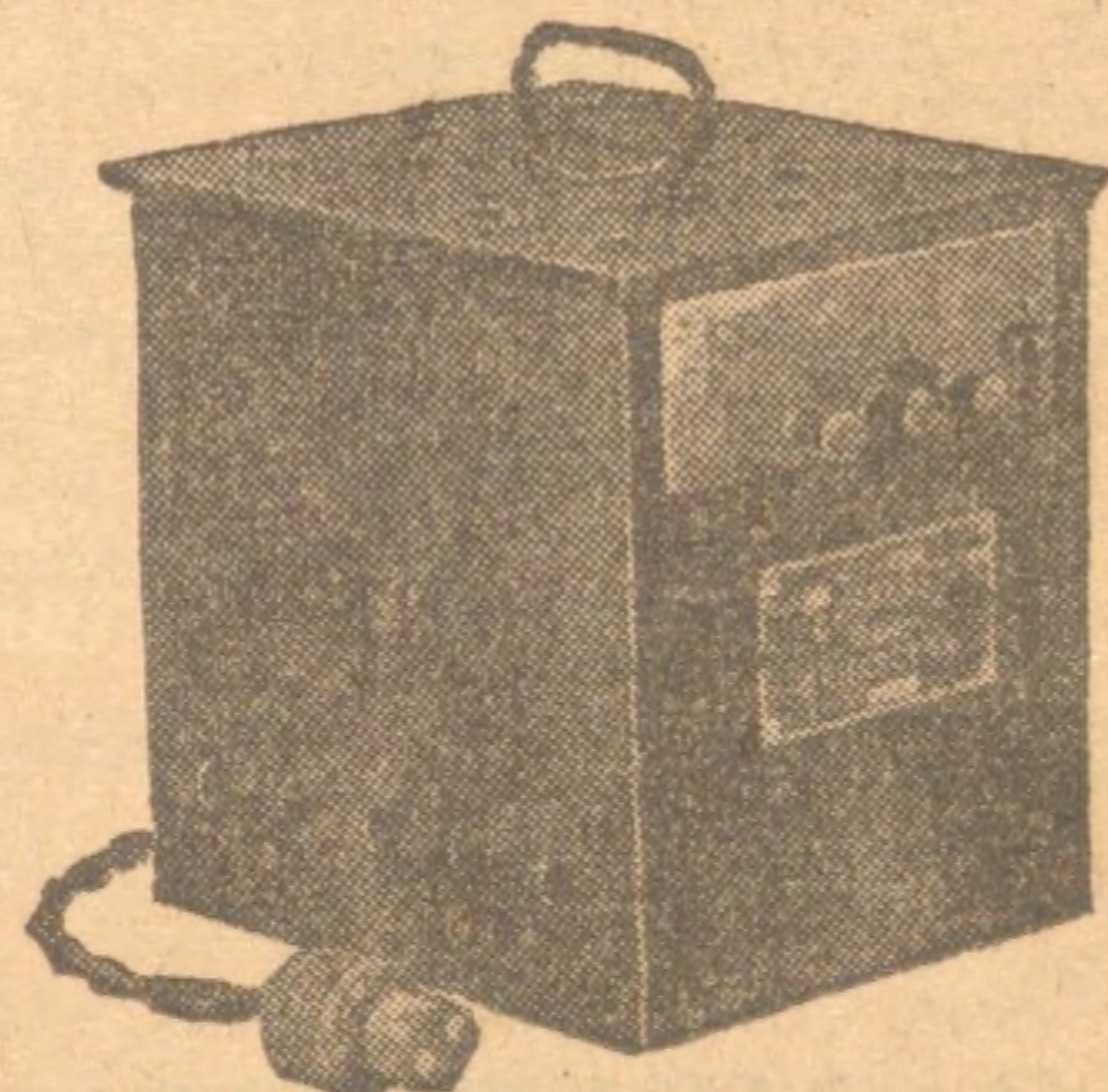
What all Wireless enthusiasts have been waiting for—a perfect Loud Speaker. Farmer's now introduce the "TEFAG," a most efficient, improved model of excellent workmanship.

The wonderful tonal qualities of the "TEFAG" are not to be compared with any other amplifying instrument. The new adjustable diaphragm is a special feature of the "TEFAG," being accurately adjusted and sensitive to the slightest note. Price, complete with the cord £2/15/-

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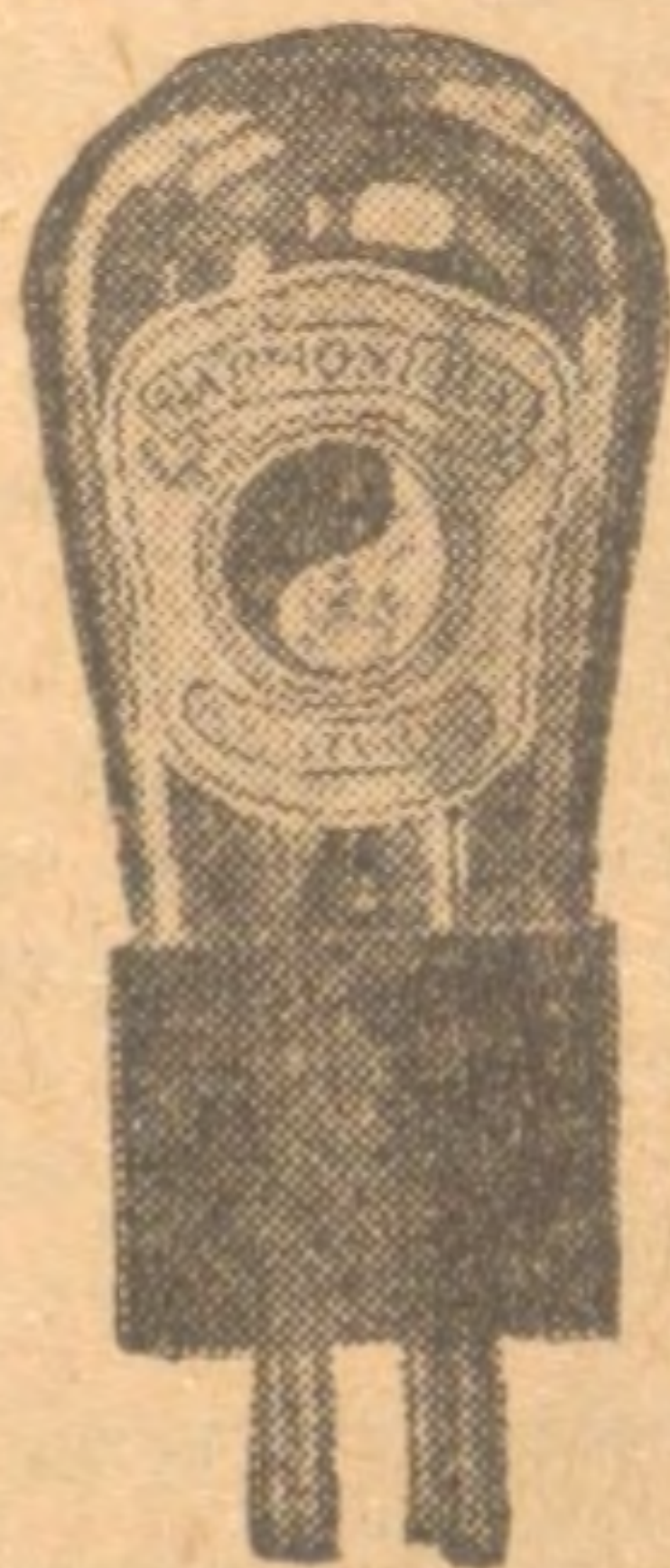
For those amateurs who are desirous of re-charging their own Batteries, the "CANBERRA" Recharger is invaluable.

The "CANBERRA" will recharge both "A" and "B" types of accumulators; the cost of using practically nil. Price, £6/10/-



Te-ka-de Valves, two-element tube; suitable for all kinds of circuits. Price, 26/-, including Valve Socket.

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Specially featured by Farmer's as the most durable and economical valve at such a moderate price 5/-

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To Country Visitors:
When in Sydney, call and see Farmer's Wireless expert, who will be glad to advise you on your Wireless Set. If it is repairs you need, he may be able to suggest some efficient accessory. Farmer's will also be pleased to demonstrate any set to you.

FARMER'S, SYDNEY

Wireless Department, Ground Floor, George Street, New Building.

10.20 a.m.—Music.
10.30 a.m.—Women's Session by Miss Helen J. Beegling.
11 a.m.—Close down.

AFTERNOON SESSION.

2 p.m.—Music.
2.20 p.m.—Address.
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 Co., Ltd.
7.15 p.m.—Music.
7.30 p.m.—Recital by Mr. Heath Burdock.
8 p.m.—Opening Chorus.
8.2 p.m.—Humorous items by Mr. Tommy Clyde.
8.9 p.m.—Violin Solos by Miss Phyllis Campbell.
8.15 p.m.—Address by Mr. A. E. Bennett.
8.30 p.m.—Straube Piano Programme.
9 p.m.—Talk by Dr. du Maurier.
9.15 p.m.—Humorous items by Mr. Tommy Clyde.
9.22 p.m.—Violin Solos by Miss Phyllis Campbell.
9.30 p.m.—Straube Piano programme.
10 p.m.—Close down.

2 UW, SYDNEY

WEDNESDAY, 2nd MAY, 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.—Miss Doris Fitzmaurice, elocutionist. Selected.
7.50 p.m.—Studio item.
7.54 p.m.—Miss G. Tyerman: Pianoforte solo. Selected.
8.1 p.m.—News, mails and shipping intelligence
8.16 p.m.—Miss Doris Fitzmaurice, elocutionist. Selected.
8.20 p.m.—Studio item.
8.24 p.m.—Miss G. Tyerman: Pianoforte solo. Selected.
8.31 p.m.—Vocal and instrumental items.
8.45 p.m.—Weather forecast.
8.48 p.m.—Request numbers.
9 p.m.—Dance music supplied by courtesy of Morley Johnsons Ltd.
9.58 p.m.—Announcements.
10 p.m.—Close down.

3LO, MELBOURNE.

WEDNESDAY, 2nd MAY, 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. Mails.
7.40 a.m.—NEWS.
8 a.m.—Melbourne Observatory time signal.
8.1 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 a.m.—3LO's CULINARY COUNSELS or How to Create Creature Comforts with a Minimum of Cash.

SCOTCH COLLOPS.

1lb. beef steak.
1 dessertspoon flour.
1 pint water or stock.
1 large onion, pepper, salt.
1 tablespoonful fat.
METHOD (1) Cut steak into neat pieces about 3 inches square. (2) Peel and cut up onion. (3) Melt fat in a saucepan. (4) When quite hot, fry meat brown, turning it once. (5) Lift the meat out.

(6) Add onion, and brown it. (7) Add flour, pepper and salt. (8) Stir water in gradually. (9) When boiling return meat to saucepan. (10) Put lid on, and simmer for 1½ hours. (11) When tender, serve neatly on hot dish. (12) Garnish with chopped parsley. N.B.—(8) Walnuts substituted for the onion make a nice change.

THE GLORY OF THE GARDEN—

"Gay cottage gardens, glad,
Comely, unkept and mad,
Jumbled, jolly and quaint;
Nooks where some old man dozes;
Currants and beans and roses.
Mingling without restraint;
A wicket that long lacks paint;
Here grows Lavender, here breathes Eng-
land.
Sprawling for Elbow room,
Spearing straight spikes of bloom,
Clean, wayward, and tough;
Sweet and tall and slender,
True, enduring and tender,
Buoyant and bold and bluff,
Simplest, sanest of stuff—
Thus grows Lavender, thence breathes Eng-
land."

—From London "Punch."

11.5 a.m.—S. SHELDON: Household Laundry Work.

New systems in vogue in other countries, and a detailed description of them.

11.20 a.m.—Musical interlude.

11.25 a.m.—MRS. M. CALLAWAY MAHOOD: "Floor treatment—Part 2."

11.40 a.m.—Musical interlude.

11.45 a.m.—MRS. CLARENCE WEBER—Be-
come a Physical Culture Family.

"Physical Culture is a scientific, system-
atised way of living, so as to get the best
out of life. The glow of health, and the
vim and energy that it produces—makes it
possible to view life from a different stand-
point. Not only your health and happiness,
but your personality, is improved and de-
veloped, making your influence stronger, and
your success in life assured."

MIDDAY SESSION.

12 noon.—Melbourne Observatory time signal.

12.1 p.m.—Metal prices, received from the Aus-
tralian 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:

"String Quartet" (Haydn).

12.30 p.m.—ERNEST SAGE, baritone:

"On Wings of Song" (Mendelssohn).

"The Two Grenadiers" (Schumann).

12.37 p.m.—Stock Exchange information.

12.40 p.m.—HELGA BRENNICKE, cello:

"Star of Eve" (Wagner).

12.47 p.m.—THE GYPSY PLAYERS and

AGNES FORTUNE, pianist:

"Quintet" (Schumann).

1 p.m.—Melbourne Observatory time signal.

1.1 p.m.—ISOBEL BIDDELL, contralto:

"Autumn Storms."

"Fairy Pipers."

1.3 p.m.—Meteorological information. Weather
forecast and rainfall for Victoria, Tasmania,
South Australia and New South Wales.
Ocean forecasts. River reports.

1.15 p.m.—Description of Wellington Stakes,
one mile, from WARRNAMBOOL RACES,
by ERIC WELCH.

THE FOUNDATIONS OF MUSIC.

1.20 p.m.—BESSIE GAUNSON, violin:

(a) "Deutscher Tanz" (Mozart).

(b) Minuet in E Flat Major (Mozart).

VARIETY.

1.30 p.m.—ERNEST SAGE, baritone:

"God Touched the Rose" (Mary E. Brown).

"Inter Nos."

1.37 p.m.—THE GYPSY PLAYERS:

"Variations—String Quartet" (Beethoven).

1.44 p.m.—ISOBEL BIDDELL, contralto:

"In Autumn."

"The Sandman."

1.51 p.m.—Close down.

2 p.m.—Description of Trial Handicap, six
furlongs, WARRNAMBOOL RACES, by
ERIC WELCH.

2.5 p.m.—Close down.

AFTERNOON SESSION.

2.15 p.m.—THE STATION ORCHESTRA:

Selection, "Maid of the Mountains."

2.27 p.m.—MINA HESELEVA, soprano:

Aria, "Huguenots" (Meyerbeer).

2.34 p.m.—THE STATION ORCHESTRA:

"Memories" (Alstyne).

Selected.

2.40 p.m.—Description of Pony Race, 5 fur-
longs, WARRNAMBOOL RACES, by ERIC
WELCH.

2.45 p.m.—DOLLY BURDETT, contralto:

Selected.

2.52 p.m.—THE STATION ORCHESTRA:

Selection, "The Student Prince" (Romberg).

PIANO RECITAL.

3.4 p.m.—HENRI PENN, piano:

"Prelude and Fuge" (Mendelssohn).

"Wild Rose" (McDowell).

"Shadow Dance" (McDowell).

"Witches' Dance" (McDowell).

3.17 p.m.—THE STATION ORCHESTRA:

"Love's Sweet Song" (Bingham).

Characteristic, "The Boy and the Bird"

(Hagan).

3.25 p.m.—Description of Amateur Turf Club
Plate, 1 mile, WARRNAMBOOL RACES, by
ERIC WELCH.

3.30 p.m.—MINA HESELEVA, soprano:

Two Ballads by Glinka.

3.37 p.m.—PERCY CODE, trumpet:

"Little Grey Home in the West" (Lohr).

3.41 p.m.—DOLLY BURDETT, contralto:

Selected.

HALF AN HOUR'S FUN.

3.48 p.m.—RUPERT HAZELL AND ELSIE
DAY:

"Harmonylarity."

4.3 p.m.—OLIVER PEACOCK, baritone:

"Thy Blue Eyes" (Lassen).

"Bianca."

4.10 p.m.—Description of Hurdle Race, 2 miles
58 yards, WARRNAMBOOL RACES, by
ERIC WELCH.

4.15 p.m.—THE KNOCKABOUTSH:

"More Hilarity."

4.20 p.m.—OLIVER PEACOCK, baritone:

"Out of the Night" (Ellis).

"A Love Song" (Landon Ronald).

AND NOW LET'S BE SERIOUS.

4.27 p.m.—THE GYPSY PLAYERS:

"Berenice Minuet" (Handel).

Selected.

4.40 p.m.—Special weather report from Ade-
laide. Special weather forecast for Mildura
districts.

4.41 p.m.—OLIVER PEACOCK, baritone:

"O, Heart of Mine" (Leighton).

"Song Is So Old" (Terry).

4.45 p.m.—THE GYPSY PLAYERS:

"Romance" (Tchaikowski).

"Minuet" (Boccherini).

4.55 p.m.—Description of Handicap Flying
Stakes, 6 furlongs, WARRNAMBOOL
RACES, by ERIC WELCH.

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 greet-
ings by "MARY MARY."

6.20 p.m.—"BOBBY BLUEGUM":

"Laugh and the world laughs with you."

6.40 p.m.—"MARY MARY":

A French Fairy Tale—"Diamonds and
Toads."

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. Bor-
rett, Ltd. Rabbit prices.

7.19 p.m.—River reports.

7.21 p.m.—Market reports by the Victorian
Producers' Co-operative, Ltd. Poultry, grain,
hay, straw, jute, dairy produce, potatoes

and onions. Market reports of fruit by the Victorian Fruiterers' Association, retail prices. Wholesale Fruit Merchants' Association, citrus fruit.

NIGHT SESSION.

7.30 p.m.—Under the auspices of the Department of Agriculture, R. CROWE, Exports Superintendent, will speak on: "Marketing Methods."

7.45 p.m.—P. W. PEARCE, Physical Cluture Expert:

"Why we feel tired."

Now and then we meet or hear about the apparently tireless person, like Hinkler. What is fatigue? Where is it? How can it be avoided? Why are there such differences between people in respect of their capacity to resist fatigue? Energy is amongst our most precious possessions. It very largely determines what becomes of us. Mr. Pearce has much to say about this subject that must be of interest to all.

8 p.m.—CAPTAIN C. H. PETERS:

"Books, wise and otherwise."

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

PIANO RECITAL.

8.16 p.m.—HENRI PENN, piano:

"Consolation" (Liszt).

"Tarantelle" (Liszt).

"Liebestraume" (Liszt).

8.36 p.m.—GIRL GUIDE talk by the Head of Lones.

FOLK LORE.

8.46 p.m.—THE STATION ORCHESTRA:

Suite, "Merry England"

8.53 p.m.—ELLA RIDDELL, contralto:

"O, Whistle and I'll come tae ye, my Lad" (Burns).

"The Bonny Wells O, Weary" (Grieve).

9 p.m.—THE STATION ORCHESTRA:

"Scottish Reminiscences."

9.5 p.m.—WILLIAM TAINSHI, some stories in Prose and Verse.

1. "The Fairies on Caldon Low" (English).

2. "The Lost Licht" (Scottish).

9.15 p.m.—ELLA RIDDELL, contralto:

"Where the Hielen Meets the Low" (Stroud)

"We'd Better Bide a Wee" (Claribel).

9.22 p.m.—WILLIAM TAINSH, more folk lore

"Foxy John" (Irish).

9.32 p.m.—Announcements.

AND NOW FOR A LITTLE HUMOR.

9.34 p.m.—RUPERT HAZELL and ELSIE DAY:

"Harmonylarity."

9.47 p.m.—THE STATION ORCHESTRA:

Characteristic, "The Parade of the Tin Soldiers" (Jassel).

Piece, "Andantino Idillico" (Drago).

9.56 p.m.—GORDON JAMES, baritone:

"Sea Fever" (John Ireland).

"The Lane to Anywhere" (Edward Green).

10.3 p.m.—THE STATION ORCHESTRA:

Selection, "Dorothy" (Cellier).

10.14 p.m.—MINA HESELEVA, soprano:

"Il Bacio" (Gounod).

"Parla-Valse" (Arditi).

10.21 p.m.—THE STATION ORCHESTRA:

March and Procession of Bacchus, from the Ballet "Sylvia" (Leo Delibes).

Characteristic Novelty, "The Teddy Bears' Picnic" (Bratton).

NEWS SESSION.

10.30 p.m.—"Argus" news service. Meteorological information. British official wireless news from Rugby.

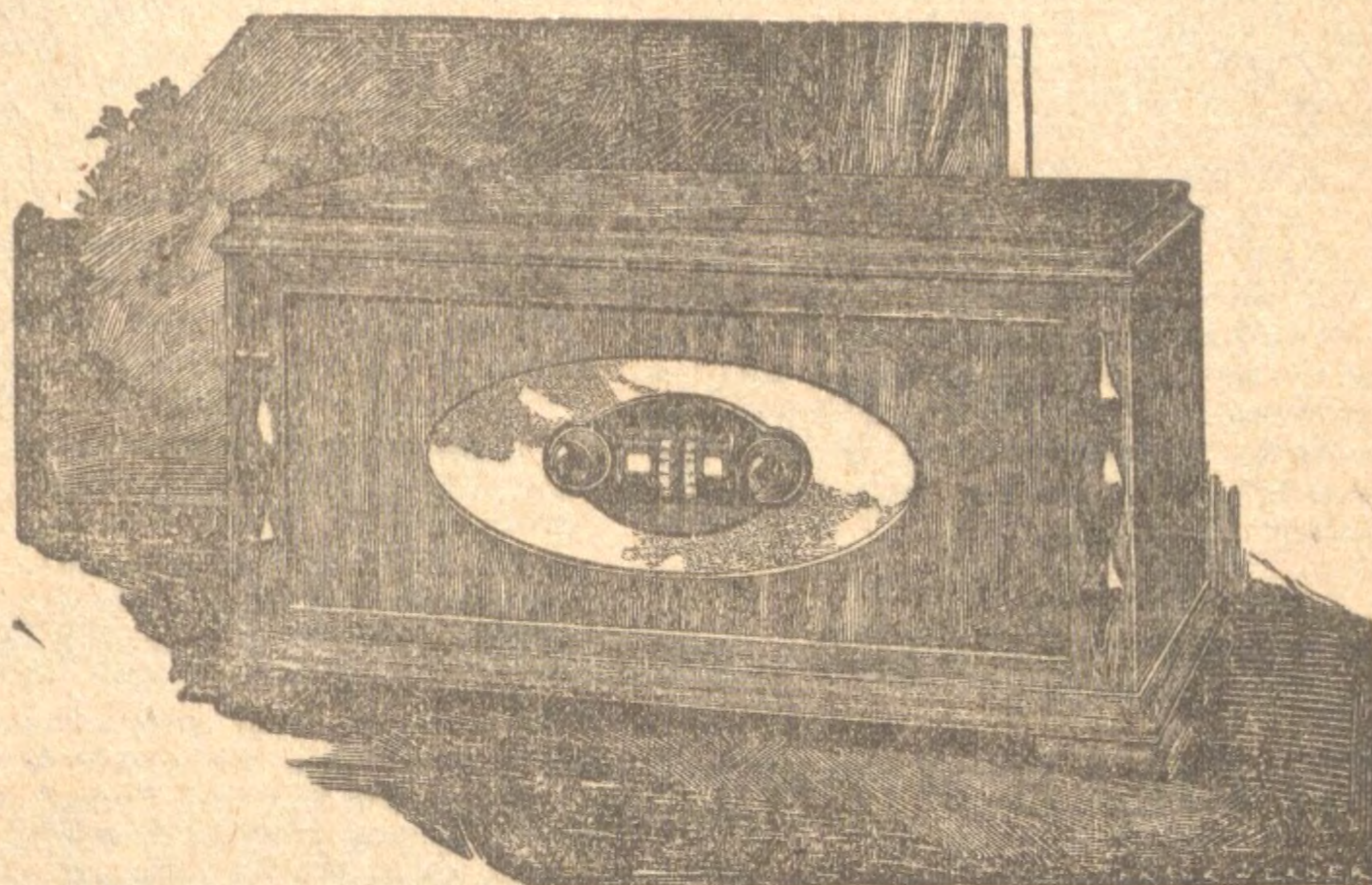
THE R.A.C.V. SAFETY MESSAGE FOR TODAY:

"The Safety Committee works for your protection. Will you help by avoiding reckless acts?"

THE OLYMPIC GAMES:

"Style, speed and stamina are the three qualities which earned George Hyde the title of Australia's little Nurmi. Subscribe to the Lord Mayor's Olympic Fund and give George an opportunity of displaying Style, Speed, and Stamina against the representatives of all nations. 3LO, Melbourne, will be pleased to receive donations towards the fund.

A LITTLE MORE MELODY.



"D.J. STANDARD 5"

Price £35 Complete

The tendency in radio to-day is to simplify the operation of a receiving set by reducing its number of controls. In the "D.J. Standard 5" 1928 Model you have a one-dial control set. Easy to operate, and receives true and clear. It has been specially designed and manufactured in our own factory. We fully guarantee it. A five-valve receiver built entirely of Australian materials. Encased in highly polished cabinet. Size 24 x 14½ x 9 inches. Set Complete, £35

There is also a "D.J. Standard 4" 1928 Model Receiving Set. Another of our own productions. Guaranteed by us. Just as easy to operate, and receives true and clear. Size 24 x 14½ x 9 ins. Price Set Complete, £27/10/-

Radio Dept., Lower Ground Floor

DAVID JONES'

Castlereagh, Market & Elizabeth Streets

- 10.40 p.m.—GORDON JAMES, baritone:
 "Smuggler's Song" (Kernchan).
 "Cheerily, Yeo-ho!" (Lyal Philips).
 10.47 p.m.—THE STATION ORCHESTRA:
 "Prelude in C Minor" (Drumm).
 "Birthday Serenade" (Lincke).
 10.56 p.m.—MINA HESELEVA, soprano:
 Aria from "Russian and Ludmeeta"
 (Glinka).
 Aria from "Marguerita-Faust" (Gounod).
 11.3 p.m.—OUR GREAT THOUGHT:
 THE SHRINE OF REMEMBRANCE.
 "A hallowed place wherein we may offer
 reverence and homage to those who made the
 supremest sacrifice on the altars of Empire
 and civilisation. The Shrine will express
 our sympathy for their suffering love for
 their loyalty and honor for their heroism."
 Mrs. Elinor Glencross.
 DANCE MUSIC.
 11.4 p.m.—THE VAGABONDS.
 11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

WEDNESDAY, 2nd MAY, 1928.

MORNING NEWS SESSION.

11 to 12 noon.

MIDDAY CONCERT SESSION.

12.1 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 results of
 the Warrnambool A.T.C. Races, together
 with other information, will be broadcast
 immediately each race is run.

- 2.0 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 pre-
 sentation.
 2.30 p.m.—Melbourne Concert Orchestra:
 "Schumann Songs" (Roberts).
 2.47 p.m.—Mr. Howard Andrews, Tenor:
 "I Attempt from Loves Sickness" (Purcell).
 "A Sheepfold Song" (Landon Ronald).
 2.55 p.m.—Melbourne Concert Orchestra:
 "Rubenstein Poetry" (Urbach).
 3.13 p.m.—Mr. Herbert Pettifer, Violin:
 "Dudziarz" (Wieniawski).
 3.17 p.m.—Ayaz Dansonians.
 3.30 p.m.—Interval Announcements.
 3.35 p.m.—Talk by Dr. George Payne Phil-
 pots, President of the Food Education
 Society of Victoria and Editor of the Na-
 tional Magazine of Health.
 3.45 p.m.—Mr. Howard Andrews, Tenor:
 "Drink to Me Only" (Ar. Quilter).
 "Pale Moon" (Logan).
 3.52 p.m.—Melbourne Concert Orchestra:
 "Andante" (Goltermann).
 "Consolation" (Haydn Wood).
 4.0 p.m.—G.P.O. Clock says "Four."
 4.1 p.m.—Second Weather Forecast.
 4.3 p.m.—Miss Vida Lugg, Mezzo Soprano:
 "Whatever is Best" (Lohr).
 "The Snowdrop" (Craxton).
 4.11 p.m.—Ayaz Dansonians.
 4.27 p.m.—Mr. C. Richard Chugg, flute:
 "Chanson" (Wittaker).
 4.31 p.m.—Miss Vida Lugg, mezzo-soprano:
 "Mattinata" (Tosti).
 "Thou'rt like a lovely flower" (Schumann).
 4.39 p.m.—Melbourne Concert Orchestra:
 "Elegie" (Tchaikowsky).
 Ballet suite, "La Source" (Delibes).
 4.55 p.m.—Announcements. To-night's enter-
 tainment.
 5 p.m.—G.P.O. clock says Five.
 God Save The King.

CHILDREN'S SESSION.

6.30 p.m.—3AR's Cousin Peter.

EVENING SESSION.

CONCERT HALL AND BALLROOM.

- 7.15 p.m.—Our Boy Scouts. Commissioner
 W. D. Kennedy, Deputy Camp Chief of Vic-
 toria, will give his interesting weekly notes
 and news on the Scout Movement.
 7.35 p.m.—Sports session. "Harlequin" pre-
 sents his budget of up-to-date news and
 comments on sport of the day.
 7.50 p.m.—Macnamara's stock reports.
 8 p.m.—G.P.O. clock says Eight.
 8.1 p.m.—Melbourne Concert Orchestra:
 Overture, "Zampa" (Herold).
 "Canzona del Violino" (Schebek).
 8.15 p.m.—Miss Shell Paterson, soprano:
 "The Market" (Molly Carew).
 "If no one ever marries me" (Lehmann).
 8.22 p.m.—Ayaz Dansonians.
 8.38 p.m.—Mr. Ernie Pettifer, clarinet:
 "La Militaire" (Raymond).
 8.42 p.m.—Miss Shell Paterson, soprano:
 "Columbine," Pepper).
 "Daddy and Babsy" (Levey).
 8.50 p.m.—Interval announcements.
 9.2 p.m.—Melbourne Concert Orchestra:
 "Songs for the Old Folks" (Arr. Lake).
 9.17 p.m.—Miss Ethel Brearley, piano:
 "La Harpe" (Jungmann).
 9.21 p.m.—Mr. Arch. Clarke, comedian:
 "The two cats" (Original).
 "The laughing policeman."
 9.30 p.m.—Melbourne Concert Orchestra:
 Suite, "The Village Green" (Elsie April).
 Selection: "The Primrose" (Gershwin).
 9.50 p.m.—Interval announcements.
 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.—Ayaz Dansonians.
 10.9 p.m.—Mr. Arch. Clarke, comedian:
 "The Juvenile Tea Party."
 10.27 p.m.—Mr. Ken Code, trombone, and Mr.
 Robert Adams, cornet:
 Duet, "Battle Eve."
 10.31 p.m.—Melbourne Concert Orchestra:
 Suite, "The Fragrant Year" (Ewing).
 10.45 p.m.—Harlequin. Sports results.
 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, "The Angel of the
 Doves," by Brunton Stephens.
 11 p.m.—G.P.O. clock says Eleven.
 God Save the King.

4QG, BRISBANE

WEDNESDAY, 2nd MAY, 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.

FROM THE POSTAL INSTITUTE:

- 1.30 p.m.—Lunch hour music.
 1.58 p.m.—FROM THE OBSERVATORY:
 Standard time signal.
 2 p.m.—Close down.

AFTERNOON SESSION.

- A description of the Q.T.C. May Day
 Meeting will be relayed from the Ascot
 Racecourse.
 5 p.m.—Close down.

EARLY EVENING SESSION.

- 6 p.m.—Mail train running times; "Daily Stan-
 dard" news; announcements.
 6.10 p.m.—Lecturette:
 An astronomy talk, "The Earth" by Mr.
 A. K. Chapman.
 6.30 p.m.—The children's hour—stories by
 "Little Miss Brisbane."
 7 p.m.—Special news service; market reports;
 stock reports.
 7.30 p.m.—Weather news; announcements.
 7.43 p.m.—Standard time signal.

7.45 p.m.—Lecturette:

"Farm Valuation" by Mr. G. B. Gallway
 (Queensland Agricultural High School and
 College).

NIGHT SESSION.

A programme of dance music by Alf.
 Featherstone and his Studio Syncopators,
 relayed from Hotel Carlton. The pro-
 gramme will include:—

Fox-trots:

- (a) "By the Sapphire Sea" (Snyder).
 (b) "Egyptian Rose" (Snyder).
 (a) Spanish: "My Carmenita" (Duremo).
 (b) One-step: "Oh Pimpinella" (Werau).

Fox-trots:

- (a) "Lonely" (Yvain).
 (b) "Shake Your Feet" (Buck).

Jazz Waltz:

- "Shalimar" (Nicholls).
 (a) Rhythmic Paraphrase: "Naila" (arr.
 Lange).

- (b) Fox-trot: "Romany Love" (Zamecnik)

Fox-trots:

- (a) "In a Street of Chinese Lanterns"
 (Melcliffe).
 (b) "Safe in Your Arms, Dear" (Hamil-
 ton).

Jazz Waltz: "Once" (Sanders).

One-steps:

- (a) "Would You Cry" (Spencer).
 (b) "Love is Just a Flower" (Schonberg).

Between dances the following will be broad-
 cast from the Studio:

Soprano Solos:

- (a) "The Waking of Spring" (Del Riego).
 (b) "Hail Caledonia" (Stroud).
 Miss Jean McDougall.

A Thought for To-night:

"The Power of Thought."

Contralto Solos:

- (a) "Sing, Happy Birds" (Liddle).
 (b) "Lovely Night" (Ronald).

Miss Lorraine Lochner.

Humour by "Graham and Wattie."

10 p.m.—The "Daily Mail" news; weather
 news.

Close down.

5CL, ADELAIDE.

WEDNESDAY, 2nd MAY, 1928.

MIDDAY SESSION.

12 noon to 2 p.m.

AFTERNOON SESSION.

- 3 p.m.—G.P.O. Chimes and Balaklava racing
 results.
 3.1p m.—Musical numbers on the studio
 "Recreator."
 3.25 p.m.—Menu talk by "Homelover."
 3.45 p.m.—Fashion talk by Messrs. J. Craven
 and Co.
 4 p.m.—G.P.O. Chimes.
 4.1 p.m.—Musical numbers on the Studio "Rec-
 reator."
 4.57 p.m.—S. C. Ward and Co.'s Stock Ex-
 change Intelligence.
 5 p.m.—G.P.O. Chimes and close down.

EVENING SESSION.

- 6 p.m.—G.P.O. Chimes.
 6.1 p.m.—Children's entertainment.
 6.30 p.m.—Dinner music on the studio "Rec-
 reator."
 7 p.m.—G.P.O. Chimes.
 7.1 p.m.—General Market reports by A. W.
 Sandford and Co., A. E. Hall and Co., Dal-
 gety and Co., S. A. Farmers Co-operative
 Union, Taylor Bros., Retail Grocers Asso-
 ciation, Interstate Fruit and Produce Mar-
 ket, Co. Ltd.
 7.10 p.m.—S. C. Ward and Co.'s Stock Ex-
 change Intelligence.
 7.15 p.m.—Extracts from "New Bulletin."
 7.30 p.m.—Boy Scouts Corner.
 7.45 p.m.—Entertainment by the "Bird Lady"
 for the 5CL Bluebird Girls Club.
 8 p.m.—G.P.O. Chimes.
 8.1 p.m.—Richmond Male Voice Choir.
 8.10 p.m.—Grand Organ recital by Miss Coud-
 rey.
 8.40 p.m.—Grace Cussion, soprano.
 8.47 p.m.—Holden's Silver Band.

9 p.m.—G.P.O. Chimes, meteorological information, Dalgety's wheat report, International News.
9.15 p.m.—Holden's Silver Band.
9.26 p.m.—Grace Cussion, soprano.
9.30 p.m.—Holden's Silver Band.
10.1 p.m.—"Advertiser" News service.
10.8 p.m.—Interstate and local sporting results.
10.16 p.m.—Relayed from Glenelg, The Maison Dance Band.
10.55 p.m.—Meteorological information, station announcements, to-morrow's programme.
11 p.m.—G.P.O. Chimes and National Anthem.

6WF, PERTH.

WEDNESDAY, 2nd MAY, 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, Bertie, 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, including vocal and instrumental artists.
10 p.m.—Late News 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.—

7ZL, HOBART

WEDNESDAY, 2nd MAY, 1928.

MORNING SESSION.
11 a.m. to 12 noon.

AFTERNOON 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.
3.15 p.m.—Musical selections and readings from the Illustrated Tasmanian Mail.
4.30 p.m.—Close down.

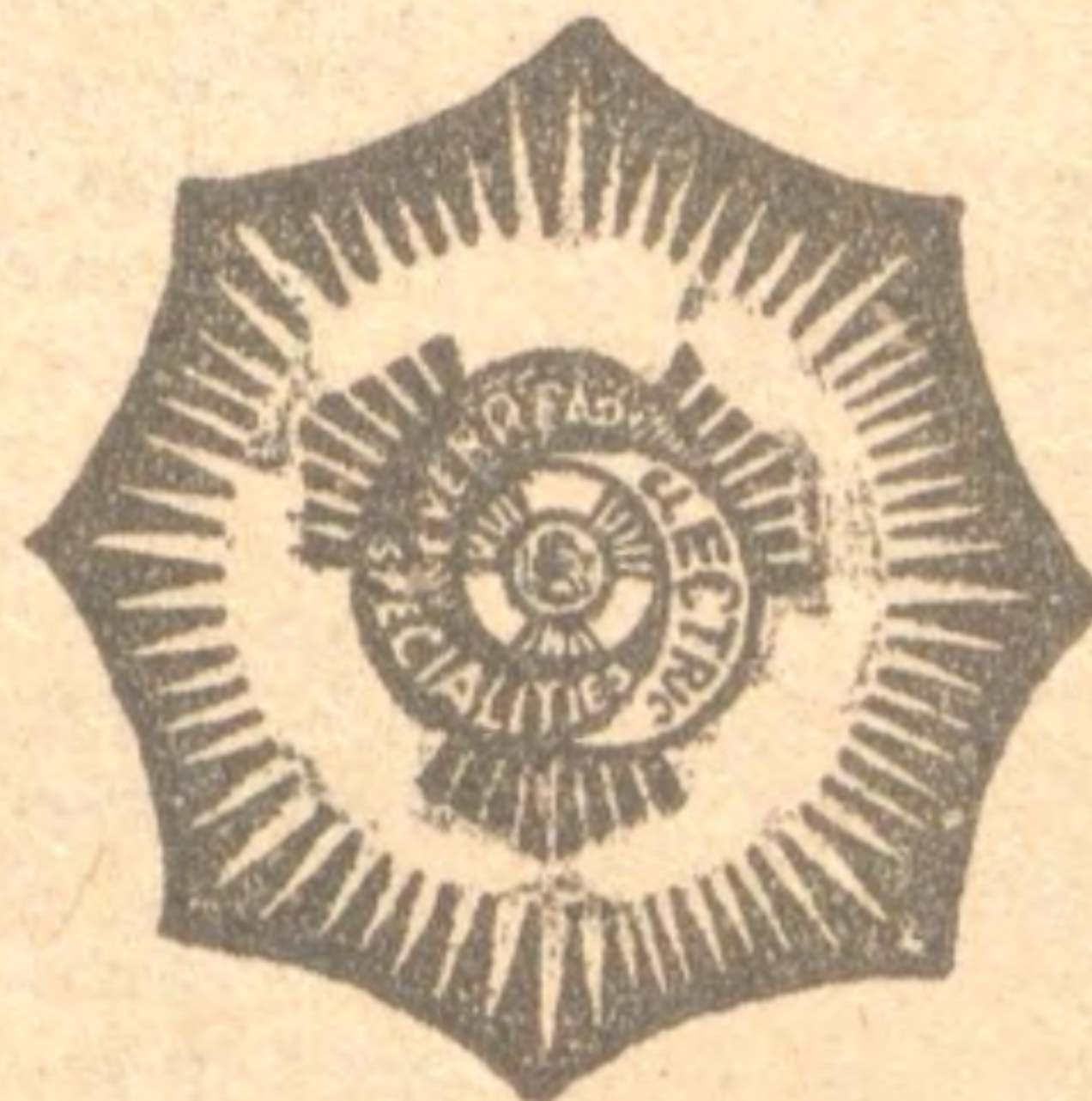
EARLY EVENING SESSION.

6.30 p.m.—Uncle Hectors half hour.
7 p.m.—Birthday Greetings and story from Illustrated Tasmanian Mail.

NIGHT SESSION.

7.30 p.m.—Weekly Scouting Corner.
7.35 p.m.—Mercury special Tasmanian news service.

Look for the name
EVER-READY



and this
TRADE-MARK

A Message — about Good Radio Reception

Years ago thousands of wireless enthusiasts delved into the question as to which of the many "B" Batteries then on the market offered the most in reliability, long life and true value-for-money power.

A consideration of price, quality of materials, craftsmanship in the making, and the time the battery was in transit from the manufacturer to the user invariably led to "Ever-Ready" Radio Batteries being selected to help them gain better reception.

If you are an "Ever-Ready" user we congratulate you on your choice, for our faith in their worth is due to an honesty of purpose in manufacture to which we have held unvaryingly since the first "Ever-Ready" was built.

Ever-Ready "B" Batteries are made in a complete range of types to suit all requirements, and are obtainable from all good Radio Dealers.

EVER-READY BIAS OR "C" BATTERIES

Greatly improved reception is obtained both as regards volume and tonal qualities, when an EVER-READY No. 126 is used, and, moreover, the life of "B" Batteries is considerably prolonged thereby, as considerable reduction is effected in the current taken from the "B" Batteries, when valves are correctly "biased" according to their maker's instructions.

Price 2/9

THE EVER-READY CO.

163 PITT STREET

:::

SYDNEY

TYPE W.P.
63 VOLT
18/-



Our special Sydney Fruit Market report.
 Railway auction produce sales.
 Weather forecasts.
 Hobart Stock Exchange quotations.
 8 p.m.—G.P.O. Clock chimes the hour.
 8.1 p.m.—Concert from the Studio.
 Miss Ruby Wallace, soprano.
 Miss Doris Mannering, soprano.
 Mr. Vincent Webb, comedian.
 Miss Enid Knight, soprano.
 Miss Jean Hibbard, soprano.
 Miss Gwen Ikin, soprano.
 Miss Lela Read, accompanist.
 Mr. George Muir, tenor.
 Mr. Hugh Taylor, elocutionist.
 Mr. Fred Heraud, baritone.
 Mr. E. Nanscawen, tenor.
 9.40 p.m.—British Official Wireless news.
 9.50 p.m.—Mercury special Interstate news service.
 Ships within wireless range.
 9 p.m. Weather forecasts.
 Tasmanian District weather reports.
 Weather reports from Australian Capital cities.
 Station announcements.
 Thursday's programme.
 10 p.m.—Close down.

Thursday, May 3 2FC, SYDNEY.

EARLY MORNING SESSION. 7 a.m. to 8 a.m.

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 Commissioner.
 10.45 a.m.—A talk by "Delisse."
 11 a.m.—"Big Ben." Studio music.
 11.5 a.m.—A.P.A. and Reuter's Cables.
 11.10 a.m.—Studio music.
 11.15 a.m.—A Reading.
 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.
 12.4 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.
 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.—Studio music.
 1.35 p.m.—Alice Pomroy, soprano.
 1.40 p.m.—Studio music.
 1.45 p.m.—Alice Pomroy, soprano.
 1.50 p.m.—Late Racing information by the 2FC Racing Commissioner.
 2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.
 3.5 p.m.—Muriel Watt, contralto.
 3.10 p.m.—Pianoforte solo:
 Pupil of Myrtle Maggy.
 3.18 p.m.—Bryson Taylor, tenor.
 3.26 p.m.—Esther Herford, soprano.
 3.30 p.m.—A Reading.
 3.45 p.m.—Pianoforte solo:
 Pupil of Myrtle Maggy.
 3.50 p.m.—Angela Clancy, soprano.
 3.55 p.m.—Studio music.
 4 p.m.—"Big Ben."
 Bryson Taylor, tenor.
 4.8 p.m.—Muriel Watt, contralto.
 4.12 p.m.—Pianoforte solos:
 Pupil of Myrtle Maggy.

4.20 p.m.—Esther Herford, soprano.
 4.25 p.m.—A short talk.
 4.35 p.m.—Popular Records.
 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, stock).
 6.43 p.m.—Fruit and vegetable markets.
 6.47 p.m.—Weather and shipping intelligence.
 6.50 p.m.—Studio Talk.
 7 p.m.—"Big Ben." Dinner music.
 7.30 p.m.—Late "Evening News" news service.

NIGHT SESSION.

AN ORCHESTRAL AND SONG NIGHT.

7.40 p.m.—Programme announcements.
 7.45 p.m.—Studio music.
 7.52 p.m.—Edgar Warwick and Eileen Dawn: Radio Sketch.
 8.5 p.m.—From the Masonic Club, Castlereagh Street, Sydney: A Farewell Concert (arranged by the Masonic Club) to Raymond Ellis prior to his return to England.
 The 2FC Studio Orchestra, conducted by Horace Keats.
 8.15 p.m.—Raymond Ellis, baritone.
 8.25 p.m.—Margaret James, soprano.
 8.34 p.m.—Ellis Price.
 8.40 p.m.—Male Voice Choir.
 Conductor, William Bourne.
 8.50 p.m.—The 2FC Studio Orchestra.
 9.6 p.m.—Peggy Dunbar, contralto.
 9.16 p.m.—From the Studio:
 During the interval at the Masonic Club:
 Edgar Warwick and Eileen Dawn: Radio Sketch.
 9.26 p.m.—From the Masonic Club: Continuation of the Farewell Concert to Raymond Ellis.
 The 2FC Studio Orchestra.
 9.37 p.m.—Margaret James, soprano.
 9.45 p.m.—Ellis Price, entertainer.
 9.52 p.m.—Male Voice Choir.
 Conductor, William Bourne.
 10 p.m.—Raymond Ellis and Margaret James: Duet.
 10.6 p.m.—The 2FC Studio Orchestra.
 10.15 p.m.—From the Ambassadors:
 The Ambassadors Dance Orchestra.
 Conductor, Al Hammet.
 10.30 p.m.—From the Studio:
 Late weather forecast.
 10.31 p.m.—The Ambassadors Dance Orchestra.
 Conductor, Al Hammet.
 10.42 p.m.—Studio music.
 10.47 p.m.—The Ambassadors Dance Orchestra.
 Conductor, Al Hammet.
 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.

2BL, SYDNEY.

THURSDAY, 3rd MAY, 1928.

EARLY MORNING SESSION.

8 a.m.—G.P.O. Clock and Chimes.
 Metropolitan weather report.
 8.1 a.m.—State weather report.
 8.2 a.m.—Tides at Fort Denison.
 8.3 a.m.—Musical programme from the Studio.
 8.15 a.m.—G.P.O. Clock and chimes.
 News from "Daily Telegraph Pictorial."
 8.25 a.m.—Musical programme from the Studio.
 8.30 p.m.—G.P.O. Clock and chimes.
 Musical programme from the Studio.
 8.35 a.m.—Information, mails, Shipping arrivals. Departures and sailings.

8.38 a.m.—News from "The Daily Telegraph Pictorial."
 9.45 a.m.—G.P.O. Clock and chimes.
 Musical programme from the Studio.
 9 a.m.—G.P.O. Clock and chimes.
 Close down.

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.
 Women's Session.
 Talk on "Architecture," by Mr. Brogan.
 12 noon.—G.P.O. Clock and chimes.
 Special ocean forecast and weather report.
 12.3 p.m.—Musical programme from the Studio.
 12.10 p.m.—Information, mails, shipping, and port directory.
 12.13 p.m.—Boats in call by wireless.
 12.15 p.m.—Fruit market report.
 12.17 p.m.—Vegetable market report.
 12.19 p.m.—London Metal market report.
 12.21 p.m.—Dairy Farm and Produce market report.
 12.24 p.m.—Forage 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."
 3.10 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 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.—Talk on "The Women of Ancient Rome."
 4.30 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 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.
 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").
 Weekly Traffic Bulletin.
 7.15 p.m.—Country news from the "Sun."
 7.30 p.m.—News from the "Sun."
 8 p.m.—G.P.O. Clock and chimes.
 Broadcasters' Topical Chorus.
 8.3 p.m.—Mr. Stanley R. Catlett, tenor.
 8.10 p.m.—The Wurlitzer organ, broadcast from the Arcadia Theatre, Chatswood.
 Organist: Mr. N. Robins.
 8.15 p.m.—Miss Doris Orr, soprano.
 8.22 p.m.—Sketch by Mr. Norman Barrington and Partner.
 8.42 p.m.—The British Music Society string quartette.
 8.52 p.m.—Miss Thelma Houston, contralto.
 8.59 p.m.—Weather report and forecast by courtesy of Mr. C. J. Mares, Government Meteorologist.
 9 p.m.—G.P.O. Clock and chimes.
 Mr. Haagen Holenbergh, pianist.
 9.10 p.m.—Mr. Stanley R. Catlett.
 9.17 p.m.—The British Music Society string quartette.

9.27 p.m.—Miss Doris Orr.
 9.34 p.m.—The British Music Society string quartette.
 9.41 p.m.—Miss Thelma Houston.
 9.48 p.m.—Mr. Haagen Holenbergh.
 9.58 p.m.—Resume of following day's programme.
 10.3 p.m.—The Wurritzer organ broadcast from the Arcadia Theatre, Chatswood.
 10.15 p.m.—The Wentworth Cafe Orchestra, under the direction of Mr. S. Simpson. During intervals between dances "Sun" news will be broadcast.
 11.30 p.m.—G.P.O. Clock and chimes. National Anthem.

2GB, SYDNEY

THURSDAY, 3rd MAY, 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 by Miss Helen J. Beegling.
 11 a.m.—Close down.

AFTERNOON SESSION.

2 p.m.—Music.
 2.20 p.m.—Address.
 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 Co., Ltd.
 7.15 p.m.—Music. Benediction Service.
 7.30 p.m.—Music. Hospital Saturday Fund.
 8 p.m.—Opening Chorus.
 8.2 p.m.—Violin Solos by Mr. Dan Scully.
 8.8 p.m.—Songs by Signor Mario Gustino.
 8.15 p.m.—Address by Miss H. J. Beegling.
 8.30 p.m.—Flute Solos by Mr. Leslie Sproule.
 8.37 p.m.—Songs by Miss Nance Marley.
 8.44 p.m.—Humorous items by Mr. Reg. Harrison.
 8.51 p.m.—Violin Solos by Mr. Dan Scully.
 9 p.m.—Talk.
 9.20 p.m.—Songs by Signor Mario Gustino.
 9.27 p.m.—Flute Solos by Mr. Leslie Sproule.
 9.34 p.m.—Humorous items by Mr. Reg. Harrison.
 9.41 p.m.—Pianoforte Solos by Miss Mollie Jones.
 9.50 p.m.—Songs by Miss Nance Marley.
 10 p.m.—Close down.

3LO, MELBOURNE.

THURSDAY, 3rd MAY, 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; Mails.
 7.40 a.m.—NEWS.
 8.0 a.m.—Melbourne Observatory Time Signal.
 8.1 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.—3LO's CULINARY COUNSELS, c.—How to Create Creature Comforts with a Minimum of Cash.

SWISS ROLL.

$\frac{1}{4}$ lb. flour, $\frac{1}{4}$ teaspoon carb. of soda, $\frac{1}{2}$ teaspoon cream of tartar, $\frac{1}{4}$ lb. sugar, 3 eggs, 2 tablespoons water, little flavoring.

METHOD: (1) Sift flour, cream of tartar, and soda. (2) Break eggs into a basin, and remove speck. (3) Beat slightly, add sugar, and beat vigorously 15 minutes. (4) Stir flour, etc., in gently, add water, and pour into a well-greased Swiss Roll tin. (5) Bake 8 or 10 minutes in moderate oven. (6) Turn on to damp cloth, roll up quickly, unroll, put on paper with sugar sifted on it, spread with warm jam, roll again, sprinkle with sugar, and stand on sieve to cool.

THE GLORY OF THE GARDEN.

"I love to turn the hard earth into soft furrows, and know that I am making good soil whereon my seeds may grow. When I feel the weight too much, I try to think of the harvest."—Kate Douglas Wiggin.

11.5 a.m.—Capt. Donald MacLean, "Famous Women of History."
 11.20 a.m.—Musical Interlude.
 11.25 a.m.—MATRON MORELAND: "Mothercraft."
 11.40 a.m.—Musical Interlude.
 11.45 a.m.—MRS. HENRIETTA C. WALKER, The Art of Being a Settler, "Books and Pictures, Rough Bindings and Mountings."

MIDDAY 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.

COMMUNITY SINGING.

12.15 p.m.—Under the auspices of the Community Singers and Concert-goers' Association, COMMUNITY SINGING, transmitted from the Assembly Hall, Collins Street, Melbourne.

FROM THE STUDIO.

1.45 p.m.—Result of Union Handicap, 6 furlongs, WARRNAMBOOL RACES. Also description of Hopkins Hurdle, $2\frac{1}{4}$ miles 58 yards, by ERIC WELCH.
 1.50 p.m.—Meteorological Information: Weather Forecast and Rainfall for Victoria, Tasmania, South Australia and New South Wales; Ocean Forecasts; River Reports; Stock Exchange Information.
 2.0 p.m.—Close Down.

AFTERNOON SESSION.

2.15 p.m.—THE STATION ORCHESTRA: "Russian Rural Scenes."
 2.25 p.m.—MINA HESELEVA, Soprano: "Two Songs by Dargomishski."
 2.32 p.m.—THE STATION ORCHESTRA: "Spanish Moon."
 2.35 p.m.—Description of Warrnambool Cup, 1 mile 3 furlongs, WARRNAMBOOL RACES, by ERIC WELCH.
 2.40 p.m.—BOBBY PEARCE, Baritone: "A Soldier's Song" (Mascheroni).
 "The Trumpeter" (Dix).
 2.47 p.m.—THE STATION ORCHESTRA: Overture to "Masanello" (Auber). Selected.

3.0 p.m.—Melbourne Observatory Time Signal. EDUCATION HOUR.

3.1 p.m.—DR. LOFTUS HILLS: "Topics of the Week."
 3.15 p.m.—PIANO RECITAL by HENRI PENN: "Puck" (Grieg).
 "Melodie" (Rachmaninoff).
 "Capriccio Brilliant" (Mendelssohn).
 3.34 p.m.—Results of Warrnambool Grand National Steeplechase, 3 miles, WARRNAMBOOL RACES, run at 3.25 p.m.
 3.35 p.m.—REV. WILLIAM BOTTOMLEY: "Idylls of the King" (Tennyson).
 "Geraint and Enid."

POPULARITIES.

3.50 p.m.—STATION ORCHESTRA: Selection, "Lady Be Good" (Gershwin).
 4.0 p.m.—MINA HESELEVA, Soprano: "A Request" (Finden).
 "Berceuse" (Gretchaninof).
 4.7 p.m.—Announcements.
 4.10 p.m.—Description of Handicap Pony Race, 5 furlongs, WARRNAMBOOL RACES, by ERIC WELCH.

A CME Socket Power eliminates "B" Batteries—gives "B" power to your set, month after month, without trouble or fuss, at a cost of a few pence per month.



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uses the latest type rectifying tube—the famous Raytheon.

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BUYING TERMS - Use while you pay.

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NEW SYSTEM TELEPHONES Pty. Ltd.
 280 Castlereagh St., Sydney
 181-3 King St., Melbourne
 Charles Street, Adelaide

4.15 p.m.—ROGER SMITH, Trombone Solo:
"The Firefly" (Moss).
4.20 p.m.—BOBBY PEARCE, Baritone:
"Roses of Picardy" (Wood).
"Just Because the Violets" (Russell).
4.27 p.m.—THE STATION ORCHESTRA:
"Pale Moon."

NEWS SERVICE.

4.30 p.m.—"Herald" News Session; Stock Exchange Information; Special Weather Report from Adelaide; Weather Forecast for Mildura District; All Racing Results to hand.

EVENSONG.

4.45 p.m.—Evensong, transmitted from ST. PAUL'S CATHEDRAL.

FROM THE STUDIO.

5.30 p.m.—Result of Handicap Flying Stakes, 5 furlongs, WARRNAMBOOL RACES, run at 4.55 p.m. Acceptances for Aspendale Park Races.
5.36 p.m.—Close Down.

EVENING SESSION.

6.0 p.m.—Answers to Letters and Birthday Greetings by "MARY GUMLEAF."
6.20 p.m.—Musical Interlude.
6.25 p.m.—"MARY GUMLEAF."
"Fairy Lines."
6.40 p.m.—Musical Interlude.
6.45 p.m.—DICKSON GREGORY:
"The Wreck of the Steamer Otago and Recovering Her Gold."

NEWS AND MARKET REPORTS.

7.0 p.m.—Official Report of Newmarket Stock Sales, by the Associated Stock and Station Agents, Bourke Street, Melbourne.
7.5 p.m.—"The Herald" News Service; Weather Synopsis; Shipping Movements.
7.12 p.m.—Stock Exchange Information.
7.17 p.m.—Fish Market Reports, by J. R. Borrett, 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 Fruiters' Association—Retail Prices; Wholesale Prices of Fruit Merchants' Association; Citrus Fruits.

NIGHT SESSION.

7.30 p.m.—H. A. BROWN will speak on:
"Gardening."
7.45 p.m.—ANNIE CROFT, now appearing in "The Girl Friend" at the Theatre Royal, will speak to you from her dressing room, by permission of J. C. Williamson, Ltd.
8.0 p.m.—ROD MCGREGOR will speak on:
"Football."
8.15 p.m.—Birthday Greetings and Programme Announcements.

DANCE PROGRAMME.

8.16 p.m.—THE VAGABONDS:
"One Summer's Night."
"Rang Tang" (Darby).
"Fifty Million Frenchmen" (Rose).
8.25 p.m.—MINA HESELEVA, Soprano:
"Matinata" (Leoncavallo).
8.28 p.m.—THE VAGABONDS:
"Just a Memory" (Henderson).
"Persian Rug" (Kahn).
"I'd Leave Ten Men" (Bloom).
8.37 p.m.—OLIVER PEACOCK, Baritone:
"Sometime, Somehow, Somewhere" (Wallace).
8.40 p.m.—THE VAGABONDS:
"Here I am" (Brown).
"Painting Pretty Pictures" (Weddell).
"The Mannikin Ball" (Dixon).
8.49 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."
8.52 p.m.—THE VAGABONDS:
"Mademoiselle Mimi" (Young).
"In a Dew, Dew, Dewy Day" (Johnson).
"Miss Anabelle Lee" (Pollack).
9.1 p.m.—ISOBEL BIDDLELL, Contralto:
"La Cloche."
9.4 p.m.—THE VAGABONDS:
"Hustling Hinkler" (Gilbert).
"Look in the Mirror" (Stept).
"Who, You, That's Who" (Yellen).
9.13 p.m.—MINA HESELEVA, Soprano:
"Pierrot."

9.16 p.m.—THE VAGABONDS:
"The Wedding Waltz" (Gilbert).
"The Sunrise" (Santly).
"Half a Moon" (Hanley).
9.25 p.m.—OLIVER PEACOCK, Baritone:
"The Lane to Ballybree" (Oley Speaks).
9.28 p.m.—THE VAGABONDS:
"Deep River Blues."
"She Belongs to Me" (Johnson).
"Just a Little Cuter" (Alexander).
9.37 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."
9.40 p.m.—THE VAGABONDS:
"Yale Blues" (Ellis).
"Baby Your Mother."
"Spanish Moon."
9.49 p.m.—ISOBEL BIDDLELL, Contralto:
"Bergere Legere."
9.52 p.m.—THE VAGABONDS:
"There Must be a Silver Lining."
"Stay Out of the South" (Dixon).
"A Shady Tree."

10.0 p.m.—NEWS SESSION.

"Argus" News Service; British Official Wireless News from Rugby; Meteorological Information; Announcements; Sporting Notes by "Olympus"; Island Shipping Movements.

R.A.C.V. SAFETY MESSAGE for to-day is:

"Always make quite sure that the road is clear behind before reversing."

THE OLYMPIC GAMES:

Tom Bolger, Champion Amateur Wrestler, has won 69 big wrestling tournaments. Give him the opportunity of winning the 70th at the Olympic Games at Amsterdam in July next. Send your donations to the Lord Mayor's Olympic Fund. 3LO Melbourne will be pleased to receive donations towards the fund.

DANCING CONTINUED.

10.15 p.m.—THE VAGABONDS:
"The Spell of the Moon" (Kahn).
"My Ohio Home" (Kahn).
"Dainty Miss"—Piano Solo.
10.24 p.m.—MINA HESELEVA, Soprano:
"Bell Song," from "Lakme" (Delibes).
10.27 p.m.—THE VAGABONDS:
"Lazy Weather" (Trent).
"Broken Hearted" (Lewis).
"From Now On" (Friend).
10.36 p.m.—OLIVER PEACOCK, Baritone:
"You and I" (May Brahe).
10.39 p.m.—THE VAGABONDS:
"Rose of the Volga" (Kahn).
"Cheerie Beerie Bee."
"I Walked Back from the Buggy Ride" (Adams).
10.48 p.m.—RUPERT HAZELL AND ELSIE DAY:
"Harmonylarity."
10.51 p.m.—THE VAGABONDS:
"Diane" (Rapee).
"The Flue Room."
"The Girl Friend."
11.0 p.m.—OUR GREAT THOUGHT:
"FORGET IT."
"Forget your Failures—Of course, you have failed. Every worth-while man fails at first. Some men failed in everything until they were 40 years old; and then made brilliant successes.
"Forget your Griefs. This is harder, but it is necessary. You must be strong. You must bring your own bereavement to the altar, and sink it in the sorrow of the race."
11.1 p.m.—THE VAGABONDS.
11.40 p.m.—GOD SAVE THE KING.

3AR, MELBOURNE

THURSDAY, 3rd MAY, 1928.

MORNING NEWS SESSION.

11 a.m. to 12 noon.

MIDDAY CONCERT SESSION.

12 noon to 1 p.m.

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

MATINEE SESSION.

ORCHESTRAL CONCERT.

2 p.m.—Ayarz Dansonians.
A half-hour Dance Session by Melbourne's favorite dance band. The latest hits, each one announced prior to its presentation.
SPORT. During the afternoon the results of the Warrnambool Races (2nd Day), together with other information, will be broadcast immediately each race is run.
2.30 p.m.—Melbourne Concert Orchestra:
"Two Entr'actes" (Thomas).
"Remembrance of Joseph Strauss" (Fetras).
2.48 p.m.—Miss Ruth Phillips, soprano:
"Nymphs and Sylphs" (Bemberg).
"Coming Home" (Willeby).
2.56 p.m.—Melbourne Concert Orchestra:
"Three Eastern Sketches" (Howgill).
"March of the Dwarfs" (Moszkowski).
3.15 p.m.—Miss Ruth Phillips, soprano:
"A May Morning" (Denza).
"I Did Not Know" (Trottere).
3.22 p.m.—Ayarz Dansonians.
3.30 p.m.—Interval announcements.
3.35 p.m.—Cookery talk by Miss G. Hughes, of the Colonial Gas Association.
3.45 p.m.—Melbourne Concert Orchestra:
"Three Little Oddities" (Zez Confrey).
"Sylvan Sketches" (Helm).
4 p.m.—G.P.O. Clock says "Four."
4.1 p.m.—Second weather forecast.
4.3 p.m.—Mr. Tom Semple, tenor:
"O Flower of all the World" (Finden).
"Beauty" (Muriel Herbert).
4.11 p.m.—Ayarz Dansonians.
4.27 p.m.—Mr. C. Richard Chugg, flute:
"By the Brook" (Wetzger).
4.31 p.m.—Mr. Tom Semple, tenor:
"Open Thy Blue Eyes" (Massenet).
"The Fisher Maiden" (Schubert).
4.39 p.m.—Melbourne Concert Orchestra:
"Der Zarewitsch" (Lehar).
4.55 p.m.—Special Racing Report. Acceptances and Barrier positions for Saturday's Races by G.F.R.
5 p.m.—G.P.O. Clock says "Five."
"God Save the King."

CHILDREN'S SESSION.

6.30 p.m.—Uncle Mac's Entertainment.

EVENING SESSION.

SONG AND DANCE.

7.15 p.m.—Stamp Session: Mr. A. G. Kelson, Vice-President of the 3AR Stamp Club.
7.25 p.m.—Early Victorian History: Mr. F. A. Currie's interesting talk this week will deal with "Early Settlers of the North-Eastern District and the Murray."
7.35 p.m.—Sport Session: "Harlequin" presents his budget of up-to-date news and comments on Sport of the Day.
7.50 p.m.—Macnamara's Stock Reports.
McPhail Anderson's Pig Marget.
8 p.m.—G.P.O. Clock says "Eight."
8.1 p.m.—Melbourne Concert Orchestra:
Overture, "Merry Wives of Windsor" (Nicolai).
"Selection of J. L. Molloy's Songs" (arr. S. Baynes).
8.15 p.m.—Miss Jean Lewis, contralto:
"An Epitaph" (Besly).
"Music when soft voices die" (Besly).
8.22 p.m.—Melbourne Concert Orchestra:
Suite, "Cobweb Castle" (Lehmann).
8.37 p.m.—Mr. Ernie Pettifer, clarinet:
"Scotch Fantasia" (Lazarus).
8.42 p.m.—Miss Jean Lewis, contralto:
"Like to the Damask Rose" (Elgar).
"To Sing Awhile" (Drummond).
8.50 p.m.—Interval announcements.
9.2 p.m.—Melbourne Concert Orchestra:
"Prayer and Temple Dance" (Ed. Grieg).
"Norwegian Scenes" (Albert Matt).
9.18 p.m.—Mr. Howard Andrews, baritone:
"The Asra" (Rubenstein).
"Why, oh, why are the roses" (Tchaikovsky).
9.26 p.m.—Mr. Herbert Petifer, violin:
(a) "Dolora" (Manen).
(b) "Ronalla" (Manen).
9.30 p.m.—"Harlequin": Sport results.
9.38 p.m.—Melbourne Concert Orchestra:
Suite, "Romantic Suite" (Cecil Stanley).

9.50 p.m.—Interval 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.—Melbourne Concert Orchestra: Suite, "Three Famous Pictures" (Haydn Wood).
 Suite, "Andalusia" (Miramontes).
 10.24 p.m.—Mr. Howard Andrews, baritone: "Evening" (Schumann).
 "For You Alone" (Geebl).
 10.31 p.m.—Melbourne Concert Orchestra: "Eugen Onegin" (Tchaikowsky).
 "Yashmak Land" (Thurban).
 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, "Altiora Peto," by George Essex Evans.
 11 p.m.—G.P.O. Clock says "Eleven."
 "God Save the King."

4QG, BRISBANE.

THURSDAY, 3rd MAY, 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 Mail Standard" news.
 1.20 p.m.—A 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; "Daily Standard" news; weather information; announcements.
 6.10 p.m.—A talk to motorists: "The Mining and Transportation of Petroleum"—by "Gargoyle."
 6.30 p.m.—Bedtime stories by "The Sandman."
 7 p.m.—Special news service; market reports; stock reports.
 7.30 p.m.—Weather news; announcements; "Daily Standard" news.
 7.43 p.m.—Standard time signal.
 7.45 p.m.—Lecturette: "The Progress of Agriculture in Queensland" by Mr. J. F. F. Reid (Editor "Queensland Agricultural Journal").

NIGHT SESSION.

PART I.—MRS. GEORGE SAMPSON'S PARTY.

A programme of classical music by Mrs. George Sampson's party:
 8 p.m.—Instrumental Trio: "Serenade" (Trouselle).
 Misses Cecile Pritchard and Otilie Cloake, and Mrs. Geo. Sampson.
 8.6 p.m.—Tenor Solo: "Eleanore" (Coleridge Talyor).
 Mr. Walter Land.
 8.9 p.m.—Cello Solo: "On Wings of Song" (Mendelssohn).
 Miss Otilie Cloake.
 8.12 p.m.—Baritone Solo: "Drake Goes West" (Sanderson).
 Mr. Seale.
 8.17 p.m.—Piano Solo: "Promenade" (from "Carnaval"—Schumann).
 Mrs. Geo. Sampson.
 8.20 p.m.—Duet: "Tenor and Baritone" (Lane Wilson).
 Messrs. Walter Land and Seale.

8.24 p.m.—Violin Solo: "Indian Lament" (Dvorak-Kreisler).
 Miss Cecile Pritchard.
 8.27 p.m.—Tenor solos:
 (a) "Nightfall at Sea" (Montague Phillips).
 (b) "The Sweetest Flower" (Robert Batten).
 Mr. Walter Land.
 8.30 p.m.—Instrumental Trio: "Drink to Me Only With Thine Eyes" (Quilter).
 Miss Cecile Pritchard, Miss Otilie Cloake and Mrs. Geo. Sampson.
 8.33 p.m.—Duet: "Two Gendarmes" (Offenbach).
 Messrs. Walter Land, tenor, and Seale, baritone.
 8.37 p.m.—Piano Solo: "Minstrels" (Debussy).
 Mrs. Geo. Sampson.
 8.40 p.m.—Baritone Solo: "King Charles" (Maude Valerie White).
 Mr. Seale.
 8.43 p.m.—Cello Solo: "Chant du Berger" (Schulhoff).
 Miss Otilie Cloake.
 8.46 p.m.—Tenor Solo: "Fair House of Joy" (Quilter).
 Mr. Walter Land.
 8.49 p.m.—Violin Solo: "Gavotte" (Popper-Auer).
 Miss Cecile Pritchard.
 8.52 p.m.—Piano Solos: "Waltz in C-Sharp Minor" (Brahms).
 "Waltz in E-Minor" (Brahms).
 Mrs. Geo. Sampson.
 8.55 p.m.—Instrumental Trio: "Marche Militaire" (Bridge).
 Miss Cecile Pritchard, Miss Otilie Cloake, and Mrs. Geo. Sampson.
PART II.—"WHITE HOUSE" ENTERTAINMENT.
 9 p.m.—Olsen and Goodchap's Concert.
FROM THE STUDIO:
 10 p.m.—"The Daily Mail" news; Weather News; Close down.

5CL, ADELAIDE

THURSDAY, 3rd MAY, 1928.

MIDDAY SESSION.

12 noon to 2 p.m.

AFTERNOON SESSION.

3 p.m.—G.P.O. Chimes and Warrnambool racing results.
 3.1 p.m.—Musical numbers on the studio "Recreator" interspersed with Warrnambool racing results.
 3.45 p.m.—"Cheer-up" talk by Rev. C. H. Nield
 4 p.m.—G.P.O. Chimes.
 4.1 p.m.—Musical numbers on the Studio "Recreator."
 4.57 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
 5 p.m.—G.P.O. Chimes and close down.

EVENING SESSION.

6 p.m.—G.P.O. Chimes.
 6.1 p.m.—Children's entertainment.
 6.30 p.m.—Dinner Music on the Studio "Recreator."
 7 p.m.—G.P.O. Chimes.
 7.1 p.m.—General Market reports by A. W. Sandford and Co., A. E. Hall and Co., Dalgety and Co., S.A. Farmers Co-operative Union, Taylor Bros., Retail Grocer's Association, Interstate Fruit and Produce Market Co. Ltd.
 7.10 p.m.—S. C. Ward and Co.'s Stock Exchange Intelligence.
 7.15 p.m.—"Windbag's" Sporting Service.
 7.30 p.m.—Better homes arranged by Slaters (Furnishers) Ltd.
 7.40 p.m.—A. M. Whitenbury will speak on "Poultry."
 8 p.m.—G.P.O. Chimes.
 8.1 p.m.—A Scottish Night.
 9 p.m.—G.P.O. Chimes, meteorological information, Dalgety's wheat report, International news.



Younger Every Day

My favorite character in fiction is the old gentleman who is lifted over a five-barred gate by a dose of somebody's salts.

I like that picture because only a steam crane could lift me over that gate—and because it shows what we "old" folks can do with only a small uplift.

Most of this talk of age comes from pushing youngsters who want our jobs.

Would you believe that one of them actually got up in a tram to give me his seat? He was very hurt when I told him to go to — back to his seat. Anyhow, it would have been like berthing a P. and O. liner in the space usually filled by a small tug!

Another thing which irritates me is this "uncle" business. I have two six-foot nephews who always hail me as "uncle." And the other day I became a "Grand Uncle"—whatever that may be.

It seems to me that a man need only sit still for a few years to become an ancestor!

I can handle "nephews," but what is the answer when a married niece with two children insists on kissing one's bald head and remarking, "A little thin on top, Nunky!" Jumping Kruschen! "Nunky!" Sounds like the pet name of a spider monkey!

Then this fashion business is unfair to men. I am only a year older than my wife, but when she walks out with me in bobbed hair, bright blouses, short skirts and silk stockings, she looks like my youngest daughter.

My only way of staying young is to switch on that blessed Acme Eliminator, which wipes out bothersome batteries, and listen-in at the children's hour. Some day you will hear this on the air:—

"Hullo! Hullo! To-day is little Johnny's birthday. He is 65 years old. Good boy, Johnny! You will find some lollies behind the piano. Be kind to father and mother, and you will grow up to be a big man some day!"

Well, I must stop. Have an appointment with the New System Radio folk at 280 Castlereagh-street. Keep young!"

9.10 p.m.—Scottish Night programme continued
 10.1 p.m.—“Advertiser” news service.
 10.8 p.m.—“Windbag’s” Sporting Service and Interstate and local sporting results.
 10.16 p.m.—Relayed from Glenelg, The Maison Dance Band.
 10.55 p.m.—Meteorological information, station announcements, to-morrow’s programme.
 11 p.m.—G.P.O. chimes and National Anthem.

7ZL, HOBART

THURSDAY, 3rd MAY, 1928.

MORNING SESSION.

11 a.m. to 12 noon.

AFTERNOON 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.
 3.15 p.m.—Selections by 7ZL Studio Trio. March, “The Guard” (Alfred). Valse, “Recits D’Amour” (Schubert). “Little Innocent” (Bendix). “Incidental Music”
 Violin solo. Selected. Mr. E. J. McCann. Fox-trot, “Yale Blues” (Taylor). Clarinet Solo. Selected. Mr. A. Young.
 4.15 p.m.—Chat by Child Welfare Nurse.
 4.30 p.m.—Close down.

EARLY EVENING SESSION.

6.30 p.m.—Uncle Huberts half hour.
 7 p.m.—Uncle Hector talks to the children.

NIGHT SESSION.

7.30 p.m.—Musical selection.
 7.35 p.m.—News Bulletin issued by Department of Markets and Migration.
 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.
 8.1 p.m.—Selections by Hobart Municipal Band. Conductor, Mr. L. M. Barnett.
 9.40 p.m.—British Official Wireless news.
 9.50 p.m.—Mercury special Interstate news service. Ships within wireless range. Tasmanian District Weather reports.
 9 p.m.—Weather forecasts. Weather reports from Australian Capital cities. Station announcements. Friday’s programme.
 10 p.m.—Close down.

Friday, May 4

2FC, SYDNEY

EARLY MORNING SESSION.
 7 a.m. to 8 a.m.

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 service.
 12.15 p.m.—Rugby wireless news.
 12.20 p.m.—Studio music.
 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.
 1.30 p.m.—Gladys Aubin, soprano.
 1.35 p.m.—Studio music.
 1.55 p.m.—Gladys Aubin, soprano.
 2 p.m.—“Big Ben.” Close down.

AFTERNOON SESSION.

3 p.m.—“Big Ben” and announcements.
 3.5 p.m.—Joyce Gillespie, soprano.
 3.10 p.m.—George McNeilly, tenor.
 3.15 p.m.—Popular Records.
 3.25 p.m.—Phyllis Broadbent, soprano.
 3.30 p.m.—Studio music.
 3.35 p.m.—Mde. Evelyn Grieg will continue her series of talks on “The Art of Listening to Music”: No. 2. The Pianoforte and the Interpreter.
 3.50 p.m.—Fosse Brakell, contralto.
 3.55 p.m.—George McNeilly, tenor.
 4 p.m.—“Big Ben.” Joyce Gillespie, soprano.
 4.5 p.m.—Studio music.
 4.15 p.m.—A Reading.
 4.30 p.m.—Phyllis Broadbent, soprano.
 4.35 p.m.—Studio music.
 4.45 p.m.—Stock Exchange, third call.
 4.47 p.m.—Fosse Brakell, contralto.
 4.50 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 (wool, wheat, stock).
 6.43 p.m.—Fruit and vegetable markets.
 6.47 p.m.—Weather and shipping intelligence.
 6.50 p.m.—W. F. Kay in a new series of Theatrical talks: No. 1. “A Stranded Actor.”
 7 p.m.—Dinner music.
 7.30 p.m.—Late “Evening News” news service.

NIGHT SESSION.

A THEATRICAL NIGHT.

7.40 p.m.—Programme announcements.
 7.45 p.m.—Rev. F. H. Raward: Talk: “Let’s Go Round the World.”
 8 p.m.—“Big Ben.”
 From Her Majesty’s Theatre, Sydney (by permission of J. C. Williamson, Ltd.): The First Act of a new Musical Comedy.
 9.10 p.m.—From the Studio: William Dallison, tenor.
 9.18 p.m.—W. F. Kay will continue his series of Theatrical talks dealing this evening with the late George Coppin.
 9.33 p.m.—Oliver King, bass.
 9.42 p.m.—Lindley Evans, pianoforte solos.
 9.50 p.m.—The Ambassadors Dance Orchestra. Conductor, Al Hammet.
 10 p.m.—“Big Ben.” William Dallison, tenor.
 10.8 p.m.—Lindley Evans, pianoforte solos.
 10.16 p.m.—The Ambassadors Dance Orchestra. Conductor, Al Hammet.
 10.25 p.m.—Oliver King, bass.
 10.32 p.m.—From the Ambassadors: The Ambassadors Dance Orchestra.
 10.40 p.m.—From the Studio: Late weather forecast. Studio music.
 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.

3LO, MELBOURNE.

FRIDAY, 4th MAY, 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. Mails.
 7.40 a.m.—NEWS.
 8 a.m.—Melbourne Observatory Time Signal.
 8.1 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 a.m.—3LO’S CULINARY COUNSELS, or How to Create Creature Comforts with a Minimum of Cash.

PASSION FRUIT JAM.

Six dozen passion fruit. Water. One large cup sugar to a small cup pulp. Wash fruit and cut in halves, scoop out pulp and seeds. Put two-thirds of the shells into pan, press down and cover with water. Boil with lid on saucepan about half-an-hour (until the inside of shell is soft). Drain water off into the basin with the pulp; scoop out the soft inside of the shell, and add it to the pulp. Measure into the preserving pan, add sugar, allowing one large cup of sugar to every small cup of pulp. Boil quickly for 25 minutes. Bottle in warm jars, and cover when cold.

MY LOVE—“She hath no scorn of common things,

And though she seem of other birth,
 Round us her heart entwines and clings,
 And patiently she folds her wings
 To tread the humble paths of earth.”

—J. R. Lowell.

11.5 p.m.—J. HOWLETT ROSS: “Catherine Spence, a Notable Australian.”

11.20 p.m.—Musical interlude.

11.25 p.m.—“AU FAIT”: “Shopping Abroad.”

11.40 p.m.—Musical interlude.

11.45 p.m.—Under the Auspices of the Public Health Department, DR. VERA SCANTLEBURY will speak on: “The Economic Aspect of Infant Welfare.”

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. Reuter’s and the Australian Press Association Cables. British Official Wireless news from Rugby. “Argus” news service.
 12.20 p.m.—THE GYPSY PLAYERS: “Cachura—Spanish Dance” (Hadley). “Spanish March” (Lope).
 12.30 p.m.—MINA HESELEVA, Soprano: Two Russian Songs by Arenski.
 12.37 p.m.—Stock Exchange information.
 12.40 p.m.—T. JAMES LLOYD, Tenor: “A Song of Araby.” “A Hundred Moonlit Miles Away” (Herbert Ivey).
 12.47 p.m.—DOROTHY ROXBURGH, viola: Selected.
 12.54 p.m.—THE GYPSY PLAYERS: “Italian Vespers” (Logan).
 1.4 p.m.—MINA HESELEVA, Soprano: Romance—“Life for the Czar” (Glinka). “Bolero” (Verdi).

1.11 p.m.—Meteorological information.

Weather forecast and rainfall for Victoria, Tasmania, South Australia, and New South Wales.

Ocean forecast. River reports.

Stock Exchange information.

THE FOUNDATIONS OF MUSIC.

1.18 p.m.—BESSIE GAUNSON, Violinist, will to-day give her final selection of the works of Mozart.

"Sonata No. 8" (Mozart).

1.28 p.m.—T. JAMES LLOYD, Tenor,

"Indian Dawn" (Zamecnik).

"The Little Old Garden" (Hewitt).

1.35 p.m.—THE GYPSY PLAYERS:

"Russian Rural Scene" (Friml).

1.45 p.m.—Close down.

AFTERNOON SESSION.

A FEW SELECTIONS FROM CHAMINADE.

2.15 p.m.—THE STATION ORCHESTRA:

"Serenade" (Victor Herbert).

"Andantino Idillico" (Drago).

2.24 p.m.—MINA HESELEVA, Soprano:

"L'ete" (Chaminade).

Selected.

2.31 p.m.—THE STATION ORCHESTRA:

"Autumn" (Chaminade).

Air de Ballet, "Pas Des Amphones"—a dance of the Vases (Chaminade).

2.40 p.m.—RUPERT HAZELL AND ELSIE DAY:

"Harmonylarity."

2.53 p.m.—THE STATION ORCHESTRA:

"Scarf Dance" (Chaminade).

"Memories" (Alstyne).

3.1 p.m.—FRANCES FRASER:

"Travels in Arcadia and Utopia."

3.15 p.m.—MINA HESELEVA, Soprano:

"Bell Song from 'Lakme'" (Delibes).

"He Loves Me Not" (Mascagni).

3.23 p.m.—THE STATION ORCHESTRA:

Selection, "The Student Prince" (Romberg).

PIANO RECITAL.

3.35 p.m.—HENRI PENN, Piano:

"Toccata" (Debussy).

"Prelude" (Debussy).

"Arabasque" (Debussy).

"Tarantelle" (Debussy).

3.48 p.m.—VICTOR BAXTER, Tenor:

"The Living God" (O'Hara).

"A Red Rose" (Murray Gibbs).

3.55 p.m.—THE STATION ORCHESTRA:

"The Three Bears from the Fairy Story—Goldilocks and The Three Bears" (E. Coates).

"March of the Dwarfs."

4.8 p.m.—MADOLINE KNIGHT, Contralto:

In old-time favorites:

"Listening."

"Love the Pedlar."

4.15 p.m.—CHARLES McFEE, Alto Saxophone:

"Visior D'amour" (Wiedoft).

4.19 p.m.—VICTOR BAXTER, Tenor:

"The Prize Song"—"The Meistersingers" (Wagner).

"If I Might Come to You" (Squire).

4.26 p.m.—THE STATION ORCHESTRA:

"Song of India" from "Sadko" (Rimsky-Korsakov).

"Pale Moon" (Logan).

4.36 p.m.—Special Weather Report from Adelaide; Special Weather Forecast for Mildura Districts.

4.37 p.m.—MADOLINE KNIGHT, Contralto:

Old Time Favorites:

"In Sweet September."

"Sunshine and Rain."

4.45 p.m.—THE STATION ORCHESTRA:

Selection, "Maid of the Mountains."

NEWS SESSION.

5.0 p.m.—"Herald" News Service; Stock Exchange Information.

5.15 p.m.—Close Down.

EVENING SESSION.

6.0 p.m.—Answers to Letters and Birthday Greetings by "BILLY BUNNY."

6.20 p.m.—Musical Interlude.

6.25 p.m.—CAPT. DONALD MacLEAN:

The Spanish Conquests of America—"How the Dons discovered the Treasures of the World."

6.40 p.m.—Musical Interlude.

6.45 p.m.—"BILLY BUNNY" has a Story to tell you.

NEWS AND MARKET REPORTS.

7.0 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. Borrett, 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 Fruiterers' Association; Citrus Fruits.

NIGHT SESSION.

7.30 p.m.—Under the Auspices of the Agricultural Department, H. A. MULLETT, will speak on:

"Wheat Growing—Sowing the Crop."

7.45 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.

7.55 p.m.—Announcements. Birthday Greetings and Programme Announcements.

8 p.m.—TRANSMISSION FROM WONT-HAGGI—Concert from Union Theatre. Chairman: Mr. W. G. McKENZIE, M.L.A. Accompanist: Miss MACONACHIE.

Opening Speech by Chairman.

BILLY HAINES AND CO:

Ten Minutes of Fun on the "Powlett."

THE WONTHAGGI CHOIR:

"Australian National Anthem."

ALBERT PETERS, Violin:

"Classical Gems."

FRANK BAXTER, Baritone:

"Toreador's Song" (Carmen).

MASTER CHARLES WHITE, Wonthaggi's young cornetist:

"Zelda" (Percy Code).

CHARLOTTE FOWLER, song with violoncello obligato:

"A Perfect Day."

EDITH STIBBS, Elocutionist:

Musical Monologue, "The Game of Life"

THE WONTHAGGI CHOIR:

"Oh, who will o'er the downs?"

AGNES FOWLER:

"The Broken Melody."

ALBERT PETERS, Violin:

"Spring Song."

MASTER ANGUS CARMICHAL, The Boy Soprano:

"In an Old-Fashioned Town."

ANNIE PETERS, Descriptive Piano Solo:

"The Battle of Abyssinia."

CHARLOTTE AND AGNES FOWLER, Duet,

"The Rosary."

INTERVAL.

FROM THE STUDIO.

HENRI PENN, Piano Recital.

"Ballade No. 1" (Chopin).

"Butterfly" (Grey).

FROM WONTHAGGI.

Let us gather round the Camp Fire on Bill Stibb's Goanna Farm for music—serious and otherwise! Mostly otherwise!

The Wonder
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I guarantee full loud speaker reception on the T.K.D. 1 valve set on all local stations.

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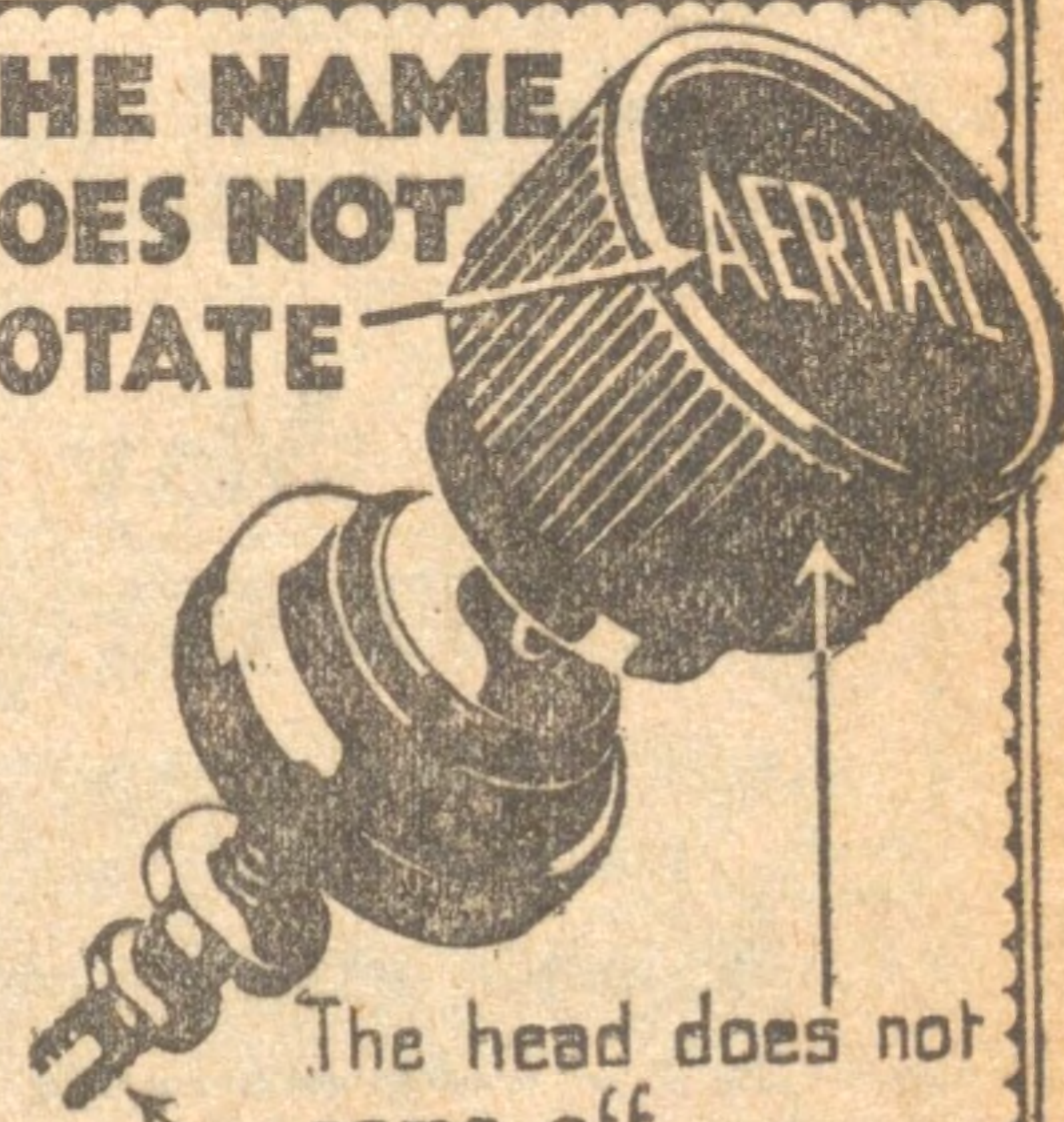
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TERMINALS

FROM THE STUDIO.

10.25 p.m.—ERIC WELCH will speak on:
"To-morrow's Races."

10.35 p.m.—THE STATION ORCHESTRA:
"The Voice of the Bells."

NEWS SESSION.

10.45 p.m.—"Argus" news service. Meteorological information. British Official Wireless news from Rugby. Road Notes, supplied by the Royal Automobile Club of Victoria. Announcements.

R.A.C.V. SAFETY MESSAGE FOR TO-DAY IS:

"All the earth's treasure cannot buy life and sound limbs. Take every care for their safety."

THE OLYMPIC GAMES.

"Tickle" Whyte ran 1500 metres in 4-min. 4-sec on a slow track and without serious competition. The world's record is 3-min. 53-sec. Whyte will compete at the Olympic Games in this event and will get serious competition on first-class cinder track. Give him the chance of doing better figures. Subscribe to the Lord Mayor's Olympic Fund. 3LO Melbourne will be pleased to receive donations towards the fund.

11 p.m.—OUR GREAT THOUGHT.

THE SHRINE OF REMEMBRANCE:

"'Twas not in hot desire of sudden fight,

In thought of glory of applauding cheers—
Ah, NO. They saw stern Duty's light,

And followed it despite their fears.

They fought and dying wrote Australia's name

In golden letters on the page of Fame."

Brig.-Gen. C. H. Brand.

11.1 p.m.—THE VAGABONDS.

DANCE MUSIC.

11.40 p.m.—GOD SAVE THE KING.

Saturday, May 5

2FC, SYDNEY.

EARLY MORNING SESSION.

7 a.m. to 8 a.m.

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 "Redgum" (J. G. Lockley).

MIDDAY SESSION.

12 noon.—"Big Ben" and announcements.

12.2 p.m.—Stock Exchange.

12.3 p.m.—Studio music.

12.20 p.m.—"Sydney Morning Herald" news service.

12.25 p.m.—Rugby wireless news.

12.30 p.m.—Studio music.

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

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

1.20 p.m.—Studio music.

2 p.m.—"Big Ben." Close down.

AFTERNOON SESSION.

3 p.m.—"Big Ben" and announcements.

3.3 p.m.—From the Nepean River: The Interstate Eight-oar Championship Race for the Oxford and Cambridge Cup, described by Mr. Roger Fitzhardinge, the ex-International oarsman.

3.30 p.m.—From the Studio:
The "Smart Set" Instrumental Trio.
Leader, Molly Gant.

3.40 p.m.—Peggy Shaw, soubrette.

3.45 p.m.—Cliff Arnold, novelty pianist.

3.52 p.m.—The "Smart Set" Trio.

4 p.m.—"Big Ben."
Peggy Shaw, soubrette.

4.5 p.m.—The "Smart Set" Trio.

4.15 p.m.—Peggy Shaw, soubrette.

4.20 p.m.—Cliff Arnold, novelty pianist.

4.30 p.m.—The "Smart Set" Trio.
Leader, Molly Gant.

4.40 p.m.—Sporting resume.

4.50 p.m.—The "Smart Set" Trio.

5 p.m.—"Big Ben." Close down.

EARLY EVENING SESSION.

5.40 p.m.—Chimes of 2FC and announcements.

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.

6.45 p.m.—Weather intelligence.

6.50 p.m.—Full description of the Racing by 2FC Commissioner.

7.5 p.m.—Dinner music.

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

NIGHT SESSION.

A POPULAR NIGHT.

7.40 p.m.—Programme announcements.

7.45 p.m.—Studio music.

8 p.m.—"Big Ben."

From the Prince Edward Theatre, Sydney:
Introductory music by the Prince Edward Concert Orchestra, conducted by Albert Cazabon.

Eddie Horton at the Orchestral Organ.
Albert Cazabon and Concert Orchestra.

9 p.m.—"Big Ben."

From the Studio:

Late weather forecast.

9.1 p.m.—Reginald Hayward, baritone.

9.9 p.m.—Madame Emily Marks, soprano.

9.18 p.m.—Charles Lawrence, entertainer.

9.26 p.m.—From the Prince Edward Theatre, Sydney:

Albert Cazabon and Concert Orchestra.

9.40 p.m.—From the Studio:

Madame Emily Marks, soprano.

9.48 p.m.—Reginald Hayward, baritone.

9.56 p.m.—Dorothy Dewar, soubrette.

10.4 p.m.—Charles Lawrence, entertainer.

10.14 p.m.—From the Ambassadors:

The Ambassadors Dance Orchestra.

Conductor, Al Hammet.

From the Studio:

10.34 p.m.—Late weather forecast.

10.35 p.m.—Dorothy Dewar, soubrette.

10.42 p.m.—The Ambassadors Dance Orchestra,
Conductor, Al Hammet.

From the Studio:

10.57 p.m.—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.

3LO, MELBOURNE.

SATURDAY, 5th MAY, 1928.

EARLY MORNING SESSION.

7.15 a.m.—Morning Me'odies.

7.20 a.m.—PHYSICAL CULTURE EXERCISES (to music).

7.27 a.m.—Morning Melodies.

7.33 a.m.—WEATHER FORECAST for all States. Mails.

7.40 a.m.—NEWS.

8 a.m.—Melbourne Observatory time signal.

8.1 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 a.m.—THE STATION ORCHESTRA:

"Hunting Chorus" from "Dorothy."

Fox-trot: "Horsey, Keep Your Tail Up."

11.10 a.m.—OLIVER PEACOCK, baritone.

"Give a Man a Horse He Can Ride"

(Riddle).

"Tally Ho" (Lecni).

11.17 a.m.—THE STATION ORCHESTRA:

"Horses."

Fox-trot: "Thanks for the Buggy Ride."

A LITTLE MORE SERIOUS.

11.25 a.m.—MINA HESELEVA, soprano:
Two songs by Tschalkowsky.

11.32 a.m.—GUILDFORD BISHOP, violin:
"Ballade" (J. Harold Henry).

11.37 a.m.—OLIVER PEACOCK, baritone:
"Pale Moon" with orchestral accompaniment.

"But Why" (Logan).

11.44 a.m.—THE STATION ORCHESTRA:
"Suite Melodique" (Friml).

11.54 a.m.—MINA HESELEVA, soprano:
"Lo! Here the Gentle Lark," with flute obligato, by J. Barille.

"Pierrot" (Rybnér).

MIDDAY NEWS SERVICE.

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.

OLD FRENCH FANCIES.

12.20 p.m.—THE GYPSY PLAYERS:

"Chanson de Noel" (Beaumont).

"Un Promenade de Matin" (Bendel).

12.30 p.m.—RUPERT HAZELL and ELSIE DAY:

"Harmonylarity."

12.43 p.m.—Stock Exchange information.

12.45 p.m.—THE GYPSY PLAYERS:
"Petite Suite—Jeux d'enfants" (Bizet).

12.55 p.m.—HENRI PENN, Piano recital:
"Romance" (Gounfeld).

"Scherzo" No. 2 (Chopin).

"Toccata" (Saint-Saens).

1.10 p.m.—Meteorological information. Weather report and rainfall for Victoria, Tasmania, South Australia and New South Wales. Ocean forecasts. River reports.

1.17 p.m.—THE GYPSY PLAYERS:

"The Fairy Tarapata Poun" from Suite

Francais (Foulds).

"Old French Country Dance" (Rawlinson).

1.29 p.m.—Announcements.

1.32 p.m.—THE GYPSY PLAYERS:
Selected.

1.37 p.m.—Description of BASEBALL MATCH, Richmond v. Collingwood at Richmond Football Ground by PERCY STEEL.

1.47 p.m.—Close down.

1.55 p.m.—Description of BASEBALL MATCH, Richmond v. Collingwood, at Richmond Football Ground, by Percy Steel.

2.5 p.m.—Close down.

AFTERNOON SESSION.

2.15 p.m.—JOHNSTON'S STUDIO BOYS: Selection, "High Jinks" (Friml).

2.30 p.m.—Description of Hurdle Race, 2 miles, from Aspendale Park Racecourse, by Eric Welch.

2.35 p.m.—Description of BASEBALL MATCH, Richmond v. Collingwood, at Richmond Football Ground, by Percy Steel.

2.40 p.m.—JOHNSTON'S STUDIO BOYS: Selection, "Katinka" (Friml).

2.50 p.m.—Description of LEAGUE FOOTBALL, Richmond v. Collingwood, at Richmond, by Rod McGregor.

3 p.m.—Description of Trial Welter Handicap, 6 furlongs, Aspendale Park Races, by Eric Welch.

3.5 p.m.—JOHNSTON'S STUDIO BOYS: Selected.

3.15 p.m.—Description of LEAGUE FOOTBALL, Richmond v. Collingwood, at Richmond Football Ground, by Rod McGregor.

3.30 p.m.—Description of Aspendale Plate, 6 furlongs, Aspendale Races, by Eric Welch.

3.35 p.m.—JOHNSTON'S STUDIO BOYS: Selected.

3.45 p.m.—Results of LEAGUE and ASSOCIATION FOOTBALL—quarter-time.

3.46 p.m.—Description of LEAGUE FOOTBALL MATCH—Richmond v. Collingwood, at Richmond Football Ground, by Rod McGregor.

4 p.m.—Description of Aspendale Park Handicap, 1 mile Aspendale Races, by Eric Welch.

4.5 p.m.—JOHNSTON'S STUDIO BOYS: Selected.

4.18 p.m.—Results of LEAGUE and ASSOCIATION FOOTBALL—Half-time.

4.20 p.m.—JOHNSTON'S STUDIO BOYS: Selected.

4.30 p.m.—Description of Aspendale Purse, 7 furlongs, Aspendale Races, by Eric Welch.

4.35 p.m.—Description of LEAGUE FOOTBALL—Richmond v. Collingwood, at Richmond, by Rod McGregor.
Also Results of ASSOCIATION FOOTBALL Three-quarter time.

5 p.m.—Description of Jumpers' Flat Race, 1¼ miles, Aspendale Races, by Eric Welch.

5.5 p.m.—Description of LEAGUE FOOTBALL—Richmond v. Collingwood at Richmond, by Rod McGregor.

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

5.25 p.m.—Close down.

5.50 p.m.—Final Scores of Association Football and other Sporting results.

During the afternoon results of Benalla Races will be given as they come to hand.

EVENING SESSION.

6 p.m.—Answers to Letters and Birthday Greetings by "LITTLE MISS KOOKABURRA."

6.20 p.m.—Musical interlude.

6.25 p.m.—"LITTLE MISS KOOKABURRA": Listen and hear "What Tommy did on the Farm."

6.40 p.m.—Musical interlude.

6.45 p.m.—"LITTLE MISS KOOKABURRA": The Next Instalment of "Pickles and Prowl."

NEWS AND MARKET REPORTS.

7 p.m.—Sporting results.

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

7.12 p.m.—Stock Exchange information.

7.17 p.m.—River reports.

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 Fruiterers' Association—Retail prices. Wholesale prices of Fruit by the Wholesale Fruit Merchants' Association. Citrus Fruits.

NIGHT SESSION.

7.30 p.m.—E. E. PEScott:

"Australian Hedges and Shelter Belts."

7.45 p.m.—DR. J. A. LEACH:

"Ringnecks."

8 p.m.—R. RAWSON:

"Esperanto."

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

A STUDIO CONCERT.

8.16 p.m.—HENRI PENN, piano recital:

"Rhapsodie No. 13" (Liszt).

"Music Box" (Poushnoff).

"Caprice" (Penn).

8.32 p.m.—MINA HESELEVA, Soprano:

"Two Russian Ballads."

8.39 p.m.—RUPERT HAZELL AND EISEN DAY:

"Harmonylarity."

8.47 p.m.—AND NOW—TO THE STADIUM. Description of to-night's event by ERIC WELCH.

BACK TO THE STUDIO.

10.30 p.m.—MINA HESELEVA:

"The Wren," with Flute obligato by J. BARRILLE (Benedict).

"He Loves Me Not" (Mascagni).

10.37 p.m.—THE STATION ORCHESTRA:

"The Three Bears"—from the Fairy Story, "Goldilocks and the Three Bears."

10.44 p.m.—Late Sporting notes.

THE OLYMPIC GAMES.

The world's champion Wrestler, Ted Thye, and Ad Santel both declare that Tommy Bolger, Victorian and Australian Champion Wrestler, has a second to none chance of annexing the 10 stone 5 lbs. division of the Olympic Wrestling Championships.

Forward your subscription to the Lord Mayor's Fund, 3LO, Melbourne, will be glad to receive donations towards the Lord Mayor's Fund.

10.57 p.m.—OUR GREAT THOUGHT—THE SHRINE OF REMEMBRANCE—

"Hope links us to the future, but the link that binds us to the past is Memory."

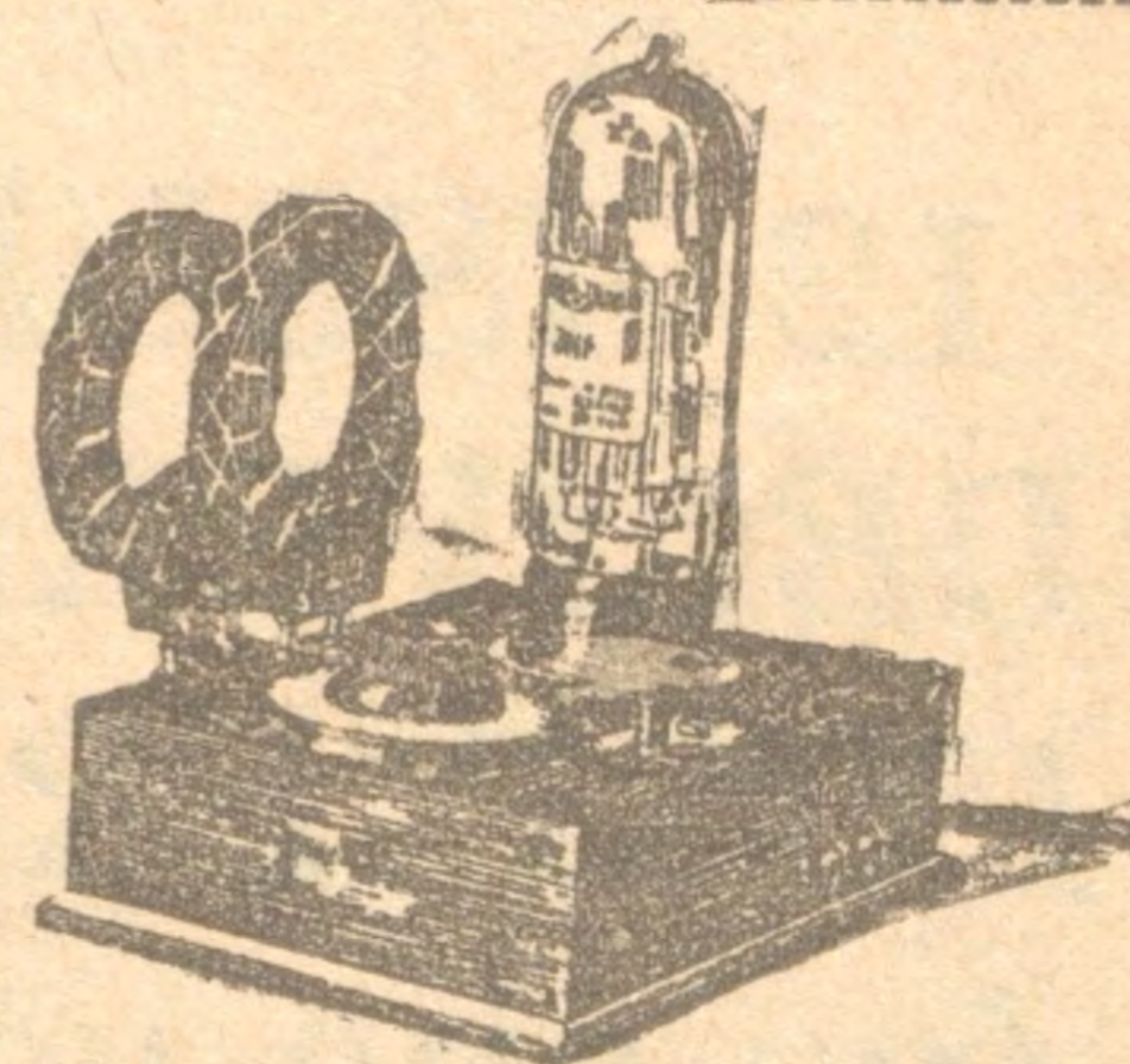
By making a donation toward the building of this beautiful State Memorial you will be assisting to keep green in our memory, and in the memory of generations of Australians yet unborn the names of those gallant men and women of ours who made the supreme sacrifice in response to the call of duty and to the memory of whom this Shrine of Remembrance is being erected.

—Major-Gen. Walter Coxen.

10.59 p.m.—THE VAGABONDS.

DANCE MUSIC.

11.40 p.m.—GOD SAVE THE KING.

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All Readers' Queries Answered Here

E.J.G. (HURSTVILLE).—Your suggestion regarding a stage of resistance capacity coupled radio frequency amplification is quite applicable to the Browning Drake receiver. If you are using a Phasatrol there should be no necessity for the neutralisation by any other means of the first stage, the idea is worth trying, and should result in greatly improved results.

(R.D. (FAIRFIELD).—Details of the Harkness Reflex Two were given in "Wireless Weekly" for April 6th, 1927, but unfortunately, owing to an error, the wrong diagrams illustrating the Harkness Three were shown. You will find all particulars of the winding of the R.F. transformers in the article.

S.L.B. (ENFIELD).—The proposed alteration of wavelengths will not materially effect your existing Harkness Reflex receiver. You will certainly be able to space the stations out better by the use of straight line frequency condensers. In order to overcome interference a wave trap will be useful in your case.

G.H. (BRISBANE).—Whilst you may expect fairly good results on an indoor aerial with the Harkness receiver, yet it will be more effective to use a good outside aerial. This, of course, for inter-State stations. The description of your trouble points to defective valves. Before making any changes, in the circuit substitute the present valves for two which are known to be efficient.

A.T.W. (LISMORE).—The results you are obtaining with the Reinartz receiver are very good, and if you so desire, it is quite a simple matter to add a stage of radio frequency amplification to this circuit. I do not recommend reflexing to the first audio.

NEW CHUM (CENTRAL TILBA).—You could use a Te Ka De valve as detector in your receiver providing it is of the VT123 type. The VT126 type is a Pentatron valve which would be better used as the detector and first audio stages, or alternatively, as the two audio stages. A short wave adaptor will work well with your Popular Three.

W.T.W. (MULLUMBIMBY).—Assuming that you have tested all components in your set, such as A battery, B battery, transformers, etc., and distortion is still in evidence, then I suggest that you try a change of grid leak. Very often, a grid leak will alter its resistance if it is of the cheap variety. For this reason it is advisable to obtain only the best.

A.J.C. (DARLINGTON).—A description of a 12 to 600 metre combined short wave and broadcast receiver, appeared in "Wireless Weekly" for the 27th January.

P.S. (TEMPE).—The laminations you are using for your transformer are incorrect, they should consist of Stalloy, or soft iron with a coat of Shellac varnish on each for insulation purposes. This will give better regulation of the output.

KOLONGA (NOWRA): It is not practicable to use an ordinary broadcast receiver on wavelengths below 200 metres, using radio frequency amplification. There are many modifications to be effected, and it is only by the use of the new screened grid valve that effective radio frequency amplification is possible at the higher frequencies. I strongly urge you to keep your broadcast receiver as it is, and construct a separate short wave receiver.

A.M.T. (YOUNG): Try changing the positions of your valves before neutralising. Also try a different value of grid leak on the detector with variations of B battery voltage. It is quite a simple matter to neutralise the re-

QUERIES

Queries must be brief and to the point.

Each enquirer is limited to three questions and where possible explanatory sketches or diagrams will facilitate the diagnosis of your trouble

ceiver by observation without removing the filament ballasting resistance.

SHORT WAVE (WARWICK, Q.).—There is no reason why your "Go-Getter" receiver should not oscillate smoothly over the whole of the short wave bands in use, with your Tickler coil placed in between the grid and aerial coils as described in the Article in "RADIO." By placing the tickler in this position, a distinct advantage is gained in that there is less detuning effect by the regeneration control. Make sure that all your wiring is correct, as it seems to me from your description that the connections to the tickler are reversed.

M.E.L. (MARRICKVILLE).—You may build up a 4 valve portable receiver using the kit mentioned by eliminating the R.F. or aerial coil unit and substituting for a loop aerial. This loop aerial may be contained in the lid of the portable cabinet. The circuit in question is the well known Browning Drake which is simple to build and extremely efficient in use. You may expect reasonably good results from a loud speaker up to 30 miles distant from a local A class station.

E.G. (WAMURAN).—Having gone through the details of your Reinartz receiver and bearing in mind that your oscillation control is quite smooth and uniform, it is obvious that the distortion arises solely from your audio stages. You have not mentioned the make or ratio of your two transformers, so that I can only advise correct grid biasing with suitable transformers. Coincidentally with this issue of "W.W." is appearing an improved one valve receiver, which will no doubt satisfy your needs for a good one valve receiver for long distance reception.

X.F. (LAWRENCE).—You do not give particulars of the type of receiver you are using, so that I have no indication of the type of circuit used. It appears that if better reception is the case when the grid leak is removed, then by some means or other the detector valve is receiving a positive bias from some part of the circuit. It may be worth while to try changing the grid return from positive to negative filament and vice versa. Even though the grid leak you know to be O.K. gives the same effect, this may be faulty from a noisy point of view. There are many grid leaks which are consistent in value, yet they have a faulty resistance surface which accumulates moisture and sets up noise in the receiver. In the Philips make of valves I recommend for a five valve receiver, the four volt types namely first and second R.F. A435, detector, A415 first audio A415 and second audio B406.

WARATAH (EDGECLIFFE).—You may use a 1 microfarad filter condenser in your B eliminator in place of two 2 microfarad condensers in parallel. There are many chokes on the market which would be suitable for this

home built eliminator. Try a Gecophone or A.W.A. There should be no necessity to earth the A positive of the set when using the eliminator. If the portion of the eliminator carrying the A.C. current is well shielded, it will certainly assist in reducing hum by pick-up from the receiver. Two 201A's in parallel should pass sufficient current to operate the set you require to use.

M.G.R. (PARRAMATTA).—See the answer to M.E.L. (MARRICKVILLE) above. Try Mullard PM3's throughout or alternatively Osram DEH410 R.F. DEL410 detector, DEL410 first audio and DEP410 second audio.

A.G.S. (WYONG).—A $3\frac{1}{2}$ to 1 transformer will be quite suitable in place of a $2\frac{1}{2}$ to 1, but do not use a ratio above this.

A.L.P. (NTH. SYDNEY).—You will note that the circuit diagrams of the Harkness Reflex receiver were corrected in the last issue of "W.W."

V.B. (ROUCHEL).—I will endeavour to find the back copy of "W.W." with the formula you require and republish it. You may add another stage of audio to the Foursome Two if required, and note the effects by variation of B voltage.

W.W. (SINGLETON).—A variable filament control is absolutely necessary in the Ultra-Audion circuit to enable a control of regeneration. The Extraordinary one valve receiver is capable of better performance than the Ultra-Audion. You may under favorable conditions receive the N.Z. stations on the headphones.

S.V.M. (Via MACKAY).—There is no doubt that if you have been using your receiver for 18 months without renewing your B batteries they are discharged. It will be necessary to replace these at once. 18 months is reasonably good usage for the average B battery.

E.M. (COTTON VALE).—It will be necessary to balance the inductance and capacity in the Selectrex Four if you should use 0005 variable condensers in place of the 00035 specified. As I have had so many requests from readers for publication in "W.W." of the "Go-Getter" short wave receiver, I shall be re-writing this specially in the near future.

E.P. (ULMARRA).—You will get more undistorted volume from your Neutrodyne Five by the use of suitable power valves in the audio stages. As you are using 201A's throughout, substitute the audio valves by UX112 and UX171.

VALVE (MULLALEY).—If you are using a Neutrodyne receiver with UX201A's and it has been functioning satisfactorily previous to your replacing the first two valves by others, it will be necessary to carry out the process of neutralisation again, as the characteristics of many valves differ considerably.

INFORMATION (CAMPERDOWN).—Reception of American Broadcast Stations on the 200 to 600 metres band is very rare even with the finest type of receiver possible. This may possibly be done by the use of 3 or more stages of tuned neutralised radio frequency amplification. This would best be done by the use of the screened grid radio frequency amplifying valve in each R.F. stage.

W.G.K. (KYOGLE).—A suitable electric generator for charging A and B accumulators would be obtainable from Messrs. Warbuton Franki Ltd., Kent Street, Sydney. A voltage not less than 30 should be used.

N.Z. 1 (IPSWICH).—From your description I am not inclined to blame your short wave adaptor, but rather the audio amplifying portion of the Solodyne receiver you are using in conjunction. Understand that the R.F. valves of the Solodyne must be first removed.

When the Fixed Condenser is Really Fixed.

A CONDENSER is usually regarded as a fixed mass—a something immobile. Because this view has generally been held, condensers have not been as rapidly improved as other parts of a radio set. The truth is that the elements of a condenser do move, due to the radio-frequency impulses, unless prevented by suitable means. To be sure, the movements may be, and are often, imperceptible; yet they may have considerable influence on the capacity and the losses in both transmitting and receiving condensers.

The usual fixed condenser, as everyone knows, consists of alternating layers of a dielectric and tinfoil. In the process of charging and discharging the condenser these layers move towards and from each other in a poorly constructed condenser, and this movement occurs as often as the condenser is charged and discharged. It is true that the movements may be often only a millionth of an inch in amplitude, yet when the dielectric is very thin it is enough to cause a considerable fluctuation in capacity.

Until William Dubilier began his research, it was commonly supposed that eddy currents, brush discharges and other hysteresis losses were chiefly responsible for condenser troubles. As a matter of fact, Mr. Dubilier's research revealed that these losses are only a small percentage of the total condenser loss. The mechanical movement of the condenser elements is of even greater importance as a source of losses. This is true of both transmitting and receiving condensers, in which the potential may be great or only a fraction of a volt, respectively.

Any motion of the condenser plates causes a wasteful power consumption in the condenser due to the power required to move the plates to and fro. At high frequencies, this wasted power may be a considerable percentage of the power in the circuit. To reduce this loss to a minimum, the condenser elements must be rigidly held in place by suitable means.

The fact that this phenomenon is responsible for a large part of the losses in so-called fixed condensers may fairly be said to be a discovery

of the Dubilier research laboratories. Knowledge of the cause of such losses and the invention of a means of overcoming the practical difficulties in assembling mica and the foil conducting plate has permitted the construction of transmitting condensers of highly compact and efficient form, as well as compact, low-loss type of fixed condenser for receiving circuits.

In preventing variations in capacity, both in transmitting and receiving condenser units, the Dubilier engineers have made use of a principle which is now universally accepted as correct. Under a pressure of several thousand pounds per square inch, the dielectric (mica) is compressed with the conducting layers into a solid mass. Only a homogeneous material such as mica can thus be properly compressed without danger of damage. By this compression the mica and foil are brought into such intimate contact that the mica is actually embedded in the metal foil. In consequence of this operation a compressed mica condenser is many times more efficient than condensers in which the elements are not bound rigidly together. In order that this embedding may occur, tinfoil plates are used in all Dubilier micadons since brass or copper plate cannot be used in carrying out this process. The tinfoil is actually made to adhere to the mica so that it can be removed only by scraping.

It is also important that no moisture be allowed to penetrate between the layers of a condenser. Hence all Dubilier condensers are treated in a vacuum with a special wax of excellent electrical qualities.

The superiority of modern radio apparatus to the human ear, considered as a listening device, was demonstrated recently in England during an attempt to broadcast the song of that seldom-heard bird, the nightingale. A feathered songster far off in the distance burst into song while the experiment was going on. The engineers at the microphone heard nothing, but the song was picked up by the especially sensitive microphone that was being used and was broadcast, without the knowledge of the engineers.

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

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(WIRELESS WEEKLY)

WIRELESS WEEKLY
12th April

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Without direct reference to this work it would be almost impossible for the average lay man to realise the extent to which wireless commercial services which Australia have been developed.

The ramifications of the services which are centred at the Radio Centre at Perth, the Receiving Centre, form a most fascinating study. The technical section

By an intelligent use of the A.W.A. "Radio Guide," the listener who has but a slight knowledge of the technicalities of radio can secure information that will enable him to so "service" his receiver that he will be sure to have it always in reliable working condition, and so will not have any fear of a "silent" night when he invites his best friends to participate in a radio programme having a very special appeal on that particular occasion.

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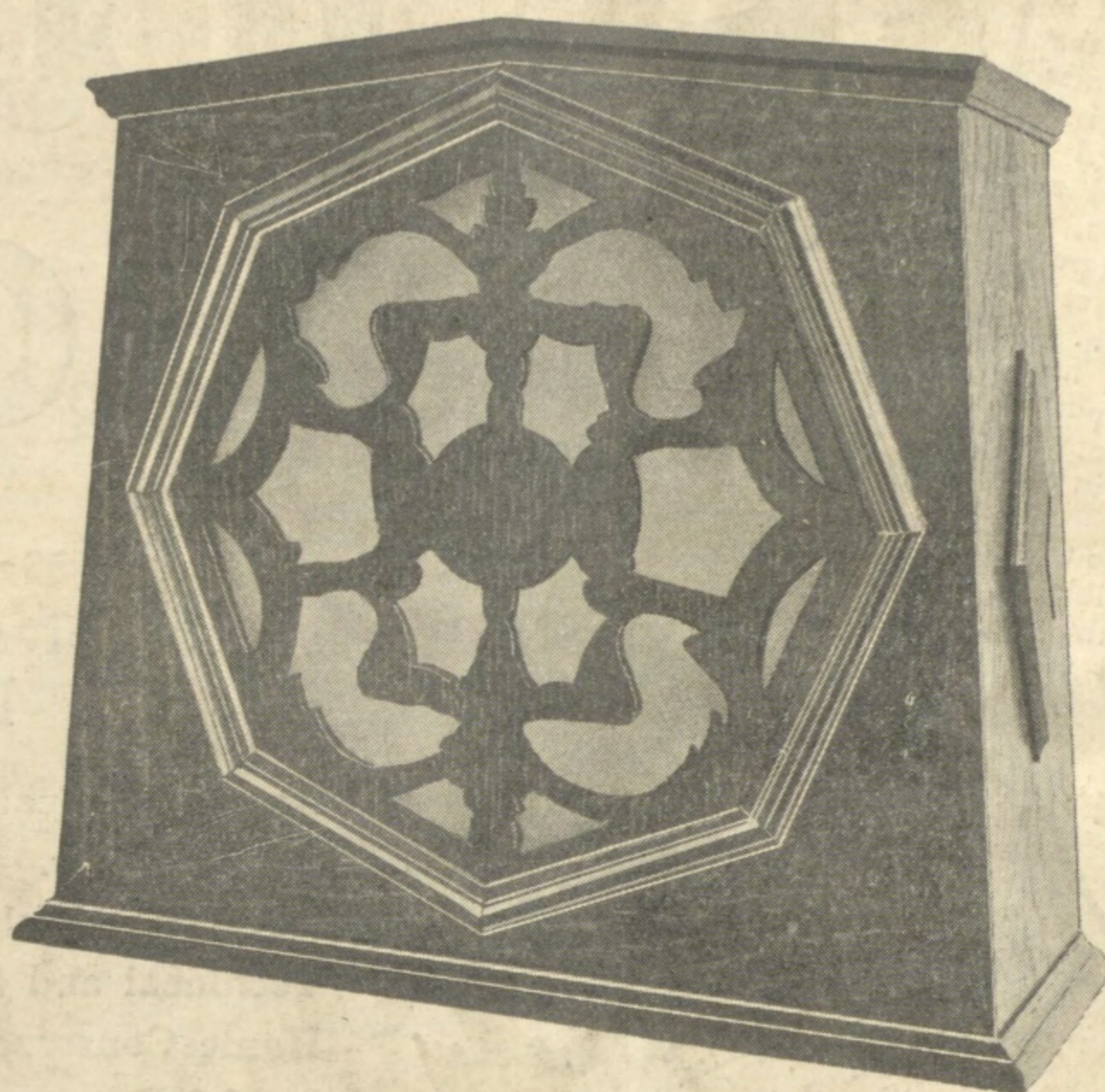
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